Oregon Snowmobiler Participation and Priorities

Report in support of the 2015-2024 Oregon Trails Plan

Conducted by Oregon State University for the Oregon Parks and Recreation Department

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Executive Summary

In preparation for the 2015-2024 Oregon Trails Plan, the Oregon Parks and Recreation Department contracted with Oregon State University to conduct surveys of Oregon residents regarding their participation in four categories of trail-related recreation: non-motorized trail, non-motorized boat, motorized (ATV / OHV), and snowmobile recreation. Each survey was designed to elicit information on current use patterns (amount, location, and type of use), user experiences and preferences, and the economic contribution of the recreation activity. This report provides the results of the snowmobiler survey.

A probability sample was drawn at random from the list of all persons with snowmobiles registered with the Oregon DMV. Each person in the sample was invited to participate in the survey by completing either an online or paper questionnaire. A total of 501 respondents (40% of the sample) completed the survey and indicated they had engaged in snowmobiling in Oregon in the past five years. Approximately two-thirds (68%) of the surveys were completed online, one-third (32%) in paper format. Due to an underrepresentation of young snowmobilers amongst respondents, the data were weighted, using the age distribution of DMV registrants as the reference distribution.

Three-quarters (77%) of respondents were male, but the genders were more evenly represented once additional snowmobilers in the household were taken into account (56% male, 44% female). The mean age of respondents was 49 years old, while the mean age of all snowmobilers in households was 39 years old. Snowmobilers tend to have higher income than Oregonians as a whole, with 44% having annual household income of $100,000 or more.

The average snowmobiling household owns 3.4 snowmobiles, with 30% owning two snowmobiles (the most common number in the household). Statewide, the number of registered snowmobiles peaked at 17,771 in 2006, with a downward trend since then. That trend presumably in part reflects the recession, but the continued decline since economic recovery may in part reflect generally declining snow amounts since 2006.

Almost all respondents (96%) took at least one day trip and 72% took at least one multi-day trip in an average season over the past five years. A roughly equal number of days was spent on day (47%) and multi-day (53%) trips. Two-thirds (67%) of day trips occurred within 60 miles of home, while 70% of multi-day trips occurred further than 60 miles from home. On average, there were 3.3 persons in the travel party for “typical” day trips and 3.6 for typical multi-day trips. The median length of multi-day trips was three days.

Almost half (45%) of respondents reported that the number of day trips remained the same in the past five years, with similar amounts reporting an increase (28%) versus a decrease (27%). The number of multi-day trips was somewhat more likely to decrease (31%) than increase (25%). Various reasons were given for increases, with more free time being the most common. The most common reason for a decrease was less snow.

Respondents engaged in a variety of activities on their trips, in addition to snowmobiling, with dining out being the most common. Hotel / motel was the most common form of lodging used on multi-day trips. The most preferred content for online information was trail maps and snow depth.

On average, respondents engaged in snowmobiling 26 days per year, with more than a third of those days (9.2) being in Central Oregon (Region 8). The three most visited parking areas, by average number of days, were in Central Oregon (Dutchman Flat, Wanoga, and Ten Mile).

Respondents reported their “most often visited” area, statewide for mail questionnaire respondents and for each region in which they rode for online respondents. They then reported distance traveled from home to the site and perceived crowding. Salt Creek Summit was the area with the greatest average distance traveled, at 281 miles. Dutchman Flat was the area with the highest level of crowding in the parking area (8.0 on a 1 to 9 scale), while Langdon Lake / Morning Creek was the area with the highest level of crowding while riding (4.7).

When considering where to ride, respondents indicated that backcountry off-trail riding opportunities, parking, and trail grooming / maintenance were most important, with 71%, 71%, and 67%, respectively, indicating that these were somewhat or very important factors. With respect to preferred trail length, respondents placed higher priority on trails under 100 miles long, with long interconnected trails (more than 100 miles) being less important.

With respect to priorities for future funding, various priorities in the write-in Other category were rated as most important (most related to sustaining and expanding access). Backcountry off-trail riding and expanding the trail system were the next most important, with 66% and 65%, respectively, rating these priorities somewhat or very important. With respect to problems on snowmobile trails, by far the most common response was closure of trails and riding areas, with 54% rating it as a moderate or serious problem.

Based on survey responses and DMV registration data, Oregon resident snowmobilers spend an estimated $15 million per year on day and multi-day snowmobiling trips. This figure does not include expenditure on vehicles or other equipment that occurs outside of trips. The $15 million trip expenditure, combined with the trip expenditure of out-of-state snowmobilers riding in Oregon, supports 155 jobs and generates approximately $5.0 million in labor income and $7.7 million in value added.

1. Introduction

1.1. Background

In preparation for the 2015-2024 Oregon Trails Plan, the Oregon Parks and Recreation Department (OPRD, Oregon State Parks) contracted with Oregon State University (OSU) to conduct surveys of Oregon residents regarding their participation in four categories of trail-related recreation: non-motorized trail, non-motorized boat, motorized (ATV / OHV), and snowmobile recreation. Each survey was designed to elicit information on current use patterns (amount, location, and type of use), user experiences and preferences, and the economic contribution of the recreation activity. This report provides the results of the snowmobiler questionnaire.

1.2. Data presentation

For ease of reading, numbers are rounded in this report; this may lead to some percentages not totaling 100. All averages in this report are means rather than medians. There are "missing values" for many variables. For example, some people did not answer the income question. Percentages shown in this report are "valid percentages" unless otherwise noted; valid percentages adjust for missing values and total 100.

Exclusion of missing values also leads to discrepancies. For example, there were 501 completes in the probability sample (Table 1.1), but only 498 with an identifiable region – from self-report or mailing address. Table 1.2 only includes the latter respondents.

The paper version of the questionnaire is included in Appendix 3. In presenting results, reference is made to question numbers in the paper version (e.g., Q7). Some questions were asked only in the online version and therefore lack reference numbers.

1.3. Survey methodology

The probability sample was designed to be as representative as possible of Oregon resident snowmobilers. It was drawn at random from the list of all persons with snowmobiles registered with the Oregon DMV.[1]

The probability sample was complemented by a convenience sample. For the convenience sample, 28 snowmobile clubs (user groups) in Oregon were contacted and asked to encourage survey participation via e-newsletters, Facebook posts, and other avenues. Unfortunately, there were only 64 complete responses in the convenience sample, and almost half of those were from a single region (Region 6). Therefore, only results for the probability sample are presented in this report. Because other reports in this project include the convenience sample, results are specifically referred to below as being from the probability sample.

Persons in the probability sample could complete the questionnaire in either online or paper format. Each person in the probability sample was sent the following correspondence:

[1] http://www.oregon.gov/odot/dmv/pages/vehicle/snowmobile.aspx

- A “pre-letter” from OPRD explaining the reason for the questionnaire and encouraging participation.

- An invitation letter from OSU, with the URL for the online questionnaire and a postage-paid reply postcard for those preferring to complete the questionnaire in traditional paper format. Paper questionnaires were sent to those returning the postcard.

- A reminder letter and reply postcard from OSU, sent to persons who had not completed the online questionnaire or returned the postcard within approximately one week.

- A reminder letter from OSU, with the URL for the online questionnaire, as well as a copy of the paper questionnaire and postage-paid reply envelope, sent to persons who had not completed the questionnaire within approximately three weeks.

For households with more than one adult snowmobiler, the invitation letter requested that the adult snowmobiler with the most recent birthday complete the questionnaire. Because the 2013-2014 season had unusually low snow, respondents were asked to answer the questions with respect to their snowmobile riding during an average season in the past five years / seasons.

The questionnaire was developed in collaboration with OPRD and the project planning advisory committee.[2]

Response rates are shown in Table 1.1 below. The probability sample response rate of 42% (40% responded and snowmobiled in the past five years, 2% responded but did not snowmobile in that period) is good by current survey standards. This rate does not include a substantial number of persons who completed part of the questionnaire but were removed from the sample as only partial completes. It does include persons who completed a majority of the questionnaire, despite leaving some questions unanswered.

Table 1.1. Response rates

	Probability sample
Initial sample	1,250
Eligible (undeliverables removed)	1,242
Responded, did not snowmobile in the past five years	27
Percent of eligible	2%
Responded, snowmobiled in the past five years	501
Percent of eligible	40%

For the probability sample, 68% of the questionnaires were completed online and 32% in paper format.

Figure 1.1 shows the planning regions across the state, and Table 1.2 shows the number of respondents by region. Table 1.2 reflects respondents who snowmobiled in the past five years and whose region of residence could be identified.

[2] The advisory committee included, alphabetically: Mike Choate (OSSA), Chuck Frayer (USFS), Ron Greb (OSSA), Dennis Jordan (OSSA), Duane Miles (OSSA), TJ Reilly (OSSA), Vera Riser (OSSA), Karen Spencer (Baker County), John Spieger (OSSA), Peggy Spieger (OSSA), John Vogel (OSSA), Fred Way (USFS).

Figure 1.1. Map of planning regions

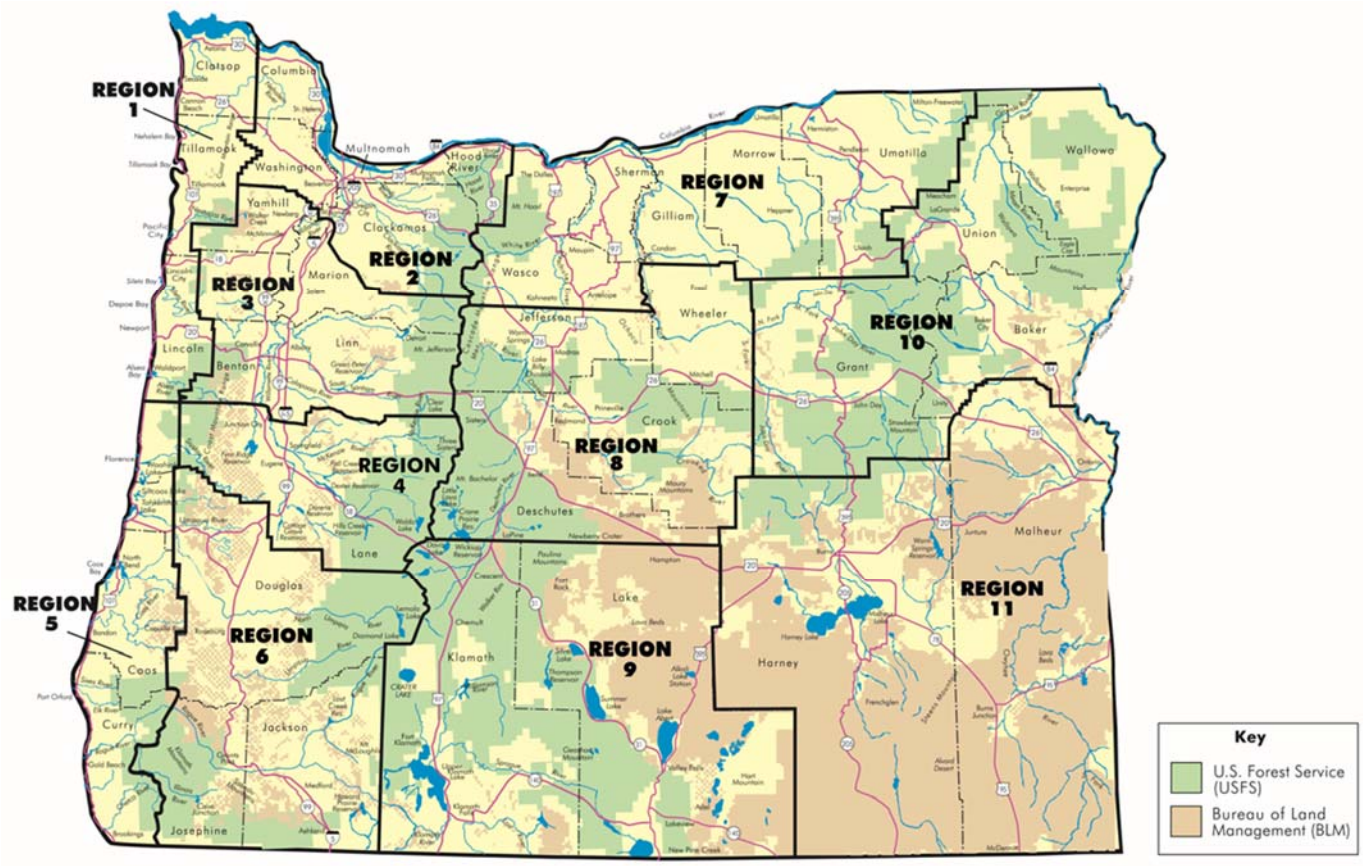


Table 1.2. Number of respondents who snowmobiled in past five years, by region		
Region	**Probability**	**Percent of statewide probability sample**
1	9	2
2	74	15
3	52	10
4	45	9
5	8	2
6	58	12
7	48	10
8	112	22
9	28	6
10	57	11
11	7	1
Statewide total	498	

1.4. Maximizing data accuracy

The goal of surveys such as this one is to use a sample (limited number of respondents) to obtain information on the population (everyone of interest, in this case all snowmobilers resident in Oregon). Because only a portion of the population is sent a questionnaire, and not all recipients complete the questionnaire, this type of data collection is susceptible to various sources of error.

This survey administration addressed the four main sources of error in the following ways:

- Coverage error was addressed through the use of the DMV registration list sampling frame. By its nature, this sampling frame excludes people who snowmobile but who do not live in a snowmobile-owning household.

- Sampling error was addressed through a reasonably-large sample size.

- Measurement error was addressed through an extensive questionnaire development and review process.

- Non-response error was addressed by maximizing response rates via multiple mailings, as well as identifying and correcting for potential non-response error via weighting.

Non-response error arises when those who complete the questionnaire (respondents) differ from those who do not (non-respondents) on a variable of interest. This potential error jeopardizes conclusions about the population based on responses in the sample. Sample data were weighted by age. The DMV registration list was "cleaned" by removing persons under 18 years old or with a mailing address outside Oregon. Duplicate entries per household were removed using zip code and street address within the Excel Remove Duplicates function. The resulting age distribution matched those of snowmobiler studies in Wyoming and Pennsylvania, except in the lower and upper age groups. The registration list distribution was modified by adding 4% to the lowest age group (18 to 29) and subtracting 4% from the highest age group (70 or older). The resulting adjusted distribution was a reasonable match with the Wyoming and Pennsylvania results and was used to calculate age weights. These weights help address potential non-response error due to low response rates from younger snowmobilers. Weighting can reduce error, but the potential for some error is inevitable in survey research.

1.5. Demographics and snowmobile ownership

This section presents demographic results from the snowmobiler survey probability sample. Within that sample, 77% of respondents were male and 23% female. Respondents also reported the gender and age of additional snowmobilers in the household. When these additional snowmobilers were accounted for, the distribution was more equally balanced (Table 1.3). Across all listed snowmobilers, 56% were male and 44% female. Note that the number of observations decreases as one moves from respondent to 6th snowmobiler (i.e., there are fewer households with 6 snowmobilers than with 1 or 2 snowmobilers).

Table 1.3. Gender of snowmobilers in household, percent		
	Male	**Female**
Respondent	77	23
2nd snowmobiler	39	61
3rd snowmobiler	57	43
4th snowmobiler	43	58
5th snowmobiler	56	44
6th snowmobiler	65	35
Total	56	44

Figure 1.2a shows the age distribution for respondents and for all adult Oregonians. Snowmobiling participation occurs across age groups, though it is particularly high amongst people in the 40 to 59 age range.

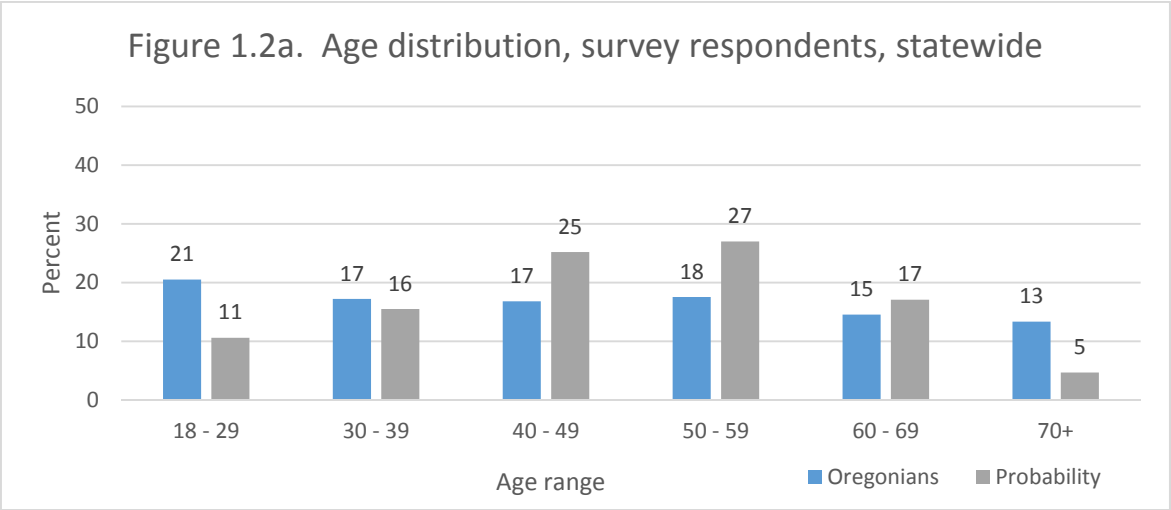
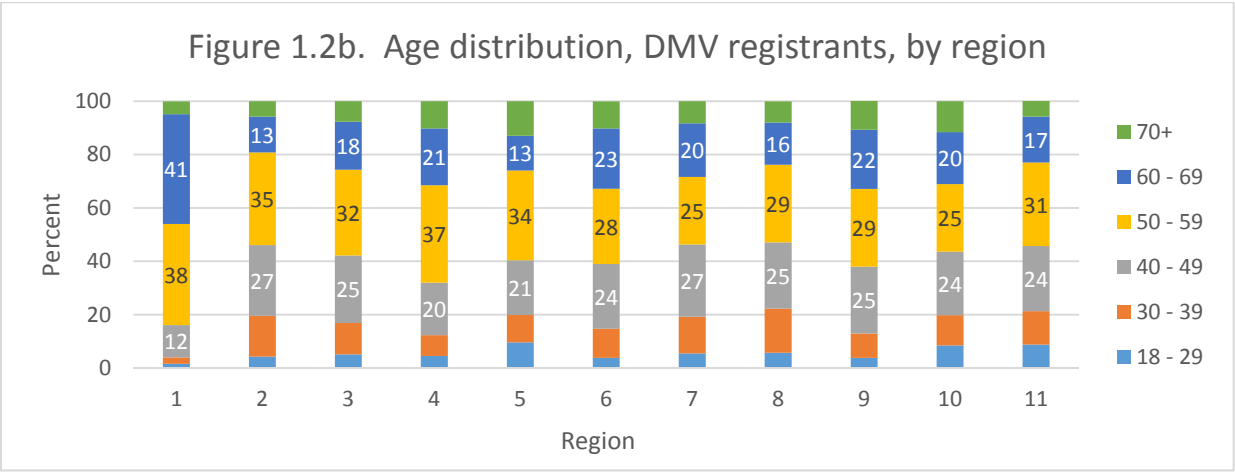


Figure 1.2b shows the age distribution, by region, for owners of snowmobilers registered with the Oregon DMV. There is regional variation, but most owners are in the middle age ranges (from 40 to 60 years old). Relatively few registrants live in Region 1 and 5, so results for those regions should be interpreted with caution.



As with gender, respondents reported the ages of additional snowmobilers in the household. As shown in Table 1.4, the age of additional snowmobilers was lower than that of the respondent. Evaluation of the full distributions suggests that the "2nd snowmobiler" typically was an additional adult, whereas the 3rd or higher snowmobilers often were children (Figure 1.3). The average age across all snowmobilers was 39.

Table 1.4. Age of snowmobilers in household, years old

	Mean age
Respondent	49
2nd snowmobiler	47
3rd snowmobiler	24
4th snowmobiler	21
5th snowmobiler	24
6th snowmobiler	34
Total	39

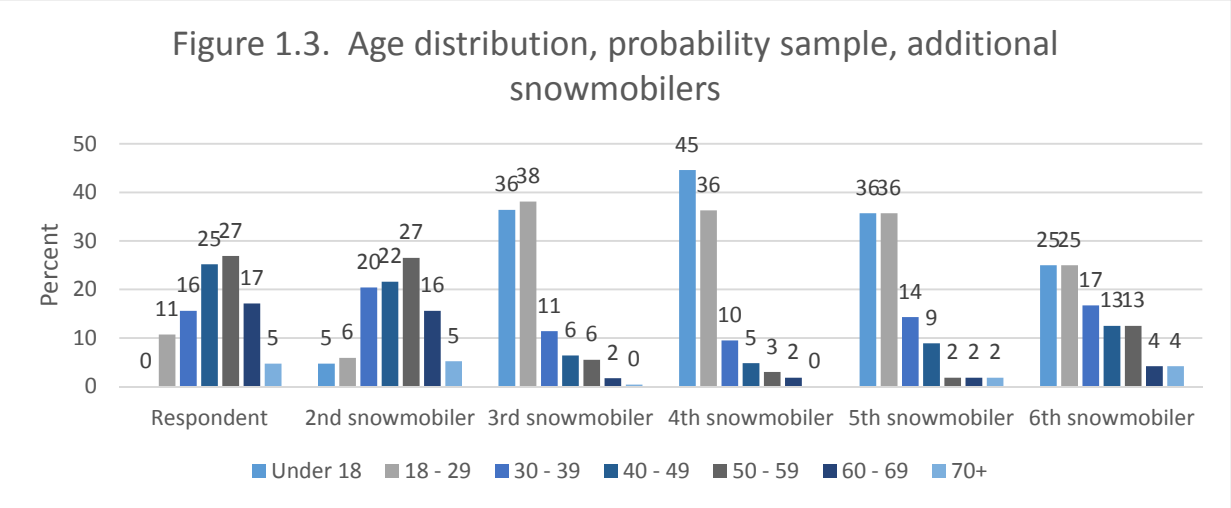
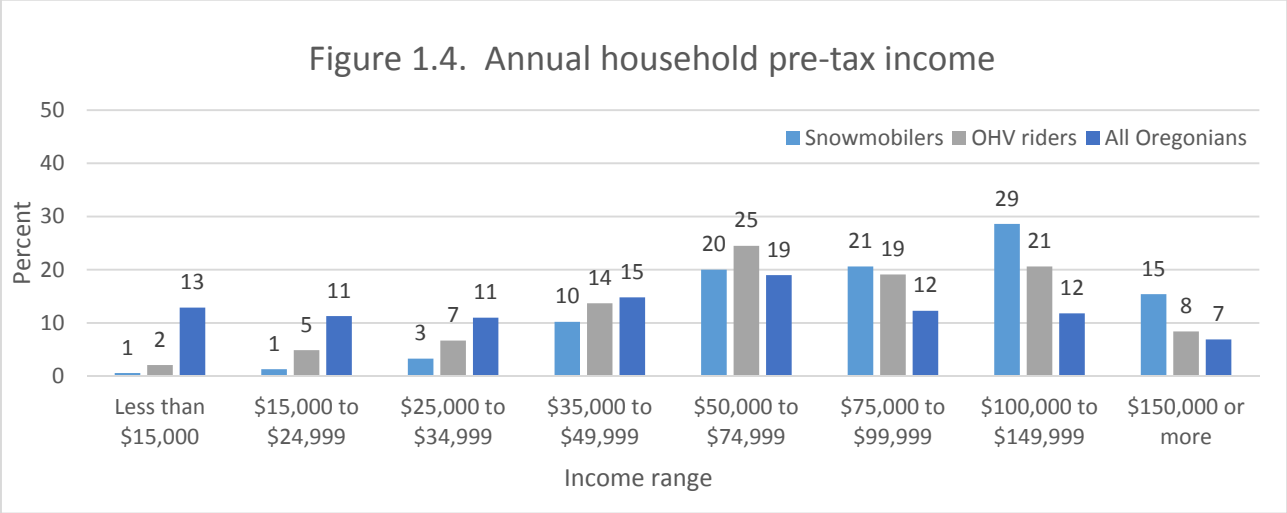


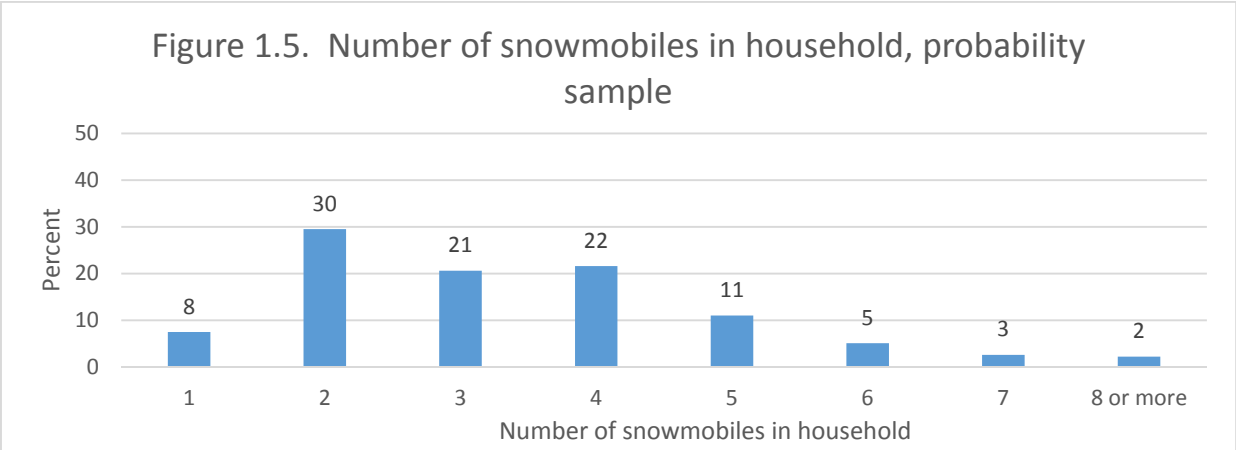
Figure 1.4 shows the distribution of annual household pre-tax income for snowmobilers, OHV riders, and Oregonians as a whole. Snowmobilers and OHV riders (at least those in each group who own and register their vehicles) have higher income than Oregonians as a whole. This is especially true for snowmobilers.



Only 1% of respondents reported they identified as Latino. Almost all (98%) reported they identified as white, with 1% reporting American Indian, and less than 1% Asian, African American, or Native Hawaiian; respondents could select multiple categories. Relative to the Oregon population as a whole, minorities are under-represented amongst snowmobilers.

Amongst probability sample respondents, 40% belonged to a snowmobile organization or club, 59% did not, and 1% were unsure (Q27).

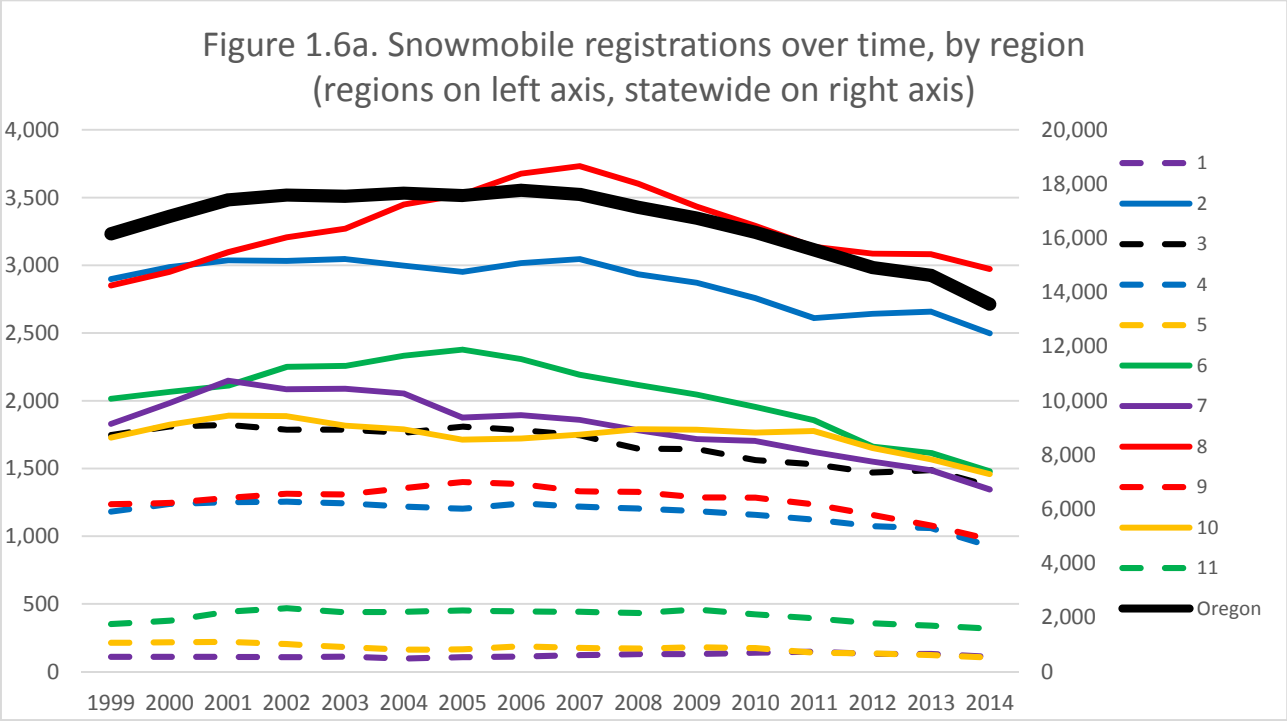
Most snowmobile households own more than one snowmobile, with two, three, and four being the most common number of snowmobiles owned (Figure 1.5, Q1). With the small number of "more than 8 snowmobiles" responses set to eight, the average number of snowmobiles owned per household was 3.4.

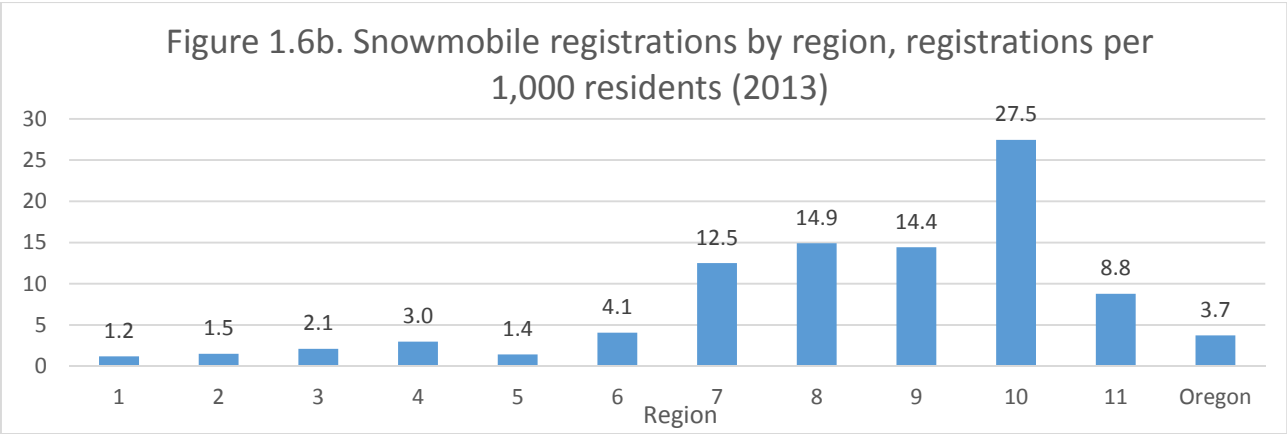


All snowmobiles in Oregon must be registered with the DMV, and Figure 1.6a shows registration counts by region and statewide over time.[3] Figure 1.6b shows registration rates across regions in per capita terms, using registrations per 1,000 residents.

Statewide registrations peaked in 2006 at 17,771. The subsequent drop presumably reflects the recession, though registrations have not recovered as the economy has improved in recent years.

[3] Some snowmobiles are ridden without being registered. The level of non-compliance is unknown, but anecdotal reports indicate that in some locations it may be as high as 20%.





Snow amounts may help explain the lack of recovery in registration numbers. Figure 1.7 shows the average across December and February for snow water equivalents at the Cascades Summit monitoring site, at 5,100 feet near Odell Lake, between Highway 58 and Diamond Peak.[4] There is substantial year-to-year variation, but the general trend since 2006 is downward. This has been noticed by snowmobilers, as indicated in Figure 2.5b below (low snow is a reason for fewer snowmobiling trips).

[4] Data from NRCS website: http://www.wcc.nrcs.usda.gov/nwcc/rgrpt?report=swe_hist&state=OR

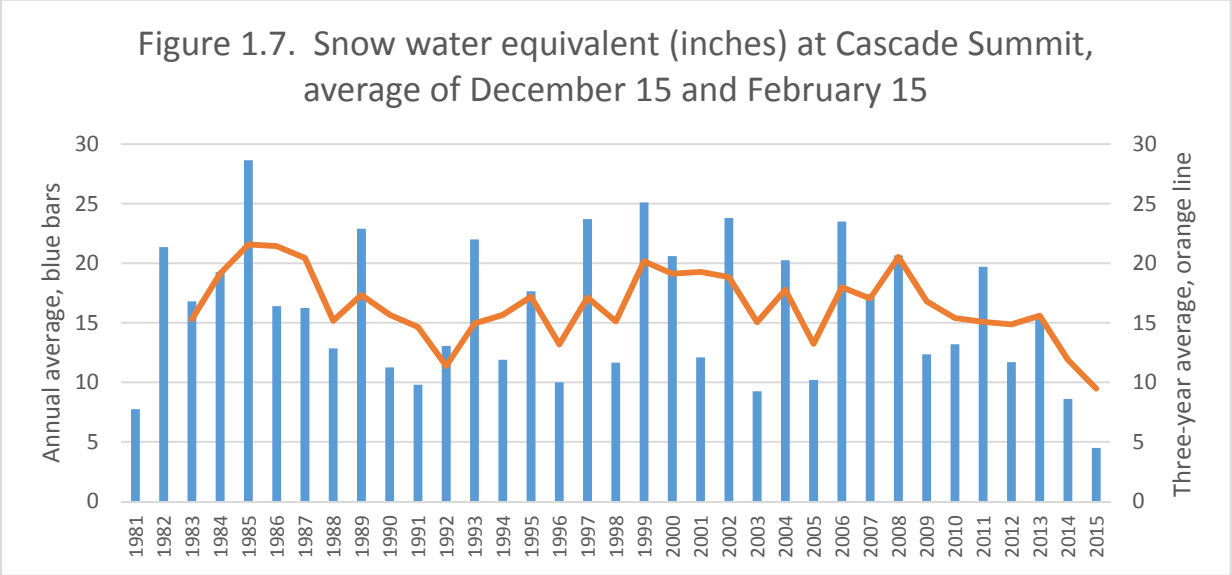
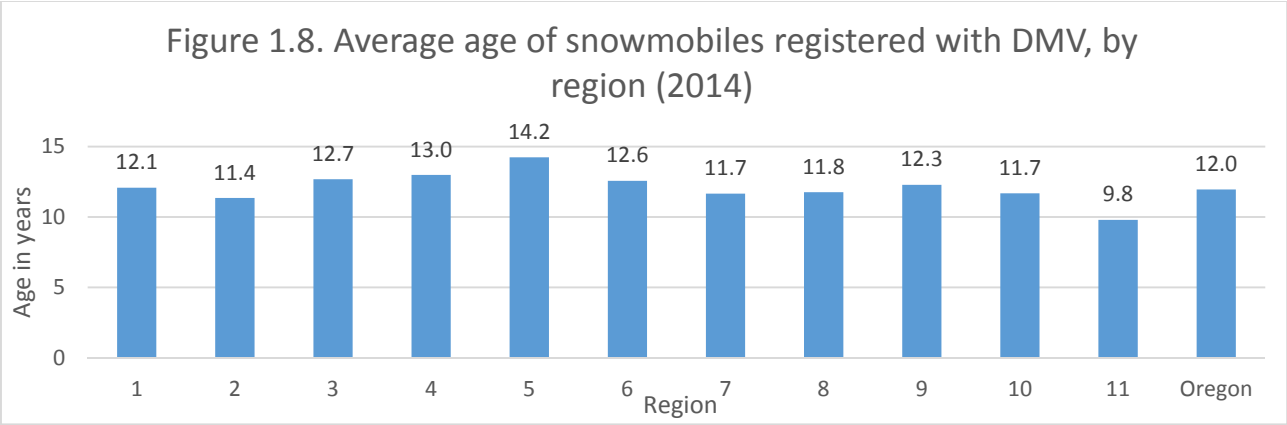


Figure 1.8 shows the average age of registered snowmobiles, by region. Figures were calculated as 2014 minus the model year for snowmobiles registered as of May 2014. Statewide, the average registered vehicle was 12 years old. Median values were close to the presented means, which indicates that the means are not "pulled up" by a small number of particularly old vehicles.



2. Trip characteristics and participation

This section presents trip characteristics and participation estimates. See also the Section 3 results for “most often visited” site, including distance traveled to those sites.

2.1. Day trip and multi-day trip characteristics

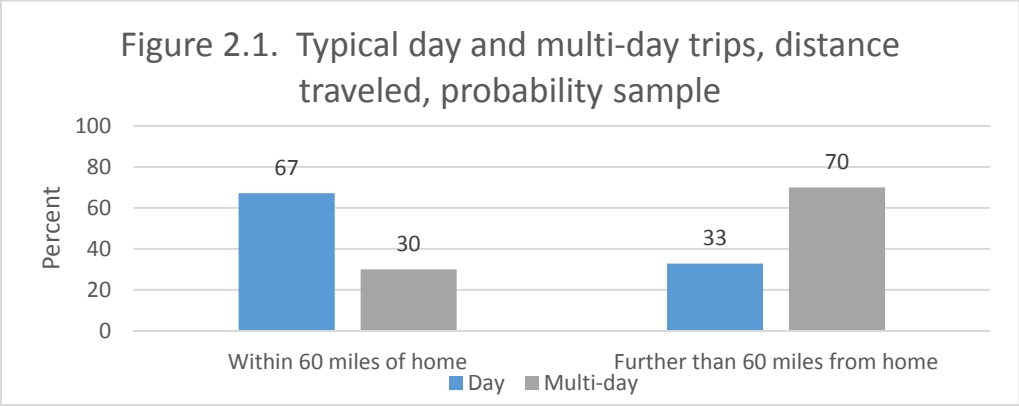
Almost all respondents (96%) took at least one day trip, while 72% took at least one multi-day trip in an average season over the past five years.

Statewide, 47% of the total days were spent on day trips and 53% on multi-day trips. Multi-day trips are defined as those involving an overnight stay away from home, even if the respondent only snowmobiled one day during the trip. The day versus multi-day distinction is used in presenting results in this section as well as in estimating economic contribution in Section 4.

In the mail questionnaire, respondents reported the total number of days snowmobiling in each region and the allocation of those into days on day trips and days on multi-day trips (Q15). In the online questionnaire, respondents reported the number of days snowmobiling at specific parking areas by region, with an “other areas on public land” category for sites not listed. The total number of days across sites in a given region was then presented, and respondents allocated those days into days on day trips and days on multi-day trips.

Observations were included in the above day trip versus multi-day trip percentages only if reported "days on day trips" and "days on multi-day trips" matched total days snowmobiling in the region. Across all “respondent by region” combinations, 82% involved no days in the region, 15.4% involved matches (days on day trips + days on multi-day trips = total days) and 2.7% involved errors. Thus, 85% (15.4 / (15.4 + 2.7)) of the allocations involved matches and are included.

The following results are for the "typical" day and multi-day trips, defined as the single location where respondents most often engaged in each type of trip in the average season in the past five years. Figure 2.1 indicates that two-thirds of day trips (67%) were within 60 miles of home while more than two-thirds (70%) of multi-day trips were more than 60 miles from home (Q17 and Q21).



The remaining results in this section and in section 4 (expenditure and economic significance) are based on travel parties. The National Visitor Use Monitoring (NVUM) approach to outliers is followed here, with observations excluded if reported travel party was eight or more persons, length of stay was more than 30 days, total expenditure was $500 or more per night (per day for day trips), or sporting goods expenditure was $500 or more.[5] In addition, respondents were excluded if they indicated that their confidence in their expenditure reporting was below five on a 0 to 10 scale, where 5 = Somewhat confident (this was not asked in the mail questionnaire). Exclusion was "listwise" across the set of questions within each type of trip. For example, if one of the above conditions was met for multi-day trips, the respondent does not appear in the results for any of these questions within the multi-day trip analysis.

Figure 2.2 shows number of persons in travel party for day and multi-day trips. For both types of trips, four people in the travel party is the most common. The average number of persons is 3.3 for day trips and 3.6 for multi-day trips.

[5] White, E.M., D.B. Goodding, and D.J. Stynes. 2013. Estimation of national forest visitor spending averages from National Visitor Use Monitoring: round 2. Gen. Tech. Rep. PNW-GTR-883. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.

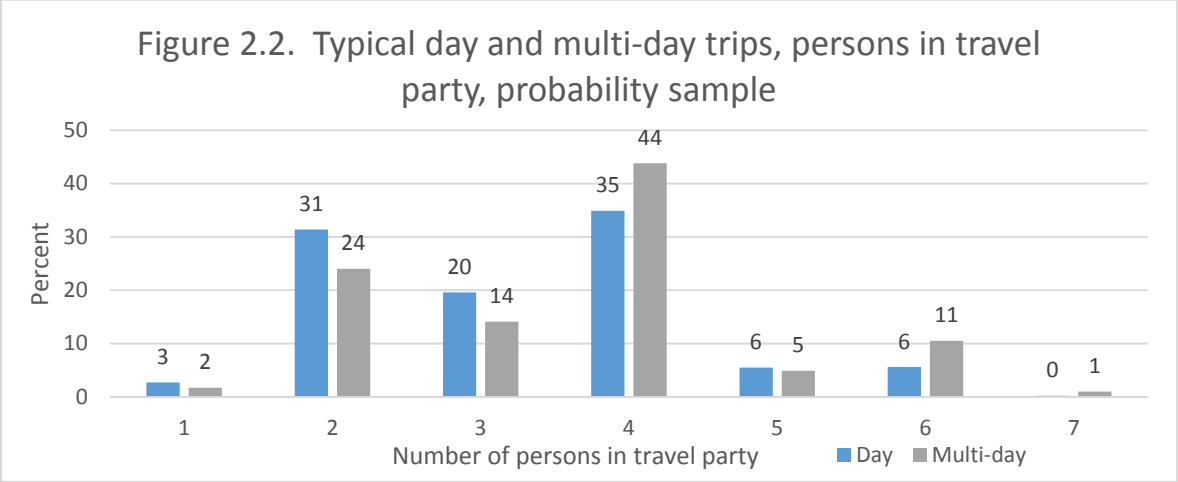
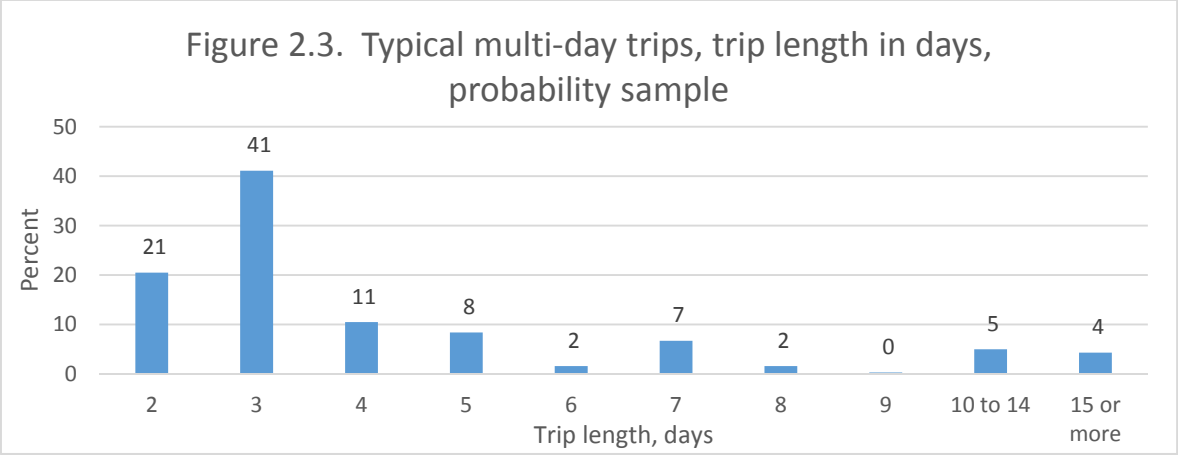
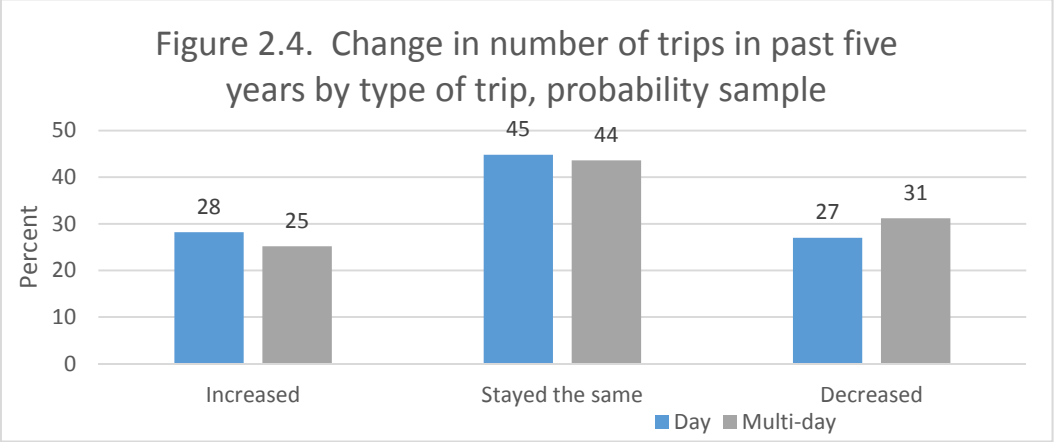


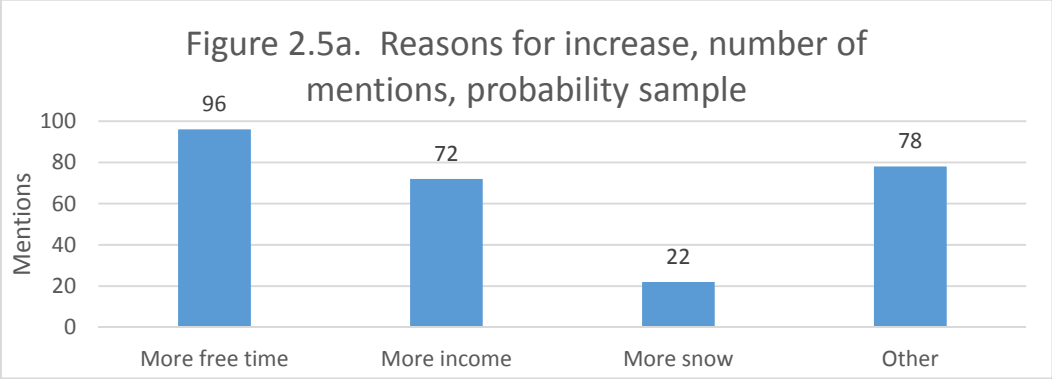
Figure 2.3 shows number of days for multi-day trips. As a reminder, this includes trip days that did not involve snowmobiling. Three days is the most common trip length, which may reflect a high proportion of "long weekend" trips. The average number of days was 4.7 days, keeping in mind that this mean is “pulled up” by longer trips (10 or more days). The median is 3 days.



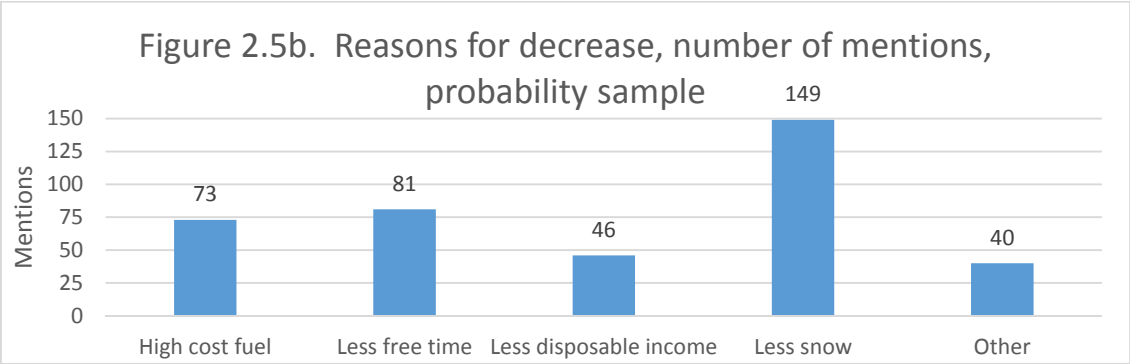
Respondents indicated whether the numbers of each type of trip (day trip and multi-day trip) had increased in the pasts five years (Q10), with results in Figure 2.4. Results are similar across trip type, and the percentage of respondents for whom number of trips has increased is similar to the percentage for whom number of trips has decreased.



In Q11, respondents indicated the reason for any change in trip frequency, with online respondents seeing the items specific to their change (e.g., “more free time” was an option only if number of trips increased). As shown in Figure 2.5a, the main reason for an increase in snowmobiling trips was more free time. Responses in the Other category were diverse and included kids becoming old enough to ride, better access to overnight facilities (own cabin or otherwise), more interest among friends, and better snowmobiles.



Less snow was the most common reasons for a decrease in snowmobiling trips (Figure 2.5b). The most common Other responses were related to age or to less interest among children or friends.



Snowmobilers engage in a variety of activities while on day or multi-day trips (Q13, Figure 2.6), with dining out being the most frequent.

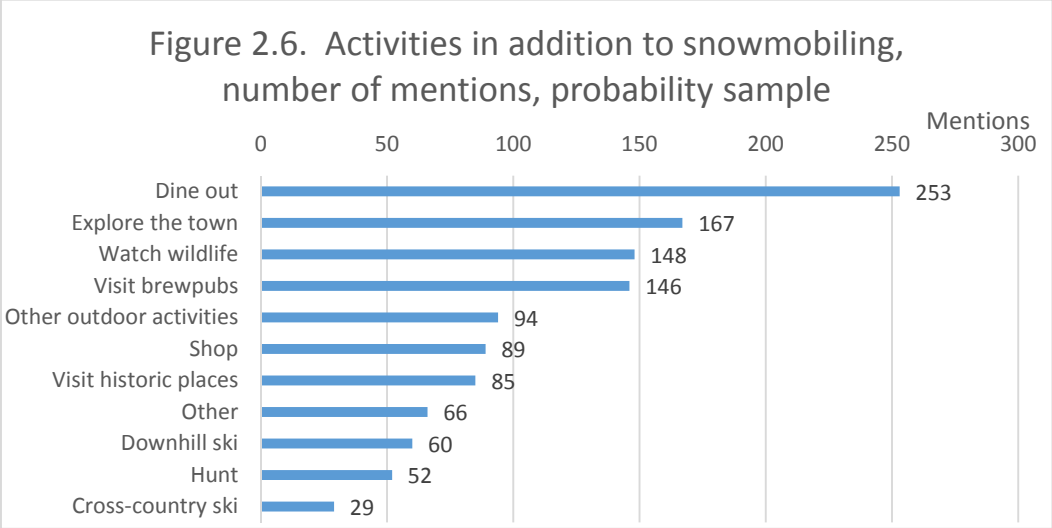
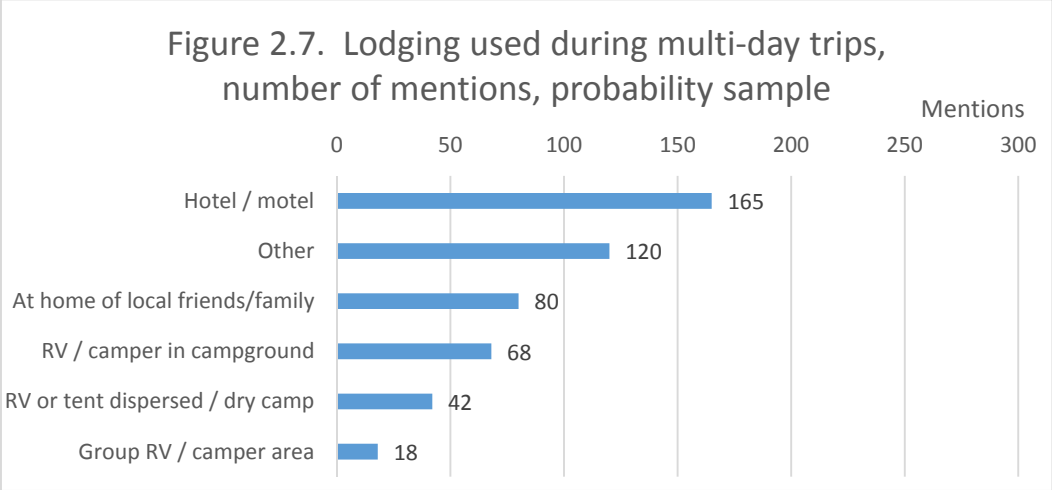
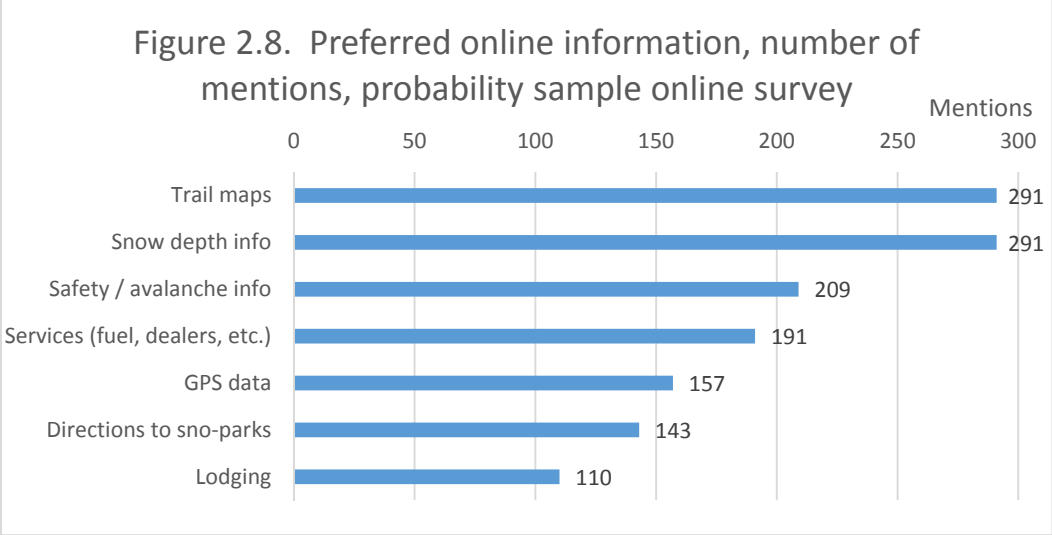


Figure 2.7 indicates that hotels and motels are the most commonly used form of lodging while on multi-day trips (Q12). Responses in the Other category were varied, with "own cabin" being the most common. Other common responses included renting a cabin, owning a second home, and staying in sno-parks with RVs.



Respondents completing the online survey indicated the types of information they would like to see on the internet for Oregon riding areas. As shown in Figure 2.8, the most preferred information was trail maps and information on snow depth.



2.2. Participation by region

Table 2.1 shows the estimated number of days snowmobiling per respondent and across all Oregon resident snowmobilers, per year. The per respondent estimate is derived from this survey (Q15). It is higher than the estimated 22.8 days that each Oregon-registered snowmobile is used per year, from the 2001/2002 fuel use report (the most recent available). Both of these estimates are higher than the 20 days per snowmobile found in Wyoming in both the 2000/2001 season and the 2011/2012 season.[6]

[6] Nagler et al. 2012. 2011-2012 Wyoming Comprehensive Snowmobile Recreation Report.

The estimate for all snowmobilers is the product of the per respondent estimate and the number of registered snowmobiles in 2014 (13,563, see Figure 1.6 above). In total, Oregon residents are estimated to engage in snowmobiling 352,500 days per year.

Note there was a small amount of reported use in regions where no use was expected, notably Region 1 and Region 5. This is a reminder that errors are possible as respondents identify the region in which use occurred. This is especially true since many snowmobile parking areas are in locations that straddle regional boundaries. Respondents were asked to report use in the region where parked, regardless of whether region boundaries were crossed while riding. Nonetheless, some allocation of days across regions may be incorrect. Appendix 4 contains the map of parking areas and associated regions.

Table 2.1. Days per year snowmobiling by Oregon resident snowmobilers

	Per respondent	All snowmobilers
Region 1	0.2	2,600
Region 2	1.4	18,900
Region 3	1.9	26,300
Region 4	0.6	7,500
Region 5	0.0	400
Region 6	3.6	48,600
Region 7	2.4	32,800
Region 8	9.2	124,600
Region 9	3.2	43,300
Region 10	3.5	46,900
Region 11	0.1	700
Statewide	**26.0**	**352,500**

Across all national forests in Oregon, Forest Service National Visitor Use Monitoring (NVUM) data suggest that 83.4% of snowmobile visits are made by Oregon residents and 16.6% by non-residents. Non-resident visits are in addition to those shown in Table 2.1.

2.3. Participation by parking area

Table 2.2 shows the average number of days snowmobiled by parking area, across all respondents in the survey (Q2). Dutchman Flat and Wanoga are the parking areas with the highest number of days.

The sum across all listed sites (24.7 days) is lower than the statewide total in Table 2.1 (26.0 days) because the latter includes days at sites other than those specifically listed in the survey. Respondents had the opportunity to write / type in sites other than those listed in the survey (shown in Table 2.2). This provided some indication of the proportion of snowmobiling that involved parking at listed sites versus other sites. However, an estimate of this proportion is difficult for various reasons, including the possibility that some sites were not entered (doing so required additional time) and the possibility that some entered sites correspond with a listed site in Table 2.2 (respondents know the site by a name other than that listed). Given this caveat, responses suggest that between 5% and 15% of snowmobiling days on public land in Oregon involve parking areas other than those in Table 2.2.

Table 2.2. Days snowmobiled per year by site, average across all respondents		
Site number	**Site name**	**Average days**
	All listed sites combined	*24.7*
31	Dutchman Flat	2.80
30	Wanoga	2.07
26	Ten Mile	1.65
37	Ray Benson	1.28
23	Crescent Lake	1.26
27	Paulina Lake	0.95
29	Edison Butte	0.92
40	Skyline Road	0.86
32	Three Creek Lake Road	0.85
19	South Diamond	0.82
18	Three Lakes (West Diamond Lake)	0.79
16	Thousand Springs	0.77
57	Langdon Lake / Morning Creek / MP 20	0.70
41	Frog Lake	0.69
24	Junction	0.53
61	Catherine Summit	0.52
59	Tollgate / Woodland	0.44
10	Great Meadow	0.41
62	Clear Creek	0.32
2	Mount Ashland	0.28
6	Fish Lake	0.28
14	Annie Creek	0.28
28	East Lake	0.27
60	Andies Prairie / Horseshoe Prairie / MP 27	0.27
54	Grande Ronde Lake	0.26
36	Little Nash	0.25
55	Four Corners	0.25
39	McCoy	0.24
48	Walton Lake	0.24
20	North Crater Lake	0.23
51	Huddleston	0.21
63	Salt Creek Summit	0.20
56	Mt. Emily	0.18
11	Four Mile Lake Road	0.17
22	Waldo Lake Road	0.17
15	Union Creek	0.16
53	Blue Springs Summit	0.15
43	White River East	0.14
45	Little John	0.14

50	Starr Ridge	0.14
17	Claude Lewis Trailhead	0.12
38	Big Springs	0.12
42	Trillium Lake	0.12
46	Billy Bob	0.12
9	Dead Indian	0.11
25	Six Mile	0.11
44	Bennett Pass	0.10
58	Spout Springs Ski Area / MP 22	0.10
64	Ferguson Ridge	0.09
13	Camas	0.08
35	Lava Lake	0.08
52	Dixie Mountain	0.08
33	Ikenick	0.07
21	Walt Haring	0.06
47	Ochoco Divide	0.06
12	Quartz Mountain	0.05
34	Tombstone Summit	0.04
8	Rainbow Bay	0.03
49	Idlewild	0.03
1	Page Mountain	0.01
4	Big Elk	0.01
7	Ichabod Spring	0.01
3	Buck Prairie	0.00
5	Summer Home	0.00

3. Experiences, preferences, and priorities

Respondents indicated the parking area where they rode most (Q3), then reported the distance traveled to the area (Q4, one-way driving miles from home) and how crowded they felt in the area (Q5, separately for crowding in the parking area and while riding). The open-ended suggestions for improvement by site (Q6) are presented verbatim in Appendix 1.

Mail survey respondents reported one statewide “most often visited” area, while online survey respondents reported a “most often visited” area for each region in which they rode. Thus, they may report multiple “most often visited” areas across the state.

Feelings of crowding were based on the following 1 to 9 scale:

How crowded do you feel	Not at all crowded		Slightly crowded		Moderately crowded			Extremely crowded	
In the parking area	1	2	3	4	5	6	7	8	9
While riding	1	2	3	4	5	6	7	8	9

Table 3.1 presents results, sorted by the number of observations by parking area. Yellow highlights indicate the three sites with at least five observations and with the highest values in each category (one-way driving miles from home, crowding in parking area, crowding while riding). Salt Creek Summit was the site most distant from home, with snowmobilers traveling an average of 281 miles to the site. Dutchman Flat had the highest crowding rating in the parking area, while Langdon Lake had the highest crowding rating while riding.

Sites 65 through 67 reflect locations that were not on the list and were "written in" at least four times. Site 65 reflects write in of "Diamond Lake" without identifying whether it was West Diamond Lake, South Diamond, or some other site in the area. Site 98 reflects the "most often" site being "Other areas on public land" without specification of location. Site 99 reflects specific "most often" sites not on the list that were written in fewer than four times.

Table 3.1. Travel distances and crowding by "most often" site

Site number	Site name	Observations	Distance (miles)		Perceived crowding	
			Mean	Median	Parking area	Riding
	All sites combined	*805*	*95*	*66*	*4.6*	*3.0*
23	Crescent Lake	61	115	100	3.4	2.8
31	Dutchman Flat	56	78	37	8.0	4.3
40	Skyline Road	45	69	59	6.2	3.5
37	Ray Benson	44	77	76	4.7	3.5
30	Wanoga	42	84	31	5.9	4.6
26	Ten Mile	40	81	59	5.7	3.6
41	Frog Lake	38	67	60	4.8	2.7
27	Paulina Lake	30	162	158	4.9	3.4
10	Great Meadow	27	94	48	3.9	2.5
18	Three Lakes (W. Diamond Lake)	25	161	120	4.8	3.4
19	South Diamond	19	137	124	4.3	3.5
57	Langdon Lake / Morning Crk	19	46	38	5.7	4.7
59	Tollgate / Woodland	19	125	76	2.9	2.7
61	Catherine Summit	18	94	35	4.4	2.7
16	Thousand Springs	17	74	65	5.2	2.7
29	Edison Butte	16	82	79	6.1	3.1
32	Three Creek Lake Road	13	74	75	5.7	3.6
63	Salt Creek Summit	13	281	299	3.0	1.9
62	Clear Creek	12	167	183	4.0	2.5
46	Billy Bob	11	107	84	2.9	2.9
24	Junction	10	94	95	3.5	2.5
65	Diamond Lake (unspec.)	10	112	100	4.2	3.0
55	Four Corners	9	73	62	4.7	2.7
39	McCoy	8	77	86	3.3	2.6
14	Annie Creek	7	43	42	3.4	2.5
22	Waldo Lake Road	6	68	75	2.6	1.3
51	Huddleston	6	85	37	4.5	3.7
54	Grande Ronde Lake	6	59	38	2.9	1.6

56	Mt. Emily	6	104	40	2.3	2.1
48	Walton Lake	5	32	30	5.2	3.0
60	Andies / Horseshoe Prairie	5	66	21	4.5	3.1
13	Camas	4	43	18	1.6	1.3
20	North Crater Lake	4	500	500	5.4	2.0
66	Halfway	4	266	307	1.6	1.3
9	Dead Indian	3	34	34	2.9	2.6
15	Union Creek	3	60	55	1.6	1.6
33	Ikenick	3	40	40	9.0	5.0
34	Tombstone Summit	3	189	189	2.0	1.0
35	Lava Lake	3	114	109	2.0	1.3
49	Idlewild	3	226	289	1.9	1.9
53	Blue Springs Summit	3	52	48	1.2	1.0
64	Ferguson Ridge	3	6	6	1.0	1.0
6	Fish Lake	2	70	70	2.0	1.0
25	Six Mile	2	119	153	5.0	3.5
36	Little Nash	2	59	59	2.1	2.0
38	Big Springs	2	95	95	4.9	4.9
42	Trillium Lake	2	85	85	4.0	2.5
43	White River East	2	62	62	2.7	2.3
45	Little John	2	40	40	3.4	1.6
50	Starr Ridge	2	71	71	1.9	1.3
3	Buck Prairie	1	300	300	1.0	1.0
8	Rainbow Bay	1	150	150	6.0	5.0
21	Walt Haring	1	34	34	3.5	1.5
28	East Lake	1	35	35	3.0	1.0
47	Ochoco Divide	1	30	30	3.0	2.0
52	Dixie Mountain	1	140	140	1.0	1.0
58	Spout Springs Ski Area / MP 22	1	43	43	5.0	3.0
67	Sumpter	1	30	30	2.5	2.0
99	Other (specified)	67	75	46	3.5	2.2
98	Other (unspec.)	37	76	65	3.3	2.6

Figure 3.1 shows the importance of considerations when deciding where to ride (Q8), percent rating 4 or 5 on a 5-point scale. The two top considerations in deciding where to ride are backcountry off-trail riding opportunities and availability of parking. Responses in the Other category included a range of considerations, with the most common being access to good snow throughout the season.

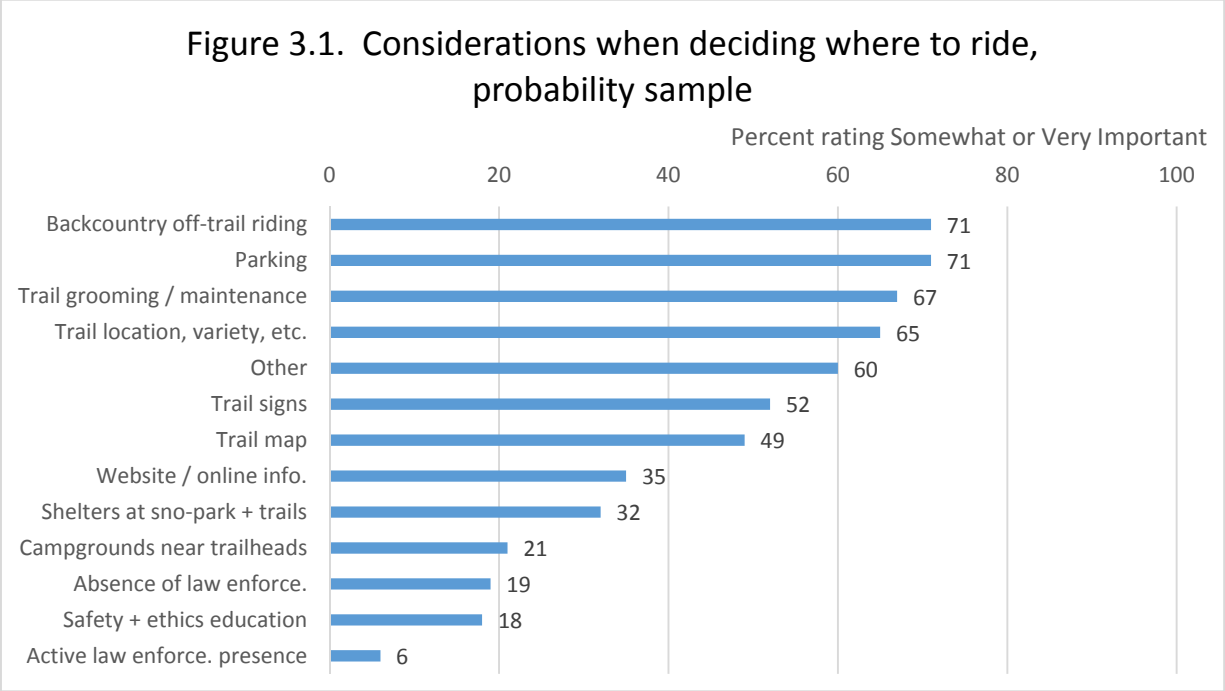
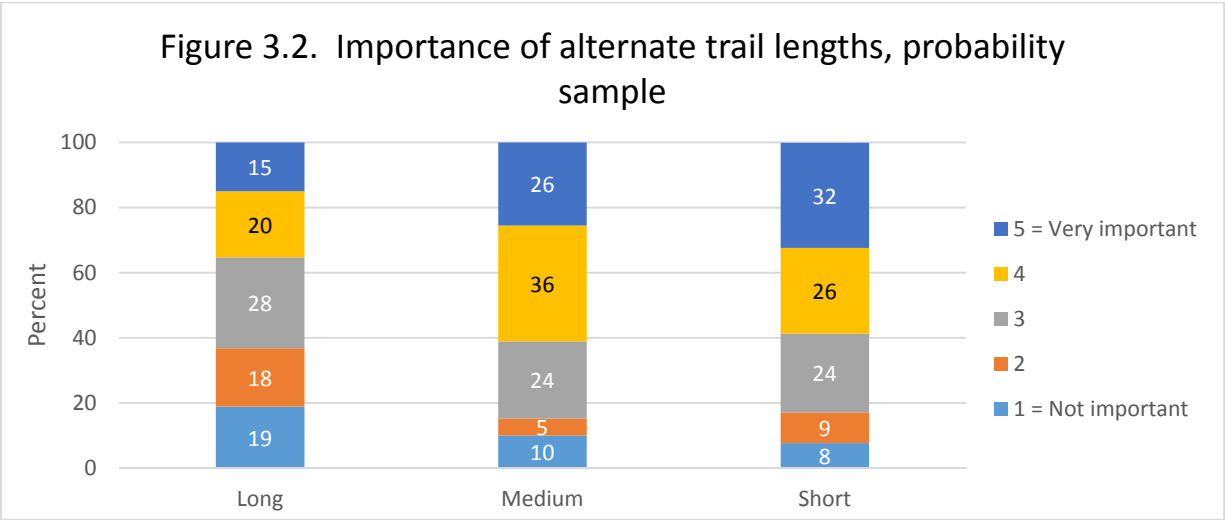


Figure 3.2 shows preferences for various trail lengths (Q9), which were described in the survey as follows:

- Long interconnected trails (more than 100 miles)
- Medium trails (50 to 100 miles)
- Short trails (fewer than 50 miles)

Many respondents rate all trail lengths as important, but trails over 100 miles received the fewest ratings of 4 or 5 on the 5-point scale. That average ratings were 2.9, 3.6, and 3.7 for Long, Medium, and Short, respectively.



Respondents indicated the funding importance of various potential improvements (Q7), with Figure 3.3 showing percent rating 4 or 5 on a 5-point scale. The Other category received the highest ratings, keeping in mind that most people did not provide “write-in actions” and associated ratings for the Other category. Percentages are of those that listed an action / rating in the Other

category; those that did so presumably considered it a high priority for funding. Actions written in the Other category were diverse, with many focusing on access – expanding current access and avoiding future access restrictions. Backcountry off-trail riding opportunities and expanded trail systems also were rated highly by respondents.

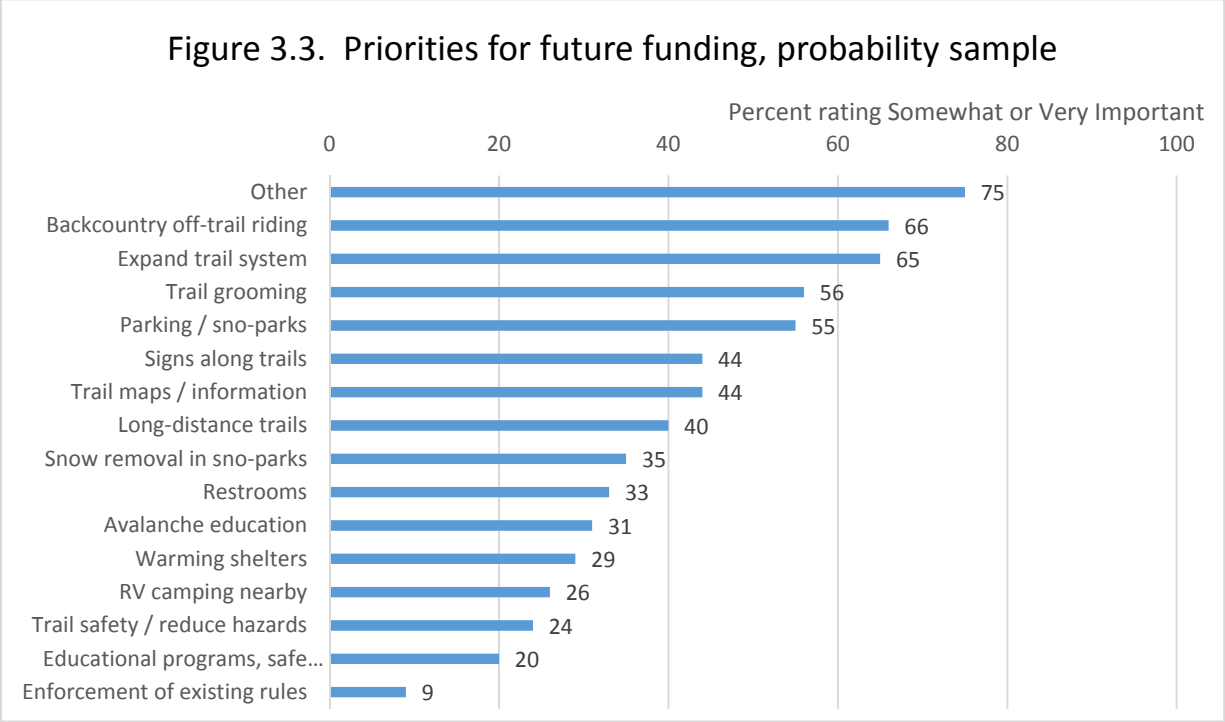
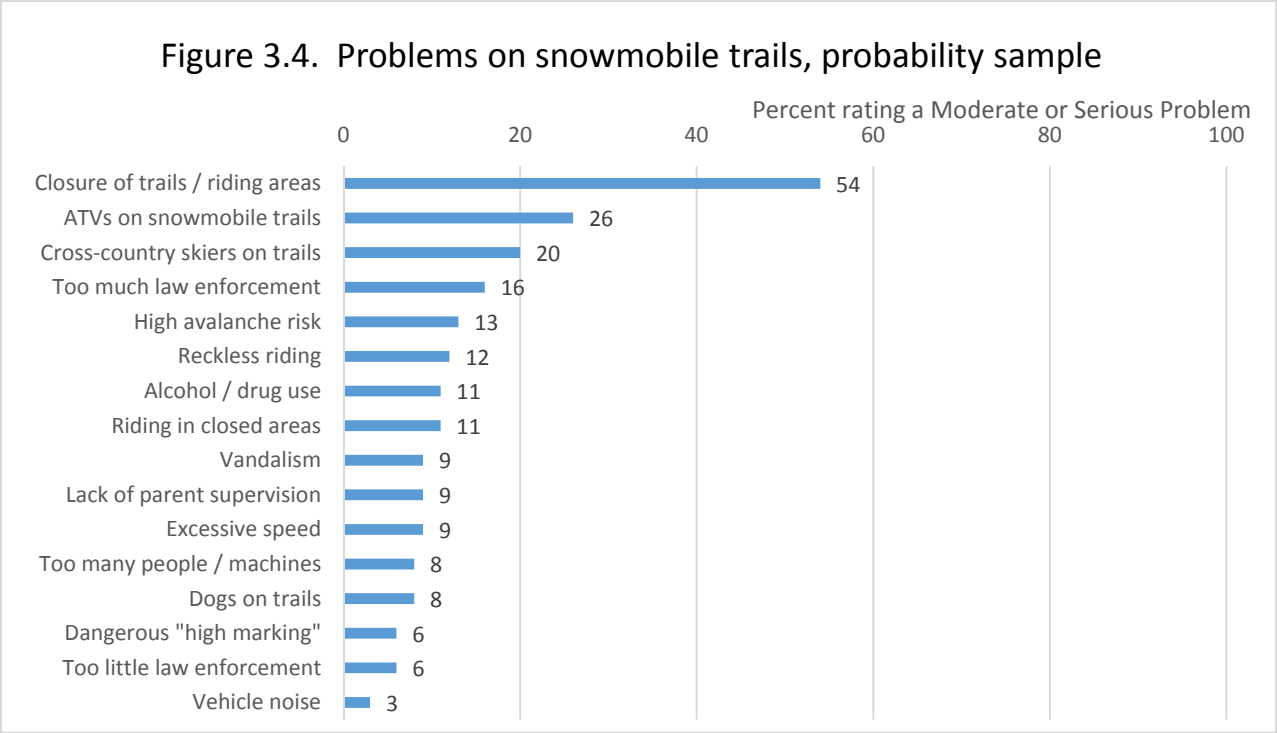


Figure 3.4 shows ratings of problems based on respondent experiences while riding snowmobiles (Q25), percent rating 4 or 5 on a 5-point scale. Closure of trails and riding areas was the most commonly rated as a moderate or serious problem.



Open-ended recommendations for improving snowmobiling in “rode most often” sites (Q6) and statewide generally (Q26) are provided in Appendix 1.

4. Expenditure and economic contribution

This section outlines snowmobiler expenditure, based on the "typical trips" described in Section 2.1. Note that this expenditure is only associated with travel, not with equipment purchase or maintenance. The expenditure and economic contribution reflects snowmobiling activity by both local (to the snowmobiling location) and non-local Oregon residents.

As noted in Section 2.1, these results are based on travel parties. The National Visitor Use Monitoring (NVUM) approach to outliers is followed here, with observations excluded if reported travel party was eight or more persons, length of stay was more than 30 days, total expenditure per travel party was $500 or more per night (per day for day trips), or sporting goods expenditure per travel party was $500 or more.[7] In addition, respondents were excluded if they indicated that their expenditure reporting was below five on a 1 to 10 certainty scale, where 5 = Somewhat confident (this was not asked in the mail questionnaire). Exclusion was "listwise" across the set of questions within each trip type. For example, if one of the above conditions was met for multi-day trips, the respondent does not appear in the results for any of these questions within the multi-day trip analysis.

Table 4.1 provides an NVUM reference point for expenditure estimates. The probability sample data reflect Oregon residents snowmobiling in Oregon. For expenditure and persons per party, the NVUM data reflect national averages for in-state and out-of-state visitors (Table 3 and Table A-2 in White and Stynes 2010[8]). Both probability sample and NVUM expenditure data are dollars per party per trip, amounts spent within 50 miles (for the snowmobiler survey, within 50 miles of the parking location; for NVUM, within 50 miles of the on-site survey location). The NVUM data are inflation adjusted from 2007 to 2014. The NVUM nights per trip data reflect Oregon resident snowmobilers on national forests in Oregon.

Expenditure on day trips in the probability sample is significantly higher than the NVUM equivalents (local day trips and non-local day trips). The difference may be explained by a variety of factors, including more persons per party, high fuel prices, and potentially greater distances from population centers to snowmobiling locations. However, reporting errors, including respondent overestimation, also may occur.

[7] White, E.M., D.B. Goodding, and D.J. Stynes. 2013. Estimation of national forest visitor spending averages from National Visitor Use Monitoring: round 2. Gen. Tech. Rep. PNW-GTR-883. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.
[8] White, E.M. and D.J. Stynes. 2010. Updated spending profiles for national forest recreation visitors by activity. Report under Joint Venture Agreement # 10-JV-11261955-018.

Table 4.1. Expenditure and party size, probability sample and NVUM reference point				
	Local day trips	**Local multi-day trips**	**Non-local day trips**	**Non-local multi-day trips**
Expenditure, $ per party per trip				
Probability sample	165	357	212	650
NVUM, national, snowmobile	84	355	147	732
Persons per party				
Probability sample	3.2	3.7	3.4	3.6
NVUM, national, snowmobile	2.3	2.9	2.5	2.8
Nights per trip				
Probability sample		4.7		3.3
NVUM, Oregon resident snowmobilers		2.9		3.8

Table 4.2 presents expenditure by trip type. Expenditure per person per day was calculated by dividing statewide expenditure across survey respondents by the number of user days, separately for day trips and multi-day trips. User occasions reflects the total amount in Table 2.1, allocated across day and multi-day based on survey responses (Q15). Statewide expenditure is the product of expenditure per person per day and user occasions, with total expenditure reflecting the sum of the values in the day and multi-day columns.

Table 4.2. Statewide snowmobiling trip expenditure by trip type							
Expenditure, $ per person per day		**User occasions (days)**			**Statewide expenditure (millions of dollars)**		
Day	**Multi-day**	**Total**	**Day**	**Multi-day**	**Total**	**Day**	**Multi-day**
55	32	352,500	165,000	187,500	15.1	9.1	6.0

Note that expenditure per day for multi-day trips is based on overall trip expenditure and trip length, including days that did not involve snowmobiling. However, user occasions and expenditure only reflect days engaged in snowmobiling.

The calculations in this report only reflect the contribution of Oregon residents. Non-residents who engage in snowmobiling in Oregon contribute additional amounts to the economy. The magnitude of this additional contribution is unknown, but can be estimated from external data sources. NVUM data provide one reference point for estimating the balance of Oregon resident versus non-resident snowmobiling activity in Oregon. Across all national forest units in Oregon, 83.4% of the visits are by Oregon residents and 16.6% by non-residents. If this pattern is the same for snowmobiling outside national forests, the statewide contribution of non-resident snowmobilers would be an additional 20% of the estimates provided here (16.6% / 83.4%).

Snowmobiler expenditure was “run” through the IMPLAN input-output model to estimate “multiplier effects” of money flowing through the local economy. To illustrate, assume that a snowmobiler eats lunch at Restaurant X. In order to provide the lunch, Restaurant X hires employees and purchases food that is then prepared for customers. Food is an input purchased from another business, and this process generates indirect effects. Wages paid to employees generate induced effects, because those employees spend a portion of their income in the local economy (perhaps by eating at Restaurant Y or shopping at Supermarket Z). Additional information on input-output and its application for this analysis is provided in Appendix 2.

Table 4.3 shows the expenditure breakdown across categories and trip type, in dollars per person per day. Expenditure categories were as follows:

- Hotel, motel, condo, cabin, B&B, or other lodging except camping
- Camping (RV, tent, etc.)
- Restaurants, bars, pubs
- Groceries
- Gas and oil
- Other transportation
- Park / forest entry, parking, or recreation use fees
- Recreation and entertainment, including guide fees
- Sporting goods
- Other expenses, such as souvenirs

Table 4.3. Expenditure by category and trip type, dollars per person per day

	Day	Multi-day
Hotel	0.00	7.62
Camping	0.00	0.44
Restaurants	11.24	5.84
Groceries	6.41	4.38
Gas	30.73	11.81
Other transportation	1.57	0.47
Recreation fees	2.94	0.42
Recreation + guiding	0.62	0.38
Sporting goods	1.29	0.39
Other	0.32	0.31
Total	**55.14**	**32.06**

Expenditure per person per day is higher for day trips than for multi-day trips, primarily due to differences in gas expenditure. This may reflect that fuel associated with traveling to snowmobile destinations is spread across multiple days and potentially additional persons in the case of multi-day trips.

Table 4.4 shows the results of the multiplier analysis. The columns are as follows:

- Employment, full-time or part-time jobs
- Labor income, which includes employee compensation (including wages, salaries, and benefits) and proprietary income (including self-employment income).
- Value added, which includes labor income, rents, profits, and indirect business taxes.
- Output, which is the dollar value of goods and services sold.

Note that much travel-related expenditure is on retail items, such as gas, with only the retail margin included in this analysis. As a result, output may be lower than expenditure, despite the multiplier effect.

Statewide, the $15 million expenditure by Oregon resident snowmobilers (Table 4.2) annually contributes 129 jobs, $4.1 million in labor income, and $6.5 million in value added. Inclusion of

out-of-state snowmobilers is estimated to add another 20% to these figures. Table 4.4 shows statewide multiplier effects.

Table 4.4. Multiplier effects of snowmobiler trip expenditure, in-state and out-of-state snowmobilers; employment in jobs, other measures in dollars

Origin	Employment	Labor Income	Value Added	Output
In-state	129	4,137,500	6,453,000	10,999,400
Out-of-state	26	827,500	1,290,600	2,199,900
Combined	155	4,965,000	7,743,600	13,199,300

Appendix 1. Open-ended comments

This appendix presents open-ended recommendations for improving snowmobiling in “rode most often” sites (Q6), by site, and statewide generally (Q26).

By site

Site #	Site name	Comment
3	Buck Prairie	better grooming
10	Great Meadow	Again the parking lot needs to be bigger for special events.
10	Great Meadow	Better trail maps and signage on the trails. Lot of interconnected trails if you know where to go, but not marked well.
10	Great Meadow	Bigger Paking Lot & Warming Hut
10	Great Meadow	Clear the snow better to make it easier to get into from the Hwy.
10	Great Meadow	have forest service do more logging to better snowmobile recreation
10	Great Meadow	more regular grooming of trails
10	Great Meadow	Need larger parking lots to accommodate larger vehicles
10	Great Meadow	No further restrictions on available riding areas
10	Great Meadow	Open up more areas to ride around Four Mile Lake, Sunset and Mt McLoughlin
10	Great Meadow	Parking lot is great
10	Great Meadow	there is a public safety officer with a bad attitude.
10	Great Meadow	we always had a great time
10	Great Meadow	Advertising
10	Great Meadow	Less interference from Forest Service law enforcement. They seem to just look for a reason to write a ticket for no reason
10	Great Meadow	Warming Hut
11	Four Mile Lake Road	A bigger parking area with nice little stub roads into the woods for privacy (rv/camper parking)
13	Camas	Cleaner restroom
14	Annie Creek	trails were in nice shape here. groomer has been broke down a few times in this area. nice warning hut. More out houses would be nice.
14	Annie Creek	Plowing the staging area
15	Union Creek	better loading area
15	Union Creek	Improve the trails around Thousand Springs. Very rough and seldomed groomed
15	Union Creek	more loop trails
16	Thousand Springs	Clear out parking lot @ Fish Lake
16	Thousand Springs	Coin op Showers and flush toilets
16	Thousand Springs	Expand the Parking lot and allow a trail from Thousand Springs to Crater Lake and Annie Springs.
16	Thousand Springs	have forest service do more logging that meets the needs for snowmobile recreation
16	Thousand Springs	Increase parking lot size. During special events, this lot overflows onto the highway.
16	Thousand Springs	Increase the size of the parking area
16	Thousand Springs	larger snow park for crowded weekends, more trail system miles to reach more backcountry riding
16	Thousand Springs	More logging to create jobs and more open space for ridding
16	Thousand Springs	More parking as we have had to park on the street and got ticketed.
16	Thousand Springs	No further restrictions on the available riding area
16	Thousand Springs	Nothing comes to mind. the trails are usually are well groomed and marked

16	Thousand Springs	Pave the parking lot, better signage, more trails
16	Thousand Springs	Safer highway crossings
16	Thousand Springs	Improve/expand parking lot
16	Thousand Springs	Increase parking area, more open areas
16	Thousand Springs	Larger/resurface parking lots
18	Three Lakes (W. Diamond Lake)	a second parking lot accross the hiway or other close location.
18	Three Lakes (W. Diamond Lake)	Add additional trails
18	Three Lakes (W. Diamond Lake)	Designating more trails for snowmobiles ONLY! NO quads...
18	Three Lakes (W. Diamond Lake)	I thought the riding and the trails were in outstanding shape. The groomers have done a great job in this area
18	Three Lakes (W. Diamond Lake)	i try to go on weekdays
18	Three Lakes (W. Diamond Lake)	keeping trails groomed, keeping large areas off limits to ATV-only because the ATVs tend to rip up the trails causing them to be almost unrideable for snowmobilers
18	Three Lakes (W. Diamond Lake)	Larger parking areas with restrooms
18	Three Lakes (W. Diamond Lake)	More avaiable parking
18	Three Lakes (W. Diamond Lake)	More grooming of the trails.
18	Three Lakes (W. Diamond Lake)	More Parking
18	Three Lakes (W. Diamond Lake)	Need snow park with a shelter off Highway 38 between Diamond Lake and Lemola Lake
18	Three Lakes (W. Diamond Lake)	Open up more areas to ride. Specifcally around Crater Lake.
18	Three Lakes (W. Diamond Lake)	Remove the hostility from skiers toward snowmobilers, they dont want to share the land
18	Three Lakes (W. Diamond Lake)	The riding area seems to be getting smaller.
19	South Diamond	Excellent experiences
19	South Diamond	Improve grooming and trail maintenance. Trails tend to be soft even when groomed. Harden up.
19	South Diamond	keep the trails groomed, especially where 4wATVs go, and designate more snowmobile only areas. MORE PARKING
19	South Diamond	more access to the closed areas around Crater Lake
19	South Diamond	More Space to park, turn around. More snow moved out of parking area.
19	South Diamond	Parking
19	South Diamond	the trails are usually groomed really well, and we love the fact that we can ride to commercial restaurants and fuel.
19	South Diamond	Trail grooming more frequently
19	South Diamond	Add restrooms not only for snowmobilers but also highway use
19	South Diamond	Free gas
19	South Diamond	Restrict ATV's
20	North Crater Lake	More trails would be nice
22	Waldo Lake Road	Better trail designations. Possible listing gas areas on maps
22	Waldo Lake Road	Extend grooming
22	Waldo Lake Road	Make a bigger parking area
23	Crescent Lake	better grooming
23	Crescent Lake	Enlarge parking at Crescent Lake; educate cross country skiers to share the snowmobile trails we groom.
23	Crescent Lake	Keep trail groomed more often

23	Crescent Lake	smoother trails and better direction signs
23	Crescent Lake	better grooming
23	Crescent Lake	ERiding is good there
23	Crescent Lake	fix the parking lot at the Junction Snow Park and the water that runs of the trail sometimes from Crescent Lake Snow Park, keep air plains off of the Crescent Lake air port during the winter
23	Crescent Lake	grooming more frequently
23	Crescent Lake	increase parking at the snowpark
23	Crescent Lake	keep the parking area clear more often at the parking lot nearest the Crescent Lake Resort
23	Crescent Lake	larger snow park, for vehicles and trailer
23	Crescent Lake	More frequent trail grooming. Particularly to Summit Lk.
23	Crescent Lake	more grooming
23	Crescent Lake	More Grooming
23	Crescent Lake	more grooming
23	Crescent Lake	More grooming at night.that seems to work best to keep trails more rideable.
23	Crescent Lake	more parking
23	Crescent Lake	More snow :)
23	Crescent Lake	more trail grooming
23	Crescent Lake	One thing to keep in mind is some of these snow parks are to low to ride all year it takes a heavy and low snow level to even ride in some areas place snow parks higher.
23	Crescent Lake	Parking.
23	Crescent Lake	repave the parking lot, maybe enlarge the parking lot
23	Crescent Lake	Riding area and parking area groomed better
23	Crescent Lake	Total plowing of parking area. The old pavement is in need of heavy repair.
23	Crescent Lake	trail maintenance and parking lot plowed
23	Crescent Lake	Trails groomed more frequently.
23	Crescent Lake	Better trail management
23	Crescent Lake	Less restricted areas
23	Crescent Lake	More grooming northside of Hwy 58-repair damage to trails
24	Junction	Better job marking trails
24	Junction	Groom the trails more often.
24	Junction	it is awesome just the way it is.
24	Junction	Just keep it open and or open up more trail
24	Junction	More consistent trail grooming.
24	Junction	nothing, crescent lake area is the best area to ride in the entire state if the snow cooperates!
24	Junction	Re-pave snow park lot.
24	Junction	stop the forest servce snowmobile police harrashing us when we are riding and treating us like we are criminals and trying to make the snowmobilers feel unwelcomed and telling us that they dont want us out there riding .they stop you when your rididng andcheck you out and treat you as a criminal and lecture you on how we have no real right to be there riding and dont want us out there .
24	Junction	Better access to snowmobile trails from parking lot-Plow snow to allow multiple access points from lot
24	Junction	More trails
24	Junction	Overall great
25	Six Mile	Don't know as we ride and explore

25	Six Mile	Larger parking area
25	Six Mile	Loading/unloading ramp
26	Ten Mile	a little more parking organization
26	Ten Mile	better marking on the trails
26	Ten Mile	bigger parking area at Dutchman Flatt's. not enough room for how popular the riding area is
26	Ten Mile	Enlarge the parking area at Ten Mile
26	Ten Mile	Groom the parking lot better
26	Ten Mile	Improve the restroom facilities
26	Ten Mile	Local Club, Lodgepole Dodgers do a GREAT Job maintaining & marking trails.
26	Ten Mile	make bigger snow park, you cant park at Paulina or Eastlake, because the gate is locked at 10 mile sno park
26	Ten Mile	More parking area
26	Ten Mile	More parking for trailers. Better organization of space. Designate seperate parking for cars without trailers.
26	Ten Mile	More parking or seperate place to park Motor Homes
26	Ten Mile	more rider ed
26	Ten Mile	More sign as to wear snowshowers should park. They always take up most of the parking and never double up!!!!!
26	Ten Mile	more trails, better signage, better access to prime riding areas
26	Ten Mile	road and parking lot needs better snow removable
26	Ten Mile	stop the forest service riding police at harashing us when we ride . they are stopping you while riding and questing on the laws and if you have a tags and where you have been as if to incinuate that you are braking the law in some way and we have no righ to be on there land and dont want snowmobilers to ride.
26	Ten Mile	Ten Mile = Increase the size of the parking lot; Wanoga, Dutchman = Open up more riding area and keep cross country skiers to their own area
26	Ten Mile	The sno parks and trail systems seem in good shape, crowded on weekends though.
26	Ten Mile	the snow mobile club keeps trails in excellant condition
26	Ten Mile	Weekends r terrible too many people I ride on weekdays
26	Ten Mile	Additional parking
26	Ten Mile	Better grooming
26	Ten Mile	Enlarge parking area
26	Ten Mile	Enlarge parking lot/add more restrooms
26	Ten Mile	Good riding area-parking can get a little tight
26	Ten Mile	More parking on busy weekends-Limit RV's
26	Ten Mile	Trail grooming
27	Paulina Lake	Add more parking
27	Paulina Lake	Additional snow park parking
27	Paulina Lake	Addtional parking, on weekends the lot is full. Need better overflow parking on main road.
27	Paulina Lake	better trail grooming. more open areas to ride
27	Paulina Lake	Excellent conditions when the snow is adequate. Otherwise grooming suffers.
27	Paulina Lake	Increase the parking area at 10 mile, improve the rest rooms
27	Paulina Lake	Making parking lots larger as all vehicles and trailers are getting larger
27	Paulina Lake	More and better signs marking the designated trails.
27	Paulina Lake	More grooming!!!!
27	Paulina Lake	MORE GROOMING, the trails are rough

27	Paulina Lake	More lodging near riding areas.
27	Paulina Lake	more parking
27	Paulina Lake	Not enough parking at the upper parking lot when the snow is low. Don't plow ALL the snow off the parking alot, leave enough to ride your machine on.
27	Paulina Lake	parking and bathroom maintanence and availability
27	Paulina Lake	Usually ride back country
28	East Lake	Groomed trails were always nice and well done. Overall a great experience most of the time.
29	Edison Butte	more parking
29	Edison Butte	control overnight parking and trailer lengths at non designated areas, IE(dutchmans flat)
29	Edison Butte	Edison is great. Need larger parking lot at higher elevation. Dutchman is too small and gets filled up by Nordic skiers which could park at Mt Bachelor & access the same trail systems. Regardless Dutchman is way too small. Wanoga sno park is great but t low elevation in late season.
29	Edison Butte	groom more trails and roads
29	Edison Butte	increased trail grooming
29	Edison Butte	Its a good parking area, just low elevation, so early & late season its hard to get on the snow.
29	Edison Butte	More grooming of trails. Better instructions for cars to not park in trailer areas.
29	Edison Butte	more parking
29	Edison Butte	Open addtional areas for snowmobile access
29	Edison Butte	Better out of bounds marking
30	Wanoga	Allow additional riding areas
30	Wanoga	better access to the high country. More parking at Dutchman. Allow parking at Mount Bachelor.
30	Wanoga	better groomed trials. I also would park at Dutchman Flats but I never can get a spot!!!
30	Wanoga	Better marked trails
30	Wanoga	Better marked trails
30	Wanoga	Build another snow park
30	Wanoga	Complete the Kapka Butte parking lot. Only because we've been shot down to enlarging Dutchman for over 15 years
30	Wanoga	Designate a overnight area.over day use.also the snow park gets a lot of out of state users.maybe out of state riders/users should have to pay higher snow park permit fees.
30	Wanoga	enlarge the parking area. Allow more use at Duchman Flats, i.e. trailers.
30	Wanoga	Having a snowpark higher in elevation and more parking
30	Wanoga	Having more parking and more riding areas.
30	Wanoga	Improve grooming and trail maintenance. Trails tend to be soft even when groomed. Harden up.
30	Wanoga	Increase parking lot size if possible. I really like the additional parking lot for sledders only. A few years ago, sledding vehicles would take a full size parking space made for towing vehicle & trailer.
30	Wanoga	increased parking, cell phone availability for safety, quick grooming
30	Wanoga	keep the clubhouse at Wanoga open midweek and at night or build a primitive warming shelter at Wanoga.
30	Wanoga	more groomed trails
30	Wanoga	More grooming of trails.
30	Wanoga	more parking and groomed trailers to handle the large weekend crowds
30	Wanoga	more parking area
30	Wanoga	More parking at dutchman and room for 4 place snowmobile trailers, current rule is 40 ft for truck and trailer
30	Wanoga	More parking at higher areas .Example Dutchman for early and later season rides.

30	Wanoga	More parking for larger rigs with trailers and enough room to allow overnight stays in the parking area.
30	Wanoga	more parking on weekend
30	Wanoga	Need better trail grooming!!! Please do it much more often.
30	Wanoga	Need more parking!! This season there will be a new parking area, but not enough.
30	Wanoga	No suggestions, as this is some of the best riding in the state.
30	Wanoga	Open a new snow park at the higher elevations as Wanoga is often without snow and Dutchman fills up by 6:30am
30	Wanoga	open tumalo mountain
30	Wanoga	small parking areas thruought the region,
30	Wanoga	Stopping the forrest service from closing more of our riding areas and adding more area to park at higher elevations
30	Wanoga	Expand parking, create another lot at ? Elevation-maybe Edison #29 are (not Dutchman Flats though
30	Wanoga	Larger riding areas
30	Wanoga	More grooming-another trail to Moon Mt.
30	Wanoga	More trail grooming
30	Wanoga	Need new parking near Dutchman
31	Dutchman Flat	make parking area bigger, sharing with cross country skiers, elk lake resort cabin parking, hard to park a vehicle and trailer
31	Dutchman Flat	Adding/maintaining a parking area.
31	Dutchman Flat	Additional parking - expand Dutchman Flat Snow-Park
31	Dutchman Flat	Additional parking in the dutchman flat area that would accomodate longer trailers
31	Dutchman Flat	Better instruction for trailers vs nontrailer vehicals. Where to park, how to park, more parking.
31	Dutchman Flat	bigger parking area, seperate lot for skiers
31	Dutchman Flat	Bigger parking lots. Open more terrain to snowmobiles!
31	Dutchman Flat	change the layout of the parking area
31	Dutchman Flat	Complete the new parking area at Kiowa; Dutchman is too small for amount of use.
31	Dutchman Flat	Dutchman parking lot needs to be expanded! , and its the only location where there was any snow most of the season. Wanoga, and anything down lower just doesn't get snow sometimes, the new proposed lot by the sunriver exit will be equally as worthless aswanoga is. Dutchman is the only option but it needs a major expansion..
31	Dutchman Flat	expand dutchman parking area. it is the highest in elevation, thusly, during low snow years often the only access
31	Dutchman Flat	Expand Dutchman Snowpark
31	Dutchman Flat	Expand parking area. Allow riding to Edison on S side of road.
31	Dutchman Flat	Expand the Dutchman flat snow park size. With low snow levels it is the only park in the area where snow can be accessed.
31	Dutchman Flat	Expansion of the parking lot
31	Dutchman Flat	Greatly increase size of parking. Because of heavy use-greatly increase trail grooming frequency.
31	Dutchman Flat	i try to go on weekdays
31	Dutchman Flat	Increase parking
31	Dutchman Flat	larger parking areas
31	Dutchman Flat	More parking
31	Dutchman Flat	More Parking, at Dutchman,not enough space for snombl trlr! Too many CCskiers, more groomed and designated trails
31	Dutchman Flat	Need more parking at Dutchman Flat. This is a very important high elevation access point for backcountry riding.
31	Dutchman Flat	Parking (day use and overnight) is the only improvement needed. Dutchman needs trailer parking immensely, or there needs to be an agreement with Mt. Bachelor for

		parking overflow with snowmobile riding access to Mt. Bachelor parking area (walking from Mt.B to your sled waiting for you at Dutchman is not realistic).
31	Dutchman Flat	ten times the size of dutchman's parking lot & separate sledders from cross country skiers
31	Dutchman Flat	The parking is a nightmare. Their needs to be more area to park.
31	Dutchman Flat	This is a multiuse area and gets taken over by backcounty skiers and needs to be made bigger
31	Dutchman Flat	Triple the size of the parking area!!! Keep that parking area for snowmobile and non-motorized use AND triple the size!!! Dutchman is the ONLY higher elevation park and necessary for (1) low snow seasons, (2) early & late season use and (3) for elderly (4) handicapped riders who cannot withstand the bumpy, rough and low snow conditions of the trail from Wanoga to Dutchman. Allow overnight parking at Dutchman!!! Riders and non-motorized users stay overnight at Elk Lake Resort, all the more reason for oernight parking. There should be no length restrictions at Dutchman. KAPKA is not the solution. This survey will likely show that Dutchman is the most popular park in Region 8 (depending on survey distribution). It is EXTRAORDINARILY popular with ridersand non-motorized users (ski, snowshoe, back country skiers and snowboarders). There is never an empty parking space and Dutchman is likely the smallest park in Oregon. KAPKA (a parking lot at a lower elevation) is not the solution because of the earlie reasons listed, Region 8 and Central Oregon must have an expansion of this higher elevation park!!!
31	Dutchman Flat	We frequently cant get into dutchman, especially during holidays. Minimal parking enforcement there. Often motorhomes pulling trailers take up big areas. Plus there is at least a conflict or two every season with skiers. Ive had my trailer unhooked frm my vehicle before and had lug nuts removed from a trailer tire. We often park at Vista Butte at the sunriver junction. No necessarily a snow park, but it gives fast access to trail 6 and to the moon meadow area. Due to increased issues with dutchman,the latter part of last season I started going to Three Creeks parking area and riding in that zone. Parking is never an issue, put it is lower in elevation and snow depths can be low. My suggestion is a much bigger lot at dutchman. There are tons of beatle kill trees on the south side of the lot, so extend the lot and make it long. Also split it into two areas. One for skiers, one for sleds, and actually enforce the parking rules. The two sides would get along better if they were split.
31	Dutchman Flat	Better/more consistent grooming
31	Dutchman Flat	Build a parking lot
31	Dutchman Flat	Expand Dutchman and move cross country skiers to to Mt. Bachelor
31	Dutchman Flat	Expand parking
31	Dutchman Flat	Expansion please
31	Dutchman Flat	Larger parking area
31	Dutchman Flat	Larger parking area that allows 4 place trailers, stop closing areas like Dutchman and Tumalo. I've been riding here since 1986
31	Dutchman Flat	More parking
31	Dutchman Flat	More parking for large trailers and tow vehicles.
31	Dutchman Flat	New snowpark at Dutchman
31	Dutchman Flat	Turn part of the flat into parking lot
32	Three Creek Lake Road	Parking Lots need to be larger
32	Three Creek Lake Road	A LOT more trails and play areas (Snow Feilds)
32	Three Creek Lake Road	Keep the non snowmobilers in a separate parking lot. Single cars take up a full truck and trailer space.
32	Three Creek Lake Road	Keep the outhouses open by 3 Creeks Lake for access while riding...
32	Three Creek Lake Road	More grooming on the trail
32	Three Creek Lake Road	more parking for trailers, lots of skiers and snowshoers parking with a single car in a trailer space
32	Three Creek Lake Road	move commercial operator out of upper parking lot and into lower lot as was the original plan

32	Three Creek Lake Road	Move Snomobile rentals/tours to lower adjoining parking lot, have designated car parking in lower adjoining lot. Keep larger parking area for trailer parking or make additional parking. Make a higher elevation snoparks for season begin and end. More trail
32	Three Creek Lake Road	Ticket skiers that park in the snowmobile park rather than the Nordic lot. It's very hard to park a trailer in the Nordic lot and every year the problem of skiers taking up space meant for trailers gets worse. Higher a few rangers that care about thesnowmobiling sport.
32	Three Creek Lake Road	Add additional trails
32	Three Creek Lake Road	Keep snowshoers and nordic skiers in their own lot
32	Three Creek Lake Road	More groomed trails
33	Ikenick	More parking, bigger lots.
34	Tombstone Summit	Do not have any suggestions.
35	Lava Lake	groom snowmobile trails
36	Little Nash	better grooming
36	Little Nash	Plow Mekenzie Pass turnaround out more often
37	Ray Benson	Additional parking at Ray Benson Snow Park
37	Ray Benson	better grooming of trails
37	Ray Benson	better parking
37	Ray Benson	better parking lot maintenance
37	Ray Benson	Better signage on where you can or can't ride.
37	Ray Benson	better trail signage
37	Ray Benson	improve the trail grooming
37	Ray Benson	improved trail markings
37	Ray Benson	Larger parking area
37	Ray Benson	love it there
37	Ray Benson	More plowing of the parking during big snowfall - I understand it competes with clearing roads.
37	Ray Benson	More snoparks, better maintained/plowed parking areas, more trails
37	Ray Benson	more trail signage
37	Ray Benson	more trails for people to scatter out some more, wider road entrance into ray benson, it's a little tight when you meet another vehical both towing traylors
37	Ray Benson	ODT keeping Ray Benson lots clear for parking
37	Ray Benson	Open more area to ride make a few more looped trails to help snowmobiles get better experiance. I think we should be able to ride all our forest areas with snowmobiles they do no damage to the enviroment. Make it so the groomer can cross the highway from elow little nash and groom big springs area there are many miles in that area that are not accessble for gromming without haluling the groomer there.
37	Ray Benson	Open up more riding areas and have Cross Country skiers stay in designated areas
37	Ray Benson	Snow Plows can do a better job keeping the parking lot clean for easier access,
37	Ray Benson	We love riding there
37	Ray Benson	Enlarge parking lot/add more restrooms
37	Ray Benson	Extend the groomed trail system
37	Ray Benson	Parking lots need cleared more often
37	Ray Benson	RV hook ups-power
37	Ray Benson	Trail maps are good/trail markers are terrible
39	McCoy	enlarge snow park/add new snow park-more trails & a second shelter
39	McCoy	frequent plowing to the upper parking area

39	McCoy	Not enough parking at the bottom and top parking area. Needs a parking lot mid way because of elevation and snow level.
39	McCoy	Plow parking lot more frequently.
40	Skyline Road	Access to higher elevation riding.
40	Skyline Road	Add more snow parks
40	Skyline Road	better marked trails and roads
40	Skyline Road	make dog sleders not park at entrance to trail, and clean up after them selfs and dogs
40	Skyline Road	More truck and trailer parking! Most times you have to get there super early or else there is no where to park and you have to go back home.
40	Skyline Road	Add more EXTREMELY needed snow parks
40	Skyline Road	Additional Outhouse
40	Skyline Road	better marked trails and roads
40	Skyline Road	better trail grooming
40	Skyline Road	bigger parking
40	Skyline Road	Bigger parking lot is needed here. It is by far the most popular place because of the great facilities, but more parking is needed.
40	Skyline Road	Find an alternate trail route along roads plowed open for logging year-around, and post No Wheeled Vehicles on trails.
40	Skyline Road	making bigger snow park, for vehicles and trailers
40	Skyline Road	More grooming of the trails. More parking. Bypass Govt. Camp ski traffic.
40	Skyline Road	More open play areas versus just trail riding.
40	Skyline Road	More parking areas
40	Skyline Road	more trail grooming.
40	Skyline Road	more trails
40	Skyline Road	more truck and trailer parking! Most time going up there you have to get there super early or else there is no where to park and you have to turn around and come home.
40	Skyline Road	Mt Hood Snowmobile Club Sponsers a charity ride. I attend and participate.
40	Skyline Road	Need additional or larger parking lot
40	Skyline Road	Cleaner restroom
40	Skyline Road	Enlarge parking lot
40	Skyline Road	Increase parking
40	Skyline Road	Larger parking/better bathrooms
40	Skyline Road	Make designated areas for motorhome and trailer
40	Skyline Road	More grooming northside of Hwy 58-repair damage to trails
40	Skyline Road	More parking/groom trails
40	Skyline Road	The club in that area ot friendly. Moved to Diamond Lake-Larger parking/better bathrooms
40	Skyline Road	Trail maps, riding areas-off trail
40	Skyline Road	Widen entrance/exit roads
41	Frog Lake	A warming shelter in the area would be nice
41	Frog Lake	better trail maps and trail markings
41	Frog Lake	better trail signs
41	Frog Lake	bigger parking and educate people w/o a snowmobile trailer to not park in the middle of the parking
41	Frog Lake	bigger parking lot, better trail signs(we got lost a lot), more grooming
41	Frog Lake	Larger parking lot
41	Frog Lake	more grooming
41	Frog Lake	More grooming done to trails.

41	Frog Lake	More parking areas for trailers.
41	Frog Lake	More parking. Expanded riding area
41	Frog Lake	More trails put in
41	Frog Lake	more parking
41	Frog Lake	Need more "open" or "play" areas versus just trails.
41	Frog Lake	nothing
41	Frog Lake	parking area on west side
41	Frog Lake	People park in all sorts of orientations and in all areas. It's frustrating when you have a trailer & people without trailers are parked all over without any order.
41	Frog Lake	Signage on trails (marking) could be better.
41	Frog Lake	signs markers
41	Frog Lake	Warming Hut
41	Frog Lake	Warming hut is needed.
41	Frog Lake	Clear fallen trees and cleaner bathrooms
42	Trillium Lake	Long drive so would like off trail access
43	White River East	Expansion of the Sno Park and better warming shelters
45	Little John	mark and maintain trails better
45	Little John	Nothing - it an excellent area to ride. Well groomed and supervised by law enforcement
46	Billy Bob	mark and maintain trails
46	Billy Bob	we try new areas of the state every year this is one in the last five years. Our goal is to ride as much of our state as we can over the years.
46	Billy Bob	Work on getting more snow! Well maintained
48	Walton Lake	better grooming of trails
48	Walton Lake	better parking, curtial winter logging operations in and around sno-park
48	Walton Lake	plowing of road and parking lot-has been just 1 lane in past which is dangerous since it is 2 way traffic
48	Walton Lake	Plow road wider to snow park, clear parking areas
49	Idlewild	Keep all riding trails and roads open
51	Huddleston	Enjoyed snowmobiling where there were not a lot of people
51	Huddleston	More snowmobile classes-courteous riders
52	Dixie Mountain	no wilderness
53	Blue Springs Summit	Quit grooming trails
53	Blue Springs Summit	Snow Park
54	Grande Ronde Lake	Better access to ski lodge
55	Four Corners	Ability to ride at a higher elevation
55	Four Corners	Better snow park and parking area
55	Four Corners	For the County Road Crew to keep the road plowed
55	Four Corners	Having the local County road crew plow-out the parking lot.
55	Four Corners	more outhouses
56	Mt. Emily	outhouse
56	Mt. Emily	Some better maps and signage on the trails for people that haven't ridden this area would help a lot.
57	Langdon Lake / Morning Crk	better grooming on the trails
57	Langdon Lake / Morning Crk	keep up with the groomed trails

57	Langdon Lake / Morning Crk	More parking
57	Langdon Lake / Morning Crk	open more areas
57	Langdon Lake / Morning Crk	Snow Grooming, Brushing of trails in summer
57	Langdon Lake / Morning Crk	the forest service treats us like criminals, they pull us over to check tags and most of us are very resonsible people, come up on a saturday night about midnight and stop the ones that are driving drunk
57	Langdon Lake / Morning Crk	the trails could use more frequent grooming but for a volunteer only operation they are acceptable.
57	Langdon Lake / Morning Crk	more area
57	Langdon Lake / Morning Crk	Better trail markings and grooming
57	Langdon Lake / Morning Crk	Grooming trails
57	Langdon Lake / Morning Crk	More off road parking
59	Tollgate / Woodland	ensure that the road from the highway to the parking area is clear.
59	Tollgate / Woodland	More grooming of the trails on the weekends!
59	Tollgate / Woodland	Better warming hut, gathering area.
59	Tollgate / Woodland	Keep up the groomed trails in the private land trail areas
59	Tollgate / Woodland	more grooming
59	Tollgate / Woodland	More grooming of trails
59	Tollgate / Woodland	snow grooming
59	Tollgate / Woodland	We just like the big play areas and plenty of snow.
60	Andies / Horseshoe Prairie	More parking/more trails
60	Andies / Horseshoe Prairie	Smoother trails for the first 10 miles
61	Catherine Summit	A few more trails.
61	Catherine Summit	better outhouse in parking area
61	Catherine Summit	Keep it open, no restrictions
61	Catherine Summit	keep the parking lot clean as it is usually a challenge not to get stuck in the lot
61	Catherine Summit	more frequent trail grooming
61	Catherine Summit	Smoother access trail to riding areas. It's brutal only a couple days after grooming.
61	Catherine Summit	Better parking
61	Catherine Summit	Enlarge parking area
61	Catherine Summit	Groomed trails
61	Catherine Summit	Make bigger
61	Catherine Summit	Paving parking lot
61	Catherine Summit	Restroom improvement
62	Clear Creek	Better snow park development. Hard to park and turn around
62	Clear Creek	improve the Clear Creek Sno Park. It's too small
62	Clear Creek	Just keep it open!!
62	Clear Creek	larger snow park more marked trails

62	Clear Creek	much better grooming
62	Clear Creek	Need bigger parking area.
62	Clear Creek	A warming hut
62	Clear Creek	Don't mess with it-Open more out back
63	Salt Creek Summit	make more areas like this available closer to home!
63	Salt Creek Summit	nothing except make the parking free (no pass required)
63	Salt Creek Summit	Better grooming
63	Salt Creek Summit	More trail grooming
64	Ferguson Ridge	groomed every once an awhile would be great!
65	Diamond Lake (unspec.)	More vehicle and trailer parking space, especially on busy 3 day weekends.
65	Diamond Lake (unspec.)	Add more snow parks.
65	Diamond Lake (unspec.)	Better grooming of the trails
65	Diamond Lake (unspec.)	Groom trails more frequently
65	Diamond Lake (unspec.)	Maintain trails better
65	Diamond Lake (unspec.)	They do a good job of keeping the trails plowed/groomed
66	Halfway	public restrooms
67	Sumpter	Areas with rest rooms
67	Sumpter	More grooming, more parking
98	Other (unspec.)	Free parking, more trails, easier access
98	Other (unspec.)	not maximizing parking lot
98	Other (unspec.)	Better sled
98	Other (unspec.)	Don't close riding area
98	Other (unspec.)	everyone knows the rules of snowmobiling
98	Other (unspec.)	improved trail markings
98	Other (unspec.)	increase grooming the trails and build bridges where creeks seep thru the snow and make it hard to cross
98	Other (unspec.)	more grooming
98	Other (unspec.)	need some snow parks
98	Other (unspec.)	No snowparks
98	Other (unspec.)	Open more area for people to ride the more area you close the tighter it make the area for more people this in turn make more conflicts. more area means less frequenciey of runins with other recreationalist. and we all need to get along of course.
98	Other (unspec.)	Parking.
98	Other (unspec.)	Simply keep it open.
98	Other (unspec.)	Wider parking area
98	Other (unspec.)	Bathrooms
98	Other (unspec.)	better grooming
98	Other (unspec.)	better trail maps and trail markings
98	Other (unspec.)	More trails and trail signs on the East side of Mt. Hood, snowmobile trail maps
98	Other (unspec.)	Keeping the parking area plowed properly
98	Other (unspec.)	ride from 2nd home
98	Other (unspec.)	Parking and bathrooms
98	Other (unspec.)	Better Parking

99	Other (specified)	clear cut hill side for more hill climb area
99	Other (specified)	Does not seem to be a designated area for snowmobiling but many locals use this area. It would be useful if there was signage designating it as a place you can snowmobile, maybe a map showing possible trails, trail markers, act.
99	Other (specified)	Four wheel drive vehicles also use the area until snow depth prevents their use.
99	Other (specified)	Increase size of parking lot and increase the amount of public land available for riding (i.e.less restricted wilderness areas)
99	Other (specified)	Put a sno park up the Clackamas river so we don't have to go through Government Camp to ride.
99	Other (specified)	Close road to snowmobilers and skiers during high snow periods
99	Other (specified)	kappka snow parking needs to built
99	Other (specified)	Groomed trails
99	Other (specified)	Leave public lands open to the public (snowmobiles and others)
99	Other (specified)	looks great nice job of gromming trails
99	Other (specified)	Nothing really the trails are good and you can make it all the way to the Hyatt Lake Resort for lunch
99	Other (specified)	The parking areas are managed poorly. Snow covers the lines and so everyone parks however they feel like. After mixing in trailers and pickups and RV's each parking area fills up at about 50% capacity. It becomes such a jumbled mess that you can not leaveand return and are often times blocked in. Consider placing cones or flags to mark parking places and driving lanes. Also consider making larger parking lots. The lots are very small compared to the size of the riding areas.
99	Other (specified)	we liked it except for the closure of certain trails due to the monument.
99	Other (specified)	A better snowpark and clearcuts.
99	Other (specified)	Increased trail grooming frequency. Increased parking area .
99	Other (specified)	Snowmobiling in Oregon has limited access to the forest. In the area that we rode most loggers and 4x4 also go in.
99	Other (specified)	I ride from my home to this area via FS lands. Once in the area (about 10 miles) there are groomed trails. The only improvement for me, would be to stop 4wheel drive vehicles from driving on back roads in the snow.
99	Other (specified)	Keep all of thepublic lands open with the exception of designated wilderness.
99	Other (specified)	More snowmobile snow parks & fewer cross country only snow parks. Very one-sided against S/M parking & trails.
99	Other (specified)	no logging and leave it as it is
99	Other (specified)	Allow parking on the gravel roads. Currently no vehicles are allowed past the intersection of the road. Typically the snow may be 1+ miles up the mountain meaning you have to ride on gravel before hitting it.
99	Other (specified)	The area has many roads to ride just no warming huts around this area
99	Other (specified)	better plowed roads for access
99	Other (specified)	better trail marking
99	Other (specified)	enlarge parking area
99	Other (specified)	keep all public lands open: All!
99	Other (specified)	Keep area open
99	Other (specified)	More parking
99	Other (specified)	more parking at anthony lakes upper area and clear the road to make a loop up top. hard to turn around
99	Other (specified)	More Trails
99	Other (specified)	more trails, bathrooms
99	Other (specified)	snow removal is an issue at the parking area and has big piles to ride over to access the trail head from parking area.
99	Other (specified)	Stop wilderness encroachment!
99	Other (specified)	Need a snow park between Unity and Austin Junction

99	Other (specified)	Nothing I love everything about the Steens
99	Other (specified)	Add parking area
99	Other (specified)	Allow access to higher elevations. Most areas above 8000' are wilderness
99	Other (specified)	Land owned by logging co. Park taken care of by snowmobile club. 2 miles of road to park opened by snowmobile club
99	Other (specified)	Larger parking
99	Other (specified)	Open more forest service roads
99	Other (specified)	Signage and continued groomed trails from Hyatt to Lake of the woods-Done well by local group

Statewide

A new snow park at higher elevations
Access to wilderness areas. Snowmobiles don't leave a trace and don't harm the environment.
Add more trails
Add sno-parking area near Estacada, adjust trail grooming funding to coincide with sno-pack.
add some roads for off season use
Additional funding to Grooming program and more money to snow park creation/expansion
Additional snowmobile events: poker runs, races, rallys.
add'l parking and grooming
Be able to snowmobile in the wilderness areas thus allowing more areas to ride in
beacon search park, Avi 101
Beter mapping
better access to snow parks
better access to trails and smoother rides
Better and bigger parking close to the good snow areas
Better free trail maps online, more trails closer to portland, it's a long drive to the mountain and that plays a big part in decreased usage,
Better maps/trail markings
Better marked trails
Better marking of avalanche potentials if you go off trails
Better Parking areas at higher elevations. Like Dutchman snowpark. we try to carpool with 4-5 people and cant park our trailer there due to length
better parking, esp. re: snmbl trailers, more, better marked trails specific for snowmobiles, and enforcement for that violation
Better road maintenance
better snow removal in snowmobile parking lots. better trail grooming. more open areas to snowmobiles
Better snowparks for spring riding
Better trail grooming. Please do not take away ANY MORE riding areas in all public lands.
better trail maps and snow conditon updates
Change Dept. of Interior road closure policies
Charge out of state snowmobilers license fees that will contribute to costs of snow removal and trail grooming.
Clean up burn areas
Clean up burned areas
Close in grooming to prevent moguls
Create more trails that are for snowmobiles. Most conflicts are between cross country skiers and snowmobilers where the cross country skier is upset because there is a snowmobile in the area.

Create new riding areas or no further closures w/o opening new areas to compensate
Creation of more snowmobile only trails to limit skier rider interaction so that each may enjoy in their way.
Develop more trail systems. Do not close National Forest land outside of designated wilderness areas to snow machine use.
Dimly lit parking areas, nothing too bright, just to keep your belongings safe and provide a low glare light.
do not close any areas currently available to riding
Do not limit; create more
Don't know what you mean by "Dangerous 'high marking'
Don't over regulate.
Don't regulate too much
Don't take away the areas we have to ride now and the need to open up new areas
dont try to overportect the riders. charge for the use of search and rescue
early season grooming
Education
enforce the laws, keep riders where riders should be, four strokes only
Enlarge snowmobile park at Dutchmans Flat rather than do a new one at anywhere else...
equal access, enforce overnight parking in non designated areas, and out of state violators.
ethanol free gas available close to riding. open more trails and areas. better signage on trails, bigger hills
expand
expand areas
Expand Dutchman sno-park size. Often it is the only park where the snow is deep enough to ride.
Expand higher elevation riding on Mt Hood
Expand parking/education requirments
Expand Snowparks, especially high elevation snowparks, such as Dutchman. Keep balance between use groups
Expand the riding areas
expand trial systems so heavy use areas are not so crowded.
Extend groomed trail system to dispurse large groups of snowmobilers
Family play areas for kids
Fight wilderness proposals that would close existin back country riding areas
For Ray Benson and Crescent Lake, we are VERY IMPRESSED with the overall delivery of services.
Forest service working with ODOT/private land owners to connect trail heads to extend riding from trail to trail
frequent grooming
Give us MORE places to ride, over crowding is a problem.
Groom trails for non-aggressive riders
Grooming
Grooming
Grooming and restrooms or warming shacks
grooming and snow depth up dates would be nice
Grooming and Trail Maintenance is done by volunteers. Washington pays their groomers. Also, some trails in the Tollgate area are on private property and off trail riding is prohibited.
Grooming information would be helpful
Grooming! Wanoga [is bad]; don't ride there very much simply because of grooming. Paulina is better, although could use improvement
Have more ares to ride
Have more backcountry access available so we can get off of the trail sooner.

Have more info on snowmobile activies
having a state sponsored forum where riders can post information about riding areas, and keep each other current on the riding conditions, hazards, etc...
Having respect from cross country skiiers and snow shoers when using shared areas.
Higher elevation snowmobile parks. Less law enforcement. No length restrictions. More parking.
I love snowmobiling in Oregon. The trails especially around Paulina Lake and Mt. Bachelor are much better marked than those in the Mt. Hood National Forest.
I prefer to spend as little time on the trail as possible and prefer backcountry, but when I do have to ride trail to get to the backcountry I prefer it to be groomed more often than they currently are.
improve access to the info for on line users
Improve grooming and trail maintenance. Trails tend to be soft even when groomed. Harden up.
Improve the riding on Mt Hood. Add a sno park up the Clackamas past Ripplebrook so those of us who choose to ride Mt Hood areas don't have to fight all the traffic at Govt Camp. But like everything else in the Mt Hood National Forest it takes years to getanything done. Like the new outhouses at Skyline.
Increase number of grooming days.
Increase parking
increase parking in the high country. Kapka butte is not the high country. Snow shoers and skiers can park at the Mt Bachelor Nordic center.
Info on internet
Its all about parking and access. Im lucky enough to work shift work so I ride mostly on week days. It has to be real epic for me to go up on a weekend, since parking is terrible.
its pretty darn good
Just need more snow. We have good trails
Keep 4 wheel clubs off closed roads
Keep 4 wheel drives off trails
keep 4x4s off gromed trails
keep all public lands open to the public
keep areas open and allow more off trail riding.
Keep areas open for snowboarding
Keep areas open to all users.ATV's, skiers, it's all public land and fees paid. We should be able to use it
Keep off ATV's or make them help pay for grooming
Keep skiers and snowmobilers in separate areas
Keep the accessable to the public
KEEP THE RIDING AREAS OPEN!
Keep the sport positive. Promoting safety and fun while enjoying oregon s great out back areas.
Keep the trails open.
keep them all open
Keep them open
Keep them open, do not reduce the amount of trails
Keep them open, not restricted
Keep trails open. Develop more trails.
Keep trails open. Stop closing them down as wilderness areas. Work with other users (motorized and non-motorized) to maximize use for everyone.
Keep UTV's with tracks off the trails
Keeping up with trail grooming
Kids/teenagers with adults
Larger area to park at Dutchman flat!!
Larger riding areas

Law Enforcement to site acohol use on trails & snow parks (Thousand Springs)
less interference from government agencies and law enforcement
little more info to keep people safe
Local club does a great job in grooming
Log trails
Maintain local control, not USFS
Make Dutchman Flats Snowpark bigger
Make Dutchmann bigger
make it easier to work with the forest service to maintain old and open new trails for snowmobiling
Make it legal to cross roads, highways, etc. Too many trails are separated by heavily traveled roadways, make more tunnels under these roads or make it legal to cross them.
Make more areas to ride and more connectors from one area to another
Make more trails and back country riding available
make more trails, don't close trails
Make people more aware of the great riding areas, to keep them from going to Washington.
Maps, Parking
Massively expand the trailsystem and play areas
Minimize environmental restrictions
More and larger snow parks above 5500 feet for early and late season riding
More areas...no fee parking
More back country riding
more connecting trails with accomodations along the trails
More frequent grooming better signage
More funding for trail grooming
more groomed trails
More groomed trails
More groomed trails
more groomed trails
More grooming
More grooming
More grooming
More grooming
more grooming
More grooming
More grooming
More grooming of trails, including trimming of growth next to trails to keep trail wide enough for safe passage
More grooming on smaller trails
More grooming, more parking
More grooming.
More grooming. And grooming on the weekends when more riders are out.
More grooming. Trail expansion
More info on trails
More instructors to give classes
more large equipment to help brush trails in the summer time.

More law enforcement out on the trails
more logging
more maintance during off season
more orange diamond markers and intersection sinage that corespondes with the maps
More parking and restrooms
More parking areas and groomed trails
More parking at Dutchman flat parking area
More parking at high elevations
more parking with trailers at snow level
More parking, explanded parking
More parking.
More parking/expand trails
More parking/grooming
more plowing
More riding areas
More RV parking in areas that have snow
More signage/marking
More signs/education/off road parking
More sno parks with access to off trail riding-open hillsides, meadow, etc
More snowparks at higher elevations with room for larger trailers w/ proper signs indicating where to park. Many times XL/snowshoers park in snowmobile site in a way that takes up more space thus leaving no room for snowmobilers
More trail grooming
More trail grooming
more trail maintenance, keep brush clear
More trails
More trails
more trails , more areas to ride and stop bringing our boundaries in every year . MORE parking at higher elevations which allow us access to normal riding areas longer in the year.
More trails away from snowparks-must keep 4 wheelers and cross country skiers off trails
More trails to ease crowding and excessive machines on trails
more trails, more maps like PDFmaps
more trails, more shelters, more parking,
More volunteer efforts, less government oversight.
More/better grooming
Mt. Hood, more trails...
Need more riding area around Mt Bachelor. Too many riders being crowded in too small an area due to closures. Causes accidents.
New/enlarge parking lots, develop new trails in unused areas, more cooperation from USFS
No pedestrians or dog sleds-more grooming
No snow park fees
non closure of areas
Not letting snoeshoes walk onsnowmobilng trails. Have better signs for them
Open a big lot near Dutchman that allows vehicles over 40ft. Or allow parking at Mt. Bachelor or offer season pass to park there. I would pay extra money to park there.
Open all public areas to snowmobiling. Snowmobiles leave no trace!

Open more areas
open more areas
open more areas
open more areas for riding
open more areas to riding
Open more outback
Open more trails
open more trails , groom more
Open the trails. Keep the government out of the recreation. Clear sno-park just as important as ski areas
Open up areas, keep ATV's/4x4's off trails, direct skiers to their secluded areas
open up more areas.
Open up more back country areas
Open up more back country riding
open up more lands. Snowmobiling is a low impact sport. Like all other activities the more people that are in one area the less personal responsiblility each individual takes.
Open up more USF land, we do not leave any trace riding on snow.
Open up the wilderness areas.
Open up wilderness to snowmobile
Opening up corridors through national forest that would provide for more area to spread out riders
Parking
parking in higher elevations for early ,late or poor snow conditions. Also more parking for truck and snowmobile trailers.
Patroled by law enforcement
Promote riding in OR
Quit closing riding areas from snowmobilers
Quit closing riding areas.
Quit giving trails to cross country skiers. Open more public land to snowmobiles
Re-open closed forest service roads
reopen previously closed areas, more grooming, larger trail systems, larger snoe parks
Separate areas for cross country skiers
Sharing of snow parks
Snow parks w/power and water hook ups
Snowmobilers need to become better organized and do a better job providing positive public education concerning the sport, and the counter the threats to lock us out of public lands by the pro-environmental organizations.
snowpark in area of estscada
Some new trails/continue good signage
stop closeing down areas really how much damage does a snowmobile do to the ground when it's driving on snow.
Stop closing areas
stop closing forests to multiple use opportunities
Stop the forrest service from shutting down our riding areas. In our riding area, non-motorized users have areas to themselves, meanwhile the motorized riding areas, parking lots and trails must be shared. This creates conflicts, which the forrest uses to shut down more motorized areas...to reduce conflict???
Stop wilderness encroachment
They are good generally speaking. Local clubs provide a great service too. Better parking in high cascade areas. Pretty good otherwise. Keep public lands open and prevent closure by environmental groups should be the main focus.
This is our recreation in the winter and we want access to it

to quit adding fees so we can afford to ride
Tracked side by sides ruin groomed trails. Need to direct those riders elsewhere or limit the trail acess
Trail grooming reports updated online
Trail intersection markers with numbers coralating with numbers on map
trail maintenance
up to date avalanche conditions
use some sno-park permit funds for plowing snow parks
USPS attempt to cloe recreational and snowmobile areas
Watershed and wilderness intrusion by snowmobilers is a common issue and one that needs attention. Snowmobilers have unprecedented access when snow conditions permit to most public lands.
We only go to Hoo Doo, 5 stars for us! All other ones have issues, some major. If the survey was about each location I could give more info on why we don't go to them
Where we are (region8) often pickups drive on trails early season-very difficult problem. Also, logging causes snow plowing of roads so you cannot ride there
With new road closures, there have beenmany misunderstandings/conflicts with the law regarding where we can park
Work together with all users and forest service to open new trails and back country riding opertunities.
Work with oregon state snowmobile assn-OSSA

Appendix 2. Calculation of economic contribution

The following steps were used in estimating the economic contribution of expenditure by snowmobilers.

1. An IMPLAN model was created for the state, with 2012 economic structure data.

2. IMPLAN default values were used and Type SAM multipliers were created. These multipliers treat households as endogenous and thus include induced effects.

3. An impact scenario was created by allocating visitor expenditure into relevant IMPLAN categories (bridging). Spending in the groceries, gas and oil, and miscellaneous categories was treated as retail expenditure and margined.

4. Impact estimates were generated. Impact results are shown in 2014 dollars.

Input-output analysis assumptions

IMPLAN is based on input-output (IO) analysis and is widely used to estimate the economic contribution of tourism, recreation, and other activities. The IO approach involves several assumptions. These assumptions generally are not met in their entirety, but IO (and IMPLAN in particular) provides a good balance between practicality and accuracy. That is particularly true in cases, such as the present, in which the impact being evaluated is a small proportion of the overall study area economy. In such cases, non-linearities can be reasonably approximated with the linear relationships inherent in IO. IO assumptions include the following.

1. All businesses within each sector produce a single, homogeneous product or service; the input procedures used in the production process are identical.

2. An increase of production will lead to purchase of inputs in the proportions shown in the technical coefficients matrix. In technical terms, the production function is linear and homogeneous. This assumption restricts economies of scale; IO analysis assumes a business always will use the same proportion of inputs regardless of how much it grows.

3. When households are included in the analysis (as is done for this analysis), their spending patterns (consumption functions) also are assumed to be linear and homogeneous.

4. The structure of the economy will not change. Many input-output models, including the one used here, are static in nature. They are based on data from a single year, in this case 2012. Dramatic structural changes in the economy would mean the relationship between expenditure and impact would be different in future years.

5. When IO is used to estimate the effect of changes in final demand (as in the present case), there must be unemployed resources available to be brought into the sector as inputs.

Appendix 3. Questionnaire instrument (mail version)

The mail questionnaire is reproduced below. Note that the online version involved greater detail, notably in region-level (rather than statewide-level) reporting of “ride most often” sites and associated distance, crowding, and improvements.

Snowmobiling in Oregon

Please Complete This Survey and Return It As Soon As Possible

Your Input Helps Inform Future Trail Opportunities

Thank You for Your Participation

OSU
Oregon State
UNIVERSITY
Cascades

This research survey, and each question in it, is voluntary. Your responses will be confidential – responses will only be reported as part of larger groups. We do not anticipate any direct risks or benefits in completing the survey, but your responses may enhance future opportunities for you and other riders. The survey takes approximately 15 to 20 minutes to complete, depending on your riding patterns.

If you have any questions about the survey, please contact Principal Investigator Kreg Lindberg at 541-322-3126 or by e-mail at kreg.lindberg@osucascades.edu. If you have any questions about your rights as a survey participant, please contact the OSU Institutional Review Board (IRB) Human Protections Administrator at 541-737-8008 or by e-mail at IRB@oregonstate.edu.

1. How many snowmobiles are owned within your household? Please write in the number. _____ snowmobiles

Please answer the remaining questions only with respect to recreational snowmobile riding on public lands in Oregon. This includes US Forest Service, BLM, and county lands.

Because the 2013-2014 season had unusually low snow, please answer survey questions with respect to your snowmobile riding during an average season over the past five years / seasons. If you did not ride snowmobiles recreationally on public lands in Oregon during the past five years, please tick this box ☐ , skip the remaining questions, and return the survey in the postage-paid envelope.

2. For your average season over the past five years, how many days did you park in each of the following parking areas to ride your snowmobile on surrounding trails and off-trail areas? See enclosed map to locate each parking area, then write in the number of days for each area where you rode. Any portion of a day counts as a full day.

If you parked in areas not listed here, at the bottom of the table please write in the names of the areas (and days in each) where you parked to ride your snowmobile.

Snowmobile parking area	Days
1. Page Mountain	
2. Mount Ashland	
3. Buck Prairie	
4. Big Elk	
5. Summer Home	
6. Fish Lake	
7. Ichabod Spring	
8. Rainbow Bay	
9. Dead Indian	
10. Great Meadow	
11. Four Mile Lake Road	
12. Quartz Mountain	
13. Camas	
14. Annie Creek	
15. Union Creek	
16. Thousand Springs	
17. Claude Lewis Trailhead	
18. Three Lakes (W. Diamond Lake)	
19. South Diamond	
20. North Crater Lake	
21. Walt Haring	
22. Waldo Lake Road	
23. Crescent Lake	
24. Junction	
25. Six Mile	
26. Ten Mile	
27. Paulina Lake	
28. East Lake	
29. Edison Butte	
30. Wanoga	
31. Dutchman Flat	
32. Three Creek Lake Road	

Snowmobile parking area	Days
33. Ikenick	
34. Tombstone Summit	
35. Lava Lake	
36. Little Nash	
37. Ray Benson	
38. Big Springs	
39. McCoy	
40. Skyline Road	
41. Frog Lake	
42. Trillium Lake	
43. White River East	
44. Bennett Pass	
45. Little John	
46. Billy Bob	
47. Ochoco Divide	
48. Walton Lake	
49. Idlewild	
50. Starr Ridge	
51. Huddleston	
52. Dixie Mountain	
53. Blue Springs Summit	
54. Grande Ronde Lake	
55. Four Corners	
56. Mt. Emily	
57. Langdon Lake / Morning Creek / MP 20	
58. Spout Springs Ski Area / MP 22	
59. Tollgate / Woodland	
60. Andies Prairie / Horseshoe Prairie / MP 27	
61. Catherine Summit	
62. Clear Creek	
63. Salt Creek Summit	
64. Ferguson Ridge	

Write in areas not listed above	Days

Write in areas not listed above	Days

3. From the list in Question 2 above, please write the name of the parking area where you rode snowmobiles most often in the average season. If there is a tie, write the name for your favorite among those in the tie.

I rode most often at (write in one name) _____

4. For the area you wrote in Question 3 above (rode snowmobiles most often), approximately how many miles do you drive one-way from your home to that area? Write in the number of miles.

_____ miles

5. For the area you wrote in Question 3 above (rode in most), on average how crowded do you feel? Please circle one number for each part.

How crowded do you feel	Not at all crowded		Slightly crowded		Moderately crowded			Extremely crowded	
In the parking area	1	2	3	4	5	6	7	8	9
While riding	1	2	3	4	5	6	7	8	9

6. For the area you wrote in Question 3 above (rode in most), what can be done to improve your experience riding at that area? Please write your suggestion.

_____

7. Trail managers have limited resources to provide for all types of snowmobile experiences. How important is it for trail managers to allocate funding for each of the following actions at the area you wrote in Question 3 above (rode in most)? Circle one number for each action.

Action	Not important				Very important
More signs along trails	1	2	3	4	5
More trail maps / information	1	2	3	4	5
More enforcement of existing rules / regulations in trail areas	1	2	3	4	5
More trail grooming	1	2	3	4	5
More educational programs promoting safe / responsible riding	1	2	3	4	5
More parking / sno-parks in the area	1	2	3	4	5
More restrooms in the sno-park	1	2	3	4	5
More RV camping opportunities nearby	1	2	3	4	5
Better snow removal in the sno-park	1	2	3	4	5
Increase trail safety / reduce hazards	1	2	3	4	5
More avalanche education	1	2	3	4	5
More warming shelters	1	2	3	4	5
Expand existing trail system	1	2	3	4	5
Develop long-distance trails (more than 100 miles long)	1	2	3	4	5
More back-country off-trail riding	1	2	3	4	5
Other (please specify) _____	1	2	3	4	5

8. There are various considerations in deciding where to ride. How important is each of the following when deciding in which snowmobile area to ride? Circle one number for each consideration.

Consideration	Not important				Very important
Trail opportunities (location of trails, variety of trails, etc.)	1	2	3	4	5
Access to backcountry off-trail riding	1	2	3	4	5
Active law enforcement presence	1	2	3	4	5
Absence of law enforcement	1	2	3	4	5
Safety and user ethics education	1	2	3	4	5
Availability of shelters (in sno-park and along trails)	1	2	3	4	5
Trail grooming / maintenance	1	2	3	4	5
Trail signs	1	2	3	4	5
Trail map availability	1	2	3	4	5
Parking availability	1	2	3	4	5
Website / online information	1	2	3	4	5
Campground areas at or near trailheads	1	2	3	4	5
Other (please specify) _____	1	2	3	4	5

9. How important is each of the following snowmobile trail riding opportunities in Oregon? Circle one number for each opportunity.

Trail riding opportunities	Not important				Very important
Long interconnected trails (more than 100 miles)	1	2	3	4	5
Medium trails (50 to 100 miles)	1	2	3	4	5
Short trails (fewer than 50 miles)	1	2	3	4	5

Please tell us more about your snowmobile riding trips. Day trips do not involve an overnight stay away from home. Multi-day trips involve an overnight stay, even if you only ride your snowmobile on one day.

10. In the past five years, has the number of trips you have taken increased, stayed the same, or decreased? Please tick one box for each type of trip you take.

Type of trip	In the past 5 years, the number of this type of trip has…		
Day trip	☐ Increased	☐ Stayed the same	☐ Decreased
Multi-day trip	☐ Increased	☐ Stayed the same	☐ Decreased

11. If the number of either type of trip has increased or decreased, please indicate why. Tick all that apply.

☐ More free time
☐ More disposable income
☐ More snow than before
☐ High cost of fuel
☐ Less free time
☐ Less disposable income
☐ Less snow than before
☐ Other (please describe): _____

12. For multi-day trips, what type of overnight accommodation do you use? Tick all that apply.

☐ RV / camper in campground ☐ Group RV / camper area ☐ RV or tent dispersed / dry camp
☐ Hotel / motel ☐ At home of local friends/family ☐ Other (please describe): _____

13. While on day trips or multi-day trips, what activities do you typically do or would like to do in addition to riding? Tick all that apply.

☐ Downhill skiing ☐ Dine out ☐ Hunt
☐ Cross-country skiing ☐ Visit brewpubs / breweries ☐ Watch wildlife
☐ Explore the town / area ☐ Visit historic places ☐ Other outdoor activities
☐ Shop ☐ Other (please describe):_____

14. Please refer to the map again and indicate in which region you lived in 2013 (if you moved across regions, indicate the region where you lived the most days in 2013). Write in one number.

I lived in region _____

15. Please write the number of days you parked in each of the regions (1 through 11) shown on the map in order to engage in recreational snowmobile riding on public land in the average season during the past five years.

This may be in the designated areas shown on the map or in other areas. You may have crossed region boundaries while snowmobiling, but please report where you parked. Include even short trips close to home, such as riding on US Forest Service or BLM land near your house. Any portion of a day counts as a full day.

Then split the total number of days riding in each region into:

- **days spent on day snowmobile riding trips (did not involve an overnight stay away from home); and**
- **days spent on multi-day snowmobile riding trips (involved an overnight stay, even if you only rode one day during the trip).**

Example: assume you rode 8 days total in the Example region in the average season. Five of those days were day trips (1 day each) and three of those days were from a multi-day trip. In the Example row, you would write 8 in the first column, 5 in the second column, and 3 in the third column.

Region	Total number of days riding in region		Of these total days riding in each region, how many days were spent on…	
			day snowmobile riding trips	multi-day snowmobile riding trips
Example	8	→	5	3

Region	Total number of days riding in region		Of these total days riding in each region, how many days were spent on…	
			day snowmobile riding trips	multi-day snowmobile riding trips
1		→		
2		→		
3		→		
4		→		
5		→		
6		→		
7		→		
8		→		
9		→		
10		→		
11		→		

Please tell us more about your "typical" day snowmobile riding trip – at the single location where you most often rode on day trips in the average season.

We then ask the same questions about your typical multi-day trip. If you did not take any day snowmobile riding trips in the average season, please skip to Question 20.

16. In which of the 11 Oregon regions was the location (where you rode) on your typical day snowmobile riding trip? It may be the same as the region you live in. Write in one number.

My typical day snowmobile riding trip was in region _____ (write one number between 1 and 11)

17. Was the location for your typical day snowmobile riding trip within 60 one-way driving miles of your home? Tick one box.

☐ Yes, it was within 60 miles of my home
☐ No, it was further than 60 miles from my home

18. How many people usually were in your travel party for your typical day snowmobile riding trip? This includes everyone who traveled in the same vehicle with you to the riding location. Write in the number of people, including yourself.

_____ person(s)

19. On this typical day snowmobile riding trip, how much did you and other members of your travel party combined spend within 50 miles of the location? If the typical trip was a short trip near your home, it is possible that you spent little or no money. Write in the amount for each item, rounding off to the nearest dollar.

Item	Amount spent by everyone in travel party within 50 miles of the location
Hotel, motel, condo, cabin, B&B, or other lodging except camping	$
Camping (RV, tent, etc.)	$
Restaurants, bars, pubs	$
Groceries	$
Gas and oil	$
Other transportation	$
Park / forest entry, parking, or recreation use fees	$
Recreation and entertainment, including guide fees	$
Sporting goods	$
Other expenses, such as souvenirs	$
Total	$

☐ I don't recall my trip spending
☐ I don't want to report my trip spending

Now please tell us more about your "typical" multi-day snowmobile riding trip – at the single location where you most often rode on multi-day trips in the average season.

If you stayed overnight it was a multi-day trip, even if you only rode your snowmobile on one day. If you did not take any multi-day snowmobile riding trips in the average season, please skip to Question 25.

20. In which of the 11 Oregon regions was the location (where you rode) on your typical multi-day snowmobile riding trip? It may be the same as the region you live in. Write in one number.

My typical multi-day snowmobile riding trip was in region _____ (write one number between 1 and 11)

21. Was the location on this typical multi-day snowmobile riding trip within 60 one-way driving miles of your home? Tick one box.

☐ Yes, it was within 60 miles of my home
☐ No, it was further than 60 miles from my home

22. On this typical multi-day snowmobile riding trip, how many days did you spend within 50 miles of the location? Write in the number of days, including the days you didn't ride during the trip.

_____ days on my typical multi-day trip

23. How many people usually were in your travel party for your typical multi-day snowmobile riding trip? This includes everyone who traveled in the same vehicle with you to the riding location. Write in the number of people, including yourself.

_____ person(s)

24. On this typical multi-day snowmobile riding trip, how much did you and others in your travel party combined spend within 50 miles of the location? Write in the amount for each item, rounding off to the nearest dollar.

Item	Amount spent by everyone in travel party within 50 miles of the location
Hotel, motel, condo, cabin, B&B, or other lodging except camping	$
Camping (RV, tent, etc.)	$
Restaurants, bars, pubs	$
Groceries	$
Gas and oil	$
Other transportation	$
Park / forest entry, parking, or recreation use fees	$
Recreation and entertainment, including guide fees	$
Sporting goods	$
Other expenses, such as souvenirs	$
Total	$

☐ I don't recall my trip spending
☐ I don't want to report my trip spending

25. Based on your snowmobile riding, how much of a problem do you think each of the following is on snowmobile trails on public lands in Oregon? Circle one number for each issue.

Issue	Not a problem				A serious problem
Alcohol or drug use	1	2	3	4	5
Vandalism	1	2	3	4	5
High avalanche risk	1	2	3	4	5
Dangerous "high marking"	1	2	3	4	5
Riding in closed areas	1	2	3	4	5
Too little law enforcement	1	2	3	4	5
Too much law enforcement	1	2	3	4	5
Closure of snowmobile trails / riding areas	1	2	3	4	5
Irresponsible / dangerous / reckless riding	1	2	3	4	5
Too many people and machines	1	2	3	4	5
Lack of parent supervision of youth riders	1	2	3	4	5
Excessive speed on trails	1	2	3	4	5
Vehicle noise	1	2	3	4	5
Dogs on trails	1	2	3	4	5
ATVs on snowmobile trails	1	2	3	4	5
Cross-country skiers on trails	1	2	3	4	5

26. What can be done to improve snowmobile trail opportunities in Oregon? Please write your suggestion.

_____

27. Do you currently belong to a snowmobile organization or club? Tick one box.

☐ Yes ☐ No ☐ Unsure

28. For each person in your household who participated in <u>recreational snowmobile riding on public lands in Oregon in the average season</u>, please tick the relevant box for their gender and write their age in years.

Rider	Gender (tick one)	Current age (write in age)
Yourself	☐ Male ☐ Female	years old
2nd snowmobile rider in household	☐ Male ☐ Female	years old
3rd snowmobile rider in household	☐ Male ☐ Female	years old
4th snowmobile rider in household	☐ Male ☐ Female	years old
5th snowmobile rider in household	☐ Male ☐ Female	years old
6th snowmobile rider in household	☐ Male ☐ Female	years old

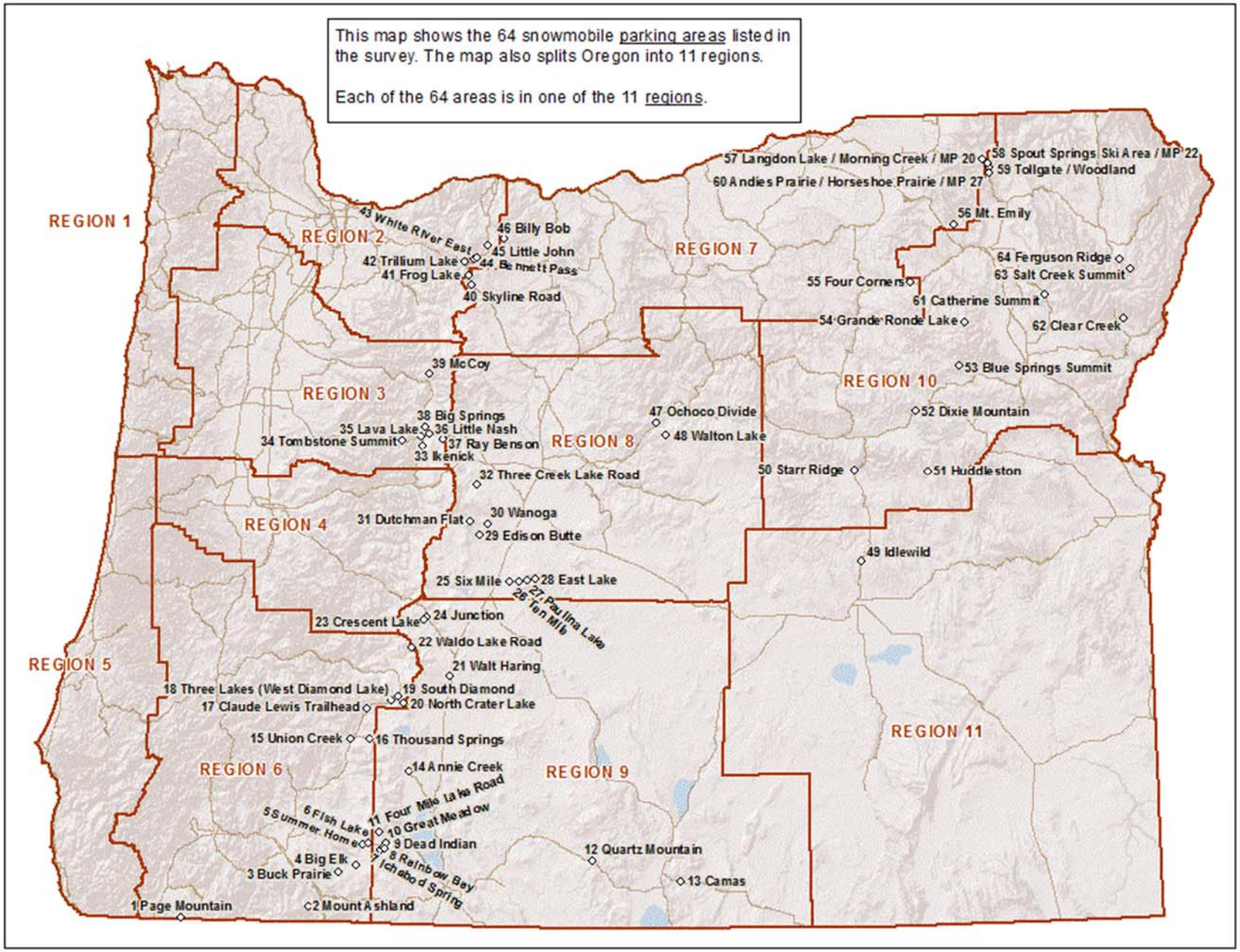
29. What is your household's total annual income before taxes? Include income for all persons that regularly live in your household and all sources of income – salary, pensions, interest or dividends, and all other sources. Tick one box.

- ☐ Less than $10,000
- ☐ $10,000 to $14,999
- ☐ $15,000 to $24,999
- ☐ $25,000 to $34,999
- ☐ $35,000 to $49,999
- ☐ $50,000 to $74,999
- ☐ $75,000 to $99,999
- ☐ $100,000 to $149,999
- ☐ $150,000 or more

30. Are you of Spanish / Hispanic / Latino descent? Tick one box.

- ☐ Yes
- ☐ No

31. Please select one or more of the following categories that best describes your race.

- ☐ Black / African American
- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Native Hawaiian or other Pacific Islander
- ☐ White
- ☐ Some other race

Appendix 4. Map of parking areas and regions