

2010 CONSUMER EXPENDITURE INTERVIEW SURVEY
PUBLIC USE MICRODATA
User's Documentation
September 27, 2011

U.S. Department of Labor
Bureau of Labor Statistics
Division of Consumer Expenditure Survey

TABLE OF CONTENTS

Links to Pages

I. INTRODUCTION	4
II. CHANGES FROM THE 2009 MICRODATA FILES	4
III FILE INFORMATION	8
A. DATA SET NAMES	15
B. RECORD COUNTS AND LOGICAL RECORD LENGTHS	18
C. DATA FLAGS	20
D. INCOME IMPUTATION	22
E. FILE NOTATION	23
F. ALLOCATION AND RECORD ORIGIN (EXPAN)	23
G. NOTES ON FILES	24
1. CONSUMER UNIT (CU) CHARACTERISTICS FILE (FMLY)	24
a. SUMMARY EXPENDITURE DATA	24
2. MEMBER CHARACTERISTICS AND INCOME FILE	25
3. MONTHLY EXPENDITURES (MTAB) FILE	26
4. INCOME (ITBI) FILE	26
5. IMPUTED. INCOME (ITII) FILE	27
6. PARADATA FILES	27
a. CU Level Paradata file (FPAR)	28
b. Contact History Attempt file (MCHI)	28
7 DETAILED EXPENDITURES (EXPAN) FILES	28
a. Section 1- General Survey Information (APA)	28
b. Section 21 – Credit Liability (FN2)	28
8. PROCESSING FILES	29
a. Istub file	29
b. UCC file	29
c. VEHICLE file	29
d. Sample program file	30
IV. TOPCODING AND OTHER NONDISCLOSURE REQUIREMENTS	30
A. CU CHARACTERISTICS AND INCOME FILE (FMLY)	30
B. MEMBER CHARACTERISTICS AND INCOME FILE (MEMB)	35
C. MONTHLY EXPENDITURE FILE (MTAB)	38
D. INCOME FILE (ITAB)	38
E. DETAILED EXPENDITURE FILES (EXPAN)	41
V. ESTIMATION PROCEDURE	73
A. DESCRIPTION OF PROCEDURES	73
1. GENERAL CONCEPTS	73
a. SAMPLE VERSUS POPULATION ESTIMATES	73
b. CALENDAR PERIOD VERSUS COLLECTION PERIOD	73
c. TIME PERIOD DIFFERENCES	75
d. COMPARISONS WITH PUBLISHED CE DATA	75
2. ESTIMATION OF UNWEIGHTED STATISTICS	75
a. AGGREGATE STATISTICS	75
b. MEANS	76
(i) SAMPLE MEANS	76
(ii) MEANS OF THOSE REPORTING	77
3. ESTIMATION OF WEIGHTED STATISTICS	78
B. DESCRIPTION OF FORMULAS	78
1. AGGREGATE EXPENDITURE ESTIMATES (UNWEIGHTED)	79
2. SAMPLE MEAN EXPENDITURE ESTIMATES (UNWEIGHTED)	79
3. AGGREGATE EXPENDITURE ESTIMATES (WEIGHTED)	80
4. SAMPLE MEAN EXPENDITURE ESTIMATES (WEIGHTED)	81
VI. RELIABILITY STATEMENT	81
A. DESCRIPTION OF SAMPLING AND NONSAMPLING ERRORS	81
B. ESTIMATING SAMPLING ERROR	82
1. VARIANCE ESTIMATION	82

2. STANDARD ERROR OF THE MEAN.....	83
3. STANDARD ERROR OF THE DIFFERENCE BETWEEN TWO MEANS	83
VII. MICRODATA VERIFICATION AND ESTIMATION METHODOLOGY	84
A. SAMPLE PROGRAM.....	86
B. OUTPUT	96
VIII. DESCRIPTION OF THE SURVEY	96
IX. DATA COLLECTION AND PROCESSING	97
A. BUREAU OF THE CENSUS ACTIVITIES.....	98
B. BUREAU OF LABOR STATISTICS ACTIVITIES	98
X. SAMPLING STATEMENT	99
A. SURVEY SAMPLE DESIGN	99
B. COOPERATION LEVELS	99
C. WEIGHTING	100
D. STATE IDENTIFIER.....	100
XI. INTERPRETING THE DATA	100
XII. APPENDIX 1 -- GLOSSARY	101
XIII. APPENDIX 2 -- UNIVERSAL CLASSIFICATION CODE (UCC) TITLES	102
A. EXPENDITURE UCCS ON MTAB FILE	102
B. INCOME AND RELATED UCCS ON ITAB FILE.....	115
XIV. APPENDIX 3 -- UCC AGGREGATION	117
XV. APPENDIX 4 -- FMLY AND MEMB VARIABLES ORDERED BY START POSITION	117
XVI. APPENDIX 5 -- PUBLICATIONS AND DATA RELEASES FROM THE CONSUMER EXPENDITURE SURVEY.....	127
XVIII. INQUIRIES, SUGGESTIONS, AND COMMENTS.....	128

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 2010 and the first quarter of 2011. The Interview survey collects data on up to 95 percent of total household expenditures. In addition to the FMLY, MEMB, MTAB, FPAR, MCHI, 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. Starting in 2009, the FPAR and MCHI files are included. These files include paradata, which is data about the interview survey process.

Estimates of average expenditures in 2010 from the Interview Survey, integrated with data from the Diary Survey, will be published in the report *Consumer Expenditures in 2010* (due out in 2012). 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, 2010."

I. CHANGES FROM THE 2009 MICRODATA FILES

A. FMLY file

No changes in 2010

B. MEMB file

Variable Deletions

Beginning in 2010Q1, the following MEMB variables will be deleted from the data:

Variable name	Start Position	Format
PYMT2009	788	CHAR(1)
PYMT_009	789	CHAR(1)
HWUSED09	790	CHAR(1)
HWUS_D09	791	CHAR(1)
QSTIMPYX	792	NUM(4)
QSTI_PYX	796	CHAR(1)

Changes reflected in the ioimemb spreadsheet in DCES_Phase4_Formats

C. FPAR file

Variable Additions

Beginning in 2010Q2, the FPAR file will be added to the data.

Variable name	Description	Start Position	Format
RECSEC01	01 Respondent(s) used bills, receipts, or other resources to answer expenditure questions in section 01.	208	CHAR(2)
RECSEC02	02 Respondent(s) used bills, receipts, or other resources to answer expenditure questions in section 02.	210	CHAR(2)
RECSEC03	03 Respondent(s) used bills, receipts, or other resources to answer expenditure questions in section 03.	212	CHAR(2)
RECSEC04	04 Respondent(s) used bills, receipts, or other resources to answer expenditure questions in section 04.	214	CHAR(2)
RECSEC05	05 Respondent(s) used bills, receipts, or other resources to answer expenditure questions in section 05.	216	CHAR(2)
RECSEC06	06 Respondent(s) used bills, receipts, or other resources to answer expenditure questions in section 06.	218	CHAR(2)
RECSEC07	07 Respondent(s) used bills, receipts, or other resources to answer expenditure questions in section 07.	220	CHAR(2)
RECSEC08	08 Respondent(s) used bills, receipts, or other resources to answer expenditure questions in section 08.	222	CHAR(2)
RECSEC09	09 Respondent(s) used bills, receipts, or other resources to answer expenditure questions in section 09.	224	CHAR(2)
RECSEC10	10 Respondent(s) used bills, receipts, or other resources to answer expenditure questions in section 10.	226	CHAR(2)

Changes reflected in the *iofpar* spreadsheet in *DCES_Phase4_Formats*

D. MCHI file

Variable Additions

Beginning in 2010Q2, the following MCHI variables will be added to the data:

Variable name	Description	Start Position	Format
COUTCOME	<p>Outcome at time MCHI record was created</p> <p>200 NEW CASE, NOT STARTED</p> <p>201 COMPLETED INTERVIEW</p> <p>202 CASE STARTED, INSUFFICIENT PARTIAL</p> <p>203 TRANSMIT, NO MORE FOLLOW-UP POSSIBLE (THROUGH SECTION 20 COMPLETE)</p> <p>204 PARTIAL, COMPLETE THROUGH SECTION 20, CALLBACK TO COMPLETE</p> <p>206 DON'T KNOW FOLLOW-UP NEEDED</p> <p>215 INSUFFICIENT PARTIAL (TYPE A NONINTERVIEW)</p> <p>216 NO ONE HOME, UNABLE TO CONTACT (TYPE A NONINTERVIEW)</p> <p>217 TEMPORARILY ABSENT (TYPE A NONINTERVIEW)</p> <p>219 OTHER (TYPE A NONINTERVIEW)</p> <p>224 ALL PERSONS UNDER 16 (TYPE B NONINTERVIEW)</p> <p>225 OCCUPIED BY PERSONS WITH URE (TYPE B NONINTERVIEW)</p> <p>226 VACANT FOR RENT (TYPE B NONINTERVIEW)</p> <p>228 UNFIT, TO BE DEMOLISHED (TYPE B NONINTERVIEW)</p> <p>229 UNDER CONSTRUCTION, NOT READY (TYPE B NONINTERVIEW)</p> <p>231 UNOCCUPIED TENT/TRAILER SITE (TYPE B NONINTERVIEW)</p> <p>232 PERMIT GRANTED, CONSTRUCTION NOT STARTED (TYPE B NONINTERVIEW)</p> <p>233 OTHER (TYPE B NONINTERVIEW)</p> <p>240 DEMOLISHED (TYPE C NONINTERVIEW)</p> <p>241 HOUSE OR TRAILER MOVED (TYPE C NONINTERVIEW)</p> <p>243 CONVERTED TO PERMANENT NONRESIDENTIAL USE (TYPE C NONINTERVIEW)</p> <p>244 MERGED UNITS WITHIN SAME STRUCTURE (TYPE C NONINTERVIEW)</p> <p>245 CONDEMNED (TYPE C NONINTERVIEW)</p> <p>246 BUILT AFTER APRIL 1, 1990 (TYPE C NONINTERVIEW)</p> <p>247 UNUSED SERIAL NUMBER OR LISTING SHEET (TYPE C NONINTERVIEW)</p> <p>248 OTHER (TYPE C NONINTERVIEW)</p> <p>252 LOCATED ON MILITARY BASE OR POST (TYPE C NONINTERVIEW)</p> <p>256 REMOVED DURING SUBSAMPLING (TYPE C NONINTERVIEW)</p> <p>257 UNIT ALREADY HAD A CHANCE OF SELECTION (TYPE C NONINTERVIEW)</p> <p>290 SPAWNED IN ERROR (TYPE C NONINTERVIEW)</p> <p>321 REFUSED, HOSTILE RESPONDENT (TYPE A NONINTERVIEW)</p> <p>322 REFUSED, TIME RELATED EXCUSES (TYPE A NONINTERVIEW)</p> <p>323 REFUSED, LANGUAGE PROBLEMS (TYPE A NONINTERVIEW)</p> <p>324 REFUSED, OTHER (TYPE A NONINTERVIEW)</p> <p>331 VACANT FOR SALE (TYPE B NONINTERVIEW)</p> <p>332 VACANT OTHER (TYPE B NONINTERVIEW)</p> <p>341 CU MOVED (TYPE C NONINTERVIEW)</p> <p>342 CU MERGED WITH ANOTHER CE CU WITHIN THE SAME ADDRESS (TYPE C NONINTERVIEW)</p> <p>583 SALVAGED CASE</p>	137	CHAR(3)
LAUNCH	<p>Launch Code:</p> <p>1 Launched from Case Management</p> <p>2 Launched from Instrument</p>	140	CHAR(1)
TIMER	Number of seconds the file was opened for each record entered.	141	NUM(8.0)

TOTLDRIV	Total number of drive-by attempts (Sum of MRNDRIVE, AFTDRIVE, and EVNDRIVE)	149	NUM(8.0)
----------	---	-----	----------

E. MTAB file

Variable	Description	Format	Start Position
SEQNO*	Sequence Number	Num(3.0)	36
ALCNO*	Allocation Number	Num(3.0)	39
RTYPE*	Record Type of the corresponding EXPN record	Char(3)	42
EXPNAME*	Name of expense variable from which UCC mapped	Char(8)	45
UCCSEQ*	Sequence number of UCC in a given mapping	Num(2)	53

*Changes reflected in the **ioimtab** and **varsup** spreadsheets in DCES_Phase4_Formats*

F. ITAB file

No changes in 2010

G. EXPN file

APB

Variable Additions

Beginning in 2010Q1, the following APB variables will be added to the data:

Variable name	Description	Start Position	Format
INSTLLEX	Cost of Installation (only asked for item codes 365, 430, 440, 640, 670)	82	NUM(8.0)
INST_LEX		90	CHAR(1)

XPA

Variable Additions

Beginning in 2010Q1, the following XPA variables will be added to the data:

Variable name	Description	Start Position	Format
JALHOMQV	Quarterly expenditure for alcohol, including beer and wine, to be served at home	131	NUM(8)

JALH_MQV		139	CHAR(1)
----------	--	-----	---------

XPB

Variable Additions

Beginning in 2010Q1, the following XPB variables will be added to the data:

Variable name	Description	Start Position	Format
JSUBSIDY	Quarterly value of transit subsidy received	190	NUM(8)
JSUB_IDY		198	CHAR(1)

Variable Deletions

Beginning in 2010Q1, the following XPB variables will be deleted from the data:

Variable name	Description	Start Position	Format
TRANSUBX	Usual monthly amount of transit subsidy	176	NUM(6)
TRAN_UBX		182	CHAR(1)

II. FILE INFORMATION

The microdata on CD-ROM are provided as SAS, STATA, SPSS data sets or ASCII text and comma-delimited files. The 2010 Interview release contains seven groups of Interview data files (FMLY, MEMB, MTAB, ITAB, ITAB_IMPUTE, FPAR, and MCHI), 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 2010 through the first quarter of 2011. 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.

The FPAR and MCHI datasets are grouped as 2-year datasets (2009 and 2010), plus the first quarter of the 2011 and contain paradata about the Interview survey. The FPAR file contains CU level data about the Interview survey, including timing and record use. The MCHI file contains data about each interview contact attempt, including reasons for refusal and times of contact. Both FPAR and MCHI files contain five quarters of data. Each of the 50 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 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/ce/#forms>. A list of the 50 EXPN file names with a brief description, including the Questionnaire sections to which they relate, follows.

APL Section 1, Part C	<i>General Survey Information – Major Household Appliances</i> Section 1, Part C is used to create an inventory of household appliances, including major kitchen appliances, washers and dryers, televisions, computers, and other electronic equipment.
RNT Section 2	<i>Rented Living Quarters – CU Tenure, Rental Payments, Facilities, and Services for Sample Unit and Other Units</i> Section 2 collects rent and related expenses from households who rent their homes or other properties. The questions asked during the first interview vary from those asked during subsequent interviews.
OPB Section 3, Part B	<i>Owned Living Quarters and Other Owned Real Estate – Detailed Property Description</i> Section 3, Part B collects detailed information about owned properties reported in Section 3, Part A, including the date of settlement, total cost, current market value, and annual property taxes.
OPD Section 3, Part D	<i>Owned Living Quarters and Other Owned Real Estate – Disposed of Property</i> Section 3, Part D collects information on properties that have been sold, traded, given to someone outside of the household, or otherwise disposed of by the household.
MOR Section 3, Part F	<i>Owned Living Quarters and Other Owned Real Estate – Mortgages</i> Section 3, Part F deals with mortgages and home equity loans, including the type of loan, interest rate and term, and amount of payment.
HEL Section 3, Part F	<i>Owned Living Quarters and Other Owned Real Estate – Lump Sum Home Equity Loans</i> Section 3, Part F deals with mortgages and home equity loans, including the type of loan, interest rate and term, and amount of payment.
OPH Section 3, Part H	<i>Owned Living Quarters and Other Owned Real Estate – Line of Credit Home Equity Loans</i> Section 3, Part H covers payments made on home equity lines of credit.

OPI Section 3, Part I	<i>Owned Living Quarters and Other Owned Real Estate – Ownership Costs</i> Section 3, Part I collects ownership costs, including extra mortgage and home equity loan payments, ground rent, homeowners' association fees, condominium and cooperative fees, and special assessments. The respondent is also asked to provide an estimate of the owned property's rental value.
UTA Section 4, Part A	<i>Utilities and Fuels for Owned and Rented Properties – Telephone Expenses</i> Section 4, Part A deals with expenditures for telephone services, including residential service and cellular service.
UTP Section 4, Part B	<i>Utilities and Fuels for Owned and Rented Properties – Additional Telephone Expenses</i> Section 4, Part B deals with other telephone expenses, including the purchase of pre-paid telephone and cellular cards and spending on public telephone use.
UTI Section 4, Part C	<i>Utilities and Fuels for Owned and Rented Properties – Internet Services Expenditures</i> Section 4, Part C collects expenditures on cable, satellite, and internet services for the household residence and other owned properties, including cable or satellite TV, satellite radio services, internet service provider, online games, and internet services at web cafes or internet kiosks.
UTC Section 4, Part D	<i>Utilities and Fuels for Owned and Rented Properties – Detailed Questions</i> Section 4, Part D collects expenditures on fuels and utilities for the household residence and other owned properties as well as rented vacation properties, including electricity, natural gas, other fuels, water service, sewer maintenance, garbage collection, and cable television or satellite service.
CRA Section 5	<i>Construction, Repairs, Alterations, and Maintenance of Owned and Rented Property – Screening Questions</i> Section 5 deals with expenses for supplies and services related to home construction, repair, alteration and maintenance.
CRB Section 5	<i>Construction, Repairs, Alterations, and Maintenance of Owned and Rented Property – Job Description</i> Section 5 deals with expenses for supplies and services related to home construction, repair, alteration and maintenance.
APA Section 6, Part A	<i>Appliances, Household Equipment, and Other Selected Items – Purchase of Household Appliances</i> Section 6, Part A covers purchases and rentals of major household appliances, such as kitchen appliances, clothes washers, and clothes dryers.
APB Section 6, Part B	<i>Appliances, Household Equipment and Other Selected Items – Purchase of</i>

	<p><i>Household Appliances and Other Selected Items</i></p> <p>Section 6, Part B deals with purchases and rentals of small appliances, televisions, radios, sound equipment, sports and exercise equipment, and miscellaneous other household items.</p>
EQB Section 7	<p><i>Household Equipment Repairs, Service Contracts, and Furniture Repair and Reupholstering – Household Equipment Repairs and Service Contracts</i></p> <p>Section 7 covers expenditures for maintenance, repair, and service contracts for appliances, televisions, computers, tools, pest control service, and other household items.</p>
FRA Section 8, Part A	<p><i>Home Furnishings and Related Household Items – Purchases</i></p> <p>Section 8, Part A deals with purchases of furniture, household decorative items, dishes, household linens, floor coverings, and window coverings.</p>
FRB Section 8, Part B	<p><i>Home Furnishings and Related Household Items – Rental, Leasing, or Repair of Furniture</i></p> <p>Section 8, Part B deals with expenditures for furniture rental and repair.</p>
CLA Section 9, Part A	<p><i>Clothing and Sewing Materials – Clothing</i></p> <p>Section 9, Part A deals with purchases of clothing for persons age 2 years old and older.</p>
CLB Section 9, Part B	<p><i>Clothing and Sewing Materials – Infants Clothing, Watches, Jewelry, and Hairpieces</i></p> <p>Section 9, Part B deals with purchases of clothing for children under 2 years of age, jewelry, and hairpieces.</p>
CLD Section 9, Part C	<p><i>Clothing and Sewing Materials – Clothing Services</i></p> <p>Section 9, Part C deals with expenses for clothing services, including alterations, jewelry repair, clothing rental, and clothing storage.</p>
CLC Section 9, Part D	<p><i>Clothing and Sewing Materials – Sewing Materials</i></p> <p>Section 9, Part D deals with purchases of sewing materials, including materials for making slipcovers and curtains, materials for making clothes, and sewing notions.</p>
RTV Section 10, Part A.1	<p><i>Rented and Leased Vehicles – Screening Questions</i></p> <p>Section 10 deals with vehicle rentals and leases. The questions asked during the first interview vary from those asked during subsequent interviews.</p>
LSD Section 10, Part B	<p><i>Rented and Leased Vehicles – Detailed Questions for Leased Vehicles</i></p> <p>Section 10 in a first interview asks if there are any vehicle lease payments or new leases, then collects details about those vehicles and expenses.</p>
OVB Section 11	<p><i>Owned Vehicles – Detailed Questions</i></p>

	Section 11 collects expenditures for owned vehicles. The questions asked depend on whether it is the first interview or a subsequent interview, and whether there are any previously reported vehicles owned by the consumer unit.
OVC Section 11	<i>Owned Vehicles – Disposal of Vehicles</i> Section 11 collects expenditures for owned vehicles. The questions asked depend on whether it is the first interview or a subsequent interview, and whether there are any previously reported vehicles owned by the consumer unit.
VEQ Section 12, Part A	<i>Vehicle Operating Expenses – Vehicle Maintenance and Repair</i> Section 12, Part A deals with expenses for vehicle services, parts and equipment.
VLR Section 12, Part B	<i>Vehicle Operating Expenses – Licensing, Registration, and Inspection of Vehicles</i> Section 12, Part B deals with expenses for driver's licenses, vehicle registration, and vehicle inspection.
VOT Section 12, Part C	<i>Vehicle Operating Expenses – Other Vehicle Operating Expenses</i> Section 12, Part C deals with other vehicle operating expenses, including a monthly average expenditure on gasoline, purchases of oil and other fluids, parking fees, towing charges, docking or landing fees, and expenses for auto repair service policies and clubs.
INB Section 13, Part B	<i>Insurance Other Than Health – Detailed Questions</i> Section 13, Part B collects detailed information about each type of non-health insurance policy that was reported.
IHB Section 14, Part B	<i>Hospitalization and Health Insurance – Detailed Questions</i> Section 14, Part B collects detailed information about each health insurance policy that was reported in Section 14, Part A.
IHC Section 14, Part C	<i>Hospitalization and Health Insurance – Medicare and Medicaid</i> Section 14, Part C covers participation in health insurance plans for which the household does not pay directly, such as Medicare, Medicaid, and military health care plans.
IHD Section 14, Part C	<i>Hospitalization and Health Insurance – Medicare Prescription Drug Program</i> Section 14, Part C covers participation in health insurance plans for which the household does not pay directly, such as Medicare, Medicaid, and military health care plans.
MDB Section 15, Part A	<i>Medical and Health Expenditures – Payments For Medical Expenses</i> Section 15, Part A collects out-of-pocket medical payments, including

	payments for medical services, prescription drug purchases, and rentals or purchases of medical supplies and equipment.
MDC Section 15, Part B	<i>Medical and Health Expenditures – Reimbursements For Medical Expenses</i> Section 15, Part B covers reimbursements received by the consumer unit for medical services, prescription drugs, and medical supplies or equipment.
EDA Section 16	<i>Educational Expenses</i> Section 16 collects educational expenses, including recreational lesson fees, tuition, room and board, purchases of school books and equipment, and other educational expenses.
SUB Section 17, Part A	<i>Subscriptions, Memberships, Books, and Entertainment Expenses – Subscriptions and Memberships</i> Section 17, Part A deals with expenditures for subscriptions, mail order clubs, season tickets, reference books, recreational club memberships and shopping club memberships.
ENT Section 17, Part B	<i>Subscriptions, Memberships, Books, and Entertainment Expenses – Books and Entertainment Expenses</i> Section 17, Part B deals with expenses for participation in sports, admissions to sporting or other events, and purchases of various entertainment items such as books, magazines, newspapers, music CDs or tapes, photographic film, and video tapes or DVDs.
TRD Section 18, Part A	<i>Trips and Vacations – 100% Reimbursed Trips</i> Section 18, Part A is used to determine whether the household has taken any trips during the reference period, or to follow up on previously reported trips. Specific questions in this section are used to distinguish between trip expenses paid by the household and those paid by someone else. Only expenses paid by the household are included in CE Survey estimates.
TRV Section 18, Part BC	<i>Trips and Vacations – Trips Paid Entirely by CU and Partially Reimbursed Trips</i> Section 18, Part BC collects detailed information about the trips identified in Part A, including the value of any package deals and expenses for transportation, lodging, food, and entertainment on trips.
TRE Section 18, Part E	<i>Trips and Vacations – Trip Expenses for Non-CU Members</i> Section 18, Part E deals with trip expenses paid by the household for someone outside of the household.
TRF Section 18, Part F	<i>Trips and Vacations – Local Overnight Stays</i> Section 18, Part F collects detailed information about local overnight stays, including the value of any package deals and expenses for lodging, food, and entertainment.

MIS Section 19, Part A	<p><i>Miscellaneous Expenses</i></p> <p>Section 19, Part A covers miscellaneous expenses such as funeral expenses, legal and accounting fees, various household services, babysitting and adult care, toys and games, lotteries, and pet expenses.</p>
CNT Section 19, Part B	<p><i>Miscellaneous Expenses – Contributions</i></p> <p>Section 19, Part B deals with payments and contributions to persons outside of the household, and to religious, political, educational and other charitable organizations.</p>
XPA Section 20, Part A	<p><i>Expense Patterns For Food, Beverages, and Other Selected Items – Food and Beverages</i></p> <p>Section 20, Part A asks for expenditure estimates for groceries, alcoholic beverages, and meals away from home.</p>
XPB Section 20, Part B	<p><i>Expense Patterns For Food, Beverages, and Other Selected Items – Selected Services and Goods</i></p> <p>Section 20, Part B deals with expenses for dry cleaning, laundry service, cigarettes, personal services, banking fees, taxis, limousines, and mass transportation.</p>
FN2 Section 21, Part A.1	<p><i>Credit Liability – Credit Balances – Second Interview Only</i></p> <p>Section 21, Part A.1 asks about money owed to credit sources such as gasoline credit cards, store or major credit cards, financial institutions, medical practitioners, and certain types of loans. This section is only asked during the second interview.</p>
FNA Section 21, Part A.2	<p><i>Credit Liability – Credit Balances – Fifth Interview Only</i></p> <p>Section 21, Part A.2 asks about money owed to credit sources such as gasoline credit cards, store or major credit cards, financial institutions, medical practitioners, and certain types of loans. This section is only asked during the fifth interview.</p>
FNB Section 21, Part B	<p><i>Credit Liability – Finance Charges – Fifth Interview Only</i></p> <p>Section 21, Part B asks about finance charges, interest, and late fees paid to credit sources such as gasoline credit cards, store or major credit cards, financial institutions, medical practitioners, and certain types of loans. This section is only asked during the fifth interview.</p>

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.)

\\INTRVW10\FMLYI101x.TXT	(Interview FMLY file for first quarter, 2010)
\\INTRVW10\MEMBI101x.TXT	(Interview MEMB file for first quarter, 2010)
\\INTRVW10\MTABI101x.TXT	(Interview MTAB file for first quarter, 2010)
\\INTRVW10\ITABI101x.TXT	(Interview ITAB file for first quarter, 2010)
\\INTRVW10\ITBII101x.TXT	(Interview ITAB_Imputed file for first quarter, 2010)
\\INTRVW10\FMLYI102.TXT	(etc.)
\\INTRVW10\MEMBI102.TXT	
\\INTRVW10\MTABI102.TXT	
\\INTRVW10\ITABI102.TXT	
\\INTRVW10\ITBII102.TXT	
\\INTRVW10\FMLYI103.TXT	
\\INTRVW10\MEMBI103.TXT	
\\INTRVW10\MTABI103.TXT	
\\INTRVW10\ITABI103.TXT	
\\INTRVW10\ITBII103.TXT	
\\INTRVW10\FMLYI104.TXT	
\\INTRVW10\MEMBI104.TXT	
\\INTRVW10\MTABI104.TXT	
\\INTRVW10\ITABI104.TXT	
\\INTRVW10\ITBII104.TXT	
\\INTRVW10\FMLYI101.TXT	
\\INTRVW10\MEMBI101.TXT	
\\INTRVW10\MTABI101.TXT	
\\INTRVW10\ITABI101.TXT	
\\INTRVW10\ITBII101.TXT	
\\INTRVW10\UCCI10.TXT	
\\INTRVW10\VEHI10.TXT	
\\PARA10\FPAR0910.TXT	
\\PARA10\MCHI0910.TXT	
\\EXPN10\APL10.TXT	
\\EXPN10\RNT10.TXT	
\\EXPN10\OPB10.TXT	
\\EXPN10\OPD10.TXT	
\\EXPN10\MOR10.TXT	
\\EXPN10\HEL10.TXT	
\\EXPN10\OPH10.TXT	
\\EXPN10\OPI10.TXT	
\\EXPN10\UTA10.TXT	
\\EXPN10\UTP10.TXT	
\\EXPN10\UTI10.TXT	
\\EXPN10\UTC10.TXT	
\\EXPN10\CRA10.TXT	
\\EXPN10\CRB10.TXT	
\\EXPN10\APA10.TXT	
\\EXPN10\APB10.TXT	
\\EXPN10\EQB10.TXT	
\\EXPN10\FRA10.TXT	
\\EXPN10\FRB10.TXT	
\\EXPN10\CLA10.TXT	

\\EXP10\\CLB10.TXT
\\EXP10\\CLD10.TXT
\\EXP10\\CLC10.TXT
\\EXP10\\RTV10.TXT
\\EXP10\\LSD10.TXT
\\EXP10\\OVB10.TXT
\\EXP10\\OVC10.TXT
\\EXP10\\VEQ10.TXT
\\EXP10\\VLR10.TXT
\\EXP10\\VOT10.TXT
\\EXP10\\INB10.TXT
\\EXP10\\IHB10.TXT
\\EXP10\\IHC10.TXT
\\EXP10\\IHD10.TXT
\\EXP10\\MDB10.TXT
\\EXP10\\MDC10.TXT
\\EXP10\\EDA10.TXT
\\EXP10\\SUB10.TXT
\\EXP10\\ENT10.TXT
\\EXP10\\TRD10.TXT
\\EXP10\\TRV10.TXT
\\EXP10\\TRE10.TXT
\\EXP10\\TRF10.TXT
\\EXP10\\MIS10.TXT
\\EXP10\\CNT10.TXT
\\EXP10\\XPA10.TXT
\\EXP10\\XPB10.TXT
\\EXP10\\FN210.TXT
\\EXP10\\FNA10.TXT
\\EXP10\\FNB10.TXT
\\EXP10\\RBT10.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

\\INTRVW10\\FMLI101x.sas7bdat (Interview FMLY file for first quarter, 2010)
\\INTRVW10\\MEMI101x.sas7bdat (Interview MEMB file for first quarter, 2010)
\\INTRVW10\\MTBI101x.sas7bdat (Interview MTAB file for first quarter, 2010)
\\INTRVW10\\ITBI101x.sas7bdat (Interview ITAB file for first quarter, 2010)
\\INTRVW10\\ITII101x.sas7bdat (Interview ITBI_IMPUTED file for first quarter, 2010)
\\INTRVW10\\FMLI102.sas7bdat (etc.)
\\INTRVW10\\MEMI102.sas7bdat
\\INTRVW10\\MTBI102.sas7bdat
\\INTRVW10\\ITBI102.sas7bdat
\\INTRVW10\\ITII102.sas7bdat
\\INTRVW10\\FMLI103.sas7bdat
\\INTRVW10\\MEMI103.sas7bdat
\\INTRVW10\\MTBI103.sas7bdat
\\INTRVW10\\ITBI103.sas7bdat
\\INTRVW10\\ITII103.sas7bdat

\\INTRVW10\FML1104.sas7bdat
\\INTRVW10\MEM1104.sas7bdat
\\INTRVW10\MTBI104.sas7bdat
\\INTRVW10\ITBI104.sas7bdat
\\INTRVW10\ITII104.sas7bdat
\\INTRVW10\FML1111.sas7bdat
\\INTRVW10\MEM1111.sas7bdat
\\INTRVW10\MTBI111.sas7bdat
\\INTRVW10\ITBI111.sas7bdat
\\INTRVW10\ITII111.sas7bdat
\\INTRVW10\UCCI10.txt
\\INTRVW10\VEHI10.txt
\\PARA10\FPAR0910.sas7bdat
\\PARA10\MCHI0910.sas7bdat
\\EXPN10\APL10.sas7bdat
\\EXPN10\RNT10.sas7bdat
\\EXPN10\OPB10.sas7bdat
\\EXPN10\OPD10.sas7bdat
\\EXPN10\MOR10.sas7bdat
\\EXPN10\HEL10.sas7bdat
\\EXPN10\OPH10.sas7bdat
\\EXPN10\OPI10.sas7bdat
\\EXPN10\UTA10.sas7bdat
\\EXPN10\UTP10.sas7bdat
\\EXPN10\UTI10.sas7bdat
\\EXPN10\UTC10.sas7bdat
\\EXPN10\CRA10.sas7bdat
\\EXPN10\CRB10.sas7bdat
\\EXPN10\APA10.sas7bdat
\\EXPN10\APB10.sas7bdat
\\EXPN10\EQB10.sas7bdat
\\EXPN10\FRA10.sas7bdat
\\EXPN10\FRB10.sas7bdat
\\EXPN10\CLA10.sas7bdat
\\EXPN10\CLB10.sas7bdat
\\EXPN10\CLD10.sas7bdat
\\EXPN10\CLC10.sas7bdat
\\EXPN10\RTV10.sas7bdat
\\EXPN10\LSD10.sas7bdat
\\EXPN10\OVB10.sas7bdat
\\EXPN10\OVC10.sas7bdat
\\EXPN10\VEQ10.sas7bdat
\\EXPN10\VLR10.sas7bdat
\\EXPN10\VOT10.sas7bdat
\\EXPN10\INB10.sas7bdat
\\EXPN10\IHB10.sas7bdat
\\EXPN10\IHC10.sas7bdat
\\EXPN10\IHD10.sas7bdat
\\EXPN10\MDB10.sas7bdat
\\EXPN10\MDC10.sas7bdat
\\EXPN10\EDA10.sas7bdat
\\EXPN10\SUB10.sas7bdat
\\EXPN10\ENT10.sas7bdat
\\EXPN10\TRD10.sas7bdat

\\EXPN10\\TRV10.sas7bdat
\\EXPN10\\TRE10.sas7bdat
\\EXPN10\\TRF10.sas7bdat
\\EXPN10\\MIS10.sas7bdat
\\EXPN10\\CNT10.sas7bdat
\\EXPN10\\XPA10.sas7bdat
\\EXPN10\\XPB10.sas7bdat
\\EXPN10\\FN210.sas7bdat
\\EXPN10\\FNA10.sas7bdat
\\EXPN10\\FNB10.sas7bdat
\\EXPN10\\RBT10.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:

<u>ASCII data set</u>	<u>SAS data set</u>	<u>LRECL</u> <u>L</u>	<u>Record</u> <u>Counts</u>
FMLYI101X.TXT	FMLI101X.SAS7BDAT	6219	7198
FMLYI102.TXT	FMLI102.SAS7BDAT	6219	7135
FMLYI103.TXT	FMLI103.SAS7BDAT	6219	7059
FMLYI104.TXT	FMLI104.SAS7BDAT	6219	7037
FMLYI111.TXT	FMLI111.SAS7BDAT	6219	6869
MEMBI101X.TXT	MEMI101X.SAS7BDAT	787	17922
MEMBI102.TXT	MEMI102.SAS7BDAT	787	18062
MEMBI103.TXT	MEMI103.SAS7BDAT	787	17799
MEMBI104.TXT	MEMI104.SAS7BDAT	787	17453
MEMBI111.TXT	MEMI111.SAS7BDAT	787	17318
MTABI101X.TXT	MTBI101X.SAS7BDAT	54	598515
MTABI102.TXT	MTBI102.SAS7BDAT	54	562691
MTABI103.TXT	MTBI103.SAS7BDAT	54	556499
MTABI104.TXT	MTBI104.SAS7BDAT	54	549792
MTABI111.TXT	MTBI111.SAS7BDAT	54	552801
ITABI101X.TXT	ITBI101X.SAS7BDAT	34	402249
ITABI102.TXT	ITBI102.SAS7BDAT	34	397800
ITABI103.TXT	ITBI103.SAS7BDAT	34	390951
ITABI104.TXT	ITBI104.SAS7BDAT	34	388101
ITABI111.TXT	ITBI111.SAS7BDAT	34	378708
ITBII101x.TXT	ITII101x.SAS7BDAT	35	555693
ITBII102.TXT	ITII102.SAS7BDAT	35	547458
ITBII103.TXT	ITII103.SAS7BDAT	35	538317
ITBII104.TXT	ITII104.SAS7BDAT	35	534471

ITBII111.TXT	ITII111.SAS7BDAT	35	523680
<u>PARA</u>			
FPAR0910.TXT	FPAR0910.SAS7BDAT	227	107717
MCHI0910.TXT	MCHI0910.SAS7BDAT	156	422450
<u>EXPN</u>			
APL10.TXT	APL10.SAS7BDAT	40	320100
RNT10.TXT	RNT10.SAS7BDAT	94	12696
OPB10.TXT	OPB10.SAS7BDAT	114	27474
OPD10.TXT	OPD10.SAS7BDAT	64	164
MOR10.TXT	MOR10.SAS7BDAT	231	16014
HEL10.TXT	HEL10.SAS7BDAT	231	1173
OPH10.TXT	OPH10.SAS7BDAT	75	2381
OPI10.TXT	OPI10.SAS7BDAT	320	41753
UTA10.TXT	UTA10.SAS7BDAT	254	46239
UTP10.TXT	UTP10.SAS7BDAT	43	3208
UTI10.TXT	UTI10.SAS7BDAT	56	43614
UTC10.TXT	UTC10.SAS7BDAT	119	114910
CRA10.TXT	CRA10.SAS7BDAT	74	1034
CRB10.TXT	CRB10.SAS7BDAT	302	10481
APA10.TXT	APA10.SAS7BDAT	88	3103
APB10.TXT	APB10.SAS7BDAT	90	35430
EQB10.TXT	EQB10.SAS7BDAT	72	4788
FRA10.TXT	FRA10.SAS7BDAT	72	29015
FRB10.TXT	FRB10.SAS7BDAT	41	352
CLA10.TXT	CLA10.SAS7BDAT	79	137334
CLB10.TXT	CLB10.SAS7BDAT	79	18759
CLC10.TXT	CLC10.SAS7BDAT	72	2893
CLD10.TXT	CLD10.SAS7BDAT	72	2464
RTV10.TXT	RTV10.SAS7BDAT	48	807
LSD10.TXT	LSD10.SAS7BDAT	211	1323
OVB10.TXT	OVB10.SAS7BDAT	323	64504
OVC10.TXT	OVC10.SAS7BDAT	62	2159
VEQ10.TXT	VEQ10.SAS7BDAT	94	39585
VLR10.TXT	VLR10.SAS7BDAT	49	12727
VOT10.TXT	VOT10.SAS7BDAT	101	35298
INB10.TXT	INB10.SAS7BDAT	160	76703
IHB10.TXT	IHB10.SAS7BDAT	55	35069
IHC10.TXT	IHC10.SAS7BDAT	152	13396
IHD10.TXT	IHD10.SAS7BDAT	56	4788
MDB10.TXT	MDB10.SAS7BDAT	74	59961
MDC10.TXT	MDC10.SAS7BDAT	74	1248
EDA10.TXT	EDA10.SAS7BDAT	86	14387
SUB10.TXT	SUB10.SAS7BDAT	35	17234
ENT10.TXT	ENT10.SAS7BDAT	146	21282
TRV10.TXT	TRV10.SAS7BDAT	315	13220

TRD10.TXT	TRD10.SAS7BDAT	36	5653
TRE10.TXT	TRE10.SAS7BDAT	36	3738
TRF10.TXT	TRF10.SAS7BDAT	85	319
MIS10.TXT	MIS10.SAS7BDAT	72	59595
CNT10.TXT	CNT10.SAS7BDAT	36	36006
XPA10.TXT	XPA10.SAS7BDAT	139	35295
XPB10.TXT	XPB10.SAS7BDAT	198	35295
FN210.TXT	FN210.SAS7BDAT	33	24236
FNA10.TXT	FNA10.SAS7BDAT	42	5966
FNB10.TXT	FNB10.SAS7BDAT	104	9074

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 and MEMB 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.

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(Y102) indicates the variable is deleted starting with the data file of the second quarter of 2010.

*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 (EXPANDED)

Expenditures on the EXPN 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 EXPN file record, can be interpreted as follows:

CODING

- 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.

The variables FOODTOT through HOUSKEEP contain summary expenditure data. They are all BLS derived. The UCCs comprising each summary expenditure variable are listed below the variable description. UCCs may not be represented in all Interview quarters. When UCCs are added or deleted to the summary variable definition, the quarter in which the addition (deletion) to the summary expenditure variable occurs is denoted by a leading superscript directly after the UCC code in the "Changes to the 2010 Microdata section". For example, N101<UCC> or D101<UCC> identifies a new or deleted UCC for a given summary expenditure variable beginning in Q101.

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 2010Q1 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 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 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 $((\$50,000 * 4) / 12 = \$16666.67)$ 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. PARADATA FILES

With the development of computer-assisted modes of data collection, data on the survey process automatically generated by the new electronic modes became known as “paradata”¹. The scope of paradata now includes computer-generated as well as other types of interviewer reported data about the process of collecting survey data.

Starting in 2005, the Consumer Expenditure Survey (CE) began recording data about attempts to contact the sample unit through the Contact History Instrument (CHI), developed by the U.S. Census Bureau. CHI provides interviewer observations for each contact attempt with a sample unit, regardless of whether contact is made.

Additional paradata is collected about the interview within the interview collection instrument (CAPI). This data includes information on the amount of time required to collect each interview and interview section, as well as other interviewer entered information about the resulting survey.

The paradata files include all eligible interviews for both completed interviews and eligible but non-responding sample units (Type A non-interviews), in Interviews 1 through 5. The case’s final disposition for a sample unit can be found in the variable “OUTCOME” in the FPAR file. All other (non-paradata) files on the microdata CD include only completed interviews (OUTCOME = ‘201’ and ‘203’) and interviews 2 through 5.

The paradata files FPAR0910 and MCHI0910 each contain 9 quarters of data. This allows users to have a possible complete set of interviews (1-5) for respondents in 2010. These files include the variable CUID, which allows users to link the same CU across quarters (and interviews). It also includes the variable NEWID, which allows users to link the paradata for a particular quarter (interview) with other data from that quarter.

The paradata are in two files:

¹ Couper, M. (1998). Measuring survey quality in a CASIC environment. Pp. 41-46 in Proceedings of the Section on Survey Research Methods. Alexandria, VA: American Statistical Association.

a. CU Level Paradata file (FPAR)

The CU level paradata contains one record per CU per interview. Most of the data included in the file are only relevant to completed or partially completed interviews and will have missing data for non-interviews. The non-interviews in these cases will still have an ID and OUTCOME code.

This file is derived from information captured automatically in the CAPI instrument in addition to responses entered directly by the interviewer in the CAPI instrument.

This file includes information on the total amount of time needed to complete each section (for a description of the sections and questions, see the CE website:

<http://www.bls.gov/cex/csxsurveyforms.htm#interview>)

b. Contact History Attempt file (MCHI)

The contact history attempt file consists of data collected through the CHI instrument. There –can be multiple records per CU per quarter.

Examples of CHI information include whether contact was made, the mode of contact (e.g., by telephone or in person), reasons for non-interview, the strategies the interviewer used when attempting to contact the sample unit, as well the interviewer's observations about interactions with a sample unit that was contacted. Interviewers can make a CHI entry immediately after a contact attempt or at a later time (for example, at home) . Every time the survey questionnaire is accessed on the laptop, CHI launches automatically upon exiting the questionnaire, at which point, interviewers can complete a CHI entry. Alternatively, a contact attempt entry can also be recorded by selecting a case from the Case Management System and bringing up CHI without opening the survey itself. Interviewers are instructed to complete a CHI record each time a contact attempt is made.²

7. 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.

²In theory, interviewers are expected to record a CHI entry whenever CHI automatically launches. However, the first CHI screen does have an “out” by allowing interviewers to select the category “Looking at a case – exit CHI”. Therefore it is possible for interviewers to complete an interview without ever having recorded a single CHI entry.

8. PROCESSING FILES

c. Istub file

X:\Programs\Istub2010.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.

d. UCC file

X:\INTRVW10\UCCI10.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)

e. 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:\EXPN10\CAPIVEHI10.TXT

CAPIVEHI10.TXT is formatted as follows

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

f. **Sample program file**

X:\Programs\SAS\Intrvw Mean and SE.sas
X:\Programs\SAS\Intrvw Sumvars.sas
X:\Programs\SAS\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 and to validate the data on the CD.

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	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
ALIOTHX	Other regular contributions including alimony Amount received from other regular contributions	50000	NA	88611	NA
ALIOTHXM	Investments to farm or business	50000	NA	54977	NA
BSINVSTX	Lump sum child support payment	250000	NA	1936667	NA
CHDLMPX	Child support payments	12000	NA	13840	NA
CHDOTHX	Amount received from other child support payments	15600	NA	35380	NA
CHDOTHXM	Market value of all checking accounts	15600	NA	29220	NA
CKBKACTX	Change in U.S. savings bonds	30000	NA	181104	NA
COMPBNDX	Change in checking account	5000	-15000	77667	-25000
COMPCKGX	Change in money owed to consumer unit	29000	-16000	104963	-35977
COMPOWDX	Change in savings account	30000	-8500	231167	-34000
COMPSAVX	Difference in estimated market value of all stocks, bonds, or mutual funds including broker fees	60000	-60000	115083	-186269
COMPSECX	Federal income tax refunds	200000	-	767693	-869250
FEDRFNDX	Additional federal income tax paid (new UCC Q20062)	9902	NA	17413	NA
FEDTAXX	Dividends, royalties, estates, trusts	24000	NA	70936	NA
FININCX	Amount received from regular income from dividends, royalties, estates or trusts	75000	NA	210297	NA
FININCXM	Amount of net income or loss received from roomers or boarders	75000	NA	91640	NA
INCLOSAM	Amount of net	30600	-30000	35262	-43600
INCLOSBM		50000	-20000	36679	-16764

Variable	Description	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
	income or loss				
	received from other				
	rental units				
	Roomer and boarder				
INCLOSSA	income	30600	-30000	55236	-43600
INCLOSSB	Other rental income	50000	-20000	71700	-29714
	Refunds from				
INSRFNDX	insurance policies	4800	NA	9057	NA
	Amount received				
	from interest on				
	savings accounts or				
INTEARNM	bonds	35000	NA	47467	NA
INTEARNX	Interest	35000	NA	67324	NA
LUMPSUMX	Lump sum receipts	124000	NA	303406	NA
MISCTAXX	Other taxes	10000	NA	19966	NA
	Amount of money				
	owed to CU by				
MONYOWDX	persons outside CU	65500	NA	164167	NA
OTHRFNDX	Other tax refunds	4000	NA	7721	NA
	Amount received				
	from other money				
OTHRINCM	income	32000	NA	36771	NA
OTHRINCX	Other income	32000	NA	51124	NA
	Amount received				
	from pensions or				
PENSIONM	annuities	72000	NA	86471	NA
	Pensions and				
PENSIONX	annuities	72000	NA	118027	NA
	Refunds from				
PTAXRFDX	property taxes	4800	NA	7229	NA
	Purchase price of				
	stocks, bonds or				
	mutual funds				
PURSSECX	including broker fees	200000	NA	666000	NA
	Estimated monthly				
	rental value of				
RENTEQVX	owned home	3000	NA	4638	NA
	Money from sale of				
	household				
SALEINCX	furnishings, etc.	7000	NA	35464	NA
	Market value of all				
SAVACCTX	savings accounts	134000	NA	668907	NA
	Market value of all				
SECESTX	securities	950000	NA	3525145	NA
	Sale price of stocks,				
	bonds, and mutual				
SELLSECX	funds, net	100000	NA	309375	NA
	Change in surrender				
SETLINSX	of insurance policies	50000	NA	150000	NA
	Additional state and				
SLOCTAXX	local income tax paid	6000	NA	19230	NA
SLRFUNDX	State and local	2500	NA	4700	NA

Variable	Description	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
	income tax refunds				
SSOVERPX	Refund from overpayment on Social Security	2040	NA	4733	NA
TAXPROPX	Personal property taxes	1200	NA	2603	NA
TYPEPYX	Amount received from reverse mortgage	0	NA	9800	NA
USBNDX	Market value of all U.S. savings bonds	50000	NA	82182	NA
WDBSASTX	Amount of assets withdrawn from own farm or business	100000	NA	158100	NA
WDBSGDSX	Amount of goods or services withdrawn from own farm or business	1560	NA	9667	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, FJSSDEDX, FJSSDEDM	Amount of money placed in individual retirement plan Estimated amount of annual Social Security contribution
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, Amount of personal taxes paid
TOTTXPDM

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 \$85,000 (-\$9,999). The topcode value for FARMINCM is \$123,279 (-\$31,017). (See Section IV.B. MEMBER CHARACTERISTICS AND INCOME FILE (MEMB)).

FARMINCM		FFRMINCM		FLAGGED AS TOPCODED?
CU		REPORTED	AFTER TOPCODING	
CU 1:	MEMB1	\$80,000	\$80,000	
	MEMB2	70,000	70,000	No
CU 2:	MEMB1	90,000	123,279	
	MEMB2	60,000	60,000	Yes
CU 3	MEMB1	200,000	123,279	
	MEMB2	100,000	123,279	Yes
CU 4	MEMB1	50,000	50,000	
	MEMB2	-55,000	-31,017	Yes

While CUs 1 and 2 each originally report \$150,000 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 (\$183,279) is higher than the amount that it reported (\$150,000). 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 14 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 may be avoided. REGION is suppressed in some states. (In past releases selected observations of POPSIZE 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	Minnesota			
*	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 strata¹ 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 stratum¹ 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 strata¹.

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 stratum¹.

¹ 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	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
AGE	Age of member	82	NA	87	NA
AMTFED	Amount of Federal income tax deducted from last pay	1200	NA	3455	NA
ANFEDTX	Annual amount of Federal income tax deducted from pay	25526	NA	48485	NA
ANFEDTXM	Annual amount of Federal income tax deducted from pay	25526	NA	48478	NA
ANGOVRTM	Annual amount of government retirement deducted from pay	9655	NA	12746	NA

Variable	Description	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
ANGOVRTX	Annual amount of government retirement deducted from pay	9655	NA	12603	NA
ANPRVPNM	Annual amount of private pension fund deducted from pay	19960	NA	26099	NA
ANPRVPNX	Annual amount of private pension fund deducted from pay	19960	NA	25887	NA
ANRRDEDM	Annual amount of Railroad Retirement deducted from pay	8000	NA	10532	NA
ANRRDEDX	Annual amount of Railroad Retirement deducted from pay	8000	NA	10395	NA
ANSLTX	Annual amount of state and local income taxes deducted from pay	9100	NA	17254	NA
ANSLTXM	Annual amount of state and local income taxes deducted from pay	9100	NA	17242	NA
FARMINCM	Amount of income or loss received from own farm	85000	-9999	123279	-31017
FARMINCX	Amount of income or loss received from own farm	85000	-9999	106833	-40391
GOVRETX	Amount of government retirement deducted from last pay	850	NA	1624	NA
GROSPAYX	Amount of last gross pay	6800	NA	15929	NA
INDRETX	Amount of money placed in individual retirement plan	25000	NA	55611	NA
JSSDEDX	Estimated annual Social Security contribution	8797	NA	12883	NA
JSSDEDXM	Estimated annual Social Security contribution	8797	NA	10081	NA
NONFARMM	Amount of income or loss received from own nonfarm business	200000	-9999	232523	-27164
NONFARMX	Amount of income or loss received from own nonfarm	200000	-9999	435664	-52172

Variable	Description	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
	business				
PRIVPENX	Amount of private pension fund deducted from last pay	1200	NA	3296	NA
RRRDEDX	Amount of Railroad Retirement deducted from last pay	414	NA	530	NA
SALARYX	Amount received from wage and salary income before deductions	150000	NA	279006	NA
SALARYXM	Amount received from wage and salary income before deductions	150000	NA	222338	NA
SLFEMPSM	Amount of self-employment Social Security contribution	17593	NA	15386	NA
SLFEMPSS	Amount of self-employment Social Security contribution	17593	NA	22490	NA
SLTAXX	Amount of state and local income taxes deducted last pay	430	NA	1169	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 ANPRVPM, GROSPAYX, and PRIVPENX are not, then the values for ANPRVPM, 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 some UCCs. The COST variable is not topcoded by the conventional method of replacement with a topcode value. First, variables are topcoded in the EXPN files. Then those variables are mapped to their appropriate UCC. If the variable was topcoded in the EXPN files, then the associated UCC will have a topcoded COST value, and the value of COST_ is set to 'T'. All the EXPN variables that are topcoded are listed in Section IV, subsection E of this documentation. To obtain the concordance file that lists what EXPN variables are mapped to which UCC, please contact the Consumer Expenditure Survey via the phone number or email address listed on the last page of this documentation.

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

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	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
001000	Purchase price of stocks, bonds or mutual funds including broker fees	16667	NA	55500	NA
001010	Sale price of stocks, bonds, and mutual funds, net	NA	-8333	NA	-25781

Variable	Description	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
001210	Investments to farm or business	20833	NA	161389	NA
002010	Change in savings account	5000	-5000	9590	-15522
002020	Change in checking account	2417	-1333	8747	-2998
002030	Change in U.S. savings bonds	417	-1250	6472	-2083
003000	Change in money owed to consumer unit	2500	-708	19264	-2181
003100	Change in surrender of insurance policies	NA	-4167	NA	-12500
900040	Pensions and annuities	6000	NA	7206	NA
900050	Dividends, royalties, estates, trusts	6250	NA	7637	NA
900060	Roomer and boarder income	2550	-2500	2938	-3633
900070	Other rental income	4167	-1667	3057	-1397
900080	Interest	2917	NA	3956	NA
900131	Child support payments	1300	NA	2435	NA
900132	Other regular contributions including alimony	4167	NA	4581	NA
900140	Other income	2667	NA	3064	NA
910000	Lump sum receipts	10333	NA	25284	NA
910010	Money from sale of household furnishings, etc.	583	NA	2955	NA
910020	Refund from overpayment on Social Security	170	NA	394	NA
910030	Refunds from insurance policies	400	NA	755	NA
910040	Refunds from property taxes	400	NA	602	NA
910041	Lump sum child support payment	1000	NA	1153	NA
920010	Market value of all savings accounts	11167	NA	55742	NA
920020	Market value of all checking accounts	2500	NA	15092	NA
920030	Market value of all U.S. savings bonds	4167	NA	6848	NA
920040	Market value of all securities	79167	NA	293762	NA
950001	Federal income tax refunds	NA	-825	NA	-1451

Variable	Description	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
950003	Additional federal income tax paid (new UCC Q20062)	2000	NA	5911	NA
950011	State and local income tax refunds	NA	-208	NA	-392
950013	Additional state and local income tax paid (new UCC Q20062)	500	NA	1602	NA
950021	Other taxes	833	NA	1664	NA
950022	Personal property taxes	100	NA	217	NA
950023	Other tax refunds	NA	-333	NA	-643

¹ 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.

² 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.)

UCC	FMLY variable	Description
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	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
ADVMATX	Materials and supplies purchased for insulation, dwellings under constr, additions, finishing, remodeling, landscaping, etc. Total cost of tools, equipment, and supplies purchased for painting and wall papering for jobs not yet started	('1'<=QTENURE & QTENURE<='2') & (('100'<=CRMCODEA & CRMCODEA<='150') CRMCODEA='240')	7500	NA	10500	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='170' CRMCODEA='180')	500	NA	743	NA
ADVMATX	Electrical supplies, heating and cooling equipment	('1'<=QTENURE & QTENURE<='2') & (CRMCODEA='190' CRMCODEA='270' CRMCODEA='280')	1800	NA	5226	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='210' CRMCODEA='220')	600	NA	818	NA
ADVMATX	Plumbing supplies and equipment	('1'<=QTENURE & QTENURE<='2') & CRMCODEA='160'	210	NA	372	NA
ADVMATX	Materials for hard surface flooring, repair and replacement	('1'<=QTENURE & QTENURE<='2') & CRMCODEA='200'	450	NA	955	NA
ADVMATX		('1'<=QTENURE & QTENURE<='2') & CRMCODEA='230'	1300	NA	3250	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
ADVMATX	Materials and equipment for roof and gutters	('1'<=QTENURE & QTENURE<='2') & CRMCODEA='260'	691	NA	2133	NA
ADVMATX	Materials for masonry, brick or stucco work	('1'<=QTENURE & QTENURE<='2') & CRMCODEA='290'	150	NA	3085	NA
ADVMATX	Material for insulation, other maintenance and repair	('1'<=QTENURE & QTENURE<='2') & CRMCODEA='300' ('3'<=QTENURE & QTENURE<='5') & (('100'<=CRMCODEA & CRMCODEA<='130') CRMCODEA='150')	2000	NA	4207	NA
ADVMATX	Construction materials for jobs not started		100	NA	457	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')	150	NA	205	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'))	0	NA	112	NA
ADVMATX	Total cost of tools, equipment, and supplies purchased for electrical work for jobs not yet started	('3'<=QTENURE & QTENURE<='5') & (CRMCODEA='210' CRMCODEA='220')	2	NA	42	NA
ADVMATX	Material for insulation, other maintenance and repair	('3'<=QTENURE & QTENURE<='5') & (CRMCODEA='240' CRMCODEA='300')	50	NA	137	NA
ADVMATX	Total cost of tools, equipment, and supplies purchased for flooring repair for jobs not yet started	('3'<=QTENURE & QTENURE<='5') & CRMCODEA='230'	0	NA	787	NA
DISPX	Sale price of property or trade-in amount (owned home)	OWNYD EQ '100' OR OWNYD EQ '200'	639000	NA	1174750	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
DISPX	Sale price of property or trade-in amount (owned vacation)	OWNYD EQ '300'	240000	NA	294429	NA
DISPX	Sale price of property or trade-in amount (other property)	OWNYD EQ '400' OR OWNYD EQ '500'	140000	NA	261667	NA
INTCHGX	Cable and satellite television services	INTSERV EQ '100' AND INTMO EQ '13'	187	NA	231	NA
INTCHGX	Cable and satellite television services	INTSERV EQ '100' AND INTMO NE '13'	236	NA	345	NA
INTCHGX	Computer information services	INTSERV EQ '200' AND INTMO EQ '13'	100	NA	148	NA
INTCHGX	Computer information services	INTSERV EQ '200' AND INTMO NE '13'	140	NA	204	NA
JCPIRE1X	CPI quarterly rental equivalence	OWNYI EQ '100'	9000	NA	13639	NA
JCPIRE1X	CPI quarterly rental equivalence--second home	OWNYI EQ '300'	12000	NA	19960	NA
JCPIRE2X	CPI quarterly rental equivalence--second home	OWNYI EQ '300'	12277	NA	17991	NA
JCPIRE3X	CPI quarterly rental equivalence--second home	OWNYI EQ '300' EDUC_AY EQ '310' AND EDMONTHA EQ '13'	4200	NA	9247	NA
JEDUCNET	Housing while attending school	EDUC_AY EQ '310' AND EDMONTHA NE '13'	1100	NA	2793	NA
JEDUCNET	Housing while attending school	(CRMPTYPE='4' CRMPTYPE='5') & (('120'<=CRMCODEB & CRMCODEB<='220') CRMCODEB='240' ('260'<=CRMCODEB & CRMCODEB<='300'))	5813	NA	7219	NA
JLABOR1X	Repair or maintenance services	(CRMPTYPE='4' CRMPTYPE='5') & ('100'<=CRMCODEB & CRMCODEB<='110')	1628	NA	2600	NA
JLABOR1X	Labor and materials for dwellings under construction and additions	(CRMPTYPE='4' CRMPTYPE='5') & ('100'<=CRMCODEB & CRMCODEB<='110')	80	NA	3800	NA
JLABOR1X	Repair and replacement of hard surface flooring	(CRMPTYPE='4' CRMPTYPE='5') & CRMCODEB='230'	0	NA	472	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
JLABOR1X	Capital improvement labor and materials (owned home)	CRMPYTYPE='1' & (CRMTYPE='1' CRMTYPE='2' CRMTYPE='5')	35441	NA	46572	NA
JLABOR1X	Other repair and maintenance services	CRMPYTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='160') CRMCODEB='190' CRMCODEB='240' ('270'<=CRMCODEB & CRMCODEB<='300'))	10500	NA	23339	NA
JLABOR1X	Painting and papering	CRMPYTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & (CRMCODEB='170' CRMCODEB='180')	6993	NA	8498	NA
JLABOR1X	Heat, a/c, electrical work	CRMPYTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & (CRMCODEB='210' CRMCODEB='220')	9500	NA	15400	NA
JLABOR1X	Plumbing and water heating	CRMPYTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='200'	3258	NA	11412	NA
JLABOR1X	Repair and replacement of hard surface flooring	CRMPYTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='230'	5300	NA	9333	NA
JLABOR1X	Roofing and gutters	CRMPYTYPE='1' & (CRMTYPE='2' CRMTYPE='5')	10000	NA	11640	NA
JLABOR1X	Capital improvement labor and materials (owned vacation)	CRMPYTYPE='2' & (CRMTYPE='3' CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='220') CRMCODEB='240' ('260'<=CRMCODEB & CRMCODEB<='300'))	7650	NA	50667	NA
JLABOR1X	Repair and remodeling services	CRMPYTYPE='3' & (CRMTYPE='1' CRMTYPE='2' CRMTYPE='5')	2500	NA	4965	NA
JLABOR1X	Contractors labor and materials, supplies CU obtained,		3961	NA	37167	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
JLABOR1X	appliances provided by contractor, other property Expenses for other properties	CRMPTYPE='3' & (CRMTYPE='3' CRMTYPE='4') & (('100'<=CRMCODEB & CRMCODEB<='240') ('260'<=CRMCODEB & CRMCODEB<='300')) (CRMPTYPE='4' CRMPTYPE='5') & (('120'<=CRMCODEB & CRMCODEB<='220') CRMCODEB='240' (('260'<=CRMCODEB & CRMCODEB<='300'))	330	NA	1090	NA
JLABOR2X	Repair or maintenance services	(CRMPTYPE='4' CRMPTYPE='5') & ('100'<=CRMCODEB & CRMCODEB<='110')	2430	NA	4075	NA
JLABOR2X	Labor and materials for dwellings under construction and additions	(CRMPTYPE='4' CRMPTYPE='5') & CRMCODEB='230'	700	NA	5957	NA
JLABOR2X	Repair and replacement of hard surface flooring	CRMPTYPE='1' & (CRMTYPE='1' CRMTYPE='2' CRMTYPE='5') CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='160') CRMCODEB='190' CRMCODEB='240' (('270'<=CRMCODEB & CRMCODEB<='300'))	150	NA	307	NA
JLABOR2X	Capital improvement labor and materials (owned home)	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='180') CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='210' CRMCODEB='220')	20000	NA	35970	NA
JLABOR2X	Other repair and maintenance services	(CRMPTYPE='3' CRMTYPE='4') & CRMCODEB='170' CRMCODEB='180') CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='210' CRMCODEB='220')	13900	NA	22183	NA
JLABOR2X	Painting and papering	(CRMPTYPE='3' CRMTYPE='4') & CRMCODEB='210' CRMCODEB='220')	5250	NA	9077	NA
JLABOR2X	Heat, a/c, electrical work	(CRMPTYPE='3' CRMTYPE='4') & CRMCODEB='210' CRMCODEB='220')	8400	NA	11167	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
JLABOR2X	Plumbing and water heating Repair and replacement of hard surface flooring	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='200'	4500	NA	8010	NA
JLABOR2X		CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='230'	4500	NA	8351	NA
JLABOR2X	Roofing and gutters Capital improvement labor and materials (owned vacation)	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='260'	9000	NA	13336	NA
JLABOR2X		CRMPTYPE='2' & (CRMTYPE='1' CRMTYPE='2' CRMTYPE='5')	7500	NA	26000	NA
JLABOR2X	Repair and remodeling services Contractors labor and materials, supplies CU obtained, appliances provided by contractor, other property	CRMPTYPE='2' & (CRMTYPE='3' CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='220') CRMCODEB='240' ('260'<=CRMCODEB & CRMCODEB<='300'))	5375	NA	10609	NA
JLABOR2X		CRMPTYPE='3' & (CRMTYPE='1' CRMTYPE='2' CRMTYPE='5')	5000	NA	38017	NA
JLABOR2X	Expenses for other properties	CRMPTYPE='3' & (CRMTYPE='3' CRMTYPE='4') & (('100'<=CRMCODEB & CRMCODEB<='240') ('260'<=CRMCODEB & CRMCODEB<='300'))	160	NA	813	NA
JLABOR3X	Repair or maintenance services Labor and materials for dwellings under construction and	(CRMPTYPE='4' CRMTYPE='5') & (('120'<=CRMCODEB & CRMCODEB<='220') CRMCODEB='240' ('260'<=CRMCODEB & CRMCODEB<='300'))	5000	NA	14132	NA
JLABOR3X		(CRMPTYPE='4' CRMTYPE='5') & ('100'<=CRMCODEB & CRMCODEB<='110')	600	NA	10788	NA

Variable	Description additions	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
JLABOR3X	Repair and replacement of hard surface flooring	(CRMPTYPE='4' CRMPTYPE='5') & CRMCODEB='230'	180	NA	518	NA
JLABOR3X	Capital improvement labor and materials (owned home)	(CRMTYPE='1' CRMTYPE='2' CRMTYPE='5') & CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='160') CRMCODEB='190' CRMCODEB='240' ('270'<=CRMCODEB & CRMCODEB<='300'))	40000	NA	83750	NA
JLABOR3X	Other repair and maintenance services	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & (CRMCODEB='170' CRMCODEB='180')	13000	NA	17033	NA
JLABOR3X	Painting and papering	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & (CRMCODEB='210' CRMCODEB='220')	6000	NA	6853	NA
JLABOR3X	Heat, a/c, electrical work	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='200'	7500	NA	15640	NA
JLABOR3X	Plumbing and water heating	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='230'	7500	NA	8815	NA
JLABOR3X	Repair and replacement of hard surface flooring	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='260'	4800	NA	6575	NA
JLABOR3X	Roofing and gutters	CRMPTYPE='2' & (CRMTYPE='1' CRMTYPE='2' CRMTYPE='5')	10000	NA	14200	NA
JLABOR3X	Capital improvement labor and materials (owned vacation)		12500	NA	16333	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
JLABOR3X	Repair and remodeling services Contractors labor and materials, supplies CU obtained, appliances provided by contractor, other property	CRMPTYPE='2' & (CRMTYPE='3' CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='220') CRMCODEB='240' (('260'<=CRMCODEB & CRMCODEB<='300'))	3460	NA	7000	NA
JLABOR3X		CRMPTYPE='3' & (CRMTYPE='1' CRMTYPE='2' CRMTYPE='5') CRMPTYPE='3' & (CRMTYPE='3' CRMTYPE='4') & (('100'<=CRMCODEB & CRMCODEB<='240') ('260'<=CRMCODEB & CRMCODEB<='300'))	3844	NA	37000	NA
JLABOR3X	Expenses for other properties Principal paid, home equity line of credit (owned home)	OWNYH EQ '100' OR OWNYH EQ '200'	1000	NA	1941	NA
JLCPRINX	Principal paid, home equity line of credit (owned vacation)	OWNYH EQ '300'	4454	-2241	14975	-2956
JLCPRINX	Principal paid, home equity line of credit (other property)	OWNYH EQ '400' OR OWNYH EQ '500'	2531	-75	30949	-909
JLCPRINX	monthly amount of rental equivalence for properties that are vacation homes, but are not timeshares.	OWNYH EQ '400' OR OWNYH EQ '500'	822	-13	6372	-314
JRNTEQ2X	monthly amount of rental equivalence for properties that are vacation homes, but are not timeshares.	NA	8000	NA	12857	NA
JRNTEQ3X	Lodging on out-of-town trips	NA	42900	NA	48932	NA
LDGCOSTX	Eyecare services	NA	1715	NA	3368	NA
MEDPMTX		MEDPCARY EQ '110'	475	NA	1351	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
MEDPMTX	Dental services	MEDPCARY EQ '200'	2000	NA	4097	NA
MEDPMTX	Hospital room and services	MEDPCARY EQ '330'	2341	NA	5053	NA
MEDPMTX	Service by professionals other than physician	MEDPCARY EQ '410'	900	NA	2220	NA
MEDPMTX	Physician's services	MEDPCARY EQ '420'	500	NA	1273	NA
MEDPMTX	Lab tests, x-rays	MEDPCARY EQ '510'	750	NA	1495	NA
MEDPMTX	Care in convalescent or nursing home	MEDPCARY EQ '520'	3582	NA	5663	NA
MEDPMTX	Other medical care services	MEDPCARY EQ '530'	1300	NA	4476	NA
MEDPMTX	Rental of supportive, convalescent medical equipment	MEDPCARY EQ '630'	350	NA	466	NA
MEDPMTX	Supportive and convalescent medical equipment	MEDPCARY EQ '640'	800	NA	1349	NA
MEDPMTX	Rental of medical equipment	MEDPCARY EQ '650'	437	NA	1211	NA
MEDPMTX	Medical equipment for general use	MEDPCARY EQ '660'	314	NA	420	NA
MEDRMBX	Eyecare services	MEDRCARY EQ '110'	400	NA	1619	NA
MEDRMBX	Dental services	MEDRCARY EQ '200'	1750	NA	2343	NA
MEDRMBX	Hospital room and services	MEDRCARY EQ '330'	1180	NA	2433	NA
MEDRMBX	Service by professionals other than physician	MEDRCARY EQ '410'	1737	NA	5249	NA
MEDRMBX	Physician's services	MEDRCARY EQ '420'	900	NA	1757	NA
MEDRMBX	Lab tests, x-rays	MEDRCARY EQ '510'	570	NA	841	NA
MEDRMBX	Care in convalescent or nursing home	MEDRCARY EQ '520'	3300	NA	5386	NA
MEDRMBX	Other medical care services	MEDRCARY EQ '530'	1200	NA	1361	NA
MEDRMBX	Supportive and convalescent medical equipment	MEDRCARY EQ '640'	39	NA	167	NA
MEDRMBX	Rental of medical equipment	MEDRCARY EQ '650'	0	NA	52	NA
MEDRMBX	Medical equipment for general use	MEDRCARY EQ '660'	70	NA	169	NA
MISCEXPX	Occupational expenses	MISCCODE EQ '380'	197	NA	371	NA
MISCEXPX	AND MISCMO EQ '13'					
MISCEXPX	Occupational expenses	MISCCODE EQ '380'	800	NA	1697	NA
MISCEXPX	AND MISCMO NE '13'					

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
MRTPMTG	Amount of last monthly payment, home equity loan (owned property)	(LOANTYPE EQ '2')	2138	NA	4829	NA
MRTPMTX	Amount of last monthly payment (owned property)	(LOANTYPE EQ '1')	3600	NA	6474	NA
NETPURX	Net purchase price of boat with motor after discount, trade-in, or rebate, including destination fee	VEHICYB EQ '160'	162375	NA	173941	NA
ORGMRTG	Original loan amount, home equity loan (loan obtained during interview quarter) (owned home)	(OWNYG EQ '100' OR OWNYG EQ '200') AND (LOANTYPE EQ '2')	185000	NA	320040	NA
ORGMRTG	Original loan amount, home equity loan (loan obtained during interview quarter) (owned vacation)	(OWNYG EQ '300') AND (LOANTYPE EQ '2')	145000	NA	254579	NA
ORGMRTG	Original loan amount, home equity loan (loan obtained during interview quarter) (other property)	(OWNYG EQ '400' OR OWNYG EQ '500') AND (LOANTYPE EQ '2')	48205	NA	170000	NA
ORGMRTX	Amount of mortgage (owned home)	(OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1')	440000	NA	657049	NA
ORGMRTX	Amount of mortgage (vacation home)	(OWNYF EQ '300') AND (LOANTYPE EQ '1')	467537	NA	643400	NA
ORGMRTX	Original loan amount (mortgage obtained during interview quarter) (other property)	(OWNYF EQ '400' OR OWNYF EQ '500') AND (LOANTYPE EQ '1')	410000	NA	844968	NA
OWN_PURX	Purchase price of property (owned home)	OWNYB EQ '100' OR OWNYB EQ '200'	765000	NA	1071786	NA
OWN_PURX	Purchase price of property (owned vacation)	OWNYB EQ '300'	520000	NA	1092667	NA
OWN_PURX	Purchase price of property (other)	OWNYB EQ '400' OR OWNYB EQ '500'	373000	NA	781500	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
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')	2282	NA	3825	NA
PAYMT1G	Amount of mortgage payment in the first month of the reference period, home equity loan (owned vacation)	(OWNYG EQ '300') AND (LOANTYPE EQ '2')	625	NA	900	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')	4424	NA	19520	NA
PAYMT1X	Amount of mortgage payment in the first month of the reference period (vacation home)	(OWNYF EQ '300') AND (LOANTYPE EQ '1')	1900	NA	2105	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')	723	NA	952	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')	2191	NA	2573	NA
PAYMT2G	Amount of mortgage payment in the second month of the reference period, home equity loan (owned vacation)	(OWNYG EQ '300') AND (LOANTYPE EQ '2')	613	NA	865	NA
PAYMT2X	Amount of mortgage payment in the second month of the	(OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1')	4300	NA	5417	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
	reference period (owned home)					
PAYMT2X	Amount of mortgage payment in the second month of the reference period (vacation home)	(OWNYF EQ '300') AND (LOANTYPE EQ '1')	1920	NA	2310	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')	723	NA	939	NA
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')	2191	NA	2573	NA
PAYMT3G	Amount of mortgage payment in the third month of the reference period, home equity loan (owned vacation)	(OWNYG EQ '300') AND (LOANTYPE EQ '2')	610	NA	865	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')	4400	NA	5441	NA
PAYMT3X	Amount of mortgage payment in the third month of the reference period (vacation home)	(OWNYF EQ '300') AND (LOANTYPE EQ '1')	1920	NA	2143	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')	723	NA	939	NA
PROPVALX	Approximate value property would sell for on today's market (owned home)	OWNYI EQ '100'	800000	NA	1317684	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
PROPVALX	Approximate value property would sell for on today's market (owned vacation)	OWNYI EQ '300'	1300000	NA	2220732	NA
PRPVAL2X	Approximate value timeshare would sell for on today's market	NA	150000	NA	203909	NA
QADCAB1X	Cable and satellite television services	NA	170	NA	191	NA
QADCAB2X	Cable and satellite television services	NA	170	NA	192	NA
QADCAB3X	Cable and satellite television services	NA	170	NA	193	NA
QADFUL1X	Water/sewer maint. (owned vacation)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '2')	164	NA	327	NA
QADFUL1X	Piped in water/sewage maintenance (other property)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '3') (UTILY EQ '200' OR UTILY EQ '220') AND	273	NA	500	NA
QADFUL1X	Water/sewer maint. (renter)	(UTLPTYPE EQ '4' OR UTLPTYPE EQ '5') (UTILY EQ '200' OR UTILY EQ '220') AND	192	NA	275	NA
QADFUL1X	Water/sewer maint. (rented vacation)	(UTLPTYPE EQ '6') (UTILY EQ '200' OR UTILY EQ '220') AND	87	NA	124	NA
QADFUL1X	Water/sewer maint. (owned home)	UTLPTYPE EQ '1' (UTILY EQ '100' AND (UTLPTYPE EQ '2') (UTILY EQ '200' OR UTILY EQ '220') AND	260	NA	450	NA
QADFUL1X	Electricity (owned vacation)	UTLPTYPE EQ '2') (UTILY EQ '100' AND (UTLPTYPE EQ '3') (UTILY EQ '100' AND	530	NA	724	NA
QADFUL1X	Electricity (other property)	(UTLPTYPE EQ '4' OR UTLPTYPE EQ '5') (UTILY EQ '100' AND (UTLPTYPE EQ '6') (UTILY EQ '100' AND	242	NA	448	NA
QADFUL1X	Electricity (renter)	UTLPTYPE EQ '1' (UTILY EQ '110' AND (UTLPTYPE EQ '2') (UTILY EQ '100' AND	450	NA	559	NA
QADFUL1X	Electricity (rented vacation)	UTLPTYPE EQ '3') (UTILY EQ '110' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5') (UTILY EQ '100' AND	273	NA	289	NA
QADFUL1X	Electricity (owned home)	UTLPTYPE EQ '6') (UTILY EQ '100' AND (UTLPTYPE EQ '1' (UTILY EQ '110' AND	520	NA	654	NA
QADFUL1X	Utility--natural gas (owned vacation)	UTLPTYPE EQ '2') (UTILY EQ '110' AND (UTLPTYPE EQ '3') (UTILY EQ '110' AND	148	NA	207	NA
QADFUL1X	Utility--natural gas (other property)	UTLPTYPE EQ '4' OR UTLPTYPE EQ '5') (UTILY EQ '100' AND (UTLPTYPE EQ '6') (UTILY EQ '100' AND	89	NA	95	NA
QADFUL1X	Utility--natural gas (renter)	UTLPTYPE EQ '1' (UTILY EQ '110' AND (UTLPTYPE EQ '2') (UTILY EQ '100' AND	300	NA	356	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
QADFUL1X	Utility--natural gas (rented vacation)	UTILY EQ '110' AND (UTLPTYPE EQ '6')	116	NA	157	NA
QADFUL1X	Utility--natural gas (owned home)	UTILY EQ '110' AND UTLPTYPE EQ '1'	427	NA	709	NA
QADFUL1X	Fuel oil (owned vacation)	UTILY EQ '130' AND (UTLPTYPE EQ '2')	209	NA	253	NA
QADFUL1X	Fuel oil (renter)	UTILY EQ '130' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	510	NA	665	NA
QADFUL1X	Fuel oil (owned home)	UTILY EQ '130' AND UTLPTYPE EQ '1'	1700	NA	2600	NA
QADFUL1X	Gas, btld/tank (owned vacation)	UTILY EQ '150' AND (UTLPTYPE EQ '2')	580	NA	1336	NA
QADFUL1X	Gas, btld/tank (renter)	UTILY EQ '150' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	835	NA	1102	NA
QADFUL1X	Gas, btld/tank (rented vacation)	UTILY EQ '150' AND (UTLPTYPE EQ '6')	0	NA	22	NA
QADFUL1X	Coal, wood, other fuels (renter)	UTILY EQ '150' AND UTLPTYPE EQ '1'	2000	NA	2817	NA
QADFUL1X	Coal, wood, other fuels (vacation)	UTILY EQ '180' AND (UTLPTYPE EQ '2')	0	NA	113	NA
QADFUL1X	Coal, wood, other fuels (renter)	UTILY EQ '180' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	158	NA	238	NA
QADFUL1X	Coal, wood, other fuels (owned home)	UTILY EQ '180' AND UTLPTYPE EQ '1'	710	NA	1171	NA
QADFUL1X	Trash/garb. coll. (owned vacation)	UTILY EQ '210' AND (UTLPTYPE EQ '2')	102	NA	151	NA
QADFUL1X	Trash/garb. coll. (other property)	UTILY EQ '210' AND (UTLPTYPE EQ '3')	43	NA	71	NA
QADFUL1X	Trash/garb. coll. (renter)	UTILY EQ '210' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	135	NA	206	NA
QADFUL1X	Trash/garb. coll. (rented vacation)	UTILY EQ '210' AND (UTLPTYPE EQ '6')	40	NA	54	NA
QADFUL1X	Trash/garb. coll. (owned home)	UTILY EQ '210' AND UTLPTYPE EQ '1'	153	NA	225	NA
QADFUL1X	Water softening service (vacation)	UTILY EQ '270' AND (UTLPTYPE EQ '2')	0	NA	64	NA
QADFUL1X	Water softening service (renter)	UTILY EQ '270' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	54	NA	85	NA
QADFUL1X	Water softening service (owned)	UTILY EQ '270' AND UTLPTYPE EQ '1'	113	NA	156	NA
QADFUL1X	Septic tank clean. (renter)	UTILY EQ '280' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	30	NA	166	NA
QADFUL1X	Septic tank clean. (owned home)	UTILY EQ '280' AND UTLPTYPE EQ '1'	490	NA	901	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
QADFUL2X	Water/sewer maint. (owned vacation) Piped in	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '2')	213	NA	405	NA
QADFUL2X	water/sewage maintenance (other property)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '3')	200	NA	252	NA
QADFUL2X	Water/sewer maint. (renter)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	171	NA	222	NA
QADFUL2X	Water/sewer maint. (rented vacation)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '6')	83	NA	112	NA
QADFUL2X	Water/sewer maint. (owned home)	(UTILY EQ '200' OR UTILY EQ '220') AND UTLPTYPE EQ '1'	242	NA	346	NA
QADFUL2X	Electricity (owned vacation)	UTILY EQ '100' AND (UTLPTYPE EQ '2')	599	NA	715	NA
QADFUL2X	Electricity (other property)	UTILY EQ '100' AND (UTLPTYPE EQ '3')	245	NA	456	NA
QADFUL2X	Electricity (renter)	UTILY EQ '100' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	423	NA	517	NA
QADFUL2X	Electricity (rented vacation)	UTILY EQ '100' AND (UTLPTYPE EQ '6')	250	NA	287	NA
QADFUL2X	Electricity (owned home)	UTILY EQ '100' AND UTLPTYPE EQ '1'	505	NA	658	NA
QADFUL2X	Utility--natural gas (owned vacation)	UTILY EQ '110' AND (UTLPTYPE EQ '2')	141	NA	180	NA
QADFUL2X	Utility--natural gas (other property)	UTILY EQ '110' AND (UTLPTYPE EQ '3')	90	NA	95	NA
QADFUL2X	Utility--natural gas (renter)	UTILY EQ '110' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	320	NA	390	NA
QADFUL2X	Utility--natural gas (rented vacation)	UTILY EQ '110' AND (UTLPTYPE EQ '6')	131	NA	168	NA
QADFUL2X	Utility--natural gas (owned home)	UTILY EQ '110' AND UTLPTYPE EQ '1'	412	NA	640	NA
QADFUL2X	Fuel oil (owned vacation)	UTILY EQ '130' AND (UTLPTYPE EQ '2')	190	NA	330	NA
QADFUL2X	Fuel oil (renter)	UTILY EQ '130' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	600	NA	875	NA
QADFUL2X	Fuel oil (owned home)	UTILY EQ '130' AND UTLPTYPE EQ '1'	1400	NA	1883	NA
QADFUL2X	Gas, btld/tank (owned vacation)	UTILY EQ '150' AND (UTLPTYPE EQ '2')	340	NA	776	NA
QADFUL2X	Gas, btld/tank (renter)	UTILY EQ '150' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	532	NA	648	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
QADFUL2X	Gas, btld/tank (rented vacation)	UTILY EQ '150' AND (UTLPTYPE EQ '6')	10	NA	32	NA
QADFUL2X	Coal, wood, other fuels (renter)	UTILY EQ '150' AND UTLPTYPE EQ '1'	1820	NA	2253	NA
QADFUL2X	Coal, wood, other fuels (vacation)	UTILY EQ '180' AND (UTLPTYPE EQ '2')	0	NA	177	NA
QADFUL2X	Coal, wood, other fuels (renter)	UTILY EQ '180' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	200	NA	265	NA
QADFUL2X	Coal, wood, other fuels (owned home)	UTILY EQ '180' AND UTLPTYPE EQ '1'	651	NA	817	NA
QADFUL2X	Trash/garb. coll. (owned vacation)	UTILY EQ '210' AND (UTLPTYPE EQ '2')	94	NA	123	NA
QADFUL2X	Trash/garb. coll. (other property)	UTILY EQ '210' AND (UTLPTYPE EQ '3')	35	NA	57	NA
QADFUL2X	Trash/garb. coll. (renter)	UTILY EQ '210' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	135	NA	189	NA
QADFUL2X	Trash/garb. coll. (rented vacation)	UTILY EQ '210' AND (UTLPTYPE EQ '6')	35	NA	46	NA
QADFUL2X	Trash/garb. coll. (owned home)	UTILY EQ '210' AND UTLPTYPE EQ '1'	140	NA	210	NA
QADFUL2X	Water softening service (vacation)	UTILY EQ '270' AND (UTLPTYPE EQ '2')	0	NA	55	NA
QADFUL2X	Water softening service (renter)	UTILY EQ '270' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	50	NA	72	NA
QADFUL2X	Water softening service (owned)	UTILY EQ '270' AND UTLPTYPE EQ '1'	180	NA	260	NA
QADFUL2X	Septic tank clean. (renter)	UTILY EQ '280' AND (UTLPTYPE EQ '2')	64	NA	170	NA
QADFUL2X	Septic tank clean. (owned home)	UTILY EQ '280' AND UTLPTYPE EQ '1'	400	NA	1183	NA
QADFUL3X	Water/sewer maint. (owned vacation)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '2')	176	NA	307	NA
QADFUL3X	Piped in water/sewage maintenance (other property)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '3')	100	NA	203	NA
QADFUL3X	Water/sewer maint. (renter)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	200	NA	306	NA
QADFUL3X	Water/sewer maint. (rented vacation)	(UTILY EQ '200' OR UTILY EQ '220') AND (UTLPTYPE EQ '6')	83	NA	114	NA
QADFUL3X	Water/sewer maint. (owned home)	(UTILY EQ '200' OR UTILY EQ '220') AND UTLPTYPE EQ '1'	255	NA	388	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
QADFUL3X	Electricity (owned vacation)	UTILY EQ '100' AND (UTLPTYPE EQ '2')	600	NA	723	NA
QADFUL3X	Electricity (other property)	UTILY EQ '100' AND (UTLPTYPE EQ '3')	271	NA	453	NA
QADFUL3X	Electricity (renter)	UTILY EQ '100' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	437	NA	567	NA
QADFUL3X	Electricity (rented vacation)	UTILY EQ '100' AND (UTLPTYPE EQ '6')	288	NA	388	NA
QADFUL3X	Electricity (owned home)	UTILY EQ '100' AND UTLPTYPE EQ '1'	525	NA	682	NA
QADFUL3X	Utility--natural gas (owned vacation)	UTILY EQ '110' AND (UTLPTYPE EQ '2')	309	NA	663	NA
QADFUL3X	Utility--natural gas (other property)	UTILY EQ '110' AND (UTLPTYPE EQ '3')	100	NA	143	NA
QADFUL3X	Utility--natural gas (renter)	UTILY EQ '110' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	356	NA	467	NA
QADFUL3X	Utility--natural gas (rented vacation)	UTILY EQ '110' AND (UTLPTYPE EQ '6')	150	NA	198	NA
QADFUL3X	Utility--natural gas (owned home)	UTILY EQ '110' AND UTLPTYPE EQ '1'	450	NA	693	NA
QADFUL3X	Fuel oil (owned vacation)	UTILY EQ '130' AND (UTLPTYPE EQ '2')	359	NA	795	NA
QADFUL3X	Fuel oil (renter)	UTILY EQ '130' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	546	NA	678	NA
QADFUL3X	Fuel oil (owned home)	UTILY EQ '130' AND UTLPTYPE EQ '1'	1600	NA	2017	NA
QADFUL3X	Gas, btld/tank (owned vacation)	UTILY EQ '150' AND (UTLPTYPE EQ '2')	579	NA	906	NA
QADFUL3X	Gas, btld/tank (renter)	UTILY EQ '150' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	600	NA	740	NA
QADFUL3X	Gas, btld/tank (rented vacation)	UTILY EQ '150' AND (UTLPTYPE EQ '6')	25	NA	223	NA
QADFUL3X	Coal, wood, other fuels (renter)	UTILY EQ '150' AND UTLPTYPE EQ '1'	1366	NA	1590	NA
QADFUL3X	Coal, wood, other fuels (vacation)	UTILY EQ '180' AND (UTLPTYPE EQ '2')	0	NA	220	NA
QADFUL3X	Coal, wood, other fuels (renter)	UTILY EQ '180' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	250	NA	483	NA
QADFUL3X	Coal, wood, other fuels (owned home)	UTILY EQ '180' AND UTLPTYPE EQ '1'	875	NA	1530	NA
QADFUL3X	Trash/garb. coll. (owned vacation)	UTILY EQ '210' AND (UTLPTYPE EQ '2')	83	NA	112	NA
QADFUL3X	Trash/garb. coll. (other property)	UTILY EQ '210' AND (UTLPTYPE EQ '3')	60	NA	97	NA
QADFUL3X	Trash/garb. coll. (renter)	UTILY EQ '210' AND (UTLPTYPE EQ '4' OR	135	NA	168	NA

Variable	Description	Condition UTLPTYPE EQ '5')	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
QADFUL3X	Trash/garb. coll. (rented vacation)	UTILY EQ '210' AND (UTLPTYPE EQ '6')	37	NA	45	NA
QADFUL3X	Trash/garb. coll. (owned home)	UTILY EQ '210' AND UTLPTYPE EQ '1'	148	NA	221	NA
QADFUL3X	Water softening service (vacation)	UTILY EQ '270' AND (UTLPTYPE EQ '2')	0	NA	64	NA
QADFUL3X	Water softening service (renter)	UTILY EQ '270' AND (UTLPTYPE EQ '4' OR UTLPTYPE EQ '5')	60	NA	80	NA
QADFUL3X	Water softening service (owned)	UTILY EQ '270' AND UTLPTYPE EQ '1'	239	NA	553	NA
QADFUL3X	Septic tank clean. (owned home)	UTILY EQ '280' AND UTLPTYPE EQ '1'	350	NA	582	NA
QADINE1X	Computer information services	NA	100	NA	146	NA
QADINE2X	Computer information services	NA	100	NA	142	NA
QADINE3X	Computer information services	NA	100	NA	146	NA
QADPSP2X	Materials for additions, finishing basements, remodeling rooms Total cost of tools, equipment, and supplies purchased for painting and wall papering	NA (CRMPTYPE='4' CRMPTYPE='5') & (('100'<=CRMCODEB & CRMCODEB<='130') CRMCODEB='150')	800	NA	1733	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='170' CRMCODEB='180')	300	NA	902	NA
QADPSP2X		(CRMPTYPE='4' CRMPTYPE='5') & (CRMCODEB='190' '260'<=CRMCODEB & CRMCODEB<='280'))	84	NA	806	NA
QADPSP2X	Electrical supplies, heating and cooling equipment	(CRMPTYPE='4' CRMPTYPE='5') & (CRMCODEB='210' CRMCODEB='220')	20	NA	213	NA
QADPSP2X	Material for insulation, other maintenance and repair	(CRMPTYPE='4' CRMPTYPE='5') & (CRMCODEB='240' CRMCODEB='300')	100	NA	375	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
QADPSP2X	Material for landscape maintenance	(CRMPTYPE='4' CRMPTYPE='5') & CRMCODEB='140'	30	NA	288	NA
QADPSP2X	Plumbing supplies and equipment	(CRMPTYPE='4' CRMPTYPE='5') & CRMCODEB='200'	21	NA	185	NA
QADPSP2X	Material for hard surface flooring	(CRMPTYPE='4' CRMPTYPE='5') & CRMCODEB='230'	0	NA	132	NA
QADPSP2X	Materials and supplies purchased for insulation, dwellings under constr, additions, finishing, remodeling, landscaping, etc.	CRMPTYPE='1' & (CRMPTYPE='1' CRMPTYPE='2' CRMPTYPE='5')	6000	NA	17667	NA
QADPSP2X	Total cost of tools, equipment, and supplies purchased for painting and wall papering	CRMPTYPE='1' & (CRMPTYPE='3' CRMPTYPE='4') & (CRMCODEB='170' CRMCODEB='180')	1300	NA	1933	NA
QADPSP2X	Total cost of materials purchased for patios, walks, fences, driveways, masonry,brick, stucco, plastering, panels, roofing, gutters, etc.	CRMPTYPE='1' & (CRMPTYPE='3' CRMPTYPE='4') & (CRMCODEB='190' CRMCODEB='270' CRMCODEB='280')	1000	NA	1365	NA
QADPSP2X	Electrical supplies, heating and cooling equipment	CRMPTYPE='1' & (CRMPTYPE='3' CRMPTYPE='4') & (CRMCODEB='210' CRMCODEB='220')	300	NA	994	NA
QADPSP2X	Material for insulation, other maintenance and repair	CRMPTYPE='1' & (CRMPTYPE='3' CRMPTYPE='4') & (CRMCODEB='240' CRMCODEB='300')	490	NA	2848	NA
QADPSP2X	Total cost of materials purchased for patios, walks, fences, driveways, masonry,brick, stucco, plastering, panels, roofing, gutters, etc.	CRMPTYPE='1' & (CRMPTYPE='3' CRMPTYPE='4') & CRMCODEB='160'	450	NA	775	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
QADPSP2X	Plumbing supplies and equipment	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='200'	630	NA	977	NA
QADPSP2X	Materials for hard surface flooring, repair and replacement	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='230'	700	NA	1034	NA
QADPSP2X	Materials and equipment for roof and gutters	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='260'	1105	NA	2900	NA
QADPSP2X	Supplies purchased for additions, maintenance and repairs, and new construction	CRMPTYPE='2' & (CRMTYPE='1' CRMTYPE='2' CRMTYPE='5')	500	NA	8261	NA
QADPSP2X	Supplies purchased for replacement, maintenance and repairs, and plastering or paneling	CRMPTYPE='2' & (CRMTYPE='3' CRMTYPE='4') & (CRMCODEB='190' ('260'<=CRMCODEB & CRMCODEB<='280'))	0	NA	94	NA
QADPSP2X	Supplies purchased for replacement, maintenance and repairs, and insulation	CRMPTYPE='2' & (CRMTYPE='3' CRMTYPE='4') & (CRMCODEB='240' CRMCODEB='300')	0	NA	92	NA
QADPSP2X	Supplies purchased for replacement, maintenance and repairs, and plumbing or water heating installations and repairs	CRMPTYPE='2' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='200' (CRMPTYPE='4' CRMPTYPE='5') & (('100'<=CRMCODEB & CRMCODEB<='130') CRMCODEB='150')	37	NA	243	NA
QADPSP3X	Materials for additions, finishing basements, remodeling rooms	(CRMPTYPE='4' CRMPTYPE='5') & (CRMCODEB='170' CRMCODEB='180')	1070	NA	2550	NA
QADPSP3X	Total cost of tools, equipment, and supplies purchased for painting and wall papering	(CRMPTYPE='4' CRMPTYPE='5') & (CRMCODEB='190' ('260'<=CRMCODEB & CRMCODEB<='280'))	200	NA	767	NA
QADPSP3X	Total cost of materials purchased for patios, walks, fences, driveways, masonry,brick,		0	NA	90	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
	stucco, plastering, panels, roofing, gutters, etc.					
QADPSP3X	Electrical supplies, heating and cooling equipment	(CRMPTYPE='4' CRMPTYPE='5') & (CRMCODEB='210' CRMCODEB='220')	96	NA	619	NA
QADPSP3X	Material for insulation, other maintenance and repair	(CRMPTYPE='4' CRMPTYPE='5') & (CRMCODEB='240' CRMCODEB='300')	300	NA	608	NA
QADPSP3X	Material for landscape maintenance	(CRMPTYPE='4' CRMPTYPE='5') & CRMCODEB='140'	70	NA	132	NA
QADPSP3X	Plumbing supplies and equipment	(CRMPTYPE='4' CRMPTYPE='5') & CRMCODEB='200'	100	NA	633	NA
QADPSP3X	Materials and supplies purchased for insulation, dwellings under constr, additions, finishing, remodeling, landscaping, etc.	CRMPTYPE='1' & (CRMPTYPE='1' CRMPTYPE='2' CRMPTYPE='5')	13300	NA	20000	NA
QADPSP3X	Total cost of tools, equipment, and supplies purchased for painting and wall papering	CRMPTYPE='1' & (CRMPTYPE='3' CRMPTYPE='4') & (CRMCODEB='170' CRMCODEB='180')	816	NA	1086	NA
QADPSP3X	Total cost of materials purchased for patios, walks, fences, driveways, masonry,brick, stucco, plastering, panels, roofing, gutters, etc.	CRMPTYPE='1' & (CRMPTYPE='3' CRMPTYPE='4') & (CRMCODEB='190' CRMCODEB='270' CRMCODEB='280')	1000	NA	3420	NA
QADPSP3X	Electrical supplies, heating and cooling equipment	CRMPTYPE='1' & (CRMPTYPE='3' CRMPTYPE='4') & (CRMCODEB='210' CRMCODEB='220')	225	NA	574	NA
QADPSP3X	Material for insulation, other maintenance and repair	CRMPTYPE='1' & (CRMPTYPE='3' CRMPTYPE='4') & (CRMCODEB='240' CRMCODEB='300')	1000	NA	1858	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
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'	500	NA	865	NA
QADPSP3X	Plumbing supplies and equipment	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='200'	700	NA	1100	NA
QADPSP3X	Materials for hard surface flooring, repair and replacement	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='230'	1400	NA	3081	NA
QADPSP3X	Materials and equipment for roof and gutters	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='260'	500	NA	1450	NA
QADPSP3X	Material for masonry, brick or stucco work	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='290'	0	NA	26	NA
QADPSP3X	Supplies purchased for additions, maintenance and repairs, and new construction	CRMPTYPE='2' & (CRMTYPE='1' CRMTYPE='2' CRMTYPE='5')	800	NA	10417	NA
QADPSP3X	Supplies purchased for replacement, maintenance and repairs, and insulation	CRMPTYPE='2' & (CRMTYPE='3' CRMTYPE='4') & (CRMCODEB='240' CRMCODEB='300')	150	NA	466	NA
QADPSP3X	Supplies purchased for replacement, maintenance and repairs, for flooring	CRMPTYPE='2' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='230'	0	NA	2006	NA
QADPSPLX	Materials for additions, finishing basements, remodeling rooms	(CRMPTYPE='4' CRMPTYPE='5') & (('100'<=CRMCODEB & CRMCODEB<='130') CRMCODEB='150')	600	NA	1200	NA
QADPSPLX	Total cost of tools, equipment, and supplies purchased for painting and wall papering	(CRMPTYPE='4' CRMPTYPE='5') & (CRMCODEB='170' CRMCODEB='180')	200	NA	415	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
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'))	50	NA	163	NA
QADPSPLX	Electrical supplies, heating and cooling equipment	(CRMPTYPE='4' CRMPTYPE='5') & (CRMCODEB='210' CRMCODEB='220')	50	NA	207	NA
QADPSPLX	Material for insulation, other maintenance and repair	(CRMPTYPE='4' CRMPTYPE='5') & (CRMCODEB='240' CRMCODEB='300')	100	NA	189	NA
QADPSPLX	Material for landscape maintenance	(CRMPTYPE='4' CRMPTYPE='5') & CRMCODEB='140'	50	NA	133	NA
QADPSPLX	Plumbing supplies and equipment	(CRMPTYPE='4' CRMPTYPE='5') & CRMCODEB='200'	100	NA	152	NA
QADPSPLX	Material for hard surface flooring	(CRMPTYPE='4' CRMPTYPE='5') & CRMCODEB='230'	20	NA	211	NA
QADPSPLX	Materials and supplies purchased for insulation, dwellings under constr, additions, finishing, remodeling, landscaping, etc.	CRMPTYPE='1' & (CRMPTYPE='1' CRMPTYPE='2' CRMPTYPE='5')	10000	NA	24512	NA
QADPSPLX	Total cost of tools, equipment, and supplies purchased for painting and wall papering	(CRMPTYPE='1' & (CRMPTYPE='3' CRMPTYPE='4') & (CRMCODEB='170' CRMCODEB='180'))	730	NA	1239	NA
QADPSPLX	Total cost of materials purchased for patios, walks, fences, driveways, masonry,brick, stucco, plastering, panels, roofing, gutters, etc.	CRMPTYPE='1' & (CRMPTYPE='3' CRMPTYPE='4') & (CRMCODEB='190' CRMCODEB='270' CRMCODEB='280')	1600	NA	4309	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
QADPSPLX	Electrical supplies, heating and cooling equipment	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & (CRMCODEB='210' CRMCODEB='220')	425	NA	968	NA
QADPSPLX	Material for insulation, other maintenance and repair	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & (CRMCODEB='240' CRMCODEB='300')	700	NA	1517	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'	800	NA	1220	NA
QADPSPLX	Plumbing supplies and equipment	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='200'	712	NA	906	NA
QADPSPLX	Materials for hard surface flooring, repair and replacement	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='230'	2000	NA	3733	NA
QADPSPLX	Materials and equipment for roof and gutters	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='260'	300	NA	1250	NA
QADPSPLX	Materials and equipment for masonry, brick or stucco work	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='290'	12	NA	57	NA
QADPSPLX	Supplies purchased for additions, maintenance and repairs, and new construction	CRMPTYPE='2' & (CRMTYPE='1' CRMTYPE='2' CRMTYPE='5')	523	NA	20463	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')	20	NA	233	NA
QADPSPLX	Total cost of tools, equipment, and supplies purchased for plastering or paneling	CRMPTYPE='2' & (CRMTYPE='3' CRMTYPE='4') & (CRMCODEB='190' ('260' <= CRMCODEB & CRMCODEB <= '280'))	240	NA	764	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
QADPSPLX	Total cost of tools, equipment, and supplies purchased for insulation	CRMPTYPE='2' & (CRMTYPE='3' CRMTYPE='4') & (CRMCODEB='240' CRMCODEB='300')	381	NA	558	NA
QADPSPLX	Total cost of tools, equipment, and supplies purchased for plumbing or water heating installations and repairs	CRMPTYPE='2' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='200'	40	NA	615	NA
QADPSPLX	Supplies purchased for additions, maintenance and repairs, and new construction	CRMPTYPE='3' & (CRMTYPE='1' CRMTYPE='2' CRMTYPE='5') & (CRMTYPE='3' CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='240') ('260'<=CRMCODEB & CRMCODEB<='300'))	0	NA	1017	NA
QADPSPLX	Total cost of tools, equipment, and supplies purchased for improvements	OWNYB EQ '100' OR	110	NA	350	NA
QADPTAX	Property taxes	OWNYB EQ '200'	10000	NA	14928	NA
QADPTAX	Property taxes	OWNYB EQ '300'	9000	NA	16754	NA
QADPTAX	Expenses for other properties	OWNYB EQ '400' OR	5000	NA	8433	NA
QADPTAX	Capital improvement labor and materials (owned home)	OWNYB EQ '500'				
QADRSP2X		CRMPTYPE='1' & (CRMTYPE='1' CRMTYPE='2' CRMTYPE='5') & (CRMTYPE='3' CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='160') CRMCODEB='190' CRMCODEB='240' ('270'<=CRMCODEB & CRMCODEB<='300'))	103	NA	476	NA
QADRSP2X	Other repair and maintenance services	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='230'	50	NA	162	NA
QADRSP2X	Total cost of supplies for flooring or replacement	CRMPTYPE='1' & (CRMTYPE='1' CRMTYPE='2' CRMTYPE='5')	20	NA	202	NA
QADRSP3X	Capital improvement labor and materials (owned home)		200	NA	638	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
QADRSP3X	Other repair and maintenance services	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & (('120'<=CRMCODEB & CRMCODEB<='160') CRMCODEB='190' CRMCODEB='240' '270'<=CRMCODEB & CRMCODEB<='300'))	200	NA	254	NA
QADRSP3X	Total cost of supplies for flooring or replacement	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='230' (CRMPTYPE='4' CRMPTYPE='5') & (('120'<=CRMCODEB & CRMCODEB<='220') CRMCODEB='240' '260'<=CRMCODEB & CRMCODEB<='300'))	99	NA	270	NA
QADRSP3X	Total cost of supplies for insulation	CRMPTYPE='1' & (CRMTYPE='1' CRMTYPE='2' CRMTYPE='5') & CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & (CRMCODEB='170' CRMCODEB='180') CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='230'	7	NA	13	NA
QADRSP3X	Capital improvement labor and materials (owned home)	CRMPTYPE='1' & (CRMTYPE='1' CRMTYPE='2' CRMTYPE='5') & CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & (CRMCODEB='170' CRMCODEB='180') CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='230'	150	NA	257	NA
QADRSP3X	Total cost of supplies for painting and papering	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & (CRMCODEB='170' CRMCODEB='180') CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='230'	0	NA	31	NA
QADRSP3X	Total cost of supplies for flooring or replacement	CRMPTYPE='1' & (CRMTYPE='3' CRMTYPE='4') & CRMCODEB='230'	13	NA	62	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')	150000	NA	246694	NA
QBLNCM1X	Principal balance outstanding at the beginning of the month 3 months ago	('100' LE OWNYF LE '500') AND (LOANTYPE EQ '1')	409613	NA	574919	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')	150731	NA	245966	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
QBLNCM2X	Principal balance outstanding at the beginning of the month 2 months ago	('100' LE OWNYF LE '500') AND (LOANTYPE EQ '1')	410000	NA	577473	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')	150000	NA	251729	NA
QBLNCM3X	Principal balance outstanding at the beginning of the month 1 month ago	('100' LE OWNYF LE '500') AND (LOANTYPE EQ '1')	410118	NA	580919	NA
QHI3MCX	Health maintenance organization (BCBS)	HHICODE EQ '1' AND HHIBCBS EQ '1'	3030	NA	4500	NA
QHI3MCX	Health maintenance organization (not BCBS)	HHICODE EQ '1' AND HHIBCBS EQ '2'	3122	NA	3789	NA
QHI3MCX	Traditional fee for service health plan (BCBS)	HHICODE EQ '2' AND HHIBCBS EQ '1' AND HHIFEET = '1'	3400	NA	7840	NA
QHI3MCX	Preferred provider health plan (BCBS)	HHICODE EQ '2' AND HHIBCBS EQ '1' AND HHIFEET = '2'	3300	NA	3600	NA
QHI3MCX	Traditional fee for service health plan (not BCBS)	HHICODE EQ '2' AND HHIBCBS EQ '2' AND HHIFEET = '1'	3609	NA	5406	NA
QHI3MCX	Preferred provider health plan (not BCBS)	HHICODE EQ '2' AND HHIBCBS EQ '2' AND HHIFEET = '2'	4192	NA	5588	NA
QHI3MCX	Commercial medicare supplement (BCBS)	HHICODE EQ '3' AND HHIBCBS EQ '1'	2112	NA	2693	NA
QHI3MCX	Commercial medicare supplement (not BCBS)	HHICODE EQ '3' AND HHIBCBS EQ '2'	2882	NA	4159	NA
QHI3MCX	Other health insurance (BCBS)	HHICODE EQ '4' AND HHIBCBS EQ '1'	1210	NA	1657	NA
QHI3MCX	Other health insurance (not BCBS)	HHICODE EQ '4' AND HHIBCBS EQ '2'	1302	NA	2051	NA
QLMPSUMX	Special lump sum mortgage payment (vacation home)	OWNYI EQ '300'	20000	NA	68667	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
QLMPSUMX	Special lump sum mortgage payment (other property)	OWNYI EQ '400' OR OWNYI EQ '500'	600	NA	2467	NA
QLMPSUMX	Special lump sum mortgage payment (owned home)	OWNYI EQ '100' OR OWNYI EQ '200'	6000	NA	25517	NA
QLR3MCMX	Amount paid for ground or land rent (vacation home)	OWNYI EQ '300'	3100	NA	4300	NA
QLR3MCMX	Ground rent Reduction	OWNYI EQ '100' OR OWNYI EQ '200'	1902	NA	2893	NA
QPRINM1G	mortgage principal, home equity loan (owned home)	(OWNYG EQ '100' OR OWNYG EQ '200') AND (LOANTYPE EQ '2')	1026	NA	2090	NA
QPRINM1G	Reduction mortgage principal, home equity loan (owned vacation)	(OWNYG EQ '300') AND (LOANTYPE EQ '2')	1042	NA	1332	NA
QPRINM1G	Reduction mortgage principal, home equity loan (other property)	(OWNYG EQ '400' OR OWNYG EQ '500') AND (LOANTYPE EQ '2')	362	NA	624	NA
QPRINM1X	Reduction of mortgage principal (owned home)	(OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1')	1122	NA	1738	NA
QPRINM1X	Reduction of mortgage principal (owned vacation)	(OWNYF EQ '300') AND (LOANTYPE EQ '1')	1232	NA	2064	NA
QPRINM1X	Reduction of mortgage principal (other property)	(OWNYF EQ '400' OR OWNYF EQ '500') AND (LOANTYPE EQ '1')	1179	NA	3088	NA
QPRINM2G	Reduction mortgage principal, home equity loan (owned home)	(OWNYG EQ '100' OR OWNYG EQ '200') AND (LOANTYPE EQ '2')	927	NA	2031	NA
QPRINM2G	Reduction mortgage principal, home equity loan (owned vacation)	(OWNYG EQ '300') AND (LOANTYPE EQ '2')	1050	NA	1341	NA
QPRINM2G	Reduction mortgage principal, home equity loan (other property)	(OWNYG EQ '400' OR OWNYG EQ '500') AND (LOANTYPE EQ '2')	364	NA	628	NA
QPRINM2X	Reduction of mortgage principal (owned home)	(OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1')	1119	NA	1739	NA
QPRINM2X	Reduction of mortgage principal	(OWNYF EQ '300') AND (LOANTYPE EQ '1')	1193	NA	1978	NA

Variable	Description (owned vacation)	Condition '1')	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
QPRINM2X	Reduction of mortgage principal (other property)	(OWNYF EQ '400' OR OWNYF EQ '500') AND (LOANTYPE EQ '1')	1186	NA	2714	NA
QPRINM3G	Reduction mortgage principal, home equity loan (owned home)	(OWNYG EQ '100' OR OWNYG EQ '200') AND (LOANTYPE EQ '2')	931	NA	2077	NA
QPRINM3G	Reduction mortgage principal, home equity loan (owned vacation)	(OWNYG EQ '300') AND (LOANTYPE EQ '2')	704	NA	1243	NA
QPRINM3G	Reduction mortgage principal, home equity loan (other property)	(OWNYG EQ '400' OR OWNYG EQ '500') AND (LOANTYPE EQ '2')	193	NA	626	NA
QPRINM3X	Reduction of mortgage principal (owned home)	(OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1')	1119	NA	1742	NA
QPRINM3X	Reduction of mortgage principal (owned vacation)	(OWNYF EQ '300') AND (LOANTYPE EQ '1')	1197	NA	1987	NA
QPRINM3X	Reduction of mortgage principal (other property)	(OWNYF EQ '400' OR OWNYF EQ '500') AND (LOANTYPE EQ '1')	1214	NA	3045	NA
QRT3MCMX	Rent	NA	5700	NA	7593	NA
QSPCLX	Amount of special fees paid, co-op	SPFEECR EQ '01000'	0	NA	736	NA
RNTEQVX	Estimated monthly rental value of owned home	OWNYI EQ '100'	3000	NA	4558	NA
RNTEQVX	Estimated monthly rental value of owned vacation home	OWNYI EQ '300'	4500	NA	6854	NA
SALEX	Sale of boats, with motors	VEHICYC EQ '160'	1500	NA	7667	NA
TELCEL1X	Cellular phone service	NA	338	NA	431	NA
TELCEL2X	Cellular phone service	NA	325	NA	419	NA
TELCEL3X	Cellular phone service	NA	350	NA	464	NA
TELRES1X	Residential telephone/pay phones	NA	210	NA	280	NA
TELRES2X	Residential telephone/pay phones	NA	210	NA	293	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
TELRES3X	Residential telephone/pay phones	NA	210	NA	281	NA
TELVOP1X	Total expense for Voice Over IP service	NA	231	NA	278	NA
TELVOP2X	Total expense for Voice Over IP service	NA	226	NA	314	NA
TELVOP3X	Total expense for Voice Over IP service	NA	231	NA	253	NA
TOTYUPDX	Lodging on out-of-town trips	TOTYUPDY EQ '130'	1341	NA	2433	NA
TRNONCUX	Lodging on out-of-town trips	TRNONCUY EQ '130'	1730	NA	3200	NA
ALIOTHX	Other regular contributions including alimony	NA	50000	NA	88611	NA
ALIOTHXM	Amount received from other regular contributions including alimony	NA	50000	NA	54977	NA
BSINVSTX	Investments to farm or business	NA	250000	NA	1936667	NA
CHDLMPX	Lump sum child support payment	NA	12000	NA	13840	NA
CHDOTHX	Child support payments	NA	15600	NA	35380	NA
CHDOTHXM	Amount received from other child support payments	NA	15600	NA	29220	NA
CKBKACTX	Market value of all checking accounts	NA	30000	NA	181104	NA
COMPBNDX	Change in U.S. savings bonds	NA	5000	-15000	77667	-25000
COMPCKGX	Change in checking account	NA	29000	-16000	104963	-35977
COMPOWDX	Change in money owed to consumer unit	NA	30000	-8500	231167	-34000
COMPSAVX	Change in savings account	NA	60000	-60000	115083	-186269
COMPSECX	Difference in estimated market value of all stocks, bonds, or mutual funds including broker fees	NA	200000	-	767693	-869250
FEDRFNDX	Federal income tax refunds	NA	9902	NA	17413	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
FEDTAXX	Additional federal income tax paid (new UCC Q20062)	NA	24000	NA	70936	NA
FININCX	Dividends, royalties, estates, trusts	NA	75000	NA	210297	NA
FININCXM	Amount received from regular income from dividends, royalties, estates or trusts	NA	75000	NA	91640	NA
INCLOSAM	Amount of net income or loss received from roomers or boarders	NA	30600	-30000	35262	-43600
INCLOSBM	Amount of net income or loss received from other rental units	NA	50000	-20000	36679	-16764
INCLOSSA	Roomer and boarder income	NA	30600	-30000	55236	-43600
INCLOSSB	Other rental income	NA	50000	-20000	71700	-29714
INSRFNDX	Refunds from insurance policies	NA	4800	NA	9057	NA
INTEARNM	Amount received from interest on savings accounts or bonds	NA	35000	NA	47467	NA
INTEARNX	Interest	NA	35000	NA	67324	NA
LUMPSUMX	Lump sum receipts	NA	124000	NA	303406	NA
MISCTAXX	Other taxes	NA	10000	NA	19966	NA
MONYOWDX	Amount of money owed to CU by persons outside CU	NA	65500	NA	164167	NA
OTHRFNDX	Other tax refunds	NA	4000	NA	7721	NA
OTHRINCM	Amount received from other money income	NA	32000	NA	36771	NA
OTHRINCX	Other income	NA	32000	NA	51124	NA
PENSIONM	Amount received from pensions or annuities	NA	72000	NA	86471	NA
PENSIONX	Pensions and annuities	NA	72000	NA	118027	NA
PTAXRFDX	Refunds from property taxes	NA	4800	NA	7229	NA
PURSSECX	Purchase price of stocks, bonds or mutual funds including broker	NA	200000	NA	666000	NA

Variable	Description	Condition	2010 Upper Critical Value	2010 Lower Critical Value	2010 Upper Topcode Value	2010 Lower Topcode Value
	fees					
RENTEQVX	Estimated monthly rental value of owned home	NA	3000	NA	4638	NA
SALEINCX	Money from sale of household furnishings, etc.	NA	7000	NA	35464	NA
SAVACCTX	Market value of all savings accounts	NA	134000	NA	668907	NA
SECESTX	Market value of all securities	NA	950000	NA	3525145	NA
SELLSECX	Sale price of stocks, bonds, and mutual funds, net	NA	100000	NA	309375	NA
SETLINSX	Change in surrender of insurance policies	NA	50000	NA	150000	NA
SLOCTAXX	Additional state and local income tax paid (new UCC Q20062)	NA	6000	NA	19230	NA
SLRFUNDX	State and local income tax refunds	NA	2500	NA	4700	NA
SSOVERPX	Refund from overpayment on Social Security	NA	2040	NA	4733	NA
TAXPROPX	Personal property taxes	NA	1200	NA	2603	NA
TYPEPYX	Amount received from reverse mortgage	NA	0	NA	9800	NA
USBNDX	Market value of all U.S. savings bonds	NA	50000	NA	82182	NA
WDBSASTX	Amount of assets withdrawn from own farm or business	NA	100000	NA	158100	NA
WDBSGDSX	Amount of goods or services withdrawn from own farm or business	NA	1560	NA	9667	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 2010, they are reporting expenditures for November and December of 2009, and January of 2010. 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 2010 contains expenditure data collected in interviews that took place in April, May, and June of 2010. Referring to the rotation chart, one can see that this MTAB file contains expenditures made between January 2010 and May 2010. Similarly, the MTAB file for the third quarter of 2010 (interviews conducted between July and September) contains expenditures made between April and August 2010. To obtain all expenditures made in January 2010, one should access the

MTAB files for both the first and second quarters of 2010. The MTAB file for the first quarter of 2010 would contain January expenditures made by CUs interviewed in February and March 2010, while the MTAB file for the second quarter of 2010 would contain January expenditures made by CUs interviewed in April 2010.

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 2010 based on collection period, that is, from all interviews conducted in 2010, data users need data only from Q101 through Q104 files. However, to produce a 2010 annual estimate based on expenditures made in 2010 (calendar period), one needs to access five collection-quarter files, the first quarter of 2010 through the first quarter of 2011. (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 2010, 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		UCC	ITAB	
VARIABLE	AMOUNT		AMOUNT	MONTH
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 2010 is 7198. (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 2010. 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 2010). 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 2010 estimate would be based on data from interviews over five quarters. MO_SCOPE would take on the following values:

Interview Month and Year									
	2010				2010				
	<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>
MO_SCOPE	0	1	2	3	3	3	3	3	3
			2010	2011		2011			
	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>			
MO_SCOPE	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 2010, 2/3 the independent sample for the first quarter of 2010, and one independent sample for the second, third, and fourth quarters of 2010. 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 cannot be used in all analyses in the same ways that means estimated for the U.S. population can. For example, means of those reporting specific items, such as rented dwellings, owned dwellings and other lodging, cannot be aggregated to compute means of those reporting larger categories, such as shelter. Similarly, the ratio of the mean for those reporting a specific item (e.g., rented dwellings) to the mean of those reporting an expenditure for at least one element of the larger category (e.g., shelter), cannot be interpreted as the expenditure share for

those reporting either the specific item or the larger category. Proper care should be used when interpreting results computed only from those reporting an expenditure.

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
- $W_{i,t,F21}$ = 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

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

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.

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

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

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.

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.

$AK \sum_{(S,x)(q,m),a}$ = 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 ath 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 ath 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 2010 is \$6,939.02. The standard error for this estimate is \$49.28. 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 \$6,842.43 to \$7,035.61. We could conclude with 95 percent confidence that the true population mean expenditure for food for all consumer units in 2010 lies within the interval \$6,842.43 to \$7,035.61.

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 2010 mean expenditure estimate for apparel and services for CUs in the \$30,000 to \$39,999 income range is \$768.81 and the estimate for CUs in the \$40,000 to \$49,999 income range is \$866.36. The apparent difference between the two mean expenditures is \$97.55. The standard error on the estimate of \$768.81 is \$27.27 and the estimated standard error for \$866.36 is \$37.38.

The standard error of a difference is approximately equal to

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

where

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

This assumes the two sample means, ${}_{WC}\bar{X}_1$ and ${}_{WC}\bar{X}_2$, 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

$$\sqrt{((27.27)^2 + (37.38)^2)} = 46.27 \quad (2)$$

This means that the 95 percent confidence interval around the difference is from \$6.86 to \$188.24. 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 \$40,000 to \$49,999 income range is different than the mean apparel and services expenditures for CUs in the \$30,000 to \$39,999 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

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

where

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

and where r is the correlation coefficient between ${}_{w}\bar{X}_1$ and ${}_{w}\bar{X}_2$. 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

1	/******	
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	/* DATA AND INPUT FILES USED IN THIS SAMPLE PROGRAM WERE UNZIPPED	*/
20	/* OR COPIED TO THE LOCATIONS BELOW:	*/
21	/*	*/
22	/* INTRVW DATA -- C:\2010_CEX\INTRVW10	*/
23	/* ISTUB2010.TXT -- C:\2010_CEX\Programs	*/
24	/*	*/
25	/******	
26		
27	/*Enter Data Year*/	
28	%LET YEAR = 2010;	
29	/*Enter location of the unzipped microdata file*/	
30	%LET DRIVE = C:\2010_CEX;	
31		
32		
33	/******	
34	/* STEP1: READ IN THE STUB PARAMETER FILE AND CREATE FORMATS	*/
35	/* -----	*/
36	/* 1 CONVERTS THE STUB PARAMETER FILE INTO A LABEL FILE FOR OUTPUT	*/
37	/* 2 CONVERTS THE STUB PARAMETER FILE INTO AN EXPENDITURE AGGREGATION FILE	*/
38	/* 3 CREATES FORMATS FOR USE IN OTHER PROCEDURES	*/
39	/******	
40		
41		
42	%LET YR1 = %SUBSTR(&YEAR,3,2);	
43	%LET YR2 = %SUBSTR(%EVAL(&YEAR+1),3,2);	
44		
45	LIBNAME I&YR1 "&DRIVE\INTRVW&YR1";	
NOTE:	Libref I10 was successfully assigned as follows:	
	Engine: V9	
	Physical Name: C:\2010_CEX\INTRVW10	
46		
47		
48	DATA STUBFILE (KEEP= COUNT TYPE LEVEL TITLE UCC SURVEY GROUP LINE);	
49	INFILE "&DRIVE\PROGRAMS\ISTUB&YEAR..TXT"	
50	PAD MISSOEVER;	
51	INPUT @1 TYPE \$1. @ 4 LEVEL \$1. @7 TITLE \$CHAR60. @70 UCC \$6.	
		<p>Sets the calendar year and drive used as macro variables that can be used throughout the program.</p> <p>Reads in the aggregation stub file and dynamically creates numbers associated with each expenditure line item.</p> <p>Note: This aggregation file can be</p>

<pre> 52 @80 SURVEY \$1. @86 GROUP \$7.; 53 IF (TYPE = '1'); 54 IF GROUP IN ('CUCHARS' 'FOOD' 'EXPEND' 'INCOME'); 55 IF SURVEY = 'T' THEN DELETE; 56 57 RETAIN COUNT 9999; 58 COUNT + 1; 59 LINE = PUT(COUNT, \$5.) LEVEL ; WARNING: Variable COUNT has already been defined as numeric. 60 /* READS IN THE STUB PARAMETER FILE AND CREATES LINE NUMBERS FOR UCCS */ 61 /* A UNIQUE LINE NUMBER IS ASSIGNED TO EACH EXPENDITURE LINE ITEM */ 62 RUN; NOTE: The infile "C:\2010_CEX\PROGRAMS\ISTUB2010.TXT" is: File Name=C:\2010_CEX\PROGRAMS\ISTUB2010.TXT, RECFM=V,LRECL=256 NOTE: 1233 records were read from the infile "C:\2010_CEX\PROGRAMS\ISTUB2010.TXT". The minimum record length was 91. The maximum record length was 95. NOTE: The data set WORK.STUBFILE has 695 observations and 8 variables. NOTE: DATA statement used (Total process time): real time 0.42 seconds cpu time 0.06 seconds 63 64 65 DATA AGGFMT1 (KEEP= UCC LINE LINE1-LINE10); 66 SET STUBFILE; 67 LENGTH LINE1-LINE10 \$6.; 68 ARRAY LINES(9) LINE1-LINE9; 69 IF (UCC > 'A') THEN 70 LINES(SUBSTR(LINE,6,1)) = LINE; 71 RETAIN LINE1-LINE9; 72 IF (UCC < 'A') THEN 73 LINE10 = LINE; 74 IF (LINE10); 75 /* MAPS LINE NUMBERS TO UCCS */ 76 RUN; NOTE: Character values have been converted to numeric values at the places given by: (Line):(Column). 70:15 74:7 NOTE: There were 695 observations read from the data set WORK.STUBFILE. NOTE: The data set WORK.AGGFMT1 has 570 observations and 12 variables. NOTE: DATA statement used (Total process time): real time 0.09 seconds cpu time 0.04 seconds 77 78 79 PROC SORT DATA= AGGFMT1 (RENAME=(LINE= COMPARE)); 80 BY UCC; 81 RUN; </pre>	<p>modified to accommodate any customized aggregation scheme.</p> <p>One needs only to make sure that the column start positions in the file match the start positions in the input statement.</p> <p>Subsequent program steps manipulate the aggregation stub file into a dataset that associates UCCs with line numbers.</p>
---	--

```

NOTE: There were 570 observations read from the data set WORK.AGGFMT1.
NOTE: The data set WORK.AGGFMT1 has 570 observations and 12 variables.
NOTE: PROCEDURE SORT used (Total process time):
      real time          0.15 seconds
      cpu time           0.00 seconds

82
83
84  PROC TRANSPOSE DATA= AGGFMT1 OUT= AGGFMT2 (RENAME=(COL1= LINE));
85    BY UCC COMPARE;
86    VAR LINE1-LINE10;
87  RUN;

NOTE: There were 570 observations read from the data set WORK.AGGFMT1.
NOTE: The data set WORK.AGGFMT2 has 5700 observations and 4 variables.
NOTE: PROCEDURE TRANSPOSE used (Total process time):
      real time          0.15 seconds
      cpu time           0.03 seconds

88
89
90  DATA AGGFMT (KEEP= UCC LINE);
91    SET AGGFMT2;
92    IF LINE;
93    IF SUBSTR(COMPARE,6,1) > SUBSTR(LINE,6,1) OR COMPARE=LINE;
94    /* AGGREGATION FILE. EXTRANEIOUS MAPPINGS ARE DELETED          */
95    /* PROC SQL WILL AGGANGE LINE#/UCC PAIRS FOR USE IN PROC FORMAT */
96  RUN;

NOTE: Character values have been converted to numeric values at the places given by:
(Line):(Column).
      92:8
NOTE: There were 5700 observations read from the data set WORK.AGGFMT2.
NOTE: The data set WORK.AGGFMT has 2667 observations and 2 variables.
NOTE: DATA statement used (Total process time):
      real time          0.01 seconds
      cpu time           0.00 seconds

97
98
99  PROC SQL NOPRINT;
100    SELECT UCC, LINE, COUNT(*)
101    INTO   :UCCS SEPARATED BY " ",
102           :LINES SEPARATED BY " ",
103           :CNT
104    FROM AGGFMT;
NOTE: The query requires remerging summary statistics back with the original data.
105  QUIT;
NOTE: PROCEDURE SQL used (Total process time):
      real time          0.35 seconds
      cpu time           0.03 seconds

106  RUN;

```


<pre> 107 108 109 %MACRO MAPPING; 110 %DO I = 1 %TO &CNT; 111 "%SCAN(&UCCS,&I,%STR())" = "%SCAN(&LINES,&I,%STR())" 112 %END; 113 %MEND MAPPING; 114 115 116 DATA LBLFMT (RENAME=(LINE= START TITLE= LABEL)); 117 SET STUBFILE (KEEP= LINE TITLE); 118 RETAIN FMTNAME 'LBLFMT' TYPE 'C'; 119 /* LABEL FILE. LINE NUMBERS ARE ASSIGNED A TEXT LABEL */ 120 /* DATASET CONSTRUCTED TO BE READ INTO A PROC FORMAT */ 121 RUN; NOTE: There were 695 observations read from the data set WORK.STUBFILE. NOTE: The data set WORK.LBLFMT has 695 observations and 4 variables. NOTE: DATA statement used (Total process time): real time 0.03 seconds cpu time 0.00 seconds 122 123 124 PROC FORMAT; 125 126 VALUE \$AGGFMT (MULTILABEL) 127 %MAPPING 128 OTHER= 'OTHER'; NOTE: Format \$AGGFMT has been output. 129 /* CREATE AGGREGATION FORMAT */ 130 131 132 VALUE \$INC (MULTILABEL) 133 '01' = '01' 134 '01' = '10' 135 '02' = '02' 136 '02' = '10' 137 '03' = '03' 138 '03' = '10' 139 '04' = '04' 140 '04' = '10' 141 '05' = '05' 142 '05' = '10' 143 '06' = '06' 144 '06' = '10' 145 '07' = '07' 146 '07' = '10' 147 '08' = '08' 148 '08' = '10' 149 '09' = '09' 150 '09' = '10'; NOTE: Format \$INC has been output. 151 /* CREATE INCOME CLASS FORMAT */ 152 RUN; </pre>	<p>Creates a Dataset that can be used to associate titles with line numbers with a format procedure.</p> <p>Formats:</p> <p>Puts the aggregation scheme into a SAS format.</p> <p>Puts the income groupings into a SAS format.</p> <p>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.</p>
--	---

<pre> NOTE: PROCEDURE FORMAT used (Total process time): real time 10.43 seconds cpu time 9.84 seconds 153 154 155 PROC FORMAT LIBRARY= WORK CNTLIN= LBLFMT; NOTE: Format \$LBLFMT has been output. 156 /* CREATE LABEL FILE FORMATS */ 157 RUN; NOTE: PROCEDURE FORMAT used (Total process time): real time 0.01 seconds cpu time 0.01 seconds NOTE: There were 695 observations read from the data set WORK.LBLFMT. 158 159 160 /***** 161 /* STEP2: READ IN ALL NEEDED DATA FROM THE CD-ROM */ 162 /* ----- 163 /* 1 READ IN THE INTERVIEW FMLY FILES & CREATE THE MO_SCOPE VARIABLE */ 164 /* 2 READ IN THE INTERVIEW MTAB AND ITAB FILES */ 165 /* 3 MERGE FMLY AND EXPENDITURE FILES TO DERIVE WEIGHTED EXPENDITURES */ 166 *****/ 167 168 169 DATA FMLY (KEEP = NEWID INCLASS WTREP01-WTREP44 FINLWT21 REPWT1-REPWT45); 170 171 SET I&YR1..FMLI&YR1.1X (IN = FIRSTQTR) 172 I&YR1..FMLI&YR1.2 173 I&YR1..FMLI&YR1.3 174 I&YR1..FMLI&YR1.4 175 I&YR1..FMLI&YR2.1 (IN = LASTQTR); 176 BY NEWID; 177 /* READ IN FMLY FILE DATA */ 178 179 IF FIRSTQTR THEN 180 MO_SCOPE = (QINTRVMO - 1); 181 ELSE IF LASTQTR THEN 182 MO_SCOPE = (4 - QINTRVMO); 183 ELSE 184 MO_SCOPE = 3; 185 /* CREATE MONTH IN SCOPE VARIABLE (MO_SCOPE) */ 186 187 ARRAY REPS_A(45) WTREP01-WTREP44 FINLWT21; 188 ARRAY REPS_B(45) REPWT1-REPWT45; 189 190 DO i = 1 TO 45; 191 IF REPS_A(i) > 0 THEN 192 REPS_B(i) = (REPS_A(i) * MO_SCOPE / 12); 193 ELSE REPS_B(i) = 0; 194 END; 195 /* ADJUST WEIGHTS BY MO_SCOPE TO ACCOUNT FOR SAMPLE ROTATION */ 196 RUN; </pre>	<p>Puts the titles into a SAS format for use in the final output.</p> <p>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.</p> <p>Lines 179-184 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.</p> <p>Lines 187-194 create weights that are mo_scope adjusted to account for sample rotation.</p>
---	--

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

180:19 182:23

NOTE: There were 7198 observations read from the data set I10.FMLI101X.

NOTE: There were 7135 observations read from the data set I10.FMLI102.

NOTE: There were 7059 observations read from the data set I10.FMLI103.

NOTE: There were 7037 observations read from the data set I10.FMLI104.

NOTE: There were 6869 observations read from the data set I10.FMLI111.

NOTE: The data set WORK.FMLY has 35298 observations and 92 variables.

NOTE: DATA statement used (Total process time):

real time 8.84 seconds

cpu time 2.51 seconds

197

198

199

200 DATA EXPEND (KEEP=NEWID UCC COST);

201

202 SET I&YR1..MTBI&YR1.1X

203 I&YR1..MTBI&YR1.2

204 I&YR1..MTBI&YR1.3

205 I&YR1..MTBI&YR1.4

206 I&YR1..MTBI&YR2.1

207

208 I&YR1..ITBI&YR1.1X (RENAME=(VALUE=COST))

209 I&YR1..ITBI&YR1.2 (RENAME=(VALUE=COST))

210 I&YR1..ITBI&YR1.3 (RENAME=(VALUE=COST))

211 I&YR1..ITBI&YR1.4 (RENAME=(VALUE=COST))

212 I&YR1..ITBI&YR2.1 (RENAME=(VALUE=COST));

213

214

215 IF REFYR = "&YEAR" OR REF_YR = "&YEAR";

216 IF UCC = '710110' THEN

217 COST = (COST * 4);

218 /* READ IN MTAB AND ITAB EXPENDITURE AND INCOME DATA */

219 /* ADJUST UCC 710110 TO ANNUALIZE */

220 RUN;

NOTE: There were 598515 observations read from the data set I10.MTBI101X.

NOTE: There were 562691 observations read from the data set I10.MTBI102.

NOTE: There were 556499 observations read from the data set I10.MTBI103.

NOTE: There were 549792 observations read from the data set I10.MTBI104.

NOTE: There were 552801 observations read from the data set I10.MTBI111.

NOTE: There were 402249 observations read from the data set I10.ITBI101X.

NOTE: There were 397800 observations read from the data set I10.ITBI102.

NOTE: There were 390951 observations read from the data set I10.ITBI103.

NOTE: There were 388101 observations read from the data set I10.ITBI104.

NOTE: There were 378708 observations read from the data set I10.ITBI111.

NOTE: The data set WORK.EXPEND has 3799956 observations and 3 variables.

NOTE: DATA statement used (Total process time):

real time 10.68 seconds

cpu time 5.00 seconds

221

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 5th interview).

<pre> 222 223 PROC SORT DATA=EXPEND; 224 BY NEWID; 225 RUN; NOTE: There were 3799956 observations read from the data set WORK.EXPEND. NOTE: The data set WORK.EXPEND has 3799956 observations and 3 variables. NOTE: PROCEDURE SORT used (Total process time): real time 14.35 seconds cpu time 3.65 seconds 226 227 DATA PUBFILE (KEEP = NEWID INCLASS UCC RCOST1-RCOST45); 228 MERGE FMLY (IN = INFAM) 229 EXPEND (IN = INEXP); 230 BY NEWID; 231 IF INEXP AND INFAM; 232 233 IF COST = . THEN 234 COST = 0; 235 236 ARRAY REPS_A(45) WTREP01-WTREP44 FINLWT21; 237 ARRAY REPS_B(45) RCOST1-RCOST45; 238 239 DO i = 1 TO 45; 240 IF REPS_A(i) > 0 241 THEN REPS_B(i) = (REPS_A(i) * COST); 242 ELSE REPS_B(i) = 0; 243 END; 244 /* MERGE FMLY FILE WEIGHTS AND CHARACTERISTICS WITH MTAB/ITAB COSTS */ 245 /* MULTIPLY COSTS BY WEIGHTS TO DERIVE WEIGHTED COSTS */ 246 RUN; NOTE: There were 35298 observations read from the data set WORK.FMLY. NOTE: There were 3799956 observations read from the data set WORK.EXPEND. NOTE: The data set WORK.PUBFILE has 3799956 observations and 48 variables. NOTE: DATA statement used (Total process time): real time 1:06.00 cpu time 10.82 seconds 247 248 249 /****** / 250 /* STEP3: CALCULATE POPULATIONS */ 251 /* ----- */ 252 /* 1 SUM ALL 45 WEIGHT VARIABLES TO DERIVE REPLICATE POPULATIONS */ 253 /* 2 FORMAT FOR CORRECT COLUMN CLASSIFICATIONS */ 254 /****** / 255 256 257 PROC SUMMARY NWAY DATA=FMLY; 258 CLASS INCLASS / MLF; 259 VAR REPWT1-REPWT45; 260 FORMAT INCLASS \$INC.; 261 OUTPUT OUT = POP (DROP = _TYPE_ _FREQ_) SUM = RPOP1-RPOP45; </pre>	<p>Merges the FMLY and EXPEND data sets together and changes missing cost values to zero.</p> <p>Weights the cost values by the 44 replicate weights and full sample weight. RCOST1-RCOST45 represents the weighted costs for each expenditure.</p> <p>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.</p>
---	--

```

262 /* SUMS WEIGHTS TO CREATE POPULATIONS PER REPLICATE */
263 /* FORMATS TO CORRECT COLUMN CLASSIFICATIONS */
264 RUN;

```

NOTE: There were 35298 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      3.26 seconds
    cpu time       0.26 seconds

```

```

265
266
267
268 /*****
269 /* STEP4: CALCULATE WEIGHTED AGGREGATE EXPENDITURES */
270 /* ----- */
271 /* 1 SUM THE 45 REPLICATE WEIGHTED EXPENDITURES TO DERIVE AGGREGATES */
272 /* 2 FORMAT FOR CORRECT COLUMN CLASSIFICATIONS AND AGGREGATION SCHEME */
273 /*****
274
275
276 PROC SUMMARY NWAY DATA=PUBFILE SUMSIZE=MAX COMPLETETYPES;
277   CLASS UCC INCLASS / MLF;
278   VAR RCOST1-RCOST45;
279   FORMAT UCC $AGGFMT. INCLASS $INC.;
280   OUTPUT OUT=AGG (DROP=_TYPE_ _FREQ_ RENAME=(UCC=LINE))
281   SUM = RCOST1-RCOST45;
282 /* SUMS WEIGHTED COSTS PER REPLICATE TO GET AGGREGATES */
283 /* FORMATS INCOME TO CREATE COMPLETE REPORTING COLUMN */
284 /* FORMATS EXPENDITURES TO CORRECT AGGREGATION SCHEME */
285 RUN;

```

NOTE: There were 3799956 observations read from the data set WORK.PUBFILE.

NOTE: The data set WORK.AGG has 6760 observations and 47 variables.

NOTE: PROCEDURE SUMMARY used (Total process time):

```

    real time      31.11 seconds
    cpu time       37.97 seconds

```

```

286
287
288
289 /*****
290 /* STEP5: CALCULATE MEAN EXPENDITURES */
291 /* ----- */
292 /* 1 READ IN POPULATIONS AND LOAD INTO MEMORY USING A 2 DIMENSIONAL ARRAY */
293 /*   POPULATIONS ARE ASSOCIATED BY INCLASS(i), AND REPLICATE(j) */
294 /* 2 READ IN AGGREGATE EXPENDITURES FROM AGG DATASET */
295 /*   CALCULATE MEANS BY DIVIDING AGGREGATES BY CORRECT SOURCE POPULATIONS */
296 /* 4 CALCULATE STANDARD ERRORS USING REPLICATE FORMULA */
297 /*****
298
299
300 DATA TAB1 (KEEP = LINE MEAN SE);
301
302 /* READS IN POP DATASET. _TEMPORARY_ LOADS POPULATIONS INTO SYSTEM MEMORY */

```

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.

This data step calculates means and standard errors:

<pre> 303 ARRAY POP{01:10,45} _TEMPORARY_; 304 IF _N_ = 1 THEN DO i = 1 TO 10; 305 SET POP; 306 ARRAY REPS(45) RPOP1-RPOP45; 307 DO j = 1 TO 45; 308 POP{INCLASS,j} = REPS(j); 309 END; 310 END; 311 312 /* READS IN AGG DATASET AND CALCULATES MEANS BY DIVIDING BY POPULATIONS */ 313 SET AGG (KEEP = LINE INCLASS RCOST1-RCOST45); 314 ARRAY AGGS(45) RCOST1-RCOST45; 315 ARRAY AVGS(45) MEAN1-MEAN44 MEAN; 316 DO k = 1 TO 45; 317 IF AGGS(k) = . THEN AGGS(k) = 0; 318 AVGS(k) = AGGS(k) / POP{INCLASS,k}; 319 END; 320 321 /* CALCULATES STANDARD ERRORS USING REPLICATE FORMULA */ 322 ARRAY RMNS(44) MEAN1-MEAN44; 323 ARRAY DIFF(44) DIFF1-DIFF44; 324 DO n = 1 TO 44; 325 DIFF(n) = (RMNS(n) - MEAN)**2; 326 END; 327 SE = SQRT((1/44)*SUM(OF DIFF(*))); 328 RUN; NOTE: Character values have been converted to numeric values at the places given by: (Line):(Column). 308:13 318:33 NOTE: There were 10 observations read from the data set WORK.POP. NOTE: There were 6760 observations read from the data set WORK.AGG. NOTE: The data set WORK.TAB1 has 6760 observations and 3 variables. NOTE: DATA statement used (Total process time): real time 0.17 seconds cpu time 0.07 seconds 329 330 331 332 /****** 333 /* STEP6: TABULATE EXPENDITURES 334 /* ----- 335 /* 1 ARRANGE DATA INTO TABULAR FORM 336 /* 2 SET OUT INTERVIEW POPULATIONS FOR POPULATION LINE ITEM 337 /* 3 INSERT POPULATION LINE INTO TABLE 338 /* 4 INSERT ZERO EXPENDITURE LINE ITEMS INTO TABLE FOR COMPLETENESS 339 /****** 340 341 342 PROC TRANSPOSE DATA=TAB1 OUT=TAB2 343 NAME = ESTIMATE PREFIX = INCLASS; 344 BY LINE; 345 VAR MEAN SE; 346 /*ARRANGE DATA INTO TABULAR FORM */ 347 RUN; </pre>	<p>Lines 303-310 reads in the column populations and stores them into temporary memory. Populations in memory are associated with INCLASS(i), and REPLICATE(j).</p> <p>Line 313 reads in the aggregated expenditures.</p> <p>Lines 314-319 calculates means by dividing the aggregate expenditures by the appropriate populations in memory as determined by INCLASS and REPLICATE.</p> <p>Lines 322-328 calculates standard errors using the replicate weight formula.</p> <p>Arranges output for tabulation. This will give a rough expenditure table.</p>
---	--

NOTE: There were 6760 observations read from the data set WORK.TAB1.
 NOTE: The data set WORK.TAB2 has 1352 observations and 12 variables.
 NOTE: PROCEDURE TRANSPOSE used (Total process time):
 real time 0.03 seconds
 cpu time 0.00 seconds

```
348
349
350 PROC TRANSPOSE DATA=POP (KEEP = RPOP45) OUT=CUS
351     NAME = LINE PREFIX = INCLASS;
352     VAR RPOP45;
353     /* SET ASIDE POPULATIONS FROM INTERVIEW */
354 RUN;
```

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 0.03 seconds
 cpu time 0.01 seconds

```
355
356
357 DATA TAB3;
358     SET CUS TAB2;
359     IF LINE = 'RPOP45' THEN DO;
360         LINE = '100001';
361         ESTIMATE = 'N';
362     END;
363     /* INSERT POPULATION LINE ITEM INTO TABLE AND ASSIGN LINE NUMBER */
364 RUN;
```

NOTE: There were 1 observations read from the data set WORK.CUS.
 NOTE: There were 1352 observations read from the data set WORK.TAB2.
 NOTE: The data set WORK.TAB3 has 1353 observations and 12 variables.
 NOTE: DATA statement used (Total process time):
 real time 0.01 seconds
 cpu time 0.00 seconds

```
365
366
367 DATA TAB;
368     MERGE TAB3 STUBFILE;
369     BY LINE;
370     IF LINE NE '100001' THEN DO;
371         IF SURVEY = 'S' THEN DELETE;
372     END;
373     ARRAY CNTRL(10) INCLASS1-INCLASS10;
374     DO i = 1 TO 10;
375         IF CNTRL(i) = . THEN CNTRL(i) = 0;
376         IF SUM(OF CNTRL(*)) = 0 THEN ESTIMATE = 'MEAN';
377     END;
378
379     IF GROUP IN ('CUCHARS' 'INCOME') THEN DO;
```

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

Population totals per income class are inserted into the output.

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.

<pre> 380 IF LAG(LINE) = LINE THEN DELETE; 381 END; 382 /* MERGE STUBFILE BACK INTO TABLE TO INSERT EXPENDITURE LINES */ 383 /* THAT HAD ZERO EXPENDITURES FOR THE YEAR */ 384 RUN; NOTE: There were 1353 observations read from the data set WORK.TAB3. NOTE: There were 695 observations read from the data set WORK.STUBFILE. NOTE: The data set WORK.TAB has 1292 observations and 20 variables. NOTE: DATA statement used (Total process time): real time 0.04 seconds cpu time 0.03 seconds 385 386 387 PROC TABULATE DATA=TAB; 388 CLASS LINE / GROUPINTERNAL ORDER=DATA; 389 CLASS ESTIMATE; 390 VAR INCLASS1-INCLASS10; 391 FORMAT LINE \$LBLFMT.; 392 393 TABLE (LINE * ESTIMATE), (INCLASS10 INCLASS1 INCLASS2 INCLASS3 INCLASS4 394 INCLASS5 INCLASS6 INCLASS7 INCLASS8 INCLASS9) 395 *SUM='' / RTS=25; 396 LABEL ESTIMATE=ESTIMATE LINE=LINE 397 INCLASS1='LESS THAN \$5,000' INCLASS2='\$5,000 TO \$9,999' 398 INCLASS3='\$10,000 TO \$14,999' INCLASS4='\$15,000 TO \$19,999' 399 INCLASS5='\$20,000 TO \$29,999' INCLASS6='\$30,000 TO \$39,999' 400 INCLASS7='\$40,000 TO \$49,999' INCLASS8='\$50,000 TO \$69,999' 401 INCLASS9='\$70,000 AND OVER' INCLASS10='ALL CONSUMER UNITS'; 402 OPTIONS NODATE NOCENTER NONUMBER LS=167 PS=MAX; 403 WHERE LINE NE 'OTHER'; 404 TITLE "INTERVIEW EXPENDITURES FOR &YEAR BY INCOME BEFORE TAXES"; 405 RUN; NOTE: There were 1290 observations read from the data set WORK.TAB. WHERE LINE not = 'OTHER'; NOTE: PROCEDURE TABULATE used (Total process time): real time 0.26 seconds cpu time 0.06 seconds </pre>	<p>Tabulate the data. Line numbers are formatted to give titles.</p>
---	--

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 U.S. 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 U.S. 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 U.S. 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 2010 and 2011 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 2010 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	
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%
2009	46,846	9,223	37,623	9,594	28,029	74.5%
2010	48,036	9,318	38,718	10,289	28,429	73.4%

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, ^{N(D)}Y101(UCC) identifies a new (deleted) UCC beginning in Q101.

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 (2010)
*L 006004	Total amount owed to creditors, 5th interview, asked first quarter, current year (2010)
006005	Total amount owed to creditors, 2nd interview, asked first quarter, current year + 1 (2011)
006006	Total amount owed to creditors, 5th interview, asked first quarter, current year +1 (2011)
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
 670903 Test preparation, tutoring services
 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
 690117 Portable memory
 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 Down payment, 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
- 910104 CPI Adjusted rental equivalence of vacation owned home
- 910105 CPI Adjusted rental equivalence of vacation home not available for rent
- 910106 CPI Adjusted rental equivalence of vacation home available for rent
- 910107 CPI Adjusted rental equivalence for timeshares
- 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.

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	EDUCOREF	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	FGOVRETXX	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	FDHOMEPCQ	1373
ROOMSQ	683	WTREP05	885	FDHOMEPCQ	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
ALCBEPVQ	1469	BBYDAYCQ	2009	GASMOPQ	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	VEHINSQ	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
MRPINSPQ	1613	MAJAPPCQ	2153	TRNTRPPQ	2693
MRPINSCQ	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
NTLGASPPQ	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
WATRPSPQ	1901	OTHAPLCQ	2441	OTHENTPQ	2981
WATRPSCQ	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	TAIRFARC	3752
TOBACCPQ	3077	ALIOTHX_	3346	TOTHFARP	3762
TOBACCCQ	3089	CHDLMPX	3347	TOTHFARC	3772
MISCPQ	3101	CHDLMPX_	3355	TLOCALTP	3782
MISCCQ	3113	ERANKMTH	3356	TLOCALTC	3792
MISC1PQ	3125	ERAN_MTH	3367	TENTRMNP	3802
MISC1CQ	3137	ERANKH	3368	TENTRMNC	3812
MISC2PQ	3149	ERANKH_	3377	TFEESADP	3822
MISC2CQ	3161	TOTEX4PQ	3387	TFEESADC	3832
CASHCOPQ	3173	TOTEX4CQ	3399	TOTHENTP	3842
CASHCOCQ	3185	MISCX4PQ	3411	TOTHENTC	3852
PERINSPQ	3197	MISCX4CQ	3423	OWNVACP	3862
PERINSCQ	3209	VEHQL	3456	OWNVACC	3872
LIFINSPQ	3221	VEHQL_	3458	VOTHRLOP	3882
LIFINSCQ	3233	NUM_TVAN	3459	VOTHRLOC	3892
RETPENPQ	3245	NUM__VAN	3461	VMISCHEP	3902
RETPENCQ	3257	TTOTALP	3462	VMISCHEC	3912
HH_CU_Q	3269	TTOTALC	3472	UTILOWNP	3922
HH_CU_Q_	3271	TFOODTOP	3482	UTILOWNC	3932
HHID	3272	TFOODTOC	3492	VFUELOIP	3942
HHID_	3275	TFOODAWP	3502	VFUELOIC	3952
POV_CY	3276	TFOODAWC	3512	VOTHRFLP	3962
POV_CY_	3277	TFOODHOP	3522	VOTHRFLC	3972
POV_PY	3278	TFOODHOC	3532	VELECTRP	3982
POV_PY_	3279	TALCBEPV	3542	VELECTRC	3992
HEATFUEL	3292	TALCBEVC	3552	VNATLGAP	4002
HEAT_UEL	3294	TOTHRLOP	3562	VNATLGAC	4012
SWIMPOOL	3298	TOTHRLOC	3572	VWATERPP	4022
SWIM_OOL	3300	TTRANPRP	3582	VWATERPC	4032
WATERHT	3307	TTRANPRC	3592	MRTPRNOP	4042
WATERHT_	3309	TGASMOTP	3602	MRTPRNOC	4052
APTMENT	3310	TGASMOTC	3612	UTILRNTP	4062
APTMENT_	3312	TVRENTLP	3622	UTILRNTC	4072
OFSTPARK	3313	TVRENTLC	3632	RFUELOIP	4082
OFST_ARK	3315	TCARTRKP	3642	RFUELOIC	4092
WINDOWAC	3316	TCARTRKC	3652	ROTHRFLP	4102
WIND_WAC	3318	TOTHVHRP	3662	ROTHRFLC	4112
CNTRALAC	3319	TOTHVHRC	3672	RELECTRP	4122
CNTR_LAC	3321	TOTHTREP	3682	RELECTRC	4132
CHILDAGE	3322	TOTHTREC	3692	RNATLGAP	4142
CHIL_AGE	3323	TTRNTRIP	3702	RNATLGAC	4152
INCLASS	3324	TTRNTRIC	3712	RWATERPP	4162
STATE	3326	TFAREP	3722	RWATERPC	4172
CHDOTHX	3329	TFAREC	3732	POVLEVCY	4182
CHDOTHX_	3337	TAIRFARP	3742	POVL_VCY	4190

Interview: FMLY

Variable Name	Start Position	Variable Name	Start Position	Variable Name	Start Position
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
ECARTKNC	4416	WELFREBX	4667	HORREF1_	4785
ECARTKUP	4426	WELF_EBX	4673	HORREF2	4786
ECARTKUC	4436	FOODSMPX	4677	HORREF2_	4787
EOTHVEHP	4446	FOOD_MPX	4683	ALIOHXM	4788
EOTHVEHC	4456	FOODSMPB	4684	ALIO_HXM	4798
EENTRMTP	4466	FOOD_MPB	4686	ALIOHXM1	4799
EENTRMTC	4476	FOODSPBX	4687	ALIOHXM2	4807
EOTHENTP	4486	FOOD_PBX	4693	ALIOHXM3	4815
EOTHENTC	4496	INCLOSAB	4694	ALIOHXM4	4823
ENOMOTRP	4506	INCL_SAB	4696	ALIOHXM5	4831
ENOMOTRC	4516	INCLSABX	4697	ALIOHMXI	4839
EMOTRVHP	4526	INCL_ABX	4703	CHDOHXM	4842
EMOTRVHC	4536	INCLOSBB	4704	CHDO_HXM	4852
EENTMSCP	4546	INCL_SBB	4706	CHDOHXM1	4853
EENTMSCC	4556	INCLSBBX	4707	CHDOHXM2	4861
EMISCELP	4566	INCL_BBX	4713	CHDOHXM3	4869
EMISCELC	4576	CHDLMPB	4714	CHDOHXM4	4877
EMISCMTP	4586	CHDLMPB_	4716	CHDOHXM5	4885

Interview: FMLY

Variable Name	Start Position	Variable Name	Start Position	Variable Name	Start Position
CHDOTHXI	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
ERNKMTM	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	FOODSMMPM	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
FFRMINCI	5076	FOODSMP3	5397	INC_RNK5	5701
FGOVRETM	5079	FOODSMP4	5405	INCLOSAM	5710
FGOV_ETM	5087	FOODSMP5	5413	INCL_SAM	5721
FINCATXM	5088	FOODSMPI	5421	INCLOSA1	5722
FINCA_XM	5099	FPRIPENM	5424	INCLOSA2	5731
FINCATX1	5100	FPRI_ENM	5432	INCLOSA3	5740
FINCATX2	5109	FRRDEDM	5433	INCLOSA4	5749
FINCATX3	5118	FRRDEDM_	5441	INCLOSA5	5758
FINCATX4	5127	FRRETIRM	5442	INCLOSAI	5767
FINCATX5	5136	FRRE_IRM	5452	INCLOSBM	5770
FINCBTXM	5145	FRRETIR1	5453	INCL_SBM	5781
FINCB_XM	5156	FRRETIR2	5461	INCLOSBI	5782
FINCBTX1	5157	FRRETIR3	5469	INCLOSBI	5791
FINCBTX2	5166	FRRETIR4	5477	INCLOSBI	5800
FINCBTX3	5175	FRRETIR5	5485	INCLOSBI	5809
FINCBTX4	5184	FRRETIRI	5493	INCLOSBI	5818
FINCBTX5	5193	FSALARYM	5496	INCLOSBI	5827
FINCBTXI	5202	FSAL_RYM	5506	INTEARNM	5830

Interview: FMLY

Variable Name	Start Position	Variable Name	Start Position
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
POV_CY3	5996	REVSMORT	6199
POV_CY4	5997	REVS_ORT	6200
POV_CY5	5998	RVSLUMP	6201
POV_PYM	5999	RVSLUMP_	6202
POV_PYM_	6000	RVSREGMO	6203
POV_PY1	6001	RVSR_GMO	6204
POV_PY2	6002	RVSLOC	6205
POV_PY3	6003	RVSLOC_	6206
POV_PY4	6004	RVSOTHPY	6207
POV_PY5	6005	RVSO_HPY	6208
PRINERNM	6006	TYPEPYX	6209
PRIN_RNM	6008	TYPEPYX_	6217
PRINERN1	6009	HISP_REF	6218
PRINERN2	6011	HISP2	6219
PRINERN3	6013		
PRINERN4	6015		
PRINERN5	6017		
TOTTXPDM	6019		

Interview: MEMB

Variable Name	Start Position	Variable Name	Start Position	Variable Name	Start Position
NEWID	1	INCRP_	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	JSSDEX	140	NONFARMB	272
ANFEDTX_	29	JSSDEX_	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
ANRRDEX	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	RRRDEX	185	HISP_NIC	314
EMPLCONT	77	RRRDEX_	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
INCRP	124	SSNORM	260	ANGO_RTM	349

Interview: MEMB

Variable Name	Start Position	Variable Name	Start Position
ANPRVPNM	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	SOCRRXM	683
FARMINC1	389	SOCRRXM_	693
FARMINC2	398	SOCRRX1	694
FARMINC3	407	SOCRRX2	702
FARMINC4	416	SOCRRX3	710
FARMINC5	425	SOCRRX4	718
FARMINCI	434	SOCRRX5	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	* D(Y095) PYMT2009	788
NONFARM1	488	* D(Y095) PYMT_009	789
NONFARM2	497	* D(Y095) HWUSED09	790
NONFARM3	506	* D(Y095) HWUS_D09	791
NONFARM4	515	* D(Y095) QSTIMPYX	792
NONFARM5	524	* D(Y095) QSTI_PYX	796
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

CONSUMER EXPENDITURE SURVEY DATA ON THE INTERNET

CE reports and data tables can be found on-line at <http://www.bls.gov/cex/home.htm> .

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 1984-2010
- Expenditure Shares Tables from 1998-2010
- Aggregate Expenditure Shares Tables from 1998-2010

Two Year Tables

- Cross-Tabulated Tables from 1986-2010
- Metropolitan Statistical Area Tables from 1986-2010
- Region Tables from 1998-2010
- High Income Tables from 1998-2002
- Multi-Year Tables for 1984-1992 and 1994-2010

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 1994-2010. The 1980-81 through 2010 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. Starting with the 2009 release, paradata files are also available on the CD-Rom. 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/csxmico.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.

Written suggestions and comments should be forwarded to:

Division of Consumer Expenditure Survey
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.