

# 2015-2016 Pleasant Grove Ranger District Visitor Use Study FALL QUARTERLY REPORT



*Prepared for:*

Mountainland Association of Governments and the Pleasant Grove Ranger District  
of the Uinta-Wasatch-Cache National Forest

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IORT-PR-2015-7

November 2015



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Through statewide collaboration and cooperation, IORT will be a source for the creation, communication, and transfer of knowledge on resource-based recreation and tourism issues affecting social, economic, and environmental systems, in order to assist Utah's citizens in making decisions that enhance both community and resource sustainability.

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## Introduction

The purpose of this research is to collect visitor use data—from both dispersed and developed recreation areas—on the Pleasant Grove Ranger District of the Uinta-Wasatch-Cache National Forest, by conducting visitor intercept surveys (on-site interviews) at recreation sites, areas, and trailheads. Additionally, for those respondents agreeing to participate, a more-detailed, on-line e-survey will be administered. The data collected and subsequent analysis will be useful for the National Forest, Mountainland Association of Governments, and the American Fork Canyon Vision. This research project is being funded through the Mountainland Association of Governments and the Pleasant Grove Ranger District.

This report outlines the data gathered from the intercept survey during the **2015 Fall Quarter (August, September, and October)** of this twelve-month project. The intercept survey is designed to gather the following information: visitor demographics including group size and make-up; local and non-local use; visitor use patterns; minority use; forms of transportation utilized for access; explore additional transportation options; sites/areas recreated in along with recreational activities; motivations for recreation participation and personal values/benefits sought; issues of solitude and perceived crowding; and awareness and visitation of designated Wilderness areas.

## Methods

All study participants were recreating on the Pleasant Grove Ranger District when they were surveyed. Visitors were intercepted at trailheads and recreation areas as they were leaving these sites. Visitors were surveyed by a surveyor working for the Utah Conservation Corps, who was trained by Utah State University's Institute for Outdoor Recreation and Tourism research staff. Surveys were verbally administered, and each survey takes between eight to twelve minutes to complete. No recruiting tools or incentives were used to entice study participation.

Survey locations were chosen by the Pleasant Grove Ranger District's staff. A variety of sites were chosen across the Pleasant Grove Ranger District to capture its diverse use and users. Sites were chosen to represent frontcountry and backcountry users, motorized and non-motorized users, and day and overnight users. The days and times these sites were surveyed were chosen at random. Each month, sixteen sites were surveyed, and each site was surveyed during a six hour AM or PM block—AM (8:00 a.m. - 2:00 p.m.) PM (11:00 p.m. - 5:00 p.m.). (Note: PM survey times change with the seasonal changes in daylight hours.) Copies of this study's randomized survey schedule can be seen in Appendix D.

Many of the questions used in the survey instrument were developed by the USDA Forest Service for its National Visitor Use Monitoring Program (NVUM). Additional questions were added to the survey instrument that were more applicable to the Pleasant Grove Ranger District and current planning efforts. The final draft of the survey instrument was developed by the Institute for Outdoor Recreation and Tourism, the Pleasant Grove Ranger District, Mountainland Association of Governments, and Logan Simpson Design, who undertook the American Fork Canyon Visioning effort. A copy of the survey instrument can be found in Appendix G.

## Results

Over the third quarter (fall), 511 visitor intercept surveys were completed. Table 1 presents the number of surveys completed at each survey location over the fall quarter.

Table 1: Number of surveys completed by site

	Surveys	Percent of Surveys Completed
Tibble Fork	57	11.2
Little Mill	55	10.8
Timpooneke TH	53	10.4
Mt Timpanogos TH/Theater in the Pines	50	9.8
Cascade Springs Lower	49	9.6
Dispersed Sites Between Tibble and Holman	35	6.8
Roadhouse	31	6.1
Mineral Basin	29	5.7
Summit Trailhead	27	5.3
Soldier Hollow	23	4.5
Silver Lake Flat	22	4.3
Dry Creek (Alpine)	20	3.9
Upper Mill	20	3.9
Snake Creek	19	3.7
Martin	14	2.7
Dry Canyon (Lindon)	7	1.4
Total		100.0

The results section follows the format of the intercept survey. Each question on the intercept survey is presented in bold and italics, and is followed by tables, graphs, and interpretations of the data.

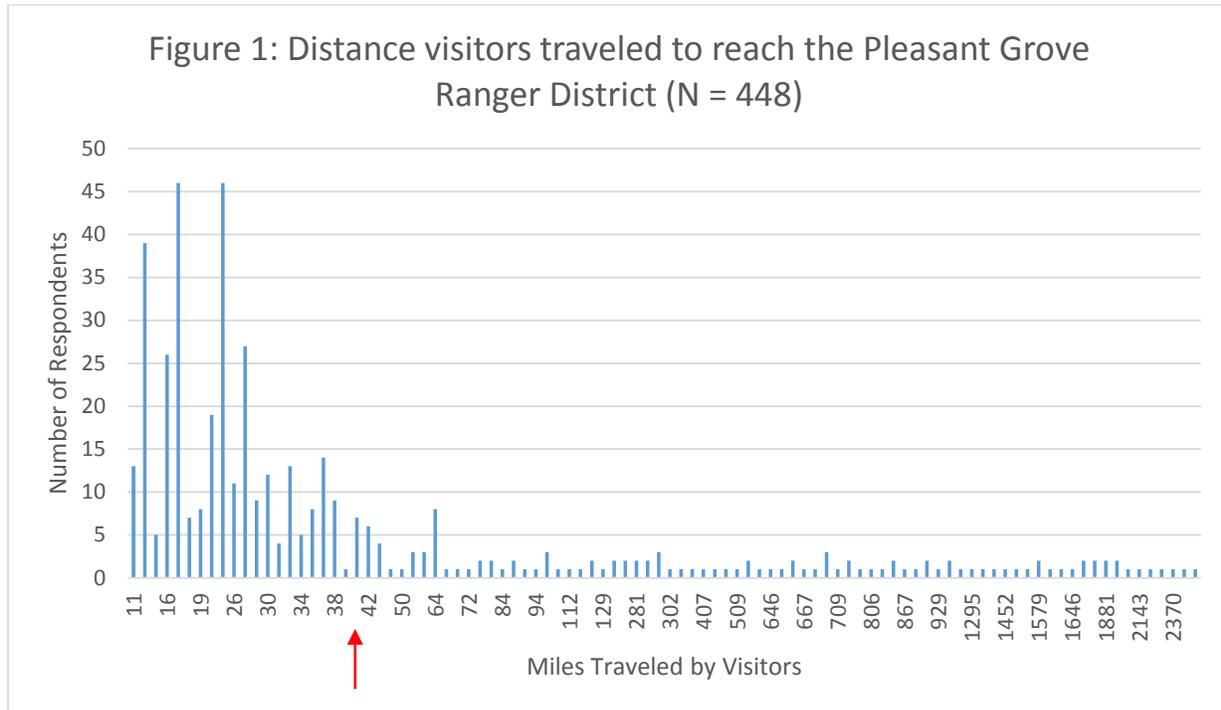
### ***Are you a resident of the United States?***

***Yes*** ***If Yes, what is your Home Zip Code?*** \_\_\_\_\_

***No*** ***If No, what Country are you from?*** \_\_\_\_\_

The question above was used to identify how far visitors were traveling to reach the Pleasant Grove Ranger District (PGRD). This analysis was done by calculating the distance each zip code was from a central location (i.e., Tibble Fork Reservoir) in the Pleasant Grove Ranger District. As seen in Figure 1, the majority of visitors live fewer than 40 miles from Tibble Fork Reservoir. The median distance traveled by visitors was 27 miles, and the mean distance was 190 miles. The large discrepancy between the median and mean is illustrated in the heavily right-skewed distribution of the histogram below. The minimum distance traveled was 11 miles, and

the maximum distance traveled by U.S. residents to reach the Pleasant Grove Ranger District during the fall quarter was 2,513 miles. Over this quarter, three respondents were from outside of the county—Germany (2 respondents) and Australia (1 respondent). These data show that 73% of PGRD visitors live fewer than 40 miles from Tibble Fork Reservoir, and 60% live fewer than 30 miles.



**How long are you going to be recreating on this trip to American Fork Canyon/the Alpine Loop?**

- Short trip under three hours
- About half the day
- The majority of the day
- Overnight
- Multiple days – if so, how many? \_\_\_\_\_ days

The question above is used to gauge how long respondents are spending on the Pleasant Grove Ranger District during their recreational visit. Half (50%) of the respondents spent fewer than three hours recreating during their visit, 25% spent about half the day, and 13% spent the majority of the day. Just over 12% spend multiple days during their visit. Table 2 presents the amount of time respondents were recreating during their visit, and Table 3 presents the number of days respondents spent recreating for those who spent multiple days on the PGRD.

Table 2: Respondents' Trip Duration

	Number	Percent
Short trip under three hours	250	50
About half the day	128	25
The majority of the day	66	13
Overnight	16	3
Multiple days	45	9
Total	505	100

Table 3: Number of days respondents spent recreating on their trip

	Number of Respondents	Percent
Two days	19	31.1
Three days	12	19.7
Four days	20	32.7
Five days	4	6.5
Six days	5	8.1
Fifteen days	1	1.6
Total	61	100

***On this trip, are you planning on visiting any other sites in American Fork Canyon/the Alpine Loop besides this one?  Yes  No***

***If Yes, how many other sites are you going to visit? \_\_\_\_\_ sites***

Respondents were asked if they planned on visiting more than one site during their trip to the PGRD. The majority (75.4%) of respondents said they only planned on visiting one site during their trip to the PGRD. Of the 24.6% who did plan on visiting multiple sites during their recreational visit, 45 respondents planned on visiting two sites, 43 planned on visiting three sites, 13 planned on visiting four sites, and 11 planned on visiting five or more sites. Table 4 presents the proportion of respondents who visited one site and the respondents who visited more than one site. Table 5 presents the number of sites visited by respondents who visited more than one site.

Table 4: Respondents visiting more than one site per visit

Visited more than one site	Number of respondents	Percent
No	384	75.4
Yes	125	24.6
Total	509	100

Table 5: Number of sites visited by respondents who visited more than one site

Total number of sites visited	Number of respondents	Percent
2	45	40.2
3	43	38.4
4	13	11.6
5 or more sites	11	9.8
Missing	13	(not included)
Total	125	100

***On average, how many times per year do you visit American Fork Canyon/the Alpine Loop?***  
 \_\_\_\_\_ ***times per year***

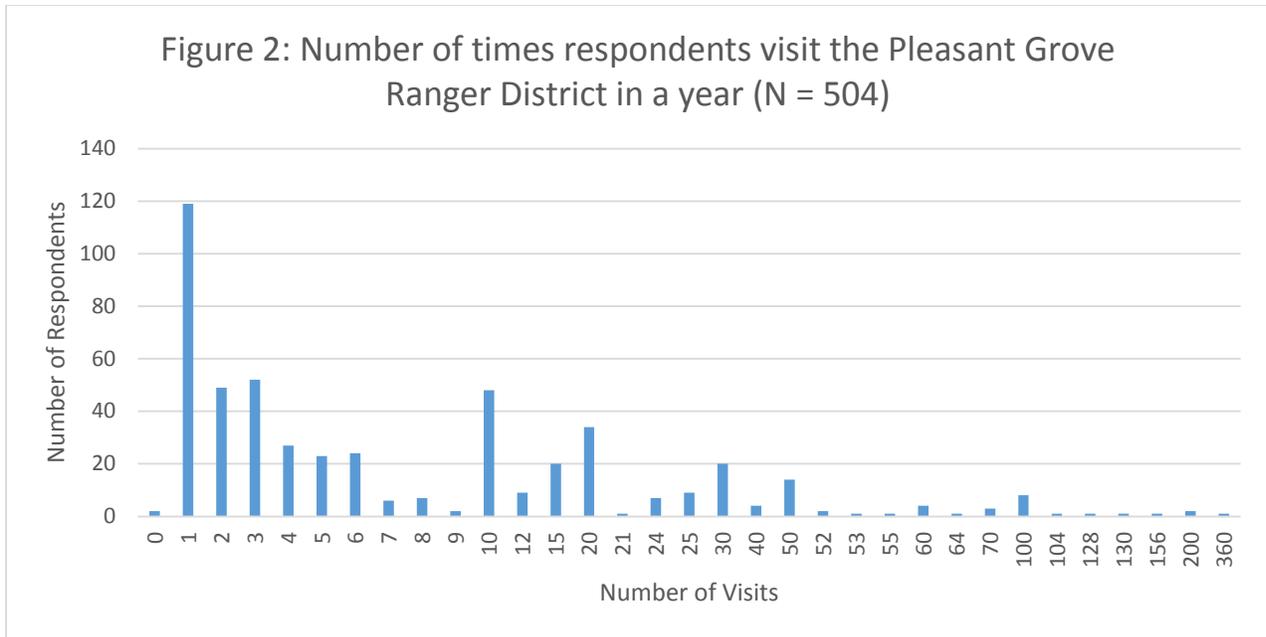
Respondents were asked, on average, how many times they visit the PGRD in a year. The median number of times respondents visit the PGRD was 5 times, and the mean was 14.09 times. Table 6 presents the mean, median, standard deviation, and range of days respondents visit the PGRD in a year.

Over the fall quarter, the mean and median number of times respondents visit the PGRD stayed consistent with the summer quarter. During the spring quarter, the median was 10 and the mean was 33.56. This indicates that the summer and fall bring a large influx of visitors who visit less frequently than people who visit the PGRD during the spring months.

Table 6: Number of times respondents visit the Pleasant Grove Ranger District in a year

	Visits
Mean	14.09
Median	5
Std. Deviation	28.19
Minimum	0
Maximum	360

Figure 2 shows the large proportion of visitors who visit the PGRD fewer than ten times per year.



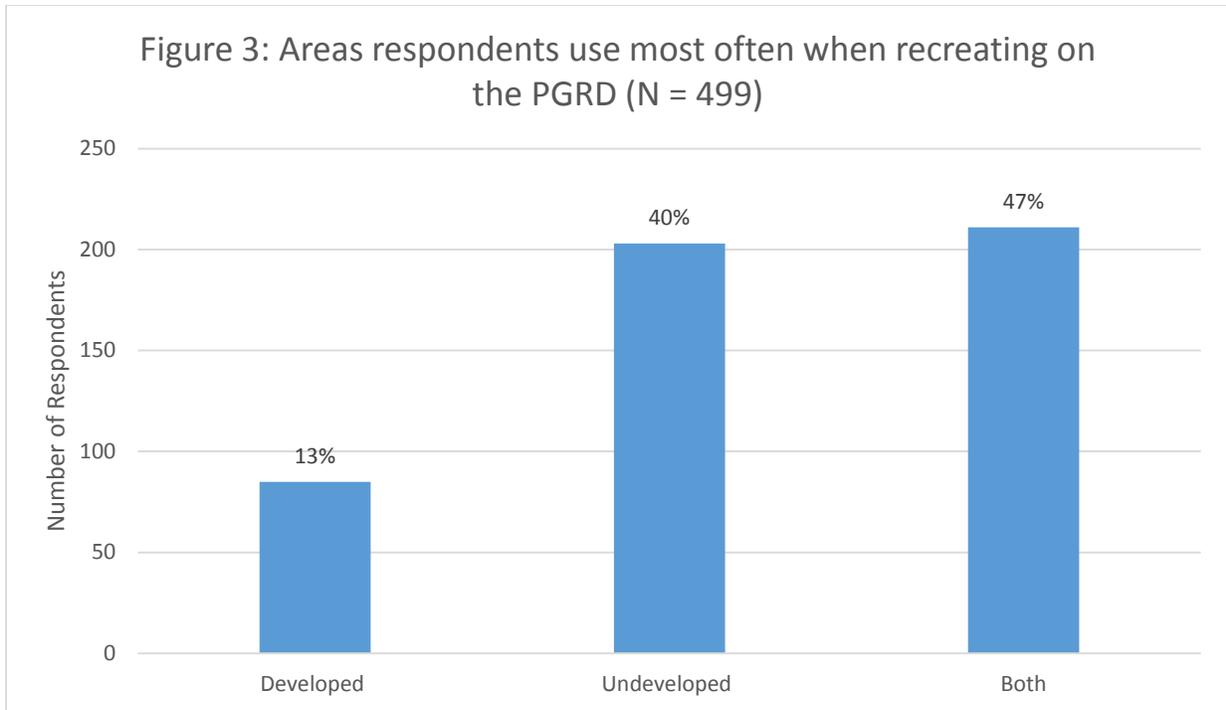
**What types of areas do you use most often when recreating here in American Fork Canyon/the Alpine Loop?**

- Developed areas, such as developed campgrounds, picnic areas, ski resorts, etc.*
- Undeveloped areas, such as trails, dirt roads, rivers and lakes, dispersed camping, wilderness, etc.*
- I use both developed and undeveloped areas equally.*

Forty-two percent of the respondents reporting using both developed and undeveloped areas equally, and 40% said they mostly use undeveloped areas while recreating on the Pleasant Grove Ranger District (Table 7). Only 17% of respondents said they use developed sites most often. Figure 3 presents the types of areas PGRD visitors visit most often.

Table 7: Proportion of respondents who use developed and undeveloped areas

	Number	Percent
Developed	85	17
Undeveloped	203	41
Both	211	42
Total	499	100



For **TODAY**, please check “✓” all of the Recreation Activities you have participated in (or will participate in). Then, **Circle** your **MAIN** activity or purpose for visiting American Fork Canyon/Alpine Loop **TODAY**.

✓	RECREATION ACTIVITIES
<b>NON-MOTORIZED ACTIVITIES</b>	
	Hiking/Walking
	Trail running
	Horseback riding
	Road cycling
	Mountain biking
	Fat biking
	Non-motorized water travel (canoe, kayak, raft, sail)
	Rock climbing
	Ice climbing
	Downhill skiing (Resort)
	Snowboarding (Resort)
	Cross-country skiing
	Backcountry skiing
	Backcountry snowboarding
	Snowshoeing
	Sledding, tobogganing
	Other non-motorized activities (races, endurance events)
<b>MOTORIZED ACTIVITIES</b>	
	Driving for pleasure on roads (paved, gravel or dirt)
	Riding on motorized trails (non-snow, OHV/ATV)
	Snowmobile travel
	Other motorized activities (races, games)
<b>VIEWING &amp; LEARNING—NATURE &amp; CULTURE</b>	
	Viewing wildlife, birds, fish, natural features, scenery, flowers, etc.
	Photographing birds, fish, natural features, scenery, flowers, etc.
	Visiting historic and prehistoric
	Nature study
	Visiting a nature center, interpretive trail, or visitor center

✓	RECREATION ACTIVITIES
<b>CAMPING OR OTHER OVERNIGHT</b>	
	Camping in developed sites (family or group sites)
	Primitive camping (motorized in roaded areas)
	Primitive camping (backpacking in unroaded backcountry areas)
	Resorts, cabins, or other accommodations on Forest Service managed lands (private or FS)
<b>FISHING &amp; HUNTING</b>	
	Fishing—all types
	Hunting—all types
<b>OTHER ACTIVITIES</b>	
	Picnicking or family day gatherings in developed sites (family or group)
	Gathering mushrooms, berries, firewood, or other natural products
	Relaxing, hanging out
	Escaping heat, noise, pollution, etc.
	Exercising
	Walking/Exercising Pet(s)
	Visiting Timpanogos Cave National Monument
<b>OTHER ACTIVITIES NOT LISTED? (Please write in below and ✓ to left.)</b>	

The question on the previous page asks two things: it first asks respondents to identify all of the recreational activities they will be participating in during their visit to the PGRD, and it also asks them to identify their “main” activity or reason for visiting. The most popular “main” recreational activity participated in by PGRD visitors was hiking (32%). The second most popular activity was riding on motorized trails (19%), followed by driving for pleasure (13%), picnicking (10%), camping in developed sites (5%), and rock climbing (4%) (Table 8). (Note: road cyclists are very difficult to survey given they do not “use” any specific site. Therefore, the number of road cyclists are very likely underrepresented in this table.)

Table 8: Respondents’ main reason for visiting the Pleasant Grove Ranger District

	Number	Percent
Hiking/Walking	159	32
Riding on motorized trails (non-snow, OHV/ATV)	95	19
Driving for pleasure on roads (paved, gravel, or dirt)	64	13
Picnicking of family day gatherings in developed sites (family or group)	50	10
Camping in developed sites (family or group)	26	5
Rock Climbing	20	4
Fishing	13	3
Trail Running	13	3
Road Cycling	9	2
Primitive camping (motorized in roaded areas)	9	2
Hunting	9	2
Viewing wildlife, birds, fish, natural features, scenery, flowers, etc.	8	2
Relaxing, hanging out	7	1
Mountain Biking	4	1
Non-motorized water travel (canoe, kayak, raft, sail)	4	1
Primitive camping (backpacking in unroaded areas)	3	1
Walking/Exercising Pet(s)	2	0
Horseback Riding	1	0
Other non-motorized activities (races, endurance events)	1	0
Photographing wildlife, birds, fish, natural features, scenery, flowers, etc.	1	0
Visiting a nature center, nature trail, or visitor center	1	0
Escaping heat, noise, pollution, etc	1	0
Exercising	1	0
	501	100

Table 9 includes all of the activities in which respondents reported participating. To clarify, someone could visit the PGRD to ride their ATV, and they identify riding their ATV as their main activity, but they also may take pictures of the scenery and have a picnic. Data collected over the fall quarter show that hiking (56%) is still the most common activity, but hiking was followed by viewing wildlife, birds, fish, natural features, scenery, flowers, etc. (41%), relaxing and hanging out (33%), photography (28%), driving for pleasure on roads (28%), and riding on motorized trails (22%).

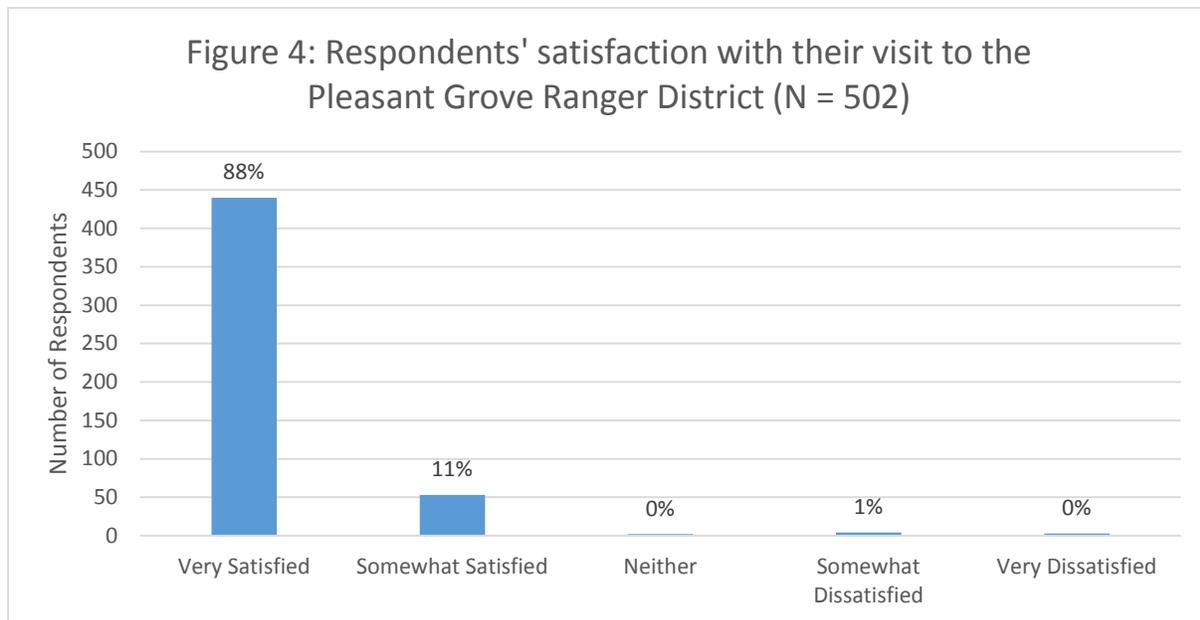
Table 9: All activities respondents participated

	Number	Percent
Hiking/Walking	280	56
Viewing wildlife, birds, fish, natural features, scenery, flowers, etc.	206	41
Relaxing, hanging out	165	33
Photographing wildlife, birds, fish, natural features, scenery, flowers, etc.	141	28
Driving for pleasure on roads (paved, gravel, or dirt)	141	28
Riding on motorized trails (non-snow, OHV/ATV)	112	22
Picnicking of family day gatherings in developed sites (family or group)	107	21
Escaping heat, noise, pollution, etc.	97	19
Exercising	91	18
Walking/Exercising Pet(s)	60	12
Camping in developed sites (family or group)	50	10
Fishing	36	7
Trail Running	29	6
Visiting historic sites	28	6
Rock Climbing	22	4
Visiting a nature center, nature trail, or visitor center	18	4
Primitive camping (motorized in roaded areas)	18	4
Nature study	15	3
Hunting	17	3
Visiting Timpanogos Cave National Monument	13	3
Gathering mushrooms, berries, firewood, or other natural products	12	2
Primitive camping (backpacking in unroaded areas)	11	2
Non-motorized water travel (canoe, kayak, raft, sail)	10	2
Road Cycling	10	2
Mountain Biking	8	2
Horseback Riding	1	0
	501	Does not equal 100%

**Overall, how satisfied or dissatisfied are you with your visit to American Fork Canyon/the Alpine Loop today?**

- Very satisfied**
- Somewhat satisfied**
- Neither satisfied or dissatisfied**
- Somewhat dissatisfied**
- Very dissatisfied**

The majority of respondents (88%) were “very satisfied” with their visit to the PGRD, and 11% were “somewhat satisfied.” One percent were “neither satisfied or dissatisfied” or “Somewhat dissatisfied/very dissatisfied” (Figure 4).



**What is the main reason you chose to recreate at this specific site today? (e.g., picnic tables, bathrooms, trail shade, fewer people, scenery, close to home, etc.)**

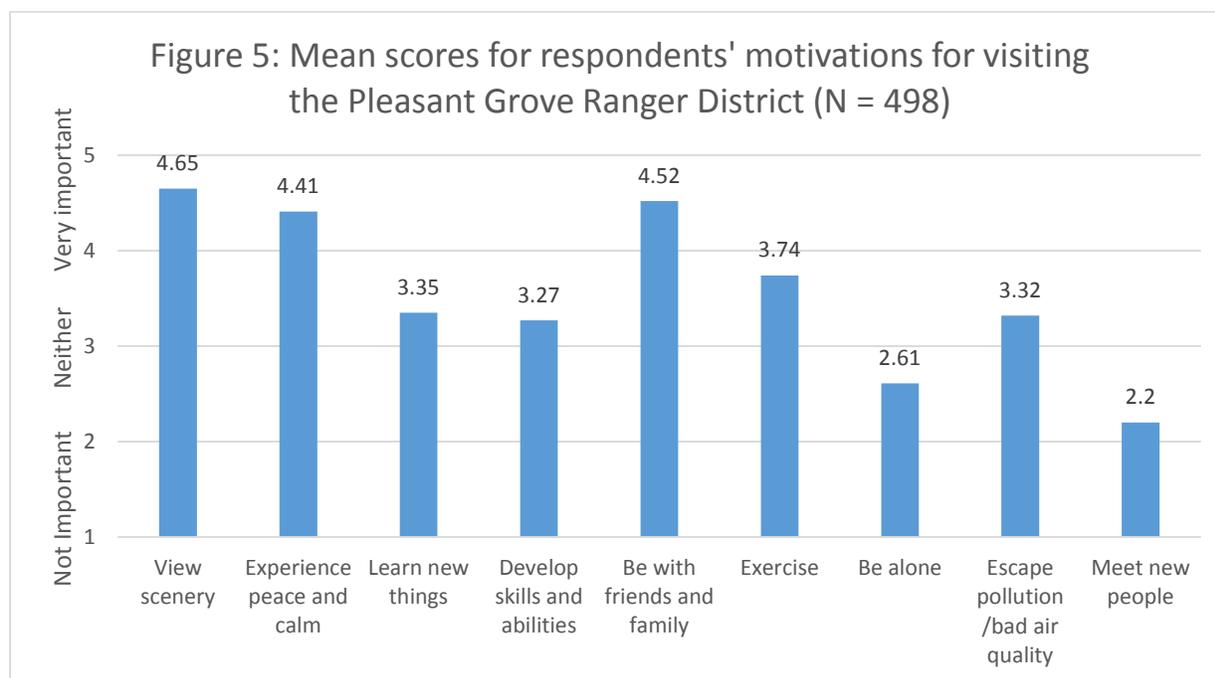
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Respondents were asked why they chose the site they did, and the most common reason was because the site was close to their home. The next most common reason was for the scenery/beauty, followed by access to trails. Other reasons given by respondents were picnic tables/areas and fewer people. For the full list of reasons why respondents chose the sites they did, by location, please refer to Appendix B.

**What motivated you to recreate TODAY? Please rank below.**

	<i>Not Important at All</i>	<i>Somewhat Unimportant</i>	<i>Neither Unimportant nor Important</i>	<i>Somewhat Important</i>	<i>Very Important</i>
<b><i>View scenery</i></b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b><i>Experience peace and calm</i></b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b><i>Learn new things</i></b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b><i>Develop skills and abilities</i></b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b><i>Be with friends and family</i></b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b><i>Exercise</i></b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b><i>Be alone</i></b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b><i>Escape pollution/bad air quality</i></b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b><i>Meet new people</i></b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

There are many reasons why people visit public lands, and the list of motivations above are some of the most common. Respondents were asked to rank each of these motivations on a scale from “not important at all” to “very important.” Respondents ranked “view scenery,” “be with friends and family,” and “experience peace and calm” as the most important motivating factors for visiting the PGRD. Respondents ranked “meet new people” and “be alone” as the least important factors for visiting the PGRD. Figure 5 presents all of the motivations with their corresponding mean scores.





**Have you recreated in the Lone Peak Wilderness or Mt. Timpanogos Wilderness areas?**

Yes →  Lone Peak Wilderness, and/or  Mt. Timpanogos Wilderness

No

I don't know

**If yes, what recreational activities do you typically engage in when you visit these Wilderness areas?**

Respondents were asked if they had ever recreated in the Lone Peak or Mount Timpanogos Wilderness Areas, and 60% of respondents said they had. Those respondents who had visited the Wilderness areas on the PGRD were asked which of the two Wilderness areas they visited, and 47% said they visited both Wilderness areas, 46% said they visited only Mount Timpanogos Wilderness area, and 7% said they only visited Lone Peak Wilderness.

Respondents were then asked what kinds of activities they participate in when they visit these Wilderness areas. Most (73%) said hiking, followed by backpacking (16%), trail running (7%), and rock climbing (5%) (Table 10).

Table 10: Wilderness recreation activities

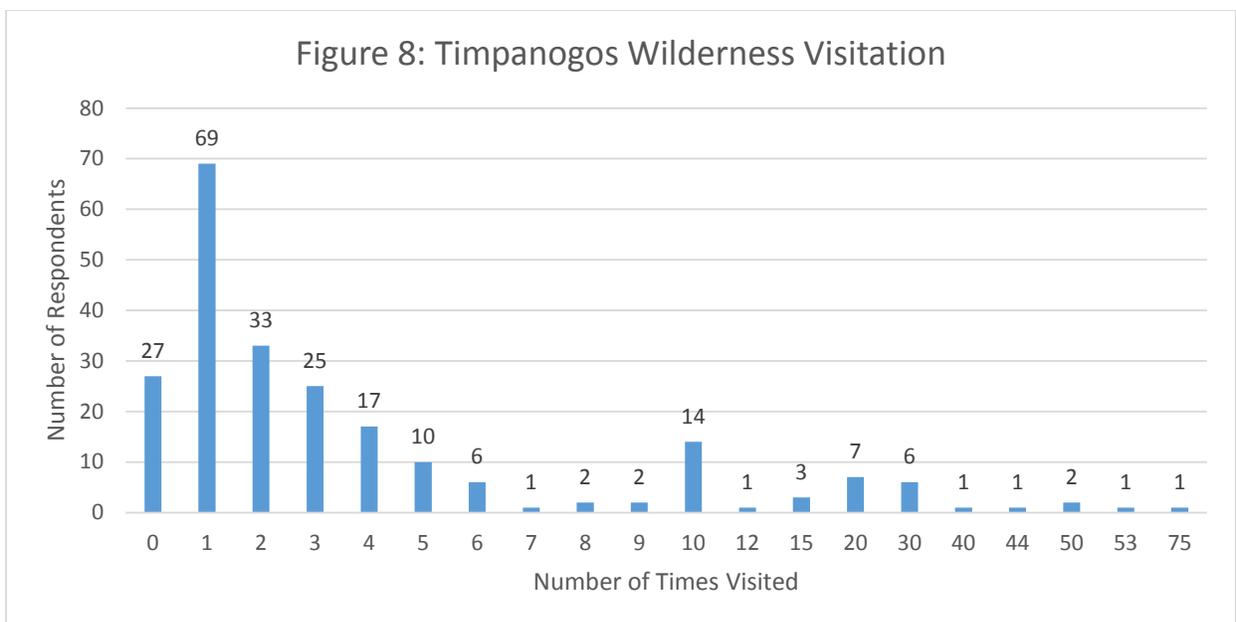
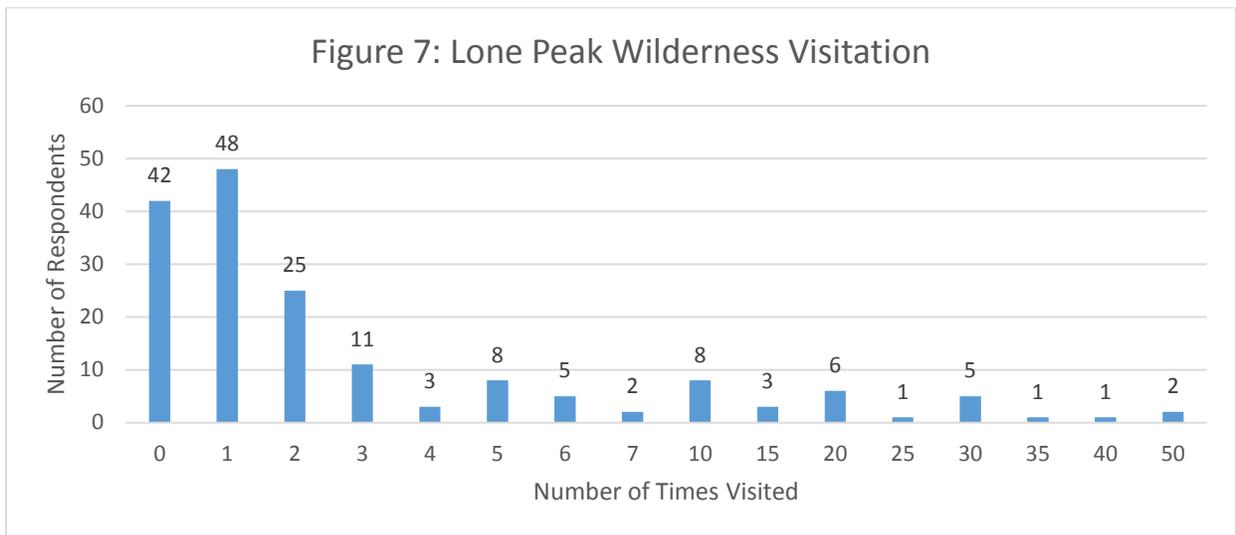
	Number	Percent
Hiking/Walking	196	73
Primitive camping (backpacking)	43	16
Trail Running	18	7
Rock Climbing	13	5
Fishing	11	4
Hunting	10	4
Backcountry skiing	3	1
Viewing wildlife and natural features	3	1
Horseback Riding	2	1
Photographing wildlife and/or natural features	2	1
Picnicking	2	1
Cross-country skiing	1	0
Snowshoeing	1	0
Escaping heat, noise, pollution, etc.	1	0
N = 270		100

**How many times have you visited these Wilderness areas in the last 12 months?**

**Lone Peak Wilderness** \_\_\_\_\_

**Mt. Timpanogos Wilderness** \_\_\_\_\_

Respondents were then asked how many times they have visited one or both of these Wilderness areas in the last twelve months. Respondents reported visiting the Lone Peak Wilderness Area slightly less frequently (median = 1) than the Mount Timpanogos Wilderness area (median = 2). Figures 7 and 8 below present the distributions of respondents' Wilderness visitation on the PGRD.





this quarter said they wanted additional Wilderness to limit the amount of area accessible to motorized vehicles such as motorcycles, four-wheelers, and side-by-sides than in the summer quarter.

A large proportion of respondents said they would support Wilderness expansion, but they had stipulations, such as where the expansion would occur. Some also said they would support Wilderness expansion as long as it did not limit the current amount of off-highway vehicle and mountain bike access.

Comments left by respondents who said they would not support the expansion of Wilderness areas on the PLGD fell into two categories: 1) “I like it how it is” and 2) “Do not limit access.” Those who opposed Wilderness expansions because it would limit access were mostly concerned about losing motorized vehicle and mountain bike access. They were also concerned about the children and elderly people who may lose access because of their inability to hike long distances. Many also said they like the current balance, and there is no need to change it.

***Are there places in American Fork Canyon/Alpine Loop you no longer visit because encounters with other forest users/uses have negatively affected your recreational experience?  Yes  No***

***If Yes, please identify the area(s) and explain the type of encounter and why you no longer visit:***

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Respondents were asked if there were places on the PGRD they no longer visit because of negative encounters and/or experiences, and 89.9% said “no” there were not places they no longer visit, and 10.1% said “yes” there were places they no longer visit.

When asked what area(s) they no longer visit and what negatively affected their experience, the most common location was Tibble Fork Reservoir and the roads above Tibble Fork Reservoir, and the reasons for no longer visiting ranged from the area being too loud because of ATV/motorcycles and it being altogether too crowded and chaotic. Other areas were also mentioned, such as Mount Timpanogos (too crowded) and American Fork Canyon (too crowded). Some respondents did not mention specific areas, but said they avoid areas where there are many off-highway vehicles and areas that are generally crowded (these are the two main reasons people avoid areas), and some said they just avoid weekends all together. To see all of the locations respondents said they no longer visit, and the reasons why they no longer visit, please refer to Appendix E on page 62.

**About how many people outside of your group did you encounter (see, talk to, interact with, etc.) while recreating today? \_\_\_\_\_ people**

**What do you think about the number of people you encountered while recreating today?**

**Did they positively enhance your experience?  Yes  No**

**If Yes, in what ways? Please describe:**

---

**Did they negatively affect your experience?  Yes  No**

**If Yes, in what ways? Please describe:**

---

**They neither positively enhanced nor negatively affected my experience.**

Respondents were asked how many people outside of their group they encountered while recreating. The median number of out-group encounters was ten people (mean = 18.11), and the range was from zero to 400 out-group encounters. The number of out-group encounters stayed relatively consistent with the summer's as the median for both quarters was ten; however there was a slight decrease in the mean over the fall (summer mean = 26; fall mean = 18) which indicates the number of out-group encounters has started to decrease.

Respondents were then asked how those out-group encounters affected their visit to the PGRD. Forty-seven percent said their out-group encounter positively enhanced their recreational visit, 43% said their out-group encounter had no impact, and 9% said their out-group encounter had a negative impact on their experience. Therefore, 90% said their out-group encounter(s) either positively enhanced or had no impact on their visit to the PGRD (Figure 10). There was a slight decrease in the number of out-group encounters that had a negative impact on respondents' recreational experience. During the spring, only 4% of out-group encounters negatively affected respondents' experience, and over the summer that increased to 12%, and in the fall it fell to 9%. With the large increase of visitors during the summer, it is understandable to see the number of conflicts and the level of crowding increase. As the number of visitors starts to decrease as the fall progresses, we are seeing the level of negative out-group encounters decrease as well.

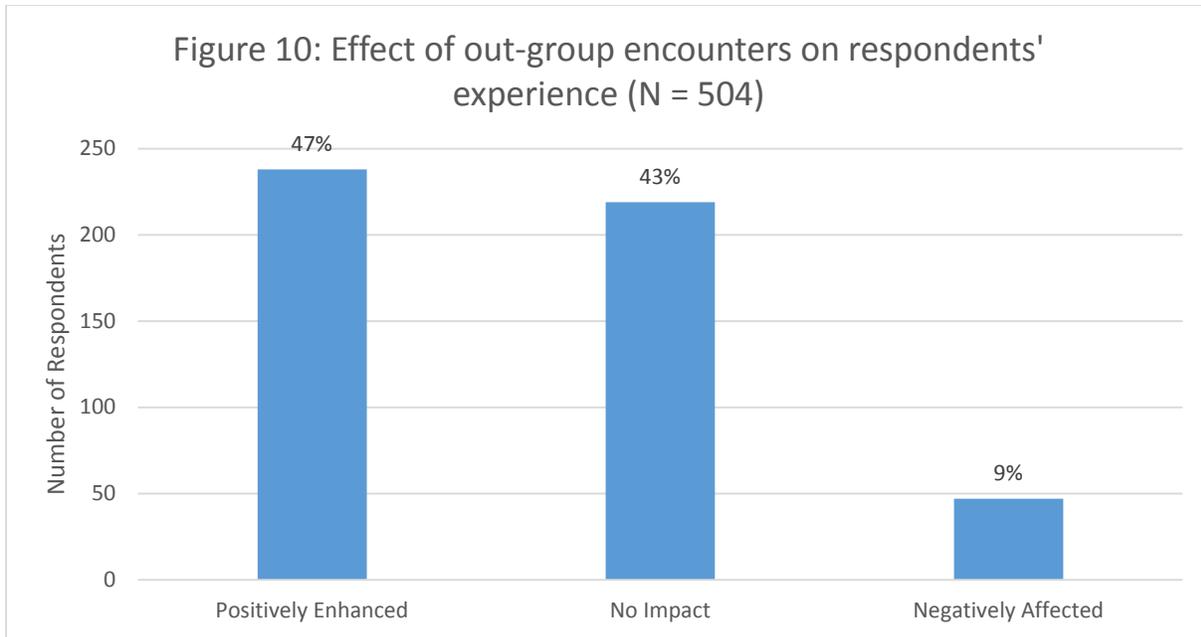


Table 11 presents the comments explaining why respondents' out-group encounters negatively affected their experience by location.

Table 11: Explanations of negative out-group encounter by location

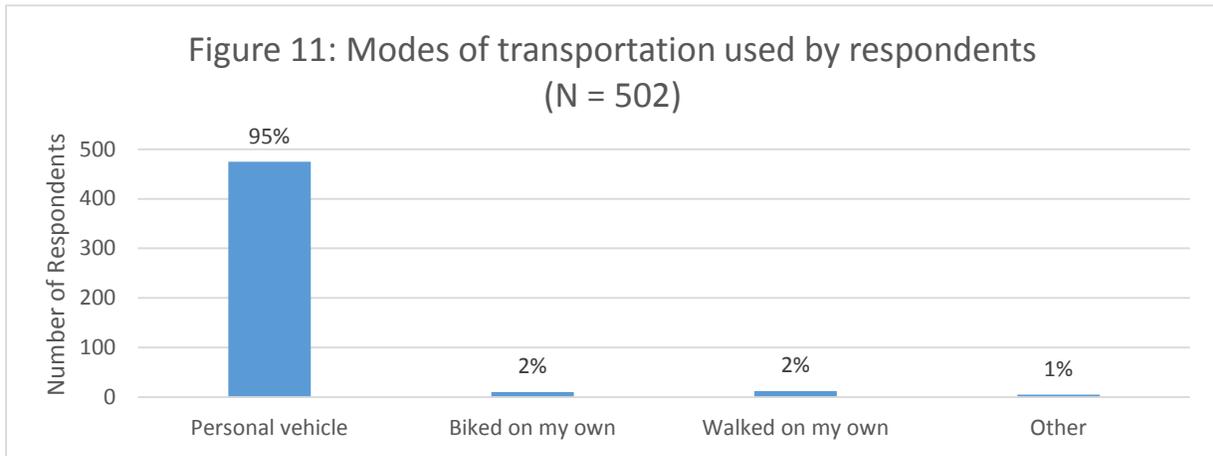
Location	Comment
Little Mill	Selfish—like it to myself. Too many people. Uncomfortable.
Summit Trailhead	Hunters - so we had to be careful and make noise. Hunters shooting Bambi. Too many cars on road. Unsafe for them to be hiking during hunting season. Unsafe when hunting, scare wildlife.
Mt Timpanogos TH/Picnic Site/Theater in the Pines	Sad to see goat hunter wanting to kill goats. Too many.
Martin	Prefer to be alone in recreational activities.

Tibble Fork	<p>Don't like all the motorized vehicles.  Generally I like fewer people, but expected a crowd on Sunday afternoon.  Nowhere to park.  Quite a few off-road vehicles being loud.  Too many people.  Too many people.  Too packed with not enough privacy.</p>
Upper Mill	<p>I rather see the Wilderness.  It was a little busy for us.  They were close, we were not alone.  Too many.</p>
Cascade Springs Lower	<p>People off trail.  They were kind of loud.  Too much traffic.</p>
Dutchman Flat	<p>A bit overused.  I like to be out alone.  No solitude.  Noise at late hours.  Slowed me down.  They arrive at midnight or 1 am and made a ton of noise until 4am.</p>
Mineral Basin	<p>Drove too fast (razors).  I like to be the only person for miles.  One ATV rider almost drove into our Razor - going too fast.  Too many.</p>
Timpooneke TH	<p>A large group was very loud.  I'm a jerk and like to be alone.  Too many.  Usually the less people the better.</p>
Silver Lake Flat	<p>Rode by too fast.  They were noisy.</p>

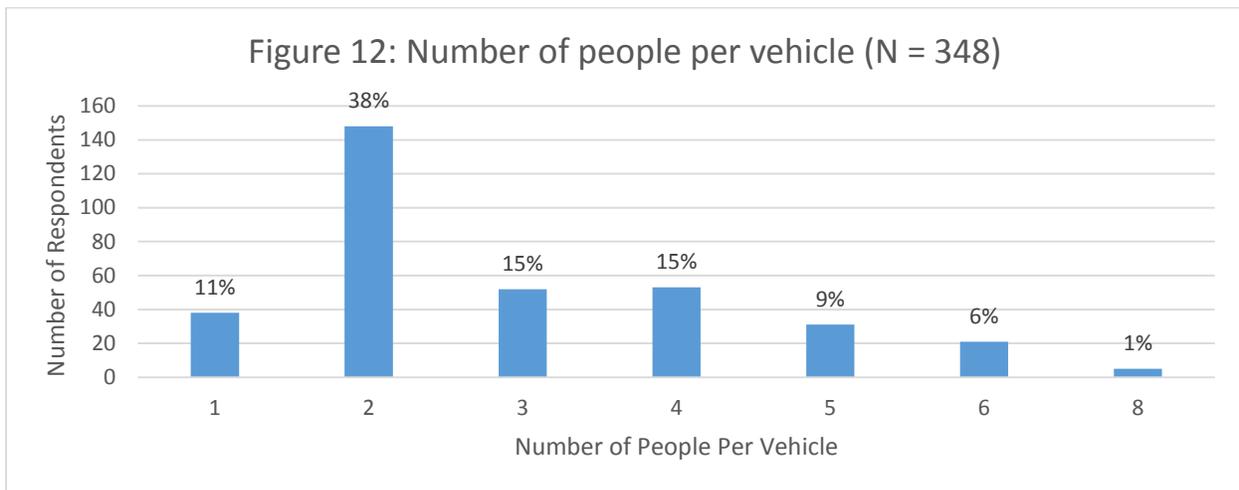
**How did you access the recreation site you are visiting today? (Check one)**

- Personal Vehicle—How many people were in your vehicle TOTAL? \_\_\_\_\_**
- Biked on my own**
- Walked on my own**
- Other Please describe: \_\_\_\_\_**

The most common mode of transportation respondents used to reach their desired recreation site was their personal vehicle (95%). Other modes of transportation were biking (2%), walking (2%), and other (1%). Figure 11 presents the modes of transportation used by respondents to reach their desired locations on the PLGD.



The respondents who used their personal vehicles to reach their desired locations were asked how many people total were traveling in their vehicle. The median number of people per vehicle was two (mean = 2.74) with a range of 1-8. Figure 12 presents the number of people per vehicle.



***If a public transit system were available, would you have used it today to reach this recreation site?***

***Yes***    ***No***

***Please explain:*** \_\_\_\_\_

---

Respondents were asked if they would have used public transportation to reach their desired location the day they were surveyed, and 84.6% said they would not, and 15.4% said they would have if it were available. Content analysis was performed on the comments left by respondents to gain a better understanding of why respondents would or would not have used a shuttle the day they were surveyed.

Of the comments left by respondents explaining why they would not have used a shuttle to reach their desired location, the most common reason was because respondents said they like driving themselves. Another common reason respondents gave was because they would not have been able to carry their gear, dog, OHVs, etc. with them, along with not having control over when they come and leave. Some respondents also said they live so close that it does not make sense to use a shuttle, and some just said they just do not like public transportation and they don't want to see it in the mountains.

The three most common reasons respondents gave for wanting to use a shuttle system were 1) to cut down on congestion in parking areas, 2) less pollution, and 3) it would save them money on fuel.

A large portion of respondents who said they would have used a shuttle had stipulations, such as, it would have to be efficient, cheap, and serve the specific location they wanted to visit.

***To which of the following sites would you like to see shuttle transportation?***

***Timpanogos Cave NM***

***Timpooneke***

***Mt. Timp/AG***

***Sawmill (Cross Country)***

***Summit***

***Cascade Springs***

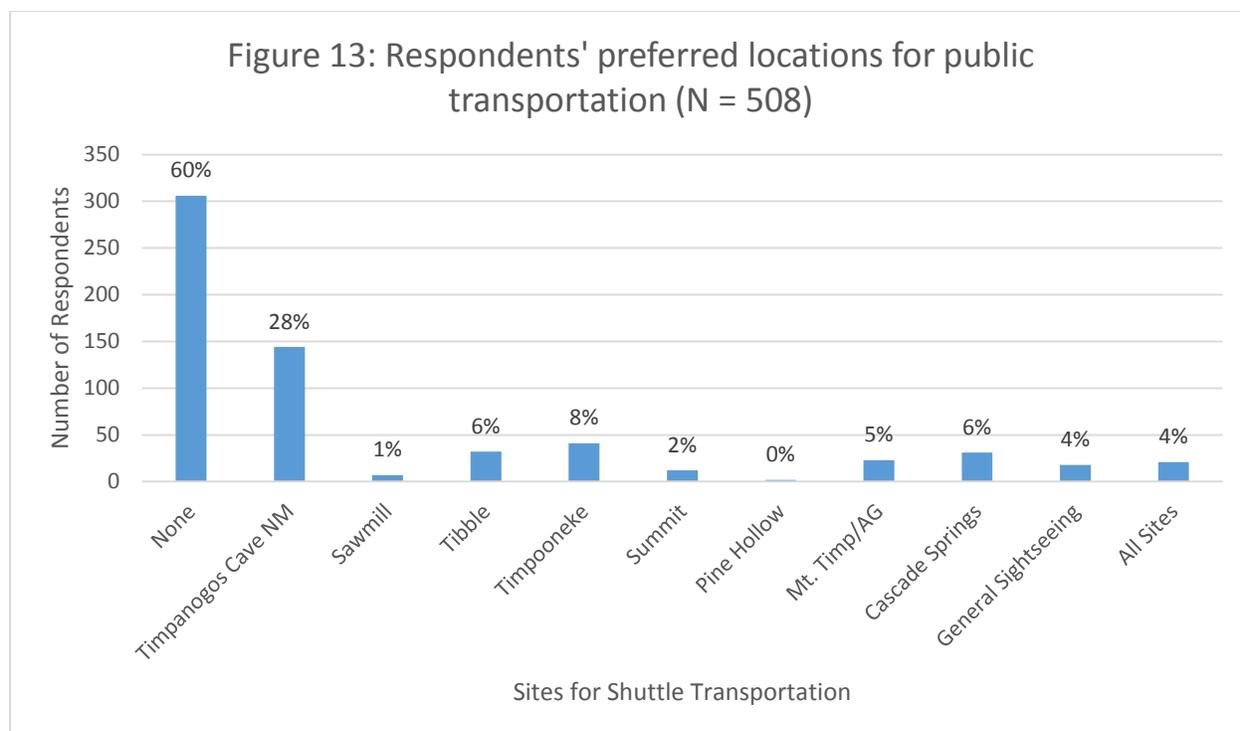
***Tibble***

***Pine Hollow***

***General Sightseeing***

---

Respondents were then asked to pick sites where they would like to see shuttle transportation, and 60% said they would not like to see shuttle transportation to any sites. Of those who would like to see shuttle transportation, 28% said they would like to see a shuttle system implemented for Timpanogos Cave National Monument. Timpooneke (8%) was the next most desired location for shuttle transportation. Only 4% said they would like to see shuttle transportation to all of the sites (Figure 13).



***If you could choose just one or two words to describe your personal feelings about American Fork Canyon/Alpine Loop what would the word(s) be?***

The word map on the cover page of this report was developed from the frequency of words respondents used to describe their personal feeling toward the PGRD. The word “beautiful” is the largest because it was mentioned most by respondents. The words “peaceful,” “calm,” and “love” were also commonly used by respondents. The website *Tagul* was used to develop the word map. For a larger image of the word map, please refer to Appendix F.

***Are you recreating alone today?  Yes  No***

***If No, how many people (total) are in your group? \_\_\_\_\_ people***

***Of these, how many are under 16 years of age? \_\_\_\_\_ people***

The number of people recreating in a group fell during the fall quarter to 85%; during the summer it was 92%, and during the spring 74% of respondents were recreating in a group (Figure 14). The size of groups stayed consistent with the summer—median group size of three—but the mean decreased slightly to 4.04 (spring mean = 3.32; summer mean = 4.69), and the size of groups ranged from two to 35 people (Figure 15). Of the respondents recreating in a group, 29% had group members that were under 16 years of age (Figure 16).

Figure 14: Proportion of respondents recreating alone or in a group (N = 510)

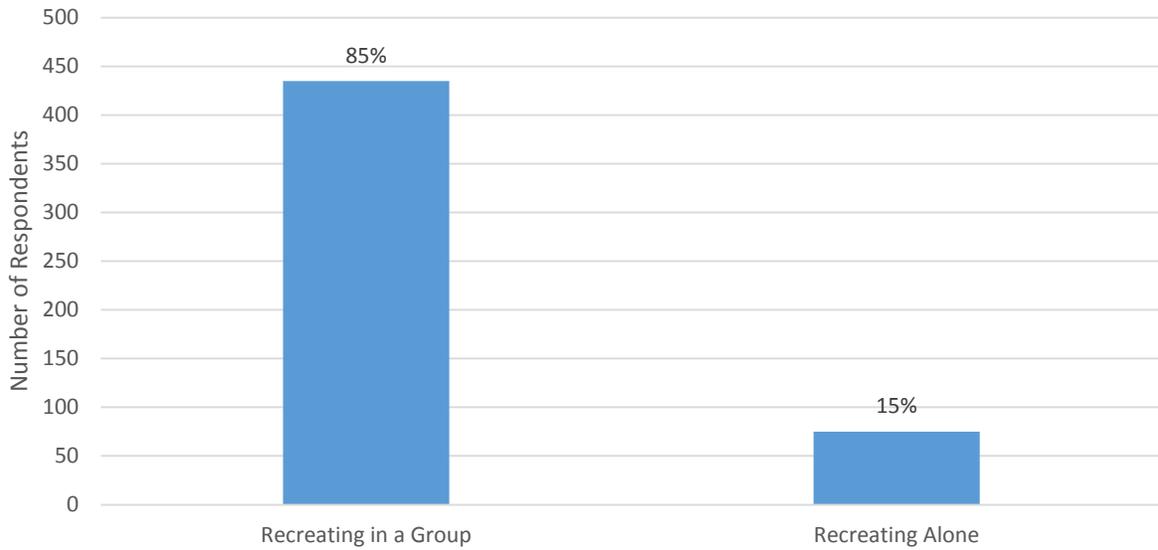
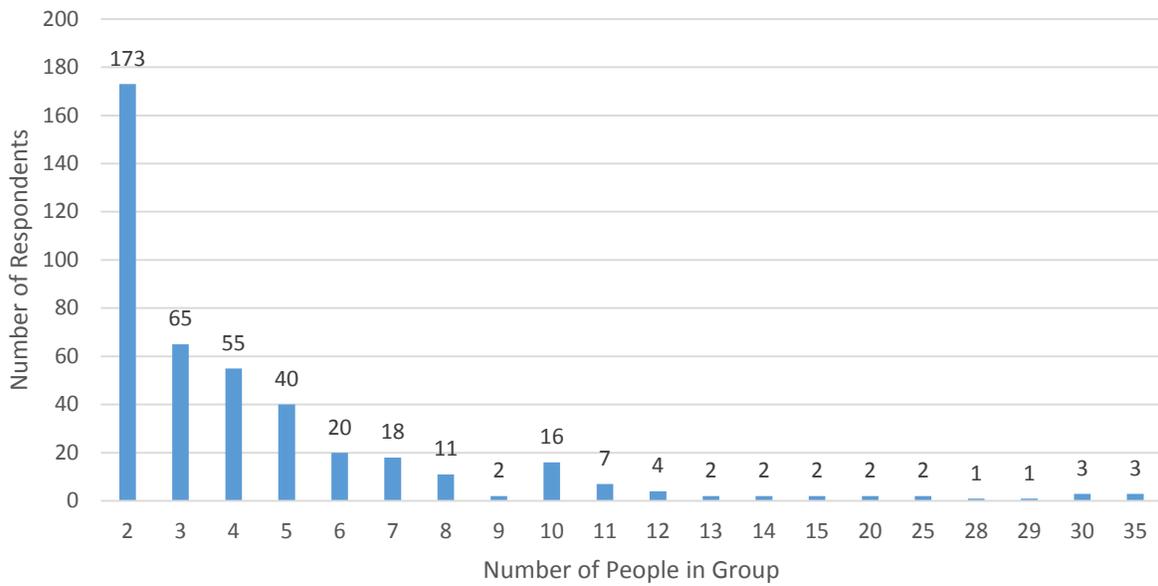
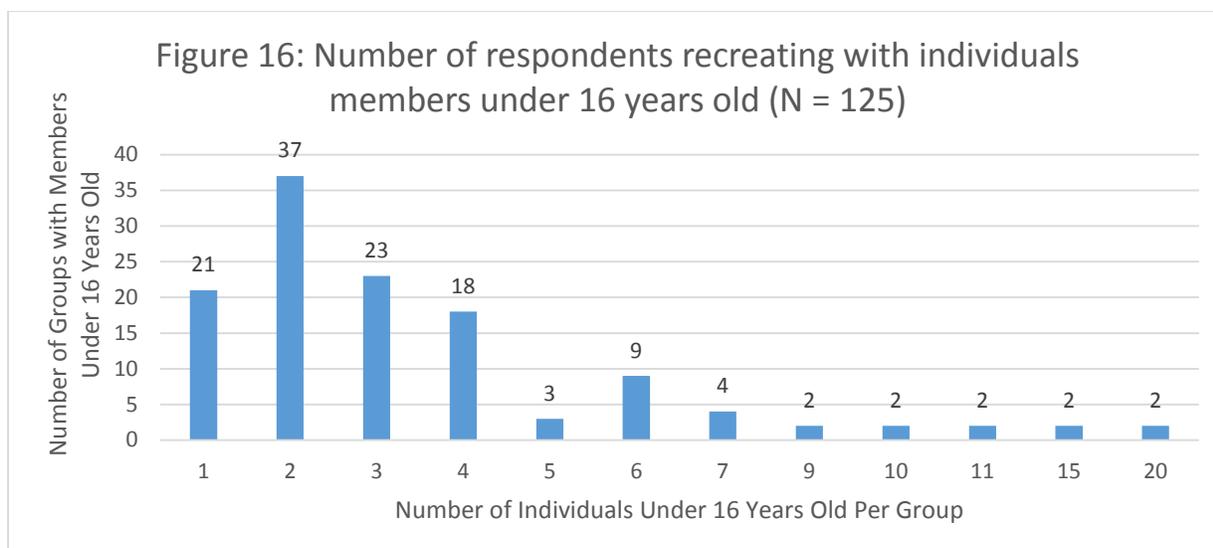


Figure 15: Respondents' group size (N = 429)



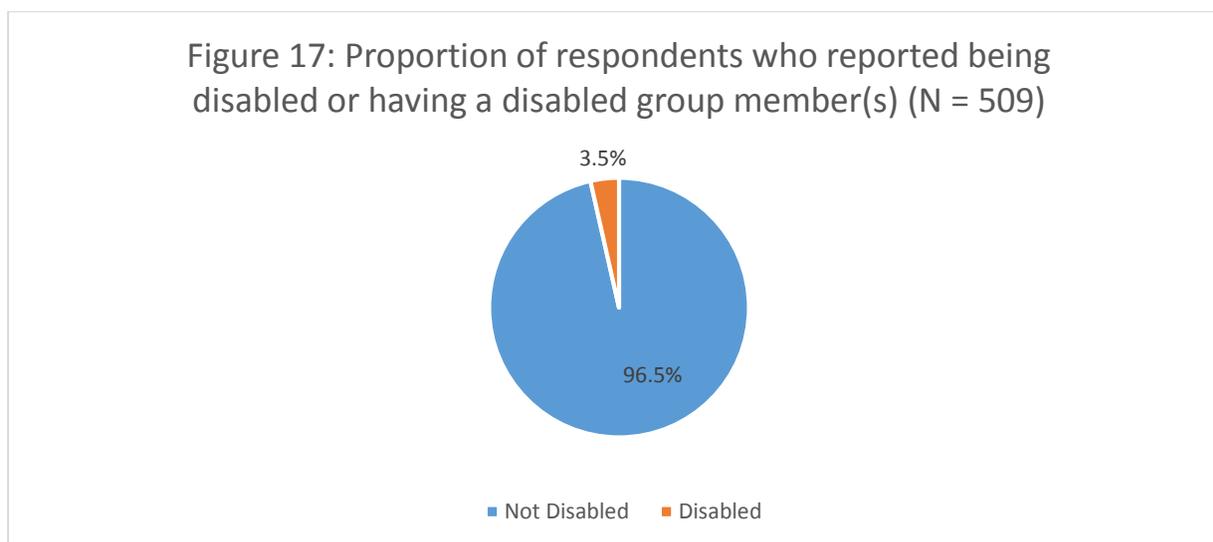


**Does anyone in your group have any disabilities?**  Yes  No

**If Yes, were the areas and facilities you visited accessible?**  Yes  No

**If No, please explain:** \_\_\_\_\_

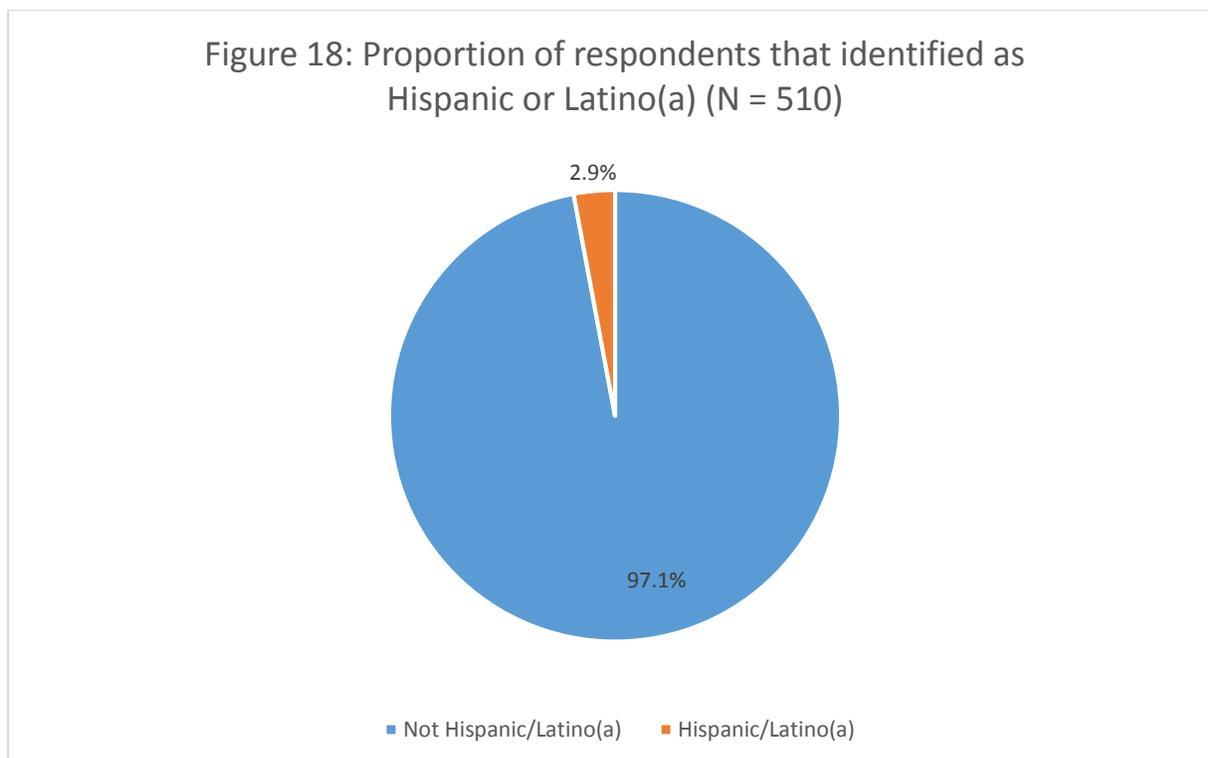
Of the 509 who responded to the question, 18 (3.5%) reported themselves, or someone in their group as being disabled (Figure 17). Respondents who reported themselves, or someone in their group as being disabled were then asked if the sites and facilities they visited were accessible, and all but one said “yes,” they were accessible. One respondent did leave a comment saying, “Couldn’t get to some of the locations that were not wheelchair accessible at Cascade Falls.”



**Do you consider yourself Hispanic or Latino(a)?**

- Yes, Hispanic or Latino(a)**
- No, not Hispanic or Latino(a)**

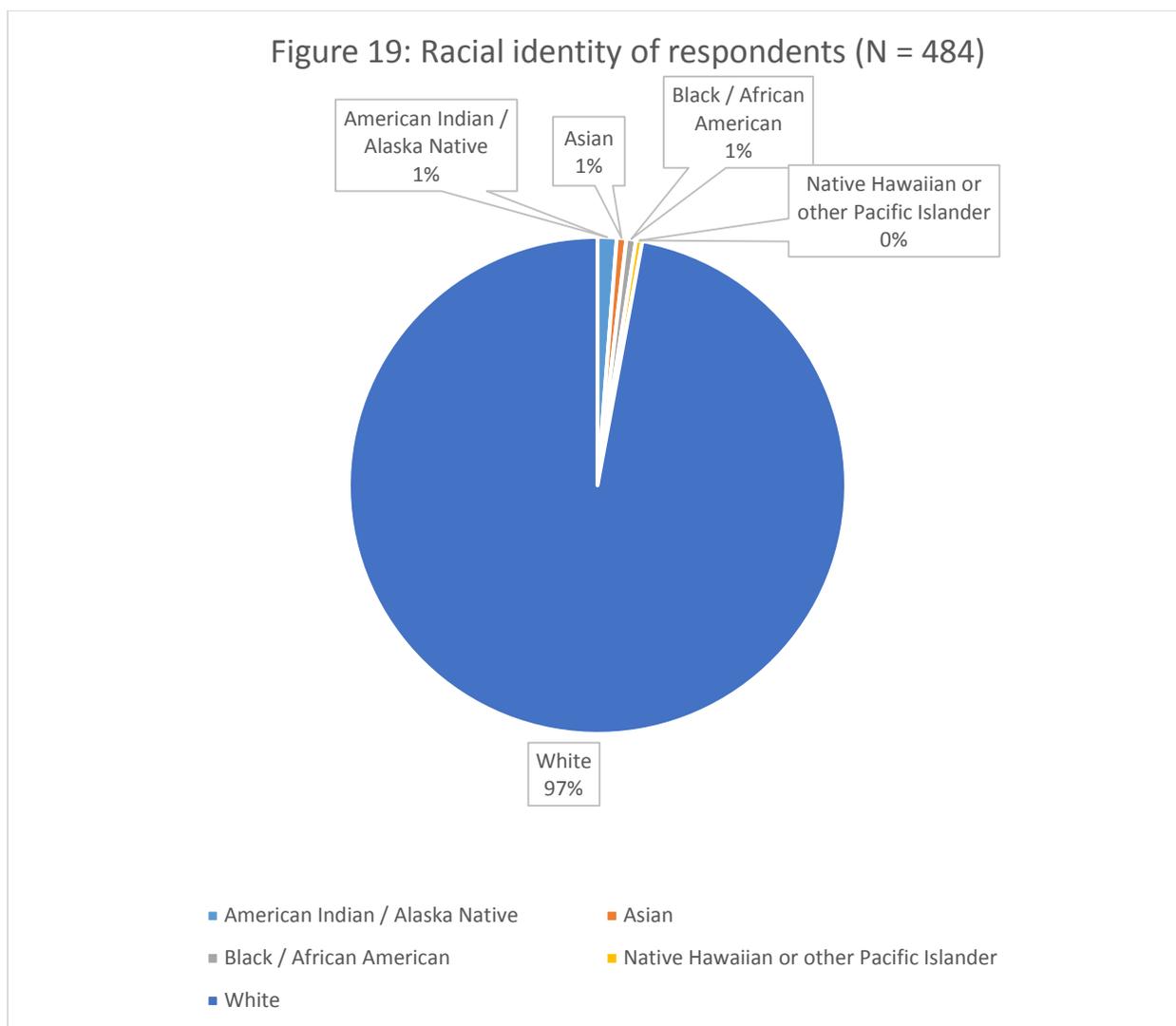
Respondents were asked if they considered themselves Hispanic or Latino(a). Of the 510 people who responded to the question, only 15 (2.9%) identified as Hispanic or Latino(a). Figure 18 presents the proportion of respondents who identified as Hispanic or Latino(a).



**With which racial group do you most closely identify?**

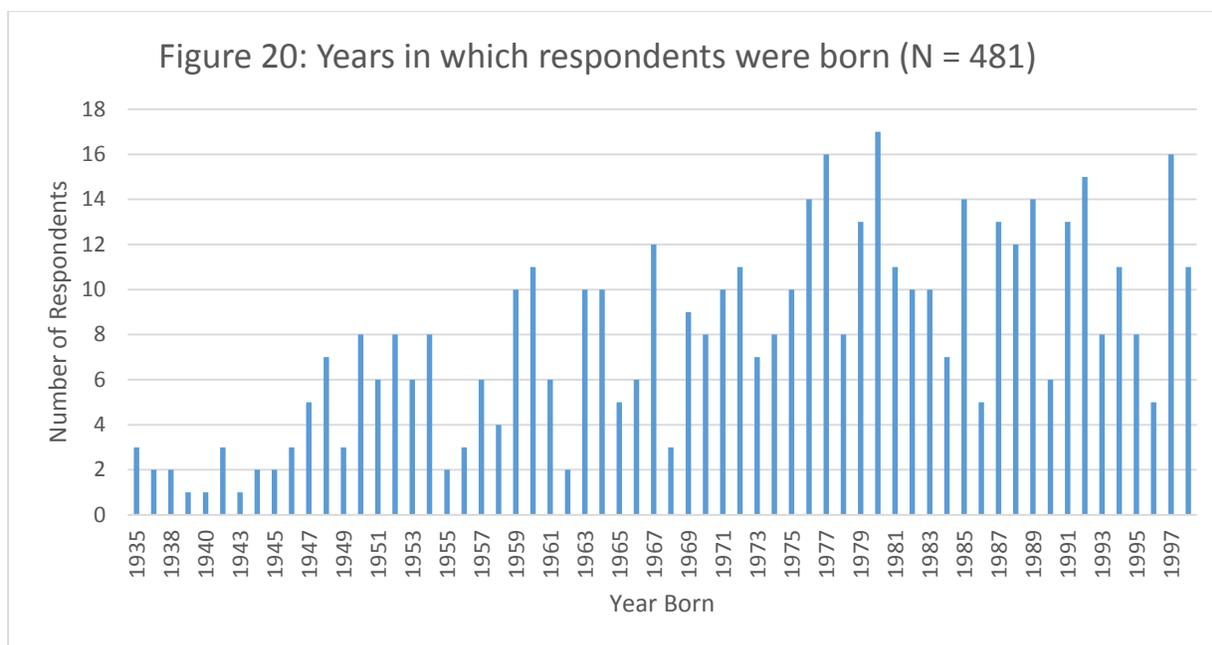
- American Indian/Alaska Native**
- Asian**
- Black/African American**
- Native Hawaiian or other Pacific Islander**
- White**

Respondents were asked which racial group they most closely identified, and 97% identified as “white.” “Asian” (1%), “Black/African American” (1%), and “American Indian/Alaska Native” (1%) were the next most common racial groups respondents identified (Figure 19).



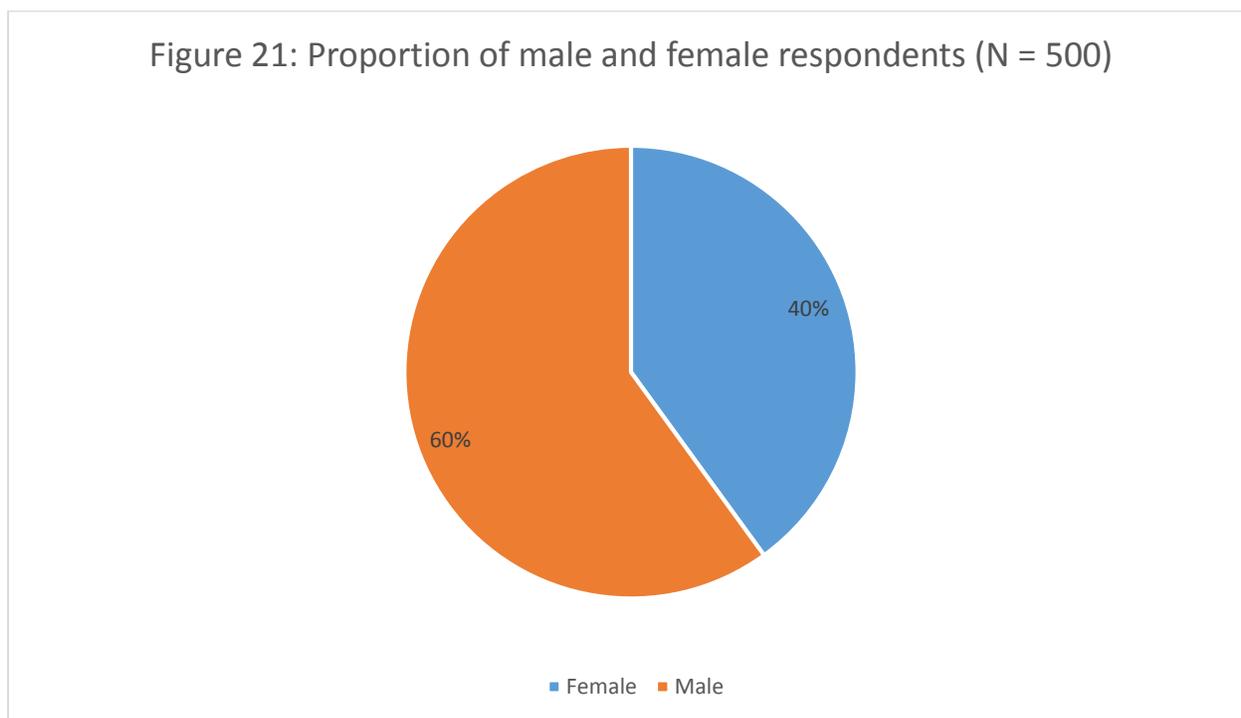
***In what year were you born?*** \_\_\_\_\_

The median age of respondents was 38 years old (mean = 41 years old), and the range was from 18 to 80 years old. Figure 20 presents the distribution of respondents' ages.



**What is your sex:**  Male  Female

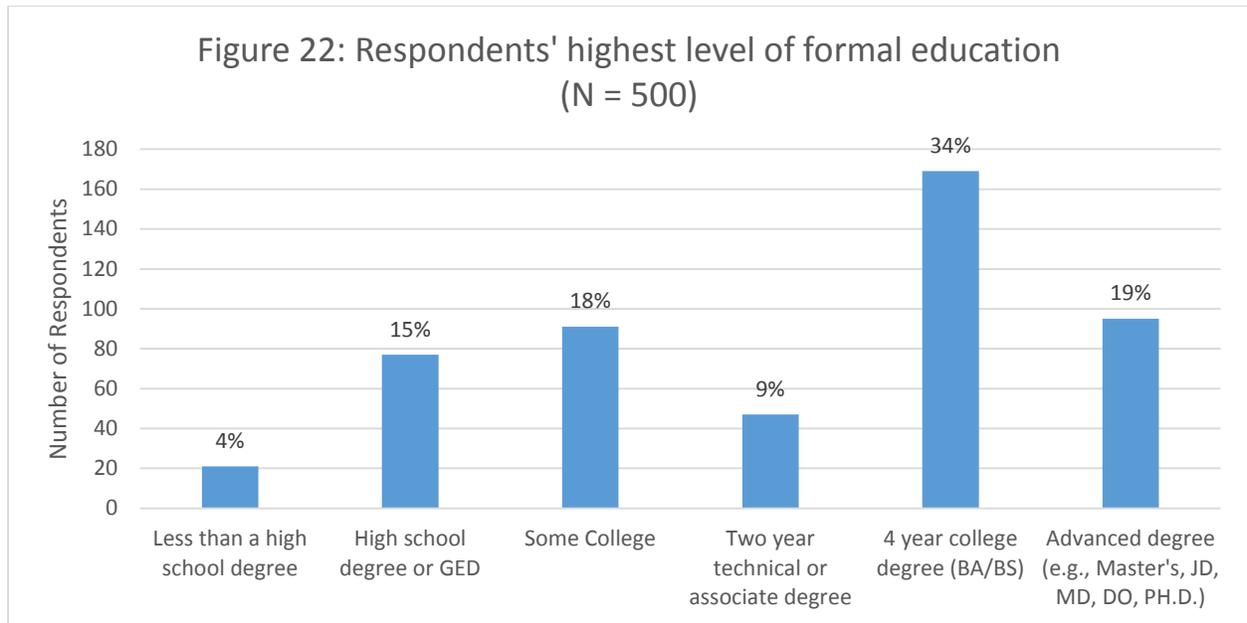
More males (60%) were surveyed than females (40%). Figure 21 presents the proportion of males and females recreating on the PGRD.



**What is the highest level of formal education you have completed?**

- Less than a high school degree*
- High school degree or GED*
- Some college*
- 2 year technical or associate degree*
- 4 year college degree (BA/BS)*
- Advanced degree (e.g., Master’s, JD, MD, DO, Ph.D.)*

There was a wide distribution in the level of respondents’ formal education. The largest proportion (34%) had a “4 year college degree (BA/BS),” and the next highest proportion (19%) had an “advanced degree.” Figure 22 presents respondents’ highest level of formal education.

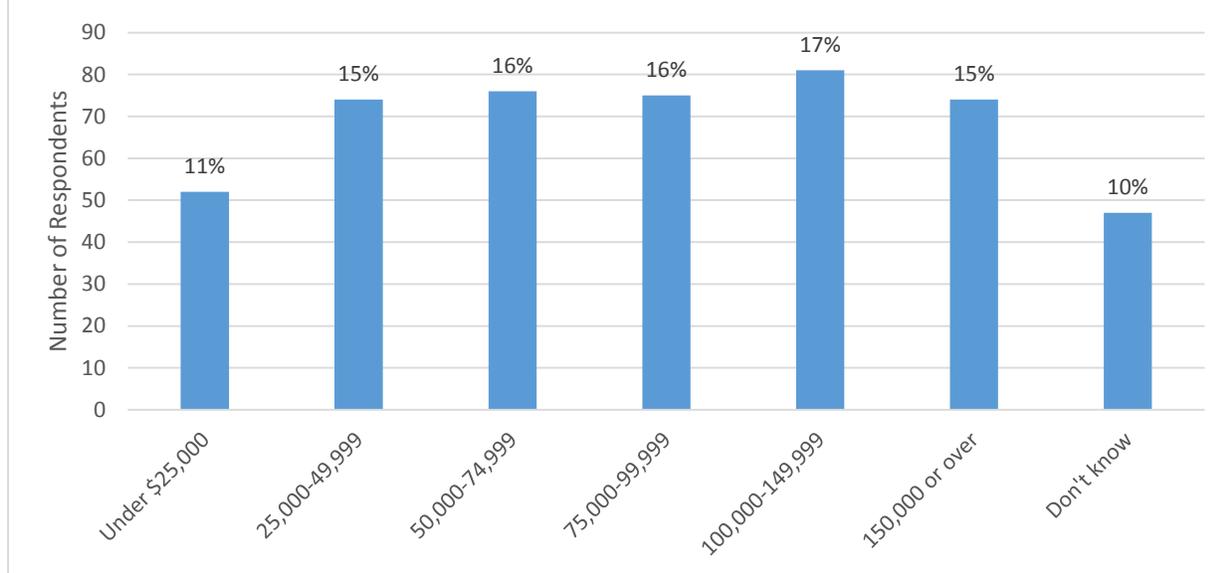


**Information about income is important because people with different incomes come to Public Lands for different reasons. What is your annual household income?**

- Under \$25,000*
- \$100,000-\$149,999*
- \$25,000-\$49,999*
- \$150,000 or over*
- \$50,000-\$74,999*
- Don't know*
- \$75,000-\$99,999*

There was a wide distribution in respondents’ household incomes. Both the mean and median household incomes were in the range of \$75,000 – \$99,999. Figure 23 presents the distribution in respondents’ household incomes.

Figure 23: Respondents' household income  
(N = 479)



## Appendices

## Appendix A: Comments for Forest Service

*If you could ask the U.S. Forest Service to change some things about the way they manage American Fork Canyon/the Alpine Loop, what would you ask them to do?*

A few camp spots that aren't right off the main road.

Add a bike lane.

Add bike lane.

Add more "pay" stations so you don't feel like you're going to a Taylor Swift concert!

Add more trail signs on trails with forks.

Add more trails.

Add roadside trail for bikes/runners from mouth to Tibble TCT. Add more single track trails!  
Restrict motor bikes from certain areas.

Ask more volunteers to come help keep trails clean and maintained. Get more of the public to sign up for work days. Offer free access to working volunteers. Find ways to reach people about proper land use, and keep these areas open for all to enjoy.

Better dirt roads.

Better patrolling for developed sites (safety).

Better restrooms, water.

Better signage at intersections.

Better winter access for higher trailheads (Timpooneke).

Bike lane and garbage cans at picnic areas.

Bike Lane!

Can't think of anything.

Chainsaw logs further from the trails so my feet don't hit the stumps.

Clean the restroom.

Clean the restrooms more often.

Cleaner bathroom.

Cleaner bathrooms.

Cleaner bathrooms.

Cleaner bathrooms.

Cleaner restrooms.

Create more off-road trails.

Cut logs back further along trails.

Dangerous traffic with kids at the entrance of Little Mill Campground. Trash service for campgrounds.

Do not bring developments (i.e. commercial) into these beautiful areas.

Do not develop area.

Do something about the smell of the bathrooms.

Doing good.

Don't allow ski resort expansion.

Don't allow Snowbird expansion.

Don't allow Snowbird to expand. Fix Timpooneke parking issues.

Don't change roads (not paved or improved).

Don't charge for admittance. Take reservation for campers.

Don't issue so many cow tags for elk.

Don't let Snowbird come.

Don't let Snowbird expand into AF.

Don't sell land.

Emergency accessible areas, fish and game.

Emergency cell phone coverage.

Empty toilets more often. Provide trash service in campgrounds.

Enforce speed limits above Tibble Fork.

Every year the campground prices increase without visible improvements. I shouldn't have to pay for an extra vehicle if I have a motor home.

Find a way to obtain more money.

Fine as is.

Fix bathroom, they smell bad.

Fix parking issues on Timpanogos trailheads.

Garbage clean up. Less hunters.

Have Alpine Loop open longer.

Hire a team to inspect and replace climbing bolts.

I appreciate that it is pet friendly.

I do wish there was a pit toilet on Timpanogos trail.

I don't like the fee every time you come up.

I like the way it is.

I think there are too few wildlife (e.g. deer, elk, moose) because of hunting tags. No expansion of Snowbird. Better road to Mineral Basin and Forest Lake. Better trail to Pittsburg Lake and Silver Glance Lake.

I would rather pay higher taxes than \$7 at Soldier Hollow parking lot.

Roads should be WIDER and safer so biking and walking is not so scary!

Increase the number of campsites.

Is there a way we could make it safer to cycle up the canyon? I love seeing so many people hike Timpanogos, but it is getting overused...large groups parking up and down the road. Don't know how to solve this problem... Could we build more trailheads; more options for people to go?

It's great.

It's great.

It's great, thanks.

Keep access open.

Keep access open, no Snowbird.

Keep all the trails well marked.

Keep bathrooms open. Have picnic area close to Cascade Springs (next to).

Keep building trails for MOTORCYCLE and MOUNTAIN BIKE use!!! Keep it primitive and private.

Keep doing good things.

Keep doing what you're doing.

Keep houses out!!!

Keep it beautiful, limit land.

Keep it the same.

Keep it up.

Keep it wild.

Keep open access.

Keep open for OHV.

Keep open for OHV.

Keep protecting the land.

Keep roads clear of debris (Fist sized rocks or larger).

Keep ski expansion out.

Keep ski resorts out.

Keep Snowbird out.

Keep Snowbird out.

Keep Snowbird out.

Keep the bathrooms clean.

Keep the Loop Road open as long as possible. Open it earlier, when snow is melted. Keep campgrounds open and do construction during times of low usage.

Keep trails open.

Keep trails open at all costs.

Leave it alone.

Leave it natural.

Leave it the way it is, no ski resort.

Leave the bathrooms open (at Cascade Falls, the flush toilet).

Fewer four wheelers.

Less bumpy dirt roads.

Fewer motorized activities.

Fewer people.

Limit motorized vehicles on dirt trails and snowmobiles in winter. There's too much noise and air pollution due to these on trails. Keep motorized vehicles to paved roads and dirt roads.

Limit number of people on holidays. Police fishing limit.

Limit the access to cars past Tibble Fork. Better maintain the roads.

Lower fee for annual pass.

Maintain trails.

Maintain Wilderness areas, minimize snowmobile use.

Make AF canyon roads passable by licensed vehicles only.

Make bathrooms stink less; more undeveloped places to camp.

Make bike lane.

Make more trails. Keep Snowbird out.

Make most camp sites off the main road so people don't get dusted.

Make road one way.

Make sure campgrounds are well maintained (tables, sites).

Make sure there are bathrooms.

Manage quantity of people.

Map service for trails.

Maybe a few more pullouts.

Maybe provide more places to dispose of trash. I hate coming up here and seeing trash in the beautiful canyon.

Mile markers on trails.

More accessible camping for RV users.

More bathrooms, fewer people.

More camping areas with non-active use.

More cooperation with Access Fund to help manage the area.

More detailed hiking maps.

More hiking opportunities.

More information about trails.

More maps.

More mountain biking on front.

More parking for the Aspen Grove side of Timpanogos.

More parking for trailers, campers, picnics and more restrooms and trails.

More parking lots for ATV trailers.

More rangers to interact with.

More running water (drinkable).

More signs at Horsetail Falls.

More signs/encourage less trash on trails.

More single track.

More trail maintenance.

More trails.

More trash awareness.

Never ever, ever develop it.

Nicer bathroom.

No changes needed - just road maintenance. Maybe more parking areas for horse trailers.

No commercial expansion.

Don't diminish OHV use.

No fee.

No land swaps that diminish OHV use.

No more controlled burns, too risky.

No pay stations, I don't think it breaks even. More trail (hiking and biking). I don't like lofty peaks or any for-profit venture that is exclusive. Cut trees back further on trails.

No ski expansion.

No ski expansion from SLC canyons.

No to Snowbird.

None, doing a great job.

Not sure, perhaps a bin we could put recycled plastic bags and a bin for doggie bags.

Nothing.

Nothing.

Nothing, it's perfect.

Open canyon days (free).

Open loop earlier in spring.

Open more trails.

Open the bathrooms or map to nearest facilities (people often didn't see the vault toilet).

Open the front side of Mt. Baldy.

Patrol it and keep people on the trails. Enforce people without spark arresting mufflers.

Pay more consideration to Timpooneke trail (people cutting trails). Upper Basin flowers have trails formed in them from too many goats.

Please don't change AF canyon - the connection to SLC canyons is a bad idea!

Please don't give Snowbird a parcel of American Fork.

Power hookups for Little Mill.

Preserve the canyon, but allow people to enjoy. Teach how to use canyon without destroying it.

Preserve, but allow people to enjoy.

Prevent Snowbird from developing condos.

Price is a little high.

Protect AF from Snowbird.

Protect from Snowbird.

Protect the animals/wildlife. Don't give hunters tags for moose and goats especially.

Provide garbage service in the campground. People tend not to pack out their trash. Water spigots at each campsite.

Put TP in bathroom, make them less stinky. Fewer reserved campgrounds.

Put up guard rails on dirt road leading to Cascade Springs.

Quicker access at booths at bottom of canyon.

Raise the price to help with maintenance. Widen roads for safety. Oppose commercialization of AF. Better marked trail junctions. Flush toilets where possible.

Reduce price to free.

Reduce traffic flow.

Regulate dogs on leash rule. More emphasis on telling people to leave boom boxes at home. Love the way you maintain trails.

Repave roads every few years.

Reservation system, shouldn't have to occupy waking sties if you talk to host.

Reserve the Right Fork for hikers, mountain bikes, and horses.

Restrict the number of people.

Road maintenance above Tibble Fork.

Road should be open later in the fall.

See a breakdown for how funds (fees) are used. Do fees filter the socio-economic groups that visit the canyons?

Set up speed limit above Tibble Fork and have someone monitor it.

Some of these roads are a bit narrow. It might be nice to restrict large pickup trucks.

Somehow reduce amount of dog poop on Dry Canyon trail.

Supply bathrooms.

Take more input from off-road community.

Tell people what you need us to do to keep things well and don't have an agenda.

They do a good job.

Update certain roads and try to enforce traffic laws.

Toilet paper at Cascade Springs; cleaner restrooms; cell reception; garbage cans.

Trail erosion control on hike to Silver Lake (Wilderness).

Try to maintain the dirt road above Tibble Fork a little better.

Turn Forest Service land back over to State.

Widen Loop Road.

Widen the Loop Road slightly.

**Appendix B: Respondents reasons for picking sites by site.**

Little Mill	A cave visit/tour
	Access
	Access, dog friendly
	Awesome climbing
	Camping
	Cascade Springs, hike
	Climbing
	Climbing
	Climbing
	Climbing in shade
	Close
	Close to family
	Close to home
	Close to home
	Close to home
	Close to home, able to reserve online
	Close to home, bathrooms, picnic tables
	Close to home, familiar
	Convenient
	Creek nearby
	Developed camp site
	Familiar to us
	Family gatherings
	Good all-around climbing
	Good climbing
	Good climbing
	Good climbing
	Heard about the climbing
	Leaves
	Nice place to get out of the city
	Not crowded, fire pit
Not too far from home	
On the river	
On the way to Grand Teton	

Little Mill	Our friends invited us
	Parents live close, caves
	Picnic
	Relax and climb
	Rock climbing
	Scenery
	Shade
	Shade and river
	Shade, by river
	Shade, close to river
	Shade, privacy, fire pit, table
	Shade, scenery, close to home
	Shady place to climb
	Space for tents
	Stumbled upon it
Tables, bathrooms, close	

Summit Trailhead	Bathrooms
	Beautiful mountains
	Beauty, low traffic
	Close to home
	Elk hunt
	Elk Hunt
	Fewer people
	Get away from crowds, view scenery
	Fewer people
	Location, close to SLC
	Location, scenery
	Meet with friends
	Picnic tables, scenery
	Ride
	Road Cycle
	Saturday off, beautiful scenery
	Scenery
	Scenery

Summit Trailhead	Scenery
	Scenery, altitude gain
	The loop road
	Trail
	Trails
	Training
	You can camp anywhere

Mt Timpanogos TH/Picnic Site/Theater in the Pines	Check out hiking trailheads
	Close by
	Close to home, time to hike and get back
	Closer to home
	Done this hike before, enjoy the waterfall
	Exercise
	Falls
	Familiar
	Fun date with the wife
	Handy, close
	Hike Timpanogos
	Hiking
	New to us
	New to us
	Phone service and proximity of home
	Picnic, waterfall was great
	Pleasant hike, close to home
	Scenery
	Scenery
	Scenery
	Scenery, bird watching
	Scenery, fewer people, exercise
	See the fall colors
	Shade, no people, lunch
	Short hike
	The falls
	Timpanogos
Timpanogos trail	

Mt Timpanogos TH/Picnic Site/Theater in the Pines	Timpanogos summit
	To avoid people
	Trail
	Trail
	Trail
	Trail
	Trail to summit
	Trail, fewer people
	Trail, scenery, close to home
	Walk
	Waterfall
	Waterfall
	Waterfall
	Waterfall, shade
	Waterfalls
Waterfalls	

Roadhouse	Bathrooms, close to home, escape the city
	Came with family
	Close to home
	Close to home
	Close to home, trails
	Close to home, trails, scenery
	Fire rings
	Had the grandchildren
	Hang out with friends
	Holiday from school
	It was shaded
	Fewer people, bathrooms
	Only people here
	Open
	Photography
	Picnic
	Picnic
	Picnic
	Picnic tables
	Picnic tables



Tibble Fork	Close to home
	Close to home and pretty
	Close to home, dirt bike trails
	Close to home, family fun
	Close to home, scenery
	Close, fun, scenic
	Close, scenery
	Deer hunt
	familiar
	Family
	Father-in-law suggested
	Fewer people, scenery
	Fish
	Hunting
	It was close to home
	It's close
	Memories
	Memories
	Picnic
	Picnic with family
	Picnic, lake
	Pictures
	Relaxation
	Ride, family pictures
	Scenery
	Scenery
	Scenery
	Scenery
	Scenery, fewer people
	Scenery, location
Scenery, trail, fewer people	
Studying flowers	
To see the fall leaves	
Trails	

Tibble Fork	Trails
	View
	Water, close to home
	Wild walk

Snake Creek	Close
	Close
	Close to home, scenery
	Elevation training
	Fall leaves
	Get away
	Leaves - wanted to see the changing colors
	Picnic tables
	Random
	Road
	Scenery
	Sunday drive
Sunday photography	
Views	

Soldier Hollow	ATV rental
	ATV trails
	ATVs
	Close to home
	Close to home
	Family knows the area
	Few people on weekdays
	Fun area
	Get away
	Good off-roading trails
	Location

Soldier Hollow	Motor single-track trails
	Parking
	Proximity
	Razor riding, trail riding
	Scenery
	Single track motorcycle
	To get in mountains
	Trails
	Trails

Dry Creek (Alpine)	Close
	Close
	Close
	Close to home
	Close to home
	Close to home, good workout
	Close to home, scenery, trail
	Exercise
	Hike
	Hiking, exercise
	Live close
	Not too crowded
	Pretty hike
	Proximity
	Scenery
	Scenery
	Scenery
Scenery, close to home	

Dry Canyon (Lindon)	Close
	Close to home
	Just hang out
	Just to walk in the mountains
	Proximity
	Steep hills, close to work

Upper Mill	Awesome trails
	Backcountry trail
	Close
	Close to home
	Close to SLC, beautiful scenery
	Dirt biking
	Dog friendly, the views, fewer people
	Fewer people
	Free
	Fun route
	Location
	Motorcycle trails
	Open, close
	Past experience
	Privacy
	Riding our dirt bikes
	Scenery, close to home
	Springs, close to home
Trails	
View, flat tent site	

Cascade Springs	Bathrooms, picnic tables
	Beautiful area, close proximity to where we live
	Beauty, ease of walking
	Cascade Springs
	Cascade Springs
	Close to home
	Close to Midway
	Day off from work
	Dirt bikes
	Enjoy nature
	Enjoying another great outdoor evening with family
	Fall colors
	Fall foliage
	Family camping trip
	Fewer people, scenery, close to home

Cascade Springs	Go for Sunday drive
	Hike
	Hiking
	Hiking
	Memories
	Natural beauty, accessible
	Nature, viewing scenery/wildlife
	New to us
	Scenery
	Scenery, close to home
	Scenery, on way home
	Scenery, sound
	Scenery, trail
	Scenery, trail
	Scenery
	Shade, scenery
	Sightseeing with family
	Springs
	The falls
	Trail shade
	Trail, scenery
Wanted to see the fall colors	
Waterfalls, hike	
Weather	
Wonder of nature	

Dutchman Flat	All of the above
	ATV
	ATV riding
	Camp, relax
	Close to home
	Close to home

Dutchman Flat	Close to home
	Close to home and very pretty
	Do some off-road trails
	Family activities
	Fewer people
	Fewer people
	Fun, relaxation
	Its close and beautiful
	Location - short distance from home
	New to us
	Open campsites
	Riding ATV's
	Scenery
	Scenery
	Scenery
	scenery, camping, four wheeling
	Seclusion
	Shade, fewer people, scenery, good space
	Silver Lake was close
	Trails
Trails, get away	
Trails, riding	
Trails, close to home	

Mineral Basin	Adventure
	Close
	Close
	Close
	Close to home
	Close to home
	Close to home

Mineral Basin	Close to home, fewer people
	Close to home, good riding trails
	Close to my home
	Close, scenery
	Close, scenery
	close, good unpaved riding
	Cool road
	Four wheeling
	Fun, scenery
	Get out of town
	Grouse hunting
	Just riding
	New to us
	New to us
	Proximity
	Scenery
	Scenery
	To get out
	To get out in nature
	Trails
Trails	
Trails, remote location	

Timpooneke TH	Backpacking
	Big family, scenery
	Climb Timpanogos
	Close to BYU
	Close to home, good trails
	Family exercise
	Free site
	Good scenery
	Hike Timpanogos
	Hiking
	Invited by friends
	Mountain biking
	New
	Nice long trail

Timpooneke TH	Parking
	Scenery
	Scenery, close to home
	Scenery, peaceful atmosphere
	Solitude
	Summit the mountain
	Timpanogos summit
	Timpanogos summit
	Timpanogos Sunset
	To hike Timpanogos
	Trail
	Trail (hike)
	Trail conditions
	Trail system
	Trail to summit of Timpanogos
	Trail, fall colors
	Trail, scenery
	Trails
We wanted to backpack here	
Wild places	

Silver Lake Flat	Advice from another
	Close to home, good hike to lake
	Family reunion
	Guidebook

Silver Lake Flat	Hiking
	Hiking trails
	Lake
	Lake
	Length of trail
	New hikes for us
	Scenery
	Scouting (hunting)
	Silver Lake
	Silver Lake
	The Silver Lake Trail
	To get out
	Trail
	Trail to Silver Lake
	Trail, family activity
	Trail, scenery, picnic
	Trails
Trails	

**Appendix C: Comments by respondents explaining why their out-group encounters positively enhanced their recreational experience.**

Always nice to see people.

Beautiful scenery.

Cheerful.

Considerate.

Cool people.

Cool, nice.

Courteous.

Courteous.

Didn't disturb me.

Enjoying themselves.

Entertaining.

Felt alone.

Few people.

Friendly.

Friendly, good attitude.

Friendly, uplifting.

Good conversation.

Good people.

Good people.

Good to see people enjoying the things I enjoy.

Good to see people out.

Good to see people out and about.

Good to see people outdoors.

Good vibes.

Happy, pleasant experience.

He was a trail guide.

He was very nice.

Helped us filter water, conversation.

I didn't want to see people.

I don't love crowds, but it's cool that many people enjoy it.

I enjoy fewer people.

I love seeing families together.

I'm antisocial.

It's good to see other people enjoying what I do.

It's great to see others enjoying nature.

It's nice to see others enjoy the outdoors.

It's nice to see others enjoying the trail.

Just being nice.

Kept to themselves.

Kind.

Kind people.

Kind, showed us where to see deer.

Like-minded people.

Lots of happy people taking family photos.

Loved being in nature and no people.

Loved it! Liked that we had alone time.

Neutral.

Nice.

Nice and friendly.

Nice people.

Nice people.

Nice to be alone.

Nice to meet friendly people.

Nice, friendly.

Nice, kept to themselves.

Nice, smiled.

Nice, smiled.

Nice, smiles.

Not very many.

One group of dirt bikers help cut/clear trail.

Other climbers, very friendly.

Other people enjoying hiking.

People are always very nice on trails.

People enjoying themselves.

People up here are nice and friendly.

Pleasant conversation.

Pleasant couples informed us of muddy trails ahead.

Pleasant people, but not good for hunting.

Pleasant, said hi.

Polite and open to talk.

Positive, family, fun.

Provided information.

Saying hi.

Shared a conversation.

Shared experiences.

Sharing the beauty and laughing at an enthusiastic dog.

Smile, talked.

Smiled.

Smiled.

Smiles.

Super nice.

Super nice people.

Talked to us.

They are always supportive and friendly.

They enjoy the outdoors too.

They own a cabin and private land here, very nice.

They took a picture for us.

They waved and were nice.

They were enjoying nature in a similar way.

They were friendly.

They were friendly.

They were friendly and gave helpful advice.

They were nice.

They were nice.

They were nice.

They were nice and respectful.

They were very friendly.

They were very nice.

They were very nice.

They were very nice and respectful.

They weren't negative in any way.

Took a picture of us.

Very few here most of the day.

Very friendly.

Very friendly.

Very friendly.

Very friendly.

Very kind.

Very kind.

Very nice.

We chatted about the trail.

We had pleasant experiences with everyone we met.

We saw them at one part then met up with them again.

Who doesn't love the outdoors?

Whole family enjoying nature.

## Appendix D: Survey Schedule.

~ August 2015 ~						
◀ Jul 2015						Sep 2015 ▶
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						<b>1</b> Dutchman Flat/Schaffer Fork/Mary Ellen (AM)
<b>2</b>	<b>3</b>	<b>4</b> Dry Creek (Alpine) (PM)	<b>5</b> Timpooneke TH (AM)	<b>6</b> Silver Lake (PM)	<b>7</b>	<b>8</b>
<b>9</b> Picnic Areas (PM)	<b>10</b> Timpooneke TH (AM)	<b>11</b>	<b>12</b> Mill Canyon GFA (PM)	<b>13</b>	<b>14</b>	<b>15</b>
<b>16</b>	<b>17</b> Silver Lake (AM)	<b>18</b>	<b>19</b>	<b>20</b> Mineral Basin/085 Junction (PM)	<b>21</b> Mt Timpanogos/Theater in the Pines (AM)	<b>22</b> Mill Canyon GFA (AM)
<b>23</b> Cascade Springs (PM)	<b>24</b> Tibble Fork (AM)	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b> Soldier Hollow (AM)	<b>29</b> Little Mill/Grey Cliffs (PM)
<b>30</b> Snake Creek (PM)	<b>31</b>	<b>Notes:</b> <b>AM = 7:00-3:00</b> <b>PM = 1:00-9:00</b>				

~ September 2015 ~						
◀ Aug 2015						Oct 2015 ▶
Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2 Soldier Hollow (PM)	3 Mineral Basin/085 (AM)	4 Silver Lake (PM)	5
6 Tibble Fork (AM)	7	8	9	10	11	12
13 Dutchman's Flat (PM)	14	15 Summit TH (AM)	16 Summit TH (AM)	17 Timpooneke TH (AM)	18 Cascade Springs (AM)	19 Little Mill/Grey Cliffs (PM)
20	21 Mt. Timpanogos /Theater in the Pines (AM)	22 Picnic Areas (AM)	23	24	25	26
27 Snake Creek (PM)	28 Cascade Springs (PM)	29 Timpooneke TH (AM)	30 Mt. Timpanogos /Theater in the Pines (PM)	<b>Notes:</b> <b>AM = 7:00-3:00</b> <b>PM = 1:00-9:00</b>		

~ October 2015 ~						
◀ Sep 2015						Nov 2015 ▶
Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2 Tibble Fork (AM)	3 Summit TH (AM)
4	5 Soldier Hollow (PM)	6	7	8	9	10 Timpooneke TH (AM)
11	12	13	14	15 Picnic Areas (PM)	16	17 Snake Creek (AM)
18 Soldier Hollow (AM)	19 Silver Lake (AM)	20 Little Mill/Grey Cliffs (PM)	21 Mt. Timpanogos/Theater in the Pines (AM)	22	23 Dry Creek (PM)	24 Cascade Springs (PM)
25	26 Dutchman Flat/Schaffer Fork/Mary Ellen (PM)	27 Dry Creek (Alpine) (PM)	28 Timpooneke TH (PM)	29	30 Mineral Basin Rd./085 Junction (AM)	31

**Notes:****AM = 7:00-3:00****PM = 12:00-8:00**

**Appendix E: Places and reasons respondents no longer visit**

Above Tibble Fork Reservoir.

Above Tibble Fork, too busy.

American Fork Canyon - I was held at gunpoint.

All picnic areas.

ATV areas.

ATV noise – American Fork Canyon.

Campgrounds too many people.

Fishing in the river - too many people.

Forest Lake, lots of people and Tibble is hard to relax and fish because of too many people.

High traffic up from Tibble Fork. Careless ATV drivers makes it unsafe to bring my family up that road.

I don't like crowds (Timpanogos).

I don't like so many people.

Loud motorized vehicles.

Marry Ellen Gulch.

Mill Canyon – motorcycles.

Mineral basin.

Mineral Basin - too many four wheelers.

Narrow road past Tibble Fork - too dangerous.

Pacific Mine and Mary Ellen Gulch - too many vehicles.

Picnic areas - too busy.

Silver Lake Flat: noise pollution. Guys on ATVs; Mineral Basin: gunning it and revving up engines as they go past, extremely loud, ruins the peace and quiet of mountains.

The lower campgrounds are too packed.

The places where motorcycles are.

This area - upper Mill Canyon.

Tibble Fork - overpopulated/used.

Tibble Fork - too crowded.

Tibble Fork - too many people. Not enough quiet for me.

Tibble Fork is too crowded.

Timpanogos Cave - too many people; North Fork of Provo canyon.

Timpanogos Trailhead on weekends - too crowded.

Timpanogos Trail, Timpanogos Caves, and Silver Lake - all too crowded.

Timpooneke - too many people.

Too many people at campsites and picnic areas.

Trail 157 to Tibble - use less due to dirt bike use.

Way too many people now.

We try to go during off times when the trails aren't as crowded.

Weekends - too crowded.

Weekends and summer are often very busy.

Weekends, too crowded.

Weekends, too many people.



## Appendix G: Survey Instrument

Survey ID#: \_\_\_\_\_

(Please Leave Blank)

**Visitor Intercept Survey  
Pleasant Grove Ranger District  
Uinta-Wasatch-Cache National Forest**

**Surveyor Introduction:**

Hello! I am surveying visitors using the National Forest here on the Pleasant Grove Ranger District, as part of a study being conducted by Utah State University's Institute for Outdoor Recreation and Tourism, and we are very interested in learning more about you as a recreationist.

**To Be Completed by Surveyor:**

Date: \_\_\_\_\_ Day: M Tu W Th F S Su

Time: \_\_\_\_\_ Location: \_\_\_\_\_  
a.m./p.m. \_\_\_\_\_

Surveyor's Name: \_\_\_\_\_

Your participation in this survey is voluntary and all of your answers to these questions will be kept strictly confidential.

**1. Would you be willing to take a few minutes to complete this survey?**

Yes  No (If "No," ask for ZIP Code or County and record on DSF)

**2. Are you a resident of the United States?**

Yes If Yes, what is your Home ZIP Code? \_\_\_\_\_

No If No, what Country are you from? \_\_\_\_\_

**3. How long are you going to be recreating on this trip to American Fork Canyon/the Alpine Loop?**

Short trip under three hours

About half the day

The majority of the day

Overnight

Multiple days – If so, how many? \_\_\_\_\_ days

**4. On this trip, are you planning on visiting any other sites in American Fork Canyon, or on the Alpine Loop besides this one?  Yes  No**

If Yes, how many other sites are you going to visit? \_\_\_\_\_ sites

**5. On average, how many times per year do you visit American Fork Canyon/Alpine Loop?**

\_\_\_\_\_ times per year

**6. What types of areas do you use most often when recreating here in American Fork Canyon/Alpine Loop?**

Developed areas, such as developed campgrounds, picnic areas, etc.

Undeveloped areas, such as trails, dirt roads, rivers and lakes, dispersed camping, wilderness, etc.

I use both developed and undeveloped areas equally.

7. For **TODAY**, please check “✓” all of the Recreation Activities you have participated in (or will participate in). Then, **Circle** your **MAIN** activity or purpose for visiting American Fork Canyon/Alpine Loop **TODAY**.

✓	RECREATION ACTIVITIES
<b>NON-MOTORIZED ACTIVITIES</b>	
	Hiking/Walking
	Trail running
	Horseback riding
	Road cycling
	Mountain biking
	Fat biking
	Non-motorized water travel (canoe, kayak, raft, sail)
	Rock climbing
	Ice climbing
	Downhill skiing (Resort)
	Snowboarding (Resort)
	Cross-country skiing
	Backcountry skiing
	Backcountry snowboarding
	Snowshoeing
	Sledding, tobogganing
	Other non-motorized activities (races, endurance events)
<b>MOTORIZED ACTIVITIES</b>	
	Driving for pleasure on roads (paved, gravel or dirt)
	Riding on motorized trails (non-snow, OHV/ATV)
	Snowmobile travel
	Other motorized activities (races, games)
<b>VIEWING &amp; LEARNING—NATURE &amp; CULTURE</b>	
	Viewing wildlife, birds, fish, natural features, scenery, flowers, etc.
	Photographing birds, fish, natural features, scenery, flowers, etc.
	Visiting historic and prehistoric
	Nature study
	Visiting a nature center, interpretive trail, or visitor center

✓	RECREATION ACTIVITIES
<b>CAMPING OR OTHER OVERNIGHT</b>	
	Camping in developed sites (family or group sites)
	Primitive camping (motorized in roaded areas)
	Primitive camping (backpacking in unroaded backcountry areas)
	Resorts, cabins, or other accommodations on Forest Service managed lands (private or FS)
<b>FISHING &amp; HUNTING</b>	
	Fishing—all types
	Hunting—all types
<b>OTHER ACTIVITIES</b>	
	Picnicking or family day gatherings in developed sites (family or group)
	Gathering mushrooms, berries, firewood, or other natural products
	Relaxing, hanging out
	Escaping heat, noise, pollution, etc.
	Exercising
	Walking/Exercising Pet(s)
	Visiting Timpanogos Cave National Monument
<b>OTHER ACTIVITIES NOT LISTED? (Please write in below and ✓ to left.)</b>	



12. Have you recreated in the Lone Peak Wilderness or Mt. Timpanogos Wilderness areas?

- Yes →  Lone Peak Wilderness, and/or  Mt. Timpanogos Wilderness  
 No  
 I don't know

12a. If yes, what recreational activities do you typically engage in when you visit these Wilderness areas?

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12b. How many times have you visited these Wilderness areas in the last 12 months?

Lone Peak Wilderness \_\_\_\_\_

Mt. Timpanogos Wilderness \_\_\_\_\_

13. How important are these Congressionally designated Wilderness areas to you?

Not important at all		Neutral		Very important
1	2	3	4	5
				6
				7

14. Would you support the expansion of Wilderness areas in American Fork Canyon/Alpine Loop?

- Yes  No

Please explain: \_\_\_\_\_

---

15. Are there places in American Fork Canyon/Alpine Loop you no longer visit because encounters with other forest users/uses have negatively affected your recreational experience?  Yes  No

If Yes, please identify the area(s) and explain the type of encounter and why you no longer visit:

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16. About how many people outside of your group did you encounter (see, talk to, interact with, etc.) while recreating today? \_\_\_\_\_ people

16a. What do you think about the number of people you encountered while recreating today?

Did they positively enhance your experience?  Yes  No

If Yes, in what ways? Please describe:

---

Did they negatively affect your experience?  Yes  No

If Yes, in what ways? Please describe:

---

They neither positively enhanced nor negatively affected my experience.

17. How did you access the recreation site you are visiting today? (Check one)

Personal Vehicle—How many people were in your vehicle TOTAL? \_\_\_\_\_

Biked on my own

Walked on my own

Other Please describe: \_\_\_\_\_

18. If a public transit system were available, would you have used it today to reach this recreation site?

Yes  No

Please explain: \_\_\_\_\_

---

To which of the following sites would you like to see shuttle transportation?

Timpanogos Cave NM

Timpooneke

Mt. Timp/AG

Sawmill (Cross Country)

Summit

Cascade Springs

Tibble

Pine Hollow

General Sightseeing

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19. If you could choose just one or two words to describe your personal feelings about American Fork Canyon/Alpine Loop what would the word(s) be?

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20. Are you recreating alone today?  Yes  No

If No, how many people (total) are in your group? \_\_\_\_\_ people

Of these, how many are under 16 years of age? \_\_\_\_\_ people

21. Does anyone in your group have any disabilities?  Yes  No

If Yes, were the areas and facilities you visited accessible?  Yes  No

If No, please explain: \_\_\_\_\_

\_\_\_\_\_

22. Do you consider yourself Hispanic or Latino(a)?

Yes, Hispanic or Latino(a)

No, not Hispanic or Latino(a)

23. With which racial group do you most closely identify?

American Indian/Alaska Native

Asian

Black/African American

Native Hawaiian or other Pacific Islander

White

24. In what year were you born? \_\_\_\_\_

25. What is your sex:  Male  Female

26. What is the highest level of formal education you have completed?

Less than a high school degree  High school degree or GED

Some college  2 year technical or associate degree

4 year college degree (BA/BS)  Advanced degree (e.g., Master's, JD, MD, DO, Ph.D.)

27. Information about income is important because people with different incomes come to Public Lands for different reasons. What is your annual household income?

Under \$25,000  \$100,000-\$149,999

\$25,000-\$49,999  \$150,000 or over

\$50,000-\$74,999  Don't know

\$75,000-\$99,999

**28. We would like to learn more about your recreational experience and your perspectives on planning for the future of the American Fork Canyon/Alpine Loop.**

**Would you be willing to participate in a follow-up e-survey that asks questions specific to issues regarding resource protection, transportation, access, and capacity on the Pleasant Grove Ranger District?**

Yes    No

**If Yes, please provide your first name and e-mail address below:**

**First Name:** \_\_\_\_\_

**E-mail Address:** \_\_\_\_\_

**(please write clearly)**

**29. If you could ask the U.S. Forest Service to change some things about the way they manage American Fork Canyon/the Alpine Loop, what would you ask them to do?**