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User's Guide for the Data Analysis, Retrieval, and Tabulation System (DARTS), Revised Edition*

A Mainframe Computer Code for
Generating Cross-Tabulation Reports

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MASTER

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**USER'S GUIDE FOR THE DATA ANALYSIS, RETRIEVAL,
AND TABULATION SYSTEM (DARTS),
REVISED EDITION**

**A Mainframe Computer Code
for Generating
Cross-Tabulation Reports**

by

John L. Anderson

ABSTRACT

A computer system known as the Data Analysis, Retrieval, and Tabulation System (DARTS) was developed by the Energy Systems Division at Argonne National Laboratory to generate tables of descriptive statistics derived from analyses of housing and energy data sources. Through a simple input command, the user can request the preparation of a hierarchical table based on any combination of several hundred of the most commonly analyzed variables. The system was written in the Statistical Analysis System (SAS) language and designed for use on a large-scale IBM mainframe computer.

1 INTRODUCTION

Argonne National Laboratory (ANL) researchers involved in the Socioeconomic Research and Analysis Program (sponsored by the Office of Minority Economic Impac in the U.S. Department of Energy) have long been interested in analyzing data contained in the Annual Housing Survey (AHS) and Residential Energy Consumption Survey (RECS) data bases.

Quite often in the past (prior to development of the DARTS code), an ANL researcher or user would request that a computer programmer produce a hierarchical table (or cross-tabulation report) based on a set of variables selected from AHS or RECS data bases. The programmer would then write the computer code needed to access the appropriate data, categorize the requested variables, and generate the desired "cross-tab" report on the mainframe computer. The process would indeed yield the desired reports, but two problems were encountered.

First, although it was possible in theory and practice for a programmer to address a single user's request in a timely manner and generate the desired report in one or two days of development time, a problem arose when several users made multiple requests over a short period of time. Potential users were then forced to "wait in line" behind earlier requests, and the lead time involved prior to actually initiating a new

report request could become excessive. In this situation, the programmer -- the only one capable of obtaining the desired information -- became the critical path.

A second problem area, the definition of variables, emerged as more users examined the AHS and RECS data. In the raw data files, a given variable may be able to take on many more unique values than a researcher is interested in studying. For example, if the data field that describes housing type consists of nine different housing codes, the researcher may want to commingle the contents of this field into three new codes (e.g., "single-family," "multifamily," and "other"). The definition of these new codes by several different users could potentially lead to inconsistent results. It was also possible for a single user to define codes (inadvertently or purposely) one way initially and redefine them several months later, thus generating results over time that were inconsistent.

2 SYSTEM OVERVIEW

2.1 SYSTEM FUNCTIONAL REQUIREMENTS

After many individual Statistical Analysis System (SAS) programs had been written to prepare cross-tabulation reports from the AHS and RECS data, it became evident that ANL researchers needed a general-purpose "cross-tab" generator system that:

- Eliminates the need for a programmer to rewrite SAS code for each new report request.
- Eliminates the need for a user to know anything about SAS to obtain a new cross-tab report.
- Allows access to a file containing definitions of AHS and RECS variables that are consistent for all users.
- Allows access to any AHS or RECS data base currently available at ANL.
- Requires minimal user input to obtain a new cross-tab output.

2.2 GENERAL DESCRIPTION OF SYSTEM

The Data Analysis, Retrieval, and Tabulation System (DARTS) was developed to generate hierarchical tables using a mainframe computer and information from the AHS or RECS data bases. To address the problem of the computer programmer becoming the critical path in each new report request, DARTS was designed as a two-phase system. The first (or preprocessor) phase generates SAS code based on user input; this code was previously written by the programmer. The second phase automatically submits and executes the SAS code prepared in Phase I. Therefore, the DARTS user becomes the critical path and controls the scheduling and generation of each new report.

To ensure consistent definition of variables, the new system accesses a set of library files containing definitions of about 150 commonly used variables from AHS and RECS data. This approach eliminates confusing variations in definitions previously applied to individual SAS codes that were written to generate cross-tab reports.

2.3 VARIABLE-DEFINITION FILES

The DARTS code accesses two files of variable definitions, one for AHS and one for RECS. These files are used by Phase I of DARTS and contain actual SAS coding for each variable of interest. The variable-definition files are actually library files containing named members (e.g., HOMETYPE) that reference some 150 of the most commonly used variables from AHS or RECS. The SAS coding associated with each

member name is a constant "prewritten" set of SAS instructions that does not change from one report request to the next.

It is possible to list, for example, the contents of the RECS definition file specifically for the member HOMETYPE, which describes how DARTS should process (i.e., regroup, commingle, etc.) type-of-home data from the RECS raw data file. The HOMETYPE member would contain SAS language statements that collapse nine possible home codes into the three new codes ("single-family," "multifamily," and "other"). Therefore, if a user requests a report that is to include the use of RECS raw data for home type, the definition file member HOMETYPE will be specified by the user and accessed during Phase I of DARTS to include the appropriate SAS coding.

The SAS coding for each member of the variable-definition files has been determined by the computer programmer during the original loading of these files. The DARTS user does not modify or update the contents of the definition files, but instead selects the members to be used in generating each new cross-tab report.

2.4 DATA-BASE FILES

Since 1983, ANL personnel involved with the study of minorities and residential energy policy have based much of their research on data obtained from the AHS and RECS data bases (see App. A for available documentation for RECSs for 1978, 1979, 1980, 1981, 1982, 1984, and 1987). Cross-tab output from AHS and RECS can be found in many of the research publications produced by ANL for the Office of Minority Economic Impact.

The DARTS code allows a user to access about 150 commonly studied variables from SAS versions of the AHS and RECS. In addition to the standard RECS files, DARTS can process the ANL-generated, RECS-Condensed Version (RECS-CV) file. This file consists of 150-variable subsets of data from each of the original RECSs (1978, 1979, 1980, 1981, 1982, 1984, and 1987), merged into a single file. The data in RECS-CV can be studied by year, or as a seven-year sample (Table 1). The DARTS user does not modify or update the contents of any of the DARTS data-base files, but rather specifies which (single) data base is to be used as the source of the raw data to be analyzed and displayed in each new cross-tab report.

2.5 USER INPUT REQUIREMENTS

To generate a cross-tabulation report, a DARTS user is required to supply only three simple types of input:

- The name of the DARTS data base that is to be the source of the raw data to be analyzed.
- The name of the DARTS variables to be used to categorize the cross-tab output (see App. B for a complete list of all legitimate AHS variable names, and App. C for RECS variables).

- The type of output values to be displayed in the cross-tab cells, i.e.,

Output based on household counts (e.g., the user wants to know the number and percentage of black households in the Northeast Census Region that are headed by women);

or

Output based on mean values (e.g., the user wants to know the average age of black female household heads in the Northeast Census Region).

Section 3.2 of this report contains a step-by-step description of input requirements.

TABLE 1 DARTS Data Bases and Storage Media

Survey ^a	DARTS Data- Base Name	Storage Media/Space Required
1980 RECS	RECS1	Disk/400 tracks ^b
1981 RECS	RECS2	Disk/400 tracks ^b
1982 RECS	RECS3	Disk/400 tracks ^b
1984 RECS	RECS4	Disk/500 tracks ^b
1987 RECS	RECS5	Disk/500 tracks ^b
RECS-CV	ALL7	Disk/500 tracks ^b
1978 RECS in RECS-CV	NIX	Disk/70 tracks ^b
1979 RECS in RECS-CV	SCR	Disk/70 tracks ^b
1980 RECS in RECS-CV	RX1	Disk/70 tracks ^b
1981 RECS in RECS-CV	RX2	Disk/70 tracks ^b
1982 RECS in RECS-CV	RX3	Disk/70 tracks ^b
1984 RECS in RECS-CV	RX4	Disk/70 tracks ^b
1987 RECS in RECS-CV	RX5	Disk/70 tracks ^b
1980 AHS	AHS80	6250 mag. tape (2 vols)
1981 AHS	AHS81	6250 mag. tape
1983 AHS	AHS83	6250 mag. tape

^aRECS = Residential Energy Consumption Survey; AHS = Annual Housing Survey; RECS-CV = Residential Energy Consumption Survey - Condensed Version.

^bUsing an IBM 3350 disk.

2.6 LABELS FILE

One other input file required by the system is "Labels," which contains all possible titles (labels) associated with the variables to be displayed on any cross-tab output. The user does not modify or update the contents of the Labels file. After a user specifies the variables needed to categorize cross-tab output, DARTS Phase I logic accesses the Labels file and selects the appropriate titles.

2.7 SYSTEM FLOW CHART

Figure 1 illustrates the DARTS data flow.

FIGURE 1 DARTS Flow Chart

3 SYSTEM UTILIZATION

3.1 SYSTEM REQUIREMENTS

The SAS language source code for DARTS consists of a single main "preprocessor" routine that reads in the user's cross-tab request, selects the appropriate members from the variable-definition files, constructs the SAS code needed to generate the desired cross tabulation, and then automatically executes the newly assembled SAS code to access the required raw data and generate the cross-tab report.

The DARTS code has been designed for use with SAS Version 5 on an IBM Model 3033 mainframe computer at Argonne National Laboratory. The DARTS source code is stored on the 3033 as a WYLBUR data set, and the system can be executed by submitting the following JCL job stream:

```
//SAMPLE    JOB (acctg. info.),CLASS=W,REGION=2048K,TIME=4

//STEP1     EXEC SAS,OPTIONS='SYSIN=SASIN'

//ABASE1    DD DISP=OLD,DSN=C190.B16887.AHS8081,
            UNIT=(READ6250,,DEFER),VOL=SER=(199299,199307)

//ABASE2    DD DISP=OLD,DSN=C190.B16887.AHS8081,
            UNIT=AFF=ABASE1,VOL=SER=194805

//ABASE3    DD DISP=OLD,DSN=C190.B16887.AHS1983,
            UNIT=AFF=ABASE1,VOL=SER=200435

//BASE1     DD DISP=OLD,DSN=B11152.RECS1

//BASE2     DD DISP=OLD,DSN=B11152.RECS2

//BASE3     DD DISP=OLD,DSN=B11152.RECS3

//BASE4     DD DISP=OLD,DSN=B11152.RECS4

//BASE5     DD DISP=OLD,DSN=B11152.RECS5

//BASE9     DD DISP=OLD,DSN=B16887.EIADICT.SASDATA

//FORMATS   DD DISP=OLD,DSN=B11152.MI4MATS

//NEWSAS    DD UNIT=SASCR,SPACE=(TRK,(5,5)),DCB=(RECFM=F,
            BLKSIZE=80)

//NEWSAS2   DD UNIT=SASCR,SPACE=(TRK,(5,5)),DCB=(RECFM=F,
            BLKSIZE=80)
```

```
//SASIN      DD DISP=OLD,DSN=B11151.MIALL
//MIVAHS     DD DISP=OLD,DSN=B11152.MIVAHS
//MIVARS     DD DISP=OLD,DSN=B11152.MIVARS
//SYSIN      DD *
              user input for first cross-tab
              user input for second cross-tab
              etc.
```

3.2 USER INPUT REQUEST

The DARTS user input required to generate a cross tabulation is entered after //SYSIN DD * JCL record and consists of the following "free format" data:

Field No.	Contents
-----------	----------

1	DARTS data-base name
---	----------------------

Choices:	RECS1	RX1
	RECS2	RX2
	RECS3	RX3
	RECS4	RX4
	RECS5	RX5
	ALL7	AHS80
	NIX	AHS81
	SCR	AHS83

2	Type of cell output requested
---	-------------------------------

TABLE

cross-tab cells display: no. of raw data records, no. of households, and row percent values.

MEANS

cross-tab cells display: no. of raw data records, no. of households, and average values.

3	DARTS member name for the first level of classification on the left edge of the desired cross-tab output.
---	---

- 4 DARTS member name for the second level of classification on the left edge of the desired cross-tab output, or * if none exists.
- 5 DARTS member name for the third level of classification on the left edge of the desired cross-tab output, or * if none exists.
- 6‡ DARTS member name for the first level of classification on the top edge of the desired cross-tab output.
- 7‡ DARTS member name for the middle level of classification on the top edge of the desired cross-tab output, or * if none exists.
- 8‡ DARTS member name for the lowest level of classification on the top edge of the desired cross-tab output, or * if none exists.

Note well: the " * " input fields are of critical importance as "place-holders" and cannot be omitted.

3.3 SAMPLE OUTPUT

The example of a "TABLE" type of cross-tab output shown in Table 2 was obtained by entering the following input request:

RECS3 TABLE POPB * * KOWNRENT * *

TABLE 2 Example of "TABLE" Cross-Tab Output

OWNED OR RENTED?						
OWN NWEIGHT			RENT NWEIGHT			
RECS.	HHOLDS	ROW %	RECS.	HHOLDS	ROW %	
POPL. SEGMENT						
BLACK	216	4,618,095	44.3	257	5,800,261	55.7
NON-BLACK	2,897	49,158,877	67.4	1,290	23,772,516	32.6

‡If field No. 2 is input as MEANS, then fields 6, 7, and 8 are DARTS member names for which a mean is to be obtained, or * if none exists.

The example of a "MEANS" type cross-tab output shown in Table 3 was obtained by entering the following input request:

RECS3 MEANS REGIONC * * HDD65 CDD65 *

TABLE 3 Example of "MEANS" Cross-Tab Output

	HEATING DD (BASE65)			COOLING DD (BASE65)		
	RECS.	HHOLDS	AVE.	RECS.	HHOLDS	AVE.
CENSUS REGION						
NORTH EAST	937	17,951,610	5750.8	937	17,951,610	453.8
NORTH CENTRAL	1,126	21,305,204	6106.7	1,126	21,305,204	597.9
SOUTH	1,353	28,054,571	3031.0	1,353	28,054,571	1743.8
WEST	1,244	16,038,364	3822.3	1,244	16,038,364	642.4

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APPENDIX A:
SELECTED BIBLIOGRAPHY

APPENDIX A:

SELECTED BIBLIOGRAPHY

The publications listed below may be of interest to DARTS users. Copies of these reports can be obtained from the following:

National Energy Information Center, EI-231
Energy Information Administration
Forrestal Building, Room 1F-048
1000 Independence Avenue, S.W.
Washington, D.C. 20585
(202) 586-8800

Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402
(202) 783-3238

Household Energy Consumption and Expenditures 1987, Part 1: National Data (also known as RECS 5), 1989, U.S. Department of Energy Report DOE/EIA-0321/1 (87), Oct.

Residential Energy Consumption Survey: Consumption and Expenditures, April 1978 through March 1979 (also known as National Interim Energy Consumption Survey), 1980, U.S. Department of Energy Report DOE/EIA-0207/5, July.

Residential Energy Consumption Survey: 1979-1980 Consumption and Expenditures, Part 1: National Data (Including Conservation) (also known as Household Screener Survey), 1981, U.S. Department of Energy Report DOE/EIA-0262/1, April.

Residential Energy Consumption Survey: 1979-1980 Consumption and Expenditures, Part II: Regional Data (also known as Household Screener Survey), 1981, U.S. Department of Energy Report DOE/EIA-0262/2, May.

Residential Energy Consumption Survey: Consumption and Expenditures, April 1980 through March 1981, Part 1: National Data (also known as RECS 1), 1982, U.S. Department of Energy Report DOE/EIA-0321/1(80), Sept.

Residential Energy Consumption Survey: Consumption and Expenditures, April 1980 through March 1981, Part 2: Regional Data (also known as RECS 1), 1983, U.S. Department of Energy Report DOE/EIA-0321/2(80), April.

Residential Energy Consumption Survey: Consumption and Expenditures, April 1981 through March 1982, Part 1: National Data (also known as RECS 2), 1983, U.S. Department of Energy Report DOE/EIA-0321/1(81), Sept.

Residential Energy Consumption Survey: Consumption and Expenditures, April 1981 through March 1982, Part 2: Regional Data (also known as RECS 2), 1983, U.S. Department of Energy Report DOE/EIA-0321/2(81), Oct.

Residential Energy Consumption Survey: Consumption and Expenditures, April 1982 through March 1983, Part 1: National Data (also known as RECS 3), 1984, U.S. Department of Energy Report DOE/EIA-0321/1(82), Nov.

Residential Energy Consumption Survey: Consumption and Expenditures, April 1982 through March 1983, Part 2: Regional Data (also known as RECS 3), 1984, U.S. Department of Energy Report DOE/EIA-0321/2(82), Dec.

Residential Energy Consumption Survey: Consumption and Expenditures, April 1984 through March 1985, Part 1: National Data (also known as RECS 4), 1987, U.S. Department of Energy Report DOE/EIA-0321/1(84), March.

Residential Energy Consumption Survey: Consumption and Expenditures, April 1984 through March 1985, Part 2: Regional Data (also known as RECS 4), 1987, U.S. Department of Energy Report DOE/EIA-0321/2(84), May.

APPENDIX B:
DARTS/AHS VARIABLES

<u>LABEL</u>	<u>AHS</u>	<u>DARTS/AHS MEMBER</u>
CENSUS REGION	G002	REGIONC=1:NORTH EAST 2:NORTH CENTRAL 3:SOUTH 4:WEST
URBAN/RURAL	G004	URBAN=1:URBAN 2:RURAL
POPL. CATEGORY	H092, RACHD	POP2=1:WHITE 2:BLACK 3:HISPANIC 4:OTHER
POPL. SEGMENT	RACHD	POPB2=1:BLACK 2:NON-BLACK
POPL. SEGMENT	H092	POPH2=1:HISPANIC 2:NON-HISP.
POPL. CATEGORY (83 AHS ONLY)	RC10, RELOn	POOR83=1:POOR 2:NOT POOR
OWN/RENT	H100	OWNRENT=1:OWN 2:RENT 3:UNKNOWN
HOME TYPE	H101	HOMETP=1:SINGLE FMLY 2:MULTI-FMLY 3:OTHER
HOME TYPE	H101	HOMETP2=1:SINGLE FMLY 2:OTHER
YEAR HOME BUILT	H007	HAGE=1:BEFORE 1940 2:1940-1974 3:AFTER 1974
YEAR HOME BUILT	H007	HAGE2=1:BEFORE 1940 2:1940-1959 3:1960-1974 4:AFTER 1974
#ROOMS	H022	NUMROOMS (<39)
HEATING EQUIPMENT	H109	HTEQUIP =1:CTRL WARM AIR FURNACE 2:HEAT PUMP 3:STEAM/ HOT H2O 4:BUILT IN ELEC. UNITS 5:FL/ WALL/ PIPELESS FURN. 6:ROOM HEATERS 7:FIREPL/ STV/ PORT.RM HTR 8:NO HEAT EQUIP USED

<u>LABEL</u>	<u>AHS</u>	<u>DARTS/AHS MEMBER</u>
MAIN HEATING FUEL	H032	KHEAT=1:GAS 2:LPG 3:FO+KERO 4:ELECTRIC 5:OTHER 6:NO FUEL
H2O HEATING FUEL	H510	WHFUEL=1:NG 2:LPG 3:FO+KERO 4:ELECTRIC 5:OTHER 6:NO FUEL
HAS A/C	H110	HASAC=1:YES 2:NO
HAS CENTRAL A/C	H110, H111	HASCAC=1:YES 2:NO
HIGHEST GRADE COMPL. HHOLDER	H091	HHGRADE=0:NO SCHOOL/ KINDGTN 1:1ST GRADE 2:2ND GRADE 3:3RD GRADE 4:4TH GRADE 5:5TH GRADE 6:6TH GRADE 7:7TH GRADE 8:8TH GRADE 9:9TH GRADE 10:10TH GRADE 11:11TH GRADE 12:12TH GRADE 13:1 YR COLL 14:2 YRS COLL 15:3 YRS COLL 16:4 YRS COLL 17:5/MORE YRS
HIGHEST GRADE COMPL. HHOLDER	H091	HHGRADGP=0:NO SCHOOLING 1:FINISH GRADE SCHL 2:GRAD HIGH SCHL 3:HAD 4 YRS COLL 4:HAD 5/MORE YRS COLL 5:UNKNOWN
HAVE CARPORT/ GARAGE?	H034	HAVEGAR=1:YES 2:NO 3:UNKNOWN

<u>LABEL</u>	<u>AHS</u>	<u>DARTS/AHS MEMBER</u>
CONDO/CO-OP	H100	CONDCOOP=1: CONDO 2: CO-OP 0: NEITHER
# LIVING UNITS	H101	NUMUNITS=1: ONE 2: TWO 3: 3-4 4: 5-9 5: 10-19 6: 20-49 7: 50/MORE
# FLOORS IN BLDG	H105	NUMFLOOR=1: 1-3 2: 4-6 3: 7-12 4: 13/MORE
MONTHLY CONTRACT RENT	H151	RENTMNTH (\$) *NOTE: \$1,999/MORE >\$1,999
MONTHLY CONTRACT RENT	H151	RENTMNGP=1: UP TO \$499 2: \$500-\$999 3: \$1,000-\$1,499 4: \$1,500-\$1,998 5: \$1,999/MORE
PUBLIC HOUSING PROJECT?	H154	HOUSPROJ=1: YES 2: NO 3: UNKNOWN
GOVT SUBSID. RENT?	H155	SUBSIDZD=1: YES 2: NO 3: UNKNOWN
SOCIAL SEC./ RR RET. INCOME?	H184	SS&RINC=1: YES 2: NO
AMT. SSI/ RR RET. INCOME	H185	SSRRAMT (\$)
AMT. SSI/ RR RET. INCOME	H185	SSRRAMGP=1: <\$1,000 2: \$1,000-\$4,999 3: \$5,000-\$9,999 4: \$10,000-\$19,999 5: \$20,000-\$29,999 6: \$30,000-\$49,999 7: \$50,000/MORE

<u>LABEL</u>	<u>AHS</u>	<u>DARTS/AHS MEMBER</u>
WELFARE/ PUBL. ASSIST. INCOME?	H192	WELINC=1:YES 2:NO
AMT. WELFARE/ PUBL. ASSIST. INCOME	H193	WELAMT (\$)
AMT. WELFARE/ PUBL. ASSIST. INCOME	H193	WELAMTGP=1:<\$1,000 2:\$1,000-\$4,999 3:\$5,000-\$9,999 4:\$10,000-\$19,999 5:\$20,000-\$29,999 6:\$30,000-\$49,999 7:\$50,000/MORE
UNEMPLYMT COMPENSATION?	H194	UNEMPINC=1:YES 2:NO
AMT. UNEMPLYMT COMP.	H195	UNEMPAMT (\$)
AMT. UNEMPLYMT COMP.	H195	UNEMPGP=1:<\$1,000 2:\$1,000-\$4,999 3:\$5,000-\$9,999 4:\$10,000-\$19,999 5:\$20,000-\$29,999 6:\$30,000-\$49,999 7:\$50,000/MORE
WORKMAN'S COMPENSATION ?	H196	WORKINC=1:YES 2:NO
AMT. WORKMAN'S COMP.	H197	WORKAMT (\$)
AMT. WORKMAN'S COMP.	H197	WORKAMGP=1:<\$1,000 2:\$1,000-\$4,999 3:\$5,000-\$9,999 4:\$10,000-\$19,999 5:\$20,000-\$29,999 6:\$30,000-\$49,999 7:\$50,000/MORE
GOVT EMPLOYEE PENSION?	H198	PENSINC=1:YES 2:NO
AMT. GOVT PENSION	H199	PENSAMT (\$)
AMT. GOVT PENSION	H199	PENSAMGP=1:<\$1,000 2:\$1,000-\$4,999

<u>LABEL</u>	<u>AHS</u>	<u>DARTS/AHS MEMBER</u>
		3:\$5,000-\$9,999 4:\$10,000-\$19,999 5:\$20,000-\$29,999 6:\$30,000-\$49,999 7:\$50,000/MORE
VETERAN'S PAYMENTS?	H200	VETINC=1:YES 2:NO
AMT. VETERAN'S PAYMENT	H201	VETAMT (\$)
AMT. VETERAN'S PAYMENT	H201	VETAMTGP=1:<\$1,000 2:\$1,000-\$4,999 3:\$5,000-\$9,999 4:\$10,000-\$19,999 5:\$20,000-\$29,999 6:\$30,000-\$49,999 7:\$50,000/MORE
PRVT PENSIONS/ ANNUITIES?	H202	PRVTINC=1:YES 2:NO
AMT. PRVT PENSIONS/ANNU.	H203	PRVTAMT (\$)
AMT. PRVT PENSIONS/ANNU.	H203	PRVTAMGP=1:<\$1,000 2:\$1,000-\$4,999 3:\$5,000-\$9,999 4:\$10,000-\$19,999 5:\$20,000-\$29,999 6:\$30,000-\$49,999 7:\$50,000/MORE
ALIMONY/ CHILD SUPPORT?	H204	ALIMINC=1:YES 2:NO
AMT. ALIMONY/ CHILD SUPPORT	H205	ALIMAMT (\$)
AMT. ALIMONY/ CHILD SUPPORT	H205	ALIMAMGP=1:<\$1,000 2:\$1,000-\$4,999 3:\$5,000-\$9,999 4:\$10,000-\$19,999 5:\$20,000-\$29,999 6:\$30,000-\$49,999 7:\$50,000/MORE
ANYTHING ELSE?	H208	OTHRINC=1:YES 2:NO

<u>LABEL</u>	<u>AHS</u>	<u>DARTS/AHS MEMBER</u>
AMT. ANYTHING ELSE	H209	OTHRAMT (\$)
AMT. ANYTHING ELSE	H209	OTHRAMGP=1:<\$1,000 2:\$1,000-\$4,999 3:\$5,000-\$9,999 4:\$10,000-\$19,999 5:\$20,000-\$29,999 6:\$30,000-\$49,999 7:\$50,000/MORE
PRIMARY COOKING FUEL	H509	COOKFUEL=1:GAS 2:LPG 3:FO 4:KERO, ETC. 5:EL 6:OTHER 7:NO FUEL 8:UNKNOWN
BASEMT IN HOUSE/ BLDG?	H733	HAVEBSMT=1:YES 2:NO
MARITAL STATUS HHOLDER	MSTHD	MARITAL=1:NOW MARRIED 2:WIDOWED 3:DIVORCD /SEPRTD 4:NEVER MARRIED
AGE HHOLDER	AGEHD	AGEHEAD (<90 YEARS)
AGE HHOLDER	AGEHD	AGEHDGP=1:14-19 2:20-29 3:30-44 4:45-64 5:>65
SEX HHOLDER	SEXHH	SEXHEAD=1:MALE 2:FEMALE
RELN TO HHOLDER PERSON 02	REL02	RELNO2=4:OTHER RELTV 5:PARTNER 6:OTHER NON-RLTV 12:SPOUSE 13:UNMARR. CHILD 21:HD SUBFAM 1 22:SPSE SUBFAM 1 23:CHLD SUBFAM 1 31:HD SUBFAM 2 32:SPSE SUBFAM 2 33:CHLD SUBFAM 2 41:HD SUBFAM 3 42:SPSE SUBFAM 3

<u>LABEL</u>	<u>AHS</u>	<u>DARTS/AHS MEMBER</u>
		43:CHLD SUBFAM 3 51:HD SUBFAM 4 52:SPSE SUBFAM 4 53:CHLD SUBFAM 4
AGE PERSON 02	AGE02	YEAR02 (<90 YEARS)
AGE PERSON 02	AGE02	YEAR02GP=1:0-19 2:20-30 3:31-45 4:46-65 5:>65
SEX PERSON 02	SEX02	SEXOF02=1:MALE 2:FEMALE
TYPE OCCUPANCY	RC07	OCCUPNCY=1:YR ROUND 2:SEASONAL 3:MIGRATORY
TOTAL FAMILY INCOME	RC10	MONEYFAM (<\$50,000)
FAMILY INCOME RANGE	RC10	MONEY=1:0-\$19,999 2:\$20,000-\$49,999 3:\$50,000 /MORE
GROSS RENT W/ ELEC GAS H2O OIL	RC12	GROSRENT (<\$2,930)
GROSS RENT W/ ELEC GAS H2O OIL	RC12	GRSRNTGP=1:UP TO \$499 2:\$500-\$999 3:\$1,000-\$1,499 4:\$1,500-\$1,999 5:\$2,000-\$2,499 6:\$2,500-\$2,899 7:\$2,900/MORE
METRO RESIDENCE	RC80A	METRO=1:METRO IN-CITY 2:METRO OUT-CITY 3:NON METRO
ATTIC/ROOF INSL.?	H519	ATTGINSL=1:YES 2:NO 3:UNKNOWN
AMT. MORTGAGE PAYMENT	H534	MORTAMT (<\$9,997)

<u>LABEL</u>	<u>AHS</u>	<u>DARTS/AHS MEMBER</u>
AMT. MORTGAGE PAYMENT	H534	MORTAMGP=1:<\$500 2:\$501-\$1,000 3:\$1,001-\$1,500 4:\$1,501-\$2,500 5:>\$2,500 6:UNKNOWN
FREQ. MORTGAGE PAYMENT	H535	MORTFREQ=1:MONTHLY 2:YEARLY 3:UNKNOWN
ANNUAL FIRE/ HAZARD INS.	H537	INSURAMT (<\$1,999)
ANNUAL FIRE/ HAZARD INS.	H537	INSAMGP=1:UP TO \$499 2:\$500-\$999 3:\$1,000-\$1,499 4:\$1,500-\$1,998 5:\$1,999/MORE 6:UNKNOWN
ANNUAL REAL ESTATE TAXES	H540	ANNTAXES (<\$99,997)
ANNUAL REAL ESTATE TAXES	H540	ANNTAXGP=1:<\$500 2:\$501-\$1,000 3:\$1,001-\$1,500 4:\$1,501-\$2,500 5:\$2,501-\$5,000 6:\$5,001-\$10,000 7:>\$10,000 8:UNKNOWN
VEHICLE OWNERSHIP CATEGORY	H736, H737	HASVEH=1:HH OWNS VEHICLE(S) 2:NO VEHICLES OWNED
# VEHICLES	H736, H737	NUMVEH
FAMILY SIZE GROUPS	REL02- REL15	FSIZE=1:ONE 2:TWO 3:THREE 4:FOUR 5:FIVE 6:SIX 7:>SEVEN
FAMILY SIZE	REL02- REL15	FMLYSIZE (<15)

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<u>LABEL</u>	<u>AHS</u>	<u>DARTS/AHS MEMBER</u>
TOTAL # HH MEMBERS	SUM05	NUMPEOPL
TOTAL # HH MEMBERS	SUM05	NUMPPLGP=1:1-4 2:5-8 3:9-12 4:13/MORE
MONTHLY EL COST	H157	ELECMT (<\$399)
MONTHLY EL COST	H157	ELECAMP=1:0-\$99 2:\$100-\$199 3:\$200-\$299 4:\$300-\$398 5:\$399/MORE
MONTHLY NG COST	H159	GASMT (<\$1,999)
MONTHLY NG COST	H159	GASAMP=1:0-\$49 2:\$50-\$99 3:\$100-\$149 4:\$150-\$198 5:\$199/MORE
MONTHLY FO, COAL, OTHER COST	H163	OILMT (<\$1,999)
MONTHLY FO, COAL, OTHER COST	H163	OILAMP=1:0-\$499 2:\$500-\$999 3:\$1,000-\$1,499 4:\$1,500-\$1,998 5:\$1,999/MORE

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APPENDIX C:
DARTS/RECS VARIABLES

<u>LABEL</u>	<u>RECS</u>	<u>DARTS/RECS MEMBER</u>
CENSUS REGION	REGIONC	REGIONC=1:NORTH EAST 2:NORTH CENTRAL 3:SOUTH 4:WEST
CENSUS DIVISION	DIVISION	DIVISION=1:NEW ENGLAND 2:MID.ATLANTIC 3:EAST N.CENTRAL 4:WEST N.CENTRAL 5:SOUTH ATLANTIC 6:EAST S.CENTRAL 7:WEST S.CENTRAL 8:MOUNTAIN 9:PACIFIC
POPL.SEGMENT	ORIGIN SDESCENT	POP=WHITE BLACK AM.IND. ASIAN HISPANIC OTHER
POPL. SEGMENT	SDESCENT ORIGIN	POPB=BLACK NON-BLACK
POPL.SEGMENT	SDESCENT	POPH=HISPANIC NON-HISP.
POPL. SEGMENT	SDESCENT ORIGIN	POPBH=BLACK HISPANIC MAJORITY
POPL.SEGMENT	HEADAGE	POPE=ELDERLY NON-ELD.
OWNED OR RENTED ?	KOWNRENT	KOWNRENT=1:OWN 2:RENT
HOME TYPE	TYPEHOME	HOMETYPE=1:SINGLE FMLY DETACHED 2:MULTI FAMILY 3:OTHER
YR HOME BUILT	YEARMAD	HAGE=1:BEFORE 1950 2:1950-1974 3:AFTER 1974
YR MOVED IN	OCCUPYY	MOVEN=1:BEFORE 1950 2:1950-1974 3:AFTER 1974
# ROOMS IN HOME	NROOMS	NROOMS (<20)

<u>LABEL</u>	<u>RECS</u>	<u>DARTS/RECS MEMBER</u>
MAIN SPACE HEATING EQPMT.	EQUIPM	EQUIPMEN= 1:CTRL WARM AIR FURNACE 2:HEAT PUMP 3:STEAM/ HOT H2O 4:BUILT IN ELEC. UNITS 5:FL/ WALL/ PIPELESS FURN. 6:ROOM HEATERS 7:FIREPL/ STV/ PORT.RM HTR 8:OTHER 9:UNKNOWN
MAIN SPACE HEATING EQPMT.	EQUIPM	HTEQ=2:HOT H2O OR STEAM 3:CENT WARM AIR 4:HEAT PUMP 5:ELEC WALL UNIT 6:MISC HTRS&STOVES 7:OTHER 8:NO HEATING EQPMT.
MAIN HEATING FUEL	FUELHEAT	KHEAT=0:NO FUEL 1:GAS 2:LPG 3:FO+KERO 4:ELECTRIC 5:OTHER
HAS CAC ?	COOLMAIN	HASCAC=1:YES 2:NO
CENTRAL AIR COND. FUEL	FUELCOOL	FUELCOOL=1:PIPED GAS 2:LPG 3:ELECTRICITY 9:UNKNOWN
# WINDOWS IN HOME	WINDOWS	WINDOWS (<95)
# WINDOWS IN HOME	WINDOWS	WINDOWGP=0:NONE 1:1-20 2:21-40 3:41-60 4:61-80 5:81-94 6:95/MORE
# WINDOWS WITH STORMS	PANESINS	PANESINS (<95)

<u>LABEL</u>	<u>RECS</u>	<u>DARTS/RECS MEMBER</u>
# WINDOWS WITH STORMS	PANESINS	PANESGP=0:NONE 1:1-20 2:21-40 3:41-60 4:61-80 5:81-94 6:95/MORE 7:UNKNOWN
ATTIC INSULATION ?	HINATTIC	HINAT=1:YES 2:NO 3:UNK.
PCT OF ROOF INSULATED	ROOFPCT	ROOFINSL=0:<5 % 1:5-33 % 2:34-66 % 3:67-95 % 4:96-100 % 5:UNKNOWN
WALL INSULATION ?	WALLINS	WALLIN=1:YES 2:NO 3:UNK.
HOW MUCH WALL INSULATED	WALLINS	WALLINSL=0:NONE 1:ALL 2:SOME 3:UNKNOWN
#DRIVERS	NDRIVERS	NDRIVERS (≤12)
# VEHICLES	VEHICLES	VEHICLES (≤17)
USE REFRIG.	FRIDGE	FRIDGE=1:YES 0:NO
# REFRIG. IN USE	NREFRIG	NREFRIG=1:ONE 2:TWO 3:THREE/MORE 9:UNKNOWN
WATER HEATING FUEL	FUE LH2O	WHEAT=0:NO FUEL 1:GAS 2:LPG 3:FO+KERO 4:ELECTRIC 5:OTHER
FUEL USED FOR COOKING	FUELFOOD	FUELCOOK=0:NO FUEL 1:GAS 2:LPG 3:FO + KERO

<u>LABEL</u>	<u>RECS</u>	<u>DARTS/RECS MEMBER</u>
		4:ELECTRICITY 5:OTHER
USE EL RANGE ?	ELSTOVE	ELSTOVE=1:YES 0:NO 9:UNKNOWN
USE GAS RANGE ?	GASSTOVE	GASSTOVE=1:YES 0:NO 9:UNKNOWN
CLOTHES WASHER ?	WASHER	WASHER=1:YES 0:NO
DISH WASHER ?	DISHWASH	DISHWASH=1:YES 0:NO
EL CLOTHES DRYER ?	ELDRYER	ELDRYER=1:YES 0:NO
GAS CLOTHES DRYER ?	GASDRYER	GASDRYER=1:YES 0:NO
USE WHOLE HOUSE FAN?	ATTICFAN	ATTICFAN=1:YES 0:NO
# B/W TVS	TVBLACK	TVBLACK=0:NONE 1:ONE 2:TWO 3:THREE 4:FOUR 5:FIVE/MORE
# COLOR TVS	TVCOLOR	TVCOLOR=0:NONE 1:ONE 2:TWO 3:THREE 4:FOUR 5:FIVE/MORE
SEX OF HHOLDER	HHSEX	HHSEX=1:FEMALE 2:MALE
AGE OF HHOLDER	HHAGE	HHAGE (<95)
AGE OF HHOLDER	HHAGE	HHAGEGP=1:0-19 2:20-30 3:31-45 4:46-65 5:>65

<u>LABEL</u>	<u>RECS</u>	<u>DARTS/RECS MEMBER</u>
EMPLOYMT HHOLDER	EMPLOYHH	EMPLOYHH=1:FULL TIME 2:PART TIME 0:NOT EMPL.
RELN MEMBER 2-12 TO HHOLDER	KIN02-12	KIN02-12=2:SPOUSE 3:CHILD 4:GNDCHILD 5:GREAT GNDCHILD 6:PARENT 7:GRANDPARENT 21:OTHER RELATIVE 31:FOSTER CHILD 41:OTHER NON-RLTV 99:UNKNOWN
SEX MEMBER 2-12	SEX02-12	SEX02-12=1:FEMALE 2:MALE 9:UNKNOWN
AGE MEMBER 2-12	YEARS02-12	YEARS02-12 (<95)
AGE GROUP MEMBER 2-12	YEARS02-12	YRS02GP-12GP=0:UNKNOWN 1:0-19 2:20-30 3:31-45 4:46-65 5:>65
EMPLOYMT MEMBER 2-12	EMPLOY02-12	EMPLOY02-12=1:FULL TIME 2:PART TIME 0:NOT EMPL. 9:UNKNOWN
ANOTHER FAMILY IN HOME?	SHARELQT	SHARELQT=1:YES 0:NO 8:UNKNOWN
MARITAL STAT OF HHOLDER	MARRIED	MARRIED=1:NOW MARRIED 2:WIDOWED 3:DIVORCD /SEPRTD 4:NEVER MARRIED
HHOLDER NOW MARRIED?	MARRIED	MARRY=1:MARRIED 2:UNMARRIED
HIGHEST GRADE ATTND HHOLDER	GRADHH	GRADEHH=0:NO SCHOOL 1:1ST GRADE 2:2ND GRADE 3:3RD GRADE 4:4TH GRADE 5:5TH GRADE

<u>LABEL</u>	<u>RECS</u>	<u>DARTS/RECS MEMBER</u>
		6:6TH GRADE
		7:7TH GRADE
		8:8TH GRADE
		9:9TH GRADE
		10:10TH GRADE
		11:11TH GRADE
		12:12TH GRADE
		13:1 YR COLL
		14:2 YRS COLL
		15:3 YRS COLL
		16:4 YRS COLL
		17:5 YRS COLL
		18:6/MORE YRS
HIGHEST GRADE ATTND HHOLDER	GRADHH	GRADHHGP=0:NO SCHOOL 1:GRADE SCHOOL 2:HIGH SCHOOL 3:1ST-4TH YR COLL 4:5TH/MORE YR COLL
HOLDER FINISH LAST GRADE ?	FINISHHH	FINISHHH=1:YES 0:NO 9:UNKNOWN
RCVD WAGES PAST 12 MOS?	WAGES	WAGES=1:YES 0:NO
SELF EMPLOY INCOME PAST 12 MOS?	SELFHIRE	SELFHIRE=1:YES 0:NO
AFDC INCOME PAST 12 MOS?	AFDC	AFDC=1:YES 0:NO
SSI INCOME PAST 12 MOS?	SSI	SSI=1:YES 0:NO
OTHER PUBLIC AID PAST 12 MOS?	OTHERAID	OTHERAID=1:YES 0:NO
FOOD STAMPS PAST 12 MOS?	FSTAMPS	FSTAMPS=1:YES 0:NO
SOCIAL SECURITY PAST 12 MOS?	SSECURTY	SSECURTY=1:YES 0:NO
UNEMPLYMT BENEFITS PAST 12 MOS?	UNEMPLOY	UNEMPLOY=1:YES 0:NO

<u>LABEL</u>	<u>RECS</u>	<u>DARTS/RECS MEMBER</u>
GOVT HELPED PAY HEATING	HEATAID	HEATAID=1: YES 0: NO 9: UNKNOWN
GOVT HELPED PAY COOLING	COOLAID	COOLAID=1: YES 0: NO 9: UNKNOWN
GOVT HELPED PAY OTHER ENERGY COSTS	LIFELINE	LIFELINE=1: YES 0: NO 9: UNKNOWN
GOVT HEATING VOUCHERS ?	VOUCHERS	VOUCHERS=1: YES 0: NO 9: UNKNOWN
GOVT DIRECTLY PAID HEATING CO.?	FUELPAID	FUELPAID=1: YES 0: NO 9: UNKNOWN
TOTAL HEATING PAID BY GOVT	GOVTAMT	GOVTAMT (<\$9,995)
TOTAL HEATING \$ PAID BY GOVT	GOVTAMT	GOVAMTGP=1: UP TO \$1,000 2: \$1,001-\$4,000 3: \$4,001-\$7,000 4: \$7,001-\$9,994 5: \$9,995/MORE 6: UNKNOWN
CONDO OR CO-OP ?	KOWNCOND	KOWNCOND=1: CONDO 2: CO-OP 0: NEITHER 9: UNKNOWN
MONTHLY RENT	RENTFEE	RENTFEE (<\$9,993)
MONTHLY RENT	RENTFEE	RNTFEEGP=1: UP TO \$499 2: \$500-\$999 3: \$1,000-\$1,499 4: \$1,500-\$1,998 5: \$1,999/MORE 6: OCCUP W/OUT RENT 7: OTHER 8: UNKNOWN
IN PUBL. HOUSING PROJECT?	HUPROJ	HUPROJ=1: YES 0: NO 9: UNKNOWN

<u>LABEL</u>	<u>RECS</u>	<u>DARTS/RECS MEMBER</u>
RENT SUBSIDIZED BY GOVT ?	RENTHELP	RENTHELP=1: YES 0: NO 9: UNKNOWN
# STORIES IN HOUSING UNIT	STORIES	STORY=1: ONE STORY 2: TWO STORY 3: THREE/MORE 4: SPLIT LEVEL 5: OTHER 6: UNKNOWN
ATTACHED GARAGE ?	CARHOME	GARAGE=1: YES 0: NO 8: UNKNOWN
TYPE OF FOUNDATION UNDER HOME	HOMEBASE	HOMEBASE=0: OTHER 1: BASEMENT 2: ENCL. CRAWL SPACE 3: OPEN CRAWL SPACE 4: CONCRETE SLAB 5: COMBIN. 9: UNKNOWN
BASEMENT IN 2-4 UNIT BLDG ?	BLDGBASE	BLDGBASE=1: YES 0: NO 9: UNKNOWN
BASEMENT PRIMAR. USED BY HHOLD?	USEBASE	USEBASE=1: YES 0: NO 9: UNKNOWN
SPACE CHANGES	CHANGES	CHANGES=1: YES 0: NO 8: UNKNOWN
HOW TOTAL SQ FT CHANGED	SAMEFEET	FTCHANGE=1: INCREASED 2: DECREASED 3: REMAINED SAME 8: UNKNOWN
TOTAL SQ FT HEATED	HEATED	HEATED (SQ. FT.)
TOTAL SQ FT HEATED	HEATED	HEATEDGP=1: 0-500 2: 501-1,000 3: 1,001-1,500 4: 1,501-2,000 5: 2,001-2,500 6: 2,501-3,000 7: 3,001/MORE

<u>LABEL</u>	<u>RECS</u>	<u>DARTS/RECS MEMBER</u>
TOTAL FAMILY INCOME	MONEYPY	FAMINC=1:<\$10,000 2:\$10,000-\$19,999 3:\$20,000-\$29,999 4:\$30,000-\$49,999 5:\$50,000/MORE
TOTAL FAMILY INCOME	MONEYPY	INCOME2(\$)
TYPE OF LIVING QUARTERS	TYPEHOME	TYPHOMGP=1:MOBILE HOME 2:SNGL FAM DETACHED 3:SNGL FAM ATTACHED 4:BLDG OF 2-4 UNITS 5:BLDG OF >4 UNITS 6:UNKNOWN
# HOUSING UNITS IN BLDG	UNITS	UNITS (<995)
# HOUSING UNITS IN BLDG	UNITS	UNITSGP=1:ONE 2:TWO 3:3-4 4:5-9 5:10-19 6:20-49 7:50/MORE 8:UNKNOWN
# FLOORS IN BLDG	FLOORS	FLOORS (<95)
# FLOORS IN BLDG	FLOORS	FLOORGP=1:1-3 2:4-6 3:7-12 4:13 /MORE 5:UNKNOWN
TYPE OF OCCUP.	OCCUP	OCCUP=1:YEAR ROUND 2:SEASONAL 3:MIGRATORY 8:NOT ASCERTND 9:UNKNOWN
1980 RESID. SUMMARY CODES	AREA1980	AREA1980=1:METRO IN-CITY 2:METRO OUT-CITY 4:NON METRO
COOLING DD TO BASE 65	CDD65	CDD65 (ANN. COOLING DD)

<u>LABEL</u>	<u>RECS</u>	<u>DARTS/RECS MEMBER</u>
COOLING DD TO BASE 65	CDD65	CDDAYSGP=0:DD<0 1:1-1,000 2:1,001-2,000 3:2,001-3,000 4:3,001-4,000 5:4,001-5,000 6:5,001-6,000 7:6,001/MORE
HEATING DD TO BASE 65	HDD65	HDD65 (ANN. HEATING DD)
HEATING DD TO BASE 65	HDD65	HDDAYSGP=0:DD <0 1:1-1,000 2:1,001-2,000 3:2,001-3,000 4:3,001-4,000 5:4,001-5,000 6:4,001-6,000 7:6,001/MORE
EST. KERO COST	DOLLARKR	KEROCOST (\$)
ANN. KERO BTUS (1000s)	BTUKER	KEROUSE (1000s BTUS)
EST. EL COST	DOLLAREL	ELECCOST (\$)
EST. EL COST	DOLLAREL	ELCOSTGP=1:0-99 2:100-199 3:200-299 4:300-398 5:399/MORE
ANN. EL BTUS (1000s)	BTUEL	ELECUSE (1000s BTUS)
EST. NG COST	DOLLARNG	GASCOST (\$)
EST. NG COST	DOLLARNG	GASCSTGP=1:0-49 2:50-99 3:100-149 4:150-198 5:199/MORE
ANN. NG BTUS (1000s)	BTUNG	CASUSE (1000s BTUS)
EST. FUEL OIL COST	DOLLARFO	OILCOST (\$)

<u>LABEL</u>	<u>RECS</u>	<u>DARTS/RECS MEMBER</u>
ANNUAL FO BTUS (1000s)	BTUFO	OILUSE (1000s BTUS)
EST. LPG COST	DOLLARLP	LPGCOST (\$)
ANNUAL LPG BTUS (1000s)	BTULP	LPGUSE (1000s BTU)
ANN. COST ALL FUELS	DOLLAREL DOLLARFO DOLLARLP DOLLARNG	DOLLARAF (\$)
ANNUAL BTU ALL FUELS	BTUEL, BTUNG, BTUFO, BTULP	BTUAF (1000s BTUS)
SPOUSE PRESENT	SPOUSE	SPOUSE=2:SPOUSE 99:UNKNOWN
SEX OF SPOUSE	SEXS	SEXS=1:FEMALE 2:MALE 9:UNKNOWN
AGE OF SPOUSE	AGES	AGESP (<95 YEARS)
AGE OF SPOUSE	AGES	AGESPGP=1:0-19 2:20-30 3:31-45 4:46-65 5:>65
EMPLOYMT SPOUSE	EMPS	EMPS=1:FULL TIME 2:PART TIME 0:NOT EMPL. 9:UNKNOWN
WHO IS HH HEAD ?	HEAD	HEAD=1:HOUSE HOLDER 2:SPOUSE
SEX OF HH HEAD	HEADSEX	HEADSEX=1:FEMALE 2:MALE
AGE OF HH HEAD	HEADAGE	HEADAGE (<95 YEARS)

<u>LABEL</u>	<u>RECS</u>	<u>DARTS/RECS MEMBER</u>
AGE OF HH HEAD	HEADAGE	HDAGEGP=1:0-19 2:20-30 3:31-45 4:46-65 5:>65
EMPLOYMT HH HEAD	HEADEMP	HEADEMP=1:FULL TIME 2:PART TIME 0:NOT EMPL.
HHOLD STRUCTURE	STRUCTUR	STRUCTUR= 1:MARRIED SPOUSE PRES 2:MARRIED SPOUSE ABS 4:OTHER NOT MARRIED
ATTAINED EDUC. OF HH HEAD	HEADED	HEADED=0:NO SCHOOL 1:1ST GRADE 2:2ND GRADE 3:3RD GRADE 4:4TH GRADE 5:5TH GRADE 6:6TH GRADE 7:7TH GRADE 8:8TH GRADE 9:9TH GRADE 10:10TH GRADE 11:11TH GRADE 12:12TH GRADE 13:1 YR COLL 14:2 YRS COLL 15:3 YRS COLL 16:4 YRS COLL 17:5/MORE YRS
ATTAINED EDUC. OF HH HEAD	HEADED	HEADEDGP=0:NO SCHOOLING 1:FINISH GRADE SCHL 2:GRAD HIGH SCHL 3:HAD 1-4 YRS COLL 4:HAD 5/MORE YRS COLL
HHOLD SIZE	NHSLDMEM	HHSIZE=1:ONE 2:TWO 3:3-4 4:>4
HHOLD SIZE	NHSLDMEM	NHSLDMEM (NO. OF PERSONS)
RELATED PERSONS IN HHOLD	FAMSIZE	FAMSIZE (NO. OF PERSONS)

<u>LABEL</u>	<u>RECS</u>	<u>DARTS/RECS MEMBER</u>
RELATED PERSONS IN HHOLD	FAMSIZE	FAMSIZEGP=1:1-4 2:5-8 3:9-12
<100% OF POV. LINE	POOR100	POOR100=1:POOR 100% 0:NON-POOR
<125% OF POV. LINE	POOR125	POOR125=1:POOR 125% 0:NON-POOR
HOW UTILS. ARE PAID	HOWPAID	HOWPAID=1:ALL PD BY HHOLD 2:ALL INCL IN RENT 3:SOME PAID; SOME RENT 4:OTHER 9:NO UT FUEL USED
URBAN/RURAL	KURBRURL	KURBRURL=1:URBAN 2:RURAL
SMSA SIZE	KSMSASZ	KSMSASZ=1:SMSA >1,000,000 2:SMSA <1,000,000 3:OUTSIDE SMSA
URBAN/RURAL SIZE	KHHLOC	KHHLOC=1:CITY >1 M 2:URBAN >1 M 3:RURAL >1 M 4:CITY <1 M 5:URBAN <1 M 6:RURAL <1 M 7:URBAN 8:RURAL
RESIDENCE VALUE	KOWNVALU	RESVAL=1:<\$40,000 2:\$ 40,000-\$ 99,999 3:\$100,000-\$149,999 4:\$150,000-\$199,999 5:\$200,000-\$249,999 6: ≥\$250,000
SURVEY YEAR	SURVEYYR	SURVEYYR=1978:NIECS 1979:SCREENER 1980:RECS1 1981:RECS2 1982:RECS3 1984:RECS4 1987:RECS5

END

DATE FILMED

02 / 11 / 91