

# REPORT

FINAL REPORT

---

## **Technical Documentation for the Fiscal Year 2015 Supplemental Nutrition Assistance Program Quality Control Database and the QC Minimodel**

---

October 2016

---

Alma Vigil  
Kelsey Farson Gray  
Sarah Fisher  
Sarah Lauffer  
Bruce Schechter

---

**Submitted to:**

U.S. Department of Agriculture  
Food and Nutrition Service  
3101 Park Center Drive, Suite 1014  
Alexandria, VA 22302  
Project Officer: Jenny Genser  
Contract Number: AG-3198-K-16-0011

---

**Submitted by:**

Mathematica Policy Research  
1100 1st Street, NE, 12th Floor  
Washington, DC 20002-4221  
Telephone: (202) 484-9220  
Facsimile: (202) 863-1763  
Project Director: Karen Cunyngnam  
Reference Numbers: 50235.300 and 50235.400

---

**This page has been left blank for double-sided printing.**

---

**CONTENTS**


---

CONTENTS.....	I
I INTRODUCTION.....	1
II OVERVIEW OF THE SNAP QC DATABASE.....	3
A. The QC system.....	3
B. The raw datafile.....	4
C. Creation of the SNAP QC database.....	5
1. Preliminary processing.....	5
2. Data editing.....	6
3. Variable construction.....	7
4. Weighting.....	8
D. Final SNAP QC database.....	9
III FY 2015 SNAP QC FILE DEVELOPMENT PROCESS.....	11
A. Developing the SNAP QC file.....	11
B. Obtaining file consistency.....	15
1. Standard editing procedures.....	16
2. State-variations to editing procedures.....	22
3. SSI-CAP programs with a standard benefit.....	25
4. SSI-CAP programs with a standard shelter expense.....	30
C. Derivation of sampling weights.....	32
IV DEVELOPMENT OF THE 2015 QC MINIMODEL.....	35
A. Create MATH-style version of SNAP QC database.....	35
1. Introduction.....	35
2. User parameters.....	35
3. Programmer's guide.....	35
4. Technical description.....	36
B. QC-specific portion of the QC Minimodel.....	37
1. Introduction.....	37
2. User parameters.....	38
3. Programmer's guide.....	39
4. Technical description.....	41

---

V	CODEBOOK FOR THE FY 2015 SNAP QC DATABASE .....	51
	A. Overview of variables on the QC file .....	51
	1. Origin: Reported versus constructed .....	51
	2. Missing values.....	51
	3. Using the SNAP QC database.....	52
	B. Codebook .....	52
	REFERENCES.....	96
	APPENDIX A: ASSESSMENT OF THE QUALITY OF SELECTED VARIABLES IN THE FY 2015 SNAP QC DATABASE .....	A.1
	APPENDIX B: AUTOMATED EDITS TO SNAP UNITS .....	B.1
	APPENDIX C: VARIABLES CHANGED ON THE FY 2015 SNAP QC DATABASE.....	C.1
	APPENDIX D: DERIVATION OF WEIGHTS BY STATE AND MONTH.....	D.1
	APPENDIX E: STATE AND REGION CODES.....	E.1
	APPENDIX F: FY 2015 SNAP PARAMETERS.....	F.1
	APPENDIX G: QUALITY CONTROL REVIEW SCHEDULE .....	G.1

**TABLES**


---

II.1	Number and percentage of cases sampled, dropped from the edited file, and included in the edited file, FY 2015 .....	6
II.2	Comparison of program data to edited SNAP QC database, FY 2015 .....	8
III.1	SSI-CAP programs with standard benefits .....	26
III.2	States with special rules for identifying, recoding, and calculating benefits for SSI-CAP units.....	27
III.3	SSI-CAP programs with standard shelter expenses.....	31
III.4	States with standard medical deductions.....	32
V.1	Codes for missing data in the restricted use SNAP QC database .....	51

**FIGURES**


---

III.1	FY 2015 SNAP QC file development process .....	12
-------	--	----

**This page has been left blank for double-sided printing.**

---

## I. INTRODUCTION

---

The Supplemental Nutrition Assistance Program (SNAP) is the largest domestic food and nutrition assistance program administered by the U.S. Department of Agriculture's Food and Nutrition Service (FNS), providing millions of Americans with the means to purchase food for a nutritious diet. During fiscal year (FY) 2015, SNAP served an average of 45.8 million people a month and paid out \$69.7 billion in benefits.<sup>1</sup>

In response to legislative adjustments to program rules and changes in economic and demographic trends, the characteristics of SNAP participants and households and their levels of participation in SNAP change over time. To measure the effect of these changes on SNAP, FNS relies on data from the SNAP Quality Control (QC) database. This database is an edited version of the raw datafile of monthly case reviews conducted by State SNAP agencies to assess the accuracy of eligibility determinations and benefit calculations for each State's SNAP caseload.<sup>2</sup>

This document describes how the raw data are cleaned and edited to create the SNAP QC database. It also describes how the QC Minimodel—one of FNS's SNAP microsimulation models—uses the SNAP QC database to simulate the effect of various policy changes to SNAP on current SNAP participants.

Chapter II provides an overview of the SNAP QC System, the resulting raw datafile, and the creation of the SNAP QC database. The overview, written for a nontechnical audience, is designed to give analysts and new users of the data enough general information to analyze and interpret the results of SNAP QC data tabulations and policy change simulations from the QC Minimodel.

Chapter III describes the process for developing files for the SNAP QC database. We discuss the file development programs used to transform the raw data into the SNAP QC database, the algorithms used to edit the data for consistency, and the development of the sampling weights for the file.

Chapter IV provides a technical description of the procedures used to transform the SNAP QC database into the format required by the QC Minimodel and to document the QC-specific portions of the QC Minimodel.<sup>3</sup>

Chapter V contains the codebook for the FY 2015 SNAP QC database and explains how to use it. For each variable in the database, the codebook lists the variable name, the variable origin (whether it came from the raw datafile or was constructed), and a description (including all valid values of the variable).

---

<sup>1</sup> These estimates of 45.8 million participants and \$69.7 billion in benefits come from FNS administrative records. They differ from the other estimates in this documentation, which come from the edited SNAP QC database, because this database is adjusted to exclude receipt of benefits by ineligible households and those receiving disaster assistance.

<sup>2</sup> This report refers to the original datafile as the raw datafile and the edited version as the SNAP QC database.

<sup>3</sup> Documentation of the generic portions of the QC Minimodel can be found in the *2011 MATH SIPP+ Microsimulation Model: Programmer's Guide, Technical Description, and Codebook* (Schechter et al. 2014).

Appendix A provides an assessment of the quality of selected variables in the FY 2015 SNAP QC database. Users should read this appendix before using the SNAP QC database because it recommends against the use of some variables and cautions against the use of others because of apparent miscoding, high prevalence of missing or unknown values, or small sample sizes. Appendix B describes automated edits to the raw data. Appendix C provides information on new and changed variables on the FY 2015 SNAP QC database. Appendix D shows the derivation of monthly sampling weights used in the SNAP QC file. Appendix E lists the State and region identification codes used in the file. Appendix F contains the parameter values used to determine SNAP eligibility in FY 2015, including gross and net income screens, deductions, and maximum benefit amounts. Appendix G presents the QC review schedule—the coding form in which the raw data are originally recorded by the State QC System reviewers.

### **Key program changes since the previous fiscal year**

In FY 2015, Pennsylvania expanded its broad-based categorical eligibility (BBCE) policy by removing its resource test. Before May 2015, Pennsylvania had a resource limit of \$9,000 for households containing at least one elderly individual or individual with a disability and it had a \$5,500 resource limit for all other households.

Also during FY 2015, Alabama launched a medical deduction demonstration program, which uses a standard deduction amount for households with medical expenses below a specified limit. The demonstration program simplifies the application process for qualifying households and may slightly increase eligibility and benefit amounts.

In addition, the earnings deduction rate for the Minnesota Family Investment Program (MFIP) participants increased from 43 percent for most of FY 2014 to 50 percent in FY 2015.

### **Key changes to the FY 2015 SNAP QC database**

The contents of the FY 2015 SNAP QC database are very similar to the contents of the FY 2014 SNAP QC database, with a few minor changes. First, to accommodate a very large SNAP unit, the database now includes person-level variables for up to 29 individuals rather than the previous 16. Second, we added new variables to the file, including an indicator for working individuals (WORKi); indicators for units with non-elderly individuals with disabilities (FSDIS), elderly individuals (FSELDER), and children (FSKID); and a variable for State names (STATENAME) that correspond to the Federal Information Processing Standard (FIPS) code for the state (STATE). Third, we made minor changes to the individual disability indicator (DISi) algorithm and some income editing routines; Section III.B and Appendix B provide more details about these changes.



---

## II. OVERVIEW OF THE SNAP QC DATABASE

---

The SNAP QC database is an edited version of the raw datafile generated by SNAP's QC System. The SNAP QC database contains detailed demographic, economic, and SNAP eligibility information for a nationally representative sample of approximately 48,000 SNAP units.<sup>4</sup> The data, produced annually, are well-suited for tabulating characteristics of SNAP units and simulating the impact on current SNAP units of various policy changes to the program. Accordingly, the SNAP QC database is the source for FNS's annual report, "Characteristics of Supplemental Nutrition Assistance Program Households," and FNS's QC Minimodel, a microsimulation model that estimates the effect of proposed changes to SNAP on current participants. In this chapter, we provide an overview of the raw datafile and the processing and edits that convert the datafile to the SNAP QC database.

### A. The QC system

The raw datafile is generated from the monthly reviews of SNAP cases conducted by State SNAP agencies as part of the QC System. The primary objective of QC reviews is to assess the accuracy of eligibility determinations and benefit calculations. Participating units, or active cases, are reviewed to determine whether they are eligible for participation and receiving the correct benefit amount. Units that had their participation denied or terminated, or negative cases, are reviewed to determine whether the denial or termination was correct. The SNAP QC database is based on the sample of active cases drawn each month for the 50 States, the District of Columbia, Guam, and the Virgin Islands.

State QC reviewers review data in the active case file. They gather financial and demographic information from the sampled unit's case file, visit the household to re-interview the participants, and then determine whether the SNAP unit received the correct SNAP benefit amount. The review information is entered on a data coding form (either manually or electronically), sent to FNS's national computer center, and entered into the raw datafile. FNS regional offices conduct a Federal re-review of a subsample of each original State sample. Federal re-review data are also sent to the national computer center for entry into the raw datafile and for use in conjunction with the State review data to calculate the official payment error rate for each State. States can be sanctioned or rewarded on the basis of their official payment error rates.

Most of the data on the raw datafile are the financial and demographic information collected during the review. The authorized benefit amount and eligibility status determined by the caseworker are also on the file, along with the error amount and eligibility status determined by the reviewer. The reviewer-determined entries are defined as follows:

---

<sup>4</sup> In this technical documentation, "SNAP unit" or simply "unit" refers to individuals who together are certified for and receive SNAP benefits. A household may contain multiple SNAP units and/or individuals who do not receive SNAP benefits. However, since QC sampling is done at the unit level, each record contains data on only one SNAP unit.

- If the SNAP unit was eligible and the authorized benefit amount equaled the issued benefit, then the error amount is zero and the case finding is “amount correct.”
- If the SNAP unit was eligible and the authorized benefit amount varied from the issued benefit, then the difference between the two amounts is recorded as the error amount and the case finding is either “overissuance” or “underissuance.” Error amounts of \$38 or less are not included in the calculation of State error rates.<sup>5</sup>
- If the reviewer determines that the SNAP unit was ineligible, then the issued benefit amount is recorded as the error amount and the case finding is “ineligible.”

State QC reviewers also review the negative cases to decide whether proper procedures were used to deny or terminate a case. Because these cases are not participating in SNAP, they are not included in the SNAP QC database and QC Minimodel.

## **B. The raw datafile**

While most participating SNAP units are subject to sampling in the active case file, certain types of units not appropriate for review are excluded. Specifically, the active case universe excludes the following types of cases:

- Dropped as a result of oversampling
- Listed in error as active cases, including, but not limited to:
  - Negative cases incorrectly included in the active case file
  - Cases that did not participate in SNAP for the sample month, including suspended cases and those that were eligible for zero benefits before any recoupments were made
  - Cases receiving restored benefits that were not otherwise participating
  - Cases receiving retroactive benefits for the sample month
- Receiving benefits for a disaster authorized by FNS
- Pending a hearing for an adverse action
- Under investigation for SNAP fraud (including those with pending fraud hearings)
- Where all members have died or moved outside the State
- Where no member could be interviewed because:
  - All members had been hospitalized, incarcerated, or placed in a mental institution and were expected to remain there for 95 days after the end of the sample month
  - Members could not be located

---

<sup>5</sup> The Agricultural Act of 2014 (2014 Farm Bill) decreased the tolerance threshold from \$50 to \$37 for all active FY 2014 SNAP cases. The 2014 Farm Bill allows the threshold to be adjusted each year to account for inflation. As a result, the FY 2015 tolerance threshold was \$38.

The sampling unit within the active universe is the SNAP unit as defined in an FNS-approved State manual.

State sampling plans must conform to accepted principles of probability sampling. A State may use either a simple random sampling plan or a more complex sampling design that best meets its needs. FNS must approve sampling designs other than simple random sampling.

The standard minimum annual State sample sizes range from 300 to 2,400 reviews depending primarily on the size of the monthly participating caseload. States must use the following guidelines when determining their standard annual QC sample sizes:

- If the average monthly caseload is under 10,000, the standard minimum sample size is 300 cases per year.
- If the average monthly caseload is 60,000 or greater, the standard minimum sample size is 2,400 cases per year.
- If the average monthly caseload is between 10,000 and 60,000, the standard minimum sample size is derived by the following formula:  
Standard minimum =  $300 + 0.042(N - 10,000)$ ,  
where N is the average monthly caseload.

A State may choose an optional minimum sample size if it agrees not to dispute later payment error rate findings and the associated sanctions on the basis of the precision of the estimates. Optional minimum sample sizes are determined as follows:

- If the average monthly caseload is under 12,942, the optional minimum sample size is 300.
- If the average monthly caseload is 60,000 or greater, the optional minimum sample size is 1,020.
- If the average monthly caseload is between 12,942 and 60,000, the optional minimum sample size is derived by the following formula:  
Optional minimum =  $300 + 0.0153(N - 12,942)$ ,  
where N is the average monthly caseload.

In FY 2015, all States chose to use the optional minimum sample size.

### **C. Creation of the SNAP QC database**

We create the SNAP QC database from the raw datafile by following four steps: (1) preliminary processing, (2) data editing, (3) variable construction, and (4) weighting.

#### **1. Preliminary processing**

After first converting the raw datafile into a SAS file, we generate and inspect a series of quality assurance counts and frequency distributions for the values of each variable on the file. We assign missing value codes to data that are out of range, missing from the file, or coded as unknown on the source file. We remove the following records from that file that are:

- Coded as not subject to review (REVDISP = 2), incomplete (REVDISP = 3), or deselected due to oversampling (REVDISP = 4)
- Coded with review findings of ineligible (STATUS = 4)
- Missing all data except error and status information, identified as those coded with 0 case members (CERTHHSZ = 0)
- Found by the reviewer to be eligible but not qualifying for a positive benefit or identified as those having a benefit overissuance equal to or exceeding the recorded benefit (STATUS = 2 and RAWBEN <= AMTERR)

In Table II.1, we show the number of cases dropped from the FY 2015 edited file.

**Table II.1. Number and percentage of cases sampled, dropped from the edited file, and included in the edited file, FY 2015**

	FY 2015 SNAP QC sample	Percentage of cases sampled	Percentage of cases subject to review
Number of cases sampled	55,508	100.0	
Cases not subject to review	2,507	4.5	
Cases deselected to correct for oversampling	0	0.0	
Cases subject to review	53,001	95.5	100.0
Incomplete cases	4,298	7.7	8.1
Cases completed	48,703	87.7	91.9
Not eligible for SNAP	370	0.7	0.7
Not eligible for a positive benefit	210	0.4	0.4
Eligible for a positive benefit	48,123	86.7	90.8
Dropped due to unresolved inconsistencies	101	0.2	0.2
SNAP units on the final file	48,022	86.5	90.6

Source: FY 2015 Supplemental Nutrition Assistance Program QC sample.

## 2. Data editing

Consistent measures of SNAP unit size, income, and benefit level are critical to any analysis of SNAP units. However, data for these measures are not always consistent in the raw datafile. For instance, the sum of the income of each person in the unit may not equal reported unit-level gross income. Such inconsistencies may be rooted in the initial case record information or the data entry process. In the data-editing step, we resolve the inconsistencies described below. We drop the small number of SNAP units with unresolved inconsistencies from the edited file.

The overall strategy of the editing process is to ensure that certain relationships hold for all cases. The two most basic relationships are the following:<sup>6</sup>

<sup>6</sup> Households participating in the Minnesota Family Investment Program (MFIP) or an SSI Combined Application Project (SSI-CAP) are subject to different eligibility and benefit determination rules and have been edited accordingly.

- Net income must equal gross income minus the total deductions for which the unit is eligible, and it must not be negative.
- The SNAP benefit level must equal the maximum benefit for that unit size minus 30 percent of net income (or be set to the minimum benefit if appropriate), and it must not be negative.

In addition, several important relationships must hold for some final and intermediate variables. For example:

- Gross unit income must equal the sum of all countable person-level income amounts.
- The earned income deduction must equal the specified percentage (rounded down) of countable earned income.
- The excess shelter deduction must equal shelter costs above 50 percent of gross income minus all other deductions up to a cap. Units with elderly members or individuals with disabilities are not subject to the cap. Units with a homeless deduction will not have an excess shelter deduction.
- Total deductions must equal the sum of the following:
  - standard deduction
  - earned income deduction
  - medical deduction
  - excess shelter deduction or homeless deduction
  - dependent care deduction
  - child support expense deduction.<sup>7</sup>

In Chapter III, we describe the complex process by which we determine whether a case is internally consistent and, if not, perform needed edits.

### 3. Variable construction

We construct several variables from the reported data once the file is edited. The major classes of constructed variables are unit-level countable income variables, SNAP eligibility and benefit determination variables, and characteristics flags.

- **Unit-level countable income variables.** The total SNAP unit income variable for each type of income (for example, Temporary Assistance for Needy Families [TANF] or Social Security) is constructed by summing the person-level income of that type over all individuals in the SNAP unit. The total SNAP unit gross income, earned income, and unearned income variables are constructed by summing all the appropriate unit income variables.
- **SNAP eligibility and benefit determination variables.** Variables used to determine eligibility and benefits—such as SNAP unit deductions, SNAP unit net countable

---

<sup>7</sup> In some cases, child support payments are excluded from gross income and not taken as a deduction.

income, and SNAP unit benefits—are constructed on the basis of SNAP unit countable income and unit demographic characteristics.

- **Characteristics flags.** Characteristics flags identify SNAP units with certain features, such as the presence of an elderly individual or an individual with a disability. In addition, data from Census files are merged to identify whether a SNAP unit resides in a metropolitan, micropolitan, or rural area.<sup>8</sup>

#### 4. Weighting

We weight the observations on the raw QC file to ensure that the weighted totals match three adjusted SNAP Program Operations totals—the monthly number of SNAP units by State and stratum, the monthly number of SNAP participants by State, and the monthly total benefits issued by State. We adjust these totals by removing benefits issued in error and benefits issued through the SNAP disaster assistance program because cases with either of these circumstances are not included in the SNAP QC data.<sup>9</sup> In Section III.C, we describe the derivation of the sampling weights in detail.

SNAP Program Operations totals are generated from FNS’s National Data Bank and reflect actual levels of participation and benefit issuance. Information about the number of SNAP units receiving a disaster assistance benefit comes from FNS. The rates of SNAP units receiving benefits in error are estimated from the raw QC datafile. In Table II.2, we compare the QC System sample-based estimates to aggregate program participation data for FY 2015.

**Table II.2. Comparison of program data to edited SNAP QC database, FY 2015**

Average monthly value	Program data	Adjustments for disaster assistance <sup>a</sup>	Adjustments for ineligible SNAP units	Edited SNAP QC database
Number of SNAP units	22,522,261	88	229,001	22,293,171
Number of participants	45,766,672	224	582,388	45,184,060
Value of benefits	\$5,804,619,049	\$39,831	\$136,899,228	\$5,667,679,990
Average SNAP unit size	2.03	2.54	2.54	2.03
Average benefit per person	\$126.83	—	\$235.07	\$125.44
Average benefit per household	\$257.73	—	\$597.81	\$254.23

Source: FY 2015 SNAP Program Operations data and SNAP QC database.

<sup>a</sup> Adjustments are made for units and individuals who receive disaster SNAP assistance only. Adjustments are made to benefits for disaster SNAP benefits issued to disaster SNAP units as well as replacement benefits issued to qualifying ongoing SNAP units. As a result, the average disaster SNAP benefit per person cannot be calculated from the information in this table.

<sup>8</sup> A Micropolitan Statistical Area has at least one urban cluster of at least 10,000 but fewer than 50,000 people and includes adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.

<sup>9</sup> In FY 2015, about 1,100 units that were not previously on SNAP received disaster assistance in the form of SNAP benefits. These units and participating SNAP units with replacement SNAP benefits as a result of a disaster received a combined \$500,000 in benefits. As such, the adjusted total number of SNAP units and benefits are lower than Program Operations data by about 1 and 2 percent, respectively.

**D. Final SNAP QC database**

We create two versions of the SNAP QC database: a restricted-use version that includes all variables and a public use version that excludes REVNUM, COUNTYCD, LOCALCOD, AK\_AREA (newly added in FY 2015), and URBRUR for privacy reasons. The first excluded variable is the QC review number and the other four are geographic variables. For a more detailed explanation of the variables on the file, see Chapter V.

After we develop the SNAP QC databases, we create SAS, STATA, and SPSS versions that can be used to tabulate characteristics of SNAP units and a binary file that serves as the underlying database for FNS's QC Minimodel.

**This page has been left blank for double-sided printing.**



### III. FY 2015 SNAP QC FILE DEVELOPMENT PROCESS

---

#### A. Developing the SNAP QC file

In this chapter and in Figure III.1, we describe the programs and data used in the development of the FY 2015 SNAP QC file.<sup>10</sup>

##### Step 1. Obtain data

We received the data from FNS on a CD in an ASCII (or text) format.

INPUT CD	File: FY2015	(ASCII file)
	Record length 2,250	
	55,508 records	

##### Step 2. Read in and prepare files

We converted to SAS format the specified fields from the raw FNS file, created the unique record identifier (HHLDNA), and corrected stratum codes to reflect FNS's updated specifications.

PROGRAM NAME	10_SASIFY15.SAS	
INPUT FILE	FY2015	(ASCII; 55,508 records)
OUTPUT FILE	QCFY2015_1.SAS7BDAT	(55,508 records; 721 variables)

##### Step 3. QA the data

We ran preliminary frequencies on the SAS file and checked the frequencies for evidence of data corruption, consistency across States and months, and the extent of missing and out-of-range data. In addition, we calculated means and compared them to those for the previous year.

PROGRAM NAMES	FREQS15.SAS FREQS15A.SAS CMP1415A.SAS	
INPUT FILE	QCFY2015_1.SAS7BDAT	(55,508 records; 721 variables)

##### Step 4. Set SNAP parameters

We obtained relevant SNAP values (parameters), including those for maximum and minimum benefit amounts, income screens, MFIP values, SSI Combined Application Project (SSI-CAP) values, and standard utility allowance (SUA) amounts by State.<sup>11</sup> We entered them into a SAS format library, and used the formats for our program in Step 6.

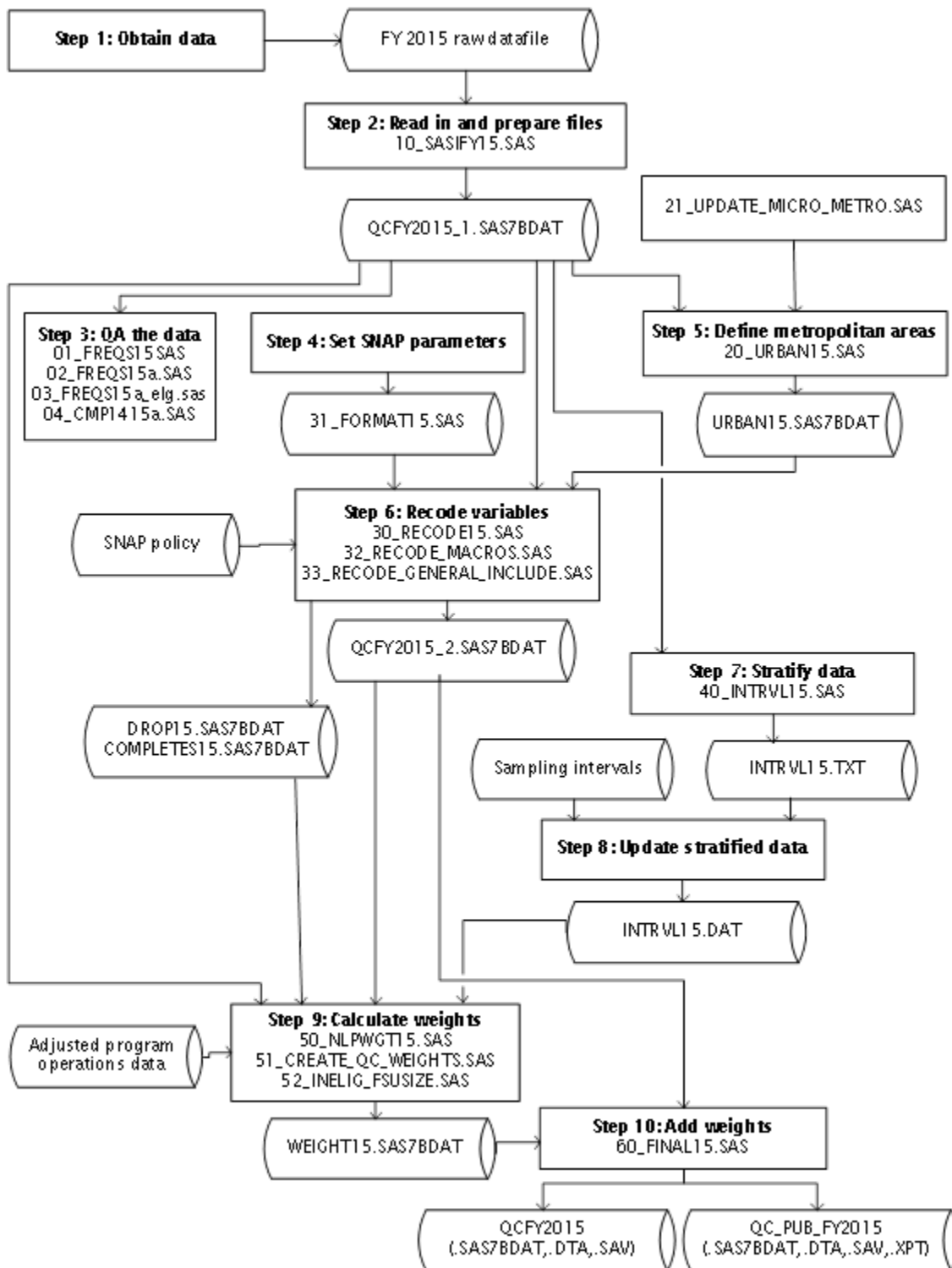
OUTPUT PROGRAM	31_FORMAT15.SAS	
----------------	-----------------	--

---

<sup>10</sup> Copies of the file development programs are available from FNS upon request.

<sup>11</sup> SUAs are standard utility allowances that States may use in place of actual utility costs to calculate a household's total shelter expenses. SUAs are mandatory in some States and optional in others.

**Figure III.1. FY 2015 SNAP QC file development process**



### Step 5. Define metropolitan areas

We added geographic-level information to the file. Using the local agency code on the raw datafile, we assigned a county Federal Information Processing Standards (FIPS) code to each SNAP unit. We flagged any unknown local agency codes for correction or addition to the concordance of local agency codes by county and State. We then merged each unit to the 2013 Census Bureau files of metropolitan and micropolitan areas by using State and county codes. We coded units as metropolitan or micropolitan, depending on their match to one of the Census files. Those not found in either file were coded as rural, except for those with local codes that were State-wide, which we coded as missing metropolitan status. Beginning in 2014, we assigned Alaska units with missing or unknown local agency codes a metropolitan status based on the minimum benefits. We removed cases not subject to review and incomplete cases in the output files.

PROGRAM NAME	20_URBAN15.SAS	
INPUT FILES	QCFY2015_1.SAS7BDAT	(55,508 records; 721 variables)
	METRO2_13.TXT	(ASCII; 1,236 records; 3 variables) (Census 2013 Metropolitan File)
	MICRO2_13.TXT	(ASCII; 646 records; 3 variables) (Census 2013 Micropolitan File)
	FIPS_LAC.TXT	(ASCII; 5,134 records; 6 variables) (Concordance of local area codes, updated in 2015.)
OUTPUT FILE	URBAN15.SAS7BDAT	(48,703 records; 5 variables)

### Step 6. Recode and standardize variables

We edited the file to resolve inconsistencies between variables within a unit and created several unit-level variables pertaining to SNAP affiliation, income deductions, shelter limit, benefit amount, assets, poverty status, and specific types of income. Unknown values (9-filled or 0 where a value should have been entered) were set to missing. The program detected inconsistencies between person-level income totals and reported totals and resolved them by using a procedure described in detail below (see Section B, Obtaining file consistency). Units meeting all the following conditions were written to the output file: (1) had a completed review, (2) found eligible by the QC reviewer, (3) contained at least one SNAP participant under review, (4) received a benefit amount of at least \$1, and (5) passed the eligibility tests, were flagged as categorically eligible, or were identified as participating in MFIP or an SSI-CAP. Meeting these conditions, together with the sample reductions in Step 5, completed the sample selection for the final datafile (48,022 records).

PROGRAM NAME	30_RECODE15.SAS	
INPUT FILES	QCFY2015_1.SAS7BDAT	(55,508 records; 721 variables)
	31_FORMAT15.SAS	(Format library)
	URBAN15.SAS7BDAT	(48,703 records; 5 variables)

OUTPUT FILES	QCFY2015_2.SAS7BDAT	(48,022 records; 2,627 variables)
	COMPLETES15.SAS7BDAT	(48,703 records; 2,629 variables)
	DROP15.SAS7BDAT	(101 records; 2,628 variables)

### Step 7. Stratify data

We created a file containing State name, FIPS code, and stratum, with one record per State/stratum combination.

PROGRAM NAME	40_INTRVL15.SAS	
INPUT FILE	QCFY2015_1.SAS7BDAT	(55,508 records; 721 variables)
OUTPUT FILE	INTRVL15.TXT	(ASCII; 53 records, 4 variables)

### Step 8. Update stratified data

We edited the INTRVL15.TXT file by hand to add sampling interval information (obtained from FNS) for each State/stratum combination and saved the edited file as INTRVL15.DAT.<sup>12</sup>

INPUT FILE	INTRVL15.TXT	(ASCII; 53 records; 4 variables)
OUTPUT FILE	INTRVL15.DAT	(ASCII; 53 records, 4 variables)

### Step 9. Calculate weights

As described later in Section III.C, we calculated a weight for each SNAP unit that had a complete review, excepting those units that were dropped from the edited file because of unresolved inconsistencies.

PROGRAM NAME	50_NLPWGT15.SAS	
INPUT FILES	QCFY2015_1.SAS7BDAT	(55,508 records; 721 variables)
	QCFY2015_2.SAS7BDAT	(48,022 records; 2,627 variables)
	INTRVL15.DAT	(ASCII; 53 records, 4 variables)
	FY15_ADJUSTED.XLSX	(Excel spreadsheet containing FNS Program Operations data adjusted for disasters)
	COMPLETES15.SAS7BDAT	(48,703 records; 2,629 variables)
	DROP15.SAS7BDAT	(101 records; 2,628 variables)
OUTPUT FILE	WEIGHT15.SAS7BDAT	(48,602 records; 27 variables)

### Step 10. Add weights

We merged the file containing weights with the edited SNAP QC file to produce the final FY 2015 SNAP QC files. QCFY2015 is for internal use and includes all variables. QC\_PUB\_FY2015 is for public use and excludes REVNUM, COUNTYCD, LOCALCOD, AK\_AREA and URBRUR for privacy reasons.

<sup>12</sup> No States had a stratified sample in the FY 2015 SNAP QC file.

PROGRAM NAME	60_FINAL15.SAS	
INPUT FILES	QCFY2015_2.SAS7BDAT	(48,022 records; 2,627 variables)
	WEIGHT15.SAS7BDAT	(48,602 records; 27 variables)
OUTPUT FILES	QCFY2015.SAS7BDAT	(48,022 records; 1,313 variables)
	QC_PUB_FY2015.SAS7BDAT	(48,022 records; 1,306 variables)
	QCFY2015.DTA	(48,022 records; 1,313 variables)
	QC_PUB_FY2015.DTA	(48,022 records; 1,306 variables)
	QCFY2015.SAV	(48,022 records; 1,313 variables)
	QC_PUB_FY2015.SAV	(48,022 records; 1,306 variables)
	QC_PUB_FY2015.XPT	(48,022 records; 1,306 variables)

After developing the final QCFY2015 SNAP QC files, we create two hierarchical binary files using this file:

1. The file MATHPC.BIN is generated for the QC Minimodel with SAS missing values coded to negative values.

PROGRAM NAME	MINIQC15.SAS	
INPUT FILE	QCFY2015.SAS7BDAT	(48,022 records; 1,313 variables)
OUTPUT FILE	MATHPC.BIN	(48,022 unit records; 106,115 person records)

2. The file QC2TPL15.BIN is used to produce tables with Table Producing Language (TPL) software. These tables are included in the annual Characteristics Reports. The program also creates a codebook for the TPL software. SAS missing values were coded to negative values. Additional unit-level recodes were created for use in table generation.

PROGRAM NAME	20_QC2TPL15.SAS	
INPUT FILE	QCFY2015.SAS7BDAT	(48,022 records; 1,313 variables)
OUTPUT FILES	QC2TPL15.BIN	(48,022 unit records; 106,115 person records)
	QC2TPL15.CBK	

## B. Obtaining file consistency

As mentioned under Step 6 above, we performed selected editing of the reported data. We followed the procedures below to obtain a high degree of consistency between related variables in the data while maintaining the integrity of the database. Some of the procedures do not apply to SNAP units in MFIP or participating in an SSI-CAP. We present the editing procedures for MFIP and SSI-CAP units after outlining the general procedure. For details on specific data-cleaning procedures, please refer to Appendix B.

## 1. Standard editing procedures

**Step 1. Eliminate case records that are incomplete or are for SNAP units that do not qualify for a benefit.**

- Those with incomplete reviews (REVDISP not equal to 1)
- Those with no case members (CERTHHSZ = 0)
- Those found ineligible by the QC reviewer (STATUS = 4)
- Those with an overissuance that is equal to or greater than the reported benefit (STATUS = 2 and RAWBEN <= AMTERR)
- Those with unknown eligibility (STATUS is missing)

**Step 2. Get a preliminary count of the number of people in the SNAP unit.**

**Step 3. Recode missing information to SAS missing values.**

- Any field coded with an out-of-range value is set to missing value of .A (for example, a 0 in the SNAP case affiliation code).
- Any field coded as unknown (filled with 9s) is set to missing value of .B. The one exception is the SNAP case affiliation code (FSAFILi) where the 9s remain to signify a valid person.
- Any constructed field that cannot be determined because of missing values is set to missing value of .C (for example, total assets).
- For units participating in months for which they are not certified, CERTMTH is set to missing value of .D.
- For MFIP and SSI-CAP units, variables not relevant in the benefit determination are set to missing value of .E.

**Step 4. Finalize the unit size.** We use the SNAP case affiliation flags for each person in the unit to construct a measure of the number of members in the SNAP unit under review. A person is considered a member of the SNAP unit if his or her affiliation code (FSAFILi) is equal to 1.

**Step 5. Determine unit totals and indicator variables.** Examples of totals include the number of elderly individuals (FSNELDER), children (FSNKID), and non-elderly individuals with disabilities (FSNDIS). Examples of indicators include citizenship status of the unit head (NONCIT\_HEAD) and categorical eligibility status (CAT\_ELIG) of the unit.

**Step 6. Initialize FY 2015 values (for example, standard deduction, shelter cap, maximum benefit).**

**Step 7. Reconcile duplicated amounts of wages (WAGESi), Social Security income (SOCSECi) and Supplemental Security Income (SSIi).** If a unit contains multiple individuals with equivalent WAGESi and either equivalent SOCSECi amounts or SSIi amounts, we check whether the sum of unduplicated income amounts is equal to RAWGROSS. If so, we assume that the QC reviewer incorrectly reported each individual's income for all members of the unit.

We try to reconcile the duplicated amounts by using work registration status (WRKREG<sub>i</sub>) and age. For example, if two non-elderly members have identical WAGES<sub>i</sub> and SOCSEC<sub>i</sub>, and one is coded as being exempt from work registration due to a disability and the other is not, we assign the SOCSEC<sub>i</sub> income to the former (and set WAGES<sub>i</sub> to 0) and the WAGES<sub>i</sub> income to the latter (and set SOCSEC<sub>i</sub> to 0).

**Step 8. Calculate earned and unearned incomes for those inside the unit and others in the household by adding up person-level income amounts.**

- Earned income variables are wages (WAGES<sub>i</sub>), self-employment income (SLFEMP<sub>i</sub>), and other earned income (OTHERN<sub>i</sub>).
- Unearned income variables include:
  - contributions (CONT<sub>i</sub>)
  - court-ordered child support payments (CSUPRT<sub>i</sub>)
  - deemed income (DEEM<sub>i</sub>)
  - State diversion payments (DIVER<sub>i</sub>)
  - educational grants/scholarships/loans (EDLOAN<sub>i</sub>)
  - earned income tax credit income (EITC<sub>i</sub>)
  - energy assistance income (ENERGY<sub>i</sub>)
  - foster care payments (FOSTER<sub>i</sub>)
  - State general assistance (GA<sub>i</sub>)
  - other government benefits (OTHGOV<sub>i</sub>)
  - other unearned income (OTHUN<sub>i</sub>)
  - Social Security income (SOCSEC<sub>i</sub>)
  - Supplemental Security Income (SSI<sub>i</sub>)
  - TANF (TANF<sub>i</sub>)
  - unemployment compensation (UNEMP<sub>i</sub>)
  - veterans' benefits (VET<sub>i</sub>)
  - workers' compensation (WCOMP<sub>i</sub>)
  - subsidized earned income (WGESUP<sub>i</sub>)

**Step 9. Reconcile reported person-level income amounts with reported unit-level income and deduction variables.** All household members reported on the file (not just unit members) are initially considered in the process of reconciling person and unit-level income. Any person-level income amount that is found to not count toward the benefit calculation is set to 0. To reconcile any differences between the person and unit-level income amounts, we perform the following steps sequentially, and stop when inconsistencies are resolved:

- 9a. **Does the child support income match the child support deduction?** For units where child support income and child support expenses are the same, we determine if the exclusion of either will allow us to replicate the reported unit-level gross income or net income. We set to 0 any child support income or deductions that are not used.<sup>13</sup>

<sup>13</sup> States may exclude child support expenses from gross income rather than consider them a deduction. For units excluding it from gross income, we check that gross income minus child support expenses is at or below 130 percent of the poverty guidelines.

- 9b. **Does the sum of person-level income match the unit-level gross income?** We compare earned and unearned income for the unit and the household to see if any combination is equal to the reported unit-level gross income. We check in the following order: (1) all unit income; (2) all unit income plus unearned income from outside the unit; (3) all unit income plus earned income from outside the unit; and (4) all household income.<sup>14</sup> At each stage, we check to see if child support expenses have been excluded from the unit-level gross income. If person-level sums and the unit-level gross income are equal at any stage, we set any income not used to 0.
- 9c. **Does the sum of person-level unearned income and earnings implied by the earnings deduction match the unit-level gross income?** We compare unearned income for the unit and the household plus the amount of earnings implied by the reported earnings deduction with the reported unit-level gross income to see if any combination is equal. We check in the following order: (1) unit unearned income, and (2) household unearned income. At each stage, we check to see if child support expenses have been excluded from the unit-level gross income. If reconciliation is made, we adjust earnings to satisfy the earnings deduction (adjusting existing earnings proportionately or, in the event of no person-level earnings, adding to the householder's other earned income). We set all other income to 0.
- 9d. **Is gross income not recorded?** If the reported unit-level gross income is 0 and the benefit is less than the maximum benefit for a unit of this size, we set the unit-level gross income to the sum of the person-level income values for the household.
- 9e. **Is the benefit consistent with having no income?** If the reported unit-level gross income is 0 and the benefit is equal to the maximum benefit for a unit of this size, we set the person-level income values for the household to 0.
- 9f. **Is gross income unreasonably high?** If the reported unit-level gross income is out of range (in this case, greater than three times the net income screen for a unit of this size) and no person-level income value is out of range, we set the unit-level gross income to the sum of the person-level income values for the household.
- 9g. **Is person-level income consistent with deductions and unit-level net income?** We compare combinations of earned and unearned income for the unit and the household less calculated total deductions to the reported unit-level net income. The calculated total deductions vary for each combination because the shelter deduction depends on household income while the earnings deduction depends on total earnings. We check in the following order: (1) all unit income less total deductions, (2) all unit income plus unearned income from outside the unit less total deductions, (3) all unit income plus earned income from outside the unit less total deductions, and (4) all household income less total deductions. If reconciliation is made, we set any income types not used to 0 and recalculate unit-level gross income.
- 9h. **Are person-level unearned income and earnings implied by the earnings deduction consistent with deductions and unit-level net income?** We check unearned income for the unit and the household plus the amount of earnings implied by the reported earnings deduction to see if any combination equals the reported unit-level net income plus calculated

---

<sup>14</sup> "Unit" income is income associated with participating household members. We allow a \$5 difference to account for potential rounding differences.



total deductions. We check in the following order: (1) unit unearned income, and (2) household unearned income. If reconciliation is made, we adjust earnings to satisfy the earnings deduction (adjusting existing earnings proportionately or, in the event of no person-level earnings, adding to the householder's other earned income). We set any income types not used to 0.

- 9i. **Do unit-level income values agree with no errors reported?** If no errors are reported ( $AMTERR = 0$ ) and the unit-level income values agree (gross income = net income + total deductions), we adjust the person-level income to agree with the unit-level values. We first adjust person-level earnings proportionately to agree with the earnings deductions. If any further adjustments are needed, we adjust person-level unearned income values proportionately. However, we only adjust SSI values if SSI is the only unearned income or the amount of other unearned income is not enough to reconcile the unit.
- 9j. **Do earnings agree with the reported earned income deduction, but exceed the reported unit-level gross income?** If earnings agree with the reported earned income deduction but exceed the unit-level reported gross income, we recalculate the gross income, setting to 0 any person-level income not used. If unit earnings agree, we set all income outside the unit to 0. If household earnings agree, we set any unearned income outside the unit to 0. Beginning in FY 2015, if the unit reports no earnings, has deemed income (FSDEEM), has an earned income deduction equal to 20 percent of FSDEEM (within \$5), and includes an individual outside the unit, we change the deemed income to wages. If the deemed income was reported by someone outside the unit, the wages remain with that person. If the deemed income was reported by someone inside the unit, we move the wages to someone outside the unit. If more than one individual is outside the unit, we give it to the first individual outside the unit that satisfies one of the following conditions (in order): individual is the household head ( $RELi=1$ ), spouse of household head ( $RELi=2$ ), first non-elderly adult, first individual.
- 9k. **Are person and unit-level income amounts still inconsistent?** If we still have not resolved incomes, we make the person-level incomes equal the reported unit-level gross income as follows. If the reported earned income deduction indicates zero earnings, we set to 0 any person-level earnings. If the reported earned income deduction indicates earnings no greater than the reported gross income, we proportionately adjust all person-level earnings to satisfy the earned income deduction. Otherwise, we proportionately adjust all person-level earnings. If additional adjustments are needed, we proportionately adjust all person-level unearned income values.

**Step 10. Calculate final SNAP unit income totals (for example, gross, net, TANF, and SSI).**

**Step 11. Create remaining flags and variables.**

**Step 12. Calculate the benefit.**

**Step 13. If the calculated benefit does not match the raw benefit, adjust the dependent care deduction, excess shelter deduction, or medical expense deduction if doing so results in a matching benefit.** In some SNAP units, we are able to reconcile initial differences between the calculated benefit and the raw benefit by performing the following steps sequentially and stopping when inconsistencies are resolved:

**13a. Does the calculated benefit match the raw benefit?** We define a SNAP unit as having a matching benefit if it meets one of the following conditions:

1. QC reviewers recorded a payment error and (1) the calculated benefit is within \$5 of the raw benefit adjusted for the error amount, or (2) the calculated benefit is within \$5 of the unadjusted raw benefit, and the error element is not indicated to be the dependent care deduction, the shelter deduction, or the standard utility allowance.
2. QC reviewers recorded no payment errors and the calculated benefit is within \$5 of the raw benefit.

**13b. Does adjusting the dependent care deduction result in a matching benefit?** If a unit has a dependent care deduction that is not consistent with dependent care costs, we make the deduction match the expenses if, as a result of doing so, one of the following conditions is met:

1. QC reviewers recorded a payment error and the calculated benefit is within \$5 of the raw benefit adjusted for the error amount.
2. QC reviewers recorded no payment errors and the calculated benefit is within \$5 of the raw benefit.

For each condition, we check with and without allotment adjustments.

**13c. Does adjusting the shelter deduction result in a matching benefit?** We try setting the amount of utility expenses equal to an SUA amount or to 0.<sup>15</sup> We try different SUA amounts in the following order: (1) HCSUA, (2) LUA, (3) utilities equal 0, (4) telephone allowance, and (5) a single-element SUA. We set the amount of utility expenses equal to an SUA amount or to 0 if, as a result, one of the following conditions is met:

1. QC reviewers recorded a payment error and the calculated benefit is within \$5 of the raw benefit adjusted for the error amount.
2. QC reviewers recorded no payment errors and the calculated benefit is within \$5 of the raw benefit.
3. QC reviewers recorded no payment errors and the calculated shelter deduction is within \$5 of the raw shelter deduction.
4. For SNAP units in New York, QC reviewers recorded no payment errors, utilities equal the HCSUA, and the unit is coded as using an HCSUA.<sup>16</sup>

---

<sup>15</sup> Many States employ more than one SUA to accommodate units with different types of utility expenses. The Heating and Cooling SUA (HCSUA) generally includes all utilities, including telephone service. The Lower Utility Allowance (LUA) is used for units that do not have heating and cooling expenses separate from rent, but have at least two other utility expenses. The LUA generally includes all other utilities, including telephone service. A telephone allowance is used for units with telephone expenses but without any other utility expenses. Some States also use a one-utility standard, for units with a single utility expense such as electricity. In addition, a few States use combinations of individual standards for different utility expenses. Hawaii, for example, employs individual utility standards for electricity, telephones, sewage, trash, and water.

<sup>16</sup> New York's computer system automatically generates an SUA for certain units. Consequently, we do not require a matching net income or a matching shelter deduction for New York SNAP units, as long as the unit is coded as using an HCSUA.

For each condition, we check with and without allotment adjustments. Appendix F, Table F.7, provides FY 2015 SUA values by State.

**13d. Does setting the medical deduction to 0 for a medical deduction demonstration participant result in a matching benefit?** For participants in medical deduction demonstration States,<sup>17</sup> we set the medical deduction, medical expenses, and the medical deduction demonstration flag to 0 if, as a result, one of the following conditions is met:

1. QC reviewers recorded a payment error and the calculated benefit is within \$5 of the raw benefit adjusted for the error amount.
2. QC reviewers recorded no payment errors and the calculated benefit is within \$5 of the raw benefit.

**13e. Redo the income reconciliation, if necessary.** If we modified a deduction to match the computed benefit (Steps 13b, 13c, or 13d) and used deductions in the income reconciliation (Step 9), then we redo the income reconciliation with new deduction values, repeating all steps beginning with Step 9.

**Step 14. Drop units whose calculated benefit is less than \$1.**

**Step 15. Perform automated edits to reconcile remaining inconsistencies.** Appendix B provides details.

**Step 16. Update categorical eligibility.** A unit is categorically eligible for SNAP if any of the following is true:

- The QC reviewer recorded the unit as categorically eligible.
- The unit meets the standards for expanded categorical eligibility in their State. (See Appendix B for information on State expanded categorical eligibility policies).
- The unit is pure cash public assistance (PA); that is, either (1) everyone in the unit has person-level income from TANF, GA, or SSI, (2) the unit has TANF income and every adult has person-level income from TANF, GA, or SSI, or (3) the unit contains only children and at least one has person-level income from TANF. Because TANF income is not reported on the file for the vast majority of MFIP units, we code all MFIP units as pure PA.

**Step 17. Determine eligibility.** We assess whether each unit would pass the applicable asset and income tests.

---

<sup>17</sup> By the end of FY 2015, medical deduction demonstrations were operating in Alabama, Arkansas, Idaho, Illinois, Iowa, Kansas, Massachusetts, Missouri, New Hampshire, North Dakota, Rhode Island, South Dakota, Texas, Vermont, Virginia, and Wyoming.

- Units without an elderly member or individual with a disability must have a monthly gross income at or below 130 percent of the poverty guidelines (Appendix F).<sup>18</sup>
- Units must have a net monthly income at or below 100 percent of the poverty guidelines (Appendix F).<sup>19</sup>
- Units without an elderly member or individual with a disability must have total countable assets of \$2,000 or less. Units with an elderly member or individual with a disability are allowed up to \$3,250 in countable assets. (See next section for exceptions.)

We retain on the file only units that are either categorically eligible or pass the applicable income and asset tests.

## 2. State-variations to editing procedures

Below, we detail the State-specific editing procedures that we use to model State SNAP rules. These rules include higher asset limits (Section 2a), MFIP (Section 2b), SSI-CAP with standard benefits and standard shelter expenses (Section 2c), and medical deduction demonstrations (Section 2d).

### a. Higher asset limits

In FY 2015, three States (Idaho, Michigan, and Texas) allowed all SNAP units to have up to \$5,000 in countable assets based on the State's BBCE policy.

### b. Minnesota Family Investment Program (MFIP) units

MFIP is Minnesota's TANF program, open to low-income families with children.<sup>20</sup> MFIP calculates participants' food assistance and cash assistance benefits together; consequently, the SNAP benefit calculation differs from the Federal formula. Both the maximum food assistance portion and maximum cash assistance portion of the MFIP benefit are based on unit size and are higher for families with earnings (see Table F.8). To calculate the benefits, countable income is subtracted from the combined maximum food portion and cash portion, or the "transitional standard." If a unit has earned income, an earnings deduction is applied and the remaining countable income is subtracted from the "family wage level," which is 10 percent higher than the transitional standard. If the total benefit amount is less than or equal to the maximum food portion, the unit receives only food assistance. If the benefit is greater than the maximum food portion, the unit receives the remainder of the benefit as cash assistance. MFIP units receive no income deductions other than the earnings deduction. The earnings deduction rate for MFIP participants was 50 percent in FY 2015.

---

<sup>18</sup> States may exclude child support expenses from gross income rather than consider them a deduction. For units excluding it from gross income, we check that gross income minus child support expenses is at or below 130 percent of the poverty guidelines.

<sup>19</sup> This test is not performed on SNAP units identified as participating in MFIP or an SSI-CAP demonstration in a State using standard benefits.

<sup>20</sup> More information is available on Minnesota's Department of Human Services website (<http://www.dhs.State.mn.us/>).

Because cash TANF income for MFIP units is not used in the SNAP benefit calculation, TANF receipt is not recorded on the QC data for the vast majority of units. However, we code all MFIP units as pure PA. It is important to note that we do not calculate the TANF benefit (the cash portion) after we calculate the SNAP portion.

Below, we describe the calculation of the food portion of the benefit and differences in the general editing procedures that reconcile unit-level income with person-level income. (See Appendix F for FY 2015 cash and food portion values.)

1. **Flag units that are MFIP participants.** Recognizing that not all MFIP participants receive a cash benefit, we first attempt to identify MFIP-participating units. We flag units in Minnesota as MFIP participants if they have one of the following characteristics:<sup>21</sup>
  - The unit has person-level TANF income for SNAP unit members, unless the SNAP benefit on the raw datafile appears to have been calculated using regular SNAP rules.
  - The unit has children and the benefit, adjusted for errors, matches the MFIP table of benefits for this unit size.
  - The unit has children, positive person-level earnings, and a positive reported earned income deduction, where the reported earned income deduction was 50 percent in October 2014 through September 2015 of the person-level earnings.
2. **Reconcile reported person-level income amounts with reported unit-level income and deduction variables.** The procedure for reconciling person-level income amounts with unit-level income and deductions is the same as for all other SNAP units except in the following cases:
  - We begin reconciling person-level income to unit-level gross income by excluding TANF from unearned income. At each step in reconciling to unit-level gross income described above, if person-level incomes with TANF excluded do not equal the unit-level gross income, we try including TANF income to see if its addition allows us to reconcile to unit-level gross income.<sup>22</sup> The final calculated gross income includes any TANF income initially included on the raw datafile.
  - We do not attempt to reconcile MFIP participants' person-level income with reported unit-level net income because net income is not used in the same way for the MFIP benefit as it is in the Federal program. We code the calculated net income variable as missing for all MFIP units.
3. **Calculate the earned income deduction.** For MFIP units, we calculate the earned income deduction as 50 percent of earnings in October 2014 through September 2015.

---

<sup>21</sup> MFIP's unit composition rules differ from those under the regular SNAP. Specifically, SSI and TANF recipients living in the same household are treated as separate SNAP units. Consequently, if a Minnesota unit of more than one person had both SSI and TANF income, we set the affiliation code of the SSI recipient to unknown (99).

<sup>22</sup> With the cash portion of the benefit calculated at the same time as the food portion of the benefit, we do not expect TANF income to be included in a unit's total gross income. However, in some unit records, TANF income is included and we accept it as verification that the recorded gross income is correct.

4. **Calculate the final deductions.** We code all deductions except the earned income deduction and total deduction as missing (.E) for MFIP participants.
5. **Food benefit calculation.** We determine the benefit depending on unit characteristics:
  - If the unit has no income, then the benefit is the food portion for the unit size.
  - If the unit has only earned income, the benefit is the minimum of the food portion and the difference between the family wage level (the income threshold for units with earnings) and net earnings, but never less than 0.
  - If the unit has only unearned income, the benefit is the minimum of the food portion and the difference between the transitional standard (the income threshold for units without earnings) and net unearned income, but never less than 0.
  - If the unit has both earned and unearned income, we subtract net earned income from the family wage level and compare the difference to the transitional standard. We then subtract unearned income from the smaller of the two (to ensure that the wages were high enough to merit the full increase to the family wage level). The benefit amount is the minimum of this difference or the food portion, but never less than 0.
  - For one- and two-person SNAP units, we set the benefit amount to the higher of the calculated benefit or the minimum Federal SNAP benefit.

**c. SSI-Combined Application Project (SSI-CAP) units**

In FY 2015, 17 States—Arizona, Florida, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Mississippi, New Jersey, New York, North Carolina, Pennsylvania, South Carolina, South Dakota, Texas, Virginia, and Washington—had SSI-CAP demonstrations. In addition, one State (New Mexico) had ongoing SSI-CAP units even though the State discontinued its SSI-CAP demonstration in March 2014.<sup>23</sup> These demonstration projects aim to streamline procedures for providing SNAP benefits to certain units eligible for both SNAP and SSI. Most provide participants with a standard benefit, while three provide a standard shelter expense. SSI-CAP participation in these States is generally limited to one-person elderly units with SSI and no earned income.

In this section, we describe the 18 programs and our procedures for identifying and editing SSI-CAP units for the SNAP QC database. Most of the SSI-CAP units identified have reported data that are consistent with program rules. In some cases, however, we identify units as participating through an SSI-CAP even though some of their reported data is inconsistent with program rules. We flag SSI-CAP units with consistent data as `SSI_CAP = 2`; those with some inconsistent data as `SSI_CAP = 3`. Beginning in FY 2015, we modeled State opt-out rules by setting `SSI_CAP = 0` for potential SSI-CAP units with reported data that are inconsistent with some SSI-CAP program rules and high reported medical expenses (`FSMEDEXP > $200`).

---

<sup>23</sup> New Mexico SSI-CAP households may remain on the program through their certification period. The last New Mexico SSI-CAP benefits will be issued in February 2017.

### 3. SSI-CAP programs with a standard benefit

The States listed in Table III.1 operate programs that provide participants with a standard “high” or “low” benefit, based on whether participants’ shelter expenses fall above or below a State-determined threshold. Since net income and deductions are not used in calculating benefits for SSI-CAP households, we set the final values of these variables to missing (.E).<sup>24</sup> More specifically, the variables set to missing for SSI-CAP participants in States with standard SSI-CAP benefits include:

- Net income (FSNETINC)
- Total deductions (FSTOTDED)
- Standard deduction (FSSTDDED)
- Medical deduction (FSMEDDED)
- Earned income deduction (FSERNDED)
- Dependent care deduction (FSDEPDED)
- Child support expense deduction (FSCSDED)
- Homeless deduction (HOMELESS\_DED)
- Excess shelter deduction (FSSLTDED)
- Standard utility allowance (SUA1 and SUA2)

---

<sup>24</sup> The raw variables indicating the actual costs are usually retained.

**Table III.1. SSI-CAP programs with standard benefits**

State	Start date	Unit composition	Age	Allowed income	Shelter amounts	Benefit calculation
Arizona (AZSNAP)	February 2009	Living alone	65 or older	Unearned	\$0 to 99; \$100 to 199; \$200 to 299; \$300 or more	Table F.9
Kentucky (KYSAFE)	2007	Living alone or married	60 or older	Earned and unearned	<b>One person:</b> Less than \$200; \$200 or more <b>Two people:</b> Less than \$200; \$200 or more	Table F.10
Louisiana (LaCAP)	2007	Living alone	60 or older	Earned and unearned	\$0 to 100; \$101 to 399; \$400 to 699; \$700 or more	Table F.11
Maryland (MSNAP)	July 2010	Living alone	60 or older	Unearned	Less than \$506 \$506 or more	Table F.12
Michigan (MiCAP)	April 2009	Living alone	18 or older	No income	Less than \$1,000 \$1,000 or more	Table F.13
Mississippi (MSCAP)	October 2001*	Living alone	No age requirement	Unearned	<b>SSI only:</b> Low/high shelter <b>SSI and other unearned income:</b> Low/high shelter	Table F.14
New Jersey <sup>1</sup> (NJ SNAS)	May 2009	Living alone	65 or older	Unearned	Less than \$315 \$315 or more	Table F.15
New Mexico (NMCAP)	June 2009	Living alone or married	22 or older	Unearned	Less than \$315 \$315 or more	Table F.16
New York (NYSNIP)	March 2003*	Living alone	No age requirement	Earned and unearned	<b>Gross income minus SSI &lt; \$87:</b> Positive utility costs (high/low rent), no utility costs (high/low rent), no shelter costs <b>Gross income minus SSI &gt;= \$87:</b> Positive utility costs (high/low rent), no utility costs (high/low rent), no shelter costs	Table F.17
North Carolina (NCSNAP)	August 2005	Living alone	65 or older	Earned and unearned	Less than \$150 \$150 or more	Table F.18
Pennsylvania (PACAP)	2007	Living alone	18 or older	Unearned	<b>SSI only:</b> Low/high shelter <b>SSI and other unearned income:</b> Low/high shelter	Table F.19
South Carolina (SCCAP)	October 1995*	Living alone	No age requirement	Unearned	<b>SSI only:</b> Low/high shelter <b>SSI and other unearned income:</b> Low/high shelter	Table F.20
South Dakota (SD IN)	January 2010	Living alone or married	18 or older	Earned and unearned	<b>No earnings:</b> Individuals or couples with high/low shelter expenses and medical expenses over \$35 or \$35 or less <b>Earnings:</b> Individuals or couples with high/low shelter expenses and medical expenses over \$35 or \$35 or less	Table F.21
Texas <sup>1</sup>	September 2002*	Living alone or married	50 or older	Earned or unearned	Less than \$289 \$289 or more	Table F.22
Virginia	August 2006	Living alone	65 or older	Unearned	Less than \$500 \$500 or more	Table F.23

\* We began modeling the SSI-CAP program in FY 2004.

<sup>1</sup> Although the FY 2015 SNAP QC data contain households that meet the State's SSI-CAP composition criteria, none of them had a reported benefit equal to one of the program's standard benefit amounts. Therefore, the FY 2015 SNAP QC data do not contain any households flagged as participating in this State.



We use the following process to identify, recode, and assign benefits to households participating in standard benefit SSI-CAP programs:

**Identifying units.** We identify as SSI-CAP participants all individuals meeting the eligibility criteria, outlined for each State in Table III.1 with a recorded benefit adjusted for errors equal to any of the SSI-CAP standard benefit amounts for that State (see Appendix F, Tables F.9-F.23).

**Recodes for units.** In addition to setting calculated net income and all calculated deduction variables to missing, if the sum of individual incomes does not equal the raw gross income, we set the sum of individual incomes equal to the (RAWGROSS) by adjusting individual incomes proportionately, as necessary.

**Benefit calculations for units.** We set the final calculated benefit equal to the standard SSI-CAP benefit corresponding to the unit's rent/mortgage expenses (RENT) value or total shelter expenses (FSSLTEXP) and unit size.

Table III.2 identifies States with alternate or specific characteristics for identifying, recoding, and calculating benefits for SSI-CAP units.

**Table III.2. States with special rules for identifying, recoding, and calculating benefits for SSI-CAP units**

State	Identifying units	Recodes for units	Benefit calculations
Arizona	X		
Kentucky	X		
Louisiana	X		
Mississippi	X	X	X
New Jersey	X		
New Mexico	X		
New York	X		X
Pennsylvania			X
South Carolina	X	X	X
South Dakota	X		X
Texas	X	X	
Virginia	X		

### Identifying units

In addition to the criteria listed in III.1, we identify as SSI-CAP participants units with a certification period of 24 months in New Jersey; 36 months in Arizona, Kentucky, and Virginia; and 36 to 39 months in Louisiana.

In New York, the certification period for NYSNIP is four years with interim contact at the end of two years. We identify as NYSNIP participants one-person units that receive SSI benefits and belong to one of the following groups:<sup>25, 26</sup>

- Units with a recorded benefit adjusted for errors that matches an NYSNIP benefit, and the benefit amount is consistent with the presence of unit income other than SSI, adjusting for the NY SSI supplement of \$87
- Units with a recorded benefit adjusted for errors that matches an NYSNIP benefit and medical and shelter deductions are both coded as 0
- Units with a certification period exceeding four years

Married couples in Kentucky, New Mexico, and South Dakota may participate in SSI-CAP, but each individual must meet the eligibility criteria and be treated as a member of the same SNAP unit. Only married couples in which both individuals are SNAP participants and report receiving SSI benefits are identified as SSI-CAP participants.

In Texas, at least one person must be age 50 or older and receiving SSI benefits. SNAP-CAP treats elderly SSI participants independently of other household member. All other household members apart from the first elderly SSI participant are edited to be outside of the unit.

QC reviewers in Mississippi and South Carolina attempt to work backwards from the standard benefit to make income and deductions consistent with the benefit for MSCAP and SCCAP participants. A majority of MSCAP and SCCAP units follow a consistent pattern in terms of income and recorded shelter expenses. Additional units follow the same pattern closely but not exactly (see Appendix F, Table F.14 for MSCAP benefits and income patterns and Table F.20 for SCCAP benefits and income patterns). If one of the following conditions is true, we flag as MSCAP or SCCAP participants one-person units that report receiving SSI benefits and have no reported earned income:

- The recorded benefit adjusted for errors equals an MSCAP or SCCAP standard benefit, and the recorded gross income or recorded net income is consistent with that benefit according to the pattern followed in most units (allowing the recorded utility amount for MSCAP or rent/mortgage amount for SCCAP to be inconsistent).<sup>27</sup>
- The recorded benefit adjusted for errors equals a standard benefit, and the recorded utility amount equals the MSCAP SUA or standard rent/mortgage amount for SCCAP (allowing the recorded gross and net income to be inconsistent).
- The recorded utility amount equals the MSCAP SUA, or the recorded rent/mortgage amount equals the standard rent/mortgage amount for SCCAP, and the recorded gross

---

<sup>25</sup> New York requires NYSNIP participants to be living alone (not just forming one-person SNAP units) and provides data on the QC datafile that is sufficiently detailed for us to identify households consisting of just one person.

<sup>26</sup> Because so few NYSNIP eligible units have allotment adjustments, we do not check for units where the recorded benefit plus or minus the allotment adjustment would equal an NYSNIP standard benefit.

<sup>27</sup> If the recorded benefit equals the minimum benefit, we require both gross income and net income to be consistent with the pattern.

income or recorded net income equals one of the income amounts consistent with the pattern (allowing the benefit to be inconsistent).<sup>28</sup>

### Recodes for units

In Mississippi and South Carolina, we set calculated net income and all calculated deduction variables to missing as described earlier, and perform the following recodes for units identified as MSCAP or SCCAP participants:

- **Shelter expenses.** For most MSCAP participants, QC reviewers record the utility expenses as the MSCAP SUA. For units where this was not the case, we recode the utility expense values (UTIL). In addition to a utility expense, some QC reviewers recorded a rent or mortgage value for MSCAP units. We recode this value (RENT) as 0 because the MSCAP SUA reflects combined shelter expenses, including rent/mortgage.

For most SCCAP participants, QC reviewers record the utility expense value as the South Carolina HCSUA value and rent/mortgage as the standard SCCAP rent amount. We recode utilities (UTIL) and rent/mortgage (RENT) for SCCAP units that do not follow this pattern.

- **Income.** In most MSCAP and SCCAP units, the raw gross income equals either the maximum SSI benefit for eligible individuals or the maximum SSI benefit plus \$20, reflecting the \$20 unearned income disregard for SSI. We recode the raw gross income (RAWGROSS) of MSCAP and SCCAP units that do not follow this pattern. We set the sum of individual incomes equal to the raw gross income (RAWGROSS) by adjusting individual incomes proportionately, as necessary.

In Texas, after setting calculated net income and all calculated deduction variables to missing as described earlier, we perform the following recode for units identified as SNAP-CAP participants:

- **SNAP participation and unit size.** According to SNAP-CAP rules, married couples may participate in the program but are treated as separate units. If a unit consists of a married couple, both partners are age 50 or older, and the unit is coded as SNAP participants and receives a SNAP-CAP standard benefit, we keep the first person as an eligible member of the SNAP case under review (FSAFILi = 1) and recode the other as “Eligible SNAP participant in another unit, not currently under review” (FSAFILi = 2). We adjust the variable indicating unit size accordingly (FSUSIZE).
- **Income.** In SNAP-CAP units that originally had more than one individual coded as a SNAP participant, we reset raw gross income (RAWGROSS) equal to the sum of the individual incomes assigned to the one individual who remains a SNAP participant (FSAFILi = 1). In other SNAP-CAP units, we reconcile individual incomes with the original gross income.

---

<sup>28</sup>Because so few MSCAP- and SCCAP-eligible units have allotment adjustments, we do not check for units in which the recorded benefit plus or minus the allotment adjustment would equal an MSCAP or SCCAP standard benefit.

### **Benefit calculations for units**

In Mississippi, we set the final calculated benefit equal to the standard SSI-CAP benefit that corresponds to the utility (UTIL) and raw gross (RAWGROSS) values in Appendix F, Table F.14.

In New York, for NYSNIP units with a recorded benefit that matches an NYSNIP benefit, we set the calculated benefit equal to the recorded benefit. For NYSNIP units with a recorded benefit that does not match an NYSNIP benefit, we calculate the benefit based on NYSNIP rules.

In Pennsylvania, we set the final calculated benefit equal to the standard SSI-CAP benefit that corresponds to the unit's rent (RENT) and presence or absence of unearned income other than SSI, as shown in Appendix F, Table F.19.

In South Carolina, we set the final calculated benefit equal to the standard SSI-CAP benefit that corresponds to the rent (RENT) and raw gross (RAWGROSS) value found in Appendix F, Table F.20.

In South Dakota, we set the final calculated benefit equal to the standard SSI-CAP benefit that is consistent with unit size, shelter expenses (FSSLTEXP), presence or absence of earned income (FSEARN), and presence or absence of medical expenses (FSMEDEXP) as found in Appendix F, Table F.21.

#### **4. SSI-CAP programs with a standard shelter expense**

The States listed in Table III.3 operate programs that assign participants a standard “high” or “low” shelter expense, and then calculate the unit benefit on the basis of actual income, the standard deduction, the SUA, and the standard shelter expense. Because net income and a few deductions are used to calculate a benefit for SSI-CAP participants in these States, the variables are retained on the file. However, other deductions are not used for the benefit calculation and are set to missing (.E). The variables set to missing for SSI-CAP participants in these States include:

- Medical deduction (FSMEDDED)
- Earned income deduction (FSERNDED)
- Dependent care deduction (FSDEPDED)
- Child support expense deduction (FSCSDED)
- Homeless deduction (HOMELESS\_DED)

In addition, we recode the SUAs to differentiate SSI-CAP units from other units that received the same SUA by setting SUA1 to 9 (“Other”). Like SSI-CAP units with a standard benefit, when we set calculated deductions to missing, the raw variables indicating the actual costs are usually retained.

Units with earnings are not eligible to enroll in SSI-CAP programs in these States. However, after a unit participates, it may have earned income for up to three consecutive months without losing eligibility.

**Table III.3. SSI-CAP programs with standard shelter expenses**

State	Start date	Unit composition	Age	Allowed income	Shelter amounts
Florida (SUNCAP)	April 2005	Living alone	No age requirement	Earned and unearned	\$240 or less More than \$240
Massachusetts (BAYSTATE CAP)	February 2005	Living alone	18 or older	Earned and unearned	Less than \$450 \$450 or more
Washington (WASHCAP) <sup>1</sup>	December 2001*	Living alone	18 or older	Unearned	Less than \$300 \$300 or more

\* We began modeling the SSI-CAP program in FY 2004.

<sup>1</sup> QC reviewers use a special local agency code for WASHCAP units whose applications were processed in an SSA office. We identify as WASHCAP participants all units that meet the criteria outlined in the table above and flagged with this special local agency code.

We use the following process to identify, recode, and assign benefits to households participating in SSI-CAP programs with a standard shelter expense:

**Identifying units.** We identify as SSI-CAP participants all individuals meeting the eligibility criteria outlined in Table III.3 who have recorded rent/mortgage amounts equal to any of the standard rent/mortgage allowances for that State.

In Massachusetts, if the recorded rent/mortgage amount is not equal to the standard allowance, we calculate the benefit assuming that the standard allowance was used. If this calculated benefit matches the raw benefit, then we recode the rent/mortgage amount to be the standard allowance, and flag the unit as a BAYSTATE CAP participant.

**Recodes for units.** In addition to setting the deductions not used in the benefit calculation to missing as described above, we perform the following recode for units identified as participants:

- **Shelter expenses.** When necessary, we recode utilities of units in Massachusetts and Washington to equal the State's HCSUA or LUA for one-person units.
- **Income.** We reconcile individual incomes with gross income in SSI-CAP units by using the same process as in non-CAP units.

**Benefit calculation for units.** We use the regular SNAP benefit calculation. Benefits are based on actual income, the standard deduction, the standard shelter amount, and the SUA. The standard shelter amount is determined by the unit's actual monthly shelter expenses, excluding utilities. Benefit calculations for all States with a standard shelter expense SSI-CAP program are shown in Appendix F, Table F. 24.

#### d. Medical expense deduction demonstration programs

Sixteen States have programs to standardize medical deduction amounts when units' medical expenses fall within a specified range (see Appendix F, Table F.4). In these States, if a unit with an elderly member or individual with a disability incurs medical expenses less than or equal to the State threshold, the unit receives a medical expense deduction equal to the threshold

minus \$35. Units with medical expenses greater than the threshold receive a medical deduction equal to actual medical expenses, minus \$35. To achieve cost neutrality, most States reduced the HCSUA for the entire caseload. The HCSUA modeled for these States in the SNAP QC database reflects the adjustments. The States are listed in Table III.4 below.

**Table III.4. States with standard medical deductions**

State	Start date (of current waiver)	Cost neutrality
Alabama	October 2014	HCSUA was reduced by \$6.
Arkansas	November 2011	HCSUA was reduced by \$4.
Idaho	November 2013	HCSUA was reduced by \$11.
Illinois	June 2011	The standard deduction was reduced by \$4 between October 2014 and February 2015, and by \$7 between March 2015 and September 2015. These reductions are not reflected in the SNAP QC database.
Iowa	October 2012	HCSUA and lower utility standard were reduced by \$5. Both reductions are reflected in the SNAP QC database.
Kansas	January 2011	HCSUA was reduced by \$8.
Massachusetts	April 2013	HCSUA was reduced by \$7.
Missouri	September 2011	HCSUA was reduced by \$10.
New Hampshire	June 2015	HCSUA was reduced by \$6.
North Dakota	April 2013	HCSUA was reduced by \$10.
Rhode Island	October 2012	HCSUA was reduced by \$7.
South Dakota	May 2013	HCSUA was reduced by \$9.
Texas	October 2012	HCSUA and lower utility standard were reduced by \$2. Both reductions are reflected in the SNAP QC database.
Vermont	December 2013	HCSUA was reduced by \$12.
Virginia	October 2011	HCSUA was reduced by \$3.
Wyoming	January 2012	HCSUA was reduced by \$7.

### C. Derivation of sampling weights

The SNAP QC file's sampling weights are derived to reflect State and national caseload totals from SNAP Program Operations data after adjustments for receipt of disaster assistance benefits and benefits issued in error. They are intended to match monthly target levels of SNAP households, participants, and benefits.

To derive monthly weights, we first calculate preliminary weights that sum to the monthly number of SNAP units by State and stratum, as reflected in the adjusted SNAP Program Operations data. The tables in Appendix D show the preliminary monthly weights (HWGT) and their derivation for each State and stratum. We create the preliminary weights using these six major steps, presented in Tables D.4-D.15:

1. In States that distributed disaster SNAP benefits, we lower the Program Operations counts in the month(s) of the disaster by the number of SNAP units receiving benefits

specifically because of the disaster (but not already participating SNAP units who receive additional benefits). (Column e)

2. For the States with stratified samples, we apportion the adjusted Program Operations counts across the strata according to the percentage of the sample that is in that stratum in that month. (Column f)<sup>29</sup>
3. We calculate the disqualification rate by State and stratum by first identifying all disqualified SNAP units, which are those that the reviewers found “ineligible” (coded as STATUS = 4) or “eligible” but not qualifying for a benefit (coded as STATUS = 2 with the error amount at least as large as the full benefit). The number of disqualified SNAP units divided by the number of SNAP units with completed reviews is the “disqualification” rate.<sup>30</sup> (Column i)
4. We lower the Program Operations counts of SNAP units by the disqualification rate calculated in Step 3 to derive the final adjusted Program Operations totals. (Column j)
5. We remove any additional SNAP units that do not appear to be eligible for SNAP either because they do not pass the asset or income tests and are not categorically eligible or because they do not qualify for a positive benefit. Removing these households does not affect disqualification rates or the total number of weighted units. (Column k)
6. We calculate a preliminary weight for each SNAP unit by State and stratum by dividing the final adjusted Program Operations count by the remaining number of SNAP units on the file. (Column m)

After deriving the preliminary weights, we use a nonlinear programming (NLP) technique to create final weights that produce estimates that match adjusted Program Operation monthly totals of units, participants, and benefits. Participant totals are adjusted by the number of individuals in units removed in Steps 1 and 4 above. Benefit totals are adjusted by benefits issued to units that were removed and by additional disaster benefits issued to units receiving regular SNAP benefits. The NLP algorithm incrementally changes the original weight until the three adjusted Program Operation monthly totals are matched, with the additional restriction that the final weights will not be less than 10 percent of the preliminary weights. The resulting monthly weights are no longer identical to the preliminary weights or identical among units sampled in the same month, State, and stratum.

To calculate standard errors using the bootstrap method, we use the NLP algorithm to compute 500 sets of replicate weights. Each set of replicate weights is calculated from a random sample of the raw SNAP QC datafile, using a methodology similar to the one described above.

Because the replicate weights are based on a random sample of raw SNAP QC data, there are occasionally instances when the NLP algorithm cannot find weights that match all three Program Operations totals within a certain State and month. When this happens, the algorithm attempts to match only the unit and individuals control totals for that particular State and month.

---

<sup>29</sup> Column omitted from Appendix D tables due to space limitations but available upon request. No States had a stratified sample in the FY 2015 SNAP QC file.

<sup>30</sup> The numerator of FNS’ error rate includes units that received too much or too little in benefits in addition to the units included in the disqualification rate numerator.

If the algorithm cannot find weights that match both control totals, the replicate weights are set equal to the preliminary weights for that particular State and month.

The edited SNAP QC file contains two weight variables: the monthly weight (HWGT) and the full-year weight (FYWGT). HWGT is used for tabulations in specific months. If a tabulation is for a period longer than one calendar month, the average monthly value for the time period can be obtained by dividing HWGT by the number of months being analyzed. Tabulations of average monthly values for the entire fiscal year can be obtained by using FYWGT, which is HWGT divided by 12.



## IV. DEVELOPMENT OF THE 2015 QC MINIMODEL

---

The QC Minimodel—one of FNS’s SNAP microsimulation models—uses the SNAP QC database to simulate the impact of various policy changes to SNAP on current SNAP participants. The QC Minimodel uses a series of algorithms, organized in the SNAP Module (FSTAMP), to simulate eligibility, benefits, and participation in SNAP. Some of the FSTAMP routines are specific to the SNAP QC database while others are database-independent. This chapter provides a technical description of the procedures specific to the SNAP QC database that are used to transform characteristics of SNAP units in that database into the data elements that conform with inputs used with the database-independent algorithms of FSTAMP. The database-independent algorithms are documented in the *2011 MATH SIPP+ Microsimulation Model: Programmer’s Guide, Technical Description and Codebook* (Schechter et al. 2014).

### A. Create MATH-style version of SNAP QC database

#### 1. Introduction

The QC Minimodel requires a binary file in a particular format (MATH™ style)<sup>31</sup> as input. This section describes the procedure used to create the binary file from the SAS version of the SNAP QC database. A two-step process is required to generate the final binary file in the MATH format: (1) create a binary file from the SAS dataset, and (2) run a tally using the binary file from Step 1 to finalize the binary file for use with the QC Minimodel.

#### 2. User parameters

None.

#### 3. Programmer’s guide

##### a. Input file for Step 1

QCFY2015.SAS7BDAT      Final SNAP QC database, in SAS format.

##### b. Output files from Step 1

MATHPC.HDR      ASCII header file that describes the record layout of the database file, MATHPC.BIN.

MATHPC.BIN      QC database file in standard binary form, in a hierarchical format (household record and then person records for individuals in the household).

##### c. Program for Step 1

MINIQ15.SAS

---

<sup>31</sup> MATH stands for Micro Analysis of Transfers to Households.

**d. Output variables for Step 1**

The variables are the same as those in the final SNAP QC database.

**e. Input files for Step 2**

MATHPC.HDR                      From Step 1.

MATHPC.BIN                      From Step 1.

**f. Output files from Step 2**

MATHPC.HDR                      ASCII header file that describes the record layout of the database file, MATHPC.BIN, in final MATH format.

MATHPC.BIN                      QC database file in standard binary form, in a hierarchical format (household record then person records for individuals in the household), in final MATH format.

**g. Programs for Step 2**

Subroutine tally:

- Rename unit-level variable FSDEPDED to HDEPDED (because FSDEPDED is reserved as a MATH model variable name).
- Delete the variable SEEDP and generate a new person-level SEEDP that is compatible with the MATH model random number generator MATHRAND.
- Create a person-level baselaw variable FSNABAWD (the number of adults without disabilities age 18 to 49 in childless units) on the unit head's record, by summing over individuals in the unit with NDISCA = 1. Set FSNABAWD to '0' for all other individuals.
- Create a person-level baselaw variable FSALLPA from the unit-level PURE\_PA and set it to '0' for all, or '1' for the unit head if PURE\_PA = 1.
- Ensure the asset test result FSATEST = 1 for all units.

**h. Output variables for Step 2**

The variables are the same as those in the SNAP QC database, plus the newly created variables.

**4. Technical description**

The following is a brief description of the procedures used to create a binary MATH-style version of the SNAP QC database.

**a. Create preliminary binary file**

We create a hierarchical file in standard binary format that contains one household-record per household in the SNAP QC database. Within each household, we create one person-record

for each person represented in the SNAP QC database and then convert proprietary SAS missing data codes as follows:

- . -1 (blank on raw QC file)
- A -2 (coded by Mathematica as out of range)
- B -3 (coded by QC reviewer as unknown)
- C -4 (unable to construct variable)
- D -5 (household participating in month not certified)
- E -6 (MFIP and SSI-CAP units, variable not relevant in benefit determination)

**b. Create preliminary header file**

We edit by hand the MATHPC.HDR file so that its record layout matches the output statement in MINIQC15.SAS.

**c. Create final binary and header files**

The model tracks, updates, and writes out the final header file, illustrated below.

MATHPC.BIN	FILE NAME
08/04/2016	CREATION DATE
14:37:34.91	CREATION TIME
FY2015	BASE YEAR
FY2015	YEAR AGED TO
avg	SIMULATION MONTH
48022	HOUSEHOLD COUNT
QC MINI	MODEL LABEL
2015.00	MODEL VERSION

Using the output database from MINIQC15.SAS, we run a QC Minimodel-based program to generate the final version of the QC Minimodel database. This program:

- Creates person-level seeds SEEDP to be used with the random number generator.
- Creates the variables FSDEPDED, FSNDIS, FSNONCIT, FSNABAWD, FSALLPA, and FSASTEST.

**B. QC-specific portion of the QC Minimodel**

**1. Introduction**

The QC Minimodel software is segregated into database-independent (generic) and database-specific components. In this section, we document the QC-specific portion of the model.

## 2. User parameters

The QC Minimodel contains the following model-specific user parameters:

1. SHELAP1 is the shelter limit for the contiguous U.S., Alaska, Hawaii, Guam, and the Virgin Islands.
2. MN\_BEN is a table by SNAP unit size with entries for the food portion amounts and the cash portion amounts required for calculating the benefit for MFIP participants.
3. MNERNDED is the value used for calculating the earned income deduction for MFIP participants.
4. XMN\_FIP is a flag that allows us to exclude MFIP participants from a simulation.
5. XSCAP\_AZ is a flag that allows us to exclude AZSNAP participants from a simulation.
6. XSCAP\_FL is a flag that allows us to exclude SUNCAP participants from a simulation.
7. XSCAP\_KY is a flag that allows us to exclude KYSAFE participants from a simulation.
8. XSCAP\_LA is a flag that allows us to exclude LaCAP participants from a simulation.
9. XSCAP\_MA is a flag that allows us to exclude BAYSTATECAP participants from a simulation.
10. XSCAP\_MD is a flag that allows us to exclude MSNAP participants from a simulation.
11. XSCAP\_MI is a flag that allows us to exclude MiCAP participants from a simulation.
12. XSCAP\_MS is a flag that allows us to exclude MSCAP participants from a simulation.
13. XSCAP\_NC is a flag that allows us to exclude NCSNAP participants from a simulation.
14. XSCAP\_NJ is a flag that allows us to exclude NJSNAP participants from a simulation.
15. XSCAP\_NM is a flag that allows us to exclude NMCAP participants from a simulation.
16. XSCAP\_NY is a flag that allows us to exclude NYSNIP participants from a simulation.
17. XSCAP\_PA is a flag that allows us to exclude PACAP participants from a simulation.
18. XSCAP\_SC is a flag that allows us to exclude SCCAP participants from a simulation.
19. XSCAP\_SD is a flag that allows us to exclude SD IN program participants from a simulation.
20. XSCAP\_TX is a flag that allows us to exclude SNAP-CAP participants from a simulation.

21. XSCAP\_VA is a flag that allows us to exclude VaCAP participants from a simulation.
22. XSCAP\_WA is a flag that allows us to exclude WASHCAP participants from a simulation.
23. DOSTAT allows us to include or exclude table statistics in the standard summary tables

For a list of generic FSTAMP user parameters, see documentation for the database-independent portion of the SNAP model (FSTAMP) in the *2011 MATH SIPP+ Microsimulation Model: Programmer's Guide, Technical Description and Codebook* (Schechter et al. 2014).

### 3. Programmer's guide

#### a. Input files

MATHPC.PRM	User parameter file (text file).
MATHPC.HDR	ASCII header file that describes the record layout of the database file, MATHPC.BIN.
MATHPC.BIN	SNAP QC database file in standard binary form, in a hierarchical format: household record, and then person records for individuals in the household. <sup>32</sup>

#### b. Output files

MATHPC.HDR <sup>33</sup>	ASCII header file that describes the record layout of the output database file, MATHPC.BIN.
MATHPC.BIN	SNAP QC database file in standard binary form, in a hierarchical format (unit record, and then person records for individuals in the unit).
MATHPC.TAB	Summary tables (text file).
MATHPC.OUT	Debug file.
Q15Pxxx_NAT_tabs_ddmmmyyyy.xlsx	Summary tables (Excel file) where xxx is the plan number and ddmmmyyyy is the date.

<sup>32</sup> Individuals on the file include SNAP participants plus nonparticipating household members whose income was considered in the eligibility and benefit determinations of the SNAP unit under review.

<sup>33</sup> Note that MATHPC.HDR and MATHPC.BIN are created only when the WRFILE is set to T (true).

### c. Programs

#### i. Subroutines

db_fs_counts	Increments debug counters and prints totals to MATHPC.OUT file.
db_fs_hh_definers	Creates variables that describe fixed characteristics of the SNAP household, such as the geographic indices used in the income screens and benefit calculations. If needed, the replicate weight file is opened, the replicate weight array is allocated, and the weights are read.
db_fs_display_partic_debug	Dummy routine for generic code compatibility.
db_fs_asset	Counts database-specific assets for SNAP units; since the SNAP QC database contains a reported value for unit countable assets, the routine only computes the asset limit.
db_fs_unit	Identifies which household members belong to which SNAP unit and determines whether a person is categorically excluded from any SNAP unit.
db_fs_locate_vars	Locates the database-specific input variables.
db_fs_parm_array_sizes	Sets the size of database-specific arrays.
db_fs_readparm	Reads database-specific user parameters from parameter file.
db_fs_validate_parm	Validates the user parameters using database-specific criteria.
db_fs_participation	Determines whether or not eligible units participate.
db_fs_display_debug	Prints database-specific debug about SNAP units and their eligibility determination.
db_fs_vars	Creates SNAP unit summary variables (for example, FSGRINC, FSNETINC).
db_fs_calc_benefit	Computes the benefit for participants in State programs with nonstandard benefit calculations.
db_fs_calc_pure_pa	Calculates FSALLPA, the pure PA flag.

db_fs_set_fsgptest	Recomputes gross income test for units with child support payment expenses.
db_fs_save_generic_vars	Dummy routine for generic code compatibility.
db_fs_display_summ_debug	Dummy routine for generic code compatibility.
db_fs_table_b	Dummy routine for generic code compatibility.
db_fs_prob_distr_tab	Dummy routine for generic code compatibility.
db_fs_calc_categ_elig	Dummy routine for generic code compatibility. Placeholder for any new BBCE coding.
db_fs_display_partic_debug	Dummy routine for generic code compatibility. Placeholder for any new participation algorithm debug.

## ii. Modules

fs_dbdefine	Common storage for database-specific household definer variables.
fs_dblocs	Common storage for database-specific variable locations.
fs_dbparm	Common storage for model-specific parameters. The medical deduction demonstration program parameters are also stored here.
fs_dbwork	Common storage for some working variables.

## d. Output variables

None. The database-independent portion of the MATH FSTAMP model creates all output variables.

## 4. Technical description

The primary purpose of the SNAP QC-specific model algorithms is to use SNAP QC-specific data elements to construct the variables needed by the database-independent portion of FSTAMP. Sections a, b, and c refer to code that is executed in the initialization phase (KEOF=1). The remaining sections refer to code executed in the processing phase (KEOF=2).

### a. Set parameter array sizes

#### i. Purpose

Certain parameters or features of the models are generic across the models, but vary in form or shape from model to model. In this section we set the database-specific elements. For example, all model use the maximum benefit parameters, but the number of regions where the maximum benefit is specified varies from model to model (seven regions in the QC Minimodel).

## ii. Specification

Deflation parameters. These are usually set to 1.0 (no deflations) in the QC Minimodel:

```
defl_gen = 1.0
defl_VEH = 1.0
```

State loops. There is no looping over states in the QC Minimodel. These parameters control looping:

```
start_kist = 1
end_kist = 1
gen_array_size = 1
```

Database-specific parameter dimensions for the QC Minimodel:

```
num_benmax_region = 7
num_benmin_region = 7
num_depmax_region = 5
num_screen_region = 3
num_shelcap_region = 5
num_standded_region = 5
max_nbr_asset_states = 57
```

## b. Validate user parameters

### i. Purpose

Although not SNAP QC-specific, two of the generic FSTAMP user parameters must have certain values for the QC Minimodel: BASELAW and FS\_VARS.

### ii. Specification

The QC Minimodel does not support BASELAW = ‘ ’ (baselaw eligibility simulation), because the baselaw simulation is determined by the SNAP QC file editing process rather than by FSTAMP (although the results of the SNAP QC file editing algorithms match the results of the FSTAMP algorithms exactly). For new baselaw runs, a new file created with WRFILE = T should be saved, and policy change simulations can be run off this baselaw by setting BASELAW = the suffix of the variables from the new baseline and setting FS\_VARS = BASELAW+1. For example, if baselaw variables have a suffix of “1” a new policy change simulation is created with FS\_VARS = 2 and saved as a new baseline. The new file now has two sets of variables, one with suffix = “1” and the other with suffix = “2”. To use the new baseline in a policy change simulation, point INDIR to the new file and set BASELAW = “2” and FS\_VARS = “3”.

FS\_VARS = 1 is not allowed, because the variables with a suffix of “1” are always on the file. The original “suffix 1” variables are always needed by the DBVARS routine for imputing medical, shelter, and child support payment expenses, and countable assets (when the unit composition is not that of the original unit). Users who change the “suffix 1” set of variables on the file should make sure that they understand the impact on the DBLOCS, DBDEFINE, and DBVARS calculations.



Certain parameters must stay constant from plan to plan in a multi-plan run. These include:

DOSTATS

XMN\_FIP

XSCAP\_xx, where xx is the state abbreviation of a state with an SSI\_CAP program.

A fatal error will be issued if the model detects a variation in any of these parameters from plan to plan.

### c. Locate the input variables used and the output variables created

#### i. Purpose

During KEOF = 1, before processing household records, obtain pointers to variables needed as input to the database-specific model algorithms.

#### ii. Specification

Use the LOCVAR supervisor routine to obtain and store locations for the following variables:

AGE	FOSTER	HOMEDED	SOCSEC
AK_AREA	FSAFIL	HOMELSDDED	SSI
CAT_ELIG	FSASSET 1	MED_DED_DEMO	SSI_CAP
CONT	FSCSDED	MINIMUM_BEN	STATE
CSUPRT	FSMEDEXP	MN_FIP	TANF
CTZN	FSNDIS 1	NDISCA	UNEMP
DEEM	FSNELDER 1	OTHERN	VET
DIS	FSNKID 1	OTHGOV	WAGES
DIVER	FSSLTEXP	OTHUN	WCOMP
DPCOST	FSUN 1	PURE_PA	WGESUP
EDLOAN	FSUSIZE 1	RACETH	WRKREG
EITC	FSVEHAST	RCNTACTN	YRMONTH
EMPRG	FYWGT	REL	
ENERGY	GA	SEX	
EXFSCSDED	HDEPDED	SLFEMP	

### d. Construct household definer variables

#### i. Purpose

For each household, we create household definer variables that are used in subsequent calculations.

## ii. Specification

If statistics are selected, we open the replicate weight file and read in the weights for each household. We set WGT to FYWGT. We set geographic indicators for the 48 contiguous United States plus the District of Columbia, Alaska, Hawaii, Guam, and Virgin Islands. GEOG\_DED indexes the standard deduction, dependent care deduction, and shelter deduction arrays; GEOG\_SCRN indexes the gross and net income screen arrays; GEOG\_BEN indexes the maximum benefit array; and GEOG\_POV indexes the POVMONTH array.

```

select case (state%ihhld)
  case(15)                                !! hawaii
    geog_ded = 3
    geog_scrn = 3
    geog_ben = 5
  case(2)                                  !! alaska
    geog_ded = 2
    geog_scrn = 2
select case(l_ak_area%ihhld)
  case(1)                                  !! alaska rural i
    geog_ben = 3
  case(2)                                  !! alaska rural ii
    geog_ben = 4
  case default
    geog_ben = 2                          !! alaska urban is default
end select
  case(66)                                  !! guam
    geog_ded = 4
    geog_scrn = 1
    geog_ben = 6
  case(78)                                  !! virgin islands
    geog_ded = 5
    geog_scrn = 1
    geog_ben = 7
  case default
    geog_ded = 1
    geog_scrn = 1
    geog_ben = 1
end select

geog_pov = geog_scrn
region = region_lookup(state%ihhld)
fstate = state%ihhld

```

We set skip\_hh\_flags for MN\_FIP and SSI\_CAP units according to the “skip” parameters, which vary by State.

Next, we assign SNAP reporting status, FS\_REPORTER, and set it to true for all units. Then, we obtain *original* SNAP QC database values for imputation of shelter expenses, medical expenses, child support expenses, and dependent care deductions (FSSLTEXP, FSMEDEXP, FSCSDDED, FSDEPDDED) in cases where the SNAP unit is not the original SNAP unit. Note that all of the calculations below *must* be based on the original SNAP unit and its data, even if a new baselaw has been constructed. Also, we set original assets and original unit counts and flags.

```

orig_fsmedexp = l_original_fsmedexp%ihhld
orig_fssltextp = l_original_fssltextp%ihhld

```

```

orig_fsdepded = I_original_fsdepded%ihhld
orig_fscsded = I_original_fscsded %ihhld

orig_fsuhead = 0
do ip = 1, ctprrh
if (I_original_fsun%iper(ip) == ip) orig_fsuhead = ip
end do
orig_fsusize = I_original_fsusize %iper(orig_fsuhead)
orig_fsnkid = I_original_fsnkid %iper(orig_fsuhead)
orig_fsnelder = I_original_fsnelder%iper(orig_fsuhead)
orig_fsndis = I_original_fsndis %iper(orig_fsuhead)
orig_fsasset = I_original_fsasset %iper(orig_fsuhead)
orig_kids_lt15 = 0
hhtanf = 0
do ip = 1, ctprrh
if (I_tanf%iper(ip) > 0) hhtanf = hhtanf + tanf%iper(ip)
if (I_original_fsun%iper(ip) == 0) cycle
if (I_age%iper(ip) < 15 .and. age%iper(ip) >= 0) orig_kids_lt15 = orig_kids_lt15 + 1
end do

```

## e. Construct SNAP unit

### i. Purpose

We use the “FSUN 1” code to construct the SNAP unit. We make sure that every SNAP unit has a head.

### ii. Specification

We assign FSUN (SNAP unit number) to each person in the household:

```

do ip = 1, ctprrh
fsun(ip) = I_original_fsun%iper(ip)
end do

```

We identify units that no longer have a head due to a policy change simulation, and assign them a new head:

```

do ip = 1, ctprrh
if (fsun(ip) == 0) cycle
if (fsun(fsun(ip)) /= fsun(ip)) then
do jp = ip+1, ctprrh
if (fsun(jp) == fsun(ip)) fsun(jp) = ip
end do
fsun(ip) = ip
end if
end do

```

## f. Create SNAP unit summary variables

### i. Purpose

We summarize characteristics of each SNAP unit by adding the countable income of all household members and counting various types of people in the unit (such as number of elderly members and number of children).

### ii. Specification

For each unit, we aggregate the countable income of all members in the household. Gross income is the sum of all earned and unearned income. When appropriate, we exclude child support expenses from the gross income. (There are separate values that indicate expenses to be subtracted before the gross income test (EXFSCSDED) and from expenses to be subtracted before the net income test (FSCSDED).

We loop over all individuals in the household:<sup>34</sup>

```
do ip = 1, cprhh
  !----- WELFARE Support (Note: missing income values are coded as < 0)
  if (L_tanf%iper(ip) > 0) fstanf(iunit) = fstanf(iunit) + L_tanf%iper(ip)
  if (L_ssi %iper(ip) > 0) fsssi (iunit) = fsssi (iunit) + L_ssi %iper(ip)
  if (L_ga %iper(ip) > 0) fsga (iunit) = fsga (iunit) + L_ga %iper(ip)

  !----- Earnings
  if (L_wages %iper(ip) > 0) fsearn(iunit) = fsearn(iunit) + L_wages %iper(ip)
  if (L_othern%iper(ip) > 0) fsearn(iunit) = fsearn(iunit) + L_othern%iper(ip)
  if (L_slfemp%iper(ip) > 0) fsearn(iunit) = fsearn(iunit) + L_slfemp%iper(ip)

  !---- Other unearned income
  if (L_eitc%iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + L_eitc%iper(ip)
  if (L_othgov%iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + L_othgov%iper(ip)
  if (L_socsec%iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + L_socsec%iper(ip)
  if (L_unemp %iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + L_unemp%iper(ip)
  if (L_vet %iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + L_vet%iper(ip)
  if (L_wcomp %iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + L_wcomp %iper(ip)
  if (L_edloan%iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + L_edloan%iper(ip)
  if (L_csuprt%iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + L_csuprt%iper(ip)
  if (L_deem %iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + L_deem %iper(ip)
  if (L_cont %iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + L_cont %iper(ip)
  if (L_othun %iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + L_othun %iper(ip)
  if (L_diver %iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + L_diver %iper(ip)
  if (L_wgesup %iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + L_wgesup %iper(ip)
  if (L_energy %iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + L_energy %iper(ip)
  if (L_foster %iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + L_foster %iper(ip)

end do ! end of person loop

fsgrinc(iunit) = fsgrinc(iunit) + fsearn(iunit) + fsssi(iunit) + fSTANF(iunit) + fsga(iunit)
fsgrinc(iunit) = fsgrinc(iunit) - exfscsded%iper(iunit)

end do ! end of unit loop
```

<sup>34</sup>All individuals in the household include all individuals in the SNAP unit under review, plus individuals outside the unit that contribute income to the unit.

For each unit, we loop over individuals and count members with various characteristics:

- Total members
- Number of adults and number of female adults (those with missing age are included as adults)
- Number of children, number of school-aged children, number of toddlers (children under age 2), and number of children older than toddlers
- Number of elderly members
- Number of noncitizens
- Number of ABAWDs
- Number of disabled members

```

do iunit = 1, ctprrh
  do ip = 1, ctprrh
    if (fsun(ip) /= iunit) cycle ! cycle if person not in the SNAP unit
      fsusize(iunit) = fsusize(iunit) + 1
      if (l_age%iper(ip) > max_kid_age .or. l_age%iper(ip) < 0) then
        fsnadult(iunit) = fsnadult(iunit) + 1
        if (sex%iper(ip) == 2) femadults = femadults + 1
      else
        fsnkid(iunit) = fsnkid(iunit) + 1
        if (l_age%iper(ip) >= min_school_age) fsnk5t17(iunit) = fsnk5t17(iunit) + 1
        if (l_age%iper(ip) < max_toddler_age) then
          fndepl2(iunit) = fndepl2(iunit) + 1
        else
          fndepge2(iunit) = fndepge2(iunit) + 1
        end if
      end if

      if (l_age%iper(ip) >= min_elderly_age) fsnelder(iunit) = fsnelder(iunit) + 1
      if (l_ctzn%iper(ip) > 2) fsnoncit(iunit) = fsnoncit(iunit) + 1
      if (l_NDISCA%iper(ip) == 1 .AND. l_fsafil%iper(ip) == 1) fsnabawd(iunit) = fsnabawd(iunit) + 1
      if (l_dis%iper(ip) == 1) fsndis(iunit) = fsndis(iunit) + 1

    end do ! end of person loop
  end do ! end of loop over all fs units in the household

```

We identify SNAP units headed by a single female. This is not used for any eligibility determination. It is used for summary counts only (Gainer/Loser tables).

```
if (fsnadult(iunit) == 1 .and. femadults==1 .and. fsnkid(iunit) >0) fsngmom(iunit) = 1
```

### **g. Impute assets, shelter expenses, medical expenses, homeless deduction, and child support payment expenses when SNAP unit is not the original SNAP unit**

#### **i. Purpose**

Asset and expense data recorded on the SNAP QC database pertain to the actual SNAP unit sampled by the QC System. However, the QC Minimodel has the capability to simulate SNAP units with compositions that are different from the composition of the original SNAP unit by removing individuals with certain characteristics from the original SNAP unit.

The QC system records countable income at the person-level for every household member whose income is used to determine the SNAP unit's eligibility. However, asset and expense data are recorded only at the unit level for the original SNAP unit. Thus, the QC Minimodel uses the original SNAP unit's asset and expense data, along with algorithms described below, to impute expenses and assets for any simulated SNAP unit that has a composition different from that of the original SNAP unit.

Many different algorithms could be used to impute assets and expenses in simulations that involve changes to SNAP unit composition. The best algorithm to use depends on the type of policy change to be simulated. The algorithms described below have been incorporated into the QC Minimodel because they have been used for numerous policy change simulations requested by FNS. These algorithms will work well for many types of simulations, but they are not designed to be generally applicable.

## ii. Specification

**Countable assets.** For all simulated SNAP units, the QC Minimodel assigns the countable assets of the original SNAP unit:

$$fsasset(iunit) = orig\_fsasset$$

While the value of countable assets is kept constant when the unit composition changes, the removal of certain individuals from the SNAP unit may mean that a different asset limit is applicable, thus resulting in some units losing asset eligibility. For example, the removal of elderly members or individuals with disabilities from the SNAP unit would lead to a lower asset limit.

**Shelter expenses.** For all simulated SNAP units, the QC Minimodel assigns shelter expenses equal to the product of the number of individuals in the unit and the per capita shelter expenses of the original SNAP unit:

$$fssltxp(iunit) = nint( orig\_fssltxp * float(fsusize(iunit)) / orig\_fsusize )$$

In reality, a household's shelter expenses are assigned to each SNAP unit in the household, based on the share of shelter expenses actually *paid* by each member of each SNAP unit. Although the SNAP QC data contain no information regarding which individuals are responsible for paying shelter expenses, one could impute payment responsibility based on income; a person with 65 percent of a household's income would be assumed to be responsible for paying 65 percent of the household's shelter expenses. Again, the best imputation depends on the type of policy change to be simulated.

**Medical expenses.** The QC Minimodel imputes medical expenses based either on the number of elderly members or individuals with disabilities in the original unit. If the original unit contains no elderly individuals and no individuals with disabilities, then a medical deduction is not allowed—either in the original SNAP QC file editing process or in any QC Minimodel simulations. In policy change simulations, the medical expense is prorated by the ratio of elderly individuals and individuals with disabilities in the policy change simulation relative to the number of elderly individuals and individuals with disabilities in baselaw:

```

if (orig_fsmedexp > 0) then
  if (orig_fsnelder + orig_fsndis > 0) then
    fsmedexp(iunit) = nint (real (orig_fsmedexp * (fsnelder(iunit) + fsndis(iunit))
      / (orig_fsnelder + orig_fsndis))
  end if
else
  fsmedexp(iunit) = 0
end if

```

In addition, we identify units participating in medical deduction demonstration programs in the 16 States with such demonstrations. See Appendix F, Table F.4 for more detail on the standard medical deduction amounts for these States:

```

do i = 1, num_med_demo
  if (fstate == med_demo_state(i) .and. fsmedexp(iunit) > 0 .and. l_yrmonth%ihhld >=
    med_demo_date(i) ) then
    if (fsmedexp(iunit) <= (med_demo_thres(i)-35)) fsmedexp(iunit) = med_demo_min(i)
  end if
end do

```

**Child support payment expenses.** The QC Minimodel imputes the child support payment expenses of the original unit to the head of the original unit. The child support deduction is equal to the child support expenses.

```

if (orig_fscsded > 0 .and. fsun(orig_fsuhead) == iunit) fscspded(iunit) = orig_fscsded

```

For a policy change simulation, we assign child support expenses to the simulated SNAP unit that contains the head of the original unit. If the head of the original unit does not belong to any of the newly simulated units, then the child support expenses are not used.

**Homeless deduction.** The QC Minimodel assigns the homeless deduction attributed to the original unit to all simulated SNAP units within the household.

```

if (l_homeded%ihhld == 3) then
  fshomeDED(IUNIT) = l_homelstded%ihhld
end if

```

**Recompute gross income test.** In the QC Minimodel, the gross income test is recalculated for units with child support payment expenses:

```

if (fscspded(iunit) > 0 .and. fsgrinc(iunit) - fscspded(iunit) <= GROSS_SCREEN(IUNIT)) then
  FSGRTEST(IUNIT) = 1
end if

```

## h. Select participants

### i. Purpose

After eligibility is determined for a SNAP unit in the household, the model must simulate whether or not the unit decides to participate. In the QC Minimodel, we simulate all SNAP-eligible units on the file as participants because every household on the file did in reality participate in SNAP. We believe that this all-eligible-units-participate rule is reasonable in most cases. On the other hand, if a large reduction in SNAP benefits is simulated, the user may want to make some out-of-model adjustments to account for eligible SNAP units that may not

continue to participate. If a baselaw eligible unit is simulated to have a zero benefit under a policy change simulation, the unit is treated as ineligible in the simulation results.

## ii. Specification

```
do iunit = 1, ctprrh
  fspart(iunit) = 0
  if (fsun (iunit) /= iunit) cycle      ! not the SNAP unit head
  if (fsben(iunit) > 0) fspart(iunit) = 1 ! all eligible units participate
end do
```

We describe in detail the FSBEN calculation in the FSBEN entry of the codebook (Chapter V). We describe MFIP and State SSI-CAP programs in Chapter III, and we list the MFIP parameters and SSI-CAP standard benefit and shelter amounts in Appendix F.



## V. CODEBOOK FOR THE FY 2015 SNAP QC DATABASE

In this chapter, we describe the variables on the FY 2015 SNAP QC database, including an overview of the types of variables on the file and a list and detailed description of each variable.

### A. Overview of variables on the QC file

For each variable in the FY 2015 SNAP QC database, the Codebook provides the name, origin, label, range of values, and a list of values or description. This section explains how to interpret and use that information.

#### 1. Origin: Reported versus constructed

The “Origin” column in the codebook indicates the source of each particular variable as either reported or constructed. Variables coded as “R” are those reported on the QC Review Schedule input form and have been read directly from the raw datafile, although some editing may have taken place as noted in the variable description. Variables coded as “C” are constructed or recoded variables that are derived from reported variables and program parameters, such as the Thrifty Food Plan and the SNAP benefit reduction rate. Constructed variables are the best variables for analytical purposes because inconsistencies have been corrected.

The following variables are used in creating the tables in the “Characteristics of Supplemental Nutrition Assistance Program Households” report series and should be used to obtain consistent results:

FSBEN	Unit SNAP benefit amount
FSUSIZE	Unit size
FSGRINC	Unit total income
FSNETINC	Unit net income
FSERNDDED	Unit earnings deduction
TPOV	Unit poverty percentage

#### 2. Missing values

Table V.1 lists the missing value conventions used in the restricted use version of the SNAP QC database. Beginning in FY 2015, the public use version of the SNAP QC database includes only one value (“.”) for all missing data.

**Table V.1. Codes for missing data in the restricted use SNAP QC database**

ASCII or binary codes	SAS codes	Description
-1	.	Blank on source file
-2	.A	Value out of range
-3	.B	Coded by QC reviewer as unknown (field coded with all 9s)
-4	.C	Pertains to constructed variables only; variable could not be constructed or calculated due to missing data
-5	.D	For CERTMTH variable, indicates that unit is participating in months not certified
-6	.E	For SSI-CAP and MFIP units, variables that are not relevant in the benefit determination

### 3. Using the SNAP QC database

The FY 2015 SNAP QC database is a SAS file with 48,022 observations from 12 sample months—October 2014 through September 2015 for all States, the District of Columbia, Guam, and the Virgin Islands. To conduct analyses for a specific calendar month, the user should select observations sampled in that month by using the year month (YRMONTH) variable. The year month variable is a six-digit code with the first four digits indicating the year and the last two digits indicating the month. For example, to conduct an analysis based on observations from January 2015, the user should select all observations with a YRMONTH code equal to “201501.”

After selecting the desired observations, the user must assign a weight to each observation so that the sample represents the national SNAP caseload. The weights, stored in the variable HWGT, are computed for each of the independent monthly samples and are based on actual program participation. When analyzing one specific calendar month, the user should use the YRMONTH code to select the correct observations and then use the HWGT variable. However, if the analysis is based on more than one month, and an average monthly estimate is desired, the user should divide HWGT by the number of months being analyzed. The FYWGT variable should be used for all full-year tabulations (FYWGT equals HWGT divided by 12 for all States).

The tables in the “Characteristics of Supplemental Nutrition Assistance Program Households” report series are based on the full-year sample. To create the tables, we select all observations for all months and weight the observations by FYWGT to reflect the national monthly average caseload during the fiscal year.

The SNAP QC database can be used to obtain person-level information along with unit-level data. An integer from 1 to 29, representing up to 29 people in a household, is attached to each person-level variable. For ease, users often place these variables in arrays and use indices to access the data. One of the key person-level variables is the affiliation code FSAFILi. An FSAFILi value of 1 indicates that the person participated in SNAP.

### B. Codebook

This codebook lists and describes each variable in the FY 2015 SNAP QC database. The unit-level variables are listed first, followed by the person-level variables and then the detailed error findings variables, for a total of nine categories.

The unit-level variables are divided into the following six categories:

1. Unit-level QC review administrative data
2. Unit-level demographics and sample weights
3. Unit-level countable income
4. Unit-level countable assets
5. Unit-level expenses and deductions
6. Unit-level benefits

The person-level variables are divided into two categories:

7. Person-level characteristics
8. Person-level income

One category covers detailed error findings variables:

9. Detailed error findings

The categories appear in the order shown above. The variables in each category are listed alphabetically. Two codebooks are presented, both sorted in the same order. The first codebook—the quick-reference codebook—lists only the variable name, its origin, and a brief description. The second codebook—the detailed codebook—lists the variable name, its origin, and a description that includes all the valid values of the variable for discrete variables and the range of valid values for continuous variables (such as HWGT).

Note: Detailed information on each variable in the database can be found starting on page 59.

**Unit QC review administrative data**

ACTNTYPE	R	Type of action
ALLADJ	R	Allotment adjustment
AMTADJ	R	Amount of allotment adjustment
AUTHREP	R	Authorized representative
BENFIX	C	Benefit allotment (SNAP benefit) adjusted for errors
CASE	R	Case classification
CAT_ELIG	C	Indicator of categorical eligibility status
CERTMTH	R	Months in certification period
EXPEDSER	R	Received expedited service
HHLDNA	C	SNAP household identification number
LASTCERT	C	Months since last SNAP certification
LOCALCOD	R	Local agency code (not retained on public use file)
MED_DED_DEMO	C	Indicator of medical deduction demonstration participation
MN_FIP	C	Indicator of MFIP participation
PURE_PA	C	Indicator of pure cash public assistance status
RCNTACTN	R	Most recent action on case
REP_SYS	R	Reporting requirement
REVNUM	R	State QC review number (not retained on public use file)
SSI_CAP	C	Indicator of SSI-CAP participation
STATUS	R	Status of case error findings
YRMONTH	R	Sample year and month

**Unit demographics and sample weights**

AK_AREA	C	Alaska region (not retained on public use file)
CERTHHSZ	R	Certified unit size
COMPOSITION	C	Unit composition
COUNTYCD	C	FIPS code for county (not retained on public use file)
CTPRHH	C	Number of people in household
FSDIS	C	Indicator of non-elderly individuals with disabilities in unit
FSELDER	C	Indicator of elderly individuals in unit
FSKID	C	Indicator of children in unit
FSNDIS	C	Number of non-elderly individuals with disabilities in unit
FSNDISCA	C	Number of adults age 18 to 49 without disabilities in childless units
FSNELDER	C	Number of elderly individuals in unit
FSNGMOM	C	Indicator of single-female-headed unit
FSNK0T4	C	Number of preschool-age children in unit
FSNK5T17	C	Number of school-age children in unit
FSNKID	C	Number of children in unit
FSNONCIT	C	Number of noncitizens in unit
FSUSIZE	C	Constructed certified unit size
FYWGT	C	Weight used for full-year calculations

\*R indicates the variable is from the raw data; C indicates the variable was constructed.

**VARIABLE****ORIGIN\*****DESCRIPTION***Quick-Reference Codebook*

HWGT	C	Monthly sample weight
NONCIT_HEAD	C	Unit head citizenship indicator
RAWHSIZE	R	Reported number of people in household
REGION	C	Constructed census region code
REGIONCD	R	FNS region code
STATE	R	FIPS code for State or territory
STATENAME	C	State or territory
STRATUM	R	Stratum identification
TANF_IND	C	Indicator of TANF receipt for unit
TPOV	C	Gross income/poverty level ratio
URBRUR	C	Urban/rural indicator (not retained on public use file)
WRK_POOR	C	Indicator of working poor unit

**Unit countable income (monthly dollar amounts)**

FSCONT	C	Countable unit income from contributions
FSCSUPRT	C	Countable unit child support payment income
FSDEEM	C	Countable unit deemed income
FSDIVER	C	Countable unit State diversion payments
FSEARN	C	Countable unit earned income
FSEDLOAN	C	Countable unit income from educational grants and loans
FSEITC	C	Countable unit income from earned income tax credit
FSENERGY	C	Countable unit energy assistance income
FSGA	C	Countable unit general assistance benefits
FSGRINC	C	Final gross countable unit income
FSNETINC	C	Final net countable unit income
FSOTHERN	C	Countable unit other earned income
FSOTHGOV	C	Countable unit income from other government benefits
FSOTHUN	C	Countable unit other unearned income
FSSLFEMP	C	Countable unit self-employment income
FSSOCSEC	C	Countable unit Social Security income
FSSSI	C	Countable unit SSI benefits
FSTANF	C	Countable unit TANF payments
FSUNEARN	C	Countable unit unearned income
FSUNEMP	C	Countable unit unemployment compensation benefits
FSVET	C	Countable unit veterans' benefits
FSWAGES	C	Countable unit wages and salaries
FSWCOMP	C	Countable unit workers' compensation benefits
FSWGESUP	C	Countable unit wage supplementation income
RAWGROSS	R	Reported gross countable unit income
RAWNET	R	Reported net countable unit income

**Unit countable and reported assets**

FSASSET	C	Total countable assets under State rules
FSVEHAST	C	Countable nonexcluded vehicles' value under State rules
LIQRESOR	C	Countable liquid assets under State rules
OTHNLRES	C	Countable other nonliquid assets under State rules

RAWLQRES	R	Reported liquid assets
RAWOTRES	R	Reported other nonliquid assets
RAWRPROP	R	Reported real property
RAWVHAST	R	Reported nonexcluded vehicles' value
REALPROP	C	Countable real property under State rules
VEHICLEA	R	Reported category for first vehicle
VEHICLEB	R	Reported category for second vehicle

**Unit expenses and deductions**

ERN_INC_DED_PCT	C	Percentage used to calculate earnings deduction
EXCL_FSCSDED	C	Child support excluded from gross income
FSCSDED	C	Child support expense deduction
FSCSEXP	R	Reported child support expense deduction
FSDEPDED	R	Reported dependent care deduction
FSDEPDE2	C	Marginal effectiveness of dependent care deduction
FSERNDED	C	Calculated earned income deduction
FSERNDE2	C	Marginal effectiveness of earned income deduction
FSMEDDED	C	Calculated medical deduction
FSMEDDE2	C	Marginal effectiveness of medical deduction
FSMEDEXP	R	Reported medical expenses
FSSLTDED	C	Calculated excess shelter deduction
FSSLTDE2	C	Marginal effectiveness of excess shelter deduction
FSSLTEXP	C	Calculated shelter expenses
FSSTDDDED	C	Standard deduction
FSSTDDDE2	C	Marginal effectiveness of standard deduction
FSTOTDED	C	Total deductions
FSTOTDE2	C	Marginal effectiveness of total deduction
HOMEDDED	R	Indicator of homelessness
HOMELESS_DED	C	Amount of homeless deduction
RAWERND	R	Reported earned income deduction
RENT	R	Rent/mortgage amount
SHELCAP	C	Maximum allowable shelter expense deduction
SHELDED	R	Reported shelter deduction
SUA1	R	Standard utility allowance – usage and entitlement
SUA2	R	Standard utility allowance – prorated
UTIL	R	Utility amount

**Unit benefits**

AMTERR	R	Amount of benefit in error
ASSLIM	C	Asset limit
BENMAX	C	Maximum benefit amount
FSASTEST	C	Indicator of passing asset test
FSBEN	C	Final calculated benefit
FSGRTEST	C	Indicator of passing gross income test
FSMINBEN	C	Received minimum benefit
FSNETEST	C	Indicator of passing net income test

**VARIABLE****ORIGIN****DESCRIPTION***Quick-Reference Codebook*

GROSSCRN	C	Gross income screen
MINIMUM_BEN	C	Minimum benefit amount
NETSCRN	C	Net income screen
RAWBEN	R	Reported SNAP benefit received

**Person-level characteristics: i = 1 to 29**

ABWDSTi	R	ABAWD status
AGEi	R	Age
CTZNi	R	Citizenship status
DISi	C	Person-level disability indicator
DPCOSTi	R	Reported dependent care cost
EMPRGi	R	SNAP Employment and Training program status
EMPSTAi	R	Employment status – type
EMPSTBi	R	Employment status – amount
FSAFILi	R	SNAP case affiliation
FSUNi	C	Position of head of SNAP unit
NDISCAi	C	Adult age 18 to 49 without disabilities in childless unit status
RACETHi	R	Race/ethnicity
RELi	R	Relationship to head of household
SEXi	R	Sex
WORKi	C	Person-level working indicator
WRKREGi	R	Work registration status
YRSEDi	R	Highest educational level completed

**Person-level countable income (monthly dollar amounts): i = 1 to 29**

CONTi	R	Countable income from contributions
CSUPRTi	R	Countable child support payment income
DEEMi	R	Countable deemed income
DIVERi	R	Countable State diversion payments
EDLOANi	R	Countable income from educational grants and loans
EITCi	R	Countable income from earned income tax credit
ENERGYi	R	Countable energy assistance income
GAi	R	Countable general assistance benefits
OTHERNi	R	Countable other earned income
OTHGOVi	R	Countable income from other government benefits
OTHUNi	R	Countable other unearned income
SLFEMPi	R	Countable self-employment income
SOCSECi	R	Countable Social Security income
SSi	R	Countable SSI benefits
TANFi	R	Countable TANF payments
UNEMPi	R	Countable unemployment compensation benefits
VETi	R	Countable veterans' benefits
WAGESi	R	Countable wages and salaries
WCOMPi	R	Countable workers' compensation benefits
WGESUPi	R	Countable wage supplementation income

**Detailed error findings: i = 1 to 9**

AGENCYi	R	Agency or client responsibility
AMOUNTi	R	Variance dollar amount
DISCOVi	R	Variance discovery
E_FINDGi	R	Error finding
ELEMENTi	R	Variance element
NATUREi	R	Nature of variance
OCCDATEi	R	Variance occurrence date
TIMEPERi	R	Variance time period
VERIFI	R	Variance verification



**Unit QC review administrative data**

ACTNTYPE	R	TYPE OF ACTION Range = (1, 2) 1 = Certification 2 = Recertification
ALLADJ	R	ALLOTMENT ADJUSTMENT Range = (1, 3) 1 = No adjustment 2 = Prorated benefit 3 = Other adjustment
AMTADJ	R	AMOUNT OF ALLOTMENT ADJUSTMENT Range = (0, 917)
AUTHREP	R	AUTHORIZED REPRESENTATIVE Range = (1, 2) 1 = Used to make application 2 = Not used to make application
BENFIX	C	BENEFIT ALLOTMENT ADJUSTED FOR ERRORS Range = (0, 9986)
CASE	R	CASE CLASSIFICATION Range = (1, 3) 1 = Included in error rate calculation 2 = Excluded from error rate calculation – processed by SSA worker 3 = Excluded from error rate calculation, as designated by FNS (for example, demonstration project, simplified SNAP)
CAT_ELIG	C	INDICATOR OF CATEGORICAL ELIGIBILITY STATUS Range = (0, 2) 0 = Unit not categorically eligible for benefits 1 = Unit reported as categorically eligible for benefits and therefore not subject to SNAP income or asset tests (unit subject to State-determined income and/or asset limit on cash Public Assistance [PA] or noncash TANF-funded benefit used to confer categorical eligibility) 2 = Unit recoded as categorically eligible after being identified as pure cash PA or as meeting State-specified criteria for BBCE and therefore not subject to SNAP income or asset tests

<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Unit QC Review Administrative Data</i>
CERTMTH	R	MONTHS IN CERTIFICATION PERIOD Range = (0, 84) Number of months SNAP unit was certified to participate during current certification or recertification period.	
EXPEDSER	R	RECEIVED EXPEDITED SERVICE Range = (1, 3) 1 = Entitled to expedited service and received benefits within Federal time frame 2 = Entitled to expedited service but did not receive benefits within Federal time frame 3 = Not entitled to expedited service	
HHLDNA	C	SNAP HOUSEHOLD IDENTIFICATION NUMBER Range = (1, 55505) Position of unit in unedited SNAP QC file (unique unit identifier).	
LASTCERT	C	MONTHS SINCE LAST SNAP CERTIFICATION Range = (0, 99)	
LOCALCOD	R	LOCAL AGENCY CODE (not retained on public use file) Range = (0, 930) Designates local agency and allows grouping of data by county or county equivalent (may be FIPS code or alternative classification).	
MED_DED_DEMO	C	INDICATOR OF MEDICAL DEDUCTION DEMONSTRATION PARTICIPATION Range = (0, 1) 0 = No 1 = Yes	
MN_FIP	C	INDICATOR OF MFIP PARTICIPATION <b>We recommend using MN_FIP with the understanding that it may slightly undercount the number of MFIP units. We caution against using MFIP units' TANF income. See Appendix A for details.</b> Range = (0, 1) 0 = No 1 = Yes	

<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Unit Demographics and Sample Weights</i>
PURE_PA	C	INDICATOR OF PURE CASH PUBLIC ASSISTANCE STATUS Range = (0, 1) 0 = No 1 = Yes A unit is pure cash public assistance (pure PA) when everyone in the unit receives TANF, GA, or SSI or unit has TANF income and every adult receives TANF, GA, or SSI.	
RCNTACTN	R	MOST RECENT ACTION ON CASE Range = (20010301, 20150930) Date the case was certified or recertified for participation in sample month under review (in yyyyymmdd format).	
REP_SYS	R	REPORTING REQUIREMENT Range = (1, 10) 1 = \$25 change reporting 2 = \$80 change in earned income 3 = \$100 change in earned income 4 = Status reporting 5 = 5-hour change in hours worked and expected to continue over a month 6 = Simplified reporting (exceeding 130 percent of income poverty guidelines) 7 = Quarterly reporting 8 = Monthly reporting 9 = Transitional benefits (no reporting requirement) 10 = Other	
REVNUM	R	STATE QC REVIEW NUMBER (not retained on public use file) Range = (1, 910576)	
SSI_CAP	C	INDICATOR OF SSI-CAP PARTICIPATION <b>We recommend caution when using SSI_CAP with the understanding that it may underestimate the actual number of SSI-CAP units in some States. See Appendix A for details.</b> Range = (0, 3) 0 = Not in SSI-CAP 1 = SSI-CAP case with standard shelter expenses 2 = SSI-CAP case with standard benefit, consistent with program rules 3 = SSI-CAP case with standard benefit, inconsistent with program rules	

<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Unit Demographics and Sample Weights</i>
STATUS	R	STATUS OF CASE ERROR FINDINGS Range = (1, 3) 1 = Amount correct 2 = Overissuance 3 = Underissuance	
YRMONTH	R	SAMPLE YEAR AND MONTH Range = (201410, 201509) Allows user to select one or more sample months from full-year file for analyses. The YRMONTH variable is a six-digit code; the first four digits indicate the sample year and the last two indicate the month. To select observations from January 2015, for example, YRMONTH should equal 201501.	

### **Unit demographics and sample weights**

AK_AREA	C	ALASKA REGION (not retained on public use file) Range = (1, 3) 1 = Alaska Rural I 2 = Alaska Rural II 3 = Alaska Urban	
CERTHHSZ	R	CERTIFIED UNIT SIZE Range = (1, 29)	
COMPOSITION	C	UNIT COMPOSITION Range = (0, 5) 0 = No children 1 = Child(ren) only 2 = Child(ren) and one male adult 3 = Child(ren) and one female adult 4 = Child(ren) and married unit head (spouse may be nonparticipating; includes married teens) 5 = Child(ren) with other multiple adults	
COUNTYCD	C	FIPS CODE FOR COUNTY (not retained on public use file) Range = (1, 840)	
CTPRHH	C	NUMBER OF PEOPLE IN HOUSEHOLD Range = (1, 29) Number of people in household with nonmissing person-level information.	

<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Unit Demographics and Sample Weights</i>
FSDIS	C	INDICATOR OF NON-ELDERLY INDIVIDUALS WITH DISABILITIES IN UNIT Range = (0, 1) <b>We recommend caution when using FSDIS with the understanding that it likely undercounts the number of units with non-elderly individuals with disabilities.</b> 0 = No 1 = Yes A SNAP unit with one or more individuals that are defined as disabled (DIS <sub>i</sub> = 1).	
FSELDER	C	INDICATOR OF ELDERLY INDIVIDUALS IN UNIT Range = (0, 1) 0 = No 1 = Yes A SNAP unit with one or more elderly individuals.	
FSKID	C	INDICATOR OF CHILDREN IN UNIT Range = (0, 1) 0 = No 1 = Yes A SNAP unit with one or more children under age 18.	
FSNDIS	C	NUMBER OF NON-ELDERLY INDIVIDUALS WITH DISABILITIES IN UNIT <b>We recommend using FSNDIS with the understanding that it likely undercounts the number of non-elderly individuals with disabilities and the number of units containing such individuals. See Appendix A for details.</b> Range = (0, 9) Number of individuals in the unit that are defined as disabled (DIS <sub>i</sub> = 1).	
FSNDISCA	C	NUMBER OF ADULTS AGE 18 to 49 WITHOUT DISABILITIES IN CHILDLESS UNITS <b>We recommend using FSNDISCA with the understanding that it likely overcounts the number of adults without disabilities. See Appendix A for details.</b> Range = (0, 5) Number of adults age 18 to 49 without disabilities in childless SNAP units.	
FSNELDER	C	NUMBER OF ELDERLY INDIVIDUALS IN UNIT Range = (0, 3) Number of people age 60 or older in SNAP unit.	

<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Unit Demographics and Sample Weights</i>
FSNGMOM	C	INDICATOR OF SINGLE-FEMALE-HEADED UNIT Range = (0, 1) 0 = No 1 = Yes A SNAP unit with one adult and one or more children; the adult is female.	
FSNK0T4	C	NUMBER OF PRESCHOOL-AGE CHILDREN IN UNIT Range = (0, 4) Number of children under age 5 in SNAP unit.	
FSNK5T17	C	NUMBER OF SCHOOL-AGE CHILDREN IN UNIT Range = (0, 24) Number of children age 5 to 17 in SNAP unit.	
FSNKID	C	NUMBER OF CHILDREN IN UNIT Range = (0, 25) Number of children under age 18 in SNAP unit.	
FSNONCIT	C	NUMBER OF NONCITIZENS IN UNIT Range = (0, 12) Number of people with FSAFIL <sub>i</sub> = 1 and CTZ <sub>Ni</sub> >= 3.	
FSUSIZE	C	CONSTRUCTED CERTIFIED UNIT SIZE Range = (1, 29) Number of people with FSAFIL <sub>i</sub> = 1.	
FYWGT	C	WEIGHT USED FOR FULL-YEAR CALCULATIONS Range = (5.75, 4423.22) Calculated as HWGT/12 for all States.	
HWGT	C	MONTHLY SAMPLE WEIGHT Range = (68.96, 53078.64) Allows user to replicate total monthly caseloads as reflected in SNAP Program Operations data. If the reference period for the analysis is longer than one calendar month, the weight field must be divided by the number of months being analyzed to calculate an average monthly value for that reference period.	
NONCIT_HEAD	C	UNIT HEAD CITIZENSHIP INDICATOR Range = (0, 2) 0 = Head of unit is a citizen 1 = Head of unit is a participating noncitizen 2 = Head of unit is a nonparticipating noncitizen	
RAWHSIZE	R	REPORTED NUMBER OF PEOPLE IN HOUSEHOLD Range = (1, 29)	

<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Unit Demographics and Sample Weights</i>
REGION	C	CONSTRUCTED CENSUS REGION CODE Range = (1, 4) 1 = Northeast 2 = Midwest 3 = South 4 = West See Appendix E (Table E.3) for a list of States in each region.	
REGIONCD	R	FNS REGION CODE Range = (1, 7) 1 = Northeast 2 = Mid-Atlantic 3 = Southeast 4 = Midwest 5 = Southwest 6 = Mountain Plains 7 = West See Appendix E (Table E.2) for a list of States in each region.	
STATE	R	FIPS CODE FOR STATE OR TERRITORY Range = (1, 78) See Appendix E (Table E.1) for FIPS code list.	
STATENAME	C	STATE OR TERRITORY State or territory name. See Appendix E (Table E.1) for list.	
STRATUM	R	STRATUM IDENTIFICATION Range = (0, 0) Codes for distinct parts of States with stratified samples; codes in States that are not stratified are recoded to 0.	
TANF_IND	C	INDICATOR OF TANF RECEIPT FOR UNIT Range = (0, 1) 0 = No 1 = Yes TANF_IND = 1 if FSTANF > 0 or MN_FIP = 1	
TPOV	C	GROSS INCOME/POVERTY LEVEL RATIO Range = (0, 695) TPOV = FSGRINC/NETSCRN*100, rounded to nearest integer. If FSGRINC = 0, then TPOV = 0. Otherwise if TPOV rounds to 0, TPOV is set to 1.	

<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Unit Demographics and Sample Weights</i>
URBRUR	C	<p>URBAN/RURAL INDICATOR (not retained on public use file)</p> <p><b>We recommend caution when using this variable for all State-level tabulations, and recommend against using this variable for State-level tabulations in Alabama, Nebraska, Nevada, Vermont, Utah, and Washington. See Appendix A for details.</b></p> <p>Range = (1, 3)</p> <p>Location of agency at which unit's SNAP application was processed.</p> <p>1 = Metropolitan (at least one urbanized area of 50,000 or more population and adjacent territory with a high degree of social and economic integration with the core as measured by commuting ties)</p> <p>2 = Micropolitan (at least one urban cluster of at least 10,000 but fewer than 50,000 people and adjacent territory with a high degree of social and economic integration with the core as measured by commuting ties)</p> <p>3 = Rural (not metropolitan or micropolitan)</p>	
WRK_POOR	C	<p>INDICATOR OF WORKING POOR UNIT</p> <p>Range = (0, 1)</p> <p>0 = No</p> <p>1 = Yes</p> <p>All SNAP units with countable earnings (FSEARN) or multiple indicators of earnings in the unedited SNAP QC file.</p>	



**VARIABLE      ORIGIN      DESCRIPTION**

*Detailed Codebook  
Unit Countable Income*

**Unit countable income (monthly dollar amounts)**

FSCONT	C	COUNTABLE UNIT INCOME FROM CONTRIBUTIONS Range = (0, 2330) Sum of CONT1 through CONT29
FSCSUPRT	C	COUNTABLE UNIT CHILD SUPPORT PAYMENT INCOME Range = (0, 2934) Sum of CSUPRT1 through CSUPRT29
FSDEEM	C	COUNTABLE UNIT DEEMED INCOME Range = (0, 2306) Sum of DEEM1 through DEEM29
FSDIVER	C	COUNTABLE UNIT STATE DIVERSION PAYMENTS Range = (0, 481) Sum of DIVER1 through DIVER29
FSEARN	C	COUNTABLE UNIT EARNED INCOME Range = (0, 7628) Sum of FSWAGES, FSSLFEMP, and FSOTHERN
FSEDLOAN	C	COUNTABLE UNIT INCOME FROM EDUCATIONAL GRANTS AND LOANS Range = (0, 1832) Sum of EDLOAN1 through EDLOAN29
FSEITC	C	COUNTABLE UNIT INCOME FROM EARNED INCOME TAX CREDIT Range = (0, 900) Sum of EITC1 through EITC29
FSEENERGY	C	COUNTABLE UNIT ENERGY ASSISTANCE INCOME Range = (0, 141) Sum of ENERGY1 through ENERGY29
FSGA	C	COUNTABLE UNIT GENERAL ASSISTANCE BENEFITS Range = (0, 1518) Sum of GA1 through GA29
FSGRINC	C	FINAL GROSS COUNTABLE UNIT INCOME Range = (0, 9106) Total monthly gross income of unit (sum of FSEARN and FSUNEARN)

<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Unit Countable Income</i>
FSNETINC	C	FINAL NET COUNTABLE UNIT INCOME Range = (0, 7426) Total monthly income of unit after applying deductions. Calculated as FSGRINC-FSTOTDED but not less than 0. Coded as missing for MFIP units and for SSI-CAP units in States with standard SSI-CAP benefits.	
FSOTHERN	C	COUNTABLE UNIT OTHER EARNED INCOME Range = (0, 1811) Sum of OTHERN1 through OTHERN29	
FSOTHGOV	C	COUNTABLE UNIT INCOME FROM OTHER GOVERNMENT BENEFITS Range = (0, 2424) Sum of OTHGOV1 through OTHGOV29	
FSOTHUN	C	COUNTABLE UNIT OTHER UNEARNED INCOME Range = (0, 4904) Sum of OTHUN1 through OTHUN29	
FSSLFEMP	C	COUNTABLE UNIT SELF-EMPLOYMENT INCOME Range = (0, 4944) Sum of SLFEMP1 through SLFEMP29	
FSSOCSEC	C	COUNTABLE UNIT SOCIAL SECURITY INCOME Range = (0, 3526) Sum of SOCSEC1 through SOCSEC29	
FSSSI	C	COUNTABLE UNIT SSI BENEFITS Range = (0, 2792) Sum of SSI1 through SSI29	
FSTANF	C	COUNTABLE UNIT TANF PAYMENTS <b>We recommend caution when using FSTANF in Minnesota and California. See Appendix A for more details.</b> Range = (0, 1484) Sum of TANF1 through TANF29	
FSUNEARN	C	COUNTABLE UNIT UNEARNED INCOME Range = (0, 6878) Sum of FSCONT, FSCSUPRT, FSDEEM, FSEDLOAN, FSGA, FSOTHGOV, FSOTHUN, FSSOCSC, FSSSI, FSTANF, FSUNEMP, FSVET, FSWCOMP, FSDIVER, FSENERGY, and FSWGESUP	

<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Unit Countable Income</i>
FSUNEMP	C	COUNTABLE UNIT UNEMPLOYMENT COMPENSATION BENEFITS Range = (0, 2756) Sum of UNEMP1 through UNEMP29	
FSVET	C	COUNTABLE UNIT VETERANS' BENEFITS Range = (0, 3509) Sum of VET1 through VET29	
FSWAGES	C	COUNTABLE UNIT WAGES AND SALARIES Range = (0, 7628) Sum of WAGES1 through WAGES29	
FSWCOMP	C	COUNTABLE UNIT WORKERS' COMPENSATION BENEFITS Range = (0, 2361) Sum of WCOMP1 through WCOMP29	
FSWGESUP	C	COUNTABLE UNIT WAGE SUPPLEMENTATION INCOME Range = (0, 1469) Sum of WGESUP1 through WGESUP29	
RAWGROSS	R	REPORTED GROSS COUNTABLE UNIT INCOME Range = (0, 6607) Reported total monthly countable income of unit before applying deductions (see FSGRINC for final value)	
RAWNET	R	REPORTED NET COUNTABLE UNIT INCOME Range = (0, 5057) Reported total monthly countable income of unit after applying deductions (see FSNETINC for final value)	

<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Unit Countable Assets</i>
<b>Unit countable assets</b>			
FSASSET	C	TOTAL COUNTABLE ASSETS UNDER STATE RULES <b>We recommend caution when using FSASSET. See Appendix A for more details.</b> Range = (0, 20111) Sum of LIQRESOR, FSVEHAST, OTHNLRES, and REALPROP	
FSVEHAST	C	COUNTABLE NON-EXCLUDED VEHICLES' VALUE UNDER STATE RULES <b>We recommend caution when using FSVEHAST. See Appendix A for more details.</b> Range = (0, 2850)	
LIQRESOR	C	COUNTABLE LIQUID ASSETS UNDER STATE RULES Range = (0, 20111)	
OTHNLRES	C	COUNTABLE OTHER NONLIQUID ASSETS UNDER STATE RULES Range = (0, 2200)	
RAWLQRES	R	REPORTED LIQUID ASSETS Range = (0, 55681)	
RAWOTRES	R	REPORTED OTHER NONLIQUID ASSETS Range = (0, 47760)	
RAWRPROP	R	REPORTED REAL PROPERTY Range = (0, 47760) Does not include home	
RAWVHAST	R	REPORTED NONEXCLUDED VEHICLES' VALUE Range = (0, 2850)	
REALPROP	C	COUNTABLE REAL PROPERTY UNDER STATE RULES Range = (0, 4710) Does not include home	

<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Unit Countable Assets</i>
VEHICLEA	R	<p>REPORTED CATEGORY FOR FIRST VEHICLE  <b>We recommend against using VEHICLEA. See Appendix A for more details.</b>            Range = (1, 8)            1 = No vehicle            2 = Vehicle exempt because used for producing income, as a home, to transport a physically disabled member, for long-distance travel (other than commuting), or to carry fuel or water            3 = Vehicle exempt because inaccessible resource (equity value \$1,500 or less)            4 = Vehicle exempt due to categorical eligibility            5 = Vehicle excluded under State TANF standard (vehicle of non-categorically eligible unit members only)            6 = Vehicle registered and attributable to an adult unit member or used by a person under age 18 for employment or education (subject to fair market value only)            7 = Vehicle not registered (equity test only)            8 = Vehicle not excluded and not included in code 6 (subject to fair market value or equity test, whichever is greater)</p>	
VEHICLEB	R	<p>REPORTED CATEGORY FOR SECOND VEHICLE  <b>We recommend against using VEHICLEB. See Appendix A for more details.</b>            Range = (1, 8)            1 = No vehicle            2 = Vehicle exempt because used for producing income, as a home, to transport a physically disabled member, for long-distance travel (other than commuting), or to carry fuel or water            3 = Vehicle exempt because inaccessible resource (equity value \$1,500 or less)            4 = Vehicle exempt due to categorical eligibility            5 = Vehicle excluded under State TANF standard (vehicle of non-categorically eligible unit members only)            6 = Vehicle registered and attributable to an adult unit member or used by a person under age 18 for employment or education (subject to fair market value only)            7 = Vehicle not registered (equity test only)            8 = Vehicle not excluded and not included in code 6 (subject to fair market value or equity test, whichever is greater)</p>	

**Unit expenses and deductions**

ERN_INC_DED_PCT	C	PERCENTAGE USED TO CALCULATE EARNINGS DEDUCTION Range = (0.20, 0.50) 0.50 for MFIP participants; 0.20 for all other SNAP participants.
EXCL_FSCSDED	C	CHILD SUPPORT EXCLUDED FROM GROSS INCOME Range = (0, 762) Child support expenses excluded before gross income test rather than before net income test for eligibility
FSCSDED	C	CHILD SUPPORT EXPENSE DEDUCTION Range = (0, 4000) Coded as missing for MFIP units and for units participating in an SSI-CAP program in States using standard SSI-CAP benefits
FSCSEXP	R	REPORTED CHILD SUPPORT EXPENSE DEDUCTION Range = (0, 4000) (Some States treat child support payments to non-unit members as an income exclusion rather than a deduction. See EXCL_FSCSDED and FSCSDED for final values.)
FSDEPDED	R	REPORTED DEPENDENT CARE DEDUCTION <b>We recommend against using this variable for State-level tabulations. See Appendix A for more details.</b> Range = (0, 2400) Some values have been edited to obtain consistency with DPCOST1 to DPCOST29 and to improve the final benefit calculation. See Appendix B for details. Coded as missing for all MFIP and SSI-CAP units.
FSDEPDE2	C	MARGINAL EFFECTIVENESS OF DEPENDENT CARE DEDUCTION <sup>35</sup> Range = (0, 2855) Calculated as FSDEPDE2 = NEWNET-FSNETINC, where NEWNET = MAX (0, FSGRINC-FSSLT3-FSERNDED-FSMEDDED-FSSTDDED-FSCSDED-HOMELESS_DED) and where FSSLT3 is the shelter deduction calculated without FSDEPDED. Coded as missing for all MFIP and SSI-CAP units.

---

<sup>35</sup> The marginal effectiveness variables are calculated as the difference between the actual calculated net income and what the net income would have been without the deduction. Given that the combined value of deductions to which a unit is entitled sometimes exceeds the gross income received by the unit, the marginal effectiveness variables give a more accurate picture of the impact of the deductions.

<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Unit Expenses and Deductions</i>
FSEARNDED	C	CALCULATED EARNED INCOME DEDUCTION Range = (0, 1525) Calculated as FSEARNDED = ERN_INC_DED_PCT*FSEARN, rounded to nearest integer. The deduction equals 50 percent of total earned income for MFIP participants <sup>36</sup> and 20 percent of total earned income for all others. Coded as missing for all SSI-CAP units.	
FSEARNDE2	C	MARGINAL EFFECTIVENESS OF EARNED INCOME DEDUCTION Range = (0, 1525) Calculated as FSEARNDE2 = NEWNET-FSEARNINC, where NEWNET = MAX (0, FSGRINC-FSSLT2-FSEDEPDED-FSEMEDDED-FSSTDDED-FSCSDED-HOMELESS_DED) and where FSSLT2 is the shelter deduction calculated without FSEARNDED. Coded as missing for all MFIP and SSI-CAP units.	
FSEMEDDED	C	CALCULATED MEDICAL DEDUCTION Range = (0, 2498) The deduction is for units with elderly members or individuals with disabilities only; the entry for medical expenses should include only expenses in excess of \$35. Calculated as FSEMEDDED = MAX(0, FSEMEDEXP) Coded as missing for all MFIP and SSI-CAP units.	
FSEMEDDE2	C	MARGINAL EFFECTIVENESS OF MEDICAL DEDUCTION Range = (0, 2735) Calculated as FSEMEDDE2 = NEWNET-FSEARNINC, where NEWNET = MAX (0, FSGRINC-FSSLT4-FSEDEPDED-FSEARNDED-FSSTDDED-FSCSDED-HOMELESS_DED) and where FSSLT4 is the shelter deduction calculated without FSEMEDDED. Coded as missing for all MFIP and SSI-CAP units.	
FSEMEDEXP	R	REPORTED MEDICAL EXPENSES Range = (0, 2498) Allowable medical expenses in excess of \$35 for elderly adults or individuals with disabilities.	

---

<sup>36</sup> The MFIP earned income deduction was 50 percent in FY 2015.

<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Unit Expenses and Deductions</i>
FSSLTDED	C	<p>CALCULATED EXCESS SHELTER DEDUCTION</p> <p>Range = (0, 3122)</p> <p>Set to 0 if HOMEDED = 3; otherwise set to XCOST for units with elderly members or individuals with disabilities and equal to the minimum of XCOST and SHELCAP for units without elderly members or individuals with disabilities, where</p> <p><math>XCOST = \text{MAX}(0, FSSLTEXP - \text{HALFNET})</math> and <math>\text{HALFNET} = \text{MAX}(0, \text{ROUND}(FSGRINC - FSSTDDED - FSRNDED - FSDEPDED - FSMEDDED - FSCSDED)/2)</math></p> <p>The final value of FSSLTDED is rounded to nearest integer.</p> <p>Coded as missing for MFIP units and for units participating in an SSI-CAP program in States that use standard SSI-CAP benefits.</p>	
FSSLTDE2	C	<p>MARGINAL EFFECTIVENESS OF EXCESS SHELTER DEDUCTION</p> <p>Range = (0, 2012)</p> <p>Calculated as <math>FSSLTDE2 = \text{NEWNET} - \text{FSNETINC}</math>, where <math>\text{NEWNET} = \text{MAX}(0, FSGRINC - FSDEPDED - FSRNDED - FSMEDDED - FSSTDDED - FSCSDED - \text{HOMELESS\_DED})</math>.</p> <p>Coded as missing for MFIP units and for units participating in an SSI-CAP program in States that use standard SSI-CAP benefits.</p>	
FSSLTEXP	C	<p>CALCULATED SHELTER EXPENSES</p> <p>Range = (0, 4324)</p> <p>Sum of RENT and UTIL</p>	
FSSTDDED	C	<p>STANDARD DEDUCTION</p> <p>Range = (137, 443)</p> <p>Varies by region. See Appendix F for values.</p> <p>Coded as missing for MFIP units and for units participating in an SSI-CAP program in States that use standard SSI-CAP benefits.</p>	
FSSTDDE2	C	<p>MARGINAL EFFECTIVENESS OF STANDARD DEDUCTION</p> <p>Range = (0, 665)</p> <p>Calculated as <math>FSSTDDE2 = \text{NEWNET} - \text{FSNETINC}</math>, where <math>\text{NEWNET} = \text{MAX}(0, FSGRINC - FSSLT1 - FSDEPDED - FSRNDED - FSMEDDED - FSCSDED - \text{HOMELESS\_DED})</math> and where FSSLT1 is the shelter deduction calculated without FSSTDDED.</p> <p>Coded as missing for MFIP units and for units participating in an SSI-CAP program in States that use standard SSI-CAP benefits.</p>	



<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Unit Expenses and Deductions</i>
FSTOTDED	C	TOTAL DEDUCTIONS Range = (0, 4555) Sum of FSSTDDED, FSERNDED, FSDEPDED, FSSLTDED, FSMEDDED, HOMELESS_DED, and FSCSDED. Coded as missing for MFIP units and for units participating in an SSI-CAP program in States that use standard SSI-CAP benefits.	
FSTOTDE2	C	MARGINAL EFFECTIVENESS OF TOTAL DEDUCTION Range = (0, 3885) Calculated as FSGRINC-FSNETINC. Coded as missing for MFIP units and for units participating in an SSI-CAP program in States that use standard SSI-CAP benefits.	
HOMEDED	R	INDICATOR OF HOMELESSNESS Range = (1, 3) 1 = Not homeless 2 = Homeless, not receiving homeless shelter allowance 3 = Homeless, receiving homeless shelter allowance	
HOMELESS_DED	C	AMOUNT OF HOMELESS DEDUCTION Range = (0, 143) Positive value only for those with HOMEDED = 3 Coded as missing for all MFIP and SSI-CAP units.	
RAWERND	R	REPORTED EARNED INCOME DEDUCTION Range = (0, 999) (See FSERNDED for final earned income deduction value.)	
RENT	R	RENT/MORTGAGE AMOUNT Range = (0, 3944) Some values for SSI-CAP units have been edited to apply standard shelter allowances.	
SHELCAP	C	MAXIMUM ALLOWABLE SHELTER EXPENSE DEDUCTION Range = (386, 782) SHELCAP varies by region. See Appendix F for values.	
SHELDED	R	REPORTED SHELTER DEDUCTION Range = (0, 27835) (See FSSLTDED for the final value)	

VARIABLE

ORIGIN

DESCRIPTION

*Detailed Codebook  
Unit Expenses and Deductions*

SUA1

R

STANDARD UTILITY ALLOWANCE–USAGE AND ENTITLEMENT

Range = (1, 9)

1 = No utilities and no LIHEEA assistance

2 = Uses actual expenses

3 = Uses higher standard based on LIHEEA assistance

4 = Uses higher standard and does not receive LIHEEA assistance

5 = Uses lower standard

6 = Uses telephone-only standard

7 = Uses individual standards

8 = Uses higher standard, LIHEEA assistance status unknown

9 = Other

Some values have been edited to obtain consistency with UTIL. See Appendix B for more details. Coded as missing for MFIP units and for units participating in an SSI-CAP program in States that use standard SSI-CAP benefits.

**LIHEEA** is the Low Income Home Energy Assistance Act of 1981. Some State programs may have another name, such as Home Energy Assistance Program (HEAP).

**Higher standard** is an SUA based upon payment of heating or cooling and includes all utilities.

**Lower standard** is an SUA based upon all utilities but is for households that do not incur heating or cooling or receive LIHEEA.

SUA2

R

STANDARD UTILITY ALLOWANCE–PRORATED

Range = (1, 2)

1 = Not prorated

2 = Prorated

Some values have been edited to obtain consistency with UTIL. See Appendix B for more details. Coded as missing for MFIP units and for units participating in an SSI-CAP program in States that use standard SSI-CAP benefits.

UTIL

R

UTILITY AMOUNT

Range = (0, 1300)

Some values have been edited to improve the final benefit calculation. See Appendix B for more details.

<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Unit Benefits</i>
<b>Unit benefits</b>			
AMTERR	R	AMOUNT OF BENEFIT IN ERROR Range = (0, 777) Dollar amount of any identified error, or the difference between the benefits the State authorized and the benefits the State should have authorized. Before FY 2012, only errors over \$25 were recorded.	
ASSLIM	C	ASSET LIMIT Range = (2250, 5000) SNAP eligibility limit. Categorically eligible units are not subject to an asset limit. See Appendix F.	
BENMAX	C	MAXIMUM BENEFIT AMOUNT Range = (194, 4235) The maximum possible benefit for a unit, which varies by unit size and region. See Appendix F for schedule.	
FSASTEST	C	INDICATOR OF PASSING ASSET TEST Range = (0, 1) 0 = No 1 = Yes	
FSBEN	C	FINAL CALCULATED BENEFIT Range = (1, 4235) Calculated as $FSBEN = \text{MAX}(\text{minimum benefit}, \text{BENMAX-ROUND}(.3*FSNETINC))$ if $FSUSIZE$ is 2 or Less. Otherwise, $FSBEN = \text{MAX}(0, \text{BENMAX-ROUND}(.3*FSNETINC))$ for all units, except for MFIP units and for units participating in an SSI-CAP program in States that use standard SSI-CAP benefits where the benefit is calculated by using a State-specific formula.	
FSGRTEST	C	INDICATOR OF PASSING GROSS INCOME TEST Range = (0, 1) 0 = No 1 = Yes	

<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Unit Benefits</i>
FSMINBEN	C	RECEIVED MINIMUM BENEFIT Range = (0, 1) 0 = No 1 = Yes FSMINBEN = 1 when FSBEN = 8 percent of the maximum one-person benefit for the unit's geographic region and FSUSIZE = 1 or 2. FSMINBEN is always set to 0 for units participating in an SSI-CAP program in States that use standard SSI-CAP benefits.	
FSNETEST	C	INDICATOR OF PASSING NET INCOME TEST Range = (0, 1) 0 = No 1 = Yes Coded as missing for MFIP units and for units participating in an SSI-CAP program in States that use standard SSI-CAP benefits.	
GROSSCRN	C	GROSS INCOME SCREEN Range = (1265, 13584) SNAP eligibility limit determined by unit size. Categorically eligible units and those with elderly members or individuals with disabilities are not subject to gross income screen. See Appendix F for values.	
NETSCRN	C	NET INCOME SCREEN Range = (973, 10460) SNAP eligibility limit determined by unit size. Categorically eligible units are not subject to net income screen. See Appendix F for values.	
RAWBEN	R	REPORTED SNAP BENEFIT RECEIVED Range = (0, 9998) Reported amount of SNAP benefits that the unit was certified to receive during sample month (see FSBEN for final value)	

**Person-level characteristics**

ABWDST1 to ABWDST29	R	<p>ABAWD STATUS</p> <p><b>We recommend caution when using ABWDSTi, and recommend combining values ABWDSTi = 2 through 7, unless the specific State policies in effect regarding ABAWDs are known. Additionally, we recommend against using ABWDSTi for State-level tabulations for Maryland, Nevada, New Hampshire, New Jersey, North Dakota, Texas, West Virginia, and Wyoming. See Appendix A for more details.</b></p> <p>Range = (1, 6)</p> <p>Person 1 through Person 29</p> <p>1 = Not an able-bodied adult without dependents (ABAWD)</p> <p>2 = ABAWD in a waived area</p> <p>3 = Exempt based on 15 percent option</p> <p>4 = ABAWD meeting work requirements</p> <p>5 = ABAWD in 1st 3 months</p> <p>6 = ABAWD in 2nd 3 months</p> <p>7 = ABAWD who has exhausted time-limited benefits</p>
AGE1 to AGE29	R	<p>AGE</p> <p>Range = (0, 98)</p> <p>Person 1 through Person 29</p> <p>0 = Age less than 1 year</p> <p>1 to 97 = Age in years</p> <p>98 = Age 98 years or older</p>
CTZN1 to CTZN29	R	<p>CITIZENSHIP STATUS</p> <p>Range = (1, 10)</p> <p>Person 1 through Person 29</p> <p>1 = US-born citizen</p> <p>2 = Naturalized citizen</p> <p>3 = Legal permanent resident with 40 quarters of work, military service, five years legal U.S. residency, disability, or under age 18</p> <p>5 = Person admitted as refugee, granted asylum, or given stay of deportation</p> <p>6 = Other eligible noncitizen</p> <p>7 = Noncitizen legally in U.S. who does not meet one of the above codes and is not receiving SNAP benefits but whose income and resources must be considered in determining benefits</p> <p>8 = Other ineligible legal noncitizen (for example, visitor, tourist, student, diplomat)</p> <p>9 = Undocumented noncitizen</p> <p>10 = Noncitizen, status unknown</p>

<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Person-Level Characteristics</i>
DIS1 to DIS29	C	PERSON-LEVEL DISABILITY INDICATOR <b>We recommend using DISi with the understanding that it likely undercounts the number of non-elderly individuals with disabilities. See Appendix A for more details.</b> Range = (0, 1) Person 1 through Person 29 0 = Not disabled 1 = Disabled Non-elderly individuals identified as disabled using receipt of SSI or a combination of hours worked, work registration status, receipt of Social Security, veterans' benefits, or workers' compensation, and/or unit medical expense deduction. See Appendix B for details.	
DPCOST1 to DPCOST29	R	REPORTED DEPENDENT CARE COST <b>We recommend against using DPCOSTi for State-level tabulations. See Appendix A for more details.</b> Range = (0, 1000) Person 1 through Person 29 Some values have been edited to obtain consistency with FSDEPDED. See Appendix B for details.	
EMPRG1 to EMPRG29	R	SNAP EMPLOYMENT AND TRAINING PROGRAM STATUS <b>We recommend caution when using EMPRGi. See Appendix A for more details.</b> Range = (0, 9) Person 1 through Person 29 0 = Not participating in E&T 1 = Participating in non-SNAP E&T (such as TANF) 2 = SNAP job search or job search training 3 = SNAP E&T workfare or work experience 4 = SNAP E&T work supplementation 5 = SNAP E&T education leading to high school diploma or GED 6 = SNAP E&T postsecondary education leading to degree or certificate 7 = SNAP E&T remedial education (including adult education and English lessons not leading to degree) 8 = SNAP E&T vocational training 9 = Other	

<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Person-Level Characteristics</i>
EMPSTA1 to EMPSTA29	R	EMPLOYMENT STATUS–TYPE Range = (1, 8) Person 1 through Person 29 <b>We recommend caution when using EMPSTAi. See Appendix A for more details.</b> 1 = Not in labor force and not looking for work 2 = Unemployed and looking for work 3 = Active-duty military 4 = Migrant farm labor 5 = Nonmigrant farm labor 6 = Self-employed, farming 7 = Self-employed, nonfarming 8 = Employed by other	
EMPSTB1 to EMPSTB29	R	EMPLOYMENT STATUS–AMOUNT Range = (1, 5) Person 1 through Person 29 <b>We recommend caution when using EMPSTBi. See Appendix A for more details.</b> 1 = Not employed 2 = 1–19 hours/week 3 = 20–29 hours/week 4 = 30–39 hours/week 5 = Full-time (40 hours or more)	

**VARIABLE****ORIGIN****DESCRIPTION***Detailed Codebook  
Person-Level Characteristics*

FSAFIL29

FSAFIL1 to R SNAP CASE AFFILIATION

Range = (1, 99)

Person 1 through Person 29

**We recommend against using FSAFILi for State-level tabulations of nonparticipants in West Virginia, and recommend caution when using it for tabulations of nonparticipants in Arkansas, Hawaii, Minnesota, Montana, Pennsylvania, South Dakota, West Virginia, and Wyoming. See Appendix A for more details.**

- 1 = Eligible member of SNAP case under review and entitled to receive benefits
- 2 = Eligible SNAP participant in another unit, not currently under review (code added by Mathematica for use in certain SNAP-CAP units)
- 4 = Member is ineligible noncitizen and not participating in State-funded SNAP
- 5 = Member not paying/cooperating with child support agency
- 6 = Member is ineligible striker
- 7 = Member is ineligible student
- 8 = Member disqualified for program violation
- 9 = Member ineligible to participate due to disqualification or failure to meet work requirements (work registration, E&T, acceptance of employment, employment status/job availability, voluntary quit/reducing work effort, workfare/comparable workfare)
- 10 = ABAWD time limit exhausted and ABAWD ineligible to participate due to failure to meet ABAWD work requirements, to work at least 20 hours per week, to participate in at least 20 hours per week in qualifying educational training activities, or to participate in workfare
- 11 = Fleeing felon or parole and probation violator
- 13 = Convicted drug felon
- 14 = Social Security Number disqualified
- 15 = SSI recipient in California
- 16 = Prisoner in detention center
- 17 = Foster care
- 18 = Member is ineligible noncitizen and participating in State-funded SNAP
- 19 = Individual in the home but not part of SNAP household
- 20 = Ineligible ABAWD, originally coded as participant (code added by Mathematica Policy Research)
- 21 = Ineligible noncitizen, originally coded as participant (code added by Mathematica Policy Research)
- 99 = Unknown



<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Person-Level Characteristics</i>
FSUN1 to FSUN29	C	POSITION OF HEAD OF SNAP UNIT Range = (0, 8) Person 1 through Person 29	Identifies the index position of the head of the SNAP unit. The head is defined as the first person in unit with RELi = 1 or, if no one in unit has RELi = 1, as the first adult in unit. If there are no adults in unit, the oldest child is the head. FSUNi is the same for everyone in unit. For example, if unit head is the second person in the household, FSUNi = 2 for everyone in unit. FSUNi = 0 for any individuals in household who are not part of the SNAP unit.
NDISCA1 to NDISCA29	C	ADULT AGE 18 TO 49 WITHOUT DISABILITIES IN CHILDLESS UNIT STATUS <b>We recommend using NDISCAi with the understanding that it likely overcounts the number of adults without disabilities. See Appendix A for details.</b> Range = (0, 2) Person 1 through Person 29 0 = Not in universe (AGEi < 18 or AGEi > 49) 1 = Adult age 18 to 49 without disabilities in childless unit 2 = Age 18 to 49, but not adult without disabilities in childless unit	

<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Person-Level Characteristics</i>
RACETH1 to RACETH29	R	RACE/ETHNICITY Range = (1, 22) Person 1 through Person 29 <b>We recommend against using RACETHi. See Appendix A for more details.</b> 1 = Racial/ethnic data not available because application was not found 2 = Not recorded on application <b>Not Hispanic or Latino</b> 3 = American Indian or Alaska Native 4 = Asian 5 = Black or African American 6 = Native Hawaiian or other Pacific Islander 7 = White <i>Multiple Races Reported</i> 8 = (American Indian or Alaska Native) and white 9 = Asian and white 10 = (Black or African American) and white 11 = (American Indian or Alaska Native) and (black or African American) 12 = Respondent reported more than one race and does not fit into above categories (codes 8 through 11) <b>Hispanic or Latino</b> 13 = (Hispanic or Latino) and (American Indian or Alaska Native) 14 = (Hispanic or Latino) and Asian 15 = (Hispanic or Latino) and (black or African American) 16 = (Hispanic or Latino) and (Native Hawaiian or other Pacific Islander) 17 = (Hispanic or Latino) and white <i>Multiple Races Reported</i> 18 = (Hispanic or Latino) and (American Indian or Alaska Native) and white 19 = (Hispanic or Latino) and Asian and white 20 = (Hispanic or Latino) and (black or African American) and white 21 = (Hispanic or Latino) and (American Indian or Alaska Native) and (black or African American) 22 = (Hispanic or Latino) and respondent reported more than one race and does not fit into above categories (codes 18 through 21)	

<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Person-Level Characteristics</i>
REL1 to REL29	R	RELATIONSHIP TO HEAD OF HOUSEHOLD Range = (1, 7) Person 1 through Person 29 1 = Head of household 2 = Spouse 3 = Parent 4 = Daughter, stepdaughter, son, or stepson 5 = Other related person (brother, sister, niece, nephew, grandchild, great-grandchild, cousin) 6 = Foster child 7 = Unrelated person	
SEX1 to SEX29	R	SEX Range = (1, 2) Person 1 through Person 29 1 = Male 2 = Female	
WORK1 to WORK29	C	PERSON-LEVEL WORKING INDICATOR Range = (0, 1) Person 1 through Person 29 0 = No 1 = Yes Identifies individuals who are coded as being employed ( $EMPSTA_i > 2$ ), having positive earnings ( $WAGES_i + OTHERN_i + SLFEMP_i > 0$ ), and working one or more hours per week ( $EMPSTBI > 1$ ).	
WRKREG1 to WRKREG29	R	WORK REGISTRATION STATUS Range = (1, 6) Person 1 through Person 29 <b>We recommend combining values of <math>WRKREG_i = 1</math> and <math>WRKREG_i = 2</math> when tabulating work registration status. See Appendix A for more details.</b> 1 = Federal exemption for disability 2 = Federal exemption for reason other than disability 3 = Work registrant, not E&T participant 4 = Work registrant, voluntary E&T participant 5 = Work registrant, mandatory E&T participant 6 = Should have been registered, but was not registered	

<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Person-Level Characteristics</i>
YRSED1 to YRSED29	R	HIGHEST EDUCATIONAL LEVEL COMPLETED <b>We recommend against using YRSEDi. See Appendix A for more details.</b> Range = (0, 14) Person 1 through Person 29 0 = None 1 = Grade 1 2 = Grade 2 3 = Grade 3 4 = Grade 4 5 = Grade 5 6 = Grade 6 7 = Grade 7 8 = Grade 8 9 = Grade 9 10 = Grade 10 11 = Grade 11 12 = High school graduate or GED 13 = Postsecondary education (for example, technical education or some college) 14 = College graduate or post-graduate degree	



<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Person-Level Countable Income</i>
OTHGOV1 to OTHGOV29	R	COUNTABLE INCOME FROM OTHER GOVERNMENT BENEFITS Range = (0, 2034) Person 1 through Person 29 Includes but not limited to Black Lung Benefits, Railroad Retirement payments, and payments to farmers by USDA. OTHGOVi amounts were recoded as SSI benefits in units with reported SSI income in cases for which OTHGOVi equaled an applicable State SSI supplement.	
OTHUN1 to OTHUN29	R	COUNTABLE OTHER UNEARNED INCOME Range = (0, 4904) Person 1 through Person 29 Includes alimony, foster care payments, dividends and interest, rental income, pensions, and union benefits. OTHUNi amounts were recoded as SSI benefits in units with reported SSI income in cases for which OTHUNi equaled an applicable State SSI supplement.	
SLFEMP1 to SLFEMP29	R	COUNTABLE SELF-EMPLOYMENT INCOME Range = (0, 4535) Person 1 through Person 29 Net income from any self-employment enterprise.	
SOCSEC1 to SOCSEC29	R	COUNTABLE SOCIAL SECURITY INCOME Range = (0, 2141) Person 1 through Person 29	
SSI1 to SSI29	R	COUNTABLE SSI BENEFITS Range = (0, 1575) Person 1 through Person 29 Includes recoded countable income reported as OTHGOVi or OTHUNi in units with reported SSI income and where OTHGOVi or OTHUNi equaled an applicable State SSI supplement.	
TANF1 to TANF29	R	COUNTABLE TANF PAYMENTS Range = (0, 1484) Person 1 through Person 29 Assigned to payee or principal person of assistance group.	
UNEMP1 to UNEMP29	R	COUNTABLE UNEMPLOYMENT COMPENSATION BENEFITS Range = (0, 2408) Person 1 through Person 29	

<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Person-Level Countable Income</i>
VET1 to VET29	R	COUNTABLE VETERANS' BENEFITS Range = (0, 3509) Person 1 through Person 29	
WAGES1 to WAGES29	R	COUNTABLE WAGES AND SALARIES Range = (0, 6607) Person 1 through Person 29 Amount of wages, salaries, tips, and commission.	
WCOMP1 to WCOMP29	R	COUNTABLE WORKERS' COMPENSATION BENEFITS Range = (0, 2361) Person 1 through Person 29	
WGESUP1 to WGESUP29	R	COUNTABLE WAGE SUPPLEMENTATION INCOME Range = (0, 1469) Person 1 through Person 29 Earnings above cash assistance and/or SNAP benefit amount.	

**VARIABLE      ORIGIN      DESCRIPTION**

*Detailed Codebook  
Detailed Error Findings*

**Detailed error findings**

<p>AGENCY1 to AGENCY9</p>	<p>R</p>	<p>AGENCY OR CLIENT RESPONSIBILITY  Range = (1, 99)  Variance 1 through Variance 9  Primary cause of variance  1 = Information not reported  2 = Incomplete or incorrect information provided; agency not required to verify  3 = Information withheld by client (case referred for Intentional Program Violation [IPV] investigation)  4 = Incorrect information provided by client (case referred for IPV investigation)  7 = Inaccurate information reported by collateral contact  8 = Acted on incorrect Federal computer match information not requiring verification (such variance is excluded from error determination but must be recorded)  10= Policy incorrectly applied  12= Reported information disregarded or not applied  14= Agency failed to follow up on inconsistent or incomplete information  15= Agency failed to follow up on impending changes  16= Agency failed to verify required information  17= Computer programming error  18= Data entry and/or coding error  19= Mass change (error due to problem with computer-generated mass change)  20= Arithmetic computation error  21= Computer user error  99= Other</p>
<p>AMOUNT1 to AMOUNT9</p>	<p>R</p>	<p>VARIANCE DOLLAR AMOUNT  Range = (0, 777)  Variance 1 through Variance 9  Dollar amount of variance</p>



<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	<i>Detailed Codebook Detailed Error Findings</i>
DISCOV1 to DISCOV9	R	VARIANCE DISCOVERY Range = (1, 9) Variance 1 through Variance 9 How variance was discovered	1 = Variance clearly identified from case record (documentation not from an automated match) 2 = Variance clearly identified from case record (documentation from an automated match) 3 = Variance discovered from recipient interview 4 = Employer (present or former) 5 = Financial institution, insurance company, or other business 6 = Landlord 7 = Government agency or public records, not automated match 8 = Government agency or public records, automated match 9 = Other
E_FINDG1 to E_FINDG9	R	ERROR FINDING Range = (2, 4) Variance 1 through Variance 9 Impact of variance	2 = Overissuance 3 = Underissuance 4 = Ineligible
ELEMENT1 to ELEMENT9	R	VARIANCE ELEMENT Range = (111, 820) Variance 1 through Variance 9 Element of variance	111 = Student status 130 = Citizenship and noncitizen status 140 = Residency 150 = Unit composition 151 = Recipient disqualification 160 = Employment and training programs 161 = Time-limited participation 162 = Work registration requirements 163 = Voluntary quit/reduced work effort 164 = Workfare and comparable workfare 165 = Employment status/job availability 166 = Acceptance of employment 170 = Social Security Number 211 = Bank accounts or cash on hand 212 = Nonrecurring lump-sum payment 213 = Other liquid assets 221 = Real property 222 = Vehicles

**VARIABLE****ORIGIN****DESCRIPTION***Detailed Codebook  
Detailed Error Findings*

224 = Other nonliquid resources  
 225 = Combined resources  
 311 = Wages and salaries  
 312 = Self-employment  
 314 = Other earned income  
 321 = Earned income deductions  
 323 = Dependent care deduction  
 331 = RSDI benefits  
 332 = Veterans' benefits  
 333 = SSI and/or State SSI supplement  
 334 = Unemployment compensation  
 335 = Workers' compensation  
 336 = Other government benefits  
 342 = Contributions  
 343 = Deemed income  
 344 = TANF, PA, or GA  
 345 = Educational grants/scholarships/loans  
 346 = Other unearned income  
 350 = Child support payments received from absent parent  
 361 = Standard deduction  
 363 = Shelter deduction  
 364 = Standard utility allowance  
 365 = Medical deductions  
 366 = Child support payment deduction  
 371 = Combined gross income  
 372 = Combined net income  
 520 = Arithmetic computation  
 530 = Transitional benefits  
 560 = Reporting systems  
 810 = SNAP simplification project  
 820 = Demonstration projects

NATURE1 to  
NATURE9

R

NATURE OF VARIANCE

Range = (6, 306)

Variance 1 through Variance 9

Nature of each variance

6 = Eligible person(s) excluded  
 7 = Ineligible person(s) included  
 12 = Eligible person(s) with no income, resources, or  
 deductible expenses excluded  
 13 = Eligible person(s) with income excluded  
 14 = Eligible person(s) with resources excluded  
 15 = Eligible person(s) with deductible expenses excluded  
 16 = Newborn improperly excluded  
 20 = Incorrect resource limit applied  
 24 = Resource should have been excluded  
 28 = Incorrect income limit applied

**VARIABLE****ORIGIN****DESCRIPTION*****Detailed Codebook  
Detailed Error Findings***

- 29 = Exceeds prescribed limit
- 30 = Resource should have been included
- 32 = Failed to consider or incorrectly considered income of ineligible member
- 35 = Unreported source of income (do not use for change in employment status)
- 36 = Rounding used/not used or incorrectly applied
- 37 = All income from source known but not included
- 38 = More income received from this source than budgeted
- 39 = Employment status changed from unemployed to employed
- 40 = Employment status changed from employed to unemployed
- 41 = Change only in amount of earnings
- 42 = Conversion to monthly amount not used or incorrectly applied
- 43 = Averaging not used or incorrectly applied
- 44 = Less income received from this source than budgeted
- 45 = Cost of doing business not used or incorrectly applied
- 46 = Failed to consider/anticipate month with extra pay date
- 52 = Deduction that should have been included was not
- 53 = Deduction included that should not have been
- 54 = Incorrect standard used (not as a result of change in unit size or move)
- 64 = Incorrect amount used resulting from change in residence
- 65 = Incorrect standard used resulting from change in unit size
- 75 = Benefit/allotment/eligibility incorrectly computed
- 77 = Unit not entitled to transitional benefits
- 79 = Incorrect use of allotment tables
- 80 = Improper prorating of initial month's benefits
- 97 = Not required to be reported or acted upon based on time frames and reporting requirements for allotment differences below the \$50 threshold
- 98 = Transcription or computation errors
- 99 = Other
- 111 = Child support payment(s) not considered or incorrectly applied for initial month(s) of eligibility
- 112 = Retained child support payment(s) not considered or incorrectly applied
- 120 = Variance/errors resulting from noncompliance with this means-tested public assistance program
- 123 = Incorrectly prorated
- 124 = Variances resulting from use of automatic Federal information exchange system

**VARIABLE****ORIGIN****DESCRIPTION*****Detailed Codebook  
Detailed Error Findings***

- 127 = Pass-through not considered or incorrectly applied
- 200 = Eligible noncitizen excluded
- 201 = Ineligible noncitizen included
- 301 = Unit improperly participating under retrospective budgeting
- 302 = Unit improperly participating under prospective budgeting
- 303 = Unit improperly participating under monthly reporting
- 304 = Unit improperly participating under quarterly reporting
- 305 = Unit improperly participating under semiannual reporting
- 306 = Unit improperly participating under change reporting

OCCDATE1 to  
OCCDATE9

R

VARIANCE OCCURRENCE DATE  
Range = (200004, 999999)  
Variance 1 through Variance 9  
Date each variance occurred (month and year)  
999999 = Unknown

TIMEPER1 to  
TIMEPER9

R

VARIANCE TIME PERIOD  
Range = (1, 9)  
Variance 1 through Variance 9  
Time period during which variance occurred  
1 = Before most recent action  
2 = At time of most recent action by agency  
3 = After most recent action by agency  
9 = Time of occurrence cannot be determined

VERIF1 to  
VERIF9

R

VARIANCE VERIFICATION  
Range = (1, 9)  
Variance 1 through Variance 9  
Indicates how each variance was verified  
1 = From case record (verification not from an automated match)  
2 = From case record (verification from an automated match)  
3 = From information provided by recipient  
4 = Employer (present or former)  
5 = Financial institution, insurance company, or other business  
6 = Landlord  
7 = Government agency or public records, not automated match  
8 = Government agency or public records, automated match  
9 = Other

**This page has been left blank for double-sided printing.**

**REFERENCES**

---

Vigil, Alma, Kelsey Farson Gray, Shivani Kochhar, and Bruce Schechter. “Technical Documentation for the Fiscal Year 2014 Supplemental Nutrition Assistance Program Quality Control Database and the QC Minimodel.” Washington, DC: Mathematica Policy Research, December 2015.

Schechter, Bruce, Joel Smith, and Randy Rosso. “2011 MATH SIPP+ Microsimulation Model: Programmer’s Guide, Technical Description and Codebook.” Washington, DC: Mathematica Policy Research, March 2014.

**APPENDIX A**

**ASSESSMENT OF THE QUALITY OF SELECTED VARIABLES  
IN THE FY 2015 SNAP QC DATABASE**

**This page has been left blank for double-sided printing.**



We assessed the quality of the data for variables on the FY 2015 SNAP QC database that are new to the file, have changed in recent years, or have a history of coding inconsistencies. Based on our assessment, we recommend against using some variables and recommend caution when using other variables, as listed below and described in detail in the following sections. More information about our assessment and recommendations is available upon request.

### **A. Summary recommendations concerning use of certain variables**

Based on our assessment, we recommend against using the following variables for all tabulations:

- RACETHi
- VEHICLEA and VEHICLEB
- YRSEDi

We recommend against using the following variables for specific tabulations:

- ABWDSTi for State-level tabulations in Maryland, Nevada, New Hampshire, New Jersey, North Dakota, Texas, West Virginia, and Wyoming
- DPCOSTi and FSDEPDED for State-level tabulations
- FSAFILi for State-level tabulations of nonparticipants in West Virginia
- URBRUR for State-level tabulations in Alabama, Nebraska, Nevada, Vermont, Utah, and Washington (not retained in public use file)

We recommend caution when using the following variables for tabulations:

- ABWDSTi (values ABWDSTi = 2 through 7 should be combined unless the specific State policies on ABAWDs are known)
- DISi, FSDIS, and FSNDIS (with the understanding that DISi likely undercounts the number of non-elderly individuals with disabilities)
- EMPRGi (with the understanding that this variable is best used along with other work-related variables)
- EMPSTAi and EMPSTBi (with the understanding that these variables are best used along with other work-related variables)
- FSAFILi for State-level tabulations of nonparticipants in Arkansas, Hawaii, Minnesota, Montana, Pennsylvania, South Dakota, West Virginia, and Wyoming.
- FSASSET and FSVEHAST (with the understanding that assets are not recorded for most households)
- FSTANF in Minnesota and California
- MN\_FIP (with the understanding that it may slightly undercount total MFIP units)

- NDISCAi and FSNDISCA (with the awareness that NDISCAi likely overcounts the number of non-elderly adults without disabilities)
- SSI\_CAP (with the awareness that the SNAP QC database may underestimate the actual number of SSI-CAP units in some States)
- URBRUR for State-level tabulations (not retained in public use file)
- WRKREGi (with the understanding that this variable is best used along with other work-related variables)

We found the quality of other assessed variables to be suitable for all tabulations. Below, we discuss in detail our recommendations for specific variables in the SNAP QC database.

## **B. Variables not recommended for all tabulations**

### **1. Race/Ethnicity (RACETHi)**

Current values for RACETHi allow reporting of multiple races and ethnicities and also include values for race/ethnicity data not available or not recorded. About 15 percent of participants have unreported race/ethnicity data, though this percentage varies considerably by State. Given the large percentage of participants with unreported race/ethnicity information nationally, we recommend against the use of this variable.

### **2. Vehicles (VEHICLEA and VEHICLEB)**

For over a decade, we have recommended against using the vehicle variables (VEHICLEA and VEHICLEB) because of coding inconsistencies. In addition, QC reviewers are instructed to record possession of vehicles only if the vehicle's value is counted toward a unit's resources. As a result, VEHICLEA and VEHICLEB are often missing, and FSVEHAST is almost always equal to \$0. Because VEHICLEA and VEHICLEB are not consistent with FSVEHAST, we recommend against the use of these variables.

### **3. Highest Educational Level Completed (YRSEDi)**

We recommend against using YRSEDi because 9 percent of adult participants have a missing or unknown value for this variable.

## **C. Variables not recommended for specific tabulations**

### **1. Non-Elderly Childless Adults without Disabilities Subject to Work Registration (ABWDSTi)**

We recommend that care be taken to avoid State-level tabulations that result in small sample sizes, which could have misleading results. For this reason, we specifically recommend against using ABWDSTi for State-level tabulations in Maryland, Nevada, New Hampshire, New Jersey, North Dakota, Texas, West Virginia, and Wyoming.

### **2. Dependent Care Costs (DPCOSTi) and Deduction (FSDEPDED)**

Nationally, inconsistencies between DPCOSTi and FSDEPDED affect only 1 percent of unweighted units that have a positive dependent care deduction, positive dependent care costs, or both. In a few States, however, the percentage of units with dependent care expenses or

deductions that have inconsistencies between the two variables is relatively high. Because of this as well as small sample sizes in some States, we recommend against using DPCOSTi and FSDEPDED for State-level tabulations.

### **3. SNAP Case Affiliation (FSAFILi)**

FSAFILi can be used for tabulations of participants. However, certain States have a high percentage of missing or unknown values for nonparticipants. In eight states, at least 5 percent of nonparticipants have unknown FSAFILi values; in one of those States, West Virginia, four-fifths of nonparticipants have unknown FSAFILi values. As a result, we recommend against the use of FSAFILi for State-level tabulations of nonparticipants in West Virginia and recommend caution when using FSAFILi for State-level tabulations of nonparticipants in Arkansas, Hawaii, Minnesota, Montana, Pennsylvania, South Dakota, and Wyoming.

### **4. Locality (URBRUR)**

Several States use Local Agency Codes (LACs) that do not align to geographic areas and so cannot be used to classify units as being in a metropolitan, micropolitan, or rural area.<sup>1</sup> In FY 2015, these States included Alabama, Nebraska, Nevada, Vermont, Utah, and Washington. As a result, we cannot identify metropolitan status for a large percentage of cases in these States, and thus we recommend against using URBRUR (metropolitan, micropolitan, or rural status) in those States. URBRUR is not retained in the public use file.

## **D. Variables we recommend using with caution**

### **1. Non-Elderly Childless Adults without Disabilities Subject to Work Registration (ABWDSTi)**

There are some inconsistencies between ABWDSTi and related variables (WRKREGi, EMPSTAi, and EMPSTBi). For example, of the 361,000 weighted participants with an ABWDSTi code indicating they are an ABAWD meeting work requirements, 67 percent have a WRKREGi code indicating they are exempt from work registration. Because of the inconsistencies between ABWDSTi and these employment variables, we recommend caution when using this variable, and further we recommend combining all values ABWDSTi = 2 through 7 unless the specific State policies on ABAWDs are known.

### **2. Person-Level and Unit Disability (DISi, FSDIS, and FSNDIS)**

We use an algorithm to identify individuals with disabilities (DISi) based on SSI receipt, medical expenses, age, work registration status (WRKREGi), and other factors. We then use this variable to identify units containing individuals with disabilities (FSDIS) and count the number of individuals with disabilities in a unit (FSNDIS). We began using the algorithm for the FY 2012 SNAP QC file and made slight refinements to the algorithm for the FY 2014 and FY 2015

---

<sup>1</sup> Metropolitan Statistical Areas have at least one urbanized area of 50,000 or more people, plus adjacent territory that has a high degree of social and economic integration with the core, as measured by commuting ties. Micropolitan Statistical Areas have at least one urban cluster of at least 10,000 but less than 50,000 people, plus adjacent territory that has a high degree of social and economic integration with the core, as measured by commuting ties (OMB Bulletin No. 04-03).

files. We recommend using DISi, FSDIS, and FSNDIS with the awareness that they likely undercount the number of individuals with disabilities.

### **3. SNAP Employment and Training Program Status (EMPRGi) and Employment Status (EMPSTAi and EMPSTBi)**

We are limited in our ability to assess EMPRGi, although we did find some inconsistencies between EMPRGi and YRSEDi (years of education) and between EMPRGi and WRKREGi (work registration status). Based on our limited assessment of EMPRGi and of the other work-related variables, we recommend caution when using EMPRGi.

As in previous years, we have found inconsistencies between the two employment status variables, EMPSTAi and EMPSTBi, and with other variables recording countable earned income. For example, 2 percent of participants with countable earned income (wages, self-employment earnings, or other earnings) have EMPSTAi codes indicating they were not in the labor force or were unemployed. Given these inconsistencies, we recommend caution when using EMPSTAi and EMPSTBi to determine participants' employment status.

### **4. SNAP Case Affiliation (FSAFILi)**

As discussed previously, certain States have a high percentage of missing or unknown values for nonparticipants. In eight States (Arkansas, Hawaii, Minnesota, Montana, Pennsylvania, South Dakota, West Virginia, and Wyoming), individuals with FSAFILi values of 99 ("Unknown") make up 5 percent or more of nonparticipants. Therefore, we recommend caution when using FSAFILi for State-level tabulations of nonparticipants in these eight States.

### **5. Assets (FSASSET and FSVEHAST)**

We edit positive values of FSVEHAST, LIQRESOR, OTHNLRES, and REALPROP to \$0 for units not subject to a SNAP asset test because of their State's BBCE policy. Due to this edit and the large number of States with BBCE policies, a large number of units have no recorded assets. Only 9 percent of all SNAP units have recorded assets ( $FSASSET > 0$ ) in the FY 2015 file, and nearly all units have no vehicle assets ( $FSVEHAST = 0$ ). We recommend using FSASSET and FSVEHAST for tabulations with the understanding that most units have no recorded countable assets.

### **6. TANF Recipients in the Minnesota Family Investment Program (MFIP) and in California (FSTANF)**

In general, we code units in Minnesota with TANF income (FSTANF) as MFIP units. The reported TANF amounts for these units are typically very small, likely because of Federal QC System constraints. Specifically, when States transmit a quality control record, the national computer system checks that the unit's gross income is equal to the sum of all reported income types. Because TANF income is not used in the MFIP benefit calculation, it's not included in reported gross income, resulting in a fatal error in the data transmission.

Because TANF receipt may not be recorded for some units receiving an MFIP cash assistance benefit, we recommend using the MFIP variable (MN\_FIP) with the understanding that it may slightly undercount the number of MFIP units. We caution against using MFIP units' TANF income.

Additionally, the percentage of weighted California SNAP units that are pure PA units appears to be too high compared with State administrative data. Therefore, we recommend using TANF receipt in California with the awareness that it may overestimate the number of pure PA units in California.

### **7. Adults Age 18 to 49 Without Disabilities in Childless Units (NDISCAi and FSNDISCA)**

We recommend using the NDISCAi and FSNDISCA codes with the understanding that DISi likely undercounts the number of non-elderly individuals with disabilities and, therefore, NDISCAi likely overcounts the number of adults without disabilities.

### **8. SSI-CAP (SSI\_CAP)**

Because the raw SNAP QC data does not identify units that enter SNAP through an SSI-CAP, we use an algorithm for identifying, recoding, and assigning benefits for SSI-CAP units in States with these projects. In FY 2015, these States included Arizona, Florida, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Mississippi, New Jersey, New Mexico, New York, North Carolina, Pennsylvania, South Carolina, South Dakota, Texas, Virginia, and Washington.<sup>2</sup>

Because SSI-CAP units are not directly identified in the raw data but rather through an algorithm that relies on available data, the SNAP QC datafile may underestimate the actual number of SSI-CAP units in some States. Therefore, we recommend caution when using SSI\_CAP.

### **9. Locality (URBRUR)**

Because the SNAP QC sample is not designed to be representative at the sub-State level, we recommend caution when using URBRUR for State-level tabulations. URBRUR is not retained in the public use file.

### **10. Work Registration Status (WRKREGi)**

WRKREGi includes values that distinguish between individuals with a Federal exemption because of a disability (WRKREGi = 1) and individuals with a Federal exemption for a reason other than a disability (WRKREGi = 2). We found continued evidence in the FY 2015 file of likely miscoding of this variable. For example, we found some inconsistencies between WRKREGi and ABWDSTi. Of the 361,000 weighted participants coded as ABAWDs who were meeting work requirements, 67 percent are coded as being exempt from work registration (WRKREGi = 1 or 2). Because of inconsistencies, likely miscoding, and our limited ability to assess WRKREGi, we recommend caution when using the variable, and we also recommend combining values for WRKREGi = 1 and WRKREGi = 2. If attempting to identify individuals with disabilities, we recommend using the person-level disability indicator, DISi, described above.

---

<sup>2</sup> New Mexico ended its SSI-CAP demonstration in March 2014. However, SSI-CAP households may remain on the program through their certification period. The last SSI-CAP benefits will be issued in February 2017.

**This page has been left blank for double-sided printing.**

## **APPENDIX B**

### **AUTOMATED EDITS TO SNAP UNITS**

**This page has been left blank for double-sided printing.**



In any raw datafile, inconsistencies in the way data are entered can often be resolved by simple algorithms. In the FY 2015 SNAP QC raw datafile, we performed the automated edits described below.

### **1. Missing and miscoded SNAP affiliation (FSAFILi) codes**

We checked for instances where the SNAP case affiliation codes in the raw datafile were missing. If the individual had nonmissing age and gender, we recoded them as potential SNAP participants. That is, we first recoded FSAFILi as “unknown” (99) and then set it to 1 if certain other conditions, described below, were met.

We also checked for instances where the SNAP case affiliation codes in the raw datafile were inconsistent with other coded variables on the file such as citizenship, ABAWD status, and receipt of SSI and TANF. We were able to recode many of the inconsistencies:

- If there were differences between the unit size (count of those with affiliation code of 1) and the certified household size, we checked to see which size matched the reported benefit and edited the affiliation codes accordingly. We also resolved differences by recoding any affiliation codes that were inconsistent with citizenship or ABAWD status.
- Beginning in FY 2015, if a participating minor child of the household head ( $FSAFILi = 1$ ,  $AGEi < 18$ , and  $RELi = 4$ ) has an inconsistent citizenship status ( $CTZNi \geq 7$ ) and there is no one outside the unit ( $FSAFILi > 1$ ), then we changed the child’s citizenship status to the value for the household head.
- We set the affiliation codes of California SSI recipients to 15.
- MFIP uses unit composition rules that differ from those in regular SNAP. Specifically, SSI and TANF recipients living in the same household are treated as separate SNAP units. Consequently, if a Minnesota unit of more than one person had both SSI and TANF income, we set the affiliation code of the SSI recipient to unknown (99).

### **2. Vehicle assets**

The following States consider the value of some vehicles when determining asset eligibility for households that are not categorically eligible: Alaska, Arkansas, Delaware, Guam, Idaho, Illinois, Iowa, Maine, Michigan, Minnesota, Nebraska, Nevada, New Hampshire, New York, North Dakota, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Texas, Vermont, the Virgin Islands, and Washington. For all other States, we reset any reported vehicle assets to \$0 because the States exclude the value of all vehicles when determining asset eligibility.

### **3. Child support deduction and child support income**

We checked for instances where the reported child support expense deduction is exactly equal to the reported countable unit child support payment income. Although it is possible for a unit to have both child support expenses and child support income, it is highly unlikely that the two would be exactly equal in value. In these units, we checked to see if either of the amounts should be excluded by using the following procedure:

- If unit income less child support income was within \$5 of reported gross income, we set child support income to \$0.
- If calculated net income for the unit was within \$5 of reported net income, we retained both child support income and the child support deduction.
- If calculated net income was greater than reported net income and the difference between the two was greater than or equal to child support income, we set child support income to \$0.
- If calculated net income was less than reported net income and the difference between the two was less than child support income, we set the child support expense deduction to \$0.

In addition, if a unit was not categorically eligible, included no elderly individuals or individuals with disabilities, and would have passed the gross income test if child support expenses were excluded from gross income but would not if they were included, we excluded child support expenses from unit gross income and set the child support expense deduction to \$0.

#### **4. Dependent care costs**

The QC datafile includes units for which the QC reviewers recorded dependent care expenses for the parent rather than for the dependent. We corrected for this error, as follows:

- If dependent care expenses were assigned to adults between age 18 and 59 without SSI and there were children in the unit without dependent care expenses, we set the expenses to \$0 for the adults and distributed them among the children in the following order:
  1. If the unit contained at least one member age 0 to 4, we distributed the costs evenly to unit members from age 0 to 8.
  2. If the unit did not contain a member age 0 to 4, we distributed the costs evenly to any unit members from age 5 to 13.
  3. If the unit did not contain a member age 0 to 13, we distributed the costs evenly to any unit members from age 14 to 17.

In units where the calculated benefit matched the raw benefit, we assumed the recorded dependent care deduction was correct and, if necessary, recoded the costs to make them consistent with the deduction. We followed these guidelines to reconcile differences between the dependent care deduction and expenses:

- If the dependent care deduction was greater than the total value of dependent care costs, we set the costs equal to the deduction by assigning additional dependent care costs to unit members who originally had positive dependent care expenses.
- If no unit members originally had recorded dependent care expenses, we assigned costs to unit members in the following order:
  1. If the unit contained at least one member age 0 to 4, we distributed costs evenly to unit members from age 0 to 8.

2. If the unit did not contain a member age 0 to 4, we distributed costs evenly to any unit members from age 5 to 13.
  3. If the unit did not contain a member age 0 to 13, we distributed costs evenly to any unit members from age 14 to 17.
  4. If the unit did not contain a member age 0 to 17, we distributed costs evenly to any unit members of age 18 or older with SSI.
  5. If the unit did not contain a member age 0 to 17 or an adult with SSI, we distributed costs to elderly unit members without SSI.
  6. If the unit did not contain a member age 0 to 17 or an adult with SSI or an elderly unit member without SSI, we distributed costs evenly to any unit members age 18 or older.
- If a unit had positive dependent care costs but no dependent care deduction, we set the dependent care deduction equal to the total unit dependent care costs.

These edits excluded households identified as MFIP or SSI CAP.

## 5. SUA usage and prorating<sup>3</sup>

The SNAP QC datafile includes two variables that describe the use of standard utility allowances (SUAs). One variable records the usage of and entitlement to SUAs (SUA1); the other records prorating utility allowances in shared housing situations (SUA2). In units where the calculated benefit matched the raw benefit, we assumed the recorded utility amount to be correct. For these units, we recoded the SUA1 and SUA2 variables to make them consistent with the utility amount. For units coded as receiving a type of SUA not used in the State, we recoded SUA1 regardless of the result of the benefit calculation.

In most States, we checked for full SUA values as well as for half SUA values (see Table F.7).<sup>4</sup> If the utility amount equaled a full SUA value, we confirmed that SUA1 indicated the correct SUA type and that SUA2 was coded as “not prorated.” If the utility amount equaled half of an SUA value, we confirmed that SUA1 indicated the correct SUA type and that SUA2 was coded as “prorated.” However, in States that use individual standards, we checked half SUA values for the HCSUA and LUA, but only full SUA values for the telephone SUA, electricity SUA, or both (telephone plus electricity). If the utility amount did not equal a full or half SUA value and was not coded as prorated, we coded the unit as using individual standards in States with individual standards and as using actual expenses in other States. However, in States where

---

<sup>3</sup> These edits exclude units identified as MFIP or SSI-CAP participants. SSI-CAP participants in States with a standard benefit had SUA1 and SUA2 set to missing. SSI-CAP participants in States with a standardized shelter expense had SUA1 set to 9 (“Other”) and SUA2 set to 1 (not prorated).

<sup>4</sup> Prorated values are not always equal to half of the full SUA value. However, because of the multitude of possible values, we checked only for values that were half of the full amount.

SUA use was mandatory and the State did not use individual standards, we did not change the values from the raw datafile and were unable to reconcile the value of SUA1 and SUA2.<sup>5</sup>

## 6. Pure Public Assistance (PA) units

We flagged the following types of units as pure PA units:

- Units containing only children where at least one member received TANF income
- Units where at least one member received TANF income and where every adult member of the unit received TANF, SSI, or GA income
- Units where every adult and every child received SSI or GA income
- All MFIP units

## 7. Categorical eligibility

Most States have adopted BBCE policies that confer categorical SNAP eligibility on all units authorized to receive a TANF or Maintenance of Effort funded noncash benefit. In such States, units meeting State-determined eligibility criteria are exempt from the Federal SNAP income and asset tests. In States with BBCE policies, most units were already identified as categorically eligible through the CAT\_ELIG variable, which is set to 0 for units that are not categorically eligible and to 1 for units reported as categorically eligible in the raw file. We set the CAT\_ELIG flag to 2 for units that were not reported to be categorically eligible but that we identified as pure PA or met the following State-specific criteria:

- **Alabama.** All units with (1) gross income at or below 130 percent of poverty or (2) only elderly individuals or individuals with disabilities and gross income at or below 200 percent of poverty and net income at or below 100 percent of poverty
- **Arizona, Connecticut, Maine, New Jersey, Oregon, and Vermont.** All units with gross income at or below 185 percent of poverty
- **California, Delaware, District of Columbia, Florida, Hawaii, Maryland, Nevada, North Carolina, Washington, and Wisconsin.** All units with gross income at or below 200 percent of poverty
- **Colorado.** All units with net income at or below 100 percent of poverty and either (1) gross income at or below 130 percent of poverty or (2) any elderly individuals or individuals with disabilities and gross income at or below 200 percent of poverty
- **Georgia.** All units with (1) gross income at or below 130 percent of poverty or (2) only elderly individuals or individuals with disabilities and gross income at or below 200 percent of poverty
- **Guam, Minnesota, and New Mexico.** All units with gross income at or below 165 percent of poverty

---

<sup>5</sup> Throughout FY 2015, 47 States mandated the use of an SUA rather than actual utility costs.

- **Idaho.** All units with countable assets at or below \$5,000, net income at or below 100 percent of poverty, and either (1) gross income at or below 130 percent of poverty or (2) any elderly individuals or individuals with disabilities
- **Illinois, Kentucky, Ohio, and South Carolina.** All units with (1) gross income at or below 130 percent of poverty or (2) any elderly individuals or individuals with disabilities and gross income at or below 200 percent of poverty
- **Iowa.** All units with gross income at or below 160 percent of poverty
- **Massachusetts.** All units (1) with gross income at or below 200 percent of poverty with either children age 18 or younger present living with a parent or caretaker, or any elderly individuals or individuals with disabilities or (2) with net income at or below 100 percent of poverty and gross income at or below 130 percent of poverty
- **Michigan.** All units with gross income at or below 200 percent of poverty and countable assets at or below \$5,000
- **Mississippi and Oklahoma.** All units with net income at or below 100 percent of poverty and either (1) gross income at or below 130 percent of poverty or (2) any elderly individuals or individuals with disabilities
- **Montana and North Dakota.** All units with net income at or below 100 percent of poverty and gross income at or below 200 percent of poverty
- **Nebraska.** All units with net income at or below 100 percent of poverty, countable financial assets at or below \$25,000, and either (1) gross income at or below 130 percent of poverty or (2) any elderly individuals or individuals with disabilities
- **New Hampshire.** All units with children under the age of 22 and a relative of the child present and gross income at or below 185 percent of poverty
- **New York.** All units with (1) gross income at or below 130 percent of poverty, (2) any elderly individuals or individuals with disabilities and gross income at or below 200 percent of poverty, or (3) dependent care expenses and gross income at or below 200 percent of poverty
- **Pennsylvania.** Through April 2015, all units with (1) gross income at or below 160 percent of poverty and countable assets at or below \$5,500 or (2) any elderly individuals or individuals with disabilities, gross income at or below 200 percent of poverty, and countable assets at or below \$9,000. As of May 2015, all units with (1) gross income at or below 160 percent of poverty or (2) any elderly individuals or individuals with disabilities and gross income at or below 200 percent of poverty
- **Rhode Island.** All units with (1) gross income at or below 185 percent of poverty or (2) any elderly individuals or individuals with disabilities and gross income at or below 200 percent of poverty
- **Texas.** All units with gross income at or below 165 percent of poverty and countable assets at or below \$5,000

- **Virgin Islands.** All units with (1) gross income at or below 175 percent of poverty or (2) any elderly individuals or individuals with disabilities and gross income at or below 200 percent of poverty
- **West Virginia.** All units with (1) gross income at or below 130 percent of poverty or (2) only elderly individuals or individuals with disabilities and gross income at or below 200 percent of poverty and no earned income

## 8. State SSI supplements

Some States appear to have coded State SSI supplements as other government benefits (FSOTHGOV) or other unearned income (FSOTHUN), rather than SSI. We add these types of income to SSI (and set FSOTHGOV or FSOTHUN to 0) if the total amount of one of those income types was equal to the State's SSI supplement for individuals or couples.

## 9. Person-level disability

The QC datafile does not directly identify individuals with disabilities. However, we can use information in the QC datafile—such as SSI receipt, or work registration status—to identify those likely to have a disability. Starting in FY 2012, we used the following procedure to flag individuals with disabilities:

- We identify as disabled most individuals under the age of 60 with SSI. Exceptions are made if they are the only individual in the unit to have SSI, have a work registration status indicating a Federal exemption for a reason other than a disability ( $WRKREG_i = 2$ ), and meet any of the following conditions:
  1. Individual is an adult (age 18 to 59) living with at least one individual who does not have SSI, does not have earned income, and has a work registration status indicating disability ( $WRKREG_i = 1$ ). In these cases, we code the first child in the unit with  $WRKREG_i = 1$  as disabled; or, if there are no children in the unit, we code the first adult in the unit with  $WRKREG_i = 1$  as disabled. We do not code the adult with SSI and  $WRKREG_i = 2$  as disabled.
  2. Individual is a child (age 0 to 17) living with at least one other child who does not have SSI, does not have earned income, and has a work registration status indicating disability. In these cases, we code the first child in the unit with  $WRKREG_i = 1$  as disabled. We do not code the child with SSI and  $WRKREG_i = 2$  as disabled.
  3. Individual does not meet conditions (1) or (2) but is in the labor force ( $EMPSTAI_i$  greater than 1), has earned income, has no Social Security, veterans' benefits, or workers' compensation, and is living with at least one child who does not have SSI. In these cases, we code the first child in the unit as disabled. We do not code the individual described above with SSI as disabled.
- We identify as disabled all non-elderly adults who satisfy all three of the following conditions:

1. Coded as working fewer than 30 hours per week ( $EMPSTBi = 1, 2, \text{ or } 3$ ) and have monthly earnings equal to less than the equivalent of the monthly Federal minimum wage for someone working 30 hours a week
  2. Coded as being exempt from work registration due to disability ( $WRKREGi = 1$ )
  3. Has Social Security, veterans' benefits, or workers' compensation
- Beginning with the FY 2014 QC database, we also identify as disabled all non-elderly adults who satisfy all three of the following conditions:
    1. Coded as being exempt from work registration due to a disability ( $WRKREGi = 1$ )
    2. Has Social Security
    3. Has no related dependent in the unit.
  - Beginning in FY 2015, we also identify as disabled non-elderly adults in single-person SNAP households who receive Social Security.
  - In units where no individual is identified as disabled based on the above criteria, but where the unit receives a medical deduction and has no elderly individuals, we code at least one individual as disabled. We do so by looking for the following types of individuals, stopping when a step codes one or more individuals as disabled.
    1. Individuals with a work registration status indicating disability. (Code all such individuals as disabled.)
    2. Individuals with Social Security, veterans' benefits, or workers' compensation and coded as working fewer than 30 hours per week. (Code all such individuals as disabled.)
    3. Individuals with Social Security, veterans' benefits, or workers' compensation. (Code all such individuals as disabled.)
    4. Child coded as working fewer than 30 hours per week. (Code first as disabled.)
    5. Adult coded as working fewer than 30 hours per week. (Code first as disabled.)

If the unit did not contain any of the types of individuals listed above, we code all individuals in the unit as disabled.

**This page has been left blank for double-sided printing.**



**APPENDIX C**

**NEW VARIABLES AND VARIABLES THAT CHANGED IN THE FY 2015 SNAP QC  
DATABASE**

**This page has been left blank for double-sided printing.**

**Variables changed on the FY 2015 SNAP QC database**

DISi            The DISi algorithm was slightly adjusted to newly identify as disabled non-elderly adults in single-person SNAP households who receive Social Security. See pages B.8–B.9 of this documentation for further information.

**New variables on the FY 2015 SNAP QC database**

All person-level variables    Person-level variables (previously only reported for positions 1–16 in the unit) were added to report data for persons in positions 17–29.

FSDIS            Person-level indicator of non-elderly individuals with disabilities in unit

FSELDER        Indicator of elderly individuals in unit

FSKID            Indicator of children in unit

STATENAME    State or territory

WORKi          Person-level working indicator

Note:            Information regarding variables on the FY 2014 SNAP QC database may be found in *Technical Documentation for the Fiscal Year 2014 SNAP QC Database and QC Minimodel* (Vigil et al. 2015).

**This page has been left blank for double-sided printing.**

## **APPENDIX D**

### **DERIVATION OF WEIGHTS BY STATE AND MONTH**

**This page has been left blank for double-sided printing.**

Tables D.1a through D.3b present the final calculated weighted counts of SNAP units, individuals, and benefit amounts in the FY 2015 SNAP QC file. Tables D.4 through D.15 show the preliminary monthly weights (HWGT) and their derivation for each State and stratum. The preliminary weights (Stratum-Specific Weights) are derived as follows:

Data	Table D.4 – D.15 Columns	Derivation
Sampling interval	a	Raw data
Stratum sampling size	b	Raw data
SNAP units in stratum (unedited)	c*	a*b
Stratum share of State sample	d*	c/(sum c over State)
SNAP units in State	e	Raw data
SNAP units in stratum (edited)	f*	d*e
Units with complete reviews	g	Raw data
Ineligible units	h	Raw data
Disqualification rate	i	h/g
Adjusted SNAP units in State	j	(1-i)*f
Failing units	k	Raw data
Stratum sampling size	l	g-h-k
<b>Stratum-specific weight</b>	<b>m</b>	<b>j/l</b>

\* Column omitted from published tables due to space limitations; available on request.

As described in Chapter III, Section C, the preliminary monthly stratum-specific unit weights are the starting point for creating the final weights. After deriving the preliminary weights, we use a nonlinear programming technique to create final weights that match the adjusted monthly Program Operations number of units, participants, and benefits. In Chapter III, Section C, we provide a description of the derivation of sampling weights.

**Table D.1a. Calculated weighted unit counts by State (October 2014 to April 2015)**

State	October 2014	November 2014	December 2014	January 2015	February 2015	March 2015	April 2015
Alabama	417,767	418,026	423,364	420,116	417,564	416,232	410,077
Alaska	29,186	33,396	33,109	33,649	33,147	34,132	35,309
Arizona	454,266	445,703	442,851	441,771	430,335	427,987	424,015
Arkansas	216,101	219,111	216,630	208,712	204,774	211,255	207,143
California	1,972,979	2,056,792	2,025,794	2,023,244	2,048,434	2,095,801	2,098,966
Colorado	231,694	230,104	235,978	235,112	223,293	232,355	233,027
Connecticut	245,527	249,097	243,427	248,368	243,886	245,723	245,080
Delaware	70,210	70,838	73,178	72,359	69,190	71,839	69,996
District of Columbia	81,636	80,572	80,340	80,423	78,806	79,617	78,168
Florida	2,018,928	2,014,801	2,020,053	2,013,299	1,999,238	1,993,985	1,986,052
Georgia	858,357	848,269	842,219	829,194	832,672	832,202	818,869
Hawaii	96,970	97,071	98,159	97,055	96,566	93,813	89,989
Idaho	84,471	84,269	84,389	85,070	84,930	83,758	84,010
Illinois	994,716	1,041,442	1,048,606	1,055,990	1,064,507	1,057,161	1,065,865
Indiana	388,061	385,195	371,210	374,460	384,064	374,310	377,195
Iowa	186,272	187,882	186,226	188,407	186,281	183,746	184,519
Kansas	125,424	123,307	123,737	122,006	122,854	120,996	121,699
Kentucky	377,114	381,604	377,086	378,382	364,136	358,173	361,866
Louisiana	395,096	381,799	385,201	387,684	383,191	382,789	378,650
Maine	113,489	110,247	109,843	102,320	101,880	101,623	102,188
Maryland	406,148	404,626	405,712	403,788	403,097	397,898	402,834
Massachusetts	464,798	450,427	445,094	443,137	439,985	428,783	433,252
Michigan	845,599	834,467	834,614	820,859	831,767	817,168	823,255
Minnesota	234,463	229,329	238,232	237,157	232,469	233,203	237,204
Mississippi	302,294	298,874	301,115	298,998	296,687	293,714	292,244
Missouri	392,593	391,743	400,327	390,292	397,836	395,037	398,881
Montana	56,419	52,077	56,288	56,302	56,275	56,146	50,676
Nebraska	76,111	75,889	77,151	75,877	75,817	77,808	76,538
Nevada	199,971	202,470	195,295	203,043	206,354	201,947	208,142
New Hampshire	50,714	49,518	48,234	47,465	50,327	52,115	52,037
New Jersey	459,290	456,977	457,776	449,970	452,574	452,882	452,465
New Mexico	191,531	196,603	198,008	198,725	202,065	197,384	205,413
New York	1,678,096	1,585,940	1,658,407	1,673,567	1,668,394	1,672,183	1,623,849
North Carolina	804,590	812,761	808,476	785,589	798,142	798,643	796,349
North Dakota	24,660	24,517	24,007	24,749	24,126	24,264	23,614
Ohio	782,283	826,962	795,429	806,482	809,842	824,993	785,708
Oklahoma	266,982	260,991	262,635	270,188	259,720	264,412	265,570
Oregon	440,446	444,777	439,513	444,972	445,307	438,052	442,105
Pennsylvania	906,271	908,019	906,251	899,966	910,386	901,155	914,195
Rhode Island	100,020	99,405	99,732	101,932	100,771	99,952	99,640
South Carolina	386,311	368,143	384,984	378,743	377,302	381,374	373,029
South Dakota	43,074	42,354	43,331	43,832	43,754	42,843	43,411
Tennessee	638,397	628,458	609,784	602,892	611,689	614,716	605,837
Texas	1,575,397	1,581,394	1,547,567	1,536,160	1,544,770	1,543,069	1,530,217
Utah	86,974	87,266	87,285	89,118	88,713	88,311	86,567
Vermont	45,052	45,655	45,767	45,829	45,490	45,251	44,882
Virginia	419,316	404,092	413,867	397,644	395,589	389,678	400,467
Washington	578,767	576,778	577,737	578,401	569,757	575,160	572,959
West Virginia	180,853	173,222	181,657	182,600	180,284	181,004	181,048
Wisconsin	409,928	412,640	400,790	416,517	409,101	412,483	403,293
Wyoming	13,082	12,868	13,474	13,321	13,820	14,017	13,827
Guam	15,482	14,665	14,896	15,191	15,304	15,626	15,221
Virgin Islands	12,126	12,600	12,534	12,569	12,385	12,460	12,408
United States	22,446,305	22,426,032	22,407,372	22,343,498	22,339,650	22,341,227	22,239,821



**Table D.1b. Calculated weighted unit counts by State (May 2015 to September 2015) and FY average**

State	May 2015	June 2015	July 2015	August 2015	September 2015	FY average 2015
Alabama	414,375	415,687	415,581	410,833	416,029	416,304
Alaska	35,638	35,990	35,328	35,049	34,755	34,057
Arizona	430,884	433,907	429,398	438,572	434,496	436,182
Arkansas	204,363	206,743	202,413	205,056	206,978	209,107
California	2,080,310	2,115,586	2,095,275	2,123,659	2,104,918	2,070,147
Colorado	229,931	232,906	231,402	230,279	219,258	230,445
Connecticut	247,556	244,672	247,110	247,960	241,361	245,814
Delaware	70,637	71,839	71,231	68,730	70,343	70,866
District of Columbia	78,098	78,353	79,760	79,336	78,505	79,468
Florida	2,000,595	2,011,166	1,990,601	2,014,845	2,028,944	2,007,709
Georgia	831,987	836,195	829,262	831,315	819,854	834,200
Hawaii	90,564	90,956	88,191	92,501	92,025	93,655
Idaho	83,506	79,950	80,019	80,736	80,329	82,953
Illinois	1,064,622	1,045,715	1,042,650	1,037,873	1,050,682	1,047,486
Indiana	362,183	368,841	362,553	363,304	355,573	372,246
Iowa	180,636	181,913	180,612	173,585	177,283	183,114
Kansas	121,149	120,660	119,139	119,886	117,390	121,521
Kentucky	365,261	359,540	352,447	340,489	337,595	362,808
Louisiana	386,738	388,269	392,306	395,122	392,573	387,452
Maine	103,013	100,315	102,491	101,644	100,330	104,115
Maryland	406,276	399,053	388,447	406,245	400,386	402,042
Massachusetts	437,163	445,361	447,926	444,309	428,619	442,405
Michigan	820,586	815,469	811,481	807,555	802,001	822,068
Minnesota	226,178	236,954	233,088	228,538	230,516	233,111
Mississippi	292,349	282,109	289,148	293,913	294,400	294,654
Missouri	398,912	399,196	399,948	394,131	399,280	396,515
Montana	52,607	54,535	53,167	53,630	53,288	54,284
Nebraska	76,538	76,045	78,264	77,796	78,742	76,881
Nevada	209,608	207,276	209,219	218,067	217,155	206,546
New Hampshire	51,471	50,311	48,342	49,328	49,784	49,971
New Jersey	436,147	449,050	450,352	453,611	449,490	451,715
New Mexico	204,208	200,346	202,794	203,998	198,997	200,006
New York	1,639,277	1,589,617	1,590,271	1,647,478	1,626,892	1,637,831
North Carolina	786,171	781,488	783,281	766,975	792,763	792,936
North Dakota	24,826	24,835	24,804	24,725	24,807	24,494
Ohio	826,054	812,063	807,362	773,876	791,172	803,519
Oklahoma	266,490	271,488	266,702	270,896	266,266	266,028
Oregon	445,530	433,829	426,293	436,358	433,956	439,261
Pennsylvania	921,046	923,430	930,751	938,705	942,847	916,919
Rhode Island	100,626	99,483	98,296	100,921	99,697	100,040
South Carolina	374,405	372,078	372,087	377,132	372,133	376,477
South Dakota	42,360	42,995	42,779	42,756	41,944	42,953
Tennessee	595,674	601,447	587,872	586,477	583,380	605,552
Texas	1,515,726	1,550,472	1,537,611	1,561,516	1,571,497	1,549,616
Utah	88,397	86,526	86,896	85,440	85,336	87,236
Vermont	43,825	44,321	43,973	43,969	43,072	44,757
Virginia	387,656	393,236	392,395	370,354	375,563	394,988
Washington	570,554	551,592	550,467	557,312	554,529	567,834
West Virginia	182,415	175,988	182,727	177,746	179,616	179,930
Wisconsin	390,134	400,752	394,153	385,208	383,619	401,552
Wyoming	13,723	13,883	13,874	12,911	13,549	13,529
Guam	15,586	15,665	15,684	15,779	15,581	15,390
Virgin Islands	12,568	12,050	12,242	12,850	13,022	12,485
United States	22,237,131	22,232,146	22,120,462	22,211,280	22,173,123	22,293,171

**Table D.2a. Calculated weighted individual counts by State (October 2014 to April 2015)**

State	October 2014	November 2014	December 2014	January 2015	February 2015	March 2015	April 2015
Alabama	897,572	884,651	902,267	894,443	888,274	885,245	869,304
Alaska	66,828	77,908	77,642	79,734	80,129	81,429	84,291
Arizona	1,040,557	1,017,693	1,007,057	1,007,623	965,565	964,184	956,528
Arkansas	471,409	481,749	478,059	454,560	448,832	460,217	446,451
California	4,093,371	4,381,564	4,210,717	4,294,034	4,332,350	4,410,913	4,415,987
Colorado	494,811	491,774	503,645	500,125	473,172	490,710	493,102
Connecticut	436,692	445,897	439,906	443,804	433,140	435,872	434,127
Delaware	149,235	147,800	153,419	150,224	140,499	149,905	142,002
District of Columbia	145,070	141,589	141,513	142,476	138,338	140,817	138,835
Florida	3,695,060	3,686,064	3,689,976	3,668,493	3,642,572	3,624,900	3,607,878
Georgia	1,852,846	1,817,002	1,801,740	1,776,584	1,782,600	1,779,106	1,750,230
Hawaii	192,092	187,863	189,976	189,450	188,829	186,722	180,327
Idaho	197,869	198,435	194,820	199,944	199,709	195,982	197,356
Illinois	1,880,644	2,007,463	2,034,299	2,012,581	2,048,833	2,029,119	2,045,280
Indiana	851,282	845,933	819,878	811,892	839,656	815,052	822,483
Iowa	392,019	396,004	390,952	395,994	391,235	390,290	390,277
Kansas	282,027	279,229	277,806	275,244	275,885	271,511	272,697
Kentucky	783,869	796,518	783,142	788,177	757,369	759,472	759,211
Louisiana	873,547	848,515	848,417	856,114	845,883	843,459	826,733
Maine	215,430	208,044	209,935	197,281	194,260	192,105	197,886
Maryland	789,349	786,347	786,745	781,136	778,493	754,890	775,307
Massachusetts	817,015	781,038	769,319	764,264	773,297	745,535	751,607
Michigan	1,613,544	1,567,737	1,593,345	1,553,624	1,583,866	1,567,420	1,569,228
Minnesota	480,603	475,686	491,926	484,686	479,701	467,975	491,329
Mississippi	652,120	642,182	648,814	643,651	638,502	631,050	628,098
Missouri	833,624	830,489	849,694	836,393	842,509	834,463	844,467
Montana	117,611	110,952	118,115	118,308	117,109	117,772	105,927
Nebraska	171,307	170,757	173,296	167,660	170,302	173,617	170,613
Nevada	401,354	408,215	382,984	402,127	413,476	392,422	414,306
New Hampshire	103,969	101,927	96,234	96,358	103,690	107,499	107,244
New Jersey	919,480	914,198	915,614	885,238	903,626	904,816	904,012
New Mexico	427,195	437,938	439,312	440,019	444,763	435,014	452,905
New York	3,068,825	2,842,254	2,997,524	3,055,942	3,045,194	3,050,058	2,928,532
North Carolina	1,640,627	1,647,975	1,661,672	1,594,280	1,632,755	1,631,349	1,627,167
North Dakota	52,862	52,505	51,536	53,005	52,470	51,425	47,509
Ohio	1,617,414	1,697,147	1,633,261	1,651,858	1,663,237	1,691,441	1,608,502
Oklahoma	592,773	557,093	566,897	594,033	568,946	581,276	586,476
Oregon	768,120	786,462	781,540	786,186	785,435	769,855	778,397
Pennsylvania	1,813,280	1,815,612	1,808,787	1,773,797	1,810,998	1,784,984	1,815,225
Rhode Island	175,926	172,304	174,763	177,356	174,800	174,100	170,245
South Carolina	819,056	796,392	815,073	800,718	797,462	804,886	790,027
South Dakota	98,624	96,509	98,881	99,759	99,383	96,315	98,970
Tennessee	1,286,059	1,264,669	1,222,740	1,191,342	1,226,271	1,232,834	1,216,681
Texas	3,795,117	3,782,821	3,663,745	3,651,721	3,684,002	3,676,661	3,651,040
Utah	222,366	220,955	224,781	227,251	226,479	226,077	216,655
Vermont	84,830	87,208	87,263	87,270	86,363	85,569	84,686
Virginia	884,933	854,264	876,230	850,758	849,179	830,774	854,306
Washington	1,083,140	1,082,731	1,079,737	1,145,530	1,061,028	1,071,764	1,063,849
West Virginia	367,993	345,989	367,943	369,156	364,726	363,087	363,767
Wisconsin	808,869	807,449	765,566	820,056	810,834	812,728	786,316
Wyoming	30,726	29,583	32,029	30,834	32,419	32,888	32,604
Guam	47,543	43,859	44,116	46,464	46,217	47,342	46,192
Virgin Islands	26,820	27,666	27,453	27,575	27,062	27,125	26,999
United States	45,625,305	45,580,607	45,402,101	45,347,130	45,361,725	45,282,022	45,040,174

**Table D.2b. Calculated weighted individual counts by State (May 2015 to September 2015) and FY average**

State	May 2015	June 2015	July 2015	August 2015	September 2015	FY average 2015
Alabama	881,147	883,164	883,077	878,211	882,759	885,843
Alaska	85,117	86,215	84,479	83,988	82,834	80,883
Arizona	978,128	983,839	957,987	992,876	959,976	986,001
Arkansas	440,828	450,267	440,311	443,829	452,792	455,775
California	4,400,063	4,429,146	4,371,309	4,441,949	4,370,682	4,346,007
Colorado	490,694	492,908	489,675	488,427	461,026	489,173
Connecticut	439,722	430,715	438,918	440,074	421,059	436,661
Delaware	146,947	149,593	148,094	142,560	143,513	146,982
District of Columbia	137,006	136,688	141,468	140,883	139,276	140,330
Florida	3,630,463	3,646,571	3,628,030	3,653,696	3,677,655	3,654,280
Georgia	1,785,403	1,796,931	1,783,872	1,787,148	1,755,777	1,789,103
Hawaii	182,093	177,889	174,145	183,649	182,927	184,664
Idaho	195,814	188,039	186,668	188,460	187,716	194,234
Illinois	2,044,847	2,025,775	1,989,803	1,981,229	2,014,280	2,009,513
Indiana	788,308	802,695	789,639	796,358	762,572	812,146
Iowa	381,693	386,392	384,643	369,358	377,049	387,159
Kansas	271,883	270,870	267,753	269,842	263,112	273,155
Kentucky	761,750	754,709	740,969	717,648	697,835	758,389
Louisiana	854,073	855,741	865,685	871,708	871,813	855,141
Maine	199,508	193,342	197,987	196,771	193,720	199,689
Maryland	781,337	746,497	734,176	781,497	759,336	771,259
Massachusetts	758,562	776,941	781,015	757,620	730,841	767,255
Michigan	1,564,370	1,554,285	1,544,844	1,538,126	1,526,238	1,564,719
Minnesota	456,159	480,284	476,455	472,728	458,065	476,300
Mississippi	628,737	610,096	618,826	629,081	627,469	633,219
Missouri	844,083	844,851	846,529	831,558	845,105	840,314
Montana	111,670	116,843	115,396	115,139	114,253	114,925
Nebraska	170,196	167,279	174,963	174,364	176,472	171,735
Nevada	417,316	395,745	407,329	435,785	425,867	408,077
New Hampshire	106,022	104,528	98,269	98,678	102,838	102,271
New Jersey	846,446	896,318	899,713	906,370	897,652	899,457
New Mexico	452,239	445,627	445,509	451,850	446,010	443,198
New York	3,004,121	2,821,969	2,858,695	3,001,608	2,976,623	2,970,946
North Carolina	1,583,619	1,584,452	1,581,974	1,529,443	1,615,510	1,610,902
North Dakota	53,185	53,293	53,217	52,980	53,323	52,276
Ohio	1,695,975	1,659,826	1,648,146	1,568,470	1,611,783	1,645,588
Oklahoma	585,872	600,596	588,771	602,523	584,513	584,147
Oregon	790,867	754,931	727,756	767,181	762,308	771,586
Pennsylvania	1,828,419	1,830,489	1,844,556	1,858,713	1,863,656	1,820,710
Rhode Island	173,923	171,474	166,578	173,977	168,082	172,794
South Carolina	793,353	787,526	786,314	799,056	785,705	797,964
South Dakota	97,395	98,227	97,981	98,067	96,659	98,064
Tennessee	1,190,784	1,207,553	1,188,369	1,185,635	1,168,763	1,215,142
Texas	3,607,607	3,710,572	3,710,594	3,742,946	3,754,421	3,702,604
Utah	226,945	222,194	223,055	219,631	219,172	222,963
Vermont	79,806	83,218	82,314	82,340	81,250	84,343
Virginia	825,348	835,547	835,248	791,682	793,396	840,139
Washington	1,059,863	1,006,111	993,719	1,019,201	1,033,013	1,058,307
West Virginia	368,144	337,212	369,447	350,791	361,313	360,797
Wisconsin	761,096	790,537	810,851	758,806	765,008	791,510
Wyoming	32,535	32,960	32,193	30,280	31,950	31,750
Guam	47,023	47,078	47,138	47,452	46,885	46,442
Virgin Islands	27,361	26,768	26,131	27,722	28,079	27,230
United States	45,065,868	44,943,314	44,780,583	44,969,963	44,809,930	45,184,060

**Table D.3a. Calculated weighted benefit amounts by State (October 2014 to April 2015)**

State	October 2014	November 2014	December 2014	January 2015	February 2015	March 2015	April 2015
Alabama	114,549,134	111,995,878	114,280,984	113,468,049	110,618,947	111,118,897	106,496,531
Alaska	11,345,983	13,166,713	13,322,068	14,111,526	14,084,188	14,288,156	14,876,156
Arizona	123,877,969	119,322,933	123,907,910	121,094,086	120,352,490	118,974,869	111,510,764
Arkansas	54,671,295	54,179,082	54,054,261	52,082,525	49,645,721	51,328,052	51,121,436
California	565,330,025	628,955,891	623,804,825	610,423,578	598,130,559	610,399,036	611,105,517
Colorado	64,698,678	63,853,290	64,633,225	65,728,968	60,781,939	63,876,575	64,400,579
Connecticut	61,637,386	60,411,334	61,420,964	61,093,686	59,610,808	58,517,093	59,166,871
Delaware	18,729,653	19,154,616	19,312,219	19,334,278	18,410,196	18,966,513	18,450,619
District of Columbia	18,081,158	17,096,978	17,978,981	17,506,367	18,045,941	17,194,989	17,298,028
Florida	481,658,948	477,729,755	471,445,819	474,553,773	466,731,311	466,880,629	461,931,332
Georgia	235,209,815	226,324,116	222,049,108	219,518,859	229,296,794	221,468,910	222,796,849
Hawaii	43,684,523	42,259,280	41,627,838	42,286,534	41,340,029	40,648,946	38,839,564
Idaho	23,054,790	22,925,140	22,109,219	23,033,931	22,884,042	22,488,975	22,565,951
Illinois	248,331,121	261,570,494	278,831,600	272,446,321	272,455,839	277,286,457	260,342,266
Indiana	110,818,247	100,323,905	96,320,086	101,683,976	99,615,354	102,470,236	101,182,335
Iowa	42,606,384	41,571,204	42,684,510	42,194,473	41,744,077	42,614,863	40,958,170
Kansas	32,132,188	31,911,185	31,418,678	30,669,088	31,409,339	31,017,003	31,145,256
Kentucky	97,251,660	95,715,305	91,277,080	91,102,808	89,812,943	90,906,475	89,537,396
Louisiana	109,956,819	107,522,317	104,631,014	106,101,836	105,317,911	105,795,918	102,558,768
Maine	25,749,940	24,991,928	24,686,809	23,011,745	22,952,638	22,883,795	23,318,397
Maryland	97,051,253	96,782,243	95,993,977	93,558,025	95,942,027	92,110,445	91,463,589
Massachusetts	101,009,922	101,691,957	97,446,851	95,278,321	97,489,435	92,014,637	94,281,773
Michigan	208,427,088	203,833,210	199,870,229	194,356,058	189,493,414	192,498,657	201,307,610
Minnesota	51,638,625	50,236,095	49,175,658	51,470,743	50,044,068	49,197,971	52,252,576
Mississippi	79,370,813	78,258,424	77,754,214	76,771,751	76,459,437	75,304,260	75,151,740
Missouri	105,815,586	105,600,277	106,554,267	103,411,312	103,625,378	105,115,861	104,312,376
Montana	14,627,874	12,999,076	14,163,070	14,037,818	13,472,354	14,652,620	12,737,167
Nebraska	20,308,205	20,265,500	19,802,588	19,878,710	18,988,236	19,728,598	20,031,212
Nevada	48,292,426	45,559,463	46,375,857	48,223,686	48,524,276	45,714,740	49,808,128
New Hampshire	10,782,643	10,901,092	10,852,426	10,180,155	10,756,403	10,816,079	10,880,988
New Jersey	113,189,659	112,997,470	109,673,113	107,819,213	108,534,964	107,447,611	106,936,979
New Mexico	51,838,208	55,329,810	53,109,128	53,775,037	53,939,201	55,176,094	54,426,576
New York	431,792,205	397,677,322	411,942,612	425,478,622	427,613,728	428,179,770	399,039,527
North Carolina	202,224,913	188,121,060	187,616,253	190,192,027	193,646,497	198,761,372	186,806,797
North Dakota	6,521,920	6,333,334	6,528,955	6,424,377	6,330,162	6,532,795	6,176,250
Ohio	205,367,363	198,658,363	202,041,267	203,362,936	207,500,024	213,375,967	192,007,243
Oklahoma	71,606,242	67,770,130	67,544,466	70,415,885	69,012,884	70,023,094	69,980,060
Oregon	96,126,418	96,223,534	92,582,801	94,009,055	94,448,001	94,125,590	93,743,491
Pennsylvania	221,854,384	222,497,614	218,632,843	221,518,367	217,961,781	222,462,320	218,282,201
Rhode Island	22,316,592	22,840,295	23,361,839	23,629,454	23,377,409	23,679,707	22,186,086
South Carolina	103,207,470	102,669,741	101,582,134	98,816,497	98,644,991	100,944,234	97,783,513
South Dakota	12,425,381	12,013,969	12,579,585	12,512,988	12,499,358	12,038,996	12,347,088
Tennessee	163,301,505	159,482,577	158,053,823	153,001,773	154,231,098	156,449,519	156,364,883
Texas	452,706,851	449,919,467	443,109,822	432,163,675	434,913,832	430,544,734	428,170,348
Utah	25,785,393	25,872,349	25,747,491	26,205,608	25,884,423	25,666,690	25,354,388
Vermont	10,561,653	10,560,642	10,434,234	10,468,078	10,045,732	10,396,316	10,093,236
Virginia	107,259,079	102,025,920	105,347,937	101,566,117	100,484,946	99,201,826	99,445,277
Washington	130,167,437	127,320,905	126,833,808	129,001,328	128,228,804	128,741,047	128,129,760
West Virginia	41,508,237	38,888,312	40,245,395	39,878,386	38,940,334	39,147,470	40,371,904
Wisconsin	88,901,236	87,005,987	84,189,646	89,211,301	86,950,919	86,591,986	85,767,862
Wyoming	3,815,405	3,844,060	3,743,243	3,710,813	3,894,740	3,860,733	3,815,541
Guam	9,138,935	8,764,191	8,418,889	8,621,685	9,185,226	8,582,080	8,805,804
Virgin Islands	4,537,709	4,679,849	4,627,454	4,556,970	4,636,540	4,577,954	4,583,180
United States	5,796,854,345	5,748,605,583	5,735,733,070	5,714,953,178	5,688,941,684	5,712,788,162	5,612,447,938

**Table D.3b. Calculated weighted benefit amounts by State (May 2015 to September 2015) and FY average**

State	May 2015	June 2015	July 2015	August 2015	September 2015	FY average 2015
Alabama	109,685,553	106,007,849	108,353,460	109,431,951	108,817,985	110,402,102
Alaska	14,659,298	14,762,746	14,339,154	14,286,260	13,954,398	13,933,054
Arizona	114,441,779	114,272,461	117,995,328	113,996,633	118,343,362	118,174,215
Arkansas	50,626,131	52,374,100	50,139,596	51,832,421	50,900,751	51,912,947
California	621,227,092	613,821,991	605,101,971	599,118,991	595,532,156	606,912,636
Colorado	61,060,695	63,304,353	63,052,796	62,931,329	60,666,352	63,249,065
Connecticut	58,591,198	57,905,342	57,843,092	57,430,174	58,173,961	59,316,826
Delaware	18,005,431	18,911,359	18,330,252	16,832,200	18,361,488	18,566,569
District of Columbia	17,356,377	17,259,826	18,261,631	17,676,966	18,010,075	17,647,276
Florida	465,389,058	468,910,862	469,253,751	469,349,261	477,410,667	470,937,097
Georgia	229,135,665	225,281,568	226,912,877	227,384,279	219,310,854	225,390,808
Hawaii	40,073,198	39,371,903	38,311,512	40,624,459	40,060,114	40,760,658
Idaho	22,729,679	21,214,211	21,434,223	21,734,202	21,509,644	22,307,001
Illinois	266,066,436	265,227,664	266,021,144	260,545,308	268,980,665	266,508,776
Indiana	97,760,733	98,540,691	93,405,297	94,257,056	91,183,185	98,963,425
Iowa	40,566,675	42,126,207	41,855,335	38,290,680	40,633,664	41,487,187
Kansas	30,697,467	30,672,700	30,736,127	30,462,115	29,719,618	30,999,230
Kentucky	90,454,900	87,703,521	88,332,945	84,850,294	83,701,701	90,053,919
Louisiana	108,401,675	106,236,125	109,595,503	109,411,766	108,529,159	107,004,901
Maine	22,386,410	21,881,043	22,114,436	21,895,349	21,418,681	23,107,598
Maryland	95,836,621	92,360,084	84,071,156	93,680,819	89,859,349	93,225,799
Massachusetts	95,416,572	95,689,560	95,681,064	96,245,237	92,774,834	96,251,680
Michigan	187,205,853	189,186,840	189,057,008	184,918,359	182,488,189	193,553,543
Minnesota	50,526,161	50,886,591	48,831,024	49,840,540	48,293,190	50,199,437
Mississippi	74,050,984	71,942,951	72,779,999	73,960,098	74,684,408	75,540,757
Missouri	102,421,009	102,493,016	104,074,031	102,261,650	103,539,873	104,102,053
Montana	13,825,766	13,916,135	13,690,992	13,533,381	13,446,239	13,758,541
Nebraska	19,794,561	19,171,723	19,703,655	19,889,472	20,453,182	19,834,637
Nevada	50,053,060	48,804,545	48,187,949	50,956,575	49,521,814	48,335,210
New Hampshire	11,024,847	10,642,304	10,290,728	10,586,383	10,594,495	10,692,379
New Jersey	104,161,902	104,516,853	103,875,064	106,128,622	103,691,638	107,414,424
New Mexico	55,694,109	54,731,959	55,457,961	54,853,102	50,213,541	54,045,394
New York	411,482,071	396,981,351	400,138,656	417,277,001	397,517,499	412,093,364
North Carolina	196,806,589	188,673,356	190,071,295	189,658,715	181,647,442	191,185,526
North Dakota	6,393,839	6,477,998	6,418,146	6,329,399	6,545,421	6,417,716
Ohio	205,609,346	195,265,811	202,866,168	190,471,491	195,738,357	201,022,028
Oklahoma	70,335,506	71,314,378	70,902,330	72,699,478	72,163,665	70,314,010
Oregon	91,941,102	91,131,892	88,264,813	89,024,479	88,518,264	92,511,620
Pennsylvania	221,199,797	227,327,108	225,557,611	225,481,549	221,413,434	222,015,751
Rhode Island	23,327,077	21,627,845	23,071,000	22,028,233	22,693,128	22,844,889
South Carolina	97,099,236	96,680,941	98,967,150	98,419,043	97,731,773	99,378,894
South Dakota	12,222,207	12,360,436	12,432,195	12,365,822	12,203,816	12,333,487
Tennessee	153,205,044	152,441,982	149,870,098	146,676,255	148,721,183	154,316,645
Texas	430,952,416	431,526,192	426,874,845	438,644,398	435,898,054	436,285,386
Utah	26,415,209	25,848,409	25,199,137	25,199,590	24,929,974	25,675,722
Vermont	10,118,050	10,078,079	10,218,190	10,034,854	9,685,911	10,224,581
Virginia	98,817,032	96,808,148	92,884,528	93,909,674	96,920,931	99,555,951
Washington	124,712,590	125,102,167	123,799,058	122,383,012	123,350,053	126,480,831
West Virginia	39,459,327	37,838,663	40,038,079	38,887,296	38,859,301	39,505,225
Wisconsin	81,790,429	79,214,862	82,450,160	75,565,676	78,512,840	83,846,075
Wyoming	3,778,039	3,847,825	3,725,357	3,183,165	3,808,899	3,752,318
Guam	8,413,887	8,897,530	8,898,751	8,689,935	8,337,933	8,729,571
Virgin Islands	4,567,615	4,537,107	4,576,844	4,572,097	4,761,771	4,601,257
United States	5,657,973,305	5,604,111,166	5,594,315,474	5,590,697,095	5,554,738,878	5,667,679,990

**Table D.4. Stratification and weight calculation by State, October 2014**

	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum-specific units weight
State	Stratum	a	b	e	g	h	i	j	k	l	m
Alabama	0	1	95	422,625	87	1	0.0115	417,767	0	86	4,858
Alaska	0	1	45	29,975	38	1	0.0263	29,186	0	37	789
Arizona	0	1	99	454,266	83	0	0.0000	454,266	0	83	5,473
Arkansas	0	1	111	220,380	103	2	0.0194	216,101	2	99	2,183
California	0	1	82	2,070,011	64	3	0.0469	1,972,979	0	61	32,344
Colorado	0	1	93	234,743	77	1	0.0130	231,694	0	76	3,049
Connecticut	0	1	92	248,450	85	1	0.0118	245,527	0	84	2,923
Delaware	0	1	92	72,108	76	2	0.0263	70,210	1	73	962
District of Columbia	0	1	92	81,636	89	0	0.0000	81,636	0	89	917
Florida	0	1	98	2,018,928	88	0	0.0000	2,018,928	0	88	22,942
Georgia	0	1	101	868,223	88	1	0.0114	858,357	0	87	9,866
Hawaii	0	1	95	98,153	83	1	0.0120	96,970	2	80	1,212
Idaho	0	1	96	85,453	87	1	0.0115	84,471	2	84	1,006
Illinois	0	1	99	1,052,548	91	5	0.0549	994,716	0	86	11,566
Indiana	0	1	104	396,497	94	2	0.0213	388,061	0	92	4,218
Iowa	0	1	91	188,723	77	1	0.0130	186,272	0	76	2,451
Kansas	0	1	100	125,424	89	0	0.0000	125,424	0	89	1,409
Kentucky	0	1	86	386,312	84	2	0.0238	377,114	0	82	4,599
Louisiana	0	1	97	395,096	81	0	0.0000	395,096	0	81	4,878
Maine	0	1	85	113,489	76	0	0.0000	113,489	0	76	1,493
Maryland	0	1	89	406,148	76	0	0.0000	406,148	0	76	5,344
Massachusetts	0	1	91	464,798	78	0	0.0000	464,798	0	78	5,959
Michigan	0	1	89	845,599	78	0	0.0000	845,599	0	78	10,841
Minnesota	0	1	101	247,346	96	5	0.0521	234,463	0	91	2,577
Mississippi	0	1	95	302,294	85	0	0.0000	302,294	0	85	3,556
Missouri	0	1	91	392,593	74	0	0.0000	392,593	0	74	5,305
Montana	0	1	83	58,008	73	2	0.0274	56,419	0	71	795
Nebraska	0	1	95	77,051	82	1	0.0122	76,111	0	81	940
Nevada	0	1	105	202,098	95	1	0.0105	199,971	0	94	2,127
New Hampshire	0	1	74	52,251	68	2	0.0294	50,714	0	66	768
New Jersey	0	1	88	459,290	71	0	0.0000	459,290	0	71	6,469
New Mexico	0	1	98	201,229	83	4	0.0482	191,531	0	79	2,424
New York	0	1	90	1,678,096	74	0	0.0000	1,678,096	0	74	22,677
North Carolina	0	1	94	813,432	92	1	0.0109	804,590	0	91	8,842
North Dakota	0	1	41	24,660	38	0	0.0000	24,660	0	38	649

FINAL REPORT

D.10



Table D.4 (continued)

	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum- specific units weight
State	Stratum	a	b	e	g	h	i	j	k	l	m
Ohio	0	1	99	828,300	90	5	0.0556	782,283	0	85	9,203
Oklahoma	0	1	101	272,544	98	2	0.0204	266,982	0	96	2,781
Oregon	0	1	97	446,166	78	1	0.0128	440,446	0	77	5,720
Pennsylvania	0	1	91	906,271	84	0	0.0000	906,271	0	84	10,789
Rhode Island	0	1	91	101,302	79	1	0.0127	100,020	0	78	1,282
South Carolina	0	1	97	386,311	88	0	0.0000	386,311	0	88	4,390
South Dakota	0	1	66	43,074	65	0	0.0000	43,074	0	65	663
Tennessee	0	1	96	638,397	74	0	0.0000	638,397	0	74	8,627
Texas	0	1	94	1,596,686	75	1	0.0133	1,575,397	0	74	21,289
Utah	0	1	85	89,148	82	2	0.0244	86,974	0	80	1,087
Vermont	0	1	71	45,816	60	1	0.0167	45,052	0	59	764
Virginia	0	1	92	419,316	73	0	0.0000	419,316	0	73	5,744
Washington	0	1	91	578,767	83	0	0.0000	578,767	0	83	6,973
West Virginia	0	1	93	180,853	80	0	0.0000	180,853	0	80	2,261
Wisconsin	0	1	89	420,716	78	2	0.0256	409,928	0	76	5,394
Wyoming	0	1	30	14,051	29	2	0.0690	13,082	0	27	485
Guam	0	1	43	15,482	38	0	0.0000	15,482	0	38	407
Virgin Islands	0	1	26	12,632	25	1	0.0400	12,127	0	24	505

**Table D.5. Stratification and weight calculation by State, November 2014**

	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum-specific units weight
State	Stratum	a	b	e	g	h	i	j	k	l	m
Alabama	0	1	95	422,887	87	1	0.0115	418,026	0	86	4,861
Alaska	0	1	52	33,396	44	0	0.0000	33,396	0	44	759
Arizona	0	1	98	450,768	89	1	0.0112	445,703	0	88	5,065
Arkansas	0	1	111	219,111	105	0	0.0000	219,111	1	104	2,107
California	0	1	83	2,056,792	67	0	0.0000	2,056,792	0	67	30,698
Colorado	0	1	94	233,172	76	1	0.0132	230,104	0	75	3,068
Connecticut	0	1	93	249,097	81	0	0.0000	249,097	1	80	3,114
Delaware	0	1	92	71,723	81	1	0.0123	70,838	0	80	885
District of Columbia	0	1	93	81,531	85	1	0.0118	80,572	1	83	971
Florida	0	1	97	2,014,801	92	0	0.0000	2,014,801	0	92	21,900
Georgia	0	1	101	858,614	83	1	0.0120	848,269	0	82	10,345
Hawaii	0	1	96	99,625	78	2	0.0256	97,071	1	75	1,294
Idaho	0	1	97	85,205	91	1	0.0110	84,269	1	89	947
Illinois	0	1	98	1,053,277	89	1	0.0112	1,041,442	0	88	11,835
Indiana	0	1	102	389,893	83	1	0.0120	385,195	1	81	4,755
Iowa	0	1	92	187,882	85	0	0.0000	187,882	0	85	2,210
Kansas	0	1	98	124,811	83	1	0.0120	123,307	0	82	1,504
Kentucky	0	1	85	381,604	82	0	0.0000	381,604	0	82	4,654
Louisiana	0	1	96	391,846	78	2	0.0256	381,799	0	76	5,024
Maine	0	1	84	111,679	78	1	0.0128	110,247	0	77	1,432
Maryland	0	1	90	404,626	80	0	0.0000	404,626	0	80	5,058
Massachusetts	0	1	91	461,413	84	2	0.0238	450,427	0	82	5,493
Michigan	0	1	88	845,898	74	1	0.0135	834,467	0	73	11,431
Minnesota	0	1	99	243,312	87	5	0.0575	229,329	0	82	2,797
Mississippi	0	1	95	302,270	89	1	0.0112	298,874	1	87	3,435
Missouri	0	1	92	396,898	77	1	0.0130	391,743	0	76	5,155
Montana	0	1	82	57,685	72	7	0.0972	52,077	3	62	840
Nebraska	0	1	94	76,901	76	1	0.0132	75,889	0	75	1,012
Nevada	0	1	106	202,470	94	0	0.0000	202,470	1	93	2,177
New Hampshire	0	1	74	51,839	67	3	0.0448	49,518	0	64	774
New Jersey	0	1	88	456,977	66	0	0.0000	456,977	0	66	6,924
New Mexico	0	1	98	201,340	85	2	0.0235	196,603	0	83	2,369
New York	0	1	90	1,671,667	78	4	0.0513	1,585,940	1	73	21,725
North Carolina	0	1	93	821,893	90	1	0.0111	812,761	0	89	9,132
North Dakota	0	1	41	24,517	37	0	0.0000	24,517	0	37	663

FINAL REPORT

D.12



Table D.5 (continued)

	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum- specific units weight
State	Stratum	a	b	e	g	h	i	j	k	l	m
Ohio	0	1	99	826,962	85	0	0.0000	826,962	0	85	9,729
Oklahoma	0	1	100	271,980	99	4	0.0404	260,991	0	95	2,747
Oregon	0	1	95	444,777	85	0	0.0000	444,777	0	85	5,233
Pennsylvania	0	1	91	908,019	84	0	0.0000	908,019	0	84	10,810
Rhode Island	0	1	90	100,603	84	1	0.0119	99,405	0	83	1,198
South Carolina	0	1	97	384,877	92	4	0.0435	368,143	0	88	4,183
South Dakota	0	1	66	43,026	64	1	0.0156	42,354	0	63	672
Tennessee	0	1	95	628,458	78	0	0.0000	628,458	0	78	8,057
Texas	0	1	94	1,581,394	83	0	0.0000	1,581,394	0	83	19,053
Utah	0	1	85	88,357	81	1	0.0123	87,266	0	80	1,091
Vermont	0	1	70	45,655	59	0	0.0000	45,655	1	58	787
Virginia	0	1	91	415,805	71	2	0.0282	404,092	0	69	5,856
Washington	0	1	90	576,778	79	0	0.0000	576,778	0	79	7,301
West Virginia	0	1	93	180,440	75	3	0.0400	173,222	0	72	2,406
Wisconsin	0	1	89	417,999	78	1	0.0128	412,640	0	77	5,359
Wyoming	0	1	29	13,897	27	2	0.0741	12,868	0	25	515
Guam	0	1	43	15,437	40	2	0.0500	14,665	0	38	386
Virgin Islands	0	1	26	12,600	25	0	0.0000	12,600	0	25	504

**Table D.6. Stratification and weight calculation by State, December 2014**

	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum-specific units weight
State	Stratum	a	b	e	g	h	i	j	k	l	m
Alabama	0	1	96	423,364	81	0	0.0000	423,364	0	81	5,227
Alaska	0	1	52	33,109	44	0	0.0000	33,109	0	44	752
Arizona	0	1	96	448,123	85	1	0.0118	442,851	0	84	5,272
Arkansas	0	1	111	218,775	102	1	0.0098	216,630	0	101	2,145
California	0	1	84	2,084,513	71	2	0.0282	2,025,794	0	69	29,359
Colorado	0	1	93	235,978	74	0	0.0000	235,978	0	74	3,189
Connecticut	0	1	91	249,590	81	2	0.0247	243,427	1	78	3,121
Delaware	0	1	92	73,178	76	0	0.0000	73,178	0	76	963
District of Columbia	0	1	93	81,308	84	1	0.0119	80,340	1	82	980
Florida	0	1	99	2,020,053	91	0	0.0000	2,020,053	0	91	22,198
Georgia	0	1	99	852,490	83	1	0.0120	842,219	1	81	10,398
Hawaii	0	1	96	99,542	72	1	0.0139	98,159	2	69	1,423
Idaho	0	1	97	85,296	94	1	0.0106	84,389	0	93	907
Illinois	0	1	100	1,073,279	87	2	0.0230	1,048,606	0	85	12,337
Indiana	0	1	101	388,679	89	4	0.0449	371,210	0	85	4,367
Iowa	0	1	92	188,554	81	1	0.0123	186,226	0	80	2,328
Kansas	0	1	99	123,737	91	0	0.0000	123,737	0	91	1,360
Kentucky	0	1	85	381,629	84	1	0.0119	377,086	0	83	4,543
Louisiana	0	1	98	390,016	81	1	0.0123	385,201	0	80	4,815
Maine	0	1	83	111,327	75	1	0.0133	109,843	0	74	1,484
Maryland	0	1	90	405,712	81	0	0.0000	405,712	1	80	5,071
Massachusetts	0	1	90	456,084	83	2	0.0241	445,094	0	81	5,495
Michigan	0	1	87	834,614	82	0	0.0000	834,614	0	82	10,178
Minnesota	0	1	99	243,355	95	2	0.0211	238,232	0	93	2,562
Mississippi	0	1	94	301,115	79	0	0.0000	301,115	0	79	3,812
Missouri	0	1	94	400,327	79	0	0.0000	400,327	0	79	5,067
Montana	0	1	82	57,968	69	2	0.0290	56,288	1	66	853
Nebraska	0	1	94	77,151	82	0	0.0000	77,151	0	82	941
Nevada	0	1	106	203,879	95	4	0.0421	195,295	0	91	2,146
New Hampshire	0	1	74	52,188	66	5	0.0758	48,234	0	61	791
New Jersey	0	1	89	457,776	65	0	0.0000	457,776	0	65	7,043
New Mexico	0	1	98	202,613	88	2	0.0227	198,008	0	86	2,302
New York	0	1	90	1,682,099	71	1	0.0141	1,658,407	0	70	23,692
North Carolina	0	1	93	808,476	86	0	0.0000	808,476	0	86	9,401
North Dakota	0	1	42	24,639	39	1	0.0256	24,007	0	38	632

FINAL REPORT

D.14

Table D.6 (continued)

	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum- specific units weight
State	Stratum	a	b	e	g	h	i	j	k	l	m
Ohio	0	1	99	833,307	88	4	0.0455	795,429	0	84	9,469
Oklahoma	0	1	100	270,929	98	3	0.0306	262,635	0	95	2,765
Oregon	0	1	96	444,873	83	1	0.0120	439,513	0	82	5,360
Pennsylvania	0	1	91	906,251	85	0	0.0000	906,251	0	85	10,662
Rhode Island	0	1	90	100,979	81	1	0.0123	99,732	0	80	1,247
South Carolina	0	1	96	384,984	94	0	0.0000	384,984	0	94	4,096
South Dakota	0	1	66	43,331	65	0	0.0000	43,331	0	65	667
Tennessee	0	1	95	633,237	81	3	0.0370	609,784	0	78	7,818
Texas	0	1	92	1,569,995	70	1	0.0143	1,547,567	0	69	22,429
Utah	0	1	85	88,390	80	1	0.0125	87,285	0	79	1,105
Vermont	0	1	71	45,767	61	0	0.0000	45,767	0	61	750
Virginia	0	1	91	413,867	75	0	0.0000	413,867	0	75	5,518
Washington	0	1	90	577,737	82	0	0.0000	577,737	0	82	7,046
West Virginia	0	1	93	181,657	80	0	0.0000	181,657	1	79	2,299
Wisconsin	0	1	88	416,822	78	3	0.0385	400,790	0	75	5,344
Wyoming	0	1	30	13,939	30	1	0.0333	13,474	0	29	465
Guam	0	1	44	15,310	37	1	0.0270	14,896	0	36	414
Virgin Islands	0	1	26	12,534	26	0	0.0000	12,534	0	26	482

**Table D.7. Stratification and weight calculation by State, January 2015**

	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum-specific units weight
State	Stratum	a	b	e	g	h	i	j	k	l	m
Alabama	0	1	94	420,116	84	0	0.0000	420,116	0	84	5,001
Alaska	0	1	52	33,649	41	0	0.0000	33,649	0	41	821
Arizona	0	1	96	441,771	80	0	0.0000	441,771	0	80	5,522
Arkansas	0	1	110	217,319	101	4	0.0396	208,712	0	97	2,152
California	0	1	85	2,084,554	68	2	0.0294	2,023,244	0	66	30,655
Colorado	0	1	94	235,112	74	0	0.0000	235,112	0	74	3,177
Connecticut	0	1	92	248,368	82	0	0.0000	248,368	0	82	3,029
Delaware	0	1	92	73,393	71	1	0.0141	72,359	0	70	1,034
District of Columbia	0	1	92	80,423	84	0	0.0000	80,423	0	84	957
Florida	0	1	97	2,013,299	83	0	0.0000	2,013,299	0	83	24,257
Georgia	0	1	98	838,949	86	1	0.0116	829,194	0	85	9,755
Hawaii	0	1	94	98,385	74	1	0.0135	97,055	1	72	1,348
Idaho	0	1	96	85,070	76	0	0.0000	85,070	0	76	1,119
Illinois	0	1	100	1,067,345	94	1	0.0106	1,055,990	0	93	11,355
Indiana	0	1	101	387,226	91	3	0.0330	374,460	0	88	4,255
Iowa	0	1	92	188,407	87	0	0.0000	188,407	0	87	2,166
Kansas	0	1	98	123,441	86	1	0.0116	122,006	0	85	1,435
Kentucky	0	1	84	378,382	84	0	0.0000	378,382	1	83	4,559
Louisiana	0	1	95	387,684	79	0	0.0000	387,684	1	78	4,970
Maine	0	1	77	103,803	70	1	0.0143	102,320	1	68	1,505
Maryland	0	1	89	403,788	78	0	0.0000	403,788	1	77	5,244
Massachusetts	0	1	87	449,125	75	1	0.0133	443,137	0	74	5,988
Michigan	0	1	87	832,755	70	1	0.0143	820,859	0	69	11,897
Minnesota	0	1	99	242,257	95	2	0.0211	237,157	0	93	2,550
Mississippi	0	1	94	298,998	87	0	0.0000	298,998	0	87	3,437
Missouri	0	1	94	399,929	83	2	0.0241	390,292	0	81	4,818
Montana	0	1	83	57,934	71	2	0.0282	56,302	2	67	840
Nebraska	0	1	96	77,774	82	2	0.0244	75,877	1	79	960
Nevada	0	1	107	205,203	95	1	0.0105	203,043	0	94	2,160
New Hampshire	0	1	74	52,212	66	6	0.0909	47,465	2	58	818
New Jersey	0	1	88	456,220	73	1	0.0137	449,970	1	71	6,338
New Mexico	0	1	98	203,401	87	2	0.0230	198,725	0	85	2,338
New York	0	1	90	1,673,567	79	0	0.0000	1,673,567	1	78	21,456
North Carolina	0	1	93	803,243	91	2	0.0220	785,589	0	89	8,827
North Dakota	0	1	41	24,749	38	0	0.0000	24,749	0	38	651
Ohio	0	1	98	824,811	90	2	0.0222	806,482	0	88	9,165

Table D.7 (continued)

	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum- specific units weight
State	Stratum	a	b	e	g	h	i	j	k	l	m
Oklahoma	0	1	99	270,188	95	0	0.0000	270,188	0	95	2,844
Oregon	0	1	96	444,972	82	0	0.0000	444,972	0	82	5,426
Pennsylvania	0	1	90	911,216	81	1	0.0123	899,966	0	80	11,250
Rhode Island	0	1	90	101,932	83	0	0.0000	101,932	0	83	1,228
South Carolina	0	1	96	382,860	93	1	0.0108	378,743	0	92	4,117
South Dakota	0	1	67	43,832	62	0	0.0000	43,832	0	62	707
Tennessee	0	1	94	627,334	77	3	0.0390	602,892	2	72	8,374
Texas	0	1	92	1,557,496	73	1	0.0137	1,536,160	0	72	21,336
Utah	0	1	85	89,118	72	0	0.0000	89,118	0	72	1,238
Vermont	0	1	71	45,829	64	0	0.0000	45,829	0	64	716
Virginia	0	1	91	408,690	74	2	0.0270	397,644	0	72	5,523
Washington	0	1	91	578,401	80	0	0.0000	578,401	0	80	7,230
West Virginia	0	1	94	182,600	83	0	0.0000	182,600	0	83	2,200
Wisconsin	0	1	88	416,517	76	0	0.0000	416,517	0	76	5,480
Wyoming	0	1	29	13,900	24	1	0.0417	13,321	0	23	579
Guam	0	1	43	15,580	40	1	0.0250	15,191	0	39	390
Virgin Islands	0	1	26	12,569	26	0	0.0000	12,569	0	26	483

**Table D.8. Stratification and weight calculation by State, February 2015**

State	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum-specific units weight
	a	b	e	g	h	i	j	k	l	m	
Alabama	0	1	94	417,564	88	0	0.0000	417,564	0	88	4,745
Alaska	0	1	53	33,918	44	1	0.0227	33,147	0	43	771
Arizona	0	1	94	435,782	80	1	0.0125	430,335	0	79	5,447
Arkansas	0	1	110	217,185	105	6	0.0571	204,774	1	98	2,090
California	0	1	85	2,082,575	61	1	0.0164	2,048,434	0	60	34,141
Colorado	0	1	93	233,144	71	3	0.0423	223,293	0	68	3,284
Connecticut	0	1	91	247,138	76	1	0.0132	243,886	0	75	3,252
Delaware	0	1	92	72,242	71	3	0.0423	69,190	0	68	1,017
District of Columbia	0	1	91	79,722	87	1	0.0115	78,806	0	86	916
Florida	0	1	97	1,999,238	91	0	0.0000	1,999,238	0	91	21,970
Georgia	0	1	98	832,672	92	0	0.0000	832,672	0	92	9,051
Hawaii	0	1	94	97,854	76	1	0.0132	96,566	1	74	1,305
Idaho	0	1	97	84,930	83	0	0.0000	84,930	0	83	1,023
Illinois	0	1	99	1,064,507	91	0	0.0000	1,064,507	0	91	11,698
Indiana	0	1	100	384,064	87	0	0.0000	384,064	0	87	4,415
Iowa	0	1	92	188,610	81	1	0.0123	186,281	0	80	2,329
Kansas	0	1	97	122,854	87	0	0.0000	122,854	0	87	1,412
Kentucky	0	1	84	373,355	81	2	0.0247	364,136	0	79	4,609
Louisiana	0	1	95	383,191	76	0	0.0000	383,191	0	76	5,042
Maine	0	1	77	103,315	72	1	0.0139	101,880	0	71	1,435
Maryland	0	1	90	403,097	81	0	0.0000	403,097	0	81	4,977
Massachusetts	0	1	88	445,626	79	1	0.0127	439,985	0	78	5,641
Michigan	0	1	87	831,767	74	0	0.0000	831,767	0	74	11,240
Minnesota	0	1	98	240,050	95	3	0.0316	232,469	0	92	2,527
Mississippi	0	1	93	296,687	83	0	0.0000	296,687	0	83	3,575
Missouri	0	1	93	397,836	80	0	0.0000	397,836	0	80	4,973
Montana	0	1	82	57,980	68	2	0.0294	56,275	1	65	866
Nebraska	0	1	95	77,644	85	2	0.0235	75,817	0	83	913
Nevada	0	1	107	206,354	91	0	0.0000	206,354	0	91	2,268
New Hampshire	0	1	73	51,876	67	2	0.0299	50,327	0	65	774
New Jersey	0	1	87	452,574	79	0	0.0000	452,574	0	79	5,729
New Mexico	0	1	98	204,471	85	1	0.0118	202,065	0	84	2,406
New York	0	1	90	1,668,394	74	0	0.0000	1,668,394	0	74	22,546
North Carolina	0	1	92	798,142	90	0	0.0000	798,142	0	90	8,868
North Dakota	0	1	41	24,796	37	1	0.0270	24,126	0	36	670
Ohio	0	1	97	819,840	82	1	0.0122	809,842	0	81	9,998

Table D.8 (continued)

State	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum- specific units weight
	a	b	e	g	h	i	j	k	l	m	
Oklahoma	0	1	98	268,574	91	3	0.0330	259,720	0	88	2,951
Oregon	0	1	95	445,307	87	0	0.0000	445,307	1	86	5,178
Pennsylvania	0	1	91	910,386	85	0	0.0000	910,386	0	85	10,710
Rhode Island	0	1	89	100,771	81	0	0.0000	100,771	0	81	1,244
South Carolina	0	1	95	381,639	88	1	0.0114	377,302	0	87	4,337
South Dakota	0	1	67	43,754	65	0	0.0000	43,754	0	65	673
Tennessee	0	1	92	611,689	77	0	0.0000	611,689	0	77	7,944
Texas	0	1	91	1,544,770	76	0	0.0000	1,544,770	0	76	20,326
Utah	0	1	86	88,713	76	0	0.0000	88,713	0	76	1,167
Vermont	0	1	70	45,490	52	0	0.0000	45,490	0	52	875
Virginia	0	1	89	401,868	64	1	0.0156	395,589	0	63	6,279
Washington	0	1	90	576,791	82	1	0.0122	569,757	0	81	7,034
West Virginia	0	1	94	182,566	80	1	0.0125	180,284	0	79	2,282
Wisconsin	0	1	89	414,215	81	1	0.0123	409,101	0	80	5,114
Wyoming	0	1	29	13,820	27	0	0.0000	13,820	0	27	512
Guam	0	1	44	15,718	38	1	0.0263	15,304	0	37	414
Virgin Islands	0	1	26	12,385	23	0	0.0000	12,385	0	23	538

**Table D.9. Stratification and weight calculation by State, March 2015**

State	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum-specific units weight
	a	b	e	g	h	i	j	k	l	m	
Alabama	0	1	94	416,232	87	0	0.0000	416,232	0	87	4,784
Alaska	0	1	53	34,132	39	0	0.0000	34,132	0	39	875
Arizona	0	1	94	433,337	81	1	0.0123	427,987	0	80	5,350
Arkansas	0	1	107	213,326	103	1	0.0097	211,255	3	99	2,134
California	0	1	112	2,095,801	85	0	0.0000	2,095,801	0	85	24,656
Colorado	0	1	93	235,495	75	1	0.0133	232,355	0	74	3,140
Connecticut	0	1	92	248,757	82	1	0.0122	245,723	1	80	3,072
Delaware	0	1	92	71,839	75	0	0.0000	71,839	0	75	958
District of Columbia	0	1	90	79,617	85	0	0.0000	79,617	0	85	937
Florida	0	1	95	1,993,985	87	0	0.0000	1,993,985	0	87	22,919
Georgia	0	1	97	832,202	83	0	0.0000	832,202	0	83	10,027
Hawaii	0	1	91	95,031	78	1	0.0128	93,813	1	76	1,234
Idaho	0	1	97	84,699	90	1	0.0111	83,758	0	89	941
Illinois	0	1	99	1,069,312	88	1	0.0114	1,057,161	0	87	12,151
Indiana	0	1	100	383,015	88	2	0.0227	374,310	1	85	4,404
Iowa	0	1	92	186,164	77	1	0.0130	183,746	0	76	2,418
Kansas	0	1	97	122,355	90	1	0.0111	120,996	0	89	1,360
Kentucky	0	1	83	372,128	80	3	0.0375	358,173	0	77	4,652
Louisiana	0	1	94	382,789	78	0	0.0000	382,789	0	78	4,908
Maine	0	1	99	103,933	90	2	0.0222	101,623	0	88	1,155
Maryland	0	1	89	403,066	78	1	0.0128	397,898	0	77	5,168
Massachusetts	0	1	85	440,372	76	2	0.0263	428,783	0	74	5,794
Michigan	0	1	87	828,677	72	1	0.0139	817,168	0	71	11,509
Minnesota	0	1	98	240,891	94	3	0.0319	233,203	0	91	2,563
Mississippi	0	1	92	293,714	84	0	0.0000	293,714	0	84	3,497
Missouri	0	1	94	400,304	76	1	0.0132	395,037	0	75	5,267
Montana	0	1	83	57,797	70	2	0.0286	56,146	0	68	826
Nebraska	0	1	95	77,808	78	0	0.0000	77,808	0	78	998
Nevada	0	1	108	208,258	99	3	0.0303	201,947	0	96	2,104
New Hampshire	0	1	74	52,115	69	0	0.0000	52,115	0	69	755
New Jersey	0	1	86	452,882	73	0	0.0000	452,882	1	72	6,290
New Mexico	0	1	98	204,976	81	3	0.0370	197,384	0	78	2,531
New York	0	1	90	1,672,183	72	0	0.0000	1,672,183	0	72	23,225
North Carolina	0	1	93	798,643	89	0	0.0000	798,643	0	89	8,974
North Dakota	0	1	42	24,886	40	1	0.0250	24,264	0	39	622
Ohio	0	1	98	824,993	86	0	0.0000	824,993	0	86	9,593



Table D.9 (continued)

State	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum- specific units weight
	a	b	e	g	h	i	j	k	l	m	
Oklahoma	0	1	98	267,286	93	1	0.0108	264,412	0	92	2,874
Oregon	0	1	95	443,741	78	1	0.0128	438,052	0	77	5,689
Pennsylvania	0	1	91	912,012	84	1	0.0119	901,155	0	83	10,857
Rhode Island	0	1	90	101,201	81	1	0.0123	99,952	0	80	1,249
South Carolina	0	1	95	381,374	87	0	0.0000	381,374	0	87	4,384
South Dakota	0	1	67	43,492	67	1	0.0149	42,843	1	65	659
Tennessee	0	1	93	614,716	79	0	0.0000	614,716	0	79	7,781
Texas	0	1	91	1,543,069	77	0	0.0000	1,543,069	0	77	20,040
Utah	0	1	86	89,443	79	1	0.0127	88,311	0	78	1,132
Vermont	0	1	70	45,251	63	0	0.0000	45,251	0	63	718
Virginia	0	1	89	401,139	70	2	0.0286	389,678	0	68	5,731
Washington	0	1	90	575,160	81	0	0.0000	575,160	0	81	7,101
West Virginia	0	1	94	185,165	89	2	0.0225	181,004	0	87	2,081
Wisconsin	0	1	88	412,483	73	0	0.0000	412,483	0	73	5,650
Wyoming	0	1	30	14,017	25	0	0.0000	14,017	1	24	584
Guam	0	1	44	15,626	38	0	0.0000	15,626	0	38	411
Virgin Islands	0	1	26	12,460	23	0	0.0000	12,460	0	23	542

**Table D.10. Stratification and weight calculation by State, April 2015**

State	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum-specific units weight
	a	b	e	g	h	i	j	k	l	m	
Alabama	0	1	94	415,018	84	1	0.0119	410,077	0	83	4,941
Alaska	0	1	54	35,309	42	0	0.0000	35,309	0	42	841
Arizona	0	1	94	429,250	82	1	0.0122	424,015	0	81	5,235
Arkansas	0	1	107	211,414	99	2	0.0202	207,143	0	97	2,135
California	0	1	113	2,098,966	78	0	0.0000	2,098,966	0	78	26,910
Colorado	0	1	93	233,027	81	0	0.0000	233,027	0	81	2,877
Connecticut	0	1	91	248,263	78	1	0.0128	245,080	2	75	3,268
Delaware	0	1	91	71,703	84	2	0.0238	69,996	1	81	864
District of Columbia	0	1	90	79,077	87	1	0.0115	78,168	1	85	920
Florida	0	1	97	1,986,052	87	0	0.0000	1,986,052	0	87	22,828
Georgia	0	1	98	828,070	90	1	0.0111	818,869	0	89	9,201
Hawaii	0	1	90	93,637	77	3	0.0390	89,989	0	74	1,216
Idaho	0	1	96	84,010	82	0	0.0000	84,010	0	82	1,025
Illinois	0	1	90	1,065,865	80	0	0.0000	1,065,865	0	80	13,323
Indiana	0	1	99	377,195	83	0	0.0000	377,195	0	83	4,545
Iowa	0	1	90	184,519	86	0	0.0000	184,519	0	86	2,146
Kansas	0	1	97	121,699	90	0	0.0000	121,699	0	90	1,352
Kentucky	0	1	82	366,447	80	1	0.0125	361,866	0	79	4,581
Louisiana	0	1	95	383,568	78	1	0.0128	378,650	0	77	4,918
Maine	0	1	99	103,336	90	1	0.0111	102,188	0	89	1,148
Maryland	0	1	89	402,834	77	0	0.0000	402,834	0	77	5,232
Massachusetts	0	1	84	438,953	77	1	0.0130	433,252	0	76	5,701
Michigan	0	1	93	823,255	84	0	0.0000	823,255	0	84	9,801
Minnesota	0	1	100	239,755	94	1	0.0106	237,204	0	93	2,551
Mississippi	0	1	91	292,244	80	0	0.0000	292,244	1	79	3,699
Missouri	0	1	94	398,881	72	0	0.0000	398,881	1	71	5,618
Montana	0	1	79	55,580	68	6	0.0882	50,676	3	59	859
Nebraska	0	1	95	77,449	85	1	0.0118	76,538	0	84	911
Nevada	0	1	110	210,266	99	1	0.0101	208,142	1	97	2,146
New Hampshire	0	1	74	52,037	58	0	0.0000	52,037	1	57	913
New Jersey	0	1	87	452,465	75	0	0.0000	452,465	0	75	6,033
New Mexico	0	1	98	207,918	83	1	0.0120	205,413	0	82	2,505
New York	0	1	90	1,667,152	77	2	0.0260	1,623,849	0	75	21,651
North Carolina	0	1	91	796,349	84	0	0.0000	796,349	0	84	9,480
North Dakota	0	1	42	25,003	36	2	0.0556	23,614	0	34	695
Ohio	0	1	98	815,545	82	3	0.0366	785,708	0	79	9,946

Table D.10 (continued)

State	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum- specific units weight
	a	b	e	g	h	i	j	k	l	m	
Oklahoma	0	1	98	268,588	89	1	0.0112	265,570	0	88	3,018
Oregon	0	1	96	442,105	83	0	0.0000	442,105	0	83	5,327
Pennsylvania	0	1	91	914,195	82	0	0.0000	914,195	0	82	11,149
Rhode Island	0	1	90	100,826	85	1	0.0118	99,640	0	84	1,186
South Carolina	0	1	95	377,128	92	1	0.0109	373,029	0	91	4,099
South Dakota	0	1	67	43,411	63	0	0.0000	43,411	0	63	689
Tennessee	0	1	91	605,837	75	0	0.0000	605,837	0	75	8,078
Texas	0	1	91	1,530,217	74	0	0.0000	1,530,217	0	74	20,679
Utah	0	1	85	88,875	77	2	0.0260	86,567	0	75	1,154
Vermont	0	1	70	44,882	62	0	0.0000	44,882	1	61	736
Virginia	0	1	88	400,467	68	0	0.0000	400,467	0	68	5,889
Washington	0	1	90	572,959	84	0	0.0000	572,959	0	84	6,821
West Virginia	0	1	94	183,153	87	1	0.0115	181,048	0	86	2,105
Wisconsin	0	1	87	408,334	81	1	0.0123	403,293	0	80	5,041
Wyoming	0	1	30	13,827	29	0	0.0000	13,827	0	29	477
Guam	0	1	43	15,221	39	0	0.0000	15,221	1	38	401
Virgin Islands	0	1	26	12,408	26	0	0.0000	12,408	0	26	477

**Table D.11. Stratification and weight calculation by State, May 2015**

State	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum-specific units weight
	a	b	e	g	h	i	j	k	l	m	
Alabama	0	1	93	414,375	84	0	0.0000	414,375	0	84	4,933
Alaska	0	1	56	35,638	47	0	0.0000	35,638	0	47	758
Arizona	0	1	94	430,884	77	0	0.0000	430,884	0	77	5,596
Arkansas	0	1	106	210,683	100	3	0.0300	204,363	1	96	2,129
California	0	1	113	2,103,684	90	1	0.0111	2,080,310	0	89	23,374
Colorado	0	1	93	233,312	69	1	0.0145	229,931	0	68	3,381
Connecticut	0	1	93	247,556	84	0	0.0000	247,556	2	82	3,019
Delaware	0	1	91	70,637	74	0	0.0000	70,637	0	74	955
District of Columbia	0	1	91	78,996	88	1	0.0114	78,098	0	87	898
Florida	0	1	98	2,000,595	80	0	0.0000	2,000,595	0	80	25,007
Georgia	0	1	97	831,987	86	0	0.0000	831,987	0	86	9,674
Hawaii	0	1	90	93,308	68	2	0.0294	90,564	1	65	1,393
Idaho	0	1	95	83,506	86	0	0.0000	83,506	0	86	971
Illinois	0	1	93	1,064,622	81	0	0.0000	1,064,622	0	81	13,143
Indiana	0	1	98	375,118	87	3	0.0345	362,183	0	84	4,312
Iowa	0	1	89	182,923	80	1	0.0125	180,636	0	79	2,287
Kansas	0	1	96	121,149	88	0	0.0000	121,149	0	88	1,377
Kentucky	0	1	83	365,261	78	0	0.0000	365,261	0	78	4,683
Louisiana	0	1	96	386,738	78	0	0.0000	386,738	0	78	4,958
Maine	0	1	99	103,013	96	0	0.0000	103,013	0	96	1,073
Maryland	0	1	91	406,276	72	0	0.0000	406,276	0	72	5,643
Massachusetts	0	1	87	442,697	80	1	0.0125	437,163	1	78	5,605
Michigan	0	1	93	820,586	85	0	0.0000	820,586	0	85	9,654
Minnesota	0	1	97	238,885	94	5	0.0532	226,178	0	89	2,541
Mississippi	0	1	92	292,349	83	0	0.0000	292,349	0	83	3,522
Missouri	0	1	93	398,912	80	0	0.0000	398,912	0	80	4,986
Montana	0	1	78	54,894	72	3	0.0417	52,607	1	68	774
Nebraska	0	1	95	77,616	72	1	0.0139	76,538	0	71	1,078
Nevada	0	1	111	211,663	103	1	0.0097	209,608	0	102	2,055
New Hampshire	0	1	73	51,471	64	0	0.0000	51,471	0	64	804
New Jersey	0	1	88	449,364	68	2	0.0294	436,147	0	66	6,608
New Mexico	0	1	98	206,668	84	1	0.0119	204,208	0	83	2,460
New York	0	1	90	1,660,566	78	1	0.0128	1,639,277	2	75	21,857
North Carolina	0	1	92	795,313	87	1	0.0115	786,171	0	86	9,142
North Dakota	0	1	42	24,826	38	0	0.0000	24,826	0	38	653
Ohio	0	1	97	826,054	87	0	0.0000	826,054	1	86	9,605

Table D.11 (continued)

State	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum- specific units weight
	a	b	e	g	h	i	j	k	l	m	
Oklahoma	0	1	99	269,518	89	1	0.0112	266,490	0	88	3,028
Oregon	0	1	95	445,530	77	0	0.0000	445,530	0	77	5,786
Pennsylvania	0	1	91	921,046	83	0	0.0000	921,046	0	83	11,097
Rhode Island	0	1	90	100,626	84	0	0.0000	100,626	0	84	1,198
South Carolina	0	1	94	374,405	88	0	0.0000	374,405	0	88	4,255
South Dakota	0	1	66	43,043	63	1	0.0159	42,360	0	62	683
Tennessee	0	1	125	600,945	114	1	0.0088	595,674	0	113	5,271
Texas	0	1	91	1,537,379	71	1	0.0141	1,515,726	0	70	21,653
Utah	0	1	85	88,397	80	0	0.0000	88,397	0	80	1,105
Vermont	0	1	69	44,581	59	1	0.0169	43,825	0	58	756
Virginia	0	1	87	398,732	72	2	0.0278	387,656	3	67	5,786
Washington	0	1	90	570,554	79	0	0.0000	570,554	0	79	7,222
West Virginia	0	1	94	182,415	85	0	0.0000	182,415	0	85	2,146
Wisconsin	0	1	86	404,949	82	3	0.0366	390,134	0	79	4,938
Wyoming	0	1	29	13,723	27	0	0.0000	13,723	0	27	508
Guam	0	1	44	15,586	42	0	0.0000	15,586	0	42	371
Virgin Islands	0	1	26	12,568	24	0	0.0000	12,568	0	24	524

**Table D.12. Stratification and weight calculation by State, June 2015**

State	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum-specific units weight
	Stratum	a	b	e	g	h	i	j	k	l	m
Alabama	0	1	94	415,687	83	0	0.0000	415,687	0	83	5,008
Alaska	0	1	56	35,990	43	0	0.0000	35,990	0	43	837
Arizona	0	1	94	433,907	80	0	0.0000	433,907	0	80	5,424
Arkansas	0	1	106	211,050	98	2	0.0204	206,743	0	96	2,154
California	0	1	114	2,115,586	89	0	0.0000	2,115,586	1	88	24,041
Colorado	0	1	92	232,906	74	0	0.0000	232,906	0	74	3,147
Connecticut	0	1	91	247,693	82	1	0.0122	244,672	1	80	3,058
Delaware	0	1	90	71,839	78	0	0.0000	71,839	0	78	921
District of Columbia	0	1	91	79,275	86	1	0.0116	78,353	0	85	922
Florida	0	1	99	2,011,166	83	0	0.0000	2,011,166	0	83	24,231
Georgia	0	1	97	836,195	82	0	0.0000	836,195	0	82	10,198
Hawaii	0	1	90	93,518	73	2	0.0274	90,956	1	70	1,299
Idaho	0	1	94	82,911	84	3	0.0357	79,950	0	81	987
Illinois	0	1	89	1,060,040	74	1	0.0135	1,045,715	0	73	14,325
Indiana	0	1	97	373,232	85	1	0.0118	368,841	0	84	4,391
Iowa	0	1	89	181,913	80	0	0.0000	181,913	0	80	2,274
Kansas	0	1	96	120,660	86	0	0.0000	120,660	0	86	1,403
Kentucky	0	1	93	363,535	91	1	0.0110	359,540	0	90	3,995
Louisiana	0	1	96	388,269	81	0	0.0000	388,269	0	81	4,793
Maine	0	1	98	102,544	92	2	0.0217	100,315	0	90	1,115
Maryland	0	1	90	404,041	81	1	0.0123	399,053	0	80	4,988
Massachusetts	0	1	87	445,361	74	0	0.0000	445,361	1	73	6,101
Michigan	0	1	93	815,469	72	0	0.0000	815,469	0	72	11,326
Minnesota	0	1	97	239,502	94	1	0.0106	236,954	0	93	2,548
Mississippi	0	1	92	292,430	85	3	0.0353	282,109	0	82	3,440
Missouri	0	1	94	399,196	81	0	0.0000	399,196	1	80	4,990
Montana	0	1	78	54,535	65	0	0.0000	54,535	0	65	839
Nebraska	0	1	96	77,877	85	2	0.0235	76,045	0	83	916
Nevada	0	1	112	213,891	97	3	0.0309	207,276	0	94	2,205
New Hampshire	0	1	72	51,110	64	1	0.0156	50,311	0	63	799
New Jersey	0	1	96	449,050	80	0	0.0000	449,050	0	80	5,613
New Mexico	0	1	98	207,766	84	3	0.0357	200,346	0	81	2,473
New York	0	1	90	1,661,872	69	3	0.0435	1,589,617	0	66	24,085
North Carolina	0	1	92	800,319	85	2	0.0235	781,488	0	83	9,416
North Dakota	0	1	41	24,835	38	0	0.0000	24,835	0	38	654
Ohio	0	1	97	812,063	82	0	0.0000	812,063	0	82	9,903

Table D.12 (continued)

State	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum- specific units weight
State	Stratum	a	b	e	g	h	i	j	k	l	m
Oklahoma	0	1	100	271,488	89	0	0.0000	271,488	0	89	3,050
Oregon	0	1	96	439,320	80	1	0.0125	433,829	0	79	5,492
Pennsylvania	0	1	92	923,430	84	0	0.0000	923,430	0	84	10,993
Rhode Island	0	1	90	100,711	82	1	0.0122	99,483	0	81	1,228
South Carolina	0	1	94	376,259	90	1	0.0111	372,078	0	89	4,181
South Dakota	0	1	65	42,995	62	0	0.0000	42,995	0	62	693
Tennessee	0	1	124	601,447	103	0	0.0000	601,447	0	103	5,839
Texas	0	1	92	1,550,472	74	0	0.0000	1,550,472	0	74	20,952
Utah	0	1	84	87,650	78	1	0.0128	86,526	0	77	1,124
Vermont	0	1	69	44,321	58	0	0.0000	44,321	0	58	764
Virginia	0	1	88	399,105	68	1	0.0147	393,236	1	66	5,958
Washington	0	1	89	566,704	75	2	0.0267	551,592	0	73	7,556
West Virginia	0	1	94	182,427	85	3	0.0353	175,988	0	82	2,146
Wisconsin	0	1	85	400,752	74	0	0.0000	400,752	1	73	5,490
Wyoming	0	1	29	13,883	29	0	0.0000	13,883	0	29	479
Guam	0	1	44	15,665	38	0	0.0000	15,665	0	38	412
Virgin Islands	0	1	26	12,574	24	1	0.0417	12,050	0	23	524

**Table D.13. Stratification and weight calculation by State, July 2015**

State	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum- specific units weight
	a	b	e	g	h	i	j	k	l	m	
Alabama	0	1	93	415,581	89	0	0.0000	415,581	0	89	4,669
Alaska	0	1	55	35,328	42	0	0.0000	35,328	0	42	841
Arizona	0	1	94	434,765	81	1	0.0123	429,398	0	80	5,367
Arkansas	0	1	106	211,026	98	4	0.0408	202,413	0	94	2,153
California	0	1	115	2,119,925	86	1	0.0116	2,095,275	0	85	24,650
Colorado	0	1	92	231,402	74	0	0.0000	231,402	0	74	3,127
Connecticut	0	1	92	247,110	83	0	0.0000	247,110	0	83	2,977
Delaware	0	1	90	71,231	68	0	0.0000	71,231	0	68	1,048
District of Columbia	0	1	91	79,760	86	0	0.0000	79,760	0	86	927
Florida	0	1	98	2,013,221	89	1	0.0112	1,990,601	0	88	22,620
Georgia	0	1	97	829,262	80	0	0.0000	829,262	0	80	10,366
Hawaii	0	1	89	92,958	78	4	0.0513	88,191	0	74	1,192
Idaho	0	1	92	82,211	75	2	0.0267	80,019	0	73	1,096
Illinois	0	1	91	1,055,063	85	1	0.0118	1,042,650	0	84	12,413
Indiana	0	1	97	371,396	84	2	0.0238	362,553	0	82	4,421
Iowa	0	1	88	180,612	82	0	0.0000	180,612	0	82	2,203
Kansas	0	1	95	119,139	87	0	0.0000	119,139	0	87	1,369
Kentucky	0	1	93	356,407	90	1	0.0111	352,447	0	89	3,960
Louisiana	0	1	96	392,306	84	0	0.0000	392,306	0	84	4,670
Maine	0	1	98	102,491	95	0	0.0000	102,491	0	95	1,079
Maryland	0	1	89	404,632	75	3	0.0400	388,447	0	72	5,395
Massachusetts	0	1	88	447,926	82	0	0.0000	447,926	0	82	5,463
Michigan	0	1	92	811,481	83	0	0.0000	811,481	0	83	9,777
Minnesota	0	1	97	237,995	97	2	0.0206	233,088	1	94	2,480
Mississippi	0	1	92	292,718	82	1	0.0122	289,148	0	81	3,570
Missouri	0	1	93	399,948	79	0	0.0000	399,948	0	79	5,063
Montana	0	1	77	54,039	62	1	0.0161	53,167	0	61	872
Nebraska	0	1	95	78,264	81	0	0.0000	78,264	0	81	966
Nevada	0	1	113	215,896	97	3	0.0309	209,219	0	94	2,226
New Hampshire	0	1	72	50,719	64	3	0.0469	48,342	2	59	819
New Jersey	0	1	96	450,352	78	0	0.0000	450,352	0	78	5,774
New Mexico	0	1	98	207,928	81	2	0.0247	202,794	0	79	2,567
New York	0	1	90	1,656,532	75	3	0.0400	1,590,271	0	72	22,087
North Carolina	0	1	92	801,287	89	2	0.0225	783,281	0	87	9,003
North Dakota	0	1	42	24,804	36	0	0.0000	24,804	0	36	689
Ohio	0	1	97	807,362	82	0	0.0000	807,362	0	82	9,846



Table D.13 (continued)

State	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum- specific units weight
	a	b	e	g	h	i	j	k	l	m	
Oklahoma	0	1	100	272,629	92	2	0.0217	266,702	0	90	2,963
Oregon	0	1	97	437,972	75	2	0.0267	426,293	0	73	5,840
Pennsylvania	0	1	92	930,751	84	0	0.0000	930,751	0	84	11,080
Rhode Island	0	1	91	100,636	86	2	0.0233	98,296	0	84	1,170
South Carolina	0	1	94	376,315	89	1	0.0112	372,087	0	88	4,228
South Dakota	0	1	66	42,779	63	0	0.0000	42,779	1	62	690
Tennessee	0	1	124	598,860	109	2	0.0183	587,872	0	107	5,494
Texas	0	1	92	1,558,674	74	1	0.0135	1,537,611	0	73	21,063
Utah	0	1	84	86,896	79	0	0.0000	86,896	0	79	1,100
Vermont	0	1	68	43,973	63	0	0.0000	43,973	0	63	698
Virginia	0	1	87	398,166	69	1	0.0145	392,395	0	68	5,771
Washington	0	1	88	565,973	73	2	0.0274	550,467	0	71	7,753
West Virginia	0	1	93	182,727	86	0	0.0000	182,727	0	86	2,125
Wisconsin	0	1	84	394,153	73	0	0.0000	394,153	0	73	5,399
Wyoming	0	1	31	14,352	30	1	0.0333	13,874	0	29	478
Guam	0	1	43	15,684	42	0	0.0000	15,684	0	42	373
Virgin Islands	0	1	27	12,713	27	1	0.0370	12,242	0	26	471

**Table D.14. Stratification and weight calculation by State, August 2015**

State	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum- specific units weight
	a	b	e	g	h	i	j	k	l	m	
Alabama	0	1	93	415,843	83	1	0.0120	410,833	0	82	5,010
Alaska	0	1	54	35,049	48	0	0.0000	35,049	0	48	730
Arizona	0	1	95	438,572	79	0	0.0000	438,572	0	79	5,552
Arkansas	0	1	106	209,373	97	2	0.0206	205,056	1	94	2,181
California	0	1	114	2,123,659	81	0	0.0000	2,123,659	1	80	26,546
Colorado	0	1	92	230,279	67	0	0.0000	230,279	0	67	3,437
Connecticut	0	1	92	247,960	78	0	0.0000	247,960	0	78	3,179
Delaware	0	1	90	70,563	77	2	0.0260	68,730	0	75	916
District of Columbia	0	1	91	79,336	89	0	0.0000	79,336	0	89	891
Florida	0	1	97	2,014,845	82	0	0.0000	2,014,845	0	82	24,571
Georgia	0	1	98	831,315	83	0	0.0000	831,315	0	83	10,016
Hawaii	0	1	89	92,501	69	0	0.0000	92,501	0	69	1,341
Idaho	0	1	94	81,733	82	1	0.0122	80,736	0	81	997
Illinois	0	1	91	1,050,530	83	1	0.0120	1,037,873	0	82	12,657
Indiana	0	1	96	368,148	76	1	0.0132	363,304	0	75	4,844
Iowa	0	1	88	180,177	82	3	0.0366	173,585	0	79	2,197
Kansas	0	1	95	119,886	90	0	0.0000	119,886	0	90	1,332
Kentucky	0	1	91	352,367	89	3	0.0337	340,489	0	86	3,959
Louisiana	0	1	98	395,122	77	0	0.0000	395,122	0	77	5,131
Maine	0	1	97	101,644	83	0	0.0000	101,644	0	83	1,225
Maryland	0	1	91	406,245	76	0	0.0000	406,245	0	76	5,345
Massachusetts	0	1	88	450,079	78	1	0.0128	444,309	0	77	5,770
Michigan	0	1	91	807,555	82	0	0.0000	807,555	0	82	9,848
Minnesota	0	1	97	235,990	95	3	0.0316	228,538	0	92	2,484
Mississippi	0	1	92	293,913	78	0	0.0000	293,913	0	78	3,768
Missouri	0	1	94	399,843	70	1	0.0143	394,131	0	69	5,712
Montana	0	1	76	53,630	64	0	0.0000	53,630	0	64	838
Nebraska	0	1	97	78,781	80	1	0.0125	77,796	0	79	985
Nevada	0	1	113	218,067	94	0	0.0000	218,067	0	94	2,320
New Hampshire	0	1	71	50,137	62	1	0.0161	49,328	1	60	822
New Jersey	0	1	97	453,611	75	0	0.0000	453,611	0	75	6,048
New Mexico	0	1	98	209,098	82	2	0.0244	203,998	0	80	2,550
New York	0	1	90	1,647,478	79	0	0.0000	1,647,478	1	78	21,122
North Carolina	0	1	92	803,068	89	4	0.0449	766,975	0	85	9,023
North Dakota	0	1	41	24,725	38	0	0.0000	24,725	0	38	651
Ohio	0	1	96	804,027	80	3	0.0375	773,876	0	77	10,050

Table D.14 (continued)

	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum- specific units weight
State	Stratum	a	b	e	g	h	i	j	k	l	m
Oklahoma	0	1	100	274,010	88	1	0.0114	270,896	0	87	3,114
Oregon	0	1	97	436,358	78	0	0.0000	436,358	0	78	5,594
Pennsylvania	0	1	92	938,705	82	0	0.0000	938,705	0	82	11,448
Rhode Island	0	1	91	100,921	84	0	0.0000	100,921	0	84	1,201
South Carolina	0	1	95	377,132	90	0	0.0000	377,132	0	90	4,190
South Dakota	0	1	65	42,756	62	0	0.0000	42,756	0	62	690
Tennessee	0	1	126	592,010	107	1	0.0093	586,477	0	106	5,533
Texas	0	1	93	1,561,516	70	0	0.0000	1,561,516	0	70	22,307
Utah	0	1	83	86,535	79	1	0.0127	85,440	0	78	1,095
Vermont	0	1	69	43,969	58	0	0.0000	43,969	0	58	758
Virginia	0	1	87	397,992	72	5	0.0694	370,354	0	67	5,528
Washington	0	1	88	564,743	76	1	0.0132	557,312	0	75	7,431
West Virginia	0	1	94	179,914	83	1	0.0120	177,746	0	82	2,168
Wisconsin	0	1	84	390,485	74	1	0.0135	385,208	0	73	5,277
Wyoming	0	1	28	13,449	25	1	0.0400	12,911	0	24	538
Guam	0	1	44	15,779	41	0	0.0000	15,779	0	41	385
Virgin Islands	0	1	27	12,850	26	0	0.0000	12,850	0	26	494

**Table D.15. Stratification and weight calculation by State, September 2015**

	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum-specific units weight
State	Stratum	a	b	e	g	h	i	j	k	l	m
Alabama	0	1	94	416,029	90	0	0.0000	416,029	0	90	4,623
Alaska	0	1	54	34,755	46	0	0.0000	34,755	0	46	756
Arizona	0	1	96	440,531	73	1	0.0137	434,496	0	72	6,035
Arkansas	0	1	106	209,027	102	1	0.0098	206,978	1	100	2,070
California	0	1	116	2,126,397	99	1	0.0101	2,104,918	0	98	21,479
Colorado	0	1	92	228,791	72	3	0.0417	219,258	0	69	3,178
Connecticut	0	1	91	248,460	70	2	0.0286	241,361	1	67	3,602
Delaware	0	1	90	71,393	68	1	0.0147	70,343	0	67	1,050
District of Columbia	0	1	92	79,397	89	1	0.0112	78,505	0	88	892
Florida	0	1	99	2,028,944	89	0	0.0000	2,028,944	0	89	22,797
Georgia	0	1	97	830,501	78	1	0.0128	819,854	0	77	10,647
Hawaii	0	1	87	92,025	73	0	0.0000	92,025	0	73	1,261
Idaho	0	1	92	81,400	76	1	0.0132	80,329	2	73	1,100
Illinois	0	1	89	1,050,682	78	0	0.0000	1,050,682	0	78	13,470
Indiana	0	1	95	364,690	80	2	0.0250	355,573	1	77	4,618
Iowa	0	1	88	179,712	74	1	0.0135	177,283	0	73	2,429
Kansas	0	1	95	118,739	88	1	0.0114	117,390	1	86	1,365
Kentucky	0	1	89	345,730	85	2	0.0235	337,595	0	83	4,067
Louisiana	0	1	98	397,606	79	1	0.0127	392,573	0	78	5,033
Maine	0	1	97	100,330	94	0	0.0000	100,330	0	94	1,067
Maryland	0	1	90	406,025	72	1	0.0139	400,386	0	71	5,639
Massachusetts	0	1	88	451,178	80	4	0.0500	428,619	0	76	5,640
Michigan	0	1	91	802,001	80	0	0.0000	802,001	0	80	10,025
Minnesota	0	1	96	235,582	93	2	0.0215	230,516	0	91	2,533
Mississippi	0	1	93	294,400	86	0	0.0000	294,400	0	86	3,423
Missouri	0	1	94	399,280	73	0	0.0000	399,280	0	73	5,470
Montana	0	1	76	53,288	56	0	0.0000	53,288	0	56	952
Nebraska	0	1	97	78,742	84	0	0.0000	78,742	0	84	937
Nevada	0	1	115	219,394	98	1	0.0102	217,155	0	97	2,239
New Hampshire	0	1	70	49,784	66	0	0.0000	49,784	0	66	754
New Jersey	0	1	97	449,490	77	0	0.0000	449,490	0	77	5,838
New Mexico	0	1	98	209,073	83	4	0.0482	198,997	0	79	2,519
New York	0	1	90	1,648,584	76	1	0.0132	1,626,892	0	75	21,692
North Carolina	0	1	93	801,772	89	1	0.0112	792,763	0	88	9,009
North Dakota	0	1	42	24,807	35	0	0.0000	24,807	0	35	709
Ohio	0	1	96	801,187	80	1	0.0125	791,172	0	79	10,015

Table D.15 (continued)

State	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum- specific units weight
	a	b	e	g	h	i	j	k	l	m	
Oklahoma	0	1	101	275,044	94	3	0.0319	266,266	0	91	2,926
Oregon	0	1	94	433,956	72	0	0.0000	433,956	0	72	6,027
Pennsylvania	0	1	93	942,847	81	0	0.0000	942,847	0	81	11,640
Rhode Island	0	1	91	100,884	85	1	0.0118	99,697	0	84	1,187
South Carolina	0	1	95	376,617	84	1	0.0119	372,133	0	83	4,484
South Dakota	0	1	66	42,621	63	1	0.0159	41,944	0	62	677
Tennessee	0	1	124	588,732	110	1	0.0091	583,380	0	109	5,352
Texas	0	1	93	1,571,497	73	0	0.0000	1,571,497	0	73	21,527
Utah	0	1	83	86,403	81	1	0.0123	85,336	0	80	1,067
Vermont	0	1	68	43,870	55	1	0.0182	43,072	0	54	798
Virginia	0	1	88	397,024	74	4	0.0541	375,563	0	70	5,365
Washington	0	1	88	562,566	70	1	0.0143	554,529	0	69	8,037
West Virginia	0	1	94	179,616	80	0	0.0000	179,616	0	80	2,245
Wisconsin	0	1	82	383,619	74	0	0.0000	383,619	0	74	5,184
Wyoming	0	1	29	13,549	26	0	0.0000	13,549	0	26	521
Guam	0	1	44	15,581	41	0	0.0000	15,581	0	41	380
Virgin Islands	0	1	27	13,022	27	0	0.0000	13,022	0	27	482

**This page has been left blank for double-sided printing.**

**APPENDIX E**

**STATE AND REGION CODES**

**This page has been left blank for double-sided printing.**



**Table E.1. State FIPS codes (STATE)**


---

Alabama	01	Montana	30
Alaska	02	Nebraska	31
Arizona	04	Nevada	32
Arkansas	05	New Hampshire	33
California	06	New Jersey	34
Colorado	08	New Mexico	35
Connecticut	09	New York	36
Delaware	10	North Carolina	37
District of Columbia	11	North Dakota	38
Florida	12	Ohio	39
Georgia	13	Oklahoma	40
Guam	66	Oregon	41
Hawaii	15	Pennsylvania	42
Idaho	16	Rhode Island	44
Illinois	17	South Carolina	45
Indiana	18	South Dakota	46
Iowa	19	Tennessee	47
Kansas	20	Texas	48
Kentucky	21	Utah	49
Louisiana	22	Vermont	50
Maine	23	Virgin Islands	78
Maryland	24	Virginia	51
Massachusetts	25	Washington	53
Michigan	26	West Virginia	54
Minnesota	27	Wisconsin	55
Mississippi	28	Wyoming	56
Missouri	29		

---

Source: U.S. Department of Agriculture, FNS.

**Table E.2. SNAP region codes (REGIONCD)**


---

<b>REGIONCD = 1 (Northeast)</b>	<b>REGIONCD = 5 (Southwest)</b>
Connecticut	Arkansas
Maine	Louisiana
Massachusetts	New Mexico
New Hampshire	Oklahoma
New York	Texas
Rhode Island	<b>REGIONCD = 6 (Mountain Plains)</b>
Vermont	Colorado
<b>REGIONCD = 2 (Mid-Atlantic)</b>	Iowa
Delaware	Kansas
District of Columbia	Missouri
Maryland	Montana
New Jersey	Nebraska
Pennsylvania	North Dakota
Virgin Islands	South Dakota
Virginia	Utah
West Virginia	Wyoming
<b>REGIONCD = 3 (Southeast)</b>	<b>REGIONCD = 7 (West)</b>
Alabama	Alaska
Florida	Arizona
Georgia	California
Kentucky	Guam
Mississippi	Hawaii
North Carolina	Idaho
South Carolina	Nevada
Tennessee	Oregon
<b>REGIONCD = 4 (Midwest)</b>	Washington
Illinois	
Indiana	
Michigan	
Minnesota	
Ohio	
Wisconsin	

---

Source: U.S. Department of Agriculture, FNS.

**Table E.3. Census region codes (REGION)**


---

<b>REGION = 1 (Northeast)</b>	<b>REGION = 3 (South)</b>
Connecticut	Alabama
Maine	Arkansas
Massachusetts	Delaware
New Hampshire	District of Columbia
New Jersey	Florida
New York	Georgia
Pennsylvania	Kentucky
Rhode Island	Louisiana
Vermont	Maryland
<b>REGION = 2 (Midwest)</b>	Mississippi
Illinois	North Carolina
Indiana	Oklahoma
Iowa	South Carolina
Kansas	Tennessee
Michigan	Texas
Minnesota	Virginia
Missouri	West Virginia
Nebraska	<b>REGION = 4 (West)</b>
North Dakota	Alaska
Ohio	Arizona
South Dakota	California
Wisconsin	Colorado
	Guam
	Hawaii
	Idaho
	Montana
	Nevada
	New Mexico
	Oregon
	Utah
	Virgin Islands
	Washington
	Wyoming

---

Source: U.S. Census Bureau.

**This page has been left blank for double-sided printing.**

**APPENDIX F**

**FY 2015 SNAP PARAMETERS**

**This page has been left blank for double-sided printing.**

**Table F.1. SNAP gross income screen, FY 2015**

Unit size	Gross income screen (dollars per month)		
	Contiguous United States, Guam, and the Virgin Islands	Alaska	Hawaii
1	\$1,265	\$1,580	\$1,454
2	1,705	2,130	1,960
3	2,144	2,681	2,466
4	2,584	3,231	2,972
5	3,024	3,781	3,478
6	3,464	4,332	3,984
7	3,904	4,882	4,490
8	4,344	5,432	4,996
Each additional	+440	+551	+506

Source: U.S. Department of Agriculture, FNS.

Note: The FY 2015 SNAP gross monthly income limits were based on the 2014 poverty guidelines issued by the U.S. Department of Health and Human Services. FNS derived the FY 2015 gross income limits by multiplying the 2014 poverty guidelines by 130 percent, dividing the results by 12, and then rounding up to the nearest dollar.

**Table F.2. SNAP net income screen, FY 2015**

Unit size	Net income screen (dollars per month)		
	Contiguous United States, Guam, and the Virgin Islands	Alaska	Hawaii
1	\$ 973	\$1,215	\$1,119
2	1,311	1,639	1,508
3	1,650	2,062	1,897
4	1,988	2,485	2,286
5	2,326	2,909	2,675
6	2,665	3,332	3,065
7	3,003	3,755	3,454
8	3,341	4,179	3,843
Each additional	+339	+424	+390

Source: U.S. Department of Agriculture, FNS.

Note: The FY 2015 SNAP net monthly income limits were based on the 2014 poverty guidelines issued by the U.S. Department of Health and Human Services. FNS derived the FY 2015 net income limits by dividing the 2014 poverty guidelines by 12 and rounding up to the nearest dollar.

**Table F.3. Deduction amounts, FY 2015**

Deduction	Contiguous United States	Alaska	Hawaii	Guam	Virgin Islands
Standard deduction					
1 to 2 people	\$155	\$266	\$219	\$312	\$137
3 people	155	266	219	312	137
4 people	165	266	219	330	165
5 people	193	266	222	387	193
6 or more people	221	277	255	443	221
Maximum excess shelter expense deduction	490	782	660	575	386
Homeless household shelter deduction	143	143	143	143	143
Earnings deduction	20%	20%	20%	20%	20%

Source: U.S. Department of Agriculture, FNS.

Note: MFIP has a separate SNAP benefit calculation procedure that does not include any deductions except for the earnings deduction, which was 50 percent. As a result, all the other deductions are coded as missing for MFIP participants in the SNAP QC database. Similarly, deductions are not used to assign benefits to units participating in SSI-CAP in States with standardized benefit amounts. Consequently, all deductions are coded as missing for SSI-CAP participants in these States. SSI-CAP States without standardized benefits (or standard shelter expenses) use some deductions, but not all. The deductions that are not applicable are coded as missing.

**Table F.4. Medical deduction demonstration, FY 2015**

State	If medical expenses are less than or equal to	Then medical deduction is	Otherwise, medical deduction is
Alabama <sup>a</sup>	\$200	\$165	Actual expenses minus \$35
Arkansas	138	103	Actual expenses minus \$35
Idaho	179	144	Actual expenses minus \$35
Illinois	245	210	Actual expenses minus \$35
Iowa	140	105	Actual expenses minus \$35
Kansas	175	140	Actual expenses minus \$35
Massachusetts	190	155	Actual expenses minus \$35
Missouri	200	165	Actual expenses minus \$35
New Hampshire	118	83	Actual expenses minus \$35
North Dakota	200	165	Actual expenses minus \$35
Rhode Island	176	141	Actual expenses minus \$35
South Dakota	200	165	Actual expenses minus \$35
Texas	137	102	Actual expenses minus \$35
Vermont	173	138	Actual expenses minus \$35
Virginia	175	140	Actual expenses minus \$35
Wyoming	138	103	Actual expenses minus \$35

Source: U.S. Department of Agriculture, FNS.

<sup>a</sup> Alabama implemented its program in October 2014.



**Table F.5. Maximum monthly SNAP benefit, FY 2015**

Unit size	Maximum SNAP benefit						
	Contiguous United States	Alaska Urban	Alaska Rural I	Alaska Rural II	Hawaii	Guam	Virgin Islands
1	\$194	\$227	\$290	\$353	\$332	\$287	\$250
2	357	417	532	648	609	526	459
3	511	598	762	928	872	753	657
4	649	759	968	1,178	1,107	957	835
5	771	902	1,150	1,399	1,315	1,136	991
6	925	1,082	1,380	1,679	1,578	1,364	1,189
7	1,022	1,196	1,525	1,856	1,744	1,507	1,315
8	1,169	1,367	1,743	2,121	1,994	1,723	1,503
Each additional	+ 146	+ 171	+ 218	+ 265	+ 249	+ 215	+ 188

Source: U.S. Department of Agriculture, FNS.

Note: These maximum benefit values were based on 100 percent of the cost of the Thrifty Food Plan in June 2014 for a reference family of four, rounded to the lowest dollar increment.

**Table F.6. Minimum monthly SNAP benefit, FY 2015**

Unit size	Minimum SNAP benefit						
	Contiguous United States	Alaska Urban	Alaska Rural I	Alaska Rural II	Hawaii	Guam	Virgin Islands
1 to 2 people	\$16	\$18	\$23	\$28	\$27	\$23	\$20

Source: U.S. Department of Agriculture, FNS.

Note: The minimum benefit, applicable to one- and two-person units, is equal to 8 percent of the maximum benefit for single-person units.

**Table F.7. Standard utility allowances, FY 2015**

State	HCSUA <sup>a</sup>	LUA <sup>b</sup>	Telephone allowance	Electricity <sup>d</sup>	Water <sup>d</sup>	Sewer <sup>d</sup>	Trash <sup>d</sup>	Other standards <sup>e</sup>
Alabama	\$355	\$311	\$35					
Alaska <sup>f</sup>								
Central	322		23	\$82	\$48	\$41	\$23	\$105
Southeast	451		26	75	33	61	28	228
South central	484		25	118	31	46	49	215
Northern	743		23	131	45	63	27	454
Southwest	987		33	165	58	49	14	668
Northwest	1,078		31	139	61	45	29	773
Arizona								
1 to 3 people	271		32					
4 or more people	366		32					
Arkansas	277		25					
California	373	113	20					
Colorado	462	291	74	55	55	55	55	55
Connecticut	724	318	27					
Delaware	433	299	35	79	79	79	79	79
District of Columbia	319	251	55	65	65	65	65	65
Florida	337	270	36					
Georgia	343	285	38					
Hawaii								
1 person			26	221	43	79	79	221
2 people			26	241	48	79	79	241
3 people			26	278	53	79	79	278
4 to 5 people			26	346	63	79	79	346
6 people			26	408	72	79	79	408
7 or more people			26	462	86	79	79	462
Idaho	388	234	41	97	97	97	97	97
Illinois	370	280	32	62	62	62	62	62
Indiana								
10/2014-4/2015	405	223	24	50	50	50	50	50
5/2015-9/2015	415	232	32	50	50	50	50	50
Iowa	326	229	26					
Kansas	369	238	36					
Kentucky	299	252	34					
Louisiana	323	178	42					
Maine	687	228	45					
Maryland								
10/2014-12/2014	406	246	40					
1/2015-9/2015	402	245	40					
Massachusetts	634	390	45					

See notes at the end of the table.

**Table F.7** (continued)

State	HCSUA <sup>a</sup>	LUA <sup>b</sup>	Telephone allowance	Electricity <sup>d</sup>	Water <sup>d</sup>	Sewer <sup>d</sup>	Trash <sup>d</sup>	Other standards <sup>e</sup>
Michigan	553		34	124	77	77	21	47
Minnesota	450		38	150				
Mississippi	269	197	28					
Missouri	318	249	29	88	88	88	88	88
Montana	498	180	37	143	143	143	143	143
Nebraska	447	203	52	38	38	38	38	38
Nevada	295	252	23	57	57	57	57	57
New Hampshire	578	261	28	152				
New Jersey	491	283	29					
New Mexico	319	116	39					
New York								
New York City	785	311	33					
Long Island	732	287	33					
Rest of New York	650	263	33					
North Carolina								
1 person	360	217	29					
2 people	396	238	29					
3 people	435	261	29					
4 people	474	284	29					
5 or more people	517	310	29					
North Dakota	635	219	36	182	182	182	182	182
Ohio	498	330	39	73	73	73	73	73
Oklahoma	345	297	48					
Oregon	446	328	57	55	55	55	55	55
Pennsylvania	557	289	33	55	55	55	55	55
Rhode Island	627		23					
South Carolina	288	210	28					
South Dakota								
10/2014-1/2015	683	195	46	80	80	80	80	80
2/2015-9/2015	698	195	46	80	80	80	80	80
Tennessee								
1 person	335	133	25					
2 people	347	133	25					
3 people	360	133	25					
4 people	373	133	25					
5 people	384	133	25					
6 people	397	133	25					
7 people	408	133	25					
8 people	421	133	25					
9 people	436	133	25					
10 or more people	447	133	25					

See notes at the end of the table.

**Table F.7** (continued)

State	HCSUA <sup>a</sup>	LUA <sup>b</sup>	Telephone allowance	Electricity <sup>d</sup>	Water <sup>d</sup>	Sewer <sup>d</sup>	Trash <sup>d</sup>	Other standards <sup>e</sup>
Texas	343	326	36					
Utah	311	230	45					
Vermont	805	230	36					
Virginia								
1 to 3 people	298		47					
4 or more people	375		47					
Washington	415	336	65					
West Virginia	345	210	57	57	57	57	57	57
Wisconsin	446	321	30	161	74	74	19	125 <sup>9</sup> 37
Wyoming	371	250	59					
Guam								
1 person			24	132	31	27	30	31
2 to 3 people			24	154	39	27	30	31
4 people			24	187	52	27	30	62
5 people			24	214	63	27	30	62
6 people			24	247	81	27	30	62
7 people			24	282	99	27	30	94
8 people			24	296	109	27	30	94
9 to 10 people			24	317	124	27	30	94
11 to 16 people			24	325	129	27	30	94
Virgin Islands			31					

Source: U.S. Department of Agriculture, FNS.

<sup>a</sup> HCSUA is a standard utility allowance used for units with heating and cooling expenses not included in rent. The HCSUA generally includes all utilities, including telephones.

<sup>b</sup> LUA is a standard utility allowance used for units that do not have heating and cooling expenses separate from rent. The LUA generally includes all utilities, including telephones.

<sup>c</sup> The telephone allowance is a standard utility allowance used for units that have telephone expenses but do not have any other utility expenses.

<sup>d</sup> Single-utility standard.

<sup>e</sup> A single utility is standard for gas/fuel unless otherwise noted.

<sup>f</sup> Alaska has six HCSUAs determined by utility regions.

<sup>9</sup> Wisconsin has a single utility standard for space heating, space cooling, and hot water, in addition to a standard for gas/fuel.

**Table F.8. Minnesota Family Investment Program (MFIP) benefits, FY 2015**

Unit size	Family wage level (1.1 * transitional standard)	Transitional standard (cash portion + food portion)	Cash portion	Food portion
1	\$464	\$422	\$250	\$172
2	829	754	437	317
3	1,090	991	532	459
4	1,328	1,207	621	586
5	1,530	1,391	697	694
6	1,755	1,595	773	822
7	1,913	1,739	850	889
8	2,114	1,922	916	1,006
9	2,314	2,104	980	1,124
10	2,507	2,279	1,035	1,244
Each additional	+191	+174	+53	+121

Source: <http://www.dhs.State.mn.us/>

**Table F.9. AZ SSI-CAP (AZSNAP) benefit criteria, FY 2015**

Shelter expenses	Benefit
\$0 to 99	\$36
\$100 to 199	73
\$200 to 299	101
\$300 or more	141

Source: U.S. Department of Agriculture, FNS.

**Table F.10. KY SSI-CAP (KYSAFE) benefit criteria, FY 2015**

Unit size	Shelter expenses	Benefit
<b>October 2014 – June 2015</b>		
One person	Less than \$200	\$43
	\$200 or more	\$0
Two people	Less than \$108	77
	\$108 or more	123
<b>July 2015 – September 2015</b>		
One person	Less than \$200	30
	\$200 or more	75
Two people	Less than \$108	77
	\$108 or more	123

Source: U.S. Department of Agriculture, FNS.

**Table F.11. LA SSI-CAP (LaCAP) benefit criteria, FY 2015**

Shelter expenses	Benefit
<b>October 2014 – April 2015</b>	
\$0 to 100	\$34
\$101 to 399	57
\$400 to 699	90
\$700 or more	112
<b>May 2015 – September 2015</b>	
\$0 to 100	34
\$101 to 399	54
\$400 to 699	85
\$700 or more	110

Source: U.S. Department of Agriculture, FNS.

**Table F.12. MD SSI-CAP (MSNAP) benefit criteria, FY 2015**

Shelter expenses	Benefit
Less than \$506	\$65
\$506 or more	110

Source: U.S. Department of Agriculture, FNS.

**Table F.13. MI SSI-CAP (MiCAP) benefit criteria, FY 2015**

Shelter expenses	Benefit	Gross income <sup>a</sup>
<b>October 2014 – December 2014</b>		
Less than \$1,000	\$171	\$735
\$1,000 or more	185	735
<b>January 2015 – September 2015</b>		
Less than \$1,000	171	747
\$1,000 or more	185	747

Source: U.S. Department of Agriculture, FNS.

<sup>a</sup> In FY 2015, Michigan had an SSI supplement of \$14.

**Table F.14. MS SSI-CAP (MSCAP) benefits by income and shelter expense patterns, FY 2015**

Income type and shelter expenses	Benefit level	Gross income
<b>October 2014 – December 2014</b>		
SSI only		
Low shelter expenses (reported as \$335)	\$39	\$721
High shelter expenses (reported as \$392)	56	721
SSI and other unearned income		
Low shelter expenses (reported as \$335)	30	741
High shelter expenses (reported as \$392)	47	741
<b>January 2015 - September 2015</b>		
SSI only		
Low shelter expenses (reported as \$335)	34	733
High shelter expenses (reported as \$392)	51	733
SSI and other unearned income		
Low shelter expenses (reported as \$335)	25	753
High shelter expenses (reported as \$392)	42	753

Source: U.S. Department of Agriculture, FNS.

Note: When necessary, the data for units identified as MSCAP participants have been edited to follow the pattern presented in this table.

**Table F.15. NJ SSI-CAP (NJ SNAS) benefit criteria, FY 2015**

Shelter expenses	Benefit
Less than \$315	\$50
\$315 or more	85

Source: U.S. Department of Agriculture, FNS.

**Table F.16. NM SSI-CAP (NMCAP) benefit criteria, FY 2015**

Shelter expenses	Benefit
Less than \$315	\$33
\$315 or more	68

Source: U.S. Department of Agriculture, FNS.

Note: NMCAP ended in March 2014. Participants may remain on the program through their current certification period. The last NMCAP benefits will be issued in February 2017.

**Table F.17. NY SSI-CAP (NYSNIP) benefit criteria, FY 2015**

Income and shelter expenses	Monthly benefit amount		
	New York	Long Island	Rest of State
<b>October 2014 – December 2014</b>			
Gross income minus SSI < \$87			
With positive utility costs			
Rent \$242 or less	\$194	\$192	\$167
Rent more than \$242	194	194	194
With no utility costs			
Rent \$242 or less	16	16	16
Rent more than \$242	31	31	31
With no shelter costs	16	16	16
Gross income minus SSI >= \$87			
With positive utility costs			
Rent \$242 or less	194	183	158
Rent more than \$242	194	194	194
With no utility costs			
Rent \$242 or less	16	16	16
Rent more than \$242	22	22	22
With no shelter costs	16	16	16
<b>January 2015 – September 2015</b>			
Gross income minus SSI < \$87			
With positive utility costs			
Rent \$246 or less	194	188	163
Rent more than \$246	194	194	194
With no utility costs			
Rent \$246 or less	16	16	16
Rent more than \$246	26	26	26
With no shelter costs	16	16	16
Gross income minus SSI >= \$87			
With positive utility costs			
Rent \$246 or less	194	179	154
Rent more than \$246	194	194	194
With no utility costs			
Rent \$246 or less	16	16	16
Rent more than \$246	17	17	17
With no shelter costs	16	16	16

Source: U.S. Department of Agriculture, FNS.

**Table F.18. NC SSI-CAP (NCSNAP) benefit criteria, FY 2015**

Shelter expenses	Benefit
Less than \$150	\$58
\$150 or more	114

Source: U.S. Department of Agriculture, FNS.



**Table F.19. PA SSI-CAP (PACAP) benefit criteria, FY 2015**

Income type and shelter expenses	Benefit
<b>October 2014 – December 2014</b>	
SSI only	
Shelter expenses less than \$196	\$82
Shelter expenses \$196 or more	153
SSI and other unearned income	
Shelter expenses less than \$196	73
Shelter expenses \$196 or more	144
<b>January 2015 – September 2015</b>	
SSI only	
Shelter expenses less than \$196	77
Shelter expenses \$196 or more	148
SSI and other unearned income	
Shelter expenses less than \$196	68
Shelter expenses \$196 or more	139

Source: U.S. Department of Agriculture, FNS.

**Table F.20. SC SSI-CAP (SCCAP) benefits by income and shelter expense patterns, FY 2015**

Income type and shelter expenses	Benefits	Gross income
<b>October 2014 – December 2014</b>		
SSI only		
Shelter expenses less than \$286 (reported as \$285)	\$24	\$721
Shelter expenses \$286 or more (reported as \$442)	71	721
SSI and other unearned income		
Shelter expenses less than \$286 (reported as \$285)	18	741
Shelter expenses \$286 or more (reported as \$442)	62	741
<b>January 2015 – September 2015</b>		
SSI only		
Shelter expenses less than \$286 (reported as \$285)	20	733
Shelter expenses \$286 or more (reported as \$442)	66	733
SSI and other unearned income		
Shelter expenses less than \$286 (reported as \$285)	16	753
Shelter expenses \$286 or more (reported as \$442)	57	753

Source: U.S. Department of Agriculture, FNS; FY 2015 raw SNAP QC datafile.

Note: When necessary, the data for units identified as SCCAP participants have been edited to follow the pattern presented in this table.

**Table F.21. SD SSI-CAP (SD IN) benefit criteria, FY 2015**

	Benefits			
	Individuals with shelter expenses of \$690 or more	Couples with shelter expenses of \$690 or more	Individuals with shelter expenses less than \$690	Couples with shelter expenses less than \$690
<b>Earnings and medical expenses</b>				
No earnings				
Medical expenses less than or equal to \$35	\$171	\$231	\$76	\$119
Medical expenses more than \$35	172	269	123	136
Earnings				
Medical expenses less than or equal to \$35	149	169	23	21
Medical expenses more than \$35	174	120	129	192

Source: U.S. Department of Agriculture, FNS.

**Table F.22. TX SSI-CAP (SNAP-CAP) benefit criteria, FY 2015**

Shelter expenses	Benefit
Less than \$289	\$65
\$289 or more	81

Source: U.S. Department of Agriculture, FNS.

**Table F.23. VA SSI-CAP (VaCAP) benefit criteria, FY 2015**

Shelter expenses	Benefit
Less than \$500	\$61
\$500 or more	86

Source: U.S. Department of Agriculture, FNS.

**Table F.24. FL (SUNCAP), MA (BAYSTATECAP), and WA SSI-CAP (WASHCAP) shelter allowances, FY 2015**

Rent/mortgage cutoff for high/low standard rent allowance	Standard rent/mortgage allowance
<b>FL (SUNCAP)</b>	
\$240 or less	\$152
More than \$240	372
<b>MA (BAYSTATECAP)</b>	
Less than \$450	\$223
\$450 or more	453
<b>WA (WASHCAP)</b>	
Less than \$300	\$210
\$300 or more	400

Source: U.S. Department of Agriculture, FNS.

Note: We only use the WASHCAP cutoffs for high and low standard rent allowances in our file editing process. The SUNCAP and BAYSTATECAP cutoffs are listed for reference.

**This page has been left blank for double-sided printing.**

**APPENDIX G**

**QUALITY CONTROL REVIEW SCHEDULE**

**This page has been left blank for double-sided printing.**

## QUALITY CONTROL REVIEW SCHEDULE

PRIVACY ACT/PAPERWORK REDUCTION ACT. According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0584-0299. The time required to complete this collection is estimated to average 1.056 hours per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. This report is required under provisions of 7 CFR 275.14. This information is needed for the review of State performance in determining recipient eligibility. The information is used to determine State compliance, and failure to report may result in a finding of non-compliance.

### Section 1 - Review Summary

1. QC Review Number	2. Case Number	3. State	4. Local Agency	5. Sample Month and Year	6. Stratum
<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>
7. Disposition	8. Findings	9. SNAP Allotment Under Review		10. Error Amount	11. Case Classification
<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>		<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>

### Section 2 - Detailed Error Findings

12. Element	13. Nature	14. Cause	15. Error Finding	16. Error Amount	17. Discovery	18. Verified	19. Occurrence a. Date	b. Time Period
1	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>
2	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>
3	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>
4	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>
5	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>
6	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>
7	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>
8	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>

## Section 3 - Household Characteristics

20. Most Recent Cert. Action  
Month, Day, Year

21. Type of Action

22. Length of Cert. Period  
#of months

23. Allotment Adjustment

24. Amount of  
Allotment Adjustment

25. Number of  
Household Members

26. Receipt of  
Expedited Service

27. Authorized Representative  
Used at Application

28. Categorical Eligibility

29. Reporting Requirement

### Resources:

30. Liquid

31. Property  
(excluding home)

32a. Vehicle

32b. Status  
2nd Vehicle

33. Countable  
Vehicle Assets

34. Other Non-liquid

### Income:

35. Gross

36. Net

### Deductions:

37. Earned Income

38. Medical

39. Dependent Care

40. Child Support

41. Shelter

42. Homeless

Additional  
Information on  
Shelter Costs:

43. Rent/Mortgage

44. Use of SUA  
a. Usage      b. Proration



45. Utilities (SUA or Actual)



### Section 4 - Information on Each Household Member

46. Person Number	47. SNAP Participation	48. Relation to Head of HH	49. Age	50. Sex	51. Race	52. Citizen Status	53. Edu. Level	54. Employment Status	54. Employment Hours	55. SNAP Work Reg.	56. SNAP E & T	57. ABAWD Status	58. Dependent Care Cost
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

You may record information on up to 16 individuals using additional pages.

### Section 5 - Income Identified by Household Member

59. Person Number	Source 1 60. Income Type	61. Amount	Source 2 62. Income Type	63. Amount	Source 3 64. Income Type	65. Amount	Source 4 66. Income Type	67. Amount
<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>

You may record income on up to 10 individuals by using additional pages.

### Section 6 - Reserved Coding

68.	69.	70.	71.	72.	73.	74.	75.	76.
<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>

### Section 7 - Optional For State Use

1.	<input style="width: 100%;" type="text"/>
2.	<input style="width: 100%;" type="text"/>
3.	<input style="width: 100%;" type="text"/>
4.	<input style="width: 100%;" type="text"/>

**This page has been left blank for double-sided printing.**

[www.mathematica-mpr.com](http://www.mathematica-mpr.com)

---

**Improving public well-being by conducting high quality,  
objective research and data collection**

---

**PRINCETON, NJ ■ ANN ARBOR, MI ■ CAMBRIDGE, MA ■ CHICAGO, IL ■ OAKLAND, CA ■ WASHINGTON, DC**

---

**MATHEMATICA**  
Policy Research

---

Mathematica® is a registered trademark  
of Mathematica Policy Research, Inc.