

University of Minnesota Duluth
School of Business and Economics
Bureau of Business and Economic Research
Research Report

Cook County Winter Trail Use Study: Technical Report

April 2003



NORTHEAST MINNESOTA
REGIONAL SUSTAINABLE DEVELOPMENT PARTNERSHIP

About this Project

The following technical report on the Cook County resident survey was developed as a part of the larger research project “Tourism and Winter Trail-based Recreation: An economic and environmental comparison of motor and quiet sports.”

The project was designed to document and compare the impacts of snowmobiling and cross country skiing in a destination county. It will measure the economic impacts and assess the perceived social and environmental impacts of these activities. This study employed questionnaires with snowmobilers and cross country skiers and survey local residents in Cook County, Minnesota. An understanding of the differences between motor sports (snowmobiling) and a quiet sport (cross country skiing) is useful in planning future development, minimizing negative impacts, and improving marketing decisions.

Executive Summary

The Cook County Winter Trail Use Study was conducted in the fall of 2002 (a winter, like the one in 2001, which had little snow). A random sample of 105 households in Cook County were contacted by phone and a random adult in the home was asked a short set of questions about their views of cross-country skiing and snowmobiling in Cook County (65% cooperation rate). In addition, a random sample of 51 Cook County hospitality businesses were interviewed using the same instrument (53% cooperation rate).

In general, there were no statistically significant differences in response between the business and resident samples. Statistically significant differences in views are seen primarily across the various user groups (ski only, snowmobile only, both, and neither). Tables in this report provide further information. The following summary relies on the overall resident sample since it is more representative of Cook County views.

About two-thirds (65%) of respondents said that they were aware of problems that snowmobilers pose for Cook County residents and 7% were aware of problems that cross country skiers pose for the county. About 6% of respondents listed a problem posed by skiers (generally conflicting trail use with snowmobiles and ATVs), and 63% of respondents listed 195 problems with snowmobilers (e.g. noise 26%, driving on private property 17%, driving off trails 10%, and speeding/reckless driving 9%).

Most respondents see both snowmobilers and cross-country skiers as having a positive impact on the Cook County economy (95% and 88% respectively). Eight percent of respondents said that cross-country skiers harmed the environment while 55% said snowmobiles harmed the environment. About 93% felt skiers were respectful of residents compared to 69% for snowmobilers.

Some 81% felt that cross-country skiers had a positive impact overall compared to 36% feeling that snowmobilers had an positive overall impact. Over half (55%) said that snowmobilers had both a positive and negative impact and 16% felt that skiing had both a positive and negative impact.

When asked about changes respondents would like to see, 42% wanted to see an increase in snowmobilers, 37% wanted to keep it the same and 22% wanted a decrease in the number of snowmobilers. For skiers, 69% wanted to see an increase in skiers, 29% wanted it to stay the same, and 2% wanted to see a decrease in the number of skiers.

When asked if they would pay an added \$10 in property tax to provide improved trail facilities, 40% would do so for skiers and 28% would do so for snowmobilers.

About half of the residents have skied or used a snowmobile in the last 2 years. On average households own 1.2 snowmobiles and 1.8 people in the household own cross-country skis. About 70% of residents ski or snowmobile in Cook County and 71% have skied or snowmobiled at least once per month in the winter.

Table of Contents

About this Project	i
Executive Summary	ii
Table of Contents	iii
Table of Tables	iii
2003 Cook County Winter Trail Study Report	
Background	1
A. Comparison of Business and Resident Responses:	2
B. Comparison of Responses about Cross-country Skiers and Snowmobilers	7
C. Comparison of Views of Those Who Ski, Snowmobile, Both Ski and Snowmobile or Do Neither Activity.	11
Research Team.....	16

Table of Tables

Table 1: Comparison of Residents (in Business or Not) and Hospitality Business Respondents on Selected Questions, Cook County, Minnesota, 2002	2
Table 1a: 195 Problems Snowmobiling Creates for Cook County Residents, Listed by 99 of 156 Respondents	3
Table 1b: 10 Problems Cross-country Skiing Creates for Cook County Residents, Listed by 10 of 156 Respondents	4
Table 2: Comparison of Responses about Skiers and Snowmobilers for the Resident Sample and the Hospitality Business Sample, Cook County, 2002.....	8
Table 3: Comparison of Responses of Skiers and Snowmobilers about Skiers and Snowmobilers, Resident Sample, Cook County, 2002.....	12

2003 Cook County Winter Trail Study Report

Background

The *Cook County Winter Trail Use* study includes a survey of residents and a survey of hospitality businesses in Cook County. The purpose was to assess issues, perceived impacts and attitudes toward cross-country ski and snowmobile uses of winter trails in the county. The final data set includes a random sample of 105 Cook County households (65% cooperation rate¹) and a random sample of 51 hospitality businesses taken from a complete list of such businesses of record (53% cooperation rate). The *Bureau of Business and Economic Research* in coordination with Glenn Kreag, Minnesota Sea Grant Program, developed the telephone interview instrument which was used for both samples to facilitate comparisons. The *Minnesota Center for Survey Research* at the University of Minnesota conducted the telephone interviews.

Interviews were conducted between October 23rd and November 26th, 2002. The resident sample was a random sample of Cook County households in which a random adult was interviewed. The hospitality business sample used a randomly ordered list of all known hospitality businesses in the county. It should be noted that the resident sample was drawn from households with a telephone. Cook County includes many vacation homes, not all of which have telephone service.

The survey instrument asked respondents about their awareness of skiers or snowmobilers, their impression of the impact on the environment and economy, their interest in increasing or decreasing the activity, and their willingness to invest in facilities for each activity. Parallel questions were asked about cross-country skiing and about snowmobiling. Respondents were asked some background questions about age, gender, whether someone in their household engaged in one or both activities in the past 2 years (the prior year, like the current year had little snow but the winter two years prior to the interview was a regular snowfall year). If the respondent was a manager or owner of a business they were asked about the impact of each activity on their business.

This report provides results from the surveys in 3 main tables described below. Table 1 shows responses for business and resident groups (and the overall resident sample). Table 2 contrasts responses about skiers and snowmobilers that were asked in the resident and hospitality business samples. Table 3 compares responses by the activity that the random sample of Cook County households engaged in (cross country skiing only, snowmobiling only, both or neither sport).

¹ Cooperation rate is the number of completed interviews divided by the number of potential interviews (i.e. contact was made with the selected person).

A. Comparison of Business and Resident Responses:

Table 1 provides a comparison of business and resident responses. Three groups are distinguished. One is the entire hospitality business sample (86% of whom were in tourist-related businesses). The resident sample was divided into two groups. One group consisted of residents who owned or managed a Cook county business (46.7% of whom owned or managed a tourist-related business). The remaining group consisted of all non-business residents.

Table 1
Comparison of Residents (in Business or Not) and Hospitality Business
Respondents on Selected Questions, Cook County, Minnesota, 2002

<i>Selected Questions</i>	<i>Total Hospitality Business Sample</i>	<i>Resident Sample Those who Own/Manage Local Business</i>	<i>Non-Business Resident Sample</i>	<i>Sig²</i>	<i>Total Resident Sample</i>
Percent female	66.7% (51)	54.8% (31)	54.1% (74)	ns	54.3% (105)
Average age of respondent	49.1yrs (51) ³	45.8yrs (31)	54.9yrs (73)	.006	52.2yrs (104)
Average years in Cook County	21.1yrs (51)	19.3yrs (31)	24.3yrs (73)	ns	22.8yrs (104)
Average number of snowmobiles owned	1.6 (26)	1.2 (21)	1.2 (32)	ns	1.2 (53)
Average number of persons in household who own skis	2.2 (38)	2.0 (21)	1.7 (35)	ns	1.8 (56)
Percent within 1 mile from Lake Superior	40.9% (22)	35.7% (14)	46.4% (28)	ns	42.9% (42)
Frequently notice: Snowmobilers	84.3% (51)	77.4% (31)	69.4% (72)	ns	71.8% (103)
Skiers	80.4% (51)	77.4% (31)	53.4% (73)	.004	60.6% (104)
Problems for Cook County by: Snowmobilers	60.8% (51)	64.5% (31)	65.8% (73)	ns	65.4% (104)
Skiers	6.0% (50)	9.7% (31)	5.4% (74)	ns	6.7% (105)
Desired change in number coming to Cook County					
- Desire increase					
Snowmobilers	51.0% (49)	38.7% (31)	42.9% (70)	ns	41.6% (101)
Skiers	87.5% (48)	71.4% (28)	68.6% (70)	ns	69.4% (98)
- Desire no change					
Snowmobilers	28.6% (49)	32.3% (31)	38.6% (70)	ns	36.6% (101)
Skiers	10.4% (48)	25.0% (28)	30.0% (70)	ns	28.6% (98)
- Desire decrease					
Snowmobilers	20.4% (49)	29.0% (31)	18.6% (70)	ns	21.8% (101)
Skiers	2.1% (48)	3.6% (28)	1.4% (70)	ns	2.0% (98)

² Chi square or ANOVA probability. "ns" means not statistically significant at the .05 level of significance.

³ The number in parenthesis is the total number of households responding (the base of the percentage or average).

Table 1 also provides overall results for the total resident sample because it represents an overall picture of Cook County resident views.

In general, there are no statistically significant differences in the response of these three groups. The only exceptions are in the average age of respondents (where the non-business residents were somewhat older (54.9 years versus 49.1 years for hospitality business sample and 45.8 years for the business-resident respondents), and in frequently noticing cross-country skiers where hospitality business people were more likely to frequently notice skiers (80.4% vs. 77.4% for resident business people and 53.4% for non-business residents). Thus, readers should focus primarily on the overall resident sample results in assessing the level of reaction to the survey questions. Note that the resident and hospitality business samples were not combined because the hospitality business sample focused on a specialized subset of businesses and there was no basis for properly weighting responses in combining the two samples.

Fifty-four percent of respondents were women. The average age of respondents is 52 years and, on average, they have lived 23 years in Cook County. Overall, households own an average of 1.2 snowmobiles and 1.8 persons in households own skis. About two-thirds of respondents lived in a community (Grand Marais, Grand Portage or others). Among those who lived in rural areas, 43% lived within a mile of Lake Superior.

In general, Cook County residents frequently notice winter trail sports. Some 72% of residents frequently noticed snowmobilers and 61% frequently noticed cross-country skiers (the latter varies from business to non-business as noted above).

Two thirds (65%) feel snowmobilers create problems for Cook County residents as compared to 7% who feel cross-country skiers create problems for residents. Table 1a summarizes the 195 problems that 99 of 156 respondents noted about snowmobilers. The most often noted problems were noise (26%), driving over private property (17%) and driving off their trails (10%). Nine percent noted speeding and reckless driving as a problem.

Table 1a
195 Problems Snowmobiling Creates for Cook County Residents
Listed by 99 of 156 Respondents

Noise	26.2%
Drive on private property	17.4
Driving off trails	10.3
Speeding/reckless driving	9.2
Alcohol use	5.1
Drive on roads/ditches	4.6
Late night driving	4.1
Use/harm ski and dog sled trails	4.1
Air pollution	4.1
Driver attitude	2.6
Damage trees/roads	2.6
Fuel smell	2.1
Drive through towns	1.0
Other	<u>6.7</u>
	100%
	(195)

Table 1b lists the 10 problems noted about cross-country skiers. Most of these appear to be conflicts with snowmobilers as seen by snowmobilers.

Table 1b
10 Problems Cross-country Skiing Creates for Cook County Residents
Listed by 10 of 156 Respondents

	<u>Number</u>
Oppose snowmobile use/trails	4
Use snowmobile trails for skiing	2
Complaint that skiers don't pay for trails/ have more trails than snowmobilers	2
Problem of snowmobiler's not liking skiers	1
Alleged theft of liquor by skiers	1
	10

More respondents want to increase the number of people coming to Cook County to ski or snowmobile although there is a preference for increasing skiers rather than snowmobilers. Table 1 indicates that 42% want to increase the number of people coming to Cook County to snowmobile, 37% want no change and 22% want a decrease in the number of snowmobilers. On the other hand, 69% want to increase the number of cross-country skiers, 29% want the number to remain unchanged and only 2% want to decrease the number of cross-country skiers.

As shown in the second panel of Table 1, below, about 40% of respondents would be willing to pay an added \$10 in property taxes to provide better facilities for cross-country skiers while 28% would do so for snowmobile facilities.

Most agree or strongly agree that snowmobilers and cross-country skiers have a positive impact on the economy of Cook County (95% vs. 88% respectively).

Over half (55%) agree or strongly agree that snowmobilers have harmed the environment, compared to 8% for cross-country skiers.

While the majority of respondents feel both skiers and snowmobilers are respectful of residents, there is a large difference (69% feel snowmobilers are respectful vs. 93% who feel cross-country skiers are respectful). Just over a third (36%) feel snowmobilers have an overall positive or very positive impact as compared to 81% who feel skiers have a positive or very positive overall impact. Some 55% are more ambivalent about the impact of snowmobilers, stating that snowmobilers have both a positive and negative impact versus 16% who have this ambivalent view of cross-country skiers.

About half of the resident sample respondents have snowmobiled in the past 2 years (51%) and 54% have cross-country skied in the past 2 years. Most of this activity by Cook County residents occurs in Cook County (68% for snowmobilers and 71% for cross country skiers). Only 4% say they snowmobile only outside Cook County and 5% cross country ski only outside Cook County. Approximately a quarter pursue the activity both inside and outside Cook County (28% for snowmobiling and 23% for cross country skiing).

About the same percentage (72% for snowmobilers and 71% for cross country skiing) pursue their activity at least once per month during the winter.

Table 1, continued

Selected Questions	Total Hospitality Business Sample	Resident Sample Those who Own/Manage Local Business	Non-Business Resident Sample	Sig⁴	Total Resident Sample
Would pay \$10 in property tax to support trail facilities for					
Snowmobilers	41.9% (43)	33.3% (30)	25.0% (68)	ns	27.6% (98)
Skiers	56.5% (46)	46.2% (26)	37.3% (67)	ns	39.8% (93)
Strongly agree or agree that it has a positive impact on the Cook County economy					
Snowmobilers	98.0% (50)	90.4% (31)	97.3% (73)	ns	95.2% (104)
Skiers	94.0% (50)	83.9% (31)	90.2% (71)	ns	88.3% (102)
Strongly agree or agree it has harmed the environment					
Snowmobilers	46.9% (49)	48.4% (31)	58.6% (70)	ns	55.4% (101)
Skiers	7.8% (51)	6.4% (31)	8.2% (73)	ns	7.7% (104)
Strongly agree or agree they have been respectful of residents					
Snowmobilers	62.6% (48)	76.6% (30)	65.7% (70)	ns	69.0% (100)
Skiers	98.0% (49)	96.6% (29)	91.3% (69)	ns	92.9% (98)
Overall impact of activity is positive or very positive					
Snowmobilers	38.0% (50)	29.0% (31)	38.3% (73)	ns	35.6% (104)
Skiers	86.2% (51)	80.6% (31)	81.7% (71)	ns	81.3% (102)
Overall impact of activity is both positive and negative					
Snowmobilers	56.0% (50)	64.5% (31)	50.7% (73)	ns	54.8% (104)
Skiers	9.8% (51)	16.1% (31)	15.5% (71)	ns	15.7% (102)

Among those in the hospitality business sample, 64% say snowmobilers have at least a small positive impact on their business while 76% say cross country skiing has at least a small positive impact on their business. Approximately half of residents who own or manage a business see a positive impact (large or small) of snowmobiling and cross-country skiing on their business (52% and 53% respectively).

⁴ Chi square or ANOVA probability. "ns" means not statistically significant at the .05 level of significance.

Table 1, continued

Selected Questions	Total Hospitality Business Sample	Resident Sample Those who Own/Manage Local Business	Non-Business Resident Sample	Sig⁵	Total Resident Sample
Have done activity in past 2 years					
Snowmobile	51.0% (51)	67.7% (31)	43.8% (73)	ns	51.0% (104)
Cross Country Skiing	74.5% (51)	67.7% (31)	47.9% (73)	ns	53.8% (104)
Average number of snowmobiles owned	1.6 (26)	1.2 (21)	1.2 (32)	ns	1.2 (53)
Average number of persons in household who own skis	2.2 (38)	2.0 (21)	1.7 (35)	ns	1.8 (56)
Location of activity					
- Cook County					
Snowmobile	80.8% (26)	81.0% (21)	59.4% (32)	ns	67.9% (53)
Skiing	81.6% (38)	66.7% (21)	74.3% (35)	ns	71.4% (56)
- Both inside and outside					
Snowmobile	11.5% (26)	19.0% (21)	34.4% (32)	ns	28.3% (53)
Skiing	15.8% (38)	28.6% (21)	20.0% (35)	ns	23.2% (56)
- Outside Cook County					
Snowmobile	7.7% (26)	0.0% (21)	6.3% (32)	ns	3.8% (53)
Skiing	2.6% (38)	4.8% (21)	5.7% (35)	ns	5.4% (56)
Activity at least once/month in the winter					
Snowmobile	73.1% (26)	66.7% (21)	75.0% (32)	ns	71.7% (53)
Skiing	68.4% (38)	61.9% (21)	77.1% (35)	ns	71.4% (56)
Positive (large or small) impact on respondent's business					
Snowmobilers	64.0% (50)	51.7% (31)	--	ns	--
Skiers	75.5% (49)	53.3% (30)	--	ns	--
Business is tourist-related	86.0% (50)	46.7% (30)	--	.000	--

⁵ Chi square or ANOVA probability. "ns" means not statistically significant at the .05 level of significance.

B. Comparison of Responses about Cross-country Skiers and Snowmobilers

Table 2 organizes responses to contrast answers to the same questions asked about cross-country skiers and snowmobilers in both the resident sample and in the hospitality business sample. Somewhat more detailed responses are provided for each question.

Residents are more aware of snowmobilers than they are of cross-country skiers (13.5% are not usually aware of skiers but 5.8% are usually not aware of snowmobilers). Hospitality business respondents are more aware of both activities and also somewhat more aware of snowmobilers (see Table 2, following).

Both samples are similar in noting far more problems of snowmobilers than of skiers. Over sixty percent in both samples say snowmobilers create problems for Cook County residents but about 6% say the same for skiers. A fifth of both samples want a decrease in the number of snowmobilers coming to Cook County compared to 2% wanting fewer skiers. Table 2 also shows that in both samples more respondents want more skiers than want more snowmobilers. For the resident sample the percentages are 69% vs. 42% and for the business sample the percentages are 88% vs. 51%).

When asked if they would pay \$10 more in property tax to support improved trail facilities, a higher percentage of both residents and hospitality business people would support this funding for ski facilities than for snowmobile facilities (40% vs. 28% support for ski vs. snowmobile facilities for the resident sample and 56% vs. 42% for the hospitality business sample).

The second panel of Table 2 provides comparisons of attitudes about skiers and snowmobilers found in the resident and hospitality business samples. The vast majority of both groups of respondents feel that both skiers and snowmobilers who come to Cook County have a positive impact on the economy.

When asked if ski or snowmobile trails have harmed the environment of Cook County, about half of both samples agree this is the case for snowmobilers (56% for residents and 47% for businesses) but less than 10% feel the same way about cross country skiers. In fact, nearly three-quarters of both samples strongly disagree that skiers have harmed the environment compared to a fifth with this view of snowmobilers.

Resident and business respondents also express a difference between skiers and snowmobilers in ratings of their respect for residents. Most agree skiers are respectful but most in both samples are more ambivalent or negative about snowmobiler respectfulness.

Overall, respondents see the impact of snowmobilers who come to Cook County as both positive and negative while the impact of skiers is seen as somewhat or very positive.

Almost half of respondents have not skied or snowmobiled in the past 2 years (although only 26% of those in the hospitality business had not skied). For those who have

Table 2
Comparison of Responses about Skiers and Snowmobilers for the Resident Sample and the Hospitality Business Sample, Cook County, 2002

<i>Selected Questions</i>	<i>Resident Sample</i>		<i>Hospitality Business Sample</i>	
	<i>About Skiers</i>	<i>About Snowmobilers</i>	<i>About Skiers</i>	<i>About Snowmobilers</i>
How aware are you of people who ... in your area?				
Usually not aware	13.5%	5.8%	0.0%	0.0%
Occasionally aware	26.0	22.3	19.6	15.7
Frequently aware	<u>60.6</u>	<u>71.8</u>	80.4	84.3
	100%	100%	100%	100%
	(104) ⁶	(103)	(51)	(51)
Are you aware of any problems that ... creates for Cook County residents?				
Yes	6.7%	65.4%	6.0%	60.8%
No	<u>93.3</u>	<u>34.6</u>	94.0	<u>39.2</u>
	100%	100%	100%	100%
	(105)	(104)	(50)	(51)
Would you like to have the number of ... who come to Cook County:				
Increase	69.4%	41.6%	87.5%	51.0%
Stay about the same	28.6	36.6	10.4	28.6
Decrease	<u>2.0</u>	<u>21.8</u>	<u>2.1</u>	20.4
	100%	100%	100%	100%
	(98)	(101)	(48)	(49)
In addition to funding they already receive, would you be willing to pay \$10 per year MORE in property taxes to provide improved public facilities for ... such as public trails, signs, parking and shelters at trail heads?				
Yes	39.8%	27.6%	56.5%	41.9%
No	<u>60.2</u>	<u>72.4</u>	43.5	<u>58.1</u>
	100%	100%	100%	100%
	(93)	(98)	(46)	(43)

engaged in one or both of these winter activities, the majority did so only in Cook County (71% for resident skiers, 82% for business skiers, 68% for resident snowmobilers, and 81% for business snowmobilers). More residents ski or snowmobile both inside and outside Cook County than is true of business skiers or snowmobilers (23% and 28% vs. 16% and 12%). Few only ski or snowmobile outside the county.

⁶ The number in parentheses is the total number of households responding to the question. This is the base of the percentages.

About 70% pursue their sport/s at least once a month in the winter and this does not differ markedly between skiers and snowmobilers. Hospitality businesspersons own slightly more snowmobiles than do residents (1.6 vs. 1.2) and businesspersons have more people in their household owning skis than do residents (2.2 vs. 1.8).

Table 2, continued

Selected Questions	Resident Sample		Hospitality Business Sample	
	About Skiers	About Snowmobilers	About Skiers	About Snowmobilers
“People who come to Cook County to ... have a positive impact on the ECONOMY of Cook County.”				
Strongly agree	41.2%	62.5%	56.0%	68.0%
Somewhat agree	47.1	32.7	38.0	30.0
Somewhat disagree	4.9	3.8	6.0	2.0
Strongly disagree	6.9	<u>1.0</u>	<u>0.0</u>	<u>0.0</u>
	100%	100%	100%	100%
	(102)	(104)	(50)	(50)
“... and trails have harmed the ENVIRONMENT in Cook County.”				
Strongly agree	1.9%	14.9%	0.0%	16.3%
Somewhat agree	5.8	40.6	7.8	30.6
Somewhat disagree	21.2	21.8	17.6	24.5
Strongly disagree	71.2	<u>22.8</u>	74.5	<u>28.6</u>
	100%	100%	100%	100%
	(104)	(101)	(51)	(49)
“People who come to Cook County to cross-country ski are RESPECTFUL OF RESIDENTS.”				
Strongly agree	65.3%	22.0%	69.4%	18.8%
Somewhat agree	27.6	47.0	28.6	43.8
Somewhat disagree	5.1	26.0	2.0	31.3
Strongly disagree	<u>2.0</u>	<u>5.0</u>	<u>0.0</u>	<u>6.3</u>
	100%	100%	100%	100%
	(98)	(100)	(49)	(48)
What would you say is the OVERALL impact of people who come to Cook County to ...				
Very positive	43.1%	16.3%	62.7%	18.0%
Somewhat positive	38.2	19.2	23.5	20.0
Both positive and negative	15.7	54.8	9.8	56.0
Somewhat negative	2.9	8.7	3.9	6.0
Very negative	<u>0.0</u>	<u>1.0</u>	<u>0.0</u>	<u>0.0</u>
	100%	100%	100%	100%
	(102)	(104)	(51)	(50)

Among people in both samples who own or manage a business, most see a (small or large) positive impact of both skiing and snowmobiling on their business. This apparently varies by type of business. Almost half of residents who owned and managed businesses felt that these winter activities had no impact at all on their business (43% for skiers and 48% for

snowmobilers). Among those in the hospitality business the impacts were seen as greater and only 24% felt skiers had no impact on their business and 28% felt snowmobilers had no impact on their business.

Table 2, continued

Selected Questions	Resident Sample		Hospitality Business Sample	
	About Skiers	About Snowmobilers	About Skiers	About Snowmobilers
Have you or anyone else in your household gone ... in the past 2 years?				
Yes, I did	21.2%	13.5%	21.6%	11.8%
Yes, someone else did	6.7	8.7	9.8	11.8
Yes, both	26.0	28.8	43.1	27.5
No	<u>46.2</u>	<u>49.0</u>	<u>25.5</u>	<u>49.0</u>
	100%	100%	100%	100%
	(104)	(104)	(51)	(51)
<u>IF YES, have done ... in past 2 years:</u>				
Did you (they) ... in Cook County or somewhere outside Cook County?				
Cook County	71.4%	67.9%	81.6%	80.8%
Outside Cook County	5.4	3.8	2.6	7.7
Both inside and outside	<u>23.2</u>	<u>28.3</u>	<u>15.8</u>	<u>11.5</u>
	100%	100%	100%	100%
	(56)	(53)	(38)	(26)
Does anyone in your household ... at least once a month during winter?				
Yes	71.4%	71.7%	68.4%	73.1%
No	<u>28.6</u>	<u>28.3</u>	<u>31.6</u>	<u>26.9</u>
	100%	100%	100%	100%
	(56)	(53)	(38)	(26)
Average number of snowmobiles household owns		1.2 (53)		1.6 (26)
Average number of persons in household who own skis	1.8 (56)		2.2 (38)	
<u>If respondent manages or owns a BUSINESS in Cook County:</u>				
What impact does ... have on your business?				
A large positive impact	10.0%	19.4%	26.5%	26.0%
A small positive impact	43.3	32.3	49.0	38.0
A small negative impact	3.3	0.0	0.0	6.0
A large negative impact	0.0	0.0	0.0	2.0
No impact at all	<u>43.3</u>	<u>48.4</u>	<u>24.5</u>	<u>28.0</u>
	100%	100%	100%	100%
	(30)	(31)	(49)	(50)

C. Comparison of Views of Those Who Ski, Snowmobile, Both Ski and Snowmobile or Do Neither Activity.

Table 3 provides data for the resident sample divided by the activities in which their family participates (ski, both ski and snowmobile, snowmobile or neither). The hospitality business sample was not divided in this way because of the small numbers involved and because the resident sample provides a representative picture of the views of residents of Cook County.

Those who neither ski or snowmobile are most likely to be women (73%) while only 33% of snowmobiling family respondents were women. Families who ski had, on average, older respondents (61 years) compared to families who snowmobile. Families who snowmobile and ski have, on average, more people in their household who own skis (1.9).

Regardless of activity, more problems are noted for snowmobilers than for skiers. Except for snowmobile-only households, nearly 70% of respondents list problems with snowmobilers. However 22% of those who only snowmobile list skier problems (33% also list snowmobiler problems) while 76% of ski-only households list snowmobile problems (compared to 0% skier problems).

As Table 3 shows, there is a substantially higher percentage of all activity groups except snowmobile-only households who want to increase the number of cross-country skiers coming to Cook County compared to the percentage who want an increase in snowmobilers. The notable difference is in snowmobile-only households where a substantially higher percentage (67%) want to increase snowmobilers as compared to 22% who want an increase in skiers.

All groups except the snowmobile-only households want to decrease snowmobilers more than they want to decrease skiers. Among ski-only households 43% want a decrease in snowmobilers (vs. 0.0% decrease in skiers). Among snowmobile-only households 6% want a decrease in the number of snowmobilers but 12% want a decrease in the number of cross country skiers.

Ten percent of the ski-only households would be willing to pay an extra \$10 in property tax to upgrade facilities for snowmobilers (compared to 12% of snowmobile-only households who would be willing to pay an extra \$10 to support skier facilities). Both groups would be willing to support their own sport. Except for snowmobile-only households, all groups are more willing to support skiing than snowmobiling.

Those who do not ski or snowmobile are in high agreement (97%) that both activities have a positive impact on the Cook County economy. Those who only ski consider skiing to have more economic impact (100% vs. 86%), and those who snowmobile see snowmobiling as having more economic impact than skiing (97% to 86% for those who do both activities and 100% vs. 67% for those who only snowmobile).

Table 3
Comparison of Responses of Skiers and Snowmobilers about Skiers and Snowmobilers, Resident Sample, Cook County, 2002

<i>Selected Questions</i>	<i>Respondent And/or family only ski</i>	<i>Respondent and/or family ski and snowmobile</i>	<i>Respondent and/or family only snowmobile</i>	<i>Do Neither Activity</i>	<i>Sig⁷</i>
Percent female	57.1% (21) ⁸	48.6% (35)	33.3% (18)	73.3% (30)	.044
Average age of respondent	60.6 yrs (21)	45.1 yrs (35)	47.6 yrs (17)	56.7 yrs (30)	.001
Average years in Cook County	16.4 yrs (21)	19.9 yrs (34)	28.3 yrs (18)	27.8 yrs (30)	ns
Average number of snowmobiles owned	--	0.9 (35)	1.9 (18)	--	ns
Average number of persons in household who own skis	1.6 (21)	1.9 (35)	--	--	.001
Percent non-town but within 1 mile of Lake Superior	50.0% (8)	37.5 (16)	16.7% (6)	58.3% (12)	ns
Frequently notice: Snowmobilers	61.9% (21)	77.1% (35)	77.8% (18)	48.1% (29)	ns
Skiers	71.4% (21)	80.0% (35)	38.9% (18)	44.8% (29)	.005
Problems for Cook County by: Snowmobilers	76.2% (21)	68.6% (35)	33.3% (18)	73.3% (30)	.017
Skiers	0.0% (21)	5.7% (35)	22.2% (18)	3.3% (30)	.029
Desired change in number coming to Cook County					
- Desire increase					
Snowmobilers	19.0% (21)	37.1% (35)	66.7% (18)	48.1% (27)	.026
Skiers	75.0% (20)	63.6% (33)	41.2% (17)	88.9% (27)	.005
- Desire no change					
Snowmobilers	38.1% (21)	37.1% (35)	27.8% (18)	40.7% (27)	.026
Skiers	25.0% (20)	36.4% (33)	47.1% (17)	11.1% (27)	.005
- Desire decrease					
Snowmobilers	42.9% (21)	25.7% (35)	5.6% (18)	11.1% (27)	.026
Skiers	0.0% (20)	0.0% (33)	11.8% (17)	0.0% (27)	.005

All groups agree that snowmobiling harms the environment more than cross-country skiing. Among those who only ski, 81% see snowmobiling as harming the environment versus 5% who see cross country skiing harming the environment. The difference is somewhat smaller for those who do both activities (57% say snowmobilers harm the environment vs. 3% who say skiing harms the environment). Among those who only snowmobile the difference is smallest but still more see greater environmental harm from snowmobilers (28% vs. 22% for skiing). Among those who do neither activity, 52% see harm by snowmobilers and 7% see harm by cross-country skiing.

⁷ Chi square or ANOVA probability. "ns" means not statistically significant at the .05 level of significance.

⁸ The number in parentheses is the total number of households responding to the question. It is the base of percentages or averages.

Table 3, continued

Selected Questions	Respondent And/or family only ski	Respondent and/or family ski and snowmobile	Respondent and/or family only snowmobile	Do Neither Activity	Sig⁹
Would pay \$10 in property tax to support trail facilities for Snowmobilers Skiers	10.0% (20) 57.9% (19)	32.4% (34) 50.0% (30)	41.2% (17) 11.8% (17)	25.9% (27) 34.6% (26)	ns .021
Strongly agree or agree that it has a positive impact on the Cook County economy Snowmobilers Skiers	85.8% (21) 100% (20)	97.1% (35) 85.7% (35)	100% (18) 66.7% (18)	96.7% (30) 96.6% (29)	ns .014
Strongly agree or agree it has harmed the environment Snowmobilers Skiers	80.9% (21) 4.8% (21)	57.1% (35) 2.9% (35)	27.8% (18) 22.3% (18)	51.8% (27) 6.7% (30)	.043 .053
Strongly agree or agree they have been respectful of residents Snowmobilers Skiers	50.0% (20) 100% (20)	72.7% (33) 94.1% (34)	100% (18) 80.0% (15)	58.6% (29) 93.1% (29)	.015 .005
Overall impact of activity is positive or very positive Snowmobilers Skiers	19.0% (21) 100% (20)	37.1% (35) 76.5% (34)	55.5% (18) 50.0% (18)	33.3% (30) 93.3% (30)	ns .000
Overall impact of activity is both positive and negative Snowmobilers Skiers	61.9% (21) 0.0% (20)	54.3% (35) 23.5% (34)	44.4% (18) 33.3% (18)	56.7% (30) 6.7% (30)	ns .000

A question was asked about respondent's assessment of whether those who ski or snowmobile are respectful of Cook County residents. For each activity group except for those who only snowmobile, a higher percentage agree or strongly agree that skiers are more respectful of residents. As shown in the table above, the differences are largest in favor of skiers for those who only ski (100% vs 50% for snowmobilers) and smallest for those who snowmobile. Among those who do neither activity, 59% agree or strongly agree that snowmobilers are respectful and 93% agree that skiers are respectful.

The overall impact of snowmobiling and skiing is seen as positive by a larger percentage of respondents except for those who only snowmobile who see snowmobiling as having a slightly more positive overall impact. Among those who do not ski or snowmobile, a third see snowmobiling as having a positive impact and 93% see skiing as having a positive overall impact.

⁹ Chi square or ANOVA probability. "ns" means not statistically significant at the .05 level of significance.

This view is also evident in the percentage of respondents who see each activity as having both a positive and negative impact on Cook County. Snowmobiling is judged to have this mixed impact by a higher percentage of respondents in each activity category although the differences are smallest among those who only snowmobile (44% vs. 33%) and largest among those who only ski (62% vs. 0%).

Except for questions on impact on the environment and respectfulness, respondent groups appear to be more in agreement about their assessment of snowmobilers (i.e. differences across groups are generally not statistically significant) than they are about skiing.

Table 3, continued

Selected Questions	Respondent And/or family only ski	Respondent and/or family ski and snowmobile	Respondent and/or family only snowmobile	Do Neither Activity	Sig¹⁰
Location of activity					
- Cook County					
Snowmobile	--	68.6% (35)	66.7% (18)	--	ns
Skiing	81.0% (21)	65.7% (35)	--	--	ns
- Both inside and outside	--	25.7% (35)	33.3% (18)	--	ns
Snowmobile	14.3% (21)	28.6% (35)	--	--	ns
Skiing					
- Outside Cook County	--	5.7% (35)	0.0% (18)	--	ns
Snowmobile	4.8% (21)	5.7% (35)	--	--	ns
Skiing					
Activity at least once/month in the winter					
Snowmobile	--	57.1% (35)	100% (18)	--	.001
Skiing	81.0% (21)	65.7% (35)	--	--	ns
Own or manage a business	28.6% (21)	44.1% (34)	33.3% (18)	14.3% (28)	ns
<u>If respondent manages or owns a BUSINESS in Cook County:</u>					
Positive (large or small) impact on respondent's business	50.0% (6)	46.7% (15)	50.0% (6)	75.0% (4)	ns
Snowmobilers	83.3% (6)	46.7% (15)	20.0% (5)	75.0% (4)	ns
Skiers	66.7% (6)	35.7% (14)	50.0% (6)	50.0% (4)	ns
Business is tourist-related					

¹⁰ Chi square or ANOVA probability. "ns" means not statistically significant at the .05 level of significance.

The last panel of Table 3, above, indicates that the largest percentage of residents conduct their sport only in Cook County. This is especially true of skiers (81% in Cook County). About two-thirds of snowmobilers conduct their activity only in Cook County. Fourteen percent of skiers ski both in Cook County and elsewhere, about a quarter who do both activities do them both inside and out of Cook County, and a third of those who only snowmobile conduct their sport both in and out of the county. A small percentage of residents only conduct their activity outside Cook County (5% to 6%).

Some 81% of only-skiers ski at least once per month in the winter and 100% of only-snowmobilers snowmobile at least once per month. For those who do both activities, 57% snowmobile and 66% cross-country ski at least once per month in the winter.

Although the numbers are small, the last panel of Table 3 gives the percentage of those residents who own or manage a business and the extent to which they see skiing or snowmobiling as having a positive impact on their business. For business respondents who both ski and snowmobile, about 47% see a positive impact of skiing and 47% see a positive impact on their business of snowmobiling.

RESEARCH TEAM

Principal Investigator

Glenn M. Kreag, Extension Educator/Professor \
gkreag@d.umn.edu
MN Sea Grant College Program
208 W H
2305 E 5th Street
Duluth, MN 55812
Office Phone: +1 218-726-8714
Fax: +1 218-726-6556

UMD Bureau of Business & Economic Research

19 School of Business and Economics
412 Library Drive
Duluth, MN 55812-2496

Jim Skurla, Acting Director

jskurla@d.umn.edu

Richard Lichty, Director

rlichty@d.umn.edu (on sabbatical leave from 8/23/02 to 9/2/03)

Jean Jacobson, Editor

jjacobs1@d.umn.edu

Donald G. McTavish, Senior Consultant

Malita Barkataki, Undergraduate Research Assistant

Amber Paukner, Undergraduate Research Assistant