

SNOWMOBILERS, OFF-ROAD RECREATION VEHICLE USERS
AND THE 1977 NATIONAL RECREATION SURVEY:

An Analysis of Trends and Patterns
in Participation and Use

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June 1978

Preface

This report is an exploratory analysis of data obtained by the 1977 National Recreation Survey Telephone Interview Sample. It is strictly a function of the author's interest in off-road recreation vehicles and snowmobiles. The report was financed, in part, by the Heritage Conservation and Recreation Service, United States Department of the Interior. The author wishes to thank John Peine of the agency for his cooperation and encouragement.

Introduction

In 1977, the Heritage Conservation and Recreation Service (HCRS),¹ United States Department of the Interior, conducted a nationwide household telephone survey concerned with outdoor recreation participation patterns, trends in use, and perceptions concerning a variety of factors related to recreational opportunities. While much of that data has been summarized by appropriate HCRS personnel, the wealth of information contained in the data bank allows the opportunity for in-depth exploration of trends and patterns of use of participants in particular recreation activities.

¹At the time of the survey, Bureau of Outdoor Recreation.

Despite years and years of research, we really know very little about the behavior and needs of snowmobilers and off-road recreation vehicle (ORV) users. Several research summaries exist (Lodico, 1973; Bury, et al., 1976) but despite the estimated 40 million participants in these activities, a systematic and comprehensive national research program has yet to be developed that would deal with the needs of participants as well as strategies for resolving conflicts and impacts resulting from participation in these controversial activities.²

The 1977 National Recreation Survey allows an excellent opportunity to make comparisons between ORV and snowmobile participants and participants in other activities. The essential nature of this report is exploratory: the data contained herein is reflective of the author's inherent and long established interest in the ORV phenomenon and is not directed toward the solution of any specific management or planning problem. While the inquiry may appear to be academic, it also is suggestive of the kinds of questions the Survey may be able to answer.

This report will seek to answer the following questions:

1. What are the patterns in recreational activity participation of ORV participants?
2. Are ORV participants more likely than non-participants to live near and use recreational opportunities?
3. How do ORV participants perceive the importance of recreational opportunities?
4. What are the federal investment preferences of ORV participants?
5. How have (or will) changes in gasoline energy prices affect ORV participation?
6. What kinds of dissatisfaction do ORV users experience?
7. What factors prevent ORV participants from engaging in recreational experiences?

²See McCool, 1978, for a more comprehensive discussion of the need for an ORV oriented research program at the national level.

Questions dealing with basic socio-demographic characteristics of ORV participants have not been included because data bearing on this issue has already been analyzed in the National Recreation Survey.

Constraints

The National Recreation Survey involved telephone interviews with over 4,000 households, about 400 in each of the 10 Federal Regions. Appropriate weighting factors needed to generalize the Survey results to the entire American population are included in the data bank. However, because this analysis contrasts ORV participants and non-participants, such weighting factors are not required. The results here, are, of course, constrained by any methodological or sampling weaknesses inherent in the original research design for the Survey.

The proportion of ORV Users (non snowmobile participants) identified in the study is unusually large. This may be due to the way in which the activity was defined in the interview. To what extent this occurred is not known and can only be estimated with a check survey.

Finally, one must be cautious when interpreting the data as to impact on ORV and snowmobiling activities. ORV participants and snowmobilers do engage in other recreational activities. Thus, while the data may suggest characteristics or impacts of certain conditions on the participants, that characteristic or impact may also be found in other activities.

What are the patterns in recreational activity participation of ORV enthusiasts?

About 26 percent of the sample stated they had been involved in off-road recreation vehicle activity during the past year.³ Snowmobilers accounted for eight percent of the sample. Using latest Bureau of Census information,⁴ these figures indicate that as many as 72 million people engage in off-road vehicle oriented experiences annually!

³The actual activity was termed "driving vehicles or motorcycles off-road." See the interview schedule.

⁴As of March 1977, there were 74,142,000 households with an average household size of 2.86 persons.

Several sub-questions have been generated to answer the basic question.

Are ORV participants and snowmobilers more likely to be frequent participants than individuals engaging in other recreational activities?

Frequent participation has been defined in the survey as engaging in an activity more than four times in the past 12 months. Table 1 shows data indicating that ORV participants tend to be more enthusiastic in their activity than participants in other recreational pursuits. Snowmobilers, however, are typical of other participants.

Table 2 is an indication of the diversity of participation in other activities by snowmobilers, ORV participants, and non-participants. Table 2 indicates that ORV users tend to be much more recreationally active and diverse than non-participants, and snowmobilers more than ORV participants.

Have many individuals just started participating in ORV activity?

Table 3 suggests that much of the growth in off-road recreation vehicle activity has occurred but that the snowmobiling population will continue to grow relatively rapidly.

How many individuals would like to start participating in ORV activity?

Data answering this question is shown in Table 4. Again, it appears that snowmobiling has more interest than ORV's. About twice the proportion of the sample is interested in snowmobiling than in general ORV.

Where do ORV users and snowmobilers reside?

Tables 5 and 6 indicate the proportion of respondents participating in ORV and snowmobiling activity by Federal Region and urban area respectively. Highest concentrations of ORV users are found in the Denver and Seattle regions where public land opportunities for ORV users are abundant. The New York and Boston areas--regions of high population density with relatively little public--show the smallest proportion of ORV participants. Snowmobiling participation appears, logically, to be linked to climate conditions rather than public land tenure. The Boston, New York, Chicago and Denver regions show the greatest proportion of participation, while San Francisco, Dallas, and Atlanta show the least.

Table 6 shows that individuals living outside urban regions (SMSA's) are much more likely to participate in these activities than those within a SMSA. Again, this may be linked to availability of opportunities.

Are ORV participants more likely to live near and use recreational opportunities than non-participants?

There is considerable debate about the significance of recreational opportunities as amenities to attract people to particular geographical residency. And, if ORV participants are recreationally active, it would be important for them to have opportunities nearby. Of course, it is impossible from this data to suggest a cause and effect relationship, but the data may indicate certain trends and patterns.

Table 7 shows that both ORV users and snowmobilers are much more likely to live near areas having recreational opportunities than non-participants. And their rate of use of recreational opportunities is much greater than non-participants. Snowmobilers tend not only to live in locales with more opportunity available than ORV participants, but to also use them slightly more frequently.

Also of interest is the availability and use of opportunities by the enthusiast (respondents who participated more than four times in the last 12 months). This information is shown in Table 8. ORV and snowmobiler enthusiasts are much more likely to have recreational opportunities available and to use them. Except for the availability of a yard (between ORV enthusiasts and non-enthusiasts) the differences are large and significant. For example, nearly an equal proportion of ORV enthusiasts and non-enthusiasts have yards suitable for outdoor recreational purposes. Yet the ORV respondent is much more likely to use this yard more than 10 times a year for recreational purposes than the non-ORV user. This relation may involve income factors. If ORV participants and snowmobilers have higher incomes, there may be a greater likelihood of those individuals owning single family dwellings with yards. The same relation may hold true with respect to neighborhood parks, i.e., homes with yards (occupied by individuals with higher than average incomes) may be located in neighborhoods with parks. Nevertheless, of those who do have yards and live in neighborhoods with parks, ORV users and snowmobilers are much more likely to use those opportunities.

Do such trends hold up for the initiate--the respondent that has just started ORV or snowmobile activity? Table 9 confirms that such trends also are soundly reflected in the novice; even those just getting started are firmly imbedded in a context of relative abundance of recreational opportunities. In fact, except for use of the residence yard for outdoor recreation, the ORV initiate re-

sponds with similar proportions as the enthusiast as well as the average user. The snowmobilers response pattern contains more diversity, yet the pattern is unmistakable.

Given this data, what can be said about those intending to participate? While behavioral intentions are often not good predictors of behavior in a specific instance, they may strongly suggest actual behavior over the long run. If those respondents stating their desire to begin ORV or snowmobiling activity have characteristics similar to those currently involved, then those intentions may have a strong likelihood of being carried out. Table 10 shows characteristics of respondents intending to begin participating in ORV and snowmobiling activity within the next year or so. For the most part, these characteristics are similar to the current user. The major exception to this is the lack of difference between ORV intenders and non-intenders in terms of the availability of a yard and use of local parks; snowmobilers similarly show little difference from non-snowmobilers for the availability of a yard.

Examining the four tables strongly suggests that the ORV user or snowmobiler occupies a milieu of relative recreational abundance, compared to the non-participant. While income levels may have some level of influence or availability, it is still apparent that these people are very active recreationally: they locate themselves to nearby recreation areas and parks and they use them. The snowmobiler may be at the pinnacle of this abundance. His milieu contains an even greater abundance or recreational opportunity than even the ORV user. Nearly 100 percent of the novice snowmobilers have yards suitable for outdoor recreation and about 85 percent reside within a 15 minute walk or a park or other recreation area. Such statistics are unusual, yet descriptive.

How do ORV participants perceive the importance of recreational opportunities?

Understanding the priorities people hold with respect to recreational opportunities is often helpful to policy makers concerned with the amount of public support for existing and proposed programs. Information on who and who does not perceive recreation as important may also assist in planning and management personnel in designing and evaluating public communications programs.

Four questions were included in the Survey on this topic. The first dealt with the respondent's overall perception of importance of outdoor recreation in general. As Table 11 suggests, ORV and snowmobile participants tend to respond "very important." This perception is strengthened somewhat by the "enthusiastic" (five or more occasions of participation in the last 12 months) participants (Table 12). Enthusiastic snowmobilers gave recreation a slightly higher importance rating than enthusiastic ORV users.

The next question dealt with the importance of parks within a 15 minute walk (neighborhood parks) of the respondent's residence. Again, ORV and snowmobile participants gave these parks a slightly higher importance rating than non-participants. This valuation carried over to the enthusiastic users, where the differences were much higher.

Local parks, those within an hour's travel of the respondent's residence, received a slightly higher importance rating than neighborhood parks. However, the enthusiastic ORV and snowmobiler tended to rate these areas lower in importance, perhaps because they don't provide the overall diversity of experiences being sought. On the other hand, remote parks which received the lowest importance rating by ORV and snowmobile users, received the highest ranking by the enthusiast. This may be a function of the ability of remote parks, which are usually large and undeveloped to more adequately provide the opportunities the enthusiast is seeking.

In summary, the ORV and snowmobile participant view outdoor recreation as having greater importance than non-participants. This may be due to their more frequent and diverse activity patterns than non-participants, or just their inherent nature.

What are the federal investment preferences of ORV participants?

Question 31 on the telephone interview schedule dealt with respondent preferences concerning how the federal government should invest funds for providing recreational facilities. Because of the relative recency of the ORV phenomenon and complexity of the activity (McCool, 1977) it is likely that ORV participants hold differing preferences for investment decisions. Six alternative, contrasting investment possibilities were provided to respondents. Tables 13-18 contrast ORV and non-ORV participants in their preferences.

Before discussing the results, the reader should note the disparity between participants and non-participants which responded "don't know" or which gave no response. On all issues, ORV and snowmobile participants were more likely to respond and indicate a preference than the sample at large. This may suggest that these individuals are more active and involved in recreation than the population as a whole, and may be more willing to give input into federal recreation investment decisions.

Table 13 shows preferences for either many small parks or a few large parks. Clearly, the vast majority of the sample were in favor of the former alternative. This preference carried over to both ORV participants and snowmobilers. These groups gave even more support for many small parks than non-participants.

The opinion of the entire sample was almost evenly split on the issue of location of recreation opportunities (Table 14). ORV non-participants were more supportive of urban parks than participants. On the other hand, ORV participants gave most of their support to rural parks as compared to non-participants. Snowmobilers and non-snowmobilers had similar responses except the differences were more pronounced.

On the question of maintenance of existing parks vs development of new ones, there was a slight tendency in the total sample to prefer maintenance (Table 15). This tendency carried over to ORV users and snowmobilers, with the pattern of responses being similar to the sample.

Preferences for facility development or land acquisition are shown in Table 16. The sample had a clear preference for development over acquisition. This pattern was also reflected in snowmobiler responses. However, ORV participants were almost equally split on this issue.

Table 17 shows preferences for location of parks. The sample had slight but significant preference for inland property vs waterfront locations. However, snowmobilers clearly preferred waterfront properties over inland parks. This may reflect the highly recreation-ally active nature of ORV users.

Finally, preferences for types of facilities are shown in Table 18. Both snowmobilers and ORV participants have a significant and obvious preference for outdoor facilities as compared to non-participants.

In sum, ORV users (including snowmobilers) are similar to the total sample in terms of preferences for the size and number of parks and for maintenance and development. ORV participants, however, showed a preference to rural locations over urban ones and for waterfront rather than inland properties. Snowmobilers are similar to the total sample for preferences for development over acquisition. For ORV participants, the pattern of responses on this issue is somewhat different.

How have (or will) changes in gasoline energy prices affect ORV participation?

Beginning with the Arab oil embargo of 1973-74, there has been considerable discussion concerning the impact of changes in the availability and cost of gasoline energy on recreational travel. Only a few studies have been reported in the literature (for example, see McCool, et al., 1974) and none have attempted to estimate the impacts of such changes on ORV participation, although it has been

suggested that increases in price will probably have a greater impact on the location of ORV activity than frequency (McCool, 1977, 1978). Several questions in the National Recreation Survey dealt with these issues and may allow some tentative testing of these hypotheses. Table 19 contains the results of these questions. Respondents were asked if the present price of gasoline had caused them to take fewer trips than they normally would for outdoor recreation. Of those indicating an opinion, nearly half the total sample indicated that they had taken fewer trips. ORV participants appeared to be slightly more sensitive to gasoline prices than non-participants while snowmobilers were significantly more sensitive than non-snowmobilers.

Has the present price of gasoline resulted in shorter trips for outdoor recreation? Again, about half the total sample responded positively. And, ORV participants appear to be significantly more affected than non-participants. The same was true of snowmobilers. If these two answers reflect actual ORV and snowmobile activity, it appears that nearly the same level of recreational activity has been focused on areas closer to home--in accordance with recent predictions (McCool, 1977).

The third line in Table 17 indicates if respondents have used public transportation for outdoor recreation because of energy prices. Very few have been so impacted and it appears that there are no major differences among ORV participants, snowmobilers, and non-participants.

Finally, respondents were asked their behavioral intentions assuming a scenario where gasoline prices doubled in the next six months. Over 80 percent of the total sample indicated that if such a situation occurred they would take fewer trips for outdoor recreation. ORV participants were more sensitive to this scenario than non-participants while there were no meaningful differences between snowmobilers and non-snowmobilers.

From this data it appears that both ORV participants and snowmobilers are more sensitive than the rest of the sample to changes in gasoline energy costs. In most cases, however it appears that the difference is only slight. From the data, it is impossible to determine if the differences will be reflected in actual ORV and snowmobile use patterns. All that is known is that the ORV participant will take fewer trips for outdoor recreation, but it is not known whether these fewer trips will actually involve ORV's or some other outdoor recreation activity.

What kinds of dissatisfactions do ORV participants experience?

Information concerning the nature of recreation experience dissat-

isfactions is very helpful to managers. Quite obviously, it can lead to programs designed to enhance the capability of resources and facilities to produce high quality recreational opportunities as well as suggest appropriate visitor management directions.

Several questions in the Survey were directed at identifying dissatisfactions at neighborhood, local, and remote parks. The answers to these questions are summarized in Tables 20-21. Because few individuals articulated dissatisfaction with their recreational experiences, sources of these dissatisfactions are tabulated only for neighborhood parks, where dissatisfaction levels are greatest. Several observations are evident from Table 20. First, the proportion of respondents dissatisfied decreases as the remoteness of the opportunities increases. This may be because respondents have relatively fewer experiences at these locations from which to draw upon to answer the question, or perhaps these more remote areas are under better management.

Second, non-participants report fewer instances of dissatisfaction than participants. One would almost expect a reverse situation, given the ORV's and snowmobiles are often sources of dissatisfaction to non-participants. Finally, ORV participants report a slightly higher overall rate of dissatisfaction than snowmobile users.

Table 21 strongly suggests that dissatisfactions at the neighborhood level stem from the lack of good facilities and maintenance programs. ORV participants and snowmobilers tend to be more sensitive to these factors than non-participants. Ranked third was the problem of undesirable visitors, including obnoxious behavior, and so forth. This, again, is suggestive of the need for better maintenance and law enforcement programs.

At the local and remote level (not tabulated), the principal dissatisfactions reported were with poor maintenance and crowded conditions. ORV participants and snowmobilers tended to be more sensitive to these situations than non-users.

What factors prevented ORV and snowmobiler participants from engaging in recreational experiences?

Questions 26 on the survey dealt with barriers to using outdoor recreation areas during the last 12 months. This information is often useful to planners and decision-makers in formulating and implementing policies to achieve more efficient and equitable use of recreation resources. If one particular group of people reports a different set of barriers than another, then certain programs may be instituted with the goal of removing the barrier.

The information displayed in Table 22 shows the relative importance of different factors preventing individual respondents from using outdoor recreation areas during the last 12 months. It is noteworthy that a considerable number and diversity of barriers exist, and that no one barrier seems to dominate the list. The barriers that are listed include issues associated with the management of outdoor recreation areas, personal barriers confronting the respondents, and the presence of competing opportunities, as well as the lack of suitable resources.

Lack of money--often cited as a significant barrier--was indicated by slightly more than one-third of the sample, far behind crowding and time factors. Lack of time was the major barrier reported by the sample. But, ORV participants and snowmobilers were slightly more likely to indicate time as a barrier than non-participants.

The second major factor reported was the perception that "areas were too crowded." Nearly half the total sample reported it as a factor. However, ORV participants and snowmobilers were much more likely to report this barrier than non-participants. This may suggest that the ORV user and snowmobiler may be much more sensitive to visitor use densities than noted in the rhetoric of debate. Alternatively, it may indicate that these individuals, despite their location of relative recreational abundance, are actually faced with higher use densities than non-participants.

Another major barrier reported concerned lack of information. Here again, the participant was significantly more likely to report this factor than non-participants. Many studies have reported the influence and need for information dissemination systems to communicate the availability of alternative opportunities to potential users. This need is confirmed here and is especially significant for the ORV and snowmobile user.

ORV participants and snowmobilers were also more likely than non-participants to report the following as barriers: poor maintenance, pollution problems, and lack of transportation. It is interesting to note that snowmobilers and non-snowmobilers did not differ significantly on the factor of personal safety problems but the ORV participants and non-participants did. Perhaps this is a result of the tendency of ORV participants to congregate in large (10,000+) disorganized groups where opportunities for deviant behavior abound.

In summary, it appears that the ORV and snowmobile participant is posed with barriers to participation more frequently than non-participants. The data indicates, for the most part, that the reverse situation does not occur. Given a general goal of equity in providing recreational opportunities, the data is strongly sugges-

tive of the need for further exploration into the nature of these barriers as well as appropriate remedial action.

A Few Thoughts on the Findings

As mentioned earlier, the principal thrust behind this report has been to illustrate possible manipulations using the National Recreation Survey data bank as well as to explore what the Survey actually shows with regard to ORV and snowmobile participation across the country. As such, the analysis was not intended to be either exhaustive or comprehensive.

Nevertheless, the author has found the National Recreation Survey to be a powerful tool in answering some of the questions uppermost in his mind. The data reported here is only a fraction of that which had to be tabulated for this report.⁵ The process of data manipulation instilled within the author an enthusiasm and confidence in the Survey with regard to its ability to suggest answers to pathways to exploring many of the significant and imperative issues concerning the supply of and demand for recreational opportunities.

It is readily apparent from the illustrative data analysis contained herein that the ORV participant and snowmobile differ significantly from the non-participant in many respects. Participants tend to be extremely active recreationally; they are involved in many different experiences and engage in many of these frequently throughout the year. This may be partially due to residence: the participant resides within an area of relative abundance of opportunity for recreation. Still, it may be fruitful to explore the cause-effect relationship here by controlling the amount of recreational opportunities.

The data also suggests that the growth in ORV activity, while still above annual population growth, may be slowing, while snowmobiling growth remains significantly higher. Not attached here are the reasons for such differentiated rates of growth, possible regional differences in growth rates, and dropout rates. The Survey would allow some exploration on the first two issues but not on the third. Such exploration, however, would help increase understanding of the dynamics of the ORV and snowmobiling market. Given similar responses to a number of different questions, the Survey does appear to be an accurate predictor of new entries into ORV and snowmobiling activity.

⁵Time and money limitations prevent reporting these results at this time.

Participants also view outdoor recreation as extremely important to their lifestyles. Regardless of the location--neighborhood or remote--the participant views such opportunities as very important; the differences between participants and non-participants are usually large--and significant. One may expect that the ORV and snowmobile enthusiast may be much more outspoken on issues related to recreation than the population as a whole because of this commitment.

Similarly, the ORV and snowmobile participants hold different federal investment preferences than non-participants. They generally are able to articulate a position on this important issue more frequently than non-participants--which may reflect higher knowledge, interest, or commitment levels. Major differences were in the areas of rural vs urban parks and indoor vs outdoor facilities. The former difference probably reflects the residence of ORV and snowmobile users (trending toward non-SMSA areas) as well as the simple fact that much ORV and snowmobiling activity requires open spaces usually not found in urban areas. The preference for outdoor facilities probably has a similar explanation--but with the ORV and snowmobile groups recreationally active, one would expect this factor as an explanation also. Given the relatively tightly and strongly organized nature of ORV and snowmobile participants, one can expect such investment preferences to be firmly and specifically stated when the opportunity arises. Again, though, certain questions remain unanswered: Are preferences, even among ORV and snowmobile users, locationally influenced? What impacts do the respondents' perceptions of barriers to participation have on investment preferences? Are those hurt by energy crunches more likely to prefer urban over rural parks?

Since the Arab Oil Embargo of 1973-74, there has been considerable discussion on the need for a national energy policy. Part of that energy policy would presumably address issues related to consumption of energy in order to provide and participate in recreational opportunities. While it may be possible to postulate a philosophical position that would simply and reliably identify necessary and unnecessary energy consumption, the pragmatic implementation of such a policy, in the American system, would be politically improbable. The counteracting forces are strong, the stakes would be high; the issues complex.

How does the National Recreation Survey fit in? Given the politically improbable outright ban on recreation-related travel, data in the Survey might be useful in suggesting impacts of alternative strategies for reducing energy consumption; namely using the pricing mechanism and providing public transportation. ORV and snowmobile participants appear to be more impacted than non-partici-

pants as a result of higher gasoline prices, mainly in terms of shorter trips. Snowmobiles also have a tendency to report fewer trips. The effect of higher gasoline prices appears to have been more in the way of crowding in smaller areas than reducing the total amount. If gradual rises in price continue, it is likely that this will lead to higher frequencies of conflict with other recreational experiences and land uses. It would be fruitful to explore from Survey data what other recreation activities show similar responses. This may indicate the kinds of conflict that will occur in the future.

On the similar issues of dissatisfactions and barriers to participation, ORV participants were usually more sensitive to maintenance and crowding problems than non-participants. Since the ORV user is usually perceived as a very gregarious individual, seeking experiences and situations where social interaction may be enhanced, the latter finding is significant. It would be fruitful to explore such items as how ORV users define crowding, the users' expectations of crowding and their locational dependency, and ORV users' needs for solitude. Such a research approach, while outside the domain of the National Recreation Survey, would aid considerably in our understanding of crowding--now linked almost solely to wilderness-line situations--as well as assist in delivering higher quality opportunities to the ORV user. The Survey could be used, however, to identify regional differences in dissatisfactions and barriers which could have immediate planning implications.

The author recommends that the HCRS give consideration to further analyses and discussion of the National Recreation Survey. Such analyses could uncover valuable relations and issues, not only with regard to ORV's and snowmobiles, but many other recreation activities as well. It certainly can be an important educational tool--for both undergraduates and graduates. And, of course, it can help improve the effectiveness of recreation development and management decisions. To do otherwise would be ignoring an important resource.

References

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Table 1. The proportion of "enthusiastic" participants among snowmobilers, ORV users, and other recreational participants.

	<u>Activity</u>		
	ORV Participants	Snowmobilers	Other Participants ^{b.}
Frequent Participants ^{a.}			
YES	77.0	62.6	61.4
NO	23.0	37.4	38.6
TOTAL	100.0	100.0	100.0

a. Computed by: $\frac{\text{number of individuals participating more than four times in last year}}{\text{number of individuals participating}} \times 100\%$

b. Based on an average of the other 29 activities in the survey.

Table 2. Recreation activity of ORV participants, snowmobilers, and non-participants, in percent.

	Activity			
	ORV Participants	Non- Participants	Snowmobilers	Non- Snowmobilers
Recreation Activity:				
Infrequent Recreationists	1.4	20.8	1.4	17.1
Moderate Recreationists	17.9	31.4	11.4	29.5
Frequent Recreationists	50.6	37.1	44.3	40.2
Recreational Enthusiasts	30.0	10.8	42.9	13.1
TOTAL	100.0	100.0	100.0	100.0

Table 3. Porportion of ORV enthusiasts just starting activity in last 12 months.

	Activity	
	ORV	Snowmobiling
Just Starting: ^{a.}		
YES	4.1%	8.4
NO	95.9	91.6
TOTAL	100.0	100.0

a. Computed by: $\frac{\text{number of participants just starting}}{\text{total number of participants}} \times 100\%$

Table 4. Proportion of sample desiring to engage in ORV activity in the next year.

	Activity	
	ORV	Snowmobiling
Want to Start: ^{a.}		
YES	1.1 %	2.7 %
NO	98.9 %	97.3 %
TOTAL	100.0	100.0

a. Computed by: $\frac{\text{number wanting to start}}{4029} \times 100\%$

Table 5. Participation in ORV and Snowmobiling activity by Federal Region.

Federal Region:	Percent Participating in:	
	ORV	Snowmobiling
Seattle	29.0	6.3
Boston	22.8	15.3
New York	20.6	15.0
Philadelphia	25.6	8.7
Atlanta	25.7	1.7
Chicago	26.1	16.4
Dallas	28.2	2.0
Kansas City	28.3	6.5
Denver	30.0	15.5
San Francisco	25.2	1.9

Table 6. Participation in ORV and Snowmobiling activity by residence within a Standard Metropolitan Statistical Area (SMSA).

Residence	Percent Participating in:	
	ORV	Snowmobiling
Inside SMSA	23.8	6.9
Outside SMSA	32.6	14.5

Table 7. Availability and use of recreational opportunities by activity, in percent.

Type of Opportunity:	Activity			
	ORV Participants	Non-participants	Snowmobilers	Snowmobilers
Yard a.	81.8	76.4	85.5	77.1
Yard Use b.	64.4	54.9	68.5	56.3
Neighborhood Parks c.	80.1	71.1	85.5	72.3
Neighborhood Park Use d.	51.6	45.0	54.4	46.0
Local Park Use e.	54.6	41.4	54.7	44.2
Remote Park Use f.	28.3	17.8	25.7	19.2

- a. Percent of respondents who have a yard that can be used for outdoor recreation.
- b. Percent of respondents who have a yard that used it more than 10 times during the last 12 months for outdoor recreation.
- c. Percent of respondents who have a park within a 15 minute walk of their residence.
- d. Percent of those respondents having a park within a 15 minute walk that used the park more than 10 times in the last 12 months.
- e. Percent of the respondents that used parks within an hour's travel of their residence more than 10 times in the last 12 months, excludes non-responses.
- f. Percent of the respondents that used parks more than an hour's travel from their residence more than 10 times in the last 12 months, excludes non-responses.

Table 8. Availability and use of recreational opportunities to Snowmobile and ORV Enthusiasts, in percent. ^a

Type of Opportunity ^b	Activity			
	ORV Enthusiasts	Non-ORV Enthusiasts	Snowmobile Enthusiasts	Non-Snowmobile Enthusiasts
Yard	80.9	77.1	84.5	77.5
Yard Use	67.6	54.9	71.0	56.7
Neighborhood Parks	80.5	71.8	86.0	72.8
Neighborhood Park Use	52.4	45.4	56.4	46.3
Local Park Use	56.3	42.2	50.3	44.8
Remote Park Use	26.0	18.5	29.8	19.6

^a. An enthusiast is a respondent who participated in Snowmobiling or ORV activity on more than five occasions in the last 12 months. A non-enthusiast is a respondent who may have participated in other recreation activities, some more than 4 times in the last 12 months. It may include ORV and snowmobile participants who engaged in the activity 4 or fewer times in the last 12 months.

^b. See Table 7 for an explanation of opportunities.

Table 9. Availability and use of recreational opportunities to respondents participating for the first time in ORV and Snowmobile activity in the last 12 months. ^a.

Type of Opportunity ^b .	Activity			
	ORV Participants	Non-ORV Participants	Snowmobilers	Non-Snowmobilers
Yard	86.0%	77.7%	93.9%	77.7%
Yard Use	54.1	57.5	64.5	57.4
Neighborhood Parks	81.4	73.4	84.8	73.4
Neighborhood Park Use	51.4	46.8	60.7	46.8
Local Park Use	65.1	44.9	66.7	44.9
Remote Park Use	27.3	20.0	22.6	20.1

a. May include enthusiasts.

b. See Table 7 for explanations.

Table 10. Availability and use of Recreational Opportunities by respondents intending to participate in ORV or Snowmobiling activity, in percent.

Type of Opportunity ^a .	Activity			
	ORV	Non-ORV	Snowmobile	Non-Snowmobile
Yard	73.9%	77.9%	80.0%	77.7%
Yard Use	66.6	57.4	70.1	57.1
Neighborhood Parks	84.8	73.3	86.4	73.1
Neighborhood Park Use	59.0	46.7	66.3	46.2
Local Park Use	46.7	45.1	57.4	44.8
Remote Park Use	22.0	20.1	22.1	20.1

a. See explanations in Table 7.

Table 11. Importance of recreational opportunities to ORV participants, snowmobilers, and non-participants, in percent.

Importance of ^{a.}	Activity			
	ORV Participants	Non-Participants	Snowmobilers	Non-Snowmobilers
Neighborhood Parks ^{b.}	54.2	49.9	53.8	50.8
Local Parks ^{c.}	62.1	50.6	62.1	52.8
Remote Parks ^{d.}	45.1	36.1	45.7	37.7
Outdoor Recreation in General	70.4	55.6	71.8	58.2

a. Percent responding very important.

b. Within a 15 minute walk.

c. Within an hour's travel away.

d. More than an hour's travel away.

Table 12. Importance of recreational opportunities to enthusiastic ^{a.} ORV participants, Snowmobilers, and non-participants, in percent.

Importance of: ^{b.}	Activity			
	ORV Participants	Non-Participants	Snowmobilers	Non-Snowmobilers
Neighborhood Parks	72.4	56.3	76.0	58.6
Local Parks	53.0	50.5	52.5	50.9
Remote Parks	61.6	51.6	59.9	53.3
Outdoor Recreation in General	72.4	56.3	76.0	58.6

a. Individuals who participated 5 or more times in last 12 months.

b. See Table 7 for explanation.

Table 13. Size and number of park preferences by activity, in percent.

Preference for	Activity			
	ORV Participants	Non- Participants	Snowmobilers	Non- Snowmobilers
Many small parks	67.7	65.6	70.5	65.7
A few large parks	22.2	19.6	20.6	20.3
Both	4.7	3.2	4.2	3.5
Don't know, no response	5.3	11.6	4.7	10.4
Total	100.0%	100.0%	100.0%	100.0%

Table 14. Location of park preferences by activity, in percent.

Preference for	Activity			
	ORV Participants	Non- Participants	Snowmobilers	Non- Snowmobilers
Urban Parks	38.9	43.2	34.3	42.9
Rural Parks	44.9	36.6	47.9	37.9
Both	10.6	9.4	10.6	9.6
Don't Know, No Response	5.5	10.8	7.2	9.6
Total	100.0%	100.0%	100.0%	100.0%

Table 15. Maintenance and Development preferences by activity, in percent.

Preference for	Activity			
	ORV Participants	Non- Participants	Snowmobilers	Non- Snowmobilers
Maintenance of existing parks	46.7	46.4	46.2	46.5
Development of new parks	41.9	38.3	40.9	39.0
Both	9.1	7.8	11.4	7.8
Don't Know, No Response	2.3	7.5	1.4	6.6
Total	100.0%	100.0%	100.0%	100.0%

Table 16. Facility and land acquisition preferences by activity, in percent.

Preference for	Activity			
	ORV Participants	Non- Participants	Snowmobilers	Non- Snowmobilers
Facility Development	46.2	48.3	50.7	47.4
Land Acquisition	44.8	35.9	40.9	37.9
Both	6.2	5.0	5.8	5.3
Don't Know, No Response	2.8	10.9	2.5	9.4
Total	100.0%	100.0%	100.0%	100.0%

Table 17. Preferences for location of recreational property, by activity, in percent.

Preference for	Activity			
	ORV Participants	Non- Participants	Snowmobilers	Non- Snowmobilers
Waterfront property	41.6	33.3	46.2	34.6
Inland property	41.1	42.8	37.0	42.9
Both	11.1	9.6	9.2	10.1
Don't Know, No Response	6.2	14.0	7.5	12.4
Total	100.0%	100.0%	100.0%	100.0%

Table 18. Preferences for type of facility by activity, in percent.

Preference for	Activity			
	ORV Participants	Non- Participants	Snowmobilers	Non- Snowmobilers
Indoor Facilities	11.8	14.7	12.3	14.1
Outdoor Facilities	76.3	66.5	76.9	68.3
Both	9.8	11.5	8.1	11.3
Don't Know, No Response	2.2	7.3	2.8	6.2
Total	100.0%	100.0%	100.0%	100.0%

Table 19. Impact of gasoline price changes on ORV participation patterns, in percent.

Change	Activity ^{a.}			
	ORV Participants	Non-Participants	Snowmobilers	Non-Snowmobilers
Gasolines prices result in fewer trips	48.7%	45.1%	51.0%	45.6%
Gasoline prices result in shorter trips	52.4	47.0	53.3	48.0
Gasoline prices result in use of Public Transportation	13.5	13.5	12.5	13.7
Doubling of gasoline prices in next six months will result in fewer trips	85.2	81.5	83.3	82.4

a. Numbers in table reflect percent of respondents saying yes to the question. See the Questionnaire, Q27 - Q30 for the full statement of the question. Responses exclude No Opinions and No Responses.

Table 20. Proportion of ORV participants, Snowmobilers, and Non-participants dissatisfied with recreational experiences by location of park, in percent.

Locale ^{a.}	Activity			
	ORV Participants	Non-Participants	Snowmobilers	Non-Snowmobilers
Neighborhood Park	17.9%	14.0%	14.8%	15.2%
Local Park	15.6	10.2	14.5	11.4
Remote Park	11.3	8.2	11.8	8.8

a. See Table 5 for explanations.

Table 21. Types of dissatisfactions experienced at neighborhood parks by activity, in percent.

Dissatisfaction	Activity			
	ORV Participants	Non-Participants	Snowmobilers	Non-Snowmobilers
Area poorly maintained	3.9%	2.8%	3.1%	3.1%
Need more and better facilities	4.6	3.1	5.8	3.3
Too many undersirable visitors	2.9	2.1	2.2	2.3
Too expensive	0.2	0.2	0.0	0.2
Too crowded	2.0	1.4	1.1	1.6
Area lacks good supervision	0.9	0.4	0.3	0.5
Dissatisfied because of poor weather, heavy traffic, etc.	0.2	0.2	0.3	0.2
Lacks natural beauty	0.2	0.2	0.6	0.1