

**2016 Topcoding and Suppression**

INTERVIEW SURVEY AND DIARY SURVEY  
CONSUMER EXPENDITURE  
PUBLIC USE MICRODATA

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## Table of Contents

<b>I. TOPCODING AND OTHER NONDISCLOSURE REQUIREMENTS .....</b>	<b>2</b>
<b>II. INTERVIEW SURVEY .....</b>	<b>3</b>
A. CU CHARACTERISTICS AND INCOME FILE (FMLI) .....	3
1. <i>Directly topcoded</i> .....	3
2. <i>Indirectly topcoded</i> .....	5
B. MEMBER CHARACTERISTICS AND INCOME FILE (MEMI) .....	7
1. <i>Direct topcoding</i> .....	7
2. <i>Special suppression for MEMI file variables</i> .....	8
C. MONTHLY EXPENDITURE FILE (MTBI) .....	9
D. INCOME FILE (ITBI) .....	10
E. DETAILED EXPENDITURE FILES (EXPN) .....	10
<b>III. DIARY SURVEY .....</b>	<b>26</b>
A. CU CHARACTERISTICS AND INCOME FILE (FMLD) .....	26
1. <i>Directly topcoded</i> .....	26
2. <i>Indirectly topcoded</i> .....	28
B. MEMBER CHARACTERISTICS AND INCOME FILE (MEMD) .....	29
C. DETAILED EXPENDITURE FILE (EXPD) .....	31
D. INCOME FILE (DTBD).....	32

### I. 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
CREFINX	TOT AMT PAID FINANCE LATE CHARGE AND INTEREST ALL CARDS LAST MONTH	1,370		2,735	
CREDITX	TOT AMT OWED ALL CARDS	30,000		51,839	
CREDTYRX	TOT AMT OWED ALL CARDS YR AGO	35,000		59,940	
INTRDVX	AMT RECEIVED IN INTEREST LAST 12 MNTHS	40,000		114,642	
INTRDVXM	AMT RECEIVED IN INTEREST LAST 12 MNTHS	40,000		67,951	
IRAX	TOT VALUE OF ALL RET ACCOUNTS	1,100,000		1,788,226	
IRAYRX	TOT VALUE OF ALL RET ACCOUNTS YR AGO	1,050,000		1,746,648	
LIQUDYRX	TOT VALUE OF ACOUNTS YR AGO	150,000		380,627	
LIQUIDX	TOT VALUE OF ACOUNTS	175,000		391,152	
LUMPSUMX	Amount of lump sum receipts	157,000		503,254	
MISCTAXX	Amount of other taxes paid during the past 12 months	35,000		73,500	

NETRENTM	NET RENTAL INCOME OR LOSS	60,000	(21,000)	72,089	(33,000)
NETRENTX	NET RENTAL INCOME OR LOSS	60,000	(21,000)	105,717	(33,000)
OTHASTX	VAL OF OTHER FINANCIAL ASSETS	750,000		3,625,000	
OTHFINX	TOT AMT PAID IN FINANCE LATE CHARGES ALL OTHER LOANS	1,062		1,920	
OTHLNYRX	TOT AMT OWED ALL OTHER LOANS YR AGO	50,000		179,000	
OTHLONX	TOT AMT OWED ALL OTHER LOANS	50,000		197,596	
OTHREGX	AMT INCOME FROM OTHER SOURCES	36,826		55,862	
OTHREGXM	AMT INCOME FROM OTHER SOURCES	36,826		41,074	
OTHRINCM	Amount received in other money income	50,000		53,411	
OTHRINCX	Amount received in other money income	50,000		77,582	
OTHSTYRX	VAL OF OTHER FINANCIAL ASSETS YR AGO	750,000		3,375,000	
RENTEQVX	Estimated monthly rental equivalence of owned home	4,000		6,703	
RETSURVM	AMT INCOME FROM RET SURVIVOR DISABILITY	74,880		96,696	
RETSURVX	AMT INCOME FROM RET SURVIVOR DISABILITY	74,880		127,754	
ROYESTX	AMT INCOME FROM ROYALTY OR ESTATES AND TRUSTS	130,000		462,818	
ROYESTXM	AMT INCOME FROM ROYALTY OR ESTATES AND TRUSTS	130,000		245,688	
STOCKX	TOT VALUE DIRECTLY HELD STOCKS BONDS MUTUAL FUNDS	1,100,000		2,481,143	
STOCKYRX	TOT VALUE DIRECTLY HELD STOCKS BONDS MUTUAL FUNDS YR AGO	1,000,000		2,483,333	

WHLFYRX	TOT SURRENDER VALUE OF POLICIES YR AGO	500,000		868,571	
WHOLIFX	TOT SURRENDER VALUE OF POLICIES	500,000		973,000	

## 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
FSMPFRMX, FSMPFRXM	Amount of income or loss received from self-employment income
FGOVRETX, FGOVRETM	Amount of government retirement deducted from last pay, annualized for all CU members
FINATXEM	Amount of CU income after taxes (Estimated)
FINCBTAX, FINCBTXM	Amount of CU income before taxes
FINDRETX	Amount of money placed in individual retirement plan
FJSSDEDX, FJSSDEDM	Estimated amount of annual Social Security contribution
FPRIPENX, FPRIPENM	Amount of private pension fund deducted from last pay, annualized for all CU members
FRRDEDX, FRRDEDM	Amount of Railroad Retirement deducted from last pay, annualized for all CU members
FSALARYX, FSALARYM	Amount received from wage and salary income before deductions
NONINCMX	Amount of other money receipts excluded from family income

TOTXEST	Amount of personal taxes paid (Estimated)
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### 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 \(MEMI\)](#).

<u>CU</u>		<i>SEMPFRMX</i>		<i>FSMPFRMX</i>	<b>FLAGGED AS</b>
		<u>REPORTED</u>	<u>AFTER TOPCODING</u>	<u>VALUE</u>	
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.

## B. 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	
ANGOVRTM	Annual amount government retirement	10,400		14,773	
ANGOVRTX	Annual amount government retirement	10,400		14,548	
ANPRVPNM	Annual amount private pensions	25,730		42,591	
ANPRVPNX	Annual amount private pensions	25,730		41,745	
ANRRDEDM	Annual amount Railroad retirement	6,500		7,712	
ANRRDEDX	Annual amount Railroad retirement	6,500		7,712	
GOVRETX	Government retirement deducted from last pay	4,100		17,354	
GROSPAYX	Amount of last gross pay	7,764		23,087	
INDRETX	Self-employment retirement plan contributions	42,000		124,518	
JSSDEDX	Estimated annual Social Security contribution	10,465		17,494	
JSSDEDXM	Estimated annual Social Security contribution	10,465		12,960	
PRIVPENX	Private pension deducted from last pay	4,000		56,539	
RRRDEDX	Railroad retirement deducted from last pay	300		9,125	

SALARYX	Wage and salary income received before deductions	160,000		280,500	
SALARYXM	Wage and salary income received before deductions	160,000		228,786	
SEMPFRMM	AMT OF SELF EMPLOYMENT INCOME OR LOSS	175,000	(36,000)	241,175	(29,790)
SEMPFRMX	AMT OF SELF EMPLOYMENT INCOME OR LOSS	175,000	(36,000)	729,390	(54,667)
SLFEMPSM	Self-employment Social Security contribution	25,569		36,202	
SLFEMPSS	Self-employment Social Security contribution	25,569		56,169	

## 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 ANPRVPM, GROSPAYX, and PRIVPENX are not, then the values for ANPRVPM, GROSPAYX, and PRIVPENX are suppressed and their flag variables are assigned a value of 'T.'

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

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

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

### **C. 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.

## D. 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.

## E. 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	CONSTR MAT JOB NOT STRTD RNTR	NA	9,783		23,061	
DISPX	What was the selling price (trade-in value)?	OWNYD EQ '100' OR OWNYD EQ '200'	525,000		649,200	
DISPX	What was the selling price (trade-in value)?	OWNYD EQ '300'	255,000		376,750	
DISPX	What was the selling price (trade-in value)?	OWNYD EQ '400' OR OWNYD EQ '500'	114,000		540,000	
INTCHGX	Cable/Satellite - cont expnesnse	INTSERV EQ '100' AND INTMO EQ '13'	250		296	
INTCHGX	Cable/Satellite	INTSERV EQ '100' AND INTMO NE '13'	280		436	

INTCHGX	Internet services - cont expenses	INTSERV EQ '200' AND INTMO EQ '13'	150		187	
INTCHGX	Internet services	INTSERV EQ '200' AND INTMO NE '13'	194		264	
JCPIRE1X	CPI quarterly rental equivalence adjusted for ownership percentage	OWNYI EQ '100'	11,550		16,599	
JCPIRE1X	CPI quarterly rental equivalence adjusted for ownership percentage	OWNYI EQ '300'	18,000		35,249	
JCPIRE2X	CPI quarterly rental equivalence adjusted for ownership percentage	OWNYI EQ '300'	2,500		4,256	
JCPIRE3X	CPI quarterly rental equivalence adjusted for ownership percentage	OWNYI EQ '300'	2,100		7,328	
JEDUCNET	Net amount paid for educational expenses (housing) - cont expn	EDUC_AY EQ '310' AND EDMONTHA EQ '13'	2,300		2,821	
JEDUCNET	Net amount paid for educational expenses (housing)	EDUC_AY EQ '310' AND EDMONTHA NE '13'	6,500		7,033	
JLABOR1X	FLOORING/CARPETING	CRMCODEB='235'	8,500		13,500	
JLABOR1X	CONST AND ADDITIONS	(CRMCODEB='100'   CRMCODEB='110')	40,000		50,221	
JLABOR1X	ROOM FINISHING/REMODELING	(CRMCODEB='120'   CRMCODEB='130')	40,000		62,403	
JLABOR1X	LANDSCAP/OUTDOOR BUILDING REPAIR/PAINTING	('140'<=CRMCODEB AND CRMCODEB<='190')	12,500		20,250	
JLABOR1X	PLUMBING/ELECTRICAL/HEAT/AC	('200'<=CRMCODEB AND CRMCODEB<='220')	8,700		14,521	

JLABOR1X	INSULATION, ROOFING, SIDING, MASONRY, WINDOWS	('240'<=CRMCODEB AND CRMCODEB<='290')	18,000		39,225	
JLABOR1X	OTHER REPAIR AND COMBINED CODES	(CRMCODEB='300'   CRMCODEB='310')	13,400		30,264	
JLABOR2X	FLOORING/CARPETING	CRMCODEB='235'	8,000		13,268	
JLABOR2X	CONST AND ADDITIONS	(CRMCODEB='100'   CRMCODEB='110')	43,000		63,757	
JLABOR2X	ROOM FINISHING/REMODELING	(CRMCODEB='120'   CRMCODEB='130')	28,766		44,269	
JLABOR2X	LANDSCAP/OUTDOOR BUILDING REPAIR/PAINTING	('140'<=CRMCODEB AND CRMCODEB<='190')	22,000		27,750	
JLABOR2X	PLUMBING/ELECTRICAL/HEAT/AC	('200'<=CRMCODEB AND CRMCODEB<='220')	10,000		12,355	
JLABOR2X	INSULATION, ROOFING, SIDING, MASONRY, WINDOWS	('240'<=CRMCODEB AND CRMCODEB<='290')	15,000		19,767	
JLABOR2X	OTHER REPAIR AND COMBINED CODES	(CRMCODEB='300'   CRMCODEB='310')	6,452		10,599	
JLABOR3X	FLOORING/CARPETING	CRMCODEB='235'	9,000		17,310	
JLABOR3X	CONST AND ADDITIONS	(CRMCODEB='100'   CRMCODEB='110')	67,861		130,000	
JLABOR3X	ROOM FINISHING/REMODELING	(CRMCODEB='120'   CRMCODEB='130')	40,000		63,166	
JLABOR3X	LANDSCAP/OUTDOOR BUILDING REPAIR/PAINTING	('140'<=CRMCODEB AND CRMCODEB<='190')	18,000		44,667	

JLABOR3X	PLUMBING/ELECTRICAL/HEAT/AC	('200'<=CRMCO DEB AND CRMCO DEB<= '220')	13,000		26,700	
JLABOR3X	INSULATION, ROOFING, SIDING, MASONRY, WINDOWS	('240'<=CRMCO DEB AND CRMCO DEB<= '290')	18,000		28,973	
JLABOR3X	OTHER REPAIR AND COMBINED CODES	(CRMCO DEB=' 300'   CRMCO DEB='3 10')	17,568		35,000	
JLCPRINX	Estimated amount of principal paid on home equity loan during reference period	OWNYH EQ '100' OR OWNYH EQ '200'	6,269	1,468	38,116	1,635
JLCPRINX	Estimated amount of principal paid on home equity loan during reference period	OWNYH EQ '300'	5,600	-	11,296	1,694
JRNTEQ2X	Monthly rental equivalence of owned home	NA	7,200		13,840	
JRNTEQ3X	Monthly rental equivalence of owned home	NA	39,000		52,557	
LDGCOSTX	Cost for hotels, motels, cottages, trailer camps, or other lodging including taxes and tips	NA	2,500		4,663	
MEDPMTX	Eye examinations, treatment, or surgery	MEDPCARY EQ '110'	580		1,440	
MEDPMTX	Dental care	MEDPCARY EQ '200'	2,210		3,871	
MEDPMTX	Hospital room or hospital services	MEDPCARY EQ '330'	3,000		5,262	
MEDPMTX	Services by medical professionals other than physician	MEDPCARY EQ '410'	950		1,704	
MEDPMTX	Physician services	MEDPCARY EQ '420'	675		1,964	
MEDPMTX	Lab tests or x-rays	MEDPCARY EQ '510'	833		1,496	
MEDPMTX	Care in convalescent or nursing home	MEDPCARY EQ '520'	6,600		10,845	

MEDPMTX	Other medical care	MEDPCARY EQ '530'	1,300		2,279	
MEDPMTX	Purchase or rental of supportive or rehabilitative equipment	MEDPCARY EQ '635'	659		1,091	
MEDPMTX	Purchase or rental of medical or surgical equipment for general use	MEDPCARY EQ '655'	500		928	
MEDRMBX	Purchase or rental of supportive or rehabilitative equipment	MEDRCARY EQ '635'	120		322	
MEDRMBX	Purchase or rental of medical or surgical equipment for general use	MEDRCARY EQ '655'	80		204	
MEDRMBX	Eye examinations, treatment, or surgery	MEDRCARY EQ '110'	400		789	
MEDRMBX	Dental care	MEDRCARY EQ '200'	2,200		3,000	
MEDRMBX	Hospital room or hospital services	MEDRCARY EQ '330'	2,700		5,250	
MEDRMBX	Services by medical professionals other than physician	MEDRCARY EQ '410'	1,200		1,813	
MEDRMBX	Physician services	MEDRCARY EQ '420'	1,275		2,616	
MEDRMBX	Lab tests or x-rays	MEDRCARY EQ '510'	668		1,623	
MEDRMBX	Care in convalescent or nursing home	MEDRCARY EQ '520'				
MEDRMBX	Other medical care	MEDRCARY EQ '530'	1,200		3,683	
MISCEXPX	Amount of the payment by CU for occupational expenses	MISCCODE EQ '380' AND MISC MO EQ '13'	260		467	
MISCEXPX	Amount of the payment by CU for occupational expenses	MISCCODE EQ '380' AND MISC MO NE '13'	900		1,630	
MRTPMTG	Loan payment	(LOANTYPE EQ '2')	1,822		2,721	
MRTPMTX	Mortgage payment, including escrow	(LOANTYPE EQ '1')	3,650		5,570	
NETPURX	Amount paid for boat with motor	VEHICYB EQ '160'	57,000		126,333	

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')	165,000		262,800	
ORGMRTG	What was the amount of the lump sum home equity loan when you obtained it?	(OWNYG EQ '300') AND (LOANTYPE EQ '2')	-		42,222	
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')	452,230		612,340	
ORGMRTX	What was the amount of the mortgage when you obtained it excluding any interest?	(OWNYF EQ '300') AND (LOANTYPE EQ '1')	700,000		1,205,000	
ORGMRTX	What was the amount of the mortgage when you obtained it excluding any interest?	(OWNYF EQ '400') AND (LOANTYPE EQ '1')	197,361		860,007	
OWN_PURX	What was the total price paid for the property not including closing costs?	OWNYB EQ '100' OR OWNYB EQ '200'	640,000		966,000	
OWN_PURX	What was the total price paid for the property not including closing costs?	OWNYB EQ '300'	780,000		946,667	
OWN_PURX	What was the total price paid for the property not including closing costs?	OWNYB EQ '400' OR OWNYB EQ '500'	70,000		323,800	
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')	1,350		1,783	

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')	4,549		5,853	
PAYMT1X	Amount of lump sum payment on mortgage in first month of the reference period	(OWNYF EQ '300') AND (LOANTYPE EQ '1')	13,000		31,000	
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')	1,350		1,783	
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')	4,549		6,832	
PAYMT2X	Amount of lump sum payment on mortgage in second month of the reference period	(OWNYF EQ '300') AND (LOANTYPE EQ '1')	8,000		20,333	
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')	1,350		1,688	
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')	4,549		5,853	
PAYMT3X	Amount of lump sum payment on mortgage in third month of the reference period	(OWNYF EQ '300') AND (LOANTYPE EQ '1')	8,000		20,333	
PROPVAX	About how much do you think this property would sell for on today's market?	OWNYI EQ '100'	900,000		1,674,018	



PROPVALX	About how much do you think this property would sell for on today's market?	OWNYI EQ '300'	1,500,000		2,604,376	
PRPVAL2X	About how much do you think this property would sell for on today's market?	NA	200,000		256,250	
QADCAB1X	Cable/Satellite	NA	205		263	
QADCAB2X	Cable/Satellite	NA	205		263	
QADCAB3X	Cable/Satellite	NA	184		251	
QADFUL1X	FUEL OIL	UTILY EQ '130'	1,500		1,940	
QADFUL1X	BOTTLED OR TANKED GAS	UTILY EQ '150'	1,200		1,411	
QADFUL1X	OTHER FUELS	UTILY EQ '180'	825		1,900	
QADFUL1X	TRASH/GARBAGE COLL	UTILY EQ '210'	165		258	
QADFUL1X	WATER SOFTENING	UTILY EQ '270'	188		243	
QADFUL1X	SEPTIC TANK CLEANING	UTILY EQ '280'	600		920	
QADFUL1X	ELECTRICITY 1-2 MONTHS	UTILY EQ '100' AND BLPERIOD IN ('1','2','3','A','B')	498		654	
QADFUL1X	NATURAL/UTILITY GAS 1-2 MONTHS	UTILY EQ '110' AND BLPERIOD IN ('1','2','3','A','B')	305		465	
QADFUL1X	ELECTRICITY ANNUAL/OTH	UTILY EQ '100' AND BLPERIOD IN ('4','5','F')	45		418	
QADFUL1X	NATURAL/UTILITY GAS ANNUAL/OTH	UTILY EQ '110' AND BLPERIOD IN ('4','5','F')	462		867	
QADFUL1X	PIPED-IN WATER/SEWERAGE 1-2 MONTHS	(UTILY EQ '205') AND BLPERIOD IN ('1','2','3','A','B')	380		760	

QADFUL1X	PIPED-IN WATER/SEWERAGE ANNUAL/OTH	(UTILY EQ '205') AND BLPERIOD IN ('4','5','F')	585		2,071	
QADFUL2X	FUEL OIL	UTILY EQ '130'	919		1,207	
QADFUL2X	BOTTLED OR TANKED GAS	UTILY EQ '150'	832		978	
QADFUL2X	OTHER FUELS	UTILY EQ '180'	350		433	
QADFUL2X	TRASH/GARBAGE COLL	UTILY EQ '210'	145		249	
QADFUL2X	WATER SOFTENING	UTILY EQ '270'	318		829	
QADFUL2X	SEPTIC TANK CLEANING	UTILY EQ '280'	430		1,341	
QADFUL2X	ELECTRICITY 1-2 MONTHS	UTILY EQ '100' AND BLPERIOD IN ('1','2','3','A','B')	500		679	
QADFUL2X	NATURAL/UTILITY GAS 1-2 MONTHS	UTILY EQ '110' AND BLPERIOD IN ('1','2','3','A','B')	319		451	
QADFUL2X	ELECTRICITY ANNUAL/OTH	UTILY EQ '100' AND BLPERIOD IN ('4','5','F')	-		540	
QADFUL2X	NATURAL/UTILITY GAS ANNUAL/OTH	UTILY EQ '110' AND BLPERIOD IN ('4','5','F')	475		777	
QADFUL2X	PIPED-IN WATER/SEWERAGE 1-2 MONTHS	(UTILY EQ '205') AND BLPERIOD IN ('1','2','3','A','B')	350		757	
QADFUL2X	PIPED-IN WATER/SEWERAGE ANNUAL/OTH	(UTILY EQ '205') AND BLPERIOD IN ('4','5','F')	292		362	
QADFUL3X	FUEL OIL	UTILY EQ '130'	1,159		1,500	
QADFUL3X	BOTTLED OR TANKED GAS	UTILY EQ '150'	1,100		1,438	
QADFUL3X	OTHER FUELS	UTILY EQ '180'	800		949	
QADFUL3X	TRASH/GARBAGE COLL	UTILY EQ '210'	182		239	
QADFUL3X	WATER SOFTENING	UTILY EQ '270'	180		217	

QADFUL3X	SEPTIC TANK CLEANING	UTILY EQ '280'	400		662	
QADFUL3X	ELECTRICITY 1-2 MONTHS	UTILY EQ '100' AND BLPERIOD IN ('1','2','3','A','B')	498		649	
QADFUL3X	NATURAL/UTILITY GAS 1-2 MONTHS	UTILY EQ '110' AND BLPERIOD IN ('1','2','3','A','B')	328		455	
QADFUL3X	ELECTRICITY ANNUAL/OTH	UTILY EQ '100' AND BLPERIOD IN ('4','5','F')	139		407	
QADFUL3X	NATURAL/UTILITY GAS ANNUAL/OTH	UTILY EQ '110' AND BLPERIOD IN ('4','5','F')	400		565	
QADFUL3X	PIPED-IN WATER/SEWERAGE 1-2 MONTHS	(UTILY EQ '205') AND BLPERIOD IN ('1','2','3','A','B')	380		788	
QADFUL3X	PIPED-IN WATER/SEWERAGE ANNUAL/OTH	(UTILY EQ '205') AND BLPERIOD IN ('4','5','F')	563		850	
QADINE1X	Internet services	NA	178		246	
QADINE2X	Internet services	NA	185		254	
QADINE3X	Internet services	NA	184		256	
QADPSP2X	CONST AND ADDITIONS	(CRMCODEB='100'   CRMCODEB='110')	5,000		7,576	
QADPSP2X	ROOM FINISHING/REMODELING	(CRMCODEB='120'   CRMCODEB='130')	5,100		6,766	
QADPSP2X	LANDSCAP/OUTDOOR BUILDING REPAIR/PAINTING	('140'<=CRMCODEB AND CRMCODEB<='190')	4,286		8,500	
QADPSP2X	PLUMBING/ELECTRICAL/HEAT/AC	('200'<=CRMCODEB AND CRMCODEB<='220')	1,200		1,518	

QADPSP2X	INSULATION, ROOFING, SIDING, MASONRY, WINDOWS	('240'<=CRMCODEB AND CRMCODEB<='290')	850		1,480	
QADPSP2X	OTHER REPAIR AND COMBINED CODES	(CRMCODEB='300'   CRMCODEB='310')	1,500		2,300	
QADPSP2X	FLOORING/CARPETING	CRMCODEB='235'	1,500		2,813	
QADPSP3X	CONST AND ADDITIONS	(CRMCODEB='100'   CRMCODEB='110')	10,000		30,400	
QADPSP3X	ROOM FINISHING/REMODELING	(CRMCODEB='120'   CRMCODEB='130')	15,000		26,333	
QADPSP3X	LANDSCAP/OUTDOOR BUILDING REPAIR/PAINTING	('140'<=CRMCODEB AND CRMCODEB<='190')	6,000		12,250	
QADPSP3X	PLUMBING/ELECTRICAL/HEAT/AC	('200'<=CRMCODEB AND CRMCODEB<='220')	1,000		1,375	
QADPSP3X	INSULATION, ROOFING, SIDING, MASONRY, WINDOWS	('240'<=CRMCODEB AND CRMCODEB<='290')	3,568		5,250	
QADPSP3X	OTHER REPAIR AND COMBINED CODES	(CRMCODEB='300'   CRMCODEB='310')	2,100		8,161	
QADPSP3X	FLOORING/CARPETING	CRMCODEB='235'	1,800		2,213	
QADPSPLX	CONST AND ADDITIONS	(CRMCODEB='100'   CRMCODEB='110')	4,200		6,500	
QADPSPLX	ROOM FINISHING/REMODELING	(CRMCODEB='120'   CRMCODEB='130')	5,300		8,750	
QADPSPLX	LANDSCAP/OUTDOOR BUILDING REPAIR/PAINTING	('140'<=CRMCODEB AND CRMCODEB<='190')	3,500		6,250	

QADPSPLX	PLUMBING/ELECTRICAL/HEAT/AC	('200'<=CRMCO DEB AND CRMCO DEB<= '220')	2,200		5,150	
QADPSPLX	INSULATION, ROOFING, SIDING, MASONRY, WINDOWS	('240'<=CRMCO DEB AND CRMCO DEB<= '290')	2,000		2,528	
QADPSPLX	OTHER REPAIR AND COMBINED CODES	(CRMCO DEB=' 300'   CRMCO DEB='3 10')	1,378		3,333	
QADPSPLX	FLOORING/CARPET ING	CRMCO DEB='2 35'	3,804		6,067	
QADPTAX	What was the total price paid for the property not including closing costs?	OWNYB EQ '100' OR OWNYB EQ '200'	11,477		16,180	
QADPTAX	What was the total price paid for the property not including closing costs?	OWNYB EQ '300'	9,800		18,436	
QADPTAX	What was the total price paid for the property not including closing costs?	OWNYB EQ '400' OR OWNYB EQ '500'	5,000		19,714	
QADRSP2X	RENTED SUPPLIES FOR CONST/REPAIR/MAI NT	NA	254		3,050	
QADRSP3X	RENTED SUPPLIES FOR CONST/REPAIR/MAI NT	NA	400		1,133	
QADRSP4X	RENTED SUPPLIES FOR CONST/REPAIR/MAI NT	NA	400		533	
QBLNCM1G	Principal balance outstanding at beginning of month, 3 months ago	('100' LE OWNYB EQ '500') AND (LOANTYPE EQ '2')	108,299		155,867	
QBLNCM1X	Principal balance outstanding at beginning of month 3 months ago	('100' LE OWNYB EQ '500') AND (LOANTYPE EQ '1')	403,233		565,490	

QBLNCM2G	Principal balance outstanding at beginning of month, 2 months ago	('100' LE OWNYG LE '500') AND (LOANTYPE EQ '2')	107,369		153,413	
QBLNCM2X	Principal balance outstanding at beginning of month 2 months ago	('100' LE OWNYF LE '500') AND (LOANTYPE EQ '1')	402,922		566,136	
QBLNCM3G	Principal balance outstanding at beginning of month, 1 month ago	('100' LE OWNYG LE '500') AND (LOANTYPE EQ '2')	106,432		152,344	
QBLNCM3X	Principal balance outstanding at beginning of month 1 month ago	('100' LE OWNYF LE '500') AND (LOANTYPE EQ '1')	401,655		559,394	
QHI3MCX	Dental Insurance	HHICODE EQ '4' AND HHISPECT IN ('1')	1,770		3,052	
QHI3MCX	Vision Insurance	HHICODE EQ '4' AND HHISPECT IN ('2')	984		1,913	
QHI3MCX	PrscripDrug/Other/DK	HHICODE EQ '4' AND HHISPECT IN ('3','4','5','6','B','F','G')	3,036		5,593	
QHI3MCX	Health Insurance HMO/FFS/MEDSUP, COV<= 1, INDIVIDUAL	HHICODE NE '4' AND HHICOVQ <= 1 AND HHIGROUP IN ('1')	3,690		5,232	
QHI3MCX	Health Insurance HMO/FFS/MEDSUP, COV<= 1, GROUP	HHICODE NE '4' AND HHICOVQ <= 1 AND HHIGROUP IN ('2' '3')	3,600		6,963	

QHI3MCX	Health Insurance HMO/FFS/MEDSUP, COV> 1, INDIVIDUAL	HHICODE NE '4' AND HHICOVQ > 1 AND HHIGROUP IN ('1')	9,300		13,130	
QHI3MCX	Health Insurance HMO/FFS/MEDSUP, COV> 1, GROUP	HHICODE NE '4' AND HHICOVQ > 1 AND HHIGROUP IN ('2' '3')	7,800		12,770	
QLMPSUMX	Amount paid for mortgage in special or lump sum payments during reference period	OWNYI EQ '100' OR OWNYI EQ '200'	5,000		27,340	
QLMPSUMX	Amount paid for mortgage in special or lump sum payments during reference period	OWNYI EQ '300'	10,000		23,844	
QLR3MCMX	Amount paid for ground or land rent, adjusted for business	OWNYI EQ '100' OR OWNYI EQ '200'	2,580		9,258	
QLR3MCMX	Amount paid for ground or land rent, adjusted for business	OWNYI EQ '300'	3,400		4,992	
QPRINM1G	Amount of principal paid during first month of reference period	(OWNYG EQ '100' OR OWNYG EQ '200') AND (LOANTYPE EQ '2')	1,061		1,405	
QPRINM1G	Amount of principal paid during first month of reference period	(OWNYG EQ '300') AND (LOANTYPE EQ '2')	148		226	
QPRINM1X	Amount of principal paid during first month of reference period	(OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1')	1,149		1,672	
QPRINM1X	Amount of principal paid during first month of reference period	(OWNYF EQ '300') AND (LOANTYPE EQ '1')	1,145		6,913	

QPRINM1X	Amount of principal paid during first month of reference period	(OWNYF EQ '400') AND (LOANTYPE EQ '1')	1,837		2,149	
QPRINM2G	Amount of principal paid during second month of reference period	(OWNYG EQ '100' OR OWNYG EQ '200') AND (LOANTYPE EQ '2')	1,060		1,387	
QPRINM2G	Amount of principal paid during second month of reference period	(OWNYG EQ '300') AND (LOANTYPE EQ '2')	149		228	
QPRINM2X	Amount of principal paid during second month of reference period	(OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1')	1,153		1,662	
QPRINM2X	Amount of principal paid during second month of reference period	(OWNYF EQ '300') AND (LOANTYPE EQ '1')	1,102		2,882	
QPRINM2X	Amount of principal paid during second month of reference period	(OWNYF EQ '400') AND (LOANTYPE EQ '1')	1,843		2,157	
QPRINM3G	Amount of principal paid during third month of reference period	(OWNYG EQ '100' OR OWNYG EQ '200') AND (LOANTYPE EQ '2')	1,068		1,442	
QPRINM3G	Amount of principal paid during third month of reference period	(OWNYG EQ '300') AND (LOANTYPE EQ '2')	150		229	
QPRINM3X	Amount of principal paid during third month of reference period	(OWNYF EQ '100' OR OWNYF EQ '200') AND (LOANTYPE EQ '1')	1,155		1,661	
QPRINM3X	Amount of principal paid during third month of reference period	(OWNYF EQ '300') AND (LOANTYPE EQ '1')	1,106		2,900	



QPRINM3X	Amount of principal paid during third month of reference period	(OWNYF EQ '400') AND (LOANTYPE EQ '1')	1,830		2,255	
QRT3MCMX	Rental payments made in reference period adjusted for business and rooms rented to others	NA	7,350		10,839	
RNTEQVX	Monthly rental equivalence of owned home	OWNYI EQ '100'	4,000		6,308	
RNTEQVX	Monthly rental equivalence of owned home	OWNYI EQ '300'	6,000		12,794	
SALEX	How much did you sell it for?	VEHICYC EQ '160'	2,000		6,400	
TELCEL1X	Cell phone service	NA	424		536	
TELCEL2X	Cell phone service	NA	424		537	
TELCEL3X	Cell phone service	NA	420		522	
TELRES1X	Residential phone service	NA	299		366	
TELRES2X	Residential phone service	NA	290		341	
TELRES3X	Residential phone service	NA	290		366	
TOTOWED	Estimated amount of principal paid on home equity loan during reference period	OWNYH EQ '100' OR OWNYH EQ '200'	200,000		273,174	
TOTOWED	Estimated amount of principal paid on home equity loan during reference period	OWNYH EQ '300'	368,000		418,750	
TOTOWED	Estimated amount of principal paid on home equity loan during reference period	OWNYH EQ '400'	14,000		175,333	

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'	1,912		3,025	
TRNONCUX	Amount of the (lodging) expense paid for non CU member	TRNONCUY EQ '130'	4,422		9,115	

### 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 income tax paid in addition to that withheld	40,000		137,988		
ADDSTAX	State and local tax paid in addition to that withheld	10,000		22,556		
FEDREFX	Amount of refund received from Federal income tax	9,425		13,811		
INTRDVX	AMT RECEIVED IN INTEREST LAST 12 MNTHS	50,000		147,769		
INTRDVXM	AMT RECEIVED IN INTEREST LAST 12 MNTHS	50,000		68,804		

LUMPX	Amount of lump sum receipts	157,000		379,571		
NETRENTM	NET RENTAL INCOME OR LOSS	130,000	(10,000)	214,523	(33,497)	
NETRENTX	NET RENTAL INCOME OR LOSS	130,000	(10,000)	243,000	(58,600)	
OCCEXPX	Amount of payment by CU for occupational expenses	7,000		18,765		
OTHINX	Amount received in other money income	50,000		121,750		
OTHINXM	Amount received in other money income	50,000		70,959		
OTHREGX	AMT INCOME FROM OTHER SOURCES	35,160		40,427		
OTHREGXM	AMT INCOME FROM OTHER SOURCES	35,160		28,270		
RETSURVM	AMT INCOME FROM RET SURVIVOR DISABILITY	90,000		85,536		
RETSURVX	AMT INCOME FROM RET SURVIVOR DISABILITY	90,000		119,710		
ROYESTX	AMT INCOME FROM ROYALTY OR ESTATES AND TRUSTS	120,000		173,333		
ROYESTXM	AMT INCOME FROM ROYALTY OR ESTATES AND TRUSTS	120,000		111,228		
STATREFX	Refund received from state and local income tax	2,500		4,153		

## 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 FSMPFRX1-5 FSMPFRMX	Amount of income received from self-employment income
FGVXM, FGVX1-5 FGVX	Amount of government retirement deducted from last pay, annualized for all CU members
FINCBEFM FINCBEF1-5 FINCBEFX	Amount of CU income before taxes
FIRAX	Amount of money placed in individual retirement plan
FJSSDEDM FJSSDED1-5 FJSSDEDX	Estimated amount of annual Social Security contribution
FPVTXM 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 FSTATXX1-5 FSTATXX	Amount of State and local income taxes deducted from last pay, annualized for all CU members
FWAGEXM FWAGEX1-5 FWAGEX	Amount received from wage and salary income before deduction
OTHRECX	Amount of other money receipts excluded from family income

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		87	
ANFEDTXM	Annual amount federal tax deducted from pay	24,686		40,712	
ANFEDTXX	Annual amount federal tax deducted from pay	24,686		40,712	
ANGVX	Annual amount government retirement	10,400		14,604	
ANGVXM	Annual amount government retirement	10,400		14,426	
ANPVTX	Annual amount private pensions	25,730		39,344	
ANPVTXM	Annual amount private pensions	25,730		40,786	
ANSTATXM	Annual amount state and local income tax	9,264		13,162	
ANSTATXX	Annual amount state and local income tax	9,264		13,162	
FEDTXX	Amount of federal tax deducted from last pay	1,200		2,572	
GROSPAYX	Amount of last gross pay	7,764		22,530	

GVX	Government retirement deducted from last pay	2,400		18,890	
IRAX	Self-employment retirement plan contributions	42,000		78,926	
JSSDEDX	Estimated annual Social Security contribution	10,465		16,466	
JSSDEDXM	Estimated annual Social Security contribution	10,465		11,818	
PVTX	Private pension deducted from last pay	4,000		13,729	
SEMPFRMM	AMT OF SELF EMPLOYMENT INCOME OR LOSS	200,000	(12,246)	182,770	(14,714)
SEMPFRMX	AMT OF SELF EMPLOYMENT INCOME OR LOSS	200,000	(12,246)	392,933	(27,000)
SLFEMPSM	Self-employment Social Security contribution	24,844		26,537	
SLFEMPSS	Self-employment Social Security contribution	24,844		28,061	
STATXX	State and local income tax deducted last pay	477		821	
WAGEX	Wage and salary income received before deductions	160,000		246,332	
WAGEXM	Wage and salary income received before deductions	160,000		194,331	

### **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	2015 Upper Critical Value	2015 Lower Critical Value	2015 Upper Topcode Value	2015 Lower Topcode Value
001000	Purchase price of stocks, bonds, mutual funds	337		751	
009000	Mortgage payment including coop	3,100		6,405	
210110	Rent of dwelling	2,311		3,076	
210210	Lodging away from home	557		630	
210310	Housing for someone at school	-		280	
550320	Purchase of medical equipment for general use	88		1,732	
550330	Purchase of supportive/convalescent medical equipment	603		768	
560110	Physicians' services	244		612	
560210	Dental services	1,712		3,432	
560310	Eyecare services	800		1,176	
560330	Lab tests, x-rays	304		901	
560400	Serv by pros oth than physicians	300		684	
570000	Hospital care, not specified	1,622		24,395	
570230	Other medical care service	-		595	
570901	Rental of medical equipment	58		875	

#### 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.