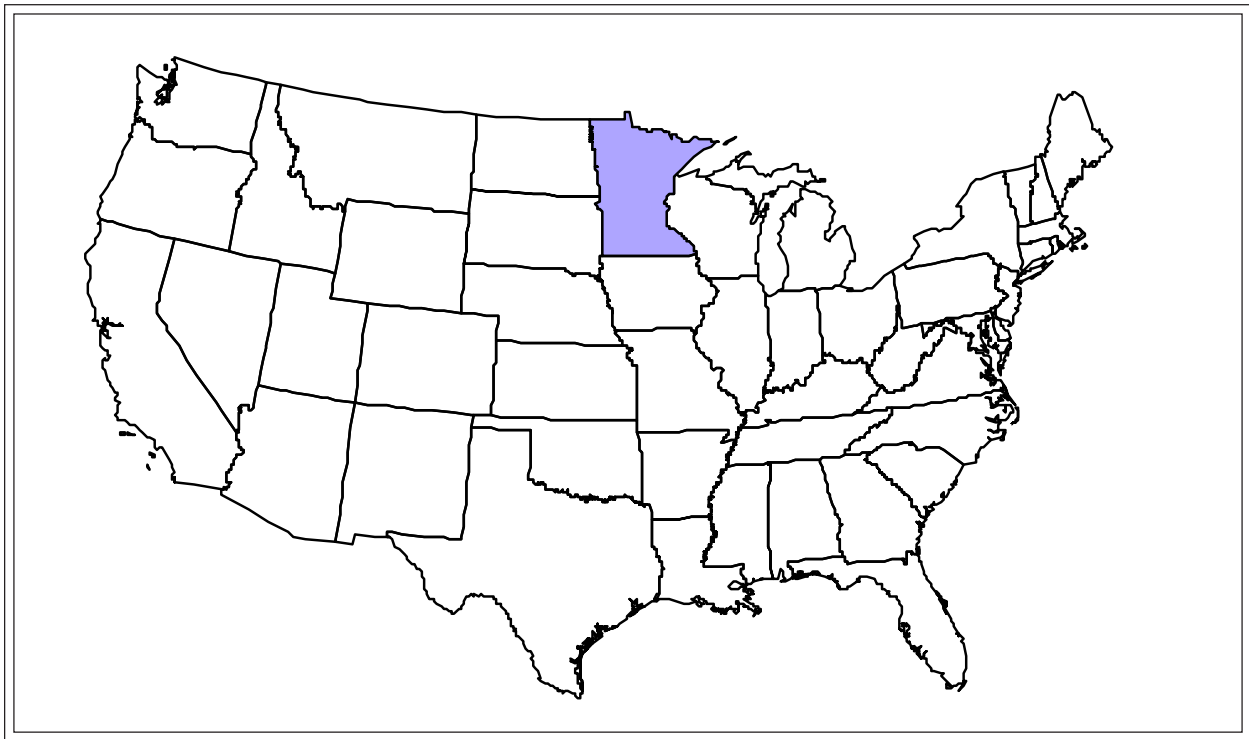


**2004 OUTDOOR RECREATION
PARTICIPATION SURVEY
OF MINNESOTANS
METHODOLOGY**



2004 OUTDOOR RECREATION PARTICIPATION SURVEY OF MINNESOTANS

METHODOLOGY



The 2004 Outdoor Recreation Participation Survey of Minnesotans was funded by the Legislative Commission on Minnesota Resources with an allocation of Land and Water Conservation Funds

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An electronic copy of this report can be found on the MN DNR's website: www.dnr.state.mn.us;

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INTRODUCTION

The most recent State Comprehensive Outdoor Recreation Plan identified the need to better understand the changing nature of outdoor recreation in Minnesota (Reference 1). To meet this need, three efforts are underway, and one is planned for future funding. The first effort—which is the topic of this document—is the collection of primary information on the outdoor recreation patterns of adult Minnesotans. Data collection for this effort commenced in March 2004. To permit trend analysis, such data collection will be repeated using a consistent methodology every five years. Short-term recreation forecasts will be one product of the effort.

The second effort is an analysis of existing information sources to delineate recent trends in recreation participation (e.g., trends in fishing licenses, watercraft registrations, and park attendance). One report—on wildlife-related recreation (fishing, hunting, wildlife observation) and recreational boating—has been completed (Reference 2), and a few others are planned. This effort assembles information that assists with short-term recreation forecasting.

The third effort is to determine—from providers—the recreation facility needs of cities, counties and school districts in the state. Similar to the first effort, this effort will establish a cost-effective methodology that can be replicated every 5 years, so trends can be established, and short-term forecasts made.

The fourth effort is to determine the recreation facility and program needs of the general Minnesota population directly from that population of Minnesotans. This will be a companion to the third effort. Work on this effort will commence once funding is certain.

Funding for all of these efforts is from the Land and Water Conservation Fund, as allocated by the Legislative Commission on Minnesota Resources.

The scoping and planning of these four efforts was done by a work team, which continues to meet on an ad hoc basis as the efforts progress:

Current members:

Dorian Grilley, Parks & Trails Council of Minnesota

Tim Kelly, MN DNR

Emmett Mullin, MN DNR

Jon Nauman, Three Rivers Park District
Wayne Sames, MN DNR
Ron Sushak, MN DNR
Jonathan Vlaming, Metropolitan Council

Past members:

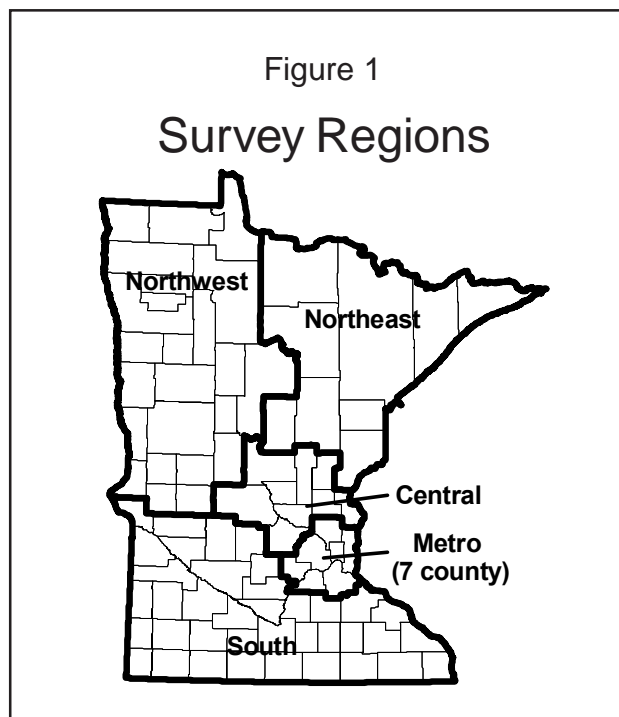
John Schneider, Metropolitan State University
Colleen Tollefson, Office of Tourism

PROCEDURES

Mail survey

To collect data from adult Minnesotans on their outdoor recreation participation, a mail survey was conducted beginning in March 2004, near the close of the winter recreation season. Names and addresses of Minnesotans were obtained in January 2004 from Survey Sampling International, Fairfield, CT. Telephone numbers were also obtained, when they were available.

The sample of 4400 Minnesotans was allocated to five regions, with 1200 allocated to the Twin Cities metropolitan area (seven-county region) and 800 to each of the four non-metropolitan regions (Figure 1). This regional stratification is intended to produce region-specific results. Sampling within each region was proportional to the population of regional zip codes. The regions are the four DNR regions, with the Central DNR region broken into the seven county Twin Cities metropolitan and the balance of the Central Region. The Twin Cities metropolitan area contains half of the Minnesota population and is



covered by the regional governmental agency (Metropolitan Council) that has outdoor recreation functions.

The mail survey instrument, cover letters, and envelopes are presented in Appendix A.

The mail survey asks respondents to provide information on the following topics:

- Overall outdoor recreation involvement over the last 12 months.
- Trends in overall recreation involvement over the last 5 years
- Importance of outdoor recreation in the respondent's life
- Reasons for recreating outdoors
- Barriers to recreation participation
- Participation by activity (34 individual activities, a few with subactivities) over the last 12 months, including location of activity days relative to home and within Minnesota.
- New recreation activities taken up in the last 5 years.
- Demographics of the respondent.

Reasons (or motivations) for recreating outdoors were selected from a more comprehensive listing of leisure-activity motivations (Reference 3). The most relevant motivations were included in this study.

Barriers to recreating outdoors were taken from previous Minnesota work and from NSRE 2000 barrier questions (Reference 4).

The 34 recreation activities were selected from more inclusive lists of activities, primarily the NSRE 2000 list of 74 activities (Reference 4). The more inclusive listing was examined and some activities eliminated because they were not applicable (e.g., saltwater fishing), some were combined into broader groupings (e.g., multiple types of fishing into just one type "fishing"), and some were eliminated because they were too small to reliably tracked over time using this type of technique (e.g., rock climbing).

The block of 34 activities—like similar blocks in these types of surveys—was not always answered according to survey instructions. Although the survey asked respondents whether they did ("yes") or did not ("no") participate in each of the 34 activities, some people only answered "yes" for selected activities. They did

not give “no” responses. Such respondents were identified and “no” was filled in for those activities not indicated as “yes”.

Subsequent to the “yes”/ “no” response for each activity, respondents were asked to indicate the total number of days they participated in the activity in the last 12 months. Extreme values for each activity were checked by hand, and some data entry and impossible answers were found and changed. In addition, some respondents indicated “yes” and then did not fill in the number of days. A sample of these was selected and examined by hand. In most cases, such respondents were filling in days for some “yes” responses and not for others. The “yes” with days in the last 12 months was read as a stronger indication of participation than a “yes” with no days, and the latter weak indications were not accepted as participants in the last 12 months.

Next, respondents were asked to indicate the number of activity days in the last 12 months that occurred within a half-hour drive of home, and the number that occurred in Minnesota. If missing, these latter days were estimated from total days using average activity-specific ratios from data provided by other respondents.

For each activity an hour-per-occasion (day) figure was added to the data file, so activities could be combined into recreation-involvement aggregates based on a meaningful measure, namely, time spent recreating. A walking occasion, for example, is about one-quarter the length of a fishing occasion. To combine walking and fishing together when taking occasion length into account is to derive a more meaningful measure of overall recreation involvement than to ignore occasion length. Occasion lengths (in terms of hours) were derived from other sources (Reference 5), since they were not collected as part of this survey effort.

Demographic information was collected to be comparable to the 2000 U. S. Census (Reference 6). One demographic characteristic (“other” race) was checked and edited by hand. The “other” race category—which, if indicated, the survey requested a written description of—is commonly used by people to describe ancestry (e.g., Irish, Swedish) and not race. These were edited as best as possible.

One demographic characteristic was added to each respondent record. A measure of residential population density (urban/small town/rural) was added based on 2000 U.S. Census data for population densities of zip codes (Reference 6). The

urban-rural continuum is an important factor in understanding outdoor recreation activity patterns.

The annual time frame for recall of recreation involvement (both overall and by activity) was selected to ensure all recreation seasons are included in the study. However, it is known that annual recall on a topic like this produces a high bias to the results (i.e., more recreation participation than actually occurs), and adjusting results for that bias is a later topic (Reference 7).

The time frame of five years for personal recreational involvement trends and the adoption of new activities was selected because this data collection is intended to be repeated ever five years.

The mail survey achieved nearly a 60 percent overall return rate after three mailings (Table 1). The return rate varied from a low of 52 percent in the Twin Cities metro area to a high of 61 percent in the Northwest and Central regions of the state. The return rates are near expectations for an effort such as this.

Because the response rate was not higher (not above 70 percent), a non-respondent survey was conducted to evaluate nonresponse bias.

<u>Item for mail survey</u>	----- <i>Region</i> -----					<u>Total</u>
	<u>Northwest</u>	<u>Northeast</u>	<u>South</u>	<u>Central</u>	<u>Metro</u>	
Initial sample size	800	800	800	800	1200	4400
Deliverable	728	734	748	745	1140	4095
Returns	444	432	436	451	596	2359
Return rate	61%	59%	58%	61%	52%	58%
Nonresponse rate	39%	41%	42%	39%	48%	42%

Non-respondent telephone survey

To judge whether the people who did not respond to the mail survey (some 40 percent of potential respondents) are different with respect to outdoor recreation than those who did respond, a telephone survey was conducted of non-respondents. The telephone survey included a subset of questions from the mail survey. The telephone survey was conducted by the Minnesota Center for Survey Research (MCSR) at the University of Minnesota during May and June of 2004 (Reference 8). Appendix B contains the methodology document prepared by MCSR.

The telephone survey was stratified by the same regions as the mail survey. Overall, 500 interviews were completed, with approximately 140 completions in the Twin Cities metropolitan area (seven-county region) and 90 in each of the four non-metropolitan regions.

As expected, people who did not respond to the mail survey participated less in outdoor recreation than those that did (Table 2). The next section describes how these results are used to reduce this non-respondent bias in the final results.

Table 2

Comparison of overall outdoor recreation involvement between mail and nonresponse-telephone survey respondents
(statewide weighted responses)

QUESTION: Think back over the last 12 months. About how many days in the last 12 months did you go outside for recreation of all types (including walking, fishing, camping, biking, skiing, hunting, golfing, sightseeing and so on)?

<u>Response categories</u>	<u>Mail survey (percent)</u>	<u>Nonresponse telephone survey (percent)</u>
zero days in last 12 months	5	7
1 to 5 days in last 12 months	4	8
6 to 10 days in last 12 months	3	7
11 to 20 days in last 12 months	7	8
21 to 50 days in last 12 months	18	18
51 to 100 days in last 12 months	25	19
more than 100 days in last 12 months	<u>38</u>	<u>32</u>
Total percent	100	100

Sample weighting of survey returns

As noted immediately above, the mail survey returns are biased towards Minnesotans who participate more in outdoor recreation. In addition, the survey returns are not proportional to the demographics of the state. For example, the regions of the state were not sampled proportional to population (by design), and the survey returns are more male than the Minnesota population (for other reasons, and not by design). To reduce these forms of bias, the survey returns are differentially weighted by known demographic statistics and by involvement in outdoor recreation as obtained from the mail and non-respondent telephone surveys. This weighting ensures that the results are more representative of the outdoor recreation patterns in the Minnesota population.

The demographic characteristics used for sample weighting are age and gender—two characteristics that have a large influence on overall recreation involvement and specific recreation activities—and region of the state (demographics are from the 2000 U.S. Census—Reference 6). Sample weighting occurs by five age classes (20 to 34 years old, 34 to 44, 45 to 54, 55 to 64, and 65 years and older), by gender (male and female), and by region (the five regions on Figure 1).

The weighting for overall involvement in outdoor recreation (as obtained from the mail and telephone surveys) occurs by the seven classes in Table 2 and by region (the five regions on Figure 1). Within a region, the mail-survey overall-involvement results represents the portion of the population given by the mail response rate, while the telephone-survey overall-involvement results represents the remainder of the population. The mathematical combination of the mail and telephone results—according to the portion of the population represented—is the target that is matched by the adjustment of mail-survey weights. Prior to their combination, both the mail and telephone results are adjusted to fit the age-class/gender mix of the regional population to minimize the effects of non-proportional sampling on overall involvement by these demographic characteristics.

The demographic and overall recreation involvement weighting occurs iteratively in two steps. Step one: the demographic weights are derived to match the Minnesota population. Step two: the step-one weights are adjusted to match overall involvement. Because the second step no longer produces a match to the demographics of the Minnesota population, step one is redone and the weights adjusted again. Then, step two is redone—for the same reason step one was redone, namely, overall involvement is no longer matched—and the weights

further adjusted. Rounds of steps one and two are conducted until both the demographics and overall involvement are effectively matched, and improvements in the matches between rounds is minimal. The final adjustment is to the demographic categories to ensure they are exactly represented.

Weights equivalent to those described above—which were derived from the 2000 U.S. Census information—were added to the data file for decennial census year 1990, and for population projections for Minnesota from the State Demographer for 2010, 2020 and 2030 (Reference 9). Such weights permit the assessment of recreation changes attributed solely to demographic changes, all other factors constant.

Representation of Minnesota population

After sample weighting, the Minnesota population is relatively well described in terms of standard demographic breakdowns, but there are shortcomings. Because the sample was “fit” through sample weighting to region, age, and gender, these demographic groupings are the same as the Minnesota population (Table 3). For those that were not fit in such a fashion (see Table 4), the weighted sample represents residential population density (urban/rural) rather well; it is under-representative of non-white and/or Hispanic individuals; it is under-representative of lower income Minnesotans, but the median income is represented well; it is under-representative of lower formal education groups, and is over-representative of higher education groups; and it is roughly representative of household size. This last demographic category has the major differences between household sizes 1 person and 2 people, something the survey instrument itself may account for. In the survey, respondents are asked their household size, *including themselves*, but they commonly forget to include themselves, which leads to more 1 person households, and fewer 2 person households.

The population groupings that are under-represented tend to have lower involvement in outdoor recreation than the other groupings. Thus, interest in the topic of the survey is one probable reason for the under-representation. Additional probable reasons are literacy and language. The survey is a written piece that is written in English and may not be easy/possible to read for all Minnesotans.

Table 3

Representation of Minnesota adult population in recreation survey

Fit to population proportions through sample weighting:

Population grouping	A Recreation survey, 2004 (percent)	B MN Population, 2000 (percent)	C Difference (A - B)
Region of Minnesota			
Northwest	9%	9%	0%
Northeast	8%	8%	0%
South	20%	20%	0%
Central	9%	9%	0%
Metro (7-county area)	54%	54%	0%
Age			
20-34	29%	29%	0%
35-44	24%	24%	0%
45-54	19%	19%	0%
55-64	12%	12%	0%
65+	17%	17%	0%
Gender			
Male	49%	49%	0%
Female	51%	51%	0%

Overall, the bulk of the Minnesota population is represented well in the survey, but there are definite problems that would likely require different (and probably more costly) data-collection techniques that this technique to overcome. Since most of the under-represented population groupings have lower outdoor recreation involvement, the survey will over-represent Minnesotan's recreation. Rough estimates place the over-representation near 5 percent for total outdoor recreation involvement (total annual recreation hours or days).

Table 4

Representation of Minnesota adult population in recreation survey

Not fit -- results after region, age, gender, and non-respondent sample weighting:

Population grouping	A Recreation survey, 2004 (percent)	B MN Population, 2000 (percent)	C Difference (A - B)
Population density of residence (based on 5-digit zip codes in 2000)			
Low (100 or less)	27%	30%	-2%
Medium (101 to 1000)	27%	26%	2%
High (>1000)	45%	45%	1%
Race/ethnicity (population age 18+)			
Non-white and/or Hispanic	6.3%	9.7%	-3.4%
White, non-Hispanic	94%	90%	3%
Household income			
under \$30,000	22%	30%	-7%
\$30,000 to \$39,999	13%	12%	1%
\$40,000 to \$49,999	13%	11%	2%
\$50,000 to \$74,999	24%	22%	2%
\$75,000 to \$99,999	13%	12%	1%
\$100,000 or more	15%	13%	2%
Education (population age 25+)			
Some high school	4%	12%	-8%
High school graduate	16%	29%	-13%
Vocational/technical school, associate degree, or some college	37%	32%	6%
Graduated from college	22%	19%	3%
Some postgraduate study, including postgraduate degrees	20%	8%	11%
Household size			
1 person	32%	27%	5%
2 people	28%	34%	-6%
3 people	14%	15%	-1%
4 people	16%	14%	2%
5+ people	9%	10%	-1%

Annual recall bias

The recall period in the survey for activity participation and days was one year, a length that is known to produce a high bias to the number of participants and their days of participation (Reference 7). This recall effect is of major concern when stand-alone quantities are produced from the annual-recall survey (e.g., number of anglers, or number of fishing days). It is much less of a concern when survey estimates are compared to each other (e.g., number of anglers compared to number of hunters), because the recall effect is relatively uniform and tends to cancel out. This will be illustrated in the data below.

In the late 1980s the sponsor's of the National Survey of Fishing, Hunting and Wildlife-Associated Recreation studied the effect of annual recall, and made changes to shorter recall periods to produce accurate estimates of annual participation and use (Reference 7). The recall change took place between the 1985 and 1991 surveys (Reference 10), a time when Minnesota fishing and hunting participation was relatively stable, based on license sales compared with the size of the Minnesota population (Figure 2 and 3). Thus, the results for 1985 and 1991 surveys for Minnesota provide a gauge of this recall effect.

The ratio between the 1991 (shorter recall) and the 1985 (annual recall) for both participation rates and activity days per participant is between 0.7 and 0.8 (bottom row in Table 5). Note in the table that the within-survey comparison of both fishing and hunting participation and activity days is relatively stable, largely

<u>Survey Year</u>	<i>Percent of population 16+ participating annually</i>			<i>Average annual activity days per participant</i>		
	<u>Fishing</u>	<u>Hunting</u>	Ratio: fishing/hunting	<u>Fishing</u>	<u>Hunting</u>	Ratio: fishing/hunting
1985	45%	18%	2.6	19.4	15.2	1.3
1991	34%	14%	2.5	14.7	11.4	1.3
Ratio: 1991/1985	0.74	0.78		0.76	0.75	

Figure 2

Percent of MN population (aged 16+) who hold a MN **fishing** license, 1969 to 2002

(Source: MN DNR & U.S. Bureau of the Census)

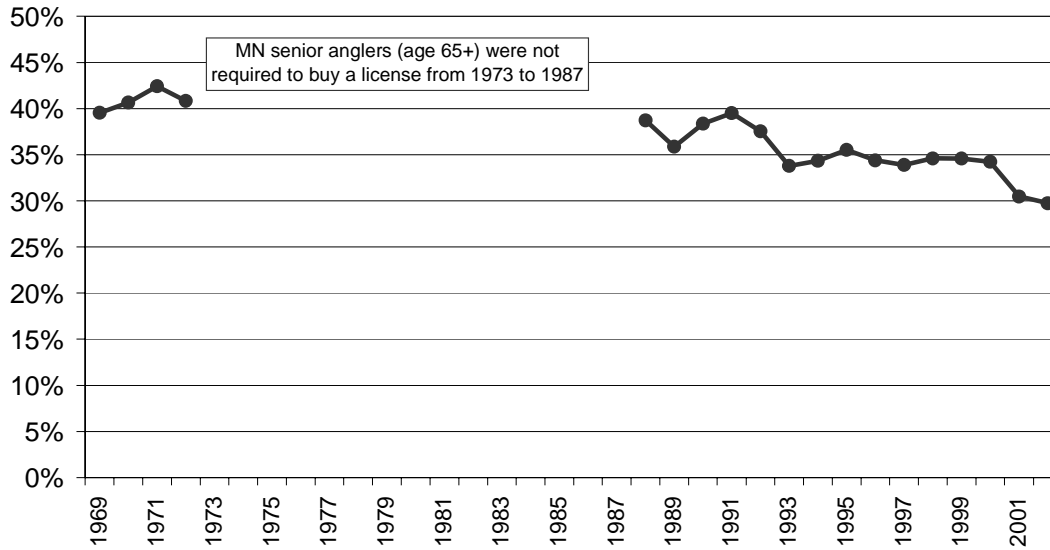
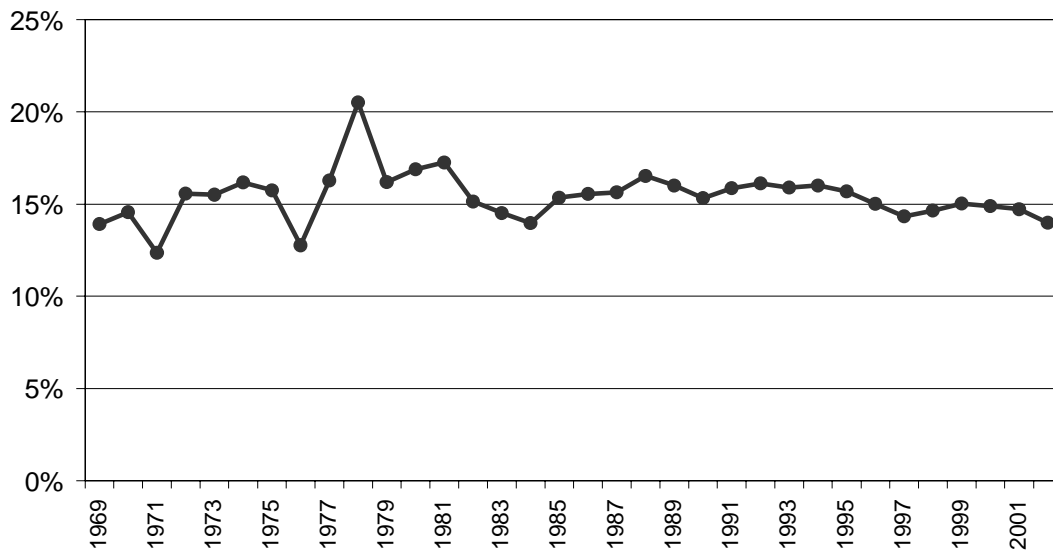


Figure 3

Percent of MN population (aged 16+) who hold a MN **hunting** license, 1969 to 2002

(Source: MN DNR & U.S. Bureau of the Census)



unaffected by the recall length. The participation-rate ratio of fishing to hunting is 2.6 in 1985 and 2.5 in 1991, while the activity-day ratio of fishing to hunting is 1.3 in both 1985 and 1991.

As another comparison, the current participation rate for fishing and hunting as judged from annual recall in this survey and the most accurate data we have on actual participation (license sales) is shown in Table 6 (Reference 11). Again, the ratio of accurate data to annual-recall data is in the range of 0.7 to 0.8. And, consistent with the preceding results, the within-information-source ratios are much closer for a comparison of fishing to hunting (2.1 for ELS and 1.9 for recreation survey).

Table 6			
Comparison of fishing and hunting participation for Minnesotans between 2003 ELS and 2004 Outdoor Recreation Participation Survey			
(based on MN DNR Electronic Licensing System records for 2003, and 2004 survey using annual-recall estimates)			
<i>Percent of Minnesota population licensed (ELS) or participating annually (recreation survey) in Minnesota</i>			
<u>Source of information</u>	<u>Fishing</u>	<u>Hunting</u>	Ratio: fishing/hunting
ELS, 2003, age 16+	29%	14%	2.1
Recreation survey, 2004, age 20+	38%	20%	1.9
Ratio: ELS/Recreation survey	0.77	0.69	

From the foregoing information, a factor between 0.7 and 0.8 appears reasonable to bulk-adjust the participant and activity day estimates to roughly correct for the bias of annual recall. From this range, one factor (.75) was selected, and is used to adjust all participant and activity-day-per-participant estimates from this survey. Performing this adjustment, although admittedly crude, is judged superior to publishing unrealistically high estimates. The adjustment produces more accurate results for known fishing and hunting and hunting quantities, and is generally believed to produce more credible results across all activities, as illustrated in the following discussion.

This current recreation survey is used to derive estimates of total annual outdoor recreation involvement (hours) for the average adult Minnesotan. The same estimate was made for 1985-86 and was based on a very-short recall period (last seven days) to eliminate recall bias as much as possible (Reference 5). The 1985-86 result (200 annual hours per adult aged 20+ spent recreating in Minnesota) is very close to the current survey result (195 annual hours) once the .75 factor is applied as described above to *both* participant and activity day estimates (i.e., $.75 \times .75 = .56$). The closeness of the two—given the different methodologies and two decades between estimates—is no doubt fortuitous, but the fact that the application of this .75 factor brings the current estimates into the correct ballpark is noteworthy and appears to demonstrate its utility.

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Appendix A

<u>Topic</u>	<u>Page</u>
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Mail survey cover letters (3 pages: 3 letters)	27
Mail survey envelopes (2 pages: outgoing and incoming envelope)	30

Outdoor Recreation in Minnesota

SECTION ONE — This section asks questions about your outdoor recreation participation

1. Think back over the last 12 months. About how many days in the last 12 months did you go outside for recreation of **all** types (including walking, fishing, camping, biking, skiing, hunting, golfing, sightseeing and so on)? (check one)
- zero days in last 12 months (please skip to question 7 on page 5)
 - 1 to 5 days in last 12 months
 - 6 to 10 days in last 12 months
 - 11 to 20 days in last 12 months
 - 21 to 50 days in last 12 months
 - 51 to 100 days in last 12 months
 - more than 100 days in last 12 months
2. Over the last 5 years, would you say the overall number of days you participated in outdoor recreation has increased, stayed about the same, or decreased? (check one)
- increased stayed about the same decreased don't know
3. How important a part of your life is outdoor recreation? (check one)
- not important at all
 - slightly important
 - moderately important
 - very important
4. What are your **most important** reasons for participating in outdoor recreation? (check all of your **most important** reasons)

Possible Reason

- Rest mentally
- Enjoy smells and sounds of nature
- Experience solitude
- Explore and discover new things
- Enjoy different experiences from home

- Rest physically
- Feel exhilarated
- Spend leisure time with family
- Get away from life's usual demands
- Get/keep physically fit

- Feel more self-confident
- Experience silence and quiet
- Enjoy natural scenery
- Get away from crowds

Possible Reason

- Get a chance to use or test my equipment
- Interact with new and varied people
- Help family, friends or others develop their outdoor skills
- Experience spiritual renewal
- Learn more about nature

- Be with members of my group
- Experience a sense of history
- Improve/retain my outdoor skills
- Experience a sense of adventure
- Take some risks

- Do something creative
- Bring back pleasant memories
- Catch or harvest some game or fish
- Feel healthier

- Other (please describe) _____

5. For each outdoor recreation activity, please do the following:

First: Indicate if you participated in this activity in the last 12 months (respond “yes” or “no”).

Second: If you DID NOT participate (responded “no”), skip to the next activity.

If you DID participate (responded “yes”), fill in the days of participation for all the other items; if days are zero, write “0”.

<u>Outdoor Recreation Activity</u>	Participated in activity last 12 months? (check one)	Total days of activity participation in last 12 months?	Of total days, how many days participation within a 1/2-hour drive of home?	Of total days, how many days occurred in Minnesota?
Walking/Hiking (walking or hiking outdoors for exercise or pleasure)	___ yes ___ no	_____	_____	_____
Horseback riding	___ yes ___ no	_____	_____	_____
Running or jogging	___ yes ___ no	_____	_____	_____
Golfing	___ yes ___ no	_____	_____	_____
Picnicking outdoors	___ yes ___ no	_____	_____	_____
Biking (bicycling outdoors of all types, including mountain biking)	___ yes ___ no	_____	_____	_____
<div style="border: 1px solid black; padding: 5px; margin-left: 20px;"> <p>↳ If you biked in the last 12 months: Of your total biking days, how many days were on a dirt trail? _____ days (if zero, enter “0”)</p> </div>				
Viewing, identifying, or photographing birds and other wildlife	___ yes ___ no	_____	_____	_____
Viewing, identifying or photographing wildflowers, trees or other natural vegetation	___ yes ___ no	_____	_____	_____
Hunting big game (e.g., deer, bear, moose)	___ yes ___ no	_____	_____	_____
Hunting waterfowl, upland game birds, and other small game	___ yes ___ no	_____	_____	_____
Fishing	___ yes ___ no	_____	_____	_____
<div style="border: 1px solid black; padding: 5px; margin-left: 20px;"> <p>↳ If you fished in the last 12 months: Of your total fishing days, how many days were fishing from a boat? _____ days (if zero, enter “0”)</p> </div>				

(continuation of Question 5)

Outdoor Recreation Activity	Participated in activity last 12 months? (check one)	Total Days of activity participation in last 12 months?	Of total days, how many days participation within a 1/2-hour drive of home?	Of total days, how many days occurred in Minnesota?
Personal watercraft boating	___ yes ___ no	_____	_____	_____
All other motorboating (excluding fishing from a motorboat)	___ yes ___ no	_____	_____	_____
Canoeing/kayaking (excluding fishing from a canoe/kayak)	___ yes ___ no	_____	_____	_____
Sailing/sailboarding	___ yes ___ no	_____	_____	_____
Swimming or wading in a lake or stream	___ yes ___ no	_____	_____	_____
Swimming or wading in an outdoor pool or outdoor water park	___ yes ___ no	_____	_____	_____
Visiting nature centers	___ yes ___ no	_____	_____	_____
Visiting outdoor zoos	___ yes ___ no	_____	_____	_____
Visiting historic or archaeological sites	___ yes ___ no	_____	_____	_____
Outdoor field sports (e.g., soccer, softball/ baseball, football)	___ yes ___ no	_____	_____	_____
Outdoor court sports (e.g., volleyball, basketball, tennis, horseshoes)	___ yes ___ no	_____	_____	_____
Camping using a camping vehicle (e.g., pop-up/ hard-sided trailer, third wheel, motorhome)	___ yes ___ no	_____	_____	_____
Camping using a tent	___ yes ___ no	_____	_____	_____



If you tent-camped in the last 12 months: Of your total tent-camping days, how many days were backpacking, or occurred at a canoe-in/boat-in campsite? _____ days (if zero, enter "0")

(continuation of Question 5)

<u>Outdoor Recreation Activity</u>	Participated in activity last 12 months? (check one)	Total Days of activity participation in last 12 months?	Of total days, how many days participation within a 1/2-hour drive of home?	Of total days, how many days occurred in Minnesota?
Inline skating, rollerblading, roller skating, roller skiing	___ yes ___ no	_____	_____	_____
Gather mushrooms, berries, or other wild foods	___ yes ___ no	_____	_____	_____
Driving for pleasure on scenic roads or in a park	___ yes ___ no	_____	_____	_____
Offroad ATV driving	___ yes ___ no	_____	_____	_____
WINTER ACTIVITIES				
Ice skating/hockey outdoors	___ yes ___ no	_____	_____	_____
Sledding and snow tubing	___ yes ___ no	_____	_____	_____
Downhill skiing/snowboarding	___ yes ___ no	_____	_____	_____
Cross country skiing	___ yes ___ no	_____	_____	_____
Snowmobiling	___ yes ___ no	_____	_____	_____
Snowshoeing	___ yes ___ no	_____	_____	_____
-----[End of Question 5]-----				

6. Have you taken up any new outdoor recreation activities in the last 5 years? (check one)

___ yes ___ no (If NO, please skip to question 7)

6a. (If YES) What are these new activities? (please describe)

- Activity 1: _____
- Activity 2: _____
- Activity 3: _____
- Activity 4: _____
- Activity 5: _____

SECTION TWO — This section asks questions about factors that limit your outdoor recreation

7. People have various reasons that limit their participation in outdoor recreation. To indicate which (if any) reasons apply to you, please tell us how much you agree or disagree with the following statement:

I don't participate more in outdoor recreation because . . .
(circle one response for each)

	Strongly disagree	Moderately disagree	Neither agree nor disagree	Moderately agree	Strongly agree	Don't know
. . . I don't have enough time to participate more	SD	MD	N	MA	SA	DK
. . . I don't have enough money to participate more	SD	MD	N	MA	SA	DK
. . . I don't have a companion to go with to outdoor recreation areas	SD	MD	N	MA	SA	DK
. . . I don't have adequate transportation to outdoor recreation areas	SD	MD	N	MA	SA	DK
. . . the outdoor recreation areas I am interested in visiting are too far from home	SD	MD	N	MA	SA	DK
. . . I don't have adequate information on outdoor recreation areas	SD	MD	N	MA	SA	DK
. . . I'm not interested in doing the activities that are available in outdoor recreation areas	SD	MD	N	MA	SA	DK
. . . I don't feel safe in outdoor recreation areas because of the other people that go there	SD	MD	N	MA	SA	DK
. . . personal health reasons limit my outdoor activity	SD	MD	N	MA	SA	DK
. . . I have a physically limiting condition and do not have the assistance or equipment to do outdoor activities	SD	MD	N	MA	SA	DK
. . . a member of my household has a disability that limits my participation in outdoor recreation	SD	MD	N	MA	SA	DK
. . . outdoor recreation areas are too crowded	SD	MD	N	MA	SA	DK
. . . there are too many rules and regulations in outdoor recreation areas	SD	MD	N	MA	SA	DK
. . . outdoor recreation areas are poorly maintained	SD	MD	N	MA	SA	DK
. . . other activities in outdoor recreation areas conflict with my favorite activities	SD	MD	N	MA	SA	DK
. . . I don't like the other people I encounter in outdoor recreation areas	SD	MD	N	MA	SA	DK
. . . I don't like outdoor pests, such as mosquitos	SD	MD	N	MA	SA	DK
. . . I don't like exposing myself to outdoor health risks, such as from sunlight, or from coming into contact with certain insects, plants or animals	SD	MD	N	MA	SA	DK
. . . I feel unwelcome or uncomfortable at many outdoor recreation areas because of who I am	SD	MD	N	MA	SA	DK
. . . I am uncomfortable and sometimes feel somewhat afraid in forest or other natural settings	SD	MD	N	MA	SA	DK
. . . I already participate enough in outdoor recreation	SD	MD	N	MA	SA	DK

SECTION THREE — This section asks questions about you so we can better understand outdoor recreation patterns

8. Are you () Male or () Female

9. How old are you? ____ Years

10. Which of the following best describes your race? (Check all that apply)

- | | |
|---|--|
| <input type="checkbox"/> African American/black | <input type="checkbox"/> Caucasian/white |
| <input type="checkbox"/> American Indian or Alaska Native | <input type="checkbox"/> Pacific Islander |
| <input type="checkbox"/> Asian | <input type="checkbox"/> Other (please describe) _____ |

11. Do you consider yourself Hispanic/Latino/Spanish? (Check one) ___ Yes ___ No

12. What is the highest level of education you have completed? (Check one)

- | | |
|--|--|
| <input type="checkbox"/> Some high school | <input type="checkbox"/> Some college |
| <input type="checkbox"/> Graduated from high school or GED | <input type="checkbox"/> AA college degree |
| <input type="checkbox"/> Some vocational or technical school | <input type="checkbox"/> BA, BS college degree |
| <input type="checkbox"/> Graduated from vocational or technical school | <input type="checkbox"/> Some postgraduate study |
| | <input type="checkbox"/> Postgraduate degree(s) |

13. Including you, how many adults, teens, and children live in your household?

- Adults (over 18) Teens (13-18 years) Children (12 or under)

14. Please indicate below your total household income before taxes last year. (Check one)

- | | |
|--|--|
| <input type="checkbox"/> Under \$10,000 | <input type="checkbox"/> \$40,000 - \$49,999 |
| <input type="checkbox"/> \$10,000 - \$19,999 | <input type="checkbox"/> \$50,000 - \$74,999 |
| <input type="checkbox"/> \$20,000 - \$29,999 | <input type="checkbox"/> \$75,000 - \$99,999 |
| <input type="checkbox"/> \$30,000 - \$39,999 | <input type="checkbox"/> Over \$100,000 |

Thank you for your input. Please place the survey in its envelope and drop it in the mail.

Survey # _____

This survey number is only used to keep track of who has completed the survey and who has not. We will send replacement surveys to those who don't respond in three weeks. Your answers are strictly confidential and will never be associated with your name.

Dear «fname_proper» «lname_proper»,

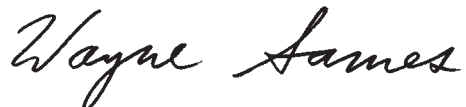
We—the Minnesota Department of Natural Resources—would like to hear from you about your use of the outdoors for recreation. We are very interested in the activities you participate in and any barriers that prevent your full enjoyment of the outdoors. We make many decisions that affect outdoor recreation in Minnesota. When making these decisions, we want to be sure we understand your preferences.

Please take 15 minutes to fill out the enclosed survey and return it to us. You are one of only a small number of Minnesotans who is being asked to complete this survey. Your survey answers are strictly confidential and will never be associated with your name.

If you have any questions about this survey, please contact Tim Kelly at 651-296-4892, or send him an email at tim.kelly@dnr.state.mn.us.

Thank you for your help.

Sincerely,



Wayne Sames
Outdoor Recreation Grants Manager

Survey #: «ID»

Dear «fname_proper» «lname_proper»,

About three weeks ago, we sent you a survey that asked about your use of the outdoors for recreation. We have received many valuable responses to our survey, but we have missed hearing from you.

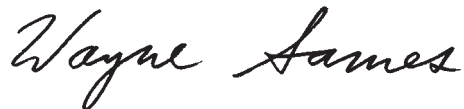
Even if you participate very little in outdoor recreation (or not at all), we want to hear that from you. We are very interested in any outdoor activities you participate in and any barriers that prevent your full enjoyment of the outdoors. We make many decisions that affect outdoor recreation in Minnesota. When making these decisions, we want to be sure we understand your preferences.

Please take 15 minutes to fill out the enclosed survey and return it to us. You are one of only a small number of Minnesotans who is being asked to complete this survey. Your survey answers are strictly confidential and will never be associated with your name.

If you have any questions about this survey, please contact Tim Kelly at 651-296-4892, or send him an email at tim.kelly@dnr.state.mn.us.

Thank you for your help.

Sincerely,



Wayne Sames
Outdoor Recreation Grants Manager

Survey #: «ID»

Dear «fname_proper» «lname_proper»,

Over the last six weeks, we sent you two surveys that asked about your use of the outdoors for recreation. We have received many valuable responses to our survey, but we have missed hearing from you.

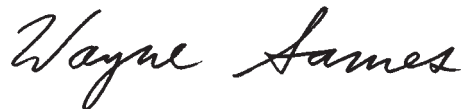
Even if you participate very little in outdoor recreation (or not at all), we want to hear that from you. We are very interested in any outdoor activities you participate in and any barriers that prevent your full enjoyment of the outdoors. We make many decisions that affect outdoor recreation in Minnesota. When making these decisions, we want to be sure we understand your preferences.

Please take 15 minutes to fill out the enclosed survey and return it to us. You are one of only a small number of Minnesotans who is being asked to complete this survey. Your survey answers are strictly confidential and will never be associated with your name.

If you have any questions about this survey, please contact Tim Kelly at 651-296-4892, or send him an email at tim.kelly@dnr.state.mn.us.

Thank you for your help.

Sincerely,



Wayne Sames
Outdoor Recreation Grants Manager

Survey #: «ID»



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Appendix B

OUTDOOR RECREATION IN MINNESOTA 2004 NONRESPONSE SURVEY:

RESULTS AND TECHNICAL REPORT

(report is on next 27 pages; has own page numbering)

TECHNICAL REPORT #04-10

Submitted to:

Tim Kelly
Minnesota Department of Natural Resources

July 20, 2004

Report Prepared by:
Pamela Jones, Survey Manager

**OUTDOOR RECREATION IN MINNESOTA 2004
NONRESPONSE SURVEY:**

RESULTS AND TECHNICAL REPORT

Minnesota Center for Survey Research
University of Minnesota
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OUTDOOR RECREATION IN MINNESOTA 2004: NONRESPONSE SURVEY

OVERVIEW

The Outdoor Recreation Nonresponse Survey was conducted as a telephone survey by the Minnesota Center for Survey Research at the University of Minnesota. The project was funded by the Minnesota Department of Natural Resources (DNR), and was a follow-up to a mail survey conducted by the DNR. The original sample for the mail survey consisted of a stratified random sample of households in Minnesota. Nonrespondents to the mail survey were randomly selected for the telephone survey. Respondents to the phone survey answered questions about the number of days in the last 12 months they went outside for recreation, how important outdoor recreation is as part of their life, and several demographic questions (year born, race, education, and household income).

Data collection was conducted from May 24 to June 7, 2004. Computer Assisted Telephone Interviewing (CATI) was used for this project. A total of 513 telephone interviews were completed. The overall response rate for the study was 48 percent.

GOALS

The goal of the Nonresponse Survey was to gather information from people who had not responded to the Outdoor Recreation in Minnesota mail survey. Data from the telephone survey were used to evaluate nonresponse bias in the mail survey.

STUDY DESIGN AND MANAGEMENT

The Outdoor Recreation Nonresponse Survey was conducted as a telephone survey by the Minnesota Center for Survey Research (MCSR) at the University of Minnesota. The project was funded by the Minnesota Department of Natural Resources. The highest standards of quality survey research were used in conducting this project.

The administrative coordination of the project was provided by MCSR Director, Rossana Armson. Survey Manager, Pam Jones, was responsible for revising the survey instrument, supervising data collection, and writing the methodology report. MCSR Data Manager, Anne Caron, was responsible for programming the survey instrument and converting the raw data into an SPSS system file format for analysis.

QUESTIONNAIRE DESIGN

The Outdoor Recreation Nonresponse Survey was a follow-up to a mail survey conducted by the DNR. The initial draft of the telephone survey was developed by DNR staff using questions from the mail questionnaire. MCSR staff revised the survey into a format appropriate for telephone data collection. Prior to the start of data collection the telephone survey was approved by Tim Kelly of the DNR.

Respondents to the telephone survey answered questions about the number of days in the last 12 months they went outside for recreation, how important outdoor recreation is as part of their life, and several demographic questions (year born, race, education, and household income).

SAMPLING DESIGN

The original sample for the mail survey consisted of a stratified random sample of households in Minnesota. The sample was divided into five regions: northeast, northwest, central, south, and metro. The goal was to complete telephone surveys with 140 nonrespondents in the metro region and 90 nonrespondents in each of the other four regions, for a total of 500 surveys. To begin data collection, 200 nonrespondents were randomly selected for the metro region, and 150 nonrespondents were randomly chosen for each of the other four regions. As data collection proceeded, numbers that were unusable (disconnected, not home phones, wrong numbers, firm refusals, etc.) or were attempted 10 times without completion were removed from the calling queue and were replaced with another randomly selected number from the corresponding region.

TELEPHONE INTERVIEWING

Data collection was conducted from May 24 to June 7, 2004. Computer Assisted Telephone Interviewing (CATI) was the data collection technology used for this project.

Selection of Telephone Interviewers

Telephone interviewers were students at the University of Minnesota. They were selected for their communication skills, were trained specifically for this project, and were supervised closely in their work. All interviewers working on this project had worked on several previous telephone surveys at MCSR.

Training of Telephone Interviewers

Training of telephone interviewers at MCSR was conducted in three phases. In the first phase, new interviewers were required to attend an initial training session during which they received basic instructions in survey interviewing. In the second phase, interviewers attended a training session that covered survey procedures and policies for this project and

review of the actual survey questionnaire. For the final phase of training, before beginning the telephone survey, each interviewer had a practice session using the survey instrument. In addition, as an employment requirement, all interviewers were required to read and sign a statement of professional ethics that contains explicit guidelines about appropriate interviewer behavior and confidentiality of respondent information. A copy of this statement is included in Appendix B.

Computer Assisted Telephone Interviews (CATI)

This project used the WinCati System for computer interviewing from Sawtooth Software. With minimal editing, data were available immediately after completion of data collection.

To conduct interviews using CATI, each interviewer uses a microcomputer which displays questions on the computer screen in the proper order. The interviewer wears a headset and has both hands free for entering responses into the computer via the keyboard. Responses are entered as numbers, such as "1" for yes and "2" for no.

Responses to "other-specify" questions were typed, verbatim, directly into the computer. In addition, interviewers were instructed to use a special "comment sheet" to record any incidents of repeating questions or categories, miscellaneous ad libs by respondents, and any problems they encountered during the interview. This information was attached to the contact record. Interviewers also had the option of typing this information on the computer using the CATI "note" function.

Supervision

Interviewers were supervised throughout the data collection process. Supervisory responsibilities included distributing new phone numbers and scheduled appointments, reviewing completed questionnaires for errors and omissions, maintaining a Master Log of completed interviews, and monitoring interviews.

Monitoring

The silent entry monitoring system utilized at MCSR enabled supervisors to listen to interviews and provide immediate feedback to interviewers regarding improvements in interviewing quality. This system allowed the monitor to hear both the interviewer and the respondent during the survey. Interviewers whose performance was not satisfactory were re-evaluated on subsequent shifts. During the two weeks of interviewing, 16 percent of the interviews were monitored.

Verification

To verify that respondents were in fact interviewed, a verification system was employed by the supervisors and reviewed by the Project Manager. Every twentieth respondent was selected from the Master Log listing and was called back by a shift supervisor. A copy of the verification script is included in Appendix B. Five percent of the respondents were contacted for verification and all confirmed that they had been interviewed.

Operations

Interviews were conducted by telephone from the phone bank located at MCSR. The interviewing was organized into daytime and evening shifts during weekdays and weekends. The originally selected nonrespondents for each region were called on consecutive shifts which included evening, daytime, and weekend shifts. As noted in the section pertaining to sampling, numbers that were unusable or were attempted 10 times without completion were removed from the calling queue and were replaced with another randomly selected number from the corresponding region.

Telephone numbers to be called were recorded on contact record forms and were distributed to interviewers at the beginning of each shift. The disposition of each attempt to complete an interview was recorded on these contact records. Each telephone number in the sample continued to be called until it had been attempted at least 10 times without success or until data collection ended on June 7, 2004.

The back of each contact record contained two forms: (1) a refusal form for recording relevant information about those respondents refusing to participate in the interview, and (2) a callback form for scheduling future interview appointments (see Appendix B). The refusal form included entries for the respondents' reasons for declining to participate in the study, the arguments used by the interviewer to encourage participation, and the point at which termination of the interview occurred. The appointment form required the interviewer to specify the date and time of the scheduled appointment, the name of the targeted respondent, and whether the appointment was firm, probable, or uncertain.

For each call made, interviewers recorded the date, time, and disposition of the call as well as their interviewer ID number. Copies of the contact records and explanations for all possible disposition codes are included in Appendix B.

Completed interviews were saved on the MCSR computer network. The contact record for each completed survey was then assigned a unique identification number in the Master Log. The CATI identification number, telephone number, and other pertinent information also were recorded in the Master Log. All contact records were returned to the supervisor at the end of the shift.

Answering Machine Messages

The sample for this study included many households with answering machines. Interviewers were instructed to leave a message stating that they were calling from the University of Minnesota, and they would be calling back, or that the respondent could call MCSR to participate in the study. The text of the answering machine message is included in Appendix B.

MANAGEMENT OF THE DATA

Data Cleaning

After data were transferred from the WinCati file to an SPSS file, a systematic examination was conducted to remove data entry errors. Data cleaning involved using a computer program to evaluate each case for variables with out-of-range values. In addition, the file was examined manually to identify cases with paradoxical or inappropriate responses.

COMPLETION STATUS

A total of 513 telephone interviews were completed for this study. The status for each region and the total sample is shown in Tables 1 and 2. The overall response rate for the study was 48 percent and the cooperation rate was 56 percent, based on formulas specified by the American Association for Public Opinion Research.

For the total sample, 229 people refused to participate, 182 numbers were still active when data collection was completed, 117 households could not be reached after 10 attempted contacts, and 35 people were unable to participate due to physical or language problems. The remaining sample was categorized as follows: disconnected number (116), not a home phone number (32), respondent deceased (40), wrong number (72), mail survey returned during telephone data collection (40), number not called/needed (100), and no phone number available (255).

TABLE 1

FINAL SAMPLE STATUS FOR THE
OUTDOOR RECREATION NONRESPONSE SURVEY

<u>Status</u>	Region 1		Region 2		Region 3	
	Northwest		Northeast		South	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Completed survey	92	33	91	31	93	30
Refusal	45	16	55	18	44	14
Active	29	10	24	8	33	10
10+ attempts	21	8	29	10	22	7
Physical/language problem	7	2	3	1	5	2
Eliminated:						
Disconnected number	18	6	26	9	26	8
Not home phone	5	2	3	1	9	3
Respondent deceased	10	4	6	2	11	4
Wrong number	11	4	13	4	7	2
Mail survey returned	9	3	6	2	4	1
Not called/needed	4	1	2	1	15	5
No phone number	<u>29</u>	<u>10</u>	<u>39</u>	<u>13</u>	<u>44</u>	<u>14</u>
TOTAL	280	99	297	100	313	100
Cooperation Rate	55%		54%		55%	
Response Rate	47%		45%		47%	

TABLE 2

FINAL SAMPLE STATUS FOR THE
OUTDOOR RECREATION NONRESPONSE SURVEY

Status	Region 4 Central		Region 5 Metro		TOTAL	
	No.	%	No.	%	No.	%
Completed survey	94	33	143	26	513	30
Refusal	36	12	49	9	229	13
Active	44	15	52	9	182	10
10+ attempts	13	4	32	6	117	7
Physical/language problem	8	3	12	2	35	2
Eliminated:						
Disconnected number	22	8	24	4	116	7
Not home phone	5	2	10	2	32	2
Respondent deceased	8	3	5	1	40	2
Wrong number	10	4	31	6	72	4
Mail survey returned	4	1	17	3	40	2
Not called/needed	3	1	76	14	100	6
No phone number	<u>40</u>	<u>14</u>	<u>103</u>	<u>19</u>	<u>255</u>	<u>15</u>
TOTAL	287	100	554	101	1731	100
Cooperation Rate	54%		59%		56%	
Response Rate	48%		50%		48%	

$$\text{COOPERATION RATE 3} = \frac{\text{Completed survey}}{\text{Potential Interviews}^*}$$

$$\text{RESPONSE RATE 1} = \frac{\text{Completed survey}}{\text{Total - Eliminated}}$$

* Potential interviews are all instances where contact was made with the selected person and are represented by the sum of the first three categories in Tables 1 or 2.

READING THE QUESTIONNAIRE AND RESULTS

The Questionnaire and Results section of this report contains the unweighted response frequencies and percentages for each question in the survey. Because a stratified sample was drawn to conduct the survey, the data should be weighted proportionately by region to generalize to the state as a whole. However, the data were not weighted for this report, and the actual responses for all 513 individuals who completed the survey are shown for each question. Percentage distributions also are presented; valid percentages were computed after eliminating those who refused to answer, did not know, or were not required to answer a particular question.

The question numbers were used as variable labels in the computer data files. This information is provided as documentation for those who wish to use a computer file and the SPSS software package to conduct more detailed data analyses.

OUTDOOR RECREATION IN MINNESOTA NONRESPONSE SURVEY – 2004

A. RECREATION QUESTIONS

The first questions are about outdoor recreation.

QA1. Think back over the last 12 months. About how many days in the last 12 months did you go outside for recreation of ALL types, including walking, fishing, camping, biking, skiing, hunting, golfing, sightseeing, and so on . . . was it zero days, 1 to 5 days, 6 to 10 days, 11 to 20 days, 21 to 50 days, 51 to 100 days, or more than 100 days in the last 12 months?

<u>Freq</u>	<u>(%)</u>		
41	(8)	1.	Zero days
38	(7)	2.	1 - 5 days
33	(6)	3.	6 - 10 days
48	(9)	4.	11 - 20 days
96	(19)	5.	21 - 50 days
94	(18)	6.	51 to 100 days
161	(32)	7.	More than 100 days
2		8.	DK (Don't Know)
0		9.	RA (Refused to Answer)

QA2. How important a part of your life is outdoor recreation . . . not important at all, slightly important, moderately important, or very important?

32	(6)	1.	Not important at all
51	(10)	2.	Slightly important
154	(30)	3.	Moderately important
275	(54)	4.	Very important
1		8.	DK (Don't Know)
0		9.	RA (Refused to Answer)

B. DEMOGRAPHIC QUESTIONS

And now I have just a few background questions.

QB1. What year were you born?

____ _ (SEE APPENDIX A, PAGES A-2 TO A-3)
 8888 DK
 9999 RA

QB2. Which of the following best describes your race . . . African American or black, American Indian or Alaska Native, Asian, Caucasian or white, Pacific Islander, or something else? (CIRCLE ALL ANSWERS)

Freq	(%)		
7	(1)	a.	African American or black
9	(2)	b.	American Indian or Alaska Native
4	(1)	c.	Asian
474	(94)	d.	Caucasian or White
1	(0)	e.	Pacific Islander
15	(3)	f.	Other (SPECIFY)_____ (see next page for list of these)
0		g.	DK
7		h.	RA

QB3. Do you consider yourself Hispanic, Latino, or Spanish?

6	(1)	1.	Yes
498	(99)	2.	No
2		8.	DK
7		9.	RA

QB4. What is the highest level of education you have completed?
 (READ LIST IF NEEDED)

50	(10)	01.	Some high school
145	(28)	02.	Graduated from high school or GED
10	(2)	03.	Some vocational or technical school
35	(7)	04.	Graduated from vocational or technical school
99	(19)	05.	Some college
29	(6)	06.	AA college degree
88	(17)	07.	BA, BS college degree
8	(2)	08.	Some postgraduate study
45	(9)	09.	Postgraduate degree(s)
1		88.	DK
3		99.	RA

“Other-Specify” Responses to QB2

<u>ID#</u>	<u>Response</u>
006	I'm a mixture of all of them.
035	American
075	American
203	American
263	American
272	American
273	International
305	American
334	Hispanic
348	African
360	Spanish
382	Mexican
432	American
442	American
449	American

OUTDOOR RECREATION NONRESPONSE SURVEY

QB5. What was your total household income before taxes last year . . . under \$10,000; \$10,000 to \$20,000; \$20,000 to \$30,000; \$30,000 to \$40,000; \$40,000 to \$50,000; \$50,000 to \$75,000; \$75,000 to \$100,000; or over \$100,000?

<u>Freq</u>	<u>(%)</u>		
35	(9)	01.	Under 10,000
44	(11)	02.	10 to 20,000
65	(16)	03.	20 to 30,000
50	(12)	04.	30 to 40,000
37	(9)	05.	40 to 50,000
88	(22)	06.	50 to 75,000
53	(13)	07.	75 to 100,000
37	(9)	08.	Over 100,000
9		88.	DK
95		99.	RA

(ASK ONLY IF UNSURE)

QB6. Are you male or female?

360	(70)	1.	Male
153	(30)	2.	Female
0		9.	RA

END. Thank you for answering all these questions. I really appreciate your help.

APPENDIX A

CONTINUOUS AND ADMINISTRATIVE VARIABLES

<u>Variable</u>	<u>Description</u>	<u>Page</u>
QB1	Year born	A-2
CDOC	Date interview completed.....	A-4
CIID	MCSR interviewer ID number	A-4
TIME	Length of interview in minutes.....	A-5
CRCON	Refusal conversion	A-5
CCONT	Number of contacts to complete interview.....	A-6
MONITOR	Interview monitored by supervisor.....	A-6
SAMPLE	Sample group.....	A-6

QB1 YEAR BORN

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1910	1	.2	.2	.2
1911	2	.4	.4	.6
1913	2	.4	.4	1.0
1914	1	.2	.2	1.2
1915	1	.2	.2	1.4
1916	1	.2	.2	1.6
1917	2	.4	.4	2.0
1918	1	.2	.2	2.2
1919	2	.4	.4	2.6
1920	3	.6	.6	3.2
1921	4	.8	.8	4.0
1922	7	1.4	1.4	5.4
1923	5	1.0	1.0	6.4
1924	4	.8	.8	7.2
1925	7	1.4	1.4	8.6
1926	4	.8	.8	9.4
1927	6	1.2	1.2	10.6
1928	5	1.0	1.0	11.6
1929	4	.8	.8	12.4
1930	5	1.0	1.0	13.3
1931	6	1.2	1.2	14.5
1932	2	.4	.4	14.9
1933	5	1.0	1.0	15.9
1934	7	1.4	1.4	17.3
1935	5	1.0	1.0	18.3
1936	4	.8	.8	19.1
1937	4	.8	.8	19.9
1938	7	1.4	1.4	21.3
1939	7	1.4	1.4	22.7
1940	8	1.6	1.6	24.3
1941	3	.6	.6	24.9
1942	6	1.2	1.2	26.1
1943	11	2.1	2.2	28.3
1944	10	1.9	2.0	30.3
1945	5	1.0	1.0	31.3
1946	8	1.6	1.6	32.9
1947	13	2.5	2.6	35.5
1948	12	2.3	2.4	37.8
1949	13	2.5	2.6	40.4
1950	12	2.3	2.4	42.8

QB1 YEAR BORN (Continued)

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1951	11	2.1	2.2	45.0
1952	6	1.2	1.2	46.2
1953	6	1.2	1.2	47.4
1954	10	1.9	2.0	49.4
1955	9	1.8	1.8	51.2
1956	9	1.8	1.8	53.0
1957	17	3.3	3.4	56.4
1958	11	2.1	2.2	58.6
1959	14	2.7	2.8	61.4
1960	14	2.7	2.8	64.1
1961	12	2.3	2.4	66.5
1962	17	3.3	3.4	69.9
1963	11	2.1	2.2	72.1
1964	13	2.5	2.6	74.7
1965	8	1.6	1.6	76.3
1966	9	1.8	1.8	78.1
1967	9	1.8	1.8	79.9
1968	7	1.4	1.4	81.3
1969	9	1.8	1.8	83.1
1970	5	1.0	1.0	84.1
1971	8	1.6	1.6	85.7
1972	12	2.3	2.4	88.0
1973	6	1.2	1.2	89.2
1974	6	1.2	1.2	90.4
1975	6	1.2	1.2	91.6
1976	10	1.9	2.0	93.6
1977	5	1.0	1.0	94.6
1978	4	.8	.8	95.4
1979	6	1.2	1.2	96.6
1980	5	1.0	1.0	97.6
1981	3	.6	.6	98.2
1982	7	1.4	1.4	99.6
1983	2	.4	.4	100.0
Total Valid	502	97.9	100.0	
9999 RA	11	2.1		
Total	513	100.0		

CDOC DATE INTERVIEW COMPLETED

Value	Frequency	Percent	Valid Percent	Cumulative Percent
524	54	10.5	10.5	10.5
525	54	10.5	10.5	21.1
526	21	4.1	4.1	25.1
527	44	8.6	8.6	33.7
529	52	10.1	10.1	43.9
530	74	14.4	14.4	58.3
601	64	12.5	12.5	70.8
602	42	8.2	8.2	78.9
603	46	9.0	9.0	87.9
605	40	7.8	7.8	95.7
606	17	3.3	3.3	99.0
607	5	1.0	1.0	100.0
Total	513	100.0	100.0	

CIID MCSR INTERVIEWER ID NUMBER

Value	Frequency	Percent	Valid Percent	Cumulative Percent
4	94	18.3	18.3	18.3
12	23	4.5	4.5	22.8
13	35	6.8	6.8	29.6
17	3	.6	.6	30.2
21	22	4.3	4.3	34.5
22	42	8.2	8.2	42.7
25	76	14.8	14.8	57.5
30	6	1.2	1.2	58.7
33	37	7.2	7.2	65.9
38	6	1.2	1.2	67.1
41	1	.2	.2	67.3
48	62	12.1	12.1	79.3
51	30	5.8	5.8	85.2
53	76	14.8	14.8	100.0
Total	513	100.0	100.0	

TIME LENGTH OF INTERVIEW IN MINUTES

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1	50	9.7	9.7	9.7
2	249	48.5	48.5	58.3
3	117	22.8	22.8	81.1
4	61	11.9	11.9	93.0
5	25	4.9	4.9	97.9
6	9	1.8	1.8	99.6
8	1	.2	.2	99.8
9	1	.2	.2	100.0
Total	513	100.0	100.0	

CRCON REFUSAL CONVERSION

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1 Yes	6	1.2	1.2	1.2
2 No	507	98.8	98.8	100.0
Total	513	100.0	100.0	

CCONT NUMBER OF CONTACTS TO COMPLETE INTERVIEW

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1	227	44.2	44.2	44.2
2	96	18.7	18.7	63.0
3	66	12.9	12.9	75.8
4	38	7.4	7.4	83.2
5	25	4.9	4.9	88.1
6	26	5.1	5.1	93.2
7	20	3.9	3.9	97.1
8	6	1.2	1.2	98.2
9	5	1.0	1.0	99.2
10	3	.6	.6	99.8
11	1	.2	.2	100.0
Total	513	100.0	100.0	

MONITOR INTERVIEW MONITORED BY SUPERVISOR

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1 Yes	82	16.0	16.0	16.0
2 No	431	84.0	84.0	100.0
Total	513	100.0	100.0	

SAMPLE SAMPLE GROUP

Value	Frequency	Percent	Valid Percent	Cumulative Percent
1 Region 1	92	17.9	17.9	17.9
2 Region 2	91	17.7	17.7	35.7
3 Region 3	93	18.1	18.1	53.8
4 Region 4	94	18.3	18.3	72.1
5 Region 5	143	27.9	27.9	100.0
Total	513	100.0	100.0	

APPENDIX B

ADMINISTRATIVE FORMS

Appendix B contains brief explanations for the contact record disposition categories and copies of the administrative forms used in the Outdoor Recreation Nonresponse Survey. There were two primary administrative forms: (1) the introduction, and (2) the contact record with callback/refusal forms on the back. Contact records were used to record the actual date and time of each attempted contact with a household, the interviewer ID, and the final outcome (disposition) of each attempted contact.

<u>Form</u>	<u>Page</u>
Interviewer Introduction.....	B-2
Answering Machine Message	B-3
Verification Script.....	B-3
Contact Record.....	B-4
Callback/Refusal Form.....	B-5
Contact Record Disposition Categories	B-6
Statement of Professional Ethics.....	B-7

**OUTDOOR RECREATION IN MINNESOTA
NONRESPONSE SURVEY – 2004**

INTRODUCTION

- A. Hello, may I please speak with NAME ON LABEL ?

- B. (WHEN CORRECT PERSON IS ON THE PHONE)
Hello, my name is _____. I'm a student calling from the University of Minnesota.

- C. We're doing a study about outdoor recreation activities, and I'd like to ask you just a few questions. This is a very short survey and will take less than five minutes.

- D. Your answers will be put with a lot of other people's, so you can't be identified in any way. If there are questions you don't care to answer, we'll skip over them. Okay, let's begin.

ANSWERING MACHINE MESSAGE

Hello, I'm calling for (NAME ON LABEL). This is _____ calling from the University of Minnesota. We're doing a study about outdoor recreation activities. You were selected to participate in our study, and we'll be calling you back another day. Or, to make sure your opinion is counted, you may call us collect at 612-627-4300. Thank you.

VERIFICATION SCRIPT

- A. Hello, my name is _____. I'm a student calling from the University of Minnesota.
- B. A few (days/weeks) ago we called and interviewed someone in your household. I'm calling to verify that a member of your household was interviewed on (DATE) by a member of our staff. Could I please speak with that person?

IF KNOWN/NEEDED: The person we interviewed is a (MALE/FEMALE) born in (YEAR).

WHEN CORRECT PERSON IS ON THE PHONE:

- C. I'm just calling to verify that you were interviewed on (DATE) by one of our interviewers. The survey was about outdoor recreation.

Do you recall this interview?

- D. **WHEN VERIFIED:** Thank you very much!

Callback time:

**CONTACT RECORD (CATI SURVEY)
DNR NONRESPONSE SURVEY - 2004**

[ID# _____]

DATE: _____
TIME: _____

(CODER USE ONLY)
ID _____

Completed
Partial
disc/not working
Not home phone
Physical problem _____
Lang. problem _____
1st Refusal
2nd Refusal
Callback
Other
Ans Machine - LEFT MSG
Ans Machine - No msg left
No Answer / Busy

Completed
Partial
disc/not working
Not home phone
Physical problem _____
Lang. problem _____
1st Refusal
2nd Refusal
Callback
Other
Ans Machine - LEFT MSG
Ans Machine - No msg left
No Answer / Busy

INTERVIEWER: _____
CONTACTS: _____

DATE: _____
TIME: _____

Completed
Partial
disc/not working
Not home phone
Physical problem _____
Lang. problem _____
1st Refusal
2nd Refusal
Callback
Other
Ans machine - LEFT MSG
Ans machine - No msg left
No Answer / Busy

Completed
Partial
disc/not working
Not home phone
Physical problem _____
Lang. problem _____
1st Refusal
2nd Refusal
Callback
Other
Ans Machine - LEFT MSG
Ans Machine - No msg left
No Answer / Busy

INTERVIEWER: _____
CONTACTS: _____

TIME START _____

SUPERVISOR: _____

TIME END _____

EDITED: Y N BY: _____

INTERVIEW IN MIN _____

INTERVIEWER ID# _____

DNR NONRESPONSE SURVEY - 2004

CALLBACK FORM				
	Date ___/___	Date ___/___	Date ___/___	Date ___/___
Speak with resp in person?	Yes / No /DK	Yes / No / DK	Yes / No /DK	Yes / No / DK
Respondent is:	F / M / DK	F / M / DK	F / M / DK	F / M / DK
Respondent's name:	_____	_____	_____	_____
Who arranged callback?	Resp / Else	Resp / Else	Resp / Else	Resp / Else
Callback Time:	___:___	___:___	___:___	___:___
Date:	___/___	___/___	___/___	___/___
Was appointment:	Firm/Prob/?	Firm/Prob/?	Firm/Prob/?	Firm/Prob/?
Was resp open/cooperative?	Yes / No / DK	Yes / No / DK	Yes / No / DK	Yes / No / DK
Comments/Information:	_____			

REFUSAL FORM	
Respondent is: Female / Male / DK	Was respondent person who refused? Yes / No / DK
Person answering phone was: Female / Male / DK	Were they busy or inconvenienced? Yes / No / DK
When was interview terminated? (Circle one.) INTRO A INTRO B INTRO C INTRO D INTRO E	
QUESTION #: _____ Other (SPECIFY) _____	
What reasons were given for refusal? (Circle all that apply.) What arguments did you use?	
<p><u>REASON</u></p> <p>a. NONE (person hung up)</p> <p>b. Not interested</p> <p>c. Too busy</p> <p>d. Too old</p> <p>e. Has unlisted phone number</p> <p>f. Bad health; sick</p> <p>g. Doesn't like surveys</p> <p>h. Doesn't like phone surveys</p> <p>i. Doesn't think it's confidential</p> <p>j. Doesn't know about the topic</p> <p>k. Doesn't think topic is important</p> <p>l. Other (SPECIFY) _____</p> <p>_____</p>	<p><u>ARGUMENTS USED</u></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
Other comments or information: _____	

CONTACT RECORD DISPOSITION CATEGORIES

There were 11 possible disposition categories for each contact that was made. A brief explanation for each of these disposition categories is presented below.

<u>Disposition</u>	<u>Explanation</u>
Completed	All questions in the interview schedule were asked.
Partial	The interview began, but was not completed. In such a case, interviewers were instructed to schedule an appointment to finish, and fill out the callback form on the back of the contact record. If a respondent declined to complete the interview, the refusal form was completed.
Disconnected/not working	The number was not in operation.
Not home phone	The number was not a residential telephone.
Physical problem	Respondent was reached, but could not complete the interview, for example, because of illness or hearing impairment.
Language problem	Respondent did not speak English well enough to complete the survey in English.
Refusal and Second Refusal	The respondent declined to participate, even following appropriate prompts by the interviewer. Interviewers were instructed to complete the refusal form.
Callback	A callback was scheduled. The appointment form was filled out.
Other	Reserved for contingencies not covered by the other dispositions, for example, respondent will call back to MCSR.
Answering Machine	The first time a respondent's answering machine was reached, the interviewer left a message stating the nature of the survey and that she or he would receive another call from MCSR. The message also suggested that the respondent call MCSR to ensure inclusion of her or his opinion.
No Answer/Busy	All attempts during a shift resulted in the phone ringing six times without being answered; or every attempt to contact the person during the shift resulted in a busy signal. If the respondent could not be contacted on a minimum of ten separate shifts, the telephone number was eliminated.

STATEMENT OF PROFESSIONAL ETHICS

All interviewers working for the Minnesota Center for Survey Research (MCSR) are expected to understand that their professional activities are directed and regulated by the following statements of policy:

All research projects conducted at MCSR have received approval from the University's Committee on the Rights of Human Subjects. When study findings are made available, the utmost care is taken to ensure that no data are released that would permit any respondent to be identified.

Interviewers perform a professional function when they obtain information from individuals. Interviewers are expected to maintain professional ethical standards of confidentiality regarding what they hear in telephone interviews or see in a mail survey form. All information about respondents obtained during the course of research is privileged information; whether it relates to the interview itself or to the respondent's home, family, or activities. This information is confidential and should not be discussed with anyone who is not affiliated with the research project.

In addition, blank survey forms, survey questions, and other survey materials should not be distributed to or discussed with anyone who is not affiliated with the research project.

I hereby agree to abide by the policy statements above, and in signing this statement I testify that I, in fact, agree to abide by and understand the contents of this statement. I also understand that if I fail to abide by the policies presented above, my actions constitute grounds for dismissal.

(Please print name here)

(Please sign name here)

Date _____