

1998 CONSUMER EXPENDITURE DIARY SURVEY
PUBLIC USE MICRODATA
DOCUMENTATION

May 17, 2000

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I. INTRODUCTION

The Consumer Expenditure Survey (CE) program provides a continuous and comprehensive flow of data on the buying habits of American consumers. These data are used widely in economic research and analysis, and in support of revisions of the Consumer Price Index. To meet the needs of users, the Bureau of Labor Statistics (BLS) produces population estimates (for consumer units 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 1998. They include weekly expenditure (EXPAN) and annual income (DTAB) files. The data in EXPAN and DTAB files are categorized by a Universal Classification Code (UCC). The advantage of the EXPAN 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 1998 from the Diary survey, integrated with data from the Interview survey, are published in *Consumer Expenditures in 1998 Report 940 (February 2000)*. 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, 1998".

II. CHANGES FROM THE 1997 MICRODATA FILES

1) The following variables have been deleted from the FMLY file. Field positions will be left blank.

<u>VARIABLE</u>	<u>START POSITION</u>	<u>FORMAT</u>
FS_DATE8	339	NUM(8)
FS_D_TE8	347	CHAR(1)
FS_AMT8	267	NUM(8)
FS_AMT8_	275	CHAR(1)

2) The following variables were added to the MEMB file. Fields were appended to the end of the file.

<u>VARIABLE</u>	<u>START POSITION</u>	<u>FORMAT</u>
PAYPERD	248	CHAR(1)
PAYPERD_	249	CHAR(1)

3) The following UCCs were deleted from the EXPAN file:

<u>UCC</u>	<u>Title</u>
190110	Lunch
190210	Dinner
190310	Snacks and nonalcoholic beverages
190320	Breakfast and brunch

<u>UCC</u>	<u>Title</u>
190901	Board
190902	Catered Affairs
200510	Beer and ale
200520	Wine
200530	Other alcoholic beverages
270510	Telephone interstate calls
270610	Telephone intrastate calls

4) The following UCCs were added to the EXPN file :

<u>UCC</u>	<u>TITLE</u>
190111	Lunch at Fast Food
190112	Lunch at Full Service
190113	Lunch at Vending Machine
190114	Lunch at Employer
190115	Lunch at Board
190116	Lunch at Catered Affairs
190211	Dinner at Fast Food
190212	Dinner at Full Service
190213	Dinner at Vending Machine
190214	Dinner at Employer
190215	Dinner at Board
190216	Dinner at Catered Affairs
190311	Snacks at Fast Food
190312	Snacks at Full Service
190313	Snacks at Vend Machine
190314	Snacks at Employer
190315	Snacks at Board
190316	Snacks at Catered Affairs
190321	Breakfast at Fast Food
190322	Breakfast at Full Service
190323	Breakfast at Vending Machine
190324	Breakfast at Employer
190325	Breakfast at Board
190326	Breakfast at Catered Affairs
190921	Catered Affairs at Fast Food
190922	Catered Affairs at Full Service
190923	Catered Affairs at Vending Machine
190924	Catered Affairs at Employer
190925	Catered Affairs at Board
190926	Catered Affairs
190911	Board at Fast Food
190912	Board at Full Service
190913	Board at Vending Machine
190914	Board at Employer
190915	Board
190916	Board at Catered Affairs
200511	Beer at Fast Food
200512	Beer at Full Service
200513	Beer at Vending Machine
200515	Beer at Board
200516	Beer at Catered Affairs
200521	Wine at Fast Food
200522	Wine at Full Service

<u>UCC</u>	<u>TITLE</u>
200523	Wine at Vending Machine
200524	Wine at Employer
200525	Wine at Board
200526	Wine at Catered Affairs
200531	Alcoholic Beverages Excluding Beer/Wine
200532	Alcoholic Beverages Excluding B/W Full Service
200533	Alcoholic Beverages Excluding B/W Vending Machine
200534	Alcoholic Beverages Excluding B/W at Employer
200535	Alcoholic Beverages Excluding B/W at Board
200536	Alcoholic Beverages Excluding B/W at Catered Affairs

Please see the NOTE at the end of Appendix II.A. for more details on expenditures for BOARD and CATERED AFFAIRS.

5) The following are EXPN file PUB_FLAG value changes beginning in Q19981.

<u>UCC</u>	<u>New Pub Flag value</u>
340520	1
280110	2
280120	2
280130	2
280220	2
320511	2
320512	2
320901	1
360120	2
360320	1
360340	2
410140	2
430110	1
430120	1
440120	1
440210	1
530412	2
620310	2
270310	2
610110	1
640420	2
650110	2
650210	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 also marked the year for which microdata were no longer offered on magnetic tape.)

The 1998 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 *Drydoc98.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 file naming convention on the ASCII CD-ROM is as follows:
(where "X" references the designated drive for your CD)

```
X:\DIARY98\FMLYD981.txt (Diary FMLY file for first quarter, 1998)
X:\DIARY98\MEMBD981.txt (Diary MEMB file for first quarter, 1998)
X:\DIARY98\EXPND981.txt (Diary EXPN file for first quarter, 1998)
X:\DIARY98\DTABD981.txt (Diary DTAB file for first quarter, 1998)
X:\DIARY98\FMLYD982.txt (etc.)
X:\DIARY98\MEMBD982.txt
X:\DIARY98\EXPND982.txt
X:\DIARY98\DTABD982.txt
X:\DIARY98\FMLYD983.txt
X:\DIARY98\MEMBD983.txt
X:\DIARY98\EXPND983.txt
X:\DIARY98\DTABD983.txt
X:\DIARY98\FMLYD984.txt
X:\DIARY98\MEMBD984.txt
X:\DIARY98\EXPND984.txt
X:\DIARY98\DTABD984.txt
X:\DIARY98\AGGD98.txt
X:\DIARY98\LABELD98.txt
X:\DIARY98\UCCD98.txt
```

The file naming convention on the SAS CD-ROM is as follows:

```
X:\DIARY98\FMLD981.sd2 (Diary FMLY file for first quarter, 1998)
X:\DIARY98\MEMD981.sd2 (Diary MEMB file for first quarter, 1998)
X:\DIARY98\EXPD981.sd2 (Diary EXPN file for first quarter, 1998)
X:\DIARY98\DTBD981.sd2 (Diary DTAB file for first quarter, 1998)
X:\DIARY98\FMLD982.sd2 (etc.)
X:\DIARY98\MEMD982.sd2
X:\DIARY98\EXPD982.sd2
X:\DIARY98\DTBD982.sd2
X:\DIARY98\FMLD983.sd2
X:\DIARY98\MEMD983.sd2
X:\DIARY98\EXPD983.sd2
X:\DIARY98\DTBD983.sd2
```

X:\DIARY98\FMLD984.sd2
 X:\DIARY98\MEMD984.sd2
 X:\DIARY98\EXPD984.sd2
 X:\DIARY98\DTBD984.sd2
 X:\DIARY98\AGGD98.txt
 X:\DIARY98\LABELD98.txt
 X:\DIARY98\UCCD98.txt

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:

<u>ASCII data set</u>	<u>SAS data set</u>	<u>98LRECL</u>	<u>98Record Count</u>
FMLYD981.txt	FMLD981.sd2	1549	2590
MEMBD981.txt	MEMD981.sd2	249	6499
EXPND981.txt	EXPD981.sd2	40	110423
DTABD981.txt	DTBD981.sd2	28	40356
FMLYD982.txt	FMLD982.sd2	1549	2644
MEMBD982.txt	MEMD982.sd2	249	6654
EXPND982.txt	EXPD982.sd2	40	113036
DTABD982.txt	DTBD982.sd2	28	40590
FMLYD983.txt	FMLD983.sd2	1549	2713
MEMBD983.txt	MEMD983.sd2	249	7037
EXPND983.txt	EXPD983.sd2	40	114080
DTABD983.txt	DTBD983.sd2	28	41733
FMLYD984.txt	FMLD984.sd2	1549	3834
MEMBD984.txt	MEMD984.sd2	249	9590
EXPND984.txt	EXPD984.sd2	40	160027
DTABD984.txt	DTBD984.sd2	28	57271

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(Y981) indicates the variable is deleted starting with the data file of the first quarter of 1998.

*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 BLS derived	1	NUM(8)
HH_CU_Q	Count of CUs in this household BLS derived	1507	NUM(2)
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. BLS derived	1510	NUM(3)
HHID_		1513	CHAR(1)
WEEKI	Week of the Diary CODED 1 First week Diary 2 Second week Diary Census derived	656	CHAR(1)
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	629	CHAR(4)

Cover 19

PICK_UP	Final interview status CODED	559	CHAR(2)
	01 Diary placed or completed		
	03 Temporarily absent during ENTIRE reference period		

Cover 20

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 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	564	CHAR(1)
SMSASTAT	Does CU reside inside a Metropolitan Statistical Area (MSA)? CODED 1 Yes 2 No BLS derived	606	CHAR(1)
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
RR 04	Arizona	31	Nebraska
*05	Arkansas	R 32	Nevada
**06	California	R 33	New Hampshire
08	Colorado	34	New Jersey
09	Connecticut	*35	New Mexico
10	Delaware	RR**36	New York
R 11	District of Columbia	**37	North Carolina
**12	Florida	RR 39	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	R 54	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 strata¹ of observations from this state include "re-codes" from other states.

RR indicates that either some observations from this state have been re-coded or at least one stratum¹ of observations from this state includes "re-codes" from other states.

R* indicates that the STATE code has been suppressed for some sampled CUs in that state and, either STATE has been re-coded or the state includes "re-codes" from other states in all strata¹.

RR** indicates that the STATE code has been suppressed for some sampled CUs in that state and, either STATE has been re-coded or the state includes "re-codes" from other states in at least one stratum¹.

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

States not listed are not in the CE sample.

Census derived

STATE_		1520	CHAR(1)
CUTENURE	Housing tenure	43	CHAR(1)
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		
CUTE_URE		44	CHAR(1)
FAM_SIZE	Number of members in CU	78	NUM(2)
	BLS derived		
FAM__IZE		80	CHAR(1)
PERSLT18	Number of children less than 18 in CU	544	NUM(2)
	BLS derived		
PERS_T18		546	CHAR(1)
PERSOT64	Number of persons over 64 in CU	547	NUM(2)
	BLS derived		
PERS_T64		549	CHAR(1)
CHILDAGE	Age of children of reference person CODED	1514	CHAR(1)
	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		
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	81	CHAR(1)
	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		
FAM__YPE		82	CHAR(1)
NO_EARNR	Number of earners	471	NUM(2)
	BLS derived		
NO_E_RNR		473	CHAR(1)
EARNCOMP	Composition of earners CODED	57	CHAR(1)
	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		
	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	1516	CHAR(2)
	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		
	BLS derived		
RESPSTAT	Completeness of income response CODED	582	CHAR(1)

- 1 Complete income respondent
- 2 Incomplete income respondent

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 FINCBFX - JFS_AMT)	1548	CHAR(1)
---------	---	------	---------

CODED

- 1 Yes
- 2 No

BLS derived

POVERTY_		1549	CHAR(1)
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c. CHARACTERISTICS OF REFERENCE PERSON AND SPOUSE

VARIABLE	ITEM DESCRIPTION	START POSITION	FORMAT
AGE_REF	Age of reference person	36	NUM(2)
	BLS derived		
AGE_REF_		38	CHAR(1)
REF_RACE	Race of reference person	578	CHAR(1)
	CODED		
	1 White		
	2 Black		
	3 American Indian, Aleut, or Eskimo		
	4 Asian or Pacific Islander		
	5 Other		
	BLS derived		
REF__ACE		579	CHAR(1)
SEX_REF	Sex of reference person	602	CHAR(1)
	CODED		
	1 Male		
	2 Female		

	BLS derived		
SEX_REF_		603	CHAR(1)
MARITAL1	Marital status of reference person CODED	469	CHAR(1)
	1 Married		
	2 Widowed		
	3 Divorced		
	4 Separated		
	5 Never married		
	BLS derived		
MARI_AL1		470	CHAR(1)
ORIGIN1	Origin or ancestry of reference person CODED	495	CHAR(1)
	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		
	BLS derived		
ORIGIN1_		497	CHAR(1)
EDUC_REF	Education of reference person CODED	68	CHAR(2)
	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		
EDUC0REF		70	CHAR(1)
AGE2	Age of spouse	39	NUM(2)
	BLS derived		
AGE2_		41	CHAR(1)
RACE2	Race of spouse CODED - same as REF_RACE	574	CHAR(1)
	BLS derived		
RACE2_		575	CHAR(1)
SEX2	Sex of spouse CODED - same as SEX_REF	604	CHAR(1)
	BLS derived		
SEX2_		605	CHAR(1)
ORIGIN2	Origin or ancestry of spouse CODED - same as ORIGIN1	497	CHAR(1)
	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	<p>The job in which reference person received the most earnings during the past 12 months best fits the following category</p> <p>CODED</p> <p>Manager, professional</p> <p>01 Administrator, manager</p> <p>02 Teacher</p> <p>03 Professional</p> <p>Administrative support, technical, sales</p> <p>04 Administrative support, including clerical</p> <p>05 Sales, retail</p> <p>06 Sales, business goods and services</p> <p>07 Technician</p> <p>Service</p> <p>08 Protective service</p> <p>09 Private household service</p> <p>10 Other service</p> <p>Operator, assembler, laborer</p> <p>11 Machine operator, assembler, inspector</p> <p>12 Transportation operator</p> <p>13 Handler, helper, laborer</p> <p>Precision production, craft, repair</p> <p>14 Mechanic, repairer, precision production</p> <p>15 Construction, mining</p> <p>Farming, forestry, fishing</p> <p>16 Farming</p> <p>17 Forestry, fishing, groundskeeping</p> <p>Armed forces</p> <p>18 Armed forces</p> <p>BLS derived</p>	561	CHAR(2)
OCCU_IS1		563	CHAR(1)
EMPLTYP1	<p>Employer from which reference person received the most earnings in past 12 months</p> <p>CODED</p> <p>1 Private company, business, or individual</p> <p>2 Federal government</p> <p>3 State government</p> <p>4 Local government</p> <p>5 Self-employed in own business, professional practice, or farm</p> <p>6 Family business or farm, working without pay</p> <p>BLS derived</p>	74	CHAR(1)
EMPL_YP1		75	CHAR(1)
WHYNWRK1	<p>Reason reference person did not work during the past 12 months</p> <p>CODED</p> <p>1 Retired</p> <p>2 Taking care of home/CU</p> <p>3 Going to school</p>	668	CHAR(1)

- 4 Ill, disabled, unable to work
- 5 Unable to find work
- 6 Doing something else

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 BLS derived	139	NUM(8)
FINC_EFX		147	CHAR(1)
FINCAFTX	Amount of CU income after taxes in past 12 months (FINCBEFX - PERSTAX) *L BLS derived	130	NUM(8)
FINC_FTX		138	CHAR(1)
EARNX	Amount of earned income before taxes by CU in past 12 months (FWAGEX + FBSNSX + FFARMX) *L BLS derived	59	NUM(8)
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 BLS derived	474	NUM(8)
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) BLS derived	378	NUM(8)
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 received from roomers or boarders?	584	NUM(8)
	*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?	526	NUM(8)
	*L		
	S04B 1g(2)		
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?	499	NUM(8)
	S04B 2c		
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?	1521	NUM(8)
	S04B 1h(2)		

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?	1530	NUM(8)
	S04B 1i(2)		
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 FINCBFX, NONERNX, and FINCAFTX	423	NUM(8)
	BLS derived		
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)
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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)
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S04B 3c

SSREFX_		615	CHAR(1)
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INSREFX	During the past 12 months, what was the total amount of refund received from insurance policies by ALL CU members?	405	NUM(8)
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S04B 3d

INSREFX_		413	CHAR(1)
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PTAXREFX	During the past 12 months, what was the total amount of refund received from property taxes by ALL CU members?	565	NUM(8)
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S04B 3e

PTAX_EFX		573	CHAR(1)
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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?	633	NUM(8)
	S04B 4c		
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?	9	NUM(8)
	S04B 4a		
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?	94	NUM(8)
	S04B 3a		
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) BLS derived	168	NUM(8)
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) BLS derived	195	NUM(8)
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 <i>(Date in 9b)</i> - 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 *D(Y981)	267	NUM(8)
FS_AMT8_	*D(Y981)	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 *D(Y981)	339	NUM(8)
FS_D_TE8	*D(Y981)	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? S04B 6b	186	NUM(8)
FREEMLX_		194	CHAR(1)
JGROCYMV	Monthly expenditure for grocery store purchases BLS derived	446	NUM(6)
JGRO_YMV		452	CHAR(1)
GROCYWK	Weekly expenditure for grocery store purchases BLS derived	453	NUM(6)
JGRO_YWK		459	CHAR(1)
JGRCFDMV	Monthly expenditure for food and non-alcoholic beverages purchased at grocery store BLS derived	432	NUM(6)
JGRC_DMV		438	CHAR(1)
JGRCFDWK	Weekly expenditure for food and non-alcoholic beverages purchased at grocery store BLS derived	439	NUM(6)
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)

I. **WEIGHTS**

VARIABLE	ITEM DESCRIPTION	START POSITION	FORMAT
FINLWT21	CU replicate weight # 45 (total sample weight) BLS derived	148	NUM(11,3)
<i>The following are the 44 half sample replicate weights, WTREP01 through WTREP44, which are used for variance computation. They are all BLS derived variables.</i>			
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 addition (deletion) to the summary expenditure variable occurs is denoted by a leading subscript directly prior to the UCC code. For example, ^{N981}<UCC> or ^{D981}<UCC> identifies a new or deleted UCC for a given 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 030810	1219	NUM(12,5)

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 180720	1399	NUM(12,5)
* FOODAWAY	Food away from home D981 190110 D981 190210 D981 190310 D981 190320 D981 190902 D981 190910 N981 190111 N981 190112 N981 190113 N981 190114 N981 190115 N981 190116 N981 190211 N981 190212 N981 190213 N981 190214 N981 190215 N981 190216 N981 190311 N981 190312 N981 190313 N981 190314 N981 190315 N981 190316 N981 190321 N981 190322 N981 190323 N981 190324 N981 190325 N981 190326 N981 190921 N981 190922 N981 190923 N981 190924 N981 190925	1411	NUM(12,5)

^{N981}190926 ^{N981}190911 ^{N981}190912 ^{N981}190913 ^{N981}190914
^{N981}190915 ^{N981}190916

* ALCBEV	Alcoholic beverages	1423	NUM(12,5)
	^{D981} <u>200111</u> ^{N981} <u>200210</u> ^{N981} <u>200310</u> ^{N981} <u>200410</u> ^{D981} <u>200510</u> ^{D981} <u>200520</u> ^{N981} <u>200530</u> ^{N981} <u>200511</u> ^{N981} <u>200512</u> ^{N981} <u>200513</u> ^{N981} <u>200516</u> ^{N981} <u>200521</u> ^{N981} <u>200522</u> ^{N981} <u>200523</u> ^{N981} <u>200526</u> ^{N981} <u>200531</u> ^{N981} <u>200532</u> ^{N981} <u>200533</u> ^{N981} <u>200536</u>		
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} <u>550410</u> 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 status 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 BLS derived	1	NUM(8)
MEMBNO	Member number S01 1	135	NUM(2)

b. **CHARACTERISTICS OF MEMBER**

VARIABLE	ITEM DESCRIPTION	START POSITION	FORMAT
CU_CODE1	What is the member's relationship to (<i>reference person</i>)? 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 S01 12	133	CHAR(1)
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 S01 11	140	CHAR(1)
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	72	CHAR(2)

- 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

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?	242	CHAR(1)
	CODED		
	1 Yes		
	2 No		

S01 14

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?	162	NUM(2)

S02 5b(d)

SCHL_CHQ		164	CHAR(1)
SCHLNCHX	What is the usual weekly expense for the meals the member purchased at school?	165	NUM(8)

S02 5b(c)

SCHL_CHX		173	CHAR(1)
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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 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	137	CHAR(2)
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)
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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?	214	NUM(8)
	S04A 6a		
WAGEX_		222	CHAR(1)
GROSPAYX	What was the gross amount of the member's last pay?	95	NUM(8)
	S04A 9		
GROS_AYX		103	CHAR(1)
PAYPERD	Time period covered for last pay	248	CHAR(1)
	1 week		
	2 2 weeks		
	3 month		
	4 quarter		

	5 year		
	6 other		
	7 twice a month		
	S04A 10a		
	*N(981)		
PAYPERD_	*N(981)	249	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?	61	NUM(8)
	*L		
	S04A 6b		
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?	77	NUM(8)
	*L		
	S04A 6c		
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?	59	CHAR(1)
	CODED		
	1 Yes		
	2 No		
	S04A 7a		
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?	57	CHAR(1)
	CODED		
	1 Yes		
	2 No		
	S04A 7b		
ANYRAIL_		58	CHAR(1)
SOCRRX	Annual amount of Social Security and Railroad Retirement income received by member in past 12 months	233	NUM(8)
	BLS derived		
SOCRRX_		241	CHAR(1)

SS_RRX	What was the amount of the last Social Security or Railroad Retirement payment received? (In past 12 months)	183	NUM(8)
	S04A 7d		
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?	246	CHAR(1)
	CODED		
	1 Yes		
	2 No		
	S04A 7e		
MED_CARE		247	CHAR(1)
SS_RRQ	During the past 12 months, how many Social Security or Railroad Retirement payments did the member receive?	228	NUM(4)
	S04A 7f		
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?	212	CHAR(1)
	CODED		
	1 Yes		
	2 No		
	S04A 8a		
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?	192	CHAR(1)
	CODED		
	1 Yes		
	2 No		
	S04A 8b		
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)	203	NUM(8)
	S04A 8b		
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 BLS derived	126	NUM(6)
JSSDEDX_		132	CHAR(1)
SLFEMPSS	Amount of income contributed to Social Security by member if self-employed BLS derived	176	NUM(6)
SLFE_PSS		182	CHAR(1)
ANRRX	Annualized amount of Railroad Retirement deducted from last	39	NUM(8)

	pay ((RRX/GROSPAYX) x WAGEX)		
	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 pension fund?	142	NUM(8)
	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, (0000-9999) 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)
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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 Blank -- Not topcoded BLS derived	27	CHAR(1)
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:\DIARY98\AGGD98.TXT

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:\DIARY98\LABELD98.TXT

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:\DIARY98\UCCD98.TXT

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

DESCRIPTION	START POSITION	FORMAT
UCC	1	CHAR(6)
UCC title See Section XIII.A. EXPENDITURE UCCS ON 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)	8	CHAR(50)

d. **SAMPLE program file**

x:\PROGRAMS\ SAMPLD98.TXT (SAS)

The SAMPLD98 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
OCCEXPX	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	98Upper critical value	98Lower critical value	98Upper topcode value	98Lower topcode value
ADDFEDX	20,000	-	53,264	-
ADDOTHX	4,820	-	5,228	-
ADDSTAX	5,000	-	11,795	-
AGE_REF	90	-	93	-
AGE2	90	-	92	-
ALIOTHX	29,000	-	35,503	-
CHDLMPX	7,200	-	13,464	-
CHDOTHX	15,000	-	17,292	-
DIVX	36,000	-	108,002	-
FEDREFX	5,000	-	12,084	-
INSREFX	8,000	-	19,800	-
INTX	35,000	-	41,500	-
LUMPX	99,000	-	214,571	-
OCCEXPX	2,490	-	6,530	-
OTHINX	25,000	-	80,400	-
OTHREFX	6,000	-	9,500	-
OTHRNTX	29,500	-12000	86,998	-60800
PENSIONX	46,800	-	62,292	-
PTAXREFX	2,100	-	2,950	-
ROOMX	27,000	-6861	77,000	-16000
SALEX	5,000	-	31,000	-
SSREFX	500	-	1,750	-
STATREFX	1,312	-	2,975	-
TAXPROPX	4,500	-	7,684	-

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
FINCBFX	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 \$150,000 (-\$9,999). The topcode value for BSNSX is \$338,500 (-\$32,826).

		BSNSX		FBSNSX	
<u>CU</u>		<u>REPORTED</u>	<u>AFTER TOPCODING</u>	<u>VALUE</u>	<u>FLAGGED AS TOPCODED?</u>
CU 1:	MEMB1	\$145,000	\$145,000	290,000	No
	MEMB2	145,000	145,000		
CU 2:	MEMB1	350,000	338,500	272,848	Yes
	MEMB2	-25,000	-32,826		
	MEMB3	-35,000	-32,826		
CU 3	MEMB1	160,000	338,500	398,500	Yes
	MEMB2	130,000	60,000		
CU 4	MEMB1	160,000	338,500	305,674	Yes
	MEMB2	-200,000	-32,826		

While CUs 1 and 2 each originally report \$290,000 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 (\$338,500) is higher than the amount that it reported (\$160,000). 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
RR 04	Arizona	31	Nebraska
*05	Arkansas	R 32	Nevada
**06	California	R 33	New Hampshire
08	Colorado	34	New Jersey
09	Connecticut	*35	New Mexico
10	Delaware	RR**36	New York
R 11	District of Columbia	**37	North Carolina
**12	Florida	RR 39	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	R 54	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 strata¹ of observations from this state include "re-codes" from other states.

RR indicates that either some observations from this state have been re-coded or at least one stratum¹ of observations from this state includes "re-codes" from other states.

R* indicates that the STATE code has been suppressed for some sampled CUs in that state and, either STATE has been re-coded or the state includes "re-codes" from other states in all strata¹.

RR** indicates that the STATE code has been suppressed for some sampled CUs in that state and, either STATE has been re-coded or the state includes "re-codes" from other states in at least one stratum¹.

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

States not listed are not in the CE sample.

B. MEMBER CHARACTERISTICS AND INCOME FILE (MEMB)

The following 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.

<u>Variable</u>	<u>98Upper critical Value</u>	<u>98Lower critical Value</u>	<u>98Upper topcode value</u>	<u>98Lower topcode value</u>
AGE	90	-	93	-
ANFEDTXX	16,824	-	25,517	-
ANGVX	5,882	-	7,775	-
ANPVTX	10,937	-	15,143	-
ANRRX	4,130	-	5,212	-
ANSTATXX	5,875	-	8,716	-
BSNSX	150,000	-9,999	338,500	-32,826
FARMX	80,000	-9,999	174,000	-43,617
FEDTXX	862	-	1,821	-
GROSPAYX	5,000	-	16,150	-
GVX	439	-	1,061	-
IRAX	13,500	-	41,192	-
JSSDEDX	5,981	-	8,546	-
PVTX	600	-	1,693	-
RRX	205	-	303	-
SLFEMPSS	11,382	-	13,981	-
STATXX	287	-	667	-
WAGEX	150,000	-	245,567	-

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

$$(1) \quad \text{ANFEDTXX} = (\text{WAGEX} (\text{FEDTXX}/\text{GROSPAYX})).$$

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

$$(2) \quad \text{WAGEX} = (\text{ANFEDTXX} (\text{GROSPAYX}/\text{FEDTXX})).$$

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.

<u>UCC</u>	<u>Description</u>
001000	Purchase price of stocks, bonds, mutual funds
009000	Mortgage payment including coop
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
560400	Service by professionals other than physicians
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.

<u>Variable</u>	<u>98Upper critical value</u>	<u>98Lower critical value</u>	<u>98Upper topcode value</u>	<u>98Lower topcode value</u>
001000	1,923	-	5,546	-
009000	2124		2,891	
210110	1,160	-	1,608	-
560110	350	-	1,128	-
560210	950	-	3,945	-
560310	250	-	413	-
570000	586	-	938	-
570230	581	-	679	-

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.

<u>Variable</u>	<u>98Upper critical value</u>	<u>98Lower critical value</u>	<u>98Upper topcode value</u>	<u>98Lower topcode value</u>
210210	1,150	-	-	-
210310	2,849	-	-	-
210900	437	-	-	-
550320	339	-	-	-
550330	425	-	-	-
560330	400	-	-	-
560400	400	-	-	-
570220	5,000	-	-	-
570901	356	-	-	-

D. INCOME FILE (DTAB)

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

<u>UCC</u>	<u>Description</u>
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

<u>UCC</u>	<u>Description</u>
900040	Amount received from pensions or annuities
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.

<u>Variable</u>	<u>98Upper critical Value</u>	<u>98Lower critical Value</u>	<u>98Upper topcode value</u>	<u>98Lower topcode value</u>
900040	46,800	-	62,292	-
900050	36,000	-	108,002	-
900060	27,000	-6,861	77,000	-16,000
900070	29,500	-12,000	86,998	-60,800
900080	35,000	-	41,500	-
900131	15,000	-	17,292	-
900132	29,000	-	35,503	-
900140	25,000	-	80,400	-
910000	99,000	-	214,571	-
910010	5,000	-	31,000	-
910020	500	-	1,750	-
910030	8,000	-	19,800	-
910040	2,100	-	2,950	-
910041	7,200	-	13,464	-
950001	-	-5,000	-	-12,084
950011	-	-1,312	-	-2,975
950021	4,820	-	5,228	-
950022	4,500	-	7,684	-
950023	-	-6,000	-	-9,500
980020	90	-	93	-

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.)

<u>UCC</u>	<u>FMLY variable</u>	<u>Description</u>
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	FINCBFX	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 1998, Report 940* (2000) used an integration methodology which incorporated information from *both* Diary and Interview Surveys. Diary data users will not be able to match published CE estimates because of this. 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

$\bar{X}_{(S,k)(q,r)}$ 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 $X_{(S,k)(12,6)}$.

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

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

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

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, $\bar{X}_{(S,k)(12,6)}$, 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

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

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 $\bar{X}_{(S,k)(q,r)}$, (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:

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

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 $\bar{X}_{(S,k)(q,r)}$.

The estimates for total ($X_{(S,k)(q,r)}$) and mean expenditures ($\bar{X}_{(S,k)(q,r)}$) 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 $\bar{X}_{(S,k)(q,r)}$ 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 $\bar{Z}_{(S,r)}$ 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

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

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:

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

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

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

and

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

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 1998 was \$4.20. The standard error for this estimate is \$.14. Hence, the 95 percent confidence interval around this estimate is from \$3.92 to \$4.48. Therefore, we could conclude with 95 percent confidence that the mean weekly expenditures for beef for total complete income reporters in 1998 lies within the interval \$3.92 to \$4.48.

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 1998 the average weekly expenditures for total food for complete income reporters in the second income quintile was \$64.45 and for complete income reporters in the third income quintile was \$80.84. The apparent difference between the two mean expenditures is $\$80.84 - \$64.45 = \$16.39$. The standard error on the estimate of \$64.45 is \$1.53 and the estimated standard error for \$80.84 is \$1.78. The standard error (S.E.) of a difference is approximately equal to

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

where

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

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

$$\sqrt{((1.78)^2 + (1.53)^2)} = 2.35$$

This means that the 95 percent confidence interval around the difference is from \$11.69 to \$21.09. 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

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

where

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

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

VII. MICRODATA VERIFICATION AND ESTIMATION METHODOLOGY

This section is designed to help users become familiar with the microdata files. The following program gives users a benchmark to verify that their copy of the CD-ROM contains valid data, 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 =98;
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 labs "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 inclclass $2.;
```

NOTE: The infile FMLY1 is:
FILENAME=x:\diary98\fmlyd981.txt,
RECFM=V,LRECL=1549

NOTE: 2590 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 2590 observations and 3 variables.

```
33 proc sort; by newid;
34
```

NOTE: The data set WORK.FMLY1 has 2590 observations and 3 variables.

```
35 data fmly2;
36   infile fmly2 lrecl=1549;
```

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. Inclclass is a code that represents the range within which the consumer unit's annual income falls.

```
37   input @1 newid 8. @148 finlwt21 11.3
38       @1516 inclass $2.;
```

NOTE: The infile FMLY2 is:
FILENAME=x:\diary98\fmlyd982.txt,
RECFM=V,LRECL=1549

NOTE: 2644 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 2644
observations and 3 variables.

```
39   proc sort; by newid;
40
```

NOTE: The data set WORK.FMLY2 has 2644
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:\diary98\fmlyd983.txt,
RECFM=V,LRECL=1549

NOTE: 2713 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 2713
observations and 3 variables.

```
45   proc sort; by newid;
46
```

NOTE: The data set WORK.FMLY3 has 2713
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:\diary98\fmlyd984.txt,

RECFM=V,LRECL=1549

NOTE: 3834 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 3834 observations and 3 variables.

```
51  proc sort; by newid;
52
53
```

NOTE: The data set WORK.FMLY4 has 3834 observations and 3 variables.

```
54  data fmyall;
55    set fmy1 fmy2 fmy3 fmy4 ;
56    by newid;
57
58    uspop = finlwt21 / 4;
```

NOTE: The data set WORK.FMLYALL has 11781 observations and 4 variables.

```
59  proc sort; by newid;
60
```

NOTE: The data set WORK.FMLYALL has 11781 observations and 4 variables.

```
61  proc summary nway data = fmyall
(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 fmy 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   pop1 = sum (of pop1-pop10);
71   popc = sum (of pop1-pop9);

```

Lines 68-71 take the transposed dataset and calculate pop1, the all consumer units population, and popc, the all complete income reporters population.

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.
;

```

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.

NOTE: The infile DTAB1 is:
 FILENAME=x:\diary98\dtabd981.txt,
 RECFM=V,LRECL=28

NOTE: 40356 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 40356 observations and 3 variables.

```

80 proc sort; by newid;
81

```

NOTE: The data set WORK.DTAB1 has 40356 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:\diary98\dtabd982.txt,
 RECFM=V,LRECL=28

NOTE: 40590 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 40590 observations and 3 variables.

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

NOTE: The data set WORK.DTAB2 has 40590 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:\diary98\dtabd983.txt,
RECFM=V,LRECL=28

NOTE: 41733 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 41733 observations and 3 variables.

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

NOTE: The data set WORK.DTAB3 has 41733 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:\diary98\dtabd984.txt,
RECFM=V,LRECL=28

NOTE: 57271 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 57271 observations and 3 variables.

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

NOTE: The data set WORK.DTAB4 has 57271 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 179950 observations and 3 variables.

```
100 proc sort; by newid;
```

NOTE: The data set WORK.DTAB has 179950 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:\diary98\expnd981.txt,
RECFM=V,LRECL=40

NOTE: 110423 records were read from the infile EXPN1.

The minimum record length was 40.

The maximum record length was 40.

NOTE: The data set WORK.EXP1 has 110423 observations and 3 variables.

```
107 proc sort; by newid;
108
```

NOTE: The data set WORK.EXP1 has 110423 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:\diary98\expnd982.txt,
RECFM=V,LRECL=40

NOTE: 113036 records were read from the infile

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.

EXP2.

The minimum record length was 40.

The maximum record length was 40.

NOTE: The data set WORK.EXP2 has 113036 observations and 3 variables.

```
112 proc sort; by newid;  
113
```

NOTE: The data set WORK.EXP2 has 113036 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:\diary98\expnd983.txt,

RECFM=V,LRECL=40

NOTE: 114080 records were read from the infile EXPN3.

The minimum record length was 40.

The maximum record length was 40.

NOTE: The data set WORK.EXP3 has 114080 observations and 3 variables.

```
117 proc sort; by newid;  
118
```

NOTE: The data set WORK.EXP3 has 114080 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:\diary98\expnd984.txt,

RECFM=V,LRECL=40

NOTE: 160027 records were read from the infile EXPN4.

The minimum record length was 40.

The maximum record length was 40.

NOTE: The data set WORK.EXP4 has 160027 observations and 3 variables.

```
122 proc sort; by newid;  
123
```

NOTE: The data set WORK.EXP4 has 160027 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.EXP4 has 497566 observations and 3 variables.

```
128   proc sort; by newid;
```

NOTE: The data set WORK.EXP4 has 497566 observations and 3 variables.

NOTE: The PROCEDURE SORT used 1 minute 24.35 seconds.

```
129           delete expn1 expn2 expn3 expn4;  
130  
131  
132
```

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

NOTE: Deleting WORK.EXP1 (memtype=DATA).
NOTE: Deleting WORK.EXP2 (memtype=DATA).
NOTE: Deleting WORK.EXP3 (memtype=DATA).
NOTE: Deleting WORK.EXP4 (memtype=DATA).

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

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

NOTE: The data set WORK.EXP4 has 677516 observations and 3 variables.

```
136   proc sort; by newid;
```

NOTE: The data set WORK.EXP4 has 677516 observations and 3 variables.

```
137   proc datasets;  
137           delete dtab expn;  
138
```

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

NOTE: Deleting WORK.DTAB (memtype=DATA).
NOTE: Deleting WORK.EXP4 (memtype=DATA).

```

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 677516 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

```

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.

NOTE: The data set WORK.AGGCST has 5016 observations and 5 variables.

```

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     _l_=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 562 observations and 11 variables.

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

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

NOTE: The infile AGG is:
FILENAME=x:\diaru98\aggd98.txt,
RECFM=V,LRECL=256

NOTE: 640 records were read from the infile AGG.

The minimum record length was 0.

The maximum record length was 20.

NOTE: The data set WORK.AGFILE has 640 observations and 2 variables.

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

NOTE: The data set WORK.AGFILE has 640 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
```

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.

NOTE: The data set WORK.PUBRAY has 630 observations and 12 variables.

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

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

NOTE: The data set WORK.AGGSUM has 68 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);
```

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.

```

192 array ex grpt grpc grp1-grp10;
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 68 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 69 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:\diary98\labeld98.txt,
RECFM=V,LRECL=256

```

NOTE: 67 records were read from the infile LABLS.
The minimum record length was 56.
The maximum record length was 57.

NOTE: The data set WORK.ADDLAB has 67 observations and 2 variables.

```

211 proc sort; by line;
212

```

NOTE: The data set WORK.ADDLAB has 67 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

```

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).

NOTE: The data set WORK.PUBTAB has 67 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.

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 1998												
OBS	POP1	POP2	POP3	POP4	POP5	POP6	POP7	POP8	POP9	POP10	POPT	POPC
1	3422880.60	7822129.81	7722629.96	7165721.14	11186812.93	9218791.63	8023542.02	11151726.19	12313108.61	28931914.27	106959257.14	78027342.88
CE Microdata Diary Survey Average Weekly Expenditures, for Calendar Year 1998 by Income												
	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		
TITLE												
Number of consumer units	78027343	3422880.6	7822129.8	7722630.0	7165721.1	11186813	9218791.6	8023542.0	11151726	12313109		
Income before taxes	40,996.85	1,044.36	7,586.33	12,207.42	17,139.55	24,566.40	34,531.21	44,447.14	58,598.78	106846.41		
Income after taxes	37,775.43	328.69	7,358.40	12,015.30	16,748.89	23,476.75	31,991.98	40,906.02	53,874.37	96,601.47		
Age of reference person.....	47.54	43.35	55.18	55.13	51.37	47.78	44.61	42.78	43.32	45.77		
Average number in consumer unit:												
Persons	2.50	2.02	1.70	1.92	2.24	2.41	2.51	2.86	2.93	3.09		
Children under 18.....	0.69	0.53	0.42	0.47	0.57	0.67	0.65	0.89	0.83	0.87		
Persons 65 and over.....	0.31	0.24	0.47	0.56	0.55	0.41	0.27	0.18	0.11	0.14		
Earners.....	1.32	0.86	0.52	0.65	0.86	1.17	1.40	1.63	1.86	2.04		
Vehicles.....	1.65	1.02	0.84	1.13	1.30	1.52	1.71	2.02	2.15	2.28		
Percent distribution:												
Male	55.20	43.41	22.47	40.74	56.95	54.62	58.56	61.92	65.17	71.93		
Female	44.80	56.59	77.53	59.26	43.05	45.38	41.44	38.08	34.83	28.07		
Homeowner	63.99	32.33	40.53	52.96	57.18	57.28	64.29	71.67	78.86	85.97		
Renter	36.01	67.67	59.47	47.04	42.82	42.72	35.71	28.33	21.14	14.03		
Black	11.39	18.10	16.76	14.65	15.94	12.54	10.84	10.07	8.13	4.61		
White and other	88.61	81.90	83.24	85.35	84.06	87.46	89.16	89.93	91.87	95.39		
Elementary education	6.80	13.29	16.61	14.05	10.37	7.93	4.56	3.77	0.64	0.34		
High school education	38.97	36.48	50.13	52.09	50.05	42.37	44.85	37.75	32.02	17.51		
College education	53.93	49.84	32.83	33.29	38.93	49.09	50.53	58.47	67.26	82.09		
Never attended and other	0.29	0.40	0.43	0.57	0.66	0.61	0.05	0.00	0.09	0.06		
At least one vehicle owned	89.33	59.56	65.86	81.94	85.58	94.31	94.70	96.62	98.24	97.95		
Food, total.....	87.22	49.42	47.41	53.10	63.31	72.91	85.87	97.00	113.20	142.41		
Food at home.....	54.07	32.12	33.29	37.57	42.82	47.69	54.07	59.43	68.84	79.22		
Cereals and cereal products.....	2.90	2.03	1.95	2.04	2.40	2.55	2.73	3.20	3.56	4.23		
Bakery products.....	5.51	2.71	3.34	3.98	4.13	5.03	5.51	6.12	6.79	8.31		
Beef.....	4.20	2.42	2.23	2.61	3.30	3.91	4.29	4.62	6.24	5.56		
Pork.....	2.86	2.05	2.20	1.97	2.79	2.55	3.05	3.05	3.33	3.68		
Other meats.....	1.80	0.98	1.27	1.20	1.51	1.55	1.83	2.08	2.24	2.55		
Poultry.....	2.69	1.45	1.64	1.86	2.19	2.31	2.81	2.77	3.50	4.02		
Fish and seafood.....	1.91	1.05	1.03	1.39	1.64	1.48	1.62	2.29	2.37	3.17		
Eggs.....	0.64	0.51	0.53	0.54	0.63	0.64	0.64	0.74	0.68	0.73		
Fresh milk and cream.....	2.39	1.80	1.61	1.99	1.95	2.09	2.37	2.63	2.98	3.16		
Other dairy products.....	3.64	1.93	2.18	2.45	2.88	3.16	3.50	3.87	4.86	5.53		
	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		
TITLE												
Fresh fruits.....	2.96	1.92	1.58	2.17	2.32	2.79	3.00	2.92	3.54	4.60		
Fresh vegetables.....	2.89	1.82	1.70	2.03	2.37	2.53	3.06	2.77	3.45	4.54		

Processed fruits.....	2.00	1.21	1.14	1.35	1.56	1.69	1.92	2.32	2.37	3.26
Processed vegetables.....	1.50	0.69	0.95	1.05	1.24	1.49	1.51	1.54	1.94	2.09
Sugar and other sweets.....	2.19	1.14	1.41	1.51	1.70	2.01	2.04	2.52	2.96	3.04
Fats and oils.....	1.50	0.92	1.05	1.08	1.31	1.36	1.50	1.68	1.87	2.03
Miscellaneous foods.....	7.84	4.55	4.51	5.01	5.39	6.61	7.94	9.09	10.30	12.06
Nonalcoholic beverages.....	4.63	2.95	2.98	3.33	3.55	3.94	4.74	5.20	5.85	6.68
Food away from home.....	33.14	17.30	14.12	15.53	20.49	25.22	31.81	37.58	44.36	63.19
Alcoholic beverages.....	5.74	4.92	2.17	2.76	3.53	4.55	5.17	6.30	7.22	11.20
Housing	58.59	29.49	34.28	41.34	43.83	53.07	60.42	62.72	72.29	90.06
Fuel and utilities	36.02	21.45	22.56	29.22	31.55	34.92	39.99	39.63	43.11	44.73
Household operations	0.17	0.00	0.00	0.06	0.00	0.59	0.13	0.23	0.04	0.20
Housekeeping supplies	9.46	3.47	4.16	6.34	6.22	7.15	9.03	10.60	13.22	16.58
Household furnishings and equipment ...	12.95	4.57	7.56	5.71	6.05	10.41	11.28	12.26	15.92	28.55
Apparel and services.....	25.06	17.02	10.38	12.07	12.59	19.97	26.04	30.71	31.60	46.32
Men, 16 and over.....	5.57	1.73	1.54	1.87	2.37	3.70	5.10	7.10	7.68	12.55
Boys, 2 to 15.....	0.69	0.23	0.19	0.32	0.32	0.89	0.68	0.72	0.79	1.28
Women, 16 and over.....	10.31	11.46	4.55	5.58	4.28	7.93	10.32	12.02	13.18	18.53
Girls, 2 to 15.....	1.12	0.90	0.33	0.24	1.01	0.94	0.96	1.43	1.36	2.17
Children under 2.....	1.48	0.94	0.44	1.15	0.63	1.20	2.12	1.69	1.80	2.36
Footwear.....	5.62	1.44	3.04	2.76	3.84	5.14	6.69	7.68	6.46	8.80
Other apparel products and services...	0.27	0.33	0.28	0.16	0.13	0.17	0.16	0.07	0.33	0.64
Transportation	18.50	9.68	8.89	12.33	12.75	16.15	22.54	21.28	24.67	25.98
Non-prescription drugs and supplies ...	2.99	1.38	1.44	2.01	2.74	2.55	2.63	4.27	3.82	4.28
Entertainment	11.17	6.24	4.64	6.46	6.50	7.71	9.61	14.09	16.06	20.33
Fees and admissions	0.64	0.59	0.40	0.25	0.03	0.15	0.24	0.81	1.05	1.66
Television, radios, sound equipment ...	5.24	3.03	2.82	3.62	3.65	4.66	5.69	5.79	7.47	7.13
Pet food and supplies	2.46	1.05	0.92	1.25	1.84	2.31	2.13	2.92	3.62	3.98
Playground equipment	0.30	0.00	0.08	0.00	0.21	0.00	0.00	0.61	0.07	1.29
Other entertainment supplies, equipment	2.53	1.57	0.42	1.34	0.77	0.58	1.54	3.97	3.85	6.27
Personal care products and services.....	8.38	7.20	4.26	6.08	4.89	6.12	7.76	8.77	10.91	14.78
Miscellaneous	2.65	1.35	0.84	1.46	1.57	1.94	2.29	2.42	4.33	5.09

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 data processing carried out by the Census Bureau includes keying the data from the questionnaires, clerical data editing, and correcting for inconsistencies in the collected data.

Upon completion by respondents, the diaries are sent from the regional offices to the Census National Processing Center (NPC) in Jeffersonville, IN. At the NPC, codes are applied to identify demographic characteristics and expenditures and inconsistencies and errors are identified and corrected.

After clerical processing at the NPC, the data are transmitted to the Census Processing Center in Suitland, MD, where they pass through basic quality checks of control counts, missing values, etc. The data are then electronically transmitted to BLS in Washington, DC.

B. BUREAU OF LABOR STATISTICS ACTIVITIES

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

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

Cases of extreme data values are investigated by reviewing questionnaires on microfilm. Errors discovered through this procedure are corrected prior to release of the data.

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 1998 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 1998 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 1998 Diary Survey is 76.4% 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	<i>Eligible housing unit interviews</i>		
		Number of potential diaries	Type A nonresponse	Total respondent interviews
18,810	3,394	15,416	3,635	11,781

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.

An underlined UCC represents either a new UCC or a deleted UCC. Please note that new UCCs may not be represented in all quarters. The quarter in which the addition (deletion) occurs is denoted by a leading superscript directly prior to the UCC code. For example, ^{N(D)971}(UCC) identifies a new (deleted) UCC 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

180720	ethnic foods, fresh and canned pizza
D981 190110	Vitamin supplements
N981 190111	Lunch at restaurants, cafes, etc...
N981 190112	Lunch at Fast Food
N981 190113	Lunch at Full Service
N981 190114	Lunch at Vending Machine
N981 190115	Lunch at Employer
N981 190116	Lunch at Board
N981 190116	Lunch at Catered Affairs
D981 190210	Dinner at restaurants, cafes, etc...
N981 190211	Dinner at Fast Food
N981 190212	Dinner at Full Service
N981 190213	Dinner at Vending Machine
N981 190214	Dinner at Employer
N981 190215	Dinner at Board
N981 190216	Dinner at Catered Affairs
D981 190310	Snacks and non alcoholic beverages, including tip
N981 190311	Snacks at Fast Food
N981 190312	Snacks at Full Service
N981 190313	Snacks at Vend Machine
N981 190314	Snacks at Employer
N981 190315	Snacks at Board
N981 190316	Snacks at Catered Affairs
D981 190320	Breakfast and brunch at restaurants, cafes, etc...
N981 190321	Breakfast at Fast Food
N981 190322	Breakfast at Full Service
N981 190323	Breakfast at Vending Machine
N981 190324	Breakfast at Employer
N981 190325	Breakfast at Board
N981 190326	Breakfast at Catered Affairs
D981 190901	Food or board, at school and rooming/boarding houses
D981 190902	Catered affairs
N981 190911	Board at Fast Food
N981 190912	Board at Full Service
N981 190913	Board at Vending Machine
N981 190914	Board at Employer
N981 190915	Board at Board
N981 190916	Board at Catered Affairs
N981 190921	Catered Affairs at Fast Food
N981 190922	Catered Affairs at Full Service
N981 190923	Catered Affairs at Vending Machine
N981 190924	Catered Affairs at Employer
N981 190925	Catered Affairs at Board
N981 190926	Catered Affairs at 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
D981 200510	Beer and ale away from home
N981 200511	Beer at Fast Food
N981 200512	Beer at Full Service
N981 200513	Beer at Vending Machine
N981 200514	Beer at Employer
N981 200515	Beer at Board
N981 200516	Beer at Catered Affairs

D981	<u>200520</u>	Wine away from home
N981	<u>200521</u>	Wine at Fast Food
N981	<u>200522</u>	Wine at Full Service
N981	<u>200523</u>	Wine at Vending Machine
N981	<u>200524</u>	Wine at Employer
N981	<u>200525</u>	Wine at Board
N981	<u>200526</u>	Wine at Catered Affairs
D981	<u>200530</u>	Other alcoholic beverages away from home
N981	<u>200531</u>	Alcoholic Beverage Excluding Beer/Wine Fast Food
N981	<u>200532</u>	Alcoholic Beverage Excluding Beer/Wine Full Service
N981	<u>200533</u>	Alcoholic Beverage Excluding Beer/Wine Vending Machine
N981	<u>200534</u>	Alcoholic Beverage Excluding Beer/Wine at Employer
N981	<u>200535</u>	Alcoholic Beverage Excluding Beer/Wine at Board
N981	<u>200536</u>	Alcoholic Beverage Excluding Beer/Wine Catered Affairs
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
D981 270510	Telephone interstate calls
D981 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, floor mats, seat covers, 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
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

NOTE: The following lists the UCCs necessary to derive expenditures for these items:

[1] for LUNCH

190111, 190112, 190113, 190114, 190115, 190116

[2] for DINNER

190211, 190212, 190213, 190214, 190215, 190216

[3] for SNACKS

190311, 190312, 190313, 190314, 190315, 190316

[4] for BREAKFAST

190321, 190322, 190323, 190324, 190325, 190326

[5] for CATERED AFFAIRS

190921, 190922, 190923, 190924, 190925, 190926

[6] for BOARD

190911, 190912, 190913, 190914, 190915, 190916

[7] for BEER

200511, 200512, 200513, 200514, 200515, 200516

[8] for WINE

200521, 200522, 200523, 200524, 200525, 200526

[9] for ALCOHOLIC BEVERAGES, EXCL. BEER AND WINE
200531, 200532, 200533, 200534, 200535, 200536

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 100 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. 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	010110-190916, 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	190111-6, 190211-6, 190311-6, 190321-6, 190921-6, 190911-6
* Alcoholic beverages	200111, 200210, 200310, 200410, 200511-3, 200516, 200521-3, 200526, 200531-3, 200536
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	AGE2	39	EARNCOMP	57
ADDFEDX	9	AGE2_	41	EARN_OMP	58
ADDFEDX_	17	BLS_URBN	42	EARNX	59
ADDOTHX	18	CUTENURE	43	EARNX_	67
ADDOTHX_	26	CUTE_URE	44	EDUC_REF	68
ADDSTAX	27	DESCRIP	45	EDUC0REF	70
ADDSTAX_	35	DESCRIP_	47	EDUCA2	71
AGE_REF	36	DIVX	48	EDUCA2_	73
AGE_REF_	38	DIVX_	56	EMPLTYP1	74

Variable	Start Position	Variable	Start Position	Variable	Start Position
EMPL_YP1	75	FS_DATE1	276	NO_EARNR	471
EMPLTYP2	76	FS_D_TE1	284	NO_E_RNR	473
EMPL_YP2	77	FS_DATE2	285	NONERNX	474
FAM_SIZE	78	FS_D_TE2	293	NONERNX_	482
FAM_IZE	80	FS_DATE3	294	OCCEXPNX	483
FAM_TYPE	81	FS_D_TE3	302	OCCE_PNX	491
FAM_YPE	82	FS_DATE4	303	OCCULIS2	492
FBSNSX	83	FS_D_TE4	311	OCCU_IS2	494
FBSNSX_	91	FS_DATE5	312	ORIGIN1	495
FD_STMPS	92	FS_D_TE5	320	ORIGIN1_	497
FD_S_MPS	93	FS_DATE6	321	ORIGIN2	497
FEDREFX	94	FS_D_TE6	329	ORIGIN2_	498
FEDREFX_	102	FS_DATE7	330	OTHINX	499
FFARMX	103	FS_D_TE7	338	OTHINX_	507
FFARMX_	111	^{D981} FS_DATE8	339	OTHRECX	508
FFEDTXX	112	^{D981} FS_D_TE8	347	OTHRECX_	516
FFEDTXX_	120	FS_MTHI	348	OTHREFX	517
FGVX	121	FS_MTHI_	350	OTHREFX_	525
FGVX_	129	FSS_RRX	351	OTHRNTX	526
FINCAFTX	130	FSS_RRX_	359	OTHRNTX_	534
FINC_FTX	138	FSTATXX	360	PENSIONX	535
FINCBEFX	139	FSTATXX_	368	PENS_ONX	543
FINC_EFX	147	FSUPPX	369	PERSLT18	544
FINLWT21	148	FSUPPX_	377	PERS_T18	546
FIRAX	159	FWAGEX	378	PERSOT64	547
FIRAX_	167	FWAGEX_	386	PERS_T64	549
FJSSDEDX	168	HRSPRWK1	387	PERSTAX	550
FJSS_EDX	176	HRSP_WK1	390	PERSTAX_	558
FPVTX	177	HRSPRWK2	391	PICK_UP	559
FPVTX_	185	HRSP_WK2	394	OCCULIS1	561
FREEMLX	186	INC_RNKU	395	OCCU_IS1	563
FREEMLX_	194	INC_NKU	404	POPSIZE	564
FRRX	195	INSREFX	405	PTAXREFX	565
FRRX_	203	INSREFX_	413	PTAX_EFX	573
FS_AMT1	204	INTX	414	RACE2	574
FS_AMT1_	212	INTX_	422	RACE2_	575
FS_AMT2	213	JFS_AMT	423	REC_FS	576
FS_AMT2_	221	JFS_AMT_	431	REC_FS_	577
FS_AMT3	222	JGRCFDMV	432	REF_RACE	578
FS_AMT3_	230	JGRC_DMV	438	REF_ACE	579
FS_AMT4	231	JGRCFDWK	439	REGION	580
FS_AMT4_	239	JGRC_DWK	445	REGION_	581
FS_AMT5	240	JGROCYMV	446	RESPSTAT	582
FS_AMT5_	248	JGRO_YMV	452	RESP_TAT	583
FS_AMT6	249	JGROCYWK	453	ROOMX	584
FS_AMT6_	257	JGRO_YWK	459	ROOMX_	592
FS_AMT7	258	LUMPX	460	SALEX	593
FS_AMT7_	266	LUMPX_	468	SALEX_	601
^{D981} FS_AMT8	267	MARITAL1	469	SEX_REF	602
^{D981} FS_AMT8_	275	MARI_AL1	470	SEX_REF_	603

Variable	Start Position	Variable	Start Position	Variable	Start Position
SEX2	604	WTREP10	786	POULTRY	1255
SEX2_	605	WTREP11	797	SEAFOOD	1267
SMSASTAT	606	WTREP12	808	EGGS	1279
SSREFX	607	WTREP13	819	MILKPROD	1291
SSREFX_	615	WTREP14	830	OTHDairy	1303
STATREFX	616	WTREP15	841	FRSHFRUT	1315
STAT_EFX	624	WTREP16	852	FRSHVEG	1327
STRTDAY	625	WTREP17	863	PROCFRUT	1339
STRTMNTH	627	WTREP18	874	PROCVeg	1351
STRTYEAR	629	WTREP19	885	SWEETS	1363
TAXPROPX	633	WTREP20	896	NONALBEV	1375
TAXP_OPX	641	WTREP21	907	OILS	1387
TYPOWND	642	WTREP22	918	MISCFOOD	1399
TYPOWND_	643	WTREP23	929	FOODAWAY	1411
UNEMPX	644	WTREP24	940	ALCBEV	1423
UNEMPX_	652	WTREP25	951	SMOKSUPP	1435
VEHQ	653	WTREP26	962	PET_FOOD	1447
VEHQ_	655	WTREP27	973	PERSPROD	1459
WEEKI	656	WTREP28	984	PERSserv	1471
WEEKI_	657	WTREP29	995	DRUGSUPP	1483
WEEKN	658	WTREP30	1006	HOUSKEEP	1495
WELFRX	659	WTREP31	1017	HH_CU_Q	1507
WELFRX_	667	WTREP32	1028	HH_CU_Q_	1509
WHYNWRK1	668	WTREP33	1039	HHID	1510
WHYN_RK1	669	WTREP34	1050	HHID_	1513
WHYNWRK2	670	WTREP35	1061	CHILDAGE	1514
WHYN_RK2	671	WTREP36	1072	CHIL_AGE	1515
WK_WRKD1	672	WTREP37	1083	INCLASS	1516
WK_W_KD1	674	WTREP38	1094	STATE	1518
WK_WRKD2	675	WTREP39	1105	STATE_	1520
WK_W_KD2	677	WTREP40	1116	CHDOThX	1521
WRKRSX	678	WTREP41	1127	CHDOThX_	1529
WRKRSX_	686	WTREP42	1138	ALIOThX	1530
WTREP01	687	WTREP43	1149	ALIOThX_	1538
WTREP02	698	WTREP44	1160	CHDLMPX	1539
WTREP03	709	FOODTOT	1171	CHDLMPX_	1547
WTREP04	720	FOODHOME	1183	POVERTY	1548
WTREP05	731	CEREAL	1195	POVERTY_	1549
WTREP06	742	BAKEPROD	1207		
WTREP07	753	BEEF	1219		
WTREP08	764	PORK	1231		
WTREP09	775	OTHMEAT	1243		

B. MEMB FILE

Variable	Start Position	Variable	Start Position	Variable	Start Position
NEWID	1	AGE	9	AGE_	11

Variable	Start Position	Variable	Start Position	Variable	Start Position
ANFEDTXX	12	GVX_	112	SS_RRX_	191
ANFE_TXX	20	HRSPERWK	113	STA_SUPP	192
ANGVX	21	HRSP_RWK	116	STA__UPP	193
ANGVX_	29	IRAX	117	STATXX	194
ANPVTX	30	IRAX_	125	STATXX_	202
ANPVTX_	38	JSSDEDX	126	SUPPX	203
ANRRX	39	JSSDEDX_	132	SUPPX_	211
ANRRX_	47	MARITAL	133	US_SUPP	212
ANSTATXX	48	MARITAL_	134	US_SUPP_	213
ANST_TXX	56	MEMBNO	135	WAGEX	214
ANYRAIL	57	OCCULIST	137	WAGEX_	222
ANYRAIL_	58	OCCU_IST	139	WHYNOWRK	223
ANYSSINC	59	ORIGIN	140	WHYN_WRK	224
ANYS_INC	60	ORIGIN_	141	WKS_WRKD	225
BSNSX	61	PVTX	142	WKS__RKD	227
BSNSX_	69	PVTX_	150	SS_RRQ	228
CU_CODE1	70	RACE	151	SS_RRQ_	232
CU_C_DE1	71	RACE_	152	SOCRXX	233
EDUCA	72	RRX	153	SOCRXX_	241
EDUCA_	74	RRX_	161	ARM_FORC	242
EMPLTYPE	75	SCHLNCHQ	162	ARM__ORC	243
EMPL_YPE	76	SCHL_CHQ	164	IN_COLL	244
FARMX	77	SCHLNCHX	165	IN_COLL_	245
FARMX_	85	SCHL_CHX	173	MEDICARE	246
FEDTXX	86	SEX	174	MEDI_ARE	247
FEDTXX_	94	SEX_	175	PAYPERD	248
GROSPAYX	95	SLFEMPSS	176	PAYPERD_	249
GROS_AYX	103	SLFE_PSS	182		
GVX	104	SS_RRX	183		

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 Expenditures in 1998, Report 940 (February 2000)	Consumer unit income and expenditures, integrated data from Diary and Interview Surveys, classified by consumer unit characteristics. 10 tables. Available on request (202)691-6900.
Consumer Expenditure Survey, 1996-97, Report 935 (September 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)691-6900.

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)691-6900.

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, 1980-81, 1990-91, 1992-93, 1994, 1995, 1996, 1997, and 1998. The 1980-81 through 1998 releases contain Interview and Diary data, while the 1972-73 CD includes Interview data only. The 1980-81, and the 1990 files (of the 1990-91 CD) include selected EXPN data, while the 1991 files (from the 1990-91 CD) and the 1992-93 CD do not. In addition to the Interview and Diary data, the CDs from 1994-1998 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 1998. 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 1998 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 1982 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) 691-6900

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.