Minnesota

DEPARTMENT OF
NATURAL RESOURCES

COMPUTER CODING MANUAL
Summer Telephone Survey

SCORP

Research and Policy Section
Bureau of Comprehensive Planning & Progamming

COMPUTER CODING MANUAL-
SUMMER TELEPHONE SURVEY

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TABLE OF CONTENTS

General Instructions

The purpose of coding verbal or written responses into a numeric format is to place each response into a form that is easily, quickly, and accurately readable by a computer. When the coding is done correctly, the computer becomes an extremely helpful, labor saving device. Unfortunately, an incorrectly coded response can create complex problems requiring many hours of work to discover and correct.

The computer makes no errors. Errors are only made by the people coding the responses, those punching responses, and those who program the computer. To help you, the coder, avoid making some basic mistakes a brief description of how computers read data follows:

A computer can only read one character as a time. These characters can be alphabetic or numeric. Obviously, the range of possible alphabetic characters is from A to Z, or 26 possibles. Likewise, a numeric character can range from 0 to 9, plus a blank for 11 possibles. Note that the computer does distinguish between a blank, or no character, and the numeric character 0.

Because the computer reads only one character at a time and our numbering system is based on combinations of single digits that take on unique values, the computer must be told which digits to combine. For example, suppose the computer reads the three digits 1, 4, and 7. Without instruction, the computer does not know whether to interpret those as three separate numbers, as some other number such as one hundred and forty-seven, as a fourteen and a seven or as a one and a forty-seven. The way we tell the computer how to combine numbers is through formating the digits.

A format has three basic parts: a letter telling the computer whether

the codes being read are numeric or alphabetic; a number indicating the number of digits in the combination; and second number telling the computer how many of the numbers in the combination are to the right of the decimal point. If we wanted the example above read as one number, (one-hundred and forty-seven), we would format that combination as (f 3.0). The letter f indicates numeric codes. The number 3 tells the computer to combine three code digits and the zero means that none of the three digits are to the right of the decimal point. A format making the computer read the three numbers as fourteen and seven tenths would be (f 3.1). To make the three digits read one, four and seven three formats are written (f 1.0, f 1.0, f 1.0).

To enter the response into the machine, we will punch the codes on computer cards. Each card can hold up to eighty single digit codes, each one entered in one of the eighty columns. Because codes can be combined any number of ways, and since the way they are combined can seriously effect the value of the combination, we must be consistent in our method of combining codes. That is, we must always place codes for the same types of responses in the same place on the card. For example, assume that we are only using the first four columns of a card. Columns one and two are used to enter the household members' number (01 to 10). The third and fourth columns are used to record a recreation activity that household member participated in. (For example, picnicking = 01 and cross country skiing = 13). We would format this card (f 2.0, f 2.0). That means combine the codes in columns one and two with no codes to the right of the decimal and combine the codes in columns three and four with no codes to the right of the decimal. Do not read the remaining 76 columns of the card.

If household member number 10 went cross country skiing, we would put a 1 in a column three and a three in column for (1013). The computer would then read a ten and thirteen and store one cross-country skiing outing for household member 10. Suppose for a minute that we accidently skipped column three and entered cross-country skiing (13) in columns four and five. That would look like this (10-13). The computer would read a ten and a one (10)(1). The three would be dropped because the computer does not read columns 5 through 80. When the computer reads a ten and a one, it records that household member 10 went on a picnic rather than a cross-country skiing outing.

So, as you can see, it is terribly important to place the codes in the correct columns. To help you do this we have designed a special coding sheet. It has forty rows. Each row will be punched on one card and therefore haseighty columns. Columns that will be combined by the computer are separated by light lines and are enclosed by darker lines. Four of the columns are to be left blank, and they are blacked out entirely. At the top of each set of columns that will be combined is a description of the response that is to be entered in those columns.

Only one value has any digits to the right of the decimal. That value is length of time; its format is (f 3.1). If we are dealing with an activity that usually takes less than a day to participate in, we will record it in hours. For example, a picnicking occasion might very likely take up three and 1/2 hours. That would be coded as 035. A dot has been placed in the description of the columns that will be used to record length of time. That dot is on the light line that will separate the whole numbers from the tenths.

Each card can accommodate four separate activity occasions and the information about that occasion such as what type of activity it was, which household member did it, the day of the week it occurred on, etc. If a household has no recreation, no rows need be filled out for that interview. If a household reported four or fewer activity occasions, then only one row is used. Use as much of the row as is necessary to record the activity occasions. Leave the remainder of the row blank, with the exception of the card number columns, columns 79 & 80. Place 01 in these columns. For households reporting more than four activity occasions, use as many rows as are necessary to record all activity occasions. Remember to enter the case number on all rows and to enter a card number for all rows.

The card number requires some special instruction. Cards (rows) are numbered <u>within</u> cases. If only one row is needed to record all of a household's (case) reported activity occasions, the card number will always be 01. If two rows are necessary, they will be numbered 01 and 02. If a household (case) requires three rows, they will have 01, 02, and 03 in the case number columns. There can be as many as 99 rows completed for one case, (396 activity occasions). In that case, the rows would be numbered 01 through 99. Finally, it is vital that you number the rows in consecutive, ascending order beginning with 01 for each new household (case).

CODING VALUES

Case # (cc 1 through 6)

Region (cc 1 & 2)

1 = 01	6W = 07
2 = 02	7E = 08
3 = 03	7W = 09
4 = 04	8 = 10
5 = 05	9 = 11
6E = 06	10 = 12
	11 = 13

ID (cc thru 6) 0001 to 9999

Note: The entire case number should be recorded at the top of the activity occasion sheet in the blank labeled ID#.

Activity (first, second, third, and fourth)
(cc 8 & 9, 26 & 27, 44 & 45 and 62 & 63)

Camping	01
Cross Country Skiing	
Free	02
Trail	03
Combined	04
Misc..	05
Dog sledding	06
Downhill skiing	07
Hunting	
Upland birds	08
Big game	09
Waterfowl	10
Misc.	11
Ice boating	12
Ice Fishing	13
Ice Skating	
Misc.	14
Figure	15
Hockey	16
Free	17
Open Water Fishing	18
Orienteering	19
Sledding	20
Snowshoeing	
Trail	21
Free	22
Combination	23
Misc.	24
Snow Tubing	25
Snowmobiling	
Trail	26
Free	27
Combined	28
Misc.	29
Trapping	30

Household Member #
(cc 10 & 11, 28 & 29, 46 & 47, 64 & 65)

1 = 01
2 = 02
3 = 03
4 = 04
5 = 05
6 = 06
7 = 07
8 = 08
9 = 09
10 = 10
MV = 99

_____
Day of the Week
(cc 12, 30, 48, 66)

Monday	1
Tuesday	2
Wednesday	3
Thursday	4
Friday	5
Saturday	6
Sunday	7
Week Day	8
Week End	9
MV	0

Location
(cc 13-19, 31-37, 49-55, 67-73)
There are always three distinct ways to code location:

1). If the location is a public or a private resort listed in the light blue SCORP facility inventory use that facility's seven digit code number listed in the far left-hand columns.

2). If the location is a lake listed in the alphabetical list of lake names follows steps A and B.

A) Enter the six place lake code in the first six columns substituting the letter L for the dash. Note that the digits to the left of the dash are the county number; therefore, counties 1 through 9 must be coded as 01 to 09.

B) Enter the ownership of the area used in the seventh column of the seven column block:

Federal	0
State	1
County	2
City	3
Township	4
Public School	5
Regional	6
Private	7
Public Unknown	8
MC	9

3). If neither Case 1 nor Case 2 above fit the response, follow steps A, B and C below:

A) Enter the county number in the first two columns of the location block.

B) Enter the letter M in the third column of the block.

C) Using the distance and direction response refer to the state map with major and minor location cells. Find the approximate location and enter the major cell number (lower left hand corner of the square outlined by bold red line) in the fourth column of the block. These range from 1 to 7.

D) Still using the subdivided state map, enter the minor cell number (in the small cell bounded by thin red lines) in the fifth and sixth columns.

E) Using the ownership codes in method 2, enter ownership.

(If major cell is unknown, enter 9. If minor cell is unknown, enter 99.)

COUNTY CODES

Aitkin	01	Kanabec	33	Renville	65
Anoka	02	Kandiyohi	34	Rice	66
Becker	03	Kittson	35	Rock	67
Beltrami	04	Koochiching	36	Roseau	68
Benton	05	Lac Qui Parle	37	St. Louis	69
Bigstone	06	Lake	38	Scott	70
Blue Earth	07	Lake of the Woods	39	Sherburne	71
Brown	08	Le Seur	40	Sibley	72
Carlton	09	Lincoln	41	Stearns	73
Carver	10	Lyon	42	Steele	74
Cass	11	McLeod	43	Stevens	75
Chippewa	12	Mahnomen	44	Swift	76
Chisago	13	Marshall	45	Todd	77
Clay	14	Martin	46	Traverse	78
Clearwater	15	Meeker	47	Wabasha	79
Cook	16	Mille Lacs	48	Wadena	80
Cottonwood	17	Morrison	49	Waseca	81
Crow Wing	18	Mower	50	Washington	82
Dakota	19	Murray	51	Watonwan	83
Dodge	20	Nicollet	52	Wilkin	84
Douglas	21	Nobles	53	Winona	85
Faribault	22	Norman	54	Wright	86
Fillmore	23	Olmsted	55	Yellow Medicine	87
Freeborn	24	Otter Trail	56	Missing Value	99
Goodhue	25	Pennington	57		
Grant	26	Pine	58		
Hennepin	27	Pipestone	59		
Houston	28	Polk	60		
Hubbard	29	Pope	61		
Isanti	30	Ramsey	62		
Itasca	31	Red Lake	63		
Jackson	32	Redwood	64		

Length of Time

(cc 20-22, 38-40, 56-68, 74-76)

Camping - recorded in days and tenths of days.
All others coded in hours and tenths of hours. 00.1 to 99.9

Beginning Time

(cc 23 & 24, 41 & 42, 59 & 60, 77 & 78)

Recorded to the nearest 74 hr. clock hour. Convert half hour beginning time e.g. 8:30 a.m. to the earlier whole hour 8:00. Convert ending times to beginning times.

1 am = 01	1 pm = 13
2 am = 02	2 pm = 14
3 am = 03	3 pm = 15
4 am = 04	4 pm = 16
5 am = 05	5 pm = 17
6 am = 06	6 pm = 18
7 am = 07	7 pm = 19
8 am = 08	8 pm = 20
9 am = 09	9 pm = 21
10am = 10	10pm = 22
11am = 11	11pm = 23
Noon = 12	Midnight = 24
	AM = 25
	PM = 26

Card Number

Code unique number for each card within each case. Begin each new case with 01 and number subsequent cards in ascending order through the end of the case.

1 = 01
2 = 02
3 = 03
4 = 04
5 = 05
6 = 06
7 = 07
8 = 08
9 = 09
10= 10
-
-
-
99= 99

COMPLETE AS MANY CARDS AS NECESSARY TO RECORD ALL ACTIVITY OCCASIONS.

HOUSEHOLD DATA CODING MANUAL

COLUMN	DESCRIPTION	VALUES
	CARD 1	
1-2	Region	1 = 01 2 = 02 3 = 03 4 = 04 5 = 05 6E= 06 6W= 07 7E= 08 7W= 09 8 = 10 9 = 11 10= 12 11= 13
3-6	Case Number	0000 to 9999
7	Blank	
8-9	Survey Period Month of Day Beginning Period	January = 01 February = 02 March = 03 April = 04 May = 05 June = 06 July = 07 August = 08 September = 09 October = 10 November = 11 December = 12 MV = 99
10-11	Survey Period Day Beginning Period	01 to 31 MV = 99
12-13	Survey Period - Month of Day Ending Period	(see month beginning cc 8 & 9) MV = 99
14-15	Survey Period - Day Ending Period	01 to 31 MV = 99

COLUMN	DESCRIPTION	VALUES
16-17	First Household Member Number	01
18-19	Age of First Household Member	01 - 97 98 - less than 6 months old MV = 99
20	Sex of First Household Member	Female = 1 Male = 2 MV = 9
21-22	2nd Household Member Number	02 (if more than 1 household member)
23-24	Age of 2nd Household Member	01 - 97 98 - less than 6 months old MV = 99
25	Sex of 2nd Household Member	Female = 01 Male = 02 MV = 9
26-27	3rd Household Member	03 (if more than 2 household members)
28-29	Age of 3rd Household Member	01 - 97 98 - less than 6 months old MV = 99
30	Sex of 3rd Household Member	Female = 1 Male = 2 MV = 9
31-32	4th Household Member Number	04 (if more than 3 household members)
33-34	Age of 4th Household Member	01 - 97 98 - less than 6 months old MV = 99
35	Sex of 4th Household Member	Female = 1 Male = 2 MV = 9
36-37	5th Household Member Number	05 (if more than 5 household members)
38-39	Age of 5th Household Member	01 - 97 98 - less than 6 months old MV = 99
40	Sex of 5th Household Member	Female = 1 Male = 2 MV = 9

COLUMN	DESCRIPTION	VALUES
41-42	6th Household Member Number	06 (if more than 5 household members)
42-43	Age of 6th Household Member	01-97 98-less than 6 months MV=99
45	Sex of 6th Household Member	Female = 1 Male = 2 MV = 9
46-47	7th Household Member Number	07 (if more than 6 household members)
46-49	Age of 7th Household Member	01-97 98-less than 6 months MV=99
50	Sex of 7th Household Member	Female = 1 Male = 2 MV = 9
51-52	8th Household Member Number	08 (if more than 7 household members)
53-54	Age of 8th Household Member	01-97 98-less than 6 months MV-9
55	Sex of 8th Household Member	Female = 1 Male = 2 MV = 9
56-57	9th Household Member Number	09 (if more than 8 household members)
58-59	Age of 9th Household Member	01-97 98-less than 6 months MV-99
60	Sex of 9th Household Member	Female=1 Male=2 MV=9
61-62	10th Household Member Number	10 (if more than 9 household members)
63-64	Age of 10th Household Member	01-97 98-less than 6 months old MV=99
65	Sex of 10th Household Member	Female = 1 Male = 2 MV = 9

COLUMN	DESCRIPTION	VALUES
66	Blank	
67	Total number of fishermen in household	0-8+ MV=9
68	Total number of hunters in household	0-8+ MV=9
69	Total number of trappers in household	0-8+ MV=9
70	Total number of snowmobilers household	0-8+ MV=9
71	Total number of cross-country skiers in household	0-8+ MV=9
72	Total number of snowshoers in household	0-8+ MV=9
	CARD 2	
1-7	Duplication of Card 1 Columns 1-7	1-2 = region 3-6 = Case # 7 = blank
8	Total number of bicycles owned	0-8+ MV=9
9	Total number of camping vehicles owned	0-8+ MV=9
10	Total number of canoes owned	0-8+ MV=9
11	Total number of fourwheel drives owned	0-8+ MV=9
12	Total number of ice boats owned	0-8+ MV=9
13	Total number of fishing huts owned	0-8+ MV=9
14	Total number of snowmobiles owned	0-8+ MV=9
15	Total number of trailbikes owned	0-8+ MV=9

COLUMN	DESCRIPTION	VALUES	
16	Total number of vacation homes owned	0-8+ MV=9	
17	Total number of fishing boats owned	0-8+ MV=9	
18	Total number of pontoon boats owned	0-8+ MV=9	
19	Total number of sailboats owned	0-8+ MV=9	
20	Total number of speed boats owned	0-8+ MV=9	
21	Total number of cross country skiis owned (pairs)	0-8+ MV=9	
22	Total number of snowshoes owned (pairs)	0-8+ MV=9	
23	Community type	Urban = 1 Rural = 2 MV = 9	
24-28	Zip Code	00000 - 99998 MV = 99999	
29-30	County of Residence	Aitkin	01
		Anoka	02
		Becker	03
		Beltrami	04
		Benton	05
		Bigstone	06
		Blue Earth	07
		Brown	08
		Carlton	09
		Carver	10
		Cass	11
		Chippewa	12
		Chisago	13
		Clay	14
		Clearwater	15
		Cook	16
		Cottonwood	17
		Crow Wing	18
		Dakota	19
		Dodge	20
		Douglas	21

COLUMN	DESCRIPTION	VALUES	
		Faribault	22
		Fillmore	23
		Freeborn	24
		Goodhue	25
		Grant	26
		Hennepin	27
		Houston	28
		Hubbard	29
		Isanti	30
		Itasca	31
		Jackson	32
		Kanabec	33
		Kandiyohi	34
		Kitison	35
		Koochiching	36
		Lac Qui Parle	37
		Lake	38
		Lake of the Woods	39
		Le Seur	40
		Lincoln	41
		Lyon	42
		McLeod	43
		Mahnomen	44
		Marshall	45
		Martin	46
		Meeker	47
		Mille Lacs	48
		Morrison	49
		Mower	50
		Murray	51
		Nicollet	52
		Nobles	53
		Norman	54
		Olmsted	55
		Otter Tail	56
		Pennington	57
		Pine	58
		Pipestone	59
		Polk	60
		Pope	61
		Ramsey	62
		Red Lake	63
		Redwood	64
		Renville	65
		Rice	66
		Rock	67
		Roseau	68
		St. Louis	69

COLUMN	DESCRIPTION	VALUES
		Scott 70 Sherburne 71 Sibley 72 Stearns 73 Steele 74 Stevens 75 Swift 76 Todd 77 Traverse 78 Wabasha 79 Wadena 80 Waseca 81 Washington 82 Watonwan 83 Wilkin 84 Winona 85 Wright 86 Yellow Medicine 87 Missing Value 99
31-32	Time in County - Household Head	01-97 98-less than 6 months MV=99
33-34	Time in County-Spouse	01-97 98-less than 6 months MV=99
35-36	Time In Minnesota - Household Head	01-97 98-less than 6 months MV=99
37-38	Time In Minnesota - Spouse	01-97 98-less than 6 months MV=99
39	Marital Status	Single = 1 Married = 2 Widowed = 3 Separated = 4 MV = 9
40-41	Head of Household Education	1 = 01 2 = 02 3 = 03 4 = 04 5 = 05 6 = 06 7 = 07 8 = 08

COLUMN	DESCRIPTION	VALUES	
		9 = 09	
		10= 10	
		11= 11	
		12= 12	
		13= 13	
		14= 14	
		15= 15	
		16= 16	
		16+=17	
		MV= 99	
42-43	Spouse Education	1 = 01	
		2 = 02	
		3 = 03	
		4 = 04	
		5 = 05	
		6 = 06	
		7 = 07	
		8 = 08	
		9 = 09	
		10= 10	
		11= 11	
		12= 12	
		13= 13	
		14= 14	
		15= 15	
		16= 16	
		16+=17	
		MV = 99	
44-46	Household Head Occupation	see Census Bureau classes	
47	Head of Household currently employed in above occupation	Yes = 1	
		No = 2	
		Retired = 3	
		MV = 9	
48-50	Spouse's occupation	see Census Bureau classes	
51	Spouse currently employed in above occupation	Yes = 1	
		No = 2	
		Retired = 3	
		MV=9	
52	Income	Less than $5,000	1
		$5,000-$10,000	2
		$10,000-$15,000	3
		$15,000-$20,000	4
		$20,000-$25,000	5
		$25,000-$30,000	6
		$30,000+	7

COLUMN	DESCRIPTION	VALUES	
		MV	9
53	Correct Phone Number	Yes = 1 No = 2 MV = 9	