RAND

RAND CAMS Data Documentation,
Version 2015 V2

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Contents

What's New in Version 2015 V2 of the RAND CAMS Spending Data?

Version 2015 V2 incorporates the most recent versions of the CAMS survey files and Version P of the RAND HRS. It also adds and drops certain variables. The current versions of the CAMS surveys used in Version 2015 V2 are:

- 2001 Final V3
- 2003 Final V2
- 2005 Final V1
- 2007 Final V1
- 2009 Final V1
- 2011 Final V2
- 2013 Final V2
- 2015 Final V1

We have made the following changes to the file:

- **CAMS 2013 V2 data:** Version 2 of the 2013 CAMS survey was published by the HRS on October 13, 2015. This dataset has a revised version of the QTYPE13 variable, which indicates whether the respondent received the full or partial survey.

- **CAMS 2001, 2003, 2011 Weights:** Updates to demographic information captured in the Tracker file for 79 households will necessitate a recalculation of household-level and respondent-level weights for CAMS 2001, 2003 and 2011. Updated weights will be available in a future release of RAND CAMS.

- **CAMS 2013 Weights:** Weights for the 2013 CAMS survey were revised by the HRS to reflect the updated sample in version 2 of the 2013 CAMS data file. This impacted the household-level weight variable H11CWGTHH and the respondent-level weight H11CWGTR.

- **CAMS 2015 Weights:** Preliminary weights for the 2015 CAMS survey have been added to the dataset, including the household-level weight H12CWGTHH and the respondent-level weight H12CWGTR. Please note that there are 12 respondents to 2015 CAMS who have not yet been assigned a respondent or household-level weight; weights for these respondents will be available in the next release of RAND CAMS.

- **CAMS 2013 Consumption Variables:** We have added the 2013 CAMS consumption variables (H11CTOTC, H11CDURC, H11CTRANSC, H11CHOUSC and H11CHMEQF).

- **CAMS 2015 Consumption Variables:** The 2015 CAMS consumption variables (H12CTOTC, H12CDURC, H12CTRANSC, H12CHOUSC and H12CHMEQF) will be available in the next release of the RAND CAMS. These variables are derived using HRS 2016 core data for house value and transportation value, which are not yet available.

- **Sample Selection for Derived Totals:** Beginning with version 2015 V1, the RAND CAMS totals are now only derived for those observations who have given non-missing values for at least ten spending categories. The variable HwCNCAT indicates the number of non-missing values given by the Respondent for spending categories in Part B in a particular wave. The variable HwC10REP is a binary variable indicating whether the Respondent has given non-missing values for ten or more spending categories. Those Respondents who gave non-missing values for less than ten spending categories have a missing value of .T for all spending and consumption measures.

- **Merging RAND CAMS to core HRS dataset:** There are 3 Respondents to Part B of a CAMS survey that cannot be merged to the core HRS datasets due to HRS core non-response (HHIDPN=501992020, 501980010, and 500416010). Our previous approach was to assign these cases a new ID for merging with the core HRS

files called MHHIDPN. Starting with version 2015 V1, we drop the MHHIDPN and corresponding MFLAG variables, in favor of using HHIDPN for merging. Our new approach is to move the household-level spending data from the non-core respondent HHIDPN to the spouse HHIDPN should the spouse be a core respondent. As a result, we do not lose the valuable household-level spending data the non-core Respondent reported and will gain the core HRS data necessary for spending and consumption imputations. One of these three cases (HHIDPN=500416010), however, does not have an updated HHIDPN and has been dropped from the RAND CAMS dataset for two reasons. First, the Respondent claimed that his marital status was divorced in CAMS 2005, so switching to the spouse ID would be unwarranted as his marriage had dissolved and the spending data most likely did not represent the spouse. Second, this Respondent only gave one spending amount (drug purchases) out of all 32 categories, so he did not provide a complete spending report.

1. Introduction and Overview

The Consumption and Activities Mail Survey (CAMS) is a paper-and-pencil survey that is collected biennially in odd-numbered years. One of its primary objectives is to measure total household spending over the previous 12 months. It is an ongoing supplement to the Health and Retirement Study (HRS) which is a longitudinal survey representative of the U.S. population over the age of 50. For more information on the HRS, please visit their website at *hrsonline.isr.umich.edu.*

In September 2001, the first CAMS survey was mailed to 5,000 households selected at random from households that participated in the HRS 2000 core survey. Seven more CAMS surveys were fielded in September 2003, October 2005, September 2007, September 2009, September 2011, fall 2013, and fall 2015, with plans to field the survey every two years. The structure of the questionnaire is similar across waves to facilitate panel analysis.

The CAMS survey consists of three parts. In Part A, the Respondent is asked about the amount of time spent in each of 30 activities such as time spent watching TV or time spent preparing meals.[1] Part B collects information on actual spending for more than 30 categories, as well as anticipated and recollected spending change at retirement. Part C asks about current labor force status.[2]

With the goal of making the data from the survey more accessible to researchers, the RAND Center for the Study of Aging, with funding and support from the National Institute on Aging (NIA) and the Social Security Administration (SSA), created the RAND CAMS Spending Data files. This document describes the RAND CAMS data.

The RAND CAMS is a user-friendly version of Part B of the CAMS survey. It contains annualized, cleaned, and aggregated spending and consumption variables with consistent and intuitive naming conventions across waves. Specifically, total household spending and household consumption are calculated across all categories and for these subsets of spending: nondurables, durables, housing and transportation. This data file can be easily merged to the RAND HRS and other HRS files as described in "1.3 Merging to HRS files."

The data described in this document are based on 2001 (Version 3), 2003 (Version 2), 2005 (Version 1), 2007 (Version 1), 2009 (Version 1), 2011 (Version 2), 2013 (Version 2), and 2015 (Version 1) final data releases.

1.1 Confidentiality and Access Restrictions

The data described in this document are based on HRS public release files. Before using the data, you must have obtained permission from ISR by registering with them for downloading the public release files. By registering with ISR you agree to the "Conditions of Use" governing access to the data. This agreement applies to the use of the RAND HRS and RAND CAMS data as well.

RESTRICTED DATA USERS, PLEASE NOTE: If you are using any HRS/AHEAD restricted data such as SSA data, you should check whether you may merge them with the RAND HRS or RAND CAMS data. If you intend to use the RAND HRS or RAND CAMS Spending Data with restricted data, please visit our restricted data page (http://hrsonline.isr.umich.edu/i ndex.php?p=resdat) and in the RDA links box, follow the Contact Information link to send Electronic Mail to HRS Restricted Data Applications Processing (hrsrdaapplication@umich.edu). Restricted data users are reminded that ISR must be informed of any data files used in conjunction with restricted data. There are **NO RESTRICTED DATA on the RAND HRS or RAND CAMS data sets**. The HRS website contains information on the processes to register for access to HRS public release data (http://hrsonline.isr.umich.edu/inde x.php?p=reg).

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[1] Starting with CAMS 2005 and onward a separate questionnaire on time-use was sent to the spouses of CAMS Respondents. The questionnaires sent to spouses did not ask any spending questions.

[2] In 2001 CAMS part C there were questions about the use of prescription drugs

1.2 Data File Structure

The RAND CAMS Data are distributed as a single file which includes the first eight waves of CAMS. In September 2001, the first CAMS survey was mailed to 5,000 households selected at random from households that participated in HRS 2000 (HRS Wave 5). In September 2003, October 2005, September 2007, September 2009, September 2011, fall 2013, and fall 2015, CAMS waves 2 to 8 were sent to the same households. In CAMS 2005, an additional sub-sample was included, consisting of the newly added Early Baby-Boomers cohort that was first recruited into the HRS sample as part of the HRS 2004 core survey. Likewise, in CAMS 2011, a sub-sample was added targeting a portion of the new Mid Baby-Boomers cohort that was first recruited for the HRS 2010 core survey.

In order to facilitate analysis of the RAND CAMS Spending data in conjunction with the RAND HRS, the CAMS variables are given the wave number of the preceding HRS wave. CAMS 2001 is the first wave of the CAMS survey, but it is given Wave 5 variable names to align with the household characteristics of RAND HRS Wave 5 (fielded in 2000). We chose this alignment because each CAMS wave uses the sample of the preceding HRS wave as its sampling frame. As a result, most CAMS observations within a wave will have a matching observation in the preceding wave that can be used for merging purposes (but not necessarily in the subsequent HRS wave).

In the case of a coupled household, the full CAMS questionnaire was sent to one of the spouses, chosen at random, in each HRS household.[3] The instructions for Part B requested that the person most knowledgeable about the topics be involved in answering the questions, and the Respondent was asked to provide spending information for all members of the household. The RAND CAMS Spending data file is an individual-level file of all CAMS Respondents who responded to at least one wave of the CAMS Part B survey section. The spending information associated with each individual record reflects the spending of that person's household. Spouses of the CAMS Respondents are not included on the file.

Over time, household compositions can change through divorce, widowing and marriage. From the time of the HRS 2000 survey to the CAMS 2001 survey, some households may have experienced a change. However, the CAMS survey asks for the Respondent's marital status, so the researcher can take into consideration any reported changes in marital status.

Timing of CAMS spending measure and alighment with HRS core waves
Also worth noting is that although the CAMS data are matched to the previous wave's household structure, the spending data will not line up with other financial data such as wealth and income measures in terms of timing. For example, HRS 2002 collects total income for the calendar year of 2001, which coincides with the CAMS 2001 spending measure, but the CAMS data are linked to the HRS 2000 household and have a Wave 5 prefix instead of a Wave 6 prefix.

1.3 Merging to the HRS

The RAND CAMS can easily be merged to the RAND HRS and other HRS files using the HHIDPN variable. HHIDPN is the identification number of the CAMS survey Respondent. It is the numeric version of the person identifier found on all HRS files that identifies each Respondent uniquely. Please see the RAND HRS Data Documentation for more information on HHIDPN.

The RAND CAMS Spending Data File is an individual-level file of all CAMS Respondents who responded to at least one wave of the CAMS Part B survey section. Three Respondents to CAMS Part B did not respond to any HRS core survey (HHIDPN=501992020, 501980010, and 500416010). Their spouses, however, did respond to an HRS survey for two of the three cases. For these observations, we use the spouse's HHIDPN so that these records can be merged to the HRS files. One case, HHIDPN=500416010, responded to CAMS 2005 and has a

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[3]Starting with CAMS 2005 and onward, spouses of CAMS Respondents in a couple household were sent a separate time-use questionnaire (Part A in the full questionnaire).

spouse who responded to an HRS survey, but has been dropped from the RAND CAMS dataset for two reasons. First, the Respondent claimed that his marital status was divorced in CAMS 2005, so switching to the spouse ID would be unwarranted as his marriage had dissolved and the spending data most likely did not represent the spouse. Second, this Respondent only gave one spending amount (drug purchases) out of all 32 categories, so he did not provide a complete spending report.

To merge the RAND CAMS with other HRS data sources, one may use HHIDPN. For instance, to merge the RAND CAMS to version P of the RAND HRS, you could use the following SAS code:

```
%include "[dir]\setuphrs.inc";
libname mylib "[name of folder to store your files]";


data mylib.newfile;
      merge randhrs.rndhrs_p (keep=HHIDPN [list of other variables])
            randcams.randcams_2001_2015v2;
      by HHIDPN;
```

1.4 Sample Selection for Derived Totals

Beginning with version 2015 V1, the RAND CAMS totals are now only derived for those observations who have given non-missing values for at least ten spending categories. The variable HwCNCAT indicates the number of non-missing values given by the Respondent for spending categories in Part B in a particular wave. The variable HwC10REP is a binary variable indicating whether the Respondent has given non-missing values for ten or more spending categories. Those Respondents who gave non-missing values for less than ten spending categories have a missing value of .T for all spending and consumption measures.

1.5 Differences Across Waves

In 2001, Respondents were asked about spending in 26 categories of nondurables and 6 categories of durables. The categories were chosen to match published Consumer Expenditure Survey (CEX) aggregates, and cover all but a small percent of spending as reported in the CEX. The rate of item nonresponse was very low, averaging in the single digits across categories. CAMS 2003 added three additional categories (housekeeping services, yard services, and personal care), parsed three categories into more detailed components (home repairs and maintenance was split into services versus supplies, housekeeping and yard supplies was also split into housekeeping versus yard supplies, and hobbies/sports was separated into hobbies and sports), and changed the scope of one category (vehicle finance charges was expanded to include principal in addition to interest). In the 2005 survey and onward, only spending on furnishings was added to the 2003 categories. Please see Table 1 for details.

There are also differences in the choice of reporting periods offered across survey waves. The CAMS 2001 survey offered the choice of three reporting periods (last week, last month, last 12 months) for many spending categories. For spending categories that tend to be less frequent this generated a sizeable number of outliers. For example, spending on vehicle repair reported for "last week" would result in a large number when multiplied by 52 to arrive at an annual estimate for a household. For this reason the "last week" option was removed for most categories and the "last month" option was removed for some less frequent spending categories starting in CAMS 2003. This change is likely to affect cross-wave comparability. Measures of changes in spending from 2001 to 2003 may not be reliable as a result.

Starting in CAMS 2005, the layout of the questionnaire was adjusted so that the recall period was printed in each entry field. Analyses of the 2001/2003 spending changes revealed that some Respondents apparently entered amounts referring to one recall period into the column referring to a different recall period (e.g. entering

an amount spent "last month" into the column for amount spent "last week"). This layout change may have introduced cross-wave differences in reported spending between 2003 and 2005.

Table 1: Variable Names Across Waves

Category	CAMS01	CAMS03	CAMS05-CAMS15
Durables			
Refrigerator	B2	B2	B2
Washer/Dryer	B3	B3	B3
Dishwasher	B4	B4	B4
Television	B5	B5	B5
Computer	B6	B6	B6
Nondurables			
Electricity	B11	B15	B20
Water	B12	B16	B21
Heat	B13	B17	B22
Phone/Cable/Internet	B14	B18	B23
Health Insurance	B17	B11	B11
House/Yard Supplies	B18	split	split
Housekeeping Supplies	combined	B20	B25
Yard Supplies	combined	B22	B27
Housekeeping Services	n/a	B21	B26
Gardening/Yard Services	n/a	B23	B28
Food/Drink Grocery	B20	B36	B37
Dining Out	B21	B37	B38
Clothing	B22	B26	B29
Drugs	B25	B28	B31
Health Services	B26	B29	B32
Medical Supplies	B27	B30	B33
Vacations	B28	B12	B12
Tickets	B29	B31	B34
Hobbies/Sports Equipment	B30	split	split
Hobbies	combined	B33	B36
Sports Equipment	combined	B32	B35
Contributions	B31	B34	B16
Gifts	B32	B35	B17
Personal Care	n/a	B27	B30
Household Furnishings	n/a	n/a	B15
Transportation			
Purchase/Lease auto	B1	B1	B1
Auto Finance Charges	B15	n/a	n/a
Car Payments	n/a	B19	B24
Auto Insurance	B16	B9	B9
Gasoline	B23	B38	B39
Vehicle Services	B24	B10	B10
Housing			
Mortgage	B7	B13	B18
Home/Rent Insurance	B8	B7	B7
Property Tax	B9	B8	B8
Rent	B10	B14	B19
Home Repairs Supplies & Services	B19	split	split
Home Repair Supplies	combined	B24	B13
Home Repairs Services	combined	B25	B14

1.6 Spending versus Consumption

The CAMS questionnaire aims at eliciting household spending. However, in most economic models individuals (or households) draw utility from consumption. Consumption is different from spending for items like consumer durables (e.g., automobile, television, computer etc.) and housing. The purchase occurs in one period, but the item provides utility for more than one period. To arrive at a measure of household consumption from the data elicited in CAMS involves two steps.

First, CAMS records two spending categories that contain components of saving: car payments and mortgage payments. In a mail survey it is difficult to ask separately about how these payments are split between interest and principal. Therefore, only total mortgage payments and total car payments were elicited.[4] To arrive at a pure spending measure the analyst will need to devise a way to remove the saving component (i.e., the reduction in principal) contained in the mortgage and the car payments. For the mortgage payments we approximated households' interest payments using data from the Consumer Expenditure Survey. See "1.7 Components of Household Spending and Consumption" for details.

For car payments we did not attempt such a correction in the absence of further information on households' financing arrangements. So the measures of total household spending in this CAMS public release file include our approximation of mortgage interest and the total of car payments.

To assist analysts who would like to use a different method for removing these saving components from the CAMS measures, we have included mortgage payments, mortgage interest, and car payments as separate variables. The analyst can use these (a) to subtract them from RAND CAMS total spending and (b) to use an alternative method to compute adjusted mortgage and car payments net of payment on principle to be added back into the measures of total spending.

Second, when the objective is to derive a measure of consumption from the CAMS spending data, one needs to estimate the per-period "usage" from consumer durables, automobiles and housing. We have implemented an approach to deriving measures of total household consumption which is similar to the one implemented in a paper by Michael D. Hurd and Susann Rohwedder (2006) on "Economic Well-Being at Older Ages: Income and Consumption-Based Poverty Measures in the HRS" (NBER Working Paper 12680). Specific derivations of these spending and consumption variables are described in the following section.

Preferred approaches for estimating the consumption value of these categories will differ across empirical applications and analysts. We highlight the need for this adjustment and provide one possible implementation, but encourage analysts to choose the most suitable approach in the context of their study. To assist researchers who prefer to implement a different method we have included as separate variables:

Mortgage payment
Mortgage interest
Car payments
Consumption of housing
Consumption of transportation
Spending on housing
Spending on transportation

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[4]This is the amount that Respondents are most likely to know as a result of making these payments every month.

1.7 Components of Household Spending and Consumption

Both the spending and consumption totals are divided into the following components: durables, nondurables, transportation and housing. The derivations of each of these components are described in this section.

Durables spending
Durables spending is comprised of the purchase price of five big ticket items: dishwashers, refrigerators, washer/dryers, computers and televisions. It does not include automobile purchases, which is a component of transportation spending.

Durables consumption
For the big ticket items (excluding automobile purchases) our general strategy is to estimate using CAMS data the probability of a purchase and the expected value conditional on a purchase as functions of important covariates such as income, wealth, age, marital status and number of household members. We then impute an annual purchase amount which, in equilibrium, will be equal to the annual consumption.

We follow somewhat different methods for televisions and personal computers than for "white metal" items (refrigerators, washer/dryers and dishwashers). For televisions and computers we make the following assumptions and calculations. If p=probability of a purchase in a year, then $T = 1/p$ expected number of years of service use. Assuming that the flow of service is constant over the T years, the service flow per year is C/T where $C =$ cost of the durable. Then the annual service flow is C x p. We model $\ln(C)$ and p as functions of observables: income, wealth, age, marital status, number of household members, education, sex and whether working for pay. We estimate logistic functions for the probability of annual purchase and least-squares regression for spending conditional on purchase using the expenditure data. Then we impute the service flow to each household for televisions and computers separately.

For "white metal" consumption (refrigerators, washer/dryers and dishwashers), the probabilities and amounts are estimated as a white metal sum. First we estimate the probability for purchasing 0, 1, 2 or 3 white metal goods. Next we estimate the log sum of spending on the white metal items given the covariates and the number of white metal items purchased. White metal consumption is then calculated as the probability of purchasing one white metal item multiplied by spending on one white metal item plus the probability of purchasing two white metals multiplied by spending on two white metal items plus the probability of purchasing three white metals multiplied by spending on three white metals. The annual service flow for the five durables is then the sum of the service flows of televisions, computers and white metal items.

Nondurables spending (and consumption)
Nondurables spending is a component of both total spending and consumption. The spending categories vary by wave, but in general include: gifts, clothing, charitable contributions, dining out, medications and medical supplies, utilities, food and beverages, health insurance and services, telecommunications, tickets, trips and vacations, personal care items, furnishings, hobbies, sports, housekeeping services and supplies, and yard services and supplies. Please see Table 1 for details of which categories are available in each wave.

Transportation spending
Transportation spending is the sum of spending on new and used auto purchases, vehicle insurance, vehicle maintenance, car payments (or vehicle financing for CAMS 2001) and gasoline. The CAMS survey only measures purchase price of autos and not the outlay. Measuring the outlay is complicated due to the many financing options for vehicle purchases, including the possibility of trade-ins. Eliciting the details of the transactions is not practical in a paper-and-pencil survey. Analysts may want to consider adjustments, depending on the purpose of their analyses. For this reason, the total household auto spending measure is added to the dataset as a separate variable so analysts can subtract auto purchases from the RAND CAMS measures of total spending or total transportation

spending, develop adjusted measures and add those back in to arrive at revised totals.

Transportation Consumption
Because the total value (rather than just purchases) of automobiles and other vehicles used for transportation is elicited in the HRS core surveys in the years preceding and following CAMS, we calculate the flow of services from the total values observed in the HRS core. This calculation will more accurately estimate the flow of services for households who purchase automobiles and the like less frequently. We make these assumptions and calculations: the value of transportation (almost all automobiles) is measured in the HRS core; user cost is the sum of interest on the value, 10% depreciation, and observed insurance costs from CAMS. For the interest rate we use a three-year moving average on 48-month loan rates for automobiles published by the Federal Reserve.[5]:

Housing Spending
Housing spending is comprised of rent, home and renters insurance, property tax, home maintenance supplies and services, and mortgage interest. To calculate mortgage interest from the CAMS survey report of total mortgage payment, it is necessary to eliminate the payment of principal. We approximated households' interest payments by calculating the following ratio using data from the Consumer Expenditure Survey in each survey year[6]

$$\frac{Mortgage\ interest\ and\ charges}{Mortgage\ interest\ and\ charges\ +\ Mortgage\ principal\ paid\ on\ owned\ property}$$

These interest proportions are then applied to the CAMS reports of "mortgage principal and interest" to approximate the interest payments, stratifying by the age of the CAMS Respondent for the following age groups: 25-34 years, 35-44 years, 45-54 years, 65-74 years and 75 years and older.

Housing Consumption
We estimate the flow of consumption services from owner-occupied housing by estimating a rental equivalent: the amount the housing unit would rent for in a competitive market in equilibrium. In particular we make the following two assumptions and calculations: (1) The interest cost is the value of housing multiplied by the prevailing interest rate. We use the observed house value from the HRS core and use a moving average of the last three years' 30 year mortgage interest rate.[7]: (2) We estimate a depreciation period of 47 years. The consumption of housing is the sum of the rental equivalent of the owned house, property tax, homeowners insurance, plus any actual rent the household pays for additional properties. For renters, housing consumption is identical to housing spending.

A discussion of the calculation of home value from the adjacent HRS core waves can be found in the data codebook section "2.17 Total Housing Consumption." Please note that consumption variables for 2015 are not calculated for RAND CAMS 2015 V2 because the imputation of these variables relies on HRS 2016 core data for house value and transportation value, which are not yet available. The next version of RAND CAMS will be published once the HRS 2016 early release data has been released, and will incorporate the CAMS 2015 consumption variables.

1.8 Variable Naming Conventions

Variable names in the RAND CAMS Spending Data follow the same consistent pattern of the RAND HRS. The first character indicates whether the variable refers to the reference person ("R"), spouse ("S"), or the household ("H"). In the case of CAMS, all variables refer to the household. The second character indicates the wave to which the variable pertains: "1", "2", "3", "4", "5", "6"', "7", "8", "9", "10","11","12", or "A". For CAMS data, the second character can be only "5" through "12 " as there are only eight waves of data, beginning with CAMS 2001, which is linked to HRS 2000. The third character is "C" to indicate that it is part of the CAMS survey, though there will be RAND HRS variables with a "C" in the third position as well. For most variables, the rest of the name

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[5]Source for 48-month new car loan interest rates: http://ww w.federalreserve.gov/releases/g19/HIST/cc_hist_tc_levels.html

[6]Source for mortgage interest and principal: http://www.bls.gov/cex/standard/yyyy/age.txt, where yyyy is the survey year

[7]Source for 30-year mortgage interest rate: http://www.federalreserve .gov/releases/h15/data.htm#fn16

refers to the type of spending or consumption ("TOT" for total, "DUR" for durables, "NDUR" for nondurables, "TRANS" for transportation, and "HOUS" for housing). The suffix for these variables is either "S" for spending or "C" for consumption. Please see section "1.7 Components of Household Spending and Consumption" for a discussion of spending versus consumption measures. Finally, an additional suffix of "F" generally indicates an imputation flag associated with the variable.

1.9 Cross-Wave Category Adjustments

CAMS 2001 and 2003 have fewer spending categories than later waves (see Table 1). Estimates of total spending across waves are therefore not comparable. We have investigated in the later waves what fraction of total spending is attributable on average to those categories that were not asked in the earlier CAMS waves. These estimates could be used, at least at the population level, to adjust total spending in the first two waves to facilitate cross-wave comparisons. The RAND CAMS does not include these adjusted measures, but we describe a possible adjustment methodology in this section. These adjustments cannot fully compensate for the cross-wave differences because they miss the heterogeneity in the missing categories. For research purposes that are sensitive to changes in spending at the household level, researchers should consider limiting their analyses to CAMS Waves 2005 onward.

CAMS 2003 adjustment
CAMS 2005 can be used to adjust the earlier waves at the population-level. The percentage of the total CAMS 2005 spending that comes from the new categories is used as the adjustment factor. For CAMS 2003, the percentage of total spending from furnishings in 2005 is the adjustment factor (1.64%).

CAMS 2001 adjustment
CAMS 2001 households need two adjustment factors: one for the four missing categories in the wave, and another to make up for the fact that the vehicle finance charges do not include payments of principal, as in the later CAMS waves. For those without vehicle finance charges, the adjustment factor is the percentage of total spending from housekeeping services, yard services, personal care and furnishings in CAMS 2005 (4.76%). For those with vehicle finance charges, the vehicle finance charge is increased to account for the missing principal payments. To calculate the adjustment, the mean positive CAMS 2003 car payment is divided by the mean positive CAMS 2001 vehicle finance charges (334.62%). Once vehicle finance charges are increased by 334.62%, the total of all of the spending categories can be adjusted by the 4.76% to make up for the remaining four missing categories.

1.10 Imputation and Cleaning of Spending Variables

For durable categories, the Respondent is asked to indicate whether the household purchased the item in the past 12 months, and, to the best of their ability, provide the purchase price. If the Respondent does not indicate whether their household purchased a durable good, it is assumed that there was no purchase and the purchase price is set to zero. For nondurable categories the Respondent is asked how much was spent in each category and is sometimes given the option, depending on the survey wave and category, of reporting the amount spent weekly, monthly, or yearly. For frequent categories, such as gasoline and food, Respondents are given the option of reporting all three periodicities, while less frequent categories such as mortgage and utilities are only given monthly or yearly options. These periodicities change from wave to wave. As a result, all amounts are annualized prior to further cleaning.

When a Respondent indicates that they spent no money on a category in the last 12 months, the missing amount is set to zero. Missing codes for Don't Know and Refused are recoded from 99998, 99999, etc. to missing.

After cleaning, each separate category is winsorized to make totals more robust to outliers. The bottom five positive values are set to the next highest (bottom sixth) value. Likewise, the top five values for a category are set to the next lowest (top sixth) value.

After winsorizing, we use mean imputations to handle the missing values in specific categories. Because item nonresponse is so low, total imputed spending is a small fraction of total estimated spending. The mean of all of the values per category is calculated (including winsorized and zero values) and this mean is used to impute any missing values.

Each aggregated spending variable has a flag indicating for each Respondent if any of its components were mean imputed, winsorized, or both.

1.11 Imputation of Auto Purchases

A Respondent can report up to three auto purchases per survey. If the Respondent does not indicate whether their household purchased an automobile, it is assumed that there was no auto purchase and the auto amounts are set to zero.

Auto values are subject to winsorization and imputation similar to other categories, but with a few notable differences. First, autos are divided into used and new car purchases. Imputation differs for the two categories, but both involve using the median instead of the mean, and the imputation happens prior to winsorization. For CAMS 2001, an auto is considered new if the model year is 2000, 2001 or 2002. In later CAMS waves there is an indicator for whether the car is new or not. In these waves, a car is considered new if the indicator flag equals yes and the model year is the survey year plus or minus one year (2002-2004 for CAMS 2003 autos for example). If the model year is missing, the car is considered used.

For used cars, the median imputation is done separately for the first, second, and third car purchase as the order of reporting impacts the median values. For new cars, all three auto values are pooled together regardless of the order in which they were reported. The median is calculated from the pooled sample and the missing values are imputed. Second, because ownership information is available, the median of only the positive auto amounts is used for the auto value imputation. After imputation, the three auto values are summed and subject to winsorization.

1.12 Imputation of Consumption Variables

Total consumption is the sum of the consumption of durables, nondurables, housing and transportation. Nondurables consumption is the same as nondurables spending, which is composed of categories that are subjected to mean imputation if a response is missing. Housing and transportation consumption require a response to an adjacent HRS core survey; otherwise, there will be no asset value reported for home or transportation (see "1.7 Components of Household Spending and Consumption"). Likewise, the calculation of durables consumption also requires an adjacent HRS survey response due to the covariates used to predict the probability of purchase in a particular wave (work status, number of household members, etc.). Therefore, additional imputations, beyond the mean imputations implemented for spending, are necessary for the consumption total and subtotals.

Consumption variables for 2015 are not calculated for RAND CAMS 2015 V2 because the imputation of these variables relies on HRS 2016 core data for house value and transportation value, which are not yet available. The next version of RAND CAMS will be published once the HRS 2016 early release data has been released, and will incorporate the CAMS 2015 consumption variables.

The method for imputation of these consumption values is to calculate the portion of total consumption that is derived from each component. These percentages are calculated using the sample of observations not requiring any imputation, called the sample of "complete" reporters, and are stratified by age and marital status. Furthermore, we also calculate separate percentages for homeowners (who may also be renters) and renters who

are not homeowners.

The consumption imputations can be divided into four types:

Type 1: Homeowners who have no asset reported in the HRS
Imputation is necessary for homeowners that report having a mortgage in CAMS but only responded to one adjacent HRS wave and their home value was reported as zero. We interpret the situation of this group to be those transitioning in or out of home ownership between HRS core surveys, but who owned a home at the time of the CAMS survey and thus require a positive value for home consumption. We calculate the percentage of total consumption derived from the rent equivalent for the sample of homeowners who are complete reporters. This percentage is used to impute a value for housing consumption.

Type 2: Homeowners without an adjacent HRS wave
For those homeowners without any adjacent HRS waves, imputations are necessary not only for housing consumption but also for durables and transportation consumption. We calculate the share of consumption derived from housing, durables and transportation consumption for our sample of homeowners who are complete reporters. These percentages are used to impute the missing component values.

Type 3: Renters without an adjacent HRS wave
For those renters without any adjacent HRS waves, imputations are necessary for durables and transportation consumption. Housing is not missing because it is equivalent to housing spending, which is subject to mean imputation at the category level. We calculate the share of consumption derived from durables and transportation consumption for the sample of renters who are complete reporters. These percentages are used to impute the missing component values.

Type 4: Respondents without rent or indication of home ownership
A small percentage of observations report no rent or mortgage in the CAMS survey, in addition to having zero home value in the adjacent HRS waves. For these Respondents, we assume that another party is covering their housing spending, but they still remain consumers of housing services. We calculate the share of consumption derived from housing for the sample of complete reporters (including both homeowners and renters). These percentages are used to impute the missing value of housing consumption.

2. Data Codebook

2.1 Respondent Identifier and Merging Instructions

Variable	Label	Type
HHIDPN	HHIDPN: HHold ID + Person Number /Num	Cont

Descriptive Statistics

Variable	N	Mean	Std Dev	Minimum	Maximum
HHIDPN	7117	270092869	263571600	10001010	923495010

How Constructed:

HHIDPN is the identification number of the CAMS survey Respondent. It is the numeric version of the person identifier found on all HRS files that identifies each Respondent uniquely. Please see the RAND HRS Data Documentation for more information on HHIDPN.

Three Respondents to CAMS Part B did not respond to any HRS core survey (HHIDPN=501992020, 501980010, and 500416010). Their spouses, however, did respond to an HRS survey for two of the three cases. For these observations, we use the spouse's HHIDPN so that these records can be merged to the HRS files. One case, HHIDPN=500416010, responded to CAMS 2005 and has a spouse who responded to an HRS survey, but has been dropped from the RAND CAMS dataset for two reasons. First, the Respondent claimed that his marital status was divorced in CAMS 2005, so switching to the spouse ID would be unwarranted as his marriage had dissolved and the spending data most likely did not represent the spouse. Second, this Respondent only gave one spending amount (drug purchases) out of all 32 categories, so he did not provide a complete spending report.

To merge the RAND CAMS with other HRS data sources, one may use HHIDPN. For instance, to merge the RAND CAMS to version P of the RAND HRS, you could use the following SAS code:

```
%include "[dir]\setuphrs.inc";
libname mylib "[name of folder to store your files]";

data mylib.newfile;
      merge randhrs.rndhrs_p (keep=HHIDPN [list of other variables])
            randcams.randcams_2001_2015v2;
      by HHIDPN;
```

2.2 Response Indicators

Wave	Variable	Label	Type
5	INCAMS01	INCAMS01: =1 if responded in 2001	Categ
6	INCAMS03	INCAMS03: =1 if responded in 2003	Categ
7	INCAMS05	INCAMS05: =1 if responded in 2005	Categ
8	INCAMS07	INCAMS07: =1 if responded in 2007	Categ
9	INCAMS09	INCAMS09: =1 if responded in 2009	Categ
10	INCAMS11	INCAMS11: =1 if responded in 2011	Categ
11	INCAMS13	INCAMS13: =1 if responded in 2013	Categ
12	INCAMS15	INCAMS15: =1 if responded in 2015	Categ
.			
5	INCAMSC5	INCAMSC5:In CAMS wave 5, as lined up with the HRS	Categ
6	INCAMSC6	INCAMSC6:In CAMS wave 6, as lined up with the HRS	Categ
7	INCAMSC7	INCAMSC7:In CAMS wave 7, as lined up with the HRS	Categ
8	INCAMSC8	INCAMSC8:In CAMS wave 8, as lined up with the HRS	Categ
9	INCAMSC9	INCAMSC9:In CAMS wave 9, as lined up with the HRS	Categ
10	INCAMSC10	INCAMSC10:In CAMS wave 10, as lined up with the HRS	Categ
11	INCAMSC11	INCAMSC11:In CAMS wave 11, as lined up with the HRS	Categ
12	INCAMSC12	INCAMSC12:In CAMS wave 12, as lined up with the HRS	Categ

Descriptive Statistics

Variable	N	Mean	Std Dev	Minimum	Maximum
INCAMS01	7117	0.543	0.498	0.000	1.000
INCAMS03	7117	0.457	0.498	0.000	1.000
INCAMS05	7117	0.545	0.498	0.000	1.000
INCAMS07	7117	0.525	0.499	0.000	1.000
INCAMS09	7117	0.504	0.500	0.000	1.000
INCAMS11	7117	0.614	0.487	0.000	1.000
INCAMS13	7117	0.571	0.495	0.000	1.000
INCAMS15	7117	0.525	0.499	0.000	1.000
INCAMSC5	7117	0.543	0.498	0.000	1.000
INCAMSC6	7117	0.457	0.498	0.000	1.000
INCAMSC7	7117	0.545	0.498	0.000	1.000
INCAMSC8	7117	0.525	0.499	0.000	1.000
INCAMSC9	7117	0.504	0.500	0.000	1.000
INCAMSC10	7117	0.614	0.487	0.000	1.000
INCAMSC11	7117	0.571	0.495	0.000	1.000
INCAMSC12	7117	0.525	0.499	0.000	1.000

Categorical Variable Codes

```
Value      INCAMS01  INCAMS03  INCAMS05  INCAMS07  INCAMS09  INCAMS11  INCAMS13  INCAMS15
0.nonresp      3251      3863      3238      3379      3530      2747      3050      3380
1.resp         3866      3254      3879      3738      3587      4370      4067      3737


Value      INCAMSC5  INCAMSC6  INCAMSC7  INCAMSC8  INCAMSC9 INCAMSC10 INCAMSC11 INCAMSC12
0.nonresp      3251      3863      3238      3379      3530      2747      3050      3380
1.resp         3866      3254      3879      3738      3587      4370      4067      3737
```

How Constructed:

The INCAMS variables indicate whether an individual responded to Part B of the CAMS Survey in a particular year. Respondents have the opportunity to respond to multiple CAMS surveys, and all survey results are added to the individual's record.

2.3 Sample Indicators

Wave	Variable	Label	Type
5	H5CNCAT	H5CNCAT: W5 Number of non-missing spending categories	Cont
6	H6CNCAT	H6CNCAT: W6 Number of non-missing spending categories	Cont
7	H7CNCAT	H7CNCAT: W7 Number of non-missing spending categories	Cont
8	H8CNCAT	H8CNCAT: W8 Number of non-missing spending categories	Cont
9	H9CNCAT	H9CNCAT: W9 Number of non-missing spending categories	Cont
10	H10CNCAT	H10CNCAT: W10 Number of non-missing spending categories	Cont
11	H11CNCAT	H11CNCAT: W11 Number of non-missing spending categories	Cont
12	H12CNCAT	H12CNCAT: W12 Number of non-missing spending categories	Cont
5	H5C10REP	H5C10REP: W5 Responded to 10+ spending section questions	Categ
6	H6C10REP	H6C10REP: W6 Responded to 10+ spending section questions	Categ
7	H7C10REP	H7C10REP: W7 Responded to 10+ spending section questions	Categ
8	H8C10REP	H8C10REP: W8 Responded to 10+ spending section questions	Categ
9	H9C10REP	H9C10REP: W9 Responded to 10+ spending section questions	Categ
10	H10C10REP	H10C10REP: W10 Responded to 10+ spending section questions	Categ
11	H11C10REP	H11C10REP: W11 Responded to 10+ spending section questions	Categ
12	H12C10REP	H12C10REP: W12 Responded to 10+ spending section questions	Categ

Descriptive Statistics

Variable	N	Mean	Std Dev	Minimum	Maximum
H5CNCAT	3866	29.819	4.853	0.000	32.000
H6CNCAT	3254	35.959	4.843	0.000	38.000
H7CNCAT	3879	36.804	5.252	0.000	39.000
H8CNCAT	3738	37.068	4.822	0.000	39.000
H9CNCAT	3587	37.281	4.701	0.000	39.000
H10CNCAT	4370	37.173	4.943	0.000	39.000
H11CNCAT	4067	36.930	5.287	0.000	39.000
H12CNCAT	3737	37.279	4.951	0.000	39.000
H5C10REP	3866	0.980	0.140	0.000	1.000
H6C10REP	3254	0.991	0.096	0.000	1.000
H7C10REP	3879	0.988	0.109	0.000	1.000
H8C10REP	3738	0.991	0.095	0.000	1.000
H9C10REP	3587	0.990	0.101	0.000	1.000
H10C10REP	4370	0.988	0.107	0.000	1.000
H11C10REP	4067	0.988	0.110	0.000	1.000
H12C10REP	3737	0.987	0.113	0.000	1.000

Categorical Variable Codes

```
Value                      H5C10REP  H6C10REP  H7C10REP  H8C10REP  H9C10REP H10C10REP H11C10REP H12C10REP
0. Resp to <10 spending Qs       77        30        47        34        37        51        50        48
1. Resp to 10+ spending Qs     3789      3224      3832      3704      3550      4319      4017      3689
```

How Constructed:

Beginning with version 2015 V1, the RAND CAMS totals are now only derived for those observations who have given non-missing values for at least ten spending categories. The variable HwCNCAT indicates the number of non-missing values given by the Respondent for spending categories in Part B in a particular wave. The variable HwC10REP is a binary variable indicating whether the Respondent has given non-missing values for ten or more spending categories. Those Respondents who gave non-missing values for less than ten spending categories have a missing value of .T for all spending and consumption measures.

2.4 HRS Core Status

Wave	Variable	Label	Type
5	H5CHRSCOREF	H5CHRSCOREF:W5 CAMSFlag: HRS Core Status	Categ
6	H6CHRSCOREF	H6CHRSCOREF:W6 CAMSFlag: HRS Core Status	Categ
7	H7CHRSCOREF	H7CHRSCOREF:W7 CAMSFlag: HRS Core Status	Categ
8	H8CHRSCOREF	H8CHRSCOREF:W8 CAMSFlag: HRS Core Status	Categ
9	H9CHRSCOREF	H9CHRSCOREF:W9 CAMSFlag: HRS Core Status	Categ
10	H10CHRSCOREF	H10CHRSCOREF:W10 CAMSFlag: HRS Core Status	Categ
11	H11CHRSCOREF	H11CHRSCOREF:W11 CAMSFlag: HRS Core Status	Categ
12	H12CHRSCOREF	H12CHRSCOREF:W12 CAMSFlag: HRS Core Status	Categ

Descriptive Statistics

Variable	N	Mean	Std Dev	Minimum	Maximum
H5CHRSCOREF	3866	2.915	0.404	1.000	3.000
H6CHRSCOREF	3254	2.934	0.358	1.000	3.000
H7CHRSCOREF	3879	2.884	0.479	0.000	3.000
H8CHRSCOREF	3738	2.874	0.508	0.000	3.000
H9CHRSCOREF	3587	2.851	0.546	0.000	3.000
H10CHRSCOREF	4370	2.894	0.463	0.000	3.000
H11CHRSCOREF	4067	2.883	0.479	0.000	3.000
H12CHRSCOREF	3737	0.985	0.123	0.000	1.000

Categorical Variable Codes

Value	H5CHRSCOREF	H6CHRSCOREF	H7CHRSCOREF	H8CHRSCOREF	H9CHRSCOREF	H10CHRSCOREF	H11CHRSCOREF	H12CHRSCOREF
0. No adjacent HRS wv			31	43	39	32	23	57
1. In prev HRS wv only	165	108	154	148	190	166	187	3680
2. In foll HRS wv only			48	45	38	34	32	
3. In prev/foll HRS wv	3701	3146	3646	3502	3320	4138	3825	

How Constructed:

These variables indicate which adjacent HRS core surveys were responded to by the CAMS Respondents. They are created using the HRS Core Survey response indicator flag INW.

The adjacent core HRS surveys are used in the calculation of CAMS household consumption. Without the data for an adjacent HRS survey, these variables must be imputed. Please see section "1.12 Imputation of Consumption Variables" for more information.

RAND HRS Ver P Variables Used

```
INW5: =1 if Respondent W5
INW6: =1 if Respondent W6
INW7: =1 if Respondent W7
INW8: =1 if Respondent W8
INW9: =1 if Respondent W9
INW10: =1 if Respondent W10
INW11: =1 if Respondent W11
INW12: =1 if Respondent W12
```

2.5 Analysis Weights

Wave	Variable	Label	Type
5	H5CWGTHH	H5CWGTHH: CAMS Household Analysis Weight	Cont
6	H6CWGTHH	H6CWGTHH: CAMS Household Analysis Weight	Cont
7	H7CWGTHH	H7CWGTHH: CAMS Household Analysis Weight	Cont
8	H8CWGTHH	H8CWGTHH: CAMS Household Analysis Weight	Cont
9	H9CWGTHH	H9CWGTHH: CAMS Household Analysis Weight	Cont
10	H10CWGTHH	H10CWGTHH: CAMS Household Analysis Weight	Cont
11	H11CWGTHH	H11CWGTHH: CAMS Household Analysis Weight	Cont
12	H12CWGTHH	H12CWGTHH: CAMS Household Analysis Weight	Cont
5	H5CWGTR	H5CWGTR: CAMS Respondent Analysis Weight	Cont
6	H6CWGTR	H6CWGTR: CAMS Respondent Analysis Weight	Cont
7	H7CWGTR	H7CWGTR: CAMS Respondent Analysis Weight	Cont
8	H8CWGTR	H8CWGTR: CAMS Respondent Analysis Weight	Cont
9	H9CWGTR	H9CWGTR: CAMS Respondent Analysis Weight	Cont
10	H10CWGTR	H10CWGTR: CAMS Respondent Analysis Weight	Cont
11	H11CWGTR	H11CWGTR: CAMS Respondent Analysis Weight	Cont
12	H12CWGTR	H12CWGTR: CAMS Respondent Analysis Weight	Cont

Descriptive Statistics

Variable	N	Mean	Std Dev	Minimum	Maximum
H5CWGTHH	3866	11456.03	5969.080	0.000	42366.00
H6CWGTHH	3254	13216.75	7386.338	0.000	55578.00
H7CWGTHH	3879	13478.52	8013.483	0.000	49161.00
H8CWGTHH	3738	13411.27	8051.825	0.000	52185.00
H9CWGTHH	3587	13361.10	8056.806	0.000	53117.00
H10CWGTHH	4365	14196.53	10000.06	0.000	48654.00
H11CWGTHH	4067	14647.30	10473.79	0.000	59632.00
H12CWGTHH	3641	15662.89	10995.74	2572.622	52493.01
H5CWGTR	3866	16654.57	10611.26	0.000	70465.00
H6CWGTR	3254	19068.42	12245.26	0.000	79927.00
H7CWGTR	3879	13955.16	8966.903	0.000	40296.00
H8CWGTR	3738	13928.38	9099.980	0.000	42042.00
H9CWGTR	3587	13873.01	8971.163	0.000	41708.00
H10CWGTR	4365	14677.67	10949.16	0.000	49477.00
H11CWGTR	4067	15249.04	11423.81	0.000	53603.00
H12CWGTR	3520	16963.48	11932.89	3309.389	60087.67

How Constructed:

There are two sample weights for each wave of CAMS, a household-level weight and a respondent-level weight. These weights are non-missing if the observation responded to the spending section of the CAMS survey (Part B) in a particular year. The household weight should be used for analyses of items that are measured at the household level in the survey, namely questions about household spending. In every wave of CAMS, the household questions are asked of only one Respondent in coupled households; this person is designated as the primary CAMS Respondent and the assignment was retained across waves as long as the couple remained intact. The respondent weight should be used for analyses of respondent level items available from the core data.

The CAMS household weight is the product of the prior core wave household weight and a non-response adjustment factor. The non-response adjustment factor was obtained from a propensity model predicting the probability of completing the CAMS questionnaire among those selected and eligible to participate. The propensity model was estimated by logistic regression and weighted by the prior wave core household weight. Predictor variables included age (of oldest spouse, if coupled), education (of highest educated spouse, if coupled), race, ethnicity, coupleness, self-rated health, cognition, difficulty managing money, total assets, total income, home ownership, and ownership of a second residence. All of these measures were taken from the prior core wave or, if missing, the closest non-missing prior core wave. The inverse of the fitted probability of CAMS completion formed the non-response adjustment factor. As a final step, the weights were post-stratified to match the prior wave core weighted household sample size and composition by age, gender, and coupleness status.

The CAMS respondent weight followed a similar procedure as the household weight. It is the product of the prior core wave respondent weight and a non-response adjustment factor. The same propensity model was used to obtain the non-respondent adjustment factor, based on individual level characteristics (e.g., own age and own education) and weighted by the prior wave core respondent weight. As a last step, the CAMS Respondent weight was post-stratified to match the prior wave core weighted respondent sample size and composition by age, gender, and coupleness status.

Two Respondents to CAMS Part B did not respond to any HRS core survey (HHIDPN=501992020 and 501980010). For these observations, we use the spouse's HHIDPN so that these records can be merged to the HRS files. Because their spouses did not respond to the full CAMS survey, the respondent-level weight assigned to them is zero. Therefore, for these cases, respondent-level weights are imputed with the household-level weight.

CAMS Variables Used

```
CAMS 2001:
    CAMS01WGTHH      Household weight
    CAMS01WGTR       Respondent weight



CAMS 2003:
    CAMS03WGTHH      Household weight
    CAMS03WGTR       Respondent weight



CAMS 2005:
    CAMS05WGTHH      Household weight
    CAMS05WGTR       Respondent weight
```

```
CAMS 2007:
    CAMS07WGTHH      Household weight
    CAMS07WGTR       Respondent weight


CAMS 2009:
    CAMS09WGTHH      Household weight
    CAMS09WGTR       Respondent weight


CAMS 2011:
    CAMS11WGTHH      Household weight
    CAMS11WGTR       Respondent weight


CAMS 2013:
    CAMS13WGTHH      Household weight
    CAMS13WGTR       Respondent weight


CAMS 2015:
    CAMS15WGTHH      Household weight
    CAMS15WGTR       Respondent weight
```

2.6 CAMS Current Marital Status

```
Wave    Variable                    Label                       Type

   5    H5CMSTAT    H5CMSTAT: W5 CAMS R Current Marital Status    Categ
   6    H6CMSTAT    H6CMSTAT: W6 CAMS R Current Marital Status    Categ
   7    H7CMSTAT    H7CMSTAT: W7 CAMS R Current Marital Status    Categ
   8    H8CMSTAT    H8CMSTAT: W8 CAMS R Current Marital Status    Categ
   9    H9CMSTAT    H9CMSTAT: W9 CAMS R Current Marital Status    Categ
  10    H10CMSTAT   H10CMSTAT: W10 CAMS R Current Marital Status  Categ
  11    H11CMSTAT   H11CMSTAT: W11 CAMS R Current Marital Status  Categ
  12    H12CMSTAT   H12CMSTAT: W12 CAMS R Current Marital Status  Categ
```

Descriptive Statistics

```
Variable       N       Mean    Std Dev    Minimum    Maximum

H5CMSTAT      3789     2.739     1.901      1.000      7.000
H6CMSTAT      3194     2.661     1.890      1.000      7.000
H7CMSTAT      3739     2.776     1.897      1.000      7.000
H8CMSTAT      3624     2.843     1.901      1.000      7.000
H9CMSTAT      3338     2.926     1.936      1.000      7.000
H10CMSTAT     4079     2.902     1.922      1.000      7.000
H11CMSTAT     3901     2.976     1.925      1.000      7.000
H12CMSTAT     3385     3.053     1.929      1.000      7.000
```

Categorical Variable Codes

Value	H5CMSTAT	H6CMSTAT	H7CMSTAT	H8CMSTAT	H9CMSTAT	H10CMSTAT	H11CMSTAT	H12CMSTAT
Missing	77	60	140	114	249	291	166	352
1. married	1956	1710	1868	1746	1546	1875	1713	1427
2. living with partner	93	90	118	114	117	168	174	140
3. separated	74	49	69	64	61	95	105	92
4. divorced	472	385	526	537	501	704	641	590
5. widowed	1044	841	998	999	928	929	971	856
6. never married	145	115	146	153	136	274	264	248
7. other	5	4	14	11	49	34	33	32

How Constructed:

This variable is created using the current marital status reported in Part C of the CAMS survey.

CAMS Variables Used

```
CAMS 2001:
    C1_01           C1. MARITAL STATUS


CAMS 2003:
    C1_03           C1. MARITAL STATUS


CAMS 2005:
    C1_05           C1. MARITAL STATUS


CAMS 2007:
    C2_07           C2. MARITAL STATUS


CAMS 2009:
    C2_09           C2. MARITAL STATUS


CAMS 2011:
    C2_11           C2. MARITAL STATUS
```

```
CAMS 2013:
    C2_13              C2. MARITAL STATUS



CAMS 2015:
    C2_15              C2. MARITAL STATUS
```

2.7 Total Household Spending

Wave	Variable	Label	Type
5	H5CTOTS	H5CTOTS:W5 CAMS: Total HHold Spending	Cont
6	H6CTOTS	H6CTOTS:W6 CAMS: Total HHold Spending	Cont
7	H7CTOTS	H7CTOTS:W7 CAMS: Total HHold Spending	Cont
8	H8CTOTS	H8CTOTS:W8 CAMS: Total HHold Spending	Cont
9	H9CTOTS	H9CTOTS:W9 CAMS: Total HHold Spending	Cont
10	H10CTOTS	H10CTOTS:W10 CAMS: Total HHold Spending	Cont
11	H11CTOTS	H11CTOTS:W11 CAMS: Total HHold Spending	Cont
12	H12CTOTS	H12CTOTS:W12 CAMS: Total HHold Spending	Cont
5	H5CTOTSF	H5CTOTSF:W5 CAMSFlag: Total HHold Spending	Categ
6	H6CTOTSF	H6CTOTSF:W6 CAMSFlag: Total HHold Spending	Categ
7	H7CTOTSF	H7CTOTSF:W7 CAMSFlag: Total HHold Spending	Categ
8	H8CTOTSF	H8CTOTSF:W8 CAMSFlag: Total HHold Spending	Categ
9	H9CTOTSF	H9CTOTSF:W9 CAMSFlag: Total HHold Spending	Categ
10	H10CTOTSF	H10CTOTSF:W10 CAMSFlag: Total HHold Spending	Categ
11	H11CTOTSF	H11CTOTSF:W11 CAMSFlag: Total HHold Spending	Categ
12	H12CTOTSF	H12CTOTSF:W12 CAMSFlag: Total HHold Spending	Categ

Descriptive Statistics

Variable	N	Mean	Std Dev	Minimum	Maximum
H5CTOTS	3789	37637.62	32657.79	0.000	414585.0
H6CTOTS	3224	41007.02	33410.62	0.000	362307.0
H7CTOTS	3832	39954.12	32522.86	0.000	343736.0
H8CTOTS	3704	40921.52	32310.92	0.000	429586.0
H9CTOTS	3550	38587.27	28111.82	0.000	219766.0
H10CTOTS	4319	40277.93	31162.99	0.000	317372.0
H11CTOTS	4017	41094.03	32849.14	0.000	369772.0
H12CTOTS	3689	42853.07	35977.00	0.000	378310.0
H5CTOTSF	3789	1.107	1.287	0.000	4.000
H6CTOTSF	3224	1.162	1.321	0.000	4.000
H7CTOTSF	3832	1.167	1.346	0.000	4.000
H8CTOTSF	3704	0.968	1.232	0.000	4.000
H9CTOTSF	3550	0.971	1.210	0.000	4.000
H10CTOTSF	4319	0.967	1.204	0.000	4.000
H11CTOTSF	4017	0.965	1.234	0.000	4.000
H12CTOTSF	3689	0.907	1.197	0.000	4.000

Categorical Variable Codes

Value	H5CTOTSF	H6CTOTSF	H7CTOTSF	H8CTOTSF	H9CTOTSF	H10CTOTSF	H11CTOTSF	H12CTOTSF
.T Resp <10 cat	77	30	47	34	37	51	50	48
0. no winsor or imp	1978	1620	1957	2096	1978	2422	2292	2167
1. winsor only	108	148	158	177	161	157	151	158
2. mean/median imp only	1324	1056	1202	1113	1154	1436	1258	1107
3. zero imp only	79	113	149	89	50	67	55	55
4. imp & winsor	300	287	366	229	207	237	261	202

General Comments:

Spending measures are reported in nominal dollars. When a spending component is missing it is imputed using the method described in the section titled "1.10 Imputation and Cleaning of Spending Variables." The categories included in total spending differ across waves due to changes in the survey items. These differences are discussed in more detail in the "1.5 Difference Across Waves" section earlier in this document.

Generally, Wave 5 questions ask about 2001 spending, Wave 6 asks about 2003 spending, and so forth until Wave 12 which asks about 2015 spending.

The spending components are summed to create the total spending measures. A flag indicates whether any of its components were imputed or winsorized. CAMS spending measures are reported at the household level. The CAMS Respondent reports spending for all members of his/her household.

How Constructed:

HwCTOTS is the sum of all of the spending in the household, including durables, nondurables, transportation and housing spending. The spending categories vary by wave. Please see Table 1 for details of which categories are available in each wave. Mortgage payments include only interest. Please refer to "1.6 Spending versus Consumption" for details.

HwCTOTSF is a flag that indicates whether any components are imputed or winsorized. Please see "1.10 Imputation and Cleaning of Spending Variables" for more information.

Cross Wave Differences in Original CAMS Data

The CAMS 2001 and CAMS 2003 surveys asked fewer spending categories than in the later waves (see "1.5 Differences Across Waves." One method for adjusting 2001 and 2003 spending totals is detailed in "1.9 Cross-Wave Category Adjustments."

CAMS Variables Used

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CAMS 2001:
    B1_01           B1. PURCHASE/LEASE AUTO
    B1A_3_01        B1A_3. AUTO YEAR - 1
    B1A_4_01        B1A_4. AUTO PRICE - 1
    B1B_3_01        B1B_3. AUTO YEAR - 2
    B1B_4_01        B1B_4. AUTO PRICE - 2
    B1C_3_01        B1C_3. AUTO YEAR - 3
    B1C_4_01        B1C_4. AUTO PRICE - 3
    B2_01           B2. BUY REFRIGERATOR
    B2A_01          B2A. REFRIGERATOR PRICE
    B3_01           B3. BUY WASHER/DRYER
    B3A_01          B3A. WASHER/DRYER PRICE
    B4_01           B4. BUY DISWASHER
    B4A_01          B4A. DISHWASHER PRICE
    B5_01           B5. BUY TELEVISION
    B5A_01          B5A. TELEVISION PRICE
    B6_01           B6. BUY COMPUTER
    B6A_01          B6A. COMPUTER PRICE
    B7_01           B7. MORTGAGE
    B7A_01          B7A. MORTAGAGE - PER
    B8_01           B8. HOME/RENT INS.
    B8A_01          B8A. HOME/RENT INS - PER
    B9_01           B9. PROPERTY TAX
    B9A_01          B9A. PROPERTY TAX - PER
    B10_01          B10. RENT
    B10A_01         B10A. RENT - PER
    B11_01          B11. ELECTRICITY
    B11A_01         B11A. ELECTRICITY - PER
    B12_01          B12. WATER
    B12A_01         B12A. WATER - PER
    B13_01          B13. HEAT
    B13A_01         B13A. HEAT - PER
    B14_01          B14. PHONE/CABLE/INTERNET
    B14A_01         B14A. PHONE/CABLE - PER
    B15_01          B15. AUTO FINANCE CHRG
    B15A_01         B15A. AUTO FINANCE - PER
    B16_01          B16. AUTO INSURANCE
    B16A_01         B16A. AUTO INSUR - PER
    B17_01          B17. HEALTH INSURANCE
    B17A_01         B17A. HEALTH INSUR - PER
    B18_01          B18.  HOUSE/YARD SUPPLIES
    B18A_01         B18A. HOUSE/YARD - PER
    B19_01          B19. HOME MAINTAIN
    B19A_01         B19A. HOME MAINTAIN - PER
    B20A_01         B20. FOOD/DRINK GROC - PER
    B20_01          B20. FOOD/DRINK GROCERY
    B21_01          B21. DINING OUT
    B21A_01         B21A. DINING OUT - PER
    B22_01          B22. CLOTHING
    B22A_01         B22A. CLOTHING - PER
    B23_01          B23. GASOLINE
    B23A_01         B23A. GASOLINE - PER
    B24_01          B24. VEHICLE SERVICE
    B24A_01         B24A. VEHICLE SERVICE - PER
    B25_01          B25. DRUGS
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    B25A_01         B25A. DRUGS - PER
    B26_01          B26. HEALTH SERVICES
    B26A_01         B26A. HEALTH SERVICES - PER
    B27_01          B27. MEDICAL SUPPLIES
    B27A_01         B27A. MED SUPPLIES - PER
    B28_01          B28. VACATIONS
    B28A_01         B28A. VACATIONS - PER
    B29_01          B29. TICKETS
    B29A_01         B29A. TICKETS - PER
    B30_01          B30. HOBBIES
    B30A_01         B30A. HOBBIES - PER
    B31_01          B31. CONTRIBUTIONS
    B31A_01         B31A. CONTRIBUTIONS - PER
    B32_01          B32. GIFTS
    B32A_01         B32A. GIFTS - PER


CAMS 2003:
    B1_03           B1. PURCHASE/LEASE AUTO
    B1A3_03         B1A3. AUTO YEAR - 1
    B1A4_03         B1A4. AUTO PRICE - 1
    B1A5_03         B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_03         B1B3. AUTO YEAR - 2
    B1B4_03         B1B4. AUTO PRICE - 2
    B1B5_03         B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_03         B1C3. AUTO YEAR - 3
    B1C4_03         B1C4. AUTO PRICE - 3
    B1C5_03         B1C5. AUTO/TRUCK NEW OR USED - 3
    B2_03           B2. BUY REFRIGERATOR
    B2A_03          B2A. REFRIGERATOR PRICE
    B3_03           B3. BUY WASHER/DRYER
    B3A_03          B3A. WASHER/DRYER PRICE
    B4_03           B4. BUY DISWASHER
    B4A_03          B4A. DISHWASHER PRICE
    B5_03           B5. BUY TELEVISION
    B5A_03          B5A. TELEVISION PRICE
    B6_03           B6. BUY COMPUTER
    B6A_03          B6A. COMPUTER PRICE
    B7_03           B7. HOME/RENTERS INSURANCE
    B8_03           B8. PROPERTY TAXES
    B9_03           B9. VEHICLE INSURANCE
    B10_03          B10. VEHICLE MAINTENANCE
    B11_03          B11. HEALTH INSURANCE
    B12_03          B12. TRIPS AND VACATIONS
    B13_03          B13. MORTGAGE
    B13A_03         B13A. MORTAGAGE - PER
    B14_03          B14. RENT
    B14A_03         B14A. RENT - PER
    B15_03          B15. ELECTRICITY
    B15A_03         B15A. ELECTRICITY - PER
    B16_03          B16. WATER
    B16A_03         B16A. WATER - PER
    B17_03          B17. HEAT
    B17A_03         B17A. HEAT - PER
    B18_03          B18. PHONE/CABLE/INTERNET
    B18A_03         B18A. PHONE/CABLE - PER
    B19_03          B19. CAR PAYMENTS INTEREST/PRINCIPAL
    B19A_03         B19A. CAR PAYMENTS - PER
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B20_03          B20. HOUSEKEEPING SUPPLIES
B20A_03         B20A. HOUSEKEEPING SUPPLIES - PER
B21_03          B21. HOUSEKEEPING SERVICES
B21A_03         B21A. HOUSEKEEPING SERVICES - PER
B22_03          B22.GARDENING/YARD SUPPLIES
B22A_03         B22A. GARDEN/YARD SUPPLIES - PER
B23_03          B23. GARDEN/YARD SERVICES
B23A_03         B23A. GARDEN/YARD SERVICES - PER
B24_03          B24. HOME REPAIRS/MAINTENANCE DIY
B24A_03         B24A. HOME REPAIRS/MAINTENANCE DIY - PER
B25_03          B25. HOME REPAIRS/MAINTENANCE SERVICES
B25A_03         B25A. HOME REPAIRS/MAINTENANCE SERVICE - PER
B26_03          B26. CLOTHING AND APPAREL
B26A_03         B26A. CLOTHING - PER
B27_03          B27. PERSONAL CARE PRODUCTS/SERVICES
B27A_03         B27A. PERSONAL CARE PRODUCTS/SERVICES - PER
B28_03          B28. DRUGS
B28A_03         B28A. DRUGS - PER
B29_03          B29. HEALTH SERVICES
B29A_03         B29A. HEALTH SERVICES - PER
B30_03          B30. MEDICAL SUPPLIES
B30A_03         B30A. MED SUPPLIES - PER
B31_03          B31. TICKETS
B31A_03         B31A. TICKETS - PER
B32_03          B32. SPORTS EQUIPMENT
B32A_03         B32A. SPORTS EQUIPMENT - PER
B33_03          B33. HOBBIES/LEISURE EQUIPMENT
B33A_03         B33A. HOBBIES/LEISURE EQUIPMENT - PER
B34_03          B34. CONTRIBUTIONS
B34A_03         B34A. CONTRIBUTIONS - PER
B35_03          B35. GIFTS
B35A_03         B35A. GIFTS - PER
B36A_03         B36. FOOD/DRINK GROC - PER
B36_03          B36. FOOD/DRINK GROCERY
B37_03          B37. DINING OUT
B37A_03         B37A. DINING OUT - PER
B38_03          B38. GASOLINE
B38A_03         B38A. GASOLINE - PER


CAMS 2005:
B1_05           B1. PURCHASE/LEASE AUTO
B1A3_05         B1A3. AUTO YEAR - 1
B1A4_05         B1A4. AUTO PRICE - 1
B1A5_05         B1A5. AUTO/TRUCK NEW OR USED - 1
B1B3_05         B1B3. AUTO YEAR - 2
B1B4_05         B1B4. AUTO PRICE - 2
B1B5_05         B1B5. AUTO/TRUCK NEW OR USED - 2
B1C3_05         B1C3. AUTO YEAR - 3
B1C4_05         B1C4. AUTO PRICE - 3
B1C5_05         B1C5. AUTO/TRUCK NEW OR USED - 3
B2_05           B2. BUY REFRIGERATOR
B2A_05          B2A. REFRIGERATOR PRICE
B3_05           B3. BUY WASHER/DRYER
B3A_05          B3A. WASHER/DRYER PRICE
B4_05           B4. BUY DISWASHER
B4A_05          B4A. DISHWASHER PRICE
B5_05           B5. BUY TELEVISION
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B5A_05          B5A. TELEVISION PRICE
B6_05           B6. BUY COMPUTER
B6A_05          B6A. COMPUTER PRICE
B7_05           B7. HOME/RENTERS INSURANCE
B8_05           B8. PROPERTY TAXES
B9_05           B9. VEHICLE INSURANCE
B10_05          B10. VEHICLE MAINTENANCE
B11_05          B11. HEALTH INSURANCE
B12_05          B12. TRIPS AND VACATIONS
B13_05          B13. HOME REPAIRS/MAINTENANCE DIY
B14_05          B14. HOME REPAIRS/MAINTENANCE SERVICES
B15_05          B15. HOUSEHOLD FURNISHINGS AND EQUIPMENT
B16_05          B16. CONTRIBUTIONS
B17_05          B17. GIFTS
B18_05          B18. MORTGAGE
B18A_05         B18A. MORTAGAGE - PER
B19_05          B19. RENT
B19A_05         B19A. RENT - PER
B20_05          B20. ELECTRICITY
B20A_05         B20A. ELECTRICITY - PER
B21_05          B21. WATER
B21A_05         B21A. WATER - PER
B22_05          B22. HEAT
B22A_05         B22A. HEAT - PER
B23_05          B23. PHONE/CABLE/INTERNET
B23A_05         B23A. PHONE/CABLE - PER
B24_05          B24. CAR PAYMENTS INTEREST/PRINCIPAL
B24A_05         B24A. CAR PAYMENTS - PER
B25_05          B25. HOUSEKEEPING SUPPLIES
B25A_05         B25A. HOUSEKEEPING SUPPLIES - PER
B26_05          B26. HOUSEKEEPING SERVICES
B26A_05         B26A. HOUSEKEEPING SERVICES - PER
B27_05          B27.GARDENING/YARD SUPPLIES
B27A_05         B27A. GARDEN/YARD SUPPLIES - PER
B28_05          B28. GARDEN/YARD SERVICES
B28A_05         B28A. GARDEN/YARD SERVICES - PER
B29_05          B29. CLOTHING AND APPAREL
B29A_05         B29A. CLOTHING - PER
B30_05          B30. PERSONAL CARE PRODUCTS/SERVICES
B30A_05         B30A. PERSONAL CARE PROD/SERVICES - PER
B31_05          B31. DRUGS OOP
B31A_05         B31A. DRUGS OOP - PER
B32_05          B32. HEALTH SERVICES
B32A_05         B32A. HEALTH SERVICES - PER
B33_05          B33. MEDICAL SUPPLIES
B33A_05         B33A. MED SUPPLIES - PER
B34_05          B34. TICKETS
B34A_05         B34A. TICKETS - PER
B35_05          B35. SPORTS EQUIPMENT
B35A_05         B35A. SPORTS EQUIPMENT - PER
B36_05          B36. HOBBIES/LEISURE EQUIPMENT
B36A_05         B36A. HOBBIES/LEISURE EQUIPMENT - PER
B37_05          B37. FOOD/DRINK GROCERY
B37A_05         B37A. FOOD/DRINK GROC - PER
B38_05          B38. DINING OUT
B38A_05         B38A. DINING OUT - PER
B39_05          B39. GASOLINE
B39A_05         B39A. GASOLINE - PER
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CAMS 2007:
    B1_07           B1. PURCHASE/LEASE AUTO
    B1A3_07         B1A3. AUTO YEAR - 1
    B1A4_07         B1A4. AUTO PRICE - 1
    B1A5_07         B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_07         B1B3. AUTO YEAR - 2
    B1B4_07         B1B4. AUTO PRICE - 2
    B1B5_07         B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_07         B1C3. AUTO YEAR - 3
    B1C4_07         B1C4. AUTO PRICE - 3
    B1C5_07         B1C5. AUTO/TRUCK NEW OR USED - 3
    B2_07           B2. BUY REFRIGERATOR
    B2A_07          B2A. REFRIGERATOR PRICE
    B3_07           B3. BUY WASHER/DRYER
    B3A_07          B3A. WASHER/DRYER PRICE
    B4_07           B4. BUY DISWASHER
    B4A_07          B4A. DISHWASHER PRICE
    B5_07           B5. BUY TELEVISION
    B5A_07          B5A. TELEVISION PRICE
    B6_07           B6. BUY COMPUTER
    B6A_07          B6A. COMPUTER PRICE
    B7_07           B7. HOME/RENTERS INSURANCE
    B8_07           B8. PROPERTY TAXES
    B9_07           B9. VEHICLE INSURANCE
    B10_07          B10. VEHICLE MAINTENANCE
    B11_07          B11. HEALTH INSURANCE
    B12_07          B12. TRIPS AND VACATIONS
    B13_07          B13. HOME REPAIRS/MAINTENANCE DIY
    B14_07          B14. HOME REPAIRS/MAINTENANCE SERVICES
    B15_07          B15. HOUSEHOLD FURNISHINGS AND EQUIPMENT
    B16_07          B16. CONTRIBUTIONS
    B17_07          B17. GIFTS
    B18_07          B18. MORTGAGE
    B18A_07         B18A. MORTAGAGE - PER
    B19_07          B19. RENT
    B19A_07         B19A. RENT - PER
    B20_07          B20. ELECTRICITY
    B20A_07         B20A. ELECTRICITY - PER
    B21_07          B21. WATER
    B21A_07         B21A. WATER - PER
    B22_07          B22. HEAT
    B22A_07         B22A. HEAT - PER
    B23_07          B23. PHONE/CABLE/INTERNET
    B23A_07         B23A. PHONE/CABLE - PER
    B24_07          B24. CAR PAYMENTS INTEREST/PRINCIPAL
    B24A_07         B24A. CAR PAYMENTS - PER
    B25_07          B25. HOUSEKEEPING SUPPLIES
    B25A_07         B25A. HOUSEKEEPING SUPPLIES - PER
    B26_07          B26. HOUSEKEEPING SERVICES
    B26A_07         B26A. HOUSEKEEPING SERVICES - PER
    B27_07          B27. GARDENING/YARD SUPPLIES
    B27A_07         B27A. GARDEN/YARD SUPPLIES - PER
    B28_07          B28. GARDEN/YARD SERVICES
    B28A_07         B28A. GARDEN/YARD SERVICES - PER
    B29_07          B29. CLOTHING AND APPAREL
    B29A_07         B29A. CLOTHING - PER
    B30_07          B30. PERSONAL CARE PRODUCTS/SERVICES
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    B30A_07          B30A. PERSONAL CARE PROD/SERVICES - PER
    B31_07           B31. DRUGS OOP
    B31A_07          B31A. DRUGS OOP - PER
    B32_07           B32. HEALTH SERVICES
    B32A_07          B32A. HEALTH SERVICES - PER
    B33_07           B33. MEDICAL SUPPLIES
    B33A_07          B33A. MED SUPPLIES - PER
    B34_07           B34. TICKETS
    B34A_07          B34A. TICKETS - PER
    B35_07           B35. SPORTS EQUIPMENT
    B35A_07          B35A. SPORTS EQUIPMENT - PER
    B36_07           B36. HOBBIES/LEISURE EQUIPMENT
    B36A_07          B36A. HOBBIES/LEISURE EQUIPMENT - PER
    B37_07           B37. FOOD/DRINK GROCERY
    B37A_07          B37A. FOOD/DRINK GROC - PER
    B38_07           B38. DINING OUT
    B38A_07          B38A. DINING OUT - PER
    B39_07           B39. GASOLINE
    B39A_07          B39A. GASOLINE - PER


CAMS 2009:
    B1_09            B1. PURCHASE/LEASE AUTO
    B1A3_09          B1A3. AUTO YEAR - 1
    B1A4_09          B1A4. AUTO PRICE - 1
    B1A5_09          B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_09          B1B3. AUTO YEAR - 2
    B1B4_09          B1B4. AUTO PRICE - 2
    B1B5_09          B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_09          B1C3. AUTO YEAR - 3
    B1C4_09          B1C4. AUTO PRICE - 3
    B1C5_09          B1C5. AUTO/TRUCK NEW OR USED - 3
    B2_09            B2. BUY REFRIGERATOR
    B2A_09           B2A. REFRIGERATOR PRICE
    B3_09            B3. BUY WASHER/DRYER
    B3A_09           B3A. WASHER/DRYER PRICE
    B4_09            B4. BUY DISWASHER
    B4A_09           B4A. DISHWASHER PRICE
    B5_09            B5. BUY TELEVISION
    B5A_09           B5A. TELEVISION PRICE
    B6_09            B6. BUY COMPUTER
    B6A_09           B6A. COMPUTER PRICE
    B7_09            B7. HOME/RENTERS INSURANCE
    B8_09            B8. PROPERTY TAXES
    B9_09            B9. VEHICLE INSURANCE
    B10_09           B10. VEHICLE MAINTENANCE
    B11_09           B11. HEALTH INSURANCE
    B12_09           B12. TRIPS AND VACATIONS
    B13_09           B13. HOME REPAIRS/MAINTENANCE DIY
    B14_09           B14. HOME REPAIRS/MAINTENANCE SERVICES
    B15_09           B15. HOUSEHOLD FURNISHINGS AND EQUIPMENT
    B16_09           B16. CONTRIBUTIONS
    B17_09           B17. GIFTS
    B18_09           B18. MORTGAGE
    B18A_09          B18A. MORTAGAGE - PER
    B19_09           B19. RENT
    B19A_09          B19A. RENT - PER
    B20_09           B20. ELECTRICITY
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B20A_09        B20A. ELECTRICITY - PER
B21_09         B21. WATER
B21A_09        B21A. WATER - PER
B22_09         B22. HEAT
B22A_09        B22A. HEAT - PER
B23_09         B23. PHONE/CABLE/INTERNET
B23A_09        B23A. PHONE/CABLE - PER
B24_09         B24. CAR PAYMENTS INTEREST/PRINCIPAL
B24A_09        B24A. CAR PAYMENTS - PER
B25_09         B25. HOUSEKEEPING SUPPLIES
B25A_09        B25A. HOUSEKEEPING SUPPLIES - PER
B26_09         B26. HOUSEKEEPING SERVICES
B26A_09        B26A. HOUSEKEEPING SERVICES - PER
B27_09         B27. GARDENING/YARD SUPPLIES
B27A_09        B27A. GARDEN/YARD SUPPLIES - PER
B28_09         B28. GARDEN/YARD SERVICES
B28A_09        B28A. GARDEN/YARD SERVICES - PER
B29_09         B29. CLOTHING AND APPAREL
B29A_09        B29A. CLOTHING - PER
B30_09         B30. PERSONAL CARE PRODUCTS/SERVICES
B30A_09        B30A. PERSONAL CARE PROD/SERVICES - PER
B31_09         B31. DRUGS OOP
B31A_09        B31A. DRUGS OOP - PER
B32_09         B32. HEALTH SERVICES
B32A_09        B32A. HEALTH SERVICES - PER
B33_09         B33. MEDICAL SUPPLIES
B33A_09        B33A. MED SUPPLIES - PER
B34_09         B34. TICKETS
B34A_09        B34A. TICKETS - PER
B35_09         B35. SPORTS EQUIPMENT
B35A_09        B35A. SPORTS EQUIPMENT - PER
B36_09         B36. HOBBIES/LEISURE EQUIPMENT
B36A_09        B36A. HOBBIES/LEISURE EQUIPMENT - PER
B37_09         B37. FOOD/DRINK GROCERY
B37A_09        B37A. FOOD/DRINK GROC - PER
B38_09         B38. DINING OUT
B38A_09        B38A. DINING OUT - PER
B39_09         B39. GASOLINE
B39A_09        B39A. GASOLINE - PER


CAMS 2011:
B1_11          B1. PURCHASE/LEASE AUTO
B1A3_11        B1A3. AUTO YEAR - 1
B1A4_11        B1A4. AUTO PRICE - 1
B1A5_11        B1A5. AUTO/TRUCK NEW OR USED - 1
B1B3_11        B1B3. AUTO YEAR - 2
B1B4_11        B1B4. AUTO PRICE - 2
B1B5_11        B1B5. AUTO/TRUCK NEW OR USED - 2
B1C3_11        B1C3. AUTO YEAR - 3
B1C4_11        B1C4. AUTO PRICE - 3
B1C5_11        B1C5. AUTO/TRUCK NEW OR USED - 3
B2_11          B2. BUY REFRIGERATOR
B2A_11         B2A. REFRIGERATOR PRICE
B3_11          B3. BUY WASHER/DRYER
B3A_11         B3A. WASHER/DRYER PRICE
B4_11          B4. BUY DISWASHER
B4A_11         B4A. DISHWASHER PRICE
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B5_11          B5. BUY TELEVISION
B5A_11         B5A. TELEVISION PRICE
B6_11          B6. BUY COMPUTER
B6A_11         B6A. COMPUTER PRICE
B7_11          B7. HOME/RENTERS INSURANCE
B8_11          B8. PROPERTY TAXES
B9_11          B9. VEHICLE INSURANCE
B10_11         B10. VEHICLE MAINTENANCE
B11_11         B11. HEALTH INSURANCE
B12_11         B12. TRIPS AND VACATIONS
B13_11         B13. HOME REPAIRS/MAINTENANCE DIY
B14_11         B14. HOME REPAIRS/MAINTENANCE SERVICES
B15_11         B15. HOUSEHOLD FURNISHINGS AND EQUIPMENT
B16_11         B16. CONTRIBUTIONS
B17_11         B17. GIFTS
B18_11         B18. MORTGAGE
B18A_11        B18A. MORTAGAGE - PER
B19_11         B19. RENT
B19A_11        B19A. RENT - PER
B20_11         B20. ELECTRICITY
B20A_11        B20A. ELECTRICITY - PER
B21_11         B21. WATER
B21A_11        B21A. WATER - PER
B22_11         B22. HEAT
B22A_11        B22A. HEAT - PER
B23_11         B23. PHONE/CABLE/INTERNET
B23A_11        B23A. PHONE/CABLE - PER
B24_11         B24. CAR PAYMENTS INTEREST/PRINCIPAL
B24A_11        B24A. CAR PAYMENTS - PER
B25_11         B25. HOUSEKEEPING SUPPLIES
B25A_11        B25A. HOUSEKEEPING SUPPLIES - PER
B26_11         B26. HOUSEKEEPING SERVICES
B26A_11        B26A. HOUSEKEEPING SERVICES - PER
B27_11         B27. GARDENING/YARD SUPPLIES
B27A_11        B27A. GARDEN/YARD SUPPLIES - PER
B28_11         B28. GARDEN/YARD SERVICES
B28A_11        B28A. GARDEN/YARD SERVICES - PER
B29_11         B29. CLOTHING AND APPAREL
B29A_11        B29A. CLOTHING - PER
B30_11         B30. PERSONAL CARE PRODUCTS/SERVICES
B30A_11        B30A. PERSONAL CARE PROD/SERVICES - PER
B31_11         B31. DRUGS OOP
B31A_11        B31A. DRUGS OOP - PER
B32_11         B32. HEALTH SERVICES
B32A_11        B32A. HEALTH SERVICES - PER
B33_11         B33. MEDICAL SUPPLIES
B33A_11        B33A. MED SUPPLIES - PER
B34_11         B34. TICKETS
B34A_11        B34A. TICKETS - PER
B35_11         B35. SPORTS EQUIPMENT
B35A_11        B35A. SPORTS EQUIPMENT - PER
B36_11         B36. HOBBIES/LEISURE EQUIPMENT
B36A_11        B36A. HOBBIES/LEISURE EQUIPMENT - PER
B37_11         B37. FOOD/DRINK GROCERY
B37A_11        B37A. FOOD/DRINK GROC - PER
B38_11         B38. DINING OUT
B38A_11        B38A. DINING OUT - PER
B39_11         B39. GASOLINE
B39A_11        B39A. GASOLINE - PER
```

```
CAMS 2013:
    B1_13            B1. PURCHASE/LEASE AUTO
    B1A3_13          B1A3. AUTO YEAR - 1
    B1A4_13          B1A4. AUTO PRICE - 1
    B1A5_13          B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_13          B1B3. AUTO YEAR - 2
    B1B4_13          B1B4. AUTO PRICE - 2
    B1B5_13          B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_13          B1C3. AUTO YEAR - 3
    B1C4_13          B1C4. AUTO PRICE - 3
    B1C5_13          B1C5. AUTO/TRUCK NEW OR USED - 3
    B2_13            B2. BUY REFRIGERATOR
    B2A_13           B2A. REFRIGERATOR PRICE
    B3_13            B3. BUY WASHER/DRYER
    B3A_13           B3A. WASHER/DRYER PRICE
    B4_13            B4. BUY DISWASHER
    B4A_13           B4A. DISHWASHER PRICE
    B5_13            B5. BUY TELEVISION
    B5A_13           B5A. TELEVISION PRICE
    B6_13            B6. BUY COMPUTER
    B6A_13           B6A. COMPUTER PRICE
    B7_13            B7. HOME/RENTERS INSURANCE
    B8_13            B8. PROPERTY TAXES
    B9_13            B9. VEHICLE INSURANCE
    B10_13           B10. VEHICLE MAINTENANCE
    B11_13           B11. HEALTH INSURANCE
    B12_13           B12. TRIPS AND VACATIONS
    B13_13           B13. HOME REPAIRS/MAINTENANCE DIY
    B14_13           B14. HOME REPAIRS/MAINTENANCE SERVICES
    B15_13           B15. HOUSEHOLD FURNISHINGS AND EQUIPMENT
    B16_13           B16. CONTRIBUTIONS
    B17_13           B17. GIFTS
    B18_13           B18. MORTGAGE
    B18A_13          B18A. MORTGAGE - PER
    B19_13           B19. RENT
    B19A_13          B19A. RENT - PER
    B20_13           B20. ELECTRICITY
    B20A_13          B20A. ELECTRICITY - PER
    B21_13           B21. WATER
    B21A_13          B21A. WATER - PER
    B22_13           B22. HEAT
    B22A_13          B22A. HEAT - PER
    B23_13           B23. PHONE/CABLE/INTERNET
    B23A_13          B23A. PHONE/CABLE - PER
    B24_13           B24. CAR PAYMENTS INTEREST/PRINCIPAL
    B24A_13          B24A. CAR PAYMENTS - PER
    B25_13           B25. HOUSEKEEPING SUPPLIES
    B25A_13          B25A. HOUSEKEEPING SUPPLIES - PER
    B26_13           B26. HOUSEKEEPING SERVICES
    B26A_13          B26A. HOUSEKEEPING SERVICES - PER
    B27_13           B27. GARDENING/YARD SUPPLIES
    B27A_13          B27A. GARDEN/YARD SUPPLIES - PER
    B28_13           B28. GARDEN/YARD SERVICES
    B28A_13          B28A. GARDEN/YARD SERVICES - PER
    B29_13           B29. CLOTHING AND APPAREL
    B29A_13          B29A. CLOTHING - PER
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    B30_13          B30. PERSONAL CARE PRODUCTS/SERVICES
    B30A_13         B30A. PERSONAL CARE PROD/SERVICES - PER
    B31_13          B31. DRUGS OOP
    B31A_13         B31A. DRUGS OOP - PER
    B32_13          B32. HEALTH SERVICES
    B32A_13         B32A. HEALTH SERVICES - PER
    B33_13          B33. MEDICAL SUPPLIES
    B33A_13         B33A. MED SUPPLIES - PER
    B34_13          B34. TICKETS
    B34A_13         B34A. TICKETS - PER
    B35_13          B35. SPORTS EQUIPMENT
    B35A_13         B35A. SPORTS EQUIPMENT - PER
    B36_13          B36. HOBBIES/LEISURE EQUIPMENT
    B36A_13         B36A. HOBBIES/LEISURE EQUIPMENT - PER
    B37_13          B37. FOOD/DRINK GROCERY
    B37A_13         B37A. FOOD/DRINK GROC - PER
    B38_13          B38. DINING OUT
    B38A_13         B38A. DINING OUT - PER
    B39_13          B39. GASOLINE
    B39A_13         B39A. GASOLINE - PER


CAMS 2015:
    B1_15           B1. PURCHASE/LEASE AUTO
    B1A3_15         B1A3. AUTO YEAR - 1
    B1A4_15         B1A4. AUTO PRICE - 1
    B1A5_15         B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_15         B1B3. AUTO YEAR - 2
    B1B4_15         B1B4. AUTO PRICE - 2
    B1B5_15         B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_15         B1C3. AUTO YEAR - 3
    B1C4_15         B1C4. AUTO PRICE - 3
    B1C5_15         B1C5. AUTO/TRUCK NEW OR USED - 3
    B2_15           B2. BUY REFRIGERATOR
    B2A_15          B2A. REFRIGERATOR PRICE
    C2B_15          C2B. OWN OR RENT HOUSE
    B3_15           B3. BUY WASHER/DRYER
    B3A_15          B3A. WASHER/DRYER PRICE
    B4_15           B4. BUY DISWASHER
    B4A_15          B4A. DISHWASHER PRICE
    B5_15           B5. BUY TELEVISION
    B5A_15          B5A. TELEVISION PRICE
    B6_15           B6. BUY COMPUTER
    B6A_15          B6A. COMPUTER PRICE
    B7_15           B7. HOME/RENTERS INSURANCE
    B8_15           B8. PROPERTY TAXES
    B9_15           B9. VEHICLE INSURANCE
    B10_15          B10. VEHICLE MAINTENANCE
    B11_15          B11. HEALTH INSURANCE
    B12_15          B12. TRIPS AND VACATIONS
    B13_15          B13. HOME REPAIRS/MAINTENANCE DIY
    B14_15          B14. HOME REPAIRS/MAINTENANCE SERVICES
    B15_15          B15. HOUSEHOLD FURNISHINGS AND EQUIPMENT
    B16_15          B16. CONTRIBUTIONS
    B17_15          B17. GIFTS
    B18_15          B18. MORTGAGE
    B18A_15         B18A. MORTGAGE - PER
    B19_15          B19. RENT
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B19A_15        B19A. RENT - PER
B20_15         B20. ELECTRICITY
B20A_15        B20A. ELECTRICITY - PER
B21_15         B21. WATER
B21A_15        B21A. WATER - PER
B22_15         B22. HEAT
B22A_15        B22A. HEAT - PER
B23_15         B23. PHONE/CABLE/INTERNET
B23A_15        B23A. PHONE/CABLE - PER
B24_15         B24. CAR PAYMENTS INTEREST/PRINCIPAL
B24A_15        B24A. CAR PAYMENTS - PER
B25_15         B25. HOUSEKEEPING SUPPLIES
B25A_15        B25A. HOUSEKEEPING SUPPLIES - PER
B26_15         B26. HOUSEKEEPING SERVICES
B26A_15        B26A. HOUSEKEEPING SERVICES - PER
B27_15         B27. GARDENING/YARD SUPPLIES
B27A_15        B27A. GARDEN/YARD SUPPLIES - PER
B28_15         B28. GARDEN/YARD SERVICES
B28A_15        B28A. GARDEN/YARD SERVICES - PER
B29_15         B29. CLOTHING AND APPAREL
B29A_15        B29A. CLOTHING - PER
B30_15         B30. PERSONAL CARE PRODUCTS/SERVICES
B30A_15        B30A. PERSONAL CARE PROD/SERVICES - PER
B31_15         B31. DRUGS OOP
B31A_15        B31A. DRUGS OOP - PER
B32_15         B32. HEALTH SERVICES
B32A_15        B32A. HEALTH SERVICES - PER
B33_15         B33. MEDICAL SUPPLIES
B33A_15        B33A. MED SUPPLIES - PER
B34_15         B34. TICKETS
B34A_15        B34A. TICKETS - PER
B35_15         B35. SPORTS EQUIPMENT
B35A_15        B35A. SPORTS EQUIPMENT - PER
B36_15         B36. HOBBIES/LEISURE EQUIPMENT
B36A_15        B36A. HOBBIES/LEISURE EQUIPMENT - PER
B37_15         B37. FOOD/DRINK GROCERY
B37A_15        B37A. FOOD/DRINK GROC - PER
B38_15         B38. DINING OUT
B38A_15        B38A. DINING OUT - PER
B39_15         B39. GASOLINE
B39A_15        B39A. GASOLINE - PER
```

2.8 Total Durables Spending

Wave	Variable	Label	Type
5	H5CDURS	H5CDURS:W5 CAMS: Total HHold Durables Spending excl. auto purch.	Cont
6	H6CDURS	H6CDURS:W6 CAMS: Total HHold Durables Spending excl. auto purch.	Cont
7	H7CDURS	H7CDURS:W7 CAMS: Total HHold Durables Spending excl. auto purch.	Cont
8	H8CDURS	H8CDURS:W8 CAMS: Total HHold Durables Spending excl. auto purch.	Cont
9	H9CDURS	H9CDURS:W9 CAMS: Total HHold Durables Spending excl. auto purch.	Cont
10	H10CDURS	H10CDURS:W10 CAMS: Total HHold Durables Spending excl. auto purch.	Cont
11	H11CDURS	H11CDURS:W11 CAMS: Total HHold Durables Spending excl. auto purch.	Cont
12	H12CDURS	H12CDURS:W12 CAMS: Total HHold Durables Spending excl. auto purch.	Cont
5	H5CDURSF	H5CDURSF:W5 CAMSFlag: Total HHold Durables Spending	Categ
6	H6CDURSF	H6CDURSF:W6 CAMSFlag: Total HHold Durables Spending	Categ
7	H7CDURSF	H7CDURSF:W7 CAMSFlag: Total HHold Durables Spending	Categ
8	H8CDURSF	H8CDURSF:W8 CAMSFlag: Total HHold Durables Spending	Categ
9	H9CDURSF	H9CDURSF:W9 CAMSFlag: Total HHold Durables Spending	Categ
10	H10CDURSF	H10CDURSF:W10 CAMSFlag: Total HHold Durables Spending	Categ
11	H11CDURSF	H11CDURSF:W11 CAMSFlag: Total HHold Durables Spending	Categ
12	H12CDURSF	H12CDURSF:W12 CAMSFlag: Total HHold Durables Spending	Categ

Descriptive Statistics

Variable	N	Mean	Std Dev	Minimum	Maximum
H5CDURS	3789	316.347	678.875	0.000	7600.000
H6CDURS	3224	295.022	643.173	0.000	7322.000
H7CDURS	3832	357.664	791.859	0.000	7900.000
H8CDURS	3704	398.505	837.563	0.000	11309.00
H9CDURS	3550	366.736	713.330	0.000	6700.000
H10CDURS	4319	341.603	671.568	0.000	7189.000
H11CDURS	4017	309.144	654.951	0.000	6400.000
H12CDURS	3689	285.092	679.868	0.000	10200.00
H5CDURSF	3789	0.196	0.708	0.000	4.000
H6CDURSF	3224	0.245	0.790	0.000	4.000
H7CDURSF	3832	0.248	0.806	0.000	4.000
H8CDURSF	3704	0.141	0.597	0.000	4.000
H9CDURSF	3550	0.106	0.502	0.000	4.000
H10CDURSF	4319	0.110	0.513	0.000	4.000
H11CDURSF	4017	0.104	0.493	0.000	4.000
H12CDURSF	3689	0.078	0.431	0.000	4.000

Categorical Variable Codes

Value	H5CDURSF	H6CDURSF	H7CDURSF	H8CDURSF	H9CDURSF	H10CDURSF	H11CDURSF	H12CDURSF
.T Resp <10 cat	77	30	47	34	37	51	50	48
0. no winsor or imp	3498	2920	3477	3488	3376	4107	3828	3553
1. winsor only	41	37	38	38	40	37	34	41
2. mean imp only	51	53	51	52	71	90	83	42
3. zero imp only	198	210	253	124	57	81	71	50
4. imp & winsor	1	4	13	2	6	4	1	3

General Comments:

Spending measures are reported in nominal dollars. When a spending component is missing it is imputed using the method described in the section titled "1.10 Imputation and Cleaning of Spending Variables." There are no differences across waves in which categories are included in total durable spending.

Generally, Wave 5 questions ask about 2001 spending, Wave 6 asks about 2003 spending, and so forth until Wave 12 which asks about 2015 spending.

The durable spending components are summed to create the total spending measure. CAMS spending measures are reported at the household level. The CAMS Respondent reports spending for all members of his/her household.

How Constructed:

HwCDURS is the sum of all of the household spending on durable goods excluding autos. The durable spending categories do not vary by wave. There are five durable categories: refrigerator, washer/dryer, dishwasher, television, and computer.

HwCDURSF is a flag that indicates whether any durable components are imputed or winsorized. Please see "1.10 Imputation and Cleaning of Spending Variables" for more information.

CAMS Variables Used

```
CAMS 2001:
    B2_01           B2. BUY REFRIGERATOR
    B2A_01          B2A. REFRIGERATOR PRICE
    B3_01           B3. BUY WASHER/DRYER
    B3A_01          B3A. WASHER/DRYER PRICE
    B4_01           B4. BUY DISWASHER
    B4A_01          B4A. DISHWASHER PRICE
    B5_01           B5. BUY TELEVISION
    B5A_01          B5A. TELEVISION PRICE
    B6_01           B6. BUY COMPUTER
    B6A_01          B6A. COMPUTER PRICE
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CAMS 2003:
    B2_03            B2. BUY REFRIGERATOR
    B2A_03           B2A. REFRIGERATOR PRICE
    B3_03            B3. BUY WASHER/DRYER
    B3A_03           B3A. WASHER/DRYER PRICE
    B4_03            B4. BUY DISWASHER
    B4A_03           B4A. DISHWASHER PRICE
    B5_03            B5. BUY TELEVISION
    B5A_03           B5A. TELEVISION PRICE
    B6_03            B6. BUY COMPUTER
    B6A_03           B6A. COMPUTER PRICE


CAMS 2005:
    B2_05            B2. BUY REFRIGERATOR
    B2A_05           B2A. REFRIGERATOR PRICE
    B3_05            B3. BUY WASHER/DRYER
    B3A_05           B3A. WASHER/DRYER PRICE
    B4_05            B4. BUY DISWASHER
    B4A_05           B4A. DISHWASHER PRICE
    B5_05            B5. BUY TELEVISION
    B5A_05           B5A. TELEVISION PRICE
    B6_05            B6. BUY COMPUTER
    B6A_05           B6A. COMPUTER PRICE


CAMS 2007:
    B2_07            B2. BUY REFRIGERATOR
    B2A_07           B2A. REFRIGERATOR PRICE
    B3_07            B3. BUY WASHER/DRYER
    B3A_07           B3A. WASHER/DRYER PRICE
    B4_07            B4. BUY DISWASHER
    B4A_07           B4A. DISHWASHER PRICE
    B5_07            B5. BUY TELEVISION
    B5A_07           B5A. TELEVISION PRICE
    B6_07            B6. BUY COMPUTER
    B6A_07           B6A. COMPUTER PRICE


CAMS 2009:
    B2_09            B2. BUY REFRIGERATOR
    B2A_09           B2A. REFRIGERATOR PRICE
    B3_09            B3. BUY WASHER/DRYER
    B3A_09           B3A. WASHER/DRYER PRICE
    B4_09            B4. BUY DISWASHER
    B4A_09           B4A. DISHWASHER PRICE
    B5_09            B5. BUY TELEVISION
    B5A_09           B5A. TELEVISION PRICE
    B6_09            B6. BUY COMPUTER
    B6A_09           B6A. COMPUTER PRICE
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CAMS 2011:
    B2_11           B2. BUY REFRIGERATOR
    B2A_11          B2A. REFRIGERATOR PRICE
    B3_11           B3. BUY WASHER/DRYER
    B3A_11          B3A. WASHER/DRYER PRICE
    B4_11           B4. BUY DISWASHER
    B4A_11          B4A. DISHWASHER PRICE
    B5_11           B5. BUY TELEVISION
    B5A_11          B5A. TELEVISION PRICE
    B6_11           B6. BUY COMPUTER
    B6A_11          B6A. COMPUTER PRICE




CAMS 2013:
    B2_13           B2. BUY REFRIGERATOR
    B2A_13          B2A. REFRIGERATOR PRICE
    B3_13           B3. BUY WASHER/DRYER
    B3A_13          B3A. WASHER/DRYER PRICE
    B4_13           B4. BUY DISWASHER
    B4A_13          B4A. DISHWASHER PRICE
    B5_13           B5. BUY TELEVISION
    B5A_13          B5A. TELEVISION PRICE
    B6_13           B6. BUY COMPUTER
    B6A_13          B6A. COMPUTER PRICE




CAMS 2015:
    B2_15           B2. BUY REFRIGERATOR
    B2A_15          B2A. REFRIGERATOR PRICE
    B3_15           B3. BUY WASHER/DRYER
    B3A_15          B3A. WASHER/DRYER PRICE
    B4_15           B4. BUY DISWASHER
    B4A_15          B4A. DISHWASHER PRICE
    B5_15           B5. BUY TELEVISION
    B5A_15          B5A. TELEVISION PRICE
    B6_15           B6. BUY COMPUTER
    B6A_15          B6A. COMPUTER PRICE
```

2.9 Total Nondurables Spending

Wave	Variable	Label	Type
5	H5CNDUR	H5CNDUR:W5 CAMS: Total HHold Nondurables Spending	Cont
6	H6CNDUR	H6CNDUR:W6 CAMS: Total HHold Nondurables Spending	Cont
7	H7CNDUR	H7CNDUR:W7 CAMS: Total HHold Nondurables Spending	Cont
8	H8CNDUR	H8CNDUR:W8 CAMS: Total HHold Nondurables Spending	Cont
9	H9CNDUR	H9CNDUR:W9 CAMS: Total HHold Nondurables Spending	Cont
10	H10CNDUR	H10CNDUR:W10 CAMS: Total HHold Nondurables Spending	Cont
11	H11CNDUR	H11CNDUR:W11 CAMS: Total HHold Nondurables Spending	Cont
12	H12CNDUR	H12CNDUR:W12 CAMS: Total HHold Nondurables Spending	Cont
5	H5CNDURF	H5CNDURF:W5 CAMSFlag: Total HHold Nondurables Spending	Categ
6	H6CNDURF	H6CNDURF:W6 CAMSFlag: Total HHold Nondurables Spending	Categ
7	H7CNDURF	H7CNDURF:W7 CAMSFlag: Total HHold Nondurables Spending	Categ
8	H8CNDURF	H8CNDURF:W8 CAMSFlag: Total HHold Nondurables Spending	Categ
9	H9CNDURF	H9CNDURF:W9 CAMSFlag: Total HHold Nondurables Spending	Categ
10	H10CNDURF	H10CNDURF:W10 CAMSFlag: Total HHold Nondurables Spending	Categ
11	H11CNDURF	H11CNDURF:W11 CAMSFlag: Total HHold Nondurables Spending	Categ
12	H12CNDURF	H12CNDURF:W12 CAMSFlag: Total HHold Nondurables Spending	Categ

Descriptive Statistics

Variable	N	Mean	Std Dev	Minimum	Maximum
H5CNDUR	3789	21044.69	20578.03	0.000	344880.0
H6CNDUR	3224	24331.15	21756.15	0.000	276570.0
H7CNDUR	3832	22422.09	18821.10	0.000	221677.0
H8CNDUR	3704	23301.69	19181.06	0.000	235800.0
H9CNDUR	3550	22727.57	17947.02	0.000	194298.0
H10CNDUR	4319	22969.87	18927.78	0.000	194912.0
H11CNDUR	4017	23308.94	19748.06	0.000	213470.0
H12CNDUR	3689	24625.67	22306.99	0.000	257312.0
H5CNDURF	3789	0.626	0.941	0.000	3.000
H6CNDURF	3224	0.622	0.928	0.000	3.000
H7CNDURF	3832	0.651	0.943	0.000	3.000
H8CNDURF	3704	0.590	0.915	0.000	3.000
H9CNDURF	3550	0.601	0.926	0.000	3.000
H10CNDURF	4319	0.573	0.906	0.000	3.000
H11CNDURF	4017	0.582	0.913	0.000	3.000
H12CNDURF	3689	0.538	0.895	0.000	3.000

Categorical Variable Codes

Value	H5CNDURF	H6CNDURF	H7CNDURF	H8CNDURF	H9CNDURF	H10CNDURF	H11CNDURF	H12CNDURF
.T Resp <10 cat	77	30	47	34	37	51	50	48
0. no winsor or imp	2594	2186	2549	2573	2453	3045	2814	2668
1. winsor only	73	113	126	123	117	117	122	113
2. mean imp only	1067	883	1102	961	922	1113	1029	852
3. imp & winsor	55	42	55	47	58	44	52	56

General Comments:

Spending measures are reported in nominal dollars. When a nondurable spending component is missing it is imputed using mean imputation after the top and bottom five values are winsorized. There are differences across waves in which categories are included in total nondurable spending. These differences are discussed in more detail in the "1.5 Difference Across Waves" section earlier in this document.

Generally, Wave 5 questions ask about 2001 spending, Wave 6 asks about 2003 spending, and so forth until Wave 12 which asks about 2015 spending.

The nondurable spending components are summed to create the total spending measure. CAMS spending measures are reported at the household level. The CAMS Respondent reports spending for all members of his/her household.

How Constructed:

HwCNDUR is the sum of all of the nondurable spending in the household. The spending categories vary by wave, but in general include: gifts, clothing, charitable contributions, dining out, medications and medical supplies, utilities (heat, water and electricity), food and beverages, health insurance and services, telecommunications, tickets, trips and vacations, personal care items, furnishings, hobbies, sports, housekeeping services and supplies, and yard services and supplies. Please see "CAMS Variables Used" below and section "1.5 Differences Across Waves" for details of which nondurable categories are available in each wave.

HwCNDURF is a flag that indicates whether any nondurable components are imputed or winsorized. Please see "1.10 Imputation and Cleaning of Spending Variables" for more information.

Cross Wave Differences in Original CAMS Data

The CAMS 2001 and CAMS 2003 surveys asked fewer nondurable spending categories than in the later waves (see "1.5 Differences Across Waves").

CAMS Variables Used

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CAMS 2001:
    B11_01          B11. ELECTRICITY
    B11A_01         B11A. ELECTRICITY - PER
    B12_01          B12. WATER
    B12A_01         B12A. WATER - PER
    B13_01          B13. HEAT
    B13A_01         B13A. HEAT - PER
    B14_01          B14. PHONE/CABLE/INTERNET
    B14A_01         B14A. PHONE/CABLE - PER
    B17_01          B17. HEALTH INSURANCE
    B17A_01         B17A. HEALTH INSUR - PER
    B18_01          B18.  HOUSE/YARD SUPPLIES
    B18A_01         B18A. HOUSE/YARD - PER
    B20A_01         B20. FOOD/DRINK GROC - PER
    B20_01          B20. FOOD/DRINK GROCERY
    B21_01          B21. DINING OUT
    B21A_01         B21A. DINING OUT - PER
    B22_01          B22. CLOTHING
    B22A_01         B22A. CLOTHING - PER
    B25_01          B25. DRUGS
    B25A_01         B25A. DRUGS - PER
    B26_01          B26. HEALTH SERVICES
    B26A_01         B26A. HEALTH SERVICES - PER
    B27_01          B27. MEDICAL SUPPLIES
    B27A_01         B27A. MED SUPPLIES - PER
    B28_01          B28. VACATIONS
    B28A_01         B28A. VACATIONS - PER
    B29_01          B29. TICKETS
    B29A_01         B29A. TICKETS - PER
    B30_01          B30. HOBBIES
    B30A_01         B30A. HOBBIES - PER
    B31_01          B31. CONTRIBUTIONS
    B31A_01         B31A. CONTRIBUTIONS - PER
    B32_01          B32. GIFTS
    B32A_01         B32A. GIFTS - PER




CAMS 2003:
    B11_03          B11. HEALTH INSURANCE
    B12_03          B12. TRIPS AND VACATIONS
    B15_03          B15. ELECTRICITY
    B15A_03         B15A. ELECTRICITY - PER
    B16_03          B16. WATER
    B16A_03         B16A. WATER - PER
    B17_03          B17. HEAT
    B17A_03         B17A. HEAT - PER
    B18_03          B18. PHONE/CABLE/INTERNET
    B18A_03         B18A. PHONE/CABLE - PER
    B20_03          B20. HOUSEKEEPING SUPPLIES
    B20A_03         B20A. HOUSEKEEPING SUPPLIES - PER
    B21_03          B21. HOUSEKEEPING SERVICES
    B21A_03         B21A. HOUSEKEEPING SERVICES - PER
    B22_03          B22.GARDENING/YARD SUPPLIES
    B22A_03         B22A. GARDEN/YARD SUPPLIES - PER
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    B23_03          B23. GARDEN/YARD SERVICES
    B23A_03         B23A. GARDEN/YARD SERVICES - PER
    B26_03          B26. CLOTHING AND APPAREL
    B26A_03         B26A. CLOTHING - PER
    B27_03          B27. PERSONAL CARE PRODUCTS/SERVICES
    B27A_03         B27A. PERSONAL CARE PRODUCTS/SERVICES - PER
    B28_03          B28. DRUGS
    B28A_03         B28A. DRUGS - PER
    B29_03          B29. HEALTH SERVICES
    B29A_03         B29A. HEALTH SERVICES - PER
    B30_03          B30. MEDICAL SUPPLIES
    B30A_03         B30A. MED SUPPLIES - PER
    B31_03          B31. TICKETS
    B31A_03         B31A. TICKETS - PER
    B32_03          B32. SPORTS EQUIPMENT
    B32A_03         B32A. SPORTS EQUIPMENT - PER
    B33_03          B33. HOBBIES/LEISURE EQUIPMENT
    B33A_03         B33A. HOBBIES/LEISURE EQUIPMENT - PER
    B34_03          B34. CONTRIBUTIONS
    B34A_03         B34A. CONTRIBUTIONS - PER
    B35_03          B35. GIFTS
    B35A_03         B35A. GIFTS - PER
    B36A_03         B36. FOOD/DRINK GROC - PER
    B36_03          B36. FOOD/DRINK GROCERY
    B37_03          B37. DINING OUT
    B37A_03         B37A. DINING OUT - PER


CAMS 2005:
    B11_05          B11. HEALTH INSURANCE
    B12_05          B12. TRIPS AND VACATIONS
    B15_05          B15. HOUSEHOLD FURNISHINGS AND EQUIPMENT
    B16_05          B16. CONTRIBUTIONS
    B17_05          B17. GIFTS
    B20_05          B20. ELECTRICITY
    B20A_05         B20A. ELECTRICITY - PER
    B21_05          B21. WATER
    B21A_05         B21A. WATER - PER
    B22_05          B22. HEAT
    B22A_05         B22A. HEAT - PER
    B23_05          B23. PHONE/CABLE/INTERNET
    B23A_05         B23A. PHONE/CABLE - PER
    B25_05          B25. HOUSEKEEPING SUPPLIES
    B25A_05         B25A. HOUSEKEEPING SUPPLIES - PER
    B26_05          B26. HOUSEKEEPING SERVICES
    B26A_05         B26A. HOUSEKEEPING SERVICES - PER
    B27_05          B27.GARDENING/YARD SUPPLIES
    B27A_05         B27A. GARDEN/YARD SUPPLIES - PER
    B28_05          B28. GARDEN/YARD SERVICES
    B28A_05         B28A. GARDEN/YARD SERVICES - PER
    B29_05          B29. CLOTHING AND APPAREL
    B29A_05         B29A. CLOTHING - PER
    B30_05          B30. PERSONAL CARE PRODUCTS/SERVICES
    B30A_05         B30A. PERSONAL CARE PROD/SERVICES - PER
    B31_05          B31. DRUGS OOP
    B31A_05         B31A. DRUGS OOP - PER
    B32_05          B32. HEALTH SERVICES
    B32A_05         B32A. HEALTH SERVICES - PER
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    B33_05          B33. MEDICAL SUPPLIES
    B33A_05         B33A. MED SUPPLIES - PER
    B34_05          B34. TICKETS
    B34A_05         B34A. TICKETS - PER
    B35_05          B35. SPORTS EQUIPMENT
    B35A_05         B35A. SPORTS EQUIPMENT - PER
    B36_05          B36. HOBBIES/LEISURE EQUIPMENT
    B36A_05         B36A. HOBBIES/LEISURE EQUIPMENT - PER
    B37_05          B37. FOOD/DRINK GROCERY
    B37A_05         B37A. FOOD/DRINK GROC - PER
    B38_05          B38. DINING OUT
    B38A_05         B38A. DINING OUT - PER



CAMS 2007:
    B11_07          B11. HEALTH INSURANCE
    B12_07          B12. TRIPS AND VACATIONS
    B15_07          B15. HOUSEHOLD FURNISHINGS AND EQUIPMENT
    B16_07          B16. CONTRIBUTIONS
    B17_07          B17. GIFTS
    B20_07          B20. ELECTRICITY
    B20A_07         B20A. ELECTRICITY - PER
    B21_07          B21. WATER
    B21A_07         B21A. WATER - PER
    B22_07          B22. HEAT
    B22A_07         B22A. HEAT - PER
    B23_07          B23. PHONE/CABLE/INTERNET
    B23A_07         B23A. PHONE/CABLE - PER
    B25_07          B25. HOUSEKEEPING SUPPLIES
    B25A_07         B25A. HOUSEKEEPING SUPPLIES - PER
    B26_07          B26. HOUSEKEEPING SERVICES
    B26A_07         B26A. HOUSEKEEPING SERVICES - PER
    B27_07          B27. GARDENING/YARD SUPPLIES
    B27A_07         B27A. GARDEN/YARD SUPPLIES - PER
    B28_07          B28. GARDEN/YARD SERVICES
    B28A_07         B28A. GARDEN/YARD SERVICES - PER
    B29_07          B29. CLOTHING AND APPAREL
    B29A_07         B29A. CLOTHING - PER
    B30_07          B30. PERSONAL CARE PRODUCTS/SERVICES
    B30A_07         B30A. PERSONAL CARE PROD/SERVICES - PER
    B31_07          B31. DRUGS OOP
    B31A_07         B31A. DRUGS OOP - PER
    B32_07          B32. HEALTH SERVICES
    B32A_07         B32A. HEALTH SERVICES - PER
    B33_07          B33. MEDICAL SUPPLIES
    B33A_07         B33A. MED SUPPLIES - PER
    B34_07          B34. TICKETS
    B34A_07         B34A. TICKETS - PER
    B35_07          B35. SPORTS EQUIPMENT
    B35A_07         B35A. SPORTS EQUIPMENT - PER
    B36_07          B36. HOBBIES/LEISURE EQUIPMENT
    B36A_07         B36A. HOBBIES/LEISURE EQUIPMENT - PER
    B37_07          B37. FOOD/DRINK GROCERY
    B37A_07         B37A. FOOD/DRINK GROC - PER
    B38_07          B38. DINING OUT
    B38A_07         B38A. DINING OUT - PER
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CAMS 2009:
    B11_09          B11. HEALTH INSURANCE
    B12_09          B12. TRIPS AND VACATIONS
    B15_09          B15. HOUSEHOLD FURNISHINGS AND EQUIPMENT
    B16_09          B16. CONTRIBUTIONS
    B17_09          B17. GIFTS
    B20_09          B20. ELECTRICITY
    B20A_09         B20A. ELECTRICITY - PER
    B21_09          B21. WATER
    B21A_09         B21A. WATER - PER
    B22_09          B22. HEAT
    B22A_09         B22A. HEAT - PER
    B23_09          B23. PHONE/CABLE/INTERNET
    B23A_09         B23A. PHONE/CABLE - PER
    B25_09          B25. HOUSEKEEPING SUPPLIES
    B25A_09         B25A. HOUSEKEEPING SUPPLIES - PER
    B26_09          B26. HOUSEKEEPING SERVICES
    B26A_09         B26A. HOUSEKEEPING SERVICES - PER
    B27_09          B27. GARDENING/YARD SUPPLIES
    B27A_09         B27A. GARDEN/YARD SUPPLIES - PER
    B28_09          B28. GARDEN/YARD SERVICES
    B28A_09         B28A. GARDEN/YARD SERVICES - PER
    B29_09          B29. CLOTHING AND APPAREL
    B29A_09         B29A. CLOTHING - PER
    B30_09          B30. PERSONAL CARE PRODUCTS/SERVICES
    B30A_09         B30A. PERSONAL CARE PROD/SERVICES - PER
    B31_09          B31. DRUGS OOP
    B31A_09         B31A. DRUGS OOP - PER
    B32_09          B32. HEALTH SERVICES
    B32A_09         B32A. HEALTH SERVICES - PER
    B33_09          B33. MEDICAL SUPPLIES
    B33A_09         B33A. MED SUPPLIES - PER
    B34_09          B34. TICKETS
    B34A_09         B34A. TICKETS - PER
    B35_09          B35. SPORTS EQUIPMENT
    B35A_09         B35A. SPORTS EQUIPMENT - PER
    B36_09          B36. HOBBIES/LEISURE EQUIPMENT
    B36A_09         B36A. HOBBIES/LEISURE EQUIPMENT - PER
    B37_09          B37. FOOD/DRINK GROCERY
    B37A_09         B37A. FOOD/DRINK GROC - PER
    B38_09          B38. DINING OUT
    B38A_09         B38A. DINING OUT - PER




CAMS 2011:
    B11_11          B11. HEALTH INSURANCE
    B12_11          B12. TRIPS AND VACATIONS
    B15_11          B15. HOUSEHOLD FURNISHINGS AND EQUIPMENT
    B16_11          B16. CONTRIBUTIONS
    B17_11          B17. GIFTS
    B20_11          B20. ELECTRICITY
    B20A_11         B20A. ELECTRICITY - PER
    B21_11          B21. WATER
    B21A_11         B21A. WATER - PER
    B22_11          B22. HEAT
    B22A_11         B22A. HEAT - PER
    B23_11          B23. PHONE/CABLE/INTERNET
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    B23A_11          B23A. PHONE/CABLE - PER
    B25_11           B25. HOUSEKEEPING SUPPLIES
    B25A_11          B25A. HOUSEKEEPING SUPPLIES - PER
    B26_11           B26. HOUSEKEEPING SERVICES
    B26A_11          B26A. HOUSEKEEPING SERVICES - PER
    B27_11           B27. GARDENING/YARD SUPPLIES
    B27A_11          B27A. GARDEN/YARD SUPPLIES - PER
    B28_11           B28. GARDEN/YARD SERVICES
    B28A_11          B28A. GARDEN/YARD SERVICES - PER
    B29_11           B29. CLOTHING AND APPAREL
    B29A_11          B29A. CLOTHING - PER
    B30_11           B30. PERSONAL CARE PRODUCTS/SERVICES
    B30A_11          B30A. PERSONAL CARE PROD/SERVICES - PER
    B31_11           B31. DRUGS OOP
    B31A_11          B31A. DRUGS OOP - PER
    B32_11           B32. HEALTH SERVICES
    B32A_11          B32A. HEALTH SERVICES - PER
    B33_11           B33. MEDICAL SUPPLIES
    B33A_11          B33A. MED SUPPLIES - PER
    B34_11           B34. TICKETS
    B34A_11          B34A. TICKETS - PER
    B35_11           B35. SPORTS EQUIPMENT
    B35A_11          B35A. SPORTS EQUIPMENT - PER
    B36_11           B36. HOBBIES/LEISURE EQUIPMENT
    B36A_11          B36A. HOBBIES/LEISURE EQUIPMENT - PER
    B37_11           B37. FOOD/DRINK GROCERY
    B37A_11          B37A. FOOD/DRINK GROC - PER
    B38_11           B38. DINING OUT
    B38A_11          B38A. DINING OUT - PER




CAMS 2013:
    B11_13           B11. HEALTH INSURANCE
    B12_13           B12. TRIPS AND VACATIONS
    B15_13           B15. HOUSEHOLD FURNISHINGS AND EQUIPMENT
    B16_13           B16. CONTRIBUTIONS
    B17_13           B17. GIFTS
    B20_13           B20. ELECTRICITY
    B20A_13          B20A. ELECTRICITY - PER
    B21_13           B21. WATER
    B21A_13          B21A. WATER - PER
    B22_13           B22. HEAT
    B22A_13          B22A. HEAT - PER
    B23_13           B23. PHONE/CABLE/INTERNET
    B23A_13          B23A. PHONE/CABLE - PER
    B25_13           B25. HOUSEKEEPING SUPPLIES
    B25A_13          B25A. HOUSEKEEPING SUPPLIES - PER
    B26_13           B26. HOUSEKEEPING SERVICES
    B26A_13          B26A. HOUSEKEEPING SERVICES - PER
    B27_13           B27. GARDENING/YARD SUPPLIES
    B27A_13          B27A. GARDEN/YARD SUPPLIES - PER
    B28_13           B28. GARDEN/YARD SERVICES
    B28A_13          B28A. GARDEN/YARD SERVICES - PER
    B29_13           B29. CLOTHING AND APPAREL
    B29A_13          B29A. CLOTHING - PER
    B30_13           B30. PERSONAL CARE PRODUCTS/SERVICES
    B30A_13          B30A. PERSONAL CARE PROD/SERVICES - PER
    B31_13           B31. DRUGS OOP
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    B31A_13          B31A. DRUGS OOP - PER
    B32_13           B32. HEALTH SERVICES
    B32A_13          B32A. HEALTH SERVICES - PER
    B33_13           B33. MEDICAL SUPPLIES
    B33A_13          B33A. MED SUPPLIES - PER
    B34_13           B34. TICKETS
    B34A_13          B34A. TICKETS - PER
    B35_13           B35. SPORTS EQUIPMENT
    B35A_13          B35A. SPORTS EQUIPMENT - PER
    B36_13           B36. HOBBIES/LEISURE EQUIPMENT
    B36A_13          B36A. HOBBIES/LEISURE EQUIPMENT - PER
    B37_13           B37. FOOD/DRINK GROCERY
    B37A_13          B37A. FOOD/DRINK GROC - PER
    B38_13           B38. DINING OUT
    B38A_13          B38A. DINING OUT - PER


CAMS 2015:
    B11_15           B11. HEALTH INSURANCE
    B12_15           B12. TRIPS AND VACATIONS
    B15_15           B15. HOUSEHOLD FURNISHINGS AND EQUIPMENT
    B16_15           B16. CONTRIBUTIONS
    B17_15           B17. GIFTS
    B20_15           B20. ELECTRICITY
    B20A_15          B20A. ELECTRICITY - PER
    B21_15           B21. WATER
    B21A_15          B21A. WATER - PER
    B22_15           B22. HEAT
    B22A_15          B22A. HEAT - PER
    B23_15           B23. PHONE/CABLE/INTERNET
    B23A_15          B23A. PHONE/CABLE - PER
    B25_15           B25. HOUSEKEEPING SUPPLIES
    B25A_15          B25A. HOUSEKEEPING SUPPLIES - PER
    B26_15           B26. HOUSEKEEPING SERVICES
    B26A_15          B26A. HOUSEKEEPING SERVICES - PER
    B27_15           B27. GARDENING/YARD SUPPLIES
    B27A_15          B27A. GARDEN/YARD SUPPLIES - PER
    B28_15           B28. GARDEN/YARD SERVICES
    B28A_15          B28A. GARDEN/YARD SERVICES - PER
    B29_15           B29. CLOTHING AND APPAREL
    B29A_15          B29A. CLOTHING - PER
    B30_15           B30. PERSONAL CARE PRODUCTS/SERVICES
    B30A_15          B30A. PERSONAL CARE PROD/SERVICES - PER
    B31_15           B31. DRUGS OOP
    B31A_15          B31A. DRUGS OOP - PER
    B32_15           B32. HEALTH SERVICES
    B32A_15          B32A. HEALTH SERVICES - PER
    B33_15           B33. MEDICAL SUPPLIES
    B33A_15          B33A. MED SUPPLIES - PER
    B34_15           B34. TICKETS
    B34A_15          B34A. TICKETS - PER
    B35_15           B35. SPORTS EQUIPMENT
    B35A_15          B35A. SPORTS EQUIPMENT - PER
    B36_15           B36. HOBBIES/LEISURE EQUIPMENT
    B36A_15          B36A. HOBBIES/LEISURE EQUIPMENT - PER
    B37_15           B37. FOOD/DRINK GROCERY
    B37A_15          B37A. FOOD/DRINK GROC - PER
    B38_15           B38. DINING OUT
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B38A_15   B38A. DINING OUT - PER

2.10 Total Transportation Spending

Wave	Variable	Label	Type
5	H5CTRANSS	H5CTRANSS:W5 CAMS: Total Hhold Transportation Spending	Cont
6	H6CTRANSS	H6CTRANSS:W6 CAMS: Total Hhold Transportation Spending	Cont
7	H7CTRANSS	H7CTRANSS:W7 CAMS: Total Hhold Transportation Spending	Cont
8	H8CTRANSS	H8CTRANSS:W8 CAMS: Total Hhold Transportation Spending	Cont
9	H9CTRANSS	H9CTRANSS:W9 CAMS: Total Hhold Transportation Spending	Cont
10	H10CTRANSS	H10CTRANSS:W10 CAMS: Total Hhold Transportation Spending	Cont
11	H11CTRANSS	H11CTRANSS:W11 CAMS: Total Hhold Transportation Spending	Cont
12	H12CTRANSS	H12CTRANSS:W12 CAMS: Total Hhold Transportation Spending	Cont
5	H5CTRANSSF	H5CTRANSSF:W5 CAMSFlag: Total HHold Transportation Spending	Categ
6	H6CTRANSSF	H6CTRANSSF:W6 CAMSFlag: Total HHold Transportation Spending	Categ
7	H7CTRANSSF	H7CTRANSSF:W7 CAMSFlag: Total HHold Transportation Spending	Categ
8	H8CTRANSSF	H8CTRANSSF:W8 CAMSFlag: Total HHold Transportation Spending	Categ
9	H9CTRANSSF	H9CTRANSSF:W9 CAMSFlag: Total HHold Transportation Spending	Categ
10	H10CTRANSSF	H10CTRANSSF:W10 CAMSFlag: Total HHold Transportation Spending	Categ
11	H11CTRANSSF	H11CTRANSSF:W11 CAMSFlag: Total HHold Transportation Spending	Categ
12	H12CTRANSSF	H12CTRANSSF:W12 CAMSFlag: Total HHold Transportation Spending	Categ

Descriptive Statistics

Variable	N	Mean	Std Dev	Minimum	Maximum
H5CTRANSS	3789	8164.406	11975.70	0.000	116031.0
H6CTRANSS	3224	8459.576	13428.89	0.000	164907.0
H7CTRANSS	3832	9131.247	13855.32	0.000	146360.0
H8CTRANSS	3704	8277.366	12137.37	0.000	130741.0
H9CTRANSS	3550	7003.043	9879.375	0.000	92428.00
H10CTRANSS	4319	7957.598	11477.63	0.000	91900.00
H11CTRANSS	4017	8391.658	13276.19	0.000	201000.0
H12CTRANSS	3689	8363.730	13286.87	0.000	113900.0
H5CTRANSSF	3789	0.468	0.944	0.000	4.000
H6CTRANSSF	3224	0.435	0.945	0.000	4.000
H7CTRANSSF	3832	0.454	0.978	0.000	4.000
H8CTRANSSF	3704	0.373	0.887	0.000	4.000
H9CTRANSSF	3550	0.354	0.850	0.000	4.000
H10CTRANSSF	4319	0.348	0.856	0.000	4.000
H11CTRANSSF	4017	0.359	0.866	0.000	4.000
H12CTRANSSF	3689	0.323	0.825	0.000	4.000

Categorical Variable Codes

Value	H5CTRANSSF	H6CTRANSSF	H7CTRANSSF	H8CTRANSSF	H9CTRANSSF	H10CTRANSSF	H11CTRANSSF	H12CTRANSSF
.T Resp <10 cat	77	30	47	34	37	51	50	48
0. no winsor or imp	2981	2606	3087	3097	2980	3651	3375	3155
1. winsor only	33	41	40	40	36	41	38	33
2. mean/median imp only	646	420	487	399	414	473	458	383
3. zero imp only	68	106	146	128	86	102	97	80
4. imp & winsor	61	51	72	40	34	52	49	38

General Comments:

Spending measures are reported in nominal dollars. Missing values in vehicle insurance, vehicle maintenance, car payment or vehicle financing, and gasoline are imputed using the method described in the section titled "1.10 Imputation and Cleaning of Spending Variables." Missing values in a component of auto purchases are imputed using the method described in "1.11 Imputation of Auto Purchases." There are differences across waves concerning car payments, which are included in total transportation spending, as documented below.

Generally, Wave 5 questions ask about 2001 spending, Wave 6 asks about 2003 spending, and so forth until Wave 12 which asks about 2015 spending.

The transportation spending components are summed to create the total transportation spending measure. CAMS spending measures are reported at the household level. The CAMS Respondent reports spending for all members of his/her household.

How Constructed:

HwCTRANSS is the sum of all of the spending in the household on up to three automobile purchases, vehicle insurance, vehicle maintenance, car payment or vehicle financing, and gasoline. If the Respondent does not indicate whether or not their household purchased an automobile, it is assumed that there was no auto purchased and the auto amounts are set to zero. Please see "1.11 Imputation of Auto Purchases" for more details.

HwCTRANSSF is a flag that indicates whether any of the components of transportation spending are imputed or winsorized. Please see "1.10 Imputation and Cleaning of Spending Variables" for more information.

Cross Wave Differences in Original CAMS Data

The CAMS 2001 survey asked for car interest payment amount (vehicle financing), while later surveys asked for the combined spending on both car interest and principal payments (car payments).

CAMS Variables Used

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CAMS 2001:
   B1_01           B1. PURCHASE/LEASE AUTO
   B1A_3_01        B1A_3. AUTO YEAR - 1
   B1A_4_01        B1A_4. AUTO PRICE - 1
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    B1B_3_01        B1B_3. AUTO YEAR - 2
    B1B_4_01        B1B_4. AUTO PRICE - 2
    B1C_3_01        B1C_3. AUTO YEAR - 3
    B1C_4_01        B1C_4. AUTO PRICE - 3
    B15_01          B15. AUTO FINANCE CHRG
    B15A_01         B15A. AUTO FINANCE - PER
    B16_01          B16. AUTO INSURANCE
    B16A_01         B16A. AUTO INSUR - PER
    B23_01          B23. GASOLINE
    B23A_01         B23A. GASOLINE - PER
    B24_01          B24. VEHICLE SERVICE
    B24A_01         B24A. VEHICLE SERVICE - PER


CAMS 2003:
    B1_03           B1. PURCHASE/LEASE AUTO
    B1A3_03         B1A3. AUTO YEAR - 1
    B1A4_03         B1A4. AUTO PRICE - 1
    B1A5_03         B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_03         B1B3. AUTO YEAR - 2
    B1B4_03         B1B4. AUTO PRICE - 2
    B1B5_03         B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_03         B1C3. AUTO YEAR - 3
    B1C4_03         B1C4. AUTO PRICE - 3
    B1C5_03         B1C5. AUTO/TRUCK NEW OR USED - 3
    B9_03           B9. VEHICLE INSURANCE
    B10_03          B10. VEHICLE MAINTENANCE
    B19_03          B19. CAR PAYMENTS INTEREST/PRINCIPAL
    B19A_03         B19A. CAR PAYMENTS - PER
    B38_03          B38. GASOLINE
    B38A_03         B38A. GASOLINE - PER


CAMS 2005:
    B1_05           B1. PURCHASE/LEASE AUTO
    B1A3_05         B1A3. AUTO YEAR - 1
    B1A4_05         B1A4. AUTO PRICE - 1
    B1A5_05         B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_05         B1B3. AUTO YEAR - 2
    B1B4_05         B1B4. AUTO PRICE - 2
    B1B5_05         B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_05         B1C3. AUTO YEAR - 3
    B1C4_05         B1C4. AUTO PRICE - 3
    B1C5_05         B1C5. AUTO/TRUCK NEW OR USED - 3
    B9_05           B9. VEHICLE INSURANCE
    B10_05          B10. VEHICLE MAINTENANCE
    B24_05          B24. CAR PAYMENTS INTEREST/PRINCIPAL
    B24A_05         B24A. CAR PAYMENTS - PER
    B39_05          B39. GASOLINE
    B39A_05         B39A. GASOLINE - PER


CAMS 2007:
    B1_07           B1. PURCHASE/LEASE AUTO
    B1A3_07         B1A3. AUTO YEAR - 1
    B1A4_07         B1A4. AUTO PRICE - 1
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    B1A5_07           B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_07           B1B3. AUTO YEAR - 2
    B1B4_07           B1B4. AUTO PRICE - 2
    B1B5_07           B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_07           B1C3. AUTO YEAR - 3
    B1C4_07           B1C4. AUTO PRICE - 3
    B1C5_07           B1C5. AUTO/TRUCK NEW OR USED - 3
    B9_07             B9. VEHICLE INSURANCE
    B10_07            B10. VEHICLE MAINTENANCE
    B24_07            B24. CAR PAYMENTS INTEREST/PRINCIPAL
    B24A_07           B24A. CAR PAYMENTS - PER
    B39_07            B39. GASOLINE
    B39A_07           B39A. GASOLINE - PER


CAMS 2009:
    B1_09             B1. PURCHASE/LEASE AUTO
    B1A3_09           B1A3. AUTO YEAR - 1
    B1A4_09           B1A4. AUTO PRICE - 1
    B1A5_09           B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_09           B1B3. AUTO YEAR - 2
    B1B4_09           B1B4. AUTO PRICE - 2
    B1B5_09           B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_09           B1C3. AUTO YEAR - 3
    B1C4_09           B1C4. AUTO PRICE - 3
    B1C5_09           B1C5. AUTO/TRUCK NEW OR USED - 3
    B9_09             B9. VEHICLE INSURANCE
    B10_09            B10. VEHICLE MAINTENANCE
    B24_09            B24. CAR PAYMENTS INTEREST/PRINCIPAL
    B24A_09           B24A. CAR PAYMENTS - PER
    B39_09            B39. GASOLINE
    B39A_09           B39A. GASOLINE - PER


CAMS 2011:
    B1_11             B1. PURCHASE/LEASE AUTO
    B1A3_11           B1A3. AUTO YEAR - 1
    B1A4_11           B1A4. AUTO PRICE - 1
    B1A5_11           B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_11           B1B3. AUTO YEAR - 2
    B1B4_11           B1B4. AUTO PRICE - 2
    B1B5_11           B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_11           B1C3. AUTO YEAR - 3
    B1C4_11           B1C4. AUTO PRICE - 3
    B1C5_11           B1C5. AUTO/TRUCK NEW OR USED - 3
    B9_11             B9. VEHICLE INSURANCE
    B10_11            B10. VEHICLE MAINTENANCE
    B24_11            B24. CAR PAYMENTS INTEREST/PRINCIPAL
    B24A_11           B24A. CAR PAYMENTS - PER
    B39_11            B39. GASOLINE
    B39A_11           B39A. GASOLINE - PER


CAMS 2013:
    B1_13             B1. PURCHASE/LEASE AUTO
    B1A3_13           B1A3. AUTO YEAR - 1
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    B1A4_13          B1A4. AUTO PRICE - 1
    B1A5_13          B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_13          B1B3. AUTO YEAR - 2
    B1B4_13          B1B4. AUTO PRICE - 2
    B1B5_13          B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_13          B1C3. AUTO YEAR - 3
    B1C4_13          B1C4. AUTO PRICE - 3
    B1C5_13          B1C5. AUTO/TRUCK NEW OR USED - 3
    B9_13            B9. VEHICLE INSURANCE
    B10_13           B10. VEHICLE MAINTENANCE
    B24_13           B24. CAR PAYMENTS INTEREST/PRINCIPAL
    B24A_13          B24A. CAR PAYMENTS - PER
    B39_13           B39. GASOLINE
    B39A_13          B39A. GASOLINE - PER



CAMS 2015:
    B1_15            B1. PURCHASE/LEASE AUTO
    B1A3_15          B1A3. AUTO YEAR - 1
    B1A4_15          B1A4. AUTO PRICE - 1
    B1A5_15          B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_15          B1B3. AUTO YEAR - 2
    B1B4_15          B1B4. AUTO PRICE - 2
    B1B5_15          B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_15          B1C3. AUTO YEAR - 3
    B1C4_15          B1C4. AUTO PRICE - 3
    B1C5_15          B1C5. AUTO/TRUCK NEW OR USED - 3
    B9_15            B9. VEHICLE INSURANCE
    B10_15           B10. VEHICLE MAINTENANCE
    B24_15           B24. CAR PAYMENTS INTEREST/PRINCIPAL
    B24A_15          B24A. CAR PAYMENTS - PER
    B39_15           B39. GASOLINE
    B39A_15          B39A. GASOLINE - PER
```

2.11 Total Housing Spending

Wave	Variable	Label	Type
5	H5CHOUSS	H5CHOUSS:W5 CAMS: Total Hhold Housing Spending	Cont
6	H6CHOUSS	H6CHOUSS:W6 CAMS: Total Hhold Housing Spending	Cont
7	H7CHOUSS	H7CHOUSS:W7 CAMS: Total Hhold Housing Spending	Cont
8	H8CHOUSS	H8CHOUSS:W8 CAMS: Total Hhold Housing Spending	Cont
9	H9CHOUSS	H9CHOUSS:W9 CAMS: Total Hhold Housing Spending	Cont
10	H10CHOUSS	H10CHOUSS:W10 CAMS: Total Hhold Housing Spending	Cont
11	H11CHOUSS	H11CHOUSS:W11 CAMS: Total Hhold Housing Spending	Cont
12	H12CHOUSS	H12CHOUSS:W12 CAMS: Total Hhold Housing Spending	Cont
5	H5CHOUSSF	H5CHOUSSF:W5 CAMSFlag: Total HHold Housing Spending	Categ
6	H6CHOUSSF	H6CHOUSSF:W6 CAMSFlag: Total HHold Housing Spending	Categ
7	H7CHOUSSF	H7CHOUSSF:W7 CAMSFlag: Total HHold Housing Spending	Categ
8	H8CHOUSSF	H8CHOUSSF:W8 CAMSFlag: Total HHold Housing Spending	Categ
9	H9CHOUSSF	H9CHOUSSF:W9 CAMSFlag: Total HHold Housing Spending	Categ
10	H10CHOUSSF	H10CHOUSSF:W10 CAMSFlag: Total HHold Housing Spending	Categ
11	H11CHOUSSF	H11CHOUSSF:W11 CAMSFlag: Total HHold Housing Spending	Categ
12	H12CHOUSSF	H12CHOUSSF:W12 CAMSFlag: Total HHold Housing Spending	Categ

Descriptive Statistics

Variable	N	Mean	Std Dev	Minimum	Maximum
H5CHOUSS	3789	8112.178	13976.18	0.000	259212.0
H6CHOUSS	3224	7921.272	10831.65	0.000	141669.0
H7CHOUSS	3832	8043.114	9120.142	0.000	107609.0
H8CHOUSS	3704	8943.954	11861.27	0.000	220196.0
H9CHOUSS	3550	8489.916	9579.231	0.000	91200.00
H10CHOUSS	4319	9008.865	10551.47	0.000	122935.0
H11CHOUSS	4017	9084.288	10115.38	0.000	100325.0
H12CHOUSS	3689	9578.577	11922.02	0.000	112750.0
H5CHOUSSF	3789	0.445	0.833	0.000	3.000
H6CHOUSSF	3224	0.456	0.837	0.000	3.000
H7CHOUSSF	3832	0.414	0.804	0.000	3.000
H8CHOUSSF	3704	0.351	0.760	0.000	3.000
H9CHOUSSF	3550	0.359	0.764	0.000	3.000
H10CHOUSSF	4319	0.381	0.783	0.000	3.000
H11CHOUSSF	4017	0.395	0.796	0.000	3.000
H12CHOUSSF	3689	0.365	0.769	0.000	3.000

Categorical Variable Codes

Value	H5CHOUSSF	H6CHOUSSF	H7CHOUSSF	H8CHOUSSF	H9CHOUSSF	H10CHOUSSF	H11CHOUSSF	H12CHOUSSF
.T Resp <10 cat	77	30	47	34	37	51	50	48
0. no winsor or imp	2935	2472	3016	3039	2892	3479	3211	2998
1. winsor only	33	46	48	41	48	43	37	41
2. mean imp only	809	694	765	612	602	788	757	643
3. imp & winsor	12	12	3	12	8	9	12	7

General Comments:

Spending measures are reported in nominal dollars. When a spending component is missing it is imputed using the method described in the section titled "1.10 Imputation and Cleaning of Spending Variables." There are differences across waves in which categories are included in total housing spending as documented below.

Generally, Wave 5 questions ask about 2001 spending, Wave 6 asks about 2003 spending, and so forth until Wave 12 which asks about 2015 spending.

The housing spending components are summed to create the total housing spending measure. CAMS spending measures are reported at the household level. The CAMS Respondent reports spending for all members of his/her household.

How Constructed:

HwCHOUSS is the sum of all of the spending on housing, including mortgage interest, rent, home/renters insurance, property taxes, and home repair and maintenance (supplies and services). The spending categories vary by wave. Mortgage payments include only interest. Please refer to "1.7 Components of Household Spending and Consumption" for details on the calculation of mortgage interest.

HwCHOUSSF is a flag that indicates whether any components are imputed or winsorized. Please see "1.10 Imputation and Cleaning of Spending Variables" for more information.

Cross Wave Differences in Original CAMS Data

The CAMS 2001 survey asked about home repairs and maintenance as one spending item. In later waves, this item was split into two components:

1. Home repairs and maintenance supplies: materials your household bought directly

2. Home repairs and maintenance services: hiring costs including materials they provided

CAMS Variables Used

```
CAMS 2001:
    B7_01           B7. MORTGAGE
    B7A_01          B7A. MORTAGAGE - PER
    B8_01           B8. HOME/RENT INS.
    B8A_01          B8A. HOME/RENT INS - PER
    B9_01           B9. PROPERTY TAX
    B9A_01          B9A. PROPERTY TAX - PER
    B10_01          B10. RENT
    B10A_01         B10A. RENT - PER
    B19_01          B19. HOME MAINTAIN
    B19A_01         B19A. HOME MAINTAIN - PER


CAMS 2003:
    B7_03           B7. HOME/RENTERS INSURANCE
    B8_03           B8. PROPERTY TAXES
    B13_03          B13. MORTGAGE
    B13A_03         B13A. MORTAGAGE - PER
    B14_03          B14. RENT
    B14A_03         B14A. RENT - PER
    B24_03          B24. HOME REPAIRS/MAINTENANCE DIY
    B24A_03         B24A. HOME REPAIRS/MAINTENANCE DIY - PER
    B25_03          B25. HOME REPAIRS/MAINTENANCE SERVICES
    B25A_03         B25A. HOME REPAIRS/MAINTENANCE SERVICE - PER


CAMS 2005:
    B7_05           B7. HOME/RENTERS INSURANCE
    B8_05           B8. PROPERTY TAXES
    B13_05          B13. HOME REPAIRS/MAINTENANCE DIY
    B14_05          B14. HOME REPAIRS/MAINTENANCE SERVICES
    B18_05          B18. MORTGAGE
    B18A_05         B18A. MORTAGAGE - PER
    B19_05          B19. RENT
    B19A_05         B19A. RENT - PER


CAMS 2007:
    B7_07           B7. HOME/RENTERS INSURANCE
    B8_07           B8. PROPERTY TAXES
    B13_07          B13. HOME REPAIRS/MAINTENANCE DIY
    B14_07          B14. HOME REPAIRS/MAINTENANCE SERVICES
    B18_07          B18. MORTGAGE
    B18A_07         B18A. MORTAGAGE - PER
    B19_07          B19. RENT
    B19A_07         B19A. RENT - PER


CAMS 2009:
    B7_09           B7. HOME/RENTERS INSURANCE
    B8_09           B8. PROPERTY TAXES
```

```
    B13_09          B13. HOME REPAIRS/MAINTENANCE DIY
    B14_09          B14. HOME REPAIRS/MAINTENANCE SERVICES
    B18_09          B18. MORTGAGE
    B18A_09         B18A. MORTAGAGE - PER
    B19_09          B19. RENT
    B19A_09         B19A. RENT - PER




CAMS 2011:
    B7_11           B7. HOME/RENTERS INSURANCE
    B8_11           B8. PROPERTY TAXES
    B13_11          B13. HOME REPAIRS/MAINTENANCE DIY
    B14_11          B14. HOME REPAIRS/MAINTENANCE SERVICES
    B18_11          B18. MORTGAGE
    B18A_11         B18A. MORTAGAGE - PER
    B19_11          B19. RENT
    B19A_11         B19A. RENT - PER




CAMS 2013:
    B7_13           B7. HOME/RENTERS INSURANCE
    B8_13           B8. PROPERTY TAXES
    B13_13          B13. HOME REPAIRS/MAINTENANCE DIY
    B14_13          B14. HOME REPAIRS/MAINTENANCE SERVICES
    B18_13          B18. MORTGAGE
    B18A_13         B18A. MORTGAGE - PER
    B19_13          B19. RENT
    B19A_13         B19A. RENT - PER




CAMS 2015:
    C2B_15          C2B. OWN OR RENT HOUSE
    B7_15           B7. HOME/RENTERS INSURANCE
    B8_15           B8. PROPERTY TAXES
    B13_15          B13. HOME REPAIRS/MAINTENANCE DIY
    B14_15          B14. HOME REPAIRS/MAINTENANCE SERVICES
    B18_15          B18. MORTGAGE
    B18A_15         B18A. MORTGAGE - PER
    B19_15          B19. RENT
    B19A_15         B19A. RENT - PER
```

2.12 Car Purchases and Payments

Wave	Variable	Label	Type
5	H5CAUTOALL	H5CAUTOALL:W5 CAMS: Total HHold Auto Spending	Cont
6	H6CAUTOALL	H6CAUTOALL:W6 CAMS: Total HHold Auto Spending	Cont
7	H7CAUTOALL	H7CAUTOALL:W7 CAMS: Total HHold Auto Spending	Cont
8	H8CAUTOALL	H8CAUTOALL:W8 CAMS: Total HHold Auto Spending	Cont
9	H9CAUTOALL	H9CAUTOALL:W9 CAMS: Total HHold Auto Spending	Cont
10	H10CAUTOALL	H10CAUTOALL:W10 CAMS: Total HHold Auto Spending	Cont
11	H11CAUTOALL	H11CAUTOALL:W11 CAMS: Total HHold Auto Spending	Cont
12	H12CAUTOALL	H12CAUTOALL:W12 CAMS: Total HHold Auto Spending	Cont
5	H5CVHCLFIN	H5CVHCLFIN:W5 CAMS: Car Interest Payments	Cont
6	H6CCARPAY	H6CCARPAY:W6 CAMS: Car Interest + Principal Payments	Cont
7	H7CCARPAY	H7CCARPAY:W7 CAMS: Car Interest + Principal Payments	Cont
8	H8CCARPAY	H8CCARPAY:W8 CAMS: Car Interest + Principal Payments	Cont
9	H9CCARPAY	H9CCARPAY:W9 CAMS: Car Interest + Principal Payments	Cont
10	H10CCARPAY	H10CCARPAY:W10 CAMS: Car Interest + Principal Payments	Cont
11	H11CCARPAY	H11CCARPAY:W11 CAMS: Car Interest + Principal Payments	Cont
12	H12CCARPAY	H12CCARPAY:W12 CAMS: Car Interest + Principal Payments	Cont

Descriptive Statistics

Variable	N	Mean	Std Dev	Minimum	Maximum
H5CAUTOALL	3789	4012.065	9815.515	0.000	67000.00
H6CAUTOALL	3224	3549.592	9430.895	0.000	74500.00
H7CAUTOALL	3832	4008.529	11005.34	0.000	113000.0
H8CAUTOALL	3704	3154.898	8859.123	0.000	60000.00
H9CAUTOALL	3550	2585.688	7667.490	0.000	58000.00
H10CAUTOALL	4319	2792.705	8667.035	0.000	66000.00
H11CAUTOALL	4017	3245.212	9893.219	0.000	100000.0
H12CAUTOALL	3689	3436.659	10333.99	0.000	79000.00
H5CVHCLFIN	3789	548.156	1603.219	0.000	18000.00
H6CCARPAY	3224	1994.097	6726.262	0.000	100800.0
H7CCARPAY	3832	1629.478	3634.452	0.000	46296.00
H8CCARPAY	3704	1708.689	4985.493	0.000	72000.00
H9CCARPAY	3550	1341.202	3245.021	0.000	43200.00
H10CCARPAY	4319	1460.710	3988.037	0.000	60000.00
H11CCARPAY	4017	1580.658	5027.563	0.000	77760.00
H12CCARPAY	3689	1650.607	4502.785	0.000	60000.00

General Comments:

Spending measures are reported in nominal dollars. Missing values in vehicle finance charges and car payments are imputed using the method described in the section titled "1.10 Imputation and Cleaning of Spending Variables." When a component of auto purchases is missing it is imputed using the method described in "1.11 Imputation of Auto Purchases."

Generally, Wave 5 questions ask about 2001 spending, Wave 6 asks about 2003 spending, and so forth until Wave 12 which asks about 2015 spending. The CAMS Respondent reports spending for all members of his/her household.

Spending on auto purchases is included in the total transportation spending measure, which is a component of the total household spending measure. The CAMS survey only measures purchase price of autos and not the outlay. Measuring the outlay is complicated due to the many financing options for vehicle purchases, including the possibility of trade-ins. Eliciting the details of the transactions is not practical in a paper-and-pencil survey.

Analysts may want to consider adjustments, depending on the purpose of their analyses. To arrive at a pure spending measure the analyst will need to devise a way to remove the saving component (i.e., the principal) contained in the car payments. To enable the analyst to make the correction without having to extract any raw variables from the original CAMS files, we have included "car payments" as separate variables. The analyst can use these (a) to subtract them from RAND CAMS total spending and (b) to compute car payments to be added back into the measures of total spending. Please see "1.6 Spending versus Consumption" for more details.

How Constructed:

HwCAUTOALL is the sum of all of the spending in the household on up to three automobile purchases. If the Respondent does not indicate whether or not their household purchased an automobile, it is assumed that there was no auto purchase and the auto amounts are set to zero. When an auto has been purchased but the value is missing, it is imputed using median imputation before the top and bottom five totaled values are winsorized. There are no differences across waves in total auto spending components, but the determination of new versus old auto changes across waves. Please see "1.11 Imputation of Auto Purchases" for more information.

H5CVHCLFIN is the car interest payment amount from CAMS 2001 and can be subtracted from H5CTOTS. HwCCARPAY is the car interest and principal payment amount and can be subtracted from HwCTOTS for Waves 6 onward.

CAMS Variables Used

```
CAMS 2001:
    B1_01           B1. PURCHASE/LEASE AUTO
    B1A_3_01        B1A_3. AUTO YEAR - 1
    B1A_4_01        B1A_4. AUTO PRICE - 1
    B1B_3_01        B1B_3. AUTO YEAR - 2
    B1B_4_01        B1B_4. AUTO PRICE - 2
    B1C_3_01        B1C_3. AUTO YEAR - 3
    B1C_4_01        B1C_4. AUTO PRICE - 3
    B15_01          B15. AUTO FINANCE CHRG
    B15A_01         B15A. AUTO FINANCE - PER
```

```
CAMS 2003:
    B1_03           B1. PURCHASE/LEASE AUTO
    B1A3_03         B1A3. AUTO YEAR - 1
    B1A4_03         B1A4. AUTO PRICE - 1
    B1A5_03         B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_03         B1B3. AUTO YEAR - 2
    B1B4_03         B1B4. AUTO PRICE - 2
    B1B5_03         B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_03         B1C3. AUTO YEAR - 3
    B1C4_03         B1C4. AUTO PRICE - 3
    B1C5_03         B1C5. AUTO/TRUCK NEW OR USED - 3
    B19_03          B19. CAR PAYMENTS INTEREST/PRINCIPAL
    B19A_03         B19A. CAR PAYMENTS - PER



CAMS 2005:
    B1_05           B1. PURCHASE/LEASE AUTO
    B1A3_05         B1A3. AUTO YEAR - 1
    B1A4_05         B1A4. AUTO PRICE - 1
    B1A5_05         B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_05         B1B3. AUTO YEAR - 2
    B1B4_05         B1B4. AUTO PRICE - 2
    B1B5_05         B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_05         B1C3. AUTO YEAR - 3
    B1C4_05         B1C4. AUTO PRICE - 3
    B1C5_05         B1C5. AUTO/TRUCK NEW OR USED - 3
    B24_05          B24. CAR PAYMENTS INTEREST/PRINCIPAL
    B24A_05         B24A. CAR PAYMENTS - PER



CAMS 2007:
    B1_07           B1. PURCHASE/LEASE AUTO
    B1A3_07         B1A3. AUTO YEAR - 1
    B1A4_07         B1A4. AUTO PRICE - 1
    B1A5_07         B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_07         B1B3. AUTO YEAR - 2
    B1B4_07         B1B4. AUTO PRICE - 2
    B1B5_07         B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_07         B1C3. AUTO YEAR - 3
    B1C4_07         B1C4. AUTO PRICE - 3
    B1C5_07         B1C5. AUTO/TRUCK NEW OR USED - 3
    B24_07          B24. CAR PAYMENTS INTEREST/PRINCIPAL
    B24A_07         B24A. CAR PAYMENTS - PER



CAMS 2009:
    B1_09           B1. PURCHASE/LEASE AUTO
    B1A3_09         B1A3. AUTO YEAR - 1
    B1A4_09         B1A4. AUTO PRICE - 1
    B1A5_09         B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_09         B1B3. AUTO YEAR - 2
    B1B4_09         B1B4. AUTO PRICE - 2
    B1B5_09         B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_09         B1C3. AUTO YEAR - 3
    B1C4_09         B1C4. AUTO PRICE - 3
    B1C5_09         B1C5. AUTO/TRUCK NEW OR USED - 3
```

```
    B24_09          B24. CAR PAYMENTS INTEREST/PRINCIPAL
    B24A_09         B24A. CAR PAYMENTS - PER




CAMS 2011:
    B1_11           B1. PURCHASE/LEASE AUTO
    B1A3_11         B1A3. AUTO YEAR - 1
    B1A4_11         B1A4. AUTO PRICE - 1
    B1A5_11         B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_11         B1B3. AUTO YEAR - 2
    B1B4_11         B1B4. AUTO PRICE - 2
    B1B5_11         B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_11         B1C3. AUTO YEAR - 3
    B1C4_11         B1C4. AUTO PRICE - 3
    B1C5_11         B1C5. AUTO/TRUCK NEW OR USED - 3
    B24_11          B24. CAR PAYMENTS INTEREST/PRINCIPAL
    B24A_11         B24A. CAR PAYMENTS - PER




CAMS 2013:
    B1_13           B1. PURCHASE/LEASE AUTO
    B1A3_13         B1A3. AUTO YEAR - 1
    B1A4_13         B1A4. AUTO PRICE - 1
    B1A5_13         B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_13         B1B3. AUTO YEAR - 2
    B1B4_13         B1B4. AUTO PRICE - 2
    B1B5_13         B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_13         B1C3. AUTO YEAR - 3
    B1C4_13         B1C4. AUTO PRICE - 3
    B1C5_13         B1C5. AUTO/TRUCK NEW OR USED - 3
    B24_13          B24. CAR PAYMENTS INTEREST/PRINCIPAL
    B24A_13         B24A. CAR PAYMENTS - PER




CAMS 2015:
    B1_15           B1. PURCHASE/LEASE AUTO
    B1A3_15         B1A3. AUTO YEAR - 1
    B1A4_15         B1A4. AUTO PRICE - 1
    B1A5_15         B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_15         B1B3. AUTO YEAR - 2
    B1B4_15         B1B4. AUTO PRICE - 2
    B1B5_15         B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_15         B1C3. AUTO YEAR - 3
    B1C4_15         B1C4. AUTO PRICE - 3
    B1C5_15         B1C5. AUTO/TRUCK NEW OR USED - 3
    B24_15          B24. CAR PAYMENTS INTEREST/PRINCIPAL
    B24A_15         B24A. CAR PAYMENTS - PER
```

2.13 Mortgage Payments and Interest

Wave	Variable	Label	Type
5	H5CMORT	H5CMORT:W5 CAMS: Mortgage Interest + Principal Payments	Cont
6	H6CMORT	H6CMORT:W6 CAMS: Mortgage Interest + Principal Payments	Cont
7	H7CMORT	H7CMORT:W7 CAMS: Mortgage Interest + Principal Payments	Cont
8	H8CMORT	H8CMORT:W8 CAMS: Mortgage Interest + Principal Payments	Cont
9	H9CMORT	H9CMORT:W9 CAMS: Mortgage Interest + Principal Payments	Cont
10	H10CMORT	H10CMORT:W10 CAMS: Mortgage Interest + Principal Payments	Cont
11	H11CMORT	H11CMORT:W11 CAMS: Mortgage Interest + Principal Payments	Cont
12	H12CMORT	H12CMORT:W12 CAMS: Mortgage Interest + Principal Payments	Cont
5	H5CMORTINT	H5CMORTINT:W5 CAMS: Mortgage Interest	Cont
6	H6CMORTINT	H6CMORTINT:W6 CAMS: Mortgage Interest	Cont
7	H7CMORTINT	H7CMORTINT:W7 CAMS: Mortgage Interest	Cont
8	H8CMORTINT	H8CMORTINT:W8 CAMS: Mortgage Interest	Cont
9	H9CMORTINT	H9CMORTINT:W9 CAMS: Mortgage Interest	Cont
10	H10CMORTINT	H10CMORTINT:W10 CAMS: Mortgage Interest	Cont
11	H11CMORTINT	H11CMORTINT:W11 CAMS: Mortgage Interest	Cont
12	H12CMORTINT	H12CMORTINT:W12 CAMS: Mortgage Interest	Cont

Descriptive Statistics

Variable	N	Mean	Std Dev	Minimum	Maximum
H5CMORT	3789	3094.468	5803.998	0.000	52000.00
H6CMORT	3224	3357.670	6683.571	0.000	70000.00
H7CMORT	3832	4060.717	8926.713	0.000	138000.0
H8CMORT	3704	4547.909	9678.599	0.000	126048.0
H9CMORT	3550	4387.705	9887.936	0.000	123600.0
H10CMORT	4319	4575.350	8444.194	0.000	82368.00
H11CMORT	4017	4284.978	8534.485	0.000	102000.0
H12CMORT	3689	4426.687	9801.589	0.000	123052.0
H5CMORTINT	3789	1836.245	3490.584	0.000	33137.00
H6CMORTINT	3224	1881.985	3791.495	0.000	40299.00
H7CMORTINT	3832	2180.226	4795.705	0.000	73209.00
H8CMORTINT	3704	2561.502	5391.463	0.000	67108.00
H9CMORTINT	3550	2365.490	5319.017	0.000	64536.00
H10CMORTINT	4319	2489.467	4592.795	0.000	42988.00
H11CMORTINT	4017	2447.854	4853.929	0.000	56590.00
H12CMORTINT	3689	2360.195	5224.887	0.000	66990.00

General Comments:

Generally, Wave 5 questions ask about 2001 spending, Wave 6 asks about 2003 spending, and so forth until Wave 12 which asks about 2015 spending. The CAMS Respondent reports spending for all members of his/her household.

To arrive at a pure spending measure the analyst we devised a way to remove the saving component (i.e., the principal) contained in the mortgage payments. Please see the section "1.6 Spending versus Consumption" for details. To enable the analyst to make a different correction without having to extract any raw variables from the original CAMS files, we have included "mortgage payments" and our imputed "mortgage interest" as separate variables. The analyst can use these (a) to subtract them from RAND CAMS total spending and (b) to compute mortgage payments to be added back into the measures of total spending. Please see "1.7 Components of Household Spending and Consumption" for more details on the calculation of mortgage interest.

How Constructed:

HwCMORT is the mortgage payment amount and includes interest and principal.

HwCMORTINT is the mortgage interest amount that is a component of HwCTOTS. It can be subtracted from HwCTOTS should the analyst choose to develop an alternative measure of mortgage spending. We approximated households' interest using Consumer Expenditure Survey data. Please see the section "1.7 Components of Household Spending and Consumption" for details.

CAMS Variables Used

```
CAMS 2001:
    B7_01           B7. MORTGAGE
    B7A_01          B7A. MORTAGAGE - PER


CAMS 2003:
    B13_03          B13. MORTGAGE
    B13A_03         B13A. MORTAGAGE - PER


CAMS 2005:
    B18_05          B18. MORTGAGE
    B18A_05         B18A. MORTAGAGE - PER


CAMS 2007:
    B18_07          B18. MORTGAGE
    B18A_07         B18A. MORTAGAGE - PER


CAMS 2009:
    B18_09          B18. MORTGAGE
    B18A_09         B18A. MORTAGAGE - PER
```

```
CAMS 2011:
    B18_11          B18. MORTGAGE
    B18A_11         B18A. MORTAGAGE - PER


CAMS 2013:
    B18_13          B18. MORTGAGE
    B18A_13         B18A. MORTGAGE - PER


CAMS 2015:
    B18_15          B18. MORTGAGE
    B18A_15         B18A. MORTGAGE - PER
```

2.14 Total Household Consumption

Wave	Variable	Label	Type
5	H5CTOTC	H5CTOTC: Total HHold Consumption	Cont
6	H6CTOTC	H6CTOTC: Total HHold Consumption	Cont
7	H7CTOTC	H7CTOTC: Total HHold Consumption	Cont
8	H8CTOTC	H8CTOTC: Total HHold Consumption	Cont
9	H9CTOTC	H9CTOTC: Total HHold Consumption	Cont
10	H10CTOTC	H10CTOTC: Total HHold Consumption	Cont
11	H11CTOTC	H11CTOTC: Total HHold Consumption	Cont

Descriptive Statistics

Variable	N	Mean	Std Dev	Minimum	Maximum
H5CTOTC	3789	41777.49	32475.36	245.000	399299.0
H6CTOTC	3224	45535.12	33770.65	133.000	394608.0
H7CTOTC	3832	45736.28	34513.24	0.000	354164.0
H8CTOTC	3704	49233.16	37192.34	113.000	472101.0
H9CTOTC	3550	46994.23	35393.45	112.000	513070.0
H10CTOTC	4319	44325.28	33538.90	73.000	457792.0
H11CTOTC	4017	43206.16	31859.66	72.000	372826.0

General Comments:

The CAMS questionnaire aims at eliciting household spending. However, in most economic models individuals (or households) draw utility from consumption. Consumption is different from spending for items like consumer durables (e.g., automobile, TV, PC etc.) and housing. The purchase occurs in one period, but the item provides utility for more than one period. We provide one possible derivation of a measure of household consumption. The data used to construct the consumption measures include spending measures from the CAMS surveys and demographic data, income and wealth values from the adjacent HRS core surveys. Details on the methodology can be found in the section "1.7 Components of Household Spending and Consumption." Consumption variables for 2015 are not calculated for RAND CAMS 2015 V2 because the imputation of these variables relies on HRS 2016 core data for house value and transportation value, which are not yet available. The next version of RAND CAMS will be published once the HRS 2016 early release data has been released, and will incorporate the CAMS 2015 consumption variables.

How Constructed:

HwCTOTC is the sum of all of the consumption in the household, including durable consumption, housing consumption, transportation consumption and nondurable spending. Details on the specification of each of these measures can be found on the following pages of the data codebook and also in section "1.7 Components of Household Spending and Consumption." The nondurable spending categories vary by wave. Please see "1.5 Differences Across Waves" for details of which spending categories are available in each wave.

Cross Wave Differences in Original CAMS Data

The CAMS 2001 and CAMS 2003 surveys asked fewer nondurable spending categories than in the later waves (see "1.5 Differences Across Waves").

RAND HRS Ver P Variables Used

```
H5AHOUS:W5 Assets:Primary Residence--Cross-wave
H6AHOUS:W6 Assets:Primary Residence--Cross-wave
H7AHOUS:W7 Assets:Primary Residence--Cross-wave
H8AHOUS:W8 Assets:Primary Residence--Cross-wave
H9AHOUS:W9 Assets:Primary Residence--Cross-wave
H10AHOUS:W10 Assets:Primary Residence--Cross-wave
H11AHOUS:W11 Assets:Primary Residence--Cross-wave
H12AHOUS:W12 Assets:Primary Residence--Cross-wave


H5ATOTA:W5 Total of all Assets--Cross-wave
H6ATOTA:W6 Total of all Assets--Cross-wave
H7ATOTA:W7 Total of all Assets--Cross-wave
H8ATOTA:W8 Total of all Assets--Cross-wave
H9ATOTA:W9 Total of all Assets--Cross-wave
H10ATOTA:W10 Total of all Assets--Cross-wave
H11ATOTA:W11 Total of all Assets--Cross-wave
H12ATOTA:W12 Total of all Assets--Cross-wave


H5ATRAN:W5 Assets:Transportation--Cross-wave
H6ATRAN:W6 Assets:Transportation--Cross-wave
H7ATRAN:W7 Assets:Transportation--Cross-wave
H8ATRAN:W8 Assets:Transportation--Cross-wave
H9ATRAN:W9 Assets:Transportation--Cross-wave
H10ATRAN:W10 Assets:Transportation--Cross-wave
H11ATRAN:W11 Assets:Transportation--Cross-wave
H12ATRAN:W12 Assets:Transportation--Cross-wave

RABYEAR: R birth year

RAEDUC: R education (categ)

RAGENDER: R Gender

H5HHRES:W5 Number of people in HH
H6HHRES:W6 Number of people in HH
H7HHRES:W7 Number of people in HH
H8HHRES:W8 Number of people in HH
H9HHRES:W9 Number of people in HH
H10HHRES:W10 Number of people in HH
```

```
H11HHRES:W11 Number of people in HH
H12HHRES:W12 Number of people in HH

H5ITOT:W5 Incm: Total HHold / R+Sp only
H6ITOT:W6 Incm: Total HHold / R+Sp only
H7ITOT:W7 Incm: Total HHold / R+Sp only
H8ITOT:W8 Incm: Total HHold / R+Sp only
H9ITOT:W9 Incm: Total HHold / R+Sp only
H10ITOT:W10 Incm: Total HHold / R+Sp only
H11ITOT:W11 Incm: Total HHold / R+Sp only
H12ITOT:W12 Incm: Total HHold / R+Sp only

R5MSTAT:W5 R Marital Status
R6MSTAT:W6 R Marital Status
R7MSTAT:W7 R Marital Status
R8MSTAT:W8 R Marital Status
R9MSTAT:W9 R Marital Status
R10MSTAT:W10 R Marital Status
R11MSTAT:W11 R Marital Status
R12MSTAT:W12 R Marital Status

R5WORK:W5 R working for pay
R6WORK:W6 R working for pay
R7WORK:W7 R working for pay
R8WORK:W8 R working for pay
R9WORK:W9 R working for pay
R10WORK:W10 R working for pay
R11WORK:W11 R working for pay
R12WORK:W12 R working for pay
```

CAMS Variables Used

```
CAMS 2001:
    B2_01           B2. BUY REFRIGERATOR
    B2A_01          B2A. REFRIGERATOR PRICE
    B3_01           B3. BUY WASHER/DRYER
    B3A_01          B3A. WASHER/DRYER PRICE
    B4_01           B4. BUY DISWASHER
    B4A_01          B4A. DISHWASHER PRICE
    B5_01           B5. BUY TELEVISION
    B5A_01          B5A. TELEVISION PRICE
    B6_01           B6. BUY COMPUTER
    B6A_01          B6A. COMPUTER PRICE
    B8_01           B8. HOME/RENT INS.
    B8A_01          B8A. HOME/RENT INS - PER
    B9_01           B9. PROPERTY TAX
    B9A_01          B9A. PROPERTY TAX - PER
    B10_01          B10. RENT
    B10A_01         B10A. RENT - PER
    B11_01          B11. ELECTRICITY
    B11A_01         B11A. ELECTRICITY - PER
    B12_01          B12. WATER
    B12A_01         B12A. WATER - PER
```

```
    B13_01          B13. HEAT
    B13A_01         B13A. HEAT - PER
    B14_01          B14. PHONE/CABLE/INTERNET
    B14A_01         B14A. PHONE/CABLE - PER
    B17_01          B17. HEALTH INSURANCE
    B17A_01         B17A. HEALTH INSUR - PER
    B18_01          B18.  HOUSE/YARD SUPPLIES
    B18A_01         B18A. HOUSE/YARD - PER
    B19_01          B19. HOME MAINTAIN
    B19A_01         B19A. HOME MAINTAIN - PER
    B20A_01         B20. FOOD/DRINK GROC - PER
    B20_01          B20. FOOD/DRINK GROCERY
    B21_01          B21. DINING OUT
    B21A_01         B21A. DINING OUT - PER
    B22_01          B22. CLOTHING
    B22A_01         B22A. CLOTHING - PER
    B23_01          B23. GASOLINE
    B23A_01         B23A. GASOLINE - PER
    B25_01          B25. DRUGS
    B25A_01         B25A. DRUGS - PER
    B26_01          B26. HEALTH SERVICES
    B26A_01         B26A. HEALTH SERVICES - PER
    B27_01          B27. MEDICAL SUPPLIES
    B27A_01         B27A. MED SUPPLIES - PER
    B28_01          B28. VACATIONS
    B28A_01         B28A. VACATIONS - PER
    B29_01          B29. TICKETS
    B29A_01         B29A. TICKETS - PER
    B30_01          B30. HOBBIES
    B30A_01         B30A. HOBBIES - PER
    B31_01          B31. CONTRIBUTIONS
    B31A_01         B31A. CONTRIBUTIONS - PER
    B32_01          B32. GIFTS
    B32A_01         B32A. GIFTS - PER




CAMS 2003:
    B2_03           B2. BUY REFRIGERATOR
    B2A_03          B2A. REFRIGERATOR PRICE
    B3_03           B3. BUY WASHER/DRYER
    B3A_03          B3A. WASHER/DRYER PRICE
    B4_03           B4. BUY DISWASHER
    B4A_03          B4A. DISHWASHER PRICE
    B5_03           B5. BUY TELEVISION
    B5A_03          B5A. TELEVISION PRICE
    B6_03           B6. BUY COMPUTER
    B6A_03          B6A. COMPUTER PRICE
    B7_03           B7. HOME/RENTERS INSURANCE
    B8_03           B8. PROPERTY TAXES
    B11_03          B11. HEALTH INSURANCE
    B12_03          B12. TRIPS AND VACATIONS
    B14_03          B14. RENT
    B14A_03         B14A. RENT - PER
    B15_03          B15. ELECTRICITY
    B15A_03         B15A. ELECTRICITY - PER
    B16_03          B16. WATER
    B16A_03         B16A. WATER - PER
    B17_03          B17. HEAT
```

```
B17A_03          B17A. HEAT - PER
B18_03           B18. PHONE/CABLE/INTERNET
B18A_03          B18A. PHONE/CABLE - PER
B20_03           B20. HOUSEKEEPING SUPPLIES
B20A_03          B20A. HOUSEKEEPING SUPPLIES - PER
B21_03           B21. HOUSEKEEPING SERVICES
B21A_03          B21A. HOUSEKEEPING SERVICES - PER
B22_03           B22.GARDENING/YARD SUPPLIES
B22A_03          B22A. GARDEN/YARD SUPPLIES - PER
B23_03           B23. GARDEN/YARD SERVICES
B23A_03          B23A. GARDEN/YARD SERVICES - PER
B24_03           B24. HOME REPAIRS/MAINTENANCE DIY
B24A_03          B24A. HOME REPAIRS/MAINTENANCE DIY - PER
B25_03           B25. HOME REPAIRS/MAINTENANCE SERVICES
B25A_03          B25A. HOME REPAIRS/MAINTENANCE SERVICE - PER
B26_03           B26. CLOTHING AND APPAREL
B26A_03          B26A. CLOTHING - PER
B27_03           B27. PERSONAL CARE PRODUCTS/SERVICES
B27A_03          B27A. PERSONAL CARE PRODUCTS/SERVICES - PER
B28_03           B28. DRUGS
B28A_03          B28A. DRUGS - PER
B29_03           B29. HEALTH SERVICES
B29A_03          B29A. HEALTH SERVICES - PER
B30_03           B30. MEDICAL SUPPLIES
B30A_03          B30A. MED SUPPLIES - PER
B31_03           B31. TICKETS
B31A_03          B31A. TICKETS - PER
B32_03           B32. SPORTS EQUIPMENT
B32A_03          B32A. SPORTS EQUIPMENT - PER
B33_03           B33. HOBBIES/LEISURE EQUIPMENT
B33A_03          B33A. HOBBIES/LEISURE EQUIPMENT - PER
B34_03           B34. CONTRIBUTIONS
B34A_03          B34A. CONTRIBUTIONS - PER
B35_03           B35. GIFTS
B35A_03          B35A. GIFTS - PER
B36A_03          B36. FOOD/DRINK GROC - PER
B36_03           B36. FOOD/DRINK GROCERY
B37_03           B37. DINING OUT
B37A_03          B37A. DINING OUT - PER
B38_03           B38. GASOLINE
B38A_03          B38A. GASOLINE - PER


CAMS 2005:
B2_05            B2. BUY REFRIGERATOR
B2A_05           B2A. REFRIGERATOR PRICE
B3_05            B3. BUY WASHER/DRYER
B3A_05           B3A. WASHER/DRYER PRICE
B4_05            B4. BUY DISWASHER
B4A_05           B4A. DISHWASHER PRICE
B5_05            B5. BUY TELEVISION
B5A_05           B5A. TELEVISION PRICE
B6_05            B6. BUY COMPUTER
B6A_05           B6A. COMPUTER PRICE
B7_05            B7. HOME/RENTERS INSURANCE
B8_05            B8. PROPERTY TAXES
B11_05           B11. HEALTH INSURANCE
B12_05           B12. TRIPS AND VACATIONS
```

```
    B13_05          B13. HOME REPAIRS/MAINTENANCE DIY
    B14_05          B14. HOME REPAIRS/MAINTENANCE SERVICES
    B15_05          B15. HOUSEHOLD FURNISHINGS AND EQUIPMENT
    B16_05          B16. CONTRIBUTIONS
    B17_05          B17. GIFTS
    B19_05          B19. RENT
    B19A_05         B19A. RENT - PER
    B20_05          B20. ELECTRICITY
    B20A_05         B20A. ELECTRICITY - PER
    B21_05          B21. WATER
    B21A_05         B21A. WATER - PER
    B22_05          B22. HEAT
    B22A_05         B22A. HEAT - PER
    B23_05          B23. PHONE/CABLE/INTERNET
    B23A_05         B23A. PHONE/CABLE - PER
    B25_05          B25. HOUSEKEEPING SUPPLIES
    B25A_05         B25A. HOUSEKEEPING SUPPLIES - PER
    B26_05          B26. HOUSEKEEPING SERVICES
    B26A_05         B26A. HOUSEKEEPING SERVICES - PER
    B27_05          B27.GARDENING/YARD SUPPLIES
    B27A_05         B27A. GARDEN/YARD SUPPLIES - PER
    B28_05          B28. GARDEN/YARD SERVICES
    B28A_05         B28A. GARDEN/YARD SERVICES - PER
    B29_05          B29. CLOTHING AND APPAREL
    B29A_05         B29A. CLOTHING - PER
    B30_05          B30. PERSONAL CARE PRODUCTS/SERVICES
    B30A_05         B30A. PERSONAL CARE PROD/SERVICES - PER
    B31_05          B31. DRUGS OOP
    B31A_05         B31A. DRUGS OOP - PER
    B32_05          B32. HEALTH SERVICES
    B32A_05         B32A. HEALTH SERVICES - PER
    B33_05          B33. MEDICAL SUPPLIES
    B33A_05         B33A. MED SUPPLIES - PER
    B34_05          B34. TICKETS
    B34A_05         B34A. TICKETS - PER
    B35_05          B35. SPORTS EQUIPMENT
    B35A_05         B35A. SPORTS EQUIPMENT - PER
    B36_05          B36. HOBBIES/LEISURE EQUIPMENT
    B36A_05         B36A. HOBBIES/LEISURE EQUIPMENT - PER
    B37_05          B37. FOOD/DRINK GROCERY
    B37A_05         B37A. FOOD/DRINK GROC - PER
    B38_05          B38. DINING OUT
    B38A_05         B38A. DINING OUT - PER
    B39_05          B39. GASOLINE
    B39A_05         B39A. GASOLINE - PER


CAMS 2007:
    B2_07           B2. BUY REFRIGERATOR
    B2A_07          B2A. REFRIGERATOR PRICE
    B3_07           B3. BUY WASHER/DRYER
    B3A_07          B3A. WASHER/DRYER PRICE
    B4_07           B4. BUY DISWASHER
    B4A_07          B4A. DISHWASHER PRICE
    B5_07           B5. BUY TELEVISION
    B5A_07          B5A. TELEVISION PRICE
    B6_07           B6. BUY COMPUTER
    B6A_07          B6A. COMPUTER PRICE
```

```
    B7_07           B7. HOME/RENTERS INSURANCE
    B8_07           B8. PROPERTY TAXES
    B11_07          B11. HEALTH INSURANCE
    B12_07          B12. TRIPS AND VACATIONS
    B13_07          B13. HOME REPAIRS/MAINTENANCE DIY
    B14_07          B14. HOME REPAIRS/MAINTENANCE SERVICES
    B15_07          B15. HOUSEHOLD FURNISHINGS AND EQUIPMENT
    B16_07          B16. CONTRIBUTIONS
    B17_07          B17. GIFTS
    B19_07          B19. RENT
    B19A_07         B19A. RENT - PER
    B20_07          B20. ELECTRICITY
    B20A_07         B20A. ELECTRICITY - PER
    B21_07          B21. WATER
    B21A_07         B21A. WATER - PER
    B22_07          B22. HEAT
    B22A_07         B22A. HEAT - PER
    B23_07          B23. PHONE/CABLE/INTERNET
    B23A_07         B23A. PHONE/CABLE - PER
    B25_07          B25. HOUSEKEEPING SUPPLIES
    B25A_07         B25A. HOUSEKEEPING SUPPLIES - PER
    B26_07          B26. HOUSEKEEPING SERVICES
    B26A_07         B26A. HOUSEKEEPING SERVICES - PER
    B27_07          B27. GARDENING/YARD SUPPLIES
    B27A_07         B27A. GARDEN/YARD SUPPLIES - PER
    B28_07          B28. GARDEN/YARD SERVICES
    B28A_07         B28A. GARDEN/YARD SERVICES - PER
    B29_07          B29. CLOTHING AND APPAREL
    B29A_07         B29A. CLOTHING - PER
    B30_07          B30. PERSONAL CARE PRODUCTS/SERVICES
    B30A_07         B30A. PERSONAL CARE PROD/SERVICES - PER
    B31_07          B31. DRUGS OOP
    B31A_07         B31A. DRUGS OOP - PER
    B32_07          B32. HEALTH SERVICES
    B32A_07         B32A. HEALTH SERVICES - PER
    B33_07          B33. MEDICAL SUPPLIES
    B33A_07         B33A. MED SUPPLIES - PER
    B34_07          B34. TICKETS
    B34A_07         B34A. TICKETS - PER
    B35_07          B35. SPORTS EQUIPMENT
    B35A_07         B35A. SPORTS EQUIPMENT - PER
    B36_07          B36. HOBBIES/LEISURE EQUIPMENT
    B36A_07         B36A. HOBBIES/LEISURE EQUIPMENT - PER
    B37_07          B37. FOOD/DRINK GROCERY
    B37A_07         B37A. FOOD/DRINK GROC - PER
    B38_07          B38. DINING OUT
    B38A_07         B38A. DINING OUT - PER
    B39_07          B39. GASOLINE
    B39A_07         B39A. GASOLINE - PER



CAMS 2009:
    B2_09           B2. BUY REFRIGERATOR
    B2A_09          B2A. REFRIGERATOR PRICE
    B3_09           B3. BUY WASHER/DRYER
    B3A_09          B3A. WASHER/DRYER PRICE
    B4_09           B4. BUY DISWASHER
    B4A_09          B4A. DISHWASHER PRICE
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B5_09          B5. BUY TELEVISION
B5A_09         B5A. TELEVISION PRICE
B6_09          B6. BUY COMPUTER
B6A_09         B6A. COMPUTER PRICE
B7_09          B7. HOME/RENTERS INSURANCE
B8_09          B8. PROPERTY TAXES
B11_09         B11. HEALTH INSURANCE
B12_09         B12. TRIPS AND VACATIONS
B13_09         B13. HOME REPAIRS/MAINTENANCE DIY
B14_09         B14. HOME REPAIRS/MAINTENANCE SERVICES
B15_09         B15. HOUSEHOLD FURNISHINGS AND EQUIPMENT
B16_09         B16. CONTRIBUTIONS
B17_09         B17. GIFTS
B19_09         B19. RENT
B19A_09        B19A. RENT - PER
B20_09         B20. ELECTRICITY
B20A_09        B20A. ELECTRICITY - PER
B21_09         B21. WATER
B21A_09        B21A. WATER - PER
B22_09         B22. HEAT
B22A_09        B22A. HEAT - PER
B23_09         B23. PHONE/CABLE/INTERNET
B23A_09        B23A. PHONE/CABLE - PER
B25_09         B25. HOUSEKEEPING SUPPLIES
B25A_09        B25A. HOUSEKEEPING SUPPLIES - PER
B26_09         B26. HOUSEKEEPING SERVICES
B26A_09        B26A. HOUSEKEEPING SERVICES - PER
B27_09         B27. GARDENING/YARD SUPPLIES
B27A_09        B27A. GARDEN/YARD SUPPLIES - PER
B28_09         B28. GARDEN/YARD SERVICES
B28A_09        B28A. GARDEN/YARD SERVICES - PER
B29_09         B29. CLOTHING AND APPAREL
B29A_09        B29A. CLOTHING - PER
B30_09         B30. PERSONAL CARE PRODUCTS/SERVICES
B30A_09        B30A. PERSONAL CARE PROD/SERVICES - PER
B31_09         B31. DRUGS OOP
B31A_09        B31A. DRUGS OOP - PER
B32_09         B32. HEALTH SERVICES
B32A_09        B32A. HEALTH SERVICES - PER
B33_09         B33. MEDICAL SUPPLIES
B33A_09        B33A. MED SUPPLIES - PER
B34_09         B34. TICKETS
B34A_09        B34A. TICKETS - PER
B35_09         B35. SPORTS EQUIPMENT
B35A_09        B35A. SPORTS EQUIPMENT - PER
B36_09         B36. HOBBIES/LEISURE EQUIPMENT
B36A_09        B36A. HOBBIES/LEISURE EQUIPMENT - PER
B37_09         B37. FOOD/DRINK GROCERY
B37A_09        B37A. FOOD/DRINK GROC - PER
B38_09         B38. DINING OUT
B38A_09        B38A. DINING OUT - PER
B39_09         B39. GASOLINE
B39A_09        B39A. GASOLINE - PER


CAMS 2011:
B2_11          B2. BUY REFRIGERATOR
B2A_11         B2A. REFRIGERATOR PRICE
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B3_11          B3. BUY WASHER/DRYER
B3A_11         B3A. WASHER/DRYER PRICE
B4_11          B4. BUY DISWASHER
B4A_11         B4A. DISHWASHER PRICE
B5_11          B5. BUY TELEVISION
B5A_11         B5A. TELEVISION PRICE
B6_11          B6. BUY COMPUTER
B6A_11         B6A. COMPUTER PRICE
B7_11          B7. HOME/RENTERS INSURANCE
B8_11          B8. PROPERTY TAXES
B11_11         B11. HEALTH INSURANCE
B12_11         B12. TRIPS AND VACATIONS
B13_11         B13. HOME REPAIRS/MAINTENANCE DIY
B14_11         B14. HOME REPAIRS/MAINTENANCE SERVICES
B15_11         B15. HOUSEHOLD FURNISHINGS AND EQUIPMENT
B16_11         B16. CONTRIBUTIONS
B17_11         B17. GIFTS
B19_11         B19. RENT
B19A_11        B19A. RENT - PER
B20_11         B20. ELECTRICITY
B20A_11        B20A. ELECTRICITY - PER
B21_11         B21. WATER
B21A_11        B21A. WATER - PER
B22_11         B22. HEAT
B22A_11        B22A. HEAT - PER
B23_11         B23. PHONE/CABLE/INTERNET
B23A_11        B23A. PHONE/CABLE - PER
B25_11         B25. HOUSEKEEPING SUPPLIES
B25A_11        B25A. HOUSEKEEPING SUPPLIES - PER
B26_11         B26. HOUSEKEEPING SERVICES
B26A_11        B26A. HOUSEKEEPING SERVICES - PER
B27_11         B27. GARDENING/YARD SUPPLIES
B27A_11        B27A. GARDEN/YARD SUPPLIES - PER
B28_11         B28. GARDEN/YARD SERVICES
B28A_11        B28A. GARDEN/YARD SERVICES - PER
B29_11         B29. CLOTHING AND APPAREL
B29A_11        B29A. CLOTHING - PER
B30_11         B30. PERSONAL CARE PRODUCTS/SERVICES
B30A_11        B30A. PERSONAL CARE PROD/SERVICES - PER
B31_11         B31. DRUGS OOP
B31A_11        B31A. DRUGS OOP - PER
B32_11         B32. HEALTH SERVICES
B32A_11        B32A. HEALTH SERVICES - PER
B33_11         B33. MEDICAL SUPPLIES
B33A_11        B33A. MED SUPPLIES - PER
B34_11         B34. TICKETS
B34A_11        B34A. TICKETS - PER
B35_11         B35. SPORTS EQUIPMENT
B35A_11        B35A. SPORTS EQUIPMENT - PER
B36_11         B36. HOBBIES/LEISURE EQUIPMENT
B36A_11        B36A. HOBBIES/LEISURE EQUIPMENT - PER
B37_11         B37. FOOD/DRINK GROCERY
B37A_11        B37A. FOOD/DRINK GROC - PER
B38_11         B38. DINING OUT
B38A_11        B38A. DINING OUT - PER
B39_11         B39. GASOLINE
B39A_11        B39A. GASOLINE - PER
```

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CAMS 2013:
    B2_13            B2. BUY REFRIGERATOR
    B2A_13           B2A. REFRIGERATOR PRICE
    B3_13            B3. BUY WASHER/DRYER
    B3A_13           B3A. WASHER/DRYER PRICE
    B4_13            B4. BUY DISWASHER
    B4A_13           B4A. DISHWASHER PRICE
    B5_13            B5. BUY TELEVISION
    B5A_13           B5A. TELEVISION PRICE
    B6_13            B6. BUY COMPUTER
    B6A_13           B6A. COMPUTER PRICE
    B7_13            B7. HOME/RENTERS INSURANCE
    B8_13            B8. PROPERTY TAXES
    B11_13           B11. HEALTH INSURANCE
    B12_13           B12. TRIPS AND VACATIONS
    B13_13           B13. HOME REPAIRS/MAINTENANCE DIY
    B14_13           B14. HOME REPAIRS/MAINTENANCE SERVICES
    B15_13           B15. HOUSEHOLD FURNISHINGS AND EQUIPMENT
    B16_13           B16. CONTRIBUTIONS
    B17_13           B17. GIFTS
    B19_13           B19. RENT
    B19A_13          B19A. RENT - PER
    B20_13           B20. ELECTRICITY
    B20A_13          B20A. ELECTRICITY - PER
    B21_13           B21. WATER
    B21A_13          B21A. WATER - PER
    B22_13           B22. HEAT
    B22A_13          B22A. HEAT - PER
    B23_13           B23. PHONE/CABLE/INTERNET
    B23A_13          B23A. PHONE/CABLE - PER
    B25_13           B25. HOUSEKEEPING SUPPLIES
    B25A_13          B25A. HOUSEKEEPING SUPPLIES - PER
    B26_13           B26. HOUSEKEEPING SERVICES
    B26A_13          B26A. HOUSEKEEPING SERVICES - PER
    B27_13           B27. GARDENING/YARD SUPPLIES
    B27A_13          B27A. GARDEN/YARD SUPPLIES - PER
    B28_13           B28. GARDEN/YARD SERVICES
    B28A_13          B28A. GARDEN/YARD SERVICES - PER
    B29_13           B29. CLOTHING AND APPAREL
    B29A_13          B29A. CLOTHING - PER
    B30_13           B30. PERSONAL CARE PRODUCTS/SERVICES
    B30A_13          B30A. PERSONAL CARE PROD/SERVICES - PER
    B31_13           B31. DRUGS OOP
    B31A_13          B31A. DRUGS OOP - PER
    B32_13           B32. HEALTH SERVICES
    B32A_13          B32A. HEALTH SERVICES - PER
    B33_13           B33. MEDICAL SUPPLIES
    B33A_13          B33A. MED SUPPLIES - PER
    B34_13           B34. TICKETS
    B34A_13          B34A. TICKETS - PER
    B35_13           B35. SPORTS EQUIPMENT
    B35A_13          B35A. SPORTS EQUIPMENT - PER
    B36_13           B36. HOBBIES/LEISURE EQUIPMENT
    B36A_13          B36A. HOBBIES/LEISURE EQUIPMENT - PER
    B37_13           B37. FOOD/DRINK GROCERY
    B37A_13          B37A. FOOD/DRINK GROC - PER
    B38_13           B38. DINING OUT
    B38A_13          B38A. DINING OUT - PER
```

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B39_13          B39. GASOLINE
B39A_13         B39A. GASOLINE - PER
```

2.15 Total Durable Consumption

Wave	Variable	Label	Type
5	H5CDURC	H5CDURC:W5 CAMS: Total HHold Durables Consumption excl. trans cons	Cont
6	H6CDURC	H6CDURC:W6 CAMS: Total HHold Durables Consumption excl. trans cons	Cont
7	H7CDURC	H7CDURC:W7 CAMS: Total HHold Durables Consumption excl. trans cons	Cont
8	H8CDURC	H8CDURC:W8 CAMS: Total HHold Durables Consumption excl. trans cons	Cont
9	H9CDURC	H9CDURC:W9 CAMS: Total HHold Durables Consumption excl. trans cons	Cont
10	H10CDURC	H10CDURC:W10 CAMS: Total HHold Durables Consumption excl. trans cons	Cont
11	H11CDURC	H11CDURC:W11 CAMS: Total HHold Durables Consumption excl. trans cons	Cont

Descriptive Statistics

Variable	N	Mean	Std Dev	Minimum	Maximum
H5CDURC	3789	256.397	167.357	42.000	1383.000
H6CDURC	3224	229.445	139.263	45.000	1280.000
H7CDURC	3832	266.841	186.614	0.000	1796.000
H8CDURC	3704	301.798	226.038	34.000	3792.000
H9CDURC	3550	283.065	167.860	33.000	1330.000
H10CDURC	4319	265.222	167.614	21.000	1183.000
H11CDURC	4017	230.261	135.602	38.000	1233.000

General Comments:

The CAMS questionnaire aims at eliciting household spending. However, in most economic models individuals (or households) draw utility from consumption. Consumption is different from spending for items like consumer durables. The purchase occurs in one period, but the item provides utility for more than one period. We provide one possible implementation of the derivation of a measure of durables consumption. The data used to construct the consumption measures include spending measures from the CAMS surveys and demographic data, income and wealth values from the adjacent HRS core surveys. Details on the methodology can be found in the section "1.7 Components of Household Spending and Consumption." Consumption variables for 2015 are not calculated for RAND CAMS 2015 V2 because the imputation of these variables relies on HRS 2016 core data for house value and transportation value, which are not yet available. The next version of RAND CAMS will be published once the HRS 2016 early release data has been released, and will incorporate the CAMS 2015 consumption variables.

How Constructed:

HwCDURC is the annual service flow for the five durables (excluding transportation consumption): televisions, computers, and white metal items (refrigerator, washer/dryer, and dishwasher).

We estimate using CAMS data the probability of a purchase and the expected value conditional on a purchase as functions of important covariates such as income, wealth, age, marital status and number of household members. For "white metal" consumption (refrigerators, washer/dryers and dishwashers), the probabilities and amounts are estimated as a white metal sum. Please see section "1.7 Components of Household Spending and Consumption" for details.

RAND HRS Ver P Variables Used

```
H5ATOTA:W5 Total of all Assets--Cross-wave
H6ATOTA:W6 Total of all Assets--Cross-wave
H7ATOTA:W7 Total of all Assets--Cross-wave
H8ATOTA:W8 Total of all Assets--Cross-wave
H9ATOTA:W9 Total of all Assets--Cross-wave
H10ATOTA:W10 Total of all Assets--Cross-wave
H11ATOTA:W11 Total of all Assets--Cross-wave
H12ATOTA:W12 Total of all Assets--Cross-wave

RABYEAR: R birth year

RAEDUC: R education (categ)

RAGENDER: R Gender

H5HHRES:W5 Number of people in HH
H6HHRES:W6 Number of people in HH
H7HHRES:W7 Number of people in HH
H8HHRES:W8 Number of people in HH
H9HHRES:W9 Number of people in HH
H10HHRES:W10 Number of people in HH
H11HHRES:W11 Number of people in HH
H12HHRES:W12 Number of people in HH

H5ITOT:W5 Incm: Total HHold / R+Sp only
H6ITOT:W6 Incm: Total HHold / R+Sp only
H7ITOT:W7 Incm: Total HHold / R+Sp only
H8ITOT:W8 Incm: Total HHold / R+Sp only
H9ITOT:W9 Incm: Total HHold / R+Sp only
H10ITOT:W10 Incm: Total HHold / R+Sp only
H11ITOT:W11 Incm: Total HHold / R+Sp only
H12ITOT:W12 Incm: Total HHold / R+Sp only

R5MSTAT:W5 R Marital Status
R6MSTAT:W6 R Marital Status
R7MSTAT:W7 R Marital Status
R8MSTAT:W8 R Marital Status
R9MSTAT:W9 R Marital Status
R10MSTAT:W10 R Marital Status
R11MSTAT:W11 R Marital Status
R12MSTAT:W12 R Marital Status
```

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R5WORK:W5 R working for pay
R6WORK:W6 R working for pay
R7WORK:W7 R working for pay
R8WORK:W8 R working for pay
R9WORK:W9 R working for pay
R10WORK:W10 R working for pay
R11WORK:W11 R working for pay
R12WORK:W12 R working for pay
```

CAMS Variables Used

```
CAMS 2001:
    B2_01           B2. BUY REFRIGERATOR
    B2A_01          B2A. REFRIGERATOR PRICE
    B3_01           B3. BUY WASHER/DRYER
    B3A_01          B3A. WASHER/DRYER PRICE
    B4_01           B4. BUY DISWASHER
    B4A_01          B4A. DISHWASHER PRICE
    B5_01           B5. BUY TELEVISION
    B5A_01          B5A. TELEVISION PRICE
    B6_01           B6. BUY COMPUTER
    B6A_01          B6A. COMPUTER PRICE


CAMS 2003:
    B2_03           B2. BUY REFRIGERATOR
    B2A_03          B2A. REFRIGERATOR PRICE
    B3_03           B3. BUY WASHER/DRYER
    B3A_03          B3A. WASHER/DRYER PRICE
    B4_03           B4. BUY DISWASHER
    B4A_03          B4A. DISHWASHER PRICE
    B5_03           B5. BUY TELEVISION
    B5A_03          B5A. TELEVISION PRICE
    B6_03           B6. BUY COMPUTER
    B6A_03          B6A. COMPUTER PRICE


CAMS 2005:
    B2_05           B2. BUY REFRIGERATOR
    B2A_05          B2A. REFRIGERATOR PRICE
    B3_05           B3. BUY WASHER/DRYER
    B3A_05          B3A. WASHER/DRYER PRICE
    B4_05           B4. BUY DISWASHER
    B4A_05          B4A. DISHWASHER PRICE
    B5_05           B5. BUY TELEVISION
    B5A_05          B5A. TELEVISION PRICE
    B6_05           B6. BUY COMPUTER
    B6A_05          B6A. COMPUTER PRICE
```

```
CAMS 2007:
    B2_07           B2. BUY REFRIGERATOR
    B2A_07          B2A. REFRIGERATOR PRICE
    B3_07           B3. BUY WASHER/DRYER
    B3A_07          B3A. WASHER/DRYER PRICE
    B4_07           B4. BUY DISWASHER
    B4A_07          B4A. DISHWASHER PRICE
    B5_07           B5. BUY TELEVISION
    B5A_07          B5A. TELEVISION PRICE
    B6_07           B6. BUY COMPUTER
    B6A_07          B6A. COMPUTER PRICE




CAMS 2009:
    B2_09           B2. BUY REFRIGERATOR
    B2A_09          B2A. REFRIGERATOR PRICE
    B3_09           B3. BUY WASHER/DRYER
    B3A_09          B3A. WASHER/DRYER PRICE
    B4_09           B4. BUY DISWASHER
    B4A_09          B4A. DISHWASHER PRICE
    B5_09           B5. BUY TELEVISION
    B5A_09          B5A. TELEVISION PRICE
    B6_09           B6. BUY COMPUTER
    B6A_09          B6A. COMPUTER PRICE




CAMS 2011:
    B2_11           B2. BUY REFRIGERATOR
    B2A_11          B2A. REFRIGERATOR PRICE
    B3_11           B3. BUY WASHER/DRYER
    B3A_11          B3A. WASHER/DRYER PRICE
    B4_11           B4. BUY DISWASHER
    B4A_11          B4A. DISHWASHER PRICE
    B5_11           B5. BUY TELEVISION
    B5A_11          B5A. TELEVISION PRICE
    B6_11           B6. BUY COMPUTER
    B6A_11          B6A. COMPUTER PRICE




CAMS 2013:
    B2_13           B2. BUY REFRIGERATOR
    B2A_13          B2A. REFRIGERATOR PRICE
    B3_13           B3. BUY WASHER/DRYER
    B3A_13          B3A. WASHER/DRYER PRICE
    B4_13           B4. BUY DISWASHER
    B4A_13          B4A. DISHWASHER PRICE
    B5_13           B5. BUY TELEVISION
    B5A_13          B5A. TELEVISION PRICE
    B6_13           B6. BUY COMPUTER
    B6A_13          B6A. COMPUTER PRICE
```

2.16 Total Transportation Consumption

Wave	Variable	Label	Type
5	H5CTRANSC	H5CTRANSC:W5 CAMS: Total Hhold Transportation Consumption	Cont
6	H6CTRANSC	H6CTRANSC:W6 CAMS: Total Hhold Transportation Consumption	Cont
7	H7CTRANSC	H7CTRANSC:W7 CAMS: Total Hhold Transportation Consumption	Cont
8	H8CTRANSC	H8CTRANSC:W8 CAMS: Total Hhold Transportation Consumption	Cont
9	H9CTRANSC	H9CTRANSC:W9 CAMS: Total Hhold Transportation Consumption	Cont
10	H10CTRANSC	H10CTRANSC:W10 CAMS: Total Hhold Transportation Consumption	Cont
11	H11CTRANSC	H11CTRANSC:W11 CAMS: Total Hhold Transportation Consumption	Cont

Descriptive Statistics

Variable	N	Mean	Std Dev	Minimum	Maximum
H5CTRANSC	3789	4808.826	4771.408	0.000	69718.00
H6CTRANSC	3224	4773.194	4553.347	0.000	57012.00
H7CTRANSC	3832	5234.533	5634.928	0.000	86633.00
H8CTRANSC	3704	5280.091	5176.055	0.000	64820.00
H9CTRANSC	3550	4814.924	4800.268	0.000	67657.00
H10CTRANSC	4319	5261.657	5092.694	0.000	69087.00
H11CTRANSC	4017	4947.531	4691.907	0.000	52755.00

General Comments:

The CAMS questionnaire aims at eliciting household spending. However, in most economic models individuals (or households) draw utility from consumption. Consumption is different from spending for items like automobiles. The purchase occurs in one period, but the item provides utility for more than one period. We provide one possible implementation of the derivation of a measure of transportation consumption. The data used to construct the consumption measures include spending measures from the CAMS surveys and demographic data, income and wealth values from the adjacent HRS core surveys. Details on the methodology can be found in the section "1.6 Spending versus Consumption." Consumption variables for 2015 are not calculated for RAND CAMS 2015 V2 because the imputation of these variables relies on HRS 2016 core data for house value and transportation value, which are not yet available. The next version of RAND CAMS will be published once the HRS 2016 early release data has been released, and will incorporate the CAMS 2015 consumption variables.

How Constructed:

HwCTRANSC is composed of automobile usage and spending on gasoline. Automobile usage is derived from the value of automobiles and other vehicles used for transportation from the HRS in years preceding and following the CAMS survey. User cost is the sum of interest on the value, 10% depreciation, and observed auto insurance costs from CAMS. For the interest rate we use a three-year moving average on 48-month loan rates for automobiles published by the Federal Reserve. Please see section "1.7 Components of Household Spending and Consumption" for details.

RAND HRS Ver P Variables Used

```
H5ATOTA:W5 Total of all Assets--Cross-wave
H6ATOTA:W6 Total of all Assets--Cross-wave
H7ATOTA:W7 Total of all Assets--Cross-wave
H8ATOTA:W8 Total of all Assets--Cross-wave
H9ATOTA:W9 Total of all Assets--Cross-wave
H10ATOTA:W10 Total of all Assets--Cross-wave
H11ATOTA:W11 Total of all Assets--Cross-wave
H12ATOTA:W12 Total of all Assets--Cross-wave

H5ATRAN:W5 Assets:Transportation--Cross-wave
H6ATRAN:W6 Assets:Transportation--Cross-wave
H7ATRAN:W7 Assets:Transportation--Cross-wave
H8ATRAN:W8 Assets:Transportation--Cross-wave
H9ATRAN:W9 Assets:Transportation--Cross-wave
H10ATRAN:W10 Assets:Transportation--Cross-wave
H11ATRAN:W11 Assets:Transportation--Cross-wave
H12ATRAN:W12 Assets:Transportation--Cross-wave

RABYEAR: R birth year

RAEDUC: R education (categ)

RAGENDER: R Gender

H5HHRES:W5 Number of people in HH
H6HHRES:W6 Number of people in HH
H7HHRES:W7 Number of people in HH
H8HHRES:W8 Number of people in HH
H9HHRES:W9 Number of people in HH
H10HHRES:W10 Number of people in HH
H11HHRES:W11 Number of people in HH
H12HHRES:W12 Number of people in HH

H5ITOT:W5 Incm: Total HHold / R+Sp only
H6ITOT:W6 Incm: Total HHold / R+Sp only
H7ITOT:W7 Incm: Total HHold / R+Sp only
H8ITOT:W8 Incm: Total HHold / R+Sp only
H9ITOT:W9 Incm: Total HHold / R+Sp only
H10ITOT:W10 Incm: Total HHold / R+Sp only
H11ITOT:W11 Incm: Total HHold / R+Sp only
H12ITOT:W12 Incm: Total HHold / R+Sp only

R5MSTAT:W5 R Marital Status
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R6MSTAT:W6 R Marital Status
R7MSTAT:W7 R Marital Status
R8MSTAT:W8 R Marital Status
R9MSTAT:W9 R Marital Status
R10MSTAT:W10 R Marital Status
R11MSTAT:W11 R Marital Status
R12MSTAT:W12 R Marital Status


R5WORK:W5 R working for pay
R6WORK:W6 R working for pay
R7WORK:W7 R working for pay
R8WORK:W8 R working for pay
R9WORK:W9 R working for pay
R10WORK:W10 R working for pay
R11WORK:W11 R working for pay
R12WORK:W12 R working for pay
```

CAMS Variables Used

```
CAMS 2001:
    B1_01           B1. PURCHASE/LEASE AUTO
    B1A_3_01        B1A_3. AUTO YEAR - 1
    B1A_4_01        B1A_4. AUTO PRICE - 1
    B1B_3_01        B1B_3. AUTO YEAR - 2
    B1B_4_01        B1B_4. AUTO PRICE - 2
    B1C_3_01        B1C_3. AUTO YEAR - 3
    B1C_4_01        B1C_4. AUTO PRICE - 3
    B16_01          B16. AUTO INSURANCE
    B16A_01         B16A. AUTO INSUR - PER
    B23_01          B23. GASOLINE
    B23A_01         B23A. GASOLINE - PER




CAMS 2003:
    B1_03           B1. PURCHASE/LEASE AUTO
    B1A3_03         B1A3. AUTO YEAR - 1
    B1A4_03         B1A4. AUTO PRICE - 1
    B1A5_03         B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_03         B1B3. AUTO YEAR - 2
    B1B4_03         B1B4. AUTO PRICE - 2
    B1B5_03         B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_03         B1C3. AUTO YEAR - 3
    B1C4_03         B1C4. AUTO PRICE - 3
    B1C5_03         B1C5. AUTO/TRUCK NEW OR USED - 3
    B9_03           B9. VEHICLE INSURANCE
    B38_03          B38. GASOLINE
    B38A_03         B38A. GASOLINE - PER




CAMS 2005:
    B1_05           B1. PURCHASE/LEASE AUTO
```

```
    B1A3_05          B1A3. AUTO YEAR - 1
    B1A4_05          B1A4. AUTO PRICE - 1
    B1A5_05          B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_05          B1B3. AUTO YEAR - 2
    B1B4_05          B1B4. AUTO PRICE - 2
    B1B5_05          B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_05          B1C3. AUTO YEAR - 3
    B1C4_05          B1C4. AUTO PRICE - 3
    B1C5_05          B1C5. AUTO/TRUCK NEW OR USED - 3
    B9_05            B9. VEHICLE INSURANCE
    B39_05           B39. GASOLINE
    B39A_05          B39A. GASOLINE - PER




CAMS 2007:
    B1_07            B1. PURCHASE/LEASE AUTO
    B1A3_07          B1A3. AUTO YEAR - 1
    B1A4_07          B1A4. AUTO PRICE - 1
    B1A5_07          B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_07          B1B3. AUTO YEAR - 2
    B1B4_07          B1B4. AUTO PRICE - 2
    B1B5_07          B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_07          B1C3. AUTO YEAR - 3
    B1C4_07          B1C4. AUTO PRICE - 3
    B1C5_07          B1C5. AUTO/TRUCK NEW OR USED - 3
    B9_07            B9. VEHICLE INSURANCE
    B39_07           B39. GASOLINE
    B39A_07          B39A. GASOLINE - PER




CAMS 2009:
    B1_09            B1. PURCHASE/LEASE AUTO
    B1A3_09          B1A3. AUTO YEAR - 1
    B1A4_09          B1A4. AUTO PRICE - 1
    B1A5_09          B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_09          B1B3. AUTO YEAR - 2
    B1B4_09          B1B4. AUTO PRICE - 2
    B1B5_09          B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_09          B1C3. AUTO YEAR - 3
    B1C4_09          B1C4. AUTO PRICE - 3
    B1C5_09          B1C5. AUTO/TRUCK NEW OR USED - 3
    B9_09            B9. VEHICLE INSURANCE
    B39_09           B39. GASOLINE
    B39A_09          B39A. GASOLINE - PER




CAMS 2011:
    B1_11            B1. PURCHASE/LEASE AUTO
    B1A3_11          B1A3. AUTO YEAR - 1
    B1A4_11          B1A4. AUTO PRICE - 1
    B1A5_11          B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_11          B1B3. AUTO YEAR - 2
    B1B4_11          B1B4. AUTO PRICE - 2
    B1B5_11          B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_11          B1C3. AUTO YEAR - 3
    B1C4_11          B1C4. AUTO PRICE - 3
```

```
    B1C5_11          B1C5. AUTO/TRUCK NEW OR USED - 3
    B9_11            B9. VEHICLE INSURANCE
    B39_11           B39. GASOLINE
    B39A_11          B39A. GASOLINE - PER


CAMS 2013:
    B1_13            B1. PURCHASE/LEASE AUTO
    B1A3_13          B1A3. AUTO YEAR - 1
    B1A4_13          B1A4. AUTO PRICE - 1
    B1A5_13          B1A5. AUTO/TRUCK NEW OR USED - 1
    B1B3_13          B1B3. AUTO YEAR - 2
    B1B4_13          B1B4. AUTO PRICE - 2
    B1B5_13          B1B5. AUTO/TRUCK NEW OR USED - 2
    B1C3_13          B1C3. AUTO YEAR - 3
    B1C4_13          B1C4. AUTO PRICE - 3
    B1C5_13          B1C5. AUTO/TRUCK NEW OR USED - 3
    B9_13            B9. VEHICLE INSURANCE
    B39_13           B39. GASOLINE
    B39A_13          B39A. GASOLINE - PER
```

2.17 Total Housing Consumption

Wave	Variable	Label	Type
5	H5CHOUSC	H5CHOUSC:W5 CAMS: Total Hhold Housing Consumption	Cont
6	H6CHOUSC	H6CHOUSC:W6 CAMS: Total Hhold Housing Consumption	Cont
7	H7CHOUSC	H7CHOUSC:W7 CAMS: Total Hhold Housing Consumption	Cont
8	H8CHOUSC	H8CHOUSC:W8 CAMS: Total Hhold Housing Consumption	Cont
9	H9CHOUSC	H9CHOUSC:W9 CAMS: Total Hhold Housing Consumption	Cont
10	H10CHOUSC	H10CHOUSC:W10 CAMS: Total Hhold Housing Consumption	Cont
11	H11CHOUSC	H11CHOUSC:W11 CAMS: Total Hhold Housing Consumption	Cont
5	H5CHMEQF	H5CHMEQF:W5 CAMSFlag: Home Rental Equivalent	Categ
6	H6CHMEQF	H6CHMEQF:W6 CAMSFlag: Home Rental Equivalent	Categ
7	H7CHMEQF	H7CHMEQF:W7 CAMSFlag: Home Rental Equivalent	Categ
8	H8CHMEQF	H8CHMEQF:W8 CAMSFlag: Home Rental Equivalent	Categ
9	H9CHMEQF	H9CHMEQF:W9 CAMSFlag: Home Rental Equivalent	Categ
10	H10CHMEQF	H10CHMEQF:W10 CAMSFlag: Home Rental Equivalent	Categ
11	H11CHMEQF	H11CHMEQF:W11 CAMSFlag: Home Rental Equivalent	Categ

Descriptive Statistics

Variable	N	Mean	Std Dev	Minimum	Maximum
H5CHOUSC	3789	15667.58	15476.29	60.000	255165.0
H6CHOUSC	3224	16201.33	15136.09	49.000	148299.0
H7CHOUSC	3832	17812.81	17729.55	0.000	217132.0
H8CHOUSC	3704	20349.58	20781.54	17.000	271662.0
H9CHOUSC	3550	19168.67	20661.34	49.000	475622.0
H10CHOUSC	4319	15828.54	17350.97	30.000	406815.0
H11CHOUSC	4017	14719.43	14459.24	27.000	215395.0
H5CHMEQF	3789	2.775	1.230	0.000	6.000
H6CHMEQF	3224	2.823	1.227	0.000	6.000
H7CHMEQF	3832	2.733	1.302	0.000	6.000
H8CHMEQF	3704	2.760	1.330	0.000	6.000
H9CHMEQF	3550	2.794	1.356	0.000	6.000
H10CHMEQF	4319	2.660	1.461	0.000	6.000
H11CHMEQF	4017	2.641	1.483	0.000	6.000

Categorical Variable Codes

Value	H5CHMEQF	H6CHMEQF	H7CHMEQF	H8CHMEQF	H9CHMEQF	H10CHMEQF	H11CHMEQF
.T Resp <10 cat	77	30	47	34	37	51	50
0. Renter	457	359	522	508	488	762	743
1. Homeowner: val from prev wv	80	61	98	77	65	102	87
2. Homeowner: val from foll wv	34	32	36	50	40	34	47
3. Homeowner: val from prev and foll wv	2795	2411	2738	2609	2461	2875	2613
4. Own trans: half of val from adj wv	212	157	202	201	225	204	200
5. Homeowner: no val from prev or foll wv	132	110	136	140	136	173	174
6. Not renter or homeowner	79	94	100	119	135	169	153

General Comments:

The CAMS questionnaire aims at eliciting household spending. However, in most economic models individuals (or households) draw utility from consumption. Consumption is different from spending for items like housing. The purchase occurs in one period, but the item provides utility for more than one period. We provide one possible implementation of the derivation of a measure of household consumption. The data used to construct the consumption measures include spending measures from the CAMS surveys and demographic data, income and wealth values from the adjacent HRS core surveys. Details on the methodology can be found in the section "1.6 Spending versus Consumption." Consumption variables for 2015 are not calculated for RAND CAMS 2015 V2 because the imputation of these variables relies on HRS 2016 core data for house value and transportation value, which are not yet available. The next version of RAND CAMS will be published once the HRS 2016 early release data has been released, and will incorporate the CAMS 2015 consumption variables.

How Constructed:

HwCHOUSC is composed of spending on rent, property taxes, home/renters insurance and a derived measure of home rental equivalent. This equivalent captures the flow of consumption services from owner-occupied housing and is the amount the housing unit would rent for in a competitive market in equilibrium. In particular we make the following assumptions and calculations. (1) The interest cost is the value of housing multiplied by the prevailing interest rate. We use the observed home value from the HRS core and use a moving average the last three years' 30 year mortgage interest rate. (2) We estimate depreciation from the observed home value in HRS and an assumed depreciation of 2.14 percent per year which is equivalent to a depreciation period of 47 years. The flow of housing services is the sum of these items, plus property tax and homeowners insurance and any rent that was paid for other properties. Please see section "1.7 Components of Household Spending and Consumption" for details.

For renters, HwCHOUSC is calculated as rent plus home repairs and maintenance, property tax and homeowners insurance. Renters are households that report positive rent spending, report no mortgage spending, and have reported no positive home values in adjacent HRS core surveys.

HwCHMEQF is a flag that indicates whether the CAMS Respondent is a homeowner or renter and what HRS core information was available for estimating the base home value, a component of the home rental equivalent. A CAMS Respondent is considered to be a homeowner if (a) he/she reported mortgage spending in the CAMS or (b) reported a positive home value in an adjacent HRS core survey. If neither (a) or (b) is true

and a household reported positive rent spending in CAMS then the household is considered a renter household and the home rental equivalent is set to zero (HwCHMEQF=0). If a person is currently paying a mortgage and has a positive home value in the previous HRS wave but has a missing or zero value in the following HRS wave, then the previous wave home value is used (HwCHMEQF=1). If a person is currently paying a mortgage and has a positive home value in the following HRS wave but has a missing or zero value in the previous HRS wave, then the following wave home value is used (HwCHMEQF=2). If a person has positive home values in both the previous and following HRS waves, then the rental equivalent is based on the average of those home values (HwCHMEQF=3). If a person is not currently paying a mortgage and only one adjacent HRS wave is positive and the other wave is zero or missing, then half of the reported home value in the non-missing wave is used as this is considered an ownership transition (HwCHMEQF=4). We consider this household to be transitioning to or from home ownership at the time of the CAMS survey. The home rental equivalent is imputed from the homeowner population (HwCHMEQF=5) if a homeowner has missing or zero home values in both adjacent waves. If a person is not a homeowner as described above and reports no rent, then the home rental equivalent is imputed from the entire population (HwCHMEQF=6). It is assumed that these households have rent or mortgage paid on their behalf, but they still consume housing services. Once the base home value is calculated, it is subject to the depreciation and interest rates described above and in section "1.7 Components of Household Spending and Consumption."

RAND HRS Ver P Variables Used

```
H5AHOUS:W5 Assets:Primary Residence--Cross-wave
H6AHOUS:W6 Assets:Primary Residence--Cross-wave
H7AHOUS:W7 Assets:Primary Residence--Cross-wave
H8AHOUS:W8 Assets:Primary Residence--Cross-wave
H9AHOUS:W9 Assets:Primary Residence--Cross-wave
H10AHOUS:W10 Assets:Primary Residence--Cross-wave
H11AHOUS:W11 Assets:Primary Residence--Cross-wave
H12AHOUS:W12 Assets:Primary Residence--Cross-wave

H5ATOTA:W5 Total of all Assets--Cross-wave
H6ATOTA:W6 Total of all Assets--Cross-wave
H7ATOTA:W7 Total of all Assets--Cross-wave
H8ATOTA:W8 Total of all Assets--Cross-wave
H9ATOTA:W9 Total of all Assets--Cross-wave
H10ATOTA:W10 Total of all Assets--Cross-wave
H11ATOTA:W11 Total of all Assets--Cross-wave
H12ATOTA:W12 Total of all Assets--Cross-wave

RABYEAR: R birth year

RAEDUC: R education (categ)

RAGENDER: R Gender

H5HHRES:W5 Number of people in HH
H6HHRES:W6 Number of people in HH
H7HHRES:W7 Number of people in HH
H8HHRES:W8 Number of people in HH
H9HHRES:W9 Number of people in HH
H10HHRES:W10 Number of people in HH
H11HHRES:W11 Number of people in HH
H12HHRES:W12 Number of people in HH
```

```
H5ITOT:W5 Incm: Total HHold / R+Sp only
H6ITOT:W6 Incm: Total HHold / R+Sp only
H7ITOT:W7 Incm: Total HHold / R+Sp only
H8ITOT:W8 Incm: Total HHold / R+Sp only
H9ITOT:W9 Incm: Total HHold / R+Sp only
H10ITOT:W10 Incm: Total HHold / R+Sp only
H11ITOT:W11 Incm: Total HHold / R+Sp only
H12ITOT:W12 Incm: Total HHold / R+Sp only


R5MSTAT:W5 R Marital Status
R6MSTAT:W6 R Marital Status
R7MSTAT:W7 R Marital Status
R8MSTAT:W8 R Marital Status
R9MSTAT:W9 R Marital Status
R10MSTAT:W10 R Marital Status
R11MSTAT:W11 R Marital Status
R12MSTAT:W12 R Marital Status


R5WORK:W5 R working for pay
R6WORK:W6 R working for pay
R7WORK:W7 R working for pay
R8WORK:W8 R working for pay
R9WORK:W9 R working for pay
R10WORK:W10 R working for pay
R11WORK:W11 R working for pay
R12WORK:W12 R working for pay
```

CAMS Variables Used

```
CAMS 2001:
    B8_01           B8. HOME/RENT INS.
    B8A_01          B8A. HOME/RENT INS - PER
    B9_01           B9. PROPERTY TAX
    B9A_01          B9A. PROPERTY TAX - PER
    B10_01          B10. RENT
    B10A_01         B10A. RENT - PER
    B19_01          B19. HOME MAINTAIN
    B19A_01         B19A. HOME MAINTAIN - PER



CAMS 2003:
    B7_03           B7. HOME/RENTERS INSURANCE
    B8_03           B8. PROPERTY TAXES
    B14_03          B14. RENT
    B14A_03         B14A. RENT - PER
    B24_03          B24. HOME REPAIRS/MAINTENANCE DIY
    B24A_03         B24A. HOME REPAIRS/MAINTENANCE DIY - PER
    B25_03          B25. HOME REPAIRS/MAINTENANCE SERVICES
    B25A_03         B25A. HOME REPAIRS/MAINTENANCE SERVICE - PER
```

```
CAMS 2005:
    B7_05           B7. HOME/RENTERS INSURANCE
    B8_05           B8. PROPERTY TAXES
    B13_05          B13. HOME REPAIRS/MAINTENANCE DIY
    B14_05          B14. HOME REPAIRS/MAINTENANCE SERVICES
    B19_05          B19. RENT
    B19A_05         B19A. RENT - PER



CAMS 2007:
    B7_07           B7. HOME/RENTERS INSURANCE
    B8_07           B8. PROPERTY TAXES
    B13_07          B13. HOME REPAIRS/MAINTENANCE DIY
    B14_07          B14. HOME REPAIRS/MAINTENANCE SERVICES
    B19_07          B19. RENT
    B19A_07         B19A. RENT - PER



CAMS 2009:
    B7_09           B7. HOME/RENTERS INSURANCE
    B8_09           B8. PROPERTY TAXES
    B13_09          B13. HOME REPAIRS/MAINTENANCE DIY
    B14_09          B14. HOME REPAIRS/MAINTENANCE SERVICES
    B19_09          B19. RENT
    B19A_09         B19A. RENT - PER



CAMS 2011:
    B7_11           B7. HOME/RENTERS INSURANCE
    B8_11           B8. PROPERTY TAXES
    B13_11          B13. HOME REPAIRS/MAINTENANCE DIY
    B14_11          B14. HOME REPAIRS/MAINTENANCE SERVICES
    B19_11          B19. RENT
    B19A_11         B19A. RENT - PER



CAMS 2013:
    B7_13           B7. HOME/RENTERS INSURANCE
    B8_13           B8. PROPERTY TAXES
    B13_13          B13. HOME REPAIRS/MAINTENANCE DIY
    B14_13          B14. HOME REPAIRS/MAINTENANCE SERVICES
    B19_13          B19. RENT
    B19A_13         B19A. RENT - PER
```