

Data Description  
2009 Consumption and Activities Mail Survey (CAMS)

## 1. Introduction

In the fall of 2009, questionnaires assessing individual activities and household patterns of consumption were mailed to a sub sample of the Health and Retirement Study (HRS). The 2009 Consumption and Activities Mail Survey (CAMS), was an extension of the 2001 CAMS conducted in the fall of 2001 (for further information about the 2001 CAMS see: <http://hrsonline.isr.umich.edu/meta/2001/mailout/desc/cams01.pdf> ).

The HRS is funded under a cooperative agreement between the National Institute on Aging (NIA) and the Survey Research Center at the University of Michigan. The HRS is designed to study labor force, health, and family transitions of the U.S. population aged 51 and older, and the impact of those transitions on economic resources, claims on structured programs such as Social Security, Medicare, and Medicaid, and informal assistance and transfers to and from family members.

The National Institute on Aging (NIA) provided funding (U01 AG009740) for the 2009 CAMS. The CAMS survey was conducted by the Survey Research Center (SRC), at the Institute for Social Research (ISR), at the University of Michigan.

By receiving the dataset, you agree to use it for research and statistical purposes only and make no effort to identify respondents. In addition, you agree to send us a copy of publications you produce based on the data. See Obtaining the Data (at the end of this document for additional details).

### 1A. The Sample Interviewed in the 2009 HRS CAMS.

#### Background: 2001, 2003, 2005 and 2007

In the fall of 2001, questionnaires were mailed to 5,000 households interviewed in the HRS 2000 core survey. If a selected household had two panel members in it, one panel member was randomly selected to receive the questionnaire. In 2003, questionnaires were mailed to 4,156 of the respondents who were in the 2001 CAMS. The remaining 843 respondents were lost due to death (n=372), loss to follow-up (n=173), and exclusion from the 2003 CAMS because they were participating in other HRS supplemental studies (n=298). Completed interviews were obtained from 3,254 respondents. Of the 3,254 completed interviews, there were 2,989 who completed the 2001 CAMS.

The 2003 CAMS Final Release (Version 1.0) includes data from 3,254 respondents, for a simple response rate of 78%. The longitudinal simple response rate for completed interviews in 2001 and 2003 (n=2,989) is 86%. The simple response rate does not adjust for mortality or undeliverable questionnaires.

### 2005 CAMS Sample

The sample for the 2005 CAMS sample was configured a little differently from prior waves. In prior waves, when a household had two eligible respondents, only one respondent was chosen to participate in CAMS. In 2005, in coupled or partnered households, both individuals were included in the sample. They are referred to as R and SP – where R is the respondent who was selected for prior waves of CAMS and SP is the spouse or partner of the R.

In the 2005 CAMS there were two different versions of questionnaires. The first consisted of activities and consumption, or the “full” questionnaire (as was the case in 2001 and 2003), and the second “partial” questionnaire contained only the questions about activities. The “full” questionnaire was mailed to Rs (as defined above) and the “partial” questionnaire was mailed to their spouse or partner (SP).

In the fall of 2005, a total of 8,124 questionnaires were mailed. Of the 8,124 questionnaires, 5,440 were “full” and 2,684 were “partial” questionnaires. A total 5,815 questionnaires were returned and of these 3,880 were the “full” version and 1,935 were the “partial” version. The response rate is 71.6% for the total sample across both versions of questionnaire. The response rate for the “full” version of the questionnaire is 71.3% and for the partial version the response rate is 72.1%.

Of the 8,124 questionnaires mailed in 2005, 3,925 of them were mailed to respondents who were a part of the 2001 and 2003 CAMS. Of the 3,925 questionnaires, 2,736 were returned. Thus, 70% of the respondents who returned a CAMS questionnaire in 2003, also returned one in 2005. Across all three waves (2001, 2003, and 2005) there is a 66% simple longitudinal response rate.

### 2007 CAMS Sample

The sample for the 2007 CAMS sample was configured in the same way as 2005 CAMS; therefore, there is a “full” questionnaire as well as a “partial” questionnaire. In the fall of 2007, a total of 7,741 questionnaires were mailed. Of the 7,741 questionnaires, 5,209 were “full” and 2,532 were “partial” questionnaires. A total of 5,612 questionnaires were returned and of these 3,738 were the “full” version and 1,874 were the “partial” version. The response rate is 72.5% for the total sample across both versions of the questionnaire. The response rate for the “full” questionnaire is 71.8% and for the partial version the response rate is 74.0%.

### 2009 CAMS Sample

The sample for the 2009 CAMS mirrored that of 2005 and 2007. In the fall of 2009, a total of 7,231 questionnaires were mailed. Of the 7,231 questionnaires, 4,954 were the “full” version, and 2,277 were the “partial” version. The response rate is 73.7% for the total sample (across both versions of the questionnaires). The response rate for the “full” questionnaire is 72.4% and for the “partial” version the response rate is 76.5%.

## 1B. 2009 HRS CAMS Sections

As indicated earlier, there were two versions of CAMS questionnaires in 2009. The “full” version contained three sections:

Section A	Activities
Section B	Consumption
Section C	Demographics

Section A, Activities, was designed to measure and identify the nature of individual activities, their quantity and their quality. The activities component of the CAMS allows for describing activity patterns and permits the investigation of different types of activities and how specific types of activities are affected by health, family and economic transitions in later life and, in turn, how activities affect health and well-being.

Section B, Consumption, was designed to obtain information about the level and pattern of expenditures of sampled households. The consumption questions of the CAMS, coupled with the panel data of the HRS, allows for assessing a variety of important practical and theoretical issues, including how consumption patterns are affected by health, wealth, retirement and public and private supports.

The “partial” version of the 2009 questionnaire contained Section A, only.

All of the questions in the 2009 CAMS are the same as the questions in the 2007 CAMS.

The following are variables added in 2007. Each is also contained in CAMS 2009, but will not be present in prior waves of CAMS (2001 through 2005). The difference between 2007 and 2009 CAMS is in the extension ( \_09) at the end of each variable; the \_09 is not shown in the list:

<b>Name</b>	<b>Label</b>
A34_07	A34. Time spent on eating meals last week
A35a_07	A35a. Hours spent seeing doctors for your own - weekly
A35b_07	A35b. Hours spent seeing doctors for your own - monthly
A35c_07	A35c. Hours spent seeing doctors for your own - last year
A36_07	A36. Time spent managing medical condition of another
A36M1_07	A36M1. Spouse
A36M2_07	A36M2. Child, step child or grandchild
A36M3_07	A36M3. Parent, parent-in-law or grand parent
A36M4_07	A36M4. Others
A36a_07	A36a. Hours spend in total last week
A37a_07	A37a. Hours managing medical bills - weekly
A37b_07	A37b. Hours managing medical bills - monthly
A37c_07	A37c. Hours managing medical bills - last year
C2a_07	C2a. Money on clothing and apparel
C2a1_07	C2a1. Spending for things that you use

C2a2\_07      C2a2. Spending for things that your spouse or partner uses  
C2a3\_07      C2a3. Spending for things that other members use

### **1C. File Structure**

The 2009 HRS CAMS Final Release (Version 1.0) data are at the respondent level. Respondent-level files contain questions that were asked of all respondents about themselves or their household (or were answered by a proxy for the respondent if the respondent was not able to fill out the questionnaire). The data file contains one record for each respondent or proxy who filled out and returned a 2009 Activities and Consumption questionnaire.

Each section of 2009 HRS CAMS contains a question asking who answered the survey questions (A45, B48, and C5). Therefore, analysts can determine if the respondent to whom the questionnaire was sent completed the questionnaire, or if the spouse or partner of the respondent, or some other proxy completed the questionnaire.

The data file is called CAMS09\_R, loosely translated as: Consumption and Activities Mail Survey 2009, with the “\_R” designating the file is at the respondent level.

The CAMS09\_R data file contains 5,330 cases (including those who answered the “full” questionnaire and those who answered the “partial” questionnaire) and 194 variables. The primary Identification variables (IDs) are:

HHID      HOUSEHOLD IDENTIFIER  
PN      PERSON NUMBER

Secondary Identification variables are:

LSUBHH      2008 SUB HOUSEHOLD IDENTIFICATION NUMBER  
LPN\_SP      2008 SPOUSE/PARTNER PERSON NUMBER

Records in the data files are sorted in order by HHID and PN. The variable PN refers to the respondent to whom the questionnaire was mailed. The variable LPN\_SP is the person number of the respondent’s spouse/partner from the HRS 2008 core data. Identification variables in the HRS 2009 CAMS Final Release are stored in character format. For further information about HRS identification variables and merging data, see the Data Description for the HRS 2002 Core.

### **1D. Data Quality**

Recoded or Constructed variables:

Most of the variables in the 2009 CAMS data mirror the questions in the CAMS questionnaire. However, questions that allowed for multiple mentions have been recoded. Respondents checked “all that apply” to A36, B42, B44, and C1. These

questions have been recoded into one variable for each mention (for example B42M1, B42M2, etc).

Again, we have added several variables (B7d, B8d, B18d, B19d, B20d, B21d and B22d) to indicate where respondents have combined amounts for either property or utility costs. For example, when respondents reported that electricity was combined with their water and heating costs, the amount in B20\_09 includes water and heat for these respondents and B21 and B22 are left blank.

**Consistency:**

The data will have some inconsistency. Respondents did not always follow the correct skip patterns and in most instances their “incorrect” answers were preserved. Likewise, there were times when respondents interpreted question in different ways. For example, a few respondents answered the percentage amount in two different ways for question B41A. “Suppose next year you were to find your household with 20% more income than normal, what would you do with the extra income?” Some of the respondents gave amounts that add up to 20%, while others gave percentage amounts that add up to 100%.

**Extreme values and missing data:**

While cleaning the data, when extreme or unlikely values were encountered, the hard copies of the questionnaires were checked to determine if errors were introduced during the data entry process. If the respondent reported the extreme value, the extreme value appears unchanged in the data. For example, at question A41, if a respondent reported that it took 0 minutes to complete Section A, a zero will appear in the data; conversely, if a respondent reported that it took three hours (i.e., 180 minutes) to complete the section, then 180 minutes will appear in the data. Likewise, at questions like A5 (“sleeping and napping last week”), respondents might report 0 hours, while others might report doing so for 163 hours. The exception to the rules above is that we top-coded the following variables:

A1-A20 ((hours last week):  
if hours >168, it will be changed to 168

A21-A33 (hours last week hours last month):  
if hours >730, it will be changed to 730

A34-A35 (days in the last twelve months)  
if days >365, it will be changed to 365

When respondents did not provide an answer to a question, their answers were treated as missing. There are no codes for “don’t know” or “refused”. Instead, codes of “9” (or “99”, etc. depending on the variable width) have been used to designate “answer not given” when respondents answered did not answer a lead in question or when a lead-in question was answered, but they did not provide answers to the follow-up question(s). An example would be in the “purchased or leased a car” (B1), where respondents do not provide the “make” of the car (B1a). In the prior example, respondents were coded as

“99” or “answer not given”. Respondents, for whom the question was inapplicable, are coded as blank or dot.

## **2. Distribution Files**

The following extensions are used for the six different types of distribution files:

- .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.

For example,

CAMS09\_R.DA contains ASCII data from Sections A, B, and C.  
CAMS09\_R.SAS contains corresponding SAS program statements,  
CAMS09\_R.SPS contains corresponding SPSS program statements,  
CAMS09\_R.DO contains corresponding Stata DO statements,  
CAMS09\_R.DCT contains corresponding Stata dictionary statements, and  
CAMS09\_R.TXT contains the ASCII codebook.

The 2009 HRS CAMS Final Release data are provided in ASCII format, with fixed-length records. Use the associated SAS, SPSS or Stata program statements to read the data into the analysis package of your choice. In addition, you will probably want to download the codebook file (CAMS09\_R.TXT) and the data description (this document).

## **3. Program Statements**

### **3A. 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:\cams2009\sas" and the data file is located in "c:\cams2009\data", you can run the file as is. A SAS system file (\*.SD2 or \*.SAS7BDAT) will be saved to directory "c:\cams2009\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.

### **3B. 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:\cams2009\spss" and the data file is located in "c:\cams2009\DATA", you can run the file as is. An SPSS system file (\*.SAV) will be saved to directory "c:\cams2009\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.

### **3C. 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:\cams2009\stata" and the data file is located in "c:\cams2009\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.

## **4. Linking Respondents across Time**

4A. Respondent records in the 2009 CAMS Final Release (Version 1.0) can be linked to respondent records from 2008 and prior waves by HHID and PN. The sub-household identifiers, ASUBHH for 1992, BSUBHH for 1993, C2SUBHH for 1994, DSUBHH for 1995, ESUBHH for 1996, FSUBHH for 1998, GSUBHH for 2000, HSUBHH for 2002, JSUBHH for 2004, KSUBHH for 2006 and LSUBHH for 2008 can be used to link household data with the cross-sectional respondent data. The following examples use HRS 2002 Core and HRS CAMS 2007. They are for demonstration purposes and would need to be up-dated using CAMS 2009. The relevant xSUBHH can be obtained from the

HRS Core, with the exception of the xSUBHH for the wave prior to the present CAMS (e.g., if it is CAMS09, the 2008 Core SUBHH is included on the CAMS file).

4B. Merge Example: HRS 2002 core respondent level data with 2007 HRS CAMS Final Release data (Version 1.0)

```
libname cams 'c:\cams2007\data';
libname hrs02abc 'c:\hrs2002\data';
libname out 'c:\cams2007\new\data';

****specify variables of interest;
*avars are hrs 2002 core coverscreen vars;
*bvars are hrs 2002 core demographic vars;
*cvars are hrs 2002 core health vars;

%let avars = hhid hsubhh pn hpn_sp HA019;
%let bvars = hhid hsubhh pn hpn_sp HB031M;
%let cvars = hhid hsubhh pn hpn_sp HC001;

***sort all the files to be used in the merge;
***keep variables of interest;
proc sort data = cams.cams07_r out=cams07_r;
  by hhid pn hsubhh;
run;

data pfilea;
  set hrs02abc.h02a_r(keep = &avars);
proc sort data = pfilea;
  by hhid pn hsubhh;
run;

data pfileb;
  set hrs02abc.h02b_r(keep = &bvars);
proc sort data = pfileb;
  by hhid pn hsubhh;
run ;

data pfilec;
  set hrs02abc.h02c_r (keep = &cvars);
proc sort data = pfilec;
  by hhid pn hsubhh;
run ;

***merge the files;
data newfile ;
  merge cams07_r (in=d) pfilea pfileb pfilec;
```



```
by hhid pn hsubhh;  
if d;  
run;
```

```
***output a new file;  
proc sort data = newfile out = out.newcams (label=  
'2007 CAMS data and 2002 core a, b and c');  
by hhid pn hsubhh;  
run;
```

```
***check output of new file;  
proc contents data = out. newcams;  
run;
```

#### 4C. Merge Example: HRS 2006 core respondent level data with 2007 HRS CAMS Final Release data (Version 1.0)

```
libname cams 'c:\cams2007\data';  
libname hrs06abc 'c:\hrs2006\data';  
libname out 'c:\cams2007\new\data';
```

```
****specify variables of interest;  
*avars are hrs 2006 core coverscreen vars;  
*bvars are hrs 2006 core demographic vars;  
*cvars are hrs 2006 core health vars;
```

```
%let avars = hhid ksubhh pn kpn_sp KA019;  
%let bvars = hhid ksubhh pn kpn_sp KB091M;  
%let cvars = hhid ksubhh pn kpn_sp KC001;
```

```
***sort all the files to be used in the merge;  
***keep variables of interest;  
proc sort data = cams.cams07_r out=cams07_r;  
by hhid pn ksubhh;  
run;
```

```
data pfilea;  
set hrs06abc.h06a_r(keep = &avars);  
proc sort data = pfilea;  
by hhid pn ksubhh;  
run;
```

```
data pfileb;  
set hrs06abc.h06b_r(keep = &bvars);  
proc sort data = pfileb;  
by hhid pn ksubhh;
```

```

run ;

data pfilec;
  set hrs06abc.h06c_r (keep = &cvars);
proc sort data = pfilec;
  by hhid pn ksubhh;
run ;

***merge the files;
data newfile ;
  merge cams07_r (in=d) pfilea pfileb pfilec;
  by hhid pn ksubhh;
  if d;
run;

***output a new file;
proc sort data = newfile out = out.newcams (label=
'2007 CAMS data and 2006 core a, b and c');
by hhid pn ksubhh;
run;

***check output of new file;
proc contents data = out. newcams;
run;

```

## **5. Registration and Downloading the Data**

### **5A. Registration**

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.

### **5B. 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.

### **5C. 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 3050  
P.O. Box 1248  
Ann Arbor, MI (USA) 48106-1248

Alternately, you may contact us by e-mail at [hrsrequest@isr.umich.edu](mailto:hrsrequest@isr.umich.edu) with "Attn: Papers and Publications" in the subject line.

### **6. If You Need to Know More**

This document is intended to serve as a brief overview and to provide guidelines to using the CAMS 2009 Final Release (Version 1.0) data. We recommend that you also read the data description for the HRS 2000 Final Release (Version 1.0). If you have questions or concerns that are not adequately covered here or on our Web site, please contact us. We will do our best to provide answers.

#### **6A. 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.

<http://hrsonline.isr.umich.edu/>

#### **6B. 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: [hrsrequest@isr.umich.edu](mailto:hrsrequest@isr.umich.edu)

Postal service:  
Health and Retirement Study  
The Institute for Social Research, Room 3050  
The University of Michigan  
P.O. Box 1248  
Ann Arbor, MI 48106-1248

FAX: (734) 647-1186