# MINNESOTA CENTER FOR SURVEY RESEARCH

UNIVERSITY OF MINNESOTA

TECHNICAL REPORT 89-1

# 1988 MINNESOTA STATE SURVEY:

# RESULTS AND TECHNICAL REPORT

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| | |
|---|---|
| Overall Coordination | Rossana Armson |
| Data Collection Manager | Nancy Davenport-Sis |
| Data Coding Manager | Carol Westrum |
| Data Processing | Tom Pechman |
| Questionnaire Production | Tammy Tollefson |

This study was made possible by financial support from four outside organizations. These organizations included questions in the following content areas:

| | |
|---|---|
| Quality of Life | Minnesota Center for Survey Research |
| Environment | Center for Urban and Regional Affairs<br>University of Minnesota |
| Transportation | Minnesota Department of Transportation |
| Attractions | Science Museum of Minnesota<br>Twin Cities Tourism Attractions Association |
| Aging | Center for Urban and Regional Affairs<br>University of Minnesota |
| Education | SRI International |

We anticipate that the usefulness of this data will justify the effort expended in collecting the information.

William J. Craig, Director
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CHAPTER 1

# 1988 MINNESOTA STATE SURVEY: TECHNICAL REPORT

## OVERVIEW

The 1988 Minnesota State Survey (MSS) was the sixth annual omnibus survey of adults, age 18 and over, who reside in Minnesota. Data collection was conducted from November 1988 through January 1989 by the Minnesota Center for Survey Research (MCSR) at the University of Minnesota. MSS is an "omnibus" survey, where individual organizations define and pay for those questions which are of special interest to them. The topics in this year's survey included quality of life, environment, transportation, attractions, aging, and education.

A total of 1,209 telephone interviews were completed for MSS'88. The overall response rate was 77%. This compares favorably with other omnibus social surveys which generally have response rates of 70% to 75%.

The survey sample consisted of households selected randomly from all Minnesota telephone exchanges. Selection procedures guaranteed that every telephone household in the state had an equal chance to be included in the survey, and that once the household was sampled every adult had an equal chance to be included.

Since the individuals who participated in MSS'88 were randomly selected from the population of Minnesota, the survey results can be generalized to the entire state. These generalizations can be made either to households, using the unweighted data file, or to individuals, using the weighted data file as the source of the percentages. The questionnaire and results presented in Chapter 4 of this report are based on the weighted computer data file and all percentages presented there generalize to individuals.

The margin of error for a simple random sample of the size of the Minnesota State Survey is about plus or minus three percentage points, when the distribution of question responses is in the vicinity of 50 percent. This sampling error presumes the conventional 95% degree of desired confidence, which is equivalent to a "significance level" of .05. This means that in a sample of 1,200 households there is a 95% chance or better that if all households in Minnesota were surveyed, the results would not differ from the MSS'88 findings by more than three percentage points.

## OBJECTIVES

The Minnesota State Survey (MSS) has four basic objectives. The first and most important of these is to get useful and technically sound information on the characteristics, attitudes, and behaviors of Minnesota residents for researchers and public policy decision-makers. MSS is an "omnibus" survey, where individual organizations define and pay for those questions which are of special interest to them. Such information is potentially relevant to a multitude of needs, including market analysis, needs assessment, project evaluation, and organizational planning.

The second objective is to develop an ongoing social monitoring capability for the state of Minnesota. Because the survey has been an annual event since 1984, it provides the means to maintain an updated statewide database and to monitor change in this database over the course of time.

The third objective is to provide students at the University of Minnesota with an opportunity to participate in a professional survey operation. This training experience greatly enhances the methodological skills of such students, which also enlarges and enriches the pool of social researchers ultimately available to other projects in the community.

The fourth objective is to develop and refine methods for conducting social surveys. The most advanced methods and techniques are utilized in MCSR surveys, but attention is given to explorations that improve upon existing research methods.

## PARTICIPATING ORGANIZATIONS

Organizations providing financial support for MSS'88 were: Center for Urban and Regional Affairs at the University of Minnesota, Minnesota Department of Transportation, Science Museum of Minnesota, SRI International, and Twin Cities Tourism Attractions Association.

The topics in this year's survey included quality of life, environment, transportation, attractions, aging, and education.

## SAMPLING DESIGN

The survey sample consisted of households selected randomly from all Minnesota telephone exchanges. The random digit telephone sample was acquired from Survey Sampling, Inc. of Westport, Connecticut. Evidence of the integrity of the sampling frame and the survey procedures is given in a later section of this chapter (Evaluation of the Sample).

Selection of respondents occurred in two stages: first a household was randomly selected, and then a person was randomly selected for interviewing from within the household. The selection of a person within the household was done using the Most Recent Birthday Selection Method, a sample of which appears in the introduction (See Appendix E: Administrative Forms). These selection procedures guaranteed that every telephone household in the state had an equal chance to be included in the survey, and that once the household was sampled every adult had an equal chance to be included.

MSS'88 was conducted at the same time as a separate Twin Cities Area Survey (TCAS'88). Because of this, the 600 metropolitan area residents who were interviewed for this statewide survey also completed an additional set of questions that were for TCAS'88. The average survey length for these 600 metropolitan area residents was 18 minutes and included questions on two additional topics, compared to a 12 minute average survey length for residents of Greater Minnesota. Results and a technical report are available separately for TCAS'88.

## INTERVIEWING

MSS'88 was the sixth annual omnibus survey of adults, age 18 and over, who reside in Minnesota. Data collection was conducted from November 1988 through January 1989 by the Minnesota Center for Survey Research (MCSR) at the University of Minnesota.

### Interviewer Recruitment

All of the 33 interviewers who participated in MSS'88 were recruited from a pool of interviewers with prior MCSR experience. All of the interviewers were students at the University of Minnesota.

### Training of Interviewers

New applicants for interviewing positions are hired only after completing a personal interview with the interviewing manager. Training of interviewers was conducted in three phases. In the first phase, new interviewers were required to attend an initial training session during which they were given basic instructions in survey interviewing.

For the second phase of training, all interviewers attended a session covering survey procedures and policies, and review of the actual interview schedule. In addition, they were provided with standard protocols for dealing with anticipated questions about the survey and possible reasons for refusing to participate. Before beginning actual interviewing, all new interviewers were required to conduct: (1) a practice interview with a supervisor or other MCSR staff member, and (2) a pilot interview with a randomly selected survey respondent, which was critiqued immediately.

For the final phase of training, all interviewers attended a supplementary session on specific techniques for converting potential refusals into completed interviews.

In addition, all interviewers were required to sign a statement of professional ethics, which contained explicit guidelines about appropriate interviewing behavior and the confidentiality of all respondent information. A copy of this statement is included in Appendix E.

## Supervision

The interviews were conducted by telephone from a central phone bank at the Minnesota Center for Survey Research. This interviewing was conducted on six days each week, including weekend, evening, and weekday interviewing. Every work shift was managed by a supervisor whose responsibilities included distributing new phone numbers and scheduled appointments, monitoring interviewers at work, and reviewing completed interview schedules for errors and omissions.

In addition to the informal monitoring which was done by supervisors, there was a formal monitoring system in operation. This formal monitoring system utilized an experienced interviewer, who listened to interviews being conducted, completed evaluation forms, and provided immediate feedback on how to improve interviewing quality. During the first three weeks of the project, all of the interviewers and a total of nine percent of the completed interviews were formally monitored to ensure satisfactory interview quality. Interviewers whose performance was not acceptable were re-evaluated on subsequent shifts. If their performance did not improve, their employment was terminated.

## Operations

Numbers to be called were recorded on callback records (see Appendix E for forms), and these were distributed to interviewers at the beginning of each shift. The disposition of each attempt to complete an interview was recorded on these callback records. Each telephone number in the sample continued to be called until there were 10 "no answer" dispositions on 10 different shifts.

On the back of every callback record were two forms for recording relevant information about refusals and appointments. 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 the termination occurred. The appointment form required specifying the date and time of the scheduled appointment, the name of the targeted respondent if selected, and whether the appointment was firm, probable, or "a shot-in-the-dark."

All completed interview schedules were turned in to the supervisor for review immediately after the conclusion of the interview. They were then assigned a unique ID number, the phone number was recorded on the master list, and the interview schedule was filed for coding and data entry. All other callback records were returned to the supervisor at the end of the shift. For each call made, interviewers recorded the date, time, and disposition of the call as well as their unique interviewer number. Copies of the callback records and explanations for all possible disposition codes are included in Appendix E.

## MANAGEMENT OF DATA

### Coding/Editing and Quality Control

Completed instruments were reviewed immediately by shift supervisors for missed questions, errors in branching, and insufficient detail in open-ended responses. Errors detected in this fashion were returned to the interviewer for correction. Following shift supervisor review, survey instruments were sent to coder/editors for a more detailed and rigorous examination. Coder/editors prepared completed instruments for data entry by (1) coding administrative variables on the contact record; (2) making certain that every question on the schedule was answered properly; (3) assuring that branching had been followed; and (4) coding open-ended responses. Again, errors which required further clarification were returned to interviewers to call back the respondent.

As many questions as possible were pre-coded. The actual editing work was done by six individuals who had completed the same training as the interviewers. These editors were given one hour of instruction in procedures, followed by one hour of close supervision in editing actual interviews. All open-ended coding was done by one experienced coder, who used an existing hierarchical code structure to categorize responses.

### Data Entry

Shortly after interviewing began, completed questionnaires were key entered onto a data tape. Data entry and cleaning were continuous during the data collection phase and, as a result of this, a computer file of 1,209 completed interviews was available for preliminary analysis within a few weeks after the last interviews had been collected and coded.

### Data Cleaning

Once a complete file of 1,209 interviews was constructed, it was examined systematically to remove data entry errors. Data cleaning involved use of a computer program to evaluate each case for: (1) variables with values out of range, and (2) inappropriate branching on screening and filter questions. In addition, the file was examined manually to identify cases with paradoxical or inappropriate responses.

## EVALUATION OF THE SAMPLE

### Completion Status

A total of 1,209 telephone interviews were completed for MSS'88 (Table 1). An additional 286 individuals refused to participate, 36 were eliminated because of physical or language problems, and 31 were still active when interviewing was terminated. The remainder of the sample was categorized as follows: 173 of the telephone numbers in the sample were business numbers, 460 were not working numbers, 70 were no answers on each of 10 attempted contacts, and no eligible respondent was available in 26 cases. The overall response rate for MSS'88 was 77%. This compares favorably with other omnibus social surveys which generally have response rates of 70% to 75%.

**TABLE 1**

FINAL STATUS OF INTERVIEWING FOR MSS'88

| Status | Number | (Percent) |
|---|---|---|
| Completion | 1,209 | (53%) |
| Refusal | 286 | (12%) |
| Physical or Language Problem | 36 | (2%) |
| Active | 31 | (1%) |
| Not Home Phone | 173 | (8%) |
| Not Working Number | 460 | (20%) |
| No Answer (on 10 attempts) | 70 | (3%) |
| Eliminated | 26 | (1%) |
| TOTALS | 2,291 | (100%) |

RESPONSE RATE* 77%

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*Response rate was calculated by the following formula:

$$\text{response rate} = \frac{\text{completions}}{\text{potential interviews}}$$

(Potential interviews were defined as all instances where contact was made with the selected household, and were represented by the sum of the first four categories in Table 1.)

Representativeness

The accuracy of MSS'88 can be evaluated by comparing selected characteristics of the survey respondents with 1980 data from the U.S. Census and other more recent estimates. The geographic representation of the sample is compared to actual household distribution in the state of Minnesota (Tables 2 and 3). In addition to these geographic comparisons, reasonably accurate comparisons are possible with gender and age (Tables 4 and 5). The Census comparison for gender has been corrected for age, so that those percentages are based on the population 18 and over.

The percentage of households in each of the state development districts and regions was very close to the household distribution reported by the Census and the State Demographer (Table 2 and Table 3, respectively).

**TABLE 2**

DISTRICT OF RESIDENCE COMPARISON OF MSS'88 AND CENSUS DATA
(Household Units)

| | MSS'88 | 1980 Census | 1987 Estimates* |
|---|---|---|---|
| DISTRICT 1 | 2% | 2% | 2% |
| DISTRICT 2 | 1% | 1% | 2% |
| DISTRICT 3 | 8% | 9% | 7% |
| DISTRICT 4 | 5% | 5% | 5% |
| DISTRICT 5 | 3% | 3% | 3% |
| DISTRICT 6E | 3% | 3% | 3% |
| DISTRICT 6W | 1% | 2% | 1% |
| DISTRICT 7E | 2% | 2% | 2% |
| DISTRICT 7W | 5% | 5% | 5% |
| DISTRICT 8 | 3% | 3% | 3% |
| DISTRICT 9 | 6% | 5% | 5% |
| DISTRICT 10 | 11% | 10% | 10% |
| DISTRICT 11 | 50% | 50% | 52% |
| TOTAL | 100% (1,209) | 100% (1,445,000) | 100% (1,575,968) |

*Source: State Demographer, Minnesota State Planning Agency

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Figure 1, on the following page, shows the Minnesota counties represented by each district.

FIGURE 1

MINNESOTA DEVELOPMENT REGIONS

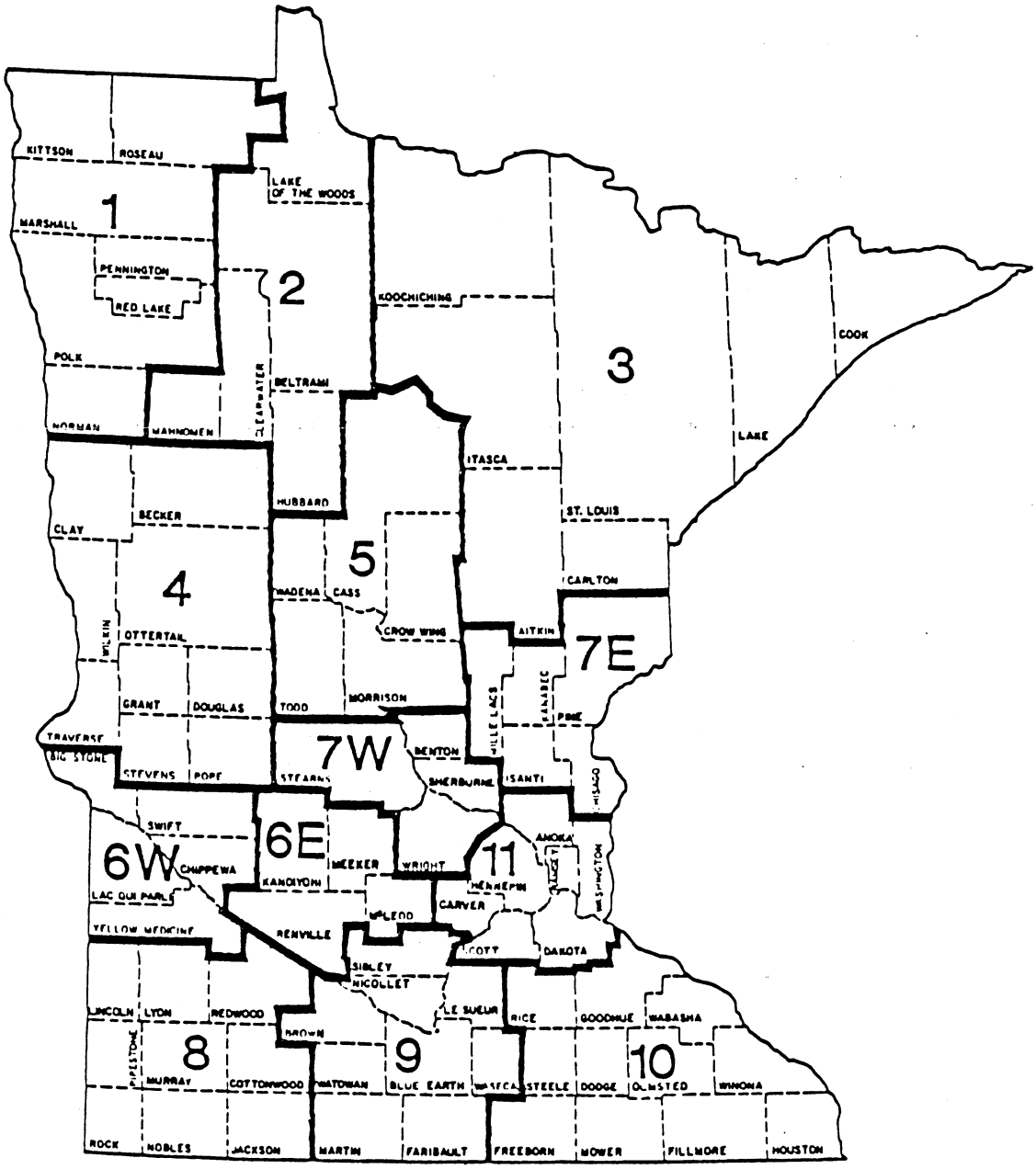

**TABLE 3**

REGION OF RESIDENCE COMPARISON OF MSS'88 AND CENSUS DATA
(Household Units)

| | MSS'88 | 1980 Census | 1987 Estimates* |
|---|---|---|---|
| Northwest | 3% | 3% | 4% |
| Northeast | 8% | 9% | 7% |
| Central | 19% | 20% | 19% |
| Southwest | 9% | 8% | 8% |
| Southeast | 11% | 10% | 10% |
| Metro | 50% | 50% | 52% |
| TOTAL | 100% (1,209) | 100% (1,445,000) | 100% (1,519,000) |

*Source: State Demographer, Minnesota State Planning Agency

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Figure 2, below, shows the Minnesota counties represented by each region.

**FIGURE 2**

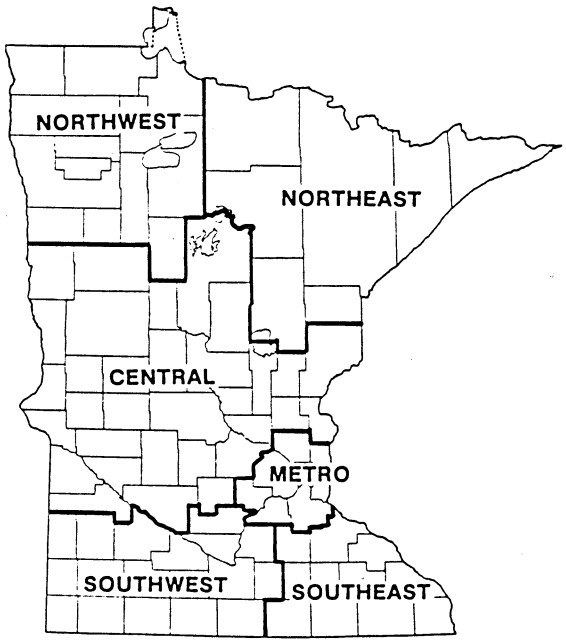

TABLE 4

GENDER COMPARISON OF MSS'88 AND CENSUS DATA

| | MSS'88 | 1980 Census | 1985 Estimates* |
|---|---|---|---|
| Male | 47% | 48% | 48% |
| Female | 53% | 52% | 52% |
| TOTAL | 100% (1,209) | 100% (2,907,813) | 100% (3,082,270) |

*Source: State Demographer, Minnesota State Planning Agency

The distribution of respondents by gender (Table 4) paralleled that reported by the Census and the State Demographer. However, the proportion of MSS'88 respondents in various age categories does differ slightly from the Census percentages (Table 5). These deviations in age categories decrease in magnitude when comparing MSS'88 to the 1985 estimates.

Using these tables to evaluate the degree to which the MSS'88 sample matches the Census profile of individuals living in Minnesota shows that it is generally an adequate representation of Minnesota residents.

TABLE 5

AGE COMPARISON OF MSS'88 AND CENSUS DATA

| | MSS'88 | 1980 Census | 1985 Estimates* |
|---|---|---|---|
| 18-24 | 13% | 19% | 17% |
| 25-34 | 26% | 23% | 24% |
| 35-44 | 20% | 16% | 18% |
| 45-54 | 14% | 13% | 12% |
| 55-64 | 12% | 12% | 12% |
| 65 + | 14% | 17% | 17% |
| TOTALS | 99% (1,197) | 100% (2,907,813) | 100% (3,082,270) |

*Source: State Demographer, Minnesota State Planning Agency

Generalizability of Results

Since the individuals who participated in MSS'88 were randomly selected from the population of Minnesota, the survey results can be generalized to the entire state. These generalizations can be made either to households, using the unweighted data file, or to individuals, using the weighted data file as the source of the percentages.

The questionnaire and results presented in Chapter 4 of this report are based on the weighted computer data file and all percentages presented there generalize to individuals. Each percentage point in MSS'88 represents approximately 30,823 individuals, since there are an estimated 3,082,270 adults in Minnesota.

## SAMPLING ERROR

The margin of error for a simple random sample of the size of the Minnesota State Survey is about plus or minus three percentage points, when the distribution of question responses is in the vicinity of 50 percent. This sampling error presumes the conventional 95% degree of desired confidence, which is equivalent to a "significance level" of .05. This means that in a sample of 1,200 households there is a 95% chance or better that if all households in Minnesota were surveyed, the results would not differ from the MSS'88 findings by more than three percentage points.

The distribution of sample responses is represented by the proportion of people responding to any question with a particular answer. For a sample size of 1,200 and a 50/50 distribution of question responses, the sampling error is 2.9 percentage points. A more extreme distribution of question responses has a smaller error range. Suppose that 80% of the respondents answer "Yes" and 20% say "No." The sampling error in this case would be 2.3 percentage points (see Table 6, below). That is, each percentage has a range of plus or minus 2.3 percentage points.

TABLE 6

SAMPLING ERROR (IN PERCENTAGE POINTS) BY
DISTRIBUTION OF QUESTION RESPONSES AND SAMPLE SIZE
Size of Sample (N)

| | | 1200 | 1000 | 800 | 600 | 400 | 200 |
|---|---|---|---|---|---|---|---|
| Distribution of Question Responses (percent) | 50/50 | 2.9 | 3.1 | 3.5 | 4.0 | 4.9 | 6.9 |
| | 60/40 | 2.8 | 3.0 | 3.4 | 3.9 | 4.8 | 6.8 |
| | 70/30 | 2.6 | 2.8 | 3.2 | 3.7 | 4.5 | 6.4 |
| | 80/20 | 2.3 | 2.5 | 2.8 | 3.2 | 3.9 | 5.5 |
| | 90/10 | 1.7 | 1.9 | 2.1 | 2.4 | 2.9 | 4.2 |

The importance of sample size in estimating sampling error also needs to be mentioned since many of the organizations using the MSS'88 data will be interested in subgroups, and not always the total sample of over 1,200 completed interviews. Essentially, as the size of the sample decreases, there is a corresponding increase in the estimated sampling error. For example, for a subset of 200 persons the estimated error may be as high as plus or minus seven percentage points.

As in all public opinion surveys, the results are also subject to other types of error associated with telephone data collection procedures. One general type of error is sampling error, and includes the systematic exclusion of households without telephones. The other general type of error is non-sampling error, and includes such things as question wording and question order.

# CHAPTER 2

## DEMOGRAPHIC PROFILE OF THE SAMPLE

The purpose of this chapter is to briefly describe the MSS'88 sample according to its demographic characteristics. In addition to variables which are reported here as raw survey results, certain variables have been constructed for the convenience of the user, such as household income and household work status. (It should be noted that while the category labels for household income are not mutually exclusive, actual practice is to record incomes in the higher category. For example, a respondent who reported a household income of exactly $10,000 would be recorded in the category "$10,000 to $15,000".) The definitions for the construction of these variables can be found in Appendix C. The first seven variables describe characteristics of the respondent, while the remaining variables are characteristics of the household.

**AGEMD** **AGE OF RESPONDENT, GROUPED**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| 18 - 24 | 1.00 | 154 | 12.7 | 12.9 | 12.9 |
| 25 - 34 | 2.00 | 308 | 25.5 | 25.7 | 38.6 |
| 35 - 44 | 3.00 | 246 | 20.3 | 20.5 | 59.1 |
| 45 - 54 | 4.00 | 172 | 14.2 | 14.4 | 73.5 |
| 55 - 64 | 5.00 | 145 | 12.0 | 12.1 | 85.6 |
| 65 AND OLDER | 6.00 | 172 | 14.2 | 14.4 | 100.0 |
| | 99.00 | 12 | 1.0 | MISSING | |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1197 Missing Cases 12

**RACE** **RACE OF RESPONDENT**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| WHITE | 1.00 | 1166 | 96.4 | 97.1 | 97.1 |
| BLACK | 2.00 | 12 | 1.0 | 1.0 | 98.1 |
| INDIAN | 3.00 | 1 | .1 | .1 | 98.2 |
| HISPANIC | 4.00 | 6 | .5 | .5 | 98.7 |
| OTHER | 5.00 | 16 | 1.3 | 1.3 | 100.0 |
| | 9.00 | 8 | .7 | MISSING | |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1201 Missing Cases 8

**GENDER** **GENDER OF RESPONDENT**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| MALE | 1.00 | 566 | 46.8 | 46.8 | 46.8 |
| FEMALE | 2.00 | 643 | 53.2 | 53.2 | 100.0 |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1209 Missing Cases 0

**EDUC EDUCATION OF RESPONDENT**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| LESS THAN HIGH SCHL | 1.00 | 43 | 3.5 | 3.6 | 3.6 |
| SOME HIGH SCHOOL | 2.00 | 74 | 6.1 | 6.1 | 9.7 |
| HIGH SCHOOL GRADUATE | 3.00 | 358 | 29.6 | 29.7 | 39.4 |
| SOME TECHNICAL SCHL | 4.00 | 57 | 4.7 | 4.7 | 44.1 |
| TECHNICAL SCHL GRAD | 5.00 | 108 | 8.9 | 8.9 | 53.1 |
| SOME COLLEGE | 6.00 | 229 | 19.0 | 19.0 | 72.1 |
| COLLEGE GRADUATE | 7.00 | 250 | 20.7 | 20.8 | 92.9 |
| GRAD OR PROF. DEGREE | 8.00 | 83 | 6.9 | 6.9 | 99.8 |
| OTHER | 9.00 | 3 | .2 | .2 | 100.0 |
| | .00 | 4 | .3 | MISSING | |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1205 Missing Cases 4

**WKSTATUS WORK STATUS OF RESPONDENT**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| WORKED FULL TIME | 1.00 | 661 | 54.7 | 54.9 | 54.9 |
| WORKED PART TIME | 2.00 | 191 | 15.8 | 15.9 | 70.8 |
| UNEMPLOYED | 3.00 | 159 | 13.1 | 13.2 | 84.0 |
| STUDENT | 4.00 | 27 | 2.3 | 2.3 | 86.3 |
| RETIRED | 5.00 | 107 | 8.9 | 8.9 | 95.2 |
| HOMEMAKER | 6.00 | 58 | 4.8 | 4.8 | 100.0 |
| | 9.00 | 6 | .5 | MISSING | |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1203 Missing Cases 6

**OCCGRP OCCUPATIONAL WORK GROUP OF RESPONDENT**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| MANAGE,PROF | 1.00 | 184 | 15.3 | 21.8 | 21.8 |
| TECH,SALES,ADMINISTR | 2.00 | 299 | 24.7 | 35.4 | 57.2 |
| SERVICE | 3.00 | 110 | 9.1 | 13.0 | 70.2 |
| FARM,FISH,FOREST | 4.00 | 43 | 3.6 | 5.1 | 75.4 |
| CRAFT,REPAIR | 5.00 | 108 | 9.0 | 12.8 | 88.2 |
| OPERATIVES,LABORERS | 6.00 | 100 | 8.3 | 11.8 | 100.0 |
| | 9.00 | 364 | 30.1 | MISSING | |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 845 Missing Cases 364

**MARSTAT MARITAL STATUS OF RESPONDENT**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| MARRIED | 1.00 | 806 | 66.7 | 66.9 | 66.9 |
| SINGLE | 2.00 | 266 | 22.0 | 22.1 | 88.9 |
| DIVORCED | 3.00 | 52 | 4.3 | 4.3 | 93.2 |
| SEPARATED | 4.00 | 14 | 1.2 | 1.2 | 94.4 |
| WIDOWED | 5.00 | 68 | 5.6 | 5.6 | 100.0 |
| | .00 | 4 | .3 | MISSING | |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1205 Missing Cases 4

**HHCOMP HOUSEHOLD COMPOSITION**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| MARRIED, KIDS | 1.00 | 414 | 34.3 | 34.4 | 34.4 |
| MARRIED, NO KIDS | 2.00 | 390 | 32.3 | 32.4 | 66.8 |
| SINGLE PARENT | 3.00 | 94 | 7.8 | 7.8 | 74.6 |
| SINGLE, NO KIDS | 4.00 | 306 | 25.3 | 25.4 | 100.0 |
| | 9.00 | 5 | .4 | MISSING | |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1204 Missing Cases 5

**HHSIZE HOUSEHOLD SIZE**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| ONE PERSON | 1.00 | 117 | 9.7 | 9.7 | 9.7 |
| TWO PEOPLE | 2.00 | 419 | 34.7 | 34.8 | 44.5 |
| 3 OR 4 PEOPLE | 3.00 | 501 | 41.4 | 41.5 | 86.1 |
| 5 OR MORE PEOPLE | 4.00 | 168 | 13.9 | 13.9 | 100.0 |
| | 9.00 | 3 | .3 | MISSING | |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1206 Missing Cases 3

**NADULTS NUMBER OF ADULTS IN HOUSEHOLD**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1.00 | 145 | 12.0 | 12.0 | 12.0 |
| | 2.00 | 788 | 65.2 | 65.2 | 77.2 |
| | 3.00 | 186 | 15.3 | 15.3 | 92.6 |
| | 4.00 | 76 | 6.3 | 6.3 | 98.9 |
| | 5.00 | 10 | .9 | .9 | 99.7 |
| | 6.00 | 3 | .3 | .3 | 100.0 |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1209 Missing Cases 0

**NKIDS NUMBER OF CHILDREN IN HOUSEHOLD**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | .00 | 697 | 57.7 | 57.8 | 57.8 |
| | 1.00 | 210 | 17.3 | 17.4 | 75.2 |
| | 2.00 | 178 | 14.7 | 14.8 | 90.0 |
| | 3.00 | 92 | 7.6 | 7.6 | 97.6 |
| | 4.00 | 26 | 2.1 | 2.1 | 99.7 |
| | 5.00 | 1 | .1 | .1 | 99.8 |
| | 6.00 | 2 | .2 | .2 | 100.0 |
| | 99.00 | 3 | .2 | MISSING | |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1206 Missing Cases 3

**INCOME HOUSEHOLD INCOME**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| UNDER 5,000 | 5.00 | 25 | 2.0 | 2.4 | 2.4 |
| 5 TO 10,000 | 10.00 | 53 | 4.4 | 5.2 | 7.7 |
| 10 TO 15,000 | 15.00 | 100 | 8.3 | 9.9 | 17.6 |
| 15 TO 20,000 | 20.00 | 98 | 8.1 | 9.7 | 27.3 |
| 20 TO 25,000 | 25.00 | 76 | 6.3 | 7.5 | 34.8 |
| 25 TO 30,000 | 30.00 | 100 | 8.3 | 9.9 | 44.6 |
| 30 TO 35,000 | 35.00 | 125 | 10.3 | 12.3 | 56.9 |
| 35 TO 40,000 | 40.00 | 107 | 8.9 | 10.6 | 67.5 |
| 40 TO 50,000 | 50.00 | 138 | 11.4 | 13.6 | 81.1 |
| 50 TO 60,000 | 60.00 | 71 | 5.9 | 7.0 | 88.2 |
| MORE THAN 60,000 | 61.00 | 120 | 9.9 | 11.8 | 100.0 |
| | 99.00 | 195 | 16.2 | MISSING | |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1014 Missing Cases 195

**HHWKSTAT HOUSEHOLD WORK STATUS**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| WORKED FULL TIME | 1.00 | 807 | 66.7 | 75.5 | 75.5 |
| WORKED PART TIME | 2.00 | 58 | 4.8 | 5.4 | 80.9 |
| UNEMPLOYED | 3.00 | 110 | 9.1 | 10.3 | 91.2 |
| STUDENT | 4.00 | 8 | .6 | .7 | 91.9 |
| RETIRED | 5.00 | 84 | 6.9 | 7.9 | 99.8 |
| HOMEMAKER | 6.00 | 2 | .2 | .2 | 100.0 |
| | 9.00 | 141 | 11.7 | MISSING | |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1068 Missing Cases 141

**HHOCCGRP HOUSEHOLD OCCUPATIONAL WORK GROUP**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| MANAGE,PROF | 1.00 | 214 | 17.7 | 25.1 | 25.1 |
| TECH,SALES,ADMINISTR | 2.00 | 239 | 19.8 | 28.1 | 53.2 |
| SERVICE | 3.00 | 57 | 4.7 | 6.7 | 60.0 |
| FARM,FISH,FOREST | 4.00 | 55 | 4.6 | 6.5 | 66.4 |
| CRAFT,REPAIR | 5.00 | 172 | 14.2 | 20.2 | 86.6 |
| OPERATIVES,LABORERS | 6.00 | 114 | 9.4 | 13.4 | 100.0 |
| | 9.00 | 358 | 29.6 | MISSING | |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 851 Missing Cases 358

**DDREGION DEVELOPMENT DISTRICT REGION**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| DISTRICT 1 | 1.00 | 21 | 1.7 | 1.7 | 1.7 |
| DISTRICT 2 | 2.00 | 18 | 1.4 | 1.4 | 3.2 |
| DISTRICT 3 | 3.00 | 94 | 7.8 | 7.8 | 11.0 |
| DISTRICT 4 | 4.00 | 61 | 5.0 | 5.0 | 16.0 |
| DISTRICT 5 | 5.00 | 30 | 2.5 | 2.5 | 18.5 |
| DISTRICT 6E | 6.00 | 37 | 3.1 | 3.1 | 21.5 |
| DISTRICT 6W | 7.00 | 15 | 1.3 | 1.3 | 22.8 |
| DISTRICT 7E | 8.00 | 20 | 1.7 | 1.7 | 24.5 |
| DISTRICT 7W | 9.00 | 72 | 5.9 | 5.9 | 30.4 |
| DISTRICT 8 | 10.00 | 37 | 3.1 | 3.1 | 33.5 |
| DISTRICT 9 | 11.00 | 64 | 5.3 | 5.3 | 38.8 |
| DISTRICT 10 | 12.00 | 132 | 10.9 | 10.9 | 49.7 |
| DISTRICT 11 | 13.00 | 608 | 50.3 | 50.3 | 100.0 |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1209 Missing Cases 0

**GEOREGN GEOGRAPHIC REGION OF MINNESOTA**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| NORTHWEST | 1.00 | 39 | 3.2 | 3.2 | 3.2 |
| NORTHEAST | 2.00 | 94 | 7.8 | 7.8 | 11.0 |
| CENTRAL | 3.00 | 235 | 19.4 | 19.4 | 30.4 |
| SOUTHWEST | 4.00 | 102 | 8.4 | 8.4 | 38.8 |
| SOUTHEAST | 5.00 | 132 | 10.9 | 10.9 | 49.7 |
| METRO | 6.00 | 608 | 50.3 | 50.3 | 100.0 |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1209 Missing Cases 0

**METRO GREATER MINNESOTA OR TWIN CITIES AREA**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| GREATER MINNESOTA | 1.00 | 601 | 49.7 | 49.7 | 49.7 |
| TWIN CITIES AREA | 2.00 | 608 | 50.3 | 50.3 | 100.0 |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1209 Missing Cases 0

**WGHT CASE-WEIGHTING FACTOR**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | .52 | 145 | 12.0 | 12.0 | 12.0 |
| | 1.03 | 788 | 65.2 | 65.2 | 77.2 |
| | 1.55 | 186 | 15.3 | 15.3 | 92.6 |
| | 2.06 | 76 | 6.3 | 6.3 | 98.9 |
| | 2.58 | 10 | .9 | .9 | 99.7 |
| | 3.09 | 3 | .3 | .3 | 100.0 |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1209 Missing Cases 0

# CHAPTER 3

## INSTRUCTIONS FOR USING THE QUESTIONNAIRE AND RESULTS

### OBJECTIVES

The questionnaire and results (Chapter 4 of this report) for a survey data file serve three basic functions: (1) a record of the exact wording and order of the survey questions; (2) a report of the responses to those questions; and (3) documentation of the variable names, which are necessary to access the computer data file. The questionnaire and results section of this report is a copy of the interview schedule with the frequency distributions and percentages added to those questions which were pre-coded or closed-ended. Appendix A shows the responses to open-ended questions, while Appendix B shows the responses to continuous variables, such as year of birth. Appendix C shows the definitions for constructed variables which make many of these responses more useful, e.g. age group. The distributions for these constructed variables are presented in Chapter 2 of this report: Demographic Profile of the Sample. Appendix D contains the frequency counts for administrative variables, such as interview length. Finally, Appendix E contains copies of the administrative forms used for this survey.

### INTERPRETING THE QUESTIONNAIRE RESULTS

Chapter 4 of this report contains a replica of the 1988 Minnesota State Survey questionnaire. Two pieces of information have been added to this replica: question labels, and the response frequencies and percentages for each question. The questionnaire and response frequencies will be of major interest to most readers. The question labels, or variable labels, are useful documentation for those who wish to use a computer and the SPSS software package for more detailed analysis.

The questionnaire is an exact replica. This is important in order to know how questions were phrased, in what order they were asked, and when it was proper to skip certain questions. Interviewers were instructed to read these questions verbatim and to avoid giving their interpretations or opinions in any way. Two types of markings which appear on the survey form were not indicated to respondents: instructions to the interviewers which are shown in parentheses, and section and survey labels which are shown in bold type.

To the right of each question is printed a list of permissible answers and a code number for each answer. The interviewer was instructed to circle the code number of the answer given by the respondent. A new questionnaire was used for each interview and was marked to show the answers of each respondent. The fourth question in the demographics section of the survey provides a good example of this coding scheme. If a respondent reported being a homeowner, the "1" would be circled on that questionnaire.

Open-ended and continuous questions were coded in different ways and the responses to those questions are shown in Appendices A and B. The responses to open-ended questions were written verbatim on the questionnaire and later classified into categories by a specially trained coder who wrote category numbers into the answer spaces for those questions. These responses are summarized in Appendix A. Questions with continuous distributions, where many discrete answers are possible, are shown with open spaces in the answer column of the question. Interviewers simply wrote in numbers like zip code and year of birth. The responses to those questions are presented in Appendix B.

## Missing Value Nomenclature

For all types of questions, two to three types of "missing" response categories exist: don't know, refused to answer, and not applicable. The first two categories are self-explanatory and are always options for respondents. Not applicable is an option where answering a given question is conditional, or in other words, where a given question was asked only of certain respondents. Standard codes are associated throughout with each missing value category: 8, 9, and 0. Where the answer is multiple digit, so is the standard code.

| | Number of Digits in Code | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | 4 |
| DK (Don't Know) | 8 | 88 | 888 | 8888 |
| RA (Refused) | 9 | 99 | 999 | 9999 |
| NA (Not Applicable) | 0 | 00 | 000 | 0000 |

## Response Frequencies

The responses summed for all 1,209 respondents are shown in the last two columns to the right of each question. The first of these columns shows the number (frequency) of people in each response category: these should sum to 1,209, with some rounding error. The second number is the percentage response rate, adjusted to exclude the missing response categories.

For most analytical purposes, people will want these adjusted percentages. They were computed and presented here to meet that need. These adjusted percentages are less appropriate when used as a public opinion poll, for showing public support for policies. For example, if 15 percent of the respondents did not answer a question, but 55 percent of those who did answer supported a particular position, it is inappropriate to argue that the issue has majority support. In this example, only 47 percent of all people would actually be supportive. For policy choices, it may be more appropriate to show the percentage distribution of all 1,209 respondents.

Analysts should beware of using these adjusted percentages. Where the number of people not responding is large, the adjusted percentages will misrepresent public sentiment. Contact MCSR if you have any doubt which percentages to use.

One final comment: the frequencies shown here are "weighted" by the number of adults in the household as explained below. This technique introduces some rounding errors, so that the sum of the frequencies for a given question may not equal 1,209 exactly.

## OPEN-ENDED QUESTIONS

The results from the open-ended questions on the survey, such as the questions on the most important problems facing people in Minnesota today, are presented in Appendix A.

## VERBATIM RESPONSES

MCSR maintains records of verbatim responses. For open-ended questions, this record is in the questionnaires themselves and is relatively inaccessible. However, a separate listing of responses is created and maintained for any question answer which falls outside a permissible list and is coded as "other". For example, a Socialist would fall outside the normal political list of Republican, Democrat, or Independent and would be coded as "other". Such a list for any question is available from the MCSR office upon request.

## CONTINUOUS VARIABLES

The results from questions which have continuous responses are presented in Appendix B.

## CONSTRUCTED VARIABLES

Appendix C contains the operational definitions of the constructed variables for the convenience of the data file user. The distribution of these variables is presented in Chapter 2 of this report: Demographic Profile of the Sample. These constructed variables are contained in the SPSS data file along with all of the original variables.

## ADMINISTRATIVE VARIABLES

The results from survey administration items, such as date of completion and interviewer ID, are presented in Appendix D.

## WEIGHTING OF DATA

The responses presented in the questionnaire and results section of this report and in the appendices have been weighted based upon the total number of adults living in the household. Because telephone surveys tend to oversample people who live in single-individual households, these individuals were downweighted by about 50% and all others upweighted accordingly to more accurately represent the distribution of adult members in households in the population of the state. Weighted response distributions will differ slightly from unweighted distributions. The construction and activation of the weighting factor is described in Appendix C, under the variable "WGHT."

MSS-88.REP

MSS-88.SCB/C:\MSS-88 01/31/89

## A. QUALITY OF LIFE

The first questions are about quality of life.

1 - 3. NO QUESTIONS ON STATEWIDE SURVEY

A4. In your opinion, what do you think is the single most important problem facing people in Minnesota today?

(IF "TAXES", PROBE: Is that income taxes, property taxes, or sales tax?)

**See Appendix A, Page A-2 for a more complete list of problems.**

| | | Freq | % |
|---|---|---|---|
| Taxes | .01 | 213 | 20 |
| Education | .02 | 27 | 2 |
| Environment | .03 | 95 | 9 |
| Economy | .04 | 463 | 43 |
| Health care | .05 | 28 | 3 |
| Transportation | .06 | 10 | 1 |
| Housing | .07 | 14 | 1 |
| Food | .08 | 5 | 0 |
| Government | .09 | 33 | 3 |
| War | .10 | 3 | 0 |
| Crime | .11 | 28 | 3 |
| Energy | .12 | 2 | 0 |
| Social issues | .13 | 105 | 10 |
| Family | .14 | 13 | 1 |
| Other | .15 | 33 | 3 |
| DK | .88 | 135 | |
| RA | .99 | 2 | |

## B. ENVIRONMENT

The next questions are about environmental issues.

B1. There are four major ways that a community can deal with its trash and garbage; these are landfilling, recycling, composting and incineration. Which would you like to see your community adopt as its first priority?

| | | | |
|---|---|---|---|
| Composting | 1 | 58 | 5 |
| Incineration | 2 | 184 | 16 |
| Landfilling | 3 | 51 | 4 |
| Recycling | 4 | 879 | 75 |
| DK | 8 | 37 | |
| RA | 9 | 1 | |

B2. Would you favor or oppose the required recycling of newspapers, cardboard, bottles, and cans?

| | | | |
|---|---|---|---|
| Favor | 1 | 1085 | 91 |
| Oppose | 2 | 111 | 9 |
| DK | 8 | 13 | |
| RA | 9 | 0 | |

## C. TRANSPORTATION

The next few questions are about transportation.

C1. I'd like to know how satisfied you are with each of the following transportation issues ... very satisfied, somewhat satisfied, not very satisfied, or not at all satisfied. (READ LIST)

| | | VERY SAT 1 | S/W SAT 2 | NOT VERY SAT 3 | NOT AT ALL SAT 4 | DK 8 | RA 9 |
|---|---|---|---|---|---|---|---|
| C1a. | The condition of Minnesota's roads | 256 (22) | 686 (58) | 191 (16) | 59 (5) | 17 | 1 |
| C1b. | The amount of work that is being done to improve Minnesota's highway system . . . . . | 280 (24) | 658 (56) | 190 (16) | 52 (4) | 28 | 1 |
| C1c. | The safety of Minnesota's roads. | 381 (32) | 659 (55) | 120 (10) | 30 (3) | 20 | 0 |
| C1d. | The time it takes you to travel to the places you want to go . . | 533 (45) | 531 (45) | 95 (8) | 25 (2) | 24 | 1 |
| C1e. | Driving through highway construction work areas. . . . . | 187 (16) | 500 (43) | 319 (27) | 160 (14) | 41 | 2 |

ONLY RESPONDENTS OUTSIDE THE METRO AREA WERE ASKED QUESTIONS 1 AND 2 IN THIS SECTION.

## D. ATTRACTIONS

The Twin Cities has a number of different attractions such as arts, sports, theater, and entertainment.

| | | | Freq | % |
|---|---|---|---|---|
| D1. | Are there any particular attractions that bring you to the Twin Cities? | Yes . . . . . 1 | 411 | 69 |
| | | No . . . . . 2 | 188 | 31 |
| | | (IF NO, GO TO 2) | | |
| | | DK . . . 8 | 2 | |
| | | RA . . . 9 | 0 | |
| | | NA . . . 0 | 608 | |

D1a. (IF YES) What attractions bring you to the Twin Cities? See Appendix A, Page A-4

D2. How do you find out or get information about Twin City attractions? (DO NOT READ LIST; PROBE ONCE WITH "WHAT ELSE?")

| | | YES 1 | NO 2 | DK 8 | RA 9 | NA 0 |
|---|---|---|---|---|---|---|
| D2a. | TV ads . . . . . | 270 (45) | 327 (55) | 4 | 1 | 608 |
| D2b. | Sunday Star Tribune. . . | 204 (34) | 392 (66) | 5 | 1 | 608 |
| D2c. | Weekly Star Tribune. . . | 127 (21) | 468 (79) | 5 | 1 | 608 |
| D2d. | Billboard. . . . . | 1 (0) | 596 (100) | 4 | 1 | 608 |
| D2e. | Local Chamber. . . . . | 5 (1) | 592 (99) | 4 | 1 | 608 |
| D2f. | Radio ads. . . . . | 144 (24) | 452 (76) | 4 | 1 | 608 |
| D2g. | Sunday St. Paul Dispatch | 23 (4) | 572 (96) | 5 | 1 | 608 |
| D2h. | Weekly St. Paul Dispatch | 17 (3) | 578 (97) | 5 | 1 | 608 |
| D2i. | Direct mail. . . . . | 18 (3) | 578 (97) | 4 | 1 | 608 |
| D2j. | Recommended by friend. . | 121 (20) | 476 (80) | 4 | 1 | 608 |
| D2k. | Other (SPECIFY). . . . . | 296 (50) | 300 (50) | 4 | 1 | 608 |

| | | | Freq | % |
|---|---|---|---|---|
| D3. Have you yourself ever been to the Science Museum of Minnesota in St. Paul? | Yes | 1 | 695 | 58 |
| | No | 2 | 509 | 42 |
| | DK | 8 | 4 | |
| | RA | 9 | 1 | |

## G. AGING

| | | | | |
|---|---|---|---|---|
| G1. As far as people in charge of running nursing homes are concerned, would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all in them? | Great deal | 1 | 187 | 17 |
| | Only some | 2 | 672 | 60 |
| | Hardly any | 3 | 266 | 24 |
| | DK | 8 | 83 | |
| | RA | 9 | 1 | |
| G2. Have you or a close friend or family member ever had any direct experience with a nursing home? | Yes | 1 | 875 | 72 |
| | No (IF NO, GO TO 3) | 2 | 334 | 28 |
| | DK | 8 | 0 | |
| | RA | 9 | 0 | |
| G2a. (IF YES) Was it you or someone else? | Respondent | 1 | 133 | 15 |
| | Someone else (IF SOMEONE ELSE, GO TO 2a-2) | 2 | 614 | 70 |
| | Both | 3 | 127 | 15 |
| | DK | 8 | 0 | |
| | RA | 9 | 0 | |
| | NA | 0 | 334 | |
| G2a-1 (IF RESP OR BOTH) Were you a resident, a volunteer or an employee at a nursing home? | Resident | 1 | 5 | 2 |
| | Volunteer | 2 | 43 | 17 |
| | Employee | 3 | 94 | 36 |
| | Visitor | 4 | 96 | 37 |
| | Other (SPECIFY) _____ | 5 | 20 | 8 |
| | DK | 8 | 0 | |
| | RA | 9 | 2 | |
| | NA | 0 | 949 | |
| G2a-2 (IF SOMEONE ELSE OR BOTH) Was this person a resident, a volunteer or an employee at a nursing home? | Resident | 1 | 576 | 78 |
| | Volunteer | 2 | 15 | 2 |
| | Employee | 3 | 83 | 11 |
| | Visitor | 4 | 6 | 1 |
| | Other (SPECIFY) _____ | 5 | 59 | 8 |
| | DK | 8 | 0 | |
| | RA | 9 | 2 | |
| | NA | 0 | 468 | |

## H. EDUCATION

The next questions are about education.

H1. Based on what you know about Minnesota's public education after high school, such as colleges and technical schools, what rating would you give to (READ LIST) ... excellent, good, fair, poor, or very poor?

| | | EXC 1 | GOOD 2 | FAIR 3 | POOR 4 | VERY POOR 5 | DK 8 | RA 9 |
|---|---|---|---|---|---|---|---|---|
| [1] H1a. | The overall quality of education provided | 371 (32) | 643 (55) | 133 (11) | 22 (2) | 6 (0) | 32 | 2 |
| [2] H1b. | The overall value for taxpayer's dollars | 152 (13) | 555 (48) | 289 (25) | 130 (11) | 19 (2) | 63 | 2 |
| [3] H1c. | The variety of programs and courses offered | 410 (36) | 578 (50) | 135 (12) | 24 (2) | 2 (0) | 57 | 3 |
| [4] H1d. | How affordable it is | 114 (10) | 467 (42) | 352 (32) | 155 (14) | 31 (3) | 86 | 3 |
| [5] H1e. | The availability of education after high school to people in all parts of the state | 320 (28) | 559 (49) | 189 (17) | 63 (6) | 8 (1) | 69 | 2 |
| [6] H1f. | The availability of programs and courses in the evenings and on weekends | 303 (27) | 596 (53) | 182 (16) | 40 (4) | 7 (1) | 80 | 2 |

See Appendix D, Page D-6 for Random Start distribution

H2. Next I'm going to read some statements about education in Minnesota at both public and private colleges and technical schools. For each statement, please tell me whether you strongly agree, agree, disagree, or strongly disagree.

| | | STRONG AGREE 1 | AGREE 2 | DISAG 3 | STRONG DISAG 4 | DK 8 | RA 9 |
|---|---|---|---|---|---|---|---|
| H2a. | Providing high quality education after high school is important to Minnesota's economic future | 687 (57) | 500 (42) | 13 (1) | 1 (0) | 7 | 2 |
| H2b. | These days, you really need to go to college to get a good job | 445 (37) | 516 (43) | 215 (18) | 19 (2) | 10 | 3 |
| H2c. | Minnesota should spend more money to improve the quality of education after high school in the state | 304 (26) | 632 (53) | 231 (20) | 15 (1) | 23 | 3 |

## I. DEMOGRAPHICS

Before ending this interview I have a few remaining background questions.

| | | | Freq | % |
|---|---|---|---|---|
| I1. What county do you live in? | Anoka. . . . . .02 | | 67 | 6 |
| | Dakota . . . . . .19 | | 61 | 5 |
| | Hennepin . . . . .27 | | 277 | 23 |
| | Olmsted. . . . . .55 | | 40 | 3 |
| **See Appendix B, Page B-2 for a complete county list.** | Ramsey . . . . . .62 | | 130 | 11 |
| | St. Louis. . . . .69 | | 61 | 5 |
| | Stearns. . . . . .73 | | 31 | 3 |
| | Washington . . . .82 | | 48 | 4 |
| | DK . . .88 | | 0 | |
| | RA . . .99 | | 0 | |
| I2. What is the name of the city or township you live in? | DO NOT CODE | | | |
| _____ | | | | |
| I3. What is your zip code? | **See Appendix B, Page B-4** | | | |
| I4. Do you own or rent your residence? | Own. . . . . 1 | | 936 | 78 |
| | Rent . . . . . 2 | | 260 | 22 |
| _____ (SPECIFY OTHER HERE) | Other (SPECIFY). . 3 | | 10 | 1 |
| | DK . . . 8 | | 2 | |
| | RA . . . 9 | | 1 | |
| I5. What kind of housing unit do you live in? (DO NOT READ LIST) | Single family detached . . . 1 | | 957 | 79 |
| | Townhouse. . . . . 2 | | 29 | 2 |
| | Duplex or 2-unit building. . 3 | | 54 | 4 |
| | Apartment building . . . . . 4 | | 108 | 9 |
| _____ (SPECIFY OTHER HERE) | Mobile home. . . . . 5 | | 35 | 3 |
| | Something else (SPECIFY) . . 6 | | 26 | 2 |
| **(CODE 4-PLEX AND TRI-PLEX AS APARTMENT)** | DK . . . 8 | | 0 | |
| | RA . . . 9 | | 1 | |
| 6 - 8. NO QUESTIONS ON STATEWIDE VERSION | | | | |
| I9. What is the highest level of school you have completed? (DO NOT READ LIST) | Less than high school .01 | | 43 | 4 |
| | Some high school. . . .02 | | 74 | 6 |
| | High school graduate. .03 | | 358 | 30 |
| | Some technical school .04 | | 57 | 5 |
| _____ (SPECIFY OTHER HERE) | Technical school grad .05 | | 108 | 9 |
| | Some college. . . . . .06 | | 229 | 19 |
| | College graduate. . . .07 | | 250 | 21 |
| | Post graduate or professional degree. .08 | | 83 | 7 |
| | Other (SPECIFY) . . . .09 | | 3 | 0 |
| | DK . . .88 | | 2 | |
| | RA . . .99 | | 2 | |
| I10. Are you married, single, divorced, separated, or widowed? | Married. . . . . 1 | | 806 | 67 |
| | Single . . . . . 2 | | 266 | 22 |
| | Divorced . . . . . 3 | | 52 | 4 |
| | Separated. . . . . 4 | | 14 | 1 |
| | Widowed. . . . . 5 | | 68 | 6 |
| | DK . . . 8 | | 0 | |
| | RA . . . 9 | | 4 | |

I11. What year were you born? See Appendix B, Page B-10

(Note AGE, page B-12 computed from I11.)

I12. What race do you consider yourself? (DO NOT READ LIST, BUT CODE THE FOLLOWING)

| | | Freq | % |
|---|---|---|---|
| White/Caucasian | 1 | 1166 | 97 |
| Mexican/Hispanic | 2 | 6 | 0 |
| Black/Negro | 3 | 12 | 1 |
| American Indian/Native American | 4 | 1 | 0 |
| Oriental/Asian | 5 | 6 | 0 |
| Mixed, no dominant racial identification | 6 | 2 | 0 |
| Other (SPECIFY) | 7 | 8 | 1 |
| DK | 8 | 2 | |
| RA | 9 | 7 | |

_____ (SPECIFY OTHER HERE)

I13. Generally speaking, do you consider yourself a Republican, Democrat, or Independent?

| | | | |
|---|---|---|---|
| Republican | 1 | 372 | 32 |
| Democrat | 2 | 380 | 33 |
| Independent | 3 | 382 | 33 |
| Other (SPECIFY) | 4 | 24 | 2 |
| DK | 8 | 12 | |
| RA | 9 | 39 | |

_____ (SPECIFY OTHER HERE)

I14. Did you have a paying job last week?

| | | | |
|---|---|---|---|
| Yes | 1 | 853 | 71 |
| No (IF NO, GO TO 14c) | 2 | 353 | 29 |
| DK | 8 | 0 | |
| RA | 9 | 3 | |

I14a. (IF YES) Were you working full-time or part-time?

| | | | |
|---|---|---|---|
| Full-time | 1 | 661 | 78 |
| Part-time | 2 | 191 | 22 |
| DK | 8 | 0 | |
| RA | 9 | 1 | |
| NA | 0 | 356 | |

I14b. (IF YES) What is your main occupation? What kind of work do you do?

| | | | |
|---|---|---|---|
| Manager, professional | 1 | 184 | 22 |
| Technical, sales, administrator | 2 | 299 | 35 |
| Service | 3 | 110 | 13 |
| Farming, forestry, fishing | 4 | 43 | 5 |
| Precis., crafts, repair | 5 | 108 | 13 |
| Operatives, laborers | 6 | 100 | 12 |
| DK | 8 | 0 | |
| RA | 9 | 9 | |
| NA | 0 | 356 | |

**(IF WORKING LAST WEEK, GO TO 15)**

I14c. (IF NO) Do you consider yourself (READ LIST)?

| | YES 1 | NO 2 | DK 8 | RA 9 | NA 0 |
|---|---|---|---|---|---|
| I14c-1 Retired | 208 (59) | 144 (41) | 1 | 1 | 856 |
| I14c-2 Unemployed | 159 (45) | 192 (55) | 2 | 1 | 856 |
| I14c-3 A student | 49 (14) | 302 (86) | 1 | 1 | 856 |
| I14c-4 A homemaker | 259 (74) | 92 (26) | 1 | 2 | 856 |

I15. How many people are living in your household now including yourself?

See Appendix B, Page B-13

(IF LIVE ALONE, GO TO 19)

I16. NO QUESTION ON THIS VERSION

I17. How many people in your household are under 18?

See Appendix B, Page B-14

Now I'd like to know the employment status of the person in your household who contributed most to the household income in 1987.

| | | | |
|---|---|---|---|
| I18. Is this person you or someone else in your household? | Respondent . . . . 1 | 516 | 48 |
| | (IF RESPONDENT, GO TO 19) | | |
| | Someone else . . . 2 | 556 | 52 |
| | Someone no longer in household. . . 3 | 7 | 1 |
| | (IF NOT IN HH, GO TO 19) | | |
| | DK . . . 8 | 3 | |
| | RA . . . 9 | 10 | |
| | NA . . . 0 | 117 | |
| I18a. (IF SOMEONE ELSE) Did this person have a paying job last week? | Yes. . . . . 1 | 445 | 80 |
| | No . . . . . 2 | 110 | 20 |
| | (IF NO, GO TO 18a-3) | | |
| | DK . . . 8 | 0 | |
| | RA . . . 9 | 1 | |
| | NA . . . 0 | 653 | |
| I18a-1 (IF YES) Were they working full-time or part-time? | Full-time. . . . . 1 | 426 | 96 |
| | Part-time. . . . . 2 | 19 | 4 |
| | DK . . . 8 | 0 | |
| | RA . . . 9 | 0 | |
| | NA . . . 0 | 764 | |
| I18a-2 (IF YES) What is their main occupation? What kind of work do they do? | Manager, professional. . 1 | 105 | 24 |
| | Technical, sales, administrator. . . . . 2 | 117 | 27 |
| | Service . . . . . 3 | 26 | 6 |
| | Farming, forestry, fishing. . . . . 4 | 23 | 5 |
| | Precis., crafts, repair 5 | 102 | 24 |
| | Operatives, laborers. . 6 | 61 | 14 |
| | DK . . . 8 | 2 | |
| | RA . . . 9 | 9 | |
| | NA . . . 0 | 764 | |

I18a-3 (IF NO) Are they: (READ LIST)?

| | YES 1 | NO 2 | DK 8 | RA 9 | NA 0 |
|---|---|---|---|---|---|
| I18a-3a Retired. . . . | 92 (84) | 18 (16) | 0 | 0 | 1099 |
| I18a-3b Unemployed . . | 68 (62) | 42 (38) | 1 | 0 | 1099 |
| I18a-3c A student. . . | 12 (11) | 98 (89) | 0 | 0 | 1099 |
| I18a-3d A homemaker. . | 42 (38) | 69 (62) | 0 | 0 | 1099 |

| | | Freq | % |
|---|---|---|---|
| I19. Was your total household income in 1987 above or below $25,000? | Above. . . . . 1 | 730 | 66 |
| | Below. . . . . 2 | 370 | 34 |
| | (IF BELOW, GO TO 19b) | | |
| | DK . . . 8 | 51 | |
| | RA . . . 9 | 58 | |
| | (IF DK OR RA, GO TO 20) | | |
| I19a. (IF ABOVE) I am going to mention a number of income categories. When I come to the category which describes your total household income <u>before</u> taxes in 1987, please stop me. | 25 to 30,000 . . .30 | 100 | 15 |
| | 30 to 35,000 . . .35 | 125 | 19 |
| | 35 to 40,000 . . .40 | 107 | 16 |
| | 40 to 50,000 . . .50 | 138 | 21 |
| | 50 to 60,000 . . .60 | 71 | 11 |
| | 60,000 or more . .61 | 120 | 18 |
| | DK . . .88 | 16 | |
| | RA . . .99 | 53 | |
| | NA . . .00 | 479 | |
| I19b. (IF BELOW) I am going to mention a number of income categories. When I come to the category which describes your total household income <u>before</u> taxes in 1987, please stop me. | Under 5,000. . . .05 | 25 | 7 |
| | 5 to 10,000. . . .10 | 53 | 15 |
| | 10 to 15,000 . . .15 | 100 | 28 |
| | 15 to 20,000 . . .20 | 98 | 28 |
| | 20 to 25,000 . . .25 | 76 | 22 |
| | DK . . .88 | 7 | |
| | RA . . .99 | 11 | |
| | NA . . .00 | 839 | |

This income figure you just gave me includes the income of everyone who was living in your household in 1987. Is that correct? (IF NO, REPEAT QUESTION 19)

I20. How many persons in the household contributed earnings or income that was part of the total household income you gave me for 1987?

See Appendix B, Page B-14

(ASK ONLY IF UNSURE)

| | | | |
|---|---|---|---|
| I21. Respondent is | Male . . 1 | 566 | 47 |
| | Female . 2 | 643 | 53 |

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

(IF A RESPONDENT ASKS FOR SURVEY RESULTS,
HAVE THEM CONTACT ROSSANA ARMSON AT 612/627-4282
DURING BUSINESS HOURS 9 AM TO 5 P.M.)

COMMENTS

# APPENDIX A

## OPEN-ENDED RESPONSES

A4 MOST IMPORTANT PROBLEM FOR PEOPLE IN MINNESOTA

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| TAXES | 10000 | 96 | 7.9 | 8.9 | 8.9 |
| INCOME TAXES | 10100 | 72 | 5.9 | 6.7 | 15.6 |
| SALES TAXES | 10200 | 8 | .7 | .8 | 16.4 |
| PROPERTY TAXES | 10300 | 38 | 3.1 | 3.5 | 19.9 |
| EDUCATION | 20000 | 2 | .2 | .2 | 20.1 |
| QUALITY OF EDUCATION | 20100 | 18 | 1.4 | 1.6 | 21.7 |
| FINANCING EDUCATION | 20200 | 5 | .4 | .4 | 22.1 |
| HIGHER EDUCATION | 20300 | 2 | .2 | .2 | 22.3 |
| EDUCATION AVAILABLE | 20400 | 1 | .1 | .1 | 22.4 |
| ENVIRONMENT | 30000 | 30 | 2.5 | 2.8 | 25.2 |
| POLLUTION | 30100 | 12 | 1.0 | 1.1 | 26.3 |
| ACID RAIN | 30101 | 5 | .4 | .5 | 26.8 |
| WATER QUALITY | 30102 | 21 | 1.7 | 1.9 | 28.7 |
| AIR POLLUTION | 30103 | 5 | .4 | .5 | 29.2 |
| HAZARDOUS WASTE | 30200 | 3 | .3 | .3 | 29.5 |
| NUCLEAR WASTE | 30300 | 1 | .1 | .1 | 29.6 |
| SOLID WASTE | 30400 | 3 | .3 | .3 | 29.9 |
| LANDFILLS | 30401 | 1 | .0 | .0 | 29.9 |
| RECYCLING | 30403 | 2 | .2 | .2 | 30.1 |
| WEATHER | 30600 | 13 | 1.1 | 1.2 | 31.3 |
| ECONOMY | 40000 | 54 | 4.5 | 5.0 | 36.4 |
| UNEMPLOYMENT/JOBS | 40100 | 42 | 3.5 | 3.9 | 40.3 |
| IRON RANGE JOBS | 40102 | 40 | 3.3 | 3.7 | 44.0 |
| QUALITY OF JOBS | 40103 | 12 | 1.0 | 1.2 | 45.2 |
| WAGES | 40104 | 57 | 4.7 | 5.3 | 50.5 |
| JOB SKILLS | 40105 | 1 | .0 | .0 | 50.6 |
| QUANTITY OF JOBS | 40106 | 52 | 4.3 | 4.8 | 55.4 |
| INFLATION/RECESSION | 40200 | 7 | .6 | .7 | 56.1 |
| SAVINGS/INVESTMENTS | 40300 | 34 | 2.8 | 3.2 | 59.2 |
| BUSINESS CLIMATE | 40400 | 14 | 1.2 | 1.3 | 60.6 |
| ATTRACTING BUSINESS | 40401 | 10 | .9 | 1.0 | 61.5 |
| KEEPING BUSINESS | 40402 | 10 | .9 | 1.0 | 62.5 |
| CORPORATE TAXES | 40403 | 28 | 2.3 | 2.6 | 65.1 |
| SMALL TOWN BUSINESS | 40404 | 5 | .4 | .4 | 65.5 |
| FARM SITUATION | 40500 | 48 | 4.0 | 4.5 | 70.0 |
| FARM SUBSIDIES | 40501 | 4 | .3 | .3 | 70.3 |
| CROP PRICES | 40502 | 8 | .6 | .7 | 71.0 |
| FARM FINANCES | 40503 | 6 | .5 | .6 | 71.6 |
| LOSS OF FARM\FARMERS | 40504 | 30 | 2.5 | 2.8 | 74.4 |
| HEALTH CARE | 50000 | 1 | .1 | .1 | 74.5 |
| COST OF HEALTH CARE | 50100 | 10 | .8 | .9 | 75.5 |
| QUALITY-HEALTH CARE | 50200 | 1 | .1 | .1 | 75.6 |
| AVAILABLE-HEALTH CARE | 50300 | 2 | .1 | .1 | 75.7 |
| ELDERLY HEALTH CARE | 50400 | 1 | .1 | .1 | 75.8 |
| NURSING HOMES | 50401 | 1 | .0 | .0 | 75.8 |
| DISEASE-GENERAL | 50600 | 3 | .2 | .2 | 76.1 |
| AIDS | 50701 | 10 | .9 | 1.0 | 77.0 |
| TRANSPORTATION | 60000 | 2 | .1 | .1 | 77.2 |
| TRAFFIC | 60100 | 2 | .2 | .2 | 77.4 |
| ROAD CONSTRUCTION | 60200 | 4 | .3 | .4 | 77.8 |
| EXPENSE-TRANSPORTATION | 60300 | 1 | .0 | .0 | 77.8 |

A4 MOST IMPORTANT PROBLEM FOR PEOPLE IN MINNESOTA, CONT.

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| DRUNK DRIVING | 60600 | 2 | .1 | .1 | 78.0 |
| HOUSING | 70000 | 2 | .1 | .1 | 78.1 |
| COST OF HOUSING | 70100 | 5 | .4 | .5 | 78.6 |
| AVAILABILITY-HOUSING | 70200 | 8 | .6 | .7 | 79.3 |
| COST OF FOOD | 80100 | 2 | .1 | .1 | 79.4 |
| SHORTAGE OF FOOD | 80200 | 3 | .3 | .3 | 79.7 |
| GOVERNMENT | 90000 | 27 | 2.2 | 2.5 | 82.2 |
| GOVT PROGRAMS | 90300 | 3 | .3 | .3 | 82.5 |
| FUNDING-DISTRIBUTION | 90400 | 4 | .3 | .3 | 82.9 |
| WAR | 100000 | 1 | .0 | .0 | 82.9 |
| WORLD PEACE | 100100 | 3 | .2 | .2 | 83.1 |
| CRIME | 110000 | 19 | 1.6 | 1.8 | 84.9 |
| CRIMINAL JUSTICE SYSTEM | 110100 | 9 | .7 | .8 | 85.7 |
| COST OF ENERGY | 120100 | 2 | .2 | .2 | 85.9 |
| SOCIAL ISSUES | 130000 | 10 | .8 | .9 | 86.8 |
| ABUSE-SOCIAL ISSUES | 130100 | 1 | .1 | .1 | 86.9 |
| WELFARE | 130200 | 3 | .2 | .2 | 87.2 |
| ABUSE-WELFARE SYSTEM | 130201 | 10 | .9 | 1.0 | 88.1 |
| NOT ENOUGH PROGRAMS | 130202 | 2 | .1 | .1 | 88.3 |
| ABORTION | 130300 | 4 | .3 | .3 | 88.6 |
| DISCRIMINATION | 130400 | 3 | .2 | .2 | 88.9 |
| DRUGS | 130500 | 42 | 3.5 | 3.9 | 92.8 |
| ALCOHOL | 130501 | 2 | .2 | .2 | 93.0 |
| MORALITY | 130600 | 7 | .6 | .6 | 93.6 |
| RELIGION/CULTS | 130601 | 7 | .6 | .6 | 94.2 |
| POVERTY | 130800 | 5 | .4 | .5 | 94.7 |
| HOMELESS | 131000 | 10 | .9 | 1.0 | 95.7 |
| FAMILY | 140000 | 5 | .4 | .4 | 96.1 |
| DAYCARE | 140100 | 1 | .1 | .1 | 96.2 |
| CHILD RAISING | 140200 | 3 | .3 | .3 | 96.5 |
| DIVORCE | 140300 | 4 | .3 | .4 | 96.9 |
| OTHER | 150000 | 33 | 2.8 | 3.1 | 100.0 |
| RA | 999999 | 136 | 11.3 | MISSING | |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1073 Missing Cases 136

D1A WHAT ATTRACTIONS BRING YOU TO THE TWIN CITIES

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| SPORTS | 10 | 6 | .5 | 1.4 | 1.4 |
| TWINS BASEBALL | 11 | 94 | 7.8 | 22.8 | 24.2 |
| VIKINGS FOOTBALL | 12 | 77 | 6.4 | 18.7 | 42.9 |
| NORTH STARS HOCKEY | 13 | 16 | 1.3 | 3.9 | 46.8 |
| WRESTLING | 14 | 3 | .3 | .8 | 47.6 |
| HIGH SCHOOL TOURNYS | 16 | 7 | .6 | 1.6 | 49.2 |
| VOLLEYBALL | 17 | 1 | .0 | .1 | 49.3 |
| UNIVERSITY SPORTS | 18 | 5 | .4 | 1.1 | 50.4 |
| ARTS | 20 | 7 | .6 | 1.6 | 52.1 |
| WALKER ART CENTER | 21 | 4 | .3 | 1.0 | 53.1 |
| ORCHESTRA HALL | 22 | 7 | .6 | 1.6 | 54.7 |
| MPLS INSTITUTE OF ARTS | 24 | 1 | .0 | .1 | 54.8 |
| THEATRE | 30 | 8 | .6 | 1.9 | 56.7 |
| ORDWAY | 31 | 7 | .6 | 1.8 | 58.5 |
| GUTHRIE | 32 | 18 | 1.4 | 4.3 | 62.7 |
| CHANHASSEN | 33 | 16 | 1.4 | 4.0 | 66.8 |
| OLD LOG THEATRE | 34 | 2 | .2 | .5 | 67.3 |
| CHILDRENS THEATRE | 35 | 1 | .1 | .3 | 67.5 |
| CARLTON THEATRE | 36 | 1 | .0 | .1 | 67.6 |
| MUSEUMS | 40 | 1 | .1 | .3 | 67.9 |
| SCIENCE MUSEUM | 41 | 6 | .5 | 1.5 | 69.4 |
| OMNI THEATRE | 42 | 1 | .0 | .1 | 69.5 |
| SHOPPING | 50 | 43 | 3.6 | 10.5 | 80.1 |
| ZOOS | 60 | 2 | .2 | .5 | 80.6 |
| COMO ZOO | 61 | 4 | .3 | .9 | 81.4 |
| MINNESOTA ZOO | 62 | 3 | .3 | .8 | 82.2 |
| RIVERFEST | 71 | 1 | .0 | .1 | 82.3 |
| STATE FAIR | 73 | 10 | .8 | 2.4 | 84.7 |
| FESTIVAL OF NATIONS | 74 | 2 | .1 | .4 | 85.1 |
| VALLEYFAIR | 75 | 7 | .6 | 1.8 | 86.8 |
| WINTER CARNIVAL | 76 | 1 | .0 | .1 | 87.0 |
| RENAISSANCE FESTIVAL | 77 | 2 | .2 | .5 | 87.5 |
| OTHER | 80 | 40 | 3.3 | 9.7 | 97.1 |
| CAR SHOWS | 82 | 1 | .1 | .3 | 97.4 |
| CANTERBURY DOWNS | 83 | 4 | .3 | 1.0 | 98.4 |
| ROCK CONCERTS | 84 | 7 | .6 | 1.6 | 100.0 |
| | 99 | 798 | 66.0 | MISSING | |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 411 Missing Cases 798

# APPENDIX B

## CONTINUOUS VARIABLES

I1 WHAT COUNTY DO YOU LIVE IN

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| AITKIN | 1 | 1 | .1 | .1 | .1 |
| ANOKA | 2 | 67 | 5.5 | 5.5 | 5.6 |
| BECKER | 3 | 10 | .8 | .8 | 6.4 |
| BELTRAMI | 4 | 8 | .7 | .7 | 7.1 |
| BENTON | 5 | 18 | 1.5 | 1.5 | 8.6 |
| BLUE EARTH | 7 | 12 | 1.0 | 1.0 | 9.6 |
| CARLTON | 9 | 12 | 1.0 | 1.0 | 10.6 |
| CARVER | 10 | 12 | 1.0 | 1.0 | 11.6 |
| CASS | 11 | 5 | .4 | .4 | 12.0 |
| CHIPPEWA | 12 | 6 | .5 | .5 | 12.5 |
| CHISAGO | 13 | 6 | .5 | .5 | 13.0 |
| CLAY | 14 | 16 | 1.4 | 1.4 | 14.4 |
| CLEARWATER | 15 | 2 | .2 | .2 | 14.5 |
| COTTONWOOD | 17 | 8 | .6 | .6 | 15.2 |
| CROW WING | 18 | 10 | .9 | .9 | 16.0 |
| DAKOTA | 19 | 61 | 5.1 | 5.1 | 21.1 |
| DODGE | 20 | 3 | .3 | .3 | 21.4 |
| DOUGLAS | 21 | 9 | .7 | .7 | 22.1 |
| FARIBAULT | 22 | 6 | .5 | .5 | 22.5 |
| FILLMORE | 23 | 2 | .1 | .1 | 22.7 |
| FREEBORN | 24 | 14 | 1.2 | 1.2 | 23.8 |
| GOODHUE | 25 | 15 | 1.2 | 1.2 | 25.1 |
| GRANT | 26 | 2 | .2 | .2 | 25.2 |
| HENNEPIN | 27 | 277 | 22.9 | 22.9 | 48.2 |
| HOUSON | 28 | 4 | .3 | .3 | 48.5 |
| HUBBARD | 29 | 6 | .5 | .5 | 49.0 |
| ISANTI | 30 | 7 | .6 | .6 | 49.6 |
| ITASCA | 31 | 10 | .9 | .9 | 50.5 |
| JACKSON | 32 | 4 | .3 | .3 | 50.8 |
| KANABEC | 33 | 1 | .1 | .1 | 50.9 |
| KANDIYOHI | 34 | 11 | .9 | .9 | 51.8 |
| KITTSON | 35 | 2 | .2 | .2 | 52.0 |
| KOOCHICHING | 36 | 10 | .8 | .8 | 52.8 |
| LAC QUI PARLE | 37 | 3 | .3 | .3 | 53.1 |
| LAKE | 38 | 1 | .0 | .0 | 53.1 |
| LAKE OF THE WOODS | 39 | 1 | .1 | .1 | 53.2 |
| LE SUEUR | 40 | 12 | 1.0 | 1.0 | 54.2 |
| LINCOLN | 41 | 2 | .2 | .2 | 54.3 |
| LYON | 42 | 9 | .7 | .7 | 55.1 |
| MCLEOD | 43 | 15 | 1.2 | 1.2 | 56.3 |
| MARSHALL | 45 | 4 | .3 | .3 | 56.6 |
| MARTIN | 46 | 9 | .7 | .7 | 57.4 |
| MEEKER | 47 | 5 | .4 | .4 | 57.8 |
| MILLE LACS | 48 | 3 | .3 | .3 | 58.1 |
| MORRISON | 49 | 7 | .6 | .6 | 58.6 |
| MOWER | 50 | 10 | .9 | .9 | 59.5 |
| MURRAY | 51 | 2 | .1 | .1 | 59.6 |
| NICOLLET | 52 | 10 | .9 | .9 | 60.4 |
| NOBLES | 53 | 4 | .3 | .3 | 60.8 |
| NORMAN | 54 | 1 | .1 | .1 | 60.9 |
| OLMSTED | 55 | 40 | 3.3 | 3.3 | 64.2 |

I1 WHAT COUNTY DO YOU LIVE IN, CONT.

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| OTTER TAIL | 56 | 16 | 1.3 | 1.3 | 65.5 |
| PENNINGTON | 57 | 4 | .3 | .3 | 65.8 |
| PINE | 58 | 3 | .2 | .2 | 66.0 |
| PIPESTONE | 59 | 2 | .1 | .1 | 66.1 |
| POLK | 60 | 5 | .4 | .4 | 66.5 |
| POPE | 61 | 1 | .0 | .0 | 66.6 |
| RAMSEY | 62 | 130 | 10.8 | 10.8 | 77.4 |
| RED LAKE | 63 | 1 | .1 | .1 | 77.5 |
| REDWOOD | 64 | 4 | .3 | .3 | 77.8 |
| RENVILLE | 65 | 6 | .5 | .5 | 78.3 |
| RICE | 66 | 13 | 1.1 | 1.1 | 79.4 |
| ROCK | 67 | 3 | .3 | .3 | 79.6 |
| ROSEAU | 68 | 4 | .3 | .3 | 80.0 |
| ST. LOUIS | 69 | 61 | 5.0 | 5.0 | 85.0 |
| SCOTT | 70 | 12 | 1.0 | 1.0 | 86.0 |
| SHERBURNE | 71 | 9 | .8 | .8 | 86.7 |
| SIBLEY | 72 | 4 | .3 | .3 | 87.0 |
| STEARNS | 73 | 31 | 2.6 | 2.6 | 89.6 |
| STEELE | 74 | 9 | .8 | .8 | 90.4 |
| STEVENS | 75 | 4 | .3 | .3 | 90.7 |
| SWIFT | 76 | 3 | .3 | .3 | 91.0 |
| TODD | 77 | 5 | .4 | .4 | 91.4 |
| TRAVERSE | 78 | 2 | .2 | .2 | 91.6 |
| WABASHA | 79 | 6 | .5 | .5 | 92.0 |
| WADENA | 80 | 3 | .2 | .2 | 92.2 |
| WASECA | 81 | 9 | .7 | .7 | 93.0 |
| WASHINGTON | 82 | 48 | 4.0 | 4.0 | 96.9 |
| WATONWAN | 83 | 3 | .3 | .3 | 97.2 |
| WILKIN | 84 | 1 | .1 | .1 | 97.3 |
| WINONA | 85 | 16 | 1.3 | 1.3 | 98.6 |
| WRIGHT | 86 | 13 | 1.1 | 1.1 | 99.7 |
| YELLOW MEDICINE | 87 | 4 | .3 | .3 | 100.0 |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1209 Missing Cases 0

I3 WHAT IS YOUR ZIP CODE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 55001 | 2 | .2 | .2 | .2 |
| | 55007 | 1 | .1 | .1 | .3 |
| | 55008 | 3 | .3 | .3 | .5 |
| | 55009 | 3 | .2 | .2 | .7 |
| | 55011 | 1 | .1 | .1 | .8 |
| | 55013 | 1 | .1 | .1 | .9 |
| | 55014 | 10 | .8 | .8 | 1.7 |
| | 55016 | 10 | .9 | .9 | 2.6 |
| | 55018 | 1 | .1 | .1 | 2.7 |
| | 55021 | 9 | .8 | .8 | 3.4 |
| | 55025 | 3 | .2 | .2 | 3.6 |
| | 55027 | 1 | .0 | .0 | 3.7 |
| | 55033 | 4 | .3 | .3 | 4.0 |
| | 55038 | 2 | .2 | .2 | 4.2 |
| | 55040 | 2 | .1 | .1 | 4.3 |
| | 55041 | 3 | .3 | .3 | 4.5 |
| | 55042 | 1 | .1 | .1 | 4.6 |
| | 55043 | 6 | .5 | .5 | 5.1 |
| | 55044 | 9 | .8 | .8 | 5.9 |
| | 55045 | 1 | .1 | .1 | 6.0 |
| | 55055 | 3 | .3 | .3 | 6.2 |
| | 55056 | 2 | .2 | .2 | 6.4 |
| | 55057 | 3 | .3 | .3 | 6.6 |
| | 55060 | 7 | .6 | .6 | 7.2 |
| | 55063 | 1 | .1 | .1 | 7.3 |
| | 55066 | 6 | .5 | .5 | 7.8 |
| | 55068 | 6 | .5 | .5 | 8.3 |
| | 55069 | 1 | .1 | .1 | 8.4 |
| | 55070 | 1 | .1 | .1 | 8.5 |
| | 55071 | 1 | .1 | .1 | 8.6 |
| | 55073 | 1 | .1 | .1 | 8.6 |
| | 55075 | 11 | .9 | .9 | 9.6 |
| | 55079 | 2 | .1 | .1 | 9.7 |
| | 55080 | 2 | .1 | .1 | 9.8 |
| | 55082 | 8 | .7 | .7 | 10.5 |
| | 55085 | 1 | .1 | .1 | 10.6 |
| | 55090 | 1 | .1 | .1 | 10.7 |
| | 55092 | 1 | .1 | .1 | 10.8 |
| | 55101 | 4 | .3 | .3 | 11.1 |
| | 55102 | 3 | .3 | .3 | 11.3 |
| | 55103 | 4 | .3 | .3 | 11.6 |
| | 55104 | 14 | 1.2 | 1.2 | 12.8 |
| | 55105 | 10 | .8 | .8 | 13.6 |
| | 55106 | 15 | 1.3 | 1.3 | 14.9 |
| | 55107 | 2 | .2 | .2 | 15.1 |
| | 55109 | 9 | .8 | .8 | 15.8 |
| | 55110 | 12 | 1.0 | 1.0 | 16.8 |
| | 55112 | 13 | 1.1 | 1.1 | 17.9 |
| | 55113 | 9 | .8 | .8 | 18.7 |
| | 55115 | 1 | .1 | .1 | 18.8 |
| | 55116 | 9 | .8 | .8 | 19.6 |
| | 55117 | 6 | .5 | .5 | 20.0 |
| | 55118 | 6 | .5 | .5 | 20.5 |
| | 55119 | 10 | .9 | .9 | 21.4 |
| | 55121 | 1 | .1 | .1 | 21.4 |
| | 55122 | 2 | .1 | .1 | 21.6 |
| | 55123 | 4 | .3 | .3 | 21.9 |
| | 55124 | 6 | .5 | .5 | 22.4 |
| | 55125 | 3 | .3 | .3 | 22.6 |

I3 WHAT IS YOUR ZIP CODE, CONT.

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 55126 | 13 | 1.1 | 1.1 | 23.7 |
| | 55127 | 2 | .1 | .1 | 23.8 |
| | 55302 | 2 | .1 | .1 | 24.0 |
| | 55303 | 10 | .9 | .9 | 24.8 |
| | 55304 | 4 | .3 | .3 | 25.1 |
| | 55308 | 2 | .1 | .1 | 25.3 |
| | 55309 | 2 | .2 | .2 | 25.4 |
| | 55312 | 1 | .1 | .1 | 25.5 |
| | 55313 | 4 | .3 | .3 | 25.9 |
| | 55314 | 1 | .0 | .0 | 25.9 |
| | 55315 | 2 | .1 | .1 | 26.0 |
| | 55316 | 3 | .3 | .3 | 26.3 |
| | 55317 | 2 | .2 | .2 | 26.5 |
| | 55318 | 3 | .3 | .3 | 26.7 |
| | 55322 | 2 | .1 | .1 | 26.8 |
| | 55328 | 1 | .1 | .1 | 26.9 |
| | 55330 | 3 | .3 | .3 | 27.2 |
| | 55331 | 3 | .3 | .3 | 27.4 |
| | 55332 | 1 | .1 | .1 | 27.5 |
| | 55334 | 1 | .1 | .1 | 27.6 |
| | 55335 | 2 | .1 | .1 | 27.7 |
| | 55336 | 3 | .2 | .2 | 28.0 |
| | 55337 | 13 | 1.1 | 1.1 | 29.0 |
| | 55342 | 1 | .1 | .1 | 29.1 |
| | 55343 | 10 | .9 | .9 | 30.0 |
| | 55345 | 5 | .4 | .4 | 30.4 |
| | 55346 | 7 | .6 | .6 | 31.0 |
| | 55347 | 7 | .6 | .6 | 31.5 |
| | 55350 | 6 | .5 | .5 | 32.0 |
| | 55355 | 4 | .3 | .3 | 32.3 |
| | 55356 | 2 | .1 | .1 | 32.4 |
| | 55357 | 2 | .2 | .2 | 32.6 |
| | 55359 | 2 | .1 | .1 | 32.7 |
| | 55362 | 2 | .2 | .2 | 32.9 |
| | 55364 | 4 | .3 | .3 | 33.2 |
| | 55369 | 11 | .9 | .9 | 34.2 |
| | 55371 | 3 | .3 | .3 | 34.4 |
| | 55372 | 6 | .5 | .5 | 34.9 |
| | 55373 | 1 | .1 | .1 | 35.0 |
| | 55376 | 2 | .2 | .2 | 35.2 |
| | 55378 | 5 | .4 | .4 | 35.6 |
| | 55381 | 2 | .2 | .2 | 35.7 |
| | 55384 | 1 | .1 | .1 | 35.8 |
| | 55385 | 2 | .2 | .2 | 36.0 |
| | 55388 | 3 | .3 | .3 | 36.3 |
| | 55391 | 4 | .3 | .3 | 36.6 |
| | 55395 | 2 | .2 | .2 | 36.7 |
| | 55396 | 1 | .1 | .1 | 36.8 |
| | 55398 | 2 | .2 | .2 | 37.0 |
| | 55402 | 1 | .1 | .1 | 37.1 |
| | 55403 | 4 | .3 | .3 | 37.4 |
| | 55404 | 3 | .3 | .3 | 37.6 |
| | 55405 | 2 | .2 | .2 | 37.8 |
| | 55406 | 13 | 1.1 | 1.1 | 38.9 |
| | 55407 | 15 | 1.2 | 1.2 | 40.2 |
| | 55408 | 7 | .6 | .6 | 40.7 |
| | 55409 | 6 | .5 | .5 | 41.2 |
| | 55410 | 11 | .9 | .9 | 42.1 |
| | 55411 | 5 | .4 | .4 | 42.5 |

I3 WHAT IS YOUR ZIP CODE, CONT.

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 55412 | 8 | .7 | .7 | 43.2 |
| | 55413 | 4 | .3 | .3 | 43.5 |
| | 55414 | 5 | .4 | .4 | 43.9 |
| | 55416 | 5 | .4 | .4 | 44.3 |
| | 55417 | 8 | .7 | .7 | 45.0 |
| | 55418 | 5 | .4 | .4 | 45.4 |
| | 55419 | 4 | .3 | .3 | 45.7 |
| | 55420 | 5 | .4 | .4 | 46.1 |
| | 55421 | 3 | .3 | .3 | 46.4 |
| | 55422 | 9 | .7 | .7 | 47.1 |
| | 55423 | 12 | 1.0 | 1.0 | 48.2 |
| | 55424 | 2 | .2 | .2 | 48.3 |
| | 55425 | 4 | .3 | .3 | 48.7 |
| | 55426 | 7 | .6 | .6 | 49.2 |
| | 55427 | 9 | .8 | .8 | 50.0 |
| | 55428 | 9 | .8 | .8 | 50.8 |
| | 55429 | 10 | .8 | .8 | 51.6 |
| | 55430 | 5 | .4 | .4 | 52.0 |
| | 55431 | 7 | .6 | .6 | 52.6 |
| | 55432 | 12 | 1.0 | 1.0 | 53.6 |
| | 55433 | 12 | 1.0 | 1.0 | 54.6 |
| | 55434 | 12 | 1.0 | 1.0 | 55.6 |
| | 55435 | 3 | .2 | .2 | 55.8 |
| | 55436 | 4 | .3 | .3 | 56.2 |
| | 55437 | 3 | .2 | .2 | 56.4 |
| | 55438 | 3 | .3 | .3 | 56.6 |
| | 55441 | 5 | .4 | .4 | 57.1 |
| | 55442 | 3 | .2 | .2 | 57.3 |
| | 55443 | 3 | .2 | .2 | 57.5 |
| | 55444 | 5 | .4 | .4 | 57.9 |
| | 55446 | 3 | .3 | .3 | 58.1 |
| | 55447 | 4 | .3 | .3 | 58.4 |
| | 55454 | 1 | .1 | .1 | 58.5 |
| | 55616 | 1 | .0 | .0 | 58.6 |
| | 55704 | 1 | .0 | .0 | 58.6 |
| | 55705 | 2 | .2 | .2 | 58.8 |
| | 55706 | 1 | .0 | .0 | 58.8 |
| | 55707 | 2 | .1 | .1 | 58.9 |
| | 55708 | 1 | .1 | .1 | 59.0 |
| | 55709 | 1 | .1 | .1 | 59.1 |
| | 55713 | 1 | .1 | .1 | 59.2 |
| | 55719 | 1 | .1 | .1 | 59.3 |
| | 55720 | 5 | .4 | .4 | 59.7 |
| | 55727 | 1 | .1 | .1 | 59.8 |
| | 55731 | 1 | .1 | .1 | 59.8 |
| | 55734 | 3 | .3 | .3 | 60.1 |
| | 55741 | 1 | .1 | .1 | 60.2 |
| | 55742 | 1 | .0 | .0 | 60.2 |
| | 55744 | 7 | .6 | .6 | 60.8 |
| | 55746 | 4 | .3 | .3 | 61.2 |
| | 55767 | 1 | .0 | .0 | 61.2 |
| | 55768 | 1 | .0 | .0 | 61.3 |
| | 55775 | 1 | .0 | .0 | 61.3 |
| | 55779 | 2 | .1 | .1 | 61.4 |
| | 55780 | 1 | .1 | .1 | 61.5 |
| | 55792 | 3 | .2 | .2 | 61.7 |
| | 55798 | 1 | .1 | .1 | 61.8 |
| | 55802 | 2 | .1 | .1 | 61.9 |
| | 55803 | 5 | .4 | .4 | 62.4 |

I3 WHAT IS YOUR ZIP CODE, CONT.

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 55804 | 6 | .5 | .5 | 62.8 |
| | 55805 | 7 | .6 | .6 | 63.4 |
| | 55806 | 4 | .3 | .3 | 63.7 |
| | 55807 | 6 | .5 | .5 | 64.2 |
| | 55808 | 1 | .1 | .1 | 64.3 |
| | 55810 | 3 | .2 | .2 | 64.5 |
| | 55811 | 5 | .4 | .4 | 64.9 |
| | 55812 | 1 | .1 | .1 | 65.0 |
| | 55901 | 8 | .6 | .6 | 65.6 |
| | 55902 | 4 | .3 | .3 | 65.9 |
| | 55904 | 21 | 1.7 | 1.7 | 67.6 |
| | 55912 | 10 | .8 | .8 | 68.5 |
| | 55917 | 1 | .1 | .1 | 68.5 |
| | 55920 | 1 | .1 | .1 | 68.6 |
| | 55921 | 2 | .1 | .1 | 68.8 |
| | 55925 | 1 | .1 | .1 | 68.8 |
| | 55929 | 1 | .1 | .1 | 68.9 |
| | 55932 | 2 | .1 | .1 | 69.0 |
| | 55940 | 1 | .1 | .1 | 69.1 |
| | 55941 | 1 | .1 | .1 | 69.2 |
| | 55943 | 1 | .1 | .1 | 69.3 |
| | 55944 | 2 | .2 | .2 | 69.5 |
| | 55946 | 1 | .0 | .0 | 69.5 |
| | 55949 | 1 | .0 | .0 | 69.6 |
| | 55951 | 1 | .0 | .0 | 69.6 |
| | 55956 | 1 | .1 | .1 | 69.7 |
| | 55960 | 1 | .1 | .1 | 69.8 |
| | 55963 | 1 | .1 | .1 | 69.9 |
| | 55974 | 1 | .0 | .0 | 69.9 |
| | 55975 | 1 | .1 | .1 | 70.0 |
| | 55976 | 3 | .3 | .3 | 70.2 |
| | 55981 | 2 | .2 | .2 | 70.4 |
| | 55987 | 15 | 1.2 | 1.2 | 71.7 |
| | 55992 | 1 | .1 | .1 | 71.7 |
| | 56001 | 14 | 1.2 | 1.2 | 72.9 |
| | 56007 | 11 | .9 | .9 | 73.8 |
| | 56013 | 3 | .3 | .3 | 74.1 |
| | 56017 | 2 | .1 | .1 | 74.2 |
| | 56019 | 1 | .1 | .1 | 74.3 |
| | 56021 | 1 | .1 | .1 | 74.4 |
| | 56027 | 1 | .1 | .1 | 74.5 |
| | 56031 | 8 | .6 | .6 | 75.1 |
| | 56036 | 3 | .2 | .2 | 75.3 |
| | 56046 | 1 | .1 | .1 | 75.4 |
| | 56048 | 1 | .1 | .1 | 75.5 |
| | 56050 | 2 | .1 | .1 | 75.6 |
| | 56055 | 2 | .2 | .2 | 75.8 |
| | 56058 | 3 | .2 | .2 | 76.0 |
| | 56071 | 6 | .5 | .5 | 76.5 |
| | 56072 | 1 | .1 | .1 | 76.6 |
| | 56073 | 1 | .0 | .0 | 76.6 |
| | 56074 | 1 | .1 | .1 | 76.7 |
| | 56081 | 3 | .3 | .3 | 77.0 |
| | 56082 | 4 | .3 | .3 | 77.3 |
| | 56085 | 3 | .2 | .2 | 77.5 |
| | 56091 | 1 | .1 | .1 | 77.6 |
| | 56093 | 6 | .5 | .5 | 78.1 |
| | 56096 | 2 | .1 | .1 | 78.2 |
| | 56097 | 1 | .1 | .1 | 78.3 |

I3 WHAT IS YOUR ZIP CODE, CONT.

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 56098 | 1 | .0 | .0 | 78.3 |
| | 56101 | 4 | .3 | .3 | 78.7 |
| | 56119 | 1 | .1 | .1 | 78.8 |
| | 56128 | 1 | .1 | .1 | 78.9 |
| | 56131 | 2 | .1 | .1 | 79.0 |
| | 56136 | 1 | .1 | .1 | 79.1 |
| | 56150 | 4 | .3 | .3 | 79.4 |
| | 56151 | 1 | .1 | .1 | 79.5 |
| | 56152 | 2 | .2 | .2 | 79.7 |
| | 56156 | 2 | .2 | .2 | 79.8 |
| | 56159 | 1 | .1 | .1 | 79.9 |
| | 56164 | 1 | .0 | .0 | 80.0 |
| | 56172 | 1 | .0 | .0 | 80.0 |
| | 56178 | 1 | .1 | .1 | 80.1 |
| | 56180 | 1 | .1 | .1 | 80.2 |
| | 56181 | 1 | .1 | .1 | 80.3 |
| | 56182 | 1 | .1 | .1 | 80.4 |
| | 56183 | 1 | .0 | .0 | 80.4 |
| | 56185 | 1 | .0 | .0 | 80.4 |
| | 56186 | 1 | .1 | .1 | 80.5 |
| | 56187 | 1 | .1 | .1 | 80.6 |
| | 56201 | 6 | .5 | .5 | 81.1 |
| | 56207 | 1 | .1 | .1 | 81.2 |
| | 56209 | 1 | .1 | .1 | 81.3 |
| | 56215 | 2 | .2 | .2 | 81.4 |
| | 56220 | 1 | .0 | .0 | 81.5 |
| | 56230 | 1 | .1 | .1 | 81.5 |
| | 56241 | 1 | .1 | .1 | 81.6 |
| | 56243 | 1 | .0 | .0 | 81.7 |
| | 56244 | 1 | .0 | .0 | 81.7 |
| | 56248 | 3 | .3 | .3 | 82.0 |
| | 56256 | 1 | .1 | .1 | 82.1 |
| | 56257 | 1 | .1 | .1 | 82.1 |
| | 56258 | 4 | .3 | .3 | 82.5 |
| | 56264 | 3 | .3 | .3 | 82.7 |
| | 56265 | 6 | .5 | .5 | 83.2 |
| | 56266 | 1 | .1 | .1 | 83.3 |
| | 56267 | 2 | .1 | .1 | 83.4 |
| | 56271 | 1 | .1 | .1 | 83.5 |
| | 56272 | 1 | .1 | .1 | 83.6 |
| | 56273 | 2 | .2 | .2 | 83.8 |
| | 56279 | 1 | .1 | .1 | 83.9 |
| | 56282 | 2 | .1 | .1 | 84.0 |
| | 56283 | 1 | .1 | .1 | 84.1 |
| | 56284 | 2 | .2 | .2 | 84.2 |
| | 56296 | 2 | .2 | .2 | 84.4 |
| | 56297 | 1 | .1 | .1 | 84.5 |
| | 56301 | 11 | .9 | .9 | 85.4 |
| | 56303 | 6 | .5 | .5 | 86.0 |
| | 56304 | 3 | .2 | .2 | 86.2 |
| | 56307 | 1 | .1 | .1 | 86.3 |
| | 56308 | 9 | .7 | .7 | 87.0 |
| | 56310 | 2 | .1 | .1 | 87.1 |
| | 56312 | 2 | .2 | .2 | 87.3 |
| | 56318 | 1 | .1 | .1 | 87.4 |
| | 56320 | 1 | .1 | .1 | 87.5 |
| | 56329 | 9 | .8 | .8 | 88.2 |
| | 56330 | 1 | .1 | .1 | 88.3 |
| | 56331 | 2 | .2 | .2 | 88.5 |

I3 WHAT IS YOUR ZIP CODE, CONT.

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 56334 | 1 | .1 | .1 | 88.6 |
| | 56336 | 1 | .1 | .1 | 88.7 |
| | 56340 | 2 | .1 | .1 | 88.8 |
| | 56345 | 4 | .3 | .3 | 89.1 |
| | 56347 | 3 | .2 | .2 | 89.3 |
| | 56353 | 1 | .1 | .1 | 89.4 |
| | 56358 | 1 | .1 | .1 | 89.5 |
| | 56361 | 1 | .1 | .1 | 89.6 |
| | 56364 | 1 | .1 | .1 | 89.6 |
| | 56367 | 2 | .2 | .2 | 89.8 |
| | 56368 | 1 | .0 | .0 | 89.9 |
| | 56373 | 1 | .1 | .1 | 89.9 |
| | 56374 | 1 | .1 | .1 | 90.0 |
| | 56378 | 3 | .2 | .2 | 90.2 |
| | 56379 | 4 | .3 | .3 | 90.6 |
| | 56381 | 1 | .0 | .0 | 90.6 |
| | 56401 | 8 | .6 | .6 | 91.3 |
| | 56431 | 1 | .1 | .1 | 91.4 |
| | 56438 | 1 | .1 | .1 | 91.4 |
| | 56441 | 1 | .0 | .0 | 91.5 |
| | 56448 | 1 | .1 | .1 | 91.6 |
| | 56450 | 1 | .1 | .1 | 91.7 |
| | 56461 | 2 | .1 | .1 | 91.8 |
| | 56467 | 3 | .2 | .2 | 92.0 |
| | 56470 | 2 | .2 | .2 | 92.2 |
| | 56473 | 1 | .1 | .1 | 92.3 |
| | 56474 | 1 | .0 | .0 | 92.3 |
| | 56477 | 1 | .0 | .0 | 92.3 |
| | 56479 | 2 | .1 | .1 | 92.5 |
| | 56482 | 1 | .1 | .1 | 92.6 |
| | 56484 | 1 | .1 | .1 | 92.6 |
| | 56501 | 6 | .5 | .5 | 93.1 |
| | 56510 | 1 | .1 | .1 | 93.2 |
| | 56520 | 1 | .1 | .1 | 93.3 |
| | 56529 | 2 | .2 | .2 | 93.5 |
| | 56531 | 1 | .1 | .1 | 93.5 |
| | 56534 | 1 | .1 | .1 | 93.6 |
| | 56537 | 10 | .8 | .8 | 94.4 |
| | 56544 | 2 | .2 | .2 | 94.6 |
| | 56547 | 1 | .1 | .1 | 94.7 |
| | 56549 | 2 | .2 | .2 | 94.9 |
| | 56560 | 10 | .8 | .8 | 95.7 |
| | 56567 | 2 | .2 | .2 | 95.8 |
| | 56569 | 1 | .1 | .1 | 95.9 |
| | 56572 | 1 | .1 | .1 | 96.0 |
| | 56585 | 1 | .0 | .0 | 96.1 |
| | 56588 | 1 | .1 | .1 | 96.1 |
| | 56601 | 7 | .6 | .6 | 96.7 |
| | 56621 | 2 | .2 | .2 | 96.9 |
| | 56623 | 1 | .1 | .1 | 97.0 |
| | 56627 | 2 | .1 | .1 | 97.1 |
| | 56630 | 1 | .1 | .1 | 97.2 |
| | 56633 | 2 | .1 | .1 | 97.3 |
| | 56636 | 2 | .2 | .2 | 97.5 |
| | 56649 | 6 | .5 | .5 | 98.0 |
| | 56653 | 1 | .1 | .1 | 98.1 |
| | 56660 | 2 | .1 | .1 | 98.2 |
| | 56662 | 1 | .1 | .1 | 98.3 |
| | 56701 | 2 | .1 | .1 | 98.4 |

I3 WHAT IS YOUR ZIP CODE, CONT.

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 56714 | 1 | .1 | .1 | 98.5 |
| | 56716 | 2 | .2 | .2 | 98.7 |
| | 56721 | 2 | .2 | .2 | 98.8 |
| | 56725 | 1 | .1 | .1 | 98.9 |
| | 56728 | 1 | .1 | .1 | 99.0 |
| | 56735 | 1 | .1 | .1 | 99.1 |
| | 56738 | 1 | .1 | .1 | 99.2 |
| | 56750 | 1 | .1 | .1 | 99.3 |
| | 56751 | 3 | .3 | .3 | 99.5 |
| | 56754 | 1 | .1 | .1 | 99.6 |
| | 56757 | 2 | .1 | .1 | 99.7 |
| | 56758 | 1 | .1 | .1 | 99.8 |
| | 56762 | 2 | .2 | .2 | 100.0 |
| REFUSE TO ANSWER | 99999 | 5 | .4 | MISSING | |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1204 Missing Cases 5

I11 WHAT YEAR WERE YOU BORN

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1897 | 1 | .0 | .0 | .0 |
| | 1899 | 1 | .1 | .1 | .1 |
| | 1900 | 2 | .2 | .2 | .3 |
| | 1901 | 1 | .0 | .0 | .3 |
| | 1902 | 2 | .2 | .2 | .5 |
| | 1903 | 3 | .3 | .3 | .8 |
| | 1904 | 4 | .3 | .3 | 1.1 |
| | 1905 | 5 | .4 | .4 | 1.5 |
| | 1906 | 5 | .4 | .4 | 1.9 |
| | 1907 | 4 | .3 | .3 | 2.2 |
| | 1908 | 5 | .4 | .4 | 2.6 |
| | 1909 | 3 | .3 | .3 | 2.8 |
| | 1910 | 7 | .6 | .6 | 3.4 |
| | 1911 | 9 | .8 | .8 | 4.2 |
| | 1912 | 6 | .5 | .5 | 4.7 |
| | 1913 | 7 | .6 | .6 | 5.3 |
| | 1914 | 5 | .4 | .4 | 5.7 |
| | 1915 | 11 | .9 | .9 | 6.6 |
| | 1916 | 8 | .6 | .6 | 7.3 |
| | 1917 | 8 | .7 | .7 | 8.0 |
| | 1918 | 12 | 1.0 | 1.0 | 9.0 |
| | 1919 | 9 | .8 | .8 | 9.8 |
| | 1920 | 13 | 1.1 | 1.1 | 10.8 |
| | 1921 | 13 | 1.1 | 1.1 | 11.9 |
| | 1922 | 17 | 1.4 | 1.4 | 13.3 |
| | 1923 | 12 | 1.0 | 1.0 | 14.4 |
| | 1924 | 10 | .9 | .9 | 15.2 |
| | 1925 | 16 | 1.4 | 1.4 | 16.6 |
| | 1926 | 13 | 1.1 | 1.1 | 17.7 |
| | 1927 | 14 | 1.2 | 1.2 | 18.9 |
| | 1928 | 15 | 1.3 | 1.3 | 20.2 |
| | 1929 | 16 | 1.3 | 1.3 | 21.6 |
| | 1930 | 15 | 1.2 | 1.2 | 22.8 |
| | 1931 | 16 | 1.4 | 1.4 | 24.2 |

I11 WHAT YEAR WERE YOU BORN, CONT.

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1932 | 11 | .9 | .9 | 25.1 |
| | 1933 | 16 | 1.3 | 1.3 | 26.5 |
| | 1934 | 23 | 1.9 | 1.9 | 28.4 |
| | 1935 | 19 | 1.5 | 1.5 | 30.0 |
| | 1936 | 12 | 1.0 | 1.0 | 31.0 |
| | 1937 | 19 | 1.6 | 1.6 | 32.5 |
| | 1938 | 19 | 1.6 | 1.6 | 34.1 |
| | 1939 | 16 | 1.3 | 1.3 | 35.5 |
| | 1940 | 13 | 1.1 | 1.1 | 36.6 |
| | 1941 | 22 | 1.8 | 1.8 | 38.4 |
| | 1942 | 16 | 1.4 | 1.4 | 39.8 |
| | 1943 | 13 | 1.1 | 1.1 | 40.9 |
| | 1944 | 16 | 1.4 | 1.4 | 42.2 |
| | 1945 | 10 | .8 | .8 | 43.0 |
| | 1946 | 27 | 2.2 | 2.2 | 45.3 |
| | 1947 | 18 | 1.5 | 1.5 | 46.8 |
| | 1948 | 24 | 2.0 | 2.0 | 48.8 |
| | 1949 | 27 | 2.2 | 2.2 | 51.1 |
| | 1950 | 20 | 1.7 | 1.7 | 52.7 |
| | 1951 | 29 | 2.4 | 2.5 | 55.2 |
| | 1952 | 37 | 3.0 | 3.1 | 58.2 |
| | 1953 | 38 | 3.1 | 3.1 | 61.4 |
| | 1954 | 33 | 2.8 | 2.8 | 64.2 |
| | 1955 | 37 | 3.0 | 3.1 | 67.2 |
| | 1956 | 32 | 2.6 | 2.7 | 69.9 |
| | 1957 | 30 | 2.5 | 2.5 | 72.4 |
| | 1958 | 29 | 2.4 | 2.4 | 74.9 |
| | 1959 | 27 | 2.2 | 2.2 | 77.1 |
| | 1960 | 34 | 2.8 | 2.8 | 79.9 |
| | 1961 | 31 | 2.6 | 2.6 | 82.5 |
| | 1962 | 37 | 3.1 | 3.1 | 85.6 |
| | 1963 | 18 | 1.5 | 1.5 | 87.1 |
| | 1964 | 25 | 2.0 | 2.1 | 89.2 |
| | 1965 | 19 | 1.5 | 1.5 | 90.7 |
| | 1966 | 22 | 1.8 | 1.9 | 92.6 |
| | 1967 | 11 | .9 | .9 | 93.5 |
| | 1968 | 22 | 1.8 | 1.8 | 95.3 |
| | 1969 | 28 | 2.3 | 2.3 | 97.6 |
| | 1970 | 28 | 2.3 | 2.4 | 100.0 |
| REFUSE TO ANSWER | 9999 | 12 | 1.0 | MISSING | |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1197 Missing Cases 12

AGE AGE OF RESPONDENT

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 18.00 | 28 | 2.3 | 2.4 | 2.4 |
| | 19.00 | 28 | 2.3 | 2.3 | 4.7 |
| | 20.00 | 22 | 1.8 | 1.8 | 6.5 |
| | 21.00 | 11 | .9 | .9 | 7.4 |
| | 22.00 | 22 | 1.8 | 1.9 | 9.3 |
| | 23.00 | 19 | 1.5 | 1.5 | 10.8 |
| | 24.00 | 25 | 2.0 | 2.1 | 12.9 |
| | 25.00 | 18 | 1.5 | 1.5 | 14.4 |
| | 26.00 | 37 | 3.1 | 3.1 | 17.5 |
| | 27.00 | 31 | 2.6 | 2.6 | 20.1 |
| | 28.00 | 34 | 2.8 | 2.8 | 22.9 |
| | 29.00 | 27 | 2.2 | 2.2 | 25.1 |
| | 30.00 | 29 | 2.4 | 2.4 | 27.6 |
| | 31.00 | 30 | 2.5 | 2.5 | 30.1 |
| | 32.00 | 32 | 2.6 | 2.7 | 32.8 |
| | 33.00 | 37 | 3.0 | 3.1 | 35.8 |
| | 34.00 | 33 | 2.8 | 2.8 | 38.6 |
| | 35.00 | 38 | 3.1 | 3.1 | 41.8 |
| | 36.00 | 37 | 3.0 | 3.1 | 44.8 |
| | 37.00 | 29 | 2.4 | 2.5 | 47.3 |
| | 38.00 | 20 | 1.7 | 1.7 | 48.9 |
| | 39.00 | 27 | 2.2 | 2.2 | 51.2 |
| | 40.00 | 24 | 2.0 | 2.0 | 53.2 |
| | 41.00 | 18 | 1.5 | 1.5 | 54.7 |
| | 42.00 | 27 | 2.2 | 2.2 | 57.0 |
| | 43.00 | 10 | .8 | .8 | 57.8 |
| | 44.00 | 16 | 1.4 | 1.4 | 59.1 |
| | 45.00 | 13 | 1.1 | 1.1 | 60.2 |
| | 46.00 | 16 | 1.4 | 1.4 | 61.6 |
| | 47.00 | 22 | 1.8 | 1.8 | 63.4 |
| | 48.00 | 13 | 1.1 | 1.1 | 64.5 |
| | 49.00 | 16 | 1.3 | 1.3 | 65.9 |
| | 50.00 | 19 | 1.6 | 1.6 | 67.5 |
| | 51.00 | 19 | 1.6 | 1.6 | 69.0 |
| | 52.00 | 12 | 1.0 | 1.0 | 70.0 |
| | 53.00 | 19 | 1.5 | 1.5 | 71.6 |
| | 54.00 | 23 | 1.9 | 1.9 | 73.5 |
| | 55.00 | 16 | 1.3 | 1.3 | 74.9 |
| | 56.00 | 11 | .9 | .9 | 75.8 |
| | 57.00 | 16 | 1.4 | 1.4 | 77.2 |
| | 58.00 | 15 | 1.2 | 1.2 | 78.4 |
| | 59.00 | 16 | 1.3 | 1.3 | 79.8 |
| | 60.00 | 15 | 1.3 | 1.3 | 81.1 |
| | 61.00 | 14 | 1.2 | 1.2 | 82.3 |
| | 62.00 | 13 | 1.1 | 1.1 | 83.4 |
| | 63.00 | 16 | 1.4 | 1.4 | 84.8 |
| | 64.00 | 10 | .9 | .9 | 85.6 |
| | 65.00 | 12 | 1.0 | 1.0 | 86.7 |
| | 66.00 | 17 | 1.4 | 1.4 | 88.1 |
| | 67.00 | 13 | 1.1 | 1.1 | 89.2 |

AGE AGE OF RESPONDENT, CONT.

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 68.00 | 13 | 1.1 | 1.1 | 90.2 |
| | 69.00 | 9 | .8 | .8 | 91.0 |
| | 70.00 | 12 | 1.0 | 1.0 | 92.0 |
| | 71.00 | 8 | .7 | .7 | 92.7 |
| | 72.00 | 8 | .6 | .6 | 93.4 |
| | 73.00 | 11 | .9 | .9 | 94.3 |
| | 74.00 | 5 | .4 | .4 | 94.7 |
| | 75.00 | 7 | .6 | .6 | 95.3 |
| | 76.00 | 6 | .5 | .5 | 95.8 |
| | 77.00 | 9 | .8 | .8 | 96.6 |
| | 78.00 | 7 | .6 | .6 | 97.2 |
| | 79.00 | 3 | .3 | .3 | 97.4 |
| | 80.00 | 5 | .4 | .4 | 97.8 |
| | 81.00 | 4 | .3 | .3 | 98.1 |
| | 82.00 | 5 | .4 | .4 | 98.5 |
| | 83.00 | 5 | .4 | .4 | 98.9 |
| | 84.00 | 4 | .3 | .3 | 99.2 |
| | 85.00 | 3 | .3 | .3 | 99.5 |
| | 86.00 | 2 | .2 | .2 | 99.7 |
| | 87.00 | 1 | .0 | .0 | 99.7 |
| | 88.00 | 2 | .2 | .2 | 99.9 |
| | 89.00 | 1 | .1 | .1 | 100.0 |
| | 91.00 | 1 | .0 | .0 | 100.0 |
| | 99.00 | 12 | 1.0 | MISSING | |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1197 Missing Cases 12

I15 HOW MANY PEOPLE LIVING IN YOUR HOUSEHOLD

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| LIVE ALONE | 1 | 117 | 9.7 | 9.7 | 9.7 |
| | 2 | 419 | 34.7 | 34.8 | 44.5 |
| | 3 | 245 | 20.2 | 20.3 | 64.8 |
| | 4 | 256 | 21.2 | 21.2 | 86.1 |
| | 5 | 116 | 9.6 | 9.7 | 95.7 |
| | 6 | 45 | 3.7 | 3.7 | 99.4 |
| | 7 | 5 | .4 | .4 | 99.8 |
| | 9 | 2 | .2 | .2 | 100.0 |
| REFUSE TO ANSWER | 99 | 3 | .3 | MISSING | |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1206 Missing Cases 3

I17 NUMBER OF PEOPLE UNDER 18 YEARS IN YOUR HOUSEHOLD

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1 | 210 | 17.3 | 19.3 | 19.3 |
| | 2 | 178 | 14.7 | 16.4 | 35.6 |
| | 3 | 92 | 7.6 | 8.5 | 44.1 |
| | 4 | 26 | 2.1 | 2.4 | 46.5 |
| | 5 | 1 | .1 | .1 | 46.6 |
| | 6 | 2 | .2 | .2 | 46.8 |
| NONE | 77 | 580 | 48.0 | 53.2 | 100.0 |
| REFUSE TO ANSWER | 99 | 120 | 9.9 | MISSING | |
| | | --- | --- | --- | |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1089 Missing Cases 120

I20 NUMBER OF PERSONS CONTRIBUTED TO 1987 INCOME

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1 | 334 | 27.6 | 28.2 | 28.2 |
| | 2 | 737 | 61.0 | 62.4 | 90.6 |
| | 3 | 80 | 6.6 | 6.8 | 97.3 |
| | 4 | 24 | 2.0 | 2.0 | 99.4 |
| | 5 | 7 | .6 | .6 | 100.0 |
| REFUSE TO ANSWER | 99 | 26 | 2.2 | MISSING | |
| | | --- | --- | --- | |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1183 Missing Cases 26

# APPENDIX C:

## Definitions of Constructed Variables in Data File

Certain variables have been constructed for the convenience of the user, and to aid interpretations of the variables used in this survey to summarize multi-variable composites, such as the respondent's employment status or household size. In this Appendix, the variables are operationally defined, and the SPSS-PC statements are presented which were used to construct each variable. The distributions for these variables are presented in Chapter 2 of this report.

Directory of Appendix C

**AGE**

Age of respondent in years (uncollapsed). This variable was constructed by subtracting the respondent's year of birth from 1988. Those who refused to give their year of birth were assigned a value of 99 and defined as missing.

```
COMPUTE AGE = 1988 - I11.
IF (I11 = 8888 OR I11 = 9999)AGE = 99.
MISSING VALUES AGE(99).
VARIABLE LABELS AGE 'AGE OF RESPONDENT'.
```

**AGEMD**

Age of respondent in years, collapsed into 6 midpoint categories. This variable recodes AGE so that 18 through 24 year olds are in group 1, 25 through 34 year olds are in group 2, 35 through 44 year olds are in group 3, 45 through 54 year olds are in group 4, 55 through 64 year olds are in group 5, and those 65 and older are in group 6. Those refusing to give their ages were assigned to category 99.

```
COMPUTE AGEMD=AGE.
RECODE AGEMD(LO THRU 24=1) (25 THRU 34=2) (35 THRU 44=3) (45 THRU 54=4)
            (55 THRU 64=5) (65 THRU 98=6) (SYSMIS=99).
MISSING VALUES AGEMD(99).
VARIABLE LABELS AGEMD 'AGE OF RESPONDENT, GROUPED'.
VALUE LABELS AGEMD 1 '18 - 24' 2 '25 - 34' 3 '35 - 44' 4 '45 - 54' 5 '55 - 64'
                   6 '65 AND OLDER'.
```

**RACE**

Respondent's self-reported racial or ethnic background. The original variable I12 was recoded into standard Census categories, where white, black, mexican/hispanic, and American Indians are broken out, and the other individuals are combined into an 'other' category.

```
COMPUTE RACE = I12.
RECODE RACE(1=1) (2=4) (3=2) (4=3) (5 THRU 7=5) (8=9).
MISSING VALUES RACE(9).
VARIABLE LABELS RACE 'RACE OF RESPONDENT'.
VALUE LABELS RACE 1 'WHITE' 2 'BLACK' 3 'INDIAN' 4 'HISPANIC' 5 'OTHER'.
```

**GENDER**

Gender of respondent. This variable is merely the I21 (gender) variable set to a new name for the convenience of the datafile users.

```
COMPUTE GENDER = I21.
VARIABLE LABELS GENDER 'GENDER OF RESPONDENT'.
VALUE LABELS GENDER 1 'MALE' 2 'FEMALE'.
```

**EDUC** Educational level of respondent. This variable is merely the I9 (education) variable set to a new name for the convenience of the data file users.

```
COMPUTE EDUC = I9.
RECODE EDUC(88,99=0).
MISSING VALUES EDUC(0).
VARIABLE LABELS EDUC 'EDUCATION OF RESPONDENT'.
VALUE LABELS EDUC 1 'LESS THAN HIGH SCHL' 2 'SOME HIGH SCHOOL'
                  3 'HIGH SCHOOL GRADUATE' 4 'SOME TECHNICAL SCHL'
                  5 'TECHNICAL SCHL GRAD' 6 'SOME COLLEGE'
                  7 'COLLEGE GRADUATE' 8 'GRAD OR PROF. DEGREE'
                  9 'OTHER'.
```

**WKSTATUS** Respondent's employment status. This variable was constructed from the working variables I14, I14A, and I14C1 through I14C4 and is prioritized so that those respondents who have more than one status, for example, women who have a part time job and who are housewives, are assigned to the working category status as opposed to the housewife (or retiree, student...) category. Fulltime workers are in WKSTATUS value 1; parttime workers are in WKSTATUS value 2; those who are unemployed are in group 3; individuals who are students and retirees and do not have paying jobs are in groups 4 and 5, respectively. Individuals who are homemakers and who do have have paying jobs outside the home are in group 6.

```
COMPUTE WKSTATUS = 9.
IF (I14 = 1)WKSTATUS = I14A.
IF (I14 <> 1 AND I14C4 = 1)WKSTATUS = 6.
IF (I14 <> 1 AND I14C1 = 1)WKSTATUS = 5.
IF (I14 <> 1 AND I14C3 = 1)WKSTATUS = 4.
IF (I14 <> 1 AND I14C2 = 1)WKSTATUS = 3.
RECODE WKSTATUS(8=9).
MISSING VALUES WKSTATUS(9).
VARIABLE LABELS WKSTATUS 'WORK STATUS OF RESPONDENT'.
VALUE LABELS  WKSTATUS  1 'WORKED FULL TIME' 2 'WORKED PART TIME'
          3 'UNEMPLOYED' 4 'STUDENT' 5 'RETIRED' 6 'HOMEMAKER'.
```

**OCCGRP** Respondent's occupational group, based on Census major divisions.

```
COMPUTE OCCGRP = I14B.
RECODE OCCGRP(0,8=9).
MISSING VALUES OCCGRP(9).
VARIABLE LABELS OCCGRP 'OCCUPATIONAL WORK GROUP OF RESPONDENT'.
VALUE LABELS OCCGRP 1 'MANAGE,PROF' 2 'TECH,SALES,ADMINISTR' 3 'SERVICE'
     4 'FARM,FISH,FOREST' 5 'CRAFT,REPAIR' 6 'OPERATIVES,LABORERS'.
```

**MARSTAT** Marital status of respondent.

```
COMPUTE MARSTAT = I10.
RECODE MARSTAT(8,9=0).
MISSING VALUES MARSTAT(0).
VARIABLE LABELS MARSTAT 'MARITAL STATUS OF RESPONDENT'.
VALUE LABELS MARSTAT 1 'MARRIED' 2 'SINGLE' 3 'DIVORCED'
      4 'SEPARATED' 5 'WIDOWED'.
```

**HHCOMP** Household composition, marital status of respondent. This variable is constructed from the marital status of the respondent, and the number of children reported living in the household. Respondents who were married, and had children living in the home were assigned a value of 1. Those who were married, and had no children living in the home were assigned a value of 2. Individuals who were divorced, separated, widowed, or single, and who had children in the home were assigned a value of 3. Singles without children were assigned a 4.

```
COMPUTE TEMPVAR = I10.
RECODE TEMPVAR(3,4,5 = 2).
IF ((TEMPVAR = 1) AND (I17 = 0 OR I17 = 77))HHCOMP = 2.
IF ((TEMPVAR = 1) AND ((I17 GE 1) AND (I17 LE 60)))HHCOMP = 1.
IF ((TEMPVAR = 2) AND (I17 = 0 OR I17 = 77))HHCOMP = 4.
IF ((TEMPVAR = 2) AND ((I17 GE 1) AND (I17 LE 60)))HHCOMP = 3.
IF (TEMPVAR GE 8)HHCOMP = 9.
IF (I17 GE 88)HHCOMP = 9.
MISSING VALUES HHCOMP(9).
VARIABLE LABELS HHCOMP 'HOUSEHOLD COMPOSITION'.
VALUE LABELS HHCOMP 1 'MARRIED, KIDS' 2 'MARRIED, NO KIDS' 3 'SINGLE PARENT'
             4 'SINGLE, NO KIDS'.
```

**HHSIZE** The total number of people reported to be living in the household. This variable is derived from I15, and recoded so that the value 3 represents households with 3 or 4 persons living in the household, and value 4 represents those households in which more than 4 persons live.

```
COMPUTE HHSIZE = I15.
RECODE HHSIZE (3,4 = 3)(5 THRU 30 = 4)(88,99 = 9).
MISSING VALUES HHSIZE(9).
VARIABLE LABELS HHSIZE 'HOUSEHOLD SIZE'.
VALUE LABELS HHSIZE 1 'ONE PERSON' 2 'TWO PEOPLE' 3 '3 OR 4 PEOPLE'
    4 '5 OR MORE PEOPLE'.
```

**NADULTS** The number of adult members living in the respondent's household, including him/her self. This variable was constructed by taking the total number of individuals living in the household (I15), and subtracting the total number of children (18 or younger) reported to be living in the household (I17). Since this variable was used in the construction of the weighting variable, the few missing cases were assigned to the 1 category.

```
COMPUTE TEMPVAR = I17.
RECODE TEMPVAR (77 = 0).
COMPUTE NADULTS = I15 - TEMPVAR.
IF (I15 GE 88 OR I17 GE 88)NADULTS = 1.
VARIABLE LABELS NADULTS 'NUMBER OF ADULTS IN HOUSEHOLD'.
```

**NKIDS** The number of household members who are under 18 years of age.

```
COMPUTE NKIDS = I17.
RECODE NKIDS (77 = 0)(88,99 = 99).
MISSING VALUE NKIDS(99).
VARIABLE LABELS NKIDS 'NUMBER OF CHILDREN IN HOUSEHOLD'.
```

**INCOME** Reported household income level for 1987. This variable represents a composite of questions I19 through I19B. The categories of INCOME are those under I19, I19A, and I19B.

```
COMPUTE INCOME = 99.
IF (I19 = 1)INCOME = I19A.
IF (I19 = 2)INCOME = I19B.
RECODE INCOME (88=99).
MISSING VALUES INCOME(99).
VARIABLE LABELS INCOME 'HOUSEHOLD INCOME'.
VALUE LABELS INCOME 5 'UNDER 5,000' 10 '5 TO 10,000' 15 '10 TO 15,000'
          20 '15 TO 20,000' 25 '20 TO 25,000' 30 '25 TO 30,000'
          35 '30 TO 35,000' 40 '35 TO 40,000' 50 '40 TO 50,000'
          60 '50 TO 60,000' 61 'MORE THAN 60,000'.
```

**HHWKSTAT** Head of household's employment status. The variable is set equal to WKSTATUS if I18 is 1, that is, the respondent contributed most to the household income. If someone else contributed most to the household income, HHWKSTAT is calculated in the same way as WKSTATUS except using the variables I18A, I18A1, and I18A3A through I18A3D.

```
COMPUTE HHWKSTAT = 9.
IF (I18A = 1)HHWKSTAT = I18A1.
IF (I18A <> 1 AND I18A3D = 1)HHWKSTAT = 6.
IF (I18A <> 1 AND I18A3A = 1)HHWKSTAT = 5.
IF (I18A <> 1 AND I18A3C = 1)HHWKSTAT = 4.
IF (I18A <> 1 AND I18A3B = 1)HHWKSTAT = 3.
RECODE HHWKSTAT(8=9).
MISSING VALUES HHWKSTAT(9).
IF (I18 = 1 AND NOT MISSING(WKSTATUS))HHWKSTAT=WKSTATUS.
VARIABLE LABELS HHWKSTAT 'HOUSEHOLD WORK STATUS'.
VALUE LABELS HHWKSTAT 1 'WORKED FULL TIME' 2 'WORKED PART TIME' 3 'UNEMPLOYED'
     4 'STUDENT' 5 'RETIRED' 6 'HOMEMAKER'.
```

**HHOCCGRP** Head of household's occupational group, based on Census major divisions.

```
COMPUTE HHOCCGRP = I18A2.
RECODE HHOCCGRP(0,8=9).
MISSING VALUES HHOCCGRP(9).
IF (I18 = 1 AND NOT MISSING(OCCGRP))HHOCCGRP=OCCGRP.
VARIABLE LABELS HHOCCGRP 'HOUSEHOLD OCCUPATIONAL WORK GROUP'.
VALUE LABELS HHOCCGRP 1 'MANAGE,PROF' 2 'TECH,SALES,ADMINISTR' 3 'SERVICE'
     4 'FARM,FISH,FOREST' 5 'CRAFT,REPAIR' 6 'OPERATIVES,LABORERS'.
```

**COUNTY** County in which the respondent reports living. COUNTY is an unrecoded duplicate of question I1.

```
COMPUTE COUNTY = I1.
RECODE COUNTY(88=99).
MISSING VALUES COUNTY(99).
VARIABLE LABELS COUNTY 'COUNTY OF RESIDENCE'.
VALUE LABELS COUNTY 1 'AITKIN' 2 'ANOKA' 3 'BECKER' 4 'BELTRAMI' 5 'BENTON'
  6 'BIG STONE' 7 'BLUE EARTH' 8 'BROWN' 9 'CARLTON' 10 'CARVER' 11 'CASS'
 12 'CHIPPEWA' 13 'CHISAGO' 14 'CLAY' 15 'CLEARWATER' 16 'COOK' 17 'COTTONWOOD'
 18 'CROW WING' 19 'DAKOTA' 20 'DODGE' 21 'DOUGLAS' 22 'FARIBAULT'
 23 'FILLMORE' 24 'FREEBORN' 25 'GOODHUE' 26 'GRANT' 27 'HENNEPIN'
 28 'HOUSON' 29 'HUBBARD' 30 'ISANTI' 31 'ITASCA' 32 'JACKSON' 33 'KANABEC'
 34 'KANDIYOHI' 35 'KITTSON' 36 'KOOCHICHING' 37 'LAC QUI PARLE' 38 'LAKE'
 39 'LAKE OF THE WOODS' 40 'LE SUEUR' 41 'LINCOLN' 42 'LYON' 43 'MCLEOD'
 44 'MAHNOMEN' 45 'MARSHALL' 46 'MARTIN' 47 'MEEKER' 48 'MILLE LACS'
 49 'MORRISON' 50 'MOWER' 51 'MURRAY' 52 'NICOLLET' 53 'NOBLES' 54 'NORMAN'
 55 'OLMSTED' 56 'OTTER TAIL' 57 'PENNINGTON' 58 'PINE' 59 'PIPESTONE'
 60 'POLK' 61 'POPE' 62 'RAMSEY' 63 'RED LAKE' 64 'REDWOOD' 65 'RENVILLE'
 66 'RICE' 67 'ROCK' 68 'ROSEAU' 69 'ST. LOUIS' 70 'SCOTT' 71 'SHERBURNE'
 72 'SIBLEY' 73 'STEARNS' 74 'STEELE' 75 'STEVENS' 76 'SWIFT' 77 'TODD'
 78 'TRAVERSE' 79 'WABASHA' 80 'WADENA' 81 'WASECA' 82 'WASHINGTON'
 83 'WATONWAN' 84 'WILKIN' 85 'WINONA' 86 'WRIGHT' 87 'YELLOW MEDICINE'.
```

**DDREGION** Development District or Financial Planning Region in the State of Minnesota. The state is divided geographically into 13 regions, where district 11 represents the seven county metro area. The variable is constructed through recoding the county variable (I1) into the appropriate region. Non-responses to the county variable were assigned a missing code of 99.

```
COMPUTE DDREGION=COUNTY.
RECODE DDREGION (35,45,54,57,60,63,68=1) (4,15,29,39,44=2)
       (1,9,16,31,36,38,69,72=3) (3,14,21,26,56,61,75,78,84=4)
       (11,18,49,77,80=5) (34,43,47,65=6) (6,12,37,76,87=7)
       (13,30,33,48,58=8) (5,71,73,86=9) (17,32,41,42,51,53,59,64,67=10)
       (7,8,22,40,46,52,71,81,83=11) (20,23,24,25,28,50,55,66,74,79,85=12)
       (2,10,19,27,62,70,82=13) (SYSMIS = 99).
MISSING VALUES DDREGION(99).
VARIABLE LABELS DDREGION 'DEVELOPMENT DISTRICT REGION'.
VALUE LABELS DDREGION 1 'DISTRICT 1' 2 'DISTRICT 2' 3 'DISTRICT 3'
      4 'DISTRICT 4' 5 'DISTRICT 5' 6 'DISTRICT 6E' 7 'DISTRICT 6W'
      8 'DISTRICT 7E' 9 'DISTRICT 7W' 10 'DISTRICT 8' 11 'DISTRICT 9'
      12 'DISTRICT 10' 13 'DISTRICT 11'.
```

**GEOREGN** Geographic area of household. Recoded version of DDREGION, so that state is broken up into six areas, as follows: Northwest (regions 1,2); Northeast (region 3); Central (regions 4 through 7W); Southwest (regions 8,9); Southeast (region 10); Metro (region 11).

```
COMPUTE GEOREGN=DDREGION.
RECODE GEOREGN (1,2=1) (3=2) (4 THRU 9=3) (10,11=4) (12=5) (13=6) (SYSMIS=9).
MISSING VALUES GEOREGN(9).
VARIABLE LABELS GEOREGN 'GEOGRAPHIC REGION OF MINNESOTA'.
VALUE LABELS GEOREGN 1 'NORTHWEST' 2 'NORTHEAST' 3 'CENTRAL' 4 'SOUTHWEST'
        5 'SOUTHEAST' 6 'METRO'.
```

**METRO**

Respondent's area of residence is in the Twin Cities Metro Area or outside the metro area. Respondents living in DDREGION code (13), actually District #11, were assigned to value 2, Twin Cities area residents, while others were assigned to value 1.

```
COMPUTE METRO=DDREGION.
RECODE METRO (13=2) (SYSMIS=99) (ELSE=1).
MISSING VALUES METRO(99).
VARIABLE LABELS METRO 'GREATER MINNESOTA OR TWIN CITIES AREA'.
VALUE LABELS METRO 2 'TWIN CITIES AREA' 1 'GREATER MINNESOTA'.
```

**WGHT**

Case-weighting factor to adjust for household size bias. This variable weights each respondent's representation in the sample according to the number of adult members living in the household, with the purpose being to down-weight respondents living in one-adult households, and up-weight those living in two or more person households. The weighting factor was derived by looking at a frequency of NADULTS in UNWEIGHTED form, and making the following computation:

| VALUE | | FREQUENCY (n) | | PRODUCT |
|---|---|---|---|---|
| 1 | x | n | = | x |
| 2 | x | n | = | nn |
| 3 | x | n | = | nnn |
| 4 | x | n | = | nnnn |
| 5 | x | n | = | nnnnn |
| 6 | x | n | = | nnnnnn |
| 7 | x | n | = | nnnnnnn |
| 8 | x | n | = | nnnnnnnn |
| | | | SUM | nnnnnnnnn |

Weighting factor = sampling size (1209)/sum of NADULTS.

For the MFS sample the weighting factor is 0.515345286. Each respondent is assigned a case weight by multiplying his/her value of NADULTS by this weighting factor. This is accomplished in SPSS-PC by the following statements:

```
COMPUTE WGHT=(NADULTS * 0.515345286)
WEIGHT BY WGHT
```

MSS-88.APC

# APPENDIX D

## ADMINISTRATIVE VARIABLES

Two administrative variables were included in the data file for methodological purposes. The first of these variables, FORM, was included to identify different versions of the survey based on variations in the first response category for Question B1. The order of response categories was always the same. However, on Form 1 the first category was composting, on Form 2 the first category was incineration, etc.

The second of these variables, HRS, was included to identify the random start item in Section H, the education questions. While the random start location identified the first item that was read to respondents, the second item read to respondents was the one below it on the list. When the end of the list was reached, the interviewer simply went back up to the top of the list and continued until all items had been asked.

DOC DATE OF COMPLETION

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 102 | 1 | .1 | .1 | .1 |
| | 103 | 16 | 1.3 | 1.3 | 1.4 |
| | 104 | 14 | 1.2 | 1.2 | 2.6 |
| | 105 | 14 | 1.2 | 1.2 | 3.8 |
| | 106 | 6 | .5 | .5 | 4.3 |
| | 107 | 22 | 1.8 | 1.8 | 6.1 |
| | 108 | 7 | .6 | .6 | 6.6 |
| | 109 | 15 | 1.3 | 1.3 | 7.9 |
| | 110 | 9 | .8 | .8 | 8.7 |
| | 111 | 14 | 1.2 | 1.2 | 9.8 |
| | 112 | 10 | .9 | .9 | 10.7 |
| | 1110 | 22 | 1.8 | 1.8 | 12.5 |
| | 1112 | 23 | 1.9 | 1.9 | 14.4 |
| | 1113 | 19 | 1.5 | 1.5 | 15.9 |
| | 1114 | 31 | 2.6 | 2.6 | 18.5 |
| | 1115 | 43 | 3.5 | 3.5 | 22.0 |
| | 1116 | 51 | 4.2 | 4.2 | 26.2 |
| | 1117 | 51 | 4.2 | 4.2 | 30.4 |
| | 1118 | 2 | .2 | .2 | 30.6 |
| | 1119 | 57 | 4.7 | 4.7 | 35.3 |
| | 1120 | 60 | 4.9 | 4.9 | 40.3 |
| | 1121 | 58 | 4.8 | 4.8 | 45.1 |
| | 1122 | 55 | 4.6 | 4.6 | 49.6 |
| | 1123 | 12 | 1.0 | 1.0 | 50.6 |
| | 1127 | 25 | 2.1 | 2.1 | 52.7 |
| | 1128 | 44 | 3.7 | 3.7 | 56.4 |
| | 1129 | 31 | 2.6 | 2.6 | 59.0 |
| | 1130 | 28 | 2.3 | 2.3 | 61.3 |
| | 1201 | 29 | 2.4 | 2.4 | 63.7 |
| | 1203 | 48 | 4.0 | 4.0 | 67.7 |
| | 1204 | 35 | 2.9 | 2.9 | 70.6 |
| | 1205 | 31 | 2.6 | 2.6 | 73.2 |
| | 1206 | 9 | .7 | .7 | 73.9 |
| | 1207 | 14 | 1.2 | 1.2 | 75.1 |
| | 1208 | 9 | .7 | .7 | 75.8 |
| | 1210 | 2 | .2 | .2 | 76.0 |
| | 1211 | 5 | .4 | .4 | 76.4 |
| | 1212 | 25 | 2.0 | 2.0 | 78.4 |
| | 1213 | 15 | 1.3 | 1.3 | 79.7 |
| | 1214 | 32 | 2.6 | 2.6 | 82.4 |
| | 1215 | 19 | 1.6 | 1.6 | 83.9 |
| | 1216 | 5 | .4 | .4 | 84.4 |
| | 1217 | 11 | .9 | .9 | 85.3 |
| | 1218 | 23 | 1.9 | 1.9 | 87.2 |
| | 1219 | 19 | 1.6 | 1.6 | 88.7 |
| | 1220 | 26 | 2.2 | 2.2 | 90.9 |
| | 1221 | 20 | 1.7 | 1.7 | 92.6 |
| | 1222 | 37 | 3.0 | 3.0 | 95.6 |
| | 1223 | 2 | .1 | .1 | 95.7 |
| | 1227 | 21 | 1.7 | 1.7 | 97.5 |
| | 1228 | 19 | 1.5 | 1.5 | 99.0 |
| | 1229 | 12 | 1.0 | 1.0 | 100.0 |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1209 Missing Cases 0

MIN NUMBER OF MINUTES TO COMPLETE SURVEY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 5 | 2 | .2 | .2 | .2 |
| | 6 | 7 | .6 | .6 | .7 |
| | 7 | 9 | .7 | .7 | 1.4 |
| | 8 | 20 | 1.6 | 1.6 | 3.1 |
| | 9 | 39 | 3.2 | 3.2 | 6.3 |
| | 10 | 110 | 9.1 | 9.1 | 15.4 |
| | 11 | 65 | 5.4 | 5.4 | 20.8 |
| | 12 | 81 | 6.7 | 6.7 | 27.5 |
| | 13 | 80 | 6.6 | 6.6 | 34.1 |
| | 14 | 103 | 8.5 | 8.5 | 42.7 |
| | 15 | 124 | 10.2 | 10.2 | 52.9 |
| | 16 | 82 | 6.8 | 6.8 | 59.7 |
| | 17 | 82 | 6.8 | 6.8 | 66.5 |
| | 18 | 57 | 4.7 | 4.7 | 71.2 |
| | 19 | 50 | 4.1 | 4.1 | 75.3 |
| | 20 | 90 | 7.4 | 7.4 | 82.7 |
| | 21 | 33 | 2.7 | 2.7 | 85.5 |
| | 22 | 20 | 1.6 | 1.6 | 87.1 |
| | 23 | 20 | 1.7 | 1.7 | 88.7 |
| | 24 | 26 | 2.1 | 2.1 | 90.9 |
| | 25 | 27 | 2.2 | 2.2 | 93.1 |
| | 26 | 5 | .4 | .4 | 93.5 |
| | 27 | 6 | .5 | .5 | 94.0 |
| | 28 | 7 | .6 | .6 | 94.6 |
| | 29 | 9 | .7 | .7 | 95.3 |
| | 30 | 10 | .8 | .8 | 96.1 |
| | 31 | 3 | .2 | .2 | 96.3 |
| | 32 | 8 | .7 | .7 | 97.0 |
| | 33 | 5 | .4 | .4 | 97.4 |
| | 34 | 4 | .3 | .3 | 97.7 |
| | 35 | 3 | .3 | .3 | 98.0 |
| | 36 | 7 | .6 | .6 | 98.6 |
| | 37 | 2 | .1 | .1 | 98.7 |
| | 38 | 1 | .1 | .1 | 98.8 |
| | 40 | 5 | .4 | .4 | 99.1 |
| | 41 | 1 | .1 | .1 | 99.2 |
| | 42 | 2 | .1 | .1 | 99.4 |
| | 43 | 1 | .1 | .1 | 99.4 |
| | 46 | 1 | .1 | .1 | 99.5 |
| | 48 | 1 | .1 | .1 | 99.6 |
| | 50 | 1 | .0 | .0 | 99.7 |
| | 51 | 1 | .0 | .0 | 99.7 |
| | 52 | 1 | .1 | .1 | 99.8 |
| | 56 | 1 | .0 | .0 | 99.8 |
| | 65 | 1 | .1 | .1 | 99.9 |
| | 66 | 1 | .1 | .1 | 100.0 |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1209 Missing Cases 0

IID INTERVIEWER IDENTIFICATION NUMBER

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 2 | 40 | 3.3 | 3.3 | 3.3 |
| | 4 | 53 | 4.3 | 4.3 | 7.7 |
| | 5 | 25 | 2.0 | 2.0 | 9.7 |
| | 7 | 90 | 7.5 | 7.5 | 17.2 |
| | 8 | 25 | 2.1 | 2.1 | 19.3 |
| | 10 | 32 | 2.6 | 2.6 | 21.9 |
| | 13 | 22 | 1.8 | 1.8 | 23.7 |
| | 14 | 77 | 6.4 | 6.4 | 30.1 |
| | 15 | 96 | 8.0 | 8.0 | 38.1 |
| | 16 | 38 | 3.1 | 3.1 | 41.2 |
| | 17 | 22 | 1.8 | 1.8 | 43.0 |
| | 18 | 11 | .9 | .9 | 43.9 |
| | 19 | 46 | 3.8 | 3.8 | 47.7 |
| | 22 | 10 | .9 | .9 | 48.6 |
| | 23 | 31 | 2.6 | 2.6 | 51.2 |
| | 24 | 10 | .9 | .9 | 52.0 |
| | 25 | 25 | 2.0 | 2.0 | 54.0 |
| | 26 | 20 | 1.6 | 1.6 | 55.7 |
| | 29 | 39 | 3.2 | 3.2 | 58.9 |
| | 30 | 81 | 6.7 | 6.7 | 65.6 |
| | 31 | 32 | 2.6 | 2.6 | 68.2 |
| | 32 | 61 | 5.0 | 5.0 | 73.3 |
| | 33 | 47 | 3.9 | 3.9 | 77.2 |
| | 36 | 16 | 1.4 | 1.4 | 78.6 |
| | 42 | 20 | 1.7 | 1.7 | 80.2 |
| | 45 | 16 | 1.4 | 1.4 | 81.6 |
| | 46 | 40 | 3.3 | 3.3 | 84.9 |
| | 47 | 35 | 2.9 | 2.9 | 87.8 |
| | 48 | 32 | 2.7 | 2.7 | 90.5 |
| | 51 | 30 | 2.5 | 2.5 | 93.0 |
| | 56 | 25 | 2.1 | 2.1 | 95.1 |
| | 59 | 26 | 2.2 | 2.2 | 97.3 |
| | 62 | 33 | 2.7 | 2.7 | 100.0 |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1209 Missing Cases 0

**CON NUMBER OF CONTACTS**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1 | 536 | 44.4 | 44.4 | 44.4 |
| | 2 | 282 | 23.4 | 23.4 | 67.7 |
| | 3 | 133 | 11.0 | 11.0 | 78.8 |
| | 4 | 95 | 7.8 | 7.8 | 86.6 |
| | 5 | 56 | 4.6 | 4.6 | 91.2 |
| | 6 | 51 | 4.2 | 4.2 | 95.4 |
| | 7 | 10 | .8 | .8 | 96.2 |
| | 8 | 12 | 1.0 | 1.0 | 97.2 |
| | 9 | 8 | .6 | .6 | 97.9 |
| | 10 | 8 | .7 | .7 | 98.6 |
| | 11 | 2 | .2 | .2 | 98.7 |
| | 12 | 7 | .6 | .6 | 99.3 |
| | 13 | 3 | .3 | .3 | 99.5 |
| | 14 | 2 | .2 | .2 | 99.7 |
| | 15 | 1 | .0 | .0 | 99.7 |
| | 18 | 3 | .3 | .3 | 100.0 |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1209 Missing Cases 0

**SAM SAMPLE THE SURVEY WAS FROM**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| METRO AND STATE | 1 | 608 | 50.3 | 50.3 | 50.3 |
| OUTSTATE ONLY | 3 | 601 | 49.7 | 49.7 | 100.0 |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1209 Missing Cases 0

**RCONV REFUSAL CONVERSION**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| YES | 1 | 94 | 7.8 | 7.8 | 7.8 |
| NO | 2 | 1115 | 92.2 | 92.2 | 100.0 |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1209 Missing Cases 0

CID CODER IDENTIFICATION NUMBER

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 3 | 51 | 4.2 | 4.2 | 4.2 |
| | 16 | 501 | 41.4 | 41.4 | 45.6 |
| | 36 | 331 | 27.4 | 27.4 | 73.0 |
| | 45 | 243 | 20.1 | 20.1 | 93.1 |
| | 62 | 73 | 6.0 | 6.0 | 99.1 |
| | 75 | 11 | .9 | .9 | 100.0 |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1209 Missing Cases 0

FORM WHICH FORM IS USED

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| FORM 1 | 1 | 305 | 25.2 | 25.2 | 25.2 |
| FORM 2 | 2 | 303 | 25.1 | 25.1 | 50.3 |
| | 3 | 304 | 25.1 | 25.1 | 75.4 |
| | 4 | 297 | 24.6 | 24.6 | 100.0 |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1209 Missing Cases 0

HRS RANDOM START SECTION H

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1 | 226 | 18.7 | 18.7 | 18.7 |
| | 2 | 193 | 15.9 | 15.9 | 34.7 |
| | 3 | 207 | 17.1 | 17.1 | 51.7 |
| | 4 | 182 | 15.0 | 15.0 | 66.8 |
| | 5 | 195 | 16.2 | 16.2 | 82.9 |
| | 6 | 206 | 17.1 | 17.1 | 100.0 |
| | TOTAL | 1209 | 100.0 | 100.0 | |

Valid Cases 1209 Missing Cases 0

## APPENDIX E: Administrative Forms

Appendix E contains brief explanations for the contact record disposition categories, and copies of the administrative forms used in the 1988 Twin Cities Area Survey and the Minnesota State Survey. There were two primary administrative forms: the contact record with callback/refusal forms on the back, and the introduction. Contact records were used to record the actual data and time of each attempted contact with a household, the interviewer ID, and the final outcome (disposition) of each attempted contact.

### DIRECTORY OF APPENDIX E

## CONTACT RECORD DISPOSITION CATEGORIES

There were 12 possible disposition categories for each call that was made. A brief explanation for each of these disposition categories is presented below.

| Disposition | Explanation |
|---|---|
| Complete | All questions in the interview schedule had been asked. |
| Partial | The interview schedule had been begun, but not completed. In such a case, interviewers were instructed to schedule an appointment to finish, and fill out the appointment for on the back of the callback record. If a respondent declined to complete the interview, the refusal form on the back of the callback record was filled out. |
| No answer/busy/machine | All attempts during a shift had resulted in the phone ringing six times without being answered. If no one in a household could be contacted on a minimum of 10 separate shifts, the telephone number was eliminated. Every attempt to contact the household during the shift had resulted in a busy signal. |
| Disconnected/not working | The number was not in operation. |
| Not home phone | The number was not for a residential phone. |
| R not available | The targeted respondent had been selected within the household, but would not be available to interview during the period of time in which interviewing was conducted. For example, if the respondent was out of town, or if they were not available between 9:30 a.m. and 9:30 p.m. |
| Physical/language problem | Respondent had been selected, but could not complete the interview, for example, because they were ill, were hearing impaired, or developmentally disabled. |
| Refusal and second refusal | Someone in the household declined to participate. The person who refused could have been any member of the household. Interviewers were instructed to complete the refusal form and to attach the selection grid to the callback record. |

| | |
|---|---|
| Callback to contact R | A respondent had been selected, but that an appointment had been suggested by someone other than the respondent. The appointment form was filled out, and the selection grid was attached. |
| Appointment with R | A respondent had been selected and he or she had scheduled a time to complete the interview. |
| Other | Reserved for contingencies not covered by the other dispositions, for example, no one over 18 living in household. |

Callback time:

**CONTACT RECORD**
**TCAS/MSS 88**

(CODER USE ONLY)

ID __ __ __ __

Do C __ __ __ __

# Min __ __

I-ID __ __

# Con __ __

Sample __

R Conv ____

C-ID __ __

Form __

DATE - _____

TIME - _____

CIRCLE CODE

| | |
|---|---|
| 01 Completed | 01 Completed |
| 02 Partial | 02 Partial |
| 03 No answer/busy/machine | 03 No answer/busy/machine |
| 04 # disc/not working | 04 # disc/not working |
| 05 Not home phone | 05 Not home phone |
| 06 R not available * | 06 R not available * |
| 07 Phys/lang problem * | 07 Phys/lang problem * |
| 08 1st refusal ** | 08 1st refusal ** |
| 09 2nd refusal ** | 09 2nd refusal ** |
| 10 Callback to contact R *** | 10 Callback to contact R *** |
| 11 Appointment with R *** | 11 Appointment with R *** |
| 12 Other * | 12 Other * |

CONTACTS/SHIFT _____

INTERVIEWER - _____

DATE - _____

TIME - _____

| | |
|---|---|
| 01 Completed | 01 Completed |
| 02 Partial | 02 Partial |
| 03 No answer/busy/machine | 03 No answer/busy/machine |
| 04 # disc/not working | 04 # disc/not working |
| 05 Not home phone | 05 Not home phone |
| 06 R not available * | 06 R not available * |
| 07 Phys/lang problem * | 07 Phys/lang problem * |
| 08 1st refusal ** | 08 1st refusal ** |
| 09 2nd refusal ** | 09 2nd refusal ** |
| 10 Callback to contact R *** | 10 Callback to contact R *** |
| 11 Appointment with R *** | 11 Appointment with R *** |
| 12 Other * | 12 Other * |

REPAIR OPERATOR
(after 4 NA's or busy):
DIAL 410-2234

Date: ____/____

I-ID __ __

| | |
|---|---|
| Working | 01 |
| Not working | 02 |
| Business # | 03 |
| Other (SPEC) | 04 |

_____

_____

CONTACTS/SHIFT _____

INTERVIEWER - _____

* Describe
** Complete refusal form
*** Complete callback form

TIME START _____

TIME END _____

INTERVIEW IN MIN _____

EDIT TIME IN MIN _____

INTERVIEWER # _____

SUPERVISOR _____

MONITORED: N Y -> BY: _____

MSS/TCAS 1988

## CALLBACK FORM

| | Date ___/___ | Date ___/___ | Date ___/___ | Date ___/___ |
|---|---|---|---|---|
| Was respondent selected? | Yes / No | Yes / No | Yes / No | Yes / No |
| Speak with Resp in person? | Yes / No | Yes / No | Yes / No | Yes / No |
| Respondent is: Relation (if known) | F / M / DK _____ | F / M / DK _____ | F / M / DK _____ | F / M / DK _____ |
| 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

Was respondent selected? Yes / No Respondent is: Female / Male

Was respondent person who refused? Yes / No

Person answering phone was: Female / Male

Did they seem very busy or inconvenienced? Yes / No / Uncertain

At what point was the interview terminated? _____

_____

_____

What reasons were given for refusal? _____

_____

_____

What arguments were employed by interviewer? _____

_____

_____

Other comments or information: _____

_____

Introduction

**MINNESOTA STATE SURVEY, 1988**

A. Hello, my name is _____. I'm a student calling from the University of Minnesota.

B. We're doing a study for state and local government about quality of life, transportation, and education.

C. I need to talk to the person in your household who is 18 or older, and celebrated the most recent birthday.

**(IF RESPONDENT ASKS, SAY, "IT'S A METHOD OF RANDOMLY SELECTING PEOPLE WITHIN THE HOUSEHOLD.")**

May I please speak to that person?

(IF RIGHT PERSON IS ON THE LINE, GO TO PARAGRAPH D.)

(IF RIGHT PERSON IS NOT ON THE LINE, ASK TO SPEAK TO THAT PERSON AND WHEN THEY ARE ON THE LINE, REPEAT PARAGRAPHS A AND B, AND THEN GO ON TO PARAGRAPH D.)

(IF RIGHT PERSON IS NOT AVAILABLE) When would be the best time to speak with that person?

SPECIFIC TIME AND DATE: Time: _____ Date: _____

What is his/her first name? Name: _____

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, we'll begin.

(INTERVIEWERS: HOUSEHOLD MEANS WHATEVER THE RESPONDENT THINKS IT MEANS.)