

2008 CONSUMER EXPENDITURE INTERVIEW SURVEY  
PUBLIC USE MICRODATA  
User's Documentation  
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U.S. Department of Labor  
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# I. INTRODUCTION

The Consumer Expenditure Survey (CE) program provides a continuous and comprehensive flow of data on the buying habits of American consumers. These data are used widely in economic research and analysis, and in support of revisions of the Consumer Price Index. To meet the needs of users, the Bureau of Labor Statistics (BLS) produces population estimates for consumer units (CUs) of average expenditures in news releases, reports, issues, and articles in the Monthly Labor Review. Tabulated CE data are also available on the Internet and by facsimile transmission (See Section XVI. APPENDIX 5). The microdata are available on CD-ROMs.

These microdata files present detailed expenditure and income data from the Interview component of the CE for 2008 and the first quarter of 2009. The Interview survey collects data on up to 95 percent of total household expenditures. In addition to the FMLY, MEMB, MTAB, and ITAB\_IMPUTE files, the microdata include files created directly from the expenditure sections of the Interview survey (EXPN files). The EXPN files contain expenditure data and ancillary descriptive information, often not available on the FMLY or MTAB files, in a format similar to the Interview questionnaire. In addition to the extra information available on the EXPN files, users can identify distinct spending categories easily and reduce processing time due to the organization of the files by type of expenditure.

Estimates of average expenditures in 2008 from the Interview Survey, integrated with data from the Diary Survey, will be published in the report *Consumer Expenditures in 2008* (due out in 2010). A list of recent publications containing data from the CE appears at the end of this documentation.

The microdata files are in the public domain and, with appropriate credit, may be reproduced without permission. A suggested citation is: "U.S. Department of Labor, Bureau of Labor Statistics, Consumer Expenditure Survey, Interview Survey, 2008."

## I. CHANGES FROM THE 2007 MICRODATA FILES

### A. FMLY file

No Changes in 2008

### B. MEMB file

No Changes in 2008

### C. MTAB file

No Changes in 2008

### D. ITAB file

#### UCC Additions

Beginning in 2008Q2, the following UCCs will be added to the ITAB file

UCC	Title
950030	2008 Tax stimulus
950031	2008 Tax stimulus (negative)

### E. EXPN files

New file created to accommodate 2008 tax stimulus responses.

#### File additions

## 1. RBT

Beginning in 2008Q2 the following file and variables will be added

Variable name	Description	Start Position	Format
NEWID	Public use microdata identifier	1	NUM(8)
CUID	First 7 digits of NEWID, identifying the CU	9	NUM(7)
RBTMO	Month rebate reported (CONTMO, where CONTCODE = '800')	16	CHAR(2)
RBTMO_	RBTMO flag	18	CHAR(1)
RBTAMT	Amount of rebate reported (CONTEXPX, where CONTCODE = '800')	19	NUM(8)
RBTAMT_	RBTAMT flag	27	CHAR(1)
CHCKEFT	How rebate was received 1. Check 2. Electronic transfer	28	CHAR(1)
CHCKEFT_	CHCKEFT flag	29	CHAR(1)
HOWUSED	Earlier, you or someone in your CU reported receiving a one-time tax rebate that was part of the Federal government's economic stimulus package. Did the tax rebate lead you or someone in your CU mostly to increase spending, mostly to increase savings, or mostly to pay off debt? 1. Mostly to increase spending 2. Mostly to increase savings 3. Mostly to pay off debt	30	CHAR(1)
HOWUSED_	HOWUSED flag	31	CHAR(1)
USDINTMO	Month in which HOWUSED was reported	32	CHAR(2)
USDINTYR	Year in which HOWUSED was reported	34	CHAR(4)

See documentation "Special 2008 Tax Rebate File (RBT).doc" for more information on the file.

## II. FILE INFORMATION

The microdata on CD-ROM are provided as SAS data sets or ASCII text files. The 2007 Interview release contains five groups of Interview data files (FMLY, MEMB, MTAB, ITAB, and ITAB\_IMPUTE), 50 EXPN files, and processing files. The FMLY, MEMB, MTAB, ITAB, and ITAB\_IMPUTE files are organized by the calendar quarter of the year in which the data were collected. (See Section V.A.1.b. CALENDAR PERIOD VERSUS COLLECTION PERIOD for a description of calendar and collection years.) There are five quarterly data sets for each of these files, running from the first quarter of 2008 through the first quarter of 2009. The FMLY file contains CU characteristics, income, and summary level expenditures; the MEMB file contains member characteristics and income data; the MTAB file contains expenditures organized on a monthly basis at the UCC level; the ITAB file contains income data converted to a monthly time frame and assigned to UCCs; and the ITAB\_IMPUTE file contains the five imputation variants of the income data converted to a monthly time frame and assigned to UCCs. Each of the 51 EXPN files contains five quarters of data. The EXPN files contain data directly derived from their respective questionnaire sections.

The processing files enhance computer processing and tabulation of data, and provide descriptive information on item codes. The processing files are: Aggregation scheme files used in the published consumer expenditure survey interview tables and integrated tables (ISTUB and INTSTUB), a UCC file that contains UCCs and their abbreviated titles, identifying the expenditure, income, or

demographic item represented by each UCC; vehicle make and model file (CAPIVEHI), and files containing sample programs (See Section VII. A. SAMPLE PROGRAM). The processing files are further explained in Section III.F.6. PROCESSING FILES.

In addition to these processing files, there is a "User's Guide to Income Imputation in the CE", which includes information on how to appropriately use the imputed income data.

Since space in this documentation prohibits the explanation of all information in the EXPN files, we strongly suggest the user refer to the questionnaire. Survey forms, as well as the CAPI questionnaire, are available on the Consumer Expenditure Survey webpage: <http://www.bls.gov/cex/#forms>. A list of the 51 EXPN file names, including the Questionnaire sections to which they relate, follows.

APL Section 1, Part C	General Survey Information – Major Household Appliances
RNT Section 2, Parts A and B	Rented Living Quarters – CU Tenure, Rental Payments, Facilities, and Services for Sample Unit and Other Units
OPB Section 3, Part B	Owned Living Quarters and Other Owned Real Estate – Detailed Property Description
OPD Section 3, Part D	Owned Living Quarters and Other Owned Real Estate – Disposed of Property
MOR Section 3, Part F	Owned Living Quarters and Other Owned Real Estate – Mortgages
HEL Section 3, Part G	Owned Living Quarters and Other Owned Real Estate – Lump Sum Home Equity Loans
OPH Section 3, Part H	Owned Living Quarters and Other Owned Real Estate – Line of Credit Home Equity Loans
OPI Section 3, Part I	Owned Living Quarters and Other Owned Real Estate – Ownership Costs
UTA Section 4, Part A	Utilities and Fuels for Owned and Rented Properties – Telephone Expenses
UTP Section 4, Part B	Utilities and Fuels for Owned and Rented Properties – Additional Telephone Expenses
UTI Section 4, Part C	Utilities and Fuels for Owned and Rented Properties – Internet Services Expenditures
UTC Section 4, Part D	Utilities and Fuels for Owned and Rented Properties – Detailed Questions
CRA Section 5, Part A	Construction, Repairs, Alterations, and Maintenance of Owned and Rented Property – Screening Questions
CRB Section 5, Part B	Construction, Repairs, Alterations, and Maintenance of Owned and Rented Property – Job Description
APA Section 6, Part A	Appliances, Household Equipment, and Other Selected Items – Purchase of Household Appliances
APB Section 6, Part B	Appliances, Household Equipment and Other Selected Items – Purchase of Household Appliances and Other Selected Items

EQB Section 7, Part A	Household Equipment Repairs, Service Contracts, and Furniture Repair and Reupholstering – Household Equipment Repairs and Service Contracts
FRA Section 8, Part A	Home Furnishings and Related Household Items – Purchases
FRB Section 8, Part B	Home Furnishings and Related Household Items – Rental, Leasing, or Repair of Furniture
CLA Section 9, Part A	Clothing and Sewing Materials – Clothing
CLB Section 9, Part B	Clothing and Sewing Materials – Infants Clothing, Watches, Jewelry, and Hairpieces
CLD Section 9, Part C	Clothing and Sewing Materials – Clothing Services
CLC Section 9, Part D	Clothing and Sewing Materials – Sewing Materials
RTV Section 10, Part A.1	Rented and Leased Vehicles – Screening Questions
LSD Section 10, Part B	Rented and Leased Vehicles – Detailed Questions for Leased Vehicles
OVB Section 11, Part B	Owned Vehicles – Detailed Questions
OVC Section 11, Part C	Owned Vehicles – Disposal of Vehicles
VEQ Section 12, Part A	Vehicle Operating Expenses – Vehicle Maintenance and Repair
VLR Section 12, Part B	Vehicle Operating Expenses – Licensing, Registration, and Inspection of Vehicles
VOT Section 12, Part C	Vehicle Operating Expenses – Other Vehicle Operating Expenses
INB Section 13, Part B	Insurance Other Than Health – Detailed Questions
IHB Section 14, Part B	Hospitalization and Health Insurance – Detailed Questions
IHC Section 14, Part C	Hospitalization and Health Insurance – Medicare and Medicaid
IHD Section 14, Part D	Hospitalization and Health Insurance – Medicare Prescription Drug Program
MDB Section 15, Part A	Medical and Health Expenditures – Payments For Medical Expenses
MDC Section 15, Part B	Medical and Health Expenditures – Reimbursements For Medical Expenses
EDA Section 16	Educational Expenses
SUB Section 17, Part A	Subscriptions, Memberships, Books, and Entertainment Expenses – Subscriptions and Memberships
ENT Section 17, Part B	Subscriptions, Memberships, Books, and Entertainment Expenses – Books and Entertainment Expenses
TRD Section 18, Part A	Trips and Vacations – 100% Reimbursed Trips

TRV Section 18, Part B	Trips and Vacations – Trips Paid Entirely by CU and Partially Reimbursed Trips
TRE Section 18, Part E	Trips and Vacations – Trip Expenses for Non-CU Members
TRF Section 18, Part F	Trips and Vacations – Local Overnight Stays
MIS Section 19, Part A	Miscellaneous Expenses
CNT Section 19, Part B	Miscellaneous Expenses – Contributions
RBT Section 19 Part B Section 20 Part B	Miscellaneous Expenses – Contributions Expense Patterns For Food, Beverages, and Other Selected Items – Selected Services and Goods
XPA Section 20, Part A	Expense Patterns For Food, Beverages, and Other Selected Items – Food and Beverages
XPB Section 20, Part B	Expense Patterns For Food, Beverages, and Other Selected Items – Selected Services and Goods
FN2 Section 21, Part A.1	Credit Liability – Credit Balances – Second Interview Only
FNA Section 21, Part A.2	Credit Liability – Credit Balances – Fifth Interview Only
FNB Section 21, Part B	Credit Liability – Finance Charges – Fifth Interview Only

Note that the variable NEWID, the CU's identification number, is the common variable among files by which matching is done.

## A. DATA SET NAMES

The file naming convention on the microdata CD is listed in the table below.  
("X" references the designated drive letter for your CD.)

\\INTRV\W08\FMLY\081x.TXT (Interview FMLY file for first quarter, 2008)
\\INTRV\W08\MEMBI\081x.TXT (Interview MEMB file for first quarter, 2008)
\\INTRV\W08\MTABI\081x.TXT (Interview MTAB file for first quarter, 2008)
\\INTRV\W08\ITABI\081x.TXT (Interview ITAB file for first quarter, 2008)
\\INTRV\W08\ITBII\081x.TXT (Interview ITAB_Imputed file for first quarter, 2008)
\\INTRV\W08\FMLY\082.TXT (etc.)
\\INTRV\W08\MEMBI\082.TXT
\\INTRV\W08\MTABI\082.TXT
\\INTRV\W08\ITABI\082.TXT
\\INTRV\W08\ITBII\082.TXT
\\INTRV\W08\FMLY\083.TXT
\\INTRV\W08\MEMBI\083.TXT
\\INTRV\W08\MTABI\083.TXT
\\INTRV\W08\ITABI\083.TXT
\\INTRV\W08\ITBII\083.TXT
\\INTRV\W08\FMLY\084.TXT
\\INTRV\W08\MEMBI\084.TXT
\\INTRV\W08\MTABI\084.TXT
\\INTRV\W08\ITABI\084.TXT
\\INTRV\W08\ITBII\084.TXT



\\INTRVW08\FMLYI091.TXT
\\INTRVW08\MEMBI091.TXT
\\INTRVW08\MTABI091.TXT
\\INTRVW08\ITABI091.TXT
\\INTRVW08\ITBII091.TXT
\\INTRVW08\UCCI08.TXT
\\INTRVW08\VEHI08.TXT
\\EXPNO8\APL08.TXT
\\EXPNO8\RNT08.TXT
\\EXPNO8\OPB08.TXT
\\EXPNO8\OPD08.TXT
\\EXPNO8\MOR08.TXT
\\EXPNO8\HEL08.TXT
\\EXPNO8\OPH08.TXT
\\EXPNO8\OPI08.TXT
\\EXPNO8\UTA08.TXT
\\EXPNO8\UTP08.TXT
\\EXPNO8\UTI08.TXT
\\EXPNO8\UTC08.TXT
\\EXPNO8\CRA08.TXT
\\EXPNO8\CRB08.TXT
\\EXPNO8\APA08.TXT
\\EXPNO8\APB08.TXT
\\EXPNO8\EQB08.TXT
\\EXPNO8\FRA08.TXT
\\EXPNO8\FRB08.TXT
\\EXPNO8\CLA08.TXT
\\EXPNO8\CLB08.TXT
\\EXPNO8\CLD08.TXT
\\EXPNO8\CLC08.TXT
\\EXPNO8\RTV08.TXT
\\EXPNO8\LSD08.TXT
\\EXPNO8\OVB08.TXT
\\EXPNO8\OVC08.TXT
\\EXPNO8\VEQ08.TXT
\\EXPNO8\VLR08.TXT
\\EXPNO8\VOT08.TXT
\\EXPNO8\INB08.TXT
\\EXPNO8\IHB08.TXT
\\EXPNO8\IHC08.TXT
\\EXPNO8\IHD08.TXT
\\EXPNO8\MDB08.TXT
\\EXPNO8\MDC08.TXT
\\EXPNO8\EDA08.TXT
\\EXPNO8\SUB08.TXT
\\EXPNO8\ENT08.TXT
\\EXPNO8\TRD08.TXT
\\EXPNO8\TRV08.TXT
\\EXPNO8\TRE08.TXT
\\EXPNO8\TRF08.TXT
\\EXPNO8\MIS08.TXT
\\EXPNO8\CNT08.TXT
\\EXPNO8\XPA08.TXT
\\EXPNO8\XPB08.TXT

\\EXPN08\FN208.TXT
\\EXPN08\FNA08.TXT
\\EXPN08\FNB08.TXT
\\EXPN08\RBT08.TXT

The file naming convention in the SAS subfolder is listed in the table below. The STATA, ASCII comma-delimited, and SPSS files use the same dataset names as SAS, but have a different file extension as follows:

Comma-delimited ASCII files: \*.csv  
STATA files: \*.dta  
SPSS files: \*.sav

\\INTRV\W08\FMLI081x.sas7bdat (Interview FMLY file for first quarter, 2008)
\\INTRV\W08\MEMI081x.sas7bdat (Interview MEMB file for first quarter, 2008)
\\INTRV\W08\MTBI081x.sas7bdat (Interview MTAB file for first quarter, 2008)
\\INTRV\W08\ITBI081x.sas7bdat (Interview ITAB file for first quarter, 2008)
\\INTRV\W08\ITII081x.sas7bdat (Interview ITBI_IMPURED file for first quarter, 2008)
\\INTRV\W08\FMLI082.sas7bdat (etc.)
\\INTRV\W08\MEMI082.sas7bdat
\\INTRV\W08\MTBI082.sas7bdat
\\INTRV\W08\ITBI082.sas7bdat
\\INTRV\W08\ITII082.sas7bdat
\\INTRV\W08\FMLI083.sas7bdat
\\INTRV\W08\MEMI083.sas7bdat
\\INTRV\W08\MTBI083.sas7bdat
\\INTRV\W08\ITBI083.sas7bdat
\\INTRV\W08\ITII083.sas7bdat
\\INTRV\W08\FMLI084.sas7bdat
\\INTRV\W08\MEMI084.sas7bdat
\\INTRV\W08\MTBI084.sas7bdat
\\INTRV\W08\ITBI084.sas7bdat
\\INTRV\W08\ITII084.sas7bdat
\\INTRV\W08\FMLI091.sas7bdat
\\INTRV\W08\MEMI091.sas7bdat
\\INTRV\W08\MTBI091.sas7bdat
\\INTRV\W08\ITBI091.sas7bdat
\\INTRV\W08\ITII091.sas7bdat
\\INTRV\W08\UCCI08.txt
\\INTRV\W08\VEHI08.txt
\\EXPN08\APL08.sas7bdat
\\EXPN08\RNT08.sas7bdat
\\EXPN08\OPB08.sas7bdat
\\EXPN08\OPD08.sas7bdat
\\EXPN08\MOR08.sas7bdat
\\EXPN08\HEL08.sas7bdat
\\EXPN08\OPH08.sas7bdat
\\EXPN08\OPI08.sas7bdat
\\EXPN08\UTA08.sas7bdat
\\EXPN08\UTP08.sas7bdat
\\EXPN08\UTI08.sas7bdat
\\EXPN08\UTC08.sas7bdat
\\EXPN08\CRA08.sas7bdat
\\EXPN08\CRB08.sas7bdat
\\EXPN08\APA08.sas7bdat

\\EXPN08\\APB08.sas7bdat
\\EXPN08\\EQB07.sas7bdat
\\EXPN08\\FRA08.sas7bdat
\\EXPN08\\FRB08.sas7bdat
\\EXPN08\\CLA08.sas7bdat
\\EXPN08\\CLB08.sas7bdat
\\EXPN08\\CLD08.sas7bdat
\\EXPN08\\CLC08.sas7bdat
\\EXPN08\\RTV08.sas7bdat
\\EXPN08\\LSD08.sas7bdat
\\EXPN08\\OVB08.sas7bdat
\\EXPN08\\OVC08.sas7bdat
\\EXPN08\\VEQ08.sas7bdat
\\EXPN08\\VLR08.sas7bdat
\\EXPN08\\VOT08.sas7bdat
\\EXPN08\\INB08.sas7bdat
\\EXPN08\\IHB08.sas7bdat
\\EXPN08\\IHC08.sas7bdat
\\EXPN08\\IHD08.sas7bdat
\\EXPN08\\MDB08.sas7bdat
\\EXPN08\\MDC08.sas7bdat
\\EXPN08\\EDA08.sas7bdat
\\EXPN08\\SUB08.sas7bdat
\\EXPN08\\ENT08.sas7bdat
\\EXPN08\\TRD08.sas7bdat
\\EXPN08\\TRV08.sas7bdat
\\EXPN08\\TRE08.sas7bdat
\\EXPN08\\TRF08.sas7bdat
\\EXPN08\\MIS08.sas7bdat
\\EXPN08\\CNT08.sas7bdat
\\EXPN08\\XPA08.sas7bdat
\\EXPN08\\XPB08.sas7bdat
\\EXPN08\\FN208.sas7bdat
\\EXPN08\\FNA08.sas7bdat
\\EXPN08\\FNB08.sas7bdat
\\EXPN08\\RBT08.sas7bdat

## B. RECORD COUNTS AND LOGICAL RECORD LENGTHS

The following are the number of records and the logical record lengths (LRECL) in each data set (recall that each EXPN file contains 5 quarters of data within a single data set) The OBS count is also applicable to the STATA and SPSS files:

ASCII data set	SAS data set	LREC L	Record Counts
FMLYI081X.TXT	FMLI081X.SAS7BDAT	6217	6914
FMLYI082.TXT	FMLI082.SAS7BDAT	6217	6942
FMLYI083.TXT	FMLI083.SAS7BDAT	6217	6794
FMLYI084.TXT	FMLI084.SAS7BDAT	6217	6895
FMLYI091.TXT	FMLI091.SAS7BDAT	6217	6940

MEMBI081X.TXT	MEMI081X.SAS7BDAT	787	17427
MEMBI082.TXT	MEMI082.SAS7BDAT	787	17554
MEMBI083.TXT	MEMI083.SAS7BDAT	787	17239
MEMBI084.TXT	MEMI084.SAS7BDAT	787	17164
MEMBI091.TXT	MEMI091.SAS7BDAT	787	17432
MTABI081X.TXT	MTBI081X.SAS7BDAT	35	572639
MTABI082.TXT	MTBI082.SAS7BDAT	35	550564
MTABI083.TXT	MTBI083.SAS7BDAT	35	557931
MTABI084.TXT	MTBI084.SAS7BDAT	35	549721
MTABI091.TXT	MTBI091.SAS7BDAT	35	570144
ITABI081X.TXT	ITBI081X.SAS7BDAT	34	386067
ITABI082.TXT	ITBI082.SAS7BDAT	34	388209
ITABI083.TXT	ITBI083.SAS7BDAT	34	380709
ITABI084.TXT	ITBI084.SAS7BDAT	34	385857
ITABI091.TXT	ITBI091.SAS7BDAT	34	387501
ITBII081x.TXT	ITII081x.SAS7BDAT	35	529347
ITBII082.TXT	ITII082.SAS7BDAT	35	532320
ITBII083.TXT	ITII083.SAS7BDAT	35	520086
ITBII084.TXT	ITII084.SAS7BDAT	35	527583
ITBII091.TXT	ITII091.SAS7BDAT	35	532641
<u>EXPN</u>			
APL08.TXT	APL08.SAS7BDAT	40	314154
RNT08.TXT	RNT08.SAS7BDAT	94	11571
OPB08.TXT	OPB08.SAS7BDAT	114	28149
OPD08.TXT	OPD08.SAS7BDAT	64	172
MOR08.TXT	MOR08.SAS7BDAT	231	17238
HEL08.TXT	HEL08.SAS7BDAT	231	1566
OPH08.TXT	OPH08.SAS7BDAT	75	2486
OPI08.TXT	OPI08.SAS7BDAT	293	42659
UTA08.TXT	UTA08.SAS7BDAT	233	47335
UTP08.TXT	UTP08.SAS7BDAT	43	2807
UTI08.TXT	UTI08.SAS7BDAT	72	45998
UTC08.TXT	UTC08.SAS7BDAT	119	113172
CRA08.TXT	CRA08.SAS7BDAT	74	882
CRB08.TXT	CRB08.SAS7BDAT	302	10803
APA08.TXT	APA08.SAS7BDAT	88	3132
APB08.TXT	APB08.SAS7BDAT	81	33158
EQB08.TXT	EQB08.SAS7BDAT	72	4673
FRA08.TXT	FRA08.SAS7BDAT	72	29789
FRB08.TXT	FRB08.SAS7BDAT	41	264
CLA08.TXT	CLA08.SAS7BDAT	79	144562
CLB08.TXT	CLB08.SAS7BDAT	79	19216
CLD08.TXT	CLD08.SAS7BDAT7	72	2628

CLC08.TXT	CLC08.SAS7BDAT	72	3000
RTV08.TXT	RTV08.SAS7BDAT	48	880
LSD08.TXT	LSD08.SAS7BDAT	211	1691
OVB08.TXT	OVB08.SAS7BDAT	323	64931
OVC08.TXT	OVC08.SAS7BDAT	62	2200
VEQ08.TXT	VEQ08.SAS7BDAT	94	39834
VLR08.TXT	VLR08.SAS7BDAT	49	12354
VOT08.TXT	VOT08.SAS7BDAT	101	34482
INB08.TXT	INB08.SAS7BDAT	160	78488
IHB08.TXT	IHB08.SAS7BDAT	55	33156
IHC08.TXT	IHC08.SAS7BDAT	152	12484
IHD08.TXT	IHD08.SAS7BDAT	56	4598
MDB08.TXT	MDB08.SAS7BDAT	74	61504
MDC08.TXT	MDC08.SAS7BDAT	74	1275
EDA08.TXT	EDA08.SAS7BDAT	86	17874
SUB08.TXT	SUB08.SAS7BDAT	35	19067
ENT08.TXT	ENT08.SAS7BDAT	146	21239
TRD08.TXT	TRD08.SAS7BDAT	36	5373
TRV08.TXT	TRV08.SAS7BDAT	315	13857
TRE08.TXT	TRE08.SAS7BDAT	36	3597
TRF08.TXT	TRF08.SAS7BDAT	85	264
MIS08.TXT	MIS08.SAS7BDAT	72	61639
CNT08.TXT	CNT08.SAS7BDAT	36	37101
XPA08.TXT	XPA08.SAS7BDAT	130	34481
XPB08.TXT	XPB08.SAS7BDAT	189	34481
FN208.TXT	FN208.SAS7BDAT	33	25977
FNA08.TXT	FNA08.SAS7BDAT	42	6305
FNB08.TXT	FNB08.SAS7BDAT	104	8710
RBT08.TXT	RBT08.SAS7BDAT	37	5895

### C. DATA FLAGS

Data fields on the FMLY, MEMB, and EXPN files are explained by flag variables following the data field. The names of the flag variables are derived from the names of the data fields they reference. In general the rule is to add an underscore to the last position of the data field name, for example SALARYX becomes SALARYX\_. However, if the data field name is eight characters in length, then the fifth position is replaced with an underscore. If this fifth position is already an underscore, then the fifth position is changed to a zero, so that PENSIONX becomes PENS\_ONX, EDUC\_REF becomes EDUC0REF.

#### 1. Flag values for the FMLY, MEMB, and ERBT files:

A flag value of "A" indicates a valid blank; that is, a blank field where a response is not anticipated.

A flag value of "B" indicates a blank resulting from an invalid nonresponse; that is, a nonresponse that is not consistent with other data reported by the CU.

A flag value of "C" refers to a blank resulting from a "don't know", refusal, or other type of nonresponse.

A flag value of "D" indicates that the data field contains a valid or good data value.

A flag value of "T" indicates topcoding has been applied to the data field.

Some Primary Sampling Units (PSUs) in some states are given "false" STATE codes for nondisclosure reasons. See Section IV.A.CU CHARACTERISTICS AND INCOME FILE (FMLY) on topcoding of CU characteristics and income for more detail.

## **2. Flag values for the EXPN\* and MTAB files:**

A flag value of "A" indicates a valid blank; that is, a blank field where a response is not anticipated.

A flag value of "B" indicates a blank resulting from an invalid nonresponse; that is, a nonresponse that is not consistent with other data reported by the CU.

A flag value of "C" refers to a blank resulting from a "don't know", refusal, or other type of nonresponse.

A flag value of "D" indicates that the data field contains a valid value and is unadjusted.

A flag value of "E" indicates that the data field contains a valid value that has been allocated.

A flag value of "F" indicates that the data field contains a valid value that has been imputed or in some other way adjusted.

A flag value of "G" indicates that the data field contains a valid value that has been allocated and imputed.

A flag value of "T" indicates that the data field contains a valid value that has been topcoded or suppressed.

A flag value of "U" indicates that the data field contains a valid value that has been allocated and then topcoded or suppressed.

A flag value of "V" indicates that the data field contains a valid value that has been imputed or in some other way adjusted and then topcoded or suppressed.

A flag value of "W" indicates that the data field contains a valid value that has been allocated and imputed and then topcoded or suppressed.

A flag value of "H" refers to a valid blank for an expenditure that is a "parent record" where the expenditure was allocated to other records and the original expenditure was overwritten with a blank.

\*Excluding the ERBT file.

## D. INCOME IMPUTATION

Beginning in 2004, the CE implemented multiple imputation of income data. Imputation allows income values to be estimated when they are not reported. Many income variables and other income related variables are now imputed using a multiple imputation process. These imputed income values are included in the FMLY, MEMB, ITAB, and ITAB\_IMPUTE (ITII) files. The multiple imputation process derives five imputation values, and a mean imputation value, per selected income variable. More information on the imputation process and how to appropriately use the data are found in the document "User's guide to Income Imputation in the CE".

In the public-use microdata, not all of the imputed income variables contain the derived imputation values. For some income variables, the five derived imputations are excluded and only the mean of those imputations is available. For these variables, there are 3 associated income variables in the FMLY and MEMB files (INCOMEM, INCOMEM\_, and INCOMEI). For all other imputed income variables, there are 7 associated variables in the FMLY and MEMB files:

INCOME1 - the first imputed income value or the reported income value, if non-missing  
INCOME2 - the second imputed income value or the reported income value, if non-missing  
INCOME3 - the third imputed income value or the reported income value, if non-missing  
INCOME4 - the fourth imputed income value or the reported income value, if non-missing  
INCOME5 - the fifth imputed income value or the reported income value, if non-missing  
INCOMEM - the mean of the five imputed income values  
INCOMEM\_ - the flag variable for the imputed variable (see section III.C. Data Flags)  
INCOMEI - the imputation indicator variable

Income variables that have imputed values as components (ex: FINCBEFM) will also have 5 imputed values and a mean based on each of the imputed components.

The imputation indicator variable is a 3 digit number that is coded as follows:

The first digit in the 3 digit code defines the imputation method. The meanings are:

- 1: No Imputation
- 2: Multiple Imputation due to invalid blank only
- 3: Multiple Imputation due to bracketing only
- 4: Multiple Imputation due to invalid blanks and bracketing
- 5: Multiple Imputation due to conversion of a valid blank to an invalid blank (this occurs only when initial values for all sources of income for the CU were valid blanks).

The meaning of the last two digits of the three digit code differs depending on whether you are looking at one of the components of overall income, like fsalaryxm, or you are looking at the summary level variable fincbtxm. For the components the last 2 digits represent the number of family members who had their data imputed for that source. For example, if a family had a value of 302 for fsalaryi that would mean that 2 of the members in the family had their salary income imputed and that in both cases the imputation was due to bracketing only. For the summary level variable fincbtxm which is a summation of all of the income components, the last 2 digits represent the number of income sources imputed for each member all added together. So, for example, if a family had 3 members and 2 had salary income imputed due to invalid blank only, and 2 had nonfarm income imputed due to bracketing only, and that was the only income data imputed for members of that family, then fsalaryi for the family would be 202, fnonfrmi would be 302, and fincbtxi would be 404.

The ITAB file includes income UCCs mapped from the associated INCOMEM variable in the FMLY files. The ITAB\_IMPUTE (ITII) file includes UCCs mapped from income variables subject to income imputation, including the variable IMPNUM to indicate the imputation number 1 - 5.

## E. FILE NOTATION

Every record from each data file includes the variable NEWID, the CU's unique identification number, which is used to link records of one CU from several files across all quarters in which they participate.

Data fields for variables on the microdata files have either numeric or character values. The format column in the detailed variable descriptions (Section III.F. DETAILED VARIABLE DESCRIPTIONS) distinguishes whether a variable is numeric (NUM) or character (CHAR) and shows the number of field positions the variable occupies. Variables that include decimal points are formatted as NUM(t,r) where t is the total number of positions occupied, and r is the number of places to the right of the decimal.

In addition to format, these detailed listings give an item description, questionnaire source, identification of codes where applicable, and start position for each variable. The questionnaire source format will now indicate the CAPI section where the question can be found.

A star (\*) is shown in front of new variables, those which have changed in format or definition, and those which have been deleted. Variables whose format has expanded are moved to the end of the files, and their original positions are left blank. New variables are added to the end of the files after variables whose format has changed. The positions of deleted variables are left blank.

Some variables require special notation. The following notation is used throughout the documentation for all files:

\*D(Yxxq) identifies a variable that is deleted as of the quarterly file indicated. The year and quarter are identified by the 'xx' and 'q' respectively. For example, the notation \*D(Y082) indicates the variable is deleted starting with the data file of the second quarter of 2008.

\*N(Yxxq) identifies a variable that is added as of the quarterly file indicated. The year and quarter are identified by the 'xx' and 'q' for new variables in the same way as for deleted variables.

\*C(Yxxq) identifies a variable's content or description has changed beginning in the quarterly file indicated. The year and quarter are identified by the 'xx' and 'q' for new variables in the same way as for deleted variables.

\*L indicates that the variable can contain negative values.

## F. ALLOCATION AND RECORD ORIGIN (EXPAN)

Expenditures on the EXPAN files that have been allocated can be identified through their flag variable, which will have a value, set to 'H' (see Section III.C. DATA FLAGS). These expenditures can be recreated using the fields SEQNO and ALCNO. SEQNO is a counter assigned to make records unique. ALCNO is zero for all original expenditure records. If ALCNO is greater than zero, the corresponding expenditure record is the result of allocation of an original record whose expenditure field has been replaced with a blank for that CU. By summing expenditures for records with ALCNO greater than zero and the same SEQNO as the original record, one can arrive at the value which was allocated.

The codes for the variable REC\_ORIG, which are common to every EXPAN file record, can be interpreted as follows:

### CODED

- 1 Data reported in the current quarter's interview.
- 2 Data reported in the previous quarter's interview that are encompassed by the current reference period. These data are brought forward through the reference period adjustment process.



- 3 Data reported in the previous quarter's interview that are encompassed by the current reference period, and this logical record duplicates a logical record from the current interview month. These data are brought forward through the reference period adjustment process; the data duplication is also identified during this process.
- 4 Inventory data reported in previous quarters' interviews brought forward through the inventory update process. No updates are applied to this logical record as none are indicated in the current inventory chart.
- 5 Inventory data reported in previous quarters' interviews brought forward through the inventory update process. Updates are applied based upon data contained in the current inventory chart.
- 6 Data created by the processing system.

## **G. NOTES ON FILES**

There are some specifics that are unique to particular files to be aware of when working with the datasets. Important notes that were previously listed with the Variable descriptions can now be found in this section of the documentation. Each note is broken into file and category.

### **1. CONSUMER UNIT (CU) CHARACTERISTICS AND INCOME FILE (FMLY)**

The "FMLY" file, also referred to as the "Consumer Unit Characteristics and Income" file, contains CU characteristics, CU income, and characteristics and earnings of the reference person and of the spouse. The file includes weights needed to calculate population estimates and variances. (See Sections V. ESTIMATION PROCEDURES and VI. RELIABILITY STATEMENT.)

Summary expenditure variables in this file can be combined to derive quarterly estimates for broad consumption categories. Demographic characteristics, such as family size, refer to the CU status on the date of the interview. Demographic characteristic information may change between interviews if, for example, a member enters or leaves the CU. Income variables contain annual values. Income data are collected in the second and fifth interviews only and cover the 12 months prior to the date of interview. Income data collected in the second interview are copied to the third and fourth interviews. Income data are updated only if a CU member over 13 is new to the CU or has not worked in previous interviews and has now started working. When there is a valid nonresponse, or where nonresponse occurs and there is no imputation, there will be missing values. The type of nonresponse is explained by associated data flag variables described in Section III.C. DATA FLAGS.

#### **a. SUMMARY EXPENDITURE DATA**

##### **Main Summary Level Expenditure Variables**

For each summary expenditure category listed below there are two variables. They apportion expenditures reported for the three-month reference period of the interview to the calendar quarters, relative to the month of interview, in which the expenditures occurred. The first variable contains expenditures made by the CU in the calendar quarter previous to the month of interview. These "previous quarter" expenditure variables are identified by "PQ" placed as the last two letters of the variable name. The second variable contains expenditures made in the calendar quarter of the month of interview (last 2 letters of the variable name 'CQ'). So if CUs were interviewed in May (when they reported their February, March, and April expenditures), the "PQ" variable would contain their February and March expenditures since the previous calendar quarter to a May interview is from January to March. The "CQ" variable for these CUs would contain only their April expenditures. The variables are set up this way to facilitate analysis by calendar time period. For example, to calculate an expenditure category mean for a given calendar quarter, expenditures from the "CQ" variable for interviews conducted during the quarter of

interest are added to amounts from the "PQ" variable for interviews conducted during the subsequent quarter prior to dividing by the number of observations. To derive expenditure statistics by collection period, i.e., for interviews conducted during a specific period, it is necessary to obtain all expenditures reported during each interview by summing the "PQ" and "CQ" variables of the desired expenditure category. See Section V.A.1.b. CALENDAR PERIOD VERSUS COLLECTION PERIOD for a detailed explanation of calendar and collection periods.

All of the summary level variables are BLS derived. The composition of each summary expenditure variable is given below the variable description. An underlined UCC represents either a new UCC or a deleted UCC. Please note that new UCCs may not be represented in all quarters. The quarter in which the addition (deletion) to the summary expenditure variable occurs is denoted by a leading superscript directly prior to the UCC code. For example, <sup>N081</sup><UCC> or <sup>D081</sup><UCC> identifies an addition or deletion of a given UCC to the summary expenditure variable beginning in Q081.

PLEASE NOTE THE FOLLOWING:

MISC2PQ(CQ) contains UCCs that are a subset of those included in MISCPQ(CQ) – miscellaneous expenditures. Component UCCs in MISCPQ(CQ) have been separated according to collection method. UCCs for which the values are obtained from questions asked in interviews 2 through 5 are now in MISC1PQ(CQ), while MISC2PQ(CQ) contains those UCCs from questions asked only in the fifth interview. To obtain population or sample estimates, the summary variable MISCX4PQ(CQ) has been created. It is comprised of MISC1PQ(CQ) expenditures and MISC2PQ(CQ) expenditures that have been multiplied by four, in order to account for families not in their fifth interviews. Similarly, TOTEX4PQ(CQ) reflects the adjustments for "non-fifth interview" families in MISC2PQ(CQ) and CASHCOPQ(CQ). Please be aware that for 2008Q1 MISCX4CQ(PQ) and TOTEX4PQ(CQ) overestimate the values of CASHCOPQ(CQ) and a portion of MISC2PQ(CQ) for "fifth interview" CUs and should only be used for population estimates.

### **Travel related summary expenditure variables**

The summary level "travel" expenditure variables (T-variables) describe expenditures by consumer units on out-of-town trips. These variables have been constructed to facilitate research on travel related spending. Because the UCCs describing these items are scattered across several categories, they are collected in one format for the convenience of the user. As is the convention with the main summary level expenditure variables, each of the T-variable categories are sorted by expenditures that took place during the previous calendar quarter and current calendar quarter. However for the T-variables, the previous quarter expenditure variables are appended with "P" and the current quarter expenditure variables are appended with "C".

### **Expenditure Outlays Summary Variables**

Expenditure outlay summary level variables (EVARS) are used to provide a measurement of all expenditure outlays. These variables are constructed similarly to the main summary level expenditure variables in that they contain interest payments for home mortgage and vehicles when financed. The difference with the EVARS are that they also include payments on principle for home mortgages and vehicles. Note: main summary level expenditure variables are components of the higher aggregated EVARS. The EVARS follow the same naming convention as the main summary level expenditure variables. Expenditures within the collection quarter are sorted by whether they occurred in the previous calendar quarter or in the current calendar quarter. As in the Travel related summary variables, the EVARS are appended with a "P" for previous or "C" for current.

## **2. MEMBER CHARACTERISTICS AND INCOME (MEMB) FILE**

The "MEMB" file, also referred to as the "Member Characteristics and Income" file, contains selected characteristics for each CU member, including identification of relationship to reference person. Characteristics for the reference person and spouse appear on both the MEMB file and FMLY file.

Demographic characteristic data, such as age of CU member, refer to the member status on the date of the interview. Characteristic information may change between interviews. Income data are collected in the second and fifth interviews for all CU members over 13 years of age and in the third and fourth interviews for members over 13 who are new to the CU or who previously reported not working and are now working. Member income data from the second interview are carried over to the third and fourth interviews subject to the above conditions. Income variables contain annual values for the 12 months

99 prior to the interview month. Income taxes withheld and pension and retirement contributions are shown both annually and as deductions from the member's last paycheck. When there is a valid nonresponse, or where nonresponse occurs and there is no imputation, there will be missing values. The type of nonresponse is explained by associated data flag variables described in Section III.C. DATA FLAGS.

### **3. MONTHLY EXPENDITURES (MTAB) FILE**

In the MTAB file, each expenditure reported by a CU is identified by UCC, gift/nongift status, and month in which the expenditure occurred. UCCs are six digit codes that identify items or groups of items. (See Section XIII.A for a listing of UCCs.) The expenditure data record purchases that were made during the three month period prior to the month of the interview. There may be more than one record for a UCC in a single month if that is what was reported to the interviewer. There are no missing values in this file. If no expenditure was reported for the item(s) represented by a UCC, then there is no record for the UCC on the file.

The following UCCs are from questions asked only in the 2nd or 5th interviews.

006001 Total amount owed to creditors (2nd interview)

006002 Total amount owed to creditors (5th interview)

710110 Finance charges, excluding mortgage and vehicles (5th interview)

NOTE: To be used at the macro level, the above UCCs need to be multiplied by 4 in order to account for those CUs that are not asked these questions.

### **4. INCOME (ITBI) FILE**

The "ITAB" file, also referred to as the "Income" file, contains CU characteristics and income data.

This file is created directly from the FMLY file and contains the same annual and point-of-interview data in a monthly format. It was created to facilitate computer processing when linking CU income and characteristics data with MTAB expenditure data. As such, the file structure is similar to MTAB. Each characteristic and income item is identified by UCC (See Section XIII.B. for a listing of UCCs), gift/nongift

118 status, and month. There are no records with missing values in ITAB. If the corresponding FMLY file variable contained a missing value, there is no record for the UCC.

The following UCCs are from questions asked only in the 5th interview. Therefore, there will be no values for these UCCs for CUs in their 2nd through 4th interviews. They have been multiplied by 4 because these data are used as estimated values for those CUs not asked the questions in that particular quarter. Therefore, to be used at the micro level they should be divided by 4. For example, if a CU reports \$50,000 for value of savings account for the past 12 months, the amount of  $(\$50,000 \times 4) / 12 = \$16666.67$  is entered as the cost for each of the 3 months of the quarter for UCC 920012. It is multiplied by 4 because only one-fourth of all CUs interviewed in a quarter are asked this question (those in the fifth interview) and it is divided by 12 to make it a monthly figure. To obtain the annual value for the CU, sum the cost for the 3 months, for the following UCCs:

001000 003000

001010 003100

001210 920010

001220 920020

002010 920030

002020 920040

002030

### **5. IMPUTED INCOME (ITII) FILE**

As a result of the introduction of multiply imputed income data in the Consumer Expenditure

Survey, the ITII file is now on the Microdata. It is very similar to the ITAB file, except that the variable IMPNUM. will indicate the number (1-5) of the imputation variant of the income variable and it only contains UCCs from variables subject to income imputation.

## 6. DETAILED EXPENDITURES (EXPN) FILES

Positions 1-20 contain the variables QYEAR, NEWID, SEQNO, ALCNO and REC\_ORIG that are common to all sections of EXPN. Descriptions of these variables can be found in Section 1 (APA).

### a. SECTION 1 GENERAL SURVEY INFORMATION (APA)

PART C Major Household Appliances - For New Consumer Units Only

This file contains an inventory of major household appliances belonging to the CU. These questions are asked at the first interview and the information is carried forward to subsequent interviews through the inventory update process. Note that the title of this section on the questionnaire each user has received indicates it is asked "For New Consumer Units Only". This is because this questionnaire is used for the second through fifth interviews. The section would only be completed if a new CU had moved to the sample address, replacing an old CU that had previously participated.

### b. SECTION 21 CREDIT LIABILITY(FN2)

PART A.1 Credit Balances - Second Quarter Only (FN2)

Data are collected in the second interview and carried forward for subsequent interviews.

### c. 2008 TAX REBATE FILE (RBT)

See documentation "Special 2008 Tax Rebate File (RBT).doc" for details on this file.

## 7. PROCESSING FILES

### a. Istub file

X:\Programs\Istub2008.txt

The Istub file shows the aggregation scheme used in the published consumer expenditure tables. It is formatted as follows:

DESCRIPTION	START POSITION	FORMAT
Type: represents whether information in this line contains aggregation data or not	1	CHAR(1)
Level: aggregation level (lowest number is highest level of aggregation)	4	CHAR(1)
Title: title of the line item	7	CHAR(60)
UCC: UCC number in the MTAB or ITAB file	70	CHAR(6)
Survey: Indicates survey source (I = interview, G = Aggregated item)	80	CHAR(1)
Group: Indicates if the item is an expenditure, income, or asset	86	CHAR(7)

Note: this file is an internal BLS file used for processing expenditures. It has other information that may be ignored by users of the public use data.

**b. UCC file**

X:\INTRVW06\UCCI08.TXT

The UCC file contains UCCs and their abbreviated titles, identifying the expenditure, income, or demographic item represented by each UCC. It is formatted as follows:

DESCRIPTION	START POSITION	FORMAT
UCC	1	CHAR(6)
UCC title  (See Section XIII.A. EXPENDITURE UCCS ON MTAB FILE and XIII.B. INCOME AND RELATED UCCS ON ITAB FILE for a list of UCCs and their full titles by file—expenditure (MTAB) or income (ITAB).)	8	CHAR(50)

**c. Vehicle file**

New vehicle codes were introduced with the CAPI instrument and should be used for vehicle information collected from the 2003q2 survey on. These codes can be found in the variable MKMDEL (the first 3 characters) in EXPN Section 10, Part B (Rented and Leased Vehicles – Detailed Questions for Leased Vehicles) and MAKE in EXPN Section 11, Part B (Owned Vehicles - Detailed Questions).

X:\INTRVW08\CAPIVEHI08.TXT

CAPIVEHI08.TXT is formatted as follows

DESCRIPTION	START POSITION	FORMAT
Make code	1	CHAR(3)
Make of vehicle	5	CHAR(32)

**d. Sample program file**

X:\Programs\Intrvw Mean and SE.sas  
X:\Programs\Intrvw Sumvars.sas  
X:\Programs\Integrated Mean and SE.sas

The Intrv Mean and SE program file contains the computer program used in Section VII.A. SAMPLE PROGRAM of the documentation. This file has been created to provide programming assistance.

In addition to the Intrvw Mean and SE.sas program, there are additional sample programs in the Programs folder to provide assistance using different files. The Intrvw Sumvars.sas program uses the summary variables in FMLY file to create calendar year estimates. The Integrated Mean and SE.sas program is used using data from the Diary and Interview files to create the means and standard errors using the same methods as the published tables.

Note: Estimates from the programs will not match the published tables exactly due to topcoding in the public-use data.

## IV. TOPCODING AND OTHER NONDISCLOSURE REQUIREMENTS

Sensitive CU data are changed so that users will not be able to identify CUs who participated in the survey. Topcoding refers to the replacement of data in cases where the value of the original data exceeds prescribed critical values. Critical values for each variable containing sensitive data are calculated in accordance with Census Disclosure Review Board guidelines. Each observation that falls outside the critical value is replaced with a topcoded value that represents the mean of the subset of all outlying observations. All five quarters of data in the CE microdata release are used when calculating the critical value and topcode amounts. If an observation is topcoded, the flag variable assigned to that observation is set to 'T'.

Since the critical value and mean of the set of values outside the critical value may differ with each annual (five-quarter) release, the topcode values may change annually and be applied at a different starting point. By topcoding values in this manner, the first moment will be preserved for each five-quarter data release when using the total sample. This, however, will not be the case when means are estimated by characteristic, because topcode values are not calculated by characteristic.

### A. CU CHARACTERISTICS AND INCOME FILE (FMLY)

The following table shows the FMLY file variables are subject to topcoding. The table also shows the critical values and topcode values associated with the variables.

Variable	Description	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
ALIOTHX	Other regular contributions including alimony	48000	NA	95421	NA
ALIOTHXM	Amount received from other regular contributions including alimony	48000	NA	68867	NA
BSINVSTX	Investments to farm or business	150000	NA	261250	NA
CHDLMPX	Lump sum child support payment	24000	NA	61123	NA
CHDOTHX	Child support payments	22800	NA	39971	NA
CHDOTHXM	Amount received from other child support payments	22800	NA	29133	NA
CKBKACTX	Market value of all checking accounts	30000	NA	198845	NA
COMPBNDX	Change in U.S. savings bonds	12816	13000	18667	29667
COMPCKGX	Change in checking account	20000	20000	118697	81036
COMPOWDX	Change in money owed to consumer unit	60000	15000	102200	18125
COMPSAVX	Change in savings account	50000	55000	208597	157148

Variable	Description	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
COMPSECX	Difference in estimated market value of all stocks, bonds, or mutual funds including broker fees	200000	500000	1053857	-109
FEDRFNDX	Federal income tax refunds	7800	NA	12145	NA
FEDTAXX	Additional federal income tax paid (new UCC Q20062)	40000	NA	78061	NA
FININCX	Dividends, royalties, estates, trusts	60000	NA	121656	NA
FININCXM	Amount received from regular income from dividends, royalties, estates or trusts	60000	NA	71304	NA
INCLOSAM	Amount of net income or loss received from roomers or boarders	30000	17000	34533	20853
INCLOSBM	Amount of net income or loss received from other rental units	72000	8467	125717	3555
INCLOSSA	Roomer and boarder income	30000	17000	48133	22333
INCLOSSB	Other rental income	72000	8467	238857	15000
INSRFNDX	Refunds from insurance policies	4600	NA	9111	NA
INTEARNM	Amount received from interest on savings accounts or bonds	35000	NA	53084	NA
INTEARNX	Interest	35000	NA	66640	NA
LUMPSUMX	Lump sum receipts	130000	NA	314976	NA
MISCTAXX	Other taxes	9740	NA	16330	NA
MONYOWDX	Amount of money owed to CU by persons outside CU	57000	NA	116250	NA
OTHRFNDX	Other tax refunds	1800	NA	5480	NA
OTHRINCM	Amount received from other money income	32000	NA	39454	NA
OTHRINCX	Other income	32000	NA	60370	NA
PENSIONM	Amount received from pensions or annuities	67000	NA	81824	NA
PENSIONX	Pensions and annuities	67000	NA	122083	NA
PTAXRFDX	Refunds from property taxes	1800	NA	3369	NA
PURSSECX	Purchase price of stocks, bonds or mutual funds including broker fees	300000	NA	711625	NA

Variable	Description	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
RENTEQVX	Rental equivalence of owned home	3000	NA	5205	NA
SALEINCX	Money from sale of household furnishings, etc.	10000	NA	150091	NA
SAVACCTX	Market value of all savings accounts	140000	NA	312804	NA
SECESTX	Market value of all securities	1032282	NA	3079641	NA
SELLSECX	Sale price of stocks, bonds, and mutual funds, net	500000	NA	827400	NA
SETLINSX	Change in surrender of insurance policies	50000	NA	138333	NA
SLOCTAXX	Additional state and local income tax paid (new UCC Q20062)	10000	NA	21797	NA
SLRFUNDX	State and local income tax refunds	2000	NA	3929	NA
SSOVERPX	Refund from overpayment on Social Security	1438	NA	1874	NA
TAXPROPX	Personal property taxes	1000	NA	2216	NA
USBNDX	Market value of all U.S. savings bonds	35000	NA	105692	NA
WDBSASTX	Amount of assets withdrawn from own farm or business	55000	NA	291667	NA
WDBSGDSX	Amount of goods or services withdrawn from own farm or business	3800	NA	36441	NA

Some income variables that are subject to topcoding are constructed by summing up the values of "lower level" MEMB or FMLY file component variables. These variables are not topcoded by the conventional method of replacement with a topcode value. Instead the variables' components are summed normally and the variables are flagged as topcoded if one of their component variables is topcoded. Following are the income variables that are calculated using values of their component variables. (See the descriptions of each variable in Sections III.F.1.e. INCOME - III.F.1.h. RETIREMENT AND PENSION DEDUCTIONS for a list of component variables.)

EARNINCX	Amount of CU income from earnings before taxes
FAMTFEDX, FAMTFEDM	Amount of Federal income tax deducted from last pay, annualized for all CU members
FFRMINCX, FFRMINCM	Amount of income or loss received from own farm
FGOVRETX, FGOVRETM	Amount of government retirement deducted from last pay, annualized for all CU members
FINCATAX, FINCATXM	Amount of CU income after taxes
FINCBTAX, FINCBTXM	Amount of CU income before taxes
FINDRETX	Amount of money placed in individual retirement plan
FJSSDEDX,	Estimated amount of annual Social Security contribution



FJSSDEDM	
FNONFRMX, FNONFRMM	Amount of income or loss received from nonfarm business
FPRIPENX, FPRIPENM	Amount of private pension fund deducted from last pay, annualized for all CU members
FRRDEDX, FRRDEDM	Amount of Railroad Retirement deducted from last pay, annualized for all CU members
FSALARYX, FSALARYM	Amount received from wage and salary income before deductions
FSLTAXX, FSLTAXXM	Amount of state and local income taxes deducted from last pay, annualized for all CU members
NO_EARNX	Amount of income from sources other than earnings before taxes
NONINCMX	Amount of other money receipts excluded from family income
TOTTXPDX, TOTTXPDM	Amount of personal taxes paid

Here are some examples of situations that may occur. The value for the variable FFRMINCM (Family income or loss from farm) is computed as the sum of the values reported for the variable FARMINCM (member income or loss from farm) from the MEMB file. FARMINCM is subject to topcoding beyond the critical value of \$143,433 (-\$9,999). The topcode value for FARMINCM is \$438,097 (-\$38,103). (See Section IV.B. MEMBER CHARACTERISTICS AND INCOME FILE (MEMB)).

CU	FARMINCM	REPORTED	FFRMINCM		FLAGGED AS TOPCODED?
			AFTER TOPCODING	VALUE	
CU 1:	MEMB1	\$140,000	\$140,000		
	MEMB2	140,000	140,000	280,000	No
CU 2:	MEMB1	270,000	438,097		
	MEMB2	10,000	10,000	448,097	Yes
CU 3	MEMB1	500,000	438,097		
	MEMB2	50,000	50,000	488,097	Yes
CU 4	MEMB1	52,000	52,000		
	MEMB2	-55,000	-38,103	13,897	Yes

While CUs 1 and 2 each originally report \$280,000 in FARMINCM, topcoding is done only on the value reported by MEMB1 of CU2. Thus, the value for FFRMINCM for CU2 is higher than for CU1 and is flagged as topcoded while CU1 is not. By using the mean of the subset of observations that are above (below) the critical value as the topcode amount, values on the public use data can be either below or above the actual reported value. Note that while CU3 has a topcoded value lower than the reported value, CU2's topcoded FFRMINCM value (\$448,097) is higher than the amount that it reported (\$280,000). The case of CU4 demonstrates that the value for FFRMINCM can be lower than other topcoding situations, yet still be flagged as topcoded. This is due to the presence of a negative value (loss) for FARMINCM reported by MEMB2. The reverse can also occur.

The value of the variable, STATE, which identifies the state of residence, must be suppressed for some observations to meet the Census Disclosure Review Board's criterion that the smallest geographically identifiable area have a population of at least 100,000. STATE data were evaluated vis-à-vis the POPSIZE, REGION, and BLS\_URBN variables, which show the population size of the geographic area that is sampled, the four Census regions, and urban/rural status respectively. Some STATE codes were suppressed because, in combination with these variables, they could be used to identify areas of 100,000 or less. On approximately 17 percent of the records on the FMLY files the STATE variable is blank.

A small proportion of STATE codes are replaced with codes of states other than the state where the CU resides. By re-coding in this manner, suppression of POPSIZE and REGION may be avoided. (In past releases selected observations of POPSIZE and REGION required suppression.) In total, approximately 4% of observations are recoded.

RR	01	Alabama	29	Missouri
	02	Alaska	*30	Montana
	04	Arizona	31	Nebraska
	*05	Arkansas	32	Nevada
	**06	California	33	New Hampshire
	**08	Colorado	34	New Jersey
	09	Connecticut	**36	New York
R	10	Delaware	*37	North Carolina
	11	District of Columbia	**39	Ohio
	12	Florida	40	Oklahoma
RR**	13	Georgia	**41	Oregon
	15	Hawaii	42	Pennsylvania
	16	Idaho	44	Rhode Island
	**17	Illinois	45	South Carolina
	**18	Indiana	*46	South Dakota
	**20	Kansas	**47	Tennessee
	21	Kentucky	**48	Texas
	22	Louisiana	49	Utah
	**23	Maine	**51	Virginia
RR	24	Maryland	53	Washington
	25	Massachusetts	**54	West Virginia
	**26	Michigan	RR**55	Wisconsin
	R	27		
	*28	Mississippi		

- \* indicates that the STATE code has been suppressed for all sampled CUs in that state.
- \*\* indicates that the STATE code has been suppressed for some sampled CUs in that state.
- R indicates that either all observations from this state have been re-coded or all strata<sup>1</sup> of observations from this state include "re-codes" from other states.
- RR indicates that either some observations from this state have been re-coded or at least one stratum<sup>1</sup> of observations from this state includes "re-codes" from other states.
- R\* indicates that the STATE code has been suppressed for some sampled CUs in that state and, either STATE has been re-coded or the state includes "re-codes" from other states in all strata<sup>1</sup>.
- RR\*\* indicates that the STATE code has been suppressed for some sampled CUs in that state and, either STATE has been re-coded or the state includes "re-codes" from other states in at least one stratum<sup>1</sup>.

<sup>1</sup> A STATE stratum is a unique POPSIZE and BLS\_URBN combination. States not listed are not in the CE sample.

## B. MEMBER CHARACTERISTICS AND INCOME FILE (MEMB)

The following table identifies the MEMB file variables subject to topcoding. The table also shows the critical values and topcode values associated with each variable listed.

Variable	Description	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
AGE	Age of member	82	NA	87	NA

<b>Variable</b>	<b>Description</b>	<b>2008 Upper Critical Value</b>	<b>2008 Lower Critical Value</b>	<b>2008 Upper Topcode Value</b>	<b>2008 Lower Topcode Value</b>
AMTFED	Amount of Federal income tax deducted from last pay	1200	NA	3177	NA
ANFEDTX	Annual amount of Federal income tax deducted from pay	24971	NA	47867	NA
ANFEDTXM	Annual amount of Federal income tax deducted from pay	24971	NA	48259	NA
ANGOVRTM	Annual amount of government retirement deducted from pay	9327	NA	13983	NA
ANGOVRTX	Annual amount of government retirement deducted from pay	9327	NA	13924	NA
ANPRVPM	Annual amount of private pension fund deducted from pay	17249	NA	26005	NA
ANPRVPMX	Annual amount of private pension fund deducted from pay	17249	NA	25939	NA
ANRRDEDM	Annual amount of Railroad Retirement deducted from pay	7900	NA	10276	NA
ANRRDEDX	Annual amount of Railroad Retirement deducted from pay	7900	NA	10276	NA
ANSLTX	Annual amount of state and local income taxes deducted from pay	9010	NA	16461	NA
ANSLTXM	Annual amount of state and local income taxes deducted from pay	9010	NA	16442	NA
FARMINCM	Amount of income or loss received from own farm	143433	-9999	438097	22352
FARMINCX	Amount of income or loss received from own farm	143433	-9999	529167	38103
GOVRETX	Amount of government retirement deducted from last pay	707	NA	1732	NA
GROSPAYX	Amount of last gross pay	6800	NA	17374	NA
INDRETX	Amount of money placed in individual retirement plan	25000	NA	48924	NA
JSSDEDX	Estimated annual Social Security contribution	8499	NA	12049	NA
JSSDEDXM	Estimated annual Social Security contribution	8499	NA	9972	NA
NONFARMM	Amount of income or loss received from own nonfarm business	150000	-9999	164720	36146
NONFARMX	Amount of income or loss received from own nonfarm business	150000	-9999	342061	56860
PRIVPENX	Amount of private pension fund deducted from last pay	1000	NA	2606	NA
RRRDEDX	Amount of Railroad Retirement deducted from last pay	420	NA	525	NA
SALARYX	Amount received from wage and salary income before deductions	150000	NA	273096	NA
SALARYXM	Amount received from wage and salary income before deductions	150000	NA	217891	NA

Variable	Description	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
SLFEMPSM	Amount of self-employment Social Security contribution	16998	NA	14472	NA
SLFEMPSS	Amount of self-employment Social Security contribution	16998	NA	21675	NA
SLTAXX	Amount of state and local income taxes deducted last pay	411	NA	944	NA

### Special suppression for MEMB file variables

The five MEMB file variables--AMTFED, GOVRETX, PRIVPENX, RRRDEDX, and SLTAXX--describe deductions from the most recent pay. These variables are used in conjunction with GROSPAYX (amount of last gross pay) and SALARYXM (annual wage and salary income) to derive ANFEDTX, ANGOVRTX, ANPRVPNX, ANRRDEDX, and ANSLTX, which represent the estimated annual deductions for each of these income deduction categories. For example, the estimated annual Federal income tax deduction from pay is calculated as

$$(1) \quad \text{ANFEDTXM} = (\text{SALARYXM} (\text{AMTFED}/\text{GROSPAYX})).$$

Note that SALARYXM can be estimated by using the above terms and rearranging such that

$$(2) \quad \text{SALARYXM} = (\text{ANFEDTXM} (\text{GROSPAYX}/\text{AMTFED})).$$

In the above example, a problem with disclosure may arise when neither ANFEDTXM, GROSPAYX, nor AMTFED are topcoded, *but SALARYXM is*. In this situation SALARYXM can be recalculated to obtain its original value by inserting the non-topcoded values into equation (2) and solving. In order to prevent this, the non-topcoded terms in equation (2) will be suppressed (blanked out) and their associated flags will be assigned a value of 'T'. The following chart describes in detail the specific rules that are applied to prevent the potential disclosure outlined above.

If SALARYXM is greater than the critical value but ANFEDTXM, GROSPAYX, and AMTFED are not, then the values for ANFEDTXM, GROSPAYX, and AMTFED are suppressed and their flag variables are assigned a value of 'T'.

If SALARYXM is greater than the critical value but ANGOVRTM, GROSPAYX, and GOVRETX are not, then the values for ANGOVRTM, GROSPAYX, and GOVRETX are suppressed and their flag variables are assigned a value of 'T'.

If SALARYXM is greater than the critical value but ANPRVPNM, GROSPAYX, and PRIVPENX are not, then the values for ANPRVPNM, GROSPAYX, and PRIVPENX are suppressed and their flag variables are assigned a value of 'T'.

If SALARYXM is greater than the critical value but ANRRDEDM, GROSPAYX, and RRRDEDX are not, then the values for ANRRDEDM, GROSPAYX, and RRRDEDX are suppressed and their flag variables are assigned a value of 'T'.

If SALARYXM is greater than the critical value but ANSLTXM, GROSPAYX, and SLTAXX are not, then the values for ANSLTXM, GROSPAYX, and SLTAXX are suppressed and their flag variables are assigned a value of 'T'.

The same special suppression for MEMB file variables occurs with the original (pre-income imputation) variables that correspond to the variables noted above (SALARYX, ANFEDTX).

### C. MONTHLY EXPENDITURE FILE (MTAB)

The MTAB variable COST is subject to topcoding for the following UCCs. If the value of COST is greater (less) than the designated critical values for the listed UCCs, COST is set to the topcode value and the associated flag variable, COST\_, is set to 'T'. The table also lists the critical values and topcode values (rounded to the nearest dollar) of the variable COST

Note: For some UCCs multiple topcode values should be expected based on where the original value is mapped from.

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
210110	Rent	NA	1818	NA	2483	NA
210210	Lodging on out-of-town trips	NA	2100	NA	3708	NA
210210	Lodging on out-of-town trips	TOTYUPDY EQ '130'	1260	NA	1751	NA
210210	Lodging on out-of-town trips	TRNONCUY EQ '130' EDUC_AY EQ '310'	1300	NA	3120	NA
210310	Housing while attending school	AND EDMONTHA EQ '13' EDUC_AY EQ '310'	1350	NA	1994	NA
210310	Housing while attending school	AND EDMONTHA NE '13'	4500	NA	6710	NA
210901	Ground rent	OWNYI EQ '100' OR OWNYI EQ '200'	1881	NA	2262	NA
210902	Ground rent	OWNYI EQ '300'	2400	NA	2800	NA
220211	Property taxes	OWNYB EQ '100' OR OWNYB EQ '200'	750	NA	1152	NA
220212	Property taxes	OWNYB EQ '300'	667	NA	1038	NA
220512	Materials and supplies purchased for insulation, dwellings under constr, additions, finishing, remodeling, landscaping, etc.	('1'<=QTENURE & QTENURE<='2') & (('100'<=CRMCODEA & CRMCODEA<='150')   CRMCODEA='240')	1333	NA	1833	NA

<b>Variable</b>	<b>Description</b>	<b>Condition</b>	<b>2008 Upper Critical Value</b>	<b>2008 Lower Critical Value</b>	<b>2008 Upper Topcode Value</b>	<b>2008 Lower Topcode Value</b>
220512	Materials and supplies purchased for insulation, dwellings under constr, additions, finishing, remodeling, landscaping, etc.	CRMPTYPE='1' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	7000	NA	9147	NA
220512	Materials and supplies purchased for insulation, dwellings under constr, additions, finishing, remodeling, landscaping, etc.	CRMPTYPE='1' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	8000	NA	24578	NA
220512	Materials and supplies purchased for insulation, dwellings under constr, additions, finishing, remodeling, landscaping, etc.	CRMPTYPE='1' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	8000	NA	11911	NA
220513	Supplies purchased for additions, maintenance and repairs, and new construction	CRMPTYPE='2' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	329	NA	917	NA
220513	Supplies purchased for additions, maintenance and repairs, and new construction	CRMPTYPE='2' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	25	NA	850	NA
220513	Supplies purchased for additions, maintenance and repairs, and new construction	CRMPTYPE='2' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	400	NA	954	NA
220611	Capital improvement labor and materials (owned home)	CRMPTYPE='1' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	100	NA	250	NA
220611	Capital improvement labor and materials (owned home)	CRMPTYPE='1' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	125	NA	207	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
220611	Capital improvement labor and materials (owned home)	CRMPTYPE='1' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	180	NA	225	NA
220611	Capital improvement labor and materials (owned home)	CRMPTYPE='1' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	45000	NA	92750	NA
220611	Capital improvement labor and materials (owned home)	CRMPTYPE='1' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	40000	NA	70000	NA
220611	Capital improvement labor and materials (owned home)	CRMPTYPE='1' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	55000	NA	119600	NA
220615	Capital improvement labor and materials (owned vacation)	CRMPTYPE='1' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	7900	NA	16407	NA
220615	Capital improvement labor and materials (owned vacation)	CRMPTYPE='1' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	10508	NA	69667	NA
220615	Capital improvement labor and materials (owned vacation)	CRMPTYPE='1' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	8000	NA	37333	NA
230112	Painting and papering	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='170'   CRMCODEB='180')	0	NA	45	NA
230112	Painting and papering	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='170'   CRMCODEB='180')	6796	NA	9693	NA
230112	Painting and papering	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='170'   CRMCODEB='180')	6588	NA	14082	NA
230112	Painting and papering	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='170'   CRMCODEB='180')	5000	NA	8026	NA
230113	Plumbing and water heating	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='200'	4000	NA	6125	NA





Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
230122	Repair and replacement of hard surface flooring	CRMPYTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='230' (CRMPYTYPE='4'   CRMPYTYPE='5') & (('120'<=CRMCODEB & CRMCODEB<='220')   CRMCODEB='240'   '260'<=CRMCODEB & CRMCODEB<='300'))	8400	NA	9246	NA
230150	Repair or maintenance services	(CRMPYTYPE='4'   CRMPYTYPE='5') & (('120'<=CRMCODEB & CRMCODEB<='220')   CRMCODEB='240'   '260'<=CRMCODEB & CRMCODEB<='300'))	1750	NA	4504	NA
230150	Repair or maintenance services	(CRMPYTYPE='4'   CRMPYTYPE='5') & (('120'<=CRMCODEB & CRMCODEB<='220')   CRMCODEB='240'   '260'<=CRMCODEB & CRMCODEB<='300'))	3000	NA	5996	NA
230150	Repair or maintenance services	(CRMPYTYPE='4'   CRMPYTYPE='5') & (('120'<=CRMCODEB & CRMCODEB<='220')   CRMCODEB='240'   '260'<=CRMCODEB & CRMCODEB<='300'))	2000	NA	5355	NA
230151	Other repair and maintenance services	CRMPYTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='160')   CRMCODEB='190'   CRMCODEB='240'   '270'<=CRMCODEB & CRMCODEB<='300'))	0	NA	47	NA
230151	Other repair and maintenance services	CRMPYTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='160')   CRMCODEB='190'   CRMCODEB='240'   '270'<=CRMCODEB & CRMCODEB<='300'))	50	NA	105	NA
230151	Other repair and maintenance services	CRMPYTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='160')   CRMCODEB='190'   CRMCODEB='240'   '270'<=CRMCODEB & CRMCODEB<='300'))	60	NA	200	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
230151	Other repair and maintenance services	CRMPYTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='160')   CRMCODEB='190'   CRMCODEB='240'   '270'<=CRMCODEB & CRMCODEB<='300'))	20000	NA	25119	NA
230151	Other repair and maintenance services	CRMPYTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='160')   CRMCODEB='190'   CRMCODEB='240'   '270'<=CRMCODEB & CRMCODEB<='300'))	11200	NA	17100	NA
230151	Other repair and maintenance services	CRMPYTYPE='2' & (CRMTYPE='3'   CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='160')   CRMCODEB='190'   CRMCODEB='240'   '270'<=CRMCODEB & CRMCODEB<='300'))	16665	NA	43750	NA
230152	Repair and remodeling services	CRMPYTYPE='2' & (CRMTYPE='3'   CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='220')   CRMCODEB='240'   '260'<=CRMCODEB & CRMCODEB<='300'))	4125	NA	16217	NA
230152	Repair and remodeling services	CRMPYTYPE='2' & (CRMTYPE='3'   CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='220')   CRMCODEB='240'   '260'<=CRMCODEB & CRMCODEB<='300'))	3000	NA	4418	NA
230152	Repair and remodeling services	CRMPYTYPE='2' & (CRMTYPE='3'   CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='220')   CRMCODEB='240'   '260'<=CRMCODEB & CRMCODEB<='300'))	3500	NA	5150	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
230901	Property management	REGFEECR EQ '01000' AND (OWNYI EQ '100' OR OWNYI EQ '200')	386	NA	829	NA
240111	Paint, wallpaper, and supplies	('3'<=QTENURE & QTENURE<='5') & (CRMCODEA='170'   CRMCODEA='180') (CRMPTYPE='4'   CRMPTYPE='5') &	20	NA	36	NA
240111	Paint, wallpaper, and supplies	(CRMCODEB='170'   CRMCODEB='180') (CRMPTYPE='4'   CRMPTYPE='5') &	158	NA	482	NA
240111	Paint, wallpaper, and supplies	(CRMCODEB='170'   CRMCODEB='180') (CRMPTYPE='4'   CRMPTYPE='5') &	181	NA	849	NA
240111	Paint, wallpaper, and supplies	(CRMCODEB='170'   CRMCODEB='180')	217	NA	440	NA
240112	Paints, wallpaper and supplies	('1'<=QTENURE & QTENURE<='2') & (CRMCODEA='170'   CRMCODEA='180') CRMPYTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') &	151	NA	320	NA
240112	Paints, wallpaper and supplies	(CRMCODEB='170'   CRMCODEB='180') CRMPYTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') &	632	NA	927	NA
240112	Paints, wallpaper and supplies	(CRMCODEB='170'   CRMCODEB='180') CRMPYTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') &	677	NA	1445	NA
240112	Paints, wallpaper and supplies	(CRMCODEB='170'   CRMCODEB='180') CRMPYTYPE='2' & (CRMTYPE='3'   CRMTYPE='4') &	768	NA	1129	NA
240113	Paints, wallpaper, supplies	(CRMCODEB='170'   CRMCODEB='180') CRMPYTYPE='2' & (CRMTYPE='3'   CRMTYPE='4') &	213	NA	707	NA
240113	Paints, wallpaper, supplies	(CRMCODEB='170'   CRMCODEB='180')	27	NA	181	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
240113	Paints, wallpaper, supplies	CRMPTYPE='2' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='170'   CRMCODEB='180')	68	NA	452	NA
240121	Tools and equipment for painting and wallpapering	('3'<=QTENURE & QTENURE<='5') & (CRMCODEA='170'   CRMCODEA='180')	2	NA	4	NA
240121	Tools and equipment for painting and wallpapering	(CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='170'   CRMCODEB='180')	17	NA	52	NA
240121	Tools and equipment for painting and wallpapering	(CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='170'   CRMCODEB='180')	19	NA	91	NA
240121	Tools and equipment for painting and wallpapering	(CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='170'   CRMCODEB='180')	23	NA	47	NA
240122	Tools and equipment for painting and wallpapering	('1'<=QTENURE & QTENURE<='2') & (CRMCODEA='170'   CRMCODEA='180')	16	NA	34	NA
240122	Tools and equipment for painting and wallpapering	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='170'   CRMCODEB='180')	68	NA	100	NA
240122	Tools and equipment for painting and wallpapering	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='170'   CRMCODEB='180')	73	NA	155	NA
240122	Tools and equipment for painting and wallpapering	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='170'   CRMCODEB='180')	82	NA	121	NA
240123	Tools and equipment for painting and wallpapering	CRMPTYPE='2' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='170'   CRMCODEB='180')	23	NA	76	NA
240123	Tools and equipment for painting and wallpapering	CRMPTYPE='2' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='170'   CRMCODEB='180')	3	NA	19	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
240123	Tools and equipment for painting and wallpapering	CRMPTYPE='2' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='170'   CRMCODEB='180')	7	NA	49	NA
240211	Materials for plastering, panels, roofing, gutters, etc.	('3'<=QTENURE & QTENURE<='5') & (CRMCODEA='190'   '260'<=CRMCODEA & CRMCODEA<='280')) (CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='190'   '260'<=CRMCODEB & CRMCODEB<='280'))	32	NA	533	NA
240211	Materials for plastering, panels, roofing, gutters, etc.	(CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='190'   '260'<=CRMCODEB & CRMCODEB<='280'))	40	NA	149	NA
240211	Materials for plastering, panels, roofing, gutters, etc.	(CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='190'   '260'<=CRMCODEB & CRMCODEB<='280'))	140	NA	357	NA
240211	Materials for plastering, panels, roofing, gutters, etc.	(CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='190'   '260'<=CRMCODEB & CRMCODEB<='280'))	15	NA	54	NA
240212	Materials for plaster., panel., siding, windows, doors, screens, awnings	('1'<=QTENURE & QTENURE<='2') & (CRMCODEA='190'   CRMCODEA='270'   CRMCODEA='280')	600	NA	2133	NA
240212	Materials for plaster., panel., siding, windows, doors, screens, awnings	('1'<=QTENURE & QTENURE<='2') & CRMCODEA='160' CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='190'   CRMCODEB='270'   CRMCODEB='280')	89	NA	367	NA
240212	Materials for plaster., panel., siding, windows, doors, screens, awnings	(CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='190'   CRMCODEB='270'   CRMCODEB='280'))	1167	NA	2508	NA
240212	Materials for plaster., panel., siding, windows, doors, screens, awnings	(CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='190'   CRMCODEB='270'   CRMCODEB='280'))	500	NA	1288	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
240212	Materials for plaster., panel., siding, windows, doors, screens, awnings	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='190'   CRMCODEB='270'   CRMCODEB='280')	1700	NA	2567	NA
240212	Materials for plaster., panel., siding, windows, doors, screens, awnings	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='160'	430	NA	888	NA
240212	Materials for plaster., panel., siding, windows, doors, screens, awnings	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='160'	515	NA	1203	NA
240212	Materials for plaster., panel., siding, windows, doors, screens, awnings	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='160'	515	NA	695	NA
240213	Materials and equipment for roof and gutters	('1'<=QTENURE & QTENURE<='2') & CRMCODEA='260'	267	NA	475	NA
240213	Materials and equipment for roof and gutters	(CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='260'	370	NA	2067	NA
240213	Materials and equipment for roof and gutters	(CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='260'	1500	NA	4167	NA
240213	Materials and equipment for roof and gutters	(CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='260'	1600	NA	2825	NA
240222	Materials for patio, walk, fence, driveway, masonry, brick and stucco work	('1'<=QTENURE & QTENURE<='2') & CRMCODEA='160'	15	NA	60	NA
240222	Materials for patio, walk, fence, driveway, masonry, brick and stucco work	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='160'	71	NA	146	NA
240222	Materials for patio, walk, fence, driveway, masonry, brick and stucco work	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='160'	85	NA	197	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
240222	Materials for patio, walk, fence, driveway, masonry, brick and stucco work	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='160'	85	NA	114	NA
240222	Materials for patio, walk, fence, driveway, masonry, brick and stucco work	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='290'	180	NA	250	NA
240222	Materials for patio, walk, fence, driveway, masonry, brick and stucco work	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='290'	0	NA	289	NA
240222	Materials for patio, walk, fence, driveway, masonry, brick and stucco work	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='290'	32	NA	450	NA
240311	Plumbing supplies and equipment	(3'<=QTENURE & QTENURE<='5') & CRMCODEA='200' (CRMPTYPE='4'   CRMPTYPE='5') & CRMCODEB='200'	7	NA	58	NA
240311	Plumbing supplies and equipment	(CRMPTYPE='4'   CRMPTYPE='5') & CRMCODEB='200'	300	NA	495	NA
240311	Plumbing supplies and equipment	(CRMPTYPE='5') & CRMCODEB='200' (CRMPTYPE='4'   CRMPTYPE='5') & CRMCODEB='200'	175	NA	357	NA
240311	Plumbing supplies and equipment	CRMPTYPE='5') & CRMCODEB='200'	245	NA	408	NA
240312	Plumbing supplies and equipment	(1'<=QTENURE & QTENURE<='2') & CRMCODEA='200' CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='200'	133	NA	250	NA
240312	Plumbing supplies and equipment	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='200'	800	NA	2067	NA
240312	Plumbing supplies and equipment	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='200'	700	NA	1183	NA
240312	Plumbing supplies and equipment	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='200'	400	NA	671	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
240321	Electrical supplies, heating and cooling equipment	(CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='210'   CRMCODEB='220')	50	NA	223	NA
240321	Electrical supplies, heating and cooling equipment	(CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='210'   CRMCODEB='220')	0	NA	172	NA
240321	Electrical supplies, heating and cooling equipment	(CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='210'   CRMCODEB='220')	35	NA	957	NA
240322	Electrical supplies, heating and cooling equipment	('1'<=QTENURE & QTENURE<='2') & (CRMCODEA='210'   CRMCODEA='220')	67	NA	439	NA
240322	Electrical supplies, heating and cooling equipment	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='210'   CRMCODEB='220')	425	NA	660	NA
240322	Electrical supplies, heating and cooling equipment	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='210'   CRMCODEB='220')	300	NA	522	NA
240322	Electrical supplies, heating and cooling equipment	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='210'   CRMCODEB='220')	300	NA	1213	NA
250111	Fuel oil (renter)	UTILY EQ '130' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	800	NA	1192	NA
250111	Fuel oil (renter)	UTILY EQ '130' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	603	NA	756	NA
250111	Fuel oil (renter)	UTILY EQ '130' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	912	NA	1301	NA
250112	Fuel oil (owned home)	UTILY EQ '130' AND UTLPTYPE EQ '1'	2700	NA	3700	NA
250112	Fuel oil (owned home)	UTILY EQ '130' AND UTLPTYPE EQ '1'	2394	NA	3450	NA
250112	Fuel oil (owned home)	UTILY EQ '130' AND UTLPTYPE EQ '1'	3500	NA	3869	NA
250113	Fuel oil (owned vacation)	UTILY EQ '130' AND (UTLPTYPE EQ '2')	400	NA	783	NA
250113	Fuel oil (owned vacation)	UTILY EQ '130' AND (UTLPTYPE EQ '2')	400	NA	891	NA



<b>Variable</b>	<b>Description</b>	<b>Condition</b>	<b>2008 Upper Critical Value</b>	<b>2008 Lower Critical Value</b>	<b>2008 Upper Topcode Value</b>	<b>2008 Lower Topcode Value</b>
250113	Fuel oil (owned vacation)	UTILY EQ '130' AND (UTLPTYPE EQ '2')	550	NA	744	NA
250211	Gas, btld/tank (renter)	UTILY EQ '150' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	500	NA	558	NA
250211	Gas, btld/tank (renter)	UTILY EQ '150' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	795	NA	875	NA
250211	Gas, btld/tank (renter)	UTILY EQ '150' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	800	NA	1274	NA
250212	Gas, btld/tank (owned home)	UTILY EQ '150' AND UTLPTYPE EQ '1'	1300	NA	2445	NA
250212	Gas, btld/tank (owned home)	UTILY EQ '150' AND UTLPTYPE EQ '1'	2100	NA	2875	NA
250212	Gas, btld/tank (owned home)	UTILY EQ '150' AND UTLPTYPE EQ '1'	2000	NA	3421	NA
250213	Gas, btld/tank (owned vacation)	UTILY EQ '150' AND (UTLPTYPE EQ '2')	600	NA	1127	NA
250213	Gas, btld/tank (owned vacation)	UTILY EQ '150' AND (UTLPTYPE EQ '2')	500	NA	707	NA
250213	Gas, btld/tank (owned vacation)	UTILY EQ '150' AND (UTLPTYPE EQ '2')	291	NA	974	NA
250911	Coal, wood, other fuels (renter)	UTILY EQ '180' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	200	NA	400	NA
250911	Coal, wood, other fuels (renter)	UTILY EQ '180' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	250	NA	439	NA
250911	Coal, wood, other fuels (renter)	UTILY EQ '180' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	500	NA	752	NA
250912	Coal, wood, other fuels (owned home)	UTILY EQ '180' AND UTLPTYPE EQ '1'	1100	NA	1540	NA
250912	Coal, wood, other fuels (owned home)	UTILY EQ '180' AND UTLPTYPE EQ '1'	700	NA	1101	NA
250912	Coal, wood, other fuels (owned home)	UTILY EQ '180' AND UTLPTYPE EQ '1'	1200	NA	2277	NA
260111	Electricity (renter)	UTILY EQ '100' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	400	NA	503	NA
260111	Electricity (renter)	UTILY EQ '100' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	400	NA	512	NA
260111	Electricity (renter)	UTILY EQ '100' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	445	NA	564	NA
260112	Electricity (owned home)	UTILY EQ '100' AND UTLPTYPE EQ '1'	500	NA	674	NA

<b>Variable</b>	<b>Description</b>	<b>Condition</b>	<b>2008 Upper Critical Value</b>	<b>2008 Lower Critical Value</b>	<b>2008 Upper Topcode Value</b>	<b>2008 Lower Topcode Value</b>
260112	Electricity (owned home)	UTILY EQ '100' AND UTLPTYPE EQ '1'	500	NA	681	NA
260112	Electricity (owned home)	UTILY EQ '100' AND UTLPTYPE EQ '1'	510	NA	669	NA
260113	Electricity (owned vacation)	UTILY EQ '100' AND (UTLPTYPE EQ '2')	470	NA	744	NA
260113	Electricity (owned vacation)	UTILY EQ '100' AND (UTLPTYPE EQ '2')	430	NA	716	NA
260113	Electricity (owned vacation)	UTILY EQ '100' AND (UTLPTYPE EQ '2')	350	NA	630	NA
260114	Electricity (rented vacation)	UTILY EQ '100' AND (UTLPTYPE EQ '6')	340	NA	557	NA
260114	Electricity (rented vacation)	UTILY EQ '100' AND (UTLPTYPE EQ '6')	280	NA	448	NA
260114	Electricity (rented vacation)	UTILY EQ '100' AND (UTLPTYPE EQ '6')	246	NA	396	NA
260211	Utility--natural gas (renter)	UTILY EQ '110' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	365	NA	557	NA
260211	Utility--natural gas (renter)	UTILY EQ '110' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	375	NA	621	NA
260211	Utility--natural gas (renter)	UTILY EQ '110' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	400	NA	565	NA
260212	Utility--natural gas (owned home)	UTILY EQ '110' AND UTLPTYPE EQ '1'	475	NA	639	NA
260212	Utility--natural gas (owned home)	UTILY EQ '110' AND UTLPTYPE EQ '1'	500	NA	688	NA
260212	Utility--natural gas (owned home)	UTILY EQ '110' AND UTLPTYPE EQ '1'	500	NA	704	NA
260213	Utility--natural gas (owned vacation)	UTILY EQ '110' AND (UTLPTYPE EQ '2')	335	NA	381	NA
260213	Utility--natural gas (owned vacation)	UTILY EQ '110' AND (UTLPTYPE EQ '2')	335	NA	416	NA
260213	Utility--natural gas (owned vacation)	UTILY EQ '110' AND (UTLPTYPE EQ '2')	335	NA	545	NA
260214	Utility--natural gas (rented vacation)	UTILY EQ '110' AND (UTLPTYPE EQ '6')	101	NA	189	NA
260214	Utility--natural gas (rented vacation)	UTILY EQ '110' AND (UTLPTYPE EQ '6')	101	NA	204	NA
260214	Utility--natural gas (rented vacation)	UTILY EQ '110' AND (UTLPTYPE EQ '6')	102	NA	195	NA
270101	Residential telephone/pay phones	NA	205	NA	267	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
270101	Residential telephone/pay phones	NA	206	NA	274	NA
270101	Residential telephone/pay phones	NA	205	NA	276	NA
270102	Cellular phone service	NA	320	NA	405	NA
270102	Cellular phone service	NA	320	NA	410	NA
270102	Cellular phone service	NA (UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	325	NA	414	NA
270211	Water/sewer maint. (renter)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	175	NA	255	NA
270211	Water/sewer maint. (renter)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	178	NA	246	NA
270211	Water/sewer maint. (renter)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	190	NA	280	NA
270212	Water/sewer maint. (owned home)	(UTILY EQ '200' OR UTILY EQ '220') AND UTLPTYPE EQ '1'	225	NA	344	NA
270212	Water/sewer maint. (owned home)	(UTILY EQ '200' OR UTILY EQ '220') AND UTLPTYPE EQ '1'	216	NA	328	NA
270212	Water/sewer maint. (owned home)	(UTILY EQ '200' OR UTILY EQ '220') AND UTLPTYPE EQ '1'	236	NA	338	NA
270213	Water/sewer maint. (owned vacation)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '2')	320	NA	378	NA
270213	Water/sewer maint. (owned vacation)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '2')	157	NA	327	NA
270213	Water/sewer maint. (owned vacation)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '2')	189	NA	314	NA
270214	Water/sewer maint. (rented vacation)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '6')	95	NA	282	NA
270214	Water/sewer maint. (rented vacation)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '6')	104	NA	140	NA
270214	Water/sewer maint. (rented vacation)	(UTILY EQ '200' OR UTILY EQ '220') AND	111	NA	163	NA

Variable	Description	Condition (UTLPTYPE EQ '6')	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
270310	Cable and satellite television services	INTSERV EQ '100' AND INTMO EQ '13'	167	NA	202	NA
270310	Cable and satellite television services	INTSERV EQ '100' AND INTMO NE '13'	230	NA	321	NA
270310	Cable and satellite television services	NA	150	NA	193	NA
270310	Cable and satellite television services	NA	150	NA	192	NA
270310	Cable and satellite television services	NA	150	NA	202	NA
270411	Trash/garb. coll. (renter)	UTILY EQ '210' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	140	NA	228	NA
270411	Trash/garb. coll. (renter)	UTILY EQ '210' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	100	NA	174	NA
270411	Trash/garb. coll. (renter)	UTILY EQ '210' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	152	NA	213	NA
270412	Trash/garb. coll. (owned home)	UTILY EQ '210' AND UTLPTYPE EQ '1'	130	NA	194	NA
270412	Trash/garb. coll. (owned home)	UTILY EQ '210' AND UTLPTYPE EQ '1'	141	NA	237	NA
270412	Trash/garb. coll. (owned home)	UTILY EQ '210' AND UTLPTYPE EQ '1'	135	NA	210	NA
270413	Trash/garb. coll. (owned vacation)	UTILY EQ '210' AND (UTLPTYPE EQ '2')	90	NA	106	NA
270413	Trash/garb. coll. (owned vacation)	UTILY EQ '210' AND (UTLPTYPE EQ '2')	60	NA	90	NA
270413	Trash/garb. coll. (owned vacation)	UTILY EQ '210' AND (UTLPTYPE EQ '2')	85	NA	97	NA
270414	Trash/garb. coll. (rented vacation)	UTILY EQ '210' AND (UTLPTYPE EQ '6')	23	NA	55	NA
270414	Trash/garb. coll. (rented vacation)	UTILY EQ '210' AND (UTLPTYPE EQ '6')	50	NA	72	NA
270414	Trash/garb. coll. (rented vacation)	UTILY EQ '210' AND (UTLPTYPE EQ '6')	43	NA	95	NA
270902	Septic tank clean. (owned home)	UTILY EQ '280' AND UTLPTYPE EQ '1'	500	NA	915	NA
270902	Septic tank clean. (owned home)	UTILY EQ '280' AND UTLPTYPE EQ '1'	325	NA	552	NA
270902	Septic tank clean. (owned home)	UTILY EQ '280' AND UTLPTYPE EQ '1'	685	NA	1058	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
320611	Material for insulation, other maintenance and repair	('3'<=QTENURE & QTENURE<='5') & (CRMCODEA='240'   CRMCODEA='300')	42	NA	65	NA
320611	Material for insulation, other maintenance and repair	(CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='240'   CRMCODEB='300')	350	NA	492	NA
320611	Material for insulation, other maintenance and repair	(CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='240'   CRMCODEB='300')	437	NA	3467	NA
320611	Material for insulation, other maintenance and repair	(CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='240'   CRMCODEB='300')	165	NA	366	NA
320612	Material for insulation, other maintenance and repair	('1'<=QTENURE & QTENURE<='2') & CRMCODEA='300' & CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='240'   CRMCODEB='300')	567	NA	1578	NA
320612	Material for insulation, other maintenance and repair	(CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='240'   CRMCODEB='300') & CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='240'   CRMCODEB='300')	800	NA	2683	NA
320612	Material for insulation, other maintenance and repair	(CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='240'   CRMCODEB='300') & CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='240'   CRMCODEB='300')	525	NA	716	NA
320612	Material for insulation, other maintenance and repair	(CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='240'   CRMCODEB='300') & CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='240'   CRMCODEB='300')	1270	NA	3003	NA
320621	Material for hard surface flooring	(CRMPTYPE='5') & CRMCODEB='230' & (CRMPTYPE='4'   CRMPTYPE='5') & CRMCODEB='230'	0	NA	176	NA
320621	Material for hard surface flooring	(CRMPTYPE='5') & CRMCODEB='230' & (CRMPTYPE='4'   CRMPTYPE='5') & CRMCODEB='230'	0	NA	164	NA
320621	Material for hard surface flooring	(CRMPTYPE='5') & CRMCODEB='230'	18	NA	90	NA
320622	Materials for hard surface flooring, repair and replacement	('1'<=QTENURE & QTENURE<='2') & CRMCODEA='230'	700	NA	917	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
320622	Materials for hard surface flooring, repair and replacement	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='230'	1500	NA	3533	NA
320622	Materials for hard surface flooring, repair and replacement	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='230'	800	NA	2000	NA
320622	Materials for hard surface flooring, repair and replacement	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='230'	1400	NA	2997	NA
320631	Material for landscape maintenance	(CRMPTYPE='4'   CRMPTYPE='5') & CRMCODEB='140'	125	NA	283	NA
320631	Material for landscape maintenance	(CRMPTYPE='4'   CRMPTYPE='5') & CRMCODEB='140'	125	NA	633	NA
320631	Material for landscape maintenance	(CRMPTYPE='4'   CRMPTYPE='5') & CRMCODEB='140'	30	NA	158	NA
340420	Water softening service	UTILY EQ '270' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	50	NA	63	NA
340420	Water softening service	UTILY EQ '270' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	57	NA	71	NA
340420	Water softening service	UTILY EQ '270' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	50	NA	101	NA
340420	Water softening service	UTILY EQ '270' AND UTLPTYPE EQ '1'	300	NA	496	NA
340420	Water softening service	UTILY EQ '270' AND UTLPTYPE EQ '1'	213	NA	248	NA
340420	Water softening service	UTILY EQ '270' AND UTLPTYPE EQ '1'	300	NA	625	NA
550320	Medical equipment for general use	MEDPCARY EQ '660'	375	NA	2559	NA
550320	Medical equipment for general use	MEDRCARY EQ '660'	NA	-114	NA	-415
550330	Supportive and convalescent medical equipment	MEDPCARY EQ '640'	500	NA	1077	NA
550330	Supportive and convalescent medical equipment	MEDRCARY EQ '640'	NA	-81	NA	-117
560110	Physician's services	MEDPCARY EQ '420'	450	NA	1076	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
560110	Physician's services	MEDRCARY EQ '420'	NA	-600	NA	-853
560210	Dental services	MEDPCARY EQ '200'	1700	NA	3170	NA
560210	Dental services	MEDRCARY EQ '200'	NA	1300	NA	2941
560310	Eyecare services	MEDPCARY EQ '110'	450	NA	1565	NA
560310	Eyecare services	MEDRCARY EQ '110'	NA	-200	NA	-563
560330	Lab tests, x-rays	MEDPCARY EQ '510'	800	NA	1877	NA
560330	Lab tests, x-rays	MEDRCARY EQ '510'	NA	-280	NA	-576
560400	Service by professionals other than physician	MEDPCARY EQ '410'	800	NA	1931	NA
560400	Service by professionals other than physician	MEDRCARY EQ '410'	NA	2200	NA	3875
570111	Hospital room and services	MEDPCARY EQ '330'	2000	NA	5575	NA
570111	Hospital room and services	MEDRCARY EQ '330'	NA	1300	NA	2683
570220	Care in convalescent or nursing home	MEDPCARY EQ '520'	6500	NA	8558	NA
570220	Care in convalescent or nursing home	MEDRCARY EQ '520'	NA	1200	NA	7510
570230	Other medical care services	MEDPCARY EQ '530'	1111	NA	2651	NA
570230	Other medical care services	MEDRCARY EQ '530'	NA	2600	NA	4898
570901	Rental of medical equipment	MEDPCARY EQ '650'	400	NA	725	NA
570901	Rental of medical equipment	MEDRCARY EQ '650'	NA	-19	NA	-43
570903	Rental of supportive, convalescent medical equipment	MEDPCARY EQ '630'	560	NA	1132	NA
570903	Rental of supportive, convalescent medical equipment	MEDRCARY EQ '630'	NA	-42	NA	-590
580111	Traditional fee for service health plan (not BCBS)	HHICODE EQ '2' AND HHIBCBS EQ '2' AND HHIFEET = '1'	1077	NA	1497	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
580112	Traditional fee for service health plan (BCBS)	HHICODE EQ '2' AND HHIBCBS EQ '1' AND HHIFEET = '1'	933	NA	1182	NA
580113	Preferred provider health plan (not BCBS)	HHICODE EQ '2' AND HHIBCBS EQ '2' AND HHIFEET = '2'	1097	NA	1367	NA
580114	Preferred provider health plan (BCBS)	HHICODE EQ '2' AND HHIBCBS EQ '1' AND HHIFEET = '2'	1200	NA	1661	NA
580311	Health maintenance organization (not BCBS)	HHICODE EQ '1' AND HHIBCBS EQ '2'	1000	NA	1303	NA
580312	Health maintenance organization (BCBS)	HHICODE EQ '1' AND HHIBCBS EQ '1'	1100	NA	1772	NA
580903	Commercial medicare supplement (not BCBS)	HHICODE EQ '3' AND HHIBCBS EQ '2'	763	NA	1041	NA
580904	Commercial medicare supplement (BCBS)	HHICODE EQ '3' AND HHIBCBS EQ '1'	785	NA	892	NA
580905	Other health insurance (not BCBS)	HHICODE EQ '4' AND HHIBCBS EQ '2'	479	NA	630	NA
580906	Other health insurance (BCBS)	HHICODE EQ '4' AND HHIBCBS EQ '1'	402	NA	648	NA
690114	Computer information services	INTSERV EQ '200' AND INTMO EQ '13'	90	NA	112	NA
690114	Computer information services	INTSERV EQ '200' AND INTMO NE '13'	140	NA	171	NA
690114	Computer information services	NA	90	NA	123	NA
690114	Computer information services	NA	90	NA	122	NA
690114	Computer information services	NA	90	NA	120	NA
790600	Expenses for other properties	CRMPTYPE='3' & (CRMTYPE='3'   CRMTYPE='4') & (('100'<=CRMCODEB & CRMCODEB<='240')   ('260'<=CRMCODEB & CRMCODEB<='300'))	2600	NA	3453	NA



Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
790600	Expenses for other properties	CRMPTYPE='3' & (CRMTYPE='3'   CRMTYPE='4') & (('100'<=CRMCODEB & CRMCODEB<='240')   ('260'<=CRMCODEB & CRMCODEB<='300'))	3000	NA	7575	NA
790600	Expenses for other properties	CRMPTYPE='3' & (CRMTYPE='3'   CRMTYPE='4') & (('100'<=CRMCODEB & CRMCODEB<='240')   ('260'<=CRMCODEB & CRMCODEB<='300'))	550	NA	3211	NA
790600	Expenses for other properties	OWNYB EQ '400' OR OWNYB EQ '500'	500	NA	690	NA
790610	Contractors labor and materials, supplies CU obtained, appliances provided by contractor, other property	CRMPTYPE='3' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	271	NA	1353	NA
790610	Contractors labor and materials, supplies CU obtained, appliances provided by contractor, other property	CRMPTYPE='3' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	0	NA	142	NA
790610	Contractors labor and materials, supplies CU obtained, appliances provided by contractor, other property	CRMPTYPE='3' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	0	NA	8684	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
790610	Contractors labor and materials, supplies CU obtained, appliances provided by contractor, other property	CRMPTYPE='3' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	6814	NA	18250	NA
790610	Contractors labor and materials, supplies CU obtained, appliances provided by contractor, other property	CRMPTYPE='3' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	2515	NA	6427	NA
790610	Contractors labor and materials, supplies CU obtained, appliances provided by contractor, other property	CRMPTYPE='3' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	9800	NA	24476	NA
790690	Construction materials for jobs not started	('3'<=QTENURE & QTENURE<='5') & (('100'<=CRMCODEA & CRMCODEA<='130')   CRMCODEA='150')	90	NA	243	NA
790710	Purchase price of property (other property)	OWNYB EQ '400' OR OWNYB EQ '500'	229000	NA	305400	NA
790810	Sale price of property or trade-in amount (other property)	OWNYD EQ '400' OR OWNYD EQ '500'	NA	115000	NA	498166
790910	Special lump sum mortgage payments (other property)	OWNYI EQ '400' OR OWNYI EQ '500'	NA	3000	NA	45707
790920	Reduction of mortgage principal (other property)	(OWNYF EQ '400' OR OWNYF EQ '500') AND (LOANTYPE EQ '1')	NA	-791	NA	3065
790920	Reduction of mortgage principal (other property)	(OWNYF EQ '400' OR OWNYF EQ '500') AND (LOANTYPE EQ '1')	NA	-795	NA	3221

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
790920	Reduction of mortgage principal (other property)	(OWNYF EQ '400' OR OWNYF EQ '500') AND (LOANTYPE EQ '1')	NA	-799	NA	- 3275
790930	Original loan amount (mortgage obtained during interview quarter) (other property)	(OWNYF EQ '400' OR OWNYF EQ '500') AND (LOANTYPE EQ '1')	158489	NA	303861	NA
790940	Reduction mortgage principal, home equity loan (other property)	(OWNYG EQ '400' OR OWNYG EQ '500') AND (LOANTYPE EQ '2')	NA	-370	NA	-711
790940	Reduction mortgage principal, home equity loan (other property)	(OWNYG EQ '400' OR OWNYG EQ '500') AND (LOANTYPE EQ '2')	NA	-373	NA	-882
790940	Reduction mortgage principal, home equity loan (other property)	(OWNYG EQ '400' OR OWNYG EQ '500') AND (LOANTYPE EQ '2')	NA	-375	NA	-888
810101	Purchase price of property (owned home)	OWNYB EQ '100' OR OWNYB EQ '200'	800000	NA	967500	NA
810102	Purchase price of property (owned vacation)	OWNYB EQ '300'	345000	NA	397667	NA
820101	Sale price of property or trade-in amount (owned home)	OWNYD EQ '100' OR OWNYD EQ '200'	NA	- 565000	NA	- 803000
820102	Sale price of property or trade-in amount (owned vacation)	OWNYD EQ '300'	NA	- 20000	NA	- 120500
830101	Special lump sum mortgage payment (owned home)	OWNYI EQ '100' OR OWNYI EQ '200'	NA	- 5000	NA	- 26161
830102	Special lump sum mortgage payment (owned vacation)	OWNYI EQ '300'	NA	- 3000	NA	- 65333
830201	Reduction of mortgage principal (owned home)	(OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1')	NA	- 1188	NA	- 2261
830201	Reduction of mortgage principal (owned home)	(OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1')	NA	- 1194	NA	- 2285

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
830201	Reduction of mortgage principal (owned home)	(OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1')	NA	- 1203	NA	- 2280
830202	Reduction of mortgage principal (owned vacation)	(OWNYF EQ '300') AND (LOANTYPE EQ '1')	NA	- 1193	NA	- 3265
830202	Reduction of mortgage principal (owned vacation)	(OWNYF EQ '300') AND (LOANTYPE EQ '1')	NA	- 1199	NA	- 3282
830202	Reduction of mortgage principal (owned vacation)	(OWNYF EQ '300') AND (LOANTYPE EQ '1')	NA	- 1204	NA	- 3299
830203	Reduction mortgage principal, home equity loan (owned home)	(OWNYF EQ '100' OR OWNYG EQ '200') AND (LOANTYPE EQ '2')	NA	-928	NA	- 1796
830203	Reduction mortgage principal, home equity loan (owned home)	(OWNYF EQ '100' OR OWNYG EQ '200') AND (LOANTYPE EQ '2')	NA	-933	NA	- 1808
830203	Reduction mortgage principal, home equity loan (owned home)	(OWNYF EQ '100' OR OWNYG EQ '200') AND (LOANTYPE EQ '2')	NA	-937	NA	- 1820
830204	Reduction mortgage principal, home equity loan (owned vacation)	(OWNYF EQ '300') AND (LOANTYPE EQ '2')	NA	-640	NA	- 2969
830204	Reduction mortgage principal, home equity loan (owned vacation)	(OWNYF EQ '300') AND (LOANTYPE EQ '2')	NA	-644	NA	- 2989
830204	Reduction mortgage principal, home equity loan (owned vacation)	(OWNYF EQ '300') AND (LOANTYPE EQ '2')	NA	-648	NA	- 3009
830301	Original loan amount (mortgage obtained during interview quarter) (owned home)	(OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1')	643000	NA	796668	NA
830302	Original loan amount (mortgage obtained during interview quarter) (owned vacation)	(OWNYF EQ '300' AND LOANTYPE EQ '1')	306000	NA	403263	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
830303	Original loan amount, home equity loan (loan obtained during interview quarter) (owned home)	(OWNYGEQ EQ '100' OR OWNYGEQ EQ '200') AND (LOANTYPE EQ '2')	91000	NA	132800	NA
860600	Sale of boats, with motors	VEHICYC EQ '160'	NA	4000	NA	5167
880120	Principal paid, home equity line of credit (owned home)	OWNYHEQ EQ '100' OR OWNYHEQ EQ '200'	638	2936	.	9910
880220	Principal paid, home equity line of credit (other property)	OWNYHEQ EQ '400' OR OWNYHEQ EQ '500'	NA	-235	NA	-428
880320	Principal paid, home equity line of credit (owned vacation)	OWNYHEQ EQ '300'	NA	-534	NA	-950
900002	Occupational expenses	MISCCODE EQ '380' AND MISCMO EQ '13'	180	NA	369	NA
900002	Occupational expenses	MISCCODE EQ '380' AND MISCMO NE '13'	733	NA	1464	NA
910050	Estimated monthly rental value of owned home	OWNYIEQ EQ '100' (CRMPTYPE='4'   CRMPTYPE='5') & (('100'<=CRMCODEB & CRMCODEB<='130')   CRMCODEB='150')	250	NA	389	NA
990920	Materials for additions, finishing basements, remodeling rooms	(CRMPTYPE='4'   CRMPTYPE='5') & (('100'<=CRMCODEB & CRMCODEB<='130')   CRMCODEB='150')	721	NA	852	NA
990920	Materials for additions, finishing basements, remodeling rooms	(CRMPTYPE='4'   CRMPTYPE='5') & (('100'<=CRMCODEB & CRMCODEB<='130')   CRMCODEB='150')	400	NA	1233	NA
990920	Materials for additions, finishing basements, remodeling rooms	(CRMPTYPE='5') & (('100'<=CRMCODEB & CRMCODEB<='130')   CRMCODEB='150')	500	NA	991	NA
990950	Labor and materials for dwellings under construction and additions	(CRMPTYPE='4'   CRMPTYPE='5') & (('100'<=CRMCODEB & CRMCODEB<='110')	0	NA	4250	NA

#### D. INCOME FILE (ITAB)

Data in the ITAB file are selected annual data from the FMLY file expressed in a monthly form (divided by 12). The ITAB variable VALUE is subject to topcoding for the following UCCs. If VALUE is

greater (less) than the designated critical values for the UCCs, VALUE is set to the topcode value and the associated flag variable, VALUE\_, is set to 'T'. The critical values and topcode values (rounded to the nearest dollar) of the variable VALUE that are associated with the UCCs follow.

Variable	Description	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
001000	Purchase price of stocks, bonds or mutual funds including broker fees	25000	NA	59302	NA
001010	Sale price of stocks, bonds, and mutual funds, net	NA	41667	NA	68950
001210	Investments to farm or business	12500	NA	21771	NA
002010	Change in savings account	4167	-4583	17383	13096
002020	Change in checking account	1667	-1667	9891	-6753
002030	Change in U.S. savings bonds	1068	-1083	1556	-2472
003000	Change in money owed to consumer unit	5000	-1250	8517	-1682
003100	Change in surrender of insurance policies	NA	-4167	NA	11528
900040	Pensions and annuities	5583	NA	6819	NA
900050	Dividends, royalties, estates, trusts	5000	NA	5942	NA
900060	Roomer and boarder income	2500	-1417	2878	-1738
900070	Other rental income	6000	-706	10476	-296
900080	Interest	2917	NA	4424	NA
900131	Child support payments	1900	NA	2428	NA
900132	Other regular contributions including alimony	4000	NA	5739	NA
900140	Other income	2667	NA	3288	NA
910000	Lump sum receipts	10833	NA	26248	NA
910010	Money from sale of household furnishings, etc.	833	NA	9606	NA
910020	Refund from overpayment on Social Security	120	NA	156	NA
910030	Refunds from insurance policies	383	NA	759	NA
910040	Refunds from property taxes	150	NA	281	NA
910041	Lump sum child support payment	2000	NA	5094	NA
920010	Market value of all savings accounts	11667	NA	26067	NA
920020	Market value of all checking accounts	2500	NA	16570	NA
920030	Market value of all U.S. savings bonds	2917	NA	8808	NA
920040	Market value of all securities		NA		NA

Variable	Description	2008 Upper Critical Value 86024	2008 Lower Critical Value	2008 Upper Topcode Value 256637	2008 Lower Topcode Value
950001	Federal income tax refunds	NA	-650	NA	-1012
950003	Additional federal income tax paid (new UCC Q20062)	3333	NA	6505	NA
950011	State and local income tax refunds	NA	-167	NA	-327
950013	Additional state and local income tax paid (new UCC Q20062)	833	NA	1816	NA
950021	Other taxes	812	NA	1361	NA
950022	Personal property taxes	83	NA	185	NA
950023	Other tax refunds	NA	-150	NA	-457

<sup>1</sup> FEDTAXX (amount of Federal tax paid in addition to that withheld) and FAMTFEDX (Federal tax withheld from last pay annualized for all CU members) are mapped to UCCs 950003 and 950002, respectively, as separate records. Records for UCC 950002 that represent FAMTFEDX are topcoded through their components (AMTFED) at the MEMB level and thus, these records will not have an ITAB critical value.

<sup>2</sup> SLOCTAXX (amount of state and local taxes paid in addition to that withheld) and FSLTAXX (state and local income tax deduction from last pay annualized for all CU members) are mapped to UCCs 950013 and 950012, respectively, as separate records. Records for UCC 950012 that represent FSLTAXX are topcoded through their components (SLTAXX) at the MEMB level and thus, these records will not have an ITAB critical value. Create the ITAB VALUE field for these records by dividing FSLTAXX by 12. If FSLTAXX is topcoded, then set VALUE\_ to 'T'

VALUE for the following income UCCs is topcoded because the FMLY file variables corresponding to these UCCs are topcoded due to recalculation. (See Section IV.A. CU CHARACTERISTICS AND INCOME FILE on topcoding of FMLY variables.)

<u>UCC</u>	<u>FMLY variable</u>	<u>Description</u>
800910	FGOVRETX, FGOVRETM	Amount of government retirement deducted from last pay, annualized for all CU members
800920	FRRDEDX, FRRDEDM	Amount of Railroad Retirement deducted from last pay, annualized for all CU members
800931	FPRIPENX, FPRIPENM	Amount of private pension fund deducted from last pay, annualized for all CU members
800932	FINDRETX	Amount of money placed in individual retirement plan
800940	FJSSDEDX, FJSSDEDM	Estimated amount of annual Social Security contribution
900000	FSALARYX, FSALARYM	Amount received from wage and salary income before deductions
900010	FNONFRMX, FNONFRMM	Amount of income or loss received from own nonfarm business
900020	FFRMINCX, FFRMINCM	Amount of income or loss received from own farm
980000	FINCBTAX, FINCBTXM	Amount of CU income before taxes
980070	FINCATAX, FINCATXM	Amount of CU income after taxes

## E. DETAILED EXPENDITURE FILES (EXPN)

The following EXPN file variables are subject to topcoding. The table also contains the critical values and topcode values associated with the following EXPN variables.

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
ADVMATX	Materials and supplies purchased for insulation, dwellings under constr, additions, finishing, remodeling, landscaping, etc.	('1'<=QTENURE & QTENURE<='2') & (('100'<=CRMCODEA & CRMCODEA<='150')   CRMCODEA='240')	4000	NA	5500	NA
ADVMATX	Total cost of tools, equipment, and supplies purchased for painting and wall papering for jobs not yet started	('1'<=QTENURE & QTENURE<='2') & (CRMCODEA='170'   CRMCODEA='180')	500	NA	1063	NA
ADVMATX	Total cost of materials purchased for patios, walks, fences, driveways, masonry,brick, stucco, plastering, panels, roofing, gutters, etc. for jobs not yet started	('1'<=QTENURE & QTENURE<='2') & (CRMCODEA='190'   CRMCODEA='270'   CRMCODEA='280')	1800	NA	6400	NA
ADVMATX	Electrical supplies, heating and cooling equipment	('1'<=QTENURE & QTENURE<='2') & (CRMCODEA='210'   CRMCODEA='220')	200	NA	1317	NA
ADVMATX	Total cost of materials purchased for patios, walks, fences, driveways, masonry,brick, stucco, plastering, panels, roofing, gutters, etc. for jobs not yet started	('1'<=QTENURE & QTENURE<='2') & CRMCODEA='160'	310	NA	1283	NA
ADVMATX	Plumbing supplies and equipment	('1'<=QTENURE & QTENURE<='2') & CRMCODEA='200'	400	NA	750	NA
ADVMATX	Materials for hard surface flooring, repair and replacement	('1'<=QTENURE & QTENURE<='2') & CRMCODEA='230'	2100	NA	2751	NA
ADVMATX	Materials and equipment for roof and gutters	('1'<=QTENURE & QTENURE<='2') & CRMCODEA='260'	800	NA	1425	NA
ADVMATX	Material for insulation, other maintenance and repair	('1'<=QTENURE & QTENURE<='2') & CRMCODEA='300'	1700	NA	4733	NA



Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
ADVMATX	Construction materials for jobs not started	('3'<=QTENURE & QTENURE<='5') & (('100'<=CRMCODEA & CRMCODEA<='130')   CRMCODEA='150')	270	NA	729	NA
ADVMATX	Total cost of tools, equipment, and supplies purchased for painting and wall papering for jobs not yet started	('3'<=QTENURE & QTENURE<='5') & (CRMCODEA='170'   CRMCODEA='180')	65	NA	120	NA
ADVMATX	Total cost of materials purchased for patios, walks, fences, driveways, masonry,brick, stucco, plastering, panels, roofing, gutters, etc. for jobs not yet started	('3'<=QTENURE & QTENURE<='5') & (CRMCODEA='190'   ('260'<=CRMCODEA & CRMCODEA<='280'))	96	NA	1598	NA
ADVMATX	Material for insulation, other maintenance and repair	('3'<=QTENURE & QTENURE<='5') & (CRMCODEA='240'   CRMCODEA='300')	125	NA	196	NA
ADVMATX	Plumbing supplies and equipment	('3'<=QTENURE & QTENURE<='5') & CRMCODEA='200'	20	NA	175	NA
DISPX	Sale price of property or trade-in amount (owned home)	OWNYD EQ '100' OR OWNYD EQ '200'	565000	NA	803000	NA
DISPX	Sale price of property or trade-in amount (owned vacation)	OWNYD EQ '300'	20000	NA	120500	NA
DISPX	Sale price of property or trade-in amount (other property)	OWNYD EQ '400' OR OWNYD EQ '500'	115000	NA	498167	NA
INTCHGX	Cable and satellite television services	INTSERV EQ '100' AND INTMO EQ '13'	167	NA	202	NA
INTCHGX	Cable and satellite television services	INTSERV EQ '100' AND INTMO NE '13'	230	NA	321	NA
INTCHGX	Computer information services	INTSERV EQ '200' AND INTMO EQ '13'	90	NA	112	NA
INTCHGX	Computer information services	INTSERV EQ '200' AND INTMO NE '13'	140	NA	171	NA
JEDUCNET	Housing while attending school	EDUC_AY EQ '310' AND EDMONTHA EQ '13'	1350	NA	1994	NA
JEDUCNET	Housing while attending school	EDUC_AY EQ '310' AND EDMONTHA NE '13'	4500	NA	6710	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
JFEETOTX	Property management	REGFEECR EQ '01000' AND (OWNYI EQ '100' OR OWNYI EQ '200')	386	NA	829	NA
JLABOR1X	Repair or maintenance services	(CRMPTYPE='4'   CRMPTYPE='5') & (('120'<=CRMCODEB & CRMCODEB<='220')   CRMCODEB='240'   (('260'<=CRMCODEB & CRMCODEB<='300'))	1750	NA	4504	NA
JLABOR1X	Repair and replacement of hard surface flooring	(CRMPTYPE='4'   CRMPTYPE='5') & CRMCODEB='230'	175	NA	428	NA
JLABOR1X	Capital improvement labor and materials (owned home)	CRMPTYPE='1' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	45000	NA	92750	NA
JLABOR1X	Other repair and maintenance services	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='160')   CRMCODEB='190'   CRMCODEB='240'   (('270'<=CRMCODEB & CRMCODEB<='300'))	20000	NA	25119	NA
JLABOR1X	Painting and papering	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='170'   CRMCODEB='180')	6796	NA	9693	NA
JLABOR1X	Heat, a/c, electrical work	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='210'   CRMCODEB='220')	8600	NA	11595	NA
JLABOR1X	Plumbing and water heating	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='200'	4000	NA	6125	NA
JLABOR1X	Repair and replacement of hard surface flooring	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='230'	6838	NA	9376	NA
JLABOR1X	Roofing and gutters	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='260'	11000	NA	21150	NA
JLABOR1X	Capital improvement labor and materials (owned vacation)	CRMPTYPE='2' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	7900	NA	16407	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
JLABOR1X	Repair and remodeling services	CRMPTYPE='2' & (CRMTYPE='3'   CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='220')   CRMCODEB='240'   (('260'<=CRMCODEB & CRMCODEB<='300'))	4125	NA	16217	NA
JLABOR1X	Contractors labor and materials, supplies CU obtained, appliances provided by contractor, other property	CRMPTYPE='3' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	6814	NA	18250	NA
JLABOR1X	Expenses for other properties	CRMPTYPE='3' & (CRMTYPE='3'   CRMTYPE='4') & (('100'<=CRMCODEB & CRMCODEB<='240')   (('260'<=CRMCODEB & CRMCODEB<='300'))	2600	NA	3453	NA
JLABOR2X	Repair or maintenance services	(CRMPTYPE='4'   CRMPTYPE='5') & (('120'<=CRMCODEB & CRMCODEB<='220')   CRMCODEB='240'   (('260'<=CRMCODEB & CRMCODEB<='300'))	3000	NA	5996	NA
JLABOR2X	Capital improvement labor and materials (owned home)	CRMPTYPE='1' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	40000	NA	70000	NA
JLABOR2X	Other repair and maintenance services	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='160')   CRMCODEB='190'   CRMCODEB='240'   (('270'<=CRMCODEB & CRMCODEB<='300'))	11200	NA	17100	NA
JLABOR2X	Painting and papering	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='170'   CRMCODEB='180')	6588	NA	14082	NA
JLABOR2X	Heat, a/c, electrical work	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='210'   CRMCODEB='220')	8500	NA	10695	NA
JLABOR2X	Plumbing and water heating	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='200'	3600	NA	10049	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
JLABOR2X	Repair and replacement of hard surface flooring	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='230'	3000	NA	5300	NA
JLABOR2X	Roofing and gutters	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='260'	9452	NA	15755	NA
JLABOR2X	Capital improvement labor and materials (owned vacation)	CRMPTYPE='2' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	10508	NA	69667	NA
JLABOR2X	Repair and remodeling services	CRMPTYPE='2' & (CRMTYPE='3'   CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='220')   CRMCODEB='240'   ('260'<=CRMCODEB & CRMCODEB<='300'))	3000	NA	4418	NA
JLABOR2X	Contractors labor and materials, supplies CU obtained, appliances provided by contractor, other property	CRMPTYPE='3' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	2515	NA	6427	NA
JLABOR2X	Expenses for other properties	CRMPTYPE='3' & (CRMTYPE='3'   CRMTYPE='4') & (('100'<=CRMCODEB & CRMCODEB<='240')   ('260'<=CRMCODEB & CRMCODEB<='300'))	3000	NA	7575	NA
JLABOR3X	Labor and materials for dwellings under construction and additions	(CRMPTYPE='4'   CRMTYPE='5') & ('100'<=CRMCODEB & CRMCODEB<='110')	0	NA	4250	NA
JLABOR3X	Repair or maintenance services	(CRMPTYPE='4'   CRMTYPE='5') & (('120'<=CRMCODEB & CRMCODEB<='220')   CRMCODEB='240'   ('260'<=CRMCODEB & CRMCODEB<='300'))	2000	NA	5355	NA
JLABOR3X	Repair and replacement of hard surface flooring	(CRMPTYPE='4'   CRMTYPE='5') & CRMCODEB='230'	95	NA	2233	NA
JLABOR3X	Capital improvement labor and materials (owned home)	CRMPTYPE='1' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	55000	NA	119600	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
JLABOR3X	Other repair and maintenance services	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='160')   CRMCODEB='190'   CRMCODEB='240'   (270'<=CRMCODEB & CRMCODEB<='300'))	16665	NA	43750	NA
JLABOR3X	Painting and papering	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='170'   CRMCODEB='180')	5000	NA	8026	NA
JLABOR3X	Heat, a/c, electrical work	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='210'   CRMCODEB='220')	10069	NA	13781	NA
JLABOR3X	Plumbing and water heating	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='200'	4000	NA	7450	NA
JLABOR3X	Repair and replacement of hard surface flooring	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='230'	8400	NA	9246	NA
JLABOR3X	Roofing and gutters	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='260'	9000	NA	11644	NA
JLABOR3X	Capital improvement labor and materials (owned vacation)	CRMPTYPE='2' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	8000	NA	37333	NA
JLABOR3X	Repair and remodeling services	CRMPTYPE='2' & (CRMTYPE='3'   CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='220')   CRMCODEB='240'   (260'<=CRMCODEB & CRMCODEB<='300'))	3500	NA	5150	NA
JLABOR3X	Contractors labor and materials, supplies CU obtained, appliances provided by contractor, other property	CRMPTYPE='3' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	9800	NA	24476	NA
JLABOR3X	Expenses for other properties	CRMPTYPE='3' & (CRMTYPE='3'   CRMTYPE='4') & (('100'<=CRMCODEB & CRMCODEB<='240')   (260'<=CRMCODEB & CRMCODEB<='300'))	550	NA	3211	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
JLCPRINX	Principal paid, home equity line of credit (owned home)	OWNYH EQ '100' OR OWNYH EQ '200'	8807	-	29729	2853
JLCPRINX	Principal paid, home equity line of credit (owned vacation)	OWNYH EQ '300'	1601	NA	2850	NA
JLCPRINX	Principal paid, home equity line of credit (other property)	OWNYH EQ '400' OR OWNYH EQ '500'	706	NA	1283	NA
LDGCOSTX	Lodging on out-of-town trips	NA	2100	NA	3708	NA
MEDPMTX	Eyecare services	MEDPCARY EQ '110'	450	NA	1565	NA
MEDPMTX	Dental services	MEDPCARY EQ '200'	1700	NA	3170	NA
MEDPMTX	Hospital room and services	MEDPCARY EQ '330'	2000	NA	5575	NA
MEDPMTX	Service by professionals other than physician	MEDPCARY EQ '410'	800	NA	1931	NA
MEDPMTX	Physician"s services	MEDPCARY EQ '420'	450	NA	1079	NA
MEDPMTX	Lab tests, x-rays	MEDPCARY EQ '510'	800	NA	1877	NA
MEDPMTX	Care in convalescent or nursing home	MEDPCARY EQ '520'	6500	NA	8558	NA
MEDPMTX	Other medical care services	MEDPCARY EQ '530'	1111	NA	2651	NA
MEDPMTX	Rental of supportive, convalescent medical equipment	MEDPCARY EQ '630'	560	NA	1132	NA
MEDPMTX	Supportive and convalescent medical equipment	MEDPCARY EQ '640'	500	NA	1077	NA
MEDPMTX	Rental of medical equipment	MEDPCARY EQ '650'	400	NA	725	NA
MEDPMTX	Medical equipment for general use	MEDPCARY EQ '660'	375	NA	2016	NA
MEDRMBX	Eyecare services	MEDRCARY EQ '110'	200	NA	563	NA
MEDRMBX	Dental services	MEDRCARY EQ '200'	1300	NA	2941	NA
MEDRMBX	Hospital room and services	MEDRCARY EQ '330'	1300	NA	2683	NA
MEDRMBX	Service by professionals other than physician	MEDRCARY EQ '410'	2200	NA	3875	NA
MEDRMBX	Physician"s services	MEDRCARY EQ '420'	600	NA	853	NA
MEDRMBX	Lab tests, x-rays	MEDRCARY EQ '510'	280	NA	576	NA
MEDRMBX	Care in convalescent or nursing home	MEDRCARY EQ '520'	1200	NA	7510	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
MEDRMBX	Other medical care services	MEDRCARY EQ '530'	2600	NA	4898	NA
MEDRMBX	Rental of supportive, convalescent medical equipment	MEDRCARY EQ '630'	42	NA	590	NA
MEDRMBX	Supportive and convalescent medical equipment	MEDRCARY EQ '640'	81	NA	117	NA
MEDRMBX	Rental of medical equipment	MEDRCARY EQ '650'	19	NA	43	NA
MEDRMBX	Medical equipment for general use	MEDRCARY EQ '660'	114	NA	415	NA
MISCEXPX	Occupational expenses	MISCCODE EQ '380' AND MISC MO EQ '13'	180	NA	369	NA
MISCEXPX	Occupational expenses	MISCCODE EQ '380' AND MISC MO NE '13'	733	NA	1464	NA
MRTPMTG	Amount of last monthly payment, home equity loan (owned property)	(LOANTYPE EQ '2')	1400	NA	3034	NA
MRTPMTX	Amount of last monthly payment (owned property)	(LOANTYPE EQ '1')	3285	NA	5212	NA
NETPURX	Net purchase price of boat with motor after discount, trade-in, or rebate, including destination fee	VEHICYB EQ '160'	67000	NA	121857	NA
ORGMRTG	Original loan amount, home equity loan (loan obtained during interview quarter) (owned home)	(OWNYGEQ '100' OR OWNYGEQ '200') AND (LOANTYPE EQ '2')	150000	NA	272376	NA
ORGMRTG	Original loan amount, home equity loan (loan obtained during interview quarter) (owned vacation)	(OWNYGEQ '300') AND (LOANTYPE EQ '2')	137024	NA	289500	NA
ORGMRTG	Original loan amount, home equity loan (loan obtained during interview quarter) (other property)	(OWNYGEQ '400' OR OWNYGEQ '500') AND (LOANTYPE EQ '2')	41000	NA	98493	NA
ORGMRTX	Amount of mortgage (owned home)	(OWNYFEQ '100' OR OWNYFEQ '200') AND (LOANTYPE EQ '1')	423000	NA	627443	NA
ORGMRTX	Amount of mortgage (vacation home)	(OWNYFEQ '300') AND (LOANTYPE EQ '1')	450000	NA	747444	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
ORGMRTX	Original loan amount (mortgage obtained during interview quarter) (other property)	(OWNYF EQ '400' OR OWNYF EQ '500') AND (LOANTYPE EQ '1')	328000	NA	570869	NA
OWN_PURX	Purchase price of property (owned home)	OWNYB EQ '100' OR OWNYB EQ '200'	925000	NA	1270529	NA
OWN_PURX	Purchase price of property (owned vacation)	OWNYB EQ '300'	440000	NA	1331400	NA
OWN_PURX	Purchase price of property (other property)	OWNYB EQ '400' OR OWNYB EQ '500'	300000	NA	356333	NA
PAYMT1G	Amount of mortgage payment in the first month of the reference period, home equity loan (owned home)	(OWNYG EQ '100' OR OWNYG EQ '200') AND (LOANTYPE EQ '2')	2000	NA	2788	NA
PAYMT1X	Amount of mortgage payment in the first month of the reference period (owned home)	(OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1')	6000	NA	9507	NA
PAYMT1X	Amount of mortgage payment in the first month of the reference period (vacation home)	(OWNYF EQ '300') AND (LOANTYPE EQ '1')	5342	NA	16160	NA
PAYMT1X	Amount of mortgage payment in the first month of the reference period (other property)	(OWNYF EQ '400' OR OWNYF EQ '500') AND (LOANTYPE EQ '1')	4000	NA	11312	NA
PAYMT2G	Amount of mortgage payment in the second month of the reference period, home equity loan (owned home)	(OWNYG EQ '100' OR OWNYG EQ '200') AND (LOANTYPE EQ '2')	2000	NA	2788	NA
PAYMT2X	Amount of mortgage payment in the second month of the reference period (owned home)	(OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1')	6126	NA	8629	NA
PAYMT2X	Amount of mortgage payment in the second month of the reference period (vacation home)	(OWNYF EQ '300') AND (LOANTYPE EQ '1')	5342	NA	9135	NA
PAYMT2X	Amount of mortgage payment in the second month of the reference period (other property)	(OWNYF EQ '400' OR OWNYF EQ '500') AND (LOANTYPE EQ '1')	2216	NA	8718	NA



Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
PAYMT3G	Amount of mortgage payment in the third month of the reference period, home equity loan (owned home)	(OWNYG EQ '100' OR OWNYG EQ '200') AND (LOANTYPE EQ '2')	1000	NA	2119	NA
PAYMT3X	Amount of mortgage payment in the third month of the reference period (owned home)	(OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1')	5000	NA	8026	NA
PAYMT3X	Amount of mortgage payment in the third month of the reference period (vacation home)	(OWNYF EQ '300') AND (LOANTYPE EQ '1')	4010	NA	5547	NA
PAYMT3X	Amount of mortgage payment in the third month of the reference period (other property)	(OWNYF EQ '400' OR OWNYF EQ '500') AND (LOANTYPE EQ '1')	1400	NA	6745	NA
QADCAB1X	Cable and satellite television services	NA	150	NA	193	NA
QADCAB2X	Cable and satellite television services	NA	150	NA	192	NA
QADCAB3X	Cable and satellite television services	NA	150	NA	202	NA
QADFUL1X	Water/sewer maint. (owned vacation)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '2')	320	NA	378	NA
QADFUL1X	Piped in water/sewage maintenance (other property)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '3')	95	NA	271	NA
QADFUL1X	Water/sewer maint. (renter)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	175	NA	255	NA
QADFUL1X	Water/sewer maint. (rented vacation)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '6')	95	NA	282	NA
QADFUL1X	Water/sewer maint. (owned home)	(UTILY EQ '200' OR UTILY EQ '220') AND UTLPTYPE EQ '1'	225	NA	344	NA
QADFUL1X	Electricity (owned vacation)	UTILY EQ '100' AND (UTLPTYPE EQ '2')	470	NA	744	NA
QADFUL1X	Electricity (other property)	UTILY EQ '100' AND (UTLPTYPE EQ '3')	300	NA	549	NA
QADFUL1X	Electricity (renter)	UTILY EQ '100' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	400	NA	503	NA
QADFUL1X	Electricity (rented vacation)	UTILY EQ '100' AND (UTLPTYPE EQ '6')	340	NA	557	NA
QADFUL1X	Electricity (owned home)	UTILY EQ '100' AND UTLPTYPE EQ '1'	500	NA	674	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
QADFUL1X	Utility--natural gas (owned vacation)	UTILY EQ '110' AND (UTLPTYPE EQ '2')	335	NA	381	NA
QADFUL1X	Utility--natural gas (other property)	UTILY EQ '110' AND (UTLPTYPE EQ '3')	75	NA	124	NA
QADFUL1X	Utility--natural gas (renter)	UTILY EQ '110' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	365	NA	557	NA
QADFUL1X	Utility--natural gas (rented vacation)	UTILY EQ '110' AND (UTLPTYPE EQ '6')	101	NA	189	NA
QADFUL1X	Utility--natural gas (owned home)	UTILY EQ '110' AND UTLPTYPE EQ '1'	475	NA	639	NA
QADFUL1X	Fuel oil (owned vacation)	UTILY EQ '130' AND (UTLPTYPE EQ '2')	400	NA	783	NA
QADFUL1X	Fuel oil (renter)	UTILY EQ '130' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	800	NA	1192	NA
QADFUL1X	Fuel oil (owned home)	UTILY EQ '130' AND UTLPTYPE EQ '1'	2700	NA	3700	NA
QADFUL1X	Gas, btld/tank (owned vacation)	UTILY EQ '150' AND (UTLPTYPE EQ '2')	600	NA	1127	NA
QADFUL1X	Gas, btld/tank (renter)	UTILY EQ '150' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	500	NA	558	NA
QADFUL1X	Gas, btld/tank (owned home)	UTILY EQ '150' AND UTLPTYPE EQ '1'	1300	NA	2445	NA
QADFUL1X	Coal, wood, other fuels (renter)	UTILY EQ '180' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	200	NA	400	NA
QADFUL1X	Coal, wood, other fuels (owned home)	UTILY EQ '180' AND UTLPTYPE EQ '1'	1100	NA	1540	NA
QADFUL1X	Trash/garb. coll. (owned vacation)	UTILY EQ '210' AND (UTLPTYPE EQ '2')	90	NA	106	NA
QADFUL1X	Trash/garb. coll. (other property)	UTILY EQ '210' AND (UTLPTYPE EQ '3')	22	NA	78	NA
QADFUL1X	Trash/garb. coll. (renter)	UTILY EQ '210' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	140	NA	228	NA
QADFUL1X	Trash/garb. coll. (rented vacation)	UTILY EQ '210' AND (UTLPTYPE EQ '6')	23	NA	55	NA
QADFUL1X	Trash/garb. coll. (owned home)	UTILY EQ '210' AND UTLPTYPE EQ '1'	130	NA	194	NA
QADFUL1X	Water softening service	UTILY EQ '270' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	50	NA	63	NA
QADFUL1X	Water softening service	UTILY EQ '270' AND UTLPTYPE EQ '1'	300	NA	496	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
QADFUL1X	Septic tank clean. (owned home)	UTILY EQ '280' AND UTLPTYPE EQ '1'	500	NA	915	NA
QADFUL2X	Water/sewer maint. (owned vacation)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '2')	157	NA	327	NA
QADFUL2X	Piped in water/sewage maintenance (other property)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '3')	82	NA	161	NA
QADFUL2X	Water/sewer maint. (renter)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	178	NA	246	NA
QADFUL2X	Water/sewer maint. (rented vacation)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '6')	104	NA	140	NA
QADFUL2X	Water/sewer maint. (owned home)	(UTILY EQ '200' OR UTILY EQ '220') AND UTLPTYPE EQ '1'	216	NA	328	NA
QADFUL2X	Electricity (owned vacation)	UTILY EQ '100' AND (UTLPTYPE EQ '2')	430	NA	716	NA
QADFUL2X	Electricity (other property)	UTILY EQ '100' AND (UTLPTYPE EQ '3')	304	NA	554	NA
QADFUL2X	Electricity (renter)	UTILY EQ '100' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	400	NA	512	NA
QADFUL2X	Electricity (rented vacation)	UTILY EQ '100' AND (UTLPTYPE EQ '6')	280	NA	448	NA
QADFUL2X	Electricity (owned home)	UTILY EQ '100' AND UTLPTYPE EQ '1'	500	NA	681	NA
QADFUL2X	Utility--natural gas (owned vacation)	UTILY EQ '110' AND (UTLPTYPE EQ '2')	335	NA	416	NA
QADFUL2X	Utility--natural gas (other property)	UTILY EQ '110' AND (UTLPTYPE EQ '3')	100	NA	140	NA
QADFUL2X	Utility--natural gas (renter)	UTILY EQ '110' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	375	NA	621	NA
QADFUL2X	Utility--natural gas (rented vacation)	UTILY EQ '110' AND (UTLPTYPE EQ '6')	101	NA	204	NA
QADFUL2X	Utility--natural gas (owned home)	UTILY EQ '110' AND UTLPTYPE EQ '1'	500	NA	688	NA
QADFUL2X	Fuel oil (owned vacation)	UTILY EQ '130' AND (UTLPTYPE EQ '2')	400	NA	891	NA
QADFUL2X	Fuel oil (renter)	UTILY EQ '130' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	603	NA	756	NA
QADFUL2X	Fuel oil (owned home)	UTILY EQ '130' AND UTLPTYPE EQ '1'	2394	NA	3450	NA
QADFUL2X	Gas, btld/tank (owned vacation)	UTILY EQ '150' AND (UTLPTYPE EQ '2')	500	NA	707	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
QADFUL2X	Gas, btld/tank (renter)	UTILY EQ '150' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	795	NA	875	NA
QADFUL2X	Gas, btld/tank (owned home)	UTILY EQ '150' AND UTLPTYPE EQ '1'	2100	NA	2875	NA
QADFUL2X	Coal, wood, other fuels (renter)	UTILY EQ '180' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	250	NA	439	NA
QADFUL2X	Coal, wood, other fuels (owned home)	UTILY EQ '180' AND UTLPTYPE EQ '1'	700	NA	1101	NA
QADFUL2X	Trash/garb. coll. (owned vacation)	UTILY EQ '210' AND (UTLPTYPE EQ '2')	60	NA	90	NA
QADFUL2X	Trash/garb. coll. (other property)	UTILY EQ '210' AND (UTLPTYPE EQ '3')	17	NA	54	NA
QADFUL2X	Trash/garb. coll. (renter)	UTILY EQ '210' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	100	NA	174	NA
QADFUL2X	Trash/garb. coll. (rented vacation)	UTILY EQ '210' AND (UTLPTYPE EQ '6')	50	NA	72	NA
QADFUL2X	Trash/garb. coll. (owned home)	UTILY EQ '210' AND UTLPTYPE EQ '1'	141	NA	237	NA
QADFUL2X	Water softening service	UTILY EQ '270' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	57	NA	71	NA
QADFUL2X	Water softening service	UTILY EQ '270' AND UTLPTYPE EQ '1'	213	NA	248	NA
QADFUL2X	Septic tank clean. (owned home)	UTILY EQ '280' AND UTLPTYPE EQ '1'	325	NA	552	NA
QADFUL3X	Water/sewer maint. (owned vacation)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '2')	189	NA	314	NA
QADFUL3X	Piped in water/sewage maintenance (other property)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '3')	84	NA	340	NA
QADFUL3X	Water/sewer maint. (renter)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	190	NA	280	NA
QADFUL3X	Water/sewer maint. (rented vacation)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '6')	111	NA	163	NA
QADFUL3X	Water/sewer maint. (owned home)	(UTILY EQ '200' OR UTILY EQ '220') AND UTLPTYPE EQ '1'	236	NA	338	NA
QADFUL3X	Electricity (owned vacation)	UTILY EQ '100' AND (UTLPTYPE EQ '2')	350	NA	630	NA
QADFUL3X	Electricity (other property)	UTILY EQ '100' AND (UTLPTYPE EQ '3')	304	NA	614	NA
QADFUL3X	Electricity (renter)	UTILY EQ '100' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	445	NA	564	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
QADFUL3X	Electricity (rented vacation)	UTILY EQ '100' AND (UTLPTYPE EQ '6')	246	NA	396	NA
QADFUL3X	Electricity (owned home)	UTILY EQ '100' AND UTLPTYPE EQ '1'	510	NA	669	NA
QADFUL3X	Utility--natural gas (owned vacation)	UTILY EQ '110' AND (UTLPTYPE EQ '2')	335	NA	545	NA
QADFUL3X	Utility--natural gas (other property)	UTILY EQ '110' AND (UTLPTYPE EQ '3')	100	NA	142	NA
QADFUL3X	Utility--natural gas (renter)	UTILY EQ '110' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	400	NA	565	NA
QADFUL3X	Utility--natural gas (rented vacation)	UTILY EQ '110' AND (UTLPTYPE EQ '6')	102	NA	195	NA
QADFUL3X	Utility--natural gas (owned home)	UTILY EQ '110' AND UTLPTYPE EQ '1'	500	NA	704	NA
QADFUL3X	Fuel oil (owned vacation)	UTILY EQ '130' AND (UTLPTYPE EQ '2')	550	NA	744	NA
QADFUL3X	Fuel oil (renter)	UTILY EQ '130' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	912	NA	1301	NA
QADFUL3X	Fuel oil (owned home)	UTILY EQ '130' AND UTLPTYPE EQ '1'	3500	NA	3869	NA
QADFUL3X	Gas, btld/tank (owned vacation)	UTILY EQ '150' AND (UTLPTYPE EQ '2')	291	NA	974	NA
QADFUL3X	Gas, btld/tank (renter)	UTILY EQ '150' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	800	NA	1274	NA
QADFUL3X	Gas, btld/tank (owned home)	UTILY EQ '150' AND UTLPTYPE EQ '1'	2000	NA	3421	NA
QADFUL3X	Coal, wood, other fuels (renter)	UTILY EQ '180' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	500	NA	752	NA
QADFUL3X	Coal, wood, other fuels (owned home)	UTILY EQ '180' AND UTLPTYPE EQ '1'	1200	NA	2277	NA
QADFUL3X	Trash/garb. coll. (owned vacation)	UTILY EQ '210' AND (UTLPTYPE EQ '2')	85	NA	97	NA
QADFUL3X	Trash/garb. coll. (other property)	UTILY EQ '210' AND (UTLPTYPE EQ '3')	29	NA	59	NA
QADFUL3X	Trash/garb. coll. (renter)	UTILY EQ '210' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	152	NA	213	NA
QADFUL3X	Trash/garb. coll. (rented vacation)	UTILY EQ '210' AND (UTLPTYPE EQ '6')	43	NA	95	NA
QADFUL3X	Trash/garb. coll. (owned home)	UTILY EQ '210' AND UTLPTYPE EQ '1'	135	NA	210	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
QADFUL3X	Water softening service	UTILY EQ '270' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	50	NA	101	NA
QADFUL3X	Water softening service	UTILY EQ '270' AND UTLPTYPE EQ '1'	300	NA	625	NA
QADFUL3X	Septic tank clean. (owned home)	UTILY EQ '280' AND UTLPTYPE EQ '1'	685	NA	1058	NA
QADINE1X	Computer information services	NA	90	NA	123	NA
QADINE2X	Computer information services	NA	90	NA	122	NA
QADINE3X	Computer information services	NA	90	NA	120	NA
QADPSP2X	Materials for additions, finishing basements, remodeling rooms	(CRMPTYPE='4'   CRMPTYPE='5') & (('100'<=CRMCODEB & CRMCODEB<='130')   CRMCODEB='150')	400	NA	1233	NA
QADPSP2X	Total cost of tools, equipment, and supplies purchased for painting and wall papering	(CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='170'   CRMCODEB='180')	200	NA	940	NA
QADPSP2X	Total cost of materials purchased for patios, walks, fences, driveways, masonry,brick, stucco, plastering, panels, roofing, gutters, etc.	(CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='190'   '260'<=CRMCODEB & CRMCODEB<='280'))	140	NA	357	NA
QADPSP2X	Electrical supplies, heating and cooling equipment	(CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='210'   CRMCODEB='220')	0	NA	172	NA
QADPSP2X	Material for insulation, other maintenance and repair	(CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='240'   CRMCODEB='300')	437	NA	3467	NA
QADPSP2X	Material for landscape maintenance	(CRMPTYPE='4'   CRMPTYPE='5') & CRMCODEB='140'	125	NA	633	NA
QADPSP2X	Plumbing supplies and equipment	(CRMPTYPE='4'   CRMPTYPE='5') & CRMCODEB='200'	175	NA	357	NA
QADPSP2X	Material for hard surface flooring	(CRMPTYPE='4'   CRMPTYPE='5') & CRMCODEB='230'	0	NA	164	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
QADPSP2X	Materials and supplies purchased for insulation, dwellings under constr, additions, finishing, remodeling, landscaping, etc.	CRMPTYPE='1' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	8000	NA	24578	NA
QADPSP2X	Total cost of tools, equipment, and supplies purchased for painting and wall papering	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='170'   CRMCODEB='180')	750	NA	1600	NA
QADPSP2X	Total cost of materials purchased for patios, walks, fences, driveways, masonry,brick, stucco, plastering, panels, roofing, gutters, etc.	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='190'   CRMCODEB='270'   CRMCODEB='280')	500	NA	1288	NA
QADPSP2X	Electrical supplies, heating and cooling equipment	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='210'   CRMCODEB='220')	300	NA	522	NA
QADPSP2X	Material for insulation, other maintenance and repair	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='240'   CRMCODEB='300')	525	NA	716	NA
QADPSP2X	Total cost of materials purchased for patios, walks, fences, driveways, masonry,brick, stucco, plastering, panels, roofing, gutters, etc.	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='160'	600	NA	1400	NA
QADPSP2X	Plumbing supplies and equipment	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='200'	700	NA	1183	NA
QADPSP2X	Materials for hard surface flooring, repair and replacement	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='230'	800	NA	2000	NA
QADPSP2X	Materials and equipment for roof and gutters	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='260'	1500	NA	4167	NA
QADPSP2X	Total cost of materials purchased for patios, walks, fences, driveways, masonry,brick, stucco, plastering, panels, roofing, gutters, etc.	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='290'	0	NA	289	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
QADPSP2X	Supplies purchased for additions, maintenance and repairs, and new construction	CRMPTYPE='2' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	25	NA	850	NA
QADPSP2X	Total cost of tools, equipment, and supplies purchased for painting and wall papering	CRMPTYPE='2' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='170'   CRMCODEB='180')	30	NA	200	NA
QADPSP2X	Contractors labor and materials, supplies CU obtained, appliances provided by contractor, other property	CRMPTYPE='3' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	0	NA	142	NA
QADPSP3X	Materials for additions, finishing basements, remodeling rooms	(CRMPTYPE='4'   CRMPTYPE='5') & (('100'<=CRMCODEB & CRMCODEB<='130')   CRMCODEB='150')	500	NA	991	NA
QADPSP3X	Total cost of tools, equipment, and supplies purchased for painting and wall papering	(CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='170'   CRMCODEB='180')	240	NA	488	NA
QADPSP3X	Total cost of materials purchased for patios, walks, fences, driveways, masonry,brick, stucco, plastering, panels, roofing, gutters, etc.	(CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='190'   ('260'<=CRMCODEB & CRMCODEB<='280'))	15	NA	54	NA
QADPSP3X	Electrical supplies, heating and cooling equipment	(CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='210'   CRMCODEB='220')	35	NA	957	NA
QADPSP3X	Material for insulation, other maintenance and repair	(CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='240'   CRMCODEB='300')	165	NA	366	NA
QADPSP3X	Material for landscape maintenance	(CRMPTYPE='4'   CRMPTYPE='5') & CRMCODEB='140'	30	NA	158	NA
QADPSP3X	Plumbing supplies and equipment	(CRMPTYPE='4'   CRMPTYPE='5') & CRMCODEB='200'	245	NA	408	NA
QADPSP3X	Material for hard surface flooring	(CRMPTYPE='4'   CRMPTYPE='5') & CRMCODEB='230'	18	NA	90	NA



Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
QADPSP3X	Materials and supplies purchased for insulation, dwellings under constr, additions, finishing, remodeling, landscaping, etc.	CRMPTYPE='1' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	8000	NA	11911	NA
QADPSP3X	Total cost of tools, equipment, and supplies purchased for painting and wall papering	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='170'   CRMCODEB='180')	850	NA	1250	NA
QADPSP3X	Total cost of materials purchased for patios, walks, fences, driveways, masonry,brick, stucco, plastering, panels, roofing, gutters, etc.	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='190'   CRMCODEB='270'   CRMCODEB='280')	1700	NA	2567	NA
QADPSP3X	Electrical supplies, heating and cooling equipment	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='210'   CRMCODEB='220')	300	NA	1213	NA
QADPSP3X	Material for insulation, other maintenance and repair	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='240'   CRMCODEB='300')	1270	NA	3003	NA
QADPSP3X	Total cost of materials purchased for patios, walks, fences, driveways, masonry,brick, stucco, plastering, panels, roofing, gutters, etc.	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='160'	600	NA	809	NA
QADPSP3X	Plumbing supplies and equipment	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='200'	400	NA	671	NA
QADPSP3X	Materials for hard surface flooring, repair and replacement	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='230'	1400	NA	2997	NA
QADPSP3X	Materials and equipment for roof and gutters	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='260'	1600	NA	2825	NA
QADPSP3X	Total cost of materials purchased for patios, walks, fences, driveways, masonry,brick, stucco, plastering, panels, roofing, gutters, etc.	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='290'	32	NA	450	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
QADPSP3X	Supplies purchased for additions, maintenance and repairs, and new construction	CRMPTYPE='2' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	400	NA	954	NA
QADPSP3X	Total cost of tools, equipment, and supplies purchased for painting and wall papering	CRMPTYPE='2' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='170'   CRMCODEB='180')	75	NA	500	NA
QADPSP3X	Contractors labor and materials, supplies CU obtained, appliances provided by contractor, other property	CRMPTYPE='3' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	0	NA	8684	NA
QADPSPLX	Materials for additions, finishing basements, remodeling rooms	(CRMPTYPE='4'   CRMPTYPE='5') & (('100'<=CRMCODEB & CRMCODEB<='130')   CRMCODEB='150')	721	NA	852	NA
QADPSPLX	Total cost of tools, equipment, and supplies purchased for painting and wall papering	(CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='170'   CRMCODEB='180')	175	NA	533	NA
QADPSPLX	Total cost of materials purchased for patios, walks, fences, driveways, masonry,brick, stucco, plastering, panels, roofing, gutters, etc.	(CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='190'   ('260'<=CRMCODEB & CRMCODEB<='280'))	40	NA	149	NA
QADPSPLX	Electrical supplies, heating and cooling equipment	(CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='210'   CRMCODEB='220')	50	NA	223	NA
QADPSPLX	Material for insulation, other maintenance and repair	(CRMPTYPE='4'   CRMPTYPE='5') & (CRMCODEB='240'   CRMCODEB='300')	350	NA	492	NA
QADPSPLX	Material for landscape maintenance	(CRMPTYPE='4'   CRMPTYPE='5') & CRMCODEB='140'	125	NA	283	NA
QADPSPLX	Plumbing supplies and equipment	(CRMPTYPE='4'   CRMPTYPE='5') & CRMCODEB='200'	300	NA	495	NA
QADPSPLX	Material for hard surface flooring	(CRMPTYPE='4'   CRMPTYPE='5') & CRMCODEB='230'	0	NA	176	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
QADPSPLX	Materials and supplies purchased for insulation, dwellings under constr, additions, finishing, remodeling, landscaping, etc.	CRMPTYPE='1' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	7000	NA	9147	NA
QADPSPLX	Total cost of tools, equipment, and supplies purchased for painting and wall papering	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='170'   CRMCODEB='180')	700	NA	1027	NA
QADPSPLX	Total cost of materials purchased for patios, walks, fences, driveways, masonry,brick, stucco, plastering, panels, roofing, gutters, etc.	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='190'   CRMCODEB='270'   CRMCODEB='280')	1167	NA	2508	NA
QADPSPLX	Electrical supplies, heating and cooling equipment	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='210'   CRMCODEB='220')	425	NA	660	NA
QADPSPLX	Material for insulation, other maintenance and repair	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='240'   CRMCODEB='300')	800	NA	2683	NA
QADPSPLX	Total cost of materials purchased for patios, walks, fences, driveways, masonry,brick, stucco, plastering, panels, roofing, gutters, etc.	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='160'	500	NA	1033	NA
QADPSPLX	Plumbing supplies and equipment	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='200'	800	NA	2067	NA
QADPSPLX	Materials for hard surface flooring, repair and replacement	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='230'	1500	NA	3533	NA
QADPSPLX	Materials and equipment for roof and gutters	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='260'	370	NA	2067	NA
QADPSPLX	Total cost of materials purchased for patios, walks, fences, driveways, masonry,brick, stucco, plastering, panels, roofing, gutters, etc.	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & CRMCODEB='290'	180	NA	250	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
QADPSPLX	Supplies purchased for additions, maintenance and repairs, and new construction	CRMPTYPE='2' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	329	NA	917	NA
QADPSPLX	Total cost of tools, equipment, and supplies purchased for painting and wall papering	CRMPTYPE='2' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='170'   CRMCODEB='180')	236	NA	783	NA
QADPSPLX	Contractors labor and materials, supplies CU obtained, appliances provided by contractor, other property	CRMPTYPE='3' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	271	NA	1353	NA
QADPTAX	Property taxes	OWNYB EQ '100' OR OWNYB EQ '200'	9000	NA	13819	NA
QADPTAX	Property taxes	OWNYB EQ '300'	8000	NA	12456	NA
QADPTAX	Expenses for other properties	OWNYB EQ '400' OR OWNYB EQ '500'	6000	NA	8275	NA
QADRSP2X	Capital improvement labor and materials (owned home)	CRMPTYPE='1' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	125	NA	207	NA
QADRSP2X	Other repair and maintenance services	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='160')   CRMCODEB='190'   CRMCODEB='240'   ('270'<=CRMCODEB & CRMCODEB<='300'))	50	NA	105	NA
QADRSP3X	Capital improvement labor and materials (owned home)	CRMPTYPE='1' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	180	NA	225	NA
QADRSP3X	Other repair and maintenance services	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='160')   CRMCODEB='190'   CRMCODEB='240'   ('270'<=CRMCODEB & CRMCODEB<='300'))	60	NA	200	NA
QADRSP3X	Capital improvement labor and materials (owned home)	CRMPTYPE='1' & (CRMTYPE='1'   CRMTYPE='2'   CRMTYPE='5')	100	NA	250	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
QADRSPLX	Other repair and maintenance services	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='160')   CRMCODEB='190'   CRMCODEB='240'   (270'<=CRMCODEB & CRMCODEB<='300'))	0	NA	47	NA
QADRSPLX	Painting and papering	CRMPTYPE='1' & (CRMTYPE='3'   CRMTYPE='4') & (CRMCODEB='170'   CRMCODEB='180')	0	NA	45	NA
QBLNCM1G	Principal balance outstanding at the beginning of the month 3 months ago, home equity loan	('100' LE OWNYG LE '500') AND (LOANTYPE EQ '2')	146202	NA	226619	NA
QBLNCM1X	Principal balance outstanding at the beginning of the month 3 months ago	('100' LE OWNYF LE '500') AND (LOANTYPE EQ '1')	404236	NA	593776	NA
QBLNCM2G	Principal balance outstanding at the beginning of the month 2 months ago, home equity loan	('100' LE OWNYG LE '500') AND (LOANTYPE EQ '2')	146034	NA	226394	NA
QBLNCM2X	Principal balance outstanding at the beginning of the month 2 months ago	('100' LE OWNYF LE '500') AND (LOANTYPE EQ '1')	406507	NA	597688	NA
QBLNCM3G	Principal balance outstanding at the beginning of the month 1 month ago, home equity loan	('100' LE OWNYG LE '500') AND (LOANTYPE EQ '2')	143988	NA	227050	NA
QBLNCM3X	Principal balance outstanding at the beginning of the month 1 month ago	('100' LE OWNYF LE '500') AND (LOANTYPE EQ '1')	407143	NA	597225	NA
QHI3MCX	Health maintenance organization (BCBS)	HHICODE EQ '1' AND HHIBCBS EQ '1'	3300	NA	5316	NA
QHI3MCX	Health maintenance organization (not BCBS)	HHICODE EQ '1' AND HHIBCBS EQ '2'	3000	NA	3909	NA
QHI3MCX	Traditional fee for service health plan (BCBS)	HHICODE EQ '2' AND HHIBCBS EQ '1' AND HHIFEET = '1'	2800	NA	3546	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
QHI3MCX	Preferred provider health plan (BCBS)	HHICODE EQ '2' AND HHIBCBS EQ '1' AND HHIFEET = '2'	3600	NA	4982	NA
QHI3MCX	Traditional fee for service health plan (not BCBS)	HHICODE EQ '2' AND HHIBCBS EQ '2' AND HHIFEET = '1'	3231	NA	4490	NA
QHI3MCX	Preferred provider health plan (not BCBS)	HHICODE EQ '2' AND HHIBCBS EQ '2' AND HHIFEET = '2'	3291	NA	4100	NA
QHI3MCX	Commercial medicare supplement (BCBS)	HHICODE EQ '3' AND HHIBCBS EQ '1'	2355	NA	2676	NA
QHI3MCX	Commercial medicare supplement (not BCBS)	HHICODE EQ '3' AND HHIBCBS EQ '2'	2290	NA	3123	NA
QHI3MCX	Other health insurance (BCBS)	HHICODE EQ '4' AND HHIBCBS EQ '1'	1206	NA	1944	NA
QHI3MCX	Other health insurance (not BCBS)	HHICODE EQ '4' AND HHIBCBS EQ '2'	1436	NA	1890	NA
QLMPSUMX	Special lump sum mortgage payment (vacation home)	OWNYI EQ '300'	3000	NA	65333	NA
QLMPSUMX	Special lump sum mortgage payment (other property)	OWNYI EQ '400' OR OWNYI EQ '500'	3000	NA	45707	NA
QLMPSUMX	Special lump sum mortgage payment (owned home)	OWNYI EQ '100' OR OWNYI EQ '200'	5000	NA	26161	NA
QLR3MCMX	Amount paid for ground or land rent (vacation home)	OWNYI EQ '300'	2400	NA	2800	NA
QLR3MCMX	Ground rent	OWNYI EQ '100' OR OWNYI EQ '200'	1881	NA	2262	NA
QPRINM1G	Reduction mortgage principal, home equity loan (owned home)	(OWNYG EQ '100' OR OWNYG EQ '200') AND (LOANTYPE EQ '2')	928	NA	1796	NA
QPRINM1G	Reduction mortgage principal, home equity loan (owned vacation)	(OWNYG EQ '300') AND (LOANTYPE EQ '2')	640	NA	2969	NA
QPRINM1G	Reduction mortgage principal, home equity loan (other property)	(OWNYG EQ '400' OR OWNYG EQ '500') AND (LOANTYPE EQ '2')	370	NA	711	NA
QPRINM1X	Reduction of mortgage principal (owned home)	(OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1')	1188	NA	2261	NA
QPRINM1X	Reduction of mortgage principal (owned vacation)	(OWNYF EQ '300') AND (LOANTYPE EQ '1')	1193	NA	3265	NA

Variable	Description	Condition	2008 Upper Critical Value	2008 Lower Critical Value	2008 Upper Topcode Value	2008 Lower Topcode Value
QPRINM1X	Reduction of mortgage principal (other property)	(OWNYF EQ '400' OR OWNYF EQ '500') AND (LOANTYPE EQ '1')	791	NA	3065	NA
QPRINM2G	Reduction mortgage principal, home equity loan (owned home)	(OWNYG EQ '100' OR OWNYG EQ '200') AND (LOANTYPE EQ '2')	933	NA	1808	NA
QPRINM2G	Reduction mortgage principal, home equity loan (owned vacation)	(OWNYG EQ '300') AND (LOANTYPE EQ '2')	644	NA	2989	NA
QPRINM2G	Reduction mortgage principal, home equity loan (other property)	(OWNYG EQ '400' OR OWNYG EQ '500') AND (LOANTYPE EQ '2')	373	NA	882	NA
QPRINM2X	Reduction of mortgage principal (owned home)	(OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1')	1194	NA	2285	NA
QPRINM2X	Reduction of mortgage principal (owned vacation)	(OWNYF EQ '300') AND (LOANTYPE EQ '1')	1199	NA	3282	NA
QPRINM2X	Reduction of mortgage principal (other property)	(OWNYF EQ '400' OR OWNYF EQ '500') AND (LOANTYPE EQ '1')	795	NA	3221	NA
QPRINM3G	Reduction mortgage principal, home equity loan (owned home)	(OWNYG EQ '100' OR OWNYG EQ '200') AND (LOANTYPE EQ '2')	937	NA	1820	NA
QPRINM3G	Reduction mortgage principal, home equity loan (owned vacation)	(OWNYG EQ '300') AND (LOANTYPE EQ '2')	648	NA	3009	NA
QPRINM3G	Reduction mortgage principal, home equity loan (other property)	(OWNYG EQ '400' OR OWNYG EQ '500') AND (LOANTYPE EQ '2')	375	NA	888	NA
QPRINM3X	Reduction of mortgage principal (owned home)	(OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1')	1203	NA	2280	NA
QPRINM3X	Reduction of mortgage principal (owned vacation)	(OWNYF EQ '300') AND (LOANTYPE EQ '1')	1204	NA	3299	NA
QPRINM3X	Reduction of mortgage principal (other property)	(OWNYF EQ '400' OR OWNYF EQ '500') AND (LOANTYPE EQ '1')	799	NA	3275	NA
QRT3MCMX	Rent	NA	5454	NA	7450	NA
RNTEQVX	Estimated monthly rental value of owned home	OWNYI EQ '100'	3000	NA	4663	NA
SALEX	Sale of boats, with motors	VEHICYC EQ '160'	4000	NA	5167	NA
TELCEL1X	Cellular phone service	NA	320	NA	405	NA
TELCEL2X	Cellular phone service	NA	320	NA	410	NA

<b>Variable</b>	<b>Description</b>	<b>Condition</b>	<b>2008 Upper Critical Value</b>	<b>2008 Lower Critical Value</b>	<b>2008 Upper Topcode Value</b>	<b>2008 Lower Topcode Value</b>
TELCEL3X	Cellular phone service Residential	NA	325	NA	414	NA
TELRES1X	telephone/pay phones Residential	NA	205	NA	267	NA
TELRES2X	telephone/pay phones Residential	NA	206	NA	274	NA
TELRES3X	telephone/pay phones Lodging on out-of-town trips	NA	205	NA	276	NA
TOTYUPDX	Lodging on out-of-town trips	TOTYUPDY EQ '130'	1260	NA	1751	NA
TRNONCUX	Lodging on out-of-town trips	TRNONCUY EQ '130'	1300	NA	3120	NA

## **V. ESTIMATION PROCEDURE**

### **A. DESCRIPTION OF PROCEDURES**

The following section describes procedures for using microdata for the estimation of descriptive statistics such as aggregates and means. A sample program written in SAS that illustrates this methodology is in Section VII. MICRODATA VERIFICATION AND ESTIMATION METHODOLOGY

#### **1. GENERAL CONCEPTS**

##### **a. SAMPLE VERSUS POPULATION ESTIMATES**

As described in Section X.C. WEIGHTING, each CU in the CE sample represents a given number of CUs in the U.S. population. The translation of sample CUs into a population estimate is accomplished by weighting. FINLWT21, one of the 45 weight variables associated with each CU, is used to estimate the population. Procedures for estimating sample (unweighted) and population (weighted) statistics are described in Sections V.A.2. ESTIMATION OF UNWEIGHTED STATISTICS and V.A.3. ESTIMATION OF WEIGHTED STATISTICS below.

##### **b. CALENDAR PERIOD VERSUS COLLECTION PERIOD**

Because the rotating panel design of the Interview survey has an effect on the structure of the data files, one must be aware of the distinction between calendar period and collection period in producing estimates. (See Section X.A. SURVEY SAMPLE DESIGN for a description of the panel rotation scheme.)

Respondents are asked to report expenditures made since the first of the month three months prior to the interview month. For example, if a CU is interviewed in February of 2008, they are reporting expenditures for November and December of 2007, and January of 2008. This is illustrated in the rotation chart below. The period between November 1 and January 31 is referred to as the reference period for the interview.



Month of Expenditure	Month of Interview					
	January Panel A	February Panel B	March Panel C	April Panel A	May Panel B	June Panel C
October	X					
November	X	X				
December	X	X	X			
January		X	X	X		
February			X	X	X	
March				X	X	X
April					X	X
May						X

Please note that UCCs 006001 and 006002 -- total amount owed to creditors (2nd and 5th interviews) -- do not adhere to the above mapping scheme. They are mapped to the month of the interview, *not* to preceding months.

The microdata files are organized and identified by collection period, i.e., the month of the interview. Thus, the MTAB file for the second quarter of 2008 contains expenditure data collected in interviews that took place in April, May, and June of 2008. Referring to the rotation chart, one can see that this MTAB file contains expenditures made between January 2008 and May 2008. Similarly, the MTAB file for the third quarter of 2008 (interviews conducted between July and September) contains expenditures made between April and August 2008. To obtain all expenditures made in January 2008, one should access the MTAB files for both the first and second quarters of 2008. The MTAB file for the first quarter of 2008 would contain January expenditures made by CUs interviewed in February and March 2008, while the MTAB file for the second quarter of 2008 would contain January expenditures made by CUs interviewed in April 2008.

As a consequence, users should be clear as to whether they desire estimates based on when expenditures were reported (collection period) or when expenditures were made (calendar period).

To produce an annual estimate for 2008 based on collection period, that is, from all interviews conducted in 2008, data users need data only from Q081 through Q084 files. However, to produce a 2008 annual estimate based on expenditures made in 2008 (calendar period), one needs to access five collection-quarter files, the first quarter of 2008 through the first quarter of 2009. (The estimates published by BLS are based on calendar periods that require the subsequent year's first quarter data).

The ITAB files are derived in a slightly different manner than MTAB. As was mentioned in the description of the ITAB file, the data on the file represents the conversion of annual and point-of-interview data into a monthly format compatible with MTAB. Looking at a CU interviewed in January 2008, as an example, nonfarm business income earned over the previous 12 months would be collected and recorded as such on the FMLY file. For the ITAB file, this annual amount would be divided by 12, and separate records would be created for October, November, and December each containing that amount.

The variables REF\_MO, REF\_YR, QINTRVMO, and QINTRVYR indicate reference month of expenditure, reference year of expenditure, interview month, and interview year, respectively. REF\_MO and REF\_YR, in the MTAB and ITAB files, can be used to select all data for the desired period in which expenditures were made. Because of the interview rotation pattern, there is a one-month to three-month lag between the time an expenditure occurs and the time it is reported. QINTRVMO and QINTRVYR can be used to identify the collection reference period.

In addition to its effect on the selection of data prior to estimation, this distinction between collection period and calendar period also directly affects the estimation procedure for producing means. In computing means based on data collected from all CUs interviewed in a given time frame (e.g., year, quarter, 8 months), the potential contribution of each CU to the mean is the same. That is each CU can contribute data from the entire reference period to the estimate. On the other hand, in computing means based on expenditures made in a given time frame, the potential contribution of each CU to the mean

varies depending on how closely the reference period for an interview coincides with the time frame desired. To see this more clearly, refer once again to the rotation chart. To compute a mean for expenditures made during the first quarter of the year, one would obtain data from CUs interviewed between February and June. However, their potential contributions to the mean are not equal. CUs interviewed in February only contribute 'one-third' of the expenditures they made during the reference period to the estimate (their January expenditures), while CUs interviewed in April contribute all their expenditures to the estimate.

As a result, the population (the denominator in the equation for a mean) has to be adjusted to account for the difference in contribution among CUs. At BLS we create a variable, MO\_SCOPE, that shows the number of months a CU's interview can contribute to the mean or is "in scope" for the time period the estimate will cover. All CUs interviewed in the same month will have identical values for MO\_SCOPE, as their potential contribution to the mean is the same. Thus, MO\_SCOPE will be conditioned on the value of QINTRVMO (and possibly QINTRVYR).

Continuing with our example of estimating a mean for expenditures made during the first quarter of the year, we would access data from files for the first and second quarter of the year. MO\_SCOPE would be derived as explained below.

```
If QINTRVMO is 1 then MO_SCOPE is 0
if QINTRVMO is 2 then MO_SCOPE is 1
if QINTRVMO is 3 then MO_SCOPE is 2
if QINTRVMO is 4 then MO_SCOPE is 3
if QINTRVMO is 5 then MO_SCOPE is 2
if QINTRVMO is 6 then MO_SCOPE is 1
```

Note that MO\_SCOPE has a value of 0 for CUs interviewed in January, as they report expenditures for October through December, totally outside the period of interest. One could extract a data set of only CUs interviewed between February and June to eliminate that condition. How MO\_SCOPE is used in estimation will be discussed later.

### **c. TIME PERIOD DIFFERENCES**

It has been mentioned previously that these files contain data that can cover a variety of time periods. Values for MTAB and ITAB variables are monthly. Values for variables on the FMLY and MEMB files can vary. For example income variables are for annual time periods and demographic variables are as of the time of interview. As such, users should pay particular attention to the descriptions of variables in the detailed listings of Section III.E. DETAILED VARIABLE DESCRIPTIONS.

This is particularly important where the user may have a choice between variables on two files that contain the same data adjusted to reflect different time periods. For instance, FMLY income data are annual covering the 12-month period prior to the collection month, whereas in ITAB these income data have been converted into monthly values. Selected demographic characteristic variables in the FMLY files contain values as of the date of interview. In the ITAB files, these values are treated as if they were "annual" amounts, and are converted to monthly records by dividing the values by 12. To illustrate each of these cases, the following example looks at a CU interviewed in April whose reference person is 60 years old at the time of interview and where CU income from wages and salaries over the previous 12 months is \$48,000.

	FMLY		ITAB	
<u>VARIABLE</u>	<u>AMOUNT</u>	<u>UCC</u>	<u>AMOUNT</u>	<u>MONTH</u>
FSALARYM	\$48,000	900000	\$4,000	JAN
		900000	\$4,000	FEB
		900000	\$4,000	MAR
AGE_REF	60	980020	5	JAN
			5	FEB
			5	MAR

Users should be aware of these time period differences when using the data.

**d. COMPARISONS WITH PUBLISHED CE DATA**

The mean values for some income and expenditure items which appear in CE publications are different than those derived from the Interview public-use microdata because some variables are topcoded or suppressed on the public-use files, but are not so treated on BLS's own data base in producing published data. (For detailed topcoding information, see Section IV. TOPCODING AND OTHER NONDISCLOSURE REQUIREMENTS.)

**2. ESTIMATION OF UNWEIGHTED STATISTICS**

**a. AGGREGATE STATISTICS**

To compute unweighted aggregate expenditures from data on the MTAB files, one would sum the value of the COST field for MTAB records of interest. These records could be selected on the basis of factors such as item category, month or year of occurrence, or characteristics of the CU or its members. While MTAB is a monthly file, there is no summation done at the monthly level for each CU for expenditures with similar UCC and gift characteristics. Thus one may find multiple MTAB records with identical characteristics including COST, if the CU reported the expenditures as discrete purchases. A similar approach can be applied to estimate aggregate income from data on the ITAB files, summing the VALUE field on the appropriate records.

Certain MTAB and ITAB item categories are collected only in the 5th interview. Therefore, the data are reported by only one-fourth of the sample at any time. For some categories, the reported values have been multiplied by 4 to expand them to represent the total sample, while in other categories, this has not been done. When estimating for these UCCs, values should be multiplied by 4 for total sample representation. (See Sections III.F.3 MONTHLY EXPENDITURES (MTAB) FILE and III.F.4 INCOME (ITAB) FILE.)

The estimation of aggregates for FMLY and MEMB file variables is similar to that for MTAB and ITAB variables. To estimate aggregates from data on the FMLY file, one would sum the value of the desired variable field for FMLY records selected on the basis of, for example, other CU characteristic variables on the FMLY file, characteristics of CU members, expenditures made, and month or year of interview. Aggregates for MEMB file variables would be developed in a similar fashion.

The user must be careful in interpreting what the aggregate represents because of the time period differences between variables on different files. For example, summing the COST field of MTAB records representing purchases for a UCC that occurred in a specific month will yield an aggregate monthly expenditure for that UCC. However, summing the value of a FMLY file variable such as FSALARYM for all CUs interviewed in a specific month will yield an aggregate annual value for that variable.

In general, one can use an aggregate derived for a certain time period to extrapolate an aggregate estimate for a longer time period. A typical case is the estimation of annual aggregates based on an aggregate using less than 12 months of data. To do this, divide the number of months for which the

estimate is desired (12) by the number of months of expenditure data being used and multiply the aggregate by that quotient.

## **b. MEANS**

There are two types of means that are customarily derived from CE data. The most common is the sample mean computed over all CUs. The other is the mean of those reporting computed over only those CUs actually reporting the item. The following sections look at each type of mean.

### **(i) SAMPLE MEANS**

Unweighted sample means are derived by computing an aggregate estimate for the desired item and dividing it by the sample size over the time period being estimated. Deriving an aggregate estimate has already been discussed; ascertaining the correct sample size is the next task.

The Interview survey is designed such that the CUs interviewed in each quarter represent one independent sample. Since there is one FMLY record for each sample CU, the national sample for the first quarter of 2008 is 6,914 (See Section III.B. RECORD COUNTS AND LOGICAL RECORD LENGTHS) The appropriate sample size for any time period will reflect the number of interviewed CUs eligible to report data over the period adjusted by the number of independent samples represented. As explained earlier, the major consideration is whether the desired estimate is a collection period estimate or a calendar period estimate.

To calculate the sample size for a collection period estimate, divide the total number of CUs interviewed by the quotient of the number of months in which these interviews occurred divided by 3. For example, one might wish to estimate the annual sample mean expenditure for men's shirts for all CUs interviewed in 2008. If one were to divide the aggregate expenditure on men's shirts from these interviews by the total number of CUs interviewed, one would get an annual sample mean about 1/4 as large as it should be, since the number of CUs interviewed represented four independent samples (one sample for each quarter of 2008). In fact, one would have derived the average quarterly sample mean rather than the annual sample mean. To get the annual sample mean, one would have to divide the total number of CUs interviewed by 4 (or 12 months divided by 3), thereby computing the average sample size over the year, and divide the aggregate by that amount.

As mentioned earlier, when one computes a calendar period estimate, the variable MO\_SCOPE is required to adjust the sample size for the difference in potential contribution among CUs. Since one independent sample of CUs is represented in each quarter, the sum of MO\_SCOPE for one quarter can be up to 3 times the independent sample (if MO\_SCOPE = 3 for every CU interviewed in the quarter, the sum of MO\_SCOPE would be equal 3 times the independent sample). To calculate the sample size for a calendar period estimate, sum MO\_SCOPE for the appropriate CUs and divide by 3. Note that this makes sense in those instances where MO\_SCOPE does not equal 3. Referring to the example where MO\_SCOPE was introduced, we can see that summing MO\_SCOPE for CUs interviewed in the second quarter of the year (QINTRVMO = 4-6) would yield approximately one independent sample as CUs interviewed in June would be counted twice while CUs interviewed in April would not be counted. Dividing this amount by 3 would yield a sample size of 1/3 the independent sample. Keep in mind that only 1/3 of the expenditures reported in those interviews occurred within the time period of the aggregate being estimated. Only April data from May interviews and April-May data from June interviews would be included in the aggregate.

One can see how the computation of sample size is affected when one calculates the commonly-used annual calendar period estimate. A 2008 estimate would be based on data from interviews over five quarters. MO\_SCOPE would take on the following values:

	<b>Interview Month and Year</b>									
	<b>2008</b>					<b>2008</b>				
	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	
<b>MO_SCOPE</b>	0	1	2	3	3	3	3	3	3	
			<b>2008</b>		<b>2009</b>					
	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>				
<b>MO_SCOPE</b>	3	3	3	3	2	1				

Summing MO\_SCOPE for each of the five quarters and dividing by 3 would yield a value of 1/3 the independent sample for the first quarter of 2008, 2/3 the independent sample for the first quarter of 2008, and one independent sample for the second, third, and fourth quarters of 2007. Summed over the five quarters, this represents 4 independent samples, so the result should be divided by 4 to get the correct sample size of one average independent sample. Thus, the general rule in computing sample size for deriving an annual calendar period estimate is to sum MO\_SCOPE over the five quarters and divide by 12.

**(ii) MEANS OF THOSE REPORTING**

The only difference between estimating a mean-of-those-reporting and estimating a sample mean is in selecting the appropriate CUs to use in the computation. The CUs to be used depend on the objective of the analysis. In deriving a sample mean, all sample units interviewed over the time period covered are included in the computation of sample size whether or not they reported the item being estimated. In computing a mean of those reporting, only those CUs reporting the desired item would be included. The aggregate estimate used in the numerator is the same in either case. The adjustments made for MO\_SCOPE and the fact that each quarter represents one independent sample would apply in this case as well. It should be noted that means of those reporting are not U.S. population estimates. They cannot be used to calculate total expenditures or expenditure shares for the U.S. population. They are useful only at the computed level.

**3. ESTIMATION OF WEIGHTED STATISTICS**

By applying weights when computing aggregates or means, one transforms the results from sample estimates to population estimates. There are 45 weight variables on the FMLY file, WTREP01-WTREP44 and FINLWT21. All the WTREP variables are half-sample replicate weights that should be used in variance computation. Use FINLWT21 to estimate weighted statistics for the population of CUs.

Users should follow the procedures for estimating unweighted statistics described above. When estimating weighted aggregates, the desired cost or value field should be multiplied by FINLWT21 at the CU level before summing across all appropriate records. In determining the proper sample size when computing collection period means, divide the sum of FINLWT21 for the CUs interviewed by the quotient of the number of months in which these interviews occurred divided by 3. Where calendar period means are to be estimated, multiply MO\_SCOPE by FINLWT21 for each CU prior to summing and dividing by 3.

**B. DESCRIPTION OF FORMULAS**

Expenditure items will be referred to in these descriptions, but income items can be handled similarly except where otherwise stated.

Definition of Terms:

Let

$S$  = all CUs in the subpopulation of interest  
 $x$  = item(s) of interest  
 $q$  = number of months for which estimate is desired  
 $m$  = number of months of interviews whose expenditures are to be used in calculating the estimate (collection period estimate)  
 $r$  = number of months in which expenditures were made to be used in calculating the estimate (calendar period estimate)  
 $j$  = individual CU in subpopulation  $S$   
 $t$  = month of expenditure  
 $i$  = month of interview  
 $MSC$  = MO\_SCOPE value

Then

$E_{j,x,i}$  = 3-month expenditure by CU $_j$  on item  $x$  reported at month  $i$  interview  
 $E_{j,x,t}$  = monthly expenditure by CU $_j$  on item  $x$  made during month  $t$   
 $W_{j,i,F21}$  = weight assigned to CU $_j$  for interview at month  $i$   
 $W_{j,t,F21}$  = weight assigned to CU $_j$  for interview where CU $_j$  makes expenditure during month  $t$

The F21 denotes FINLWT21, which is used for population estimates.

## 1. AGGREGATE EXPENDITURE ESTIMATES (UNWEIGHTED)

An estimate of unweighted aggregate expenditures for a collection period can be expressed as:

${}_{UK} X_{(S,x)(q,m)}$  = an unweighted collection (*UK*) period estimate of aggregate expenditures ( $X$ ) by CUs in subpopulation  $S$ , indexed from  $j = 1$  through  $k$ , on item  $x$  over  $q$  months of interviews, where data collected over  $m$  months of interviews are used.

or

$${}_{UK} X_{(S,x)(q,m)} = \left( \frac{q}{m} \right) \sum_{i=1}^m \left( \sum_{j=1}^k E_{x,j} \right)_i$$

An estimate of unweighted aggregate expenditures for a calendar period can be expressed as:

${}_{UC} X_{(S,x)(q,r)}$  = an unweighted calendar (*UC*) period estimate of aggregate expenditures ( $X$ ) by CUs in subpopulation  $S$ , indexed from  $j = 1$  through  $k$ , on item  $x$  over  $q$  months, where expenditures made over  $r$  months are used.

or

$${}_{UC} X_{(S,x)(q,r)} = \left( \frac{q}{r} \right) \sum_{t=1}^r \left( \sum_{j=1}^k E_{x,j} \right)_t$$

## 2. SAMPLE MEAN EXPENDITURE ESTIMATES (UNWEIGHTED)

An estimate of an unweighted mean expenditure for a collection period can be expressed as:

${}_{UK}\bar{X}_{(S,x)(q,m)}$  = an unweighted collection period estimate of the mean expenditure by CUs in subpopulation  $S$  on item  $x$  over a period of  $q$  months, where data collected over  $m$  months of interviews are used.

or

$${}_{UK}\bar{X}_{(S,x)(q,m)} = \left( \frac{{}_{UK}X_{(S,x)(q,m)}}{\sum_{i=1}^m \left( \sum_{j=1}^k S_j \right)_i} \right) \left( \frac{m}{3} \right)$$

An estimate of an unweighted mean expenditure for a calendar period can be expressed as:

${}_{UC}\bar{X}_{(S,x)(q,r)}$  = an unweighted calendar period estimate of the mean expenditure by CUs in subpopulation  $S$  on item  $x$  over a period of  $q$  months, where expenditures made over  $r$  months are used.

or

$${}_{UC}\bar{X}_{(S,x)(q,r)} = \left( \frac{{}_{UC}X_{(S,x)(q,r)}}{\sum_{t=1}^{r+3} \left( MSC \sum_{j=1}^k S_j \right)_t} \right) r$$

Note: For  $t=1$ ,  $MO\_SCOPE$  ( $MSC$ ) = 0, since CUs interviewed in the first month for which the estimate is to be generated report expenditures outside the estimate period, i.e., in the previous quarter, month, etc. For  $t=(r+3)$ ,  $MO\_SCOPE$  = 1 since only 1 month's worth of expenditures have a chance to contribute to the calendar period of  $r$  months.

### **3. AGGREGATE EXPENDITURE ESTIMATES (WEIGHTED)**

An estimate of weighted aggregate expenditures for a collection period can be expressed as:

${}_{WK}X_{(S,x)(q,m)}$  = a weighted collection ( $WK$ ) period estimate of aggregate expenditures by CUs in subpopulation  $S$  on item  $x$  over a period of  $q$  months, where data collected over  $m$  months of interviews are used.

or

$${}_{WK}X_{(S,x)(q,m)} = \left( \frac{q}{m} \right) \sum_{i=1}^m \left( \sum_{j=1}^k (W_{j,F21} E_{x,j}) \right)_i$$

An estimate of weighted aggregate expenditures for a calendar period can be expressed as:

${}_{WC}X_{(S,x)(q,r)}$  = a weighted calendar (WC) period estimate of aggregate expenditures by CUs in subpopulation S on item x over q months, where expenditures made over r months are used.

or

$${}_{WC}X_{(S,x)(q,r)} = \left( \frac{q}{r} \right) \sum_{t=1}^r \left( \sum_{j=1}^k (W_{j,F21} E_{x,j}) \right)_t$$

#### 4. SAMPLE MEAN EXPENDITURE ESTIMATES (WEIGHTED)

An estimate of a weighted mean expenditure for a collection period can be expressed as:

${}_{WK}\bar{X}_{(S,x)(q,m)}$  = a weighted collection (WK) period estimate of the mean expenditure by CUs in subpopulation S on item x over a period of q months, where data collected over m months of interviews are used.

or

$${}_{WK}\bar{X}_{(S,x)(q,m)} = \left( \frac{{}_{WK}X_{(S,x)(q,m)}}{\sum_{i=1}^m \left( \sum_{j=1}^k W_{j,F21} \right)_i} \right) \left( \frac{m}{3} \right)$$

An estimate of a weighted mean expenditure for a calendar period can be expressed as:

${}_{WC}\bar{X}_{(S,x)(q,r)}$  = a weighted calendar (WC) period estimate of the mean expenditure by CUs in subpopulation S on item x over a period of q months, where expenditures made over r months are used.

or

$${}_{WC}\bar{X}_{(S,x)(q,r)} = \left( \frac{{}_{WC}X_{(S,x)(q,r)}}{\sum_{t=1}^{r+3} \left[ \frac{(MSC) \left( \sum_{j=1}^k W_{j,F21} \right)_t}{r} \right]} \right)$$

Note: For  $t=1$ , MO\_SCOPE (MSC) = 0, since CUs interviewed in the first month for which the estimate is to be generated report expenditures outside the estimate period, i.e., in the previous



quarter, month, etc. For  $t = (r+3)$ , MO\_SCOPE = 1 since only 1 month's worth of expenditures have a chance to contribute to the calendar period of  $r$  months.

## **VI. RELIABILITY STATEMENT**

### **A. DESCRIPTION OF SAMPLING AND NONSAMPLING ERRORS**

Sample surveys are subject to two types of errors, sampling and non-sampling. Sampling errors occur because observations are not taken from the entire population. The standard error, which is the accepted measure for sampling error, is an estimate of the difference between the sample data and the data that would have been obtained from a complete census. The sample estimate and its estimated standard error enable one to construct confidence intervals.

Assuming the normal distribution applies to the means of expenditures, the following statements can be made:

- 1) The chances that an estimate from a given sample would differ from a complete census figure by less than one standard error are approximately 68 out of 100.
- 2) The chances that the difference would be less than 1.6 times the standard error are approximately 90 out of 100.
- 3) The chances that the difference would be less than two times the standard error are approximately 95 out of 100.

Nonsampling errors can be attributed to many sources, such as definitional difficulties, differences in the interpretation of questions, inability or unwillingness of the respondent to provide correct information, mistakes in recording or coding the data obtained, and other errors of collection, response, processing, coverage, and estimation of missing data. The full extent of the nonsampling error is unknown. Estimates using a small number of observations are less reliable. A small amount of nonsampling error can cause a small difference to appear significant even when it is not. It is probable that the levels of estimated expenditures obtained in the Interview survey are generally lower than the "true" level due to the above factors.

### **B. ESTIMATING SAMPLING ERROR**

#### **1. VARIANCE ESTIMATION**

Variances can be estimated in many ways. The method illustrated below (a pseudo replication technique) is chosen because it is accurate and simple to understand. The basic idea is to construct several artificial "subsamples" from the original sample data such that the variance information of the original data is preserved in the subsamples. The subsamples (or pseudo replicates) can then be used to approximate variances for the estimates. Forty-four separate subsamples can be extracted from the data base using the replicate weight variables, WTREP01-WTREP44, associated with each CU. Note that only half of the CUs are assigned to each of the 44 replicates. The replicate weight variable contains a value greater than 0 for CUs assigned to that replicate. A value of missing is assigned to the weight variable for those CUs not included in a particular replicate.

The notation for the weighted collection period and calendar period estimates of aggregate expenditures in Section V.B.3 AGGREGATE EXPENDITURE ESTIMATES (WEIGHTED) does not explicitly identify the replicate as a variable because to calculate an aggregate (or mean) only FINLWT21 is used.

An estimate for the variance of an aggregate or mean estimate can be computed by generating 44 separate estimates using the 44 replicate weights and employing the standard formula for computing sample variance. To illustrate the estimation of variance, the notation must first be expanded to include the replicates explicitly.

Expenditure items will be referred to in these descriptions, but income items can be handled similarly except where otherwise stated.

Let the subscript “a” represent one of the 44 sets of replicate weights on the FMLY files. Following the earlier notation in Section V.B., we have.

$AK X_{(S,x)(q,m),a}$  = a collection period estimate of aggregate expenditures by CUs in subpopulation S on item x over a period of q months, using data collected over m months of interviews, calculated using the weights of the a<sup>th</sup> replicate

and,

$AK \bar{X}_{(S,x)(q,m),a}$  = a collection period estimate of the mean expenditure by CUs in subpopulation S on item x over a period of q months, using data collected over m months of interviews, calculated using the weights of the a<sup>th</sup> replicate

Note that an estimate using any one of the first 44 replicate weights uses only part of the expenditure data; in general:  $AK X_{(S,x)(q,m),1}, \dots, AK X_{(S,x)(q,m),44} \neq WK X_{(S,x)(q,m)}$

Using standard variance formula, the variance of aggregate expenditures can be estimated as follows:

$$V\left( WK X_{(S,x)(q,m)} \right) = \frac{1}{44} \sum_{a=1}^{44} \left( AK X_{(S,x)(q,m),a} - WK X_{(S,x)(q,m)} \right)^2$$

Similarly, estimates for the variances of  $WK \bar{X}_{(S,x)(q,m)}$  can be given as:

$$V\left( WK \bar{X}_{(S,x)(q,m)} \right) = \frac{1}{44} \sum_{a=1}^{44} \left( AK \bar{X}_{(S,x)(q,m),a} - WK \bar{X}_{(S,x)(q,m)} \right)^2$$

## **2. STANDARD ERROR OF THE MEAN**

The standard error of the mean,  $S.E.(\bar{X})$ , is used to obtain confidence intervals that evaluate how close the estimate may be to the true population mean.  $S.E.(\bar{X})$  is defined as the square root of the variance of the mean. For example, the weighted calendar period estimated mean expenditure for total food by all consumer units in 2008 is \$7,123.51. The standard error for this estimate is \$50.86. A 95 percent confidence interval can be constructed around this estimate, bounded by values 1.96 times the standard error less than and greater than the estimate, that is, from \$7,023.82 to \$7,223.20. We could conclude with 95 percent confidence that the true population mean expenditure for food for all consumer units in 2008 lies within the interval \$7,023.82 to \$7,223.20.

## **3. STANDARD ERROR OF THE DIFFERENCE BETWEEN TWO MEANS**

Standard errors may also be used to perform hypothesis testing, a procedure that evaluates population parameters using sample estimates. The most common types of hypotheses are: 1) the population parameters are identical, and 2) they are different.

For example, the 2008 mean expenditure estimate for apparel and services for CUs in the \$40,000 to \$49,999 income range is \$977.74 and the estimate for CUs in the \$50,000 to \$59,999 income range is \$1,108.80. The apparent difference between the two mean expenditures is \$131.06. The standard error on the estimate of \$977.74 is \$42.96 and the estimated standard error for \$1108.80 is \$41.13.

The standard error of a difference is approximately equal to

$$S.E.(\bar{X}_1, \bar{X}_2) = \sqrt{V(\bar{X}_1) + V(\bar{X}_2)} \quad (1)$$

where

$$V(\bar{X}_i) = (S.E.(\bar{X}_i))^2$$

This assumes the two sample means,  $\bar{X}_1$  and  $\bar{X}_2$ , are disjoint subsets of the population. Hence the standard error of the difference in apparel and services expenditures between these two income groups of complete income reporters is about

$$\sqrt{(42.96)^2 + (41.13)^2} = 59.47 \quad (2)$$

This means that the 95 percent confidence interval around the difference is from \$14.50 to \$247.62. Since this interval does not include zero, we can conclude with 95 percent confidence that the mean apparel and services expenditures for CUs in the \$50,000 to \$59,999 income range is different than the mean apparel and services expenditures for CUs in the \$40,000 to \$49,999 income range.

Analyses of the difference between two estimates can also be performed on non-disjoint sets of population, where one is a subset of the other. The formula for computing the standard error of the difference between two non-disjoint estimates is

$$S.E.(\bar{X}_1, \bar{X}_2) = \sqrt{V(\bar{X}_1) + V(\bar{X}_2) - 2r(V(\bar{X}_1) * V(\bar{X}_2))} \quad (3)$$

where

$$V(\bar{X}_i) = (S.E.(\bar{X}_i))^2$$

and where r is the correlation coefficient between  $\bar{X}_1$  and  $\bar{X}_2$ . The correlation coefficient is generally no greater than 0.2 for CE estimates.

## VII. MICRODATA VERIFICATION AND ESTIMATION METHODOLOGY

This section is designed to help users become familiar with the microdata files. The following program gives users a benchmark to verify that their copy of the CD-ROM contains valid data, illustrates the methodology CE uses in producing publication tables, and offers an example of coding to access the data and produce a sample table. The program is written in SAS and shows usage of the SAS data sets available on the SAS CD-ROM. A program written in SAS but utilizing the ASCII data sets is present on the ASCII CD-ROM but will not be referenced here. Refer to the output file on the CD to check output. (Note: CE data published by BLS may not match some values estimated using the microdata due to topcoding of data and CE publication programming methodology.) All variables and ranges referred to in

the program are described in detail in Section III.F. DETAILED VARIABLE DESCRIPTIONS in this documentation.

This program produces a table of selected expenditures by income class of the CU. The first section of the program extracts the relevant variables from the FMLY files, while the second section extracts the expenditure and income data from the MTAB, ITAB and ITBI files. These three data sets are then used along with the ISTUB processing file to construct the sample table output. This output is the product of two SAS arrays. The values in one array are divided by the value in the other array to obtain weighted mean expenditures. The base, or denominator, for the division is a vector consisting of the weighted total population for the U.S. and selected income class categories. The numerator is a matrix of aggregate weighted costs for each line item in the table for the total U.S. population and each income class category.

It should be emphasized that this program has been written solely for the verification of the microdata and as an illustration of the CE estimation methodology. It should not be used for any other purpose.

Note: This program processes large amounts of data. If you are using a PC with limited capabilities it may be necessary to run this program in sections.

## A. SAMPLE PROGRAM

```

*****/
2      /* PROGRAM NAME: CEX INTERVIEW SURVEY SAMPLE PROGRAM (SAS)          */
3      /* LOCATION: D:\PROGRAMS                                           */
4      /* FUNCTION: CREATE AN INTERVIEW SURVEY EXPENDITURE TABLE BY INCOME CLASS */
5      /*      USING MICRODATA FROM THE BUREAU OF LABOR STATISTIC'S CONSUMER */
6      /*      EXPENDITURE SURVEY.                                         */
7      /*                                                                    */
8      /* WRITTEN BY: ERIC KEIL                                           */
9      /* MODIFICATIONS:                                                 */
10     /* DATE-      MODIFIED BY-      REASON-                            */
11     /* -----      -----      -----                              */
12     /* 03/21/02   ERIC KEIL         IMPROVE EFFICIENCY                 */
13     /* 10/22/03   ERIC KEIL         UPDATE FOR 2002 DATA             */
14     /* 11/20/03   ERIC KEIL         INCLUDE ROUTINE TO AGGREGATE EASIER */
15     /*                                                                    */
16     /* FOR SAS VERSION 8 OR HIGHER                                       */
17     /*                                                                    */
18     /******/
19
20     /*Enter Data Year*/
21     %LET YEAR = 2008;
22     /*Enter location of the unzipped microdata file*/
23     /*Be sure to keep the same file structure as on the CD*/
24     %LET DRIVE = C:\2008_CEX;
25
26
27     /******/
28     /* STEP1: READ IN THE STUB PARAMETER FILE AND CREATE FORMATS          */
29     /* ----- */
30     /* 1 CONVERTS THE STUB PARAMETER FILE INTO A LABEL FILE FOR OUTPUT    */
31     /* 2 CONVERTS THE STUB PARAMETER FILE INTO AN EXPENDITURE AGGREGATION FILE */
32     /* 3 CREATES FORMATS FOR USE IN OTHER PROCEDURES                      */
33     /******/
34
35
36     %LET YR1 = %SUBSTR(&YEAR,3,2);
37     %LET YR2 = %SUBSTR(%EVAL(&YEAR+1),3,2);
38
39     LIBNAME I&YR1 "&DRIVE\INTRVW&YR1";
NOTE: Libref I08 was successfully assigned as follows:
      Engine:          V9
      Physical Name: C:\2008_CEX\INTRVW08
40
41
42     DATA STUBFILE (KEEP= COUNT TYPE LEVEL TITLE UCC SURVEY GROUP LINE);
43     INFILE "&DRIVE\PROGRAMS\ISTUB&YEAR..TXT"
44     PAD MISSOVER;
45     INPUT @1 TYPE $1. @ 4 LEVEL $1. @7 TITLE $CHAR60. @70 UCC $6.
46           @80 SURVEY $1. @86 GROUP $7.;
47     IF (TYPE = '1');
48     IF GROUP IN ('CUCHARS' 'FOOD' 'EXPEND' 'INCOME');
49     IF SURVEY = 'T' THEN DELETE;
50
51     RETAIN COUNT 9999;

```

Sets the calendar year and drive used as macro variables that can be used throughout the program.

Reads in the aggregation stub file and dynamically creates numbers associated with each expenditure line item.

Note: This aggregation file can be modified to accommodate any customized aggregation scheme.

One needs only to make sure that the column start positions in the file match the start positions in the input statement.

```
52     COUNT + 1;
53     LINE = PUT(COUNT, $5.)||LEVEL ;
WARNING: Variable COUNT has already been defined as numeric.
54     /* READS IN THE STUB PARAMETER FILE AND CREATES LINE NUMBERS FOR UCCS */
55     /* A UNIQUE LINE NUMBER IS ASSIGNED TO EACH EXPENDITURE LINE ITEM      */
56     RUN;
```

NOTE: The infile "C:\2008\_CEX\PROGRAMS\ISTUB2008.TXT" is:  
File Name=C:\2008\_CEX\PROGRAMS\ISTUB2008.TXT,  
RECFM=V,LRECL=256

NOTE: 1264 records were read from the infile "C:\2008\_CEX\PROGRAMS\ISTUB2008.TXT".  
The minimum record length was 95.  
The maximum record length was 98.

NOTE: The data set WORK.STUBFILE has 709 observations and 8 variables.

NOTE: DATA statement used (Total process time):  
real time 0.39 seconds  
cpu time 0.01 seconds

```
57
58
59     DATA AGGFMT1 (KEEP= UCC LINE LINE1-LINE10);
60     SET STUBFILE;
61     LENGTH LINE1-LINE10 $6.;
62     ARRAY LINES(9) LINE1-LINE9;
63     IF (UCC > 'A') THEN
64         LINES(SUBSTR(LINE,6,1)) = LINE;
65     RETAIN LINE1-LINE9;
66     IF (UCC < 'A') THEN
67         LINE10 = LINE;
68     IF (LINE10);
69     /* MAPS LINE NUMBERS TO UCCS */
70     RUN;
```

NOTE: Character values have been converted to numeric values at the places given by:  
(Line):(Column).  
70:15 74:7

NOTE: There were 709 observations read from the data set WORK.STUBFILE.

NOTE: The data set WORK.AGGFMT1 has 584 observations and 12 variables.

NOTE: DATA statement used (Total process time):  
real time 0.10 seconds  
cpu time 0.03 seconds

```
71
72
73     PROC SORT DATA= AGGFMT1 (RENAME=(LINE= COMPARE));
74     BY UCC;
75     RUN;
```

NOTE: There were 584 observations read from the data set WORK.AGGFMT1.

NOTE: The data set WORK.AGGFMT1 has 584 observations and 12 variables.

NOTE: PROCEDURE SORT used (Total process time):  
real time 0.10 seconds  
cpu time 0.03 seconds

Subsequent program steps  
manipulate the aggregation stub file  
into a dataset that associates UCCs  
with line numbers.

```

76
77
78 PROC TRANSPOSE DATA= AGGFMT1 OUT= AGGFMT2 (RENAME=(COL1= LINE));
79 BY UCC COMPARE;
80 VAR LINE1-LINE10;
81 RUN;

```

NOTE: There were 584 observations read from the data set WORK.AGGFMT1.

NOTE: The data set WORK.AGGFMT2 has 5840 observations and 4 variables.

NOTE: PROCEDURE TRANSPOSE used (Total process time):

```

real time      0.10 seconds
cpu time       0.03 seconds

```

```

82
83
84 DATA AGGFMT (KEEP= UCC LINE);
85 SET AGGFMT2;
86 IF LINE;
87 IF SUBSTR(COMPARE,6,1) > SUBSTR(LINE,6,1) OR COMPARE=LINE;
88 /* AGGREGATION FILE. EXTRANEIOUS MAPPINGS ARE DELETED */
89 /* PROC SQL WILL AGGANGE LINE#/UCC PAIRS FOR USE IN PROC FORMAT */
90 RUN;

```

NOTE: Character values have been converted to numeric values at the places given by:

(Line):(Column).

92:8

NOTE: There were 5840 observations read from the data set WORK.AGGFMT2.

NOTE: The data set WORK.AGGFMT has 2725 observations and 2 variables.

NOTE: DATA statement used (Total process time):

```

real time      0.01 seconds
cpu time       0.01 seconds

```

```

91
92
93 PROC SQL NOPRINT;
94 SELECT UCC, LINE, COUNT(*)
95 INTO :UCCS SEPARATED BY " ",
96 :LINES SEPARATED BY " ",
97 :CNT
98 FROM AGGFMT;

```

NOTE: The query requires remerging summary statistics back with the original data.

99 QUIT;

NOTE: PROCEDURE SQL used (Total process time):

```

real time      0.48 seconds
cpu time       0.04 seconds

```

```

100 RUN;
101
102
103 %MACRO MAPPING;
104 %DO I = 1 %TO &CNT;
105 "%SCAN(&UCCS,&I,%STR( ))" = "%SCAN(&LINES,&I,%STR( ))"
106 %END;

```

Creates a Dataset that can be used to associate titles with line numbers with a format procedure.

```

107 %MEND MAPPING;
108
109
110 DATA LBLFMT (RENAME=(LINE= START TITLE= LABEL));
111 SET STUBFILE (KEEP= LINE TITLE);
112 RETAIN FMTNAME 'LBLFMT' TYPE 'C';
113 /* LABEL FILE. LINE NUMBERS ARE ASSIGNED A TEXT LABEL */
114 /* DATASET CONSTRUCTED TO BE READ INTO A PROC FORMAT */
115 RUN;

```

NOTE: There were 709 observations read from the data set WORK.STUBFILE.

NOTE: The data set WORK.LBLFMT has 709 observations and 4 variables.

NOTE: DATA statement used (Total process time):

```

real time          0.03 seconds
cpu time           0.03 seconds

```

```

116
117
118 PROC FORMAT;
119
120 VALUE $AGGFMT (MULTILABEL)
121 %MAPPING
122 OTHER= 'OTHER';
NOTE: Format $AGGFMT has been output.
123 /* CREATE AGGREGATION FORMAT */
124
125
126 VALUE $INC (MULTILABEL)
127 '01' = '01'
128 '01' = '10'
129 '02' = '02'
130 '02' = '10'
131 '03' = '03'
132 '03' = '10'
133 '04' = '04'
134 '04' = '10'
135 '05' = '05'
136 '05' = '10'
137 '06' = '06'
138 '06' = '10'
139 '07' = '07'
140 '07' = '10'
141 '08' = '08'
142 '08' = '10'
143 '09' = '09'
144 '09' = '10';
NOTE: Format $INC has been output.
145 /* CREATE INCOME CLASS FORMAT */
146 RUN;

```

NOTE: PROCEDURE FORMAT used (Total process time):

```

real time          18.09 seconds
cpu time           15.93 seconds

```

147

Formats:

Puts the aggregation scheme into a SAS format.

Puts the income groupings into a SAS format.

Note: The multilabel option is necessary in the aggregation format and income format since multiple mappings occur. This option is available in SAS V8 or higher.

Puts the titles into a SAS format for use in the final output.



```

148
149 PROC FORMAT LIBRARY= WORK CNTLIN= LBLFMT;
NOTE: Format $LBLFMT has been output.
150 /* CREATE LABEL FILE FORMATS */
151 RUN;

NOTE: PROCEDURE FORMAT used (Total process time):
      real time          0.01 seconds
      cpu time           0.00 seconds

NOTE: There were 709 observations read from the data set WORK.LBLFMT.

152
153
154 /*****
155 /* STEP2: READ IN ALL NEEDED DATA FROM THE CD-ROM */
156 /* ----- */
157 /* 1 READ IN THE INTERVIEW FMLY FILES & CREATE THE MO_SCOPE VARIABLE */
158 /* 2 READ IN THE INTERVIEW MTAB AND ITAB FILES */
159 /* 3 MERGE FMLY AND EXPENDITURE FILES TO DERIVE WEIGHTED EXPENDITURES */
160 /*****
161
162
163 DATA FMLY (KEEP = NEWID INCLASS WTREP01-WTREP44 FINLWT21 REPWT1-REPWT45);
164
165 SET I&YR1..FMLI&YR1.1X (IN = FIRSTQTR)
166     I&YR1..FMLI&YR1.2
167     I&YR1..FMLI&YR1.3
168     I&YR1..FMLI&YR1.4
169     I&YR1..FMLI&YR2.1 (IN = LASTQTR);
170 BY NEWID;
171 /* READ IN FMLY FILE DATA */
172
173 IF FIRSTQTR THEN
174     MO_SCOPE = (QINTRVMO - 1);
175 ELSE IF LASTQTR THEN
176     MO_SCOPE = (4 - QINTRVMO);
177 ELSE
178     MO_SCOPE = 3;
179 /* CREATE MONTH IN SCOPE VARIABLE (MO_SCOPE) */
180
181 ARRAY REPS_A(45) WTREP01-WTREP44 FINLWT21;
182 ARRAY REPS_B(45) REPWT1-REPWT45;
183
184 DO i = 1 TO 45;
185     IF REPS_A(i) > 0 THEN
186         REPS_B(i) = (REPS_A(i) * MO_SCOPE / 12);
187     ELSE REPS_B(i) = 0;
188     END;
189 /* ADJUST WEIGHTS BY MO_SCOPE TO ACCOUNT FOR SAMPLE ROTATION */
190 RUN;

NOTE: Character values have been converted to numeric values at the places given by:
      (Line):(Column).
      174:19  176:23

NOTE: There were 6914 observations read from the data set I08.FMLI081X.
NOTE: There were 6942 observations read from the data set I08.FMLI082.

```

Reads in the necessary variables from the fmly files. Newid is the code given to a consumer unit each time it participates. Finlwt21 and Wtrep01-Wtrep44 are weight variables used to weight each consumer unit such that it represents some portion of the population. Inclass is a code that represents the range within which the consumer unit's annual income falls.

Lines 173-179 create the variable mo\_scope. Mo\_scope is used to calculate calendar year, as opposed to collection year, estimates. It is used in conjunction with weights to determine populations. NOTE: More information on mo\_scope can be found in the ESTIMATION PROCEDURES section of this documentation.

Lines 181-189 create weights that are mo\_scope adjusted to account for sample rotation.

NOTE: There were 6794 observations read from the data set I08.FMLI083.  
 NOTE: There were 6895 observations read from the data set I08.FMLI084.  
 NOTE: There were 6940 observations read from the data set I08.FMLI091.  
 NOTE: The data set WORK.FMLY has 34485 observations and 92 variables.  
 NOTE: DATA statement used (Total process time):  
     real time            11.43 seconds  
     cpu time              3.97 seconds

191  
 192  
 193  
 194 DATA EXPEND (KEEP=NEWID UCC COST);  
 195  
 196 SET I&YR1..MTBI&YR1.1X  
 197 I&YR1..MTBI&YR1.2  
 198 I&YR1..MTBI&YR1.3  
 199 I&YR1..MTBI&YR1.4  
 200 I&YR1..MTBI&YR2.1  
 201  
 202 I&YR1..ITBI&YR1.1X (RENAME=(VALUE=COST))  
 203 I&YR1..ITBI&YR1.2 (RENAME=(VALUE=COST))  
 204 I&YR1..ITBI&YR1.3 (RENAME=(VALUE=COST))  
 205 I&YR1..ITBI&YR1.4 (RENAME=(VALUE=COST))  
 206 I&YR1..ITBI&YR2.1 (RENAME=(VALUE=COST));  
 additional CPU resources and reduce performance.  
 207 BY NEWID;  
 208  
 209 IF REFYR = "&YEAR" OR REF\_YR = "&YEAR";  
 210 IF UCC = '710110' THEN  
 211 COST = (COST \* 4);  
 212 /\* READ IN MTAB AND ITAB EXPENDITURE AND INCOME DATA \*/  
 213 /\* ADJUST UCC 710110 TO ANNUALIZE \*/  
 214 RUN;

NOTE: There were 572639 observations read from the data set I08.MTBI081X.  
 NOTE: There were 550564 observations read from the data set I08.MTBI082.  
 NOTE: There were 557931 observations read from the data set I08.MTBI083.  
 NOTE: There were 549721 observations read from the data set I08.MTBI084.  
 NOTE: There were 570144 observations read from the data set I08.MTBI091.  
 NOTE: There were 386067 observations read from the data set I08.ITBI081X.  
 NOTE: There were 388209 observations read from the data set I08.ITBI082.  
 NOTE: There were 380709 observations read from the data set I08.ITBI083.  
 NOTE: There were 385857 observations read from the data set I08.ITBI084.  
 NOTE: There were 387501 observations read from the data set I08.ITBI091.  
 NOTE: The data set WORK.EXPEND has 3771669 observations and 3 variables.  
 NOTE: DATA statement used (Total process time):  
     real time            17.23 seconds  
     cpu time              9.84 seconds

215  
 216  
 217  
 218 DATA PUBFILE (KEEP = NEWID INCLASS UCC RCOST1-RCOST45);  
 219 MERGE FMLY (IN = INFAM)  
 220 EXPEND (IN = INEXP);

Reads in all MTAB expenditure data and ITAB income data.

Newid is the consumer unit code. UCC is a code that represents the type of expenditure variable. Cost is the value that corresponds to the UCC code.

Refyr and Ref\_yr are the reference year of the expenditure. These are set such that any expenditure outside of the desired reference year is excluded.

UCC 710110 must be adjusted because only one-fourth of all consumer units interviewed in a quarter are asked this question (those in the 5<sup>th</sup> interview).

Merges the FMLY and EXPEND data sets together and changes missing cost values to zero.

Weights the cost values by the 44 replicate weights and full sample weight. RCOST1-RCOST45 represents the weighted costs for each expenditure.

```

221 BY NEWID;
222 IF INEXP AND INFAM;
223
224 IF COST = . THEN
225     COST = 0;
226
227     ARRAY REPS_A(45) WTREP01-WTREP44 FINLWT21;
228     ARRAY REPS_B(45) RCOST1-RCOST45;
229
230     DO i = 1 TO 45;
231         IF REPS_A(i) > 0
232             THEN REPS_B(i) = (REPS_A(i) * COST);
233             ELSE REPS_B(i) = 0;
234     END;
235     /* MERGE FMLY FILE WEIGHTS AND CHARACTERISTICS WITH MTAB/ITAB COSTS */
236     /* MULTIPLY COSTS BY WEIGHTS TO DERIVE WEIGHTED COSTS */
237 RUN;

```

NOTE: There were 34485 observations read from the data set WORK.FMLY.  
NOTE: There were 3771669 observations read from the data set WORK.EXPEND.  
NOTE: The data set WORK.PUBFILE has 3771669 observations and 48 variables.  
NOTE: DATA statement used (Total process time):  
real time 1:21.85  
cpu time 29.84 seconds

```

238
239
240 /****** /
241 /* STEP3: CALCULATE POPULATIONS */
242 /* ----- */
243 /* 1 SUM ALL 45 WEIGHT VARIABLES TO DERIVE REPLICATE POPULATIONS */
244 /* 2 FORMAT FOR CORRECT COLUMN CLASSIFICATIONS */
245 /****** /
246
247
248 PROC SUMMARY NWAY DATA=FMLY;
249 CLASS INCLASS / MLF;
250 VAR REPWT1-REPWT45;
251 FORMAT INCLASS $INC.;
252 OUTPUT OUT = POP (DROP = _TYPE_ _FREQ_) SUM = RPOP1-RPOP45;
253 /* SUMS WEIGHTS TO CREATE POPULATIONS PER REPLICATE */
254 /* FORMATS TO CORRECT COLUMN CLASSIFICATIONS */
255 RUN;

```

NOTE: There were 34485 observations read from the data set WORK.FMLY.  
NOTE: The data set WORK.POP has 10 observations and 46 variables.  
NOTE: PROCEDURE SUMMARY used (Total process time):  
real time 1.79 seconds  
cpu time 0.40 seconds

```

256
257
258
259 /****** /
260 /* STEP4: CALCULATE WEIGHTED AGGREGATE EXPENDITURES */

```

The weights in the FMLY file are summed to create replicate populations and the full US population for each income class.

Replicate populations (Repwt1-Repwt44) and the US population (Repwt45) are used as the denominator in means estimation.

Weighted costs are summed and formatted into income classes and by the aggregation scheme of the stub file. These aggregate expenditures will become the numerator in means estimation.

```

261 /* ----- */
262 /* 1 SUM THE 45 REPLICATE WEIGHTED EXPENDITURES TO DERIVE AGGREGATES */
263 /* 2 FORMAT FOR CORRECT COLUMN CLASSIFICATIONS AND AGGREGATION SCHEME */
264 /****** */
265
266
267 PROC SUMMARY NWAY DATA=PUBFILE SUMSIZE=MAX COMPLETETYPES;
268 CLASS UCC INCLASS / MLF;
269 VAR RCOST1-RCOST45;
270 FORMAT UCC $AGGFMT. INCLASS $INC.;
271 OUTPUT OUT=AGG (DROP= _TYPE_ _FREQ_ RENAME=(UCC=LINE))
272 SUM = RCOST1-RCOST45;
273 /* SUMS WEIGHTED COSTS PER REPLICATE TO GET AGGREGATES */
274 /* FORMATS INCOME TO CREATE COMPLETE REPORTING COLUMN */
275 /* FORMATS EXPENDITURES TO CORRECT AGGREGATION SCHEME */
276 RUN;

NOTE: There were 3771669 observations read from the data set WORK.PUBFILE.
NOTE: The data set WORK.AGG has 6730 observations and 47 variables.
NOTE: PROCEDURE SUMMARY used (Total process time):
      real time          2:42.35
      cpu time           1:10.75

277
278
279
280 /****** */
281 /* STEP5: CALCULATE MEAN EXPENDITURES */
282 /* ----- */
283 /* 1 READ IN POPULATIONS AND LOAD INTO MEMORY USING A 2 DIMENSIONAL ARRAY */
284 /* POPULATIONS ARE ASSOCIATED BY INCLASS(i), AND REPLICATE(j) */
285 /* 2 READ IN AGGREGATE EXPENDITURES FROM AGG DATASET */
286 /* CALCULATE MEANS BY DIVIDING AGGREGATES BY CORRECT SOURCE POPULATIONS */
287 /* 4 CALCULATE STANDARD ERRORS USING REPLICATE FORMULA */
288 /****** */
289
290
291 DATA TAB1 (KEEP = LINE MEAN SE);
292
293 /* READS IN POP DATASET. _TEMPORARY_ LOADS POPULATIONS INTO SYSTEM MEMORY */
294 ARRAY POP{01:10,45} _TEMPORARY_;
295 IF _N_ = 1 THEN DO i = 1 TO 10;
296 SET POP;
297 ARRAY REPS(45) RPOP1-RPOP45;
298 DO j = 1 TO 45;
299 POP{INCLASS,j} = REPS(j);
300 END;
301 END;
302
303 /* READS IN AGG DATASET AND CALCULATES MEANS BY DIVIDING BY POPULATIONS */
304 SET AGG (KEEP = LINE INCLASS RCOST1-RCOST45);
305 ARRAY AGGS(45) RCOST1-RCOST45;
306 ARRAY AVGS(45) MEAN1-MEAN44 MEAN;
307 DO k = 1 TO 45;
308 IF AGGS(k) = . THEN AGGS(k) = 0;
309 AVGS(k) = AGGS(k) / POP{INCLASS,k};

```

This data step calculates means and standard errors:

Lines 294-301 reads in the column populations and stores them into temporary memory. Populations in memory are associated with INCLASS(i), and REPLICATE(j).

Line 304 reads in the aggregated expenditures.

Lines 305-310 calculates means by dividing the aggregate expenditures by the appropriate populations in memory as determined by INCLASS and REPLICATE.

Lines 313-319 calculates standard errors using the replicate weight formula.

```

310     END;
311
312     /* CALCULATES STANDARD ERRORS USING REPLICATE FORMULA */
313     ARRAY RMNS(44) MEAN1-MEAN44;
314     ARRAY DIFF(44) DIFF1-DIFF44;
315     DO n = 1 TO 44;
316         DIFF(n) = (RMNS(n) - MEAN)**2;
317     END;
318     SE = SQRT((1/44)*SUM(OF DIFF(*)));
319 RUN;

```

Arranges output for tabulation. This will give a rough expenditure table.

NOTE: Character values have been converted to numeric values at the places given by:  
 (Line):(Column).  
 305:13 315:33

NOTE: There were 10 observations read from the data set WORK.POP.  
 NOTE: There were 6730 observations read from the data set WORK.AGG.  
 NOTE: The data set WORK.TAB1 has 6730 observations and 3 variables.  
 NOTE: DATA statement used (Total process time):

real time	0.50 seconds
cpu time	0.17 seconds

All populations are put into dataset POP. A special dataset, CUS, is created specifically for inserting the full US population into the output.

```

320
321
322
323     /******
324     /* STEP6: TABULATE EXPENDITURES */
325     /* ----- */
326     /* 1 ARRANGE DATA INTO TABULAR FORM */
327     /* 2 SET OUT INTERVIEW POPULATIONS FOR POPULATION LINE ITEM */
328     /* 3 INSERT POPULATION LINE INTO TABLE */
329     /* 4 INSERT ZERO EXPENDITURE LINE ITEMS INTO TABLE FOR COMPLETENESS */
330     /******
331
332
333     PROC TRANSPOSE DATA=TAB1 OUT=TAB2
334     NAME = ESTIMATE PREFIX = INCLASS;
335     BY LINE;
336     VAR MEAN SE;
337     /*ARRANGE DATA INTO TABULAR FORM */
338 RUN;

```

Population totals per income class are inserted into the output.

NOTE: There were 6730 observations read from the data set WORK.TAB1.  
 NOTE: The data set WORK.TAB2 has 1346 observations and 12 variables.  
 NOTE: PROCEDURE TRANSPOSE used (Total process time):

real time	0.13 seconds
cpu time	0.01 seconds

```

339
340
341     PROC TRANSPOSE DATA=POP (KEEP = RPOP45) OUT=CUS
342     NAME = LINE PREFIX = INCLASS;
343     VAR RPOP45;
344     /* SET ASIDE POPULATIONS FROM INTERVIEW */
345 RUN;

```

This data step further processes data by deleting unwanted table line items and inserting zero expenditure lines for items that are not reported. This is to get the output as close to publication tables as possible.

NOTE: There were 10 observations read from the data set WORK.POP.

NOTE: The data set WORK.CUS has 1 observations and 11 variables.

NOTE: PROCEDURE TRANSPOSE used (Total process time):

```
real time      0.10 seconds
cpu time       0.04 seconds
```

346

347

348 DATA TAB3;

349 SET CUS TAB2;

350 IF LINE = 'RPOP45' THEN DO;

351 LINE = '100001';

352 ESTIMATE = 'N';

353 END;

354 /\* INSERT POPULATION LINE ITEM INTO TABLE AND ASSIGN LINE NUMBER \*/

355 RUN;

NOTE: There were 1 observations read from the data set WORK.CUS.

NOTE: There were 1346 observations read from the data set WORK.TAB2.

NOTE: The data set WORK.TAB3 has 1347 observations and 12 variables.

NOTE: DATA statement used (Total process time):

```
real time      0.04 seconds
cpu time       0.03 seconds
```

356

357

358 DATA TAB;

359 MERGE TAB3 STUBFILE;

360 BY LINE;

361 IF LINE NE '100001' THEN DO;

362 IF SURVEY = 'S' THEN DELETE;

363 END;

364 ARRAY CNTRL(10) INCLASS1-INCLASS10;

365 DO i = 1 TO 10;

366 IF CNTRL(i) = . THEN CNTRL(i) = 0;

367 IF SUM(OF CNTRL(\*)) = 0 THEN ESTIMATE = 'MEAN';

368 END;

369

370 IF GROUP IN ('CUCHARS' 'INCOME') THEN DO;

371 IF LAG(LINE) = LINE THEN DELETE;

372 END;

373 /\* MERGE STUBFILE BACK INTO TABLE TO INSERT EXPENDITURE LINES \*/

374 /\* THAT HAD ZERO EXPENDITURES FOR THE YEAR \*/

375 RUN;

NOTE: There were 1347 observations read from the data set WORK.TAB3.

NOTE: There were 709 observations read from the data set WORK.STUBFILE.

NOTE: The data set WORK.TAB has 1300 observations and 20 variables.

NOTE: DATA statement used (Total process time):

```
real time      0.20 seconds
cpu time       0.03 seconds
```

376

377

Tabulate the data. Line numbers are formatted to give titles.

```

378 PROC TABULATE DATA=TAB;
379 CLASS LINE / GROUPINTERNAL ORDER=DATA;
380 CLASS ESTIMATE;
381 VAR INCLASS1-INCLASS10;
382 FORMAT LINE $LBLFMT.;
383
384 TABLE (LINE * ESTIMATE), (INCLASS10 INCLASS1 INCLASS2 INCLASS3 INCLASS4
385 INCLASS5 INCLASS6 INCLASS7 INCLASS8 INCLASS9)
386 *SUM=' ' / RTS=25;
387 LABEL ESTIMATE=ESTIMATE LINE=LINE
388 INCLASS1='LESS THAN $5,000' INCLASS2='$5,000 TO $9,999'
389 INCLASS3='$10,000 TO $14,999' INCLASS4='$15,000 TO $19,999'
390 INCLASS5='$20,000 TO $29,999' INCLASS6='$30,000 TO $39,999'
391 INCLASS7='$40,000 TO $49,999' INCLASS8='$50,000 TO $69,999'
392 INCLASS9='$70,000 AND OVER' INCLASS10='ALL CONSUMER UNITS';
393 OPTIONS NODATE NOCENTER NONUMBER LS=167 PS=MAX;
394 WHERE LINE NE 'OTHER';
395 TITLE "INTERVIEW EXPENDITURES FOR &YEAR BY INCOME BEFORE TAXES";
396 RUN;

```

NOTE: There were 1298 observations read from the data set WORK.TAB.

WHERE LINE not = 'OTHER';

NOTE: PROCEDURE TABULATE used (Total process time):

real time	0.51 seconds
cpu time	0.12 seconds

## B. OUTPUT

Sample program output is stored as a separate file in the Programs folder on the CD.

## VIII.DESCRPTION OF THE SURVEY

The CE program consists of two separate components, each with its own questionnaire and independent sample:

1) An Interview panel survey in which each CU in the sample is interviewed once every 3 months over five consecutive quarters to obtain a year's worth of data. New panels are initiated every month of the year.

2) A Diary or recordkeeping survey completed by the sample CUs for two consecutive 1-week periods; the sample is surveyed across a 12-month period.

Data are collected by the Bureau of the Census under contract with BLS. All data collected in both surveys are subject to Bureau of the Census confidentiality requirements, which prevent the disclosure of any CU member's identity.

The quarterly Interview survey is designed to collect data on major items of expense which respondents can be expected to recall for 3 months or longer. In practice, the Interview survey collects detailed data on an estimated 60 to 70 percent of total household expenditures. In addition, global estimates are obtained for food and other selected items. These global estimates account for an additional 20 to 25 percent of total expenditures. The Interview survey does not collect expenses for housekeeping supplies, personal care products, and nonprescription drugs, which contribute about 5 to 15 percent of total expenditures. Thus, up to 95 percent of total expenditures are covered in the Interview survey. Household characteristics, income, and financial data are also collected. At BLS, each quarter of data is processed independently from other quarters. Thus the annual estimates published by BLS are not dependent on the participation of a CU for the full five interviews.

The initial interview collects demographic and family characteristics data. These pertain to age, sex, race, marital status, education, and CU relationship for each CU member. This information is updated at each subsequent interview. Expenditures are for the month prior to the interview. They are used along with the inventory information solely for bounding purposes, that is, to prevent the reporting of expenditures from an indefinite past period. Expenditure data from the first interview are not on these files since they are not included in expenditure estimation.

The second through fifth interviews use uniform questionnaires to collect expenditure information from the previous three months. Income information, such as wage, salary, unemployment compensation, child support, and alimony, as well as information on the employment of each CU member age 14 and over, are collected in the second and fifth interviews only.

Income data and employment information collected in the second interview are carried over to the third and fourth interviews. For new CU members and CU members who started work since the previous interview, wage, salary, and other information on employment are collected in the third and fourth interviews. In the fifth interview, a supplement is used to collect information on asset values and changes in balances of assets and liabilities. These data, along with other household characteristics information, permit users to classify sample units for research purposes and allow BLS to adjust population weights for CUs who do not cooperate in the survey.

Each quarter, 20 percent of the sample are new households introduced for the first time. They replace one-fifth of the sample that completed its final interview in the previous quarter. This rotating procedure with overlap is designed to provide more efficient data collection. CUs that move away from their sample address between interviews are dropped from the survey. New CUs that move into the sample address are screened for eligibility and included in the survey. Students living in college- or university-regulated housing report their own expenditures directly, while at school, rather than being considered part of their parents' household.

## **IX. DATA COLLECTION AND PROCESSING**

In addition to its data collection duties, the Bureau of the Census is responsible for field editing and coding, consistency checking, quality control, and data transmittal to BLS. BLS performs additional review and editing procedures in preparing the data for publication and release.

### **A. THE US CENSUS BUREAU ACTIVITIES**

Data collection activities have been conducted by the Census Bureau on a continuing basis since October 1979. Due to differences in format and design, the Interview survey and the Diary survey data are collected and processed separately.

All interviews are sent electronically to the Census Bureau headquarters in Suitland, MD, where they pass through basic quality checks of control counts, missing values, etc. Also, missing sections of questionnaires, and certain inconsistencies and errors are identified and corrected. The data are then electronically transmitted to BLS in Washington, DC.

An input file is created by the Census Bureau when the data are electronically sent to BLS. The input file is used in the next quarter's interview to prevent the recording of duplicate reports by respondents. The input file also contains data collected in the first interview about owned property, vehicles, and insurance policies. Because the input file contains this data, only updates and new records



are collected about owned property, vehicles, and insurance policies in the second through fifth interviews.

## **B. BUREAU OF LABOR STATISTICS ACTIVITIES**

Upon receipt from the Bureau of the Census, the data undergo a series of computer edits that identify and correct irregularities and inconsistencies. Other adjustments eliminate business and reimbursed expenses, apply appropriate sales taxes, and derive CU weights based on BLS specifications. In addition, demographic and work experience items (except income) are imputed when missing or invalid. All data changes and imputations are identified with flags on the Interview data base.

Next, BLS conducts an extensive review to ensure that severe data aberrations are corrected. The review takes place in several stages: a review of counts, weighted means, and unweighted means by region; a review of family relationship coding inconsistencies; a review of selected extreme values for expenditure and income categories; and a verification of the various data transformations.

Cases of extreme data values are investigated. Any errors discovered are corrected prior to release of the data.

Two major types of data adjustment routines--imputation and allocation--are carried out to classify expenditures and improve estimates. Data imputation routines correct for missing or invalid entries. All fields except assets are subject to imputation. Allocation routines are applied when respondents provide insufficient expenditure detail to meet tabulation requirements. For example, reports of combined expenditures for fuels and utilities are allocated among gas, electricity, and other items in this group. While not strictly an allocation routine, another adjustment separates mortgage and vehicle loan payments into principal and interest components using associated data on the interest rate and term of the loan. Another adjustment is done to prepare the data for the production of calendar year estimates. Time adjustment routines are used to classify expenditures by month. Aggregation can then be done at a monthly level, permitting the production of monthly, quarterly, annual, and other interval estimates. To analyze the effects of these adjustments, tabulations are made before and after the data adjustments. At this point, processing activities are completed and the database is ready for use.

## **X. SAMPLING STATEMENT**

### **A. SURVEY SAMPLE DESIGN**

Samples for the CE are national probability samples of households designed to be representative of the total U.S. civilian population. Eligible population includes all civilian non-institutional persons.

The first step in sampling is the selection of primary sampling units (PSUs), which consist of counties (or parts thereof) or groups of counties. The set of sample PSUs used for the 2008 and 2009 samples is composed of 91 areas. The design classifies the PSUs into four categories:

- 21 "A" certainty PSUs are Metropolitan Statistical Areas (MSA's) with a population greater than 1.5 million.
- 38 "X" PSUs, are medium-sized MSA's.
- 16 "Y" PSUs are nonmetropolitan areas that are included in the CPI.
- 16 "Z" PSUs are nonmetropolitan areas where only the urban population data will be included in the CPI.

The sampling frame (that is, the list from which housing units were chosen) for the 2008 survey is generated from the 2000 Census of Population 100-percent-detail file. The sampling frame is augmented by new construction permits and by techniques used to eliminate recognized deficiencies in census coverage. All Enumeration Districts (EDs) from the Census that fail to meet the criterion for good addresses for new construction, and all EDs in nonpermit-issuing areas are grouped into the area segment frame. Interviewers are then assigned to list these areas before a sample is drawn.

To the extent possible, an unclustered sample of units is selected within each PSU. This lack of clustering is desirable because the sample size of the Diary Survey is small relative to other surveys, while the intraclass correlations for expenditure characteristics are relatively large. This suggests that any clustering of the sample units could result in an unacceptable increase in the within-PSU variance and, as a result, the total variance.

The Interview Survey is a panel rotation survey. Each panel is interviewed for five consecutive quarters and then dropped from the survey. As one panel leaves the survey, a new panel is introduced. Approximately 20 percent of the addresses are new to the survey each month.

## B. COOPERATION LEVELS

The quarterly target sample size at the United States level for the Interview Survey is 7,060 participating sample units. To achieve this target the total estimated work load is 11,500 sample units per quarter. This allows for refusals, vacancies, or nonexistent sample unit addresses. Information on interview annual participation levels for the past five years follows.

Year	Consumer units designated for the survey	Type B or C ineligible cases	Eligible housing unit interviews			Response Rate for Eligible Interviews
			Number of potential interviews	Type A nonresponse	Total respondent interviews	
2004	50,509	9,626	40,883	9,798	31,085	76.0%
2005	49,242	9,254	39,988	10,184	29,804	74.5%
2006	46,789	9,080	37,709	8,842	28,867	76.6%
2007	45,996	8,980	37,016	9,681	27,335	73.8%
2008	46,546	9,244	37,302	9,757	27,545	73.8%

Type B or C cases are housing units that are vacant, nonexistent, or ineligible for interview. Type A nonresponses are housing units that the interviewers were unable to contact or the respondents refused to participate in the survey. The response rate stated above is based only on the eligible housing units (i.e., the designated sample cases less Type B and Type C ineligible cases).

## C. WEIGHTING

Each CU included in the CE represents a given number of CUs in the U.S. population, which is considered to be the universe. The translation of sample families into the universe of families is known as weighting. However, since the unit of analysis for the CE is a CU, the weighting is performed at the CU level. Several factors are involved in determining the weight for each CU for which an interview is obtained. There are four steps in the weighting procedure:

- 1) The basic weight is assigned to an address and is the inverse of the probability of selection of the housing unit.

- 2) A weight control factor is applied to each interview if sub-sampling is performed in the field.
- 3) A non-interview adjustment is made for units where data could not be collected from occupied housing units. The adjustment is performed as a function of region, housing tenure, family size and race.
- 4) A final adjustment is performed to adjust the sample estimates to national population controls derived from the Current Population Survey. The adjustments are made based on both the CU's member composition and the CU as a whole. The weight for the CU is adjusted for individuals within the CU to meet the controls for 14 age/race categories, 4 regions, and 4 region/urban categories. The CU weight is also adjusted to meet the control for total number of CUs and total number of CUs who own their living quarters. The weighting procedure uses an iterative process to ensure that the sample estimates meet all the population controls.

NOTE: The weight for a consumer unit (CU) can be different for each quarter in which the CU participates in the survey, as the CU may represent a different number of CUs with similar characteristics.

## **D. STATE IDENTIFIER**

Since the CE is not designed to produce state-level estimates, summing the CU weights by state will not yield state population totals. A CU's basic weight reflects its probability of selection among a group of primary sampling units of similar characteristics. For example, sample units in an urban nonmetropolitan area in California may represent similar areas in Wyoming and Nevada. Among other adjustments, CUs are post-stratified nationally by sex-age-race. For example, the weights of CUs containing a black male, age 16-24 in Alabama, Colorado, or New York, are all adjusted equivalently. Therefore, weighted population state totals will not match population totals calculated from other surveys that are designed to represent state data.

To summarize, the CE sample was not designed to produce precise estimates for individual states. Although state-level estimates that are unbiased in a repeated sampling sense can be calculated for various statistical measures, such as means and aggregates, their estimates will generally be subject to large variances. Additionally, a particular state population estimate from the CE sample may be far from the true state population.

## **XI. INTERPRETING THE DATA**

Several factors should be considered when interpreting the expenditure data. The average expenditure for an item may be considerably lower than the expenditure by those CUs that purchased the item. The less frequently an item is purchased, the greater the difference between the average for all CUs and the average of those purchasing. (See Section V.A.2.b.ii. for MEANS OF THOSE REPORTING.) Also, an individual CU may spend more or less than the average, depending on its particular characteristics. Factors such as income, age of family members, geographic location, taste and personal preference influence expenditures. Furthermore, even within groups with similar characteristics, the distribution of expenditures varies substantially.

Expenditures reported are the direct out-of-pocket expenditures. Indirect expenditures, which may be significant, may be reflected elsewhere. For example, rental contracts often include utilities. Renters with such contracts would record no direct expense for utilities, and therefore, appear to have lower utility expenses. Employers or insurance companies frequently pay other costs. CU with members whose employers pay for all or part of their health insurance or life insurance would have lower direct expenses for these items than those who pay the entire amount themselves. These points should be considered when relating reported averages to individual circumstances.

## **XII. APPENDIX 1 -- GLOSSARY**

Population

The civilian non-institutional population of the United States as well as that portion of the institutional population living in the following group quarters: Boarding houses, housing facilities for students and workers, staff units in hospitals and homes for the aged, infirm, or needy, permanent living quarters in hotels and motels, and mobile home parks. Urban population is defined as all persons living in a Metropolitan Statistical Area (MSA's) and in urbanized areas and urban places of 2,500 or more persons outside of MSA's. Urban, defined in this survey, includes the rural populations within MSA. The general concept of an MSA is one of a large population nucleus together with adjacent communities that have a high degree of economic and social integration with that nucleus. Rural population is defined as all persons living outside of an MSA and within an area with less than 2,500 persons.

#### Consumer unit (CU)

A consumer unit comprises either: (1) all members of a particular household who are related by blood, marriage, adoption, or other legal arrangements; (2) a person living alone or sharing a household with others or living as a roomer in a private home or lodging house or in permanent living quarters in a hotel or motel, but who is financially independent; or (3) two or more persons living together who use their income to make joint expenditures. Financial independence is determined by the three major expense categories: housing, food, and other living expenses. To be considered financially independent, at least two of the three major expense categories have to be provided entirely or in part by the respondent.

#### Reference person

The first member mentioned by the respondent when asked to "Start with the name of the person or one of the persons who owns or rents the home." It is with respect to this person that the relationship of other CU members is determined.

#### Income before taxes

The combined income earned by all CU members 14 years old or over during the 12 months preceding the interview. The components of income are: Wage and salary income, business income, farm income, Social Security income and Supplemental Security income, unemployment compensation, workmen's compensation, public assistance, welfare, interest, dividends, pension income, income from roomers or boarders, other rental income, income from regular contributions, other income, and food stamps.

#### Income after taxes

Income before taxes minus personal taxes, which includes Federal income taxes, state and local taxes, and other taxes.

#### Geographic regions

CUs are classified by region according to the address at which they reside during the time of participation in the survey. The regions comprise the following States:

*Northeast* - Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont

*Midwest* - Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin

*South* - Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia

*West* - Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming

## XIII.APPENDIX 2 -- UNIVERSAL CLASSIFICATION CODE (UCC) TITLES

\*L denotes UCCs that could have negative values. Medical care UCCs have negative values if they are reimbursements. Reduction in loan principal UCCs are all negative for programming convenience. However, they are considered positive expenditures in CE publications.

Underlined UCCs represent either a new UCC or a deleted UCC. Please note that new UCCs may not be represented in all quarters. The quarter in which the addition (deletion) occurs is denoted by a leading superscript directly prior to the UCC code. For example, <sup>N(D)Y081</sup>(UCC) identifies a new (deleted) UCC beginning in Q081.

### A. EXPENDITURE UCCS ON MTAB FILE

- 002120 Other non-health insurance
- 006001 Total amount owed to creditors, 2nd interview
- 006002 Total amount owed to creditors, 5th interview
- \*L 006003 Total amount owed to creditors, 2nd interview, asked first quarter, current year (2008)
- \*L 006004 Total amount owed to creditors, 5th interview, asked first quarter, current year (2008)
- 006005 Total amount owed to creditors, 2nd interview, asked first quarter, current year + 1 (2009)
- 006006 Total amount owed to creditors, 5th interview, asked first quarter, current year +1 (2009)
- 190901 Food or board at school
- 190902 Food and beverages for catered affairs (now only includes food and beverages)
- 190903 Food and non-alcoholic beverages at restaurants, cafes, fast food places on trips
- 190904 Food and beverages purchased and prepared by CU on trips
- 200900 Alcoholic beverages at restaurants, cafes, bars on trips
- 210110 Rent of dwelling
- 210210 Lodging away from home on trips
- 210310 Housing for someone at school
- 210901 Ground rent - owned home
- 210902 Ground rent - owned vacation home
- 220121 Homeowners insurance - owned home including fire and extended coverage; management fees for property insurance in coops (non-vacation)
- 220122 Same as 220121 - owned vacation home, vacation coops
- 220311 Mortgage interest - owned home; portion of management fees for repayment of loans in coops (non-vacation)
- 220211 Property taxes - owned home; management fees for property taxes in coops (non-vacation)
- 220212 Same as 220211 - owned vacation home, vacation coops
- 220312 Same as 220311 - owned vacation home; vacation coops
- 220313 Interest on home equity loan - owned home
- 220314 Interest on home equity loan - owned vacation home
- 220512 Cost of supplies purchased for jobs considered addition, alteration, or new construction incl. dwellings and additions being built, finishing basement or attic, remodeling rooms, landscaping, building outdoor patios, driveways, or permanent swimming pools, and insulation - owned home
- 220513 Same as 220512 - owned vacation home
- 220611 Contractors' labor and material costs, and cost of supplies rented for jobs considered addition, alteration, or new construction (see 220512) - owned home; management fees for capital improvements in condos and coops (non-vacation)
- 220612 Built-in dishwasher, garbage disposal, or range hood for jobs considered addition, alteration, or new construction - owned home and vacation home
- 220615 Same as 220611 - owned vacation home; vacation condos and coops
- 220616 Installed and non-installed original wall to wall carpeting for owned homes
- 220901 Parking at owned home; management fees for parking in condos and coops (non-vacation)

- 220902 Parking at owned vacation home, vacation condos and coops
- 230112 Contractors labor and material costs, and cost of supplies rented for inside and outside painting and papering for jobs considered replacement or maintenance/repair - owned home; management fees for similar jobs in condos and coops (non-vacation)
- 230113 Same as 230112 for plumbing or water heating installations and repairs
- 230114 Same as 230112 for electrical work and heating or air - conditioning jobs (incl. service contracts)
- 230115 Same as 230112 for roofing, gutters, or downspouts
- 230117 Built-in dishwasher, garbage disposal, or range hood for jobs considered replacement or maintenance/repair - renter
- 230118 Same as 230117 - owned home
- 230121 Contractors' labor and material costs, and cost of supplies rented for repair or replacement of hard surfaced flooring - renter
- 230122 Contractors' labor and material costs, and cost of supplies rented for repair or replacement of hard surfaced flooring for jobs considered replacement or maintenance/repair- owned home; management fees for similar jobs in condos and coops (non-vacation)
- 230123 Same as 230122 - owned vacation home; vacation condos and coops
- 230133 Installed and non-installed replacement wall to wall carpeting for owned homes
- 230134 Installed and non-installed original wall to wall carpeting for rental homes
- 230141 Service contract charges and cost of maintenance or repair for built-in dishwasher, garbage disposal, or range hood - renter
- 230150 Repair or maintenance services (renter)
- 230151 Other repair or maintenance services (owned)
- 230152 Repair and remodeling services (owned vacation)
- 230142 Same as 230141 - owned home and vacation home
- 230901 Property management fees - owned home; condos and coops (non-vacation)
- 230902 Same as 230901 - owned vacation home; vacation condos and coops
- 240111 Cost of paint, wallpaper, and supplies purchased for inside and outside painting and papering - renter
- 240112 Same as 240111 - for jobs considered replacement or maintenance/repair - owned home
- 240113 Same as 240112 - owned vacation home
- 240121 Cost of equipment purchased for inside and outside painting and papering - renter
- 240122 Same as 240121 - for jobs considered replacement or maintenance/repair - owned home
- 240123 Same as 240122 - owned vacation home
- 240211 Cost of supplies purchased for plastering, paneling, roofing and gutters, siding, windows, screens, doors, awnings; portion of cost of supplies purchased for patios, walks, fences, driveways, swimming pools - renter
- 240212 Cost of supplies purchased for plastering, paneling, siding, windows, screens, doors, awnings for jobs considered replacement or maintenance/repair; portion of cost of supplies purchased for patios, walks, fences, driveways, swimming pools for jobs considered replacement or maintenance/repair - owned home
- 240213 Cost of supplies purchased for roofing, gutters, or downspouts for jobs considered replacement or maintenance/repair - owned home
- 240214 Same as 240212-240213 - owned vacation home
- 240221 Cost of supplies purchased for masonry, brick or stucco work; portion of cost of supplies purchased for patios, walks, fences, driveways, swimming pools - renter
- 240222 Same as 240221 for jobs considered replacement or maintenance/repair - owned home
- 240223 Same as 240222 - owned vacation home
- 240311 Cost of supplies purchased for plumbing or water heating installations and repairs - renter
- 240312 Same as 240311 for jobs considered replacement or maintenance/repair - owned home
- 240313 Same as 240312 - owned vacation home
- 240321 Cost of supplies purchased for electrical work, heating or air conditioning jobs - renter
- 240322 Same as 240321 for jobs considered replacement or maintenance/repair - owned home
- 240323 Same as 240322 - owned vacation home
- 250111 Fuel oil - renter

250112 Fuel oil - owned home; portion of management fees for utilities in condos and coops (non vacation)  
 250113 Same as 250112 - owned vacation home; vacation condos and coops  
 250114 Fuel oil - rented vacation property  
 250211 Gas, bottled or tank - renter  
 250212 Gas, bottled or tank - owned home  
 250213 Gas, bottled or tank - owned vacation home  
 250214 Gas, bottled or tank - rented vacation property  
 250911 Other fuels – renter  
 250912 Other fuels – owned home  
 250913 Other fuels – owned vacation home  
 250914 Other fuels – rented vacation property  
 260111 Electricity – renter  
 260112 Electricity – owned home; portion of management fees for utilities in condos and coops (non-vacation)  
 260113 Same as 260112 – owned vacation home; vacation condos and coops  
 260114 Electricity – rented vacation property  
 260211 Natural or utility gas – renter  
 260212 Natural or utility gas – owned home; portion of management fees for utilities in condos and coops (non-vacation)  
 260213 Same as 260212 – owned vacation home; vacation condos and coops  
 260214 Natural or utility gas – rented vacation property  
 270101 Residential telephone or pay phones  
 270102 Cellular phone service  
 270104 Phone cards  
 270105 Voice over IP telephone service  
 270211 Water and sewerage maintenance – renter  
 270212 Water and sewerage maintenance – owned home; portion of management fees for utilities in condos and coops (non-vacation)  
 270213 Same as 270212 – owned vacation home; vacation condos and coops  
 270214 Water and sewerage maintenance – rented vacation property  
 270310 Cable, satellite, or community antenna service  
 270311 Satellite radio service  
 270411 Trash and garbage collection – renter  
 270412 Trash and garbage collection – owned home; management fees for trash collection in condos and coops (non-vacation)  
 270413 Same as 270412 – owned vacation home; vacation condos and coops  
 270414 Trash and garbage collection – rented vacation property  
 270901 Septic tank cleaning – renter  
 270902 Septic tank cleaning – owned home  
 270903 Septic tank cleaning – owned vacation home  
 270904 Septic tank cleaning – rented vacation property  
 280110 Bathroom linens  
 280120 Bedroom linens  
 280130 Kitchen and dining room linens  
 280210 Curtains and drapes  
 280220 Slipcovers, decorative pillows, and cushions  
 280230 Sewing materials for slipcovers, curtains, and other home handiwork  
 280900 Other linens  
 290110 Mattresses and springs  
 290120 Other bedroom furniture  
 290210 Sofas  
 290310 Living room chairs  
 290320 Living room tables  
 290410 All kitchen and dining room furniture  
 290420 Infants' furniture

290430 Patio, porch, or outdoor furniture  
 290440 Modular wall units, shelves or cabinets; other living room, family or recreation room furniture including desks  
 300111 Purchase and installation of refrigerator or home freezer – renter  
 300112 Purchase and installation of refrigerator or home freezer – homeowner  
 300211 Purchase and installation of clothes washer – renter  
 300212 Purchase and installation of clothes washer – homeowner  
 300221 Purchase and installation of clothes dryer – renter  
 300222 Purchase and installation of clothes dryer – homeowner  
 300311 Purchase and installation of cooking stove, range or oven, excl. microwave – renter  
 300312 Purchase and installation of cooking stove, range or oven, excl. microwave – homeowner  
 300321 Purchase and installation of microwave oven – renter  
 300322 Purchase and installation of microwave oven – homeowner  
 300331 Purchase and installation of portable dishwasher – renter  
 300332 Purchase and installation of portable dishwasher – homeowner  
 300411 Window air conditioner – renter  
 300412 Window air conditioner – homeowner  
 310140 Televisions  
 310220 Video cassettes, tapes, and discs  
 310230 Video and computer game hardware and software  
 310240 Streaming or downloaded video files  
 310311 Radio  
 310313 Tape recorder and player  
 310314 Digital audio players  
 310320 Sound components, component systems, and compact disc sound systems  
 310333 Accessories and other sound equipment including phonographs  
 310334 Satellite dishes  
 310340 Records, CDs, audio tapes  
 310350 Streaming or downloaded audio files  
 320111 Carpet squares for owned and rented homes (Non-Permanent)  
 320120 Venetian blinds, window shades and other window coverings  
 320130 Infants' equipment  
 320150 Barbeque grills and outdoor equipment  
 320162 Non-installed wall to wall carpeting (replacement) and carpet squares – homeowner  
 320163 Installed and non-installed replacement wall to wall carpeting for rental homes  
 320210 Clocks  
 320220 Lamps and other lighting fixtures  
 320232 Telephones and accessories  
 320233 Clocks and other household decorative items  
 320310 Plastic dinnerware  
 320320 China and other dinnerware  
 320330 Stainless, silver and other flatware  
 320340 Glassware  
 320350 Silver serving pieces  
 320360 Serving pieces other than silver  
 320370 Non-electric cookware  
 320410 Lawnmowing equipment and other yard machinery  
 320420 Power tools  
 320511 Electric floor cleaning equipment  
 320512 Sewing machines  
 320521 Small electrical kitchen appliances  
 320522 Portable heating and cooling equipment  
 320611 Cost of supplies purchased for insulation and other improvements/repairs; materials and supplies purchased not for any specific job – renter  
 320612 Cost of supplies purchased for insulation and other improvements/repairs for jobs considered replacement or maintenance/repair; materials and supplies purchased not



- for any specific job – owned home
- 320613 Cost of supplies purchased for insulation and other improvements/repairs for jobs considered replacement or maintenance/repair – owned vacation home
- 320621 Cost of supplies purchased for repair or replacement of hard surfaced flooring – renter
- 320622 Cost of supplies purchased for repair or replacement of hard surfaced flooring for jobs considered replacement or maintenance/repair – owned home
- 320623 Same as 320622 – owned vacation home
- 320631 Cost of supplies purchased for landscaping – renter
- 320632 Cost of supplies purchased for landscaping for jobs considered replacement or maintenance/repair – owned home
- 320633 Same as 320632 – owned vacation home
- 320901 Office furniture for home use
- 320902 Non-power tools
- 320903 Fresh flowers or potted plants
- 320904 Closet storage items
- 330511 Cost of materials purchased for termite and pest control for jobs considered replacement or maintenance/repair
- 340211 Babysitting or other child care in your own home
- 340212 Babysitting or other child care in someone else's home
- 340310 Housekeeping service, incl. management fees for maid service in condos
- 340410 Gardening and lawn care services, incl. management fees for lawn care in coops and condos
- 340420 Water softening service
- 340510 Moving, storage, and freight express
- 340520 Non-clothing household laundry or dry cleaning – not coin-operated
- 340530 Non-clothing household laundry or dry cleaning – coin-operated
- 340610 Repair of television, radio, and sound equipment, excluding installed in vehicles
- 340620 Repair of household appliances, excl. garbage disposal, range hood, and built-in dishwasher
- 340630 Furniture repair, refinishing, or reupholstering
- 340901 Rental or repair of equipment and other yard machinery, power and non-power tools
- 340902 Rental of televisions
- 340903 Miscellaneous home services and small repair jobs not already specified
- 340904 Rental of furniture
- 340905 Rental of VCR, radio, and sound equipment – see 310210, 310311-310330
- 340906 Care for invalids, convalescents, handicapped or elderly persons in the CU
- 340907 Rental and installation of household equipment – see 300111-300332
- 340908 Rental of office equipment for non-business use – see 320232, 690111, 690112, 690210-690230
- 340910 Adult day care centers
- 340911 Management fees for security, incl. guards and alarm systems in coops and condos (non-vacation)
- 340912 Management fees for security, incl. guards and alarm systems in coops and condos (vacation)
- 340914 Services for termite/pest control maintenance
- 340915 Service fee expenditures for home security systems
- 350110 Renter's insurance
- 360110 Men's suits
- 360120 Men's sport coats
- 360210 Men's coats, jackets, and furs
- 360311 Men's underwear
- 360312 Men's hosiery
- 360320 Men's nightwear
- 360330 Men's accessories
- 360340 Men's sweaters and vests
- 360350 Men's swimsuits, warm-up or ski suits

360410 Men's shirts  
360513 Men's pants and shorts  
360901 Men's uniforms  
360902 Men's other clothing, incl. costumes  
370110 Boys' coats, jackets, and furs  
370120 Boys' sweaters  
370130 Boys' shirts  
370211 Boys' underwear  
370212 Boys' nightwear  
370213 Boys' hosiery  
370220 Boys' accessories  
370311 Boys' suits, sport coats, and vests  
370314 Boys' pants and shorts  
370902 Boys' other clothing, incl. costumes  
370903 Boys' uniforms  
370904 Boys' swimsuits, warm-up or ski suits  
380110 Women's coats, jackets, and furs  
380210 Women's dresses  
380311 Women's sport coats and tailored jackets  
380312 Women's vests, sweaters, and sweater sets  
380313 Women's shirts, tops, and blouses  
380320 Women's skirts and culottes  
380333 Women's pants and shorts  
380340 Women's swimsuits, warm-up or ski suits  
380410 Women's nightwear  
380420 Women's undergarments  
380430 Women's hosiery  
380510 Women's suits  
380901 Women's accessories  
380902 Women's uniforms  
380903 Women's other clothing, incl. costumes  
390110 Girls' coats, jackets, and furs  
390120 Girls' dresses and suits  
390210 Girls' sport coats, tailored jackets, shirts, blouses, sweaters, sweater sets, and vests  
390223 Girls' pants and shorts  
390230 Girls' swimsuits, warm-up or ski suits  
390310 Girls' undergarments and nightwear  
390321 Girls' hosiery  
390322 Girls' accessories  
390901 Girls' uniforms  
390902 Girls' other clothing, incl. costumes  
400110 Men's footwear  
400210 Boys' footwear  
400220 Girls' footwear  
400310 Women's footwear  
410110 Infants' coats, jackets, and snowsuits  
410120 Infants' dresses and other outerwear  
410130 Infants' undergarments, incl. diapers  
410140 Infants' sleeping garments  
410901 Infants' accessories, hosiery, and footwear  
420110 Sewing materials for making clothes  
420120 Sewing notions, patterns  
430110 Watches  
430120 Jewelry  
430130 Travel items, including luggage, and luggage carriers  
440110 Shoe repair and other shoe services

440120 Apparel laundry and dry cleaning – coin-operated  
 440130 Alteration, repair, and tailoring of apparel and accessories  
 440140 Clothing rental  
 440150 Watch and jewelry repair  
 440210 Apparel laundry and dry cleaning – not coin-operated  
 440900 Clothing storage outside the home  
 450110 New cars (net outlay)  
 450116 Trade-in allowance for new cars  
 450210 New trucks or vans (net outlay)  
 450216 Trade-in allowance for new trucks or vans  
 450220 New motorcycles, motor scooters, or mopeds (net outlay)  
 450226 Trade-in allowance for new motorcycles, motor scooters, or mopeds  
 450310 Basic lease charge (car lease)  
 450311 Charges other than basic lease, such as insurance or maintenance (car lease)  
 450312 Trade-in allowance (car lease)  
 450313 Cash down payment (car lease)  
 450314 Termination fee (car lease)  
 450410 Basic lease charge (truck/van lease)  
 450411 Charges other than basic lease, such as insurance or maintenance (truck/van lease)  
 450412 Trade-in allowance (truck/van lease)  
 450413 Cash down payment (truck/van lease)  
 450414 Termination fee (truck/van lease)  
 460110 Used cars (net outlay)  
 460116 Trade-in allowance for used cars  
 460901 Used trucks or vans (net outlay)  
 460902 Used motorcycles, motor scooters, or mopeds (net outlay)  
 460907 Trade-in allowance for used trucks or vans  
 460908 Trade-in allowance for used motorcycles, motor scooters, or mopeds  
 470111 Gasoline  
 470112 Diesel fuel  
 470113 Gasoline on out-of-town trips  
 470211 Motor oil  
 470212 Motor oil on out-of-town trips  
 470220 Coolant/antifreeze, brake & transmission fluids, additives, and radiator/cooling system  
 protectant (not purchased with tune-up)  
 480110 Tires (new, used or recapped); replacement and mounting of tires, including tube  
 replacement  
 480212 Vehicle products and services  
 480213 Vehicle parts, equipment, and accessories  
 480214 Vehicle audio equipment excluding labor  
 480215 Vehicle video equipment  
 490110 Body work, painting, repair and replacement of upholstery, vinyl/convertible top, and  
 glass, installation of carpet  
 490211 Clutch and transmission repair  
 490212 Drive shaft and rear-end repair  
 490221 Brake work  
 490231 Steering or front end repair  
 490232 Cooling system repair  
 490311 Motor tune-up  
 490312 Lubrication and oil changes  
 490313 Front end alignment, wheel balance and rotation  
 490314 Shock absorber replacement  
 490318 Repair tires and miscellaneous repair work, such as battery charge, wash, wax, repair  
 and replacement of windshield wiper, wiper motor, heater, air conditioner, radio and  
 antenna  
 490319 Vehicle air conditioner repair

- 490411 Exhaust system repair
- 490412 Electrical system repair
- 490413 Motor repair and replacement
- 490501 Vehicle accessories including labor
- 490900 Auto repair service policy
- 500110 Vehicle insurance
- 510110 Automobile finance charges
- 510901 Truck or van finance charges
- 510902 Motorcycle finance charges
- 520310 Driver's license
- 520410 Vehicle inspection
- 520511 Auto rental, excl. trips
- 520512 Auto rental on out-of-town trips
- 520521 Truck or van rental, excl. trips
- 520522 Truck or van rental on out-of-town trips
- 520531 Parking fees at garages, meters, and lots excl. fees that are costs of property ownership
- 520532 Parking fees on out-of-town trips
- 520541 Tolls or electronic toll passes
- 520542 Tolls on out-of-town trips
- 520550 Towing charges (excl. contracted or pre-paid)
- 520560 Global positioning services
- 520901 Docking and landing fees for boats and planes
- 520902 Motorcycle, motor scooter, or moped rental
- 520904 Rental of non camper-type trailer, such as for boat or cycle
- 520905 Same as 520902 – out-of-town trips
- 520907 Rental of boat or non camper-type trailer, such as for boat or cycle on out-of-town trips
- 530110 Airline fares on out-of-town trips
- 530210 Intercity bus fares on out-of-town trips
- 530311 Intracity mass transit fares
- 530312 Local transportation (excl. taxis) on out-of-town trips
- 530411 Taxi fares on out-of-town trips
- 530412 Taxi fares and limousine service (not on trips)
- 530510 Intercity train fares on out-of-town trips
- 530901 Ship fares on out-of-town trips
- 530902 Private school bus
- \*L 540000 Prescription drugs and medicines (net outlay)
- \*L 550110 Purchase of eye glasses or contact lenses, incl. kits and equipment, fittings, warranty expenses, and insurance (net outlay)
- \*L 550320 Purchase of medical or surgical equipment for general use, such as thermometers, needles/syringes, ice bags, heating pads, orthopedic appliances, and blood pressure kits (not including band aids, gauze, cotton rolls/balls) (net outlay)
- \*L 550330 Purchase of supportive or convalescent medical equipment, such as crutches, wheelchairs, braces, and ace bandages (net outlay)
- \*L 550340 Hearing aids (net outlay)
- \*L 560110 Physicians' services (net outlay)
- \*L 560210 Dental care (net outlay)
- \*L 560310 Eye exams, treatment or surgery (net outlay)
- \*L 560330 Lab tests and X-rays (net outlay)
- \*L 560400 Services by medical professionals other than physicians, nursing services, and therapeutic treatments (net outlay)
- 570111 Hospital room and services
- \*L 570220 Care in convalescent or nursing home (net outlay)
- \*L 570230 Other medical care service, such as blood donation, ambulance, emergency room, or outpatient hospital services (net outlay)
- 570240 Medical care in retirement community
- \*L 570901 Rental of medical or surgical equipment for general use (net outlay) – see 550320

- \*L 570903 Rental of supportive and convalescent equipment (net outlay) – see 550330
- 580111 Traditional fee for service health plan (not BC/BS)
- 580112 Traditional fee for service health plan (BC/BS)
- 580113 Preferred provider health plan (not BC/BS)
- 580114 Preferred provider health plan (BC/BS)
- 580311 Health maintenance organization (not BC/BS)
- 580312 Health maintenance organization (BC/BS)
- 580400 Long Term Care insurance
- 580901 Medicare payment
- 580903 Commercial Medicare supplement (not BC/BS)
- 580904 Commercial Medicare supplement (BC/BS)
- 580905 Other health insurance (not BC/BS)
- 580906 Other health insurance (BC/BS)
- 580907 Medicare Prescription Drug premium
- 590220 Books through book clubs
- 590230 Books not through book clubs
- 590310 Magazine or newspaper subscription
- 590410 Magazine or newspaper, single copy
- 600110 Outboard motor
- 600121 Boat without motor or non camper-type trailer, such as for boat or cycle (net outlay)
- 600122 Trailer-type or other attachable-type camper (net outlay)
- 600127 Trade in allowance for boat without motor or non camper-type trailer, such as for boat or cycle
- 600128 Trade-in allowance for trailer-type or other attachable-type camper
- 600132 Boat with motor (net outlay)
- 600138 Trade-in allowance for boat with motor
- 600141 Purchase of motor home
- 600142 Purchase of other vehicle
- 600143 Trade in allowance for motor home
- 600144 Trade in allowance, other vehicle
- 600210 Ping-Pong, pool tables, other similar recreation room items, general sports equipment, and health and exercise equipment
- 600310 Bicycles
- 600410 Camping equipment
- 600420 Hunting and fishing equipment
- 600430 Winter sports equipment
- 600901 Water sports equipment
- 600902 Other sports equipment
- 610110 Toys, games, arts, crafts, tricycles, and battery powered riders
- 610120 Playground equipment
- 610130 Musical instruments, supplies, and accessories (now includes pianos)
- 610210 Photographic film
- 610230 Photographic equipment
- 610320 Pets, pet supplies and medicine for pets
- 610900 Miscellaneous recreational expenses on out-of-town trips
- 620111 Membership fees for country clubs, health clubs, swimming pools, tennis clubs, social or other recreational organizations, civic, service, or fraternal organizations
- 620112 Membership fees for credit card memberships
- 620113 Membership fees for automobile service clubs
- 620115 Membership fees for shopping clubs
- 620121 Fees for participant sports, such as golf, tennis, and bowling; management fees for recreational facilities, such as tennis courts and swimming pools in condos and coops
- 620122 Fees for participant sports on out-of-town trips
- 620211 Admission fees for entertainment activities, including movie, theater, concert, opera or other musical series (single admissions and season tickets)
- 620212 Entertainment expenses on out-of-town trips, including admissions to events, museums

and tours

620221 Admission fees to sporting events (single admissions and season tickets)

620222 Admission fees to sporting events on out-of-town trips

620310 Fees for recreational lessons or other instructions

620320 Professional photography fees

620330 Film processing

620410 Pet services

620420 Veterinarian expenses for pets

620903 Miscellaneous entertainment services on out-of-town trips

620904 Rental and repair of musical instruments, supplies, and accessories (now includes pianos)

620905 Rental and repair of photographic equipment

620906 Rental of all boats and outboard motors

620908 Rental and repair of sports, recreation, and exercise equipment

620909 Rental of all campers on out-of-town trips

620912 Rental of video cassettes, tapes, and discs

620916 Rental of video or computer hardware or software

620919 Rental of other vehicles on out-of-town trips

620921 Rental of motor home

620922 Rental of other RV's

620926 Lotteries and pari-mutuel losses

620930 Online entertainment and games

630110 Cigarettes

630210 Cigars, pipe tobacco, and other tobacco products

640130 Wigs, hairpieces, or toupees

640420 Electric personal care appliances

650310 Personal care services for males and females, including haircuts

650900 Rental and repair of personal care appliances

660110 School books, supplies, and equipment for college

660210 Same as 660110 – elementary and high school

660310 Encyclopedia and other sets of reference books

660410 School books, supplies, and equipment for vocational or technical school

660900 Same as 660110 – day care center, nursery school, and other schools

660901 School books, supplies, and equipment for day care centers and nursery schools

660902 School books, supplies, and equipment for other schools

670110 Tuition for college

670210 Same as 670110 – elementary and high school

670310 Other expenses for day care centers and nursery schools, including tuition

670410 Tuition for vocational or technical school

670901 Same as 670110 – other schools

670902 Rentals of books and equipment, and other school-related expenses

680110 Legal fees, excluding real estate closing costs

680140 Funeral, burial or cremation expenses, including limousine and flowers

680210 Safe deposit boxes

680220 Charges for checking accounts and other banking services

680310 Live entertainment for catered affairs

680320 Rental of party supplies for catered affairs

680905 Vacation clubs

680901 Purchase and upkeep of cemetery lots or vaults

680902 Accounting fees

680904 Dating services

690111 Computers, computer systems, and related hardware for non-business use

690112 Computer software and accessories for non-business use

690113 Repair of computers, computer systems, and related equipment for non-business use

690114 Computer information services

690115 Personal digital assistants

690116 Internet services away from home  
 690210 Telephone answering devices  
 690230 Typewriters and other office machines for non-business use  
 690241 Purchases and rentals of smoke alarms and detectors – renter  
 690242 Same as 690241 – owned home  
 690243 Same as 690241 – owned vacation home  
 690244 Other household appliances – renter  
 690245 Same as 690244 – homeowner  
 690310 Installation for computers  
 690320 Installation for TVs  
 690330 Installation for satellite TV equipment  
 690350 Installation of other video or sound systems  
 690340 Installation of sound systems  
 700110 Life, endowment, annuities, and other insurance policies providing death benefits  
 710110 Finance charges, excluding mortgage and vehicles  
 790210 Total purchases at grocery stores  
 790240 Average food and non-alcoholic beverage expenses  
 790310 Beer and wine for home use  
 790320 Other alcoholic beverages for home use  
 790330 Beer, wine, and other alcohol for home use  
 790410 Dining out at restaurants, cafeterias, drive-ins, etc. (excluding alcoholic beverages)  
 790420 Alcoholic beverages at restaurants, cafeterias, drive-ins, etc.  
 790430 School meals for preschool and school age children  
 790600 Same as 220111, 1220121, 220211, 220311, 220313, 220321, 210901, 250111-260211, 270211-270904, incl. management fees for these services – other properties; contractors' labor and material costs, and cost of supplies rented for jobs considered replacement or maintenance/repair – other properties; cost of supplies purchased for jobs considered replacement or maintenance/repair, excl. dwellings and additions being built, and termite and pest control – other properties  
 790610 Contractors' labor and material costs, cost of supplies rented or purchased for jobs considered addition, alteration or new construction – other properties  
 790611 Same as 220612 – other properties  
 790620 Management fees for capital improvements – other properties  
 790630 Special assessments for services and capital improvements – other properties  
 790640 Same as 790620 for management, security, and parking – other properties  
 790690 Cost of supplies purchased for dwellings and additions being built, finishing basement or attic, remodeling rooms, building outdoor patios, driveways, or permanent swimming pools – jobs not yet started – renter  
 790710 Purchase price of property excluding cost of common areas – other properties  
 790730 Closing costs – other properties  
 \*L 790810 Selling price or trade-in value – other properties  
 790830 Total selling expenses – other properties  
 \*L 790910 Special or lump-sum mortgage payments – other properties  
 \*L 790920 Reduction of mortgage principal – other properties  
 790930 Original mortgage amount (mortgage obtained during current quarter's interview) – other properties  
 790940 Reduction of principal on lump sum home equity loan – other properties  
 790950 Original amount of lump sum home equity loan – other properties (loan obtained during current quarter's interview)  
 800111 Alimony expenditures  
 800121 Child support expenditures  
 800700 Meals received as pay  
 800710 Rent received as pay  
 800721 Market value of owned home  
 800804 Support for college students  
 800811 Gifts to non-CU members of stocks, bonds, mutual funds

- 800821 Cash contributions to charities, other organizations
- 800831 Cash contributions to churches or religious organizations
- 800841 Cash contributions to educational institutions
- 800851 Cash contributions to political organizations
- 800861 Other cash gifts
- 810101 Purchase price of property excluding cost of common areas – owned home
- 810102 Purchase price of property excluding cost of common areas – owned vacation home
- 810301 Closing costs – owned home
- 810302 Closing costs – owned vacation home
- 810400 Trip expenses for persons outside the CU
- \*L 820101 Selling price or trade-in value – owned home
- \*L 820102 Selling price or trade-in value – owned vacation home
- 820301 Total selling expenses – owned home
- 820302 Total selling expenses – owned vacation home
- \*L 830101 Special or lump-sum mortgage payments – owned home
- \*L 830102 Special or lump-sum mortgage payments – owned vacation home
- \*L 830201 Reduction of mortgage principal – owned home; portion of management fees for repayment of loans in coops (non-vacation)
- \*L 830202 Same as 830201 – owned vacation home; vacation coops
- \*L 830203 Reduction of principal on lump sum home equity loan – owned home
- \*L 830204 Reduction of mortgage principal, lump sum home equity loan – owned vacation home
- 830301 Original mortgage amount (mortgage obtained during current quarter’s interview) – owned home
- 830302 Original mortgage amount (mortgage obtained during current quarter’s interview) – owned vacation home
- 830303 Original amount of lump sum home equity loan (loan obtained during current quarter’s interview) – owned home
- 830304 Original amount of lump sum home equity loan (loan obtained during current quarter’s interview) – owned vacation home
- 840101 Amount for special assessment for roads, streets, or similar purposes not included in property tax – owned home
- 840102 Amount for special assessment for roads, streets, or similar purposes not included in property tax – owned vacation home
- \*L 850100 Reduction of principal on vehicle loan
- 850200 Amount borrowed excluding interest on vehicle loan
- 850300 Finance charges on other vehicles
- \*L 860100 Amount automobile sold or reimbursed
- \*L 860200 Amount truck or van sold or reimbursed
- \*L 860301 Amount motor home sold or reimbursed
- \*L 860302 Amount other vehicle sold or reimbursed
- \*L 860400 Amount trailer-type or other attachable-type camper sold or reimbursed
- \*L 860500 Amount motorcycle, motor scooter, or moped sold or reimbursed
- \*L 860600 Amount boat with motor sold or reimbursed
- \*L 860700 Amount boat without motor or non camper-type trailer, such as for or cycle sold or reimbursed
- 870101 New cars, trucks, or vans (net outlay), purchase not financed
- 870102 Cash downpayment for new cars, trucks, or vans, purchase financed
- 870103 Finance charges on loans for new cars, trucks, or vans
- 870104 Principal paid on loans for new cars, trucks, or vans
- 870201 Used cars, trucks, or vans (net outlay), purchase not financed
- 870202 Cash downpayment for used cars, trucks, or vans, purchase financed
- 870203 Finance charges on loans for used cars, trucks, or vans
- 870204 Principal paid on loans for used cars, trucks, or vans
- 870301 Motorcycles, motor scooters, or mopeds (net outlay), purchase not financed
- 870302 Cash downpayment for motorcycles, motor scooters, or mopeds, purchase financed
- 870303 Finance charges on loans for motorcycles, motor scooters, or mopeds



870304 Principal paid on loans for motorcycles, motor scooters, or mopeds  
 870401 Boat without motor or non camper-type trailer, such as for boat or cycle (net outlay), purchase not financed  
 870402 Cash downpayment for boat without motor, or non camper-type trailer, such as for boat or cycle, purchase financed  
 870403 Finance charges on loans for boat without motor or non camper-type trailer, such as for boat or cycle  
 870404 Principal paid on loans for boat without motor, or non camper-trailer, such as for boat or cycle  
 870501 Trailer-type or other attachable-type camper (net outlay), purchase not financed  
 870502 Cash downpayment for trailer-type or other attachable-type camper, purchase financed  
 870503 Finance charges on loans for trailer-type or other attachable-type camper  
 870504 Principal paid on loans for trailer-type or other attachable-type camper  
 870605 Purchase of motor home, not financed  
 870606 Principal, motor home, financed  
 870607 Interest, motor home, financed  
 870608 Downpayment, motor home, financed  
 870701 Boat with motor (net outlay), purchase not financed  
 870702 Cash downpayment for boat with motor, purchase financed  
 870703 Finance charges on loans for boat with motor  
 870704 Principal paid on loans for boat with motor  
 870801 Purchase of other vehicle, not financed  
 870802 Principal, other vehicle, financed  
 870803 Interest, other vehicle, financed  
 870804 Downpayment, other vehicle, financed  
 880110 Interest on line of credit home equity loan – owned home  
 \*L 880120 Reduction of principal on line of credit home equity loan – owned home  
 880210 Interest on line of credit home equity loan – other properties  
 \*L 880220 Reduction of principal on line of credit home equity loan – other properties  
 880310 Interest on line of credit home equity loan – owned vacation home  
 \*L 880320 Reduction of principal on line of credit home equity loan – owned vacation home  
 900002 Occupational expenses  
 910042 Monthly transit subsidy amount  
 910050 Rental equivalence of owned home  
 910101 Rental equivalence for vacation home not available for rent  
 910102 Rental equivalence for vacation home available for rent  
 910103 Rental equivalence for timeshares  
 N082\*L 950030 2008 Tax stimulus  
 N082 950031 2008 Tax stimulus  
 990900 Rental and installation of dishwasher, disposal, and range hood  
 990920 Cost of supplies purchased for dwellings and additions being built, finishing basement or attic, remodeling rooms, or building outdoor patios, walks, fences, driveways or swimming pools - renter  
 990930 Cost of supplies purchased finishing basement or attic, remodeling rooms or building outdoor patios, walks, fences, driveways or swimming pools for jobs considered maintenance/repair - owner  
 990940 Same as 990930 - owned vacation home  
 990950 Contractors' labor and material costs, and cost of supplies rented for dwellings and additions being built - other properties

## B. INCOME AND RELATED UCCS ON ITAB FILE

001000 Purchase price of stocks, bonds, or mutual funds including broker fees  
\*L 001010 Sale price of stocks, bonds, and mutual funds, net  
001210 Investments to farm or business  
\*L 001220 Assets taken from farm and business  
\*L 002010 Change in savings account  
\*L 002020 Change in checking account  
\*L 002030 Change in amount held in U.S. savings bonds  
\*L 003000 Change in money owed to CU  
\*L 003100 Amount received in settlement on surrender of insurance policies  
800910 Payroll deductions for government retirement  
800920 Payroll deductions for railroad retirement  
800931 Payroll deductions for private pensions  
800932 Non-payroll deposit to individual retirement plan  
800940 Payroll deductions for Social Security  
900000 Wages and salaries  
\*L 900010 Net business income  
\*L 900020 Net farm income  
900030 Social Security and railroad retirement income  
900040 Pensions and annuities  
900050 Dividends, royalties, estates or trusts  
\*L 900060 Income from roomers and boarders  
\*L 900070 Other rental income  
900080 Interest from savings accounts or bonds  
900090 Supplemental security income  
900100 Unemployment compensation  
900110 Workers' compensation and veterans payments including education  
900120 Public assistance or welfare including money received from job training grants such as Job Corps  
900131 Child support payments received (regular)  
900132 Other regular contributions received including alimony  
900140 Other income including money received from care of foster children, cash scholarships and fellowships or stipends not based on working  
900150 Food stamps  
910000 Lump sum payments from estates, trusts, royalties, alimony, child support, prizes or games of chance or from persons outside CU  
910010 Money from sale of household furnishings, equipment, clothing, jewelry, pets or other belongings, excluding the sale of vehicles or property  
910020 Overpayment on Social Security  
910030 Refund from insurance policies  
910040 Refunds from property taxes  
910041 Lump sum child support payments received  
920010 Market value of savings accounts  
920020 Market value of checking accounts, brokerage accounts and other similar accounts  
920030 Market value of U.S. savings bonds

920040 Market value of stocks, bonds, mutual funds and other such securities  
 \*L 950001 Federal income tax refunds  
 950002 Federal income tax - deducted  
 950003 Additional federal income tax paid  
 \*L 950011 State and local income tax refunds  
 950012 State and local income tax – deducted  
 950013 Additional state and local income tax paid  
 950021 Other taxes  
 950022 Personal property taxes  
 \*L 950023 Other tax refunds  
 \*L 980000 Income before taxes  
 980010 Family size  
 980020 Age of reference person  
 980030 Number of earners  
 980040 Number of vehicles  
 980050 Number of persons under 18  
 980060 Number of persons 65 and over  
 \*L 980070 Income after taxes  
 980090 Percent homeowner  
 980210 Percent male reference person  
 980220 Percent female reference person  
 980230 Percent homeowner with mortgage  
 980240 Percent homeowner without mortgage  
 980250 Percent homeowner, mortgage not reported  
 980260 Percent renter  
 980270 Percent black reference person  
 980281 Percent white reference person  
 980282 Percent Asian reference person  
 980283 Percent Other race reference person  
 980285 Percent Hispanic or Latino reference person  
 980286 Percent non-Hispanic or Latino reference person  
 980290 Percent reference person with elementary education  
 980300 Percent reference person with high school education  
 980310 Percent reference person with college education  
 980320 Percent reference person with no education/other  
 980330 Percent vehicle owner  
 980340 Percent of CUs with at least one leased auto, truck, or van  
 980350 Percent of CUs with at least one owned or leased vehicle  
 980360 Number of vehicles leased

## XIV.APPENDIX 3 -- UCC AGGREGATION

The Istub file in the Programs folder on the CD shows the UCC aggregation used in the sample program. New and used aircraft purchases are not on the microdata files for confidentiality reasons. They are included in the published CE tables so transportation estimates based on these data may vary slightly from BLS published tables.

## XV.APPENDIX 4 -- FMLY AND MEMB VARIABLES ORDERED BY START POSITION (applicable for column-parametered ASCII file ONLY)

This appendix lists FMLY and MEMB variables in the order that they appear on the files. Sections III.F.1. CONSUMER UNIT (CU) CHARACTERISTICS AND INCOME FILE (FMLY) and III.F.2. MEMBER CHARACTERISTICS AND INCOME (MEMB) FILE contain detailed descriptions of these variables arranged on a functional basis.

### A. FMLY FILE

Interview: FMLY

Variable Name	Start Position	Variable Name	Start Position	Variable Name	Start Position
NEWID	1	COMP_AVX	195	FRRE_IRX	387
DIRACC	9	COMPSEC	196	FSALARYX	388
DIRACC_	10	COMPSEC_	197	FSAL_RYX	396
AGE_REF	11	COMPSECX	198	FSLTAXX	397
AGE_REF_	13	COMP_ECX	206	FSLTAXX_	405
AGE2	14	CUTENURE	216	FSSIX	406
AGE2_	16	CUTE_URE	217	FSSIX_	414
AS_COMP1	26	EARNCOMP	221	GOVTCOST	421
AS_C_MP1	28	EARN_OMP	222	GOVT_OST	422
AS_COMP2	29	EDUC_REF	233	HLFBATHQ	423
AS_C_MP2	31	EDUC0REF	235	HLFB_THQ	426
AS_COMP3	32	EDUCA2	236	INC_HRS1	427
AS_C_MP3	34	EDUCA2_	238	INC_RS1	430
AS_COMP4	35	FAM_SIZE	242	INC_HRS2	431
AS_C_MP4	37	FAM_IZE	244	INC_RS2	434
AS_COMP5	38	FAM_TYPE	245	INC_RANK	435
AS_C_MP5	40	FAM_YPE	246	INC__ANK	445
BATHRMQ	41	FAMTFEDX	247	INCLOSSA	456
BATHRMQ_	44	FAMT_EDX	255	INCL_SSA	464
BEDROOMQ	45	FEDRFNDX	256	INCLOSSB	465
BEDR_OMQ	48	FEDR_NDX	264	INCL_SSB	473
BLS_URBN	49	FEDTAXX	265	INCNONW1	474
BSINVSTX	50	FEDTAXX_	273	INCN_NW1	475
BSIN_STX	60	FFRMINCX	274	INCNONW2	476
BUILDING	61	FFRM_NCX	283	INCN_NW2	477
BUIL_ING	63	FGOVRETX	284	INCOMEY1	478
CKBKACTX	85	FGOV_ETX	292	INCO_EY1	479

CKBK_CTX	95	FINCATAX	293	INCOMEY2	480
COMPBND	143	FINCAT_X	302	INCO_EY2	481
COMPBND_	144	FINCBTAX	303	INCWEEK1	482
COMPBNDX	145	FINCBT_X	312	INCW_EK1	484
COMP_NDX	153	FINDRETX	313	INCWEEK2	485
COMPCKG	154	FIND_ETX	321	INCW_EK2	487
COMPCKG_	155	FININCX	322	INSRFNDX	488
COMPCKGX	156	FININCX_	330	INSR_NDX	496
COMP_KGX	164	FINLWT21	331	INTEARNX	497
COMPENSX	165	FJSSDEDX	342	INTE_RNX	505
COMP_NSX	173	FJSS_EDX	350	MISCTAXX	515
COMPOWD	174	FNONFRMX	351	MISC_AXX	523
COMPOWD_	175	FNON_RMX	360	LUMPSUMX	527
COMPOWDX	176	FPRIPENX	361	LUMP_UMX	535
COMP_WDX	184	FPRI_ENX	369	MARITAL1	536
COMPSAV	185	FRRDEDX	370	MARI_AL1	537
COMPSAV_	186	FRRDEDX_	378	MONYOWDX	547
COMPSAVX	187	FRRETIRX	379	MONY_WDX	555

Interview: FMLY

Variable Name	Start Position	Variable Name	Start Position	Variable Name	Start Position
NO_EARNR	556	SAVA_CTX	706	WTREP10	940
NO_E_RNR	558	SECESTX	707	WTREP11	951
NONINCMX	572	SECESTX_	717	WTREP12	962
NONI_CMX	580	SELLSECX	718	WTREP13	973
NUM_AUTO	581	SELL_ECX	728	WTREP14	984
NUM_UTO	583	SETLINSX	729	WTREP15	995
OCCUCOD1	593	SETL_NSX	737	WTREP16	1006
OCCU_OD1	595	SEX_REF	738	WTREP17	1017
OCCUCOD2	596	SEX_REF_	739	WTREP18	1028
OCCU_OD2	598	SEX2	740	WTREP19	1039
OTHRFNDX	606	SEX2_	741	WTREP20	1050
OTHR_NDX	614	SLOCTAXX	742	WTREP21	1061
OTHRINCX	615	SLOC_AXX	750	WTREP22	1072
OTHR_NCX	623	SLRFUNDX	751	WTREP23	1083
PENSIONX	624	SLRF_NDX	759	WTREP24	1094
PENS_ONX	632	SMSASTAT	760	WTREP25	1105
PERSLT18	633	SSOVERPX	761	WTREP26	1116
PERS_T18	635	SSOV_RPX	769	WTREP27	1127
PERSOT64	636	ST_HOUS	770	WTREP28	1138
PERS_T64	638	ST_HOUS_	771	WTREP29	1149
POPSIZE	639	TAXPROPX	772	WTREP30	1160
PRINEARN	640	TAXP_OPX	780	WTREP31	1171
PRIN_ARN	642	TOTTXPDX	781	WTREP32	1182
PTAXRFDX	643	TOTT_PDX	790	WTREP33	1193
PTAX_FDX	651	UNEMPLX	791	WTREP34	1204
PUBLHOUS	652	UNEMPLX_	799	WTREP35	1215
PUBL_OUS	653	USBNDX	800	WTREP36	1226
PURSSECX	654	USBNDX_	808	WTREP37	1237
PURS_ECX	662	VEHQ	809	WTREP38	1248
QINTRVMO	663	VEHQ_	811	WTREP39	1259
QINTRVYR	665	WDBSASTX	812	WTREP40	1270
RACE2	669	WDBS_STX	822	WTREP41	1281
RACE2_	670	WDBSGDSX	823	WTREP42	1292
REF_RACE	671	WDBS_DSX	831	WTREP43	1303
REF_ACE	672	WELFAREX	832	WTREP44	1314
REGION	673	WELF_REX	840	TOTEXPPQ	1325
RENTEQVX	674	WTREP01	841	TOTEXPCQ	1337
RENT_QVX	680	WTREP02	852	FOODPQ	1349
RESPSTAT	681	WTREP03	863	FOODCQ	1361
RESP_TAT	682	WTREP04	874	FDHOMEPQ	1373
ROOMSQ	683	WTREP05	885	FDHOMECPQ	1385
ROOMSQ_	686	WTREP06	896	FDAYWAYPQ	1397
SALEINCX	687	WTREP07	907	FDAYWAYCQ	1409
SALE_NCX	695	WTREP08	918	FDXMAPPQ	1421
SAVACCTX	696	WTREP09	929	FDXMAPCQ	1433

Interview: FMLY

Variable Name	Start Position	Variable Name	Start Position	Variable Name	Start Position
FDMAPPQ	1445	DMSXCCCQ	1985	OTHVEHPQ	2525
FDMAPCQ	1457	BBYDAYPQ	1997	OTHVEHCQ	2537
ALCBEVPQ	1469	BBYDAYCQ	2009	GASMO PQ	2549
ALCBEVCQ	1481	OTHHEXPQ	2021	GASMOCQ	2561
HOUSPQ	1493	OTHHEXCQ	2033	VEHFINPQ	2573
HOUSCQ	1505	HOUSEQPQ	2045	VEHFINCQ	2585
SHELTPQ	1517	HOUSEQCQ	2057	MAINRPPQ	2597
SHELTCQ	1529	TEXTILPQ	2069	MAINRPCQ	2609
OWNDWEPQ	1541	TEXTILCQ	2081	VEHINS PQ	2621
OWNDWECQ	1553	FURNTRPQ	2093	VEHINSCQ	2633
MRTINTPQ	1565	FURNTRCQ	2105	VRNTLOPQ	2645
MRTINTCQ	1577	FLRCVRPQ	2117	VRNTLOCQ	2657
PROPTXPQ	1589	FLRCVRCQ	2129	PUBTRAPQ	2669
PROPTXCQ	1601	MAJAPPQ	2141	PUBTRACQ	2681
MRPINS PQ	1613	MAJAPPCQ	2153	TRNTRPPQ	2693
MRPINS CQ	1625	SMLAPPQ	2165	TRNTRPCQ	2705
RENDWEPQ	1637	SMLAPPCQ	2177	TRNOTHPQ	2717
RENDWECQ	1649	MISCEQPQ	2189	TRNOTHCQ	2729
RNTXRPPQ	1661	MISCEQCQ	2201	HEALTHPQ	2741
RNTXRPCQ	1673	APPARPQ	2213	HEALTHCQ	2753
RNTAPYPQ	1685	APPARCQ	2225	HLTHINPQ	2765
RNTAPYCQ	1697	MENBOYPQ	2237	HLTHINCQ	2777
OTHLODPQ	1709	MENBOYCQ	2249	MEDSRVPQ	2789
OTHLODCQ	1721	MENSIXPQ	2261	MEDSRVCQ	2801
UTILPQ	1733	MENSIXCQ	2273	PREDRGPQ	2813
UTILCQ	1745	BOYFIFPQ	2285	PREDRGCQ	2825
NTLGAS PQ	1757	BOYFIFCQ	2297	MEDSUPPQ	2837
NTLGASCQ	1769	WOMGRLPQ	2309	MEDSUPCQ	2849
ELCTRCPQ	1781	WOMGRLCQ	2321	ENTERTPQ	2861
ELCTRCCQ	1793	WOMSIXPQ	2333	ENTERTCQ	2873
ALLFULPQ	1805	WOMSIXCQ	2345	FEEADMPQ	2885
ALLFULCQ	1817	GRLFIFPQ	2357	FEEADMCQ	2897
FULOILPQ	1829	GRLFIFCQ	2369	TVRDIOPQ	2909
FULOILCQ	1841	CHLDRNPQ	2381	TVRDIOCQ	2921
OTHFLSPQ	1853	CHLDRNCQ	2393	OTHEQPPQ	2933
OTHFLSCQ	1865	FOOTWRPQ	2405	OTHEQPCQ	2945
TELEPHPQ	1877	FOOTWRCQ	2417	PETTOYPQ	2957
TELEPHCQ	1889	OTHAPLPQ	2429	PETTOYCQ	2969
WATRPS PQ	1901	OTHAPLCQ	2441	OTHENTPQ	2981
WATRPS CQ	1913	TRANSPQ	2453	OTHENTCQ	2993
HOUSOPPQ	1925	TRANSCQ	2465	PERSCAPQ	3005
HOUSOPCQ	1937	CARTKNPQ	2477	PERSCACQ	3017
DOMSRVPQ	1949	CARTKNCQ	2489	READPQ	3029
DOMSRVCQ	1961	CARTKUPQ	2501	READCQ	3041
DMSXCCPQ	1973	CARTKUCQ	2513	EDUCAPQ	3053

Interview: FMLY

Variable Name	Start Position	Variable Name	Start Position	Variable Name	Start Position
EDUCACQ	3065	ALIOTHX	3338	TOTHRLOC	3572
TOBACCPQ	3077	ALIOTHX_	3346	TTRANPRP	3582
TOBACCCQ	3089	CHDLMPX	3347	TTRANPRC	3592
MISCPQ	3101	CHDLMPX_	3355	TGASMOTP	3602
MISCCQ	3113	ERANKMTH	3356	TGASMOTC	3612
MISC1PQ	3125	ERAN_MTH	3367	TVRENTLP	3622
MISC1CQ	3137	ERANKH	3368	TVRENTLC	3632
MISC2PQ	3149	ERANKH_	3377	TCARTRKP	3642
MISC2CQ	3161	TOTEX4PQ	3387	TCARTRKC	3652
CASHCOPOQ	3173	TOTEX4CQ	3399	TOTHVHRP	3662
CASHCOCQ	3185	MISCX4PQ	3411	TOTHVHRC	3672
PERINSPQ	3197	MISCX4CQ	3423	TOTHTREP	3682
PERINSCQ	3209	RECORDS	3438	TOTHTREC	3692
LIFINSPQ	3221	RECORDS_	3439	TTRNTRIP	3702
LIFINSCQ	3233	TYPEREC1	3440	TTRNTRIC	3712
RETPENPQ	3245	TYPE_EC1	3441	TFAREP	3722
RETPENCQ	3257	TYPEREC2	3442	TFAREC	3732
HH_CU_Q	3269	TYPE_EC2	3443	TAIRFARP	3742
HH_CU_Q_	3271	TYPEREC3	3444	TAIRFARC	3752
HHID	3272	TYPE_EC3	3445	TOTHFARP	3762
HHID_	3275	TYPEREC4	3446	TOTHFARC	3772
POV_CY	3276	TYPE_EC4	3447	TLOCALTP	3782
POV_CY_	3277	TYPEREC5	3448	TLOCALTC	3792
POV_PY	3278	TYPE_EC5	3449	TENTRMNP	3802
POV_PY_	3279	TYPEREC6	3450	TENTRMNC	3812
HEATFUEL	3292	TYPE_EC6	3451	TFEESADP	3822
HEAT_UEL	3294	TYPEREC7	3452	TFEESADC	3832
SWIMPOOL	3298	TYPE_EC7	3453	TOTHENTP	3842
SWIM_OOL	3300	TYPEREC8	3454	TOTHENTC	3852
WATERHT	3307	TYPE_EC8	3455	OWNVACP	3862
WATERHT_	3309	VEHQL	3456	OWNVACC	3872
APTMENT	3310	VEHQL_	3458	VOTHRLOP	3882
APTMENT_	3312	NUM_TVAN	3459	VOTHRLOC	3892
OFSTPARK	3313	NUM_VAN	3461	VMISCHEP	3902
OFST_ARK	3315	TTOTALP	3462	VMISCHEC	3912
WINDOWAC	3316	TTOTALC	3472	UTILOWNP	3922
WIND_WAC	3318	TFOODTOP	3482	UTILOWNC	3932
CNTRALAC	3319	TFOODTOC	3492	VFUELOIP	3942
CNTR_LAC	3321	TFOODAWP	3502	VFUELOIC	3952
CHILDAGE	3322	TFOODAWC	3512	VOTHRFLP	3962
CHIL_AGE	3323	TFOODHOP	3522	VOTHRFLC	3972
INCLASS	3324	TFOODHOC	3532	VELECTRP	3982
STATE	3326	TALCBEPV	3542	VELECTRC	3992
CHDOTHX	3329	TALCBEVC	3552	VNATLGAP	4002
CHDOTHX_	3337	TOTHRLOP	3562	VNATLGAC	4012



Interview: FMLY

Variable Name	Start Position	Variable Name	Start Position	Variable Name	Start Position
VWATERPP	4022	ECARTKNC	4416	WELFREBX	4667
VWATERPC	4032	ECARTKUP	4426	WELF_EBX	4673
MRTPRNOP	4042	ECARTKUC	4436	FOODSMPX	4677
MRTPRNOC	4052	EOTHVEHP	4446	FOOD_MPX	4683
UTILRNTP	4062	EOTHVEHC	4456	FOODSMPB	4684
UTILRNTC	4072	EENTRMTP	4466	FOOD_MPB	4686
RFUELOIP	4082	EENTRMTC	4476	FOODSPBX	4687
RFUELOIC	4092	EOTHENTP	4486	FOOD_PBX	4693
ROTHRFLP	4102	EOTHENTC	4496	INCLOSAB	4694
ROTHRFLC	4112	ENOMOTRP	4506	INCL_SAB	4696
RELECTRP	4122	ENOMOTRC	4516	INCLSABX	4697
RELECTRC	4132	EMOTRVHP	4526	INCL_ABX	4703
RNATLGAP	4142	EMOTRVHC	4536	INCLOSBB	4704
RNATLGAC	4152	EENTMSCP	4546	INCL_SBB	4706
RWATERPP	4162	EENTMSCC	4556	INCLSBBX	4707
RWATERPC	4172	EMISCELP	4566	INCL_BBX	4713
POVLEVCY	4182	EMISCELC	4576	CHDLMPB	4714
POVL_VCY	4190	EMISCMTP	4586	CHDLMPB_	4716
POVLEVPY	4191	EMISCMTC	4596	CHDLMPBX	4717
POVL_VPY	4199	UNISTRQ	4606	CHDL_PBX	4723
COOKING	4200	UNISTRQ_	4608	CHDOTHB	4724
COOKING_	4202	YRBUILT	4609	CHDOTHB_	4726
PORCH	4203	YRBUILT_	4613	CHDOTHBX	4727
PORCH_	4205	INTEARNB	4614	CHDO_HBX	4733
ETOTALP	4206	INTE_RNB	4616	ALIOHNB	4734
ETOTALC	4216	INTERNBX	4617	ALIOHNB_	4736
ETOTAPX4	4226	INTE_NBX	4623	ALIOHNBX	4737
ETOTACX4	4236	FININCB	4624	ALIO_HBX	4743
EHOUSNGP	4246	FININCB_	4626	LUMPSUMB	4744
EHOUSNGC	4256	FININCBX	4627	LUMP_UMB	4746
ESHELTRP	4266	FINI_CBX	4633	LMPSUMBX	4747
ESHELTRC	4276	PENSIONB	4634	LMPS_MBX	4753
EOWNDWLP	4286	PENS_ONB	4636	SALEINCB	4754
EOWNDWLC	4296	PNSIONBX	4637	SALE_NCB	4756
EOTHLODP	4306	PNSI_NBX	4643	SALINCBX	4757
EOTHLODC	4316	UNEMPLB	4644	SALI_CBX	4763
EMRTPNOP	4326	UNEMPLB_	4646	OTHRINCB	4764
EMRTPNOC	4336	UNEMPLBX	4647	OTHR_NCB	4766
EMRTPNVP	4346	UNEM_LBX	4653	OTRINCBX	4767
EMRTPNVC	4356	COMPENSB	4654	OTRI_CBX	4773
ETRANPTP	4366	COMP_NSB	4656	INCLASS2	4774
ETRANPTC	4376	COMPNSBX	4657	INCL_SS2	4775
EVEHPURP	4386	COMP_SBX	4663	CUID	4776
EVEHPURC	4396	WELFAREB	4664	INTERI	4783
ECARTKNP	4406	WELF_REB	4666	HORREF1	4784

Interview: FMLY

Variable Name	Start Position	Variable Name	Start Position	Variable Name	Start Position
HORREF1_	4785	FFRMINCI	5076	FOODSMP3	5397
HORREF2	4786	FGOVRET	5079	FOODSMP4	5405
HORREF2_	4787	FGOV_ETM	5087	FOODSMP5	5413
ALIOHXM	4788	FINCATXM	5088	FOODSMPI	5421
ALIO_HXM	4798	FINCA_XM	5099	FPRIPENM	5424
ALIOHXM1	4799	FINCATX1	5100	FPRI_ENM	5432
ALIOHXM2	4807	FINCATX2	5109	FRRDEDM	5433
ALIOHXM3	4815	FINCATX3	5118	FRRDEDM_	5441
ALIOHXM4	4823	FINCATX4	5127	FRRETIRM	5442
ALIOHXM5	4831	FINCATX5	5136	FRRE_IRM	5452
ALIOHXM1	4839	FINCBTXM	5145	FRRETIR1	5453
CHDOHXM	4842	FINCB_XM	5156	FRRETIR2	5461
CHDO_HXM	4852	FINCBTX1	5157	FRRETIR3	5469
CHDOHXM1	4853	FINCBTX2	5166	FRRETIR4	5477
CHDOHXM2	4861	FINCBTX3	5175	FRRETIR5	5485
CHDOHXM3	4869	FINCBTX4	5184	FRRETIRI	5493
CHDOHXM4	4877	FINCBTX5	5193	FSALARYM	5496
CHDOHXM5	4885	FINCBTXI	5202	FSAL_RYM	5506
CHDOHXM1	4893	FININCXM	5205	FSALARY1	5507
COMPENSM	4896	FINI_CXM	5215	FSALARY2	5515
COMP_NSM	4906	FININCX1	5216	FSALARY3	5523
COMPENS1	4907	FININCX2	5224	FSALARY4	5531
COMPENS2	4915	FININCX3	5232	FSALARY5	5539
COMPENS3	4923	FININCX4	5240	FSALARYI	5547
COMPENS4	4931	FININCX5	5248	FSLTAXXM	5550
COMPENS5	4939	FININCXI	5256	FSLT_XXM	5560
COMPENSI	4947	FJSSDEDM	5259	FSLTAXX1	5561
ERANKHM	4950	FJSS_EDM	5269	FSLTAXX2	5569
ERANKHM_	4959	FJSSDED1	5270	FSLTAXX3	5577
ERNKMTHM	4960	FJSSDED2	5278	FSLTAXX4	5585
ERNK_THM	4973	FJSSDED3	5286	FSLTAXX5	5593
FAMTFEDM	4974	FJSSDED4	5294	FSSIXM	5601
FAMT_EDM	4983	FJSSDED5	5302	FSSIXM_	5611
FAMTFED1	4984	FNONFRMM	5310	FSSIX1	5612
FAMTFED2	4992	FNON_RMM	5321	FSSIX2	5620
FAMTFED3	5000	FNONFRM1	5322	FSSIX3	5628
FAMTFED4	5008	FNONFRM2	5331	FSSIX4	5636
FAMTFED5	5016	FNONFRM3	5340	FSSIX5	5644
FFRMINCM	5024	FNONFRM4	5349	FSSIXI	5652
FFRM_NCM	5035	FNONFRM5	5358	INC_RNKM	5655
FFRMINC1	5036	FNONFRMI	5367	INC__NKM	5664
FFRMINC2	5044	FOODSMPM	5370	INC_RNK1	5665
FFRMINC3	5052	FOOD_MPM	5380	INC_RNK2	5674
FFRMINC4	5060	FOODSMP1	5381	INC_RNK3	5683
FFRMINC5	5068	FOODSMP2	5389	INC_RNK4	5692

Interview: FMLY

Variable Name	Start Position	Variable Name	Start Position	Variable Name	Start Position
INC_RNK5	5701	POV_CY3	5996	REVSMORT	6199
INCLOSAM	5710	POV_CY4	5997	REVS_ORT	6200
INCL_SAM	5721	POV_CY5	5998	RVSLUMP	6201
INCLOSA1	5722	POV_PYM	5999	RVSLUMP_	6202
INCLOSA2	5731	POV_PYM_	6000	RVSREGMO	6203
INCLOSA3	5740	POV_PY1	6001	RVSR_GMO	6204
INCLOSA4	5749	POV_PY2	6002	RVSLOC	6205
INCLOSA5	5758	POV_PY3	6003	RVSLOC_	6206
INCLOSAI	5767	POV_PY4	6004	RVSOTHPY	6207
INCLOSBM	5770	POV_PY5	6005	RVSO_HPY	6208
INCL_SBM	5781	PRINERNM	6006	TYPEPYX	6209
INCLOSBI	5782	PRIN_RNM	6008	TYPEPYX_	6217
INCLOSBI	5791	PRINERN1	6009		
INCLOSBI	5800	PRINERN2	6011		
INCLOSBI	5809	PRINERN3	6013		
INCLOSBI	5818	PRINERN4	6015		
INCLOSBI	5827	PRINERN5	6017		
INTEARNM	5830	TOTTXPDM	6019		
INTE_RNM	5840	TOTT_PDM	6030		
INTEARN1	5841	TOTTXPD1	6031		
INTEARN2	5849	TOTTXPD2	6040		
INTEARN3	5857	TOTTXPD3	6049		
INTEARN4	5865	TOTTXPD4	6058		
INTEARN5	5873	TOTTXPD5	6067		
INTEARNI	5881	UNEMPLXM	6076		
OTHRINCM	5884	UNEM_LXM	6086		
OTHR_NCM	5894	UNEMPLX1	6087		
OTHRINC1	5895	UNEMPLX2	6095		
OTHRINC2	5903	UNEMPLX3	6103		
OTHRINC3	5911	UNEMPLX4	6111		
OTHRINC4	5919	UNEMPLX5	6119		
OTHRINC5	5927	UNEMPLXI	6127		
OTHRINCI	5935	WELFAREM	6130		
PENSIONM	5938	WELF_REM	6140		
PENS_ONM	5948	WELFARE1	6141		
PENSION1	5949	WELFARE2	6149		
PENSION2	5957	WELFARE3	6157		
PENSION3	5965	WELFARE4	6165		
PENSION4	5973	WELFARE5	6173		
PENSION5	5981	WELFAREI	6181		
PENSIONI	5989	COLPLAN	6184		
POV_CYM	5992	COLPLAN_	6185		
POV_CYM_	5993	COLPLANX	6186		
POV_CY1	5994	COLP_ANX	6194		
POV_CY2	5995	PSU	6195		

Interview: MEMB

Variable Name	Start Position	Variable Name	Start Position	Variable Name	Start Position
NEWID	1	INCORP_	125	SSNORM_	261
AGE	9	INCWEEKQ	126	SALARYB	262
AGE_	11	INCW_EKQ	128	SALARYB_	264
AMTFED	12	INDRETX	129	SALARYBX	265
AMTFED_	20	INDRETX_	139	SALA_YBX	271
ANFEDTX	21	JSSDEDX	140	NONFARMB	272
ANFEDTX_	29	JSSDEDX_	146	NONF_RMB	274
ANGOVRTX	30	MARITAL	147	NONFRMBX	275
ANGO_RTX	38	MEDICOV	149	NONF_MBX	281
ANPRVPNX	39	MEDICOV_	150	FARMINCB	282
ANPR_PNX	47	MEMBNO	151	FARM_NCB	284
ANRRDEDX	48	NFRMLOSS	153	FRMINCBX	285
ANRR_EDX	56	NFRM_OSS	154	FRMI_CBX	291
ANSLTX	57	NONFARMX	155	RRRETIRB	292
ANSLTX_	65	NONF_RMX	165	RRRE_IRB	294
ARM_FORC	66	OCCUCODE	166	RRRETRBX	295
ARM_ORC	67	OCCU_ODE	168	RRRE_RBX	301
CU_CODE	68	PAYPERD	170	SSIB	302
EARNER	70	PAYPERD_	171	SSIB_	304
EARNER_	71	PRIVPENX	172	SSIBX	305
EARNTYPE	72	PRIV_ENX	180	SSIBX_	311
EARN_YPE	73	PWRKSTAT	181	HORIGIN	312
EDUCA	74	PWRK_TAT	182	HISPANIC	313
EDUCA_	76	RRRDEDX	185	HISP_NIC	314
EMPLCONT	77	RRRDEDX_	193	MEMBRACE	315
EMPL_ONT	78	RRRETIRX	194	RC_WHITE	316
FARMINCX	79	RRRE_IRX	202	RC_W_ITE	317
FARM_NCX	89	SALARYX	203	RC_BLACK	318
FARMLOSS	90	SALARYX_	213	RC_B_ACK	319
FARM_OSS	91	SCHMLWKQ	214	RC_NATAM	320
GOVRETX	92	SCHM_WKQ	216	RC_N_TAM	321
GOVRETX_	100	SCHMLWKX	217	RC_ASIAN	322
GROSPAYX	101	SCHM_WKX	220	RC_A_IAN	323
GROS_AYX	111	SEX	221	RC_PACIL	324
IN_COLL	112	SLFEMPSS	223	RC_P_CIL	325
IN_COLL_	113	SLFE_PSS	229	RC_OTHER	326
INC_HRSQ	114	SLTAXX	230	RC_O_HER	327
INC_RSQ	117	SLTAXX_	238	RC_DK	328
INCMEDCR	118	SOCRXX	239	RC_DK_	329
INCM_DCR	119	SOCRXX_	247	ASIAN	330
INCNONWK	120	SS_RRQ	248	ASIAN_	331
INCN_NWK	121	SS_RRQ_	250	ANFEDTXM	332
INCOMEY	122	SSIX	251	ANFE_TXM	340
INCOMEY_	123	SSIX_	259	ANGOVRTM	341
INCORP	124	SSNORM	260	ANGO_RTM	349

Interview: MEMB

Variable Name	Start Position	Variable Name	Start Position
ANPRVPM	350	SLFEMPSM	644
ANPR_PNM	358	SLFE_PSM	652
ANRRDEDM	359	SLFEMPS1	653
ANRR_EDM	367	SLFEMPS2	659
ANSLTXM	368	SLFEMPS3	665
ANSLTXM_	376	SLFEMPS4	671
FARMINCM	377	SLFEMPS5	677
FARM_NCM	388	SOCRXXM	683
FARMINC1	389	SOCRXXM_	693
FARMINC2	398	SOCRXX1	694
FARMINC3	407	SOCRXX2	702
FARMINC4	416	SOCRXX3	710
FARMINC5	425	SOCRXX4	718
FARMINCI	434	SOCRXX5	726
JSSDEDXM	437	SSIXM	734
JSSD_DXM	445	SSIXM_	744
JSSDEDX1	446	SSIX1	745
JSSDEDX2	452	SSIX2	753
JSSDEDX3	458	SSIX3	761
JSSDEDX4	464	SSIX4	769
JSSDEDX5	470	SSIX5	777
NONFARMM	476	SSIXI	785
NONF_RMM	487		
NONFARM1	488		
NONFARM2	497		
NONFARM3	506		
NONFARM4	515		
NONFARM5	524		
NONFARMI	533		
RRRETIRM	536		
RRRE_IRM	546		
RRRETIR1	547		
RRRETIR2	555		
RRRETIR3	563		
RRRETIR4	571		
RRRETIR5	579		
RRRETIRI	587		
SALARYXM	590		
SALA_YXM	600		
SALARYX1	601		
SALARYX2	609		
SALARYX3	617		
SALARYX4	625		
SALARYX5	633		
SALARYXI	641		

## **XVI. APPENDIX 5 -- PUBLICATIONS AND DATA RELEASES FROM THE CONSUMER EXPENDITURE SURVEY**

A partial list of publications containing data from the CE program appears below. Reports may be purchased from the Chicago regional sales center, from the U.S. Government Printing Office, Washington D.C., 20402, or from National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161. To place a telephone order with National Technical Information Service, call (703)-487-4650, or for a rush order, call 1(800)-553-NTIS. Single year Consumer Expenditure reports are available on the Consumer Expenditure Survey website: [www.bls.gov/cex](http://www.bls.gov/cex).

Consumer Expenditures in 2007 Report 1016 (2009)	Consumer unit income and expenditures, integrated data from Diary and Interview Surveys, classified by consumer unit characteristics. 13 tables.
Consumer Expenditure Survey Anthology, Report 1009 (2008)	A collection of analytical and methodological articles using Consumer Expenditure Survey data.
Consumer Expenditure Survey, 2004-2005, Report 1008 (2008)	Consumer unit income and expenditures, integrated data from Interview and Diary Surveys, classified by consumer unit characteristics: one way and cross tabulations, relative and aggregate shares. 75 tables.
Consumer Expenditures in 2006 Report 1010 (2008)	Consumer unit income and expenditures, integrated data from Diary and Interview Surveys, classified by consumer unit characteristics. 13 tables.
Consumer Expenditures in 2005, Report 998 (2007)	Consumer unit income and expenditures, integrated data from Diary and Interview Surveys, classified by consumer unit characteristics. 13 tables.
Consumer Expenditures in 2004, Report 992 (2006)	Consumer unit income and expenditures, integrated data from Diary and Interview Surveys, classified by consumer unit characteristics. 13 tables.
Consumer Expenditures in 2003, Report 986 (2005)	Consumer unit income and expenditures, integrated data from Diary and Interview Surveys, classified by consumer unit characteristics. 13 tables.
Consumer Expenditure Survey Anthology, Report 981 (2005)	A collection of analytical and methodological articles using Consumer Expenditure Survey data.
Consumer Expenditures in 2002, Report 974 (2004)	Consumer unit income and expenditures, integrated data from Diary and Interview Surveys, classified by consumer unit characteristics. 10 tables.
Consumer Expenditure Survey, 2000-2001, Report 969 (2003)	Consumer unit income and expenditures, integrated data from Interview and Diary Surveys, classified by consumer unit characteristics: one way and cross tabulations, relative and aggregate shares. 64 tables.
Consumer Expenditure Survey Anthology, Report 967 (2003)	A collection of analytical and methodological articles using Consumer Expenditure Survey data.
Consumer Expenditures in 2001, Report 966 (2003)	Consumer unit income and expenditures, integrated data from Diary and Interview Surveys, classified by consumer unit characteristics. 10 tables. Available on request (202)691-6900.

Consumer Expenditures in 2000,  
Report 958 (2002)

Consumer unit income and expenditures, integrated data from  
Diary and Interview Surveys, classified by consumer unit  
characteristics. 10 tables. Available on request (202)691-6900.

For information on the availability of prior publications, please contact us by phone at (202) 691-6900, or  
by e-mail at [cexinfo@bls.gov](mailto:cexinfo@bls.gov).

## CONSUMER EXPENDITURE SURVEY DATA ON THE INTERNET

Commonly-requested CE data tables can be found on-line at <http://www.bls.gov/cex>.  
The following One and Two-year Tables of integrated Diary and Interview data are available under the  
[Tables Created by BLS](#) heading:

### One Year Tables

*Standard Tables from 1984-2008*  
*Expenditure Shares Tables from 1998-2008*  
*Aggregate Expenditure Shares Tables from 1998-2008*

### Two Year Tables

*Cross-Tabulated Tables from 1986-2008*  
*Metropolitan Statistical Area Tables from 1986-2008*  
*Region Tables from 1998-2008*  
*High Income Tables from 1998-2002*  
*Multi-Year Tables for 1984-1992 and 1994-2008*

## FAX ON DEMAND - FAXSTAT

FAXSTAT contains information and data that may be faxed to users from a touch-tone phone 24  
hours a day -- 7 days a week. To receive FAXSTAT transmissions dial (202) 691-6325 and follow the  
voice prompts. Consumer Expenditure Survey data that are accessible on FAXSTAT are for the most  
recent year available

## CD-ROMS

CE microdata on CD-Rom are available from the Bureau of Labor Statistics for 1972-73, 1980-81,  
1990-91, 1992-93, and for each individual year from 1994-2008. The 1980-81 through 2008 releases  
contain Interview and Diary data, while the 1972-73 CD includes Interview data only. The 1980-81, and  
the 1990 files (of the 1990-91 CD) include selected EXPN data, while the 1991 files (from the 1990-91  
CD) and the 1992-93 CD do not. In addition to the Interview and Diary data, the CDs from 1994-2004  
include the complete collection of EXPN files. A 1984-94 "multi-year" CD that presents Interview FMLY  
file data is also available. In addition to the microdata, the CD's also contain the same integrated Diary  
and Interview tabulated data (1984-present) that are found on the Consumer Expenditure Survey web site  
(<http://www.bls.gov/cex>).

More information on the particular CD roms available and the order form can be found on the Consumer  
Expenditure Survey web site: <http://www.bls.gov/cex/csxmicro.htm>

## **STATE CODES**

State codes from 1982 to 1993 are available for the Interview Survey. The files contain the variables NEWID and STATE, thus enabling the microdata user to identify the states in which consumer units reside. Caution should be exercised when analysis is done by state, due to the composition of some PSUs. PSUs in some state border areas may not be unique to one state, but may contain CUs from two or more states. (See Section X.D. STATE IDENTIFIER.) Also, because of nondisclosure requirements STATE has been suppressed for some sampled CUs. (See Section IV.A. CU CHARACTERISTICS AND INCOME FILE (FMLY.)) The state data diskettes are free and may be obtained by contacting the BLS national office. (See Section XVII. INQUIRIES, SUGGESTIONS, AND COMMENTS)

## **XVII. INQUIRIES, SUGGESTIONS, AND COMMENTS**

If you have any questions, suggestions, or comments about the survey, the microdata, or its documentation, please call (202) 691-6900 or email [cexinfo@bls.gov](mailto:cexinfo@bls.gov).

Written suggestions and comments should be forwarded to:

Division of Consumer Expenditure Surveys  
Branch of Information and Analysis  
Bureau of Labor Statistics, Room 3985  
2 Massachusetts Ave. N.E.  
Washington, DC. 20212-0001

The Bureau of Labor Statistics will use these responses in planning future releases of the microdata.