

2004 Oregon Statewide Trail User and Non-Motorized Boater Survey

Final Report for the Oregon Parks and Recreation Department

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Research Background

This report presents key findings from the 2004 telephone survey of Oregon motorized and non-motorized trail users and non-motorized boaters. The project was part of the Oregon Trails 2005-2014: A Statewide Action Plan effort, funded by the Oregon Parks and Recreation Department.¹ The survey randomly screened over 15,000 Oregon telephone households to identify respondents reporting trail and non-motorized boat use in the past year. Separate questionnaires were administered for motorized trail users, non-motorized trail users, and non-motorized boaters. The complete text of these questionnaires, with embedded results, is presented in Appendix B of this report.

The survey employed a random digit dial methodology to identify Oregon residents who reported qualifying trail or non-motorized boating use in the last year. Data collection was conducted in two waves. An initial list of 9,500 telephone numbers was called to identify motorized trail users, non-motorized trail users, and non-motorized boaters. At the end of this data collection sufficient motorized trail users and non-motorized boaters were not achieved, so an additional 5,950 telephone numbers were screened in association with an unrelated survey. This additional screening resulted in quotas for trail and water users being achieved that permit a sampling error for each group of $\pm 5-6\%$ and for combined trail users of $\pm 2\%$. The random telephone design and low sampling errors contribute to making this one of the most scientifically rigorous studies of trail users conducted to date for Oregon.

The sample report for the initial 9,500 telephone numbers provides the clearest picture of the outcome of the calling, not complicated by the supplementary screener and call-back design used to complete the research.²

¹ For more information on the Plan, see <http://www.prd.state.or.us/planning.php>.

² The complete methodology report for the entire survey is provided in Appendix A.

TABLE 1: Sample Report – Initial Screening	
	N
Total initial sample	9500
Commercial or other non-household numbers	5487
Screenable households	4013
Screened out for non-trail use or over quota	1863
Potentially eligible households	2150
Completed interviews	647

Almost 5,500 of the computer-generated random telephone numbers, about 58%, were non-residential, disconnected, faxes or modems, or otherwise ineligible to screen for trail usage. That left 4,013 numbers that could have been screened. Over 500 of these numbers were not answered after numerous attempts. Another 500 involved households with answering machines where a person did not answer the telephone. A total of 2,510 households (1,863 + 647) were actually screened, for a screener completion rate of 63%. Of these, 1,863 reported no Oregon trail use in the past year.

The second phase of interviewing provides a picture of completion outcomes for screened-in households:

TABLE 2: Sample Report – Supplementary Screening	
	N
Initially screened-in sample	215
Commercial or other non-household numbers	4
Screenable households	211
Screened out for non-trail use or over quota	41
Potentially eligible households	170
Completed interviews	124

Of the 215 households screened in using the supplementary survey, 170 were potentially eligible and 124 interviews were completed, for a questionnaire response rate of 78%. Combining these two estimates (screener response rate of 63% and questionnaire response rate of 78%), we estimate an overall response rate on the survey of 49%.

Because of the relative rarity of motorized trail users and non-motorized boaters, the order of questionnaire administration first selected motorized users with certainty if any were present in the household. If no one qualified on this basis, the screening selected

with certainty anyone reporting non-motorized boating use in the last year. If no one qualified at that point, the screening asked about non-motorized trail use. Households were screened in for the latter until the quota of about 300 was exceeded; another 228 non-motorized trail users were identified after the quota was filled and thus were not interviewed. A more complete description of the methodology used in collecting and weighting the data is contained in Appendix A of this report.

Each respondent, regardless of the usage type for which they were screened-in, was asked about their full range of motorized, non-motorized, and non-motorized boating experience. This question was then used to determine how many crossover users were in the sample. The resulting estimates³ are presented in the following table:

TABLE 3: Percentages of User Types		
All Combinations	Percent	Number of Occupied Oregon Households
No trail usage in past year	65.3%	870,479
Non-motorized trail use only	17.3%	230,932
Non-motorized trail user and non-motorized boater	9.6%	128,273
All three	3.4%	45,964
Motorized and non-motorized	2.5%	33,302
Motorized only	1.0%	13,788
Non-motorized boater only	.5%	6,031
Motorized trail user and non-motorized boater	.4%	4,954
Total	100%	1,333,723 ⁴
Combined Percentages		
Any non-motorized trail use	32.9%	438,471
Any non-motorized boater use	13.9%	185,222
Any motorized trail use	7.3%	98,007
Sampling error for this question is $\pm 2\%$. ⁵		

The upper part of the table presents population estimates for each possible combination of the three trail usage types. About 17% of households report only non-motorized use; a further ten percent combine this with non-motorized boating. The remaining combinations have much smaller representation.

³ The process of creating these estimates is described more fully in Appendix A.

⁴ Number of occupied Oregon households in 2000 Census. This and the average household size found at <http://factfinder.census.gov>.

⁵ Sampling error reports the error introduced because a sample, rather than the entire population, is interviewed. The numbers reported here reflect a 95% confidence interval. That is, for this table (for example), we expect the figure reported will be within 2% of the true population figure 95% of the time. There are other sources of error in surveys, but they cannot be measured as precisely so are seldom discussed. See Appendix A for more details on total survey error.

Combining the percentages presents the findings for each user type, permitting a household to be counted in one, two, or three categories. Almost a third of Oregon households have a resident with non-motorized trail use. Even the smallest usage group, motorized trail users, amounts to almost 100,000 Oregon households.

Most Oregon households, over 65%, report no trail usage in the past year. They represent a huge reservoir of potential trail use – since the average Oregon household size is 2.51, as many as 2,185,000 Oregonians do not take advantage of the state’s trails. These individuals were not interviewed, so we cannot address issues of their characteristics or views. Anecdotal reports from telephone interviewers suggest that quite a few senior citizens initially contacted in the survey felt it was ridiculous to be asking them about trail use. This suggests that planners would do well to reach out to such groups and provide opportunities for them to enjoy Oregon’s trails and waterways.

Description of Report

This report is organized in four sections. First, information specific to motorized trail users is presented. Findings are then presented for non-motorized trail users, followed by a section on non-motorized boaters. Finally, comparative tables presenting all three user groups are presented to illuminate the differences and similarities between them.

Appendix A presents a detailed description of the survey methodology and sampling. Appendix B includes the complete text of the telephone questionnaire with embedded frequencies, to be used as a reference for question wording and the unweighted results for each question. Appendix C provides the full text of all open-ended questions and answers to “other – specify” questions. Appendix D presents detailed crosstabs for key variables.

Motorized Trail Users

The following section provides survey results specific to motorized trail users.

Motorized Trail User Demographic Information

Seven percent of Oregon households have a person reporting motorized trail use, amounting to 98,000 households in the state. Screening procedure asked first for any motorized trail user in the household, and such a person, if present, was interviewed about motorized trail use. The results reported here thus related to households with a motorized trail user, not to other individuals in those households.

Basic demographics of motorized trail users are provided in the following table:

TABLE 4: Motorized Demographics N = 196	
Gender:	
Male	72%
Female	28%
Age:	
18 – 29	20%
30 – 39	28%
40 – 49	27%
50 – 59	18%
60 – 69	5%
70+	2%
Education:	
Less than high school	4%
High school graduate	34%
Some college	41%
Bachelors	17%
Masters	3%
Doctorate	1%
Income:	
Less than \$18,000	7%
\$18,000 - \$24,999	5%
\$25,000 - \$39,999	19%
\$40,000 – \$69,999	36%
\$70,000 - \$99,999	19%
\$100,000+	14%
Sampling error for this question is $\pm 6\%$	

Most motorized respondents are male, and the median age is 40 – 49 years old. More than half have some college (62%), although most are not college graduates (21%). Median income is \$40,000 to \$69,999.

Frequency of Motorized Trail Participation

The survey asked motorized trail users about the frequency of their Off-Highway Vehicle (OHV) trail use in the past year. The following table reports the percentage participation in each activity, and the estimated number of Oregon households that this represents⁶:

TABLE 5: Extent of Motorized Trail Participation		
N = 196	Participated in Last Year	Estimated Oregon Households
ATV riding (3 and 4 wheel)	70%	68,600
Off-road motorcycling	44%	43,100
4-wheel driving (stock) ⁷	44%	43,100
4-wheel (modified) ⁸	29%	28,400
Snowmobiling	24%	23,500
Sand rail riding	11%	10,800
Dune buggy riding	11%	10,800
Competitive trail events	10%	9,800
Other (listed in full as variable MOTOTHER in Appendix)	8%	7,800
Sampling error for this question is ± 6%.		

The survey also asked how often the respondent engaged in each activity in the last year:

⁶ The survey did not ask how many in the household participated in each activity, so no figure for total participation can be estimated.

⁷ 4-wheel stock with original tires, such as SUVs, trucks, and jeeps.

⁸ 4-wheel stock with modified tires and/or suspension upgrades.

N = 196	In Last Year	Of Participants in Last Year, How Often?			
		Weekly	2-3 a Month	Once a Month	Less Often
ATV riding (3 and 4 wheel)	70%	12%	34%	19%	34%
Off-road motorcycling	44%	16%	29%	20%	35%
4-wheel driving (stock) ⁹	44%	21%	24%	24%	31%
4-wheel (modified) ¹⁰	29%	21%	21%	33%	24%
Snowmobiling	24%	13%	26%	17%	44%
Sand rail riding	11%	0%	23%	18%	59%
Dune buggy riding	11%	14%	19%	0%	67%
Competitive trail events	10%	0%	16%	21%	63%
Other (listed in full as variable MOTOTHER in Appendix C)	8%	6%	25%	50%	19%

Sampling error for the “in last year” question is ± 6%. Sampling error for the frequency questions ranges from ± 8% for the most common activity to ± 22% for the least common.

The data reflect considerable overlap in motorized trail activities. All-Terrain Vehicle (ATV) riding is the most popular activity, with 70% of motorized trail users having engaged in that activity in the past year. Of those participating in motorized trail activities, weekly frequency of use is highest for 4-wheel (stock) and 4-wheel (modified) users, at 21% each. ATV, off-road motorcycle, and snowmobile users show the most frequent use two to three times a month (in season). Among the “other” activities presented in full as variable MOTOTHER in Appendix C are poker runs (traveling to a series of destinations to pick up a playing card at each, forming a poker hand at the final stop), hunting, 6x6 amphibians, and go karts.

Favorite Motorized Trail Activity

When asked to name their favorite activity, motorized trail users show a preference for ATV riding (3 and 4 wheel) and off-road motorcycling:

⁹ 4-wheel stock with original tires, such as SUVs, trucks, and jeeps.

¹⁰ 4-wheel stock with modified tires and/or suspension upgrades.

TABLE 7: Favorite Motorized Trail Activity N = 196	
ATV riding (3 and 4 wheel)	40%
Off-road motorcycling	25%
4-wheel driving (stock)	11%
Snowmobiling	11%
4-wheel (modified)	8%
Sand rail riding	3%
Dune buggy riding	1%
Competitive trail events	1%
Sampling error for this question is $\pm 6\%$	

Combining stock and modified vehicles, 19% of motorized users choose 4-wheel driving as their favorite motorized trail activity. Although snowmobiling is only available to most Oregonians for part of the year, it is still selected by more than one in ten as their favorite activity.

Preferred Level of Difficulty – Motorized

The survey asked motorized trail users the level of trail difficulty they prefer. The results are included in Table 8 below:

TABLE 8: Preferred Level of Difficulty – Motorized N = 185	
The more difficult blue square trails	51%
The most difficult black diamond trails	28%
The easiest green circle trails	21%
Sampling error for this question is $\pm 7\%$	

Moderate difficulty is preferred over both the most difficult and the easiest trails.

Distance Traveled and Preferred Setting for Motorized Activities

To reach their most frequent motorized trail activity, trail users travel a median of 41 to 50 miles (one way).¹¹ The median is the number that reflects the answer given by a cumulative 50% of respondents, so half travel longer and half a shorter distance. They travel about the same distance to reach their favorite activity, as the following table reveals.

¹¹ Since the top category for this question went above 200 miles, the mean distance would be higher.

TABLE 9: Distance Traveled for Most Frequent and for Favorite Motorized Activities ¹² N = 194				
Miles Traveled (One Way)	Most Frequent Activity		Favorite Activity	
	Percentage	Cumulative	Percentage	Cumulative
1 – 10	15%	15%	12%	12%
11 – 20	14%	29%	14%	26%
21 – 30	9%	38%	7%	33%
31 – 40	6%	44%	7%	41%
41 – 50	13%	57%	13%	53%
51 – 75	13%	71%	13%	66%
76 – 100	11%	81%	14%	80%
Over 100 miles	18%	100%	20%	100%
Sampling error for this question is ± 6%				

More than half of motorized trail users travel more than 40 miles to enjoy their favorite motorized trail activity, and one-fifth travel more than 100 miles. This travel burden restricts motorized trail user’s ability to enjoy their sport, as revealed in the following section.

Reason Motorized Trail Not Used as Much as Desired

Fifty-nine percent of motorized trail users report they would like to participate in their activities more than they do:

TABLE 10: Use Trails as Much As Wanted – Motorized N = 115	
Want to use trails more	59%
Use trails as much as want to	41%
Sampling error for this question is ± 9%	

This reflects a very large reservoir of unmet needs. The survey asked about the causes of this problem, the constraints to motorized trail use:

¹² Respondents were not restricted to destinations in Oregon.

N = 114-115	Mean	The Major Reason	An Important Reason	A Somewhat Important Reason	Not an Important Reason
Lack of time	2.2	41%	24%	16%	20%
None close by	2.8	24%	15%	17%	44%
Lack of information	3.0	12%	18%	24%	46%
Lack of money	3.3	9%	13%	19%	59%
Weather	3.3	6%	11%	25%	57%
Overcrowding	3.4	6%	6%	27%	61%
Hard to get to	3.6	5%	7%	6%	82%
User fees	3.6	5%	6%	13%	76%
Health	3.7	4%	4%	7%	84%
No one to go with	3.7	4%	3%	17%	77%
Poor maintenance	3.7	2%	5%	12%	81%
Difficult to get equipment	3.9	1%	4%	4%	91%
Personal safety	3.8	0%	6%	10%	84%
Too challenging	4.0	0%	1%	2%	97%
Other (presented in full as variable USMORE15 in Appendix C) (N=35)	1.7	51%	37%	9%	3%
Sampling error for this question is $\pm 9\%$					

Lack of time is the primary roadblock for motorized trail users; the lack of nearby trails is second. These two are closely related, since distant travel to motorized trails means it takes more time to participate in this sport. Lack of information is also an important reason motorized users do not use trails as much as they would like. Lack of money, overcrowding, and weather are not major or important reasons but do score a bit higher as a “somewhat” important reason.

A very sizable 30% of motorized users offer other reasons they do not participate in motorized trail use as much as they would like, and these answers are presented in full as variable USMORE15 in Appendix C. The leading reasons are trail closures and fire danger. Among the comments:¹³

They don't allow you on them. There are half a dozen and there is no reason some of these trails should be closed to motorized use. For example: Mount Defiance, they should not shut the gate so that motorized vehicles cannot use it.

¹³ Verbatims have been edited to improve grammar and clarity. For the original wording, see the Appendix.

All the lands that we have to do this with are being taken away by environmental groups that don't respect anybody's right to be able to enjoy the forest.

Seasonal closing. They close the trails but there's still the amount of people that want to use them so it makes for congestion. That brings up safety issues.

The fire season around here. They generally have the forests shut off to where you can't get off anything but maintained roads. In the summer time, that's probably the biggest reason why you can't go as much as you would like.

Satisfaction with Motorized Trail Services

The questionnaire asked motorized respondents to rate their satisfaction with five measures of trail service. The following graph and table present that data, listed in order of a decreasing “very satisfied” evaluation.

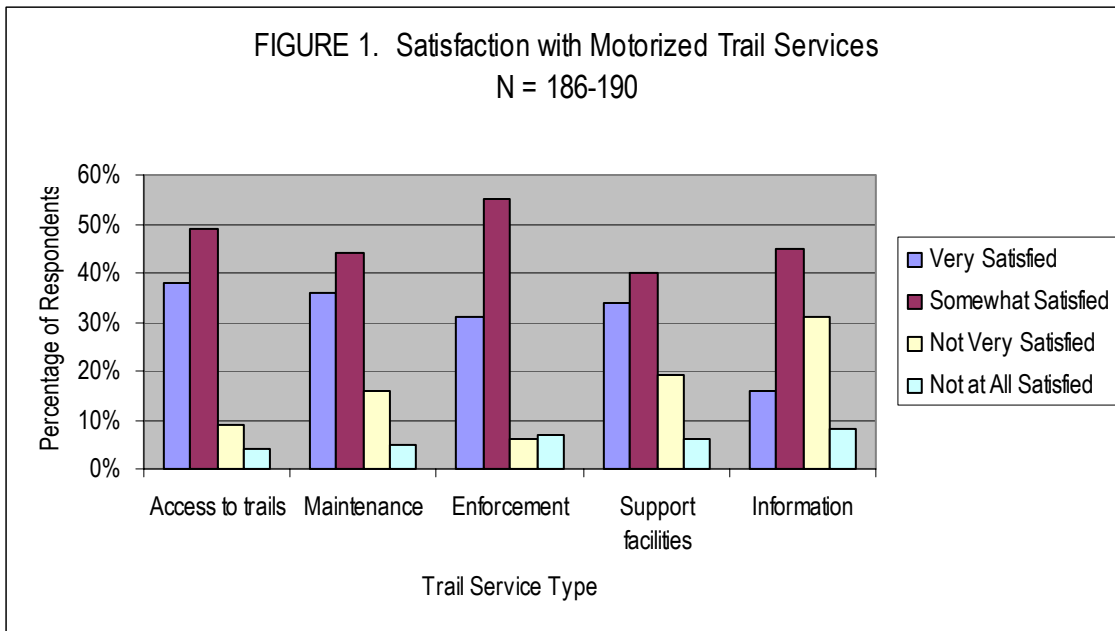


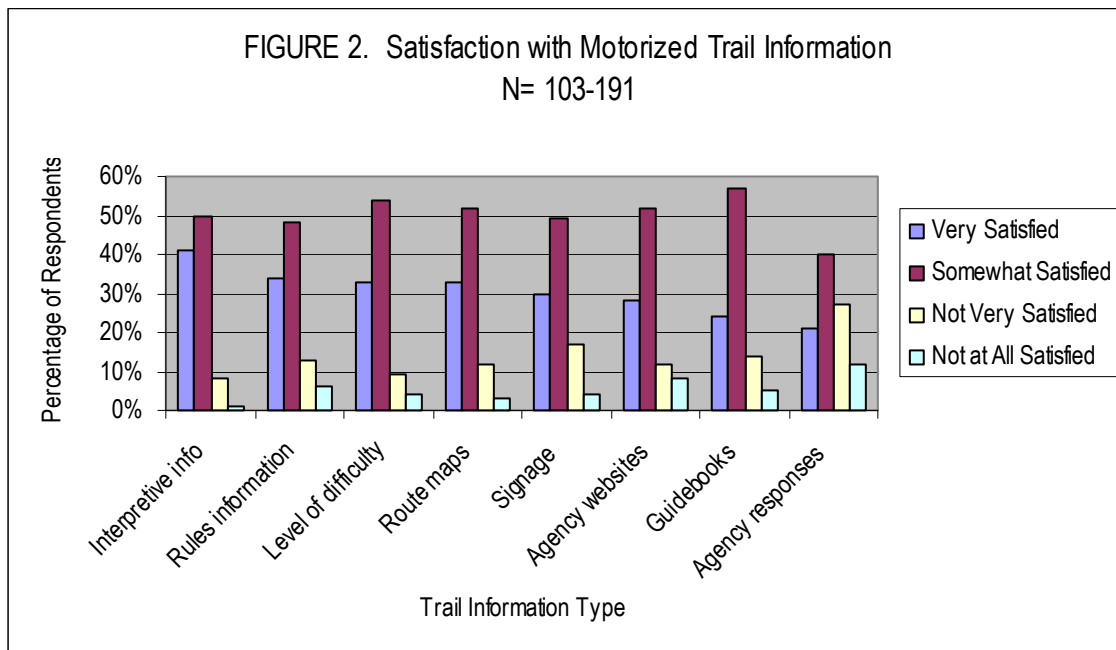
TABLE 12: Satisfaction with Motorized Trail Services
1 = Not at All Satisfied, 4 = Very Satisfied

N = 186-190	Mean	Very Satisfied	Somewhat Satisfied	Not Very Satisfied	Not at All Satisfied
Access to trails	3.2	38%	49%	9%	4%
Maintenance	3.1	36%	44%	16%	5%
Enforcement	3.1	31%	55%	6%	7%
Support facilities	3.1	34%	40%	19%	6%
Information	2.7	16%	45%	31%	8%

Sampling error for this question is ± 6%

In such satisfaction rankings, any combined “not at all/not very” total score above 10% is usually justification for attention by planners. The fact that all the measures exceed this threshold suggests that trail planning should prioritize addressing this user group’s concerns, especially in the areas of information (combined 39% dissatisfied), support facilities (25%), and maintenance (21%).

Motorized trail users were asked about satisfaction with a variety of information sources. Combined very/somewhat satisfied scores were high, with all but agency responses near or above the 80% combined rating. However, as the figure and table below show, dissatisfaction passed the 10% threshold for all categories except interpretive information. Users are more dissatisfied with agency responses, guidebooks, and signage than with other dimensions. Respondents answering “Don’t Know,” excluded from the table, amounted to 47% for agency websites, 39% for agency responses, 34% for guidebooks, and 25% for route maps, suggesting considerable lack of familiarity with these sources.



N = 103-191	Mean	Very Satisfied	Somewhat Satisfied	Not Very Satisfied	Not at All Satisfied
Interpretive (170)	3.3	41%	50%	8%	1%
Level of difficulty (170)	3.2	33%	54%	9%	4%
Route maps (147)	3.2	33%	52%	12%	3%
Rules and regulations (191)	3.2	34%	48%	13%	6%
Signage (187)	3.0	30%	49%	17%	4%
Agency websites (103)	3.0	28%	52%	12%	8%
Guidebooks (129)	3.0	24%	57%	14%	5%
Government agency responses (119)	2.7	21%	40%	27%	12%
Sampling error for these questions ranges from $\pm 6\%$ to $\pm 9\%$					

The survey asked respondents for the information sources they use and for their one favorite source:

N = 196	Use Source	Favorite Source
Advice of people	91%	38%
Brochures, maps	86%	26%
Gather information along the way	72%	3%
Visitor centers	65%	7%
Sporting goods stores	59%	4%
Internet	53%	11%
Phone trail management agencies	49%	3%
Books, magazines, newspapers	41%	2%
Clubs, groups, trail organizations	18%	2%
Other (listed in full as variable INFSRC10 in Appendix C)	9%	5%
Sampling error for this question is $\pm 6\%$		

A majority of respondents have used many of these information sources. A few favorites stand out: people’s advice, brochures and maps, and the internet. Clubs, groups, and trail organizations rank low on both lists, probably because only 10% of motorized trail users report membership in a motorized trail organization or club. The “other” answers are listed in full as INFSRC10 in Appendix C, Some respondents cite “memory” from having grown up in the area or visited it often as their source of information.

Overall Satisfaction with Motorized Trail Experience

Motorized trail users were asked for their overall evaluation of the motorized trail experience in Oregon. Only six percent say they are not very satisfied, and not one respondent selected “not at all satisfied.” Almost half report they are very satisfied.

Very Satisfied	48%
Somewhat Satisfied	46%
Not Very Satisfied	6%
Not at All Satisfied	0%
Sampling error for this question is $\pm 6\%$	

This positive finding is tempered by the fact that other trail user types, reported in later sections of this report, are much more satisfied with their Oregon trail experience. Of the three types of trail users interviewed, motorized users are by far the least satisfied with their trail experience in Oregon.

Motorized trail users were asked what would increase their satisfaction, and the many answers are provided in full in Appendix C under the variable name “INCRESAT.” Representative responses are reproduced here; many respondents echoed the plea for more motorized trails:

The trails that we have – overall – are very good. We just don't have enough. When you load up and are ready to go you're afraid of getting there and not having a place to park.

I feel they need to enforce the laws a little more. Mostly where I go is BLM land in Deschutes County. In 1995, there was a fire and they plowed the roads and made the roads inaccessible to ATVs. And it's becoming like a garbage dump. People with motorized vehicles are driving on meadows and river banks. A little more enforcement without harassment.

I'd like a better website that'd be easy to access and that you could find the information you need. Save a tree, print it on the web. Location of trails and the varying difficulty of the trails, just general facility information, and where they're open and when they're not.

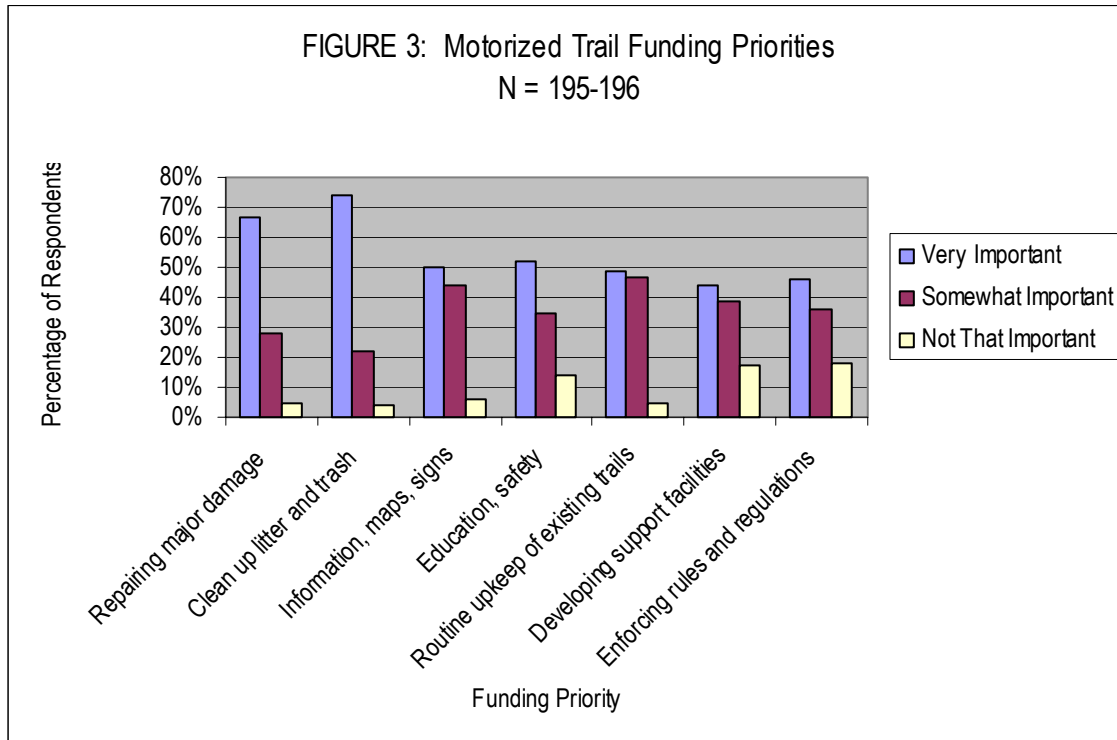
If you knew where to go, it would be a lot better. You get tired of going to the same place. Sand Lake is so crowded we usually can't find a place to park. And Florence is a four and a half hour drive. I'd like more trails to go to in Eastern Oregon. Or I'd love to go to coast range like out on the Tillamook Burns. I don't know if you can go there or not.

Less structured regulations. Most off road vehicle enthusiasts are looking to get away from structured regulations, and the structured and regulated trails defeat the purpose. That's basically why I am in the somewhat category, it's better than having nothing, but it's not the ideal. It's not really what you're looking to experience.

I used to have a 4-wheeler, then they changed the 4 wheeler law to load and unload to change trails. You have to move about 1 mile to change trails. About three years ago the law was changed, and it went too far. Now we have to load and trailer to move to other trails since we can't ride ATV on gravel road/FS road to move to the next loop. I sold the ATV as a result of the law change, it was too much hassle that took away enjoyment.

Motorized Trail Funding Priorities

Motorized trail users were asked to prioritize a variety of funding possibilities related to their sport. Cleaning up litter and trash on the trails and repairing major trail damage are clearly leading priorities, followed by education and safety, better information and signage, and routine trail upkeep. The following figure includes the top seven ranked funding priorities based on number of people selecting the item as a top priority.



Complete results are as follows:

TABLE 16: Motorized Trail Funding Priorities 1 = Not That Important, 3 = Very Important					
N = 195-196	Mean	Very Important	Somewhat Important	Not That Important	A Top Funding Priority ¹⁴
Clean up litter and trash	2.7	74%	22%	4%	113
Repairing major trail damage	2.6	67%	28%	5%	117
Providing information, maps, signs	2.4	50%	44%	6%	83
Providing educational, safety, and trail etiquette information	2.4	52%	35%	14%	82
Routine upkeep of existing trails	2.4	49%	47%	5%	80
Developing support facilities	2.3	44%	39%	17%	73
Enforcing rules and regulations	2.3	46%	36%	18%	72
Acquire access land	2.3	49%	34%	17%	65
Developing new trails	2.3	48%	38%	14%	63
Acquire land for new trails	2.2	44%	33%	24%	63
Children's play areas	2.1	41%	27%	32%	63
Providing interpretive information	1.9	19%	55%	27%	31
Trails for competitive trail events	1.8	23%	34%	43%	31
Sampling error for this question is ± 6%					

Responses to “other” are provided as variable RESORC14 in Appendix C. Among the other funding priorities motorized users mention are availability of gas and water near the trails, increased law enforcement, and more services for children.

Motorized Operator Safety Certification

A small majority of motorized trail users favor a motorized operator safety certification. The survey asked, “I would like to ask your opinion about a potential Oregon state (Off Highway Vehicle/OHV) operator safety certification program. Do you strongly oppose, somewhat oppose, somewhat support, or strongly support a one time OHV operator safety certification?” Support garners 53% of motorized users, opposition 43%. Twenty-six percent oppose the proposal strongly, 17% oppose somewhat, 24% support somewhat, and 29% support strongly. The remaining four percent volunteer that they do not have enough information to comment or are not sure.

¹⁴ Number of respondents selecting this answer. Asked only if respondent answered “very important.”

TABLE 17: Opinion on Motorized Operator Safety Certification	
	N = 110 ¹⁵
Oppose strongly	26%
Oppose somewhat	17%
Support somewhat	24%
Support strongly	29%
Don't know, not sure, neutral (if volunteered)	4%
Sampling error for this question is ± 9%	

Signage for Motorized Trails

Motorized trail users were asked to rate the importance of signs at different trail locations:

TABLE 18: Importance of Signage – Motorized (1=Not As Important, 3=Very Important)				
N = 192-194	Mean	Very Important	Somewhat Important	Not as Important
At trailhead	2.6	73%	17%	9%
Trail junctions	2.6	70%	20%	10%
Along trail	2.3	50%	34%	16%
Stream crossings	2.2	47%	26%	26%
Sampling error for this question is ± 6%				

Motorized trail users rank signage at the trailhead and at trail junctions as most important.

Club Membership – Motorized

Motorized trail users were asked if they belong to a trail club or group.

TABLE 19: Membership in a Club or Group – Motorized	
	N = 196
Yes	10%
No	90%
Sampling error for this question is ± 6%	

Only 10% of motorized users report membership in a group or club related to their activity. Although this represents 9,800 households in Oregon, as many as another

¹⁵ This question was added after data collection had started, so a smaller number of respondents were surveyed.

88,000 households contain no club or group member, reflecting a large potential membership for such organizations.

Non-Motorized Trail Users

The following section provides survey results specific to non-motorized trail users.

Non-Motorized Trail User Demographic Information

Thirty three percent of Oregon households have a person reporting non-motorized trail use, amounting to 438,500 households in the state. Screening procedure asked first for any motorized trail user or non-motorized boaters in the household, and those persons, if present, were interviewed about those usage patterns. If neither usage type was present in the household, a non-motorized trail user was interviewed if present. The results reported here thus relate to households without any motorized trail user or non-motorized boater present, and thus will not reflect the views of non-motorized trail users who live in such households. The biases introduced due to this sampling design are negligible.

Basic demographics of non-motorized trail users are provided in the following table:

TABLE 20: Non-Motorized Demographics N = 326	
Gender:	
Male	44%
Female	56%
Age:	
18 – 29	14%
30 – 39	22%
40 – 49	27%
50 – 59	20%
60 – 69	12%
70+	4%
Education:	
Less than high school	3%
High school graduate	14%
Some college	34%
Bachelors	31%
Masters	14%
Doctorate	4%
Income:	
Less than \$18,000	13%
\$18,000 - \$24,999	7%
\$25,000 - \$39,999	19%
\$40,000 – \$69,999	32%

\$70,000 - \$99,999	17%
\$100,000+	13%
Sampling error for this question is $\pm 4\%$	

Most non-motorized respondents are female, and the median age is 40 – 49 years old. A sizable majority has some college (83%), with about half being college graduates (49%). Median income is \$40,000 to \$69,999.

Non-Motorized Trail Participation

The survey asked non-motorized trail users about the frequency of their participation in different activities. The following table reports the percentage participation in each activity, and the estimated number of Oregon households that this represents¹⁶:

TABLE 21: Extent of Non-Motorized Trail Participation		
N = 326	Participated in Last Year	Estimated Oregon Households
Trail hiking or day hiking	87%	381,500
Walking for pleasure	82%	359,500
Bicycling (other than mountain biking)	38%	166,700
Jogging or running	29%	127,200
Backpacking overnight	16%	70,200
Mountain biking (on natural terrain trails)	14%	61,400
Cross-country skiing	12%	52,600
Horseback riding	7%	30,700
Roller blading (in-line skating)	5%	21,900
Hiking with horses, mules, llama	2%	8,800
Competitive trail events	2%	8,800
Other (listed in full as variable HIKOTHER in Appendix C)	13%	57,000
Sampling error for the “in last year” question is $\pm 4\%$.		

The survey also asked how often the respondent engaged in each activity in the last year:

¹⁶ The survey did not ask how many in the household participated in each activity, so no figure for total participation can be estimated.

N = 326	In Last Year	Of Participants in Last Year, How Often?			
		Weekly	2-3 a Month	Once a Month	Less Often
Trail hiking or day hiking	87%	11%	23%	20%	46%
Walking for pleasure	82%	28%	21%	20%	32%
Bicycling (other than mountain biking)	38%	29%	22%	17%	31%
Jogging or running	29%	43%	24%	12%	22%
Backpacking overnight	16%	0%	6%	11%	83%
Mountain biking (on natural terrain trails)	14%	15%	17%	17%	50%
Cross-country skiing	12%	13%	10%	18%	60%
Horseback riding	7%	21%	17%	17%	46%
Roller blading (in-line skating)	5%	13%	6%	25%	56%
Hiking with horses, mules, llama	2%	0%	14%	43%	43%
Competitive trail events	2%	20%	20%	0%	60%
Other (listed in full as variable HIKOTHER in Appendix C)	13%	14%	10%	26%	50%
Sampling error for the “in last year” question is $\pm 4\%$. Sampling errors for the frequency questions are from $\pm 5\%$ for the most common activity to $\pm 44\%$ for the least common.					

Non-motorized trail users report frequent participation in their trail activities. Hiking and walking for pleasure lead the group, with bicycling and jogging or running also having a sizable proportion of participants. Joggers and runners are the most likely to engage in their activities weekly, followed by bicyclers, walkers, horseback riders, and participants in competitive trail events. Among the “other” activities cited, listed in full as variable HIKOTHER in Appendix C, are snow shoeing, camping, and hunting.

When asked to select their favorite non-motorized trail activities, respondents answered as follows:

TABLE 23: Favorite Non-Motorized Trail Activity N = 326	
Trail hiking or day hiking	41%
Walking for pleasure	24%
Bicycling (other than mountain biking)	10%
Jogging or running	5%
Backpacking overnight	4%
Mountain biking (on natural terrain trails)	4%
Horseback riding	4%
Cross-country skiing	2%
Roller blading (in-line skating)	1%
Hiking with horses, mules, llama	0%
Competitive trail events	0%
Other	6%
Sampling error for these questions is $\pm 4\%$	

Trail hiking and walking for pleasure lead the list, with all others garnering smaller percentages, led by bicycling.

Distance Traveled and Preferred Setting for Non-Motorized Activities

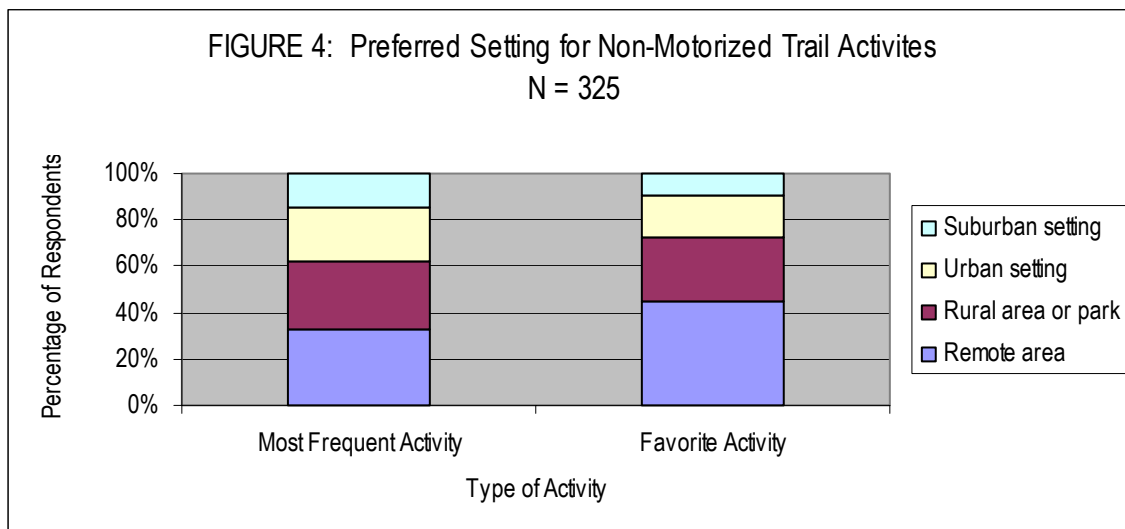
To reach their most frequent non-motorized trail activity, trail users travel a median of only one to ten miles (one way).¹⁷ The median is the number that reflects the answer given by a cumulative 50% of respondents; half travel farther, and half not as far. Non-motorized trail users travel only a bit further, 11 to 20 miles, to reach their favorite activity:

¹⁷ Since the top category for this question went above 200 miles, the mean distance would be higher.

TABLE 24: Distance Traveled for Most Frequent and for Favorite Non-Motorized Activities ¹⁸				
N = 316				
Miles Traveled (One Way)	Most Frequent Activity		Favorite Activity	
	Percentage	Cumulative	Percentage	Cumulative
1 – 10	51%	51%	44%	44%
11 – 20	10%	62%	13%	57%
21 – 30	11%	72%	9%	66%
31 – 40	6%	78%	4%	70%
41 – 50	7%	85%	8%	78%
51 – 75	6%	92%	9%	87%
76 – 100	5%	96%	7%	93%
Over 100 miles	4%	100%	7%	100%

Sampling error for this question is $\pm 5\%$

For both their most frequent and favorite non-motorized activities, respondents prefer trails in remote areas followed by a rural area or park. For their most frequent activities, non-motorized trail users prefer urban and suburban settings (combined 38%) more than they do for their favorite activities (combined 28%). Non-motorized trail users prefer remote areas for their favorite activities, as the following figure and table reveal:



¹⁸ Respondents were not restricted to destinations in Oregon.

TABLE 25: Preferred Setting for Most Frequent and Favorite Non-Motorized Trail Activities		
N = 325	Most Frequent Activity	Favorite Activity
Remote area	33%	45%
Rural area or park	29%	28%
Urban setting	23%	18%
Suburban setting	15%	10%
Sampling error for this question is $\pm 4\%$		

Comparing the last two tables, it is interesting to note that although 33% of respondents feel their most frequent activity is in a remote area, 85% report this activity is within 50 miles of their home. This suggests that users feel they are having a “remote” experience when they may actually be very close to a rural or a suburban setting.¹⁹

Respondents were presented with six types of trails, such as day-use, loop, or multi-day trails, and asked, “How likely is it you would use each of these trail types?” The following table presents the results:

TABLE 26: Preferred Non-Motorized Trail Type			
N = 312-325	Very Likely	Somewhat Likely	Not as Likely
Short, day-use trail	75%	21%	4%
Trail to specific destinations	69%	26%	5%
Loop trail	68%	25%	6%
Interpretive or nature trail	59%	33%	8%
Interconnected network of trails	54%	33%	13%
Multi-day trail	26%	26%	48%
Sampling error for this question is $\pm 5\%$			

Day use trails, trails to specific destinations, and loop trails are most preferred. Only overnight backpacking trails are unlikely to be used by a sizable proportion of non-motorized trail users, but even for these, more than half the respondents say they are at least somewhat likely to use such a trail.

¹⁹ Thanks to the USFS’s Dan Ermovik for this insight.

Reasons Non-Motorized Trails Not Used as Much as Desired

Over half of non-motorized trail users report they would like to participate in non-motorized trail activities more than they do. This reflects a large reservoir of unmet need.

TABLE 27: Use Trails as Much As Wanted – Non-Motorized N = 324	
Want to use trails more	53%
Use trails as much as want to	47%
Sampling error for this question is $\pm 4\%$	

The survey asked for constraints to non-motorized trail use:

TABLE 28: Reasons for Not Using Trails as Much as Wanted – Non-Motorized 1 = The Major Reason, 4 = Not an Important Reason					
N = 171-172	Mean	The Major Reason	An Important Reason	A Somewhat Important Reason	Not an Important Reason
Lack of time	1.7	59%	25%	11%	6%
Lack of information	3.4	3%	11%	30%	56%
None close by	3.5	4%	8%	24%	65%
No one to go with	3.5	4%	9%	22%	65%
User fees	3.5	2%	12%	17%	69%
Lack of money	3.6	5%	3%	14%	78%
Overcrowding	3.6	2%	5%	23%	70%
Health	3.7	6%	3%	9%	81%
Hard to get to	3.7	2%	5%	12%	81%
Personal safety	3.7	2%	4%	14%	81%
Conflicts with other user groups	3.8	1%	3%	17%	80%
Too challenging	3.9	1%	1%	4%	94%
Poor maintenance	3.9	0%	2%	11%	87%
Sampling error for this question is $\pm 7\%$					

Lack of time is the overwhelming roadblock for non-motorized trail users; all other reasons lag far behind. Lack of information, lack of trails nearby, overcrowding, user fees, conflicts with other groups, and no one to go with score a bit higher than others as a “somewhat important” reason.

Almost a quarter of respondents (22%) offer other reasons they are not on the trail as much as they would like, presented in full as variable USMOR14H in Appendix C.

Among them: family responsibilities, lack of transportation to the trailhead, and laziness. Verbatim comments include:

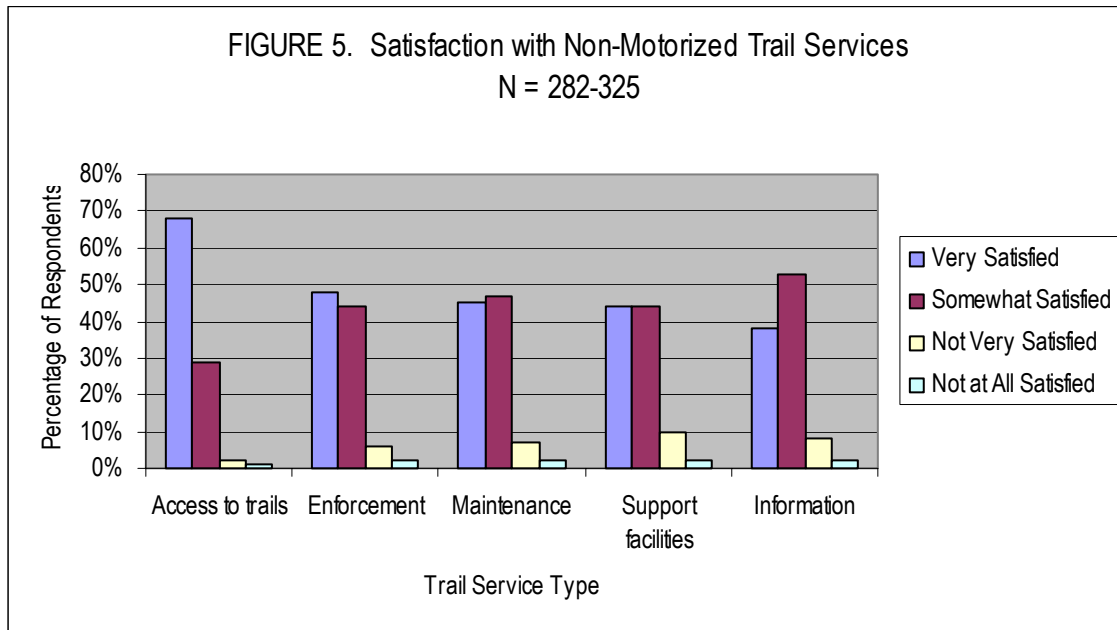
I don't have a car, so sometimes it's hard to get out of town. I have to get a ride. I don't think a bus runs by Spencer's Butte. Without a bus I can't go on my own.

I take care of my disabled daughter who needs 24 hour care, so I have to have a caregiver to go anywhere without her.

Limited parking at very popular sites makes trails hard to get to.

Satisfaction with Non-Motorized Trail Services

Next, non-motorized trail respondents were asked to rate their satisfaction with five measures of trail service. The following graph and table present that data, listed in order of a decreasing “very satisfied” evaluation.



Non-motorized trail users report a high degree of satisfaction with trail services. In such satisfaction rankings, a combined total “not at all/not very” satisfied score above 10% is usually justification for attention by planners. Only support facilities (combined 12% dissatisfaction) and information (10%) surpass this threshold, and only barely, suggesting that trail planning might prioritize addressing these two user group concerns.

TABLE 29: Satisfaction with Non-Motorized Trail Services (4= Very Satisfied, 1 = Not at All Satisfied)					
N = 282-325	Mean	Very Satisfied	Somewhat Satisfied	Not Very Satisfied	Not at All Satisfied
Access to trails	3.6	68%	29%	2%	1%
Enforcement	3.4	48%	44%	6%	2%
Maintenance	3.4	45%	47%	7%	2%
Support facilities	3.3	44%	44%	10%	2%
Information	3.3	38%	53%	8%	2%
Sampling error for these questions ranges from ± 4% to ± 5%					

Not included in the figures above, 11% responded “don’t know” to the question about enforcement, suggesting they are not very aware of efforts being made in this area. Another seven percent answered “don’t know” to the question about information.

Satisfaction with Information Sources

Non-motorized trail users were asked about satisfaction with a variety of information sources, and they report a high level of overall satisfaction. As the figure and table below show, dissatisfaction passed the ten percent threshold for agency responses (13%), agency websites (11%), and route maps (11%).

Only respondents able to rate the information sources were included. Respondents answering “Don’t Know,” excluded from the table, amounted to 22% of non-motorized trail respondents for agency websites, 21% for government agency responses, 11% for guidebooks, and 10% for route maps, suggesting considerable lack of familiarity with these sources.

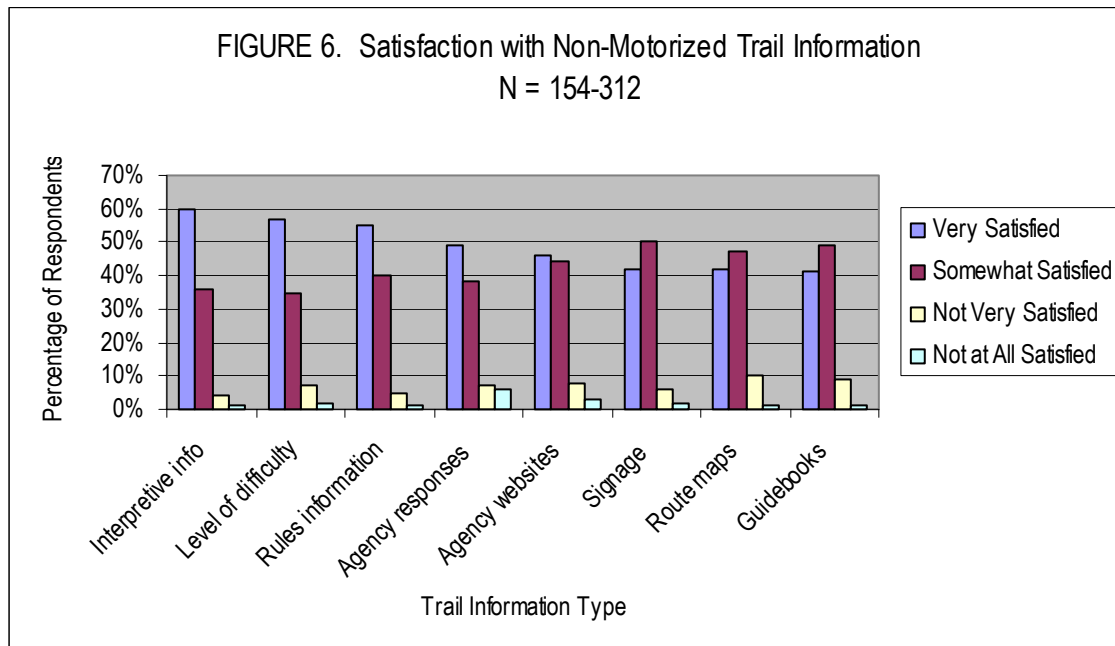


TABLE 30: Satisfaction with Non-Motorized Trail Information (4= Very Satisfied, 1= Not at All Satisfied)					
N = 154-312	Mean	Very Satisfied	Somewhat Satisfied	Not Very Satisfied	Not at All Satisfied
Interpretive	3.5	60%	36%	4%	1%
Level of difficulty	3.5	57%	35%	7%	2%
Rules and regulations	3.5	55%	40%	5%	1%
Agency responses	3.3	49%	38%	7%	6%
Agency websites	3.3	46%	44%	8%	3%
Signage	3.3	42%	50%	6%	2%
Route maps	3.3	42%	47%	10%	1%
Guidebooks	3.3	41%	49%	9%	1%
Sampling error for this question ranges from ± 5 to $\pm 7\%$					

A number of respondents suggest additional information needs not currently being met, especially those of handicapped and of dog owners:

Fewer people at the campgrounds next to where I want to hike, because I just won't go to those. They seem overcrowded, loud, noisy, and my husband being handicapped I have to take two kinds of trips. The ones I take with him because he can't hike, but I'm stuck. The rules are too confining about where I can park my van and spend the night. There are not enough places for that. I just want an obscure, lonely parking spot. My handicapped husband can be happy at the van, while I hike. I want to be able to park along the side of the stream. I would be willing to pay user fee for closer access.

I think that it's very under-reported how many dog owners there are. And with my job there is less and less time to get my dog outside. I would be very inclined to use more of the parks if there were better guides about their availability for dog use.

Information Sources for Non-Motorized Trail Users

The survey asked non-motorized trail respondents for the information sources they use and for their one favorite source. The results are listed below, ranked in order of most favorite to least favorite source:

TABLE 31: Information Sources – Non-Motorized		
N = 320-325	Use Source	Favorite Source
Advice of people	88%	24%
Books, magazines, newspapers	80%	19%
Brochures, maps	95%	18%
Internet	64%	15%
Visitor information centers	83%	8%
ODOT road signs	80%	3%
Gather information along the way	66%	3%
State highway maps	81%	3%
Sporting goods stores	51%	2%
Phone trail management agencies	39%	2%
Clubs, groups	15%	1%
Phone toll-free numbers	42%	0%
Other (listed in full as variable HIKINF13 in Appendix C)	14%	2%
Sampling error for this question is $\pm 5\%$		

A majority of respondents have used many of the information sources. Favorite information sources are more evenly divided than for other user types, with people’s advice, printed resources like books, magazines, brochures, and maps, and the internet the leading sources. Clubs and groups rank low on both lists, probably because only seven percent of respondents report membership in a non-motorized trail organization or club. Most of the “other” answers provided are listed in full as HIKINF13 in Appendix C. They include television shows, bookstores, and AAA (American Automobile Association).

Overall Satisfaction with Non-Motorized Trail Experience

Non-motorized trail users were asked for their overall evaluation of the non-motorized trail experience in Oregon, and almost 80% select the highest category of “very satisfied.” This is the highest level of satisfaction of the three user groups surveyed. Less than one percent reports a combined not very satisfied/not at all satisfied rating.

TABLE 32: Overall Satisfaction with Trail Experience – Non-Motorized N = 325	
Very Satisfied	79%
Somewhat Satisfied	20%
Not Very Satisfied	0%
Not at All Satisfied	1%
Sampling error for this question is ± 4%	

When asked how their overall non-motorized trail experience might be improved, respondents had a variety of responses and ideas, presented in full in Appendix C under the variable name INCRSAT. Some are reproduced below:

If we felt a little more safe with the parking and cars. I don't know how to do that. We have had car broken into twice in an urban area near the arboretum in Portland, near the Zoo, while we were using a trail.

The whole vehicle stuff is a downer for me, when trying to bird, when you have people dune bugging. It just shows we need more open spaces and green spaces to enjoy it as we want to.

My biggest suggestion is to let users know what a trail's main use is – if it is mainly motorized, let people know so they don't end up sharing the trail with ATVs while on foot. Once you get out on trail with kids, you don't want to turn around to find another one.

Some of us who are blind don't even read Braille because of our learning disabilities. There needs to be other media than just print, needs to be for, if it's supposed to be there for people, for everybody and not just the elite who are able bodied. How much harder would it be to have something in raised print, if you're going to put it in print anyways so both people would benefit from it? Not only that, have it on tape for people who can't read the print. For people who are physically disabled have things elevated for them.

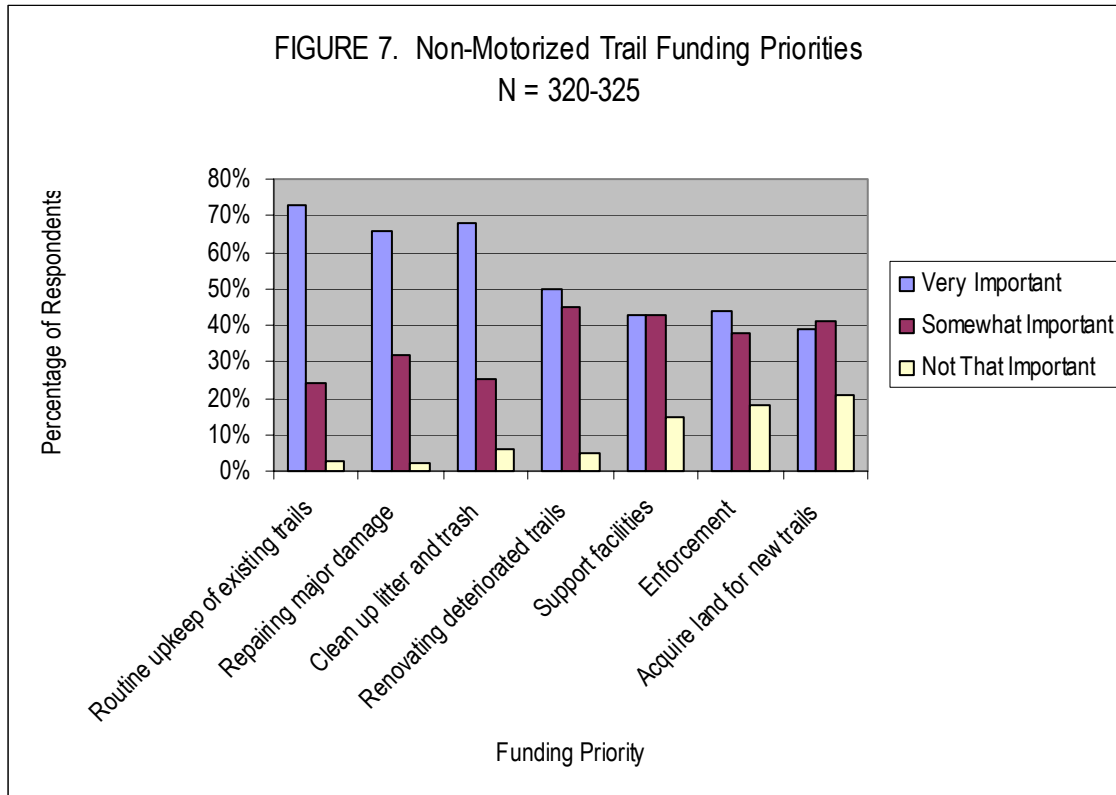
Creating a guide book for dog owners which explains which parks are friendly and what rules you have to observe.

I guess just, knowing more about where trails are located. Whenever I look online, it pops up with a lot of websites that don't necessarily deal with hiking. I'd like the information all in one place.

Downloadable maps on the web for specific trails. Maybe a little more on what interpretation is available, and maybe actual better enforcement for people that are using trails inappropriately.

Non-Motorized Trail Funding Priorities

Non-motorized trail users were asked to prioritize a variety of funding possibilities related to their sport. Routine upkeep of existing trails, repairing major damage, and cleaning up litter and trash are highest ranked priorities, followed by better information and signage, support facilities, enforcement, and acquiring land for new trails. The following figure includes the top seven ranked funding priorities based on number of people selecting the item as a top priority.



The complete distribution of answers is provided in the following table:

TABLE 33: Non-Motorized Trail Funding Priorities (1 = Not That Important, 3 = Very Important)					
N = 320-325	Mean	Very Important	Somewhat Important	Not That Important	A Top Funding Priority ²⁰
Routine upkeep of existing trails	2.7	73%	24%	3%	208
Repairing major damage	2.6	66%	32%	2%	193
Clean up litter and trash	2.6	68%	25%	6%	172
Renovating deteriorated trails	2.5	50%	45%	5%	144
Support facilities	2.3	43%	43%	15%	107
Enforcing rules and regulations	2.3	44%	38%	18%	105
Acquire land for new trails	2.2	39%	41%	21%	104
Acquire access land	2.2	37%	47%	16%	94
Providing education, safety, and trail etiquette information	2.2	35%	48%	17%	83
Developing new trails	2.1	32%	50%	18%	77
Interpretive information	1.9	19%	55%	26%	45
Landscaping along trails	1.4	6%	29%	65%	14
Sampling error for this question is $\pm 5\%$.					

Ten percent of non-motorized trail users provide priorities for funding not mentioned, available in full as variable HTRESC13 in Appendix C. These include preservation of trail-less wilderness and a variety of innovative ideas:

I'd like the parks service to purchase land simply to prevent development, but I don't feel like building trails on land is important. Human access isn't as important as preservation.

Ecological integrity is my top priority for natural sites in Oregon.

Tape recorded trails signs that can be activated by buttons for those who can't read or see.

Should have an international "go out and experience trails" day. An appreciation day²¹.

²⁰ Number of respondents selecting this answer. Asked only if respondent answered "very important."

²¹ There actually is such a day, in June. However, this and other such suggestions indicate the low level of public awareness of initiatives that are being taken.

Use of Non-Motorized Trails

When asked what they use non-motorized trails for, most choose “recreation.” Ninety-seven percent of non-motorized trail users answer recreation and fitness alone or in combination. Only two percent report they use non-motorized trails primarily for commuting or other transportation purposes:

Recreation	77%
Fitness	13%
Combination (if volunteered)	8%
Commuting, transportation	2%
Sampling error for this question is $\pm 4\%$	

Preferred Non-Motorized Trail Surface Type

The survey asked non-motorized trail users, “For [your] favorite activity, what is your preferred trail surface type? Would it be a native or natural surface, such as packed soil, sand, grass, rock or snow; woodchip; gravel or rock, such as pea gravel or crushed rock; a hardened surface like asphalt or concrete; or boardwalk, wood or engineered plastic?” The responses:

Natural surface	75%
Hardened surface like asphalt or concrete	14%
Woodchip	4%
Gravel or rock	3%
Boardwalk, wood, plastic	2%
No preference (if volunteered)	1%
Sampling error for this question is $\pm 4\%$	

Natural surface is the overwhelming favorite, with asphalt/concrete a distant second and no other surface garnering more than 4% of response.

Importance of Non-Motorized Trails

The survey asked respondents, “In your opinion, how important is it to you to have non-motorized trails for the following recreation trail activities?” Responses are presented in the following table:

Respondents provide overwhelming support for hiking and walking trails. Although backpacking is not a highly popular trail use, there is disproportionate support for trails for backpackers. Jogging, bicycling, and cross-country skiing trails also have support.

TABLE 36: Importance of Non-Motorized Trail Types (1 = Not as Important, 3 = Very Important)				
N = 315-317	Mean	Very Important	Somewhat Important	Not As Important
Trail hiking or day hiking	2.9	85%	14%	1%
Walking for pleasure	2.7	77%	20%	3%
Overnight backpacking	2.2	47%	27%	26%
Jogging or running	2.1	40%	28%	32%
Cross-country skiing	2.0	37%	24%	39%
Bicycling (other than mountain biking)	2.1	35%	35%	29%
Mountain biking (on natural terrain trails)	1.8	25%	26%	49%
Horseback riding	1.7	26%	20%	54%
Hiking with horses, mules, llama	1.6	20%	24%	56%
Competitive trail events	1.6	17%	22%	61%
Geocaching	1.5	13%	24%	63%
Roller blading (in-line skating)	1.4	11%	19%	70%
Sampling error for this question is $\pm 5\%$				

Mean answers present one number that summarizes all responses. The full distribution of answers illuminates the intensity of respondent views. Hiking and walking remain far in front of the other choices. Although only 16% of non-motorized trail users report having backpacked in the past year, almost half feel that trails for such users are very important. More than half of non-motorized trail users feel it is not as important to have trails for horseback riding, hiking with stock, competitive trail events, geocaching, and roller blading.

Signage for Non-Motorized Trails

Non-motorized trail users were asked to rate the importance of signs at different trail locations:

TABLE 37: Importance of Signage – Non-Motorized (1 = Not That Important, 3 = Very Important)				
N = 313-326	Mean	Very Important	Somewhat Important	Not That Important
Trail junctions	2.8	78%	20%	3%
At trailhead	2.7	74%	19%	7%
Along trail	2.5	59%	30%	11%
Stream crossings	2.1	41%	28%	31%
Sampling error for this question is $\pm 5\%$				

Trail junctions and at the trailhead are ranked highest, with along the trail and at stream crossings trailing behind.

Club Membership – Non-Motorized

Non-motorized trail users were asked if they belong to a trail club or group.

TABLE 38: Membership in a Club or Group – Non-Motorized	
	N = 326
Yes	7%
No	93%
Sampling error for this question is $\pm 4\%$	

Only seven percent of non-motorized users report membership in a group or club related to their activity. Although this represents a sizable 30,700 households in Oregon, as many as another 408,000 households with non-motorized trail users contain no club or group member, reflecting a large potential membership for such organizations.

Non-Motorized Boaters

The following section provides survey results specific to non-motorized boaters in Oregon.

Non Motorized Boater Demographic Information

Fourteen percent of Oregon households have a person reporting non-motorized boating, amounting to 185,200 households in the state. Screening procedure asked first for any motorized trail user or non-motorized boaters in the household, and those persons, if present, were interviewed about those usage patterns. The results reported here thus relate to households without any motorized trail user present, and thus will not reflect the views of non-motorized boaters who live in such households. The biases introduced due to this sampling design are believed to be negligible.

Basic demographics of non-motorized boaters are provided in the following table:

TABLE 39: Non-Motorized Boater Demographics N = 248	
Gender:	
Male	55%
Female	45%
Age:	
18 – 29	8%
30 – 39	21%
40 – 49	29%
50 – 59	29%
60 – 69	10%
70+	3%
Education:	
Less than high school	3%
High school graduate	12%
Some college	25%
Bachelors	35%
Masters	17%
Doctorate	9%
Income:	
Less than \$18,000	4%
\$18,000 - \$24,999	4%
\$25,000 - \$39,999	18%
\$40,000 – \$69,999	33%
\$70,000 - \$99,999	22%
\$100,000+	20%
Sampling error for this question is ± 5%	

Gender is split closely at 55% male/45% female for non-motorized boaters, and the median age is 40 – 49 years old. A sizable majority have some college (86%), with almost two-thirds being college graduates (61%). Median income is \$40,000 to \$69,999.

Frequency of Non-Motorized Boating Participation

The survey asked non-motorized boaters about the frequency of their participation in different activities. The following table reports the percentage participation in each activity, and the estimated number of Oregon households that this represents²²:

N = 248	Participated in Last Year	Estimated Oregon Households
White water rafting	47%	86,600
Canoeing	42%	77,400
Drift boating	36%	66,300
White water kayaking	16%	29,500
Sea kayaking	9%	16,600
Other (listed in full as variable WATOTHER in Appendix C)	31%	57,109
Sampling error for the “in last year” question is ± 5%.		

The survey also asked how often the respondent engaged in each activity in the last year. Non-motorized boaters report considerably less use, and less frequent use, than either motorized or non-motorized trail users. White water rafting and canoeing are the two leading activities, while those who participate in drift boating and other water activities report higher levels of weekly and monthly participation:

N = 248	In Last Year	Of Participants in Last Year, How Often?			
		Weekly	2-3 a Month	Once a Month	Less Often
White water rafting	47%	3%	8%	16%	73%
Canoeing	42%	8%	8%	15%	70%
Drift boating	36%	13%	17%	25%	45%
White water kayaking	16%	5%	8%	26%	62%
Sea kayaking	9%	0%	10%	14%	76%
Other (listed in full as variable WATOTHER in Appendix C)	31%	16%	17%	32%	36%
Sampling error for the “in last year” question is ± 5%. Sampling errors for the frequency questions are from ± 9% for the most common activity to ± 21% for the least common.					

²² The survey did not ask how many in the household participated in each activity, so no figure for total participation can be estimated.

Over 30% of respondents report another type of non-motorized boating, in part due to the inadvertent omission of flat water kayaking from the list of activities. Other mentions, presented in full as WATOTHER in Appendix C, include inner tubing, sailing, snorkeling, swimming, and windsurfing.

Favorite Non-Motorized Boating Activity

Respondents provided a ranking of their favorite non-motorized boating activity:

TABLE 42: Favorite Non-Motorized Boating Activity N = 246	
White water rafting	29%
Canoeing	26%
Drift boating	20%
White water kayaking	5%
Sea kayaking	5%
Other (listed in full as variable WATOTHER in Appendix C)	16%
Sampling error for this question is $\pm 5\%$	

The list of preferred water activities is in exactly the same order as the most frequent activity.

Favorite Place for Non-Motorized Boating Activity

The questionnaire asked non-motorized boaters, “For [the] activity you enjoy the most, is your favorite kind of place on flat water rivers and streams, white-water rivers and streams, lakes, freshwater wetlands, tidewaters, or the ocean?” The results are as follows:

TABLE 43: Preferred Place for Favorite Non-Motorized Boating Activity				
N = 29-243	All Non-Motorized Boaters	Canoeists	Drift Boaters	Sea Kayakers
	N = 247	N = 63	N = 50	N = 29
Whitewater rivers and streams	37%	5%	32%	17%
Flat water rivers and streams	32%	44%	46%	31%
Lakes	22%	38%	14%	34%
Tidewaters	3%	5%	2%	7%
The ocean	2%	2%	2%	3%
Freshwater wetlands	2%	5%	2%	3%
If volunteered: no preference	2%	2%	2%	3%
Sampling error	$\pm 5\%$	$\pm 12\%$	$\pm 14\%$	$\pm 18\%$

White water rivers and streams are the preferred favorite, with flat water rivers and streams a close second, followed by lakes. Different user groups have clearly different preferences.

Distance Traveled and Preferred Setting for Non-Motorized Boating Activities

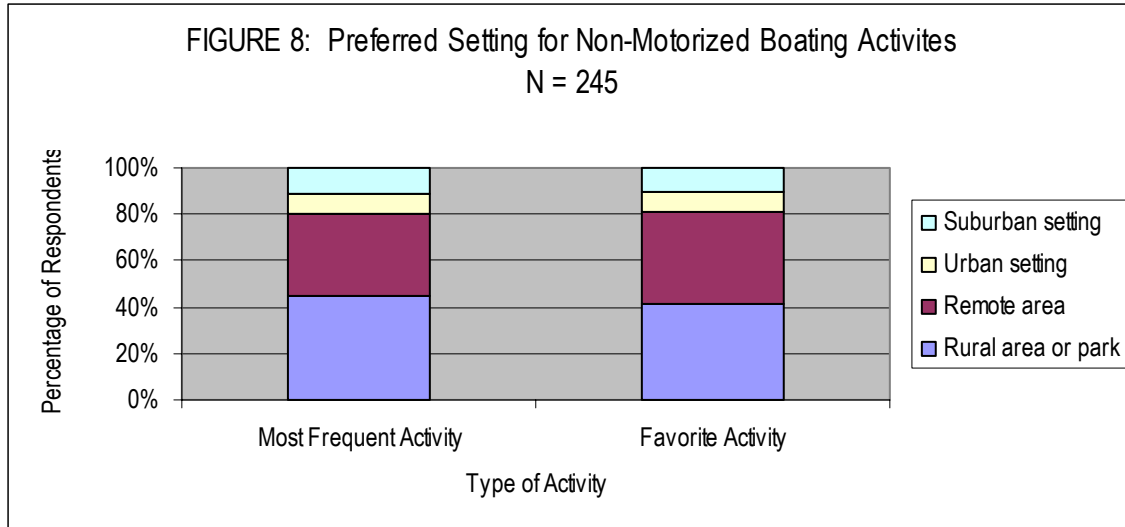
To reach their most frequent non-motorized boating activity, paddlers travel a median of 31 to 40 miles (one way).²³ The median is the number that reflects the answer given by a cumulative 50% of respondents; half travel farther, and half not as far. They travel the same distance to reach their favorite activity, as the following table reveals. The following table shows the full breakdowns of distance traveled:

TABLE 44: Distance Traveled for Most Frequent and for Favorite Non-Motorized Boating Activities ²⁴				
N = 243				
Miles Traveled (One Way)	Most Frequent Activity		Favorite Activity	
	Percentage	Cumulative	Percentage	Cumulative
1 – 10	25%	25%	23%	23%
11 – 20	14%	39%	13%	36%
21 – 30	12%	51%	12%	48%
31 – 40	6%	57%	5%	53%
41 – 50	10%	67%	10%	63%
51 – 75	10%	78%	10%	73%
76 – 100	10%	87%	13%	86%
Over 100 miles	13%	100%	14%	100%
Sampling error for this question is $\pm 5\%$				

Respondents were asked about their preferred setting for these activities. The following figure and table present the results.

²³ Since the top category for this question went above 200 miles, the mean distance would be higher.

²⁴ Respondents were not restricted to destinations in Oregon.



N = 245-248	Most Frequent Activity	Favorite Activity
Rural area or park	45%	41%
Remote area	35%	40%
Urban setting	9%	9%
Suburban setting	11%	10%
Sampling error for this question is $\pm 5\%$		

For non-motorized boaters, differences between most frequent and favorite activities are equal to or smaller than the sampling error, indicating that they may not differ at all. Rural areas or parks and remote areas are considerably more popular than suburban or urban settings.

Preferred Water Trail Type

Respondents were asked, “The next questions ask about the type of water trail facilities and services you would like to see developed for non-motorized boaters in Oregon. How likely is it that you would use each of the following water trail types?” The following table presents the results for different trail types.

TABLE 46: Preferred Non-Motorized Watercraft Trail Type			
N = 241-247	Very Likely	Somewhat Likely	Not as Likely
Short, day-use water trail	66%	25%	9%
Water trail to a specific destination	53%	31%	16%
Interpretive, nature, or historic water trail	46%	40%	15%
Loop water trail	44%	25%	31%
Multi-day water trail	33%	35%	32%
Sampling error for this question is ± 5			

Day use and trails to specific destinations are most favored, but even a multi-day water trail would be used by one-third of non-motorized boaters.

Reason for Not Using Non-Motorized Watercraft as Much as Desired

About two-thirds of non-motorized boaters report they would like to participate in their activities more than they do.

TABLE 47: Use Trails as Much As Wanted – Non-Motorized Boaters N = 248	
Want to use trails more	65%
Use trails as much as want to	35%
Sampling error for this question is $\pm 5\%$	

As with the other user groups studied in this report, this reflects a large reservoir of unmet needs. The survey asked for the constraints to non-motorized watercraft use:

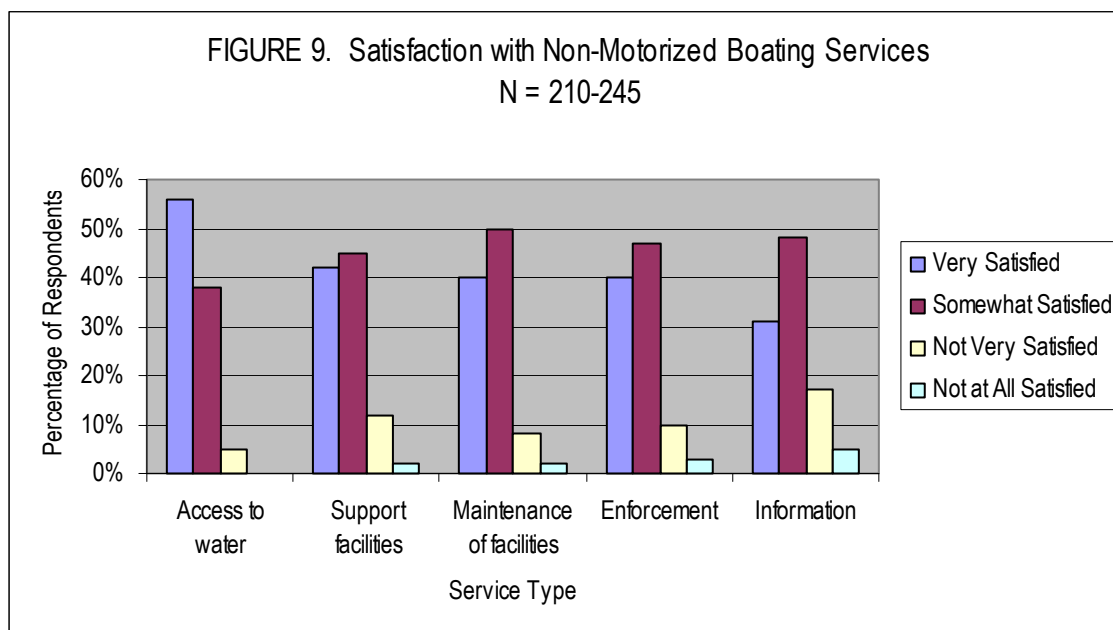
TABLE 48: Reasons for Not Using Non-Motorized Watercraft as Much as Wanted (1 = The Major Reason, 4 = Not an Important Reason)					
N = 159	Mean	The Major Reason	An Important Reason	A Somewhat Important Reason	Not an Important Reason
Lack of time	1.8	55%	22%	11%	12%
Low water	3.4	4%	11%	29%	56%
Weather	3.4	3%	9%	32%	57%
Lack of money	3.5	8%	6%	19%	67%
None close by	3.5	6%	7%	16%	71%
No one to go with	3.5	5%	9%	17%	69%
Overcrowding	3.5	3%	8%	24%	66%
Lack of information	3.6	2%	8%	19%	72%
Difficult to get equipment	3.7	3%	4%	12%	81%
User fees	3.7	2%	4%	18%	76%
Hard to get to	3.7	2%	6%	13%	79%
Personal safety	3.7	1%	6%	13%	81%
Health	3.8	3%	3%	6%	89%
Poor maintenance of support facilities	3.8	1%	4%	9%	86%
Too challenging	3.9	0%	1%	5%	94%
Sampling error for this question is $\pm 7\%$					

Lack of time is by far the primary roadblock for non-motorized watercraft users. No other reason approaches lack of time as a reason preventing these respondents from enjoying their activities as much as they would like to.

Thirty-one percent of non-motorized boaters report other reasons for not participating in activities as often as they would like; these are presented in full as variable WTRMOR16 in Appendix C. Most respondents indicate family responsibilities, especially young children, as a reason. Also mentioned was the difficulty in getting permits.

Non-Motorized Boater Evaluation of Services

The questionnaire asked non-motorized boating respondents to rate their satisfaction with five measures of service. The following graph and table present that data, listed in order of a decreasing “very satisfied” evaluation.



Non-motorized boaters report a high degree of satisfaction. In such satisfaction rankings, any combined “not at all/not very” satisfied score above 10% is usually justification for planning attention. All but access to water exceed this threshold, suggesting that trail planning should prioritize addressing the remaining four user group concerns, especially information (combined 22% dissatisfaction).

TABLE 49: Satisfaction with Non-Motorized Boating Services
(1 = Not at All Satisfied, 4 = Very Satisfied)

N = 210-245	Mean	Very Satisfied	Somewhat Satisfied	Not Very Satisfied	Not at All Satisfied
Access to water	3.5	56%	38%	5%	0%
Support facilities	3.3	42%	45%	12%	2%
Maintenance of facilities	3.3	40%	50%	8%	2%
Enforcement	3.2	40%	47%	10%	3%
Information	3.0	31%	48%	17%	5%
Sampling error for this question is ± 6%					

Information Sources for Non-Motorized Boaters

The survey asked non-motorized boater respondents for the information sources they use and for their one favorite source:

TABLE 50: Information Sources – Non-Motorized Boaters		
N = 248	Use Source	Favorite Source
Advice of people	91%	37%
Brochures, maps	90%	13%
Books, magazines, newspapers	79%	15%
Sporting goods stores	71%	3%
Visitor information centers	69%	3%
Gather information along the way	65%	1%
Internet	63%	15%
Phone management agencies	46%	3%
Clubs, groups, water trail organizations	19%	2%
Other (listed in full as variable WTRINF10 in an appendix)	13%	4%
Sampling error for this question is $\pm 5\%$		

A majority of respondents have used most of these information sources. A few favorites stand out: people’s advice, printed resources like brochures, maps, books, and magazines, and the internet. Clubs and groups rank low on the list, probably because only five percent of respondents report membership in a paddling organization or club. Among the other sources identified, provided in full as WTRINF10 in Appendix C, are resorts, television shows, the yellow pages, and AAA.

Non-motorized boaters were asked about satisfaction with a variety of information sources, and they report a high level of overall satisfaction. As the figure and table below show, dissatisfaction passed the ten percent threshold for signage (combined 18%), level of difficulty (16%), route maps (13%), and agency responses (13%). Only respondents able to rate the information sources were included. Respondents answering “Don’t Know,” excluded from the table, amounted to 16% for agency websites and 12% for agency responses, suggesting lack of familiarity with these sources.

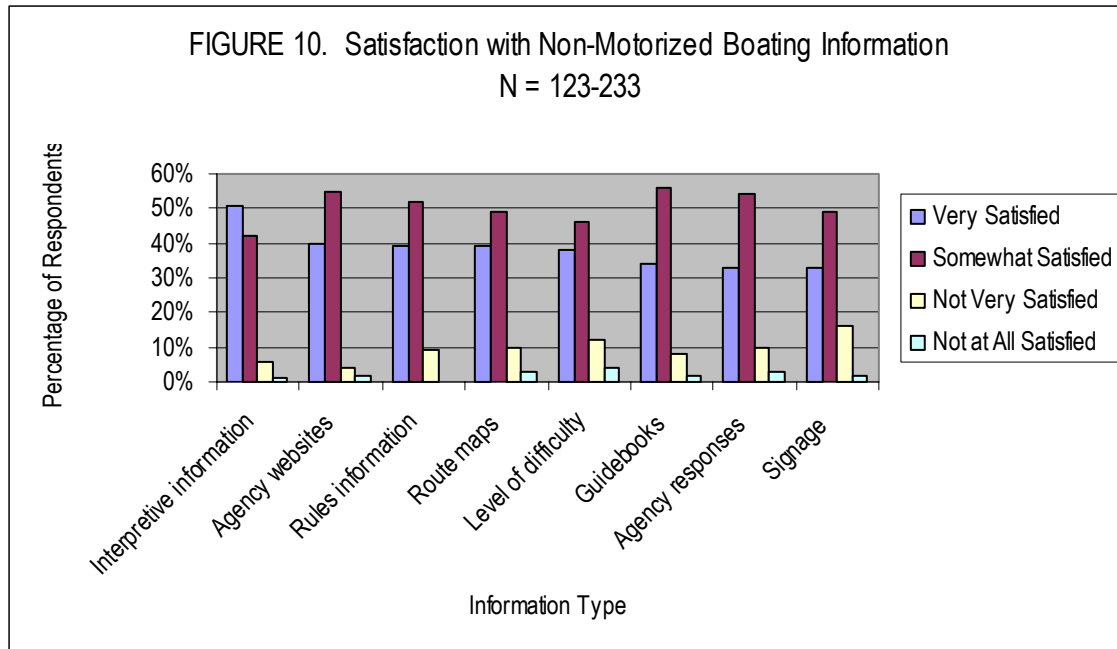


TABLE 51: Satisfaction with Non-Motorized Boating Information
(1 = Not at All Satisfied, 4 = Very Satisfied)

N = 123-233	Mean	Very Satisfied	Somewhat Satisfied	Not Very Satisfied	Not at All Satisfied
Interpretive information	3.4	51%	42%	6%	1%
Agency websites	3.3	40%	55%	4%	2%
Rules and regulations information	3.3	39%	52%	9%	0%
Route maps	3.2	39%	49%	10%	3%
Level of difficulty	3.2	38%	46%	12%	4%
Guidebooks	3.2	34%	56%	8%	2%
Agency responses to questions	3.2	33%	54%	10%	3%
Signage	3.1	33%	49%	16%	2%

Sampling error for these questions vary from $\pm 6\%$ to $\pm 8\%$

Overall Satisfaction with Non-Motorized Boating Experience

Non-motorized boaters were asked for their overall evaluation of the non-motorized boating experience in Oregon, and 75% select the highest category of “very satisfied.” This is a very high level of satisfaction. Less than one percent reports a combined not very satisfied/not at all satisfied rating.

TABLE 52: Overall Satisfaction with Non-Motorized Boating Experience N = 248	
Very Satisfied	75%
Somewhat Satisfied	24%
Not Very Satisfied	1%
Not at All Satisfied	0%
Sampling error for this question is $\pm 5\%$	

Funding Priorities for Water Trails

Non-motorized boaters were asked to prioritize a variety of funding possibilities related to developing and maintaining water trails. Maintaining existing facilities, cleaning up litter and trash, and enforcing existing rules/regulations are highest ranked priorities, with many of the remaining alternatives clumped together.

TABLE 53: Water Trail Funding Priorities (1 = Not That Important, 4 = Very Important)					
N = 242-246	Mean	Very Important	Somewhat Important	Not That Important	A Top Funding Priority ²⁵
Maintaining existing facilities	2.7	71%	28%	2%	156
Clean up litter and trash	2.7	70%	24%	5%	143
Enforcing existing rules/regulations	2.4	48%	38%	13%	93
Acquire land for public access	2.3	44%	37%	18%	84
Providing education, safety, and trail etiquette information	2.3	40%	45%	15%	79
Providing law and safety enforcement	2.2	33%	55%	11%	77
Developing support facilities	2.2	30%	60%	10%	58
Providing information, maps, signs	2.2	32%	60%	8%	57
Developing camping facilities	1.9	16%	53%	31%	34
Identify new water trail routes	1.9	17%	57%	27%	30
Providing interpretive information	1.9	11%	66%	23%	19
Sampling error for this question is $\pm 5\%$					

Eleven percent of non-motorized boaters identify other funding priorities, listed in full as variable WTRESC12 in Appendix C. These focus on access, water quality and maintenance of riparian areas:

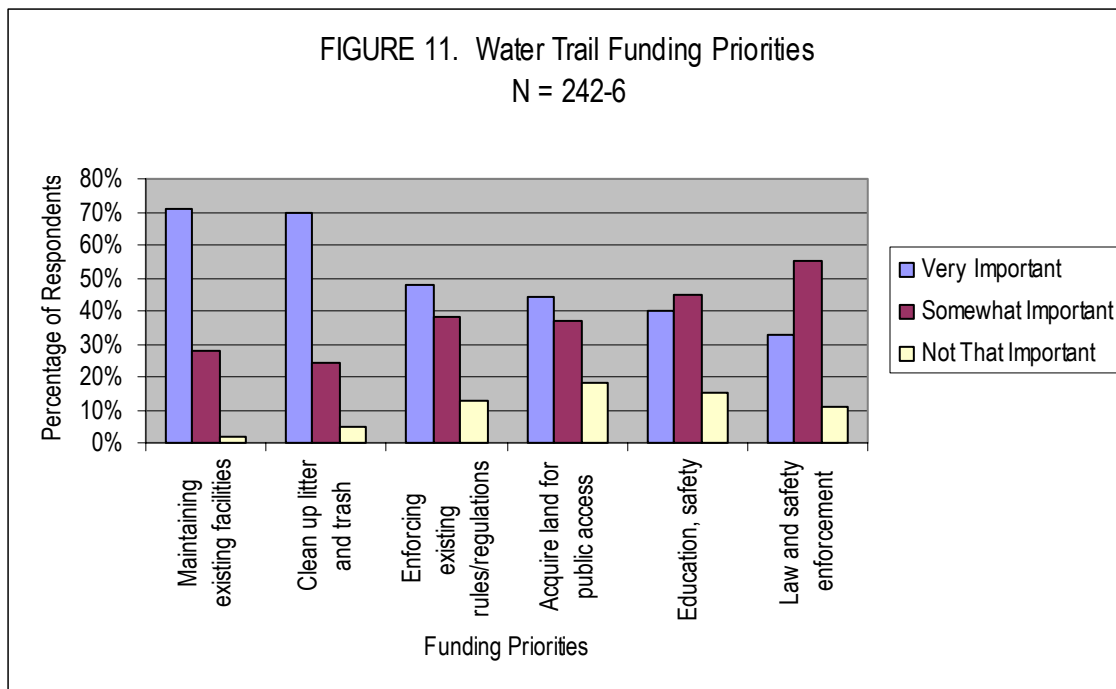
²⁵ Number of respondents selecting this answer. Asked only if respondent answered “very important.”

Access to waterways seems to be more for the middle or upper income levels, and I think it's valuable to make such access available to those with less resources.

Above all – water quality, the Department of Agriculture and the Department of Environmental Quality have to be central. If you don't have water quality no one's going to want to put their boat in the water.

Just the maintenance on the existing ones there. I guess they want money for more signs and such, but from what I see, they can't keep up with what they already have.

The following figure includes the top seven ranked based on number of people selecting the item as a top priority.



Activities Combined with Non-Motorized Boating

The survey asked, “If you get out of your non-motorized watercraft during a trip, which of the following activities would you most likely do?” Respondent answers:

TABLE 54: Activities Combined with Non-Motorized Boating N = 248	
Use bathroom	83%
Picnic	76%
Observe nature	73%
Hike	65%
Camp	62%
Swim	58%
Fish	48%
Other (listed in full as variable WTRACTV1 in Appendix C)	9%
Sampling error for this question is $\pm 5\%$	

The high percentages shown in the above table indicate that non-motorized boaters get out of their watercraft for a variety of shore-based activities. Top activities include using a bathroom, picnicking, and observing nature. The “other” activities listed, provided in full as WTRACTV1 in Appendix C, include bird watching, hunting, photography, and sun bathing.

Willingness to Pay Fees for Water Trail Development and Maintenance

The survey asked non-motorized boaters “How much would you be willing to pay each year to use water trails if money was used to develop and maintain water trails in Oregon?” Starting with \$25, interviewers offered smaller and smaller amounts until the respondent agreed to a figure. The results are as follows:

TABLE 55: Amount Willing to Pay for Water Trail Use N = 243	
\$25 per year	53%
\$20 per year	15%
\$15	10%
\$10	7%
\$5	4%
Not be willing to pay anything	11%
Sampling error for this question is $\pm 5\%$	

Eighty-nine percent of non-motorized boaters reported that they would be willing to pay a yearly fee for water trail development and maintenance. More than half of non-motorized boaters would be willing to pay \$25 per year to use water trails. The results suggest that authors underestimated non-motorized boater willingness to pay for their activities and should have started at a larger amount. Eighty-five percent would be

willing to pay at least \$10. If all Oregon households using non-motorized watercraft paid such a fee, this would generate the following revenues:

\$25 per year	\$ 4,630,550
\$20 per year	\$ 3,704,440
\$15	\$ 2,778,330
\$10	\$ 1,852,220
\$5	\$ 925,110
Sampling error for this question is $\pm 5\%$	

Eleven percent of the non-motorized boaters oppose fees in any form. Verbatim comments relating to this position include the following:

I'll always be against user fees. We've already paid our taxes and that's supposed to be taken care of that way. I do a lot of hiking, but just don't use trails that use user fees. I don't use trail heads, I park elsewhere and go cross country for access. The same with canoeing, if there's a fee or crowds, I won't go there. Same with campgrounds. If there's a fee, I don't use them.

When asked what method of payment they preferred, those respondents who are willing to pay a fee are almost equally split among the four offered: a voluntary boater pass, a parking fee at the put-in, an annual boat registration, and an access fee at launch sites:

Voluntary non-motorized boater pass	27%
Parking fee at boat access points	26%
Annual non-motorized boat registration	23%
Ramp or access fees at launch sites	21%
Sampling error for this question is $\pm 6\%$	

Importance of Water Trail Signage

The survey asked non-motorized boaters the importance of a range of types of warning and informational signs associated with water trail use. Every item received a “very important” ranking from a sizable proportion of respondents. Hazard warnings stand out as the highest priority, but non-motorized boaters value signage at all the listed locations.

TABLE 58: Importance of Signage to Water Trail Users (1 = Not That Important, 3 = Very Important)				
N = 246-248	Mean	Very important	Somewhat important	Not That Important
Hazards	2.8	81%	13%	6%
Take-out points	2.6	67%	26%	8%
At the put-in	2.5	63%	26%	11%
Portages	2.5	61%	30%	10%
On the highway	2.4	58%	26%	16%
Camping areas	2.4	53%	32%	15%
Rest areas	2.3	48%	35%	17%
Sampling error for this question is $\pm 5\%$				

Shared Use of Water Trails

Respondents were asked, “Which of the following comes closest to your view regarding the shared use of water trails: Trails should allow multiple activities, but keep motorized and non-motorized activities at different locations, or, trails should allow both motorized and non-motorized activities at the same locations?” Non-motorized boaters overwhelmingly support the segregation of their activities from motorized water users:

TABLE 59: Shared Use of Water Trails N = 244	
Different locations for motorized and non-motorized	76%
Allow at same locations	14%
Mix of these (if volunteered)	10%
Sampling error for this question is $\pm 5\%$	

One respondent’s comment illustrates the thinking behind a preference for different locations:

I do not support motorized water vehicles on most waterways. It's a source of pollution and is a danger concern with families. It's one of the reasons we don't go out as much as we like. When they are out, fees for them should be much higher due to the pollution.

Non-Motorized Boaters Perceived Right to Use Waterways

The survey asked, “I’m going to read some common watercraft activities. For each one, please tell me whether you think you can legally participate in the following activities on rivers and waterways in Oregon.” The activities included traveling anywhere on a river where the boat will float, anchoring in a river to fish, stopping on shore to picnic, stopping on shore to fish, and portaging around a fence, rapid, or waterfall. The following table reports the results:

TABLE 60: Opinions about Non-Motorized Boaters Rights to Use Waterways				
N = 215-241	Legal	Illegal	Depends (only if volunteered)	Don’t Know
Anchor to fish	46%	26%	18%	10%
Travel anywhere boat will float	41%	48%	8%	3%
Stop to picnic	38%	21%	39%	2%
Fish on shore	37%	21%	34%	8%
Portage around obstacles	36%	30%	20%	14%
Sampling errors for these question are from ± 5% to ± 6%				

Survey responses to these questions suggest existence of a sizable information gap among non-motorized boaters regarding the public’s rights to use the waterways in Oregon. This gap in understanding is likely based on a gap in law and public policy regarding public access.

According the Department of State Lands (DSL), the only circumstances in Oregon where the public has absolute assurance of its rights to use the beds and banks of Oregon’s streams is where they have been declared “title” navigable by the courts, the legislature or the State Land Board (there are 11 rivers so designated) or when streams border or abut or are surrounded by publicly owned land (e.g. within a National Forest). In Oregon, waterways subject to the ebb and flow of tide are state-owned usually to the line of high tide (there are about 230 such waterways); and meandered lakes are state-owned (there are about 75 meandered lakes).

The DSL, in consultation with the Oregon Department of Justice, advises that a common law right of use exists for the public to make reasonable and incidental use of the beds and banks of streams not yet determined navigable. According to Oregon court cases interpreting the public's right to use waterways, the public has the right to float waterways even where the bed is privately owned. This common law right or so called "floatage easement" means that the public has the right to be on the water surface, and may mean that boaters may get out of their watercraft to wade, anchor or portage their boat, or get out of their boat to stand on the stream bank. However, the precise limits of these rights and universal acceptance of the existence of the common law so-called

“floatage easement” has not been determined or found. On streams not yet determined to be navigable, there is no legal clarity as to the public’s rights to use the beds and banks for recreational purposes.

As a result, the “correct” answer to these questions is likely “it depends” (since the activities described are so fact-driven and situational). The gap can lead to person-to-person conflicts between waterfront private property owners and non-motorized boaters, each with strongly held expectations and understandings as to their individual and collective rights. This view is clearly evidenced in the statement of one respondent:

There needs to be more accessibility, and it needs to be exact, so there is no contention about it. People get into fights because the land owners think no one else has the right to fish because they think they own out to the middle of the river, and that no one has any right to fish there.

I live on the river, and own a camp on the river. I have had issues with people portaging around spots, and using my land because that is the only way they can get around it, and I would like to see there be some kind of information so that people would know more about it.

From a recreation management perspective, the survey results suggest a need for educating non-motorized boaters on where they legally can launch or access the water and shore on boatable waterways in Oregon (e.g. common rules of the trail) to ensure long-term access to waterways in a way that is considerate of the interests and concerns of private property owners.

Club Membership – Non-Motorized Boaters

Non-motorized boaters were asked if they belong to a paddling club or group.

TABLE 61: Membership in a Club or Group – Non-Motorized Boaters	
N = 248	
Yes	5%
No	90%
Sampling error for this question is ± 6%	

Only 5% of non-motorized boaters report membership in a group or club related to their activity. Although this represents 9,300 households in Oregon, as many as another 175,400 households contain no club or group member, reflecting a very large potential membership for such organizations.

Comparisons of Trail Users and Non-Motorized Watercraft Users

This section includes combined survey results to identify differences and similarities between user groups.

Demographics - All Users

About 35% of Oregon households, or 463,243 total households in the state, have at least one person who uses Oregon motorized or non-motorized trails or non-motorized watercraft. The demographics of these users is presented in the following table:

	All Users (Weighted)	Motorized Trail	Non- Motorized Trail	Non-Motorized Boater
	N = 770	N = 196	N = 326	N = 248
Gender:				
Male	51%	72%	44%	55%
Female	49%	28%	56%	45%
Age:				
18 – 29	14%	20%	14%	8%
30 – 39	22%	28%	22%	21%
40 – 49	28%	27%	27%	29%
50 – 59	22%	18%	20%	29%
60 – 69	11%	5%	12%	10%
70+	3%	2%	4%	3%
Education:				
Less than high school	3%	4%	3%	3%
High school graduate	16%	34%	14%	12%
Some college	32%	41%	34%	25%
Bachelors	30%	17%	31%	35%
Masters	13%	3%	14%	17%
Doctorate	5%	1%	4%	9%
Income:				
Less than \$18,000	10%	7%	13%	4%
\$18,000 - \$24,999	6%	5%	7%	4%
\$25,000 - \$39,999	19%	19%	19%	18%
\$40,000 – \$69,999	33%	36%	32%	33%
\$70,000 - \$99,999	18%	19%	17%	22%
\$100,000+	15%	14%	13%	20%
Sampling Error	± 2%	± 6%	± 4%	± 5%

Motorized respondents are primarily male, non-motorized respondents and boaters are more evenly split. Motorized users tend to be younger, and boaters to be older, than non-motorized trail users. Motorized respondents report less education, and boaters more, than non-motorized trail users. Income is more comparably distributed among the three groups. Non-motorized trail users report somewhat lower incomes, non-motorized boaters higher, with motorized in between.

Low-income groups are greatly underrepresented in motorized, non-motorized and non-motorized boating participation. As a result, management strategies could be targeted towards providing low-income families with opportunities to participate in these activities.

Satisfaction with the Oregon Trail Experience – All Users

Oregon trail users and non-motorized boaters are overwhelmingly satisfied with their trail experience. The survey asked, “How satisfied are you with your overall [motorized trail/non-motorized trail/non-motorized boating] experience in Oregon?” The mean scores show a remarkably high degree of satisfaction:

TABLE 63: Mean Overall Satisfaction (1 = Not at All Satisfied, 4 = Very Satisfied) N = 769	
Non-Motorized trail	3.8
Non-Motorized boating	3.7
Motorized trail	3.4
Overall mean (all users, weighted)	3.7
Sampling error for this question is ± 2%	

Mean rankings summarize information from all the answers in one number. These high rankings reflect the state’s outstanding trail infrastructure and its overall stewardship of these recreational assets. The intensity of satisfaction can be judged by the full distribution of answers:

TABLE 64: Overall Satisfaction with Trails/Non-Motorized Boating Experience (1 = Not at All Satisfied, 4 = Very Satisfied)				
	All Users (Weighted)	Motorized Trail	Non-Motor- ized Trail	Non- Motorized Boating
	N = 769	N = 196	N = 325	N = 248
Mean	3.7	3.4	3.8	3.7
Very satisfied	74%	48%	79%	75%
Somewhat satisfied	24%	46%	20%	24%
Not very satisfied	1%	6%	0%	1%
Not at all satisfied	0%	0%	1%	0%
Sampling error for this question varies from ± 4% to ±6%				

Although these two tables demonstrate a high degree of overall satisfaction, they also reflect a gap between motorized trail and non-motorized users in terms of satisfaction with their trail experience. Non-motorized trail and non-motorized boaters are most satisfied with their linear outdoor recreation experience in Oregon. Motorized trail users are also satisfied – but much less so.

The questionnaire drilled down into satisfaction to uncover the details of these findings by asking for rankings of access to trails, enforcement, maintenance, support facilities, and information. The data reveal that information and support facilities are the lowest ranked overall. For the most part, the individual user groups agree on the order of ranking. Motorized trail users are less satisfied across the board with the dimensions of their trail use experience.

TABLE 65: Satisfaction with Trail Services – All Users				
NOTE: Not at all satisfied = 1, Very satisfied = 4				
	Mean Score			
	All Users (Weighted)	Motorized	Non- Motorized	Water
	N = 680	N = 188	N = 282	N = 210
Access to trails	3.5	3.2	3.6	3.5
Enforcement	3.3	3.1	3.4	3.2
Maintenance	3.3	3.1	3.4	3.3
Support facilities	3.3	3.1	3.3	3.3
Information	3.1	2.7	3.3	3.0
Average of means	3.3	3.0	3.4	3.3
Sampling error for this question varies from $\pm 2\%$ to $\pm 7\%$				

The percentage of respondents who select the “very satisfied” category is an indicator of the intensity of user satisfaction. The table below shows that over all, the most strongly felt satisfaction is with access to trails, with the other categories lagging behind. Satisfaction with information is the lowest rated, with only 16% of motorized trail users saying they are “very satisfied” along that dimension. For most items, the data suggest the same gap in satisfaction between motorized and other users noted earlier. However, it is notable that the strength of that difference is somewhat moderated for maintenance and enforcement, suggesting that those two dimensions are priority needs for all trails users.

Trail Service	Percent Very Satisfied			
	All Users (Weighted)	Motorized	Non- Motorized	Water
	N = 637	N = 188	N = 325	N = 246
Access to trails/water	61%	38%	68%	56%
Enforcement	43%	31%	48%	40%
Support facilities	42%	34%	44%	42%
Maintenance	42%	35%	45%	40%
Information	33%	16%	38%	31%
Sampling error for this question varies from ±2% to ±6%				

Evaluation of Trail Information

To explore the details of respondent information needs and rankings, the survey asked respondents to evaluate a range of information sources. An analysis of “Don’t Know” responses suggests which sources are used most and which are less used.

Source of Information	Percent Answering “Don’t Know”			
	All Users (Weighted)	Motorized	Non-Motorized	Water
	N = 769	N = 196	N = 325	N = 248
Rules and regulations	5%	2%	5%	6%
Signage	5%	4%	4%	7%
Interpretive	7%	13%	6%	6%
Level of difficulty	16%	13%	14%	21%
Route maps	23%	25%	22%	23%
Guidebooks	31%	34%	25%	25%
Agency responses	44%	39%	46%	39%
Agency websites	50%	47%	50%	49%
Sampling error for this question varies from ±2% to ±6%				

As measured by willingness to rate each source, overall familiarity with information sources is relatively high. Even the least familiar item, agency websites, is rated by half the respondents. A sizable majority of respondents feel able to answer questions about signage, rules, and interpretive information. A sizable minority are unable to evaluate guidebooks and route maps. The different user groups do not vary much in their willingness to make evaluations of information sources, suggesting user groups do not differ much in their familiarity with information sources.

The following table presents respondent satisfaction with those information sources they were able to rate.

	Mean Score			
	All Users (Weighted)	Motorized	Non- Motorized	Water
	N = 380	N = 103	N = 154	N = 123
Interpretive	3.5	3.3	3.5	3.4
Rules and regulation	3.4	3.1	3.5	3.3
Level of difficulty	3.4	3.2	3.5	3.2
Route maps	3.3	3.2	3.3	3.2
Agency websites	3.3	3.0	3.3	3.3
Agency responses	3.2	2.7	3.3	3.2
Signage	3.2	3.1	3.3	3.1
Guidebooks	3.2	3.0	3.3	3.2
Sampling error for these questions ranges from $\pm 2\%$ to $\pm 9\%$				

The percentage given the “very satisfied” ranking is an indicator of the intensity of satisfaction. On this basis, the following table shows that interpretive information and information about rules and regulations, level of difficulty, and signage are rated highest.

	Percent Very Satisfied ²⁶			
	All Users (Weighted)	Motorized	Non-Motorized	Water
	N = 380+	N = 103+	N = 154+	N = 147+
Interpretive	55%	41%	60%	51%
Rules and regulations	48%	34%	55%	39%
Level of difficulty	49%	33%	57%	38%
Route maps	40%	33%	42%	39%
Agency websites	42%	28%	46%	40%
Agency responses	39%	21%	49%	33%
Signage	38%	30%	42%	33%
Guidebooks	37%	24%	41%	34%
Sampling error for these questions varies from $\pm 2\%$ to $\pm 9\%$				

Again we see a sizable difference between motorized and other users in satisfaction with available information. This information gap between motorized and other users, especially non-motorized land trail users, is a key finding of this research. Combined with the other problems with information gathering in consumer planning for trail and water use presented in this report, it suggests information is a key area for state programming.

²⁶ Excludes those who answered “Don’t Know.”

Respondent verbatim comments, detailed in Appendix C to this report, provide a flavor of the variety of information-related issues and needs. Each comment below is from a different user:

Information on level of difficulty. At major put ins on rivers there should be signage as to the water level and the difficulty level. It would be nice to have some uniform way of gauging the river class and levels.²⁷

More information and more access, two things that I seem to have to dig a lot for and end up going to the same places.

I would like to see greater publication of the trail system. Currently the trail systems are publicized by clubs; I would like something that details all of the trails in Oregon, versus going to each individual club.

Knowing more about where they're located. When ever I look on line, it pops up with a lot of web sites that don't necessarily have anything to do with hiking. I'd like the information all in one place. It's all about instant gratification.

To know the trail was in bad shape. You can almost figure it out when they don't have their sign in good shape. When there's a storm, and there's a fallen tree, you don't know about it until you encounter them.

To have accurate maps of what is out there and what some of the attractions are on the different trails. I think it would be good if the interpretative information is updated. The sign might be faded from the sun or mention things that are not there anymore.

For AAA you need to know the name of the place before they can give you information. Their maps don't have any camp locations or hiking trails.

Let users know what main use is. If it is mainly motorized, let people know so they don't end up sharing trail with ATVs while on foot. Once you get out on a trail with kids, you don't want to turn around to find another one.

I don't find the waterways that are restricted to non-motorized craft. If I had those options I'd paddle more.

I couldn't find a trail that I wanted to go on. I couldn't find it (University Falls). I drove to get there and I used a map, but I still couldn't find it.

Finding them, knowing where to go, how to get there, and maybe what to expect. Have you ever seen the book Fishing in Oregon? It names many streams, creeks, lakes, how to get there, what to expect, and possibly what to need. It changes the

²⁷ Verbatims in this report have been edited for grammar and ease of understanding. The unedited verbatims are found in Appendix C.

whole world of fishing, it makes a big difference. I've traveled all the way across the state of Oregon because this lake or that lake is a certain way, and I would never know except for that book.

From these and other comments, it is clear that respondents want more detailed information, more accurate and timely updates of information, one stop shopping for information, and information organized around potential and primary use. Of course, there are users who feel less is better when it comes to information:

Sometimes I wish for the more remote trails people had to research a little harder to find them so they wouldn't get so crowded. There are no surprises left. The Oregonian publishes great secret trails, but they should leave them secret.

Increasing Trail Use – All Users

The survey asked trail users “During the past 12 months, did you want to use [motorized trails/non-motorized trails/non-motorized watercraft] in Oregon more than you actually did, or did you use them about as much as you wanted to?” Fifty-seven percent of all trail users reported they want to use trails more than they do, suggesting a huge unmet craving for trail and non-motorized boating use available to be tapped if roadblocks to that use can be overcome. The breakdown by user types: 63% of non-motorized boaters, 60% of motorized trail users, and 53% of non-motorized trail users wish they could use trails more.

	All Users ²⁸	Motorized	Non-Motorized	Water
	N = 768	N = 196	N = 324	N = 248
Satisfied with amount of use	43%	41%	47%	37%
Want more of this activity	57%	59%	53%	63%
Sampling error for these questions ranges from ± 2% to ± 6%				

The following table reports the mean importance of a range of constraints to trail use:

²⁸ This table includes only respondents who said they wish they used trails more.

TABLE 71: Mean Score for Reasons for Not Using Trails as Much as Wanted (1 = Major Reason, 4 = Not an Important Reason)				
	All Users (Weighted)	Motorized	Non- Motorized	Non- Motorized Boater
	N = 443	N = 115	N = 169	N = 159
Lack of time	1.8	2.2	1.7	1.8
None close by	3.4	2.8	3.5	3.5
Low water levels	3.4	n/a	n/a	3.4
Lack of information	3.4	3.0	3.4	3.6
Weather	3.4	3.3	n/a	3.4
Lack of money	3.5	3.3	3.6	3.5
No one to go with	3.5	3.7	3.5	3.5
Overcrowding	3.6	3.5	3.6	3.5
User fees	3.6	3.6	3.5	3.7
Personal safety	3.7	3.8	3.7	3.7
Health	3.7	3.7	3.7	3.8
Hard to get to	3.7	3.6	3.7	3.7
Difficult to get equipment	3.8	3.9	n/a	3.7
Poor maintenance	3.8	3.7	3.9	3.8 ²⁹
Potential conflicts with other user groups	3.8	n/a	3.8	n/a
Too challenging	3.9	4.0	3.9	3.9
Sampling error for these questions ranges from $\pm 3\%$ to $\pm 9\%$				

Across the board, lack of time is overwhelmingly dominant as the explanation given by users wishing they spent more time on the trail and waterway. When all users are combined, all other reasons are clumped very close to 4.0, “not an important reason.” Neither resource issues (money, information, equipment) nor trail characteristics (maintenance, overcrowding, fees) are perceived as important contributors to this problem. Only for motorized trail users does anything approach time as a roadblock, and that is the perceived lack of nearby trail opportunities.

The table showing the percentage selecting each item as “the major reason” suggests the intensity of respondent opinion:

²⁹ In the case of water users, the question was worded “poorly maintained support facilities.”

	All Users (Weighted)	Motorized	Non- Motorized	Water
Want more of their activity	57%	59%	53%	63%
The major reason:				
	N = 443	N = 114	N = 169	N = 160
Lack of time	55%	41%	59%	55%
None close by	7%	24%	4%	6%
Lack of money	6%	9%	5%	8%
Health	5%	4%	6%	3%
Weather	5%	6%	n/a	3%
Lack of information	4%	12%	3%	2%
No one to go with	4%	4%	4%	5%
Low water levels	4%	n/a	n/a	4%
Overcrowding	3%	6%	2%	3%
User fees	3%	5%	2%	2%
Hard to get to	3%	5%	2%	2%
Difficult to get equipment	2%	1%	n/a	3%
Poor trail maintenance	1%	2%	2%	1% ³⁰
Personal safety	1%	0%	2%	1%
Too challenging	1%	0%	1%	0%
Potential conflicts	1%	n/a	1%	n/a
Sampling error for these questions ranges from ± 2% to ± 9%				

This analysis presents a more detailed picture. For non-motorized trail and non-motorized boaters, lack of time is the overwhelming roadblock to enjoying their activities as much as they would like. For motorized trail users, however, money and information supplement an attenuated lack of time and close-by trails as key reasons. These findings suggest that efforts to provide a compressible trail experience – especially one taking less time in getting to the trail and other non-trail activities like seeking information, packing, and securing permits – would be welcomed by users.

A sizable proportion of users offered other reasons for not using trails and waterways as much as they would like, presented in full in Appendix C. Answers included having a teenage daughter, fire danger, closures, limited access or parking, fees, gates, laziness, age, and the following:

Because all the lands that we have to do this with are being taken away by environmental groups that don't respect anybody's right to be able to enjoy the forest.

³⁰ For non-motorized boaters, this referred to maintenance of support facilities.

I don't have a car, so sometimes it's hard to get out of town. I have to get a ride. I don't think a bus runs by Spencer's Butte. Without a bus I can't go on my own.

As a mother of two small children I want safe trails. And as a woman I don't feel safe being outside.

For the last year it's because I have an infant. There's not a way to go non-motorized boating with an infant.

Water quality. A lot of the water in the Willamette is – well, I don't want put my boat in it.

Lack of overnight facilities. Down on the coast you can't stay overnight at any of the facilities with a motor home. We'd go a lot more if we could park our motor home on site.

These responses suggest a planning priority could be to provide information that would allow users to overcome their individual roadblocks, perhaps through learning from others like them who use trails and waterways more.

Preferred Trail Type – Non-Motorized and Water

Non-motorized trail users and non-motorized boaters were asked the type of trail they preferred.

Type of Trail	Mean Likelihood to Use Trail		
	Both User Groups (Weighted)	Non-Motorized	Water
	N = 553	N = 312	N = 241
Short, day-use trail	2.7	2.7	2.6
Trail to destination	2.6	2.6	2.4
Loop trail	2.5	2.6	2.1
Nature trail	2.5	2.5	2.3
Interconnected network	2.4	2.4	n/a
Multi-day trail	1.9	1.8	2.0
Sampling error for these variables ranges from $\pm 2\%$ to $\pm 5\%$			

Both groups report similar preferred trails, led by short day-use trails and trails to specific destinations. Unlike non-motorized trail users, non-motorized boaters prefer nature trails over loop trails. The percentage of respondents who choose the “very likely to use” category is a measure of strength of opinion. The following table presents the percentage of non-motorized and water trail users who said they were very likely to use each of the trail types:

Type of Trail	Very likely to use trail		
	Both User Groups (Weighted)	Non-Motor- ized Trail	Water Trail
	N = 553	N = 312	N = 241
Short, day-use trail	72%	75%	66%
Trail to destination	65%	69%	54%
Loop trail	61%	68%	44%
Interpretive or nature trail	58%	59%	47%
Interconnected network	53%	54%	n/a
Multi-day trail	28%	26%	33%
Sampling error for these questions ranges from $\pm 2\%$ to $\pm 5\%$			

Day use trails are ranked highest, followed by trails to a specific destination and loop trails. All of the choices receive a high ranking, with the exception of multi-day trails. A smaller proportion of non-motorized boaters than non-motorized trail users report they are very likely to use any type of trail.

Non-motorized trail users and non-motorized boaters were also asked their preferred setting for both the activity they do the most and the one they enjoy the most.

N = 245-325	Non-Motorized		Non-Motorized Boaters	
	Most Frequent	Favorite	Most Frequent	Favorite
Urban setting	23%	18%	9%	9%
Suburban setting	15%	10%	11%	10%
Rural area or park	29%	28%	45%	41%
Remote area	33%	45%	35%	40%
Sampling error for these questions ranges from $\pm 4\%$ to $\pm 5\%$				

There is more difference between what non-motorized trail users do most vs. what they enjoy most, than there is for non-motorized boaters. Areas closer to wilderness rank higher in all categories. Non-Motorized trail users prefer remote areas, while non-motorized boaters prefer a rural area or park.

Information Sources – All Users

The survey asked trail users about their use of a variety of sources to gain information about trails.

	Percent Using Source			
	All Users (Weighted)	Motorized	Non- Motorized	Non- Motorized Boaters
	N = 762	N = 196	N = 320	N = 246
Brochures, maps	92%	86%	95%	90%
Advice of people	89%	91%	88%	90%
State highway maps	81%	n/a	81%	n/a
ODOT road signs	76%	n/a	76%	n/a
Visitor centers	77%	65%	83%	69%
Books, magazines	74%	41%	80%	79%
Along the way	67%	72%	66%	65%
Internet	62%	53%	64%	63%
Stores	57%	59%	51%	71%
Phone agencies	42%	49%	39%	46%
Toll free numbers	42%	n/a	42%	n/a
Clubs, groups	16%	18%	15%	19%
Sampling error for these questions ranges from $\pm 2\%$ to $\pm 6\%$				

The most widely used information sources are brochures, advice, and state highway maps. Close behind are ODOT road signs, visitor centers, and books and magazines. With the exception of clubs and groups, all the potential information sources were referenced by a sizable number of trail users, suggesting that a shotgun approach is necessary to supply needed information.

Respondents were asked for the information source they use the most.

TABLE 77: Information Source Used the Most – All Users				
	All Users (Weighted)	Motorized	Non- Motorized	Non-Motorized Boater
	N = 764	N = 196	N = 322	N = 246
Advice of people	31%	38%	24%	37%
Brochures, maps	18%	26%	18%	13%
Internet	14%	11%	15%	15%
Books, magazines	14%	2%	19%	15%
Visitor centers	6%	7%	8%	3%
Along the way	3%	3%	3%	1%
Stores	3%	4%	2%	3%
Phone agencies	3%	3%	2%	3%
ODOT road signs	3%	n/a	3%	n/a
State highway maps	3%	n/a	3%	n/a
Clubs, groups	2%	2%	1%	2%
Toll free numbers	0%	n/a	0%	n/a
Sampling error for these questions ranges from $\pm 2\%$ to $\pm 6\%$				

This table presents a fuller picture of the information sources preferred by each user group. The advice of knowledgeable friends and experts is primary. Brochures and maps are the next most important information sources, especially for motorized trail users. The internet is emerging as a valued source but is not challenging the first two as of yet. Books and magazines are next, but primarily for non-motorized and water users. Other sources are not favored as the most used source of information.

Club Membership – All Users

Clubs and organized groups ranked low in both of the above tables, and this is because a relatively small proportion of users are members of such groups:

TABLE 78: Club Membership – All Users				
	All Users	Motorized	Non- Motorized	Non- Motorized Boater
	N = 770	N = 196	N = 326	N = 248
Member of club	7%	10%	7%	5%
Number of Oregon households	49,800	9,800	30,700	9,300
Sampling error for these questions ranges from $\pm 2\%$ to $\pm 6\%$				

Only eight percent of trail users report membership in a club or group organized around their sport. This minority, however, translates into a very large number of households – well more than 100,000.

Funding Priorities—All Users

The heart of the trail user survey was the effort to identify user preferences for trail funding priority options. To investigate this issue, the survey asked a battery of questions of the following form: “Trail managers have limited resources to develop and maintain trails, and must focus their money and time on the most serious needs first. In your opinion, how important is it that they [acquire land for new trails.] Would that be not as important, somewhat important, or very important?” The bracketed phrase was augmented by a list of options. listed below.

	Mean Score 1 = Not as important, 3 = Very important			
	All Users (Weighted)	Motorized	Non- Motorized	Water
	N = 755	N = 193	N = 320	N = 242
Clean up litter and trash	2.6	2.7	2.6	2.7
Routine upkeep of existing trails	2.7	2.4	2.7	2.7 ³¹
Repairing major damage	2.6	2.6	2.6	n/a
Fix deteriorated trails	2.5	n/a	2.5	n/a
Acquire access land	2.1	2.3	2.2	2.3
Support facilities	2.3	2.3	2.3	2.2
Camping facilities	1.9	n/a	n/a	1.9
Enforcement of rules and regulations	2.3	2.3	2.3	2.4
Providing education, safety, and trail etiquette information	2.2	2.4	2.2	2.3
Providing information, maps, signs	2.3	2.4	n/a	2.2
Providing law and safety enforcement	2.2	n/a	n/a	2.2
Developing new trails	2.2	2.3	2.1	n/a
Acquire land for new trails	2.1	2.2	2.2	1.9 ³²
Children’s play areas	2.1	2.1	n/a	n/a
Interpretive information	1.9	1.9	1.9	1.9
Trails for competitive trail events	1.8	1.8	n/a	n/a
Landscaping along trails	1.4	n/a	1.4	n/a
Sampling error for these questions ranges from $\pm 2\%$ to $\pm 6\%$				

Most notable in the table is the agreement in average rankings across the user groups for most items. The overall emphasis is on improved upkeep for the state’s current resources rather than on supplementing them. The one exception is in the development of new trails, where motorized trail users perceive a greater need for new trails for their activities

³¹ For water users, this question was worded “maintaining existing facilities.”

³² For water users, this question was worded “identify new water trail routes.”

and a slightly reduced need for maintaining existing trails. Although information appears as a consistent high priority need for respondents in earlier answers, when asked to select priorities, trail users would prefer limited state money be spent on other trail needs.

The percentage of users selecting “very important” as a funding priority is an indicator of the intensity of feeling. The following table presents this ranking:

	Percent Very Important			
	All Users (Weighted)	Motorized	Non- Motorized	Non- Motorized Boaters
	N = 759	N = 196	N = 320	N = 243
Clean up litter and trash	70%	74%	68%	70%
Routine upkeep of existing trails	69%	49%	73%	71% ³³
Repairing major damage	66%	67%	66%	n/a
Fix deteriorated trails	50%	n/a	50%	n/a
Enforcement of rules and regulations	45%	46%	44%	48%
Acquire access land	42%	49%	37%	44%
Children’s play areas	41%	41%	n/a	n/a
Support facilities	40%	44%	43%	30%
Providing education, safety, and trail etiquette information	39%	52%	35%	40%
Providing information, maps, signs	38%	50%	n/a	32%
Developing new trails	35%	48%	32%	n/a
Acquire land for new trails	34%	44%	39%	17% ³⁴
Trails for competitive trail events	23%	23%	n/a	n/a
Camping facilities	16%	n/a	n/a	16%
Interpretive information	17%	19%	19%	11%
Landscaping along trails	6%	n/a	6%	n/a
Sampling error for these questions ranges from ± 2% to ± 6%				

Maintenance of current outdoor resources remains the priority, but there are clear differences in emphasis among the user groups. The distinctive priorities for motorized trail users are acquiring land for new trails and for access, education and safety, information and signage, and developing new trails. Non-motorized trail users and non-motorized boaters agree on most “very important” rankings, except for support facilities and developing new trails, which non-motorized boaters select less often, and acquiring access land and education and safety, which they select more often.

More than ten percent of respondents identify other funding priorities, and these are included in full in the Appendix C to this report. They include many interesting ideas. Following are some representative comments:

³³ For non-motorized boaters, this referred to maintaining existing facilities.

³⁴ For water users, this question was worded “identify new water trail routes.”

Important for there to be places to dispose trash at sites, important to remind people to dispose of trash.

I think that they should have more of a campaign to recruit volunteers to help reduce the cost of all that other stuff. If we're going to use it then we should be a part of maintaining it.

Motorized courses for kids are not available in her area (Pendleton), but the rules say kids can't ride without the course. So there is no way for kids to legally ride.

Let people be people, don't go nuts with rules and regulations. Environmentalists want too much and they have too many restrictions.

I'd like the parks service to purchase land simply to prevent development, but I don't feel like building trails on land is important. Human access isn't as important as preservation.

Some sort of handicapped access for at least part of the trails.

Above all – water quality. The Department of Agriculture and DEQ have to be central. If you don't have water quality no one's going to want to put their boat in the water.

Access to boats, like having boat renting facilities – to allow boat rental near waterways. Organize state trips--or publicize commercial trips.

There were some who worried about spending on trails given the state's perilous economic situation:

The state budget is in such a crunch and I feel our waterways are important but being a teacher it's hard for me. I feel that our priority should be in education. I don't want money pulled from education for park development.

I think top funding should go to schools. I know Oregon recreation is important, but we live in a small community, and they just cut \$450,000 from the schools, but they're building a bike path, to a remote area called Powers, which will cost \$440,000. I know recreation is important, but schools should be the priority. Kids are our future and where money needs to go.

While all of these things are good, in light of the current economic situation in Oregon we need to look at what is really important. When I am personally having money difficulties I don't take vacations or buy art, I wait til the resources are available. Government needs to take a message from the people that they are just overtaxed. Look at Measure 30's defeat. We need to be sober minded and pay attention to the reality of our economy.

Importance of Trail Signage – Motorized and Non-Motorized

Motorized and non-motorized trail users were asked to rate the importance of signs at different trail locations:

	Mean Rating		
	Both User Groups (Weighted)	Motorized	Non-Motorized
	N = 505	N = 192	N = 313
Trail junctions	2.7	2.6	2.8
At trailhead	2.7	2.6	2.7
Along trail	2.4	2.3	2.5
Stream crossings	2.1	2.2	2.0
Sampling error for these questions ranges from $\pm 3\%$ to $\pm 6\%$			

Trail junctions and at the trailhead are ranked highest, with along the trail and at stream crossings trailing behind. The percentage selecting the highest response, “very important,” is a measure of the intensity of feeling:

	Percent Very Important		
	Both User Groups (Weighted)	Motorized	Non-Motorized
	N = 505	N = 192	N = 313
Trail junctions	76%	70%	78%
At trailhead	74%	73%	74%
Along trail	57%	50%	59%
Stream crossings	42%	47%	41%
Sampling error for these questions ranges from $\pm 2\%$ to $\pm 6\%$			

The order is the same is in the previous table. We see that motorized trail users rank signage at stream crossings as more important than do non-motorized trail users, while non-motorized trail users rank signs along the trail as more important.

Respondent Comments on the Interview

At the end of the survey, respondents were asked if there was anything else they wished to say. The complete results of this question are listed as variable ENDING1 in

³⁵ This question was not asked of water users.

³⁶ This question was not asked of water users.

Appendix C. We conclude this report with a few of the more interesting or insightful comments:

Oregon parks are special

I moved here from Iowa and I'm always amazed at quality of parks, recreation areas, the water system, the Pacific Crest Trail, the access.

Out-of-staters should pay more

I pay taxes in this state. So does the rest of my family. We use the facilities. We pay for them. I think out-of-staters should pay for them and if Oregonians get charged anything it should be nominal.

Just that the visitors from out of state need to pay more, and they need to respect our parks. I used to work for the Linn County Parks Department and I saw how they treated our parks and it wasn't nice. Heck they'd leave stoves, sleeping bags behind, new, just if they decided they didn't need them. If they had to pay more to use our parks, maybe they'd treat them better. Some people from out of state are very nice, but in my experience the out of staters need to show more respect to our parks. And the parks have gone down hill in the past 20 years. Oregon used to be a proud state and its parks, but things have gone down hill. And like I said, in my experience it was mostly with out of staters, and they should pay more to use our parks.

Parks are a social service

I feel like I've expressed my priorities through this survey. It is so important to preserve the trails that exist and to continue developing new trails – and they don't have to be fancy. But it's important for the balance and health of our community. I used to live on a 500 acre farm and the Shenandoah River in Virginia. I moved to Oregon because I feel everyone in Oregon can have that experience here through the park system and the public lands. That's a huge difference for young families no matter what their income is. I moved here as a single parent. Senior citizens told me that no matter how hard times were they could always come out to these lands. It really helps in supporting families to have access to parks, as well as other parts the social support system.

Preserve motorized rights

I just want to preserve our rights. We did several petitions to prevent these land closures on the BLM lands, so we can preserve our rights. I believe in stewardship and land use management. I'm 45 and I want to be riding when I'm 60. The club that I'm with, we're conscientious about sound levels, use the proper sound mufflers, arresters to keep. I wouldn't mind if the permit fees went up.

Include both sides at visitor centers

I work in the forest products industry and feel the forests belong to everybody who wants to enjoy them. Your interpretive centers should include insights about how forests can be managed and not just left alone and education about what social needs are that forest management meets.

Simplify permits

Permitting – Just one aspect of going outdoors. It is getting more complicated to get permits. You have to get one for everything. It should be more convenient, credit cards over the internet, you could even pay that way and then print out your own permit at home. I am not opposed to paying for the permit; just make it simpler to get them.

Use prison labor for trail work

We really need to use prison inmates to do work. I believe that if you do not work then you should not eat. They are just sitting around and should be used to clean up trails, it would be therapeutic for them and would help with costs of maintaining trails. I'm an old fashioned person that believes in the Bible and these inmates that are of low risk should be working for their keep.

Make motorized trails more family-friendly

I think they should lean more towards a family-oriented experience. For example, the reduction of alcohol so you don't have to worry about being harassed or someone crashing into you. Having good trail markers encourages safety- and family-first kinds of motorized trails. Trail markers help not only if someone gets lost but if someone gets injured you can call 911 and give directions. As a firefighter in Portland, we get incomplete calls and so it is an important safety and time concern. The parking areas, the picnic tables all make it a better experience.

Appendix A: Survey Methodology and Sampling

Appendix B: Questionnaire with Embedded Frequencies

Appendix C: Full Text of all Open-Ended Questions

Appendix D: Cross-tabulations for Key Variables