

**2014 Topcoding and Suppression**

**INTERVIEW SURVEY AND DIARY SURVEY  
CONSUMER EXPENDITURE  
PUBLIC USE MICRODATA**

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U.S. Department of Labor  
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## Topcoding and Other Nondisclosure Requirements

CE needs to ensure that users are not able to identify consumer units' (CU) who participated in the survey. CE ensures protects the respondents' identify by changing sensitive data with two methods: Topcoding and suppression.

Topcoding refers to the replacement of data if the value of the original data exceeds prescribed critical values. Critical values for each variable containing sensitive data are calculated in accordance with Census Disclosure Review Board guidelines. Each observation that falls outside the critical value is replaced with a topcoded value that represents the mean of the subset of all outlying observations. All five quarters of data in the CE microdata release are used when calculating the critical value and topcode amounts. If an observation is topcoded, the flag variable assigned to that observation is set to 'T.' For simplicity this document will refer only to "topcoding," but the reader should be aware that outliers at the lower extremes may also be "bottom-coded."

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

Suppression refers to the suppression of data if the value of the original data could reveal the identity but topcoding is not suitable. For example, state information is suppressed by changing the code from one state to that of a neighboring state.

## II. Interview Survey

### A. CU Characteristics and Income File (FMLI)

#### 1. Directly topcoded

The following table shows the FMLI file variables that are subject to topcoding and their associated critical values and topcode values. For multiple imputed income variables, it is possible for an upper topcode value to be less than the upper critical value or for a lower topcode value to be greater than the lower critical value.

| Variable | Description  | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|--|----------------------|----------------------|---------------------|---------------------|
| CREDITX  | Total amount owed on all credit cards                          | 30,000               | -                    | 51,323              | -                   |
| CREDTYRX | Total amount owed on all credit cards, one year ago            | 30,000               | -                    | 50,919              | -                   |
| FEDRFNDX | Amount of refund received from Federal income tax              | 9,000                | -                    | 14,279              | -                   |
| FEDTAXX  | Amount of Federal income tax paid in addition to that withheld | 32,000               | -                    | 82,228              | -                   |
| INTRDVX  | Amount received in interest in last 12 months                  | 32,000               | -                    | 98,338              | -                   |
| INTRDVXM | Amount received in interest in last 12 months                  | 32,000               | -                    | 55,632              | -                   |
| IRAX     | Total value of all retirement accounts                         | 1,000,000            | -                    | 2,634,911           | -                   |
| IRAYRX   | Total value of all retirement accounts, one year ago           | 887,000              | -                    | 2,128,736           | -                   |
| LIQUDYRX | Total value of accounts, one year ago                          | 160,000              | -                    | 515,460             | -                   |

| Variable | Description   | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|---|----------------------|----------------------|---------------------|---------------------|
| LIQUIDX  | Total value of accounts   | 160,000              | -                    | 490,959             | -                   |
| LUMPSUMX | Amount of lump sum receipts                                       | 160,000              | -                    | 549,195             | -                   |
| MISCTAXX | Amount of other taxes paid during the past 12 months              | 14,000               | -                    | 25,239              | -                   |
| NETRENTM | Net rental income or loss   | 60,000               | (15,000)             | 76,031              | (10,950)            |
| NETRENTX | Net rental income or loss   | 60,000               | (15,000)             | 114,786             | (54,987)            |
| OTHASTX  | Value of other financial assets                                   | 1,000,000            | -                    | 2,766,667           | -                   |
| OTHFINX  | Total amount paid in financial late charges on all other accounts | 430                  | -                    | 3,363               | -                   |
| OTHLNYRX | Total amount owed on all other loans, one year ago                | 55,000               | -                    | 390,000             | -                   |
| OTHLONX  | Total amount owed on all other loans                              | 40,000               | -                    | 310,625             | -                   |
| OTHREGX  | Amount of income from other sources                               | 40,000               | -                    | 63,667              | -                   |
| OTHREGXM | Amount of income from other sources                               | 40,000               | -                    | 55,788              | -                   |
| OTHRINCM | Amount received in other money income                             | 37,000               | -                    | 31,246              | -                   |
| OTHRINCX | Amount received in other money income                             | 37,000               | -                    | 57,875              | -                   |
| OTHSTYRX | Value of other financial assets, one year ago                     | 500,000              | -                    | 1,533,333           | -                   |
| RENTEQVX | Estimated monthly rental equivalence of owned home                | 3,200                | -                    | 4,694               | -                   |

| <b>Variable</b> | <b>Description</b>  | <b>Upper<br/>Critical<br/>Value</b> | <b>Lower<br/>Critical<br/>Value</b> | <b>Upper<br/>Topcode<br/>Value</b> | <b>Lower<br/>Topcode<br/>Value</b> |
|-----------------|---|-------------------------------------|-------------------------------------|------------------------------------|------------------------------------|
| RETSURVM        | Amount of income received from retirement, survivor, or disability pensions | 80,000                              | -                                   | 93,030                             | -                                  |
| RETSURVX        | Amount of income received from retirement, survivor, or disability pensions | 80,000                              | -                                   | 126,946                            | -                                  |
| ROYESTX         | Amount of income from royalties, estates or trusts                          | 80,000                              | -                                   | 159,191                            | -                                  |
| ROYESTXM        | Amount of income from royalties, estates or trusts                          | 80,000                              | -                                   | 91,828                             | -                                  |
| SLOCTAXX        | State and local tax paid in addition to that withheld                       | 8,000                               | -                                   | 26,570                             | -                                  |
| SLRFUNDX        | Refund received from state and local income tax                             | 2,331                               | -                                   | 4,169                              | -                                  |
| STOCKX          | Total value directly held in stocks, bonds and mutual funds                 | 1,400,000                           | -                                   | 6,586,697                          | -                                  |
| STOCKYRX        | Total value directly held in stocks, bonds and mutual funds, one year ago   | 1,350,000                           | -                                   | 5,784,192                          | -                                  |
| WHLFYRX         | Total surrender value of policies, one year ago                             | 300,000                             | -                                   | 767,375                            | -                                  |
| WHOLIFX         | Total surrender value of policies   | 300,000                             | -                                   | 789,231                            | -                                  |

## 2. Indirectly topcoded

Some income variables that are subject to topcoding are constructed by summing up the values of “lower level” component variables from the MEMI or FMLI file. 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 the interview data dictionary for a list of component variables.

| Variable              | Description  |
|-----------------------|--|
| FAMTFEDX,<br>FAMTFEDM | Amount of Federal income tax deducted from last pay, annualized for all CU members           |
| FSMPFRMX,<br>FSMPFRXM | Amount of income or loss received from self-employment income                                |
| FGOVRETX,<br>FGOVRETM | Amount of government retirement deducted from last pay, annualized for all CU members        |
| FINCATAX,<br>FINCATXM | Amount of CU income after taxes  |
| FINCBTAX,<br>FINCBTXM | Amount of CU income before taxes   |
| FINDRETX              | Amount of money placed in individual retirement plan   |
| FJSSDEX,<br>FJSSDEDM  | Estimated amount of annual Social Security contribution                                      |
| FPRIPENX,<br>FPRIPENM | Amount of private pension fund deducted from last pay, annualized for all CU members         |
| FRRDEX,<br>FRRDEDM    | Amount of Railroad Retirement deducted from last pay, annualized for all CU members          |
| FSALARYX,<br>FSALARYM | Amount received from wage and salary income before deductions                                |
| FSLTAXX,<br>FSLTAXXM  | Amount of state and local income taxes deducted from last pay, annualized for all CU members |
| NONINCMX              | Amount of other money receipts excluded from family income                                   |
| TOTTXPDX,<br>TOTTXPDM | Amount of personal taxes paid  |

### Example of indirectly topcoded variable

Here are some examples of indirect topcoding. The value for the variable FSMPFRMX (family income or loss from self-employment) is computed as the sum of the values reported for the variable SEMPFRMX (member income or loss from self-employment) from the MEMI file. SEMPFRMX is subject to topcoding beyond the critical value of \$150,000 (-\$170,000). The topcode value for SEMPFRMX is \$321,846 (-\$435,000). See [MEMBER CHARACTERISTICS AND INCOME FILE \(MEMI\)](#).

|       |          | SEMPFRMX | AFTER     |          | FSMPFRMX  | FLAGGED AS |
|-------|----------|----------|-----------|----------|-----------|------------|
| CU    |          | REPORTED | TOPCODING | VALUE    | TOPCODED? |            |
| CU 1: | Member 1 | \$95,000 | \$95,000  | 170,000  | No        |            |
|       | Member 2 | 75,000   | 75,000    |          |           |            |
| CU 2: | Member 1 | 160,000  | 321,846   | 331,846  | Yes       |            |
|       | Member 2 | 10,000   | 10,000    |          |           |            |
| CU 3: | Member 1 | 450,000  | 321,846   | 643,692  | Yes       |            |
|       | Member 2 | 350,000  | 321,846   |          |           |            |
| CU 4: | Member 1 | 300,000  | 321,846   | -113,154 | Yes       |            |
|       | Member 2 | -200,000 | -435,000  |          |           |            |

While CUs 1 and 2 each originally report \$100,000 in FSMPFRMX, topcoding is done only on the value reported by MEMI1 of CU2. Thus, the value for FSMPFRMX for CU2 is higher than for CU1 and is flagged as topcoded while CU1 is not. By using the mean of the subset of observations that are above (below) the critical value as the topcode amount, values on the public use data can be either below or above the actual reported value. Note that while CU3 has a topcoded value lower than the reported value, CU2's topcoded SFMFRMX value (\$331,846) is higher than the amount that it reported (\$170,000). The case of CU4 demonstrates that the reported value for FSMPFRMX can be positive, while the topcoded value can be negative. The reverse can also occur.

## A. Member Characteristics and Income File (MEMI)

### 1. Direct topcoding

The following table lists the MEMI file variables that are subject to topcoding. The table also shows the critical values and topcode values associated with each variable listed. For multiple imputed income variables, it is possible for an upper topcode value to be less than the upper critical value or for a lower topcode value to be greater than the lower critical value.

| Variable | Description                                  | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|--|----------------------|----------------------|---------------------|---------------------|
| AGE      | Age of member                                | 82                   | -                    | 87                  | -                   |
| AMTFED   | Amount of federal tax deducted from last pay | 1,235                | -                    | 5,779               | -                   |
| ANFEDTX  | Annual amount federal tax deducted from pay  | 26,390               | -                    | 49,640              | -                   |
| ANFEDTXM | Annual amount federal tax deducted from pay  | 26,390               | -                    | 49,877              | -                   |
| ANGOVRTM | Annual amount government retirement          | 9,893                | -                    | 12,543              | -                   |
| ANGOVRTX | Annual amount government retirement          | 9,893                | -                    | 12,347              | -                   |
| ANPRVPM  | Annual amount private pensions               | 20,077               | -                    | 29,128              | -                   |
| ANPRVPNX | Annual amount private pensions               | 20,077               | -                    | 29,513              | -                   |
| ANRRDEDM | Annual amount Railroad retirement            | 6,800                | -                    | 10,427              | -                   |
| ANRRDEDX | Annual amount Railroad retirement            | 6,800                | -                    | 9,980               | -                   |
| ANSLTX   | Annual amount state and local income tax     | 9,289                | -                    | 15,048              | -                   |
| ANSLTXM  | Annual amount state and local income tax     | 9,289                | -                    | 15,258              | -                   |

| <b>Variable</b> | <b>Description</b>                                | <b>Upper<br/>Critical<br/>Value</b> | <b>Lower<br/>Critical<br/>Value</b> | <b>Upper<br/>Topcode<br/>Value</b> | <b>Lower<br/>Topcode<br/>Value</b> |
|-----------------|---|-------------------------------------|-------------------------------------|------------------------------------|------------------------------------|
| GOVRETX         | Government retirement deducted from last pay      | 965                                 | -                                   | 3,787                              | -                                  |
| GROSPAYX        | Amount of last gross pay                          | 6,601                               | -                                   | 17,881                             | -                                  |
| INDRETX         | Self-employment retirement plan contributions     | 27,000                              | -                                   | 63,624                             | -                                  |
| JSSDEDX         | Estimated annual Social Security contribution     | 9,429                               | -                                   | 13,899                             | -                                  |
| JSSDEDXM        | Estimated annual Social Security contribution     | 9,429                               | -                                   | 10,618                             | -                                  |
| PRIVPENX        | Private pension deducted from last pay            | 1,900                               | -                                   | 32,554                             | -                                  |
| RRRDEDX         | Railroad retirement deducted from last pay        | 290                                 | -                                   | 469                                | -                                  |
| SALARYX         | Wage and salary income received before deductions | 150,000                             | -                                   | 265,049                            | -                                  |
| SALARYXM        | Wage and salary income received before deductions | 150,000                             | -                                   | 214,948                            | -                                  |
| SEMPFRMM        | AMT OF SELF EMPLOYMENT INCOME OR LOSS             | 150,000                             | (170,000)                           | 135,711                            | (435,000)                          |
| SEMPFRMX        | AMT OF SELF EMPLOYMENT INCOME OR LOSS             | 150,000                             | (170,000)                           | 321,846                            | (435,000)                          |
| SLFEMPSM        | Self-employment Social Security contribution      | 19,957                              | -                                   | 13,451                             | -                                  |
| SLFEMPSS        | Self-employment Social Security contribution      | 19,957                              | -                                   | 25,467                             | -                                  |
| SLTAXX          | State and local income tax deducted last pay      | 393                                 | -                                   | 674                                | -                                  |

## 2. Special suppression for MEMI file variables

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

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

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

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

In the above example, a problem with disclosure may arise when neither ANFEDTXM, GROSPAYX, nor AMTFED are topcoded, *but* SALARYXM is. In this situation, the original value of SALARYXM can be recalculated by inserting the non-topcoded values into equation (2) and solving for SALARYXM. 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 the specific rules that CE applies to prevent the potential disclosure outlined above.

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

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

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

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

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

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

## **B. Monthly Expenditure File (MTBI)**

The MTBI variable COST is subject to topcoding for some UCCs. The COST variable is not topcoded by the conventional method of replacement with a topcode value. First, variables are topcoded in the EXPN files. Then those variables are mapped to their appropriate UCC. If the variable was topcoded in the EXPN files, then the associated UCC will have a topcoded COST value, and the value of COST\_ is set to 'T.' All the EXPN variables that are topcoded are listed in the [EXPN section](#). To obtain the concordance file that lists what EXPN variables are mapped to which UCC, please contact the Consumer Expenditure Survey via the phone number or email address listed on the last page of this documentation.

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

## **C. Income File (ITBI)**

The ITBI variable COST is subject to topcoding for some UCCs. CE does not use the conventional method but topcodes the variable COST with three steps:

1. Topcode variables in the FMLI files.
2. Map topcoded variables to their appropriate UCC.
3. If the variable was topcoded in the FMLI files, the associated UCC will have a topcoded COST value and the value of COST\_ is set to 'T.'

All topcoded FMLI variables are listed in [FMLI section](#) of this documentation. To obtain the concordance file that lists what FMLI variables are mapped to which UCC, contact the Consumer Expenditure Survey.

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

## D. Detailed Expenditure Files (EXPX)

CE topcodes the below EXPX file variables. The table also lists the critical values, the associated topcoded values, and the conditions that determine if CE topcodes a variable.

| Variable | Description  | Condition                          | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|--|------------------------------------|----------------------|----------------------|---------------------|---------------------|
| ADVMATX  | Construction materials for job not yet started, renter             | NA                                 | 7,000                | -                    | 97,375              | -                   |
| DISPX    | What was the selling price (trade-in value)?                       | OWNYD EQ '100' OR OWNYD EQ '200'   | 407,000              | -                    | 1,243,750           | -                   |
| DISPX    | What was the selling price (trade-in value)?                       | OWNYD EQ '300'                     | 285,000              | -                    | 373,500             | -                   |
| DISPX    | What was the selling price (trade-in value)?                       | OWNYD EQ '400' OR OWNYD EQ '500'   | 48,000               | -                    | 370,000             | -                   |
| INTCHGX  | Cable/Satellite - cont expnesne                                    | INTSERV EQ '100' AND INTMO EQ '13' | 214                  | -                    | 263                 | -                   |
| INTCHGX  | Cable/Satellite  | INTSERV EQ '100' AND INTMO NE '13' | 317                  | -                    | 382                 | -                   |
| INTCHGX  | Internet services - cont expenses                                  | INTSERV EQ '200' AND INTMO EQ '13' | 115                  | -                    | 162                 | -                   |
| INTCHGX  | Internet services  | INTSERV EQ '200' AND INTMO NE '13' | 180                  | -                    | 224                 | -                   |
| JCPIRE1X | CPI quarterly rental equivalence adjusted for ownership percentage | OWNYI EQ '100'                     | 9,600                | -                    | 13,929              | -                   |

| Variable | Description  | Condition   | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|--|---|----------------------|----------------------|---------------------|---------------------|
| JCPIRE1X | CPI quarterly rental equivalence adjusted for ownership percentage | OWNYI EQ '300'  | 15,000               | -                    | 27,938              | -                   |
| JCPIRE2X | CPI quarterly rental equivalence adjusted for ownership percentage | OWNYI EQ '300'  | 4,154                | -                    | 5,914               | -                   |
| JCPIRE3X | CPI quarterly rental equivalence adjusted for ownership percentage | OWNYI EQ '300'  | 2,025                | -                    | 5,656               | -                   |
| JEDUCNET | Net amount paid for educational expenses (housing) - cont expn     | EDUC_AY EQ '310' AND EDMONTHA EQ '13'                       | 1,300                | -                    | 1,649               | -                   |
| JEDUCNET | Net amount paid for educational expenses (housing)                 | EDUC_AY EQ '310' AND EDMONTHA NE '13'                       | 8,000                | -                    | 9,696               | -                   |
| JFEETOTX | JX1FETOT<br>Repayment of loans owned by cooperative, regular fee   | REGFEECR EQ '01000' AND (OWNYI EQ '100' OR OOWNYI EQ '200') | 2,105                | -                    | 3,638               | -                   |
| JFEETOTX | JX1FETOT<br>Repayment of loans owned by cooperative, regular fee   | REGFEECR EQ '01000' AND (OWNYI EQ '300')                    | 0                    | -                    | 1,149               | -                   |
| JLABOR1X | CONST AND ADDITIONS  | (CRMCODEB='100'   CRMCODEB='110')                           | 50,000               | -                    | 79,250              | -                   |

| Variable | Description                                   | Condition                             | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|---|---------------------------------------|----------------------|----------------------|---------------------|---------------------|
| JLABOR1X | ROOM FINISHING/REMODELING                     | (CRMCODEB='120'   CRMCODEB='130')     | 23,491               | -                    | 33,089              | -                   |
| JLABOR1X | LANDSCAP/OUTDOOR BUILDING REPAIR/PAINTING     | ('140'<=CRMCODEB AND CRMCODEB<='190') | 11,000               | -                    | 17,807              | -                   |
| JLABOR1X | PLUMBING/ELECTRICAL/HEAT/AC                   | ('200'<=CRMCODEB AND CRMCODEB<='220') | 10,928               | -                    | 16,026              | -                   |
| JLABOR1X | FLOORING/CARPETING                            | ('230'<=CRMCODEB AND CRMCODEB<='232') | 2,500                | -                    | 3,500               | -                   |
| JLABOR1X | INSULATION, ROOFING, SIDING, MASONRY, WINDOWS | ('240'<=CRMCODEB AND CRMCODEB<='290') | 13,600               | -                    | 17,039              | -                   |
| JLABOR1X | OTHER REPAIR AND COMBINED CODES               | (CRMCODEB='300'   CRMCODEB='310')     | 10,428               | -                    | 22,667              | -                   |
| JLABOR2X | CONST AND ADDITIONS                           | (CRMCODEB='100'   CRMCODEB='110')     | 27,450               | -                    | 80,818              | -                   |
| JLABOR2X | ROOM FINISHING/REMODELING                     | (CRMCODEB='120'   CRMCODEB='130')     | 23,491               | -                    | 35,667              | -                   |
| JLABOR2X | LANDSCAP/OUTDOOR BUILDING REPAIR/PAINTING     | ('140'<=CRMCODEB AND CRMCODEB<='190') | 15,000               | -                    | 22,222              | -                   |

| Variable | Description                                   | Condition                             | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|---|---------------------------------------|----------------------|----------------------|---------------------|---------------------|
| JLABOR2X | PLUMBING/ELECTRICAL/HEAT/AC                   | ('200'<=CRMCODEB AND CRMCODEB<='220') | 10,000               | -                    | 12,356              | -                   |
| JLABOR2X | FLOORING/CARPETING                            | ('230'<=CRMCODEB AND CRMCODEB<='232') | 2,500                | -                    | 4,017               | -                   |
| JLABOR2X | INSULATION, ROOFING, SIDING, MASONRY, WINDOWS | ('240'<=CRMCODEB AND CRMCODEB<='290') | 12,267               | -                    | 22,835              | -                   |
| JLABOR2X | OTHER REPAIR AND COMBINED CODES               | (CRMCODEB='300'   CRMCODEB='310')     | 7,600                | -                    | 9,000               | -                   |
| JLABOR3X | CONST AND ADDITIONS                           | (CRMCODEB='100'   CRMCODEB='110')     | 46,000               | -                    | 73,686              | -                   |
| JLABOR3X | ROOM FINISHING/REMODELING                     | (CRMCODEB='120'   CRMCODEB='130')     | 42,000               | -                    | 77,167              | -                   |
| JLABOR3X | LANDSCAP/OUTDOOR BUILDING REPAIR/PAINTING     | ('140'<=CRMCODEB AND CRMCODEB<='190') | 16,000               | -                    | 32,865              | -                   |
| JLABOR3X | PLUMBING/ELECTRICAL/HEAT/AC                   | ('200'<=CRMCODEB AND CRMCODEB<='220') | 12,400               | -                    | 19,992              | -                   |
| JLABOR3X | FLOORING/CARPETING                            | ('230'<=CRMCODEB AND CRMCODEB<='232') | 1,500                | -                    | 3,105               | -                   |

| Variable | Description   | Condition                              | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|---|--|----------------------|----------------------|---------------------|---------------------|
| JLABOR3X | INSULATION, ROOFING, SIDING, MASONRY, WINDOWS   | ('240'<=CRMC ODEB AND CRMCODEB<='290') | 14,000               | -                    | 21,100              | -                   |
| JLABOR3X | OTHER REPAIR AND COMBINED CODES   | (CRMCODEB='300'   CRMCODEB='310')      | 7,228                | -                    | 12,600              | -                   |
| JLCPRINX | Estimated amount of principal paid on home equity loan during reference period              | OWNYH EQ '100' OR OWNYH EQ '200'       | 7,904                | (1,798)              | 33,379              | (2,273)             |
| JLCPRINX | Estimated amount of principal paid on home equity loan during reference period              | OWNYH EQ '300'                         | 888                  | -                    | 37,421              | -                   |
| JRNTEQ2X | Monthly rental equivalence of owned home  | NA                                     | 6,200                | -                    | 110,667             | -                   |
| JRNTEQ3X | Monthly rental equivalence of owned home  | NA                                     | 26,000               | -                    | 32,988              | -                   |
| LDGCOSTX | Cost for hotels, motels, cottages, trailer camps, or other lodging including taxes and tips | NA                                     | 2,200                | -                    | 3,749               | -                   |
| MEDPMTX  | Eye examinations, treatment, or surgery   | MEDPCARY EQ '110'                      | 500                  | -                    | 1,695               | -                   |
| MEDPMTX  | Dental care   | MEDPCARY EQ '200'                      | 1,869                | -                    | 3,403               | -                   |
| MEDPMTX  | Hospital room or hospital services  | MEDPCARY EQ '330'                      | 3,000                | -                    | 6,536               | -                   |

| Variable | Description   | Condition         | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|---|-------------------|----------------------|----------------------|---------------------|---------------------|
| MEDPMTX  | Services by medical professionals other than physician    | MEDPCARY EQ '410' | 657                  | -                    | 1,752               | -                   |
| MEDPMTX  | Physician services  | MEDPCARY EQ '420' | 560                  | -                    | 1,446               | -                   |
| MEDPMTX  | Lab tests or x-rays                                       | MEDPCARY EQ '510' | 828                  | -                    | 2,246               | -                   |
| MEDPMTX  | Care in convalescent or nursing home                      | MEDPCARY EQ '520' | 8,260                | -                    | 9,401               | -                   |
| MEDPMTX  | Other medical care  | MEDPCARY EQ '530' | 1,200                | -                    | 2,812               | -                   |
| MEDPMTX  | Rental of supportive or convalescent equipment            | MEDPCARY EQ '630' | 34                   | -                    | 78                  | -                   |
| MEDPMTX  | Purchase of supportive or convalescent equipment          | MEDPCARY EQ '640' | 300                  | -                    | 401                 | -                   |
| MEDPMTX  | Rental of medical or surgical equipment for general use   | MEDPCARY EQ '650' | 65                   | -                    | 535                 | -                   |
| MEDPMTX  | Purchase of medical or surgical equipment for general use | MEDPCARY EQ '660' | 592                  | -                    | 1,150               | -                   |
| MEDRMBX  | Eye examinations, treatment, or surgery                   | MEDRCARY EQ '110' | 500                  | -                    | 1,180               | -                   |
| MEDRMBX  | Dental care   | MEDRCARY EQ '200' | 1,400                | -                    | 1,610               | -                   |
| MEDRMBX  | Hospital room or hospital services                        | MEDRCARY EQ '330' | 1,943                | -                    | 13,300              | -                   |
| MEDRMBX  | Services by medical professionals other than physician    | MEDRCARY EQ '410' | 650                  | -                    | 1,066               | -                   |
| MEDRMBX  | Physician services  | MEDRCARY EQ '420' | 700                  | -                    | 2,333               | -                   |

| Variable | Description  | Condition  | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|--|--|----------------------|----------------------|---------------------|---------------------|
| MEDRMBX  | Lab tests or x-rays  | MEDRCARY EQ '510'  | 500                  | -                    | 905                 | -                   |
| MEDRMBX  | Care in convalescent or nursing home                                       | MEDRCARY EQ '520'  | 7,802                | -                    | 9,334               | -                   |
| MEDRMBX  | Other medical care   | MEDRCARY EQ '530'  | 725                  | -                    | 1,900               | -                   |
| MISCEXPX | Amount of the payment by CU for occupational expenses                      | MISCCODE EQ '380' AND MISCMO EQ '13'                     | 200                  | -                    | 449                 | -                   |
| MISCEXPX | Amount of the payment by CU for occupational expenses                      | MISCCODE EQ '380' AND MISCMO NE '13'                     | 818                  | -                    | 1,347               | -                   |
| MRTPMTG  | Loan payment   | (LOANTYPE EQ '2')  | 1,977                | -                    | 3,334               | -                   |
| MRTPMTX  | Mortgage payment, including escrow   | (LOANTYPE EQ '1')  | 3,484                | -                    | 5,124               | -                   |
| NETPURX  | Amount paid for boat with motor  | VEHICYB EQ '160'   | 84,400               | -                    | 176,320             | -                   |
| ORGMRTG  | What was the amount of the lump sum home equity loan when you obtained it? | (OWNYG EQ '100' OR OWNYG EQ '200') AND (LOANTYPE EQ '2') | 225,953              | -                    | 309,156             | -                   |
| ORGMRTG  | What was the amount of the lump sum home equity loan when you obtained it? | (OWNYG EQ '300') AND (LOANTYPE EQ '2')                   | 19,301               | -                    | 261,546             | -                   |

| Variable | Description   | Condition  | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|---|--|----------------------|----------------------|---------------------|---------------------|
| ORGMRTX  | What was the amount of the mortgage when you obtained it excluding any interest?      | (OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1') | 438,115              | -                    | 604,198             | -                   |
| ORGMRTX  | What was the amount of the mortgage when you obtained it excluding any interest?      | (OWNYF EQ '300') AND (LOANTYPE EQ '1')                   | 360,000              | -                    | 535,755             | -                   |
| ORGMRTX  | What was the amount of the mortgage when you obtained it excluding any interest?      | (OWNYF EQ '400' OR OWNYF EQ '500') AND (LOANTYPE EQ '1') | 375,000              | -                    | 401,400             | -                   |
| OWN_PURX | What was the total price paid for the property not including closing costs?           | OWNYB EQ '100' OR OWNYB EQ '200'                         | 600,000              | -                    | 897,500             | -                   |
| OWN_PURX | What was the total price paid for the property not including closing costs?           | OWNYB EQ '300'   | 367,407              | -                    | 465,033             | -                   |
| OWN_PURX | What was the total price paid for the property not including closing costs?           | OWNYB EQ '400' OR OWNYB EQ '500'                         | 104,000              | -                    | 176,500             | -                   |
| PAYMT1G  | Amount of lump sum payment on home equity loan in first month of the reference period | (OWNYG EQ '100' OR OWNYG EQ '200') AND (LOANTYPE EQ '2') | 1,452                | -                    | 1,920               | -                   |

| Variable | Description  | Condition  | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|--|--|----------------------|----------------------|---------------------|---------------------|
| PAYMT1X  | Amount of lump sum payment on mortgage in first month of the reference period          | (OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1') | 3,718                | -                    | 6,881               | -                   |
| PAYMT1X  | Amount of lump sum payment on mortgage in first month of the reference period          | (OWNYF EQ '300') AND (LOANTYPE EQ '1')                   | 990                  | -                    | 1,487               | -                   |
| PAYMT1X  | Amount of lump sum payment on mortgage in first month of the reference period          | (OWNYF EQ '400' OR OWNYF EQ '500') AND (LOANTYPE EQ '1') | 1,140                | -                    | 1,717               | -                   |
| PAYMT2G  | Amount of lump sum payment on home equity loan in second month of the reference period | (OWNYG EQ '100' OR OWNYG EQ '200') AND (LOANTYPE EQ '2') | 1,472                | -                    | 1,919               | -                   |
| PAYMT2X  | Amount of lump sum payment on mortgage in second month of the reference period         | (OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1') | 3,718                | -                    | 6,752               | -                   |
| PAYMT2X  | Amount of lump sum payment on mortgage in second month of the reference period         | (OWNYF EQ '300') AND (LOANTYPE EQ '1')                   | 990                  | -                    | 1,487               | -                   |

| Variable | Description   | Condition  | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|---|--|----------------------|----------------------|---------------------|---------------------|
| PAYMT2X  | Amount of lump sum payment on mortgage in second month of the reference period        | (OWNYF EQ '400' OR OWNYF EQ '500') AND (LOANTYPE EQ '1') | 1,140                | -                    | 1,717               | -                   |
| PAYMT3G  | Amount of lump sum payment on home equity loan in third month of the reference period | (OWNYG EQ '100' OR OWNYG EQ '200') AND (LOANTYPE EQ '2') | 1,488                | -                    | 2,021               | -                   |
| PAYMT3X  | Amount of lump sum payment on mortgage in third month of the reference period         | (OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1') | 3,600                | -                    | 6,491               | -                   |
| PAYMT3X  | Amount of lump sum payment on mortgage in third month of the reference period         | (OWNYF EQ '300') AND (LOANTYPE EQ '1')                   | 1,050                | -                    | 1,778               | -                   |
| PAYMT3X  | Amount of lump sum payment on mortgage in third month of the reference period         | (OWNYF EQ '400' OR OWNYF EQ '500') AND (LOANTYPE EQ '1') | 1,140                | -                    | 1,717               | -                   |
| PROPVALX | About how much do you think this property would sell for on today's market?           | OWNYI EQ '100'   | 800,000              | -                    | 1,489,500           | -                   |
| PROPVALX | About how much do you think this property would sell for on today's market?           | OWNYI EQ '300'   | 1,000,000            | -                    | 1,733,333           | -                   |

| Variable | Description   | Condition   | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|---|---|----------------------|----------------------|---------------------|---------------------|
| PRPVAL2X | About how much do you think this property would sell for on today's market? | NA  | 100,000              | -                    | 214,444             | -                   |
| QADCAB1X | Cable/Satellite   | NA  | 185                  | -                    | 213                 | -                   |
| QADCAB2X | Cable/Satellite   | NA  | 189                  | -                    | 217                 | -                   |
| QADCAB3X | Cable/Satellite   | NA  | 189                  | -                    | 220                 | -                   |
| QADFUL1X | FUEL OIL  | UTILY EQ '130'  | 1,894                | -                    | 2,234               | -                   |
| QADFUL1X | BOTTLED OR TANKED GAS   | UTILY EQ '150'  | 1,671                | -                    | 1,813               | -                   |
| QADFUL1X | OTHER FUELS   | UTILY EQ '180'  | 625                  | -                    | 1,025               | -                   |
| QADFUL1X | TRASH/GARBAGE COLL  | UTILY EQ '210'  | 158                  | -                    | 224                 | -                   |
| QADFUL1X | WATER SOFTENING   | UTILY EQ '270'  | 238                  | -                    | 425                 | -                   |
| QADFUL1X | SEPTIC TANK CLEANING  | UTILY EQ '280'  | 350                  | -                    | 433                 | -                   |
| QADFUL1X | ELECTRICITY 1-2 MONTHS  | UTILY EQ '100' AND BLPERIOD IN ('1','2','3','A','B')                    | 480                  | -                    | 649                 | -                   |
| QADFUL1X | NATURAL/UTILITY GAS 1-2 MONTHS  | UTILY EQ '110' AND BLPERIOD IN ('1','2','3','A','B')                    | 374                  | -                    | 519                 | -                   |
| QADFUL1X | PIPED-IN WATER/SEWERAGE 1-2 MONTHS  | (UTILY EQ '200'   UTILY EQ '220') AND BLPERIOD IN ('1','2','3','A','B') | 260                  | -                    | 506                 | -                   |
| QADFUL1X | ELECTRICITY ANNUAL/OTH  | UTILY EQ '100' AND BLPERIOD IN ('4','5','F')                            | 60                   | -                    | 194                 | -                   |

| Variable | Description                        | Condition   | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|------------------------------------|---|----------------------|----------------------|---------------------|---------------------|
| QADFUL1X | NATURAL/UTILITY GAS ANNUAL/OTH     | UTILY EQ '110' AND BLPERIOD IN ('4','5','F')                            | 650                  | -                    | 1,214               | -                   |
| QADFUL1X | PIPED-IN WATER/SEWERAGE ANNUAL/OTH | (UTILY EQ '200'   UTILY EQ '220') AND BLPERIOD IN ('4','5','F')         | 300                  | -                    | 354                 | -                   |
| QADFUL2X | FUEL OIL                           | UTILY EQ '130'  | 2,030                | -                    | 2,628               | -                   |
| QADFUL2X | BOTTLED OR TANKED GAS              | UTILY EQ '150'  | 1,478                | -                    | 1,981               | -                   |
| QADFUL2X | OTHER FUELS                        | UTILY EQ '180'  | 490                  | -                    | 715                 | -                   |
| QADFUL2X | TRASH/GARBAGE COLL                 | UTILY EQ '210'  | 150                  | -                    | 215                 | -                   |
| QADFUL2X | WATER SOFTENING                    | UTILY EQ '270'  | 268                  | -                    | 633                 | -                   |
| QADFUL2X | SEPTIC TANK CLEANING               | UTILY EQ '280'  | 400                  | -                    | 1,350               | -                   |
| QADFUL2X | ELECTRICITY 1-2 MONTHS             | UTILY EQ '100' AND BLPERIOD IN ('1','2','3','A','B')                    | 491                  | -                    | 650                 | -                   |
| QADFUL2X | NATURAL/UTILITY GAS 1-2 MONTHS     | UTILY EQ '110' AND BLPERIOD IN ('1','2','3','A','B')                    | 354                  | -                    | 477                 | -                   |
| QADFUL2X | PIPED-IN WATER/SEWERAGE 1-2 MONTHS | (UTILY EQ '200'   UTILY EQ '220') AND BLPERIOD IN ('1','2','3','A','B') | 234                  | -                    | 345                 | -                   |
| QADFUL2X | ELECTRICITY ANNUAL/OTH             | UTILY EQ '100' AND BLPERIOD IN ('4','5','F')                            | 168                  | -                    | 252                 | -                   |

| Variable | Description                        | Condition   | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|------------------------------------|---|----------------------|----------------------|---------------------|---------------------|
| QADFUL2X | NATURAL/UTILITY GAS ANNUAL/OTH     | UTILY EQ '110' AND BLPERIOD IN ('4','5','F')                            | 772                  | -                    | 911                 | -                   |
| QADFUL2X | PIPED-IN WATER/SEWERAGE ANNUAL/OTH | (UTILY EQ '200'   UTILY EQ '220') AND BLPERIOD IN ('4','5','F')         | 230                  | -                    | 2,100               | -                   |
| QADFUL3X | FUEL OIL                           | UTILY EQ '130'  | 2,100                | -                    | 2,604               | -                   |
| QADFUL3X | BOTTLED OR TANKED GAS              | UTILY EQ '150'  | 1,413                | -                    | 2,269               | -                   |
| QADFUL3X | OTHER FUELS                        | UTILY EQ '180'  | 500                  | -                    | 748                 | -                   |
| QADFUL3X | TRASH/GARBAGE COLL                 | UTILY EQ '210'  | 154                  | -                    | 228                 | -                   |
| QADFUL3X | WATER SOFTENING                    | UTILY EQ '270'  | 168                  | -                    | 229                 | -                   |
| QADFUL3X | SEPTIC TANK CLEANING               | UTILY EQ '280'  | 500                  | -                    | 1,035               | -                   |
| QADFUL3X | ELECTRICITY 1-2 MONTHS             | UTILY EQ '100' AND BLPERIOD IN ('1','2','3','A','B')                    | 500                  | -                    | 714                 | -                   |
| QADFUL3X | NATURAL/UTILITY GAS 1-2 MONTHS     | UTILY EQ '110' AND BLPERIOD IN ('1','2','3','A','B')                    | 378                  | -                    | 507                 | -                   |
| QADFUL3X | PIPED-IN WATER/SEWERAGE 1-2 MONTHS | (UTILY EQ '200'   UTILY EQ '220') AND BLPERIOD IN ('1','2','3','A','B') | 252                  | -                    | 331                 | -                   |
| QADFUL3X | ELECTRICITY ANNUAL/OTH             | UTILY EQ '100' AND BLPERIOD IN ('4','5','F')                            | 150                  | -                    | 1,228               | -                   |

| Variable | Description                                   | Condition   | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|---|---|----------------------|----------------------|---------------------|---------------------|
| QADFUL3X | NATURAL/UTILITY GAS ANNUAL/OTH                | UTILY EQ '110' AND BLPERIOD IN ('4','5','F')                    | 750                  | -                    | 843                 | -                   |
| QADFUL3X | PIPED-IN WATER/SEWERAGE ANNUAL/OTH            | (UTILY EQ '200'   UTILY EQ '220') AND BLPERIOD IN ('4','5','F') | 325                  | -                    | 452                 | -                   |
| QADINE1X | Internet services                             | NA  | 140                  | -                    | 168                 | -                   |
| QADINE2X | Internet services                             | NA  | 125                  | -                    | 167                 | -                   |
| QADINE3X | Internet services                             | NA  | 128                  | -                    | 164                 | -                   |
| QADPSP2X | CONST AND ADDITIONS                           | (CRMCODEB='100'   CRMCODEB='110')                               | 2,000                | -                    | 6,400               | -                   |
| QADPSP2X | ROOM FINISHING/REMODELING                     | (CRMCODEB='120'   CRMCODEB='130')                               | 5,000                | -                    | 10,250              | -                   |
| QADPSP2X | LANDSCAP/OUTDOOR BUILDING REPAIR/PAINTING     | ('140'<=CRMCODEB AND CRMCODEB<='190')                           | 1,977                | -                    | 2,399               | -                   |
| QADPSP2X | PLUMBING/ELECTRICAL/HEAT/AC                   | ('200'<=CRMCODEB AND CRMCODEB<='220')                           | 2,000                | -                    | 3,067               | -                   |
| QADPSP2X | FLOORING/CARPETING                            | ('230'<=CRMCODEB AND CRMCODEB<='232')                           | 600                  | -                    | 984                 | -                   |
| QADPSP2X | INSULATION, ROOFING, SIDING, MASONRY, WINDOWS | ('240'<=CRMCODEB AND CRMCODEB<='290')                           | 2,000                | -                    | 4,763               | -                   |

| Variable | Description                                   | Condition                             | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|---|---------------------------------------|----------------------|----------------------|---------------------|---------------------|
| QADPSP2X | OTHER REPAIR AND COMBINED CODES               | (CRMCODEB='300'   CRMCODEB='310')     | 1,259                | -                    | 1,650               | -                   |
| QADPSP3X | CONST AND ADDITIONS                           | (CRMCODEB='100'   CRMCODEB='110')     | 4,000                | -                    | 27,250              | -                   |
| QADPSP3X | ROOM FINISHING/REMODELING                     | (CRMCODEB='120'   CRMCODEB='130')     | 10,000               | -                    | 13,444              | -                   |
| QADPSP3X | LANDSCAP/OUTDOOR BUILDING REPAIR/PAINTING     | ('140'<=CRMCODEB AND CRMCODEB<='190') | 3,800                | -                    | 6,033               | -                   |
| QADPSP3X | PLUMBING/ELECTRICAL/HEAT/AC                   | ('200'<=CRMCODEB AND CRMCODEB<='220') | 2,000                | -                    | 3,695               | -                   |
| QADPSP3X | FLOORING/CARPETING                            | ('230'<=CRMCODEB AND CRMCODEB<='232') | 403                  | -                    | 1,413               | -                   |
| QADPSP3X | INSULATION, ROOFING, SIDING, MASONRY, WINDOWS | ('240'<=CRMCODEB AND CRMCODEB<='290') | 3,300                | -                    | 6,833               | -                   |
| QADPSP3X | OTHER REPAIR AND COMBINED CODES               | (CRMCODEB='300'   CRMCODEB='310')     | 3,000                | -                    | 4,989               | -                   |
| QADPSPLX | CONST AND ADDITIONS                           | (CRMCODEB='100'   CRMCODEB='110')     | 5,000                | -                    | 72,772              | -                   |

| Variable | Description   | Condition                             | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|---|---------------------------------------|----------------------|----------------------|---------------------|---------------------|
| QADPSPLX | ROOM FINISHING/REMODELING   | (CRMCODEB='120'   CRMCODEB='130')     | 7,500                | -                    | 11,160              | -                   |
| QADPSPLX | LANDSCAP/OUTDOOR BUILDING REPAIR/PAINTING                                   | ('140'<=CRMCODEB AND CRMCODEB<='190') | 2,799                | -                    | 3,886               | -                   |
| QADPSPLX | PLUMBING/ELECTRICAL/HEAT/AC   | ('200'<=CRMCODEB AND CRMCODEB<='220') | 1,765                | -                    | 3,505               | -                   |
| QADPSPLX | FLOORING/CARPETING  | ('230'<=CRMCODEB AND CRMCODEB<='232') | 220                  | -                    | 1,205               | -                   |
| QADPSPLX | INSULATION, ROOFING, SIDING, MASONRY, WINDOWS                               | ('240'<=CRMCODEB AND CRMCODEB<='290') | 1,800                | -                    | 3,082               | -                   |
| QADPSPLX | OTHER REPAIR AND COMBINED CODES   | (CRMCODEB='300'   CRMCODEB='310')     | 2,500                | -                    | 3,753               | -                   |
| QADPTAX  | What was the total price paid for the property not including closing costs? | OWNYB EQ '100' OR OWNYB EQ '200'      | 10,000               | -                    | 15,480              | -                   |
| QADPTAX  | What was the total price paid for the property not including closing costs? | OWNYB EQ '300'                        | 7,300                | -                    | 11,902              | -                   |
| QADPTAX  | What was the total price paid for the property not including closing costs? | OWNYB EQ '400' OR OWNYB EQ '500'      | 4,500                | -                    | 6,919               | -                   |

| Variable | Description   | Condition                                       | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|---|---|----------------------|----------------------|---------------------|---------------------|
| QADRSP2X | RENTED SUPPLIES FOR CONST/REPAIR/MAINT                            | NA  | 160                  | -                    | 301                 | -                   |
| QADRSP3X | RENTED SUPPLIES FOR CONST/REPAIR/MAINT                            | NA  | 250                  | -                    | 656                 | -                   |
| QADRSP4X | RENTED SUPPLIES FOR CONST/REPAIR/MAINT                            | NA  | 400                  | -                    | 878                 | -                   |
| QBLNCM1G | Principal balance outstanding at beginning of month, 3 months ago | ('100' LE OWNYG LE '500') AND (LOANTYPE EQ '2') | 200,000              | -                    | 231,876             | -                   |
| QBLNCM1X | Principal balance outstanding at beginning of month 3 months ago  | ('100' LE OWNYF LE '500') AND (LOANTYPE EQ '1') | 399,923              | -                    | 552,549             | -                   |
| QBLNCM2G | Principal balance outstanding at beginning of month, 2 months ago | ('100' LE OWNYG LE '500') AND (LOANTYPE EQ '2') | 200,000              | -                    | 229,892             | -                   |
| QBLNCM2X | Principal balance outstanding at beginning of month 2 months ago  | ('100' LE OWNYF LE '500') AND (LOANTYPE EQ '1') | 399,573              | -                    | 551,756             | -                   |
| QBLNCM3G | Principal balance outstanding at beginning of month, 1 month ago  | ('100' LE OWNYG LE '500') AND (LOANTYPE EQ '2') | 200,000              | -                    | 227,896             | -                   |

| Variable | Description   | Condition  | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|---|--|----------------------|----------------------|---------------------|---------------------|
| QBLNCM3X | Principal balance outstanding at beginning of month 1 month ago | ('100' LE OWNYP LE '500') AND (LOANTYPE EQ '1')              | 399,221              | -                    | 551,375             | -                   |
| QHI3MCX  | Dental Insurance  | HHICODE EQ '4' AND HHISPECT IN ('1')                         | 1,196                | -                    | 2,004               | -                   |
| QHI3MCX  | Vision Insurance  | HHICODE EQ '4' AND HHISPECT IN ('2')                         | 1,650                | -                    | 2,488               | -                   |
| QHI3MCX  | PrscripDrug/Other/DK  | HHICODE EQ '4' AND HHISPECT IN ('3','4','5','6','B','F','G') | 4,284                | -                    | 4,965               | -                   |
| QHI3MCX  | Health Insurance HMO/FFS/MEDSUP, COV<= 1, INDIVIDUAL            | HHICODE NE '4' AND HHICOVQ <= 1 AND HHIGROUP IN ('1')        | 3,005                | -                    | 8,602               | -                   |
| QHI3MCX  | Health Insurance HMO/FFS/MEDSUP, COV<= 1, GROUP                 | HHICODE NE '4' AND HHICOVQ <= 1 AND HHIGROUP IN ('2' '3')    | 2,772                | -                    | 5,836               | -                   |
| QHI3MCX  | Health Insurance HMO/FFS/MEDSUP, COV> 1, INDIVIDUAL             | HHICODE NE '4' AND HHICOVQ > 1 AND HHIGROUP IN ('1')         | 8,208                | -                    | 11,392              | -                   |

| Variable | Description  | Condition  | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|--|--|----------------------|----------------------|---------------------|---------------------|
| QHI3MCX  | Health Insurance HMO/FFS/MEDSUP, COV> 1, GROUP                                   | HHICODE NE '4' AND HHICOVQ > 1 AND HHIGROUP IN ('2' '3') | 5,870                | -                    | 9,263               | -                   |
| QLMPSUMX | Amount paid for mortgage in special or lump sum payments during reference period | OWNYI EQ '100' OR OWNYI EQ '200'                         | 5,878                | -                    | 33,196              | -                   |
| QLMPSUMX | Amount paid for mortgage in special or lump sum payments during reference period | OWNYI EQ '300'   | 1,500                | -                    | 9,000               | -                   |
| QLR3MCMX | Amount paid for ground or land rent, adjusted for business                       | OWNYI EQ '100' OR OWNYI EQ '200'                         | 2,616                | -                    | 13,673              | -                   |
| QLR3MCMX | Amount paid for ground or land rent, adjusted for business                       | OWNYI EQ '300'   | 3,500                | -                    | 11,765              | -                   |
| QPRINM1G | Amount of principal paid during first month of reference period                  | (OWNYG EQ '100' OR OWNYG EQ '200') AND (LOANTYPE EQ '2') | 975                  | -                    | 1,381               | -                   |
| QPRINM1G | Amount of principal paid during first month of reference period                  | (OWNYG EQ '300') AND (LOANTYPE EQ '2')                   | 211                  | -                    | 4,423               | -                   |

| Variable | Description  | Condition  | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|--|--|----------------------|----------------------|---------------------|---------------------|
| QPRINM1X | Amount of principal paid during first month of reference period  | (OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1') | 1,125                | -                    | 1,631               | -                   |
| QPRINM1X | Amount of principal paid during first month of reference period  | (OWNYF EQ '300') AND (LOANTYPE EQ '1')                   | 965                  | -                    | 1,483               | -                   |
| QPRINM1X | Amount of principal paid during first month of reference period  | (OWNYF EQ '400' OR OWNYF EQ '500') AND (LOANTYPE EQ '1') | 1,353                | -                    | 1,940               | -                   |
| QPRINM2G | Amount of principal paid during second month of reference period | (OWNYG EQ '100' OR OWNYG EQ '200') AND (LOANTYPE EQ '2') | 979                  | -                    | 1,389               | -                   |
| QPRINM2G | Amount of principal paid during second month of reference period | (OWNYG EQ '300') AND (LOANTYPE EQ '2')                   | 212                  | -                    | 4,441               | -                   |
| QPRINM2X | Amount of principal paid during second month of reference period | (OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1') | 1,134                | -                    | 1,642               | -                   |
| QPRINM2X | Amount of principal paid during second month of reference period | (OWNYF EQ '300') AND (LOANTYPE EQ '1')                   | 970                  | -                    | 1,489               | -                   |

| Variable | Description   | Condition  | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|---|--|----------------------|----------------------|---------------------|---------------------|
| QPRINM2X | Amount of principal paid during second month of reference period                          | (OWNYF EQ '400' OR OWNYF EQ '500') AND (LOANTYPE EQ '1') | 1,359                | -                    | 1,948               | -                   |
| QPRINM3G | Amount of principal paid during third month of reference period                           | (OWNYG EQ '100' OR OWNYG EQ '200') AND (LOANTYPE EQ '2') | 983                  | -                    | 1,397               | -                   |
| QPRINM3G | Amount of principal paid during third month of reference period                           | (OWNYG EQ '300') AND (LOANTYPE EQ '2')                   | 213                  | -                    | 4,460               | -                   |
| QPRINM3X | Amount of principal paid during third month of reference period                           | (OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1') | 1,134                | -                    | 1,641               | -                   |
| QPRINM3X | Amount of principal paid during third month of reference period                           | (OWNYF EQ '300') AND (LOANTYPE EQ '1')                   | 974                  | -                    | 1,477               | -                   |
| QPRINM3X | Amount of principal paid during third month of reference period                           | (OWNYF EQ '400' OR OWNYF EQ '500') AND (LOANTYPE EQ '1') | 1,059                | -                    | 1,784               | -                   |
| QRT3MCMX | Rental payments made in reference period adjusted for business and rooms rented to others | NA   | 6,027                | -                    | 8,488               | -                   |

| Variable | Description   | Condition                        | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|---|----------------------------------|----------------------|----------------------|---------------------|---------------------|
| RNTEQVX  | Monthly rental equivalence of owned home  | OWNYI EQ '100'                   | 3,200                | -                    | 4,638               | -                   |
| RNTEQVX  | Monthly rental equivalence of owned home  | OWNYI EQ '300'                   | 6,500                | -                    | 12,000              | -                   |
| SALEX    | How much did you sell it for?   | VEHICYC EQ '160'                 | 4,000                | -                    | 14,833              | -                   |
| TELCEL1X | Cell phone service  | NA                               | 357                  | -                    | 427                 | -                   |
| TELCEL2X | Cell phone service  | NA                               | 360                  | -                    | 431                 | -                   |
| TELCEL3X | Cell phone service  | NA                               | 360                  | -                    | 432                 | -                   |
| TELRES1X | Residential phone service   | NA                               | 250                  | -                    | 334                 | -                   |
| TELRES2X | Residential phone service   | NA                               | 250                  | -                    | 310                 | -                   |
| TELRES3X | Residential phone service   | NA                               | 250                  | -                    | 324                 | -                   |
| TOTOWED  | Estimated amount of principal paid on home equity loan during reference period  | OWNYH EQ '100' OR OWNYH EQ '200' | 240,516              | -                    | 339,573             | -                   |
| TOTOWED  | Estimated amount of principal paid on home equity loan during reference period  | OWNYH EQ '300'                   | 100,000              | -                    | 180,000             | -                   |
| TOTYUPDX | Amount of (lodging) expense not covered by a business, employer, or other non-CU member (for trips funded by non-CU member) | TOTYUPDY EQ '130'                | 1,524                | -                    | 3,024               | -                   |

| Variable | Description  | Condition         | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|--|-------------------|----------------------|----------------------|---------------------|---------------------|
| TRNONCUX | Amount of the (lodging) expense paid for non CU member | TRNONCUY EQ '130' | 2,379                | -                    | 2,519               | -                   |

### III. Diary Survey

#### A. CU Characteristics and Income File (FMLD)

##### 1. Directly topcoded

The following table shows the FMLD file variables that are subject to topcoding and their associated critical values and topcode values. For multiple imputed income variables, it is possible for an upper topcode value to be less than the upper critical value or for a lower topcode value to be greater than the lower critical value.

| Variable | Description  | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|--|----------------------|----------------------|---------------------|---------------------|
| ADDFEDX  | Amount of federal tax paid by any CU member in addition to | 32,000               | -                    | 86,300              | -                   |

| Variable | Description   | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|---|----------------------|----------------------|---------------------|---------------------|
|          | that withheld from earnings in past 12 months   |                      |                      |                     |                     |
| ADDOTHX  | Amount of other taxes paid which were not reported elsewhere during past 12 months  | 6,500                | -                    | 23,133.33           | -                   |
| ADDSTAX  | Amount of state and local tax paid in addition to that withheld from earnings during past 12 months   | 8,000                | -                    | 22,930.43           | -                   |
| FEDREFX  | Amount of refund received from federal income tax   | 9,000                | -                    | 37,834.03           | -                   |
| INTRDVX  | Amount of income received from interest and dividends, imputation iterations  | 23,000               | -                    | 45,026.67           | -                   |
| INTRDVXM | Amount of income received from interest and dividends, imputation iterations  | 23,000               | -                    | 29,548.58           | -                   |
| LUMPX    | Lump sum payments from insurance, estates, trusts, royalties, child support, alimony, prizes or games of chance, or from people who are not on your list                | 160,000              | -                    | 500,000             | -                   |
| NETRENTM | Amount of income received from net rental income or loss  | 75,000               | -20,000              | 87,980.26           | -23,832.54          |
| NETRENTX | Amount of income received from net rental income or loss  | 75,000               | -20,000              | 134,093.20          | -78,000             |
| OCCEXPX  | Amount of payment by CU for occupational expenses such as union dues, tools, uniforms, business or professional association dues, licenses or permits in past 12 months | 6,041                | -                    | 44,562.07           | -                   |
| OTHINX   | Amount received in other money income including   | 37,000               | -                    | 96,307.69           | -                   |

| <b>Variable</b> | <b>Description</b>  | <b>Upper<br/>Critical<br/>Value</b> | <b>Lower<br/>Critical<br/>Value</b> | <b>Upper<br/>Topcode<br/>Value</b> | <b>Lower<br/>Topcode<br/>Value</b> |
|-----------------|---|-------------------------------------|-------------------------------------|------------------------------------|------------------------------------|
|                 | money received from care of foster children, cash scholarships and fellowships, or stipends not based on working  |                                     |                                     |                                    |                                    |
| OTHINXM         | Amount received in other money income including money received from care of foster children, cash scholarships and fellowships, or stipends not based on working            | 37,000                              | -                                   | 69,090.26                          | -                                  |
| OTHREGX         | Amount of income received from any other source such as Veteran's Administration (VA) payments, unemployment compensation, child support, or alimony, imputation iterations | 26,000                              | -                                   | 37,237.40                          | -                                  |
| OTHREGXM        | Amount of income received from any other source such as Veteran's Administration (VA) payments, unemployment compensation, child support, or alimony, imputation iterations | 26,000                              | -                                   | 25,522.34                          | -                                  |
| RETSURVM        | Amount of income received from retirement, survivor, or disability pensions   | 72,000                              | -                                   | 63,526.93                          | -                                  |
| RETSURVX        | Amount of income received from retirement, survivor, or disability pensions   | 72,000                              | -                                   | 86,956.46                          | -                                  |
| ROYESTX         | Amount of income received from royalty income or income from estates and trusts   | 160,000                             | -                                   | 312,000                            | -                                  |

| Variable | Description   | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|---|----------------------|----------------------|---------------------|---------------------|
| ROYESTXM | Amount of income received from royalty income or income from estates and trusts | 160,000              | -                    | 282,052.53          | -                   |
| STATREFX | Amount of refund received from state and local income tax                       | 2,331                | -                    | 46,33.18            | -                   |

## 2. Indirectly topcoded

Some income variables that are subject to topcoding are constructed by summing up the values of “lower level” component variables from the MEMD or FMLD. 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 the diary data dictionary for a list of component variables.

| Variable                           | Description   |
|------------------------------------|---|
| FSMPFRXM<br>FSMPFRX1-5<br>FSMPFRMX | Amount of income received from self-employment income                                 |
| FFEDTXX                            | Amount of Federal tax deducted from last pay, annualized for all CU members           |
| FGVXM,<br>FGVX1-5<br>FGVX          | Amount of government retirement deducted from last pay, annualized for all CU members |
| FINCAFTM<br>FINCAFT1-5<br>FINCAFTX | Amount of CU income after taxes   |
| FINCBEFM                           | Amount of CU income before taxes  |

| Variable                           | Description  |
|------------------------------------|--|
| FINCBEF1-5<br>FINCBEFX             |  |
| FIRAX                              | Amount of money placed in individual retirement plan   |
| FJSSDEDM<br>FJSSDED1-5<br>FJSSDEDX | Estimated amount of annual Social Security contribution                                      |
| FPVTXM<br>FPVTX                    | Amount of private pension fund deducted from last pay, annualized for all CU members         |
| FRRXM FRRX                         | Amount of Railroad Retirement deducted from last pay, annualized for all CU members          |
| FSTATXXM<br>FSTATXX1-5<br>FSTATXX  | Amount of State and local income taxes deducted from last pay, annualized for all CU members |
| FWAGEXM<br>FWAGEX1-5<br>FWAGEX     | Amount received from wage and salary income before deduction                                 |
| OTHRECX                            | Amount of other money receipts excluded from family income                                   |
| PERSTAXM<br>PERSTAX1-5<br>PERSTAX  | Amount of personal taxes paid  |

For examples see the [Interview Survey examples](#).

## B. Member Characteristics and Income File (MEMD)

The following table lists MEMD file variables that are subject to topcoding. The table also shows the critical values and topcode values associated with each variable listed. For multiple imputed income variables, it is possible for an upper topcode value to be less than the upper critical value or for a lower topcode value to be greater than the lower critical value.

| Variable | Description   | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|---|----------------------|----------------------|---------------------|---------------------|
| AGE      | Age of member   | 82                   | -                    | 88                  | -                   |
| ANFEDTXM | Annual amount of Federal income tax deducted from pay           | 26,390               | -                    | 39,637.50           | -                   |
| ANFEDTXX | Annual amount of Federal income tax deducted from pay           | 26,390               | -                    | 39,207.85           | -                   |
| ANGVX    | Annual amount of government retirement deducted from pay        | 9,893                | -                    | 16,018.17           | -                   |
| ANGVXM   | Annual amount of government retirement deducted from pay        | 9,893                | -                    | 16,018.17           | -                   |
| ANPVTX   | Annual amount of private pension fund deducted from pay         | 20,077               | -                    | 28,771.05           | -                   |
| ANPVTXM  | Annual amount of private pension fund deducted from pay         | 20,077               | -                    | 29,166.24           | -                   |
| ANSTATXM | Annual amount of state and local income taxes deducted from pay | 9,289                | -                    | 12,803.27           | -                   |
| ANSTATXX | Annual amount of state and local income taxes deducted from pay | 9,289                | -                    | 12,803.27           | -                   |

| Variable | Description   | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|---|----------------------|----------------------|---------------------|---------------------|
| FEDTXX   | Amount of Federal income tax deducted from last pay           | 1,235                | -                    | 2,889.71            | -                   |
| GROSPAYX | Amount of last gross pay                                      | 6,601                | -                    | 10,810.96           | -                   |
| GVX      | Amount of government retirement deducted from last pay        | 965                  | -                    | 3,962.50            | -                   |
| IRAX     | Amount of money placed in an individual retirement plan       | 27,000               | -                    | 53,107.44           | -                   |
| JSSDEDX  | Estimated annual Social Security contribution                 | 9,429                | -                    | 13,536.91           | -                   |
| JSSDEDXM | Estimated annual Social Security contribution                 | 9,429                | -                    | 10,511.55           | -                   |
| PVTX     | Amount of private pension fund deducted from last pay         | 1,900                | -                    | 5,327.14            | -                   |
| SEMPFRMM | Amount of self-employment income                              | 135,000              | -30,000              | 128,819.20          | -25,648.62          |
| SEMPFRMX | Amount of self-employment income                              | 135,000              | -30,000              | 266,818.18          | -68,000             |
| SLFEMPSM | Amount of self-employment Social Security contributions       | 19,957               | -                    | 14,706.52           | -                   |
| SLFEMPSS | Amount of self-employment Social Security contributions       | 19,957               | -                    | 24,659.83           | -                   |
| STATXX   | Amount of state and local income taxes deducted from last pay | 393                  | -                    | 937.24              | -                   |
| WAGEX    | Amount received from wage and salary                          | 150,000              | -                    | 250,778.89          | -                   |

| Variable | Description   | Upper Critical Value | Lower Critical Value | Upper Topcode Value | Lower Topcode Value |
|----------|---|----------------------|----------------------|---------------------|---------------------|
|          | income before deductions                                      |                      |                      |                     |                     |
| WAGEXM   | Amount received from wage and salary income before deductions | 150,000              | -                    | 199,461.89          | -                   |

### **Special suppression for MEMD file variables**

The five MEMD 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 WAGEXM (annual wage and salary income) to derive ANFEDTXM, ANGVXM, ANPVTXM, ANRRXM, and ANSTATXM, 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

$$(1) \text{ ANFEDTXM} = (\text{WAGEXM} (\text{FEDTXX}/\text{GROSPAYX})).$$

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

$$(2) \text{ WAGEXM} = (\text{ANFEDTXM} (\text{GROSPAYX}/\text{FEDTXX})).$$

In the above example, a problem with disclosure may arise when neither ANFEDTXM, GROSPAYX, nor FEDTXX (calculation components) are topcoded, *but WAGEXM is*. In this situation WAGEXM 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 WAGEXM is greater than the critical value but ANFEDTXM, GROSPAYX, and FEDTXX are not, then the values for ANFEDTXM, GROSPAYX, and FEDTXX are suppressed and their flag variables are assigned a value of 'T.'
- If WAGEXM is greater than the critical value but ANGVXM, GROSPAYX, and GVX are not, then the values for ANGVXM, GROSPAYX, and GVX are suppressed and their flag variables assigned a value of 'T.'
- If WAGEXM is greater than the critical value but ANPVTXM, GROSPAYX, and PVTX are not, then the values for ANPVTXM, GROSPAYX, and PVTX are suppressed and their flag variables assigned a value of 'T.'
- If WAGEXM is greater than the critical value but ANRRXM, GROSPAYX, and RRX are not, then the values for ANRRXM, GROSPAYX, and RRX are suppressed and their flag variables assigned a value of 'T.'
- If WAGEXM is greater than the critical value but ANSTATXM, GROSPAYX, and STATXX are not, then the values for ANSTATXM, GROSPAYX, and STATXX are suppressed and their flag variables assigned a value of 'T.'

The same special suppression for MEMD file variables occurs with the original (pre-income imputation) variables that correspond to the variables noted above (WAGEX, ANFEDTXX, etc.).

### C. Detailed Expenditure File (EXPD)

The following table lists UCCs for which the EXPD variable COST is subject to topcoding as well as their associated critical values and topcode values (rounded to the nearest dollar). 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.'

| Variable | Description                                   | 2014<br>Upper<br>Critical<br>Value | 2014<br>Lower<br>Critical<br>Value | 2014<br>Upper<br>Topcode<br>Value | 2014<br>Lower<br>Topcode<br>Value |
|----------|---|------------------------------------|------------------------------------|-----------------------------------|-----------------------------------|
| 001000   | Purchase price of stocks, bonds, mutual funds | 162.75                             | -                                  | 223.21                            | -                                 |
| 009000   | Mortgage payment including coop               | 3,356.41                           | -                                  | 4,124.46                          | -                                 |
| 210110   | Rent of dwelling, includes parking fees       | 2,034.38                           | -                                  | 2,673.20                          | -                                 |
| 210210   | Lodging away from home                        | 651.6                              | -                                  | 1,054.88                          | -                                 |
| 210310   | Housing for someone at school                 | 433                                | -                                  | 895.44                            | -                                 |
| 220400   | Purchase of property                          | 93.94                              | -                                  | 92,770.31                         | -                                 |

| Variable | Description                                    | 2014<br>Upper<br>Critical<br>Value | 2014<br>Lower<br>Critical<br>Value | 2014<br>Upper<br>Topcode<br>Value | 2014<br>Lower<br>Topcode<br>Value |
|----------|--|------------------------------------|------------------------------------|-----------------------------------|-----------------------------------|
| 550320   | Medical equipment for general use              | 99.97                              | -                                  | 137.66                            | -                                 |
| 550330   | Supportive convalescent or medical equipment   | 80                                 | -                                  | 112.22                            | -                                 |
| 560110   | Physicians' services                           | 246.49                             | -                                  | 561.31                            | -                                 |
| 560210   | Dental services                                | 1,172                              | -                                  | 2,263.40                          | -                                 |
| 560310   | Eyecare services                               | 198.4                              | -                                  | 555.44                            | -                                 |
| 560330   | Lab tests and x-rays                           | 140                                | -                                  | 165.93                            | -                                 |
| 560400   | Service by professionals other than physicians | 187.25                             | -                                  | 303.30                            | -                                 |
| 570000   | Hospital care not specified                    | 708.82                             | -                                  | 2,299.73                          | -                                 |
| 570220   | Nursing or convalescent home care              | 1,688                              | -                                  | 5,115.67                          | -                                 |
| 570230   | Other medical care service                     | 150                                | -                                  | 243.41                            | -                                 |
| 570901   | Rental of medical equipment                    | 25                                 | -                                  | 49.75                             | -                                 |

#### **D. Income File (DTBD)**

The DTBD variable AMOUNT is subject to topcoding for some UCCs. The AMOUNT variable is not topcoded by the conventional method of replacement with a topcode value. First, variables are topcoded in the FMLD files. Then those variables are mapped to their appropriate UCC. If the variable was topcoded in the FMLD files, then the associated UCC will have a topcoded AMOUNT value, and the value of AMOUNT\_ is set to 'T.' All the FMLD variables that are topcoded are listed in [Section IV, A](#) of this documentation. To obtain the concordance file that lists what FMLD variables are mapped to which UCC, please contact the Consumer Expenditure Survey via the phone number or email address listed on the last page of this documentation.

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

## IV. State suppression for both surveys

The value of the variable, STATE, which identifies the state of residence, must be suppressed for some observations to meet the Census Disclosure Review Board's criterion that the smallest geographically identifiable area must have a population of at least 100,000. STATE data were evaluated in conjunction with the POPSIZE, REGION, and BLS\_URBN variables, which show the population size of the geographic area that is sampled, the four Census regions, and urban/rural status, respectively. Some STATE codes were suppressed because, in combination with these variables, they could be used to identify areas of 100,000 or less. On approximately 14 percent of the records on the FMLI files the STATE variable is blank.

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

States not listed are not in the CE sample.

The table below lists the code CE uses to identify the state, the type of suppression, and the name of the state.

| Code | Type | State                | Code | Type | State          |
|------|------|----------------------|------|------|----------------|
| 01   | D    | Alabama              | 29   |      | Missouri       |
| 02   |      | Alaska               | 30   | A    | Montana        |
| 04   |      | Arizona              | 31   |      | Nebraska       |
| 05   | A    | Arkansas             | 32   |      | Nevada         |
| 06   | B    | California           | 33   |      | New Hampshire  |
| 08   | B    | Colorado             | 34   |      | New Jersey     |
| 09   |      | Connecticut          | 36   | B    | New York       |
| 10   | C    | Delaware             | 37   | A    | North Carolina |
| 11   |      | District of Columbia | 39   | B    | Ohio           |
| 12   |      | Florida              | 40   |      | Oklahoma       |
| 13   | F    | Georgia              | 41   | B    | Oregon         |
| 15   |      | Hawaii               | 42   |      | Pennsylvania   |
| 16   |      | Idaho                | 44   |      | Rhode Island   |
| 17   | B    | Illinois             | 45   |      | South Carolina |
| 18   | B    | Indiana              | 46   | A    | South Dakota   |

| Code | Type | State         | Code | Type | State         |
|------|------|---------------|------|------|---------------|
| 20   | B    | Kansas        | 47   | B    | Tennessee     |
| 21   |      | Kentucky      | 48   | B    | Texas         |
| 22   |      | Louisiana     | 49   |      | Utah          |
| 23   | B    | Maine         | 51   | B    | Virginia      |
| 24   | D    | Maryland      | 53   |      | Washington    |
| 25   |      | Massachusetts | 54   | B    | West Virginia |
| 26   | B    | Michigan      | 55   | F    | Wisconsin     |
| 27   | C    | Minnesota     |      |      |               |
| 28   | A    | Mississippi   |      |      |               |

- A STATE codes have been suppressed for *all* sampled CUs in that state.
- B STATE codes have been suppressed for *some* sampled CUs in that state.
- C STATE codes have either been re-coded for *all* observations or all strata<sup>1</sup> of observations from this state include “re-codes” from other states.
- D STATE codes have either been recoded for *some* observations from this state or at least one stratum<sup>1</sup> of observations from this state includes “re-codes” from other states.
- E STATE code has been suppressed for *some* sampled CUs in that state and, either STATE has been re-coded or the state includes “re-codes” from other states in all strata.<sup>1</sup>
- F STATE code has been suppressed for some sampled CUs in that state and, either STATE has been re-coded or the state includes “re-codes” from other states in at least one stratum.<sup>1</sup>

<sup>1</sup> A STATE stratum is a unique POPSIZE and BLS\_URBN combination.