

HEALTH AND RETIREMENT STUDY
2014 Core
Final, Version 2.0
December 2017

Data Description and Usage

TABLE OF CONTENTS

TABLE OF CONTENTS.....	III
1. OVERVIEW.....	1
1A. THE SAMPLE INTERVIEWED IN 2014.....	1
1B. 2014 QUESTIONNAIRE SECTIONS	2
1C. LEVELS OF FILES.....	2
1C1. Household Level Files	3
1C2. Respondent Level Files	3
1C3. Sibling Level File	3
1C4. Household Member and Child Level Files	3
1C5. Helper Level File	3
1C6. Transfer-to-Child-Level File	3
1C7. Transfer-from-Child-Level-File	4
1C8. Pension Level Files	4
1C9. Jobs level files	4
2. FILE NAMING CONVENTIONS.....	4
3. DATA FILES.....	5
4. IDENTIFICATION VARIABLES.....	6
4A. PRIMARY IDENTIFICATION VARIABLES	6
4A1. HHID - Household Identification Number	6
4A2. OSUBHH - 2014 Sub-household Identifier	6
4A3. PN - Person Number	6
4A4. OPN - Other Person Number.	6
4B. PRIMARY IDENTIFICATION VARIABLES FOR DATASETS AT EACH OF THE NINE LEVELS	7
4C. SECONDARY IDENTIFICATION VARIABLES	7
4D. DATASETS INCLUDING OSUBHH AND OPN AS PRIMARY IDENTIFIERS.....	8
5. DISTRIBUTION FILES AND DIRECTORY STRUCTURE.....	8
5A. DISTRIBUTION FILES	8
5B. DIRECTORY STRUCTURE	9
6. PROGRAM STATEMENTS.....	9
6A. USING THE FILES WITH SAS	9
6B. USING THE FILES WITH SPSS	10
6C. USING THE FILES WITH STATA	10
7. DOCUMENTATION.....	10
7A. CODEBOOK	10
7A1. Variable Names	10
7A2. Other Types of Documentation	12
7B. MASTER CODES	12
8. ADDITIONAL NOTES.....	12
8A. HOUSEHOLDS WITH NO FAMILY OR FINANCIAL RESPONDENTS	12
8B. UNFOLDING BRACKET VARIABLES AND IMPUTATIONS	13
8C. MODULES FOR THE 2014 DATA COLLECTION	14
8D. EXPLANATION OF THE DIFFERENCE BETWEEN TRACKER AND CORE DATA RELEASES	15
8E. ENHANCED FACE-TO-FACE SAMPLE DESIGN AND CONTENT	15
8F. CHANGES TO 2014 CORE, VERSION 2.0	16
8G. SUMMARY OF DATA MODEL (DM) CHANGES DURING 2014 PRODUCTION	17
8H. NEW QUESTIONS IN HRS 2014	18

9. OBTAINING THE DATA.....	19
9A. REGISTRATION AND DOWNLOADING THE DATA	19
9B. CONDITIONS OF USE	19
9C. PUBLICATIONS BASED ON DATA.....	19
10. IF YOU NEED TO KNOW MORE.....	20
10A. HRS INTERNET SITE	20
10B. CONTACT INFORMATION:	20
APPENDIX.....	I
A. EXAMPLES OF SUB-HOUSEHOLD AND RESPONDENT PERSON NUMBER AND OTHER PERSON NUMBER ASSIGNMENTS.....	I
A1. MARRIED COUPLE STAYS MARRIED	I
A2. COUPLE DIVORCES.....	II
A3. ONE OR BOTH RESPONDENTS DIE.....	II
A4. SINGLE RESPONDENT MARRIES	II
A5. COUPLE DIVORCES, ONE RESPONDENT REMARRIES AND DIVORCES	III
A6. COUPLE DIVORCES AND MARRIES AGAIN	IV
A7. MARRIED COUPLE WITH CHILDREN AND SIBLINGS	IV
A8. COUPLE WITH CHILDREN AND SIBLINGS DIVORCES.....	V
A9. COUPLE DIVORCES, ONE RESPONDENT REMARRIES, BOTH SPLIT-OFF HOUSEHOLDS HAVE NEW MEMBERS .	VI
B. MASTER CODES.....	VI
B1. HEALTH CONDITIONS - CATEGORICAL	VI
B2. OCCUPATION CODES	X
B3. INDUSTRY CODES	XXII
C. STATE AND COUNTRY CODES.....	XXVII
C1. STATES	XXVII
C2. OTHER U.S.	XXVIII
C3. OTHER COUNTRIES	XXVIII

Data Description and Usage

1. Overview

The 2014 HRS Core (Final, Version 2.0) data release consists of data obtained as part of the Health and Retirement Study (HRS), a national longitudinal study of the economic, health, marital, and family status, as well as public and private support systems, of older Americans. The National Institute on Aging provided funding (NIH U01 AG09740), with supplemental support from the Social Security Administration. The Institute for Social Research (ISR) Survey Research Center (SRC) at the University of Michigan conducted the survey.

By receiving the data, which have been freely provided, you agree to use them for research and statistical purposes only and make no effort to identify the respondents. In addition, you agree to send us a copy of any publications you produce based on the data. See [Obtaining the Data](#) for additional details.

1A. The Sample Interviewed in 2014

The data collection period for the 2014 interview was March 2014 through April 2015. The HRS sample is comprised of six sub-samples (HRS, AHEAD, CODA, WAR BABY, EARLY BABY BOOMER and MIDDLE BABY BOOMER).

The first sub-sample, the HRS sub-sample, consists of people who were born 1931 through 1941 and were household residents of the conterminous U.S. in the spring 1992, and their spouses or partners at the time of the initial interview in 1992 or at the time of any subsequent interview. The HRS sub-sample was interviewed in 1992 and every two years thereafter.

The AHEAD sub-sample consists of people who were born in 1923 or earlier, were household residents of the conterminous U.S. in the spring 1992, and were still household residents at the time of their first interview in 1993 or 1994, and their spouses or partners at the time of the initial interview or at the time of any subsequent interview. The AHEAD sub-sample was interviewed in 1993-94, 1995-96, 1998 and every two years thereafter.

The War Baby (WB) sub-sample consists of people who were born in 1942 through 1947, were household residents of the conterminous U.S. in the spring 1992, who, at that time, did not have a spouse or partner born before 1924 or between 1931 and 1941, and were still household residents at the time of the first interview in 1998, and their spouses or partners at the time of the initial interview or at the time of any subsequent interview. The War Baby sub-sample was interviewed in 1998 and every two years thereafter.

The Children of the Depression (CODA) sub-sample consists of people who were born in 1924 through 1930, were household residents of the conterminous U.S. when first interviewed in 1998, and who, at that time, did not have a spouse or partner who was born before 1924 or between 1931 and 1947, and their spouses or partners at the time of the initial interview or at the time of any subsequent interview. The Children of the Depression sub-sample was interviewed in 1998 and every two years thereafter.

The Early Baby Boomer (EBB) sub-sample consists of people who were born in 1948 through 1953, were household residents of the U.S. when first interviewed in 2004, and who, at that time, did not have a spouse or partner who was born before 1948, and their spouses or partners at the time of the initial interview

or at the time of any subsequent interview. The Early Baby Boomer sub-sample was interviewed in 2004 and every two years thereafter.

The Mid Baby Boomer (MBB) sub-sample consists of people who were born between 1954 and 1959, were household residents of the U.S. when first interviewed in 2010/2011, and who, at that time, did not have a spouse or partner who was born before 1954, along with their spouses or partners at the time of the initial interview or at the time of any subsequent interview. The Middle Baby Boomer sub-sample was interviewed in 2010/2011 and every two years thereafter.

Both the EBB and MBB sub-samples were supplemented in the 2010 wave with a sample of individuals residing in areas with 10% or higher concentrations of Black and/or Hispanic populations in order to boost the size of the minority samples in those cohorts.

Original sample members are those selected as described above and their spouses or partners at the time of the initial interview in 1992 (HRS), 1993 (AHEAD), 1998 (CODA or WB), 2004 (EBB) or 2010/2011 (MBB). For more details about the sample, see our [Web site](#).

1B. 2014 Questionnaire Sections

2014 Section	Content
PR	Preload
A	Coverscreen
B	Demographics
C	Physical Health
D	Cognition
E	Family Structure
F	Parents, Siblings and Transfers
G	Functional Limitations and Helpers
H	Housing
I	Physical Measures
J	Employment
J2	Pensions
K	Last Job
L	Job History
M	Disability
N	Health Services and Insurance
P	Expectations
Q	Assets and Income
R	Asset Change
S	Widowhood and Divorce
T	Wills and Life Insurance
U	Asset Reconciliation
V	Modules
W	Event History, Internet Use and Social Security
RC	Repeat Cognition
Y	Time Calculations
IO	Interviewer Observations
LB	Leave-Behind Questionnaires
TN	Thumbnails

1C. Levels of Files

In the 2014 data collection instrument, most questions were asked of all respondents. Some questions were asked about the household. For two-respondent

households, household level questions were asked of one respondent who was designated as the financial respondent, family respondent, or coverscreen respondent (the first respondent interviewed) on behalf of the entire household.

In addition to the familiar household-level and respondent-level files, the 2014 HRS Core (Final, Version 2.0), contains files at seven other levels: household-member-and-child, sibling, helper, transfer-to-child, transfer-from-child, jobs, and pension.

1C1. Household Level Files

Household-level files contain questions that were asked about the household of a designated coverscreen, financial, or family respondent. A coverscreen respondent answered family questions (section A) on behalf of the entire household; the coverscreen respondent may or may not be the family respondent. A family respondent answered family questions (section E) on behalf of the entire household, and a financial respondent answered household-level financial questions (sections H, Q, R and U) on behalf of the entire household. The household-level files contain one record for each household in which at least one interview was obtained in 2014.

1C2. Respondent Level Files

Respondent-level files contain questions that were asked of all respondents about themselves (or asked of a proxy about the respondent if the respondent was not able to give an interview). The files contain one record for each respondent or proxy who gave an interview in 2014.

1C3. Sibling Level File

The sibling file consists of characteristics of the respondent's siblings. If a respondent had at least one living parent, he/she was asked a variety of questions about his/her siblings (Section F). The sibling file contains one record for each sibling of a respondent. Each respondent reports on his/her own parents and siblings. Sibling data are also stored in the preload section, H14PR_SB.

1C4. Household Member and Child Level Files

These files contain characteristics about household members and children. This information can come from Section A. (coverscreen) or the family respondent in Section E and also in the preload section.

1C5. Helper Level File

This file contains information provided by each respondent about helpers. A helper may be a person or organization that was reported by the respondent as providing help with ADLs or IADLs. The file contains one record for each helper. If a child helped both respondents in a two respondent household, the helper file will contain two records – one of mother's report of the child's helping her and one for father's report of the child's helping him.

1C6. Transfer-to-Child-Level File

This file contains information provided by the family respondent about transfers of money to a child or grandchild. The file contains one record for each transfer to a child or grandchild.

1C7. Transfer-from-Child-Level-File

This file contains information provided by the family respondent about transfers of money from children or grandchildren. The file contains one record for each transfer from a child or grandchild.

1C8. Pension Level Files

These files contain information about Pensions that the respondent has reported over the years during their involvement with the HRS. Each file contains one record for each Pension that has been reported, and followed up on in the current data collection.

1C9. Jobs level files

These files contain information on Jobs the respondent has reported over time. Current jobs are represented, as well as past employment that have unresolved pensions from past waves. The files have one record for each job represented.

2. File Naming Conventions

Files are named beginning with "H14" for HRS 2014, followed by a letter (or two) designating the questionnaire section. A separator, "_" and then one or two letters designating the level, follows the section letter designator.

- H for household-level
- R for respondent-level
- MC for household-member-and-child-level
- SB for sibling-level
- HP for helper-level
- TC for transfer-to-child-level
- FC for transfer-from-child-level
- JB for jobs-level
- P for pension-level

For example, the file H14A_R includes variables from section A (coverscreen) at the respondent level, whereas, H14A_H contains variables from section A (coverscreen) at the household level.

The following extensions are used for the six different types of files that are distributed.

- .DA for data files,
- .SAS for SAS program statements,
- .SPS for SPSS program statements,
- .DO for STATA DO statements,
- .DCT for STATA dictionary statements, and
- .TXT for codebook files.

One of each of these file types is provided for each of the 42 data files for the 2014 HRS Core (Final, Version 2.0) data release. For example:

- H14A_R.DA contains respondent data from section A,
- H14A_R.SAS contains corresponding SAS program statements,
- H14A_R.SPS contains corresponding SPSS program statements,
- H14A_R.DO contains corresponding STATA DO statements,
- H14A_R.DCT contains corresponding STATA dictionary statements, and
- H14A_R.TXT contains the ASCII codebook.

3. Data Files

The 2014 HRS Core (Final, Version 2.0) data are distributed in 42 data files. The files are listed below along with the number of cases (N), number of variables (NV), and the primary identifiers (IDS). The records in the data files are sorted in order by these primary identifiers.

The 2014 HRS Core data are provided in ASCII format, with fixed-length records. Use associated SAS, SPSS or STATA program statements to read the data into the analysis package of your choice.

Household level files, IDS=HHID OSUBHH

H14PR_H	N=13241	NV= 43
H14A_H	N=13241	NV= 46
H14E_H	N=13241	NV= 131
H14H_H	N=13241	NV= 213
H14Q_H	N=13241	NV= 703
H14R_H	N=13241	NV= 110
H14U_H	N=13241	NV= 246
H14IO_H	N=13241	NV= 55

Respondent level files, IDS=HHID PN

H14PR_R	N=18747	NV= 168
H14A_R	N=18747	NV= 33
H14B_R	N=18747	NV= 167
H14C_R	N=18747	NV= 227
H14D_R	N=18747	NV= 198
H14RC_R	N=18747	NV= 99
H14F_R	N=18747	NV= 188
H14G_R	N=18747	NV= 150
H14I_R	N=18747	NV= 190
H14IO_R	N=18747	NV= 73
H14J_R	N=18747	NV= 644
H14K_R	N=18747	NV= 202
H14L_R	N=18747	NV= 338
H14LB_R	N=18747	NV= 399
H14M1_R	N=18747	NV= 269
H14M2_R	N=18747	NV= 449
H14N_R	N=18747	NV= 326
H14P_R	N=18747	NV= 57
H14S_R	N=18747	NV= 114
H14T_R	N=18747	NV= 101
H14TN_R	N=18747	NV= 18
H14V_R	N=18747	NV= 471
H14W_R	N=18747	NV= 21
H14Y_R	N=18747	NV= 87

Household member and child level files IDS=HHID OSUBHH OPN

H14PR_MC	N=76005	NV= 26
H14E_MC	N=64733	NV= 28

Sibling level files IDS=HHID PN OPN

H14PR_SB	N=19646	NV= 18
H14F_SB	N=18581	NV= 22

Transfer-to-child-level-file IDS=HHID OSUBHH

H14E_TC	N= 6117	NV= 23
---------	---------	--------

Transfer-from-child-level-file IDS=HHID OSUBHH
H14E_FC N= 1117 NV= 22

Helper level file IDS=HHID PN OPN
H14G_HP N= 6259 NV= 30

Jobs level file IDS=HHID PN JOBID
H14PR_JB N=15604 NV= 16

Pension level files IDS=HHID PN Pension ID
H14PR_P N= 9120 NV= 17
H14J_P N=18263 NV= 186

At a later date, household and respondent level weight variables for the 2014 sample will be available in the HRS cross-wave Tracker file.

4. Identification Variables

Identification variables for HRS 2014 are stored in character format.

4A. Primary Identification Variables

Several variables, HHID, OSUBHH, PN, OPN, are used in various combinations to uniquely identify the seven different level datasets that comprise this data release.

4A1. HHID – Household Identification Number

In the initial wave of data collection (in 1992 for the HRS sub-sample, in 1993 for the AHEAD sub-sample, 1998 for the WB and CODA sub-samples, 2004 for the EBB sub-sample, and 2010/2011 for the MBB sub-sample), each sample household was assigned a Household Identifier. HHID is stable across waves of data collection and uniquely identifies the original household and any households derived from that household in subsequent waves of data collection. HHID has six-digits.

4A2. OSUBHH – 2014 Sub-household Identifier

In combination with HHID, OSUBHH uniquely identifies a household at the time of the 2014 data collection. Sub-household identifiers can be different at each wave. OSUBHH has one-digit. For more information, see Examples of [Sub-Household and Respondent Person Number and Other Person Number Assignments](#).

4A3. PN – Person Number

In combination with HHID, PN uniquely identifies a respondent or respondent's spouse or partner. PNs are unique within an original household (HHID). The PN assigned to a particular respondent does not change across waves. PN has three-digits.

4A4. OPN – Other Person Number.

In the 2014 data collection HHID, OSUBHH and OPN uniquely identify another person in the household member and child files; HHID, PN, and OPN uniquely identify another person in the helper or sibling files. OPN has three-digits.

4B. Primary Identification Variables for Datasets at Each of the Nine Levels

Two identifiers uniquely identify records in the

- o respondent-level datasets:

- 1) HHID HOUSEHOLD IDENTIFICATION NUMBER
- 2) PN RESPONDENT PERSON IDENTIFICATION NUMBER

Two identifiers uniquely identify records in the

- o household-level datasets:

- 1) HHID HOUSEHOLD IDENTIFICATION NUMBER
- 2) OSUBHH 2014 SUB HOUSEHOLD IDENTIFICATION NUMBER

Three identifiers uniquely identify records in the

- o helper-level datasets:

- 1) HHID HOUSEHOLD IDENTIFICATION NUMBER
- 2) PN RESPONDENT PERSON IDENTIFICATION NUMBER
- 3) OPN OTHER PERSON NUMBER

Three identifiers uniquely identify records in the

- o household-member-and-child-level:

- 1) HHID HOUSEHOLD IDENTIFICATION NUMBER
- 2) OSUBHH 2014 SUB HOUSEHOLD IDENTIFICATION NUMBER
- 3) OPN OTHER PERSON NUMBER

Three identifiers uniquely identify records in the

- o sibling-level datasets:

- 1) HHID HOUSEHOLD IDENTIFICATION NUMBER
- 2) PN RESPONDENT PERSON IDENTIFICATION NUMBER
- 3) OPN OTHER PERSON NUMBER

Three identifiers uniquely identify records in the

- o transfer-to-child-level, and
- o transfer-from-child-level datasets:

- 1) HHID HOUSEHOLD IDENTIFICATION NUMBER
- 2) OSUBHH 2014 SUB HOUSEHOLD IDENTIFICATION NUMBER
- 3) OPN OTHER PERSON NUMBER

Three identifiers uniquely identify records in the

- o Pension Level Data sets

- 1) HHID HOUSEHOLD IDENTIFICATION NUMBER
- 2) PN RESPONDENT PERSON IDENTIFICATION NUMBER
- 3) Z505 PENSION TRACKING NUMBER

Three identifiers uniquely identify records in the

- o Jobs level datasets:

- 1) HHID HOUSEHOLD IDENTIFICATION NUMBER
- 2) PN RESPONDENT PERSON IDENTIFICATION NUMBER
- 3) Z504 JOB TRACKING NUMBER

4C. Secondary Identification Variables

In addition to the primary identification variables that uniquely identify records in a dataset, secondary identification variables that allow links to other datasets are provided. Two sets of secondary identification variables are provided. They are listed below.

Secondary Identification Variables for

- o respondent-level,
- o sibling level and
- o helper-level datasets:
- o job-level datasets
- o Pension-level datasets

OSUBHH	2014	SUB HOUSEHOLD IDENTIFICATION NUMBER
NSUBHH	2012	SUB HOUSEHOLD IDENTIFICATION NUMBER
OPN_SP	2014	SPOUSE/PARTNER PERSON NUMBER
OCSR	2014	WHETHER COVERSHEET RESPONDENT
OFAMR	2014	WHETHER FAMILY RESPONDENT
OFINR	2014	WHETHER FINANCIAL RESPONDENT

Secondary Identification Variables for

- o household level,
- o household member or child level,
- o transfer-from-child-level and
- o transfer-to-child-level:

OSUBHH	2014	SUB HOUSEHOLD IDENTIFICATION NUMBER
NSUBHH	2012	SUB HOUSEHOLD IDENTIFICATION NUMBER
OPN_CS		PERSON NUMBER OF COVER SCREEN RESPONDENT
OPN_FAM	2014	FAMILY RESP PERSON NUMBER
OPN_FIN	2014	FINANCIAL RESP PERSON NUMBER
OPN_NCS	2014	NON-COVERSCREEN RESP PERSON NUMBER
OPN_NFAM	2014	NON-FAMILY RESP PERSON NUMBER
OPN_NFIN	2014	NON-FINANCIAL RESP PERSON NUMBER

4D. Datasets Including OSUBHH and OPN as Primary Identifiers

When working with datasets including OSUBHH and OPN as primary identifiers -- household-member-and-child-level, it is essential to use OSUBHH to distinguish other persons.

Sometimes records with the same HHID and OPN will be separate reports about the same person. For example, [Couple with Children and Siblings Divorces](#), the record where HHID is 890121, OSUBHH is 1, and OPN is 101 is the report about the child from the mother, and the record where HHID is 890121, OSUBHH is 2, and OPN is 101 is the report about the same child from the father.

At other times records with the same HHID and OPN will be reports about different persons. For example, a couple divorces, one respondent remarries, and both split-off households have new members. When a couple divorces and both split-off households have new members, the record where HHID is 871231, OSUBHH is 2, and OPN is 151 is for the ex-wife's mother, while the record where HHID is 871231, OSUBHH is 1, and OPN is 151 is for the ex-husband's new stepchild.

5. Distribution Files and Directory Structure

5A. Distribution Files

The files are packaged for download from our Web site in two different ways -- as one large .zip file that contains six smaller .zip files, one .pdf file, and one .txt file, or the eight smaller files available individually for separate download. The combined file is H14core.zip.

The individual .zip files for separate download are:

Data file

H14da.zip contains data files.

Program statement files

H14sas.zip contains SAS data descriptors.

H14sps.zip contains SPSS data descriptors.

H14sta.zip contains STATA data descriptors.

Documentation files

H14cb.zip contains the codebook.

H14qn.zip contains the questionnaire.

H14dd.pdf - this document.

5B. Directory Structure

While a particular setup is not required for using HRS files, we have traditionally suggested a directory structure. By using this directory structure, you will not have to change the path name in your data descriptor files. If you use a different structure, just change the directory references in the program statement files.

Directory	Contents
c:\hrs2014	Files downloaded from Web site
c:\hrs2014\codebook	Unzipped files from H14cb.zip
c:\hrs2014\data	Unzipped files from H14da.zip
c:\hrs2014\qnaire	Unzipped files from H14qn.zip
c:\hrs2014\sas	Unzipped files from H14sas.zip
c:\hrs2014\spss	Unzipped files from H14sps.zip
c:\hrs2014\STATA	Unzipped files from H14sta.zip

Decompress the selected .zip files into the appropriate subdirectories. You will need about 450 MB of free space on your storage device to store the 42 .DA files.

6. Program Statements

Each data file comes with associated SPSS, SAS, or STATA program statements to read the data. Files containing SPSS statements are named with .SPS extension, those with SAS statements with a .SAS extension, and those with STATA statements with .DO and .DCT extensions.

The statement files are named beginning with the same prefix as the corresponding data file. For example, SAS statements in the file H14A_R.SAS go with the H14A_R.DA data file.

6A. Using the Files with SAS

To create a SAS system file for a particular dataset, two file types must be present for that dataset -- .SAS program statement files and .DA data files.

To create a SAS system file, load the *.SAS file into the SAS Program Editor.

If the *.SAS file is located in "c:\hrs2014\sas" and the data file is located in "c:\hrs2014\data", you can run the file as is. A SAS system file (*.SD2 or *.SAS7BDAT) will be saved to directory "c:\hrs2014\sas".

If the files are not located in the specified directories, you will need to edit the *.SAS file to reflect the proper path names prior to running the file.

6B. Using the Files with SPSS

To create an SPSS system file for a particular dataset, two file types must be present for that dataset -- .SPS program statement files and .DA data files.

To create an SPSS system file, open the *.SPS file in SPSS as an SPSS Syntax File.

If the *.SPS file is located in "c:\hrs2014\spss" and the data file is located in "c:\hrs2014\data", you can run the file as is. An SPSS system file (*.SAV) will be saved to directory "c:\hrs2014\spss".

If the files are not located in the specified directories, you will need to edit the *.SPS file to reflect the proper path names prior to running the file.

6C. Using the Files with STATA

To use STATA with a particular dataset, the following three file types must be present for that dataset -- .DCT files, .DO files, and .DA data files.

Files with the suffix .DA contain the raw data for STATA to read. Files with the suffix .DCT are STATA dictionaries used by STATA to describe the data. Files with the suffix .DO are short STATA programs ("do files") which you may use to read in the data. Load the .DO file into STATA and then submit it.

If the *.DO and *.DCT files are located in "c:\hrs2014\STATA" and the data file is located in "c:\hrs2014\data", you can run the .DO file as is.

If the files are not located in these directories, you must edit the *.DO and *.DCT files to reflect the proper path names before you run the files.

Note that the variable names provided in the .DCT files are uppercase. If you prefer lower case variable names, you may wish to convert the .DCT files to lower case prior to use. You may do this by reading the .DCT file into a text or word processing program and changing the case. For instance in Microsoft Word, Edit, Select All, Format, Change Case, lowercase.

7. Documentation

There are several types of documentation available for use with the 2014 HRS Core (Final, Version 2.0) data release. These include a codebook and the 2014 box-and-arrow questionnaire. In addition, 2014 variables have been added to the [Online Concordance](#).

7A. Codebook

The HRS 2014 Codebook is provided as a series of 42 ASCII text files, as well as a file containing all sections. There is a codebook file corresponding to each data file. Each variable has its own codebook entry. The format of the codebook is, for the most part, consistent with all previous releases.

7A1. Variable Names

Variable names begin with a letter designating the wave of data collection (0 for 2014), followed by the section letter, and numbers after the section letter.

For example, OC001 where O=2014, C=section C (physical health), and 001 is the variable number. Variables from the preload section of the instrument will have either OX or OZ as prefix letters. The X indicates a variable that is updated by data collected in later sections of the questionnaire, whereas the Z indicates preloaded data that were not changed by subsequent answers to questions. For example:

OX007_R RESP FAM/FIN TYPE - UPDATED
OZ077_R PREV WAVE R FIN/FAM TYPE

OX007_R indicates that the preloaded Financial or Family respondent was changed, or updated, later in the instrument from what had been preloaded (or assigned) prior to the start of the 2014 interview.

7A1a. Multiple-response and Looped Variables

There are two types of variables with multiple mention indicators. First are simple multiple mentions and second are multiple mentions within loops.

Simple multiple mention variables take the form: (wave prefix) + (section letter) + (variable number) + (mention number). For example, ON219M1 through ON219M5 are 2014 variables from section N with one through 5 mentions.

Variable names for multiple mentions to questions within a loop take the form: (wave prefix) + (section letter) + (variable number) + (underscore) + (loop iteration) + (letter designating mention number). For example, ON049_1M1, is a 2014 variable from section N, variable number 049 in the first iteration of the loop, and the first mention.

Simple loop variables (not a multiple mention) have an underscore (_) in their name and a suffix that designates the loop, e.g., ON025_1.

For variables that have a "W" right after the section designator, the variable names are slightly different. Variable names for multiple mentions to questions within a W-loop take the form: (wave prefix) + (section letter) + ("W") + (variable number) + (letter designating loop iteration) + (mention number). For example, OKW097A1, is a 2014 variable from section K, variable number 097 in the first iteration of the loop, and the first mention. Other non-multiple mention variables within this type of loop are named with the letter designating the loop iteration. For example, OKW002A, is variable number 002 in the first iteration of the loop.

Null multiple mention variables and variables from null loops beyond the first mention or first loop are not included in the data. It is generally the case that one null multiple mention and one null loop was retained.

7A1b. Masked Variables

To protect the confidentiality of the information that respondents provide, a number of variables have been masked or are simply not included in the final release public dataset. Some of these variables may be made available to analysts as restricted data. See our Web site for details.

Names, addresses, days of birth, information on geographical relocation and similar variables are not included in publicly released files.

Geographical locations are recoded to a level no more detailed than U.S. Census Region and Division. Data on the highest educational degree earned have been

further grouped together to increase cell sizes. The 2010 U.S. Census codes have been used to code the occupation and industry data in 2014.

The names of variables that were masked for confidentiality end in the capital letter "M"; for example, variable OX026M (1ST ADDRESS STATE – MASKED) and variable OB024M (FATHER USUAL OCCUPATION – MASKED).

7A2. Other Types of Documentation

In addition to this document and the codebook, three additional types of documentation are available.

7A2a. Overview of HRS Public Data Files for Cross-sectional and Longitudinal Analysis

This is a thorough document that provides a description of structure and content for all HRS public data files and a detailed explanation for handling the longitudinal nature of the survey. It is located here:

<http://hrsonline.isr.umich.edu/sitedocs/dmgt/OverviewofHRSPublicData.pdf>

7A2b. Box and Arrow Questionnaire

The research community has referred to the type of documentation that describes the questions asked in the interview as a “questionnaire”. Since the 2014 HRS data were collected using a CAI program, a traditional hard-copy questionnaire was not produced as part of the data collection phase. Therefore, in order to document question sequencing, we have provided a current-wave version of the traditional box and arrow questionnaire.

7A2c. Cross-Wave Tracker File

The cross-wave tracker file contains basic demographic information, interview status, and if, when and how an interview was conducted during a specific data collection period. The cross-wave tracker file also contains weight variables. The tracker file contains one record for every person who was ever eligible to be interviewed in any wave. Please see the cross-wave tracker data description for a more detailed description.

7B. Master Codes

A master code file contains detailed codeframes used in several sections of the codebook. The master codes include Health conditions, occupation codes, industry codes, and state and country codeframes. The master codes appear in [Appendix B](#).

8. Additional Notes

The following are miscellaneous additional notes regarding the 2014 HRS Core (Final, Version 2.0). If we become aware of additional issues, they will be posted on our Web site in the [Data Alerts](#) section.

8A. Households with No Family or Financial Respondents

As noted earlier in this document, the data collection design was to have asked most questions of all respondents, some questions of just a designated coverscreen, or family, or financial respondent on behalf of the household. However, occasionally that is not what happened. For some households we did not obtain an interview from a family or financial respondent. There were 168 households that had no family respondent; 143 households had no financial respondent. There are 2 missing coverscreen respondents in this wave. The household records for these households contain null values for the missing

information. Households missing a family or financial respondent can be identified, respectively, by values of "Blank. No family/financial respondent" (in the household record) in the following variables:

OPN_FAM - 2014 FAMILY RESP PERSON NUMBER
OPN_FIN - 2014 FINANCIAL RESP PERSON NUMBER

8B. Unfolding Bracket Variables and Imputations

Typically, a series of unfolding bracket questions followed a lead-in question asking for an amount. If an actual amount was not given, a series of "unfolding" questions were asked. The manner in which the unfolding questions were programmed (Blaise) is different for the 2002 through 2010 data compared to the CAI (SurveyCraft) software used for 1993 through 2000. This change was transparent to the respondents, since exactly the same questions were asked with the new software as would have been asked with the old software; but it did have an implication for the data that were actually stored and also for the data that are released.

Instead of storing the response to each unfolding question, three summary variables were generated: the minimum and maximum values for the amount, given the answers to the unfolding questions, and if the last answer a respondent gave in an unfolding sequence was either "Don't Know" or "Refused," what that answer was. In 2002, if the Respondent said "more than" to the unfolding question with the highest value, then the maximum value was stored as ten times that value. However, in 2004 and 2010, if the Respondent said "more than" to the unfolding question with the highest value, then the maximum value was stored as 99999996.

For most analysts, those three variables (and in particular, the minimum and maximum of the possible range) will be sufficient for analyses. For any analyst who needs the more detailed information, it should be noted that the three variables, combined with the information about the unfolding questions provided in the box-and-arrow and codebook, are sufficient to allow the analyst to reconstruct the sequence of questions asked of any respondent, and the answers to each of those questions in many of the unfolding sequences.

For other sequences -- those in which respondents were randomly assigned to one of three "entry" points for the first unfolding question -- the analyst will also need to take into account a fourth variable (located in the preload sections) that specifies the entry point for each respondent. The following example shows the preload variable (OZ041) and the unfolding sequence that uses the random entry point from OZ041.

Example Random Entry Assignment Variable from Preload:

```
Preload Variable from the data file H14pr_h:
.....
OZ041          PREASSIGNED UNFOLD RANDOM VALUE - SELF EMPLOYMENT
              Section: PR   Level: Household Type: Numeric Width: 1 Decimals: 0
              Ref: HH.X041_UnfSEmpInc_V

              UNFOLD ASSIGN - SELF EMPLOYMENT INCOME

=====
4422          1.  RANDOM ASSIGNMENT 1
4412          2.  RANDOM ASSIGNMENT 2
4408          3.  RANDOM ASSIGNMENT 3
```

.....
 Unfolding Series from section Q that uses OZ041 to assign respondents an entry point:

QQ016 R INCOME FROM SELF EMPLOYMENT - MIN
 Section: Q Level: Household Type: Numeric Width: 6 Decimals: 0
 Ref: SecQ.RIncome.Q016_

Did it amount to less than \$____ , more than \$____ , or what?

PROCEDURES: 3Up, 2Up1Down, 1Up2Down
 BREAKPOINTS: \$5,000, \$10,000, \$25,000, \$100,000
 RANDOM ENTRY POINT ASSIGNMENT [1 (\$5,000)] or [2 (\$10,000)] or
 [{NOT 1 and NOT 2} (\$25,000)] AT X041

```
=====
126      0.  Value of Breakpoint
8        5000. Value of Breakpoint
15       5001. Value of Breakpoint
7        10000. Value of Breakpoint
18       10001. Value of Breakpoint
4        25000. Value of Breakpoint
26       25001. Value of Breakpoint
6        100001. Value of Breakpoint
13032    Blank.  INAP (Inapplicable); Partial Interview
=====
```

.....
 QQ017 R INCOME FROM SELF EMPLOYMENT - MAX
 Section: Q Level: Household Type: Numeric Width: 8 Decimals: 0
 Ref: SecQ.RIncome.Q017_

*

```
=====
38       4999. Value of Breakpoint
8        5000. Value of Breakpoint
14       9999. Value of Breakpoint
7        10000. Value of Breakpoint
17       24999. Value of Breakpoint
4        25000. Value of Breakpoint
18       99999. Value of Breakpoint
104      99999996. Greater than Maximum Breakpoint
032      Blank.  INAP (Inapplicable); Partial Interview
=====
```

.....
 QQ018 R INCOME FROM SELF EMPLOYMENT - RESULT Section: Q
 Level: Household Type: Numeric Width: 2 Decimals: 0Ref:
 SecQ.RIncome.Q018_

*

```
=====
22      98.  DK (Don't Know); NA (Not Ascertained)
80      99.  RF (Refused)
13140 Blank.  INAP (Inapplicable); Partial Interview
=====
```

8C. Modules for the 2014 Data Collection

There are 11 modules for 2014 HRS. The module data can be found in the file H14V_R. Topical areas of the modules include:

Module 1: Traumatic Brain Injury
 Module 2: Time Discounting (Age 71 and above)
 Module 3: Decision Making

Module 4: Health Behaviors
Module 5: Expectations
Module 6: Meaningful Work
Module 7: Family History of Mental Health
Module 8: Alcohol Use and History
Module 9: Culture and the Arts
Module 10: Financial Management Capacity and Practices Among Older Adults
Module 11: Longevity(Rs 65+) and Retirement(Rs <65)

8D. Explanation of the Difference between Tracker and Core Data Releases

There are some areas where the Tracker File and the core data are different. Below are some examples. The examples rely on data from the HRS 2008 Core.

LSUBHH - The tracker file assigns a '9' for all new spouses in 2008 for the previous wave's SUBHH number. The 2008 Final Release data, however, lists the SUBHH number of the household that the new spouse married into, since the new spouse will 'inherit' many of the relationships from that household.

LPN_SP - Even if a spouse did not give an interview in 2008, a spouse PN (LPN_SP) will exist in the core data. Additionally, for a non-original R's new spouse, we assign a spouse PN (LPN_SP) and track the spouse's influence on the household with that number, even though we will never interview that person. In contrast, the tracker file will not reference these spouses.

Family and Financial R Assignments - As we keep a record of a non-interviewed spouse in the core data, we also release their assigned role in the household (i.e. family or financial R) with a listing for LPN_FIN, and LPN_FAM in the household sections. The tracker file will simply list the assignments of the people interviewed. Therefore, for example, the 2008 Core Final data has a blank line in Section H for a household where '020' was the non-interviewed financial R. The tracker file would show the same household as not having a financial R.

Marital Status - It is important to note that marital status, as it was assigned in the 2008 data (LB063) may be different from the marital status variable (xMARST) in the Tracker file. See the Cross-wave Tracker File Data Description for a more complete explanation of how marital status was assigned and the criteria used to reclassify respondents. The marital status variable in the Tracker file was constructed by looking at several different sources of data, whereas the marital status variable in the 2008 Core Final data was not changed using outside sources, in order to preserve the flow through the instrument for respondents.

8E. Enhanced Face-to-Face Sample Design and Content

In 2006, HRS initiated what is referred to as an Enhanced Face-to-Face Interview. In addition to the core interview, the Enhanced Face-to-Face Interview includes a set of physical performance measures, collection of biomarkers, and a Leave-Behind Questionnaire on psychosocial topics. A random one-half of households were pre-selected for the enhanced face-to-face interview in 2006, with the other half of the sample selected for 2008, and the design is repeated in each subsequent wave. In coupled households, both members of the couple are selected. Selected respondents who completed a self (as opposed to proxy) interview, in-person (at least through Section I - the physical measures and biomarkers section), and who were non-institutionalized at the time of the interview were eligible for the physical measures and biomarkers

components. This same group of respondents, plus those for whom an in-person proxy interview was completed, were also eligible for the Leave-Behind Questionnaire.

Psychosocial Leave-Behind Questionnaire (Section LB_R)

In 2004, HRS added a new feature for data collection in the form of self-administered questionnaires that were left with respondents upon the completion of an in-person Core Interview, referred to as the Leave-Behind Questionnaire. The purpose of the Leave-Behind Questionnaire is to collect additional information from respondents without adding to the interview length. In 2014, as in previous data collections since 2006, the Leave-Behind Questionnaire was incorporated into the Enhanced Face-to-Face Interview. The Leave-Behind Questionnaire administered in 2010 is called the Participant Lifestyle Questionnaire, and it includes questions on participation in general activities, relationships with others, and views on their life in general as well as specific aspects of their life.

Physical Performance Measures and Biomarkers (Section I_R)

Blood pressure
Breathing test (peak flow)
Grip strength
Timed walk (8 ft.)
Balance tests (semi-tandem, side-by-side, full tandem)
Height
Weight
Waist circumference
Saliva (for which DNA was extracted and stored)
Dry blood spots (analyzed for Hemoglobin A1c, total cholesterol and HDL cholesterol)

With the exception of the timed walk, which was administered only to respondents 65 years of age or older, the physical measures and biomarkers were conducted on the full enhanced face-to-face sample.

Three separate consents were obtained to cover: 1) all of the physical measures, plus blood pressure; 2) saliva sample; and 3) dry blood spots. The physical measures booklet, which the interviewers used to administer the physical measures and biomarkers, is available on the HRS website [Physical Measures 2014](#). The booklet contains the consent forms, as well as instructions and protocols for all of the measurements.

8F. Changes to 2014 Core, Version 2.0

The variable OPN_SP was updated for 34 cases in the appropriate respondent-, sibling-, helper-, pension-, and job- level files.

Updated the code range of the "Miscellaneous" category for the following variables. The range is now 191-196.

OB121M1M--OB121M3M
OB125M1M--OB125M3M
OC108M1M--OC108M2M
OM003M1M--OM003M3M
OM503M1M--OM503M2M

OM508M1M--OM508M2M
OM559M1M--OM559M2M
OS054M1M--OS054M2M

The following variables have been added to the H14E_H files:

OE169
OE171M1-M6.

Minor adjustments were made to the following variable in H14J_R:

OJ000M2

Minor adjustments were made to the following variable in H14J_P:

OJ2W009

Minor adjustments were made to the following variables in H14N_R:

ON182

Minor adjustments were made to the following variables in H14Q_H:

OQ039
OQ054
OQ243
OQ244
OQ322
OQ366
OQ369
OQ482_2
OQ483_2
OQ490_1
OQ482_3
OQ483_3
OQ331

8G. Summary of Data Model (DM) Changes during 2014 Production

Data Model 2 changes:

Section J Pensions

W408: Changed code 996 to "CURRENT SELF-EMPLOYMENT" and added instructions "IWER: If this plan is from a past period of self-employment, select code 997." Added a skip rule to W411, if W408=996.

Section P

P041: Removed the IF condition "IF (SecE.E165_Altwave = 0 {on} AND Rvars.Z076_ReIWR_V = REIWR) OR Rvars.Z076_ReIWR_V <> REIWR then)".

P166: Changed the preload variable from X501 to X083.

Module Intro

V000: Added a condition so that Module 11 will not be administered to respondents over the age of 90.

Module 2

V085: Changed the last sentence of question text to the following, "What is the smallest sure payment that would make you prefer the sure payment over playing the lottery?"

Module 8

V400: Added jump to V400 branchpoint “ELSE IF C128=5 THEN ASK V420” and then added the new question, V420.

V404: Added code “NO ALCOHOL IN THE LAST 3 MONTHS [VOL]”.

Module 11

V570: Removed code 997.

V571: Added code 997.

-

Data Model 3 changes:

Section N

N062: Ask rules have been changed to read:

```
{PREVIOUS ASK} SecN.PlanDetails[CNT].N039_PayHlthInsCost
```

```
IF (((SecA.Relations.A044TSpAge_A < 65) AND (piRespondents1X065ACouplenss <>
OTHER)) AND (SecN.PlanDetails[CNT].N059_CovTo65 <> NO)) AND ((N051_SPCoverage <>
NO) AND N051_SPCoverage <> NONRESPONSE) THEN
```

-

Data Model 4 changes:

Section W

W314: Modified ask rule in condition 2 of the W314_W306 branchpoint to allow Non-Enhanced F-T-F Rs for whom we did not get a complete SSN into the SS Permission sequence. Added conditional text at W314, W306, and W310 for the above referenced types of R, and also, for Rs who either did not give a complete SSN in the past, or for whom we did not get a match back from SSA.

8H. New Questions in HRS 2014

Table 1. New Questions in HRS 2014

Section	Instrument	Question Number
A - Coverscreen	Core	A209, A210, A211, A212, A213, A215
B - Demographics	Core	B132
C - Health	Core	C283
D - Cognition	Core	D290
RC - Repeat Cognition	Core	RC290
E - Children and Transfers	Core	No added questions
F - Parents and Siblings	Core	No added questions
G - Functional limitations and helpers	Core	No added questions
H - Housing	Core	HW351, HW353, HW354, HW355, HW356, HW359
I - Physical Measures and Biomarkers	Core	I616, I636, I639, I660, I662, I663, I666, I961, I964, I966, I967, I968, I970, I971, I973, I977, I978, I980, I982, I985, I987, I989
J - Employment and Pensions	Core	J958, J959, J960, J2W429M1-M6, J2W457, J2W458, J2W459, J2W460, J2Z140, J2Z508
K - Last Job	Core	No added questions

L - Job History	Core	No added questions
M - Work Disability	Core	No added questions
N - Health Insurance and Service Utilization	Core	N295, N296_1-3, N298_1-3, N433_1-7, N434_1-7, N435_1-7, N472
P - Expectations	Core	P190, P191, P192, P193, P194
Q - Income and Assets	Core	No added questions
R - Capital Gains	Core	No added questions
S - Widowhood	Core	No added questions
T - Wills and Life Insurance	Core	T252
TN - Thumbnails	Core	TN06, TN07
U - Asset Reconciliation	Core	No added questions
V - Experimental Modules	Core	Content of Experimental Modules changes each wave of data collection.
W - Social Security permission, Internet and Pension Doc Request	Core	W319, W320, W321

9. Obtaining the Data

9A. Registration and Downloading the Data

HRS data are available for free to researchers and analysts at the HRS Web site. In order to obtain public release data, you must first register at our Web site. Once you have completed the registration process, your username and password will be sent to you via e-mail. Your username and password are required to download any data files.

By registering all users, we are able to document for our sponsors the size and diversity of our user community allowing us to continue to collect these important data. Registered users receive user support, information related to errors in the data, future releases, workshops, and publication lists. The information you provide will not be used for any commercial use, and will not be redistributed to third parties.

9B. Conditions of Use

By registering, you agree to the Conditions of Use governing access to Health and Retirement public release data. You must agree to

- o not attempt to identify respondents
- o not transfer data to third parties except as specified
- o not share your username and password
- o include specified citations in work based on HRS data
- o provide information to us about publications based on HRS data
- o report apparent errors in the HRS data or documentation files
- o notify us of changes in your contact information

For more information concerning privacy issues and conditions of use, please read "Conditions of Use for Public Data Files" and "Privacy and Security Notice" at the Public File Download Area of the HRS Web site.

9C. Publications Based on Data

As part of the data registration process, you agree to include specified citations and to inform HRS of any papers, publications, or presentations based

on HRS data. Please send a copy of any publications you produce based on HRS data, with a bibliographical reference, if appropriate, to the address below.

Health and Retirement Study
Attn: Papers and Publications
The Institute for Social Research, Room 3410
P.O. Box 1248
Ann Arbor, MI (USA) 48106-1248

Alternately, you may contact us by e-mail at hqsquestions@umich.edu with "Attn: Papers and Publications" in the subject line.

10. If You Need to Know More

This document is intended to serve as a brief overview and to provide guidelines to using the 2014 HRS Core (Final, Version 2.0) data. If you have questions or concerns that are not adequately covered here or on our Web site, or if you have any comments, please contact us. We will do our best to provide answers.

10A. HRS Internet Site

Health and Retirement Study public release data and additional information about the study are available on the Internet. To access the data and other relevant information, point your Web browser to the [HRS Web site](#).

10B. Contact Information:

If you need to contact us, you may do so by one of the methods listed below.

Internet: Help Desk at our Web site

E-mail: hqsquestions@umich.edu

Postal service:

Health and Retirement Study
The Institute for Social Research, Room 3410
The University of Michigan
P.O. Box 1248
426 Thompson St.
Ann Arbor, MI 48106-1248

FAX: (734) 647-1186

Appendix

A. Examples of Sub-Household and Respondent Person Number and Other Person Number Assignments

In the first year of data collection, all households, consisting of either a single respondent or of two married or partnered respondents, were assigned a SUBHH of 0.

In subsequent waves, a SUBHH of 0 indicates that the original household has not split due to divorce or separation of spouses or partners, although one member of a couple may have died or a single respondent may have become married or partnered.

A value of 1 or 2 indicates a household in which the original couple split, divorced or separated. One of the original couple is assigned a SUBHH of 1; the other is assigned a SUBHH of 2.

A value of 5 or 6 indicates a previously split household split a second time. One of the couple from a SUBHH 1 or 2 retains a SUBHH of 1 or 2; the other is assigned a SUBHH 5 or 6.

A value of 7 indicates respondents from split household reunited¹. It is important to understand these assignments when you merge records from different waves of the study.

A1. Married Couple Stays Married

Two respondents in a sample household are married at the time of the first cross-section. Each respondent is assigned a HHID of 012345 and a SUBHH of 0. One respondent has a PN of 010, the other a PN of 020.

At the time of the second cross-section the two respondents are still married, and each retains their HHID of 012345 and their SUBHH of 0 and his and her PN of 010 and 020, respectively.

Time 1

Household records

HHID=012345 ASUBHH=0

Respondent records

HHID=012345 PN=010 ASUBHH=0

HHID=012345 PN=020 ASUBHH=0

Time 2

Household records

HHID=012345 CSUBHH=0

Respondent records

HHID=012345 PN=010 CSUBHH=0

HHID=012345 PN=020 CSUBHH=0

¹In addition, a SUBHH of 3 or 4 indicates the “household” of a deceased respondent who is considered to be in a household of his or her own. These values do not occur in these files because all records in these files are from living respondents.

A2. Couple Divorces

Two respondents in a sample household are married at the time of the first cross-section. Each respondent is assigned a HHID of 023456 and a SUBHH of 0. One respondent has a PN of 010, the other a PN of 020.

By the time of the second cross-section, the couple has divorced. Both respondents retain the HHID of 023456, but one is assigned a SUBHH of 1 and the other is assigned a SUBHH of 2. Each original respondent retains his and her PN of 010 and 020, respectively.

Time 1

Household records

HHID=023456 ASUBHH=0

Respondent records

HHID=023456 PN=010 ASUBHH=0

HHID=023456 PN=020 ASUBHH=0

Time 2

Household records

HHID=023456 CSUBHH=1

HHID=023456 CSUBHH=2

Respondent records

HHID=023456 PN=010 CSUBHH=1

HHID=023456 PN=020 CSUBHH=2

A3. One or Both Respondents Die

Two respondents in a sample household are married at the time of the first cross-section. Each respondent is assigned a HHID of 034567 and a SUBHH of 0. One respondent has a PN of 010, the other a PN of 020.

One respondent dies before the next wave. At the next wave, both respondents retain their HHID of 034567. The living respondent retains her SUBHH of 0; the deceased respondent is assigned a SUBHH of 3. (If both respondents die, one would be assigned a SUBHH of 3 and the other would be assigned a SUBHH of 4.) Each original respondent retains his and her PN of 010 and 020, respectively.

Time 1

Household records

HHID=034567 ASUBHH=0

Respondent records

HHID=034567 PN=010 ASUBHH=0

HHID=034567 PN=020 ASUBHH=0

Time 2

Household records

HHID=034567 CSUBHH=0

HHID=034567 CSUBHH=3 (in exit interview)

Respondent records

HHID=034567 PN=010 CSUBHH=3 (in exit interview)

HHID=034567 PN=020 CSUBHH=0

A4. Single Respondent Marries

A respondent who has never been married is in the first cross-section. The respondent is assigned a HHID of 045678 and a SUBHH of 0 and a PN of 010.

At the time of the second cross-section, the respondent has married. Both the respondent and her new spouse are assigned a HHID of 045678 and a SUBHH of 0 because the household was not divided. The original respondent retains her PN of 010. Her new spouse is assigned PN of 011.

Time 1

Household records

HHID=045678 ASUBHH=0

Respondent records

HHID=045678 PN=010 ASUBHH=0

Time 2

Household records

HHID=045678 CSUBHH=0

Respondent records

HHID=045678 PN=010 CSUBHH=0

HHID=045678 PN=011 CSUBHH=0

A5. Couple Divorces, One Respondent Remarries and Divorces

Two respondents in a sample household are married at the time of the first cross-section. Each respondent is assigned a HHID of 056789 and a SUBHH of 0. One respondent has a PN of 010, the other a PN of 020.

By the time of the second cross-section, the couple has divorced and he has remarried. Both original respondents retain the HHID of 056789, but she is assigned a SUBHH of 1 and he is assigned a SUBHH of 2. His new spouse is also assigned the HHID of 056789 and the SUBHH of 2. Each original respondent retains his and her PN of 010 and 020, respectively. His new spouse is assigned PN of 011.

By the time of the third cross-section, that new couple has gotten divorced. All respondents retain the HHID of 056789. The original sample member ex-wife has the SUBHH of 1. The original sample member ex-husband has a SUBHH of 2, and the non-original sample member, his second ex-wife, is assigned the SUBHH of 5. Each original respondent retains his and her PN of 010 and 020, respectively. His second ex-wife retains her PN of 011.

Time 1

Household records

HHID=056789 ASUBHH=0

Respondent records

HHID=056789 PN=010 ASUBHH=0

HHID=056789 PN=020 ASUBHH=0

Time 2

Household records

HHID=056789 CSUBHH=1

HHID=056789 CSUBHH=2

Respondent records

HHID=056789 PN=010 CSUBHH=2

HHID=056789 PN=011 CSUBHH=2

HHID=056789 PN=020 CSUBHH=1

Time 3

Household records

HHID=056789 FSUBHH=1

HHID=056789 FSUBHH=2
HHID=056789 FSUBHH=5
Respondent records
HHID=056789 PN=010 FSUBHH=2
HHID=056789 PN=011 FSUBHH=5
HHID=056789 PN=020 FSUBHH=1

A6. Couple Divorces and Marries Again

Two respondents in a sample household are married at the time of the first cross-section. Each respondent is assigned a HHID of 067890 and a SUBHH of 0. One respondent has a PN of 010, the other a PN of 020.

By the time of the second cross-section, the couple has divorced. Both respondents retain the HHID of 067890, but one is assigned a SUBHH of 1 and the other is assigned a SUBHH of 2. Each original respondent retains his and her PN of 010 and 020, respectively.

By the time of the third cross-section, the respondents have remarried each other. Both are assigned the HHID of 067890 and the SUBHH of 7. Each original respondent retains his and her PN of 010 and 020, respectively.

Time 1

Household records
HHID=067890 ASUBHH=0
Respondent records
HHID=067890 PN=010 ASUBHH=0
HHID=067890 PN=020 ASUBHH=0

Time 2

Household records
HHID=067890 CSUBHH=1
HHID=067890 CSUBHH=2
Respondent records
HHID=067890 PN=010 CSUBHH=1
HHID=067890 PN=020 CSUBHH=2

Time 3

Household records
HHID=067890 FSUBHH=7
Respondent records
HHID=067890 PN=010 FSUBHH=7
HHID=067890 PN=020 FSUBHH=7

A7. Married Couple with Children and Siblings

At the time of the first cross-section, sample household with a HHID of 078901 contains two respondents assigned PNs of 010 and 020, respectively. Associated with the household are three children with OPNs of 101, 102, and 103, and two siblings with OPNs of 051 and 052. All seven persons will keep those same PNs and OPNs across time. A friend who lives with the respondents is assigned an OPN of 080. The friend will keep her OPN of 080 across time only if she is a household member at each wave.

Time 1

Household records
HHID=078901 ASUBHH=0
Respondent records

HHID=078901 PN=010 ASUBHH=0
HHID=078901 PN=020 ASUBHH=0
Household member/child records
HHID=078901 ASUBHH=0 OPN=101 (child)
HHID=078901 ASUBHH=0 OPN=102 (child)
HHID=078901 ASUBHH=0 OPN=103 (child)
HHID=078901 ASUBHH=0 OPN=051 (sibling)
HHID=078901 ASUBHH=0 OPN=052 (sibling)
HHID=078901 ASUBHH=0 OPN=080 (friend)

A8. Couple with Children and Siblings Divorces

At the time of the first cross-section, sample household with a HHID of 089012 contains two respondents assigned PNs of 010 and 020, respectively. Associated with the household are two children with OPNs of 101, and 102, and three siblings, her two brothers with OPNs of 051 and 052 and his sister with an OPN of 061. A friend who lives with the respondents is assigned an OPN of 080.

By the time of the second cross-section, the couple has divorced. Both respondents retain the HHID of 089012, but he is assigned a SUBHH of 2 and she is assigned a SUBHH of 1. Each original respondent retains his and her PN of 010 and 020, respectively.

The two children appear both in their father's SUBHH 2 and also in their mother's SUBHH 1 with their respective OPNs, 101, and 102. The three siblings appear in the SUBHH of their respective siblings and maintain their respective OPNs. The ex-wife's brothers appear as part of her SUBHH 1 with their OPNs of 051 and 052, respectively. The ex-husband's sister appears as part of his SUBHH 2 with her OPN of 061. The friend has moved out and does not appear in either household.

Time 1

Household records
HHID=089012 ASUBHH=0
Respondent records
HHID=089012 PN=010 ASUBHH=0
HHID=089012 PN=020 ASUBHH=0
Household member/child records
HHID=089012 ASUBHH=0 OPN=101 (child)
HHID=089012 ASUBHH=0 OPN=102 (child)
HHID=089012 ASUBHH=0 OPN=051 (her brother)
HHID=089012 ASUBHH=0 OPN=052 (her brother)
HHID=089012 ASUBHH=0 OPN=061 (his sister)
HHID=089012 ASUBHH=0 OPN=080 (friend)

Time 2

Household records
HHID=089012 CSUBHH=1
HHID=089012 CSUBHH=2
Respondent records
HHID=089012 PN=010 CSUBHH=2
HHID=089012 PN=020 CSUBHH=1
Household member/child records
HHID=089012 CSUBHH=1 OPN=101 (child)
HHID=089012 CSUBHH=1 OPN=102 (child)
HHID=089012 CSUBHH=1 OPN=051 (her brother)
HHID=089012 CSUBHH=1 OPN=052 (her brother)

HHID=089012 CSUBHH=2 OPN=101 (child)
HHID=089012 CSUBHH=2 OPN=102 (child)
HHID=089012 CSUBHH=2 OPN=061 (his sister)

A9. Couple Divorces, One Respondent Remarries, Both Split-off Households Have New Members

Two respondents in a sample household are married at the time of the first cross-section. Each respondent is assigned a HHID of 090123 and a SUBHH of 0. One respondent has a PN of 010, the other a PN of 020.

By the time of the second cross-section, the couple has divorced. She has moved in with her mother. He has married a woman with two children. At the second cross-section, both original respondents retain the HHID of 090123, but he is assigned a SUBHH of 1 and she is assigned a SUBHH of 2. Each original respondent retains his and her PN of 010 and 020, respectively. His new spouse and new stepchildren are assigned the HHID of 090123 and the SUBHH of 1. His new spouse is assigned a PN of 011. His new stepchildren are assigned OPNs of 151 and 152. Her mother is assigned the HHID of 090123 and the SUBHH of 2 and an OPN of 151.

Time 1

Household records

HHID=090123 ASUBHH=0

Respondent records

HHID=090123 PN=010 ASUBHH=0

HHID=090123 PN=020 ASUBHH=0

Time 2

Household records

HHID=090123 CSUBHH=1

HHID=090123 CSUBHH=2

Respondent records

HHID=090123 PN=010 CSUBHH=1

HHID=090123 PN=011 CSUBHH=1 (new wife)

HHID=090123 PN=020 CSUBHH=2

Household member/child records

HHID=090123 CSUBHH=1 OPN=151 (his stepchild)

HHID=090123 CSUBHH=1 OPN=152 (his stepchild)

HHID=090123 CSUBHH=2 OPN=151 (her mom)

B. Master Codes

Included in this file are the "Master Codes" for HRS. Other areas of the codebook often refer to these lists, as they are too long to replicate at each variable that uses the codes.

The Master Codes in order of appearance are:

B1. Health Conditions - Categorical

B2. Occupation Codes

B3. State and Country Codes

B1. Health Conditions - Categorical

NOTE: If necessary, use individual "Other" categories if system or type of condition is clear; otherwise, code 997.

Cancers and tumors; skin conditions

101. Cancer--any site or type; leukemia; Hodgkin's disease; melanomas; non-Hodgkin's lymphoma; tumors if specified as malignant; lymphoma; metastasis angiosarcoma; carcinoma; myeloma/multiple myeloma; myelodysplastic syndrome
102. Tumors, cysts or growths (except 101); polyps; osteomyelitis; pre-cancer; neuroma; benign tumors; mole removal; warts; subdural hygroma
103. Skin conditions--any mention except cancer (101) or tumor (102); dermatitis; eczema; rashes; Paget's disease; skin ulcers; bedsores; bullous pemphigoid; hair loss; pemphigus; seborrheic keratosis; rosacea; alopecia; psoriasis; burns (also use code 194 if available)

Musculoskeletal system and connective tissue

111. Arthritis; rheumatism; bursitis; ankylosing spondylitis; Reiter's syndrome; rheumatica; osteoarthritis
112. Back/neck/spine problems: chronic stiffness, deformity or pain; disc problems; scoliosis; spina bifida; bad back; spinal stenosis; back/neck injuries (also use code 194 if available); back/neck sprain (also use code 194 if available)
113. Stiffness, deformity, numbness or chronic pain in foot, leg, arm or hand, shoulder or rotator cuff; bad knee/hip problems; hip/knee replacement; plantar fasciitis; drop foot; leg cramps; tennis elbow; Dupuytren's contracture; sprain of limb (also use code 194 if available)
114. Missing legs, feet, arms, hands, or fingers (from amputation or congenital deformity)
115. Paralysis--any mention (including from polio)
116. Hernias; hiatal hernia; rectocele; cystocele
117. Muscular dystrophy; mitochondrial myopathy
118. Fibromyalgia; fibro myositis; fibrositis; myofascial pain syndrome
119. Other musculoskeletal or connective tissue problems; lupus; osteoporosis; pinched nerve (location not specified); sciatica/sciatic nerve problem; carpal tunnel syndrome; costochondritis; polymyositis; scleroderma; chromosome leak into the muscles; bone spurs (location not specified); cellulites; tendonitis (location not specified); temporomandibular joint syndrome (TMJ); trigeminal neuralgia; CREST syndrome/limited scleroderma; polymyalgia/polymyalgia rheumatica; avascular necrosis/osteonecrosis, neural muscular myositis, bone disease, myalgia, myositis, osteopenia; adhesions (location not specified); neuritis; skull bone injuries (also use code 194 if available); vascular necrosis; broken or damaged bones (location not specified) from injuries/accidents (also use code 194 if available); pulled muscle (location not specified -also use code 194 if available); strain (location not specified - also use code 194 if available); tendon damage (location not specified - also use code 194 if available); sprain (location not specified - also use code 194 if available); post-polio syndrome (without mention of paralysis); loss of calcium

Heart, circulatory and blood conditions

121. Heart problems: heart attack (coronary) or failure; arteriosclerosis; heart aneurysms; heart deformities/congenital heart deformities; angina; bad heart; congestive heart disease; cardiomyopathy; atrial fibrillation; myocardial infarction (MI); multiple infarction; myocardinitis, endocarditis; myocardial ischemia; heart murmurs; heart valve blockage; heart valve prolapse; heart valve replacement; arterial blockage; hardening of arteries; heart bypass surgery; mitral valve prolapse; myocardial ischemia; rheumatic heart disease
122. High blood pressure / hypertension (HTN); uncontrollable blood pressure; blood pressure problems, not specified high or low

- 123. Stroke; cerebral hemorrhage or accident; hematoma (if related to brain); transient ischemic attack (TIA);
- 124. Blood disorders: blood disease, anemia; aplastic anemia; hypoplastic anemia; hemophilia; polycythemia vera; bad blood; toxemia; cold agglutinin disease; triglycerides or high triglycerides; toxoplasmosis; blood transfusion; sickle cell disease; bone marrow failure; factor VIII/factor VIII deficiency/elevated factor VIII ; thrombocytopenia; hemochromatosis;
- 129. Other circulatory problems; phlebitis, clots/blood clots, embolisms; varicose veins; hemorrhoids; low blood pressure; giant cell arteritis; hemotoma (if not related to brain or location not specified); gangrene; vascular disease; pulmonary thrombosis; pulmonary embolism; Raynaud's disease; APLS Hughes syndrome; aneurysm (when not in heart or location not specified); elasticity of arteries; calcification of limbs; lymphedema; claudication, pulmonary hypertension; rheumatic fever; occult cerebral vascular malformation; bleeding (location not specified); blockage in lung; Rendu-Osler-Weber disease/syndrome

Respiratory system conditions

- 131. Allergies; hay fever; sinusitis; sinus problems; sinus headaches; tonsillitis; celiac disease/sprue (gluten intolerance); hives
- 132. Asthma
- 133. Bronchitis; pneumonia; acute upper respiratory problems; Legionnaire's disease; fungus in chest; respiratory pulmonary disease
- 134. Emphysema; chronic obstructive pulmonary disease (COPD); smoking related lung problems
- 139. Other respiratory/breathing problems; tuberculosis; sarcoidosis; ventilatory insufficiency; pulmonary idiopathic fibrosis; respiratory failure, NFS; asbestos in lungs; black lung; pleurisy

Endocrine, metabolic and nutritional conditions

- 141. Diabetes; pre-diabetic; high blood sugar
- 142. Thyroid trouble; goiter; hyperthyroidism; Graves disease; Hashimoto's disease
- 143. Cystic fibrosis
- 144. Nutritional problems; weight problems; eating disorders; high cholesterol; hypercholesterolemia; obesity; iron deficiency; overweight; vitamin deficiency
- 145. Sugar problems, NFS; erratic blood sugar
- 149. Other endocrine/metabolic problems; pancreatitis; pituitary problems; gland problems; Addison's disease; gout, nephrotic syndrome; primary adrenal insufficient; parathyroid problems; endocrinology syndrome; amyloidosis; haemochromatosis; hypoglycemia; low blood sugar; loss of calcium; alpha-1 antitrypsin deficiency; acromegaly; hormone problems; hyperpituitarism; hypoglycemia

Digestive system (stomach, liver, gallbladder, kidney, bladder)

- 151. Stomach and intestinal conditions: acid reflux, reflux disease, heartburn, stomach reflux, GERD, Barrett's esophagus, ulcers (stomach, peptic, duodenal or not further specified); colitis; ulcerative colitis; gastritis; diverticulosis; diverticulitis; appendicitis; Crohn's disease; intestinal adhesions; abdominal adhesions; colostomy; silicates disease; stomach pains, ileostomy, dumping syndrome; gastroenteritis, Irritable Bowel Syndrome; diarrhea; bowel incontinence; appendectomy; enteritis; ileitis; peritonitis; stomach removal
- 152. Liver conditions: cirrhosis; hepatitis; benign hepatic hypertrophy; encephalopathy (caused by liver problems or cause not specified); jaundice

- 153. Kidney conditions: kidney stones; kidney failure (including dialysis); nephritis
- 154. Gallbladder conditions; blockage of bile ducts; gallstones; gallbladder removal
- 155. Bladder conditions (except 156); urinary infections; interstitial cystitis, urosepsis
- 156. Urinary incontinence; urinary loss/leakage; problems with bladder control
- 157. Spleen conditions; enlarged spleen
- 159. Other digestive system problems; internal bleeding; hemorrhage; esophagus torn, ruptured or bleeding; swallowing difficulty; feeding tube

Neurological and sensory conditions

- 161. Blindness or vision problems: glaucoma; cataracts; detached/torn retina; macular degeneration; uveitis; ocular myasthenia gravis; conjunctivitis; eye conditions, NFS
- 162. Deafness; hearing loss or other ear conditions; tinnitus; vestibular disorder; Meniere's disease
- 163. Multiple sclerosis; cerebral palsy; epilepsy; Parkinson's; amyotrophic lateral sclerosis (ALS) or Lou Gehrig's disease); seizures; neuropathy; peripheral neuropathy
- 164. Speech conditions--any mention; congenital speech defects; stuttering; laryngectomy; speech impediment
- 165. Mental retardation; mental impairment; learning disabilities; Down syndrome; dyslexia
- 169. Other neurological/sensory problems; headaches; migraines; dizziness; blackouts; brain damage, NFS (also use code 194 if available); meningitis; arachnoiditis; Bell's palsy; Charcot-Marie-Tooth disease; Guillain-Barre syndrome; medial nerve palsy; myasthenia gravis/myasthenia (non-ocular); myokymia; reflex sympathetic dystrophy (RSD); restless legs syndrome (RLS); Sjogren's syndrome; spasmodic torticollis; balance problems; closed head injury; coma; paralyzed diaphragm; facial neuralgia; hydrocephalus; inclusive body myositis; spinal cerebella ataxia; benign/familial tremors, vertigo; upper motor neuron/motoneuron problems, progressive supranuclear palsy (PSP); thoracic outlet syndrome; dysautonomia; shaky hands; spinal cord damage from injuries/accident (also use code 194 if available)

Reproductive system and prostate conditions

- 171. Pregnancy and childbirth problems; miscarriage; hemorrhaging or complications from birth of child; episiotomy; RH factor
- 172. Infertility; sterilization; vasectomy; tubal ligation
- 173. Prostate conditions; PSA/high PSA
- 179. Other problems of reproductive system; hysterectomy; ovarian problems; PMS; menopause; dysmenorrhea; endometriosis; painful menstrual periods; female problems; gynecological problems, NFS; removal of reproductive organs (excluding cancer and tumors)

Emotional and psychological conditions

- 181. Alcoholism
- 182. Drug abuse/addiction/dependence
- 183. Other severe psychological conditions: (chronic) depression; schizophrenia; mania; paranoia; autism; psychosis; agoraphobia; bipolar disorder (manic-depression); post-traumatic stress disorder (PTSD)
- 189. Other emotional and psychological problems; mental problems, NFS; nerves; nervous breakdown; stress; stress related problems; night wandering; panic attacks; anxiety; behavioral problems; insomnia; attention deficit disorder (ADD)

Miscellaneous

- 191. Alzheimer's disease; senility, dementia; multi-infarct dementia; memory loss; mixed cognitive disease
- 192. Dental and gum conditions--any mention
- 193. Acute infectious diseases; flu; colds; fever; mumps; Dengue fever; Lyme disease; infection, staph infection; methicillin-resistant staphylococcus aureus (MRSA); Epstein-Barr virus; mononucleosis; influenza; measles; rubella; strep throat; virus, NFS; septic shock; toxic shock; sepsis; shingles; polio (without mention of paralysis)
- 194. Injuries and traumas: broken bones; fractures; pulled muscles; strains; tendon damage; burns, lacerations; concussion; side effects/conditions due to surgery, side effects due to medication; graft-versus host disease LOW PRIORITY--code resulting chronic or ongoing conditions if possible
- 195. Sleep disorders; sleep apnea; narcolepsy; cataplexy
- 196. Immune system disorders; human immunodeficiency virus (HIV) positive; acquired immunodeficiency syndrome (AIDS); AIDS related complex (ARC)

Cause of death

- 601. Suicide
- 602. Murder
- 603. Killed in war/combat
- 604. Motor vehicle accident - incl. as pedestrian
- 605. Industrial/work related accident
- 606. Sporting accident
- 607. Other accidental death; accidental death - NA type of accident
- 608. Still born; died at birth or infancy - NFS

Why Admitted

- 701. No other care arrangements available
- 702. Deteriorating health; health condition not specified
- 703. To recover/rehab; for injury/surgery

Other symptoms

- 595. Old age; everything wore out; bedridden; infirmity; natural causes; failure to thrive in older adults
- 596. Lack of energy/strength; (chronic) fatigue, NFS; don't have get up and go
- 597. Edema; retaining water; retaining fluids; swelling (location not specified)
- 996. None, no health condition(s) mentioned
- 997. Other health condition
- 998. DK (Don't Know); NA (Not Ascertained)
- 999. RF (Refused)

B2. Occupation Codes

Equivalent numeric codes follow the alphabetic codes. Either code may be used, depending on the processing method. The abbreviation "pt" means "part" and "n.e.c." means "not elsewhere classified."

MGR Management Occupations

- 001. Chief Executives
- 002. General and Operations Managers
- 003. Legislators
- 004. Advertising and Promotions Managers
- 005. Marketing and Sales Managers

- 006. Public Relations Managers
- 010. Administrative Services Managers
- 011. Computer and Information Systems Managers
- 012. Financial Managers
- 013. Human Resources Managers
- 014. Industrial Production Managers
- 015. Purchasing Managers
- 016. Transportation, Storage, and Distribution Managers
- 020. Farm, Ranch, and Other Agricultural Managers
- 021. Farmers and Ranchers
- 022. Construction Managers
- 023. Education Administrators
- 030. Engineering Managers
- 031. Food Service Managers
- 032. Funeral Directors
- 033. Gaming Managers
- 034. Lodging Managers
- 035. Medical and Health Services Managers
- 036. Natural Science Managers
- 040. Postmasters and Mail Superintendents
- 041. Property, Real Estate, and Community Association Managers
- 042. Social and Community Service Managers
- 043. Managers, All Other

BUS Business Operations Specialists

- 050. Agents and Business Managers of Artists, Performers, and Athletes
- 051. Purchasing Agents and Buyers, Farm Products
- 052. Wholesale and Retail Buyers, Except Farm Products
- 053. Purchasing Agents, Except Wholesale, Retail, and Farm Products
- 054. Claims Adjusters, Appraisers, Examiners, and Investigators
- 056. Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation
- 060. Cost Estimators
- 062. Human Resources, Training, and Labor Relations Specialists
- 070. Logisticians
- 071. Management Analysts
- 072. Meeting and Convention Planners
- 073. Other Business Operations Specialists

FIN Financial Specialists

- 080. Accountants and Auditors
- 081. Appraisers and Assessors of Real Estate
- 082. Budget Analysts
- 083. Credit Analysts
- 084. Financial Analysts
- 085. Personal Financial Advisors
- 086. Insurance Underwriters
- 090. Financial Examiners
- 091. Loan Counselors and Officers
- 093. Tax Examiners, Collectors, and Revenue Agents
- 094. Tax Preparers
- 095. Financial Specialists, All Other

CMM Computer and Mathematical Occupations

- 100. Computer Scientists and Systems Analysts
- 101. Computer Programmers

- 102. Computer Software Engineers
- 104. Computer Support Specialists
- 106. Database Administrators
- 110. Network and Computer Systems Administrators
- 111. Network Systems and Data Communications Analysts
- 120. Actuaries
- 121. Mathematicians
- 122. Operations Research Analysts
- 123. Statisticians
- 124. Miscellaneous Mathematical Scientists and Technicians

ENG Architecture and Engineering Occupations

- 130. Architects, Except Naval
- 131. Surveyors, Cartographers, and Photogrammetrists
- 132. Aerospace Engineers
- 133. Agricultural Engineers
- 134. Biomedical Engineers
- 135. Chemical Engineers
- 136. Civil Engineers
- 140. Computer Hardware Engineers
- 141. Electrical and Electronics Engineers
- 142. Environmental Engineers
- 143. Industrial Engineers, including Health and Safety
- 144. Marine Engineers and Naval Architects
- 145. Materials Engineers
- 146. Mechanical Engineers
- 150. Mining and Geological Engineers, Including Mining Safety Engineers
- 151. Nuclear Engineers
- 152. Petroleum Engineers
- 153. Engineers, All Other
- 154. Drafters
- 155. Engineering Technicians, Except Drafters
- 156. Surveying and Mapping Technicians

SCI Life, Physical, and Social Science Occupations

- 160. Agricultural and Food Scientists
- 161. Biological Scientists
- 164. Conservation Scientists and Foresters
- 165. Medical Scientists
- 170. Astronomers and Physicists
- 171. Atmospheric and Space Scientists
- 172. Chemists and Materials Scientists
- 174. Environmental Scientists and Geoscientists
- 176. Physical Scientists, All Other
- 180. Economists
- 181. Market and Survey Researchers
- 182. Psychologists
- 183. Sociologists
- 184. Urban and Regional Planners
- 186. Miscellaneous Social Scientists and Related Workers
- 190. Agricultural and Food Science Technicians
- 191. Biological Technicians
- 192. Chemical Technicians
- 193. Geological and Petroleum Technicians
- 194. Nuclear Technicians
- 196. Other Life, Physical, and Social Science Technicians

CMS Community and Social Services Occupations

- 200. Counselors
- 201. Social Workers
- 202. Miscellaneous Community and Social Service Specialists
- 204. Clergy
- 205. Directors, Religious Activities and Education
- 206. Religious Workers, All Other

LGL Legal Occupations

- 210. Lawyers
- 211. Judges, Magistrates, and Other Judicial Workers
- 214. Paralegals and Legal Assistants
- 215. Miscellaneous Legal Support Workers

EDU Education, Training, and Library Occupations

- 220. Postsecondary Teachers
- 230. Preschool and Kindergarten Teachers
- 231. Elementary and Middle School Teachers
- 232. Secondary School Teachers
- 233. Special Education Teachers
- 234. Other Teachers and Instructors
- 240. Archivists, Curators, and Museum Technicians
- 243. Librarians
- 244. Library Technicians
- 254. Teacher Assistants
- 255. Other Education, Training, and Library Workers

ENT Arts, Design, Entertainment, Sports, and Media Occupations

- 260. Artists and Related Workers
- 263. Designers
- 270. Actors
- 271. Producers and Directors
- 272. Athletes, Coaches, Umpires, and Related Workers
- 274. Dancers and Choreographers
- 275. Musicians, Singers, and Related Workers
- 276. Entertainers and Performers, Sports and Related Workers, All Other
- 280. Announcers
- 281. News Analysts, Reporters and Correspondents
- 282. Public Relations Specialists
- 283. Editors
- 284. Technical Writers
- 285. Writers and Authors
- 286. Miscellaneous Media and Communication Workers
- 290. Broadcast and Sound Engineering Technicians and Radio Operators
- 291. Photographers
- 292. Television, Video, and Motion Picture Camera Operators and Editors
- 296. Media and Communication Equipment Workers, All Other

MED Healthcare Practitioners and Technical Occupations

- 300. Chiropractors
- 301. Dentists
- 303. Dietitians and Nutritionists
- 304. Optometrists
- 305. Pharmacists
- 306. Physicians and Surgeons
- 311. Physician Assistants

- 312. Podiatrists
- 313. Registered Nurses
- 314. Audiologists
- 315. Occupational Therapists
- 316. Physical Therapists
- 320. Radiation Therapists
- 321. Recreational Therapists
- 322. Respiratory Therapists
- 323. Speech-Language Pathologists
- 324. Therapists, All Other
- 325. Veterinarians
- 326. Health Diagnosing and Treating Practitioners, All Other
- 330. Clinical Laboratory Technologists and Technicians
- 331. Dental Hygienists
- 332. Diagnostic Related Technologists and Technicians
- 340. Emergency Medical Technicians and Paramedics
- 341. Health Diagnosing and Treating Practitioner Support Technicians
- 350. Licensed Practical and Licensed Vocational Nurses
- 351. Medical Records and Health Information Technicians
- 352. Opticians, Dispensing
- 353. Miscellaneous Health Technologists and Technicians
- 354. Other Healthcare Practitioners and Technical Occupations

HLS Healthcare Support Occupations

- 360. Nursing, Psychiatric, and Home Health Aides
- 361. Occupational Therapist Assistants and Aides
- 362. Physical Therapist Assistants and Aides
- 363. Massage Therapists
- 364. Dental Assistants
- 365. Medical Assistants and Other Healthcare Support Occupations

PRT Protective Service Occupations

- 370. First-Line Supervisors/Managers of Correctional Officers
- 371. First-Line Supervisors/Managers of Police and Detectives
- 372. First-Line Supervisors/Managers of Fire Fighting and Prevention Workers
- 373. Supervisors, Protective Service Workers, All Other
- 374. Fire Fighters
- 375. Fire Inspectors
- 380. Bailiffs, Correctional Officers, and Jailers
- 382. Detectives and Criminal Investigators
- 383. Fish and Game Wardens
- 384. Parking Enforcement Workers
- 385. Police and Sheriff's Patrol Officers
- 386. Transit and Railroad Police
- 390. Animal Control Workers
- 391. Private Detectives and Investigators
- 392. Security Guards and Gaming Surveillance Officers
- 394. Crossing Guards
- 395. Lifeguards and Other Protective Service Workers

EAT Food Preparation and Serving Occupations

- 400. Chefs and Head Cooks
- 401. First-Line Supervisors/Managers of Food Preparation and Serving Workers
- 402. Cooks
- 403. Food Preparation Workers
- 404. Bartenders

- 405. Combined Food Preparation and Serving Workers, Including Fast Food
- 406. Counter Attendant, Cafeteria, Food Concession, and Coffee Shop
- 411. Waiters and Waitresses
- 412. Food Servers, Non-restaurant
- 413. Dining Room and Cafeteria Attendants and Bartender Helpers
- 414. Dishwashers
- 415. Host and Hostesses, Restaurant, Lounge, and Coffee Shop
- 416. Food Preparation and Serving Related Workers, All Other

CLN Building and Grounds Cleaning and Maintenance Occupations

- 420. First-Line Supervisors/Managers of Housekeeping and Janitorial Workers
- 421. First-Line Supervisors/Managers of Landscaping, Lawn Service, and Grounds keeping Workers
- 422. Janitors and Building Cleaners
- 423. Maids and Housekeeping Cleaners
- 424. Pest Control Workers
- 425. Grounds Maintenance Workers

PRS Personal Care and Service Occupations

- 430. First-Line Supervisors/Managers of Gaming Workers
- 432. First-Line Supervisors/Managers of Personal Service Workers
- 434. Animal Trainers
- 435. Nonfarm Animal Caretakers
- 440. Gaming Services Workers
- 441. Motion Picture Projectionists
- 442. Ushers, Lobby Attendants, and Ticket Takers
- 443. Miscellaneous Entertainment Attendants and Related Workers
- 446. Funeral Service Workers
- 450. Barbers
- 451. Hairdressers, Hairstylists, and Cosmetologists
- 452. Miscellaneous Personal Appearance Workers
- 453. Baggage Porters, Bellhops, and Concierges
- 454. Tour and Travel Guides
- 455. Transportation Attendants
- 460. Child Care Workers
- 461. Personal and Home Care Aides
- 462. Recreation and Fitness Workers
- 464. Residential Advisors
- 465. Personal Care and Service Workers, All Other

SAL Sales Occupations

- 470. First-Line Supervisors/Managers of Retail Sales Workers
- 471. First-Line Supervisors/Managers of Non-Retail Sales
- 472. Cashiers
- 474. Counter and Rental Clerks
- 475. Parts Salespersons
- 476. Retail Salespersons
- 480. Advertising Sales Agents
- 481. Insurance Sales Agents
- 482. Securities, Commodities, and Financial Services Sales Agents
- 483. Travel Agents
- 484. Sales Representatives, Services, All Other
- 485. Sales Representatives, Wholesale and Manufacturing
- 490. Models, Demonstrators, and Product Promoters
- 492. Real Estate Brokers and Sales Agents
- 493. Sales Engineers

- 494. Telemarketers
- 495. Door-to-Door Sales Workers, News and Street Vendors, and Related Workers
- 496. Sales and Related Workers, All Other

OFF Office and Administrative Support Occupations

- 500. First-Line Supervisors/Managers of Office and Administrative Support Workers
- 501. Switchboard Operators, Including Answering Service
- 502. Telephone Operators
- 503. Communications Equipment Operators, All Other
- 510. Bill and Account Collectors
- 511. Billing and Posting Clerks and Machine Operators
- 512. Bookkeeping, Accounting, and Auditing Clerks
- 513. Gaming Cage Workers
- 514. Payroll and Timekeeping Clerks
- 515. Procurement Clerks
- 516. Tellers
- 520. Brokerage Clerks
- 521. Correspondence Clerks
- 522. Court, Municipal, and License Clerks
- 523. Credit Authorizers, Checkers, and Clerks
- 524. Customer Service Representatives
- 525. Eligibility Interviewers, Government Programs
- 526. File Clerks
- 530. Hotel, Motel, and Resort Desk Clerks
- 531. Interviewers, Except Eligibility and Loan
- 532. Library Assistants, Clerical
- 533. Loan Interviewers and Clerks
- 534. New Account Clerks
- 535. Order Clerks
- 536. Human Resources Assistants, Except Payroll and Timekeeping
- 540. Receptionists and Information Clerks
- 541. Reservation and Transportation Ticket Agents and Travel Clerks
- 542. Information and Record Clerks, All Other
- 550. Cargo and Freight Agents
- 551. Couriers and Messengers
- 552. Dispatchers
- 553. Meter Readers, Utilities
- 554. Postal Service Clerks
- 555. Postal Service Mail Carriers
- 556. Postal Service Mail Sorters, Processors, and Processing Machine Operators
- 560. Production, Planning, and Expediting Clerks
- 561. Shipping, Receiving, and Traffic Clerks
- 562. Stock Clerks and Order Fillers
- 563. Weighers, Measurers, Checkers, and Samplers, Recordkeeping
- 570. Secretaries and Administrative Assistants
- 580. Computer Operators
- 581. Data Entry Keyers
- 582. Word Processors and Typists
- 583. Desktop Publishers
- 584. Insurance Claims and Policy Processing Clerks
- 585. Mail Clerks and Mail Machine Operators, Except Postal Service
- 586. Office Clerks, General
- 590. Office Machine Operators, Except Computer
- 591. Proofreaders and Copy Markers
- 592. Statistical Assistants
- 593. Office and Administrative Support Workers, All Other

FFF Farming, Fishing, and Forestry Occupations

- 600. First-Line Supervisors/Managers/Contractors of Farming, Fishing, and Forestry Workers
- 601. Agricultural Inspectors
- 602. Animal Breeders
- 604. Graders and Sorters, Agricultural Products
- 605. Other Agricultural Workers
- 610. Fishers and Related Fishing Workers
- 611. Hunters and Trappers
- 612. Forest and Conservation Workers
- 613. Logging Worker

CON Construction Trades

- 620. First-Line Supervisors/Managers of Construction Trades and Extraction Workers
- 621. Boilermakers
- 622. Brickmasons, Blockmasons, and Stonemasons
- 623. Carpenters
- 624. Carpet, Floor, and Tile Installers and Finishers
- 625. Cement Masons, Concrete Finishers, and Terrazzo Workers
- 626. Construction Laborers
- 630. Paving, Surfacing, and Tamping Equipment Operators
- 631. Pile-Driver Operators
- 632. Operating Engineers and Other Construction Equipment Operators
- 633. Drywall Installers, Ceiling Tile Installers, and Tapers
- 635. Electricians
- 636. Glaziers
- 640. Insulation Workers
- 642. Painters, Construction and Maintenance
- 643. Paperhangers
- 644. Pipelayers, Plumbers, Pipefitters, and Steamfitters
- 646. Plasterers and Stucco Masons
- 650. Reinforcing Iron and Rebar Workers
- 651. Roofers
- 652. Sheet Metal Workers
- 653. Structural Iron and Steel Workers
- 660. Helpers, Construction Trades
- 666. Construction and Building Inspectors
- 670. Elevator Installers and Repairers
- 671. Fence Erectors
- 672. Hazardous Materials Removal Workers
- 673. Highway Maintenance Workers
- 674. Rail-Track Laying and Maintenance Equipment Operators
- 675. Septic Tank Servicers and Sewer Pipe Cleaners
- 676. Miscellaneous Construction and Related Workers

EXT Extraction Workers

- 680. Derrick, Rotary Drill, and Service Unit Operators, Oil, Gas, and Mining
- 682. Earth Drillers, Except Oil and Gas
- 683. Explosives Workers, Ordnance Handling Experts, and Blasters
- 684. Mining Machine Operators
- 691. Roof Bolters, Mining
- 692. Roustabouts, Oil and Gas
- 693. Helpers--Extraction Workers
- 694. Other Extraction Workers

RPR Installation, Maintenance, and Repair Workers

- 700. First-Line Supervisors/Managers of Mechanics, Installers, and Repairers
- 701. Computer, Automated Teller, and Office Machine Repairers
- 702. Radio and Telecommunications Equipment Installers and Repairers
- 703. Avionics Technicians
- 704. Electric Motor, Power Tool, and Related Repairers
- 705. Electrical and Electronics Installers and Repairers, Transportation Equipment
- 710. Electrical and Electronics Repairers, Industrial and Utility
- 711. Electronic Equipment Installers and Repairers, Motor Vehicles
- 712. Electronic Home Entertainment Equipment Installers and Repairers
- 713. Security and Fire Alarm Systems Installers
- 714. Aircraft Mechanics and Service Technicians
- 715. Automotive Body and Related Repairers
- 716. Automotive Glass Installers and Repairers
- 720. Automotive Service Technicians and Mechanics
- 721. Bus and Truck Mechanics and Diesel Engine Specialists
- 722. Heavy Vehicle and Mobile Equipment Service Technicians and Mechanics
- 724. Small Engine Mechanics
- 726. Miscellaneous Vehicle and Mobile Equipment Mechanics, Installers, and Repairers
- 730. Control and Valve Installers and Repairers
- 731. Heating, Air Conditioning, and Refrigeration Mechanics and Installers
- 732. Home Appliance Repairers
- 733. Industrial and Refractory Machinery Mechanics
- 734. Maintenance and Repair Workers, General
- 735. Maintenance Workers, Machinery
- 736. Millwrights
- 741. Electrical Power-Line Installers and Repairers
- 742. Telecommunications Line Installers and Repairers
- 743. Precision Instrument and Equipment Repairers
- 751. Coin, Vending, and Amusement Machine Servicers and Repairers
- 752. Commercial Divers
- 754. Locksmiths and Safe Repairers
- 755. Manufactured Building and Mobile Home Installers
- 756. Riggers
- 760. Signal and Track Switch Repairers
- 761. Helpers--Installation, Maintenance, and Repair Workers
- 762. Other Installation, Maintenance, and Repair Workers

PRD Production Occupations

- 770. First-Line Supervisors/Managers of Production and Operating Workers
- 771. Aircraft Structure, Surfaces, Rigging, and Systems Assemblers
- 772. Electrical, Electronics, and Electromechanical Assemblers
- 773. Engine and Other Machine Assemblers
- 774. Structural Metal Fabricators and Fitters
- 775. Miscellaneous Assemblers and Fabricators
- 780. Bakers
- 781. Butchers and Other Meat, Poultry, and Fish Processing Workers
- 783. Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders
- 784. Food Batchmakers
- 785. Food Cooking Machine Operators and Tenders
- 790. Computer Control Programmers and Operators
- 792. Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic
- 793. Forging Machine Setters, Operators, and Tenders, Metal and Plastic

794. Rolling Machine Setters, Operators, and Tenders, metal and Plastic
795. Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic
796. Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic
800. Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic
801. Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic
802. Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic
803. Machinists
804. Metal Furnace and Kiln Operators and Tenders
806. Model Makers and Patternmakers, Metal and Plastic
810. Molders and Molding Machine Setters, Operators, and Tenders, Metal and Plastic
812. Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic
813. Tool and Die Makers
814. Welding, Soldering, and Brazing Workers
815. Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic
816. Lay-Out Workers, Metal and Plastic
820. Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic
821. Tool Grinders, Filers, and Sharpeners
822. Metalworkers and Plastic Workers, All Other
823. Bookbinders and Bindery Workers
824. Job Printers
825. Prepress Technicians and Workers
826. Printing Machine Operators
830. Laundry and Dry-Cleaning Workers
831. Pressers, Textile, Garment, and Related Materials
832. Sewing Machine Operators
833. Shoe and Leather Workers and Repairers
834. Shoe Machine Operators and Tenders
835. Tailors, Dressmakers, and Sewers
836. Textile Bleaching and Dyeing Machine Operators and Tenders
840. Textile Cutting Machine Setters, Operators, and Tenders
841. Textile Knitting and Weaving Machine Setters, Operators, and Tenders
842. Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders
843. Extruding and Forming Machine Setters, Operators, and Tenders, Synthetic and Glass Fibers
844. Fabric and Apparel Patternmakers
845. Upholsterers
846. Textile, Apparel, and Furnishings Workers, All Other
850. Cabinetmakers and Bench Carpenters
851. Furniture Finishers
852. Model Makers and Patternmakers, Wood
853. Sawing Machine Setters, Operators, and Tenders, Wood
854. Woodworking Machine Setters, Operators, and Tenders, Except Sawing
855. Woodworkers, All Other
860. Power Plant Operators, Distributors, and Dispatchers
861. Stationary Engineers and Boiler Operators
862. Water and Liquid Waste Treatment Plant and System Operators
863. Miscellaneous Plant and System Operators
864. Chemical Processing Machine Setters, Operators, and Tenders
865. Crushing, Grinding, Polishing, Mixing, and Blending Workers

- 871. Cutting Workers
- 872. Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders
- 873. Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders
- 874. Inspectors, Testers, Sorters, Samplers, and Weighers
- 875. Jewelers and Precious Stone and Metal Workers
- 876. Medical, Dental, and Ophthalmic Laboratory Technicians
- 880. Packaging and Filling Machine Operators and Tenders
- 881. Painting Workers
- 883. Photographic Process Workers and Processing Machine Operators
- 884. Semiconductor Processors
- 885. Cementing and Gluing Machine Operators and Tenders
- 886. Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders
- 890. Cooling and Freezing Equipment Operators and Tenders
- 891. Etchers and Engravers
- 892. Molders, Shapers, and Casters, Except Metal and Plastic
- 893. Paper Goods Machine Setters, Operators, and Tenders
- 894. Tire Builders
- 895. Helpers--Production Workers
- 896. Production Workers, All Other

TRN Transportation and Material Moving Occupations

- 900. Supervisors, Transportation and Material Moving Workers
- 903. Aircraft Pilots and Flight Engineers
- 904. Air Traffic Controllers and Airfield Operations Specialists
- 911. Ambulance Drivers and Attendants, Except Emergency Medical Technicians
- 912. Bus Drivers
- 913. Driver/Sales Workers and Truck Drivers
- 914. Taxi Drivers and Chauffeurs
- 915. Motor Vehicle Operators, All Other
- 920. Locomotive Engineers and Operators
- 923. Railroad Brake, Signal, and Switch Operators
- 924. Railroad Conductors and Yardmasters
- 926. Subway, Streetcar, and Other Rail Transportation Workers
- 930. Sailors and Marine Oilers
- 931. Ship and Boat Captains and Operators
- 933. Ship Engineers
- 934. Bridge and Lock Tenders
- 935. Parking Lot Attendants
- 936. Service Station Attendants
- 941. Transportation Inspectors
- 942. Other Transportation Workers
- 950. Conveyor Operators and Tenders
- 951. Crane and Tower Operators
- 952. Dredge, Excavating, and Loading Machine Operators
- 956. Hoist and Winch Operators
- 960. Industrial Truck and Tractor Operators
- 961. Cleaners of Vehicles and Equipment
- 962. Laborers and Freight, Stock, and Material Movers, Hand
- 963. Machine Feeders and Off bearers
- 964. Packers and Packagers, Hand
- 965. Pumping Station Operators
- 972. Refuse and Recyclable Material Collectors
- 973. Shuttle Car Operators
- 974. Tank Car, Truck, and Ship Loaders
- 975. Material Moving Workers, All Other

MIL Military Specific Occupations

980. Military Officer Special and Tactical Operations Leaders/Managers

981. First-Line Enlisted Military Supervisors/Managers

982. Military Enlisted Tactical Ops and Air/Weapons Specialists and Crew members

983. Military, Rank Not Specified (Census only)

999. DK; NA; Don't know; Not ascertained

Source: U.S. Census Bureau, Demographic Surveys Division,

B3. Industry Codes

Equivalent numeric codes follow the alphabetic codes. Either code may be used, depending on the processing method. Abbreviation "pt" means "part" and "n.e.c." means "not elsewhere classified."

AGRICULTURE, FORESTRY, FISHING, AND HUNTING

- 017. Crop production
- 018. Animal production
- 019. Forestry except logging
- 027. Logging
- 028. Fishing, hunting, and trapping
- 029. Support activities for agriculture and forestry

MINING

- 037. Oil and gas extraction
- 038. Coal mining
- 039. Metal ore mining
- 047. Nonmetallic mineral mining and quarrying
- 048. Not specified type of mining
- 049. Support activities for mining

UTILITIES

- 057. Electric power generation transmission and distribution
- 058. Natural gas distribution
- 059. Electric and gas and other combinations
- 067. Water, steam, air-conditioning, and irrigation systems
- 068. Sewage treatment facilities
- 069. Not specified utilities

CONSTRUCTION

- 077. Construction

MANUFACTURING

- 107. Animal food, grain, and oilseed milling
- 108. Sugar and confectionery products
- 109. Fruit and vegetable preserving and specialty food Manufacturing
- 117. Dairy product manufacturing
- 118. Animal slaughtering and processing
- 119. Retail bakeries
- 127. Bakeries except retail
- 128. Seafood and other miscellaneous foods n.e.c.
- 129. Not specified food industries
- 137. Beverage manufacturing
- 139. Tobacco manufacturing
- 147. Fiber, yarn, and thread mills
- 148. Fabric mills, except knitting
- 149. Textile and fabric finishing and coating mills
- 157. Carpets and rugs manufacturing
- 159. Textile product mills except carpets and rugs
- 167. Knitting mills
- 168. Cut and sew apparel manufacturing
- 169. Apparel accessories and other apparel manufacturing
- 177. Footwear manufacturing
- 179. Leather tanning and products, except footwear manufacturing

187. Pulp, paper, and paperboard mills
188. Paperboard containers and boxes
189. Miscellaneous paper and pulp products
199. Printing and related support activities
207. Petroleum refining
209. Miscellaneous petroleum and coal products
217. Resin, synthetic rubber and fibers, and filaments manufacturing
218. Agricultural chemical manufacturing
219. Pharmaceutical and medicine manufacturing
227. Paint, coating, and adhesives manufacturing
228. Soap, cleaning compound, and cosmetic manufacturing
229. Industrial and miscellaneous chemicals
237. Plastics product manufacturing
238. Tire manufacturing
239. Rubber products, except tires, manufacturing
247. Pottery, ceramics, and related products manufacturing
248. Structural clay product manufacturing
249. Glass and glass product manufacturing
257. Cement, concrete, lime, and gypsum product manufacturing
259. Miscellaneous nonmetallic mineral product manufacturing
267. Iron and steel mills and steel product manufacturing
268. Aluminum production and processing
269. Nonferrous metal, except aluminum, production and processing
277. Foundries
278. Metal forgings and stampings
279. Cutlery and hand tool manufacturing
287. Structural metals and tank and shipping container manufacturing
288. Machine shops; turned product; screw nut and bolt manufacturing
289. Coating, engraving, heat treating and allied activities
297. Ordnance
298. Miscellaneous fabricated metal products manufacturing
299. Not specified metal industries
307. Agricultural implement manufacturing
308. Construction mining and oil field machinery manufacturing
309. Commercial and service industry machinery manufacturing
317. Metalworking machinery manufacturing
318. Engines, turbines, and power transmission equipment manufacturing
319. Machinery manufacturing, n.e.c.
329. Not specified machinery manufacturing
336. Computer and peripheral equipment manufacturing
337. Communications, audio, and video equipment manufacturing
338. Navigation, measuring, electrometrical, and control instruments manufacturing
339. Electronic component and product manufacturing, n.e.c.
347. Household appliance manufacturing
349. Electrical machinery, equipment, and supplies manufacturing, n.e.c.
357. Motor vehicles and motor vehicle equipment manufacturing
358. Aircraft and parts manufacturing
359. Aerospace product and parts manufacturing
367. Railroad rolling stock manufacturing
368. Ship and boat building
369. Other transportation equipment manufacturing
377. Sawmills and wood preservation
378. Veneer, plywood, and engineered wood product manufacturing
379. Prefabricated wood buildings and mobile homes manufacturing
387. Miscellaneous wood product manufacturing
389. Furniture and fixtures

- 396. Medical equipment and supplies manufacturing
- 397. Toys, amusement, and sporting goods manufacturing
- 398. Miscellaneous manufacturing, n.e.c.
- 399. Not specified manufacturing industries

WHOLESALE TRADE

- 407. Motor vehicles, parts and supplies wholesalers
- 408. Furniture and home furnishing wholesalers
- 409. Lumber and other construction materials wholesalers
- 417. Professional and commercial equipment and supplies wholesalers
- 418. Metals and minerals, except petroleum, wholesalers
- 419. Electrical goods wholesalers
- 426. Hardware, plumbing and heating equipment, and supplies wholesalers
- 427. Machinery, equipment, and supplies wholesalers
- 428. Recyclable material wholesalers
- 429. Miscellaneous durable goods wholesalers
- 437. Paper and paper product wholesalers
- 438. Drugs, sundries, and chemical and allied product wholesalers
- 439. Apparel, fabrics, and notions wholesalers
- 447. Groceries and related product wholesalers
- 448. Farm product raw material wholesalers
- 449. Petroleum and petroleum product wholesalers
- 456. Alcoholic beverage wholesalers
- 457. Farm supplies wholesalers
- 458. Miscellaneous nondurable goods wholesalers
- 459. Not specified wholesale trade

RETAIL TRADE

- 467. Automobile dealers
- 468. Other motor vehicle dealers
- 469. Auto parts, accessories, and tire stores
- 477. Furniture and home furnishings stores
- 478. Household appliance stores
- 479. Radio, TV, and computer stores
- 487. Building material and supplies dealers
- 488. Hardware stores
- 489. Lawn and garden equipment and supplies stores
- 497. Grocery stores
- 498. Specialty food stores
- 499. Beer, wine, and liquor stores
- 507. Pharmacies and drug stores
- 508. Health and personal care, except drug, stores
- 509. Gasoline stations
- 517. Clothing and accessories, except shoe, stores
- 518. Shoe stores
- 519. Jewelry, luggage, and leather goods stores
- 527. Sporting goods, camera, and hobby and toy stores
- 528. Sewing, needlework and piece goods stores
- 529. Music stores
- 537. Book stores and news dealers
- 538. Department stores
- 539. Miscellaneous general merchandise stores
- 547. Retail florists
- 548. Office supplies and stationary stores
- 549. Used merchandise stores
- 557. Gift, novelty, and souvenir shops
- 558. Miscellaneous retail stores

- 559. Electronic shopping and mail-order houses
- 567. Vending machine operators
- 568. Fuel dealers
- 569. Other direct selling establishments
- 579. Not specified retail trade

TRANSPORTATION AND WAREHOUSING

- 607. Air transportation
- 608. Rail transportation
- 609. Water transportation
- 617. Truck transportation
- 618. Bus service and urban transit
- 619. Taxi and limousine service
- 627. Pipeline transportation
- 628. Scenic and sightseeing transportation
- 629. Services incidental to transportation
- 637. Postal Service
- 638. Courier and messengers
- 639. Warehousing and storage

INFORMATION

- 647. Newspaper publishers
- 648. Publishing except newspapers and software
- 649. Software publishing
- 657. Motion pictures and video industries
- 659. Sound recording industries
- 667. Radio and television broadcasting and cable
- 668. Wired telecommunications carriers
- 669. Other telecommunication services
- 677. Libraries and archives
- 678. Other information services
- 679. Data processing services

FINANCE AND INSURANCE

- 687. Banking and related activities
- 688. Savings institutions, including credit unions
- 689. Non-depository credit and related activities
- 697. Securities, commodities, funds, trusts, and other financial investments
- 698. Insurance carriers and related activities

REAL ESTATE AND RENTAL AND LEASING

- 707. Real estate
- 708. Automotive equipment rental and leasing
- 717. Video tape and disk rental
- 718. Other consumer goods rental
- 719. Commercial, industrial, and other intangible assets rental and leasing

PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES

- 727. Legal services
- 728. Accounting, tax preparation, bookkeeping and payroll services
- 729. Architectural, engineering, and related services
- 737. Specialized design services
- 738. Computer systems design and related services
- 739. Management, scientific and technical consulting services
- 746. Scientific research and development services
- 747. Advertising and related services

- 748. Veterinary services
- 749. Other professional, scientific and technical services

MANAGEMENT, ADMINISTRATIVE AND SUPPORT, AND WASTE MANAGEMENT SERVICES

- 757. Management of companies and enterprises
- 758. Employment services
- 759. Business support services
- 767. Travel arrangement and reservation services
- 768. Investigation and security services
- 769. Services to buildings and dwellings
- 777. Landscaping services
- 778. Other administrative and other support services
- 779. Waste management and remediation services

EDUCATIONAL SERVICES

- 786. Elementary and secondary schools
- 787. Colleges and universities, including junior colleges
- 788. Business, technical, and trade schools and training
- 789. Other schools, instruction, and educational services

HEALTH CARE AND SOCIAL ASSISTANCE

- 797. Offices of physicians
- 798. Offices of dentists
- 799. Office of chiropractors
- 807. Offices of optometrists
- 808. Offices of other health practitioners
- 809. Outpatient care centers
- 817. Home health care services
- 818. Other health care services
- 819. Hospitals
- 827. Nursing care facilities
- 829. Residential care facilities, without nursing
- 837. Individual and family services
- 838. Community food and housing, and emergency services
- 839. Vocational rehabilitation services
- 847. Child day care services

ARTS, ENTERTAINMENT, AND RECREATION

- 856. Independent artists, performing arts, spectator sports, and related industries
- 857. Museums, art galleries, historical sites, and similar Institutions
- 858. Bowling centers
- 859. Other amusement, gambling, and recreation industries

ACCOMMODATIONS AND FOOD SERVICES

- 866. Traveler accommodation
- 867. Recreational vehicle parks and camps, and rooming and boarding houses
- 868. Restaurants and other food services
- 869. Drinking places, alcoholic beverages

OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION)

- 877. Automotive repair and maintenance
- 878. Car washes
- 879. Electronic and precision equipment repair and maintenance
- 887. Commercial and industrial machinery and equipment repair and maintenance
- 888. Personal and household goods repair and maintenance

889. Footwear and leather goods repair
897. Barber shops
898. Beauty salons
899. Nail salons and other personal care services
907. Dry cleaning and laundry services
908. Funeral homes, cemeteries and crematories
909. Other personal services
916. Religious organizations
917. Civic, social, advocacy organizations, and grantmaking and giving services
918. Labor unions
919. Business, professional, political, and similar Organizations
929. Private households

PUBLIC ADMINISTRATION AND ACTIVE DUTY MILITARY

937. Executive offices and legislative bodies
938. Public finance activities
939. Other general government and support
947. Justice, public order, and safety activities
948. Administration of human resource programs
949. Administration of environmental quality and housing programs
957. Administration of economic programs and space research
959. National security and international affairs
967. U.S. Army
968. U.S. Air Force
969. U.S. Navy
977. U.S. Marines
978. U.S. Coast Guard
979. U.S. Armed Forces, branch not specified
987. Military Reserves or National Guard
999. DK; NA; Don't know; Not ascertained

C. State and Country Codes

C1. STATES

01. Alaska (AK)
02. Alabama (AL)
53. American Samoa, Guam
03. Arizona (AZ)
04. Arkansas (AR)
05. California (CA)
06. Colorado (CO)
07. Connecticut (CT)
08. Delaware (DE)
51. Dist. of Columbia(DC)
09. Florida (FL)
10. Georgia (GA)
53. Guam (GU)
11. Hawaii (HI)
12. Idaho (ID)
13. Illinois (IL)
14. Indiana (IN)
15. Iowa (IA)
16. Kansas (KS)
17. Kentucky (KY)
18. Louisiana (LA)
19. Maine (ME)

- 20. Maryland (MD)
- 21. Massachusetts (MA)
- 22. Michigan (MI)
- 23. Minnesota (MN)
- 24. Mississippi (MS)
- 25. Missouri (MO)
- 26. Montana (MT)
- 27. Nebraska (NE)
- 28. Nevada (NV)
- 29. New Hampshire (NH)
- 30. New Jersey (NJ)
- 31. New Mexico (NM)
- 32. New York (NY)
- 33. North Carolina (NC)
- 34. North Dakota (ND)
- 35. Ohio (OH)
- 36. Oklahoma (OK)
- 37. Oregon (OR)
- 38. Pennsylvania (PA)
- 52. Puerto Rico (PR)
- 39. Rhode Island (RI)
- 40. South Carolina (SC)
- 41. South Dakota (SD)
- 42. Tennessee (TN)
- 43. Texas (TX)
- 44. Utah (UT)
- 45. Vermont (VT)
- 53. (U.S.) Virgin Islands
- 46. Virginia (VA)
- 47. Washington (WA)
- 51. Washington, D.C. (DC)
- 48. West Virginia (WV)
- 49. Wisconsin (WI)
- 50. Wyoming (WY)

C2. OTHER U.S.

- 51. District of Columbia; Washington, D.C.
- 52. Puerto Rico
- 53. Guam, American Samoa, U.S. Virgin Islands, Panama Canal Zone
- 59. USA, NA which state

C3. OTHER COUNTRIES

- 97. Other Country
- 98. DK
- 99. NA