1997 DIARY SURVEY
PUBLIC USE MICRODATA
DOCUMENTATION

October 19, 1999

TABLE OF CONTENTS

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 or CUs) of average expenditures in news releases, reports, bulletins, articles in the Monthly Labor Review, and on diskettes. Tabulated CE data are also available on the Internet and by facsimile transmission (see Section XVI. Appendix 5). The microdata are available on compact disk-ROM (CD-ROM).

These microdata files present detailed expenditure and income data for the Diary component of the CE for 1997. They include weekly expenditure (EXPN) and annual income (DTAB) files. The data in EXPN and DTAB files are categorized by a Universal Classification Code (UCC). The advantage of the EXPN and DTAB files is that with the data classified in a standardized format, the user may perform comparative expenditure (income) analysis with relative ease. The FMLY and MEMB files present data on the characteristics and demographics of CUs and CU members. The summary level expenditure and income information on the FMLY files permits the data user to link consumer spending, by general expenditure category, and household characteristics and demographics on one set of files.

Estimates of average expenditures in 1997 from the Diary survey, integrated with data from the Interview survey, are published in *Consumer Expenditures in 1997 Report 927 (1999).* 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, Diary Survey, 1997”.

II. CHANGES FROM THE 1996 MICRODATA FILES

1) The following UCCs have been added to the EXPN files in Q971

180720 Vitamin supplements.

550410 Nonprescription vitamins.

2) The following UCC’s have undergone content changes in Q971

180710 Miscellaneous prepared foods
Vitamin supplements are no longer mapped to this UCC.

550210 Over-the-counter drugs
Nonprescription vitamins are no longer mapped to this UCC.

620911 Miscellaneous fees and parimutual losses.
Fishing licenses and pet licenses are no longer mapped to this UCC.

620121 Fees for participant sports
Fishing licenses are now mapped to this UCC.

620410 Pet services
Pet licenses are now mapped to this UCC.

3) The following PUBFLAG values are for the UCCs added in Q971

UCC	PUBFLAG values
180720	2
550410	2

III. FILE INFORMATION

Since the 1996 release, the microdata on the CD-ROM have been available as SAS data sets or ASCII files. (1996 marked the year for which microdata were no longer offered on magnetic tape.)

The 1997 Diary release contains four sets of Diary data files (FMLY, MEMB, EXPN, DTAB) and four processing files. The FMLY, MEMB, EXPN, and DTAB files are organized by the quarter of the calendar year in which the data were collected. There are four quarterly data sets for each of these files. The FMLY files contain CU characteristics, income, and summary level expenditures; the MEMB files contain member characteristics and income data; the EXPN files contain detailed weekly expenditures at the UCC level; and the DTAB files contain annual income data.

The four processing files enhance computer processing and tabulation of data, and provide descriptive information on item codes. The four processing files are: a sample table aggregation file (AGGD), a sample table label file (LABD), a Universal Classification Codes file (UCCD), and a file (SAMPLD) containing the sample program (Section VII.A.) The processing files are further explained in Section III.E.5. PROCESSING FILES.

An Adobe Acrobat PDF version of this sample program documentation can be found in the *X:\Document* folder of the CD-ROM. The PDF file is named *Drydoc97.pdf*. Adobe Acrobat Reader is required to read and print this file. The reader is provided in the *X:\Acroread* folder of the compact disk and can be loaded onto your system by following the guidelines in the *Readme.1st* file on the root directory. Adobe Acrobat Reader is a shareware product.

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 ASCII data set names are as follows:
(where "X" references the designated drive for your CD)

```
X:\DIARY97\FMLYD971.txt (Diary FMLY file for first quarter, 1997)
X:\DIARY97\MEMBD971.txt (Diary MEMB file for first quarter, 1997)
X:\DIARY97\EXPND971.txt (Diary EXPN file for first quarter, 1997)
X:\DIARY97\DTABD971.txt (Diary DTAB file for first quarter, 1997)
X:\DIARY97\FMLYD972.txt (etc.)
X:\DIARY97\MEMBD972.txt
X:\DIARY97\EXPND972.txt
X:\DIARY97\DTABD972.txt
X:\DIARY97\FMLYD973.txt
X:\DIARY97\MEMBD973.txt
X:\DIARY97\EXPND973.txt
X:\DIARY97\DTABD973.txt
X:\DIARY97\FMLYD974.txt
X:\DIARY97\MEMBD974.txt
```

```
X:\DIARY97\EXPND974.txt
X:\DIARY97\DTABD974.txt
X:\DIARY97\AGGD97.txt
X:\DIARY97\LABELD97.txt
X:\DIARY97\UCCD97.txt
X:\DIARY97\SAMPLD97.txt
```

The SAS data set names are as follows:

```
X:\DIARY97\FMLD971.sd2  (Diary FMLY file for first quarter, 1997)
X:\DIARY97\MEMD971.sd2  (Diary MEMB file for first quarter, 1997)
X:\DIARY97\EXPD971.sd2  (Diary EXPN file for first quarter, 1997)
X:\DIARY97\DTBD971.sd2  (Diary DTAB file for first quarter, 1997)
X:\DIARY97\FMLD972.sd2  (etc.)
X:\DIARY97\MEMD972.sd2
X:\DIARY97\EXPD972.sd2
X:\DIARY97\DTBD972.sd2
X:\DIARY97\FMLD973.sd2
X:\DIARY97\MEMD973.sd2
X:\DIARY97\EXPD973.sd2
X:\DIARY97\DTBD973.sd2
X:\DIARY97\FMLD974.sd2
X:\DIARY97\MEMD974.sd2
X:\DIARY97\EXPD974.sd2
X:\DIARY97\DTBD974.sd2
X:\DIARY97\AGGD97.sd2
X:\DIARY97\LABELD97.sd2
X:\DIARY97\UCCD97.sd2
X:\DIARY97\SAMPLD97.sd2
```

B. RECORD COUNTS AND LOGICAL RECORD LENGTHS PER QUARTER

The following are number of records and the logical record lengths (LRECL) in each data set:

ASCII data set	SAS data set	LRECL	Record Count
FMLYD971.txt	FMLD971.sd2	1549	2836
MEMBD971.txt	MEMD971.sd2	247	7159
EXPND971.txt	EXPD971.sd2	40	119109
DTABD971.txt	DTBD971.sd2	28	45010
FMLYD972.txt	FMLD972.sd2	1549	2671
MEMBD972.txt	MEMD972.sd2	247	6944
EXPND972.txt	EXPD972.sd2	40	118081
DTABD972.txt	DTBD972.sd2	28	42289
FMLYD973.txt	FMLD973.sd2	1549	2606
MEMBD973.txt	MEMD973.sd2	247	6673
EXPND973.txt	EXPD973.sd2	40	108024
DTABD973.txt	DTBD973.sd2	28	41077
FMLYD974.txt	FMLD974.sd2	1549	3669
MEMBD974.txt	MEMD974.sd2	247	9369
EXPND974.txt	EXPD974.sd2	40	149473
DTABD974.txt	DTBD974.sd2	28	56792

C. DATA FLAGS:

Data fields on the FMLY and MEMB 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 WAGEX becomes WAGEX_. 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.

The flag values are defined as follows:

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.

A flag value of "R" for recode has been created for the variable STATE_ . Some Primary Sampling Units (PSUs) in some states are given "false" STATE codes for nondisclosure reasons. CUs with STATE_='R' (for recode) indicate that not all CUs with that particular STATE code are from that state. See Section IV.A.CU CHARACTERISTICS AND INCOME FILE (FMLY) on topcoding of CU characteristics and income for more detail.

D. FILE NOTATION

Every record from each data file includes the variable NEWID, the CU's unique identification number, which can be used to link records of one CU from several files.

Data fields for variables on the microdata files have either numeric or character values. The format column in the detailed variable descriptions (SECTION III.E. 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, which identifies where the data for that variable is collected on the characteristics questionnaire, is listed beneath the variable description and is formatted "S04B 2b", which denotes Section 4, Part B, Question 2b of the characteristics questionnaire.

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 file, 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(Y971) indicates the variable is deleted starting with the data file of the first quarter of 1997.

*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.

*L indicates that the variable can contain negative values.

E. DETAILED VARIABLE DESCRIPTIONS

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. Income variables contain annual values, covering the 12 months prior to the date of the interview. 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. CU AND DIARY IDENTIFIERS

VARIABLE	ITEM DESCRIPTION	START POSITION	FORMAT
NEWID	CU identification number. Digits 1-7 (CU sequence number, 0000001 through 9999999) uniquely identify the CU. Digit 8 is the week number, 1 or 2	1	NUM(8)
	BLS derived		
HH_CU_Q	Count of CUs in this household	1507	NUM(2)
	BLS derived		
HH_CU_Q_		1509	CHAR(1)
HHID	Identifier for household with more than one CU. Household with only one CU will be set to missing.	1510	NUM(3)
	BLS derived		
HHID_		1513	CHAR(1)
WEEKI	Week of the Diary	656	CHAR(1)

	CODED 1 First week Diary 2 Second week Diary Census derived		
WEEKI_		657	CHAR(1)
WEEKN	Number of Diary weeks surveyed, 1 or 2 BLS derived	658	NUM(1)
STRTDAY	Diary start date - date Cover 19	625	CHAR(2)
STRTMNTH	Diary start date - month Cover 19	627	CHAR(2)
STRTYEAR	Diary start date - year Cover 19	629	CHAR(4)
PICK_UP	Final interview status CODED 01 Diary placed or completed 03 Temporarily absent during ENTIRE reference period Cover 20	559	CHAR(2)

b. *CU CHARACTERISTICS*

VARIABLE	ITEM DESCRIPTION	START POSITION	FORMAT
REGION	Region CODED 1 Northeast 2 Midwest 3 South 4 West BLS derived	580	CHAR(1)
REGION_		581	CHAR(1)
BLS_URBN	Urban/Rural CODED 1 Urban 2 Rural BLS derived	42	CHAR(1)
POPSIZE	Population size of the PSU	564	CHAR(1)

CODED
1 More than 4 million
2 1.20-4 million
3 0.33-1.19 million
4 125 - 329.9 thousand
5 Less than 125 thousand

BLS derived

SMSASTAT	Does CU reside inside a Metropolitan Statistical Area (MSA)?	606	CHAR(1)

CODED
1 Yes
2 No

BLS derived

STATE	State identifier (see Section IV.A. and Section X.D. for important information)	1518	CHAR(2)

01	Alabama	*28	Mississippi
02	Alaska	**29	Missouri
RR04	Arizona	31	Nebraska
*05	Arkansas	R32	Nevada
**06	California	R33	New Hampshire
08	Colorado	34	New Jersey
09	Connecticut	*35	New Mexico
10	Delaware	RR**36	New York
R11	District of Columbia	**37	North Carolina
**12	Florida	RR39	Ohio
**13	Georgia	**40	Oklahoma
15	Hawaii	**41	Oregon
16	Idaho	42	Pennsylvania
**17	Illinois	45	South Carolina
RR**18	Indiana	*46	South Dakota
*19	Iowa	**47	Tennessee
**20	Kansas	48	Texas
21	Kentucky	49	Utah
22	Louisiana	50	Vermont
R*23	Maine	**51	Virginia
24	Maryland	**53	Washington
25	Massachusetts	R54	West Virginia
**26	Michigan	55	Wisconsin
**27	Minnesota		

* indicates that the STATE code has been suppressed for all sampled CUs in that state (STATE_ = 'T' for all observations).

** indicates that the STATE code has been suppressed for some sampled CUs in that state (STATE_ = 'T' for some observations).

R indicates that either all observations from this state have been re-coded or all strata[1] of observations from this state include "re-codes" from other states.

RR indicates that either some observations from this state have been re-coded or at least one stratum[1] of observations from this state includes "re-codes" from other states.

R* indicates that the STATE code has been suppressed for some sampled CUs in that state and, either STATE has been re-coded or the state includes "re-codes" from other states in all strata[1].

RR** indicates that the STATE code has been suppressed for some sampled CUs in that state and, either STATE has been re-coded or the state includes "re-codes" from other states in at least one stratum[1].

[1] A STATE stratum is a unique POPSIZE and BLS_URBN combination.

States not listed are not in the CE sample.

Census derived

STATE_		1520	CHAR(1)
CUTENURE	Housing tenure CODED 1 Owned with mortgage 2 Owned without mortgage 3 Owned mortgage not reported 4 Rented 5 Occupied without payment of cash rent 6 Student housing BLS derived	43	CHAR(1)
CUTE_URE		44	CHAR(1)
FAM_SIZE	Number of members in CU BLS derived	78	NUM(2)
FAM__IZE		80	CHAR(1)
PERSLT18	Number of children less than 18 in CU BLS derived	544	NUM(2)
PERS_T18		546	CHAR(1)
PERSOT64	Number of persons over 64 in CU BLS derived	547	NUM(2)

PERS_T64		549	CHAR(1)
CHILDAGE	Age of children of reference person CODED 0 No children 1 All children less than 6 2 Oldest child between 6 and 11 and at least one child less than 6 3 All children between 6 and 11 4 Oldest child between 12 and 17 and at least one child less than 12 5 All children between 12 and 17 6 Oldest child greater than 17 and at least one child less than 17 7 All children greater than 17 BLS derived	1514	CHAR(1)
CHIL_AGE		1515	CHAR(1)
FAM_TYPE	CU type is based on relationship of members to reference person. "Own" children include blood-related sons and daughters, step children and adopted children. CODED 1 Husband and wife (H/W) only 2 H/W, own children only, oldest child under 6 years old 3 H/W, own children only, oldest child 6 to 17 years old 4 H/W, own children only, oldest child over 17 years old 5 All other H/W CUs 6 One parent, male, own children only, at least one child age under 18 years old 7 One parent, female, own children only, at least one child age under 18 years old 8 Single persons 9 Other CUs BLS derived	81	CHAR(1)
FAM__YPE		82	CHAR(1)
NO_EARNR	Number of earners BLS derived	471	NUM(2)
NO_E_RNR		473	CHAR(1)
EARNCOMP	Composition of earners CODED 1 Reference person only 2 Reference person and spouse 3 Reference person, spouse, and others 4 Reference person and others 5 Spouse only 6 Spouse and others 7 Others only	57	CHAR(1)

	8 No earners		
	BLS derived		
EARN_OMP		58	CHAR(1)
VEHQ	How many automobiles, trucks, or other vehicles do you own?	653	NUM(2)
	S02 4B		
VEHQ_		655	CHAR(1)
INCLASS	Income class of CU based on income before taxes (Codes 01 through 09 are for CUs considered complete reporters of income) CODED 01 Less than $5,000 02 $5,000 to $9,999 03 $10,000 to $14,999 04 $15,000 to $19,999 05 $20,000 to $29,999 06 $30,000 to $39,999 07 $40,000 to $49,999 08 $50,000 to $69,999 09 $70,000 and over 10 Incomplete income reported	1516	CHAR(2)
	BLS derived		
RESPSTAT	Completeness of income response CODED 1 Complete income respondent 2 Incomplete income respondent	582	CHAR(1)
	BLS derived		
RESP_TAT		583	CHAR(1)
INC_RNKU	Weighted cumulative percent income ranking of CU to total population. Ranking based on income before taxes for complete reporters. Rank of incomplete income reporters is set to zero.	395	NUM(9,7)
	BLS derived		
INC__NKU		404	CHAR(1)
POVERTY	Is CU income below current year's poverty threshold? (Income is defined as FINCBEFX - JFS_AMT)	1548	CHAR(1)
	CODED 1 Yes 2 No		
	BLS derived		

POVERTY_		1549	CHAR(1)

c. *CHARACTERISTICS OF REFERENCE PERSON AND SPOUSE*

VARIABLE	ITEM DESCRIPTION	START POSITION	FORMAT
AGE_REF	Age of reference person BLS derived	36	NUM(2)
AGE_REF_		38	CHAR(1)
REF_RACE	Race of reference person CODED 1 White 2 Black 3 American Indian, Aleut, or Eskimo 4 Asian or Pacific Islander 5 Other BLS derived	578	CHAR(1)
REF__ACE		579	CHAR(1)
SEX_REF	Sex of reference person CODED 1 Male 2 Female BLS derived	602	CHAR(1)
SEX_REF_		603	CHAR(1)
MARITAL1	Marital status of reference person CODED 1 Married 2 Widowed 3 Divorced 4 Separated 5 Never married BLS derived	469	CHAR(1)
MARI_AL1		470	CHAR(1)
ORIGIN1	Origin or ancestry of reference person CODED 1 European: German Italian Irish French Polish Russian	495	CHAR(1)

English
Scottish
Dutch
Swedish
Hungarian
2 Spanish:
Mexican American
Chicano Mexican
Puerto Rican
Cuban
Central or South American
Other Spanish
3 Afro-American (Black or Negro)
4 Another group not listed / Don't know

BLS derived

ORIGIN1_		497	CHAR(1)
EDUC_REF	Education of reference person CODED 00 Never attended school 10 First through eighth grade 11 Ninth through twelve grade (no H.S. diploma) 12 High school graduate 13 Some college, less than college graduate 14 Associate's degree (occupational/vocational or academic) 15 Bachelor's degree 16 Master's degree 17 Professional/Doctorate degree BLS derived	68	CHAR(2)
EDUC0REF		70	CHAR(1)
AGE2	Age of spouse BLS derived	39	NUM(2)
AGE2_		41	CHAR(1)
RACE2	Race of spouse CODED - same as REF_RACE BLS derived	574	CHAR(1)
RACE2_		575	CHAR(1)
SEX2	Sex of spouse CODED - same as SEX_REF BLS derived	604	CHAR(1)
SEX2_		605	CHAR(1)
ORIGIN2	Origin or ancestry of spouse	497	CHAR(1)

	CODED - same as ORIGIN1		
	BLS derived		
ORIGIN2_		498	CHAR(1)
EDUCA2	Education of spouse CODED - same as EDUC_REF	71	*CHAR(2)*
	BLS derived		
EDUCA2_		73	CHAR(1)

d. *WORK EXPERIENCE OF REFERENCE PERSON AND SPOUSE*

VARIABLE	ITEM DESCRIPTION	START POSITION	FORMAT
WK_WRKD1	Number of weeks worked by reference person in the last 12 months, including full or part time, paid vacation and paid sick leave.	672	NUM(2)
	BLS derived		
WK_W_KD1		674	CHAR(1)
HRSPRWK1	Number of hours usually worked per week by reference person	387	NUM(3)
	BLS derived		
HRSP_WK1		390	CHAR(1)
OCCULIS1	The job in which reference person received the most earnings during the past 12 months best fits the following category CODED Manager, professional 01 Administrator, manager 02 Teacher 03 Professional Administrative support, technical, sales 04 Administrative support, including clerical 05 Sales, retail 06 Sales, business goods and services 07 Technician Service 08 Protective service 09 Private household service 10 Other service Operator, assembler, laborer 11 Machine operator, assembler, inspector 12 Transportation operator 13 Handler, helper, laborer Precision production, craft, repair 14 Mechanic, repairer, precision production	561	CHAR(2)

	15 Construction, mining Farming, forestry, fishing 16 Farming 17 Forestry, fishing, groundskeeping Armed forces 18 Armed forces		
	BLS derived		
OCCU_IS1		563	CHAR(1)
EMPLTYP1	Employer from which reference person received the most earnings in past 12 months CODED 1 Private company, business, or individual 2 Federal government 3 State government 4 Local government 5 Self-employed in own business, professional practice, or farm 6 Family business or farm, working without pay	74	CHAR(1)
	BLS derived		
EMPL_YP1		75	CHAR(1)
WHYNWRK1	Reason reference person did not work during the past 12 months CODED 1 Retired 2 Taking care of home/CU 3 Going to school 4 Ill, disabled, unable to work 5 Unable to find work 6 Doing something else	668	CHAR(1)
	BLS derived		
WHYN_RK1		669	CHAR(1)
WK_WRKD2	Number of weeks worked by spouse in the last 12 months, including full or part time, paid vacation and paid sick leave.	675	NUM(2)
	BLS derived		
WK_W_KD2		677	CHAR(1)
HRSPRWK2	Number of hours usually worked per week by spouse	391	NUM(3)
	BLS derived		
HRSP_WK2		394	CHAR(1)
OCCULIS2	Job in which spouse received the most earnings during the past 12 months CODED - same as OCCULIS1	492	CHAR(2)

	S04A 4a		
OCCU_IS2		494	CHAR(1)
EMPLTYP2	Employer from which spouse received the most earnings during the past 12 months CODED - Same as EMPLTYP1	76	CHAR(1)
	BLS derived		
EMPL_YP2		77	CHAR(1)
WHYNWRK2	Reason spouse did not work during the past 12 months CODED - same as WHYNWRK1	670	CHAR(1)
	BLS derived		
WHYN_RK2		671	CHAR(1)
OCCEXPNX	During the past 12 months, what was the total amount of occupational expenses such as union dues, tools, uniforms, business or professional association dues, licenses or permits?	483	NUM(8)
	S04B 5		
OCCE_PNX		491	CHAR(1)

e. *INCOME*

VARIABLE	ITEM DESCRIPTION	START POSITION	FORMAT
FINCBEFX	Amount of CU income before taxes in past 12 months (UNEMPX + WRKRSX + WELFRX + INTX +DIVX + PENSIONX + ROOMX + OTHRNTX + CHDOTHX + ALIOTHX + OTHINX + JFS_AMT + FWAGEX + FBSNSX + FFARMX + FSS_RRX + FSUPPX) *L	139	NUM(8)
	BLS derived		
FINC_EFX		147	CHAR(1)
FINCAFTX	Amount of CU income after taxes in past 12 months (FINCBEFX - PERSTAX)	130	NUM(8)
	*L		
	BLS derived		
FINC_FTX		138	CHAR(1)
EARNX	Amount of earned income before taxes by CU in past 12 months	59	NUM(8)

	(FWAGEX + FBSNSX + FFARMX) *L		
	BLS derived		
EARNX_		67	CHAR(1)
NONERNX	Amount of CU income other than earnings before taxes in past 12 months (FSS_RRX + FSUPPX + UNEMPX + WRKRSX + WELFRX + INTX + DIVX + PENSIONX + ROOMX + OTHRNTX + CHDOTHX + ALIOTHX + OTHINX + JFS_AMT) *L	474	NUM(8)
	BLS derived		
NONERNX_		482	CHAR(1)
FWAGEX	Amount of wage and salary income before deductions received by all CU members in past 12 months (Sum WAGEX from MEMB file for all CU members)	378	NUM(8)
	BLS derived		
FWAGEX_		386	CHAR(1)
FBSNSX	Amount of income or loss from nonfarm business, partnership or professional practice received by all CU members in past 12 months (Sum BSNSX from MEMB file for all CU members) *L	83	NUM(8)
	BLS derived		
FBSNSX_		91	CHAR(1)
FFARMX	Amount of income or loss from own farm received by all CU members in past 12 months (Sum FARMX from MEMB file for all CU members) *L	103	NUM(8)
	BLS derived		
FFARMX_		111	CHAR(1)
FSS_RRX	Amount of Social Security and Railroad Retirement income prior to deductions for medical insurance and Medicare received by all CU members in past 12 months (Sum SOCRRX from MEMB file for all CU members)	351	NUM(8)
	BLS derived		
FSS_RRX_		359	CHAR(1)
FSUPPX	Amount of Supplemental Security Income from all sources received by all CU members in past 12 months (Sum SUPPX from MEMB file for all CU members)	369	NUM(8)

	BLS derived		
FSUPPX_		377	CHAR(1)
UNEMPX	During the past 12 months, what was the total amount of income from unemployment compensation received by ALL CU members?	644	NUM(8)
	S04B 1a		
UNEMPX_		652	CHAR(1)
WRKRSX	During the past 12 months, what was the total amount of income from workers' compensation or veterans' benefits, including education benefits, but excluding military retirement, received by ALL CU members?	678	NUM(8)
	S04B 1b		
WRKRSX_		686	CHAR(1)
WELFRX	During the past 12 months, what was the total amount of income from public assistance or welfare including money received from job training grants such as Job Corps received by ALL CU members?	659	NUM(8)
	S04B 1c		
WELFRX_		667	CHAR(1)
INTX	During the past 12 months, what was the total amount of income from interest on savings accounts or bonds received by ALL CU members?	414	NUM(8)
	S04B 1d		
INTX_		422	CHAR(1)
DIVX	During the past 12 months, what was the total amount of income from dividends, royalties, estates, or trusts received by ALL CU members?	48	NUM(8)
	S04B 1e		
DIVX_		56	CHAR(1)
PENSIONX	During the past 12 months, what was the total amount of income from pensions or annuities from private companies, military, Government, IRA, or Keogh received by ALL CU members?	535	NUM(8)
	S04B 1f		
PENS_ONX		543	CHAR(1)
ROOMX	During the past 12 months, how much net income or loss was	584	NUM(8)

	received from roomers or boarders? *L S04B 1g(1)		
ROOMX_		592	CHAR(1)
OTHRNTX	During the past 12 months, how much net income or loss was received from payments from other rental units? *L S04B 1g(2)	526	NUM(8)
OTHRNTX_		534	CHAR(1)
OTHINX	During the past 12 months, what was the total amount of other money income including money received from cash scholarships and fellowships, stipends not based on working, or from the care of foster children received by ALL CU members? S04B 2c	499	NUM(8)
OTHINX_		507	CHAR(1)
CHDOTHX	During the past 12 months, what was the total amount of income from child support payments in other than a lump sum amount received by ALL CU members? S04B 1h(2)	1521	NUM(8)
CHDOTHX_		1529	CHAR(1)
ALIOTHX	During the past 12 months, what was the total amount of income from regular contributions from alimony and other sources such as from persons outside the CU received by ALL CU members? S04B 1i(2)	1530	NUM(8)
ALIOTHX_		1538	CHAR(1)
JFS_AMT	Annual value of Food Stamps received by CU JFS_AMT = 12 X sum of (FS_AMT1 ... FS_AMT8) NOTE: JFS_AMT is a component of FINCBEFX, NONERNX, and FINCAFTX BLS derived	423	NUM(8)
JFS_AMT_		431	CHAR(1)

f. *OTHER MONEY RECEIPTS*

VARIABLE	ITEM DESCRIPTION	START POSITION	FORMAT
OTHRECX	Amount of other money receipts excluded from CU income before taxes received by CU in past 12 months (LUMPX + SALEX + SSREFX + INSREFX + PTAXREF)	508	NUM(8)
	BLS derived		
OTHRECX_		516	CHAR(1)
LUMPX	During the past 12 months, what was the total amount received from lump sum payments from estates, trusts, royalties, alimony, prizes, games of chance, or from persons outside of the CU by ALL CU members?	460	NUM(8)
	S04B 2a		
LUMPX_		468	CHAR(1)
CHDLMPX	During the past 12 months, what was the total amount received from a one time lump sum payment for child support by ALL CU members?	1539	NUM(8)
	S04B 1h(1)		
CHDLMPX_		1547	CHAR(1)
SALEX	During the past 12 months, what was the total amount received from the sale of household furnishings, equipment, clothing, jewelry, pets or other belongings, excluding the sale of vehicles or property by ALL CU members?	593	NUM(8)
	S04B 2b		
SALEX_		601	CHAR(1)
SSREFX	During the past 12 months, what was the total amount of refund received from overpayment on Social Security by ALL CU members?	607	NUM(8)
	S04B 3c		
SSREFX_		615	CHAR(1)
INSREFX	During the past 12 months, what was the total amount of refund received from insurance policies by ALL CU members?	405	NUM(8)
	S04B 3d		
INSREFX_		413	CHAR(1)
PTAXREFX	During the past 12 months, what was the total amount of refund received from property taxes by ALL CU members?	565	NUM(8)

	S04B 3e		
PTAX_EFX		573	CHAR(1)

g. TAXES

VARIABLE	ITEM DESCRIPTION	START POSITION	FORMAT
PERSTAX	Amount of personal taxes paid by CU in past 12 months (ADDFEDX + ADDSTAX + ADDOTHX + FFEDTXX + FSTATXX + TAXPROPX) - (FEDREFX + STATREFX + OTHREFX) *L BLS derived	550	NUM(8)
PERSTAX_		558	CHAR(1)
TAXPROPX	During the past 12 months, what was the total amount PAID for personal property taxes not reported elsewhere by ALL CU members? S04B 4c	633	NUM(8)
TAXP_OPX		641	CHAR(1)
FFEDTXX	Amount of Federal income tax deducted from last pay annualized for all CU members (sum ANFEDTXX from MEMB file for all CU members) BLS derived	112	NUM(8)
FFEDTXX_		120	CHAR(1)
ADDFEDX	During the past 12 months, what was the total amount PAID for Federal income tax, in addition to that withheld from earnings, by ALL CU members? S04B 4a	9	NUM(8)
ADDFEDX_		17	CHAR(1)
FEDREFX	During the past 12 months, what was the total amount of refund received from Federal income tax by ALL CU members? S04B 3a	94	NUM(8)
FEDREFX_		102	CHAR(1)
FSTATXX	Amount of state and local income taxes deducted from last pay annualized for all CU members (sum ANSTATXX from MEMB file for all CU members)	360	NUM(8)

	BLS derived		
FSTATXX_		368	CHAR(1)
ADDSTAX	During the past 12 months, what was the total amount PAID for state and local income taxes, in addition to that withheld from earnings, by ALL CU members?	27	NUM(8)
	S04B 4b		
ADDSTAX_		35	CHAR(1)
STATREFX	During the past 12 months, what was the total amount of refund received from state and local income tax by ALL CU members?	616	NUM(8)
	S04B 3b		
STAT_EFX		624	CHAR(1)
ADDOTHX	During the past 12 months, what was the total amount PAID for other taxes not reported elsewhere by ALL CU members?	18	NUM(8)
	S04B 4d		
ADDOTHX_		26	CHAR(1)
OTHREFX	During the past 12 months, what was the total amount of refund received from other sources, including any other taxes, by ALL CU members?	517	NUM(8)
	S04B 3f		
OTHREFX_		525	CHAR(1)

h. RETIREMENT AND PENSION DEDUCTIONS

VARIABLE	ITEM DESCRIPTION	START POSITION	FORMAT
FJSSDEDX	Estimated amount of income contributed to Social Security by all CU members in past 12 months (Sum JSSDEDX from MEMB file for all CU members)	168	NUM(8)
	BLS derived		
FJSS_EDX		176	CHAR(1)
FRRX	Amount of Railroad Retirement deducted from last pay annualized for all CU members (Sum ANRRX from MEMB file for all CU members)	195	NUM(8)
	BLS derived		
FRRX_		203	CHAR(1)

FGVX	Amount of government retirement deducted from last pay annualized for all CU members (Sum ANGVX from MEMB file for all CU members) BLS derived	121	NUM(8)
FGVX_		129	CHAR(1)
FPVTX	Amount of private pension fund deducted from last pay annualized for all CU members (sum ANPVTX from MEMB file for all CU members) BLS derived	177	NUM(8)
FPVTX_		185	CHAR(1)
FIRAX	Amount of money placed in an individual retirement plan, such as an IRA or Keogh, by all CU members in past 12 months (sum IRAX from MEMB file for all CU members) BLS derived	159	NUM(8)
FIRAX_		167	CHAR(1)

i. FOOD STAMPS

NOTE: JFS_AMT, the annual value of Food Stamps received by CU, is in SECTION III.E.1.e. INCOME

VARIABLE	ITEM DESCRIPTION	START POSITION	FORMAT
REC_FS	Have any members of your CU received any Food Stamps, during the past 12 months? CODED 1 Yes 2 No S04B 8a	576	CHAR(1)
REC_FS_		577	CHAR(1)
FD_STMPS	Have any members of your CU received any Food Stamps, in the past month? CODED 1 Yes 2 No S04B 9a	92	CHAR(1)
FD_S_MPS		93	CHAR(1)
FS_MTHI	In how many of the past 12 months were Food Stamps received? S04B 8b	348	NUM(2)

FS_MTHI_		350	CHAR(1)
FS_AMT1	What is the dollar value of Food Stamps received on *(Date in 9b)* - first entry S04B 9c	204	NUM(8)
FS_AMT1_		212	CHAR(1)
FS_AMT2	See FS_AMT1 for question and source - second entry	213	NUM(8)
FS_AMT2_		221	CHAR(1)
FS_AMT3	See FS_AMT1 for question and source - third entry	222	NUM(8)
FS_AMT3_		230	CHAR(1)
FS_AMT4	See FS_AMT1 for question and source - fourth entry	231	NUM(8)
FS_AMT4_		239	CHAR(1)
FS_AMT5	See FS_AMT1 for question and source - fifth entry	240	NUM(8)
FS_AMT5_		248	CHAR(1)
FS_AMT6	See FS_AMT1 for question and source - sixth entry	249	NUM(8)
FS_AMT6_		257	CHAR(1)
FS_AMT7	See FS_AMT1 for question and source - seventh entry	258	NUM(8)
FS_AMT7_		266	CHAR(1)
FS_AMT8	See FS_AMT1 for question and source - eighth entry	267	NUM(8)
FS_AMT8_		275	CHAR(1)
FS_DATE1	When were Food Stamps received? (List all dates - month, day, year on which stamps were received during the month) - first entry S04B 9b	276	NUM(8)
FS_D_TE1		284	CHAR(1)
FS_DATE2	See FS_DATE1 for question and source - second entry	*285*	NUM(8)
FS_D_TE2		293	CHAR(1)
FS_DATE3	See FS_DATE1 for question and source - third entry	294	NUM(8)
FS_D_TE3		302	CHAR(1)
FS_DATE4	See FS_DATE1 for question and source - fourth entry	303	NUM(8)

FS_D_TE4		311	CHAR(1)
FS_DATE5	See FS_DATE1 for question and source - fifth entry	312	NUM(8)
FS_D_TE5		320	CHAR(1)
FS_DATE6	See FS_DATE1 for question and source - sixth entry	321	NUM(8)
FS_D_TE6		329	CHAR(1)
FS_DATE7	See FS_DATE1 for question and source - seventh entry	330	NUM(8)
FS_D_TE7		338	CHAR(1)
FS_DATE8	See FS_DATE1 for question and source - eighth entry	339	NUM(8)
FS_D_TE8		347	CHAR(1)

j. *FREE MEALS AND GROCERIES*

VARIABLE	ITEM DESCRIPTION	START POSITION	FORMAT
FREEMLX	During the past 12 months, about what was the weekly dollar value of any free meals received by any members of your CU as part of their pay?	186	NUM(8)
	S04B 6b		
FREEMLX_		194	CHAR(1)
JGROCYMV	Monthly expenditure for grocery store purchases	446	NUM(6)
	BLS derived		
JGRO_YMV		452	CHAR(1)
GROCYWK	Weekly expenditure for grocery store purchases	453	NUM(6)
	BLS derived		
JGRO_YWK		459	CHAR(1)
JGRCFDMV	Monthly expenditure for food and non-alcoholic beverages purchased at grocery store	432	NUM(6)
	BLS derived		
JGRC_DMV		438	CHAR(1)
JGRCFDWK	Weekly expenditure for food and non-alcoholic beverages purchased at grocery store	439	NUM(6)
	BLS derived		

JGRC_DWK		445	CHAR(1)

k. *HOUSING STRUCTURE*

VARIABLE	ITEM DESCRIPTION	START POSITION	FORMAT
DESCRIP	Housing unit or Group Quarters unit CODED 01 House, apartment, flat 02 Housing unit in nontransient hotel, motel, etc. 03 Housing unit, permanent in transient hotel, motel, etc. 04 Housing unit, in rooming house 05 Mobile home or trailer with NO permanent room added 06 Mobile home or trailer with one or more permanent rooms added 07 Housing unit not specified above 08 Quarters not housing unit in rooming or boarding house 09 Student quarters in college dormitory 10 Group quarters unit, not specified above Cover 13c and 13d	45	CHAR(2)
DESCRIP_		47	CHAR(1)
TYPOWND	Are these living quarters owned by regular ownership or as a condominium or cooperative? CODED 1 Regular ownership 2 Condominium 3 Cooperative S02 1c	642	CHAR(1)
TYPOWND_		643	CHAR(1)

l. *WEIGHTS*

VARIABLE	ITEM DESCRIPTION	START POSITION	FORMAT
FINLWT21	CU replicate weight # 45 (total sample weight) BLS derived	148	NUM(11,3)

The following are the 44 half sample replicate weights, WTREP01 through WTREP44, which are used for variance computation. They are all BLS derived variables.

WTREP01	CU replicate weight # 01	687	NUM(11,3)
WTREP02	CU replicate weight # 02	698	NUM(11,3)
WTREP03	CU replicate weight # 03	709	NUM(11,3)
WTREP04	CU replicate weight # 04	720	NUM(11,3)

WTREP05	CU replicate weight # 05	731	NUM(11,3)
WTREP06	CU replicate weight # 06	742	NUM(11,3)
WTREP07	CU replicate weight # 07	753	NUM(11,3)
WTREP08	CU replicate weight # 08	764	NUM(11,3)
WTREP09	CU replicate weight # 09	775	NUM(11,3)
WTREP10	CU replicate weight # 10	786	NUM(11,3)
WTREP11	CU replicate weight # 11	797	NUM(11,3)
WTREP12	CU replicate weight # 12	808	NUM(11,3)
WTREP13	CU replicate weight # 13	819	NUM(11,3)
WTREP14	CU replicate weight # 14	830	NUM(11,3)
WTREP15	CU replicate weight # 15	841	NUM(11,3)
WTREP16	CU replicate weight # 16	852	NUM(11,3)
WTREP17	CU replicate weight # 17	863	NUM(11,3)
WTREP18	CU replicate weight # 18	874	NUM(11,3)
WTREP19	CU replicate weight # 19	885	NUM(11,3)
WTREP20	CU replicate weight # 20	897	NUM(11,3)
WTREP21	CU replicate weight # 21	907	NUM(11,3)
WTREP22	CU replicate weight # 22	918	NUM(11,3)
WTREP23	CU replicate weight # 23	929	NUM(11,3)
WTREP24	CU replicate weight # 24	940	NUM(11,3)
WTREP25	CU replicate weight # 25	951	NUM(11,3)
WTREP26	CU replicate weight # 26	972	NUM(11,3)
WTREP27	CU replicate weight # 27	973	NUM(11,3)
WTREP28	CU replicate weight # 28	984	NUM(11,3)
WTREP29	CU replicate weight # 29	995	NUM(11,3)
WTREP30	CU replicate weight # 30	1006	NUM(11,3)
WTREP31	CU replicate weight # 31	1017	NUM(11,3)
WTREP32	CU replicate weight # 32	1028	NUM(11,3)

WTREP33	CU replicate weight # 33	1039	NUM(11,3)
WTREP34	CU replicate weight # 34	1050	NUM(11,3)
WTREP35	CU replicate weight # 35	1061	NUM(11,3)
WTREP36	CU replicate weight # 36	1072	NUM(11,3)
WTREP37	CU replicate weight # 37	1083	NUM(11,3)
WTREP38	CU replicate weight # 38	1094	NUM(11,3)
WTREP39	CU replicate weight # 39	1105	NUM(11,3)
WTREP40	CU replicate weight # 40	1116	NUM(11,3)
WTREP41	CU replicate weight # 41	1127	NUM(11,3)
WTREP42	CU replicate weight # 42	1138	NUM(11,3)
WTREP43	CU replicate weight # 43	1149	NUM(11,3)
WTREP44	CU replicate weight # 44	1160	NUM(11,3)

m. *SUMMARY EXPENDITURE DATA*

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. Underlined UCCs may not be represented in all Diary quarters. The quarter in which the deletion (addition) to the summary expenditure variable occurs is denoted by a leading subscript directly prior to the UCC code. For example, ^{A971}<UCC> or ^{D971}<UCC> identifies an addition or deletion of a given UCC to the summary expenditure variable beginning in Q971.

VARIABLE	ITEM DESCRIPTION	START POSITION	FORMAT
FOODTOT	Food, total FOODHOME + FOODAWAY	1171	NUM(12,5)
FOODHOME	Food at home, total CEREAL + BAKEPROD + BEEF + PORK + OTHMEAT + POULTRY + SEAFOOD + EGGS + MILKPROD + OTHDAIRY + FRSHFRUT + FRSHVEG + PROCVEG + SWEETS + NONALBEV + OILS + MISCFOOD	1183	NUM(12,5)
CEREAL	Cereal and cereal products 010110 010120 010210 010310 010320	1195	NUM(12,5)
BAKEPROD	Bakery products 020110 020210 020310 020410 020510 020610 020620 020710 020810 020820	1207	NUM(12,5)
BEEF	Beef 030110 030210 030310 030410 030510 030610 030710	1219	NUM(12,5)

	030810		
PORK	Pork 040110 040210 040310 040410 040510 040610	1231	NUM(12,5)
OTHMEAT	Other meats 050110 050210 050310 050410 050900	1243	NUM(12,5)
POULTRY	Poultry 060110 060210 060310	1255	NUM(12,5)
SEAFOOD	Fish and seafood 070110 070230 070240	1267	NUM(12,5)
EGGS	Eggs 080110	1279	NUM(12,5)
MILKPROD	Fresh milk and cream 090110 090210	1291	NUM(12,5)
OTHDAIRY	Other dairy products 100110 100210 100410 100510	1303	NUM(12,5)
FRSHFRUT	Fresh fruits 110110 110210 110410 110510	1315	NUM(12,5)
FRSHVEG	Fresh vegetables 120110 120210 120310 120410	1327	NUM(12,5)
PROCFRUT	Processed fruits 130110 130121 130122 130211 130212 130310 130320	1339	NUM(12,5)
PROCVEG	Processed vegetables 140110 140210 140220 140230 140310 140320 140330 140340 140410 140420	1351	NUM(12,5)
SWEETS	Sugar and other sweets 150110 150211 150212 150310	1363	NUM(12,5)
NONALBEV	Nonalcoholic beverages 170110 170210 170310 170410 170510 170520 170530 200112	1375	NUM(12,5)
OILS	Fats and oils 160110 160211 160212 160310 160320	1387	NUM(12,5)
MISCFOOD	Miscellaneous foods 180110 180210 180310 180320 180410 180420 180510 180520 180611 180612 180620 180710 [A971]180720	1399	NUM(12,5)
FOODAWAY	Food away from home 190110 190210 190310 190320 190901 190902	1411	NUM(12,5)
ALCBEV	Alcoholic beverages 200111 200210 200310 200410 200510 200520 200530	1423	NUM(12,5)

SMOKSUPP	Tobacco products and smoking supplies 630110 630210 630220 630900	1435	NUM(12,5)
PET_FOOD	Pet food 610310	1447	NUM(12,5)
PERSPROD	Personal care products 640110 640120 640130 640210 640220 640310 640410 640420	1459	NUM(12,5)
PERSSERV	Personal care services 650110 650210 650900	1471	NUM(12,5)
DRUGSUPP	Non-prescription drugs and supplies 550110 550210 550310 550320 550330 A971 550410 550900 570901 570902	1483	NUM(12,5)
HOUSKEEP	Housekeeping supplies and services 330110 330210 330310 330410 330510 330610 340110 340120	1495	NUM(12,5)

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

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 sta tus at the placement of each diary. Income data are collected for all CU members over 13 years of age. Income taxes withheld and pension and retirement contributions are shown both annually and as deductions from the member's last paycheck. Income variables contain annual values for the 12 months prior to the interview month. 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. *CU AND MEMBER IDENTIFIERS*

VARIABLE	ITEM DESCRIPTION	START POSITION	FORMAT
NEWID	CU identification number. Digits 1-7 (CU sequence number, 0000001 through 9999999) uniquely identify the CU. Digit 8 is the week number, 1 or 2	1	NUM(8)
	BLS derived		
MEMBNO	Member number	135	NUM(2)
	S01 1		

b. *CHARACTERISTICS OF MEMBER*

VARIABLE	ITEM DESCRIPTION	START POSITION	FORMAT
CU_CODE1	What is the member's relationship to *(reference person)*? CODED 1 Reference person 2 Spouse 3 Child or adopted child 4 Grandchild 5 In-law 6 Brother or sister 7 Mother or father 8 Other related persons 9 Unrelated persons 0 Blank or illegible entry S01 4	70	CHAR(1)
CU_C_DE1		71	CHAR(1)
AGE	What is the member's date of birth? (Age is verified.) S01 9	9	NUM(2)
AGE_		11	CHAR(1)
RACE	What is the race of each person in this CU? CODED 1 White 2 Black 3 American Indian, Aleut, or Eskimo 4 Asian or Pacific Islander 5 Other S01 10	151	CHAR(1)
RACE_		152	CHAR(1)
SEX	Is the member male or female? CODED 1 Male 2 Female S01 6	174	CHAR(1)
SEX_		175	CHAR(1)
MARITAL	Is the member now . . . ? (Marital status) CODED 1 Married 2 Widowed 3 Divorced 4 Separated 5 Never married	133	CHAR(1)

S01 12

MARITAL_		134	CHAR(1)
ORIGIN	What is the member's ethnic origin or ancestry? CODED 1 European: German Italian Irish French Polish Russian English Scottish Dutch Swedish Hungarian 2 Spanish: Mexican American Chicano Mexican Puerto Rican Cuban Central or South American Other Spanish 3 Afro-American (Black or Negro) 4 Another group not listed / Don't know	140	CHAR(1)

S01 11

ORIGIN_		141	CHAR(1)
EDUCA	What is the highest level of school the member has completed or the highest degree the member has received? CODED 00 Never attended school 01-11 First grade through eleventh grade 38 Twelfth grade - no degree 39 High school graduate 40 Some college - no degree 41 Associate's degree (occupational/vocational) 42 Associate's degree (academic) 43 Bachelor's degree 44 Master's degree 45 Professional degree 46 Doctorate degree	72	CHAR(2)

S01 13a

EDUCA_		74	CHAR(1)
IN_COLL	Is the member currently enrolled in a college or university either . . .?	244	CHAR(1)

	CODED 1 Full time 2 Part time 3 Not at all S01 13b		
IN_COLL_		245	CHAR(1)
ARM_FORC	Is member now in the Armed Forces? CODED 1 Yes 2 No S01 14	242	CHAR(1)
ARM__ORC		243	CHAR(1)
SCHLNCHQ	During the previous 30 days, how many weeks did the member purchase meals at school or in a preschool program for preschool or school age children? S02 5b(d)	162	NUM(2)
SCHL_CHQ		164	CHAR(1)
SCHLNCHX	What is the usual weekly expense for the meals the member purchased at school? S02 5b(c)	165	NUM(8)
SCHL_CHX		173	CHAR(1)

c. *WORK EXPERIENCE OF MEMBERS*

VARIABLE	ITEM DESCRIPTION	START POSITION	FORMAT
WKS_WRKD	In the last 12 months, how many weeks did the member work either full or part time not counting work around the house? Include paid vacation and paid sick leave. S04A 2	225	NUM(2)
WKS__RKD		227	CHAR(1)
HRSPERWK	In the weeks that the member worked, how many hours did the member usually work per week? S04A 3	113	NUM(3)
HRSP_RWK		116	CHAR(1)
OCCULIST	The job in which member received the most earnings during the	137	CHAR(2)

past 12 months fits best in the following category

CODED

Manager, professional
- 01 Administrator, manager
- 02 Teacher
- 03 Professional

Administrative support, technical, sales
- 04 Administrative support, including clerical
- 05 Sales, retail
- 06 Sales, business goods and services
- 07 Technician

Service
- 08 Protective service
- 09 Private household service
- 10 Other service

Operator, assembler, laborer
- 11 Machine operator, assembler, inspector
- 12 Transportation operator
- 13 Handler, helper, laborer

Precision production, craft, repair
- 14 Mechanic, repairer, precision production
- 15 Construction, mining

Farming, forestry, fishing
- 16 Farming
- 17 Forestry, fishing, groundskeeping

Armed forces
- 18 Armed forces

S04A 4a

OCCU_IST		139	CHAR(1)
EMPLTYPE	Was the member . . . ? (Type of employee) Refers to job where member received the most earnings in the past 12 months.	75	CHAR(1)

CODED
- 1 An employee of a PRIVATE company, business, or individual working for wages or salary
- 2 A Federal government employee
- 3 A State government employee
- 4 A local government employee
- 5 Self-employed in OWN business, professional practice or farm
- 6 Working WITHOUT PAY in family business or farm,

S04A 4b

EMPL_YPE		76	CHAR(1)
WHYNOWRK	What was the main reason the member did not work during the past 12 months? Was the member . . .?	223	CHAR(1)

CODED
- 1 Retired

2 Taking care of home/family
3 Going to school
4 Ill, disabled, unable to work
5 Unable to find work
6 Doing something else

S04A 5

WHYN_WRK		224	CHAR(1)

d. *INCOME*

VARIABLE	ITEM DESCRIPTION	START POSITION	FORMAT
WAGEX	During the past 12 months, what was the amount of wages or salary income received before any deductions? S04A 6a	214	NUM(8)
WAGEX_		222	CHAR(1)
GROSPAYX	What was the gross amount of the member's last pay? S04A 9	95	NUM(8)
GROS_AYX		103	CHAR(1)
BSNSX	During the past 12 months, what was the amount of income or loss from the member's own nonfarm business, partnership or professional practice after expenses? *L S04A 6b	61	NUM(8)
BSNSX_		69	CHAR(1)
FARMX	During the past 12 months, what was the amount of income or loss from the member's own farm after expenses? *L S04A 6c	77	NUM(8)
FARMX_		85	CHAR(1)
ANYSSINC	During the past 12 months, did the member receive from the U.S. Government any money from Social Security checks? CODED 1 Yes 2 No S04A 7a	59	CHAR(1)

ANYS_INC		60	CHAR(1)
ANYRAIL	During the past 12 months, did the member receive from the U.S. Government any money from Railroad Retirement checks? CODED 1 Yes 2 No S04A 7b	57	CHAR(1)
ANYRAIL_		58	CHAR(1)
SOCRRX	Annual amount of Social Security and Railroad Retirement income received by member in past 12 months BLS derived	233	NUM(8)
SOCRRX_		241	CHAR(1)
SS_RRX	What was the amount of the last Social Security or Railroad Retirement payment received? (In past 12 months) S04A 7d	183	NUM(8)
SS_RRX_		191	CHAR(1)
MEDICARE	Is the amount of the last Social Security or Railroad Retirement payment received AFTER the deduction for a Medicare premium? CODED 1 Yes 2 No S04A 7e	246	CHAR(1)
MED_CARE		247	CHAR(1)
SS_RRQ	During the past 12 months, how many Social Security or Railroad Retirement payments did the member receive? S04A 7f	228	NUM(4)
SS_RRQ_		232	CHAR(1)
US_SUPP	During the past 12 months, did the member receive any Supplemental Security Income checks from the U.S. Government? CODED 1 Yes 2 No S04A 8a	212	CHAR(1)
US_SUPP_		213	CHAR(1)

STA_SUPP	During the past 12 months, did the member receive any Supplemental Security Income checks from the State or local government? CODED 1 Yes 2 No S04A 8b	192	CHAR(1)
STA__UPP		193	CHAR(1)
SUPPX	During the past 12 months, how much did the member receive in Supplemental Security Income checks altogether? (From U.S. Government and State or local Government) S04A 8b	203	NUM(8)
SUPPX_		211	CHAR(1)

e. *TAXES*

VARIABLE	ITEM DESCRIPTION	START POSITION	FORMAT
ANFEDTXX	Annualized amount of Federal income tax deducted from last pay ((FEDTXX/GROSPAYX) x WAGEX) BLS derived	12	NUM(8)
ANFE_TXX		20	CHAR(1)
FEDTXX	How much was deducted from the member's last pay for Federal income tax? S04A 10a	86	NUM(8)
FEDTXX_		94	CHAR(1)
ANSTATXX	Annualized amount of state and local income taxes deducted from last pay ((STATXX/GROSPAYX) x WAGEX) BLS derived	48	NUM(8)
ANST_TXX		56	CHAR(1)
STATXX	How much was deducted from the member's last pay for state and local income tax? S04A 10b	194	NUM(8)
STATXX_		202	CHAR(1)

f. *RETIREMENT AND PENSION DEDUCTIONS*

VARIABLE	ITEM DESCRIPTION	START POSITION	FORMAT
JSSDEDX	Estimated amount of income contributed to Social Security by member in past 12 months	126	NUM(6)
	BLS derived		
JSSDEDX_		132	CHAR(1)
SLFEMPSS	Amount of income contributed to Social Security by member if self-employed	176	NUM(6)
	BLS derived		
SLFE_PSS		182	CHAR(1)
ANRRX	Annualized amount of Railroad Retirement deducted from last pay ((RRX/GROSPAYX) x WAGEX)	39	NUM(8)
	BLS derived		
ANRRX_		47	CHAR(1)
RRX	How much was deducted from the member's last pay for Railroad Retirement?	153	NUM(8)
	S04A 10d		
RRX_		161	CHAR(1)
ANGVX	Annualized amount of Government Retirement deducted from last pay ((GVX/GROSPAYX) x WAGEX)	21	NUM(8)
	BLS derived		
ANGVX_		29	CHAR(1)
GVX	How much was deducted from the member's last pay for Government Retirement?	104	NUM(8)
	S04A 10e		
GVX_		112	CHAR(1)
ANPVTX	Annualized amount of private pensions deducted from last pay ((PVTX/GROSPAYX) x WAGEX)	30	NUM(8)
	BLS derived		
ANPVTX_		38	CHAR(1)
PVTX	How much was deducted from the member's last pay for private	142	NUM(8)

	pension fund?		
	S04A 10f		
PVTX_		150	CHAR(1)
IRAX	During the past 12 months, how much money did the member place in a retirement plan such as Individual Retirement Account (IRA & Keogh)? (Exclude rollovers)	117	NUM(8)
	S04A 13b		
IRAX_		125	CHAR(1)

3. ***DETAILED EXPENDITURES (EXPN) FILE***

In the "EXPN" file, each expenditure recorded by a CU in a weekly diary is identified by UCC, gift/nongift status, and day on which the expenditure occurred. UCC's are six digit codes that identify items or groups of items. (See Appendix 2.A for a listing of UCC's.) There may be more than one record for a UCC on a single day if that is what was reported in the diary. There are no missing values in this file. If no expenditure was recorded for the item(s) represented by a UCC, then there is no record for the UCC on file.

VARIABLE	ITEM DESCRIPTION	START POSITION	FORMAT
NEWID	CU identification number. Digits 1-7 (CU sequence number, 0000001 through 9999999) uniquely identify the CU. Digit 8 is the week number, 1 or 2 BLS derived	1	NUM(8)
ALLOC	Adjustment status for cost variable CODED 0 Not allocated or topcoded 1 Allocated, not topcoded 2 Topcoded and allocated 3 Topcoded, not allocated BLS derived	9	CHAR(1)
COST	Total cost of item, including sales tax BLS derived	10	NUM(12,5)
GIFT	Was item bought for someone outside the CU? CODED 1 Yes 2 No BLS derived	22	CHAR(1)

PUB_FLAG	Is cost included in published bulletin? CODED 1 Not published 2 Published in Integrated bulletin BLS derived	23	CHAR(1)
QREDATE	Purchase date recode field Consists of: Sequential day of the Diary week (1-7) Day of the week, Sunday through Saturday (1-7) Reference month of this expenditure, (01-12) Reference day of this expenditure, (01-31) Reference year of this expenditure, (00-99) BLS derived	24	CHAR(10)
QREDATE_		34	CHAR(1)
UCC	Universal Classification Code See Section XIII.A. Appendix A for a listing of EXPN UCC codes and titles BLS derived	35	CHAR(6)

4. ***INCOME (DTAB) FILE***

The "DTAB" file, also referred to as the "Income" file, contains CU characteristic and income data. This file is created directly from the FMLY file and contains the same annual and point-of-placement data. It was created to facilitate computer processing when linking CU income and demographic characteristic data with EXPN expenditure data. As such, the file structure is similar to EXPN. Each characteristic and income item is identified by UCC (See Section XIII.B for a listing of UCCs). There are no records with missing values in DTAB. If the corresponding FMLY file variable contained a missing value, there is no record for the UCC.

VARIABLE	ITEM DESCRIPTION	START POSITION	FORMAT
NEWID	CU identification number. Digits 1-7 (CU sequence number, 0000001 through 9999999) uniquely identify the CU. Digit 8 is the week number, 1 or 2 BLS derived	1	NUM(8)
UCC	Universal Classification Code See Section XIII for a listing of DTAB UCC codes and titles BLS derived	9	CHAR(6)
AMOUNT	Amount of UCC BLS derived	15	NUM(12)
AMOUNT_	CODED T – Topcoded	27	CHAR(1)

Blank -- Not topcoded

BLS derived

PUB_FLAG	Is amount included in published bulletin? CODED 1 Not published 2 Published in Integrated bulletin BLS derived	28	CHAR(1)

5. ***PROCESSING FILES***

a. ***AGGregation file***

X:\DIARY97\AGGD97.TXT (SD2)

The AGG file shows which UCCs go into each category listed in the sample table produced by the microdata file verification and estimation program. (See Section VII.A. SAMPLE PROGRAM). It designates each category with a unique 6-digit line number. It is formatted as follows:

DESCRIPTION	START POSITION	FORMAT
UCC (Universal Classification Code)	3	CHAR(6)
Line Number: represents a line in the sample table	15	CHAR(6)

b. ***LABel file***

X:\DIARY97\LABELD97.TXT (SD2)

The LABEL file assigns an identification label to each AGG file line number. It is formatted as follows:

DESCRIPTION	START POSITION	FORMAT
Line Number: represents a line in the sample table	1	CHAR(6)
Label: descriptive label in the sample table (with leading blanks)	10	CHAR(48)

c. ***UCC file***

x:\DIARY97\UCCD97.TXT (SD2)

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 8 CHAR(50)
See Section XIII.A. EXPENDITURE UCCS ON EXPN FILE and XIII.B. INCOME AND RELATED UCCS ON DTAB FILE for a list of UCCs and their full title by file -- expenditure (EXPN) or income (DTAB)

d. *SAMPLe program file*

x:\DIARY97\ SAMPLD97.TXT (SD2)

The SAMPLD97 file contains the computer program used in Section VII.A. SAMPLE PROGRAM of the documentation. This file has been created to provide programming assistance.

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 four quarters of data in the CE microdata release are used when calculating the critical value and topcode amount. If an observation is topcoded, the flag variable assigned to that observation is set to 'T'.

Since the critical value and the mean of the set of values outside the critical value may differ with each annual (four-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 four-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 FMLY file variables are subject to topcoding.

AGE_REF	Age of reference person
AGE2	Age of spouse
ADDFEDX	Amount of Federal income tax paid in addition to that withheld
ADDOTHX	Amount of other taxes paid but not reported elsewhere
ADDSTAX	Amount of state and local income tax paid in addition to that withheld
ALIOTHX	Amount received from regular contributions by all CU members
CHDLMPX	Amount received by all CU members for a lump sum child support payment in last 12 months
CHDOTHX	Amount received by all CU members in last 12 months for other child support
DIVX	Amount received from dividends, royalties, estates, or trusts
FEDREFX	Amount of refund from Federal income tax
INSREFX	Amount of refund from insurance policies
INTX	Amount received from interest on savings accounts, or bonds
LUMPX	Amount from lump sum payments from estates, trusts, royalties, alimony, child support, prizes, games of chance, or persons outside CU

OCCEXPNX	Amount paid by CU for occupational expenses, last 12 months
OTHINX	Amount from other money income, including money from care of foster children, cash scholarships and fellowships, or stipends, not based on working
OTHREFX	Amount of refund from other sources, including any other taxes
OTHRNTX	Amount of net income or loss received from other rental units
PENSIONX	Amount received from pensions or annuities from private companies, military or government, IRA or Keogh
PTAXREFX	Amount of refund from property taxes
ROOMX	Amount of net income or loss received from roomers or boarders
SALEX	Amount received from sale of household furnishings, equipment, clothing, jewelry, pets or other belongings, excluding sale of vehicles or property
SSREFX	Amount of refund from overpayment on Social Security
STATREFX	Amount of refund from state or local income tax
TAXPROPX	Amount of personal property taxes paid but not reported elsewhere

The critical values and topcode values associated with the above variables follow.

Variable	Upper critical value	Lower critical value	Upper topcode value	Lower topcode value
ADDFEDX	20,000	-	60,675	-
ADDOTHX	3,797	-	18,762	-
ADDSTAX	4,000	-	9,917	-
AGE_REF	90	-	93	-
AGE2	90	-	92	-
ALIOTHX	24,000	-	38,769	-
CHDLMPX	9,600	-	17,200	-
DIVX	30,000	-	209,139	-
FEDREFX	4,800	-	8,109	-
INSREFX	15,400	-	72,500	-
INTX	15,000	-	53,371	-
LUMPX	75,000	-	111,714	-
OCCEXPNX	1,981	-	10,455	-
OTHINX	25,000	-	95,724	-
OTHREFX	1,500	-	6,054	-
OTHRNTX	36,000	-17,000	51,539	-30,333
PENSIONX	45,000	-	65,545	-
PTAXREFX	1,500	-	4,000	-
ROOMX	20,000	-7,500	60,000	-22,500
SALEX	8,000	-	52,375	-
STATREFX	1,300	-	2,545	-
TAXPROPX	4,400	-	9,166	-

These variables will have a critical value, but no topcode amount. This implies that there are no observations outside the critical value on the current four-quarter release.

Variable	Upper critical value	Lower critical value	Upper topcode value	Lower topcode value
CHDOTHX	15,120	-	-	-
SSREFX	2,016	-	-	-

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.E.1.e. INCOME - III.E.1.h. RETIREMENT AND PENSION DEDUCTIONS for a list of component variables.)

EARNX	Amount of CU income from earnings before taxes
FBSNSX	Amount of income from non-farm business
FFARMX	Amount of income or loss received from own farm
FFEDTXX	Amount of Federal tax deducted from last pay, annualized for all CU members
FGVX	Amount of government retirement deducted from last pay, annualized for all CU members
FINCAFTX	Amount of CU income after taxes
FINCBEFX	Amount of CU income before taxes
FIRAX	Amount of money placed in individual retirement plan
FJSSDEDX	Estimated amount of annual Social Security contribution
FPVTX	Amount of private pension fund deducted from last pay, annualized for all CU members
FRRX	Amount of Railroad Retirement deducted from last pay, annualized for all CU members
FSTATXX	Amount of State and local income taxes deducted from last pay, annualized for all CU members
FWAGEX	Amount received from wage and salary income before deduction
NONERNX	Amount of income from sources other than earnings before taxes
OTHRECX	Amount of other money receipts excluded from family income
PERSTAX	Amount of personal taxes paid

Here are some examples of situations that may occur. The value for the variable FBSNSX (family income from nonfarm business) is computed as the sum of the values reported for the variable BSNSX (member income from nonfarm business) from the MEMB file. BSNSX is subject to topcoding beyond the critical value of $100,000 (-$100,000). The topcode value for BSNSX is $322,083 (-$200,000). (See Section IV.B. MEMBER CHARACTERISTICS AND INCOME FILE (MEMB)).

		BSNSX		**FBSNSX**	
CU		*REPORTED*	*AFTER TOPCODING*	*VALUE*	*FLAGGED AS TOPCODED?*
CU 1:	MEMB1	$100,000	$100,000		
	MEMB2	100,000	100,000	200,000	No
CU 2:	MEMB1	310,000	322,083		
	MEMB2	-110,000	-200,000	122,083	Yes
CU 3	MEMB1	160,000	322,083		
	MEMB2	60,000	60,000	382,083	Yes
CU 4	MEMB1	150,000	322,083		
	MEMB2	-250,000	-200,000	122,083	Yes

While CUs 1 and 2 each originally report $200,000 in BSNSX, topcoding is done only on the values reported by the members of CU2. Thus, the value for FBSNSX for CU2 is lower 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 CU2 has a topcoded value below the reported value, CU3’s topcoded FBSNSX value ($382,083) is higher than the amount that it reported ($220,000). The case of CU4 demonstrates that the reported value for FBSNSX can be negative, while the topcoded value

can be positive. This is due to a topcoded positive BSNSX value for MEMB1 that is large enough to change total CU income from negative to positive. The reverse can also occur.

The value of the variable, STATE, which identifies 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-a-vis variables POPSIZE, REGION, and BLS_URBN, which show the population size of the geographic area that is sampled, the four Census regions, and the urban/rural status respectively. Some STATE codes were suppressed because, in combination with these variables, they could be used to identify areas of 100,000 or less. On approximately 17 percent of the records on the FMLY files the STATE variable is blank. The STATE flag (STATE_) is given a value of 'T' if STATE is suppressed.

A small proportion of STATE codes are replaced with codes of states other than the state where the CU resides. By re-coding in this manner, suppression of POPSIZE and REGION may be avoided. (In past releases selected observations of POPSIZE and REGION also required suppression.) If an observation of a CU's state of residence is re-coded with another state's code, the flag variable (STATE_) of the re-coded state is assigned an 'R'. The flag variable is also assigned an 'R' for either all or a portion of other observations from that state. In total, approximately 4% of observations of STATE_ are assigned an 'R'.

01	Alabama	*28	Mississippi
02	Alaska	**29	Missouri
RR04	Arizona	31	Nebraska
*05	Arkansas	R32	Nevada
**06	California	R33	New Hampshire
08	Colorado	34	New Jersey
09	Connecticut	*35	New Mexico
10	Delaware	RR**36	New York
R11	District of Columbia	**37	North Carolina
**12	Florida	RR39	Ohio
**13	Georgia	**40	Oklahoma
15	Hawaii	**41	Oregon
16	Idaho	42	Pennsylvania
**17	Illinois	45	South Carolina
RR**18	Indiana	*46	South Dakota
*19	Iowa	**47	Tennessee
**20	Kansas	48	Texas
21	Kentucky	49	Utah
22	Louisiana	50	Vermont
R*23	Maine	**51	Virginia
24	Maryland	**53	Washington
25	Massachusetts	R54	West Virginia
**26	Michigan	55	Wisconsin
**27	Minnesota		

* indicates that the STATE code has been suppressed for all sampled CUs in that state (STATE_ = 'T' for all observations).

** indicates that the STATE code has been suppressed for some sampled CUs in that state (STATE_ = 'T' for some observations).

R indicates that either all observations from this state have been re-coded or all strata[1] of observations from this state include "re-codes" from other states.

RR indicates that either some observations from this state have been re-coded or at least one stratum[1] of observations from this state includes "re-codes" from other states.

R* indicates that the STATE code has been suppressed for some sampled CUs in that state and, either STATE has been re-coded or the state includes "re-codes" from other states in all strata[1].

RR** indicates that the STATE code has been suppressed for some sampled CUs in that state and, either STATE has been re-coded or the state includes “re-codes” from other states in at least one stratum[1].

[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 MEMB file variables are subject to topcoding.

AGE	Age of member
ANFEDTXX	Annual amount of Federal income tax deducted from pay
ANGVX	Annual amount of government retirement deducted from pay
ANPVTX	Annual amount of private pension fund deducted from pay
ANRRX	Annual amount of Railroad Retirement deducted from pay
ANSTATXX	Annual amount of state and local income taxes deducted from pay
BSNSX	Amount of income or loss received from nonfarm business
FARMX	Amount of income or loss received from own farm
FEDTXX	Amount of Federal income tax deducted from last pay
GROSPAYX	Amount of last gross pay
GVX	Amount of government retirement deducted from last pay
IRAX	Amount of money placed in an individual retirement plan
JSSDEDX	Estimated annual Social Security contribution
PVTX	Amount of private pension fund deducted from last pay
RRX	Amount of Railroad Retirement deducted from last pay
SLFEMPSS	Amount of self-employment Social Security contributions
STATXX	Amount of state and local income taxes deducted from last pay
WAGEX	Amount received from wage and salary income before deductions

The critical values and topcode values associated with the above variables follow.

Variable	Upper critical Value	Lower critical Value	Upper topcode value	Lower topcode value
AGE	90	-	94	-
ANFEDTXX	16,064	-	27,447	-
ANGVX	6,000	-	7,280	-
ANPVTX	9,579	-	13,295	-
ANSTATXX	5,455	-	8,928	-
BSNSX	100,000	-100,000	322,083	-200,000
FARMX	42,000	-10,000	85,000	-123,614
FEDTXX	800	-	3,046	-
GROSPAYX	4,500	-	17,644	-
GVX	435	-	487	-
IRAX	12,000	-	57,899	-
JSSDEDX	5,577	-	7,991	-
PVTX	500	-	2,534	-
RRX	300	-	439	-
SLFEMPSS	11,010	-	19,366	-
STATXX	250	-	720	-
WAGEX	80,000	-	119,899	-

This variable has a critical value, but no topcode amount. This implies there are no observations outside the critical value on the current four-quarter release.

Variable	Upper critical Value	Lower critical Value	Upper topcode value	Lower topcode value
ANRRX	8,000	-	-	-

Special suppression for MEMB file variables

The five MEMB file variables--FEDTXX, GVX, PVTX, RRX, and STATXX--describe deductions from the most recent pay. These variables are used in conjunction with GROSPAYX (amount of last gross pay) and WAGEX (annual wage and salary income) to derive ANFEDTXX, ANGVX, ANPVTX, ANRRX, and ANSTATXX, 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) ANFEDTXX = (WAGEX (FEDTXX/GROSPAYX)).

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

(2) WAGEX = (ANFEDTXX (GROSPAYX/FEDTXX)).

In the above example, a problem with disclosure may arise when neither ANFEDTXX, GROSPAYX, nor FEDTXX (calculation components) are topcoded, *but WAGEX is*. In this situation WAGEX can be recalculated to obtain its original value by inserting the non-topcoded values into equation (2) and solving it. 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 WAGEX is greater than the critical value but ANFEDTXX, GROSPAYX, and FEDTXX are not, then the values for ANFEDTXX, GROSPAYX, and FEDTXX are suppressed and their flag variables are assigned a value of 'T'.

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

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

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

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

C. DETAILED EXPENDITURE FILE (EXPN)

The EXPN variable COST is subject to topcoding for the following UCCs.

UCC	Description
001000	Purchase price of stocks, bonds, mutual funds
210110	Rent of dwelling, includes parking fees
210210	Lodging away from home
210310	Housing for someone at school
210900	Ground or land rent
550320	Medical equipment for general use
550330	Supportive convalescent or medical equipment
560110	Physicians' services
560210	Dental services
560310	Eyecare services
560330	Lab tests and x-rays
570000	Hospital care not specified
570220	Nursing or convalescent home care
570230	Other medical care service
570901	Rental of medical equipment

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

Variable	Upper critical value	Lower critical value	Upper topcode value	Lower topcode value
210110	1,075	-	1,486	-
210210	437	-	667	-
560110	200	-	419	-
560210	738	-	1,323	-
560310	289	-	638	-
570000	801	-	2,322	-
570230	57	-	195	-
570901	100	-	406	-

These UCCs have a critical value but no topcode amount. This implies that there are no observations outside the critical value on the current four-quarter release.

Variable	Upper critical value	Lower critical value	Upper topcode value	Lower topcode value
001000	2,300	-	-	-
210310	2,586	-	-	-
210900	1,333	-	-	-
550320	300	-	-	-
550330	580	-	-	-
560330	442	-	-	-
570220	3,000	-	-	-

D. INCOME FILE (DTAB)

The DTAB variable AMOUNT is subject to topcoding for the following UCCs.

UCC	Description
900040	Amount received from pensions or annuities
900050	Amount received from regular income from dividends, royalties, estates or trusts
900060	Amount received from net income or loss received from roomers or boarders
900070	Amount received from net income or loss received from other rental units
900080	Amount received from interest on savings accounts or bonds
900131	Amount received from other child support payments
900132	Amount received from other regular contributions, including alimony
900140	Amount received from other money income
910000	Amount received from lump sum payments from estates, trusts, etc.
910010	Amount received from money from sale household furnishings etc.
910020	Amount of overpayment on Social Security
910030	Amount of refund from insurance policies
910040	Amount of refunds from property taxes
910041	Amount received from lump sum child support payments received
950000	Amount of Federal income tax paid
950001	Amount received from Federal income tax refunds
950010	Amount received from State/local income tax
950011	Amount received from State/local income tax refunds
950021	Amount of other taxes paid
950022	Amount of personal property taxes paid
950023	Amount of other tax refund received from other sources
980020	Age of reference person

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

Variable	Upper critical Value	Lower critical Value	Upper topcode value	Lower topcode value
900040	45,000	-	65,545	-
900050	30,000	-	209,139	-
900060	20,000	-7,000	60,000	-22,500
900070	36,000	-17,000	51,539	-30,333
900080	15,000	-	53,371	-
900132	24,000	-	38,769	-
900140	25,000	-	95,724	-
910000	75,000	-	111,714	-
910010	8,000	-	52,375	-
910030	15,400	-	72,500	-
910040	1,500	-	4,000	-
910041	9,600	-	17,200	-
950001	-	-4,800	-	-8,109
950011	-	-1,300	-	-2,545
950021	3,797	-	18,762	-
950022	4,400	-	9,166	-
950023	-	-1,500	-	-6,054

980020	90	-	93	-

These UCCs have a critical value but no topcode amount. This implies that there are no observations outside the critical value on the current four-quarter release.

Variable	Upper critical value	Lower critical value	Upper topcode value	Lower topcode value
900131	15,120	-	-	-
910020	2,016	-	-	-

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

UCC	FMLY variable	Description
800910	FGVX	Amount of government retirement deducted from last pay, annualized for all CU members
800920	FRRX	Amount of Railroad Retirement deducted from last pay, annualized for all CU members
800931	FPVTX	Amount of private pension fund deducted from last pay, annualized for all CU members
800932	FIRAX	Amount of money placed in individual retirement plan
800940	FJSSDEDX	Estimated amount of annual Social Security contribution
900000	FWAGEX	Amount received from wage and salary income before deduction
900010	FBSNSX	Amount of income from non-farm business
900020	FFARMX	Amount of income or loss received from own farm
980000	FINCBEFX	Amount of CU income before taxes
980070	FINCAFTX	Amount of CU income after taxes

V. ESTIMATION PROCEDURE

This section provides users of the CE Diary microdata files with procedures for estimating means and variances of data associated with any U.S. subpopulation. The production of *Consumer Expenditures in 1997*, *Report 927* (1998) used an integration methodology which incorporated information from both Diary and Interview Surveys. In addition, users will not be able to match all values because of suppression of some values, due to topcoding. See the topcoding and other nondisclosure requirements in Section IV.

A. DEFINITION OF TERMS

Consider the following general situation. We wish to estimate expenditures on certain food items for a special group (subpopulation) of U.S. CUs; for example, all CUs of three persons. Our specific objective is to estimate the expenditures for item *k* over a period of *q* months, where data collected over *r* months are used in the estimate. The following definitions will be helpful in formulating the above type of estimate.

Definition of Terms:

Let

S = all CUs in the subpopulation of interest
x = expenditure item(s) of interest
q = number of months for which estimate is desired
r = number of months in which expenditures were made to be used in calculating the estimate
D = number of days in each of the months in which expenditures were made
j = individual CU in subpopulation S
t = month of expenditure

Then

$X_{(j,k,t)}$ = the amount of money $CU_{(j)}$ spent on item *k* for a week during month *t*
$W_{(j,t,F21)}$ = the weight assigned to $CU_{(j)}$ during month *t*

The F21 denotes FINLWT21 which is used for population estimates.

NOTE: The CUs on the Diary Survey microdata files represent the U.S. population. Some CUs represent more of the population than others; and hence carry more weight. The weight, $W_{(j,t,F21)}$, is a complex estimate of this representation. Refer to Section X.C. WEIGHTING for an explanation of weights. The weights have been adjusted so that the sum of all CU weights for one month approximates one third of the U.S. population. Consequently, the weights for three months (one quarter) of data approximate the total U.S. population.

Using the above terminology, we may define:

$X_{(S,k)(q,r)}$ as an estimate for the expenditures of subpopulation *S* on item *k* over a period of *q* months, where data collected over *r* months are used.

and

$\overline{X}_{(S,k)(q,r)}$ as an estimate of the mean expenditures of subpopulation *S* on item *k* over a period of *q* months, where data collected over *r* months are used.

B. ESTIMATION OF TOTAL AND MEAN EXPENDITURES

As an example, let us estimate total expenditures on milk (item *k*) of subpopulation *S* over a 12-month period. Data collected over 6 months will be used to make the estimate. Users may use less than 12 months of data to perform seasonal calculations. In the notation described above, the estimate is $X_{(S,k)(12,6)}$.

$$X_{(S,k)(12,6)} = 3\left(12/6\right)\sum_{t=1}^{6}\left(\sum_{j=1}^{n}\left(\frac{D_{(t)}}{7}\right)W_{(j,t,F21)}X_{(j,k,t)}\right)_t \qquad (1a)$$

where the inner summation sums expenditures for all *j* in *S*, indexed from *j* = 1 through *n* and the outer summation sums over months *t* = 1 through 6. The factor "3" compensates for the fact that the weights for the CUs visited in one month have been adjusted to represent one third of the U.S. population. The factor "12" reflects our desire to estimate expenditures over a 12-month period; and the "6" is the

adjustment made because data for 6 months are used. Since the data $X_{(j,k,t)}$ are in terms of weekly expenditures, the factors, (number of days in the month)/7, are used to convert weekly expenditures into their monthly equivalents.

The above formula can be generalized to estimate the total expenditures of subpopulation *S* on item *k* for *q* months, but using data collected over *r* months. The generalization is

$$X_{(S,k)(q,r)} = 3\left(q/r\right)\sum_{t=1}^{r}\left(\sum_{j=1}^{n}\left(\frac{D_{(t)}}{7}\right)W_{(j,t,F21)}X_{(j,k,t)}\right)_t \qquad (1b)$$

where the inner summation sums expenditures for all *j* in *S*, indexed from *j* = 1 through *n* and the outer summation sums over months *t* = 1 through *r*.

An estimate for the expenditures for two or more items may be obtained by summing those expenditures at the CU level and then proceeding as before.

The next example will give an estimate, $\overline{X}_{(S,k)(12,6)}$, of mean expenditures over twelve months (*q*), on item *k*, of CUs in subpopulation *S*, where data collected over a six month period (*r*) are used. The result is

$$\overline{X}_{(S,k)(12,6)} = \frac{3\left(12/6\right)\sum_{t=1}^{6}\left(\sum_{j=1}^{n}\left(\frac{D_{(t)}}{7}\right)W_{(j,t,F21)}X_{(j,k,t)}\right)_t}{\frac{3\sum_{t=1}^{6}\left(\sum_{j=1}^{n}W_{(j,t,F21)}\right)_t}{6}} \qquad (2a)$$

where the numerator is an estimate of aggregate expenditures as formulated in equation (1a), and where the denominator is an estimate of the population of CUs in the U.S. during the six-month period for which the expenditure data are collected. The inner summation in the denominator of (2a) sums FINLWT21 for a given month (*t*), for all *j* in *S*, indexed from *j* = 1 through *n,* and the outer summation in the denominator of (2a) sums over months *t* = 1 through 6. As in the estimate of aggregate expenditures, the factor "3" to the left of the outer summation in the denominator of equation (2a) adjusts FINLWT21 to represent the entire population for each month of data used. The proper U.S. population count is arrived at by dividing the denominator by *r*, or in this case "6", (representing the 6 month period of collected data in this example).

The above formula generalizes to $\overline{X}_{(S,k)(q,k)}$, (i.e., the estimate of the mean expenditure by subpopulation *S* on item *k* for *q* months using data collected over *r* months). In detail:

$$\overline{X}_{(S,k)(q,r)} = \frac{q\sum_{t=1}^{r}\left(\sum_{j=1}^{n}\left(\frac{D_{(t)}}{7}\right)W_{(j,t,F21)}X_{(j,k,t)}\right)_t}{\sum_{t=1}^{r}\left(\sum_{j=1}^{n}W_{(j,t,F21)}\right)_t} \qquad (2b)$$

Note: The factors "3" (adjustment of FINLWT21 to one U.S. population) and "6", (number of months, *r*, for which the data are collected), which appear both in the numerator and the denominator of (2a), cancel. These scalars are dropped from the general form of $\overline{X}_{(S,k)(q,r)}$.

The estimates for total ($X_{(S,k)(q,r)}$) and mean expenditures ($\overline{X}_{(S,k)(q,r)}$) are based on all CUs; not just the CUs with positive expenditures for item *k*. Consider the calculation for the mean expenditure of tobacco. The formula $\overline{X}_{(S,k)(q,r)}$ includes all CUs, both smoking and nonsmoking. One might be more interested in the mean expenditures on tobacco but only for those CUs that actually have expenditures. This can be accounted for by properly defining the initial subpopulation *S* so as to restrict it to CUs with positive tobacco expenditures.

C. ESTIMATION OF MEAN ANNUAL INCOME

Let $\overline{Z}_{(S,r)}$ be an estimate of the mean annual income of CUs in subpopulation S, where income data collected over r months is to be used.

Let $Z_{(j,t)}$ = the annual income reported by $CU_{(j)}$ in month *t*. Then the estimated mean annual income is

$$\overline{Z}_{(S,r)} = \frac{\sum_{t=1}^{r}\left(\sum_{j=1}^{n} W_{(j,t,F21)} Z_{(j,t)}\right)_t}{\sum_{t=1}^{r}\left(\sum_{j=1}^{n} W_{(j,t,F21)}\right)_t}$$

VI. RELIABILITY STATEMENT

A. DESCRIPTION OF SAMPLING ERROR AND NONSAMPLING ERROR

Sample surveys are subject to two types of errors, sampling and nonsampling. 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 enables 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 for 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 expenditure obtained in the Diary Survey are generally lower than the "true" level due to the above factors.

B. ESTIMATING SAMPLING ERROR

1. ***VARIANCE ESTIMATION***

Variance estimation can be done in many ways. The method illustrated below (a pseudo-replication technique) is chosen because it is accurate yet simple to understand. The basic idea is to artificially construct several "subsamples" from the original sample data. This construction is done in a manner so that the variance information of the original data is preserved in these subsamples. These subsamples (or pseudo-replications) can then be used to obtain approximate variances for the estimates.

The Diary microdata files contain information that facilitates this form of variance estimation procedure. Specifically, 45 weights are associated with each CU. The forty-fifth weight, called FINLWT21 at BLS, (which is the weight for the total sample) is used for estimations of total or mean expenditures. The other weights (replicates 1 through 44) are used for variance estimation of the totals or means. Note that half of the weights in each replicate are zero. This reflects the fact that in this technique only half the CUs are used in each of the 44 pseudo-replicates. Recall that $X_{(S,k)(q,r)}$ is an estimate for the expenditures of subpopulation *S* on item *k* over a period of *q* months, where data collected over *r* months are used. This notation does not reveal the fact that 45 replicate weights are to be used for estimation of variance. We expand the notation to include this information. Specifically, let

$X_{(S,k)(q,r),a}$ = an estimate of the same quantity as $X_{(S,k)(q,r)}$, but using the weights of the a^{th} replicate.

That is $X_{(S,k)(q,r),a}$ is an estimate of the total expenditures by CUs in subpopulation *S* on item *k* over *q* months using *r* months of collection data, and where the weights from the a^{th} replicate are used. Note that the estimate using any one of the first 44 replicate weights only uses part of the data; hence in general $X_{(S,k)(q,r),a}$ is not equal to $X_{(S,k)(q,r)}$.

An estimate for the variance of $X_{(S,k)(q,r)}$ (denoted by $V(X_{(S,k)(q,r)})$ can be calculated using the following formula:

$$V(X_{(S,k)(q,r)}) = \frac{1}{44}\sum_{a=1}^{44}\left(X_{(S,k)(q,r),a} - X_{(S,k)(q,r)}\right)^2$$

Estimates for the variances of $\overline{X}_{(S,k)(q,r)}$ and $\overline{Z}_{(S,r)}$ are similar and are given below.

$$V\left(\overline{X}_{(S,k)(q,r)}\right) = \frac{1}{44}\sum_{a=1}^{44}\left(\overline{X}_{(S,k)(q,r),a} - \overline{X}_{(S,k)(q,r)}\right)^2$$

and

$$V\left(\bar{Z}_{(S,r)}\right) = \frac{1}{44}\sum_{a=1}^{44}\left(\bar{Z}_{(S,r),a} - \bar{Z}_{(S,r)}\right)^2$$

where $\bar{X}_{(S,k)(q,r),a}$ and $\bar{Z}_{(S,r),a}$ are estimates similar to $\bar{X}_{(S,k)(q,r)}$ and $\bar{Z}_{(S,r)}$ except weights of the a^{th} replicates are used.

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

The standard error of the mean, *S.E.*($\bar{X}$), is defined as the square root of the variance 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. For example, the average weekly expenditures for beef for total complete income reporters in 1997 was $4.35. The standard error for this estimate is $.15. Hence, the 95 percent confidence interval around this estimate is from $4.05 to $4.65. Therefore, we could conclude with 95 percent confidence that the mean weekly expenditures for beef for total complete income reporters in 1997 lies within the interval $4.05 to $4.65.

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

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

For example, in 1997 the average weekly expenditures for food for complete income reporters in the second income quintile was $67.44 and for complete income reporters in the third income quintile was $80.76. The apparent difference between the two mean expenditures is $80.76 – $67.44 = $13.32. The standard error on the estimate of $67.44 is $1.61 and the estimated standard error for $80.76 is $2.23. The standard error (S.E.) of a difference is approximately equal to

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

where

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

This assumes that $\bar{x}_1$ and $\bar{x}_2$ are disjoint subsets of the population. Hence, the standard error of the difference in food expenditures between the second and third income quintile groups of complete income reporters is about

$$\sqrt{\left((2.23)^2 + (1.61)^2\right)} = 2.75$$

This means that the 95 percent confidence interval around the difference is from $7.82 to $18.82. Since this interval does not include zero, we can conclude with 95 percent confidence that the mean

weekly food expenditures for the third income quintile group of complete income reporters is greater than the mean weekly food expenditures for the second income quintile group.

Analyses of the difference between two estimates can also be performed on nondisjoint sets of population, where one is a subset of the other. The formula for computing the standard error (S.E.) of the difference between two nondisjoint estimates is

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

where

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

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

4. ***STANDARD ERROR OF THE DIFFERENCE BETWEEN TWO MEANS***

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

For example, in 1985 the average weekly expenditures for food for complete income reporters in the second income quintile was $44.17 and for complete income reporters in the third income quintile was $55.83. The apparent difference between the two mean expenditures is $55.83 - $44.17 = $11.66. The standard error on the estimate of $44.17 is $1.36 and the estimated standard error for $55.83 is $1.55. The standard error (S.E.) of a difference is approximately equal to

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

where

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

This assumes that $\bar{x}_1$ and $\bar{x}_2$ are disjoint subsets of the population. Hence, the standard error of the difference in food expenditures between the second and third income quintile groups of complete income reporters is about

$$\sqrt{\left((1.55)^2 + (1.36)^2\right)} = 2.06$$

This means that the 95 percent confidence interval around the difference is from $7.54 to $15.78. Since this interval does not include zero, we can conclude with 95 percent confidence that the mean weekly food expenditures for the third income quintile group of complete income reporters is greater than the mean weekly food expenditures for the second income quintile group.

Analyses of the difference between two estimates can also be performed on nondisjoint sets of population, where one is a subset of the other. The formula for computing the standard error (S.E.) of the difference between two nondisjoint estimates is

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

where

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

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

VII. MICRODATA VERIFICATION AND ESTIMATION METHODOLOGY

This section is designed to help users become familiar with the microdata files. The following program gives users a benchmark to verify that their copy of the CD-ROM contains valid data, illustrate the methodology CE uses in producing publication tables, and offer an example of coding to access the data and produce a sample table. The program is written in SAS and utilizes the ASCII datasets available on this CD-ROM. A program written in SAS but utilizing the SAS datasets is also present on the CD-ROM but will not be referenced here. Refer to the table following the program 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.E. DETAILED VARIABLE DESCRIPTIONS in this documentation.

This program produces a table of selected expenditures by income class of the Consumer Unit (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 EXPN and DTAB files. These three datasets are then used along with the AGG and LABEL processing files 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
3   %let y =97;
4
5   filename fmly1 "x:\diary&y\fmlyd&y.1.txt";
6   filename fmly2 "x:\diary&y\fmlyd&y.2.txt";
7   filename fmly3 "x:\diary&y\fmlyd&y.3.txt";
8   filename fmly4 "x:\diary&y\fmlyd&y.4.txt";
9
10   filename dtab1 "x:\diary&y\dtabd&y.1.txt";
11   filename dtab2 "x:\diary&y\dtabd&y.2.txt";
12   filename dtab3 "x:\diary&y\dtabd&y.3.txt";
13   filename dtab4 "x:\diary&y\dtabd&y.4.txt";
14
15   filename expn1 "x:\diary&y\expnd&y.1.txt";
16   filename expn2 "x:\diary&y\expnd&y.2.txt";
17   filename expn3 "x:\diary&y\expnd&y.3.txt";
18   filename expn4 "x:\diary&y\expnd&y.4.txt";
19
20   filename agg "x:\diary&y\aggd&y..txt";
21   filename labls "x:\diary&y\labeld&y..txt";
22
23
24
25   options linesize=153 pagesize=52 missing='';
26
27
28
29   data fmly1;
30      infile fmly1 lrecl=1549;
31      input @1 newid 8. @148 finlwt21 11.3
32            @1516 inclass $2.;

NOTE: The infile FMLY1 is:
      FILENAME=x:\diary97\fmlyd971.txt,
      RECFM=V,LRECL=1549

NOTE: 2836 records were read from the infile
FMLY1.
      The minimum record length was 1549.
      The maximum record length was 1549.
NOTE: The data set WORK.FMLY1 has 2836
observations and 3 variables.

33      proc sort; by newid;
34

NOTE: The data set WORK.FMLY1 has 2836
observations and 3 variables.

35   data fmly2;
36      infile fmly2 lrecl=1549;
37      input @1 newid 8. @148 finlwt21 11.3
```

Line 3 sets the year as a macro variable that can be used throughout the program.

Lines 5-18 designate the location of the data on the cd-rom.

Lines 20-21 designate the location of the two processing files.

Line 25 forces the output to be printed landscape.

Lines 29-51 pull in the necessary variables from the fmly files. Newid is the code given to a consumer unit each time it participates. Finlwt21 will be 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.

```
38          @1516 inclass $2.;

NOTE: The infile FMLY2 is:
      FILENAME=x:\diary97\fmlyd972.txt,
      RECFM=V,LRECL=1549

NOTE: 2671 records were read from the infile
FMLY2.
      The minimum record length was 1549.
      The maximum record length was 1549.
NOTE: The data set WORK.FMLY2 has 2671
observations and 3 variables.


39     proc sort; by newid;
40

NOTE: The data set WORK.FMLY2 has 2671
observations and 3 variables.


41   data fmly3;
42     infile fmly3 lrecl=1549;
43     input @1 newid 8. @148 finlwt21 11.3
44           @1516 inclass $2.;

NOTE: The infile FMLY3 is:
      FILENAME=x:\diary97\fmlyd973.txt,
      RECFM=V,LRECL=1549

NOTE: 2606 records were read from the infile
FMLY3.
      The minimum record length was 1549.
      The maximum record length was 1549.
NOTE: The data set WORK.FMLY3 has 2606
observations and 3 variables.

45     proc sort; by newid;
46

NOTE: The data set WORK.FMLY3 has 2606
observations and 3 variables.


47   data fmly4;
48     infile fmly4 lrecl=1549;
49     input @1 newid 8. @148 finlwt21 11.3
50           @1516 inclass $2.;

NOTE: The infile FMLY4 is:
      FILENAME=x:\diary97\fmlyd974.txt,
```

```
RECFM=V,LRECL=1549
NOTE: 3669 records were read from the infile
FMLY4.
      The minimum record length was 1549.
      The maximum record length was 1549.
NOTE: The data set WORK.FMLY4 has 3699
observations and 3 variables.


51      proc sort; by newid;
52
53

NOTE: The data set WORK.FMLY4 has 3669
observations and 3 variables.


54   data fmlyall;
55      set fmly1 fmly2 fmly3 fmly4 ;
56         by newid;
57
58      uspop  = finlwt21 / 4;

NOTE: The data set WORK.FMLYALL has 11782
observations and 4 variables.


59      proc sort; by newid;
60

NOTE: The data set WORK.FMLYALL has 11782
observations and 4 variables.


61      proc summary nway data = fmlyall
(drop=finlwt21);
62         class inclass;
63         var uspop;
64         output out = newpop sum = popus;

NOTE: The data set WORK.NEWPOP has 10
observations and 4 variables.


65      proc transpose data = newpop out = transpop
prefix = pop;
66         var popus;
67

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

Lines 54-56 bring each of the 4 quarters of fmly datasets together.

Line 58 divides finlwt21 by 4 so that summing uspop later will yield the total U.S. population. (Since summing finlwt21 for each quarter will yield one U.S. population, this adjustment is necessary).

Lines 61-73 create the total population weights by income group that will be used as the denominator in calculating the average annual expenditures later in the program and prints them.

Lines 65-66 transpose the newpop dataset to match the format of the PUBRAY data set that it will be matched with later in the program.

```
68   data subagg (drop = _name_);
69        set transpop;
70         popt = sum (of pop1-pop10);
71         popc = sum (of pop1-pop9);

NOTE: The data set WORK.SUBAGG has 1
observations and 12 variables.


72        proc print data=subagg;
73        title "Population Counts for 19&y";
74
75
76

77   data dtab1;
78      infile dtab1 lrecl=28;
79      input @1 newid 8. @9 ucc $6. @15 amount 12.
;

NOTE: The infile DTAB1 is:
      FILENAME=x:\diary97\dtabd971.txt,
      RECFM=V,LRECL=28

NOTE: 45010 records were read from the infile
DTAB1.
      The minimum record length was 28.
      The maximum record length was 28.
NOTE: The data set WORK.DTAB1 has 45010
observations and 3 variables.

80      proc sort; by newid;
81

NOTE: The data set WORK.DTAB1 has 45010
observations and 3 variables.

82   data dtab2;
83      infile dtab2 lrecl=28;
84      input @1 newid 8. @9 ucc $6. @15 amount 12.
;

NOTE: The infile DTAB2 is:
      FILENAME=x:\diary97\dtabd972.txt,
      RECFM=V,LRECL=28

NOTE: 42289 records were read from the infile
DTAB2.
      The minimum record length was 28.
      The maximum record length was 28.
NOTE: The data set WORK.DTAB2 has 42289
observations and 3 variables.
```

Lines 68-71 take the transposed dataset and calculate popt, the all consumer units population, and popc, the all complete income reporters population.

Lines 77-95 pull in the dtab files. Newid is the consumer unit code. Ucc is a code that represents the type of income variable. Amount is the value that corresponds to the ucc code.

```
85      proc sort; by newid;
86
```

NOTE: The data set WORK.DTAB2 has 42289
observations and 3 variables.

```
87   data dtab3;
88      infile dtab3 lrecl=28;
89      input @1 newid 8. @9 ucc $6. @15 amount 12.
;
```

NOTE: The infile DTAB3 is:
FILENAME=x:\diary97\dtabd973.txt,
RECFM=V,LRECL=28

NOTE: 41077 records were read from the infile
DTAB3.
The minimum record length was 28.
The maximum record length was 28.
NOTE: The data set WORK.DTAB3 has 41077
observations and 3 variables.

```
90      proc sort; by newid;
91
```

NOTE: The data set WORK.DTAB3 has 41077
observations and 3 variables.

```
92   data dtab4;
93      infile dtab4 lrecl=28;
94      input @1 newid 8. @9 ucc $6. @15 amount 12.
;
```

NOTE: The infile DTAB4 is:
FILENAME=x:\diary97\dtabd974.txt,
RECFM=V,LRECL=28

NOTE: 56792 records were read from the infile
DTAB4.
The minimum record length was 28.
The maximum record length was 28.
NOTE: The data set WORK.DTAB4 has 56792
observations and 3 variables.

```
95      proc sort; by newid;
97
```

NOTE: The data set WORK.DTAB4 has 56792
observations and 3 variables.

```
97   data dtab(rename=(amount=cost));
98      set dtab1 dtab2 dtab3 dtab4 ;
99        by newid;
```

Lines 97-99 bring the 4 quarters of dtab datasets together. The variable amount is renamed cost so that it can be merged with the expn datasets later in the program.

```
NOTE: The data set WORK.DTAB has 185168
observations and 3 variables.

100     proc sort; by newid;

NOTE: The data set WORK.DTAB has 185168
observations and 3 variables.


101     proc datasets;
101                 delete dtab1 dtab2 dtab3 dtab4 ;
102
103

NOTE: Deleting WORK.DTAB1 (memtype=DATA).
NOTE: Deleting WORK.DTAB2 (memtype=DATA).
NOTE: Deleting WORK.DTAB3 (memtype=DATA).
NOTE: Deleting WORK.DTAB4 (memtype=DATA).

104  data expn1;
105     infile expn1 lrecl=40;
106     input @1 newid 8. @35 ucc $6. @10 cost 12.5
;

NOTE: The infile EXPN1 is:
      FILENAME=x:\diary97\expnd971.txt,
      RECFM=V,LRECL=40

NOTE: 119109 records were read from the infile
EXPN1.
      The minimum record length was 40.
      The maximum record length was 40.
NOTE: The data set WORK.EXPN1 has 119109
observations and 3 variables.

107     proc sort; by newid;
108

NOTE: The data set WORK.EXPN1 has 119109
observations and 3 variables.


109  data expn2;
110     infile expn2 lrecl=40;
111     input @1 newid 8. @35 ucc $6. @10 cost 12.5
;

NOTE: The infile EXPN2 is:
      FILENAME=x:\diary97\expnd972.txt,
      RECFM=V,LRECL=40

NOTE: 118081 records were read from the infile
EXPN2.
```

Lines 101-102 delete from memory the datasets that are no longer necessary for processing.

Lines 104-122 pull in the expn files. Newid is the consumer unit code. Ucc is the code designating the type of expenditure. Cost is the amount of the expenditure.

```
      The minimum record length was 40.
      The maximum record length was 40.
NOTE: The data set WORK.EXPN2 has 118081
observations and 3 variables.

112     proc sort; by newid;
113

NOTE: The data set WORK.EXPN2 has 107656
observations and 3 variables.


114  data expn3;
115     infile expn3 lrecl=40;
116     input @1 newid 8. @35 ucc $6. @10 cost 12.5
;

NOTE: The infile EXPN3 is:
      FILENAME=x:\diary97\expnd973.txt,
      RECFM=V,LRECL=40
NOTE: 108024 records were read from the infile
EXPN3.
The minimum record length was 40.
      The maximum record length was 40.
NOTE: The data set WORK.EXPN3 has 108024
observations and 3 variables.

117     proc sort; by newid;
118

NOTE: The data set WORK.EXPN3 has 108024
observations and 3 variables.


119  data expn4;
120     infile expn4 lrecl=40;
121     input @1 newid 8. @35 ucc $6. @10 cost 12.5
;

NOTE: The infile EXPN4 is:
      FILENAME=x:\diary97\expnd974.txt,
      RECFM=V,LRECL=40

NOTE: 149473 records were read from the infile
EXPN4.
      The minimum record length was 40.
      The maximum record length was 40.
NOTE: The data set WORK.EXPN4 has 149473
observations and 3 variables.

122     proc sort; by newid;
123
```

```
NOTE: The data set WORK.EXPN4 has 149473
observations and 3 variables.


124  data expn;
125     set expn1 expn2 expn3 expn4 ;
126       by newid;
127     if cost > 0;

NOTE: The data set WORK.EXPN has 494687
observations and 3 variables.


128     proc sort; by newid;

NOTE: The data set WORK.EXPN has 494687
observations and 3 variables.
NOTE: The PROCEDURE SORT used 1 minute
24.35 seconds.

129                 delete expn1 expn2 expn3 expn4;
130
131
132

NOTE: Deleting WORK.EXPN1 (memtype=DATA).
NOTE: Deleting WORK.EXPN2 (memtype=DATA).
NOTE: Deleting WORK.EXPN3 (memtype=DATA).
NOTE: Deleting WORK.EXPN4 (memtype=DATA).

133  data expend ;
134    set dtab expn;
135     by newid;

NOTE: The data set WORK.EXPEND has 679855
observations and 3 variables.


136     proc sort; by newid;

NOTE: The data set WORK.EXPEND has
679855observations and 3 variables.

137     proc datasets;
137                 delete dtab expn;
138

NOTE: Deleting WORK.DTAB (memtype=DATA).
NOTE: Deleting WORK.EXPN (memtype=DATA).
```

Lines 129-130 delete from memory the datasets no longer needed for processing.

Lines 133-136 pull the dtab and expn files together.

Lines 137-138 delete from memory the datasets no longer needed for processing.

```
139  data pubfile (drop= uspop) ;
140      merge fmlyall (in = infam)
141                expend  (in = inexp)
142            ;
143      by newid ;
144      if not inexp then delete;
145      if cost='.' then cost=0;
146
147      wcost  = finlwt21 * cost/4;
148
```

Lines 139-147 merge the fmlyall and expend datasets together and check the cost variable to make sure that there are no missing values.

Line 147 weights the cost variable up to the population level that the consumer unit represents.

```
NOTE: Character values have been converted to
numeric values at the places given by:
(Line):(Column).145:13
NOTE: The data set WORK.PUBFILE has 679855
observations and 6 variables.
```

```
149      proc summary nway data = pubfile
(drop=newid);
150       class ucc inclass;
151       var wcost ;
152       output out = aggcst sum = ;
153
NOTE: The data set WORK.AGGCST has 4768
observations and 5 variables.
```

Lines 149-152 sum the weighted costs for the consumer units for each ucc by income group and outputs this as a new dataset called aggcst.

```
154      proc datasets;
155        delete expend pubfile;
156
```

Lines 154-155 delete from memory any datasets that are no longer needed for processing.

```
NOTE: Deleting WORK.EXPEND (memtype=DATA).
NOTE: Deleting WORK.PUBFILE (memtype=DATA).
```

```
157  data aggray1 (drop =  inclass  _type_  _freq_
wcost);
158    set aggcst;
159     by ucc ;
160        array trncost grp1-grp10;
161         retain grp1-grp10;
162          if first.ucc then do over trncost;
163              trncost = 0;
164          end;
165          _I_=inclass;
166          trncost=wcost;
167          if last.ucc then output;

168
```

Lines 157-167 create the variables grp1-grp10 that will designate the income groups and then places the weighted cost, or expenditure, data into the appropriate new variable

```
NOTE: Character values have been converted to
numeric values at the places given by:
(Line):(Column).165:13
```

```
NOTE: The data set WORK.AGGRAY1 has 532
observations and 11 variables.

169  data agfile;
170       infile agg;
171         input @3 ucc $6.
172               @15 line $6.;

NOTE: The infile AGG is:
      FILENAME=x:\diaru97\aggd97.txt,
      RECFM=V,LRECL=256

NOTE: 532 records were read from the infile AGG.
      The minimum record length was 20.
      The maximum record length was 20.
NOTE: The data set WORK.AGFILE has 532
observations and 2 variables.

173       proc sort data = agfile;
174       by ucc ;
175

NOTE: The data set WORK.AGFILE has 596
observations and 2 variables.


176  data pubray ;
177       merge aggray1 (in = inray)
178                 agfile (in = inagg);
179         by ucc;
180       if inray and inagg;
181

NOTE: The data set WORK.PUBRAY has 588
observations and 12 variables.


182       proc summary nway data = pubray;
183         class line;
184         var grp1-grp10;
185         output out =aggsum sum = ;
186

NOTE: The data set WORK.AGGSUM has 67
observations and 13 variables.

187  data cstpop1 (drop = _type_ _freq_ popt popc
pop1-pop10);
188       if _n_ = 1 then set subagg;
189       set aggsum;
190         grpt = sum (of grp1-grp10);
191         grpc = sum (of grp1-grp9);
192       array ex grpt grpc grp1-grp10;
```

Lines 169-174 pull in the file that dictates how each ucc will be summed for aggregation.

Lines 176-180 merge the dataset containing the weighted costs and the agfile. The agfile will give all costs a code called line that will be used for aggregation.

Lines 182-185 sum the weighted costs for each income group (grp1-grp10) by line and output this into a new dataset called aggsum.

Lines 187-197 create two arrays. One array is a vector from the subagg dataset that contains the population counts (popt, popc pop1-pop10). The other is a matrix of the weighted costs by income group. The costs are divided by the population counts.

```
193       array wt popt popc pop1-pop10;
194        do over ex;
195          ex = ex/wt;
196
197        end;
```

NOTE: The data set WORK.CSTPOP1 has 67 observations and 13 variables.

```
198  data numcus (rename=(popt=grpt popc=grpc
pop1=grp1 pop2=grp2
199                  pop3=grp3 pop4=grp4 pop5=grp5
pop6=grp6
200                  pop7=grp7 pop8=grp8 pop9=grp9
pop10=grp10));
201       set subagg;
202       line = '000000';
203
```

Lines 198-206 give the population counts a line value so that they can be printed as part of the final output, and then brings them together with the summed cost dataset that was calculated with the arrays.

NOTE: The data set WORK.NUMCUS has 1 observations and 13 variables.

```
204  data cstpop;
205       set numcus cstpop1;
206         by line;
207
```

NOTE: The data set WORK.CSTPOP has 68 observations and 13 variables.

```
208  data addlab ;
209       infile labls;
210       input @1 line $6. @10 title $char48.;
```

Lines 208-211 pull in the label file that will put titles on the final output.

```
NOTE: The infile LABLS is:
      FILENAME=x:\diary97\labeld97.txt,
      RECFM=V,LRECL=256
NOTE: 66 records were read from the infile LABLS.
      The minimum record length was 57.
      The maximum record length was 58.
```

NOTE: The data set WORK.ADDLAB has 66 observations and 2 variables.

```
211       proc sort; by line;
212
```

NOTE: The data set WORK.ADDLAB has 66 observations and 2 variables.

```
213  data pubtab (drop = line);
```

```
214       merge cstpop (in = inline)
215             addlab (in = inlabl);
216       by line;
217       if not inlabl then delete;
218
```

NOTE: The data set WORK.PUBTAB has 66 observations and 13 variables.

```
219       proc print split='*' uniform;
220        label
221        grpt='      All* Consumer*    Units*_________'
222        grpc='    Total*
Complete*Reporting*_________'
223        grp1='     Less*     Than*
$5,000*_________'
224        grp2='   $5,000*       To*
$9,999*_________'
225        grp3='  $10,000*       To*
$14,999*_________'
226        grp4='  $15,000*       To*
$19,999*_________'
227        grp5='  $20,000*       To*
$29,999*_________'
228        grp6='  $30,000*       To*
$39,999*_________'
229        grp7='  $40,000*       To*
$49,999*_________'
230        grp8='  $50,000*       To*
$69,999*_________'
231        grp9='  $70,000*      And*
Over*_________'
232       grp10='Incomplete*
Income*Reporters*_________';
233       format title $char40.;
234       format grpt grpc grp1-grp10 comma9.2;
235       id title;
236       var grpc grp1-grp9;
237       title "CE Microdata Diary Survey Average
Weekly Expenditures, for Calendar Year 19&y by
Income";
238       title2 ' ';
239
240    run;
```

NOTE: At least one W.D format was too small for the number to be printed. The decimal may be shifted by the "BEST" format.

Lines 213-238 merge the summed cost dataset with the titles for printing. The output is formatted and the income groups are given labels. Note that not all groups are printed – the incomplete reporters (grp10) and all consumer units (grpt).

B. OUTPUT

The following observation shows the contents of the subagg data set created in lines 68-73. It represents the weighted number of CUs in each INCLASS category as well as for the total population and the population of complete income reporters.

```
Population Counts for 1997                          09:11 Friday, September 24, 1999   7

     OBS     POP1        POP2        POP3        POP4        POP5        POP6        POP7        POP8        POP9        POP10        POPT          POPC

      1  3443461.70 8374905.05 8207631.48 7300994.86 12091952.31 10561899.28 8095905.90 10811348.43 12482513.39 23951160.40 105321772.78 81370612.38
```


TITLE	Total Complete Reporting	Less Than $5,000	$5,000 To $9,999	$10,000 To $14,999	$15,000 To $19,999	$20,000 To $29,999	$30,000 To $39,999	$40,000 To $49,999	$50,000 To $69,999	$70,000 And Over
Number of consumer units	81370612	3443461.7	8374905.0	8207631.5	7300994.9	12091952	10561899	8095905.9	10811348	12482513
Income before taxes	41,371.40	2,147.10	7,611.26	12,165.50	17,436.91	24,582.71	34,610.38	44,589.29	58,388.34	113203.99
Income after taxes	37,920.11	2,172.96	7,425.86	11,807.77	17,027.15	23,475.84	32,047.62	40,950.98	52,694.21	101830.24
Age of reference person	47.73	41.14	54.01	55.04	51.51	48.19	45.21	44.38	43.65	45.69
Average number in consumer unit:										
Persons	2.54	1.77	1.73	2.04	2.26	2.47	2.64	2.87	2.99	3.15
Children under 18	0.70	0.47	0.41	0.47	0.62	0.68	0.73	0.88	0.92	0.87
Persons 65 and over	0.31	0.17	0.49	0.55	0.51	0.41	0.29	0.17	0.14	0.12
Earners	1.41	0.85	0.59	0.83	0.97	1.29	1.53	1.80	1.90	2.10
Vehicles	1.69	0.85	0.90	1.14	1.32	1.55	1.82	2.04	2.21	2.37
Percent distribution:										
Male	57.54	42.27	34.07	41.97	54.15	56.62	63.90	64.72	70.37	69.43
Female	42.46	57.73	65.93	58.03	45.85	43.38	36.10	35.28	29.63	30.57
Homeowner	61.37	25.25	37.66	47.44	55.05	56.10	59.43	71.24	78.25	85.85
Renter	36.49	71.89	61.12	50.91	43.03	42.06	37.78	26.23	20.15	11.20
Black	11.45	19.24	20.18	15.50	15.06	10.03	10.71	7.61	8.55	5.66
White and other	88.55	80.76	79.82	84.50	84.94	89.97	89.29	92.39	91.45	94.34
Elementary education	7.12	8.83	17.42	15.88	10.44	8.28	3.86	1.59	2.45	1.29
High school education	38.05	43.61	46.07	53.05	46.33	44.31	40.94	36.60	28.62	17.01
College education	54.56	45.96	35.87	30.60	43.23	47.26	55.04	61.65	68.93	81.45
Never attended and other	0.28	1.60	0.64	0.47	0.00	0.15	0.15	0.16	0.00	0.24
At least one vehicle owned	88.76	56.38	62.00	80.86	87.88	92.47	95.80	98.32	97.34	98.16
Food, total	86.00	46.68	47.24	54.81	67.55	74.05	87.24	95.68	108.16	139.22
Food at home	56.07	32.33	35.32	40.95	49.96	51.32	57.91	60.81	66.91	80.61
Cereals and cereal products	3.18	1.85	1.91	2.45	3.06	2.74	3.53	3.23	3.77	4.56
Bakery products	5.75	3.48	3.37	3.75	4.87	5.35	5.87	6.49	6.79	8.71
Beef	4.35	2.31	2.58	3.42	4.07	4.21	4.58	4.58	5.60	5.62
Pork	3.10	1.46	2.33	2.99	3.17	3.10	3.16	3.07	3.28	3.91
Other meats	1.90	1.16	1.23	1.36	1.81	1.78	1.92	2.22	2.20	2.60
Poultry	2.80	1.73	1.85	2.30	2.55	2.54	2.83	2.92	3.25	3.97
Fish and seafood	1.74	1.57	1.09	1.00	1.69	1.69	1.70	1.46	1.91	2.88
Eggs	0.65	0.45	0.49	0.55	0.67	0.68	0.71	0.64	0.69	0.73
Fresh milk and cream	2.58	1.56	1.64	2.07	2.35	2.53	2.75	2.95	2.95	3.33
Other dairy products	3.74	2.09	2.10	2.59	3.05	3.14	3.63	4.24	4.65	6.04
Fresh fruits	2.96	1.80	1.80	2.15	2.41	2.84	2.95	2.94	3.78	4.35
Fresh vegetables	2.79	1.52	1.88	2.03	2.63	2.68	2.66	2.59	3.06	4.44
Processed fruits	2.01	1.25	1.36	1.42	1.92	1.61	1.99	2.15	2.34	3.16
Processed vegetables	1.57	0.98	1.05	1.33	1.37	1.41	1.61	1.85	1.69	2.18
Sugar and other sweets	2.28	1.18	1.61	1.49	1.94	1.93	2.45	2.44	2.92	3.26
	Total Complete	Less Than	$5,000 To	$10,000 To	$15,000 To	$20,000 To	$30,000 To	$40,000 To	$50,000 To	$70,000 And

TITLE	Reporting	$5,000	$9,999	$14,999	$19,999	$29,999	$39,999	$49,999	$69,999	Over
Fats and oils	1.60	0.97	1.14	1.27	1.71	1.46	1.77	1.62	1.84	2.02
Miscellaneous foods	8.17	4.28	4.65	5.07	6.87	7.18	8.67	9.63	10.23	12.18
Nonalcoholic beverages	4.89	2.67	3.23	3.71	3.82	4.45	5.14	5.80	5.97	6.68
Food away from home	29.94	14.35	11.92	13.86	17.59	22.73	29.33	34.87	41.25	58.61
Alcoholic beverages	5.68	2.99	2.63	2.24	3.35	4.48	5.66	6.30	7.18	11.56

TITLE	Total Complete Reporting	Less Than $5,000	$5,000 To $9,999	$10,000 To $14,999	$15,000 To $19,999	$20,000 To $29,999	$30,000 To $39,999	$40,000 To $49,999	$50,000 To $69,999	$70,000 And Over
Housing	57.46	33.01	32.61	41.70	42.08	52.75	56.27	60.78	74.25	89.15
Fuel and utilities	38.47	23.93	23.59	31.57	29.92	38.23	37.64	37.39	49.61	53.99
Household operations	0.22	0.09	0.03	0.08	0.06	0.11	0.22	0.17	0.39	0.58
Housekeeping supplies	9.33	4.62	4.82	5.79	6.67	7.58	9.26	10.08	12.53	16.01
Household furnishings and equipment	9.45	4.37	4.17	4.26	5.42	6.82	9.15	13.14	11.72	18.57
Apparel and services	29.78	15.92	13.53	12.78	20.29	22.69	30.18	29.58	43.83	55.71
Men, 16 and over	5.20	2.07	2.15	2.17	3.05	3.33	5.59	5.67	8.06	10.05
Boys, 2 to 15	0.59	0.28	0.15	0.47	0.38	0.52	0.38	0.76	0.69	1.20
Women, 16 and over	10.61	4.57	5.38	4.28	7.19	8.71	10.21	9.62	16.30	19.88
Girls, 2 to 15	1.11	0.57	0.28	0.36	0.85	0.65	1.45	1.75	1.34	2.01
Children under 2	1.46	0.36	0.77	0.65	1.17	1.41	1.63	1.64	2.10	2.14
Footwear	6.26	5.05	3.44	3.23	5.71	5.01	6.52	6.60	8.66	9.50
Other apparel products and services	4.55	3.01	1.35	1.62	1.93	3.06	4.40	3.54	6.68	10.93
Transportation	21.45	10.59	8.29	13.54	13.49	19.16	21.11	24.64	28.07	37.86
Non-prescription drugs and supplies	2.88	1.66	1.94	2.28	2.13	2.93	3.65	3.10	2.86	3.84
Entertainment	8.23	3.08	3.13	5.25	5.53	5.51	7.86	8.30	12.26	16.00
Radios, sound equipment	0.53	0.00	0.08	0.90	0.72	0.32	1.00	0.29	0.32	0.78
Pet food and supplies	2.58	1.25	1.10	1.61	1.59	2.28	2.29	2.99	3.56	4.60
Toys, games, playground equipment	2.52	1.03	0.95	0.99	1.31	1.73	2.64	2.50	4.57	4.63
Other entertainment supplies, equipment	2.59	0.80	1.00	1.75	1.91	1.18	1.94	2.52	3.81	5.98
Personal care products and services	4.94	1.65	2.32	2.84	3.69	4.89	6.22	4.86	6.02	7.78
Miscellaneous	2.81	0.86	1.31	1.45	1.89	1.75	3.47	4.76	3.72	4.22

VIII. DESCRIPTION OF THE SURVEY

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

1) 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.

2) 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.

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 the CU member's identity.

The Diary survey collects expenditure data for items purchased each day over two one-week periods. This survey is designed to collect expenditure data for small, frequently purchased items such as food, beverages, food consumed away from home, gasoline, housekeeping supplies, nonprescription drugs and medical supplies, and personal care products and services. Respondents are not limited to recording expense for these items only.

A Household Characteristics Questionnaire is completed to record demographic and family characteristics data pertaining to age, sex, race, marital status, and CU relationships each CU member. 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 is collected. The expenditure collection instrument is a self-reporting, product-oriented diary on which respondents record all expenses for two consecutive one-week periods. It is divided by day of purchase and by broad classification of goods and services, a format designed to aid the respondents when recording daily purchases.

At the beginning of the two-week collection period, the interviewer uses the Household Characteristics Questionnaire to record demographic and characteristics information pertaining to CU members. Also at this time, a diary for the first week is left with the participating CU. At the completion of the first week, the interviewer picks up the diary, reviews the entries, clarifies any questions, and leaves a second diary for the following week. At the end of the second week, the diary is picked up and reviewed. At this point, the interviewer again uses the Household Characteristics Questionnaire to collect information on CU income, employment and earnings of CU members. These data, along with the other household characteristics information, permit data users to classify sample units for research purposes, and allow BLS to adjust population weights for CUs who do not cooperate in the survey.

IX. DATA COLLECTION AND PROCESSING

In addition to its data collection duties, the Census Bureau 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. BUREAU OF THE CENSUS ACTIVITIES

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

Preliminary Diary survey processing carried out by the Bureau of the Census includes clerical data edits and adjustments. Upon completion by respondents, the diaries are returned to the regional offices, where they undergo a cursory field edit. They are then sent to the Data Preparation Division in Jeffersonville, Indiana, where more detailed edits are done for completeness and consistency. Codes are also assigned to reported expenditure items and to demographic characteristics of CU members.

After clerical processing, the data are keyed and transmitted to the Census Processing Center in Washington, D.C. Here computer programs are run which derive CU weights based on BLS specifications, impute demographic and work experience characteristics when missing or invalid, and apply appropriate sales taxes to expenditure items. Final tapes of the edited and coded data are then transmitted to the BLS on a monthly basis.

B. BUREAU OF LABOR STATISTICS ACTIVITIES

Upon receipt of the data from the Bureau of the Census, 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 by viewing diaries on microfilm. Errors discovered through this procedure are corrected prior to release of the data for public use.

Two major types of data adjustment routines--imputation and allocation--are carried out to improve and classify the estimates derived from the Diary Survey. Data imputation routines correct for missing or invalid entries among selected CU characteristic fields. No imputations are performed for income fields. Allocation routines are applied when respondents provided 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. To analyze the effects of these adjustments, tabulations are made before and after the data adjustments.

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 noninstitutional 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 1997 sample is composed of 105 areas. The design classifies the PSUs into four categories:

- 31 "A" certainty PSUs are Metropolitan Statistical Areas (MSA's) with a population greater than 1.5 million.
- 46 "B" PSUs, are medium-sized MSA's.
- 10 "C" PSUs are nonmetropolitan areas that are included in the CPI.
- 18 "D" 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 1997 survey is generated from the 1990 Population Census 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 (ED's) from the Census that fail to meet the criterion for good addresses for new construction, and all ED's in nonpermit-issuing areas are grouped into the area segment frame.

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.

Each selected sample unit is requested to keep two 1-week diaries of expenditures over consecutive weeks. The earliest possible day for placing a diary with a household is predesignated with each day of the week having an equal chance to be the first of the reference week. The diaries are evenly spaced throughout the year. During the last 6 weeks of the year, however, the Diary Survey sample is supplemented to twice its normal size to increase the reporting of types of expenditures unique to the holidays.

B. COOPERATION LEVELS

The annual target sample size at the United States level for the Diary Survey is 6,050 participating sample units. To achieve this target the total estimated work load is 8,180 sample units. This allows for refusals, vacancies, or nonexistent sample unit addresses.

Each participating sample unit selected is asked to keep two 1-week diaries. Each diary is treated independently, so response rates are based on twice the number of housing units sampled.

The response rate for the 1997 Diary Survey is 77.1% as shown below. This response rate refers to all diaries in the year.

Number of diaries designated for the survey	Type B or C ineligible cases	*Eligible housing unit interviews* Number of potential diaries	Type A nonresponse	Total respondent interviews
19,062	3,788	15,274	3,492	11,782

Type B or C cases are housing units that are vacant, nonexistent, or ineligible for diary placement. Type A nonresponses are housing units which 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 a diary is obtained. There are four basic 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 diary if subsampling is performed in the field.

3) A noninterview 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 on the CU as a whole. The weight for the CU is adjusted for individuals within the CU to meet the controls for the 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 CU who own their living quarters. The weighting procedure uses an iterative process to ensure that the sample estimates will meet all the population controls.

NOTE: The weight for a consumer unit (CU) can be different for each week 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 consumer unit 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 consumer units 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 estimate.

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 consumer units and the average of those purchasing. (See Section V.B. for ESTIMATION OF TOTAL AND MEAN EXPENDITURES). 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 also 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 no utility expenses. Employers or insurance companies frequently pay other costs. CUs 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 noninstitutional 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) 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 an MSA. The general concept of an MSA is one of a large population nucleus together with adjacent communities which 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, Supplemental Security income, unemployment compensation, worker'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 income taxes, and other taxes.

Complete income reporters

The distinction between complete and incomplete income reporters is based in general on whether the respondent provides values for major sources of income, such as wages and salaries, self-employment income, and social security income. Even complete income reporters may not provide a full accounting of all income from all sources. In the current survey, CUs that report across-the-board zero income are categorized as incomplete reporters.

Geographic regions

Data are presented for four major regions - Northeast, Midwest, South, and West. CUs are classified by region according to the address at which the CU was residing during the time of their 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.

Underlined UCCs may not be represented in all quarters. The quarter in which the deletion (addition) occurs is denoted by a leading superscript directly prior to the UCC code. For example, $^{A(D)971}$(UCC) identifies an addition (deletion) of a given UCC code beginning in Q971.

A. EXPENDITURE UCC's ON EXPN FILE

001000 Stocks, bonds, mutual funds
001100 Precious metals
001200 Miscellaneous investments
001400 Employment counseling & fees
002000 Savings account deposit
002100 Insurance other than health, hospital, vehicle and property
002200 Retirement plans
004000 Contributions

004100 Cash gifts
004190 Gifts not specified
005000 Alimony and child support
009000 Mortgage payment including coop
009900 Property assessment
010110 Flour
010120 Prepared flour mixes
010210 Cereal
010310 Rice
010320 Pasta, cornmeal, other cereal products
020110 White bread
020210 Bread other than white
020310 Fresh biscuits, rolls, muffins
020410 Cakes and cupcakes, fresh and other, excluding frozen
020510 Cookies, excluding refrigerated dough
020610 Crackers, excluding crumbs
020620 Bread and cracker products
020710 Doughnuts, sweet rolls, coffeecakes, fresh and other, excluding frozen
020810 Frozen refrigerated and canned bakery products, such as biscuits, rolls, muffins, cakes, cupcakes, doughnuts, pies, tarts, turnovers, and miscellaneous products, including dough and batter
020820 Pies, tarts, turnovers, fresh and other, excluding frozen
030110 Ground beef, excluding canned
030210 Chuck roast, excluding canned
030310 Round roast, excluding canned
030410 Other beef roast, excluding canned
030510 Round steak, excluding canned
030610 Sirloin steak, excluding canned
030710 Other steak, excluding canned
030810 Other beef, excluding canned
040110 Bacon
040210 Pork chops
040310 Ham, excluding canned
040410 Other pork, excluding canned
040510 Pork sausage, excluding canned
040610 Canned ham
050110 Frankfurters, excluding canned
050210 Bologna, liverwurst, salami, excluding canned
050310 Other lunchmeat
050410 Lamb and organ meats, excluding canned
050900 Mutton, goat, game
060110 Fresh and frozen whole chicken
060210 Fresh or frozen chicken parts
060310 Other poultry
070110 Canned fish, seafood and shellfish
070230 Fresh fish and shellfish
070240 Frozen fish and shellfish
080110 Eggs
090110 Fresh milk all types
090210 Cream
100110 Butter
100210 Cheese
100410 Ice cream and related products, including frozen yogurt
100510 Other dairy products, including powdered milk, and fresh, canned and non-frozen yogurt
110110 Apples
110210 Bananas

110310 Oranges
110410 Other fresh fruits
110510 Citrus fruits excluding oranges
120110 Potatoes
120210 Lettuce
120310 Tomatoes
120410 Other fresh vegetables
130110 Frozen orange juice
130121 Frozen fruits
130122 Frozen fruit juices
130211 Fresh fruit juices
130212 Canned/bottled fruit juices
130310 Canned fruits
130320 Dried fruits
140110 Frozen vegetables
140210 Canned beans
140220 Canned corn
140230 Miscellaneous canned vegetables, not collected in a separate UCC
140310 Other processed dried vegetables, such as squash, not collected in a separate UCC
140320 Dried peas
140330 Dried beans
140340 Dried carrots, onions, leafy greens, and cabbage
140410 Frozen vegetable juices
140420 Fresh/canned vegetable juices
150110 Candy and chewing gum
150211 Sugar
150212 Artificial sweeteners
150310 Jams, jellies, preserves and other sweets
160110 Margarine
160211 Fats and oils
160212 Salad dressings
160310 Non-dairy cream substitutes
160320 Peanut butter
170110 Cola drinks
170210 Other carbonated drinks
170310 Coffee, roasted
170410 Coffee, instant or freeze dried
170510 Noncarbonated fruit flavored drinks, including lemonade-non frozen
170520 Tea
170530 Other noncarbonated beverages and ice, excluding coffee and tea
180110 Soup
180210 Frozen meals
180220 Frozen prepared food other than meals
180310 Potato chips and other snacks
180320 Nuts
180410 Salt, other seasonings & spices
180420 Olives, pickles, relishes
180510 Sauces and gravies
180520 Other condiments
180611 Prepared salads
180612 Prepared desserts
180620 Baby food
180710 Miscellaneous prepared foods including items such as canned meats (see UCC's 030110 - 030810, 040410 - 040510, 050110, 050310 - 050410, 060110 - 060310), fresh and canned ethnic foods, fresh and canned pizza
A971 180720 Vitamin supplements

190110 Lunch at restaurants, cafes, etc...
190210 Dinner at restaurants, cafes, etc...
190310 Snacks and non alcoholic beverages, including tip
190320 Breakfast and brunch at restaurants, cafes, etc...
190901 Food or board, at school and rooming/boarding houses
190902 Catered affairs
200111 Beer and ale at home
200112 Nonalcoholic beer
200210 Whiskey at home
200310 Wine at home
200410 Other alcoholic beverages at home
200510 Beer and ale away from home
200520 Wine away from home
200530 Other alcoholic beverages away from home
210110 Rent of dwelling, including deposit and parking fees
210210 Lodging away from home
210310 Housing for someone at school
210900 Ground or land rent
220000 Capital improvements, not specified
220110 Fire/extended coverage insurance
220120 Homeowners insurance
220210 Property taxes
220310 Contracted mortgage interest
220400 Purchase of property or real estate
220410 Home purchase
220510 Capital improvements - commodities
220610 Capital improvements - services
220900 Parking, owned dwelling
230000 Repair, maintenance, and improvements for built in dishwasher, garbage disposal, and range hood
230110 Maintenance of property, including items such as ceiling repair, black top, brick, or masonry work, air conditioner repair, roof and awning repair, house painting, papering, chimney cleaning, electrical inspection, furnace inspection and repair, wiring, pest control, carpenter, plumber, etc...
230120 Installed hard surface flooring
230130 Installed wall-to-wall carpet
230140 Repair disposal, dishwasher, range hood
230900 Maintenance fees, such as service repair of property fees, management fees, homeowners association dues, condo fees, and community pool fees
240110 Paint, wallpaper and supplies
240120 Tools and equipment for painting and papering
240210 Lumber, paneling, tile, awning, glass, plywood, doors, windows, screens, siding, roofing and fencing materials
240220 Blacktop and masonry materials
240310 Plumbing supplies, fixtures and equipment
240320 Electric heating and air conditioning supplies and equipment
240900 Soft surface floor covering
250110 Fuel oil
250210 Bottled or tank gas
250220 Coal
250900 Miscellaneous fuels, such as wood, kerosene, charcoal, oil mix for gas, lawnmower oil, lamp oil, duraflame log, and sterno
260110 Electricity
260210 Utility - natural gas
270000 Telephone service, including public pay phones
270210 Water and sewerage maintenance

270310 Community antenna or cable TV
270410 Garbage, trash collection
270510 Telephone interstate calls
270610 Telephone intrastate calls
270900 Septic tank cleaning
270905 Steam heat
280110 Bathroom linens
280120 Bedroom linens
280130 Kitchen and dining room linens
280210 Curtains and drapes, excluding shower
280220 Slipcovers, decorative pillows, and cushions
280230 Sewing materials for slipcovers, curtains, and other home handiwork
280900 Other linens
290110 Mattress and springs
290120 Other bedroom furniture
290210 Sofas
290310 Living room chairs
290320 Living room tables
290410 Kitchen and dining room furniture
290420 Infants' furniture
290430 Patio, porch or outdoor furniture
290440 Modular wall units, shelves or cabinets, or other living room, family or rec-room furniture including desks
300110 Refrigerator, home freezer
300210 Washers
300220 Dryers
300310 Stoves, ovens
300320 Microwave ovens
300330 Portable dishwashers
300410 Window air conditioners
300900 Miscellaneous household appliances
310110 Black and white TV's, and combination of TV with other items
310120 Color TV console and combinations of TV with other items, such as TV with VCR
310130 Color TV (portable and table models) and combinations of portable model color TV with other items, such as TV with radio
310210 Video players, video recorders, video tape player, video tape recorder, video disc player, video camera receiver and recorder, and camcorder
310220 Video cassettes, tapes and discs, laser discs, reels, prerecorded and blank video cassettes, video tapes, and diskettes
310230 Video game cartridges, TV computer games and software, Atari cartridges and supplies, computer joystick, games, and game cartridges
310311 Radio, not installed in vehicles
310312 Phonograph or record player
310313 Tape recorder and player
310320 Sound components, component systems, amplifiers, receivers, turn tables, tape decks, tuners, stereos, speakers, and compact disc sound systems
310331 Miscellaneous sound equipment
310332 Sound equipment accessories
310340 Records, tapes, CD's, needles, styli, and record clubs
310900 Accessories for electronic equipment
320110 Room-size rugs and other non-permanent floor coverings
320120 Venetian blinds, window shades and other window coverings
320130 Infants' equipment
320140 Laundry and cleaning equipment
320150 Outdoor equipment
320210 Clocks

320220 Lamps and other lighting fixtures
320231 Other household decorative items, including fireplace equipment and accessories
320232 Telephones and accessories
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 Nonelectric cookware
320380 Tableware, nonelectric kitchenware
320410 Lawnmowing equipment and other yard machinery, powered and nonpowered
320420 Power tools
320430 Other hardware, including curtain and drapery hardware, rope, portable ladders, sheds, non-permanent shelves and shelving
320511 Electric floor cleaning equipment
320512 Sewing machines
320521 Small electrical kitchen appliances
320522 Portable heating and cooling equipment
320610 Miscellaneous supplies and equipment, such as caulking compound, duct tape, carpet tape, carpet knife, bolts, screws, drill bits, door knobs, tool box, keys, mailbox, gutter screens, clamps, shelf brackets, tool table, work bench, etc...
320620 Permanent hard surface floor covering
320630 Landscaping items, such as grass, grass seed, trees, shrubs, plants, sod, and fork lift
320901 Office furniture for home use
320902 Non-powered tools
320903 Fresh flowers or potted plants
320904 Closet and storage items
320905 Miscellaneous household equipment and parts
320906 Electronic testing equipment
330110 Soaps and detergents, excluding hand soaps
330210 Other laundry and cleaning products
330310 Paper towels, napkins, toilet tissue, facial tissue
330410 Stationery, giftwrap and wrap accessories, greeting cards, pens, pencils, tape
330510 Miscellaneous household products, including paper, plastic and foil products
330610 Lawn and garden supplies, including outdoor plants
340110 Postage
340120 Delivery services
340210 Babysitting or other home care for children
340310 Housekeeping service, such as housekeeping, cooking, maid service, interior decorating, and carpet and upholstery cleaning services
340410 Gardening and lawn care services, such as mowing, tree services, fertilizing, and yard work
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; including stove, vacuum, washer, dryer, sewing machine, refrigerator, and calculator; excluding garbage disposal, range hood, and built-in dishwasher
340630 Furniture repair, refurnishing, or reupholstery
340901 Rental or repair of lawnmowing equipment and other yard machinery, power and non-power tools
340903 Miscellaneous home services and small repair jobs not already specified
340904 Rental of furniture
340906 Care for invalids, convalescents, handicapped or elderly persons in the CU
340907 Rental of household equipment items, such as refrigerators, home freezers, washers,

microwave ovens, dishwashers, water cooler, stroller, china; excluding tools and lawn/garden equipment

340908 Rental of office equipment for non-business use, includes items such as calculators, typewriters, projectors, and other office machines.

340909 Rental of TV or radio sound equipment

340913 Repair and alterations of miscellaneous household equipment, furnishings, and textiles

350110 Tenants' insurance

360110 Men's suits

360120 Men's sportcoats and tailored jackets

360210 Men's coats, jackets, and furs

360311 Men's underwear

360312 Men's hosiery

360320 Men's sleepwear/loungewear

360330 Men's accessories

360340 Men's sweaters and vests

360350 Men's active sportswear

360410 Men's shirts

360511 Men's pants

360512 Men's shorts and shorts sets, excluding athletic

360901 Men's uniforms

370110 Boys' coats, jackets, and furs

370120 Boys' sweaters

370130 Boys' shirts

370211 Boys' underwear

370212 Boys' sleepwear/loungewear

370213 Boys' hosiery

370220 Boys' accessories

370311 Boys' suits, sportcoats, and vests

370312 Boys' pants

370313 Boys' shorts and shorts sets, excluding athletic

370901 Boys' uniforms and active sportswear

380110 Women's coats, jackets and furs

380210 Women's dresses

380311 Women's sportcoats and tailored jackets

380312 Women's vests, sweaters, and sweater sets

380313 Women's shirts, tops, and blouses

380320 Women's skirts and culottes

380331 Women's pants

380332 Women's shorts and shorts sets, excluding athletic

380340 Women's active sportswear

380410 Women's sleepwear/loungewear

380420 Women's undergarments

380430 Women's hosiery

380510 Women's suits

380901 Women's accessories

380902 Women's uniforms

390110 Girls' coats, jackets, and furs

390120 Girls' dresses and suits

390210 Girls' sport coats, tailored jackets, shirts, blouses, sweaters, sweater sets, and vests

390221 Girls' skirts, culottes, and pants

390222 Girls' shorts and shorts sets, excluding athletic

390230 Girls' active sportswear

390310 Girls' undergarments and sleepwear/loungewear

390321 Girls' hosiery

390322 Girls' accessories

390901 Girls' uniforms

400110 Men's footwear
400210 Boys' footwear
400220 Girls' footwear
400310 Women's footwear
410110 Infants' coats, jackets, and snowsuits
410120 Infants' rompers, dresses, and sweaters
410130 Infants' undergarments, including diapers
410140 Infants' sleeping garments
410901 Infants' accessories, hosiery, and footwear
420110 Sewing material 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, 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
450110 New cars
450210 New trucks, pick-ups, vans, or jeeps
450220 New motorcycles, motor scooters, or mopeds
450310 Lease payment (car lease)
450410 Lease payment (truck/pick-up/van/jeep lease)
460110 Used cars
460901 Used trucks or vans
460902 Used motorcycles, motor scooters, or mopeds
460903 Used aircraft
470111 Gasoline
470112 Diesel fuel
470114 Gasohol
470211 Motor oil
470220 Coolant/antifreeze, oil, brake & transmission fluids, additives, and radiator/cooling system protectant
480110 Tires (new, used or recapped); replacement and mounting of tires, and belting
480212 Vehicle products, such as wax, touch up paint, de-icer, protectant, polish, tar and bug remover, polish cloth, rubbing compound, auto freshner, etc...
480213 Battery replacement, floormats, seatcovers, filter, brake parts, and other equipment, supplies, parts, and accessories for auto; boating supplies and accessories
480214 Vehicle audio equipment, excluding labor
490000 Miscellaneous auto repair and servicing
490110 Body work, painting, repair and replacement of upholstery, vinyl/convertible top, and glass
490211 Clutch and transmission repair
490212 Drive shaft and rear-end repair
490220 Brake work, excluding brake adjustment
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
490315 Brake adjustment
490316 Gas tank repair and replacement
490411 Exhaust system repair

490412 Electrical system repair
490413 Motor repair and replacement
490900 Auto repair service policy
500110 Vehicle insurance
520111 Vehicle registration - state
520112 Vehicle registration - local
520310 Drivers' license
520410 Vehicle inspection
520511 Auto rental, excluding trips
520521 Truck or van rental, excluding trips
520531 Parking fees at garages, meters, and lots, excluding fees that are costs of property ownership in home city
520541 Tolls
520550 Towing charges
520901 Docking and landing fees for boats and planes, boat ramp fees
520902 Rental of motorcycle, motor scooters, moped, etc., including mileage charges
520903 Rental of aircraft, including mileage charges
520904 Rental of non camper-type trailer, such as for boat or cycle
530110 Airline fares
530210 Intercity bus fares
530311 Intracity mass transit fares
530412 Taxi fares
530510 Intercity train fares
530901 Ship fares
530902 Private school bus
530903 Car/van pool & non-motorized transportation
540000 Prescription drugs and medicines
550110 Purchase of eye glasses or contact lenses, excluding exam fee
550210 Over-the-counter drugs
550310 Topicals and dressings, such as band aids, guaze, cotton balls/rolls
550320 Purchase of medical or surgical equipment for general use, such as thermometers, needles/syringes, ice bags, heating pads, (not including band aids, gauze, cotton rolls/balls)
550330 Purchase of supportive or convalescent medical equipment, such as crutches, wheelchairs, braces, and ace bandages
550340 Hearing aids
A971 550410 Nonprescription vitamins
550900 Recreational drugs
560110 Physicians' services
560210 Dental services
560310 Eye exams, treatment or surgery, glass/lens service, glasses repaired
560330 Lab tests and x-rays
560400 Services by medical professionals other than physicians
570000 Hospital care not specified
570220 Care in convalescent in nursing home
570230 Other medical care service, such as ambulance service
570901 Rental of medical or surgical equipment for general use
570902 Repair of medical equipment
570903 Rental of supportive and convalescent equipment
580000 Hospital and health insurance not spec.
580110 Commercial health insurance
580210 Blue Cross or Blue Shield
580310 Health maintenance plans
580901 Medicare payments
590110 Newspapers (single copy and subscriptions)
590210 Magazines and periodicals (single copy and subscriptions)

590220 Books purchased through book clubs
590230 Books not purchased through book clubs
590900 Newsletters
600110 Outboard motor
600120 Unpowered boats, trailers
600130 Powered sports vehicles
600210 Ping pong, pool tables, other similar items, general sports equipment, and health and exercise equipment
600310 Bicycles
600410 Camping equipment
600420 Hunting and fishing equipment
600430 Winter sports equipment
600900 Water sports and miscellaneous sports equipment
610110 Toys, games, hobbies, tricycles, and battery powered riders
610120 Playground equipment
610130 Musical instruments and accessories
610210 Film
610220 Other photographic supplies
610230 Photographic equipment
610310 Pet food
610320 Pets, pet supplies and medicine for pets
610901 Fireworks
610902 Souvenirs
610903 Visual goods
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
620121 Fees for participant sports, such as golf, tennis, and bowling
620211 Admission fees for entertainment activities, including lectures, movie, theatre, concert, opera or other musical series
620221 Admission fees to sporting events
620310 Fees for recreational lessons or other instructions
620320 Photographer fees
620330 Film processing
620410 Pet services
620420 Veterinarian expenses for pets
620510 Miscellaneous fees for admissions
620610 Miscellaneous entertainment services
620710 Camp fees
620810 Rental and repair of sports, photographic and music equipment
620911 Miscellaneous fees and pari-mutuel losses, licenses for sports and entertainment, passport fees, taxidermist fees
620912 Rental of video cassettes, tapes, and discs
620913 Coin-operated pinball/electronic video games
620915 Passport fees
630110 Cigarettes
630210 Cigars, pipe tobacco, and other tobacco products
630220 Smoking accessories
630900 Marijuana
640110 Hair care products
640120 Non-electric articles for the hair
640130 Wigs, hairpieces, and toupees
640210 Oral hygiene products, articles
640220 Shaving needs
640310 Cosmetics, perfume, cologne, bath preparations, hand soap, face and body powder, skin

care products, nail preparations, manicure and eyemake-up implements and accessories
640410 Deodorant, female hygiene products, miscellaneous personal care products and supplies
640420 Electrical personal care appliances
650110 Personal care services for females, including haircuts
650210 Personal care services for males, including haircuts
650900 Rental and repair of personal care appliances
660000 School supplies., etc. - unspec., including reference books not in a set
660110 School books, supplies, and equipment for college
660210 School books, supplies, and equipment for elementary and high school
660310 Encyclopedia and other sets of reference books
660900 School books , supplies, and equipment for day care center, nursery school and other
670110 Tuition for college
670210 Tuition for elementary and high school
670310 Other expenses for day care centers and nursery schools, including tuition
670901 Tuition for other schools
670902 Rentals of books and equipment, and other school-related expenses
680110 Legal fees, excluding real estate closing costs
680140 Funeral, burial or cremation expenses
680210 Safe deposit box rental
680220 Charges for checking accounts and other banking services, excluding safe deposit
680901 Purchase and upkeep of cemetery lots or vaults
680902 Accounting fees
680903 Miscellaneous personal services, advertising, fines, duplicating services
690110 Computers for non-business use, hardware and software excluding video games
690114 Computer information services
690210 Telephone answering devices
690220 Calculators
690230 Typewriters and other office machines for non-business use
999000 Home ownership expense not specified
999900 Taxes not specified
999912 Unidentifiable items - Parts 1 and 2
999935 Unidentifiable items - Parts 3, 4, and 5

B. INCOME AND RELATED UCC's ON DTAB FILE

*L denotes UCC's could have negative values

800700 Meals received as pay
800710 Rent received as pay
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, such as IRA's
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 saving accounts or bonds
	900090	Supplemental security income
	900100	Unemployment compensation
	900110	Worker's compensation and veterans payments including education benefits
	900120	Public assistance or welfare including money received from job training grants such as job corps
	900131	Child support payments received
	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 of the 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
	950000	Federal income tax
*L	950001	Federal income tax refunds
	950010	State and local income tax
*L	950011	State and local income tax refunds
	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

The following UCC's contain values of either 100 or 0 depending on whether the CU satisfies the condition. For example, if the CU owns the home, then UCC 980090, homeowner, will have a value of 100, if not, the UCC will have a value of zero. These UCC's are used at BLS to compute percentages for the published tables.

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 with mortgage not reported
980260	Percent renter
980270	Percent black reference person
980280	Percent non-black 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 and other
980330	Percent vehicle owner

XIV. APPENDIX 3 -- UCC AGGREGATION

The following shows the UCC aggregation used in the sample program. This information is provided on the AGGregation and LABel files (Section III.E.5. PROCESSING FILES)

Food	010110-190902, 200112
Food at home	010110-180720, 200112
Cereal and cereal products	010110-010320
Bakery products	020110-020820
Beef	030110-030810
Pork	040110-040610
Other meats	050110-050900
Poultry	060110-060310
Fish and seafood	070110-070240
Eggs	080110
Fresh milk and cream	090110-090210
Other dairy products	100110-100510
Fresh fruits	110110-110510
Fresh vegetables	120110-120410
Processed fruits	130110-130320
Processed vegetables	140110-140420
Sugar and other sweets	150110-150310
Fats and oils	160110-160320
Miscellaneous foods	180110-180720
Nonalcoholic beverages	170110-170530, 200112
Food away from home	190110-190902
Alcoholic beverages	200111, 200210-200530
Housing	250110-300900, 320110-340913
Fuel and utilities	250110-270000
Household operations	340520, 340913
Housekeeping supplies	330110-340120
Household furnishings and equipment	300900-320905
Apparel and services	360110-360901, 370110-370901, 380110-380902, 390110-390901, 410110-410140, 410901, 400110-400310, 420110-430120, 440110-440900
Men, 16 and over	360210-360901
Boys, 2 to 15	370130-370220
Women, 16 and over	380110-380902
Girls, 2 to 15	390120-390322
Children under 2	410120-410901
Footwear	400110-400310
Other apparel products and services	420110-430120, 440120-440210
Transportation	470111-470220, 480212-49000, 49316, 520541
Non-prescription drugs and supplies	550210-550410, 570902
Entertainment	310311-310332, 310334, 600210-620913
Radios, sound equipment	310311-310332, 310334
Pet food and supplies	610310-610320
Toys, games, playground equipment	610110-610120
Other entertainment supplies, equipment	600210-600420, 610220-610903, 620320, 620913
Personal care products and services	640110-640410
Miscellaneous	620911, 630220, 680903

XV. APPENDIX 4 -- FMLY AND MEMB VARIABLES ORDERED BY START POSITION

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

A. FMLY FILE

Variable	Start Position	Variable	Start Position	Variable	Start Position
NEWID	1	FBSNSX_	91	FS_AMT5_	248
ADDFEDX	9	FD_STMPS	92	FS_AMT6	249
ADDFEDX_	17	FD_S_MPS	93	FS_AMT6_	257
ADDOTHX	18	FEDREFX	94	FS_AMT7	258
ADDOTHX_	26	FEDREFX_	102	FS_AMT7_	266
ADDSTAX	27	FFARMX	103	FS_AMT8	267
ADDSTAX_	35	FFARMX_	111	FS_AMT8_	275
AGE_REF	36	FFEDTXX	112	FS_DATE1	276
AGE_REF_	38	FFEDTXX_	120	FS_D_TE1	284
AGE2	39	FGVX	121	FS_DATE2	285
AGE2_	41	FGVX_	129	FS_D_TE2	293
BLS_URBN	42	FINCAFTX	130	FS_DATE3	294
CUTENURE	43	FINC_FTX	138	FS_D_TE3	302
CUTE_URE	44	FINCBEFX	139	FS_DATE4	303
DESCRIP	45	FINC_EFX	147	FS_D_TE4	311
DESCRIP_	47	FINLWT21	148	FS_DATE5	312
DIVX	48	FIRAX	159	FS_D_TE5	320
DIVX_	56	FIRAX_	167	FS_DATE6	321
EARNCOMP	57	FJSSDEDX	168	FS_D_TE6	329
EARN_OMP	58	FJSS_EDX	176	FS_DATE7	330
EARNX	59	FPVTX	177	FS_D_TE7	338
EARNX_	67	FPVTX_	185	FS_DATE8	339
EDUC_REF	68	FREEMLX	186	FS_D_TE8	347
EDUC0REF	70	FREEMLX_	194	FS_MTHI	348
EDUCA2	71	FRRX	195	FS_MTHI_	350
EDUCA2_	73	FRRX_	203	FSS_RRX	351
EMPLTYP1	74	FS_AMT1	204	FSS_RRX_	359
EMPL_YP1	75	FS_AMT1_	212	FSTATXX	360
EMPLTYP2	76	FS_AMT2	213	FSTATXX_	368
EMPL_YP2	77	FS_AMT2_	221	FSUPPX	369
FAM_SIZE	78	FS_AMT3	222	FSUPPX_	377
FAM__IZE	80	FS_AMT3_	230	FWAGEX	378
FAM_TYPE	81	FS_AMT4	231	FWAGEX_	386
FAM__YPE	82	FS_AMT4_	239	HRSPRWK1	387
FBSNSX	83	FS_AMT5	240	HRSP_WK1	390

Variable	Start Position	Variable	Start Position	Variable	Start Position
HRSPRWK2	391	PICK_UP	559	WK_W_KD1	674
HRSP_WK2	394	OCCULIS1	561	WK_WRKD2	675
INC_RNKU	395	OCCU_IS1	563	WK_W_KD2	677
INC__NKU	404	POPSIZE	564	WRKRSX	678
INSREFX	405	PTAXREFX	565	WRKRSX_	686
INSREFX_	413	PTAX_EFX	573	WTREP01	687
INTX	414	RACE2	574	WTREP02	698
INTX_	422	RACE2_	575	WTREP03	709
JFS_AMT	423	REC_FS	576	WTREP04	720
JFS_AMT_	431	REC_FS_	577	WTREP05	731
JGRCFDMV	432	REF_RACE	578	WTREP06	742
JGRC_DMV	438	REF__ACE	579	WTREP07	753
JGRCFDWK	439	REGION	580	WTREP08	764
JGRC_DWK	445	REGION_	581	WTREP09	775
JGROCYMV	446	RESPSTAT	582	WTREP10	786
JGRO_YMV	452	RESP_TAT	583	WTREP11	797
JGROCYWK	453	ROOMX	584	WTREP12	808
JGRO_YWK	459	ROOMX_	592	WTREP13	819
LUMPX	460	SALEX	593	WTREP14	830
LUMPX_	468	SALEX_	601	WTREP15	841
MARITAL1	469	SEX_REF	602	WTREP16	852
MARI_AL1	470	SEX_REF_	603	WTREP17	863
NO_EARNR	471	SEX2	604	WTREP18	874
NO_E_RNR	473	SEX2_	605	WTREP19	885
NONERNX	474	SMSASTAT	606	WTREP20	896
NONERNX_	482	SSREFX	607	WTREP21	907
OCCEXPNX	483	SSREFX_	615	WTREP22	918
OCCE_PNX	491	STATREFX	616	WTREP23	929
OCCULIS2	492	STAT_EFX	624	WTREP24	940
OCCU_IS2	494	STRTDAY	625	WTREP25	951
ORIGIN1	495	STRTMNTH	627	WTREP26	962
ORIGIN1_	497	STRTYEAR	629	WTREP27	973
ORIGIN2	497	TAXPROPX	633	WTREP28	984
ORIGIN2_	498	TAXP_OPX	641	WTREP29	995
OTHINX	499	TYPOWND	642	WTREP30	1006
OTHINX_	507	TYPOWND_	643	WTREP31	1017
OTHRECX	508	UNEMPX	644	WTREP32	1028
OTHRECX_	516	UNEMPX_	652	WTREP33	1039
OTHREFX	517	VEHQ	653	WTREP34	1050
OTHREFX_	525	VEHQ_	655	WTREP35	1061
OTHRNTX	526	WEEKI	656	WTREP36	1072
OTHRNTX_	534	WEEKI_	657	WTREP37	1083
PENSIONX	535	WEEKN	658	WTREP38	1094
PENS_ONX	543	WELFRX	659	WTREP39	1105
PERSLT18	544	WELFRX_	667	WTREP40	1116
PERS_T18	546	WHYNWRK1	668	WTREP41	1127
PERSOT64	547	WHYN_RK1	669	WTREP42	1138
PERS_T64	549	WHYNWRK2	670	WTREP43	1149
PERSTAX	550	WHYN_RK2	671	WTREP44	1160
PERSTAX_	558	WK_WRKD1	672	FOODTOT	1171

Variable	Start Position	Variable	Start Position	Variable	Start Position
FOODHOME	1183	NONALBEV	1375	CHIL_AGE	1515
CEREAL	1195	OILS	1387	INCLASS	1516
BAKEPROD	1207	MISCFOOD	1399	STATE	1518
BEEF	1219	FOODAWAY	1411	STATE_	1520
PORK	1231	ALCBEV	1423	CHDOTHX	1521
OTHMEAT	1243	SMOKSUPP	1435	CHDOTHX_	1529
POULTRY	1255	PET_FOOD	1447	ALIOTHX	1530
SEAFOOD	1267	PERSPROD	1459	ALIOTHX_	1538
EGGS	1279	PERSSERV	1471	CHDLMPX	1539
MILKPROD	1291	DRUGSUPP	1483	CHDLMPX_	1547
OTHDAIRY	1303	HOUSKEEP	1495	POVERTY	1548
FRSHFRUT	1315	HH_CU_Q	1507	POVERTY_	1549
FRSHVEG	1327	HH_CU_Q_	1509		
PROCFRUT	1339	HHID	1510		
PROCVEG	1351	HHID_	1513		
SWEETS	1363	CHILDAGE	1514		

B. MEMB FILE

Variable	Start Position	Variable	Start Position	Variable	Start Position
NEWID	1	FEDTXX	86	SCHLNCHX	165
AGE	9	FEDTXX_	94	SCHL_CHX	173
AGE_	11	GROSPAYX	95	SEX	174
ANFEDTXX	12	GROS_AYX	103	SEX_	175
ANFE_TXX	20	GVX	104	SLFEMPSS	176
ANGVX	21	GVX_	112	SLFE_PSS	182
ANGVX_	29	HRSPERWK	113	SS_RRX	183
ANPVTX	30	HRSP_RWK	116	SS_RRX_	191
ANPVTX_	38	IRAX	117	STA_SUPP	192
ANRRX	39	IRAX_	125	STA__UPP	193
ANRRX_	47	JSSDEDX	126	STATXX	194
ANSTATXX	48	JSSDEDX_	132	STATXX_	202
ANST_TXX	56	MARITAL	133	SUPPX	203
ANYRAIL	57	MARITAL_	134	SUPPX_	211
ANYRAIL_	58	MEMBNO	135	US_SUPP	212
ANYSSINC	59	OCCULIST	137	US_SUPP_	213
ANYS_INC	60	OCCU_IST	139	WAGEX	214
BSNSX	61	ORIGIN	140	WAGEX_	222
BSNSX_	69	ORIGIN_	141	WHYNOWRK	223
CU_CODE1	70	PVTX	142	WHYN_WRK	224
CU_C_DE1	71	PVTX_	150	WKS_WRKD	225
EDUCA	72	RACE	151	WKS__RKD	227
EDUCA_	74	RACE_	152	SS_RRQ	228
EMPLTYPE	75	RRX	153	SS_RRQ_	232
EMPL_YPE	76	RRX_	161	SOCRRX	233
FARMX	77	SCHLNCHQ	162	SOCRRX_	241
FARMX_	85	SCHL_CHQ	164	ARM_FORC	242

Variable	Start Position	Variable	Start Position	Variable	Start Position
ARM__ORC	243	IN_COLL_	245	MEDI_ARE	247
IN_COLL	244	MEDICARE	246		

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

A list of publications containing data from the CE program appears below. Bulletins may be purchased from the Chicago regional sales center, from the U.S. Government Printing Office, Washington D.C., 20402, or from National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161. To place a telephone order with National Technical Information Service, call (703)-487-4650, or for a rush order, call 1(800)-553-NTIS.

Consumer Expenditure Survey, 1996-97, Bulletin (expected release Autumn 1999)	Consumer unit income and expenditures, integrated data from Interview and Diary Surveys, classified by consumer unit characteristics: one way and cross tabulations, relative and aggregate shares. 64 tables.
Consumer Expenditures in 1997, Report 927 (1999)	Consumer unit income and expenditures, integrated data from Diary and Interview Surveys, classified by consumer unit characteristics. 10 tables. Available on request (202)-606-6900.
Consumer Expenditures in 1996, Report 926 (1998)	Consumer unit income and expenditures, integrated data from Diary and Interview Surveys, classified by consumer unit characteristics. 10 tables. Available on request (202)-606-6900.
Consumer Expenditure Survey, 1994-95, Bulletin 2492 (1997)	Consumer unit income and expenditures, integrated data from Interview and Diary Surveys, classified by consumer unit characteristics: one way and cross tabulations, relative and aggregate shares. 64 tables.
Consumer Expenditure Survey, 1992-93, Bulletin 2462 (1995)	Consumer unit income and expenditures, integrated data from Diary and Interview Surveys, classified by consumer unit characteristics: one way and cross tabulations, relative and aggregate shares. 60 tables, 245 pages. Available at the Government Printing Office, stock number 029-001-03214-5, $15.00.
Consumer Expenditure Survey, 1990-91, Bulletin 2425 (1993)	Consumer unit income and expenditures, integrated data from Diary and Interview Surveys, classified by consumer unit characteristics: one way and cross tabulations, relative and aggregate shares. 60 tables, 256 pages. NTIS Accession No. PB95-190948, $36.50 for paper copy, $17.50 for microfiche.
Consumer Expenditure Survey, 1988-89, Bulletin 2383 (1991)	Consumer unit income and expenditures, integrated data from Interview and Diary Surveys, classified by consumer unit characteristics: one way and cross tabulations. 40 tables, 199 pages. NTIS Accession #PB92130061, $36.00 for paper copy, $17.50 for microfiche.

Consumer Expenditure Survey, 1987, Bulletin 2354 (1990)	Consumer unit income and expenditures, integrated data from Interview and Diary Surveys, classified by consumer unit characteristics; one way and cross tabulations. 29 tables, 153 pages. NTIS Accession #PB92131622, $27.00 for paper copy, $12.50 for microfiche.
Consumer Expenditure Survey: Integrated Survey Data, 1984-86, Bulletin 2333 (1989)	Consumer unit income and expenditures, integrated data from Interview and Diary Surveys, classified by consumer unit characteristics; one way and cross tabulation. 34 tables, 171 pages. NTIS Accession #PB92131515, $27.00 for paper copy, $12.50 for microfiche.
Consumer Expenditure Interview Survey: Quarterly Data, 1984-1987, Bulletin 2332 (1989)	Consumer unit income and expenditures from the Interview Survey presented by quarter, classified by consumer unit characteristics; region, size, age, quintiles, income before taxes, and tenure tables included. 100 tables, 113 pages. NTIS Accession #PB92131523, $27.00 for paper copy, $12.50 for microfiche.

CONSUMER EXPENDITURE SURVEY: QUARTERLY DATA FROM THE INTERVIEW SURVEY

These quarterly reports present selected expenditure data and include a brief analysis of trends in consumer spending or other topics related to the Consumer Expenditure Survey. Requests for these reports can be made at (202)606-6900.

CONSUMER EXPENDITURE DATA ON THE INTERNET

Commonly-requested CE data tables can be found on-line at http://stats.bls.gov/csxhome.htm. Tables of integrated Diary and Interview data from 1984 forward are available under the following headings: Standard tables, Cross-tabulated tables, and Metropolitan Statistical Area tables.

FAX ON DEMAND - FAXSTAT

FAXSTAT contains information and data that may be faxed to users from a touch-tone phone 24 hours a day -- 7 days a week. To receive FAXSTAT transmissions dial (202) 606-6325 and follow the voice prompts. CE data that are accessible on FAXSTAT are for the most recent year available

PUBLIC-USE TAPES

Public-use tapes for the Diary and Interview Surveys are available for single years from 1984 to 1995, and as two-year tapes for 1982-83 and 1980-81. Seven public-use tapes are available from the 1972-73 survey including Diary Survey, detailed food quantity tapes; and integrated adjusted Quarterly Interview Survey- Summary, Detailed, Consumer Durables, and Clothing and Household Textiles tapes. Information about the tapes is available from the BLS national office. (See Section XVII. INQUIRIES, SUGGESTIONS, AND COMMENTS)

COMPACT DISKS

CE microdata on compact disk are available from the Bureau of Labor Statistics for 1972-73, 1984-85, 1990-91, 1992-93, 1994, 1995, 1996, and 1997. The 1984-85 through 1997 releases contain Interview and Diary data, while the 1972-73 CD includes Interview data only. The 1984-85, 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 1994-1996 include the complete collection of EXPN files. A 1984-94 “multi-year” CD that presents Interview FMLY file data is also available. In addition to the microdata, the CD’s also contain the same integrated Diary and Interview tabulated data that are found on the Consumer Expenditure Survey data diskettes. (see DISKETTES below)

DISKETTES

Diskettes containing integrated Diary and Interview survey data on consumer expenditures, income, and characteristics are available for the years 1984 through 1997. The diskettes are for use with IBM-compatible microcomputers with 3 1/2" disk drives. Users may specify either a Lotus 1-2-3 or an ASCII format.

The data on the diskettes are average annual expenditures by American consumers. They are presented in tables classified by 12 standard characteristics: quintiles of income, income class, age, size of consumer unit, composition of consumer unit, number of earners, housing tenure, race, type of area (urban-rural), region, occupation, and origin. Also on these diskettes are: data classified by income before taxes, cross-tabulated by age, by family size, or by region; data for selected Metropolitan Statistical Areas; and data for single persons classified by gender, cross-tabulated by age or by income. Expenditure categories in these tables are similar to those shown in the tables of the bulletin publications. For a more detailed description and an order form contact the BLS national office. (See Section XVII. INQUIRIES, SUGGESTIONS, AND COMMENTS)

STANDARD ERROR TABLES

Standard error tables for 1997 Interview and Diary data are available from the BLS national office upon request. These are cell specific, and therefore extensive.

STATE CODES ON DISKETTE

State codes from 1980 to 1993 are available on diskette for the Interview Survey. The diskettes 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 PSU's. PSU's in some state border areas may not be unique to one state, but may contain CU's from two or more states. (See Section X.D. STATE IDENTIFIER) Also, because of nondisclosure requirements STATE has been suppressed for some sampled CU's. (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) 606-6900

Written suggestions and comments should be forwarded to:

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

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