M50 MATHEMATICA Policy Research

REPORT

FINAL REPORT

Technical Documentation for the Fiscal Year 2017 Supplemental Nutrition Assistance Program Quality Control Database and the QC Minimodel

October 2018

Sarah Lauffer
Alma Vigil
Chrystine Tadler
Elaine Wilcox-Cook

CONTENTS

TABLES

FIGURES

I. INTRODUCTION

The Supplemental Nutrition Assistance Program (SNAP) is the largest of the domestic nutrition assistance programs administered by the Food and Nutrition Service (FNS) of the U.S. Department of Agriculture (USDA), providing millions of Americans with the means to purchase food for a nutritious diet. During fiscal year (FY) 2017, SNAP served an average of 42.1 million people monthly and paid out $63.6 billion in benefits.[1]

In response to legislative adjustments to program rules and changes in economic and demographic trends, the characteristics of SNAP participants and households and the size of the SNAP caseload change over time. To quantify these changes or estimate the effect of adjustments to program rules on the current SNAP caseload, 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.[2]

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 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.[3]

Chapter V contains the codebook for the FY 2017 SNAP QC database and explains how to use it. For each variable in the database, the codebook lists the variable name, the variable origin

---

[1] These estimates of 42.1 million participants and $63.6 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 ineligible households issued benefits in error and households that received disaster assistance.

[2] This report refers to the original datafile as the raw datafile and the edited version as the SNAP QC database.

[3] Documentation of the generic portions of the QC Minimodel appears in the *2011 MATH SIPP+ Microsimulation Model: Programmer's Guide, Technical Description, and Codebook* (Schechter et al. 2014).

(whether it came from the raw datafile or was constructed), and a description (including all valid values of the variable).

Appendix A provides an assessment of the quality of selected variables in the FY 2017 SNAP QC database. Users should read this appendix before using the SNAP QC database; 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 used to improve the quality of the edited datafile. Appendix C provides information on new and changed variables in the FY 2017 SNAP QC database. Appendix D shows how the monthly sampling weights were derived. 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 2017, including gross and net income eligibility thresholds, deduction amounts, and maximum benefit amounts. Appendix G presents the QC review schedule—the coding form on which the raw data are originally recorded by the State QC System reviewers.

Key program changes since the previous fiscal year

In fiscal year 2017, Colorado and Oregon implemented medical deduction demonstration programs. In addition, States now have the option to allow certification interviews to be conducted by telephone or online. (Previously States could apply for waivers that allowed interviews to be conducted by telephone or online.) Otherwise, program rules in FY 2017 are comparable to those in FY 2016.

Key changes to the FY 2017 SNAP QC database

The contents of the FY 2017 SNAP QC database are very similar to the contents of the FY 2016 SNAP QC database, with a few minor differences. First, Rhode Island has no observations for the months of June through August 2017 due to suspended QC operations as a result of systems errors, and the Virgin Islands has no observations for the months of July through September 2017 due to suspended QC operations as a result of hurricanes Irma and Maria. Thus, the full year weight (FYWGT) in those two States for FY 2017 is the monthly weight (HWGT) divided by 9, instead of HWGT divided by 12 as in all other States. This change ensures that the national annual average monthly values using FYWGT match SNAP Program Operations data after adjustments for receipt of disaster assistance benefits and benefits distributed in error. Second, we revised our Supplemental Security Income Combined Application Project (SSI-CAP) identification algorithm in Kentucky to code certain units without SSI as SSI-CAP if they meet certain household composition, certification period, and benefit amount criteria. Third, we made minor changes to the algorithm for reconciling reported person-level deemed income amounts with reported unit-level income and deduction variables. Sections III.B and III.C and Appendix B provide more detail 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 45,500 SNAP units.[4] The data, produced annually, are well suited for tabulating characteristics of SNAP units and simulating the impact on 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 currently participating units. 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 (SNAP-QCS). 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 indeed eligible to participate and are 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 either uploaded or entered directly into the SNAP-QCS by State agencies. FNS regional offices conduct a Federal re-review of a subsample of each original State sample. Federal re-review data are also entered into the SNAP-QCS and are used 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 in 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 in the file, along with the error amount and eligibility status determined by the reviewer. The reviewer-determined entries are defined as follows:

- 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."

---

[4] 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 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.[5]

- 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

Although 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

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

---

[5] 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 2017 tolerance threshold was $38, unchanged from FY 2016.

design that best meets its needs. FNS must approve all sampling designs, including 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 – 12,941),
    where N is the average monthly caseload.

In FY 2017, all States except for Guam chose to use the optional minimum sample size. FNS applies adjustments to a State sample size only when the completion rate falls below a threshold of 98 percent. For two States, Rhode Island and the Virgin Islands, FNS assigned error rates due to their inability to complete 98 percent of cases as a result of incomplete data issues addressed earlier in this report.

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 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 in the file. We assign missing value codes to data that are out of range, missing from the file, or coded as unknown in the source file. We remove 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), or have unresolved inconsistencies

- Found by the reviewer to be eligible but not qualifying for a positive benefit or identified as 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 2017 edited SNAP QC database.

Table II.1. Number and percentage of cases sampled, dropped from the edited file, and included in the edited file, FY 2017

	FY 2017 SNAP QC sample	Percentage of cases sampled	Percentage of cases subject to review
Number of cases sampled	55,462	100.0	n.a.
Cases not subject to review	2,886	5.2	n.a.
Cases deselected to correct for oversampling	1	0.0	n.a.
Cases subject to review	52,575	94.8	100.0
Incomplete cases	6,200	11.2	11.8
Cases completed	46,375	83.6	88.2
Not eligible for SNAP	574	1.0	1.1
Not eligible for a positive benefit	212	0.4	0.4
Eligible for a positive benefit	45,589	82.2	86.7
Dropped due to unresolved inconsistencies	59	0.1	0.1
SNAP units in the final SNAP QC database	45,530	82.1	86.6

Source: FY 2017 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:

- 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 expense 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 household shelter deduction will not have an excess shelter expense deduction.

- Total deductions must equal the sum of the following:
  - Standard deduction
  - Earned income deduction
  - Dependent care deduction
  - Medical expense deduction
  - Child support payment deduction[6]
  - Excess shelter expense deduction or homeless household shelter deduction

Households participating in the Minnesota Family Investment Program (MFIP) or an SSI-CAP are subject to different eligibility and benefit determination rules and have been edited accordingly.

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.

---

[6] In some cases, child support payments are excluded from gross income and are not taken as a deduction.

- **SNAP eligibility and benefit determination variables.** Variables used to determine eligibility and benefits—such as SNAP unit deductions, SNAP unit net countable 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, we merge data from Census files to identify whether a SNAP unit resides in a metropolitan, micropolitan, or rural area.[7]

4. Weighting

We weight the observations in 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 the Program Operations totals by removing benefits issued in error and benefits issued through the SNAP disaster assistance program because the SNAP QC data do not include cases with either of these circumstances.[8] 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.[9] FNS also maintains information on the number of SNAP units and individuals receiving a disaster assistance benefit and the amount of those benefits. The rates of SNAP units receiving benefits in error are estimated from the raw QC datafile. In Table II.2, we compare the aggregate program participation data for FY 2017 to the QC System sample-based estimates.

---

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

[8] In FY 2017, we identified about 2.5 million units as receiving benefits issued in error. In addition, about 322,000 units that were not previously on SNAP received disaster assistance in the form of SNAP benefits. These new units receiving disaster assistance, combined with participating SNAP units with replacement SNAP benefits as a result of a disaster, received approximately $725.2 million in benefits. As such, the adjusted totals of SNAP units and benefits are lower than indicated by Program Operations data by about 1 and 5 percent, respectively.

[9] Due to systems errors, Rhode Island had incomplete Program Operations data for FY 2017. As a result, the QC file may reflect inaccurate individual, unit, and benefit amounts for this State.

Table II.2. Comparison of program data to edited SNAP QC database, FY 2017

Average monthly value	Program data	Adjustments for disaster assistance[a]	Adjustments for ineligible SNAP units	Edited SNAP QC database
Number of SNAP units	20,836,042	26,844	212,314	20,596,884
Number of participants	42,123,374	75,496	556,940	41,490,938
Value of benefits (dollars)	5,300,305,762	60,431,643	189,318,172	5,050,555,947
Average SNAP unit size	2.02	2.81	2.62	2.01
Average benefit per person (dollars)	125.83	-	339.93	121.73
Average benefit per household (dollars)	254.38	-	891.69	245.21

Source: FY 2017 SNAP Program Operations data and SNAP QC database.

[a]Adjustments are made for units and individuals who only receive disaster SNAP assistance and were not already receiving SNAP. Adjustments are made to benefits for disaster SNAP benefits issued to disaster SNAP units as well as to replacement benefits issued to qualifying, ongoing SNAP units. As a result, the average disaster SNAP benefit per person may not be calculated from the information in this table.

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, for privacy reasons, excludes the QC review number (REVNUM) and four geographic variables: COUNTYCD, LOCALCOD, AK_AREA, and URBRUR. In Chapter V, we provide a more detailed explanation of the variables in the file.

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

III. FY 2017 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 2017 SNAP QC file.[10]

Step 1. Obtain data

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

INPUT CD	File: FY2017	(ASCII file)
	Record length 2,250	
	55,247 records	

Step 2. Read in and prepare files

We converted to SAS format the specified fields from the raw FNS file, and created the unique record identifier (HHLDNO).

PROGRAM NAME	10_SASIFY17.SAS	
INPUT FILE	FY2017	(ASCII; 55,247 records)
OUTPUT FILE	QCFY2017_1.SAS7BDAT	(55,462 records; 721 variables)[11]

Step 3. Conduct quality assurance (QA) review of the data

We ran preliminary frequencies on the SAS file and examined them for 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 with means for the previous year.

PROGRAM NAMES	FREQS17.SAS	
	FREQS17A.SAS	
	CMP1617A.SAS	
INPUT FILE	QCFY2017_1.SAS7BDAT	(55,462 records; 721 variables)

Step 4. Set SNAP parameters

We obtained relevant SNAP policy parameters, including maximum and minimum benefit amounts, income screens, Standard Utility Allowance (SUA) amounts and values for the MFIP and SSI-CAPs by State.[12] We entered them into a SAS format library, and used the formats for the program in Step 6.

OUTPUT PROGRAM	31_FORMAT17.SAS

---

[10] Copies of the file development programs are available from FNS upon request.

[11] We appended an additional 215 records onto the raw datafile. These records, received from FNS ater the original raw datafile, are from Federal re-reviews of Rhode Island cases and one case each in California and the Virgin Islands. The Rhode Island and Virgin Island records were included to partially compensate for a large number of incomplete cases in these States.

[12] 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 2017 SNAP QC file development process
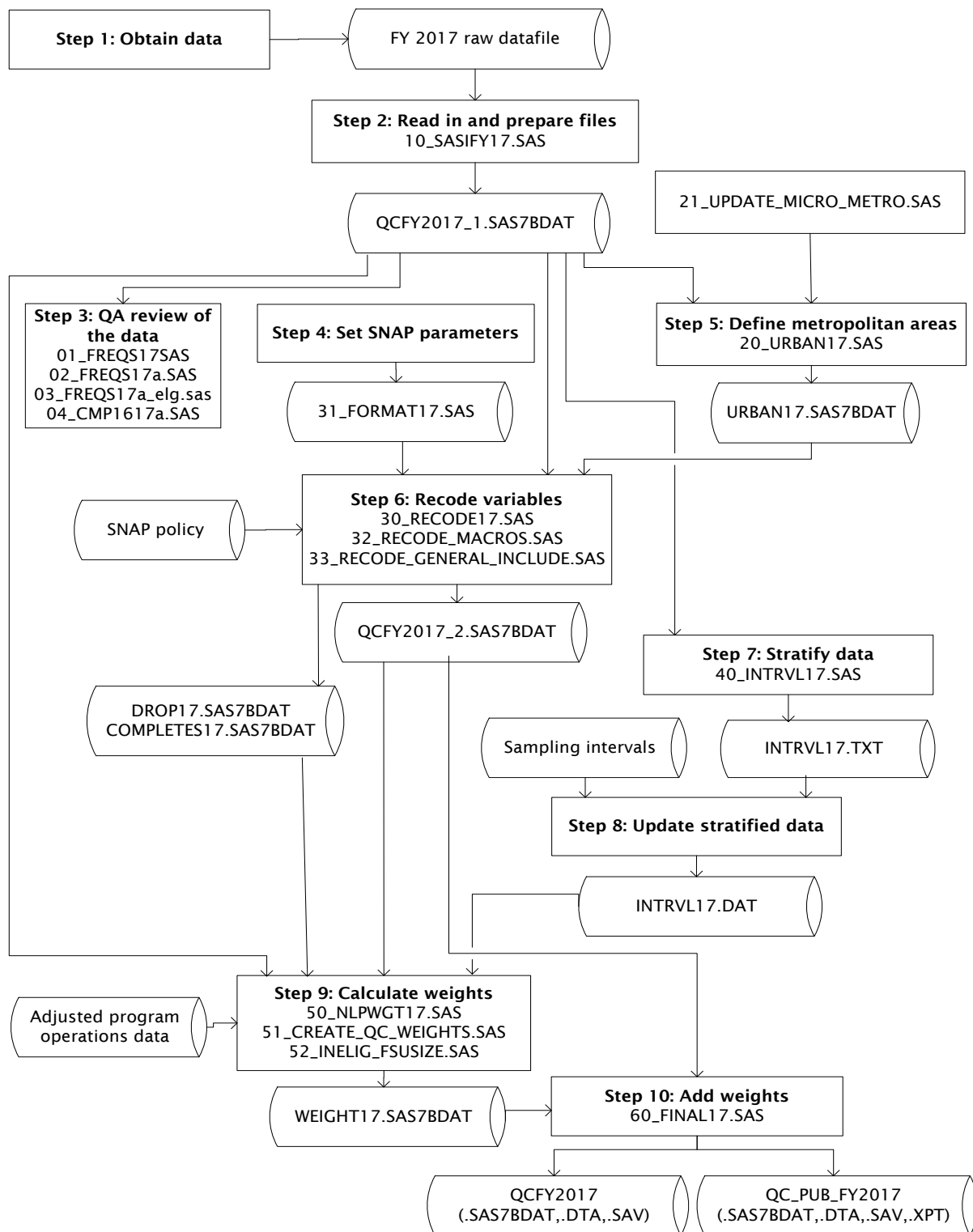
Step 5. Define metropolitan areas

We added geographic 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 unknown local agency codes for correction or addition to a concordance of local agency codes by county and State. We then merged each unit to the 2015 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 State-wide local codes, 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 unit's region (Alaska Urban, Alaska Rural I, or Alaska Rural II). We do not include cases not subject to review or incomplete cases in the output files.

PROGRAM NAME	20_URBAN17.SAS	
INPUT FILES	QCFY2017_1.SAS7BDAT	(55,462 records; 721 variables)
	METRO2_15.TXT	(ASCII; 1,236 records; 4 variables) (Census 2015 Metropolitan File)
	MICRO2_15.TXT	(ASCII; 663 records; 4 variables) (Census 2015 Micropolitan File)
	FIPS_LAC.TXT	(ASCII; 5,150 records; 6 variables) (Concordance of local area codes.)
OUTPUT FILE	URBAN17.SAS7BDAT	(46,375 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, the shelter limit, benefit amounts, assets, poverty status, and 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 the procedure we detail below (see Section B, Obtaining file consistency). Units that met all of the following conditions were written to the output file: (1) found eligible by the QC reviewer; (2) received a benefit amount of at least $1; (3) passed the eligibility tests, flagged as categorically eligible, or identified as participating in MFIP or an SSI-CAP; and (4) were internally consistent after edits. Meeting these conditions, together with the sample reductions in Step 5, completed the sample construction for the final datafile (45,530 records).

PROGRAM NAME	30_RECODE17.SAS	
INPUT FILES	QCFY2017_1.SAS7BDAT	(55,462 records; 721 variables)
	31_FORMAT17.SAS	(Format library)
	URBAN17.SAS7BDAT	(46,375 records; 5 variables)
OUTPUT FILES	QCFY2017_2.SAS7BDAT	(45,530 records; 1,580 variables)
	COMPLETES17.SAS7BDAT	(46,375 records; 1,582 variables)
	DROP17.SAS7BDAT	(59 records; 1,581 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_INTRVL17.SAS	
INPUT FILE	QCFY2017_1.SAS7BDAT	(55,462 records; 721 variables)
OUTPUT FILE	INTRVL17.TXT	(ASCII; 53 records, 4 variables)

Step 8. Update stratified data

No State had a stratified sample in fiscal year 2017, so it was not necessary to edit the INTRVL17.TXT file; we simply saved it as INTRVL17.DAT.

INPUT FILE	INTRVL17.TXT	(ASCII; 53 records; 4 variables)
OUTPUT FILE	INTRVL17.DAT	(ASCII; 53 records, 4 variables)

Step 9. Calculate weights

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

PROGRAM NAME	50_NLPWGT17.SAS	
INPUT FILES	QCFY2017_1.SAS7BDAT	(55,462 records; 721 variables)
	QCFY2017_2.SAS7BDAT	(45,530 records; 1,580 variables)
	INTRVL17.DAT	(ASCII; 53 records, 4 variables)
	FY17_ADJUSTED.XLSX	(Excel spreadsheet containing FNS Program Operations data adjusted for disasters)
	COMPLETES17.SAS7BDAT	(46,375 records; 1,582 variables)
	DROP17.SAS7BDAT	(59 records; 1,581 variables)
OUTPUT FILE	WEIGHT17.SAS7BDAT	(46,316 records; 27 variables)

Step 10. Add weights

We merged the file containing weights with the edited SNAP QC file to produce the final FY 2017 SNAP QC files. QCFY2017 is for internal use and includes all variables. QC_PUB_FY2017 is for public use and excludes REVNUM, COUNTYCD, LOCALCOD, AK_AREA, and URBRUR for privacy reasons. It also excludes two intermediate weighting variables.

PROGRAM NAME	60_FINAL17.SAS	
INPUT FILES	QCFY2017_2.SAS7BDAT	(45,530 records; 1,580 variables)
	WEIGHT17.SAS7BDAT	(46,316 records; 27 variables)

OUTPUT FILES[13]	QCFY2017.SAS7BDAT	(45,530 records; 819 variables)
	QC_PUB_FY2017.SAS7BDAT	(45,530 records; 812 variables)
	QCFY2017.DTA	(45,530 records; 819 variables)
	QC_PUB_FY2017.DTA	(45,530 records; 812 variables)
	QCFY2017.SAV	(45,530 records; 818 variables)
	QC_PUB_FY2017.SAV	(45,530 records; 811 variables)
	QC_PUB_FY2017.XPT	(45,530 records; 812 variables)

After developing the final QCFY2017 SNAP QC files, we created MATHPC.BIN, a hierarchical binary file generated for the QC Minimodel with SAS missing values coded to negative values.

PROGRAM NAME	MINIQC17.SAS	
INPUT FILE	QCFY2017.SAS7BDAT	(45,530 records; 819 variables)
OUTPUT FILE	MATHPC.BIN	(45,530 unit records; 94,247 person records)

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 while maintaining the integrity of the database. Some of the procedures do not apply to SNAP units that are in MFIP or were participating in an SSI-CAP. We present the editing procedures for MFIP and SSI-CAP units after outlining the standard editing procedures. 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, including those:

- With incomplete reviews (REVDISP not equal to 1)

- With no case members (CERTHHSZ = 0)

- Found ineligible by the QC reviewer (STATUS = 4)

- With an overissuance that is equal to or greater than the reported benefit (STATUS = 2 and RAWBEN <= AMTERR)

- With unknown eligibility (STATUS is missing)

Step 2. Obtain 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 a missing value of .A (for example, a 0 in the SNAP case affiliation code).

---

[13] The SPSS version omits the variable "statename" due to inconsistencies in the way SPSS treats such variables.

- Any field coded as unknown (filled with 9s) is set to a 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 input values is set to a missing value of .C (for example, total assets).

- For units participating in months for which they are not certified, CERTMTH is set to a missing value of .D.

- For MFIP and SSI-CAP units, variables not relevant in the benefit determination are set to a 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 2017 values (for example, the standard deduction, shelter cap, and 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 reported gross income (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 (WRKREGi) and age. For example, if two non-elderly members have identical WAGESi and SOCSECi, and one is coded as being exempt from work registration due to a disability and the other is not, we assign the SOCSECi income to the former (and set WAGESi to 0) and the WAGESi income to the latter (and set SOCSECi 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 (WAGESi), self-employment income (SLFEMPi), and other earned income (OTHERNi).

- Unearned income variables include:
    - Contributions (CONTi)
    - Court-ordered child support payments (CSUPRTi)
    - Deemed income (DEEMi)
    - State diversion payments (DIVERi)

- Educational grants/scholarships/loans (EDLOANi)

- Earned income tax credit income (EITCi)

- Energy assistance income (ENERGYi)

- Foster care payments (FOSTERi)

- State general assistance (GAi)

- Other government benefits (OTHGOVi)

- Other unearned income (OTHUNi)

- Social Security income (SOCSECi)

- Supplemental Security Income (SSIi)

- TANF (TANFi)

- Unemployment compensation (UNEMPi)

- Veterans' benefits (VETi)

- Workers' compensation (WCOMPi)

- Subsidized earned income (WGESUPi)

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 we resolve inconsistencies:

9a.   **Does the child support income match the child support payment deduction?** For units in which child support income and child support expenses are the same, we determine whether excluding 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.[14]

9b.   **Does the sum of person-level income match the unit-level gross income?** We compare earned and unearned income for members of the unit and the household to determine whether 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.[15] 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.

---

[14] States may exclude child support expenses from gross income rather than consider them a deduction. For units excluding it from gross income, we verify that gross income minus child support expenses is at or below 130 percent of the Federal poverty guidelines.

[15] "Unit" income is income associated with participating household members. We allow a $5 difference to account for potential rounding differences.

9c. **Does the sum of person-level unearned income and earnings implied by the earned income deduction match the unit-level gross income?** We compare unearned income for members of the unit and the household plus the amount of earnings implied by the reported earned income deduction with the reported unit-level gross income to determine whether any combination is equal. We first check unit unearned income and then household unearned income. At each stage, we check to see if child support expenses have been excluded from the unit-level gross income. If we find a match, we adjust earnings to satisfy the earned income deduction (adjusting existing earnings proportionately or, if there are 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 members of 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 earned income 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 earned income deduction consistent with deductions and unit-level net income?** We check unearned income for members of the unit and the household plus the amount of earnings implied by the reported earned income deduction to determine whether any combination equals the reported unit-level net income plus calculated 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 earned income 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 earned income deductions. If any further adjustments are needed, we adjust person-level unearned income values

proportionately. However, we adjust SSI values only if SSI is the only unearned income or the amount of other unearned income is not enough to reconcile the unit.

9j. **Are earnings consistent with the reported earned income deduction but exceeding the reported unit-level gross income?** If earnings are consistent 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. Specifically, if unit earnings are consistent with the reported earned income deduction, we set all income outside the unit to 0. If household earnings are consistent, we set any unearned income outside the unit to 0. Beginning in FY 2015 and revised in FY 2017, if the unit reports no earnings or $1 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 assign wages to the first individual outside the unit who satisfies one of the following conditions (in order): individual is (1) reporting $1 wage, (2) the household head (RELi = 1), (3) the spouse of the household head (RELi = 2), (4) the first non-elderly adult, or (5) the 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 to 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 expense deduction, or medical expense deduction if doing so results in a matching benefit. In some SNAP units, we can reconcile initial differences between the calculated benefit and the raw benefit by performing the following steps sequentially and stopping when we resolve inconsistencies:

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 set the deduction equal to total expenses if doing so results in meeting one of the following conditions:

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 excess shelter expense deduction result in a matching benefit?** We try setting the amount of utility expenses equal to an SUA amount or to 0.[16] We try different utility amounts in the following order: (1) Heating and Cooling SUA (HCSUA), (2) Limited Utility Allowance (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 doing so results in meeting one of the following conditions:

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.[17]

For each condition, we check with and without allotment adjustments. FY 2017 SUA values by State are provided in Appendix F, Table F.7.

13d. **Does setting the medical expense deduction to 0 for a standard medical deduction demonstration participant result in a matching benefit?** For participants in standard

---

[16] Many States employ more than one SUA to accommodate units with different types of utility expenses. The HCSUA generally includes all utilities, including telephone service. The 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.

[17] 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.

medical deduction demonstration States,[18] we set the medical expense deduction, medical expenses, and the standard medical deduction demonstration flag to 0 if doing so results in meeting one of the following conditions:

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 for which the 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 its 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, General Assistance benefits (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 most MFIP units, we code all MFIP units as pure PA.

Step 17. Determine eligibility. For units that are not identified as categorically eligible, we assess whether each unit would pass the applicable Federal asset and income tests.

- Units without an elderly member or an individual with a disability must have a monthly gross income at or below 130 percent of the Federal poverty guidelines (Appendix F).[19] Beginning in FY 2016, if a unit's gross income exceeds the gross income limit by $1 or less

---

[18] By the end of FY 2017, standard medical deduction demonstrations were operating in Alabama, Arkansas, Colorado, Georgia, Idaho, Illinois, Iowa, Kansas, Massachusetts, Missouri, New Hampshire, North Dakota, Oregon, Rhode Island, South Carolina, South Dakota, Texas, Vermont, Virginia, and Wyoming.

[19] States may exclude child support expenses from gross income rather than consider them a deduction. For units that exclude it from gross income, we check that gross income minus child support expenses is at or below 130 percent of the Federal poverty guidelines.

and the net income and benefit amounts match the raw net income and benefit amounts, we reduce the unit's gross income by $1 so it will pass the gross income test.

- Units must have a net monthly income at or below 100 percent of the Federal poverty guidelines (Appendix F).[20]

- Units without an elderly member or an individual with a disability must have total countable assets of $2,250 or less. Units with an elderly member or an individual with a disability are allowed up to $3,250 in countable assets. (See next section for exceptions.)

We retain in the file only units that either are 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 standard medical deduction demonstrations (Section 2d).

a. Asset limits in States with broad-based categorical eligibility (BBCE) polices

Most States with a BBCE policy do not include an asset test as part of their BBCE criteria. However, four States (Idaho, Maine, Michigan, and Texas) have an asset limit of $5,000 for BBCE units and Nebraska has a financial asset limit of $15,000 for BBCE units.

b. Minnesota Family Investment Program units

MFIP is Minnesota's TANF program, open to low-income families with children.[21] 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 Appendix F, 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 in FY 2017 was 50 percent after the exclusion of $65 from earned income per wage earner.

---

[20] This test is not performed on SNAP units identified as participating in MFIP or an SSI-CAP demonstration in a State using standard benefits.

[21] More information is available from Minnesota's Department of Human Services website (http://www.dhs.state.mn.us/).

Because of the way the SNAP benefit is calculated under MFIP, Minnesota does not record the full TANF benefit amount on the QC data nor do we attempt to calculate it. For some MFIP units, Minnesota records a $1 TANF benefit as an indicator that the unit received a cash TANF benefit. We code all MFIP units as pure PA regardless of whether they have a reported cash TANF benefit.

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 2017 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:[22]

   - The unit has person-level TANF income for SNAP unit members, unless the SNAP benefit on the raw datafile is consistent with having 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 equal to 50 percent 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 determine whether adding it allows us to reconcile to unit-level gross income.[23] The final calculated gross income includes any TANF income initially included in 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.

---

[22] MFIP's unit composition rules differ from regular SNAP rules. 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 SSI recipients to unknown (99).

[23] 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 confirmation 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 based 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 lower 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 lower 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 with 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 lower 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 units

In FY 2017, 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 other State (New Mexico) had ongoing SSI-CAP units even though the State discontinued its SSI-CAP demonstration in March 2014.[24] 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 deduction.

In the next two sections, 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 are inconsistent with program rules. We flag SSI-CAP units with consistent data as SSI_CAP = 2 and those with some inconsistent data as SSI_CAP = 3. Beginning in FY 2015, we modeled State rules that let units with high medical expenses opt-out of SSI-CAP 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).

---

[24] New Mexico SSI-CAP households may remain on the program through their certification period. The last New Mexico SSI-CAP benefits were issued in June 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. Because 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).[25] 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 expense deduction (FSMEDDED)

- Earned income deduction (FSERNDED)

- Dependent care deduction (FSDEPDED)

- Child support payment deduction (FSCSDED)

- Homeless household shelter deduction (HOMELESS_DED)

- Excess shelter expense deduction (FSSLTDED)

- Standard Utility Allowance (SUA1 and SUA2)

---

[25] 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 greater	Table F.9
Kentucky (KYSAFE)	2007	Living alone or married	60 or older	Earned and unearned	**One person:** Less than $200; $200 or greater **Two people:** Less than $108; $108 or greater	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 greater	Table F.11
Maryland (MSNAP)	July 2010	Living alone	60 or older	Unearned	Less than $506; $506 or greater	Table F.12
Michigan (MiCAP)	April 2009	Living alone	18 or older	No income	Less than $1,000; $1,000 or greater	Table F.13
Mississippi (MSCAP)	October 2001*	Living alone	No age requirement	Unearned	**SSI only:** $335 or less; Greater than $335 **SSI and other unearned income:** $335 or less; Greater than $335	Table F.14
New Jersey[1] (NJ SNAS)	May 2009	Living alone	65 or older	Unearned	$563 or less; Greater than $563	Table F.15
New Mexico (NMCAP)	June 2009	Living alone or married	22 or older	Unearned	Less than $315; $315 or greater	Table F.16
New York (NYSNIP)	March 2003*	Living alone	No age requirement	Earned and unearned	**SSI only:** Positive utility costs (high/low rent), no utility costs (high/low rent), no shelter costs **SSI and other unearned income:** 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 greater	Table F.18
Pennsylvania (PACAP)	2007	Living alone	18 or older	Unearned	**SSI only:** Less than $196; $196 or greater **SSI and other unearned income:** Less than $196; $196 or greater	Table F.19
South Carolina (SCCAP)	October 1995*	Living alone	No age requirement	Unearned	**SSI only:** $310 or less; Greater than $310 **SSI and other unearned income:** $310 or less; Greater than $310	Table F.20
South Dakota (SD IN)	January 2010	Living alone or married	18 or older	Earned and unearned	**No earnings:** Individuals or couples with shelter expenses less than $690 or $690 or greater and medical expenses $35 or less or greater than $35 **Earnings:** Individuals or couples with shelter expenses less than $690 or $690 or greater and medical expenses $35 or less or greater than $35	Table F.21
Texas (SNAP-CAP)	September 2002*	Living alone or married	50 or older	Earned or unearned	Less than $400; $400 or greater	Table F.22
Virginia (VaCAP)	August 2006	Living alone	65 or older	Unearned	Less than $500; $500 or greater	Table F.23

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

[1] Although the FY 2017 SNAP QC data contain households that meet the State's SSI-CAP composition criteria, only three units had a reported benefit equal to one of the program's standard benefit amounts. Therefore, the FY 2017 SNAP QC data contain few households flagged as participating in this State.

We use the following general 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 deductions 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.

We use alternate or specific characteristics for identifying SSI-CAP units, recoding values, and calculating benefits in some States, as shown in Table III.2 and described below.

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 Table 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 or 39 months in Louisiana.

In New York, the certification period for NYSNIP is 48 months, with interim contact at the end of 24 months. We identify as NYSNIP participants one-person units that receive SSI benefits and belong to one of the following groups:[26, 27]

- 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 New York SSI supplement of $87

- Units with a recorded benefit adjusted for errors that matches an NYSNIP benefit and with the medical expense and excess shelter expense deductions both coded as 0

- Units with a certification period exceeding 48 months

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 receive SSI benefits. SNAP-CAP treats elderly SSI participants independently of other household members. All other household members apart from the first elderly SSI participant are edited to be outside of the unit.

Recently, we learned that QC reviewers in Texas and Kentucky do not include information on SSI receipt for SSI-CAP units on the raw file. Thus, we revised our algorithm to incorporate units in these States that appeared to be SSI-CAP cases based on their household composition, certification periods, and benefit amounts, despite not being coded as receiving SSI.

QC reviewers in Mississippi and South Carolina make income and deductions consistent with the standard benefit for MSCAP and SCCAP participants. Most MSCAP and SCCAP units follow a consistent pattern in terms of income and recorded shelter expenses. (See Appendix F, Table F.14 for MSCAP benefits and income patterns and Appendix F, 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).[28]

---

[26] New York requires NYSNIP participants to be living alone (not just forming one-person SNAP units) and provides data on the QC datafile that are sufficiently detailed for us to identify households consisting of just one person.

[27] 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.

[28] If the recorded benefit equals the minimum benefit, we require both gross income and net income to be consistent with the pattern.

- 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 income or recorded net income equals one of the income amounts consistent with the pattern (allowing the benefit to be inconsistent).[29]

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).

---

[29]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.

- **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.

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 listed 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 listed 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 listed 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, we retain the variables in the file. However, we do not use other deductions for the benefit calculation and set them to missing (.E). The deductions we set to missing for SSI-CAP participants in these States include:

- Medical expense deduction (FSMEDDED)

- Earned income deduction (FSERNDED)

- Dependent care deduction (FSDEPDED)

- Child support payment deduction (FSCSDED)

- Homeless household shelter 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 expenses 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	18 or older	Earned and unearned	$305 or less Greater than $305
Massachusetts (BAYSTATE CAP)	February 2005	Living alone	18 or older	Earned and unearned	Less than $453 $453 or greater
Washington (WASHCAP)[1]	December 2001*	Living alone	18 or older	Unearned	Less than $320 $320 or greater

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

[1]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 meeting 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, we recode the rent/mortgage amount to be the standard allowance, and flag the unit as a BAY STATE 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. Appendix F, Table F.24 lists benefit calculations for all States with a standard shelter expense SSI-CAP program.

d.   Standard medical deduction demonstration programs

Twenty States have programs to standardize medical expense 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 expense deduction equal to actual medical expenses, minus $35. To achieve cost neutrality, as required by FNS to operate a medical deduction demonstration program, most States reduced the HCSUA for the entire caseload. The HCSUA modeled for these States in the SNAP QC database reflects the adjustments. Table III.4 lists the States.

Table III.4. States with standard medical deduction demonstrations

State	Start date (of current waiver)	Cost neutrality
Alabama	October 2014	HCSUA was reduced by $8.
Arkansas	September 2016	HCSUA was reduced by $4.
Colorado	October 2016	HCSUA was reduced by $4.
Georgia	October 2015	HCSUA was reduced by $6.
Idaho	November 2013	HCSUA was reduced by $8.
Illinois	June 2017	The standard deduction was reduced by $7.
Iowa	October 2017	HCSUA and limited utility allowance were reduced by $5.
Kansas	January 2016	HCSUA was reduced by $8.
Massachusetts	April 2013	HCSUA was reduced by $9.
Missouri	October 2016	HCSUA was reduced by $14.
New Hampshire	October 2015	HCSUA was reduced by $6.
North Dakota	April 2013	HCSUA was reduced by $10.
Oregon	February 2017	HCSUA was reduced by $6.
Rhode Island	October 2012	HCSUA was reduced by $7.
South Carolina	November 2015	HCSUA was reduced by $10.
South Dakota	May 2013	HCSUA was reduced by $10.
Texas	July 2013	HCSUA and limited utility allowance were reduced by $2.
Vermont	December 2013	HCSUA was reduced by $12.
Virginia	April 2017	HCSUA was reduced by $4.
Wyoming	January 2017	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 list 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 months of the disaster by the number of SNAP units receiving benefits 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).[30] (No State had a stratified sample in FY 2017.)

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[31] (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 from the SNAP QC file 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 create final weights using a nonlinear programming (NLP) technique that produces 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 in Steps 1 and 4 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

---

[30] Column omitted from Appendix D tables due to space limitations but available upon request.

[31] The numerator of FNS's error rate includes units that received too much or too little in benefits in addition to the units included in the disqualification rate numerator.

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, we first create 500 sets of replicate weights by drawing 500 random samples from the SNAP QC data and repeating the weighting methodology 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. If the algorithm cannot find weights that match both control totals, the replicate weights are set equal to the preliminary weights (calculated in Step 6, described above) for that particular State and month. We use the 500 replicate weights to calculate standard errors.

The edited SNAP QC file contains two weight variables: (1) the monthly weight (HWGT) (2) 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. National monthly totals for Rhode Island in months June, July and August and for Virgin Islands in months July, August, and September are not available due to missing data. Tabulations of average monthly values for the entire fiscal year can be obtained by using FYWGT, which is HWGT divided by 12 for all States except for Rhode Island and the Virgin Islands, where FYWGT is HWGT divided by 9.

IV. DEVELOPMENT OF THE 2017 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 model uses a series of algorithms, written in ISO/IEC standard Fortran 95 and 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^{TM} style)[32] 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

QCFY2017.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 a hierarchical format (household record and then person records for individuals in the household).

c. Program for Step 1

MINIQC.SAS

---

[32] 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 a hierarchical format (household record then person records for individuals in the household), in final MATH format.

g. Program for Step 2

The QC Minimodel TALLY subroutine creates:

- Person-level seeds SEEDP to be used with the random number generator.

- Variables FSDEPDED, FSNDIS, FSNONCIT, FSNABAWD, FSALLPA, and FSASTEST.

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 of procedures

The following is a brief description of the procedures used to create a 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:

SAS Recode

.   -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 SAS2BIN.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
    08/23/2018  CREATION DATE
  09:24:25.71  CREATION TIME
        FY2017  BASE YEAR
        FY2017  YEAR AGED TO
           avg  SIMULATION MONTH
         45530  HOUSEHOLD COUNT
       QC MINI  MODEL LABEL
       2017.00  MODEL VERSION
```

Using the output database from SAS2BIN.SAS, we run a QC Minimodel TALLY subroutine to generate the final version of the QC Minimodel database. This program:

- Renames unit-level variable FSDEPDED to HDEPDED (because FSDEPDED is reserved as a MATH model variable name).

- Deletes the variable SEEDP and generates a new person-level SEEDP that is compatible with the MATH model random number generator MATHRAND.

- Creates a person-level variable FSNDIS (the number of non-elderly individuals with disabilities in the unit) on the unit head's record, by summing over individuals in the unit with $DIS_i = 1$. Sets FSNDIS to '0' for all other individuals.

- Creates a person-level variable FSNONCIT (the number of noncitizens in the unit) on the unit head's record, by summing over individuals in the unit with CTZN > 2. Sets FSNONCIT to '0' for all other individuals.

- Creates a person-level 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. Sets FSNABAWD to '0' for all other individuals.

- Creates a person-level variable FSALLPA from the unit-level variable PURE_PA and sets it to '0' for all, or '1' for the unit head if PURE_PA = 1.

- Ensures the asset test result FSASTEST = 1 for all units.

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:

- SHELCAP1 is the shelter limit for the contiguous U.S., Alaska, Hawaii, Guam, and the Virgin Islands.

- 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.

- MNERNDED is the value used for calculating the earnings deduction for MFIP participants.

- The following flags allow users to exclude the specified participants from a policy change simulation:

  - XMN_FIP excludes MFIP participants.
  - XSCAP_AZ excludes AZSNAP participants.
  - XSCAP_FL excludes SUNCAP participants.
  - XSCAP_KY excludes KYSAFE participants.
  - XSCAP_LA excludes LaCAP participants.
  - XSCAP_MA excludes BAYSTATECAP participants.
  - XSCAP_MD excludes MSNAP participants.
  - XSCAP_MI excludes MiCAP participants.
  - XSCAP_MS excludes MSCAP participants.
  - XSCAP_NC excludes NCSNAP participants.
  - XSCAP_NJ excludes NJSNAP participants.
  - XSCAP_NM excludes NMCAP participants.
  - XSCAP_NY excludes NYSNIP participants.
  - XSCAP_PA excludes PACAP participants.
  - XSCAP_SC excludes SCCAP participants.
  - XSCAP_SD excludes SD IN participants.
  - XSCAP_TX excludes SNAP-CAP participants.
  - XSCAP_VA excludes VaCAP participants.
  - XSCAP_WA excludes WASHCAP participants.

- DOSTAT allows users to include or exclude table statistics in a set of 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.[33]

b. Output files

MATHPC.HDR[34]	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).
tables.json	Summary tables (JSON[35] format text file).
MATHPC.OUT	Debug file.

c. Programs

i. Subroutines

db_fs_counts	Increments debug counters and prints totals to MATHPC.OUT file.

---

[33] 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.

[34] Note that MATHPC.HDR and MATHPC.BIN are created only when the WRFILE is set to T (true).

[35] JSON stands for *JavaScript Object Notation*, and is defined and documented in ECMA-404 *The JSON Data Interchange Syntax*.

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 standard errors are desired 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_fsgrtest	Recomputes gross income test for units with child support expenses.
db_fs_save_generic_vars	Dummy routine for generic code compatibility.
db_fs_calc_liheap	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.
db_fs_calc_ben_post	Dummy routine for generic code compatibility.

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 standard 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 of procedures

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 FNS's microsimulation 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 models 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
```

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 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 simulation to simulation in a multi-simulation 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 simulation to simulation.

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	HOMELSDED	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 indicators of statistical significance 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 (l_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)
```

We set skip_hh_flags for MN_FIP and SSI_CAP units according to the "skip" parameters, which vary by State.

We assign SNAP reporting status, FS_REPORTER, and set it to true for all units.

We assign the household's dependent care and child support payment deductions and shelter and medical expenses to a set of working variables that are used in policy change simulations that change the original household composition. Note that when imputing these expenses and dependent care deductions within a simulation, the values for the original household must be used even if a new baselaw has been previously constructed. Also, we set original assets and original unit counts and flags.

```
orig_fsmedexp = l_original_fsmedexp%ihhld
orig_fssltexp = l_original_fssltexp%ihhld
orig_fsdepded = l_original_fsdepded%ihhld
orig_fscsded  = l_original_fscsded %ihhld
orig_fsuhead = 0
hhtanf = 0
orig_kids_lt15 = 0
do ip = 1, ctprhh
    if (l_original_fsun%iper(ip) == ip) orig_fsuhead = ip
    if (l_tanf%iper(ip) > 0) hhtanf = hhtanf + l_tanf%iper(ip)
    if (l_original_fsun%iper(ip) == 0) cycle
    if (l_age%iper(ip) >= 0 .and. l_age%iper(ip) < 15) &
        orig_kids_lt15 = orig_kids_lt15 + 1
enddo
orig_fsusize  = l_original_fsusize %iper(orig_fsuhead)
orig_fsnkid   = l_original_fsnkid  %iper(orig_fsuhead)
```

```
orig_fsnelder = l_original_fsnelder%iper(orig_fsuhead)
orig_fsndis   = l_original_fsndis  %iper(orig_fsuhead)
orig_fsasset  = l_original_fsasset %iper(orig_fsuhead)
```

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, ctprhh
    fsun(ip) = l_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,ctprhh
    if (fsun(ip) == 0) cycle
    if (fsun(fsun(ip)) /= fsun(ip)) then
        do jp = ip+1,ctprhh
            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:[36]

```
do iunit = 1, ctprhh
    do ip = 1, ctprhh
```

---

[36]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.

```
        if (l_dpcost%iper(ip) > 0) depexp(iunit) = depexp(iunit) + l_dpcost%iper(ip)
        !--------  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) then
            fsssi (iunit)  = fsssi (iunit) + l_ssi %iper(ip)
            nssi = nssi + 1
        endif
        if (l_ga  %iper(ip) > 0) fsga  (iunit) = fsga  (iunit) + l_ga  %iper(ip)
        !---- Earned income
        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_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_eitc  %iper(ip) > 0)  fsgrinc(iunit) = fsgrinc(iunit) + l_eitc  %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) - l_exfscsded%ihhld
end do ! end of unit loop
```

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 members with a disability

- Number of female members and number of male members

```
do iunit = 1, ctprhh
    do ip = 1, ctprhh
        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 (l_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
                fndeplt2(iunit) = fndeplt2(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
        if (l_sex%iper(ip) == 2) then
            fsnfemale(iunit) = fsnfemale(iunit) + 1
        else
            fsnmale(iunit) = fsnmale(iunit) + 1
        end if

    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.

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

g. Impute assets, shelter expenses, medical expenses, homeless household shelter deduction, and child support 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:

```
fssltexp(iunit) = nint( orig_fssltexp * 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 expense deduction is not allowed—either in the original SNAP QC file editing process or in any QC Minimodel simulations. However, under certain circumstances, such as an elderly individual outside the unit, the medical expense may be applied to the head of household. 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))
    else if (orig_fsnelder == 0 .and. orig_fsndis == 0) then
        if (nssi > 0) then
            ! The unit is allowed a medical deduction based on an elderly or
            ! disabled person outside the unit (if there are none in the unit).
            ! The medical deduction goes to whomever in the unit has SSI
            ! income.
            do ip = 1, ctprhh
                !--- Cycle if person not in the fsu
                if (fsun(ip) /= iunit) cycle
                fsmedexp(ip) = nint(real(orig_fsmedexp) / nssi)
            end do
```

```
            else
                ! The unit is allowed a medical deduction based on an elderly or
                ! disabled person outside the unit, but nobody has SSI income,
                ! so assign the medical deduction to the unit head.
                fsmedexp(iunit) = orig_fsmedexp
            end if
        end if
    else
        fsmedexp(iunit) = 0
    end if
```

In addition, we identify units participating in standard medical deduction demonstration programs in the 20 States with such demonstrations. Certain States have a reduction to the standard deduction or HCSUA to maintain cost neutrality. 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)
        fsstdded(iunit) = fsstdded(iunit) - med_demo_stddedred(i)
    end if
end do
```

Child support expenses. The QC Minimodel imputes the child support expenses of the original unit to the head of the original unit. The child support payment 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 household shelter deduction. The QC Minimodel assigns the homeless household shelter deduction attributed to the original unit to all simulated SNAP units within the household.

```
if (l_homeded%ihhld == 3)
    fshomeDED(IUNIT) = l_homelsded%ihhld
```

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

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

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, ctprhh  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 2017 SNAP QC DATABASE

In this chapter, we describe the variables on the FY 2017 SNAP QC database, including an overview of the types of variables on the file, a list of variables, and a detailed description of each variable.

A. Overview of variables on the QC file

For each variable in the FY 2017 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.

In particular, certain constructed variables are used frequently in creating the tables in the "Characteristics of Supplemental Nutrition Assistance Program Households" report series. Data users will be able to obtain results consistent with those in the report by using the following variables rather than their unedited counterparts:

FSBEN	Unit SNAP benefit
FSUSIZE	Unit size
FSGRINC	Unit gross countable income
FSNETINC	Unit net countable income
FSERNDED	Unit earned income deduction
TPOV	Unit gross income as a percentage of poverty

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 2017 SNAP QC database is a SAS file with 45,530 observations from 12 sample months—October 2016 through September 2017—for all States (except Rhode Island), the District of Columbia, and Guam. Rhode Island has no observations for the months of June through August 2017 due to suspended QC operations as a result of systems errors. The Virgin Islands has no observations for the months of July through September 2017 due to suspended QC operations as a result of hurricanes Irma and Maria. 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 2017, the user should select all observations with a YRMONTH code equal to "201701."

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 that are available for each State on the file. The FYWGT variable should be used for all full-year tabulations (FYWGT equals HWGT divided by 12 for all States, except Rhode Island and the Virgin Islands where FYWGT equals HWGT divided by 9 because of the three months of unavailable data in each State).

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 16, representing up to 16 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 2017 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).

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

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
HHLDNO	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 standard 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

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

VARIABLE	**ORIGIN***	**DESCRIPTION**	*Quick-Reference Codebook*
FSUSIZE	C	Constructed certified unit size	
FYWGT	C	Weight used for full-year calculations	
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
FSFOSTER	C	Countable unit foster care 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

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

Unit countable and reported assets

FSASSET	C	Total countable assets under State rules
FSVEHAST	C	Countable non-excluded 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 non-excluded 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 earned income deduction
EXCL_FSCSDED	C	Child support excluded from gross income
FSCSDED	C	Child support payment deduction
FSCSEXP	R	Reported child support payment 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 expense deduction
FSMEDDE2	C	Marginal effectiveness of medical expense deduction
FSMEDEXP	R	Reported medical expenses
FSSLTDED	C	Calculated excess shelter expense deduction
FSSLTDE2	C	Marginal effectiveness of excess shelter expense deduction
FSSLTEXP	C	Calculated shelter expenses
FSSTDDED	C	Standard deduction
FSSTDDE2	C	Marginal effectiveness of standard deduction
FSTOTDED	C	Total deductions
FSTOTDE2	C	Marginal effectiveness of total deduction
HOMEDED	R	Indicator of homelessness
HOMELESS_DED	C	Amount of homeless household shelter 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

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

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
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 16

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 16

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
FOSTERi	R	Countable foster child income
GAi	R	Countable general assistance benefits
OTHERNi	R	Countable other earned income

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

VARIABLE	ORIGIN	DESCRIPTION	*Detailed Codebook*
			Unit QC Review Administrative Data

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, 1683)

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, 2761)

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

VARIABLE	**ORIGIN**	**DESCRIPTION**	***Detailed Codebook***
			Unit QC Review Administrative Data

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

HHLDNO   C   SNAP HOUSEHOLD IDENTIFICATION NUMBER
Range = (1, 55592)
Position of unit in unedited SNAP QC file (unique unit identifier).

LASTCERT   C   MONTHS SINCE LAST SNAP CERTIFICATION
Range = (0, 91)

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 STANDARD MEDICAL DEDUCTION DEMONSTRATION PARTICIPATION
Range = (0, 1)
0 = No
1 = Yes

MN_FIP   C   INDICATOR OF MFIP PARTICIPATION
We recommend using MN_FIP with the understanding that it may slightly underestimate the number of MFIP units. We recommend against using MFIP units' TANF income because it is not included as gross income and is most likely recorded incorrectly, if at all. See Appendix A for details.
Range = (0, 1)
0 = No
1 = Yes

VARIABLE	**ORIGIN**	**DESCRIPTION**	***Detailed Codebook*** ***Unit QC Review Administrative Data***

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 the unit has TANF income and every adult receives TANF, GA, or SSI.

RCNTACTN   R   MOST RECENT ACTION ON CASE
Range = (20070101, 20170929)
Date the case was certified or recertified for participation in sample month under review (in yyyymmdd 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, 880904)

SSI_CAP   C   INDICATOR OF SSI-CAP PARTICIPATION
We recommend using SSI_CAP, with the understanding that it likely underestimates the actual number of SSI-CAP units. See Appendix A for details.
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

VARIABLE	**ORIGIN**	**DESCRIPTION**	***Detailed Codebook***
			Unit QC Review Administrative Data

STATUS   R   STATUS OF CASE ERROR FINDINGS
                          Range = (1, 3)
                          1 = Amount correct
                          2 = Overissuance
                          3 = Underissuance

YRMONTH   R   SAMPLE YEAR AND MONTH
                          Range = (201610, 201709)
                          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 2017, for example, YRMONTH should equal 201701.

VARIABLE	**ORIGIN**	**DESCRIPTION**	*Detailed Codebook*
			Unit Demographics and Sample Weights

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, 14)

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, 14)
Number of people in household with nonmissing person-level
information.

FSDIS   C   INDICATOR OF NON-ELDERLY INDIVIDUALS WITH
DISABILITIES IN UNIT
Range = (0, 1)
**We recommend using FSDIS with the understanding that it
likely underestimates the number of units with non-elderly
individuals with disabilities. See Appendix A for details.**
0 = No
1 = Yes
A SNAP unit with one or more individuals that are defined as
disabled ($DIS_i = 1$).

FSELDER   C   INDICATOR OF ELDERLY INDIVIDUALS IN UNIT
Range = (0, 1)
0 = No
1 = Yes
A SNAP unit with one or more elderly individuals.

VARIABLE	**ORIGIN**	**DESCRIPTION**	*Detailed Codebook*
			Unit Demographics and Sample Weights

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
We recommend using FSNDIS with the understanding that it likely underestimates the number of non-elderly individuals with disabilities and the number of units containing such individuals. See Appendix A for details.
Range = (0, 4)
Number of individuals in the unit that are defined as disabled (DISi = 1).

FSNDISCA   C   NUMBER OF ADULTS AGE 18 TO 49 WITHOUT DISABILITIES IN CHILDLESS UNITS
We recommend using FSNDISCA with the understanding that it likely overestimates the number of adults without disabilities. See Appendix A for details.
Range = (0, 6)
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 adults age 60 or older in SNAP unit.

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, 5)
Number of children under age 5 in SNAP unit.

FSNK5T17   C   NUMBER OF SCHOOL-AGE CHILDREN IN UNIT
Range = (0, 10)
Number of children age 5 to 17 in SNAP unit.

VARIABLE	**ORIGIN**	**DESCRIPTION**	***Detailed Codebook***
			Unit Demographics and Sample Weights

FSNKID   C   NUMBER OF CHILDREN IN UNIT
Range = (0, 12)
Number of children under age 18 in SNAP unit.

FSNONCIT   C   NUMBER OF NONCITIZENS IN UNIT
Range = (0, 9)
Number of people with $FSAFIL_i = 1$ and $CTZN_i >= 3$.

FSUSIZE   C   CONSTRUCTED CERTIFIED UNIT SIZE
Range = (1, 14)
Number of people with $FSAFIL_i = 1$.

FYWGT   C   WEIGHT USED FOR FULL-YEAR CALCULATIONS
Range = (3.65, 4643.81)
Calculated as HWGT/12 for all States except for Rhode Island
and the Virgin Islands where defined as HWGT/9.

HWGT   C   MONTHLY SAMPLE WEIGHT
Range = (43.77, 55725.76)
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, 14)

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.

VARIABLE	**ORIGIN**	**DESCRIPTION**	***Detailed Codebook***
			Unit Demographics and Sample Weights

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, 1169)
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.

VARIABLE	**ORIGIN**	**DESCRIPTION**	*Detailed Codebook*
			Unit Demographics and Sample Weights

URBRUR   C   URBAN/RURAL INDICATOR (not retained on public use file)

We recommend caution when using URBRUR for any State-level tabulations because of concerns about the representativeness of the sample at the substate level. We recommend against the use of URBRUR for State-level tabulations in Alabama, Nebraska, Nevada, New Hampshire, Oklahoma, Utah, Vermont, and Washington because of the number of cases with unknown locality. See Appendix A for details.
Range = (1, 3)
Location of agency at which unit's SNAP application was processed.
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)
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)
3 = Rural (not metropolitan or micropolitan)

WRK_POOR   C   INDICATOR OF WORKING POOR UNIT
Range = (0, 1)
0 = No
1 = Yes
All SNAP units with countable earnings (FSEARN) or multiple indicators of earnings in the unedited SNAP QC file.

VARIABLE	**ORIGIN**	**DESCRIPTION**	*Detailed Codebook*
			Unit Countable Income

Unit countable income (monthly dollar amounts)

FSCONT	C	COUNTABLE UNIT INCOME FROM CONTRIBUTIONS Range = (0, 2500) Sum of CONT1 through CONT16

FSCSUPRT	C	COUNTABLE UNIT CHILD SUPPORT PAYMENT INCOME Range = (0, 5046) Sum of CSUPRT1 through CSUPRT16

FSDEEM	C	COUNTABLE UNIT DEEMED INCOME Range = (0, 2078) Sum of DEEM1 through DEEM16

FSDIVER	C	COUNTABLE UNIT STATE DIVERSION PAYMENTS Range = (0, 232) Sum of DIVER1 through DIVER16

FSEARN	C	COUNTABLE UNIT EARNED INCOME Range = (0, 9984) Sum of FSWAGES, FSSLFEMP, and FSOTHERN

FSEDLOAN	C	COUNTABLE UNIT INCOME FROM EDUCATIONAL GRANTS AND LOANS Range = (0, 888) Sum of EDLOAN1 through EDLOAN16

FSEITC	C	COUNTABLE UNIT INCOME FROM EARNED INCOME TAX CREDIT Range = (0, 821) Sum of EITC1 through EITC16

FSENERGY	C	COUNTABLE UNIT ENERGY ASSISTANCE INCOME Range = (0, 815) Sum of ENERGY1 through ENERGY16

FSFOSTER	C	CALCULATED FOSTER CARE RECEIPT Range = (0, 1302) Sum of FOSTER1 through FOSTER16

FSGA	C	COUNTABLE UNIT GENERAL ASSISTANCE BENEFITS Range = (0, 1546) Sum of GA1 through GA16

VARIABLE	**ORIGIN**	**DESCRIPTION**	***Detailed Codebook***
			Unit Countable Income

FSGRINC   C   FINAL GROSS COUNTABLE UNIT INCOME
Range = (0, 11578)
Total monthly gross income of unit (sum of FSEARN and FSUNEARN)

FSNETINC   C   FINAL NET COUNTABLE UNIT INCOME
Range = (0, 9425)
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, 3190)
Sum of OTHERN1 through OTHERN16

FSOTHGOV   C   COUNTABLE UNIT INCOME FROM OTHER GOVERNMENT BENEFITS
Range = (0, 2053)
Sum of OTHGOV1 through OTHGOV16

FSOTHUN   C   COUNTABLE UNIT OTHER UNEARNED INCOME
Range = (0, 2785)
Sum of OTHUN1 through OTHUN16

FSSLFEMP   C   COUNTABLE UNIT SELF-EMPLOYMENT INCOME
Range = (0, 4007)
Sum of SLFEMP1 through SLFEMP16

FSSOCSEC   C   COUNTABLE UNIT SOCIAL SECURITY INCOME
Range = (0, 3417)
Sum of SOCSEC1 through SOCSEC16

FSSSI   C   COUNTABLE UNIT SSI BENEFITS
Range = (0, 2859)
Sum of SSI1 through SSI16

FSTANF   C   COUNTABLE UNIT TANF PAYMENTS
We recommend against using FSTANF in Minnesota because TANF income is not used in the SNAP benefit calculation for MFIP units. We recommend using FSTANF in California with the understanding that the number of pure PA units may be overestimated. See Appendix A for more details.
Range = (0, 1731)
Sum of TANF1 through TANF16

VARIABLE	**ORIGIN**	**DESCRIPTION**	*Detailed Codebook*
			Unit Countable Income

FSUNEARN   C   COUNTABLE UNIT UNEARNED INCOME
Range = (0, 5967)
Sum of FSCONT, FSCSUPRT, FSDEEM, FSEDLOAN, FSGA, FSOTHGOV, FSOTHUN, FSSOCSC, FSSSI, FSTANF, FSUNEMP, FSVET, FSWCOMP, FSDIVER, FSENERGY, and FSWGESUP

FSUNEMP   C   COUNTABLE UNIT UNEMPLOYMENT COMPENSATION BENEFITS
Range = (0, 2709)
Sum of UNEMP1 through UNEMP16

FSVET   C   COUNTABLE UNIT VETERANS' BENEFITS
Range = (0, 2420)
Sum of VET1 through VET16

FSWAGES   C   COUNTABLE UNIT WAGES AND SALARIES
Range = (0, 9984)
Sum of WAGES1 through WAGES16

FSWCOMP   C   COUNTABLE UNIT WORKERS' COMPENSATION BENEFITS
Range = (0, 1827)
Sum of WCOMP1 through WCOMP16

FSWGESUP   C   COUNTABLE UNIT WAGE SUPPLEMENTATION INCOME
Range = (0, 940)
Sum of WGESUP1 through WGESUP16

RAWGROSS   R   REPORTED GROSS COUNTABLE UNIT INCOME
Range = (0, 11578)
Reported total monthly countable income of unit before applying deductions (see FSGRINC for final value)

RAWNET   R   REPORTED NET COUNTABLE UNIT INCOME
Range = (0, 9424)
Reported total monthly countable income of unit after applying deductions (see FSNETINC for final value)

VARIABLE	**ORIGIN**	**DESCRIPTION**	*Detailed Codebook*
			Unit Countable Assets

Unit countable assets

FSASSET   C   TOTAL COUNTABLE ASSETS UNDER STATE RULES
We recommend using FSASSET with the understanding that only 8 percent of SNAP units have countable assets. See Appendix A for more details.
Range = (0, 4908)
Sum of LIQRESOR, FSVEHAST, OTHNLRES, and REALPROP

FSVEHAST   C   COUNTABLE NON-EXCLUDED VEHICLES' VALUE UNDER STATE RULES
We recommend using FSVEHAST with the understanding that very few SNAP units have non-excluded vehicles. See Appendix A for more details.
Range = (0, 4700)

LIQRESOR   C   COUNTABLE LIQUID ASSETS UNDER STATE RULES
Range = (0, 4908)

OTHNLRES   C   COUNTABLE OTHER NONLIQUID ASSETS UNDER STATE RULES
Range = (0, 2580)

RAWLQRES   R   REPORTED LIQUID ASSETS
Range = (0, 74300)

RAWOTRES   R   REPORTED OTHER NONLIQUID ASSETS
Range = (0, 2580)

RAWRPROP   R   REPORTED REAL PROPERTY
Range = (0, 50000)
Does not include home

RAWVHAST   R   REPORTED NONEXCLUDED VEHICLES' VALUE
Range = (0, 4700)

REALPROP   C   COUNTABLE REAL PROPERTY UNDER STATE RULES
Range = (0, 1850)
Does not include home

VARIABLE	**ORIGIN**	**DESCRIPTION**	*Detailed Codebook*
			Unit Countable Assets

VEHICLEA   R   REPORTED CATEGORY FOR FIRST VEHICLE
We recommend against the use of VEHICLEA. See
Appendix A for more details.
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)

VEHICLEB   R   REPORTED CATEGORY FOR SECOND VEHICLE
We recommend against the use of VEHICLEB. See
Appendix A for more details.
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)

VARIABLE	**ORIGIN**	**DESCRIPTION**	*Detailed Codebook*
			Unit Expenses and Deductions

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, 1173)
Child support expenses excluded before gross income test rather than before net income test for eligibility

FSCSDED	C	CHILD SUPPORT PAYMENT DEDUCTION

Range = (0, 1204)
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 PAYMENT DEDUCTION

Range = (0, 1204)
(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

We recommend against using FSDEPDED for State-level tabulations due to small sample sizes and inconsistencies between DPCOSTi and FSDEPDED. See Appendix A for more details.
Range = (0, 2580)
Some values have been edited to obtain consistency with DPCOST1 to DPCOST16 and to improve the final benefit calculation. See Appendix B for details. Coded as missing for all MFIP and SSI-CAP units.

VARIABLE	**ORIGIN**	**DESCRIPTION**	***Detailed Codebook***
			Unit Expenses and Deductions

FSDEPDE2   C   MARGINAL EFFECTIVENESS OF DEPENDENT CARE DEDUCTION[37]
Range = (0, 2342)
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.

FSERNDED   C   CALCULATED EARNED INCOME DEDUCTION
Range = (0, 1996)
Calculated as FSERNDED = ERN_INC_DED_PCT*FSEARN, rounded to nearest integer. The deduction equals 50 percent of total earned income for MFIP participants and 20 percent of total earned income for all others. Coded as missing for all SSI-CAP units.

FSERNDE2   C   MARGINAL EFFECTIVENESS OF EARNED INCOME DEDUCTION
Range = (0, 1996)
Calculated as FSERNDE2 = NEWNET-FSNETINC, where
NEWNET = MAX (0, FSGRINC-FSSLT2-FSDEPDED-
            FSMEDDED-FSSTDDED-FSCSDED-
            HOMELESS_DED)
and where FSSLT2 is the shelter deduction calculated without FSERNDED. Coded as missing for all MFIP and SSI-CAP units.

FSMEDDED   C   CALCULATED MEDICAL EXPENSE DEDUCTION
Range = (0, 4198)
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 FSMEDDED = MAX(0, FSMEDEXP)
Coded as missing for all MFIP and SSI-CAP units.

---

[37] 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.

VARIABLE	**ORIGIN**	**DESCRIPTION**	***Detailed Codebook***
			Unit Expenses and Deductions

FSMEDDE2   C   MARGINAL EFFECTIVENESS OF MEDICAL EXPENSE
                            DEDUCTION
                            Range = (0, 2139)
                            Calculated as FSMEDDE2 = NEWNET-FSNETINC, where
                            NEWNET = MAX (0, FSGRINC-FSSLT4-FSDEPDED-
                                       FSERNDED-FSSTDDED-FSCSDED-
                                       HOMELESS_DED)
                            and where FSSLT4 is the shelter deduction calculated without
                            FSM EDDED. Coded as missing for all MFIP and SSI-CAP units.

FSMEDEXP   R   REPORTED MEDICAL EXPENSES
                            Range = (0, 4198)
                            Allowable medical expenses in excess of $35 for elderly adults or
                            individuals with disabilities.

FSSLTDED   C   CALCULATED EXCESS SHELTER EXPENSE DEDUCTION
                            Range = (0, 3072)
                            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
                            XCOST = MAX(0, FSSLTEXP-HALFNET) and HALFNET =
                                       MAX (0,ROUND(FSGRINC-FSSTDDED-
                                       FSERNDED-FSDEPDED-FSMEDDED-
                                       FSCSDED)/2)
                            The final value of FSSLTDED is rounded to nearest integer.
                            Coded as missing for MFIP units and for units participating in an
                            SSI-CAP program in States that use standard SSI-CAP benefits.

FSSLTDE2   C   MARGINAL EFFECTIVENESS OF EXCESS SHELTER
                            EXPENSE DEDUCTION
                            Range = (0, 2560)
                            Calculated as FSSLTDE2 = NEWNET-FSNETINC, where
                            NEWNET = MAX (0,FSGRINC-FSDEPDED-FSERNDED-
                                       FSMEDDED-FSSTDDED-FSCSDED-
                                       HOMELESS_DED).
                            Coded as missing for MFIP units and for units participating in an
                            SSI-CAP program in States that use standard SSI-CAP benefits.

FSSLTEXP   C   CALCULATED SHELTER EXPENSES
                            Range = (0, 4250)
                            Sum of RENT and UTIL

VARIABLE	**ORIGIN**	**DESCRIPTION**	*Detailed Codebook*
			Unit Expenses and Deductions

FSSTDDED   C   STANDARD DEDUCTION
Range = (138, 451)
Varies by region. See Appendix F for values.
Coded as missing for MFIP units and for units participating in an SSI-CAP program in States that use standard SSI-CAP benefits.

FSSTDDE2   C   MARGINAL EFFECTIVENESS OF STANDARD DEDUCTION
Range = (0, 677)
Calculated as FSSTDDE2 = NEWNET – FSNETINC, where NEWNET = MAX (0, FSGRINC – FSSLT1 – FSDEPDED – FSERNDED – FSMEDDED – FSCSDED – HOMELESS_DED) and where FSSLT1 is the shelter deduction calculated without FSSTDDED.
Coded as missing for MFIP units and for units participating in an SSI-CAP program in States that use standard SSI-CAP benefits.

FSTOTDED   C   TOTAL DEDUCTIONS
Range = (0, 5213)
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, 4313)
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 HOUSEHOLD SHELTER 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.)

VARIABLE	**ORIGIN**	**DESCRIPTION**	*Detailed Codebook*
			Unit Expenses and Deductions

RENT   R   RENT/MORTGAGE AMOUNT
Range = (0, 3854)
Some values for SSI-CAP units have been edited to apply
standard shelter allowances.

SHELCAP   C   MAXIMUM ALLOWABLE SHELTER EXPENSE
DEDUCTION
Range = (408, 826)
SHELCAP varies by region. See Appendix F for values.

SHELDED   R   REPORTED SHELTER DEDUCTION
Range = (0, 8844)
(See FSSLTDED for the final value)

SUA1   R   STANDARD UTILITY ALLOWANCE–USAGE AND
ENTITLEMENT
Range = (1, 9)
1 = No utilities and no LIHEAA assistance
2 = Uses actual expenses
3 = Uses higher standard based on LIHEAA assistance
4 = Uses higher standard and does not receive LIHEAA assistance
5 = Uses lower, or limited, standard
6 = Uses telephone-only standard
7 = Uses individual standards
8 = Uses higher standard, LIHEAA 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.
LIHEAA 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, or limited, standard is an SUA based upon all utilities
but is for households that do not incur heating or cooling or
receive LIHEAA.

VARIABLE	**ORIGIN**	**DESCRIPTION**	***Detailed Codebook***
			Unit Expenses and Deductions

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, 1074)
                               Some values have been edited to improve the final benefit
                               calculation. See Appendix B for more details.

VARIABLE	**ORIGIN**	**DESCRIPTION**	*Detailed Codebook*
			Unit Benefits

Unit benefits

AMTERR   R   AMOUNT OF BENEFIT IN ERROR
Range = (0, 911)
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, 2798)
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, 2761)
Calculated as FSBEN = MAX(minimum benefit, BENMAX-ROUND (.3*FSNETINC)) if FSUSIZE is 2 or Less. Otherwise, FSBEN = MAX (0, 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

VARIABLE	**ORIGIN**	**DESCRIPTION**	*Detailed Codebook*
			Unit Benefits

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 = (1287, 7230)
SNAP eligibility limit determined by unit size. Categorically eligible units and those with elderly members or individuals with disabilities are not subject to the gross income screen. See Appendix F for values.

NETSCRN   C   NET INCOME SCREEN
Range = (990, 5562)
SNAP eligibility limit determined by unit size. Categorically eligible units are not subject to the net income screen. See Appendix F for values.

RAWBEN   R   REPORTED SNAP BENEFIT RECEIVED
Range = (0, 2761)
Reported amount of SNAP benefits that the unit was certified to receive during the sample month (see FSBEN for final value)

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

Person-level characteristics

ABWDST1 to ABWDST16	R	ABAWD STATUS

We recommend caution when using ABWDSTi due to inconsistencies between ABWDSTi and several employment variables (i.e., WRKREGi, EMPSTAi, and EMPSTBi). We specifically recommend against using ABWDSTi for State-level tabulations in Iowa, Maine, Nevada, New Hampshire, and North Dakota given the small sample sizes. See Appendix A for more details.
Range = (1, 6)
Person 1 through Person 16
1 = Not an able-bodied adult without dependents (ABAWD)
2 = ABAWD in a waived area
3 = Exempt based on 15 percent option
4 = ABAWD meeting work requirements
5 = ABAWD in 1st 3 months
6 = ABAWD in 2nd 3 months
7 = ABAWD who has exhausted time-limited benefits

AGE1 to AGE16	R	AGE

Range = (0, 98)
Person 1 through Person 16
0 = Age less than 1 year
1 to 97 = Age in years
98 = Age 98 years or older

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

CTZN1 to CTZN16 — **ORIGIN:** R — CITIZENSHIP STATUS
Range = (1, 10)
Person 1 through Person 16
1 = US–born citizen
2 = Naturalized citizen
3 = Legal permanent resident with 40 quarters of work, military service, five years legal U.S. residency, disability, or under age 18
5 = Person admitted as refugee, granted asylum, or given stay of deportation
6 = Other eligible noncitizen
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
8 = Other ineligible legal noncitizen (for example, visitor, tourist, student, diplomat)
9 = Undocumented noncitizen
10 = Noncitizen, status unknown

DIS1 to DIS16 — **ORIGIN:** C — PERSON-LEVEL DISABILITY INDICATOR
We recommend using DISi with the understanding that it likely underestimates the number of non-elderly individuals with disabilities. See Appendix A for more details.
Range = (0, 1)
Person 1 through Person 16
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.

<u>VARIABLE</u>	<u>ORIGIN</u>	<u>DESCRIPTION</u>	*Detailed Codebook*
			Person-Level Characteristics

DPCOST1 to DPCOST16   R   REPORTED DEPENDENT CARE COST
We recommend against using DPCOSTi for State-level tabulations due to small sample sizes and inconsistencies between DPCOSTi and FSDEPDED. See Appendix A for more details.
Range = (0, 1222)
Person 1 through Person 16
Some values have been edited to obtain consistency with FSDEPDED. See Appendix B for details.

EMPRG1 to EMPRG16   R   SNAP EMPLOYMENT AND TRAINING PROGRAM STATUS
We recommend using EMPRGi, with the understanding that this variable is best used in conjunction with other work-related variables. See Appendix A for more details.
Range = (0, 9)
Person 1 through Person 16
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

VARIABLE	ORIGIN	DESCRIPTION	*Detailed Codebook*
			Person-Level Characteristics

EMPSTA1 to
EMPSTA16   R   EMPLOYMENT STATUS–TYPE
Range = (1, 8)
Person 1 through Person 16
**We recommend using EMPSTAi, with the understanding
that this variable is best used in conjunction with other
work-related variables. See Appendix A for more details.**
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
EMPSTB16   R   EMPLOYMENT STATUS–AMOUNT
Range = (1, 5)
Person 1 through Person 16
**We recommend using EMPSTBi, with the understanding
that this variable is best used in conjunction with other
work-related variables. See Appendix A for more details.**
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

FSAFIL1 to   R   SNAP CASE AFFILIATION
FSAFIL16   Range = (1, 99)
                             Person 1 through Person 16

We recommend against the use of FSAFILi for State-level tabulations of nonparticipants in West Virginia and caution when using FSAFili for State-level tabulations of nonparticipants in the District of Columbia. 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

99 = Unknown

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

FSUN1 to FSUN16 — C — POSITION OF HEAD OF SNAP UNIT

Range = (0, 8)

Person 1 through Person 16

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 NDISCA16 — C — ADULT AGE 18 TO 49 WITHOUT DISABILITIES IN CHILDLESS UNIT STATUS

We recommend using NDISCAi with the understanding that it likely overestimates the number of adults without disabilities. See Appendix A for details.

Range = (0, 2)

Person 1 through Person 16

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

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

RACETH1 to   R   RACE/ETHNICITY
RACETH16

Range = (1, 22)
Person 1 through Person 16
We recommend against using RACETHi. See Appendix A for more details.

1 = Racial/ethnic data not available because application was not found
2 = Not recorded on application

Not Hispanic or Latino

3 = American Indian or Alaska Native
4 = Asian
5 = Black or African American
6 = Native Hawaiian or other Pacific Islander
7 = White

Multiple Races Reported

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)

Hispanic or Latino

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

Multiple Races Reported

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)

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

REL1 to REL16   R   RELATIONSHIP TO HEAD OF HOUSEHOLD
Range = (1, 7)
Person 1 through Person 16
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 SEX16   R   SEX
Range = (1, 2)
Person 1 through Person 16
1 = Male
2 = Female

WORK1 to WORK16   C   PERSON-LEVEL WORKING INDICATOR
Range = (0, 1)
Person 1 through Person 16
0 = No
1 = Yes
Identifies individuals who are coded as being employed (EMPSTAi > 2), having positive earnings (WAGESi + OTHERNi + SLFEMPi > 0), and working one or more hours per week (EMPSTBI > 1).

WRKREG1 to WRKREG16   R   WORK REGISTRATION STATUS
Range = (1, 6)
Person 1 through Person 16
We recommend using WRKREGi with the understanding that this variable is best used in conjunction with other work-related variables. See Appendix A for more details.
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

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

YRSED1 to   R   HIGHEST EDUCATIONAL LEVEL COMPLETED
YRSED16

We recommend against the use of YRSEDi. See Appendix A for more details.
Range = (0, 14)
Person 1 through Person 16

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

VARIABLE	**ORIGIN**	**DESCRIPTION**	*Detailed Codebook*
			Person-Level Countable Income

Person-level countable income (monthly dollar amounts)[38]

CONT1 to CONT16	R	COUNTABLE INCOME FROM CONTRIBUTIONS Range = (0, 2500) Person 1 through Person 16 Amount of contributions, charity, and in-kind income
CSUPRT1 to CSUPRT16	R	COUNTABLE CHILD SUPPORT PAYMENT INCOME Range = (0, 5046) Person 1 through Person 16 Court-ordered child support payments received from absent parent or responsible person
DEEM1 to DEEM16	R	COUNTABLE DEEMED INCOME Range = (0, 2078) Person 1 through Person 16 Income deemed from sponsor of noncitizen member of unit
DIVER1 to DIVER16	R	COUNTABLE STATE DIVERSION PAYMENTS Range = (0, 0) Person 1 through Person 16
EDLOAN1 to EDLOAN16	R	COUNTABLE INCOME FROM EDUCATIONAL GRANTS AND LOANS Range = (0, 888) Person 1 through Person 16 Educational grants, scholarships, and loans
EITC1 to EITC16	R	COUNTABLE INCOME FROM EARNED INCOME TAX CREDIT Range = (0, 821) Person 1 through Person 16
ENERGY1 to ENERGY16	R	COUNTABLE ENERGY ASSISTANCE INCOME Range = (0, 815) Person 1 through Person 16
FOSTER1 to FOSTER16	R	CALCULATED FOSTER CARE RECEIPT Range = (0, 855) Person 1 through Person 16

---

[38] Some person-level income amounts have been edited to obtain consistency with final gross income (FSGRINC).

VARIABLE	**ORIGIN**	**DESCRIPTION**	*Detailed Codebook*
			Person-Level Countable Income

GA1 to GA16	R	COUNTABLE GENERAL ASSISTANCE BENEFITS Range = (0, 1144) Person 1 through Person 16
OTHERN1 to OTHERN16	R	COUNTABLE OTHER EARNED INCOME Range = (0, 3190) Person 1 through Person 16
OTHGOV1 to OTHGOV16	R	COUNTABLE INCOME FROM OTHER GOVERNMENT BENEFITS Range = (0, 1884) Person 1 through Person 16 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 OTHUN16	R	COUNTABLE OTHER UNEARNED INCOME Range = (0, 2785) Person 1 through Person 16 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 SLFEMP16	R	COUNTABLE SELF-EMPLOYMENT INCOME Range = (0, 4007) Person 1 through Person 16 Net income from any self-employment enterprise.
SOCSEC1 to SOCSEC16	R	COUNTABLE SOCIAL SECURITY INCOME Range = (0, 2317) Person 1 through Person 16
SSI1 to SSI16	R	COUNTABLE SSI BENEFITS Range = (0, 1532) Person 1 through Person 16 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.

VARIABLE	**ORIGIN**	**DESCRIPTION**	*Detailed Codebook*
			Person-Level Countable Income

TANF1 to TANF16   R   COUNTABLE TANF PAYMENTS
Range = (0, 1640)
Person 1 through Person 16
Assigned to payee or principal person of assistance group.

UNEMP1 to UNEMP16   R   COUNTABLE UNEMPLOYMENT COMPENSATION BENEFITS
Range = (0, 2709)
Person 1 through Person 16

VET1 to VET16   R   COUNTABLE VETERANS' BENEFITS
Range = (0, 2073)
Person 1 through Person 16

WAGES1 to WAGES16   R   COUNTABLE WAGES AND SALARIES
Range = (0, 9984)
Person 1 through Person 16
Amount of wages, salaries, tips, and commission.

WCOMP1 to WCOMP16   R   COUNTABLE WORKERS' COMPENSATION BENEFITS
Range = (0, 1827)
Person 1 through Person 16

WGESUP1 to WGESUP16   R   COUNTABLE WAGE SUPPLEMENTATION INCOME
Range = (0, 940)
Person 1 through Person 16
Earnings above cash assistance and/or SNAP benefit amount.

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

Detailed error findings

AGENCY1 to AGENCY9	R	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

AMOUNT1 to AMOUNT9	R	VARIANCE DOLLAR AMOUNT

Range = (0, 13603)
Variance 1 through Variance 9
Dollar amount of variance

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

DISCOV1 to   R   VARIANCE DISCOVERY
DISCOV9   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   R   ERROR FINDING
E_FINDG9   Range = (2, 4)
                                Variance 1 through Variance 9
                                Impact of variance
                                2 = Overissuance
                                3 = Underissuance
                                4 = Ineligible

ELEMENT1 to   R   VARIANCE ELEMENT
ELEMENT9   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

VARIABLE	ORIGIN	DESCRIPTION	*Detailed Codebook*
			Detailed Error Findings

221 = Real property
222 = Vehicles
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 expense 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   R   NATURE OF VARIANCE
NATURE9

Range = (6, 309)
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

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

16 = Newborn improperly excluded
20 = Incorrect resource limit applied
24 = Resource should have been excluded
28 = Incorrect income limit applied
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

<u>**VARIABLE**</u>	<u>**ORIGIN**</u>	<u>**DESCRIPTION**</u>	*Detailed Codebook*
			Detailed Error Findings

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

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

307 = Unit improperly participating under status reporting

308 = Unit improperly participating under 5 hour reporting

309 = Unit improperly participating in transitional benefits

OCCDATE1 to OCCDATE9	R	VARIANCE OCCURRENCE DATE Range = (199012, 999999) Variance 1 through Variance 9 Date each variance occurred (year and month) 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

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

VERIF1 to   R   VARIANCE VERIFICATION
VERIF9

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

REFERENCES

Vigil, Alma, Sarah Lauffer, Kelsey Farson Gray, Chrystine Tadler, and Brad Miller. "Technical Documentation for the Fiscal Year 2016 Supplemental Nutrition Assistance Program Quality Control Database and the QC Minimodel." Washington, DC: Mathematica Policy Research, October 2017.

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 2017 SNAP QC DATABASE**

We assessed the quality of the data for variables in the FY 2017 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 and described in detail below.

In addition to the data quality concerns listed below, we recommend caution when preparing tabulations using monthly data from Rhode Island or the Virgin Islands for FY 2017. Both Rhode Island and the Virgin Islands experienced suspended QC operations for several months during FY 2017 as a result of systems issues and natural disasters, respectively. Due to missing and incomplete data, the edited QC datafile does not include information on participants from Rhode Island in June, July, or August, or from the Virgin Islands in July, August or September.

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 Iowa, Maine, Nevada, New Hampshire, and North Dakota

- 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, New Hampshire, Oklahoma, Utah, Vermont, and Washington (not retained in public use file)

- FSTANF in Minnesota

We recommend caution when using the following variables for tabulations:

- ABWDSTi

- DISi, FSDIS, and FSNDIS (with the understanding that DISi and FSNDIS likely underestimate the number of non-elderly individuals with disabilities and FSDIS likely underestimates the number of units containing non-elderly individuals with disabilities)

- EMPRGi (with the understanding that this variable is best used in conjunction with other work-related variables)

- EMPSTAi and EMPSTBi (with the understanding that these variables are best used in conjunction with other work-related variables)

- FSAFILi for State-level tabulations of nonparticipants in the District of Columbia

- FSASSET and FSVEHAST (with the understanding that only 8 percent of SNAP units have countable assets)

- FSTANF in California (with the understanding that the number of pure public assistance (PA) units may be overestimated)

- MN_FIP (with the understanding that it may slightly underestimate the number of Minnesota Family Investment Program (MFIP) units)

- NDISCAi and FSNDISCA (with the understanding that NDISCAi likely overestimates the number of adults without disabilities)

- SSI_CAP (with the understanding that it likely underestimates the actual number of SSI-CAP units)

- URBRUR for any State-level tabulations (not retained in public use file)

- WRKREGi (with the understanding that this variable is best used in conjunction 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 include values for race/ethnicity data not available or not recorded. About 17 percent of participants have unreported race/ethnicity data, although this percentage varies considerably by State. Given the large percentage of participants with unreported race/ethnicity information nationally, we recommend against use of this variable.

2. Vehicles (VEHICLEA and VEHICLEB)

For more than a decade, we have recommended against using the vehicle variables (VEHICLEA and VEHICLEB) because of coding inconsistencies. In addition, because QC reviewers are instructed to record possession of vehicles only if the vehicle's value is counted toward a unit's resources, VEHICLEA and VEHICLEB are often missing.

3. Highest educational level completed (YRSEDi)

We recommend against using YRSEDi because more than 8 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 produce misleading findings. For this reason, we recommend against using

ABWDSTi for State-level tabulations in Iowa, Maine, Nevada, New Hampshire, and North Dakota.

2. Dependent care costs (DPCOSTi) and deduction (FSDEPDED)

Nationally, inconsistencies between DPCOSTi and FSDEPDED affect less than 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 (25 percent in California, 11 percent in Nevada, and 5 percent in Oklahoma). As a result and because of small sample sizes in some States, we recommend against use of DPCOSTi and FSDEPDED for State-level tabulations.

3. SNAP case affiliation (FSAFILi)

FSAFILi may be used for tabulations of participants. However, certain States have a high percentage of missing or unknown values for nonparticipants. In West Virginia, a little more than four-fifths of nonparticipants have unknown FSAFILi values. As a result, we recommend against use of FSAFILi for State-level tabulations of nonparticipants in West Virginia.

4. Locality (URBRUR)

Two States (Nebraska and Utah) use Local Agency Codes (LACs) that do not align to geographic areas and therefore cannot be used to classify units as located in a metropolitan, micropolitan, or rural area. All units in these two States are classified as having an unknown locality. In addition, mostly because of the use of statewide LACs, we cannot identify locality for more than 5 percent of units in Alabama, Nevada, New Hampshire, Oklahoma, Vermont, and Washington. Because we cannot identify locality for a large percentage of cases in these States, we recommend against use of URBRUR (metropolitan, micropolitan, or rural status) in these 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 employment variables (WRKREGi, EMPSTAi, and EMPSTBi). For example, of the 439,000 weighted participants with an ABWDSTi code indicating they are an ABAWD meeting work requirements, 62 percent have a WRKREGi code indicating they are exempt from work registration. In view of the inconsistencies between ABWDSTi and these employment variables, we recommend caution when using this variable.

2. Person-level and unit disability (DISi, FSDIS, and FSNDIS)

Beginning in FY 2012, 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). The disability algorithm is described in Appendix B. We recommend use of DISi, FSDIS, and FSNDIS with

the understanding that the variables likely underestimate the number of individuals and units with disabilities.

3. SNAP employment and training program status (EMPRGi) and employment status (EMPSTAi and EMPSTBi)

Although we are limited in our ability to assess EMPRGi, we did uncover 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 the other work-related variables, we recommend caution when using EMPRGi.

As in previous years, we found inconsistencies between the two employment status variables, EMPSTAi and EMPSTBi, and with other variables recording countable earned income. For example, of the 13,883 unweighted participants coded as working one to 40+ hours and employed, 383 have no countable earnings. Given these inconsistencies, we recommend use of EMPSTAi and EMPSTBi in conjunction with other work-related variables to determine participants' employment status. Specifically, we recommend use of the person-level work indicator, WORKi, which incorporates information from person-level earnings variables as well as EMPSTAi and EMPSTBi.

4. SNAP case affiliation (FSAFILi)

As discussed earlier in Section C of this appendix, West Virginia has a very high percentage of missing or unknown values for nonparticipants. Additionally, more than 7 percent of nonparticipants in the District of Columbia have missing or unknown values. We recommend caution when using FSAFILi for State-level tabulations of nonparticipants in the District of Columbia.

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 broad-based categorical eligibility (BBCE) policy. In view of this edit and the large number of States with BBCE policies, a large number of units have no recorded assets. Only 8 percent of SNAP units have recorded assets (FSASSET > 0) in the FY 2017 file, and nearly all units have no vehicle assets (FSVEHAST = 0). We recommend use of 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 is not included in reported gross income, resulting in a fatal error in the data transmission if the full TANF amount is reported. Because TANF receipt may not be recorded for some units receiving MFIP cash assistance, we recommend using the MFIP variable (MN_FIP) with the understanding that it may

slightly underestimate the number of MFIP units. We recommend against use of MFIP units' TANF income because it is not included as gross income and is most likely recorded incorrectly, if at all.

In addition, 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 use of TANF receipt in California with the understanding that it may contribute to an overestimate of the number of pure PA units in California.

7. Adults age 18 to 49 without disabilities in childless units (NDISCAi and FSNDISCA)

We recommend use of the revised NDISCAi and FSNDISCA codes, with the understanding that DISi likely underestimates the number of non-elderly individuals with disabilities as discussed above, and therefore, NDISCAi likely overestimates the number of adults without disabilities.

8. SSI-CAP (SSI_CAP)

Because the raw SNAP QC data do 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.[1]

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 of concerns about the representativeness of the sample 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 2017 file of likely miscoding of this variable. For example, we found some inconsistencies between WRKREGi and DISi, which captures additional indicators of disability. Fifteen States have a high percentage (greater than 20 percent) of participants coded as individuals with a Federal exemption because of a disability (WRKREGi = 1). Fourteen of these States have a discrepancy of 5 percentage points or more between the percentage with WRKREGi = 1 and those flagged as having a disability (DISi = 1), with the higher percentage coded as WRKREGi = 1. Because of such inconsistencies and our limited ability to assess WRKREGi, we recommend use of WRKREGi with the understanding that it is best used in conjunction with other work-related

---

[1] See Section III.2 for details on States implementing SSI-CAP programs during FY 2017.

variables. If attempting to identify individuals with disabilities, we recommend use of the person-level disability indicator, DISi, described above.

APPENDIX B

AUTOMATED EDITS TO SNAP UNITS

In the FY 2017 SNAP QC raw datafile, we were able to resolve some inconsistencies in the raw datafile through automated edits involving simple algorithms, as described in this section.

1. Missing and miscoded SNAP affiliation (FSAFILi) codes

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

- In the case of differences between unit size (the count of those with an affiliation code of 1) and certified household size, we checked to see which size was consistent with the reported benefit and then 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 $RELi = 4$) had an inconsistent citizenship status ($CTZNi >= 7$) and there was 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, except for one-person households with SSI recoded as OTHGOV income.

- MFIP uses unit composition rules that differ from those used 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 in which the reported child support payment 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 the 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 payment deduction to $0.

In addition, if a unit was not categorically eligible, included no elderly members 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 payment deduction to $0.

4.   Dependent care expenses

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 age 18 to 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 expenses evenly to unit members age 0 to 8.

  2. If the unit did not contain a member age 0 to 4, we distributed the expenses evenly to any unit members age 5 to 13.

  3. If the unit did not contain a member age 0 to 13, we distributed the expenses evenly to any unit members 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 expenses 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 expenses, we set the expenses equal to the deduction by assigning additional dependent care expenses to unit members who originally had positive dependent care expenses.

- If no unit members originally had recorded dependent care expenses, we assigned expenses to unit members in the following order:

  1. If the unit contained at least one member age 0 to 4, we distributed expenses evenly to unit members age 0 to 8.

2. If the unit did not contain a member age 0 to 4, we distributed expenses evenly to any unit members age 5 to 13.

3. If the unit did not contain a member age 0 to 13, we distributed expenses evenly to any unit members age 14 to 17.

4. If the unit did not contain a member age 0 to 17, we distributed expenses evenly to any unit members 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 expenses 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 expenses evenly to all unit members.

- If a unit had positive dependent care expenses but no dependent care deduction, we set the dependent care deduction equal to the total unit dependent care expenses.

These edits excluded households identified as MFIP or SSI-CAP.

5. SUA usage and prorating[2]

The SNAP QC datafile includes two variables that describe the use of Standard Utility Allowances (SUAs). One variable records the use 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 (Table F.7).[3] 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 SUA use was

---

[2] 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).

[3] 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.

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.[4]

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 in which at least one member received TANF income and in which every adult member of the unit received TANF, SSI, or General Assistance (GA) income

- Units in which 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 net income at or below 100 percent of poverty and either (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

- **Arizona, Connecticut, 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) at least one elderly individual or individual with a disability 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

---

[4] Throughout FY 2017, 47 States mandated the use of an SUA rather than actual utility costs. The 47 States include Alaska, which mandates the use of an SUA for the Central geographic region.

- **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) at least one elderly individual or individual with a disability

- **Illinois.** All units with (1) gross income at or below 165 percent of poverty or (2) at least one elderly individual or individual with a disability and gross income at or below 200 percent of poverty

- **Iowa.** All units with gross income at or below 160 percent of poverty

- **Kentucky, Ohio, and South Carolina.** All units with (1) gross income at or below 130 percent of poverty or (2) at least one elderly individual or individual with a disability and gross income at or below 200 percent of poverty

- **Maine.** All units with (1) gross income at or below 185 percent of poverty with children under age 19 living with a parent or caretaker, or (2) gross income at or below 185 percent of poverty and countable assets at or below $5,000

- **Massachusetts.** All units with net income at or below 100 percent of poverty and gross income at or below 200 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) at least one elderly individual or individual with a disability

- **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) at least one elderly individual or individual with a disability

- **New Hampshire.** All units with children under age 22, 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) earned income and gross income at or below 150 percent of poverty, (3) at least one elderly individual or individual with a disability and gross income at or below 200 percent of poverty, or (4) dependent care expenses and gross income at or below 200 percent of poverty

- **Pennsylvania.** All units with (1) gross income at or below 160 percent of poverty or (2) at least one elderly individual or individual with a disability 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) at least one elderly individual or individual with a disability 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) at least one elderly individual or individual with a disability 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, no earned income, and gross income at or below 200 percent of poverty

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 removed them from FSOTHGOV or FSOTHUN) if the total amount of one of the 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 with the FY 2012 SNAP QC datafile, we used the following procedure to flag individuals with disabilities:

- We identify as disabled most individuals under age 60 with SSI. We make exceptions if they are the only individual in the unit to have SSI and a work registration status indicating a Federal exemption for a reason other than a disability (WRKREGi = 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 (WRKREGi = 1). In these cases, we code the first child in the unit with WRKREGi = 1 as disabled; or, if there are no children in the unit, we code the first adult in the unit with WRKREGi = 1 as disabled. We do not code the adult with SSI and WRKREGi = 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 WRKREGi = 1 as disabled. We do not code the child with SSI and WRKREGi = 2 as disabled.

  3. Individual does not meet conditions (1) or (2) but is in the labor force (EMPSTAi > 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, or 3) and either

    a. Has monthly earnings equal to less than the equivalent of the monthly Federal minimum wage for someone working 30 hours a week, or

    b. Beginning with the FY 2014 SNAP QC datafile, does not have a related dependent (age 17 or under, RELi = 4 or 5) receiving Social Security in the unit

2. Coded as exempt from work registration due to disability (WRKREGi = 1)

3. Receives Social Security, veterans' benefits, or workers' compensation

- In units in which no individual is identified as disabled per the above criteria, but the unit receives a medical expense deduction and has no participating elderly individuals or nonparticipating elderly members with FSAFILi = 8, 9, 11, or 13, we code at least one individual as disabled. We do so by looking for the following types of individuals, among those with FSAFILi = 1 and FSAFILi = 8, 9, 11, or 13, 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 receiving 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 receiving 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.

- Beginning with the FY 2015 SNAP QC datafile, we also identify as disabled non-elderly adults in single-person SNAP households who receive Social Security and without any individuals outside of the unit.

- Beginning with the FY 2016 SNAP QC datafile, we also identify as disabled non-elderly adults in single-person SNAP units with WRKREGi = 1, no gross income, and assets above the limit for units without any elderly or disabled individuals but below the limit for units with elderly or disabled individuals.

- Beginning with the FY 2016 SNAP QC datafile, we exclude nonparticipating elderly members with FSAFILi = 8, 9, 11, or 13 from being flagged as disabled.

APPENDIX C

**NEW VARIABLES AND VARIABLES THAT CHANGED
IN THE FY 2017 SNAP QC DATABASE**

Variables changed in the FY 2017 SNAP QC database

None

New variables in the FY 2017 SNAP QC database

None

Note: Information on variables in the FY 2016 SNAP QC database appears in *Technical Documentation for the Fiscal Year 2016 SNAP QC Database and QC Minimodel* (Vigil et al. 2017).

APPENDIX D

DERIVATION OF WEIGHTS BY STATE AND MONTH

Tables D.1a through D.3b present the final calculated weighted counts of SNAP units, individuals, and benefit amounts in the FY 2017 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 through 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
Stratum-specific weight	**m**	**j/l**

*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 2016 to April 2017)

State	October 2016	November 2016	December 2016	January 2017	February 2017	March 2017	April 2017
Alabama	385,902	385,846	384,865	377,416	370,515	367,466	369,245
Alaska	29,592	35,095	34,436	37,154	37,315	38,255	38,438
Arizona	401,281	403,488	377,743	365,471	367,730	393,048	379,283
Arkansas	169,547	169,983	167,145	171,035	169,172	159,232	161,567
California	2,013,767	1,995,059	1,989,574	1,952,311	1,982,535	1,989,555	1,938,930
Colorado	222,507	218,152	223,544	225,252	222,385	221,748	221,700
Connecticut	240,837	240,542	238,904	233,142	236,498	234,720	233,297
Delaware	69,693	67,568	69,200	63,839	70,777	69,230	67,389
District of Columbia	69,853	70,256	74,387	74,101	69,344	70,447	67,451
Florida	1,737,074	1,729,089	1,736,177	1,716,631	1,687,290	1,668,416	1,662,199
Georgia	776,017	774,463	762,981	765,272	756,417	744,920	722,193
Hawaii	87,429	84,729	84,715	85,752	85,995	86,183	85,344
Idaho	76,302	76,834	74,976	76,493	76,082	76,023	73,786
Illinois	993,475	995,892	975,153	973,205	956,029	981,849	948,882
Indiana	298,490	290,091	302,141	291,111	286,232	296,238	282,656
Iowa	172,562	173,873	170,943	175,033	173,701	164,043	167,885
Kansas	111,631	110,850	111,994	107,518	106,548	108,082	106,374
Kentucky	310,581	305,848	303,145	302,773	300,336	306,135	308,032
Louisiana	552,603	434,599	431,142	426,146	423,048	422,671	412,411
Maine	95,570	91,915	90,423	90,581	89,744	92,375	90,655
Maryland	368,246	370,767	367,095	359,106	360,325	357,191	342,435
Massachusetts	447,364	435,621	439,542	459,202	443,297	442,480	441,807
Michigan	750,000	708,792	730,256	729,899	731,892	723,388	717,365
Minnesota	225,828	219,279	221,840	218,631	217,637	213,924	221,213
Mississippi	248,610	251,031	246,742	241,357	242,364	240,705	241,552
Missouri	333,018	334,821	336,978	344,439	333,188	342,836	336,902
Montana	56,511	56,192	57,215	56,981	58,191	54,840	56,342
Nebraska	78,513	78,450	78,002	78,051	77,446	78,740	76,573
Nevada	217,082	222,347	224,436	223,123	222,233	222,028	221,413
New Hampshire	44,398	45,125	45,716	46,474	46,260	45,438	43,365
New Jersey	418,560	422,519	420,091	407,911	410,725	408,473	396,061
New Mexico	206,983	213,843	211,174	203,456	209,045	209,271	217,419
New York	1,619,633	1,622,125	1,585,075	1,584,081	1,614,016	1,598,965	1,585,012
North Carolina	832,315	678,744	791,932	777,059	775,431	758,876	674,671
North Dakota	25,252	24,617	25,227	25,276	24,657	24,725	24,075
Ohio	763,624	769,299	739,028	761,374	750,172	746,928	733,979
Oklahoma	272,543	274,859	277,014	272,126	268,001	269,454	267,927
Oregon	404,614	396,299	394,529	383,963	387,826	391,980	375,494
Pennsylvania	950,899	950,650	949,118	951,525	951,452	935,300	935,742
Rhode Island	101,245	99,621	101,914	91,626	95,391	92,704	92,913
South Carolina	351,162	346,697	346,148	343,525	339,846	338,685	329,638
South Dakota	41,953	41,966	41,775	40,628	41,769	41,472	41,220
Tennessee	517,725	525,401	514,618	506,008	506,640	510,304	495,562
Texas	1,642,153	1,603,071	1,626,854	1,621,380	1,571,764	1,598,275	1,564,959
Utah	83,441	83,050	81,376	84,101	81,255	84,307	81,786
Vermont	42,480	42,694	42,921	43,102	42,751	41,676	41,941
Virginia	360,696	367,048	371,084	364,826	342,671	366,101	326,437
Washington	526,638	525,267	526,263	525,837	525,654	524,525	522,120
West Virginia	170,095	168,229	170,308	168,835	169,900	172,711	162,764
Wisconsin	345,502	344,248	343,453	348,494	342,274	346,479	334,155
Wyoming	13,911	14,378	14,529	14,082	14,421	13,594	13,253
Guam	15,270	15,261	15,209	15,118	14,512	15,038	15,361
Virgin Islands	12,412	11,277	13,011	13,004	12,895	12,294	12,711
United States	21,200,490	20,917,760	20,954,062	20,801,066	20,693,597	20,714,343	20,281,886

Table D.1b. Calculated weighted unit counts by State (May 2017 to September 2017) and FY average

State	May 2017	June 2017	July 2017	August 2017	September 2017	FY average 2017
Alabama	364,295	362,860	364,646	362,994	365,590	371,803
Alaska	37,143	38,032	39,571	42,351	43,266	37,554
Arizona	389,017	395,470	386,727	362,945	366,459	382,389
Arkansas	167,461	162,618	160,739	157,576	163,437	164,959
California	1,916,644	1,963,764	1,926,247	1,918,162	1,964,764	1,962,609
Colorado	219,285	210,844	215,092	215,767	215,555	219,319
Connecticut	230,854	232,153	224,744	230,325	220,535	233,046
Delaware	65,751	66,920	70,026	69,597	68,638	68,219
District of Columbia	67,857	69,563	68,547	70,329	67,703	69,987
Florida	1,653,545	1,662,374	1,612,603	1,660,595	1,691,205	1,684,767
Georgia	743,297	723,998	713,342	725,516	738,913	745,611
Hawaii	83,575	85,238	81,770	85,097	84,918	85,062
Idaho	72,753	72,012	71,129	71,971	69,765	74,011
Illinois	976,761	954,728	961,076	970,013	945,619	969,390
Indiana	273,190	275,754	284,816	271,878	267,417	285,001
Iowa	168,664	164,800	167,702	168,394	164,058	169,305
Kansas	107,209	104,833	104,351	105,646	96,231	106,772
Kentucky	304,248	296,533	294,146	304,968	299,146	302,991
Louisiana	391,612	406,439	399,647	411,731	402,035	426,174
Maine	89,752	89,136	87,542	87,054	87,221	90,164
Maryland	353,807	352,612	345,917	347,014	351,092	356,301
Massachusetts	436,701	437,957	444,034	445,728	446,640	443,364
Michigan	707,344	713,427	692,627	701,147	706,794	717,744
Minnesota	221,744	211,338	210,805	211,831	214,831	217,408
Mississippi	237,921	241,261	240,166	241,096	240,863	242,806
Missouri	334,503	344,883	348,671	336,352	333,014	338,300
Montana	56,290	57,980	55,729	56,501	55,814	56,549
Nebraska	76,133	78,184	76,629	76,056	76,231	77,417
Nevada	222,186	222,516	225,126	224,866	227,781	222,928
New Hampshire	45,000	44,638	44,912	44,811	43,734	44,989
New Jersey	400,361	398,972	395,303	394,875	393,150	405,583
New Mexico	211,891	215,833	208,181	211,820	218,088	211,417
New York	1,588,127	1,606,448	1,597,548	1,554,041	1,548,468	1,591,962
North Carolina	655,833	667,570	664,922	675,235	658,785	717,614
North Dakota	25,229	24,644	24,427	23,948	23,958	24,670
Ohio	732,954	718,400	705,042	728,154	686,768	736,310
Oklahoma	270,068	268,746	256,815	273,231	264,229	269,585
Oregon	384,475	377,367	370,547	370,467	373,646	384,267
Pennsylvania	949,024	950,894	951,487	955,717	944,430	948,020
Rhode Island	91,416	-	-	-	94,242	95,675
South Carolina	323,146	332,475	324,656	313,076	325,156	334,518
South Dakota	40,392	40,171	40,597	39,936	40,540	41,035
Tennessee	505,397	497,331	501,384	494,781	484,924	505,006
Texas	1,588,555	1,587,363	1,593,222	1,602,741	1,849,835	1,620,848
Utah	78,619	80,480	79,205	77,220	76,032	80,906
Vermont	40,867	41,391	41,168	41,211	41,357	41,963
Virginia	342,598	338,200	356,236	353,480	351,537	353,410
Washington	512,895	516,897	506,313	505,207	503,869	518,457
West Virginia	166,948	159,453	169,497	167,574	163,171	167,457
Wisconsin	337,412	335,902	338,119	328,667	331,228	339,661
Wyoming	14,143	13,351	13,480	13,418	13,332	13,824
Guam	15,320	15,626	15,247	15,320	15,345	15,219
Virgin Islands	12,650	12,590	-	-	-	12,538
United States	20,302,866	20,242,969	20,072,473	20,118,433	20,421,360	20,587,162

Table D.2a. Calculated weighted individual counts by State (October 2016 to April 2017)

State	October 2016	November 2016	December 2016	January 2017	February 2017	March 2017	April 2017
Alabama	826,790	825,660	822,878	805,760	788,156	784,213	791,488
Alaska	66,845	81,340	75,750	85,531	85,866	87,803	89,119
Arizona	900,946	897,925	855,739	799,239	809,097	889,483	846,205
Arkansas	382,894	389,366	382,017	388,853	385,504	355,787	365,651
California	4,153,014	4,045,781	4,164,998	4,054,806	4,126,328	4,117,613	4,010,310
Colorado	466,789	454,291	466,844	468,636	461,645	451,040	457,848
Connecticut	422,211	421,729	418,039	403,977	412,506	408,448	405,729
Delaware	142,598	138,172	139,452	133,875	146,105	142,812	132,851
District of Columbia	122,780	125,295	127,767	127,628	120,248	120,786	114,028
Florida	3,279,009	3,265,019	3,274,938	3,232,682	3,176,287	3,155,957	3,126,089
Georgia	1,683,945	1,679,738	1,645,923	1,656,234	1,641,700	1,608,953	1,568,909
Hawaii	173,289	160,704	159,288	171,201	169,319	169,038	167,366
Idaho	175,976	176,875	172,985	176,682	175,781	174,920	170,070
Illinois	1,907,969	1,918,930	1,882,784	1,867,770	1,845,898	1,885,248	1,812,581
Indiana	689,576	662,741	688,536	666,219	658,829	670,199	632,990
Iowa	365,774	368,714	364,407	370,106	367,477	340,710	351,999
Kansas	246,051	235,039	241,963	231,955	234,006	233,285	229,300
Kentucky	652,328	655,492	626,809	637,809	615,923	644,702	650,772
Louisiana	1,185,797	947,410	933,029	921,521	912,402	909,702	892,484
Maine	182,095	175,462	168,108	177,700	175,099	178,452	173,294
Maryland	697,425	709,987	701,358	676,231	686,967	679,315	635,358
Massachusetts	771,512	736,872	751,674	788,638	762,077	759,573	758,144
Michigan	1,423,008	1,335,119	1,375,015	1,369,934	1,311,589	1,373,968	1,361,684
Minnesota	463,421	448,312	448,521	432,516	443,530	430,284	450,154
Mississippi	546,690	552,873	543,148	531,124	532,196	527,102	530,313
Missouri	719,701	713,818	726,744	749,737	710,697	737,504	719,891
Montana	120,065	120,051	121,061	121,205	122,324	111,948	115,584
Nebraska	174,705	176,672	175,813	170,666	172,000	174,956	172,318
Nevada	431,891	440,286	441,145	432,283	434,974	431,033	429,888
New Hampshire	90,807	88,850	91,456	93,812	93,302	91,306	83,859
New Jersey	838,703	848,856	844,707	815,442	825,972	821,265	793,556
New Mexico	454,905	458,322	456,255	444,546	448,412	447,241	454,371
New York	2,938,258	2,940,107	2,799,537	2,868,427	2,922,436	2,903,416	2,879,461
North Carolina	1,624,426	1,220,150	1,479,655	1,446,348	1,458,092	1,409,963	1,428,334
North Dakota	54,124	53,312	53,801	53,861	53,359	52,201	51,154
Ohio	1,519,749	1,549,654	1,469,891	1,532,807	1,510,943	1,494,207	1,472,742
Oklahoma	612,250	609,473	613,348	601,348	590,227	592,970	589,003
Oregon	709,684	699,415	695,334	656,206	660,950	686,855	631,014
Pennsylvania	1,855,129	1,851,309	1,846,117	1,849,422	1,845,237	1,768,498	1,778,943
Rhode Island	172,546	166,935	168,673	144,979	155,065	145,281	151,541
South Carolina	752,030	741,539	739,365	733,210	725,386	721,117	706,139
South Dakota	95,153	95,051	94,624	91,964	94,387	93,493	92,699
Tennessee	1,058,158	1,076,784	1,057,866	1,037,556	1,032,081	1,034,711	1,003,795
Texas	3,891,234	3,792,617	3,849,095	3,826,344	3,696,425	3,769,743	3,716,466
Utah	210,188	208,549	203,792	210,310	204,098	209,947	203,958
Vermont	78,092	78,386	78,602	78,878	78,032	73,595	75,970
Virginia	752,138	770,133	781,192	768,305	716,213	770,736	670,518
Washington	951,845	946,080	948,098	943,769	942,136	936,645	932,333
West Virginia	342,686	340,844	341,049	333,421	339,602	341,407	315,851
Wisconsin	672,296	687,485	687,509	702,811	682,533	696,930	679,899
Wyoming	32,973	33,771	34,099	32,908	33,887	32,391	30,618
Guam	45,697	45,618	45,486	45,202	43,916	44,841	45,632
Virgin Islands	26,782	22,730	27,366	27,342	27,164	25,188	26,785
United States	42,912,832	42,185,642	42,303,652	41,967,748	41,664,386	41,718,781	40,977,058

Table D.2b. Calculated weighted individual counts by State (May 2017 to September 2017) and FY average

State	May 2017	June 2017	July 2017	August 2017	September 2017	FY average 2017
Alabama	781,303	770,303	772,088	775,383	781,050	793,756
Alaska	84,998	89,082	89,921	97,855	100,676	86,232
Arizona	868,352	879,075	848,517	811,103	820,316	852,166
Arkansas	380,420	371,534	366,245	359,587	370,501	374,863
California	3,964,556	4,048,374	3,996,496	3,926,168	4,040,313	4,054,063
Colorado	449,128	420,978	441,152	441,495	440,622	451,706
Connecticut	400,878	403,646	385,761	400,782	366,390	404,175
Delaware	133,497	135,540	143,695	145,200	137,585	139,282
District of Columbia	117,435	121,303	120,356	123,036	118,198	121,572
Florida	3,110,913	3,129,822	3,007,453	3,132,728	3,191,616	3,173,543
Georgia	1,611,668	1,576,293	1,460,930	1,530,878	1,532,946	1,599,843
Hawaii	162,686	166,923	158,137	166,961	166,398	165,942
Idaho	166,890	164,014	163,822	164,101	156,719	169,903
Illinois	1,890,245	1,827,749	1,851,718	1,869,067	1,816,224	1,864,682
Indiana	627,521	634,059	643,062	622,329	614,117	650,848
Iowa	357,102	346,106	354,863	354,425	345,408	357,258
Kansas	231,395	227,754	225,730	227,807	205,870	230,846
Kentucky	646,097	622,798	622,206	651,028	637,678	638,637
Louisiana	843,773	880,530	873,261	891,796	877,772	922,456
Maine	172,569	172,991	166,696	163,414	166,255	172,678
Maryland	672,438	670,430	646,310	644,015	668,216	674,004
Massachusetts	753,308	755,539	761,847	765,353	766,805	760,945
Michigan	1,335,731	1,348,126	1,271,445	1,310,892	1,332,382	1,345,741
Minnesota	450,494	416,058	384,240	405,244	435,849	434,052
Mississippi	521,625	529,860	527,026	528,500	528,067	533,210
Missouri	704,960	738,459	751,643	722,864	720,333	726,363
Montana	112,813	121,070	113,036	116,963	116,531	117,721
Nebraska	171,427	174,127	165,403	171,017	171,398	172,542
Nevada	430,712	429,453	438,368	435,001	442,981	434,835
New Hampshire	90,086	89,312	90,368	90,060	85,296	89,876
New Jersey	804,020	801,162	793,343	792,669	788,641	814,028
New Mexico	451,111	455,558	446,135	454,935	458,359	452,513
New York	2,853,796	2,896,869	2,880,757	2,798,814	2,757,706	2,869,965
North Carolina	1,297,597	1,248,361	1,163,047	1,111,523	1,015,574	1,325,256
North Dakota	53,672	52,236	51,704	50,079	47,013	52,210
Ohio	1,480,191	1,458,540	1,420,099	1,459,106	1,380,485	1,479,035
Oklahoma	593,980	582,292	566,351	600,192	570,131	593,464
Oregon	668,745	627,154	651,730	640,262	652,429	664,982
Pennsylvania	1,834,131	1,837,088	1,837,947	1,842,248	1,797,029	1,828,592
Rhode Island	145,220	-	-	-	153,908	156,016
South Carolina	689,092	708,619	693,021	672,696	696,654	714,906
South Dakota	90,945	89,284	91,629	89,454	91,018	92,475
Tennessee	1,026,942	1,008,035	1,021,851	997,715	990,358	1,028,821
Texas	3,746,646	3,744,463	3,756,058	3,786,510	4,624,597	3,850,017
Utah	190,238	199,980	196,420	190,953	189,769	201,517
Vermont	73,559	74,793	74,292	74,511	74,715	76,119
Virginia	716,844	710,509	751,759	743,507	738,536	740,866
Washington	899,216	913,807	883,301	901,503	886,939	923,806
West Virginia	324,888	307,607	333,633	332,170	318,336	330,958
Wisconsin	659,179	670,548	679,173	656,003	660,154	677,877
Wyoming	32,671	30,879	31,084	30,955	30,587	32,235
Guam	45,346	46,253	44,973	45,195	45,117	45,273
Virgin Islands	26,635	26,451	-	-	-	26,271
United States	40,949,682	40,751,793	40,210,102	40,316,050	41,122,569	41,468,930

Table D.3a. Calculated weighted benefit amounts by State (October 2016 to April 2017)

State	October 2016	November 2016	December 2016	January 2017	February 2017	March 2017	April 2017
Alabama	99,088,727	99,843,938	99,034,401	94,315,028	90,814,808	94,530,932	94,718,994
Alaska	11,253,579	14,379,763	14,027,227	15,470,819	15,052,588	15,545,015	16,535,993
Arizona	114,459,208	108,849,466	108,974,300	90,961,300	98,968,282	102,712,259	106,707,201
Arkansas	41,662,681	42,699,103	42,707,859	43,252,090	41,858,075	39,974,080	39,469,745
California	568,260,607	522,031,216	546,228,728	521,459,587	531,194,445	551,224,580	526,586,299
Colorado	58,687,302	54,507,599	58,232,325	58,265,610	59,640,558	56,744,040	58,506,990
Connecticut	55,013,946	54,104,918	54,082,913	53,373,997	53,326,749	53,265,800	51,816,826
Delaware	16,159,298	14,768,154	16,127,410	14,873,919	14,811,953	17,508,717	15,430,802
District of Columbia	16,234,031	16,246,455	15,527,101	15,503,035	15,398,837	16,453,478	14,680,267
Florida	404,649,161	389,517,460	393,646,726	387,618,649	386,549,402	378,806,293	375,186,614
Georgia	220,504,826	214,449,402	203,093,329	198,584,256	210,907,003	196,806,750	193,159,536
Hawaii	40,310,159	38,053,083	38,426,919	41,501,236	39,400,391	39,115,800	38,979,403
Idaho	19,965,066	19,956,042	19,567,807	19,856,702	19,829,810	19,566,304	19,179,913
Illinois	238,180,354	236,646,172	229,365,191	228,733,438	231,740,260	248,289,759	227,495,965
Indiana	78,679,668	75,018,356	74,315,151	73,829,768	73,774,597	75,875,679	73,406,818
Iowa	38,058,598	39,327,508	38,559,159	36,807,649	38,501,374	37,314,140	35,772,322
Kansas	27,610,094	27,045,920	27,356,173	25,644,587	26,046,377	26,101,493	25,478,501
Kentucky	74,742,595	77,252,992	73,087,977	74,718,871	73,096,427	77,128,056	74,904,634
Louisiana	124,903,190	119,313,605	118,293,393	114,770,147	111,333,191	113,003,987	112,049,435
Maine	18,532,212	18,448,653	18,257,556	17,505,932	18,142,727	19,039,294	18,362,622
Maryland	81,804,779	84,660,024	82,315,413	72,923,505	81,709,358	78,860,593	74,929,245
Massachusetts	94,824,032	93,542,499	89,773,774	90,962,944	92,059,892	94,737,316	94,000,129
Michigan	167,147,320	156,784,809	152,618,078	139,446,283	154,200,442	162,898,036	156,878,743
Minnesota	50,604,231	48,754,226	48,985,839	48,894,327	48,018,542	48,855,813	49,495,419
Mississippi	60,234,866	64,681,319	60,580,694	58,711,835	61,050,106	60,463,190	57,240,751
Missouri	85,375,872	91,447,583	90,829,359	86,207,797	85,128,522	88,862,232	89,920,379
Montana	13,739,238	13,249,562	14,372,282	13,852,659	14,004,511	12,922,924	12,985,241
Nebraska	19,829,333	19,453,670	20,101,058	19,160,923	19,048,123	19,409,993	19,450,430
Nevada	48,767,939	49,802,967	48,695,948	50,480,742	49,609,873	48,746,302	49,477,823
New Hampshire	9,186,670	9,204,670	9,255,415	9,487,235	9,458,830	8,964,542	9,033,458
New Jersey	97,282,582	95,678,791	96,269,921	89,819,553	91,671,540	91,316,283	88,895,549
New Mexico	54,616,316	53,489,081	52,974,566	50,752,360	54,879,679	54,322,814	54,263,046
New York	392,367,850	414,565,136	370,922,581	375,999,080	383,871,189	387,049,609	365,310,156
North Carolina	266,277,272	130,778,457	174,887,492	162,811,219	165,427,577	165,289,232	161,084,535
North Dakota	6,562,490	6,142,152	6,595,771	6,112,294	6,519,787	6,088,021	6,314,162
Ohio	185,722,838	183,402,772	184,778,356	185,355,982	179,915,885	175,029,159	185,188,249
Oklahoma	73,389,431	69,493,126	71,852,308	70,067,408	73,096,720	71,140,988	68,164,064
Oregon	81,357,653	81,999,902	83,709,617	82,144,107	76,504,805	81,712,161	79,715,005
Pennsylvania	219,685,607	209,728,844	220,221,218	221,025,640	218,191,631	201,619,472	204,611,939
Rhode Island	21,713,425	22,114,505	20,701,033	19,344,664	20,823,266	20,937,549	19,174,700
South Carolina	89,886,377	89,632,093	87,033,920	88,019,415	88,419,685	86,297,504	87,485,116
South Dakota	12,059,917	11,903,578	11,876,912	11,490,635	11,778,644	11,789,124	11,645,147
Tennessee	129,602,774	130,651,868	130,312,005	129,191,106	129,500,640	130,777,881	122,100,321
Texas	452,552,716	451,452,891	434,788,631	443,157,561	427,246,113	443,034,701	441,665,467
Utah	24,189,849	24,190,207	22,275,834	23,960,410	22,609,288	23,972,508	23,516,806
Vermont	9,426,693	9,401,649	9,483,430	9,428,727	9,348,382	9,238,663	9,309,349
Virginia	85,537,355	89,884,415	89,357,716	87,523,191	90,826,403	92,277,875	80,606,573
Washington	114,841,234	111,503,799	111,426,337	113,287,057	110,706,277	114,549,239	113,989,495
West Virginia	40,238,513	37,935,870	38,247,280	36,963,415	35,854,269	37,436,042	34,969,768
Wisconsin	72,591,901	63,827,166	71,588,203	72,200,490	67,355,743	69,996,632	66,485,559
Wyoming	3,970,021	3,919,253	3,949,186	3,977,989	4,040,643	3,931,391	3,757,335
Guam	8,923,774	8,463,530	8,147,679	8,231,516	8,278,458	8,754,286	8,404,465
Virgin Islands	4,423,232	4,509,403	4,730,686	4,382,634	4,699,409	4,206,513	4,302,124
United States	5,345,702,674	5,118,686,360	5,112,565,234	5,012,425,427	5,046,259,752	5,094,476,364	4,972,792,968

Table D.3b. Calculated weighted benefit amounts by State (May 2017 to September 2017) and FY average

State	May 2017	June 2017	July 2017	August 2017	September 2017	FY average 2017
Alabama	93,382,356	93,149,322	91,422,332	90,610,834	93,432,481	94,528,679
Alaska	15,347,058	16,488,860	16,212,442	17,122,362	17,517,060	15,412,731
Arizona	108,662,158	107,923,406	106,916,424	100,234,601	103,270,260	104,886,572
Arkansas	40,358,005	40,657,666	41,692,197	39,334,134	40,371,829	41,169,789
California	519,232,159	547,951,360	530,416,606	526,509,845	524,182,689	534,606,510
Colorado	57,510,857	50,030,738	55,544,993	54,639,927	55,283,333	56,466,189
Connecticut	52,674,047	50,526,772	51,384,727	49,750,835	46,242,307	52,130,320
Delaware	15,244,552	15,283,419	16,090,026	15,853,158	16,054,270	15,683,806
District of Columbia	15,575,992	16,148,918	15,387,438	15,887,664	14,656,721	15,641,661
Florida	374,574,537	371,137,098	361,570,449	371,134,314	380,489,549	381,240,021
Georgia	203,555,927	193,536,318	191,855,475	190,495,292	186,597,055	200,295,431
Hawaii	38,656,393	38,706,118	36,915,317	39,072,955	38,701,242	38,986,584
Idaho	18,344,741	18,880,804	18,490,609	18,038,756	17,318,447	19,082,917
Illinois	233,631,167	228,005,792	231,975,607	239,996,075	222,058,558	233,009,861
Indiana	66,780,657	72,839,706	76,367,847	69,541,875	72,073,522	73,541,970
Iowa	35,180,193	35,667,462	38,149,605	38,415,251	34,121,923	37,156,265
Kansas	25,315,185	25,488,141	25,235,700	25,964,248	25,124,607	26,034,252
Kentucky	74,158,478	72,654,027	73,084,232	75,916,578	75,118,022	74,655,241
Louisiana	106,424,458	111,166,305	109,803,318	109,874,563	107,624,873	113,213,372
Maine	17,644,279	17,735,341	17,359,749	16,960,209	16,639,419	17,885,666
Maryland	77,077,793	78,752,840	78,322,494	76,804,079	76,192,166	78,696,024
Massachusetts	90,956,255	94,262,865	92,087,256	97,894,124	96,279,186	93,448,356
Michigan	150,922,114	154,167,139	149,380,087	165,528,294	163,653,709	156,135,421
Minnesota	47,475,866	48,110,645	42,395,022	45,753,512	46,332,502	47,806,329
Mississippi	59,431,537	60,727,414	59,639,247	60,063,742	59,937,166	60,230,156
Missouri	83,755,000	86,250,580	88,561,108	86,318,591	83,814,049	87,205,923
Montana	13,384,702	13,231,622	13,346,799	13,731,167	12,982,200	13,483,576
Nebraska	19,247,012	19,953,938	19,737,009	19,733,770	19,152,091	19,523,113
Nevada	50,806,084	48,875,968	50,666,643	51,429,054	53,007,923	50,030,605
New Hampshire	9,306,592	9,000,902	9,148,533	8,980,143	8,330,706	9,113,141
New Jersey	92,456,058	92,525,347	89,266,699	89,218,780	89,863,010	92,022,010
New Mexico	50,071,440	51,534,819	51,069,960	51,820,960	54,337,504	52,844,379
New York	382,011,409	373,012,567	377,384,731	371,336,046	372,046,814	380,489,764
North Carolina	156,809,609	157,912,169	158,280,074	163,544,458	161,661,053	168,730,262
North Dakota	6,642,241	6,458,054	6,462,464	5,917,356	5,960,462	6,314,605
Ohio	176,153,275	179,316,227	174,641,550	178,360,618	166,039,247	179,492,013
Oklahoma	70,886,272	69,380,722	65,244,168	71,024,430	70,015,812	70,312,954
Oregon	80,720,251	75,035,314	72,901,727	74,293,302	78,020,937	79,009,565
Pennsylvania	220,869,832	204,675,511	220,828,560	210,868,996	213,633,085	213,830,028
Rhode Island	19,326,844	-	-	-	20,420,783	20,506,308
South Carolina	80,239,877	84,121,678	83,504,271	83,020,619	82,088,876	85,812,456
South Dakota	11,445,376	11,314,429	11,505,261	11,549,311	11,412,334	11,647,555
Tennessee	121,495,717	139,774,416	127,556,356	120,883,675	119,212,203	127,588,247
Texas	435,963,370	429,982,427	434,207,313	425,662,996	547,008,366	447,226,879
Utah	22,281,764	22,838,542	22,523,104	22,321,044	22,059,024	23,061,532
Vermont	8,879,583	9,156,592	9,134,041	9,007,477	8,596,155	9,200,895
Virginia	77,558,592	86,975,849	88,771,056	88,592,681	88,600,957	87,209,389
Washington	109,868,730	110,846,723	109,184,162	109,477,322	105,589,499	111,272,490
West Virginia	37,145,030	35,319,127	35,706,701	38,253,044	35,565,241	36,969,525
Wisconsin	69,431,131	68,036,018	68,910,987	68,357,697	69,031,711	68,984,436
Wyoming	3,697,641	3,687,752	3,893,951	3,674,912	3,524,768	3,835,403
Guam	8,440,056	8,501,176	7,906,772	8,599,500	8,026,418	8,389,803
Virgin Islands	4,509,774	4,780,937	-	-	-	4,504,968
United States	4,961,520,071	4,962,447,717	4,928,044,735	4,937,371,669	5,039,275,008	5,050,550,151

Table D.4. Stratification and weight calculation by State, October 2016

State	Stratum	Unedited SNAP QC data			Edited SNAP QC data						
		Sampling interval	Stratum sampling size	SNAP units in State (program ops data)	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	385,902	87	0	0.0000	385,902	0	87	4,436
Alaska	0	1	48	31,333	36	2	0.0556	29,592	0	34	870
Arizona	0	1	98	429,148	77	5	0.0649	401,281	0	72	5,573
Arkansas	0	1	103	176,611	100	4	0.0400	169,547	0	96	1,766
California	0	1	92	2,041,736	73	1	0.0137	2,013,767	1	71	28,363
Colorado	0	1	94	222,507	67	0	0.0000	222,507	0	67	3,321
Connecticut	0	1	94	240,837	73	0	0.0000	240,837	0	73	3,299
Delaware	0	1	103	71,684	72	2	0.0278	69,693	0	70	996
District of Columbia	0	1	80	70,896	68	1	0.0147	69,853	0	67	1,043
Florida	0	1	95	1,737,074	83	0	0.0000	1,737,074	0	83	20,929
Georgia	0	1	96	776,017	85	0	0.0000	776,017	0	85	9,130
Hawaii	0	1	106	87,429	85	0	0.0000	87,429	0	85	1,029
Idaho	0	1	101	76,302	88	0	0.0000	76,302	0	88	867
Illinois	0	1	103	993,475	90	0	0.0000	993,475	0	90	11,039
Indiana	0	1	108	312,214	91	4	0.0440	298,490	1	86	3,471
Iowa	0	1	86	177,226	76	2	0.0263	172,562	0	74	2,332
Kansas	0	1	94	112,929	87	1	0.0115	111,631	0	86	1,298
Kentucky	0	1	80	314,512	80	1	0.0125	310,581	0	79	3,931
Louisiana	0	1	107	552,603	80	0	0.0000	552,603	1	79	6,995
Maine	0	1	85	95,570	73	0	0.0000	95,570	1	72	1,327
Maryland	0	1	89	373,911	66	1	0.0152	368,246	0	65	5,665
Massachusetts	0	1	93	447,364	79	0	0.0000	447,364	1	78	5,735
Michigan	0	1	94	750,000	79	0	0.0000	750,000	0	79	9,494
Minnesota	0	1	93	225,828	87	0	0.0000	225,828	0	87	2,596
Mississippi	0	1	95	251,605	84	1	0.0119	248,610	0	83	2,995
Missouri	0	1	87	352,900	71	4	0.0563	333,018	0	67	4,970
Montana	0	1	81	56,511	71	0	0.0000	56,511	0	71	796
Nebraska	0	1	90	79,507	80	1	0.0125	78,513	0	79	994
Nevada	0	1	101	224,655	89	3	0.0337	217,082	0	86	2,524
New Hampshire	0	1	67	46,694	61	3	0.0492	44,398	2	56	793
New Jersey	0	1	103	425,204	64	1	0.0156	418,560	0	63	6,644
New Mexico	0	1	98	220,968	79	5	0.0633	206,983	0	74	2,797
New York	0	1	92	1,619,633	77	0	0.0000	1,619,633	0	77	21,034
North Carolina	0	1	88	832,315	84	0	0.0000	832,315	0	84	9,909
North Dakota	0	1	44	25,252	41	0	0.0000	25,252	0	41	616

Table D.4 *(continued)*

		Unedited SNAP QC data			Edited SNAP QC data						
		Sampling interval	Stratum sampling size	SNAP units in State (program ops data)	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	772,204	90	1	0.0111	763,624	0	89	8,580
Oklahoma	0	1	101	278,600	92	2	0.0217	272,543	1	89	3,062
Oregon	0	1	103	404,614	87	0	0.0000	404,614	0	87	4,651
Pennsylvania	0	1	88	950,899	62	0	0.0000	950,899	0	62	15,337
Rhode Island	0	1	90	101,245	81	0	0.0000	101,245	0	81	1,250
South Carolina	0	1	93	351,162	88	0	0.0000	351,162	0	88	3,990
South Dakota	0	1	64	41,953	60	0	0.0000	41,953	1	59	711
Tennessee	0	1	109	523,414	92	1	0.0109	517,725	0	91	5,689
Texas	0	1	107	1,642,153	90	0	0.0000	1,642,153	0	90	18,246
Utah	0	1	88	84,600	73	1	0.0137	83,441	0	72	1,159
Vermont	0	1	64	42,480	56	0	0.0000	42,480	0	56	759
Virginia	0	1	92	379,353	61	3	0.0492	360,696	0	58	6,219
Washington	0	1	92	526,638	71	0	0.0000	526,638	0	71	7,417
West Virginia	0	1	88	174,820	74	2	0.0270	170,095	0	72	2,362
Wisconsin	0	1	102	350,171	75	1	0.0133	345,502	0	74	4,669
Wyoming	0	1	32	14,375	31	1	0.0323	13,911	0	30	464
Guam	0	1	44	15,270	41	0	0.0000	15,270	0	41	372
Virgin Islands	0	1	27	12,952	24	1	0.0417	12,412	0	23	540

Table D.5. Stratification and weight calculation by State, November 2016

State	Stratum	Unedited SNAP QC data		SNAP units in State (program ops data)	Edited SNAP QC data						Stratum-specific units weight
		Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	
State	Stratum	a	b	e	g	h	i	j	k	l	m
Alabama	0	1	95	385,846	91	0	0.0000	385,846	0	91	4,240
Alaska	0	1	56	35,972	41	1	0.0244	35,095	0	40	877
Arizona	0	1	98	426,220	75	4	0.0533	403,488	0	71	5,683
Arkansas	0	1	101	175,408	97	3	0.0309	169,983	0	94	1,808
California	0	1	93	2,030,685	57	1	0.0175	1,995,059	0	56	35,626
Colorado	0	1	95	221,849	60	1	0.0167	218,152	0	59	3,697
Connecticut	0	1	91	240,542	71	0	0.0000	240,542	0	71	3,388
Delaware	0	1	103	72,766	84	6	0.0714	67,568	0	78	866
District of Columbia	0	1	85	70,256	71	0	0.0000	70,256	1	70	1,004
Florida	0	1	96	1,729,089	79	0	0.0000	1,729,089	0	79	21,887
Georgia	0	1	97	774,463	86	0	0.0000	774,463	0	86	9,005
Hawaii	0	1	106	87,083	74	2	0.0270	84,729	0	72	1,177
Idaho	0	1	102	76,834	90	0	0.0000	76,834	0	90	854
Illinois	0	1	106	995,892	85	0	0.0000	995,892	0	85	11,716
Indiana	0	1	107	307,780	87	5	0.0575	290,091	0	82	3,538
Iowa	0	1	87	176,131	78	1	0.0128	173,873	0	77	2,258
Kansas	0	1	93	112,290	78	1	0.0128	110,850	0	77	1,440
Kentucky	0	1	79	310,346	69	1	0.0145	305,848	0	68	4,498
Louisiana	0	1	104	440,317	77	1	0.0130	434,599	0	76	5,718
Maine	0	1	84	94,504	73	2	0.0274	91,915	0	71	1,295
Maryland	0	1	89	370,767	61	0	0.0000	370,767	0	61	6,078
Massachusetts	0	1	91	446,118	85	2	0.0235	435,621	0	83	5,248
Michigan	0	1	93	744,232	84	4	0.0476	708,792	0	80	8,860
Minnesota	0	1	93	224,378	88	2	0.0227	219,279	0	86	2,550
Mississippi	0	1	94	251,031	85	0	0.0000	251,031	0	85	2,953
Missouri	0	1	87	353,954	74	4	0.0541	334,821	0	70	4,783
Montana	0	1	82	57,043	67	1	0.0149	56,192	0	66	851
Nebraska	0	1	90	79,469	78	1	0.0128	78,450	0	77	1,019
Nevada	0	1	102	224,932	87	1	0.0115	222,347	0	86	2,585
New Hampshire	0	1	67	46,681	60	2	0.0333	45,125	1	57	792
New Jersey	0	1	98	422,519	71	0	0.0000	422,519	0	71	5,951
New Mexico	0	1	98	219,189	82	2	0.0244	213,843	0	80	2,673
New York	0	1	92	1,622,125	78	0	0.0000	1,622,125	0	78	20,796
North Carolina	0	1	87	713,551	82	4	0.0488	678,744	0	78	8,702
North Dakota	0	1	44	25,265	39	1	0.0256	24,617	0	38	648

Table D.5 *(continued)*

		Unedited SNAP QC data		SNAP units in State (program ops data)	Edited SNAP QC data						
		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	98	769,299	88	0	0.0000	769,299	0	88	8,742
Oklahoma	0	1	101	278,171	84	1	0.0119	274,859	0	83	3,312
Oregon	0	1	103	396,299	81	0	0.0000	396,299	0	81	4,893
Pennsylvania	0	1	89	950,650	69	0	0.0000	950,650	0	69	13,778
Rhode Island	0	1	90	102,081	83	2	0.0241	99,621	0	81	1,230
South Carolina	0	1	94	346,697	80	0	0.0000	346,697	0	80	4,334
South Dakota	0	1	64	41,966	61	0	0.0000	41,966	0	61	688
Tennessee	0	1	108	525,401	92	0	0.0000	525,401	0	92	5,711
Texas	0	1	107	1,639,095	91	2	0.0220	1,603,071	0	89	18,012
Utah	0	1	89	84,172	75	1	0.0133	83,050	0	74	1,122
Vermont	0	1	65	42,694	58	0	0.0000	42,694	0	58	736
Virginia	0	1	91	378,171	68	2	0.0294	367,048	0	66	5,561
Washington	0	1	92	525,267	70	0	0.0000	525,267	1	69	7,613
West Virginia	0	1	88	173,570	65	2	0.0308	168,229	0	63	2,670
Wisconsin	0	1	101	348,346	85	1	0.0118	344,248	0	84	4,098
Wyoming	0	1	31	14,378	30	0	0.0000	14,378	0	30	479
Guam	0	1	43	15,261	41	0	0.0000	15,261	0	41	372
Virgin Islands	0	1	27	12,968	23	3	0.1304	11,277	0	20	564

Table D.6. Stratification and weight calculation by State, December 2016

		Unedited SNAP QC data			Edited SNAP QC data						
State	Stratum	Sampling interval	Stratum sampling size	SNAP units in State (program ops data)	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	384,865	85	0	0.0000	384,865	0	85	4,528
Alaska	0	1	58	36,956	44	3	0.0682	34,436	0	41	840
Arizona	0	1	97	422,847	75	8	0.1067	377,743	0	67	5,638
Arkansas	0	1	100	174,743	92	4	0.0435	167,145	0	88	1,899
California	0	1	92	2,020,183	66	1	0.0152	1,989,574	0	65	30,609
Colorado	0	1	95	223,544	75	0	0.0000	223,544	2	73	3,062
Connecticut	0	1	90	238,904	71	0	0.0000	238,904	0	71	3,365
Delaware	0	1	102	72,456	89	4	0.0449	69,200	0	85	814
District of Columbia	0	1	83	74,387	71	0	0.0000	74,387	0	71	1,048
Florida	0	1	95	1,736,177	73	0	0.0000	1,736,177	1	72	24,114
Georgia	0	1	95	772,518	81	1	0.0123	762,981	0	80	9,537
Hawaii	0	1	105	87,005	76	2	0.0263	84,715	0	74	1,145
Idaho	0	1	101	75,925	80	1	0.0125	74,976	0	79	949
Illinois	0	1	105	995,683	97	2	0.0206	975,153	1	94	10,374
Indiana	0	1	105	305,574	89	1	0.0112	302,141	1	87	3,473
Iowa	0	1	86	175,626	75	2	0.0267	170,943	0	73	2,342
Kansas	0	1	93	111,994	87	0	0.0000	111,994	0	87	1,287
Kentucky	0	1	79	311,019	79	2	0.0253	303,145	0	77	3,937
Louisiana	0	1	103	431,142	71	0	0.0000	431,142	1	70	6,159
Maine	0	1	84	94,412	71	3	0.0423	90,423	0	68	1,330
Maryland	0	1	87	367,095	68	0	0.0000	367,095	1	67	5,479
Massachusetts	0	1	91	445,325	77	1	0.0130	439,542	0	76	5,783
Michigan	0	1	93	739,271	82	1	0.0122	730,256	0	81	9,016
Minnesota	0	1	93	224,333	90	1	0.0111	221,840	0	89	2,493
Mississippi	0	1	94	249,679	85	1	0.0118	246,742	1	83	2,973
Missouri	0	1	87	354,483	81	4	0.0494	336,978	0	77	4,376
Montana	0	1	81	57,215	66	0	0.0000	57,215	0	66	867
Nebraska	0	1	92	79,952	82	2	0.0244	78,002	0	80	975
Nevada	0	1	102	224,436	83	0	0.0000	224,436	0	83	2,704
New Hampshire	0	1	66	46,491	60	1	0.0167	45,716	1	58	788
New Jersey	0	1	90	420,091	69	0	0.0000	420,091	0	69	6,088
New Mexico	0	1	98	216,589	80	2	0.0250	211,174	0	78	2,707
New York	0	1	92	1,626,788	78	2	0.0256	1,585,075	0	76	20,856
North Carolina	0	1	87	791,932	85	0	0.0000	791,932	0	85	9,317
North Dakota	0	1	44	25,227	41	0	0.0000	25,227	0	41	615

D-14

Table D.6 *(continued)*

State	Stratum	Unedited SNAP QC data		SNAP units in State (program ops data)	Edited SNAP QC data						
		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
Ohio	0	1	98	764,808	89	3	0.0337	739,028	0	86	8,593
Oklahoma	0	1	101	277,014	86	0	0.0000	277,014	0	86	3,221
Oregon	0	1	103	394,529	83	0	0.0000	394,529	0	83	4,753
Pennsylvania	0	1	88	949,118	73	0	0.0000	949,118	0	73	13,002
Rhode Island	0	1	89	101,914	73	0	0.0000	101,914	0	73	1,396
South Carolina	0	1	93	346,148	80	0	0.0000	346,148	0	80	4,327
South Dakota	0	1	64	41,775	61	0	0.0000	41,775	0	61	685
Tennessee	0	1	108	520,336	91	1	0.0110	514,618	0	90	5,718
Texas	0	1	105	1,626,854	88	0	0.0000	1,626,854	0	88	18,487
Utah	0	1	88	84,631	78	3	0.0385	81,376	0	75	1,085
Vermont	0	1	65	42,921	60	0	0.0000	42,921	0	60	715
Virginia	0	1	89	377,711	57	1	0.0175	371,084	0	56	6,627
Washington	0	1	92	526,263	69	0	0.0000	526,263	0	69	7,627
West Virginia	0	1	87	172,707	72	1	0.0139	170,308	0	71	2,399
Wisconsin	0	1	101	347,591	84	1	0.0119	343,453	0	83	4,138
Wyoming	0	1	32	14,529	32	0	0.0000	14,529	0	32	454
Guam	0	1	43	15,209	41	0	0.0000	15,209	0	41	371
Virgin Islands	0	1	26	13,011	26	0	0.0000	13,011	0	26	500

Table D.7. Stratification and weight calculation by State, January 2017

State	Stratum	Sampling interval	Stratum sampling size	SNAP units in State (program ops data)	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	381,909	85	1	0.0118	377,416	0	84	4,493
Alaska	0	1	58	37,154	45	0	0.0000	37,154	0	45	826
Arizona	0	1	96	417,681	72	9	0.1250	365,471	0	63	5,801
Arkansas	0	1	100	172,935	91	1	0.0110	171,035	0	90	1,900
California	0	1	91	2,006,542	74	2	0.0270	1,952,311	0	72	27,115
Colorado	0	1	96	225,252	63	0	0.0000	225,252	0	63	3,575
Connecticut	0	1	93	239,120	80	2	0.0250	233,142	0	78	2,989
Delaware	0	1	104	72,705	82	10	0.1220	63,839	0	72	887
District of Columbia	0	1	83	74,101	75	0	0.0000	74,101	1	74	1,001
Florida	0	1	95	1,716,631	86	0	0.0000	1,716,631	0	86	19,961
Georgia	0	1	95	765,272	82	0	0.0000	765,272	0	82	9,333
Hawaii	0	1	105	85,752	74	0	0.0000	85,752	0	74	1,159
Idaho	0	1	102	76,493	91	0	0.0000	76,493	0	91	841
Illinois	0	1	104	973,205	88	0	0.0000	973,205	0	88	11,059
Indiana	0	1	104	301,508	87	3	0.0345	291,111	0	84	3,466
Iowa	0	1	86	175,033	82	0	0.0000	175,033	0	82	2,135
Kansas	0	1	91	110,173	83	2	0.0241	107,518	0	81	1,327
Kentucky	0	1	78	311,068	75	2	0.0267	302,773	0	73	4,148
Louisiana	0	1	102	426,146	65	0	0.0000	426,146	0	65	6,556
Maine	0	1	84	95,757	74	4	0.0541	90,581	0	70	1,294
Maryland	0	1	87	365,297	59	1	0.0169	359,106	1	57	6,300
Massachusetts	0	1	92	459,202	79	0	0.0000	459,202	0	79	5,813
Michigan	0	1	94	739,138	80	1	0.0125	729,899	0	79	9,239
Minnesota	0	1	93	223,657	89	2	0.0225	218,631	0	87	2,513
Mississippi	0	1	93	246,970	88	2	0.0227	241,357	0	86	2,806
Missouri	0	1	87	354,142	73	2	0.0274	344,439	0	71	4,851
Montana	0	1	82	57,900	63	1	0.0159	56,981	0	62	919
Nebraska	0	1	92	80,132	77	2	0.0260	78,051	0	75	1,041
Nevada	0	1	102	225,575	92	1	0.0109	223,123	1	90	2,479
New Hampshire	0	1	67	46,474	60	0	0.0000	46,474	0	60	775
New Jersey	0	1	88	413,823	70	1	0.0143	407,911	0	69	5,912
New Mexico	0	1	98	216,333	84	5	0.0595	203,456	0	79	2,575
New York	0	1	92	1,625,767	78	2	0.0256	1,584,081	0	76	20,843
North Carolina	0	1	87	786,310	85	1	0.0118	777,059	0	84	9,251
North Dakota	0	1	44	25,276	40	0	0.0000	25,276	0	40	632

State	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
		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	97	761,374	85	0	0.0000	761,374	0	85	8,957
Oklahoma	0	1	100	275,150	91	1	0.0110	272,126	0	90	3,024
Oregon	0	1	102	394,067	78	2	0.0256	383,963	0	76	5,052
Pennsylvania	0	1	88	951,525	68	0	0.0000	951,525	0	68	13,993
Rhode Island	0	1	88	95,391	76	3	0.0395	91,626	0	73	1,255
South Carolina	0	1	93	343,525	80	0	0.0000	343,525	0	80	4,294
South Dakota	0	1	64	41,982	62	2	0.0323	40,628	0	60	677
Tennessee	0	1	107	517,508	90	2	0.0222	506,008	0	88	5,750
Texas	0	1	105	1,621,380	77	0	0.0000	1,621,380	0	77	21,057
Utah	0	1	88	84,101	79	0	0.0000	84,101	0	79	1,065
Vermont	0	1	65	43,102	58	0	0.0000	43,102	0	58	743
Virginia	0	1	92	375,250	72	2	0.0278	364,826	1	69	5,287
Washington	0	1	92	525,837	79	0	0.0000	525,837	0	79	6,656
West Virginia	0	1	86	173,278	78	2	0.0256	168,835	0	76	2,222
Wisconsin	0	1	100	348,494	86	0	0.0000	348,494	0	86	4,052
Wyoming	0	1	32	14,551	31	1	0.0323	14,082	0	30	469
Guam	0	1	43	15,118	38	0	0.0000	15,118	0	38	398
Virgin Islands	0	1	27	13,004	25	0	0.0000	13,004	0	25	520

Table D.8. Stratification and weight calculation by State, February 2017

State	Stratum	Sampling interval	Stratum sampling size	SNAP units in State (program ops data)	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	93	379,443	85	2	0.0235	370,515	0	83	4,464
Alaska	0	1	60	37,315	51	0	0.0000	37,315	0	51	732
Arizona	0	1	95	409,928	68	7	0.1029	367,730	0	61	6,028
Arkansas	0	1	99	171,011	93	1	0.0108	169,172	0	92	1,839
California	0	1	91	1,982,535	65	0	0.0000	1,982,535	0	65	30,501
Colorado	0	1	95	222,385	72	0	0.0000	222,385	0	72	3,089
Connecticut	0	1	94	236,498	82	0	0.0000	236,498	0	82	2,884
Delaware	0	1	99	72,525	83	2	0.0241	70,777	0	81	874
District of Columbia	0	1	74	70,500	61	1	0.0164	69,344	0	60	1,156
Florida	0	1	92	1,687,290	74	0	0.0000	1,687,290	0	74	22,801
Georgia	0	1	90	756,417	76	0	0.0000	756,417	0	76	9,953
Hawaii	0	1	105	85,995	70	0	0.0000	85,995	0	70	1,229
Idaho	0	1	101	76,082	86	0	0.0000	76,082	0	86	885
Illinois	0	1	102	967,018	88	1	0.0114	956,029	0	87	10,989
Indiana	0	1	104	300,195	86	4	0.0465	286,232	0	82	3,491
Iowa	0	1	86	173,701	78	0	0.0000	173,701	0	78	2,227
Kansas	0	1	90	109,179	83	2	0.0241	106,548	0	81	1,315
Kentucky	0	1	78	308,453	76	2	0.0263	300,336	0	74	4,059
Louisiana	0	1	102	428,924	73	1	0.0137	423,048	0	72	5,876
Maine	0	1	84	94,662	77	4	0.0519	89,744	0	73	1,229
Maryland	0	1	86	360,325	70	0	0.0000	360,325	0	70	5,148
Massachusetts	0	1	91	443,297	76	0	0.0000	443,297	0	76	5,833
Michigan	0	1	92	751,152	78	2	0.0256	731,892	0	76	9,630
Minnesota	0	1	93	222,640	89	2	0.0225	217,637	0	87	2,502
Mississippi	0	1	93	245,394	81	1	0.0123	242,364	0	80	3,030
Missouri	0	1	86	351,198	78	4	0.0513	333,188	0	74	4,503
Montana	0	1	82	58,191	69	0	0.0000	58,191	0	69	843
Nebraska	0	1	91	79,458	79	2	0.0253	77,446	0	77	1,006
Nevada	0	1	102	224,879	85	1	0.0118	222,233	0	84	2,646
New Hampshire	0	1	66	46,260	55	0	0.0000	46,260	1	54	857
New Jersey	0	1	87	410,725	72	0	0.0000	410,725	0	72	5,705
New Mexico	0	1	98	216,423	88	3	0.0341	209,045	0	85	2,459
New York	0	1	92	1,614,016	76	0	0.0000	1,614,016	0	76	21,237
North Carolina	0	1	85	775,431	82	0	0.0000	775,431	0	82	9,456
North Dakota	0	1	45	25,289	40	1	0.0250	24,657	0	39	632

State	Stratum	Unedited SNAP QC data			Edited SNAP QC data						
		Sampling interval	Stratum sampling size	SNAP units in State (program ops data)	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	96	750,172	86	0	0.0000	750,172	0	86	8,723
Oklahoma	0	1	100	274,024	91	2	0.0220	268,001	0	89	3,011
Oregon	0	1	102	392,997	76	1	0.0132	387,826	0	75	5,171
Pennsylvania	0	1	88	951,452	68	0	0.0000	951,452	0	68	13,992
Rhode Island	0	1	89	95,391	78	0	0.0000	95,391	0	78	1,223
South Carolina	0	1	93	339,846	85	0	0.0000	339,846	0	85	3,998
South Dakota	0	1	64	41,769	61	0	0.0000	41,769	0	61	685
Tennessee	0	1	106	513,580	74	1	0.0135	506,640	0	73	6,940
Texas	0	1	104	1,590,475	85	1	0.0118	1,571,764	0	84	18,711
Utah	0	1	88	83,681	69	2	0.0290	81,255	0	67	1,213
Vermont	0	1	65	42,751	62	0	0.0000	42,751	0	62	690
Virginia	0	1	95	376,938	66	6	0.0909	342,671	1	59	5,808
Washington	0	1	93	525,654	78	0	0.0000	525,654	0	78	6,739
West Virginia	0	1	87	172,555	65	1	0.0154	169,900	0	64	2,655
Wisconsin	0	1	100	346,398	84	1	0.0119	342,274	0	83	4,124
Wyoming	0	1	32	14,421	29	0	0.0000	14,421	0	29	497
Guam	0	1	41	14,927	36	1	0.0278	14,512	0	35	415
Virgin Islands	0	1	27	12,895	25	0	0.0000	12,895	0	25	516

Table D.9. Stratification and weight calculation by State, March 2017

		Unedited SNAP QC data			Edited SNAP QC data						
				SNAP units in State (program ops data)	Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum-specific units weight
		Sampling interval	Stratum sampling size								
State	Stratum	a	b	e	g	h	i	j	k	l	m
Alabama	0	1	92	376,429	84	2	0.0238	367,466	0	82	4,481
Alaska	0	1	60	38,255	44	0	0.0000	38,255	0	44	869
Arizona	0	1	94	410,914	69	3	0.0435	393,048	0	66	5,955
Arkansas	0	1	98	169,967	95	6	0.0632	159,232	0	89	1,789
California	0	1	91	1,989,555	67	0	0.0000	1,989,555	0	67	29,695
Colorado	0	1	96	225,108	67	1	0.0149	221,748	0	66	3,360
Connecticut	0	1	92	234,720	76	0	0.0000	234,720	2	74	3,172
Delaware	0	1	96	71,999	78	3	0.0385	69,230	0	75	923
District of Columbia	0	1	76	70,447	64	0	0.0000	70,447	0	64	1,101
Florida	0	1	93	1,689,271	81	1	0.0123	1,668,416	0	80	20,855
Georgia	0	1	94	753,684	86	1	0.0116	744,920	0	85	8,764
Hawaii	0	1	82	86,183	50	0	0.0000	86,183	0	50	1,724
Idaho	0	1	100	76,023	86	0	0.0000	76,023	0	86	884
Illinois	0	1	105	981,849	89	0	0.0000	981,849	0	89	11,032
Indiana	0	1	103	300,241	75	1	0.0133	296,238	1	73	4,058
Iowa	0	1	85	173,157	76	4	0.0526	164,043	0	72	2,278
Kansas	0	1	90	108,082	83	0	0.0000	108,082	0	83	1,302
Kentucky	0	1	150	310,540	141	2	0.0142	306,135	0	139	2,202
Louisiana	0	1	102	422,671	73	0	0.0000	422,671	0	73	5,790
Maine	0	1	83	93,640	74	1	0.0135	92,375	0	73	1,265
Maryland	0	1	86	357,191	67	0	0.0000	357,191	0	67	5,331
Massachusetts	0	1	92	442,480	81	0	0.0000	442,480	0	81	5,463
Michigan	0	1	91	732,906	77	1	0.0130	723,388	0	76	9,518
Minnesota	0	1	92	224,234	87	4	0.0460	213,924	0	83	2,577
Mississippi	0	1	92	243,472	88	1	0.0114	240,705	0	87	2,767
Missouri	0	1	86	352,493	73	2	0.0274	342,836	0	71	4,829
Montana	0	1	83	58,268	68	4	0.0588	54,840	0	64	857
Nebraska	0	1	92	79,819	74	1	0.0135	78,740	1	72	1,094
Nevada	0	1	101	224,551	89	1	0.0112	222,028	1	87	2,552
New Hampshire	0	1	67	46,221	59	1	0.0169	45,438	0	58	783
New Jersey	0	1	86	408,473	66	0	0.0000	408,473	0	66	6,189
New Mexico	0	1	98	214,778	78	2	0.0256	209,271	0	76	2,754
New York	0	1	92	1,619,731	78	1	0.0128	1,598,965	0	77	20,766
North Carolina	0	1	86	768,605	79	1	0.0127	758,876	0	78	9,729
North Dakota	0	1	44	25,328	42	1	0.0238	24,725	0	41	603

Table D.9 *(continued)*

State	Stratum	Unedited SNAP QC data		SNAP units in State (program ops data)	Edited SNAP QC data						
		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	96	755,927	84	1	0.0119	746,928	0	83	8,999
Oklahoma	0	1	99	272,551	88	1	0.0114	269,454	0	87	3,097
Oregon	0	1	103	391,980	81	0	0.0000	391,980	0	81	4,839
Pennsylvania	0	1	88	949,914	65	1	0.0154	935,300	0	64	14,614
Rhode Island	0	1	89	95,391	71	2	0.0282	92,704	0	69	1,344
South Carolina	0	1	91	338,685	83	0	0.0000	338,685	0	83	4,081
South Dakota	0	1	63	41,472	61	0	0.0000	41,472	0	61	680
Tennessee	0	1	106	516,931	78	1	0.0128	510,304	0	77	6,627
Texas	0	1	103	1,598,275	91	0	0.0000	1,598,275	0	91	17,563
Utah	0	1	88	84,307	77	0	0.0000	84,307	0	77	1,095
Vermont	0	1	64	42,420	57	1	0.0175	41,676	0	56	744
Virginia	0	1	94	366,101	67	0	0.0000	366,101	0	67	5,464
Washington	0	1	91	524,525	73	0	0.0000	524,525	0	73	7,185
West Virginia	0	1	87	172,711	65	0	0.0000	172,711	0	65	2,657
Wisconsin	0	1	100	346,479	83	0	0.0000	346,479	0	83	4,174
Wyoming	0	1	32	14,565	30	2	0.0667	13,594	0	28	486
Guam	0	1	43	15,038	42	0	0.0000	15,038	0	42	358
Virgin Islands	0	1	27	12,786	26	1	0.0385	12,294	0	25	492

Table D.10. Stratification and weight calculation by State, April 2017

	Unedited SNAP QC data			Edited SNAP QC data						
			SNAP units in State (program ops data)	Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum-specific units weight
		Sampling interval	Stratum sampling size							
State	Stratum	a	b	e	g	h	i	j	k	l	m
Alabama	0	1	91	369,245	81	0	0.0000	369,245	0	81	4,559
Alaska	0	1	62	39,292	46	1	0.0217	38,438	1	44	874
Arizona	0	1	94	406,375	75	5	0.0667	379,283	0	70	5,418
Arkansas	0	1	97	167,138	90	3	0.0333	161,567	1	86	1,879
California	0	1	90	1,967,869	68	1	0.0147	1,938,930	0	67	28,939
Colorado	0	1	94	221,700	76	0	0.0000	221,700	0	76	2,917
Connecticut	0	1	90	233,297	75	0	0.0000	233,297	0	75	3,111
Delaware	0	1	92	70,319	72	3	0.0417	67,389	0	69	977
District of Columbia	0	1	103	69,860	87	3	0.0345	67,451	0	84	803
Florida	0	1	91	1,662,199	76	0	0.0000	1,662,199	0	76	21,871
Georgia	0	1	93	741,712	76	2	0.0263	722,193	0	74	9,759
Hawaii	0	1	81	85,344	48	0	0.0000	85,344	0	48	1,778
Idaho	0	1	98	74,697	82	1	0.0122	73,786	0	81	911
Illinois	0	1	98	960,597	82	1	0.0122	948,882	0	81	11,715
Indiana	0	1	102	293,390	82	3	0.0366	282,656	0	79	3,578
Iowa	0	1	93	171,789	88	2	0.0227	167,885	0	86	1,952
Kansas	0	1	89	107,738	79	1	0.0127	106,374	0	78	1,364
Kentucky	0	1	150	308,032	141	0	0.0000	308,032	0	141	2,185
Louisiana	0	1	98	412,411	62	0	0.0000	412,411	0	62	6,652
Maine	0	1	96	92,788	87	2	0.0230	90,655	0	85	1,067
Maryland	0	1	85	354,043	61	2	0.0328	342,435	1	58	5,904
Massachusetts	0	1	91	441,807	80	0	0.0000	441,807	0	80	5,523
Michigan	0	1	90	726,446	80	1	0.0125	717,365	0	79	9,081
Minnesota	0	1	92	221,213	89	0	0.0000	221,213	0	89	2,486
Mississippi	0	1	91	241,552	86	0	0.0000	241,552	0	86	2,809
Missouri	0	1	86	350,201	79	3	0.0380	336,902	0	76	4,433
Montana	0	1	83	58,159	64	2	0.0313	56,342	0	62	909
Nebraska	0	1	90	78,615	77	2	0.0260	76,573	0	75	1,021
Nevada	0	1	101	224,216	80	1	0.0125	221,413	0	79	2,803
New Hampshire	0	1	66	45,916	54	3	0.0556	43,365	0	51	850
New Jersey	0	1	86	403,262	56	1	0.0179	396,061	0	55	7,201
New Mexico	0	1	98	217,419	78	0	0.0000	217,419	0	78	2,787
New York	0	1	92	1,605,867	77	1	0.0130	1,585,012	1	75	21,133
North Carolina	0	1	84	674,671	83	0	0.0000	674,671	0	83	8,129
North Dakota	0	1	44	25,279	42	2	0.0476	24,075	0	40	602

Table D.10 *(continued)*

State	Unedited SNAP QC data			Edited SNAP QC data							
		Sampling interval	Stratum sampling size	SNAP units in State (program ops data)	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	95	742,822	84	1	0.0119	733,979	0	83	8,843
Oklahoma	0	1	99	271,155	84	1	0.0119	267,927	0	83	3,228
Oregon	0	1	101	388,593	89	3	0.0337	375,494	0	86	4,366
Pennsylvania	0	1	87	949,708	68	1	0.0147	935,742	0	67	13,966
Rhode Island	0	1	88	95,391	77	2	0.0260	92,913	0	75	1,239
South Carolina	0	1	90	333,562	85	1	0.0118	329,638	0	84	3,924
South Dakota	0	1	63	41,220	62	0	0.0000	41,220	0	62	665
Tennessee	0	1	105	507,087	88	2	0.0227	495,562	0	86	5,762
Texas	0	1	103	1,583,814	84	1	0.0119	1,564,959	0	83	18,855
Utah	0	1	87	82,922	73	1	0.0137	81,786	0	72	1,136
Vermont	0	1	64	41,941	59	0	0.0000	41,941	0	59	711
Virginia	0	1	87	360,799	63	6	0.0952	326,437	0	57	5,727
Washington	0	1	106	522,120	89	0	0.0000	522,120	0	89	5,867
West Virginia	0	1	94	171,934	75	4	0.0533	162,764	0	71	2,292
Wisconsin	0	1	100	342,723	80	2	0.0250	334,155	0	78	4,284
Wyoming	0	1	32	14,200	30	2	0.0667	13,253	0	28	473
Guam	0	1	43	15,361	35	0	0.0000	15,361	0	35	439
Virgin Islands	0	1	26	12,711	24	0	0.0000	12,711	0	24	530

Table D.11. Stratification and weight calculation by State, May 2017

State	Stratum	Unedited SNAP QC data		SNAP units in State (program ops data)	Edited SNAP QC data						
		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	91	368,738	83	1	0.0120	364,295	0	82	4,443
Alaska	0	1	62	38,758	48	2	0.0417	37,143	0	46	807
Arizona	0	1	94	406,700	69	3	0.0435	389,017	0	66	5,894
Arkansas	0	1	98	167,461	92	0	0.0000	167,461	1	91	1,840
California	0	1	91	1,967,755	77	2	0.0260	1,916,644	1	74	25,901
Colorado	0	1	95	222,248	75	1	0.0133	219,285	0	74	2,963
Connecticut	0	1	90	233,974	75	1	0.0133	230,854	0	74	3,120
Delaware	0	1	80	70,365	61	4	0.0656	65,751	0	57	1,154
District of Columbia	0	1	101	69,399	90	2	0.0222	67,857	1	87	780
Florida	0	1	92	1,653,545	71	0	0.0000	1,653,545	0	71	23,289
Georgia	0	1	94	743,297	89	0	0.0000	743,297	0	89	8,352
Hawaii	0	1	80	85,281	50	1	0.0200	83,575	0	49	1,706
Idaho	0	1	97	73,686	79	1	0.0127	72,753	0	78	933
Illinois	0	1	97	988,529	84	1	0.0119	976,761	0	83	11,768
Indiana	0	1	102	291,902	78	5	0.0641	273,190	0	73	3,742
Iowa	0	1	93	170,772	81	1	0.0123	168,664	0	80	2,108
Kansas	0	1	89	107,209	71	0	0.0000	107,209	0	71	1,510
Kentucky	0	1	149	306,453	139	1	0.0072	304,248	0	138	2,205
Louisiana	0	1	97	404,245	64	2	0.0313	391,612	0	62	6,316
Maine	0	1	96	92,996	86	3	0.0349	89,752	0	83	1,081
Maryland	0	1	84	353,807	54	0	0.0000	353,807	0	54	6,552
Massachusetts	0	1	91	442,160	81	1	0.0123	436,701	0	80	5,459
Michigan	0	1	90	717,595	70	1	0.0143	707,344	0	69	10,251
Minnesota	0	1	92	221,744	87	0	0.0000	221,744	0	87	2,549
Mississippi	0	1	91	240,788	84	1	0.0119	237,921	0	83	2,867
Missouri	0	1	86	348,839	73	3	0.0411	334,503	0	70	4,779
Montana	0	1	83	58,077	65	2	0.0308	56,290	0	63	893
Nebraska	0	1	90	78,219	75	2	0.0267	76,133	0	73	1,043
Nevada	0	1	101	224,800	86	1	0.0116	222,186	0	85	2,614
New Hampshire	0	1	66	45,763	60	1	0.0167	45,000	0	59	763
New Jersey	0	1	96	400,361	69	0	0.0000	400,361	0	69	5,802
New Mexico	0	1	98	214,414	85	1	0.0118	211,891	0	84	2,523
New York	0	1	92	1,610,184	73	1	0.0137	1,588,127	0	72	22,057
North Carolina	0	1	84	673,801	75	2	0.0267	655,833	0	73	8,984
North Dakota	0	1	44	25,229	42	0	0.0000	25,229	0	42	601

Table D.11 *(continued)*

State	Unedited SNAP QC data			SNAP units in State (program ops data)	Edited SNAP QC data						
		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	94	742,351	79	1	0.0127	732,954	0	78	9,397
Oklahoma	0	1	98	270,068	86	0	0.0000	270,068	0	86	3,140
Oregon	0	1	101	384,475	77	0	0.0000	384,475	0	77	4,993
Pennsylvania	0	1	88	949,024	69	0	0.0000	949,024	0	69	13,754
Rhode Island	0	1	88	95,391	72	3	0.0417	91,416	0	69	1,325
South Carolina	0	1	90	331,999	75	2	0.0267	323,146	0	73	4,427
South Dakota	0	1	63	41,065	61	1	0.0164	40,392	0	60	673
Tennessee	0	1	106	511,414	85	1	0.0118	505,397	0	84	6,017
Texas	0	1	103	1,588,555	82	0	0.0000	1,588,555	0	82	19,373
Utah	0	1	86	81,895	75	3	0.0400	78,619	0	72	1,092
Vermont	0	1	62	41,610	56	1	0.0179	40,867	0	55	743
Virginia	0	1	86	360,018	62	3	0.0484	342,598	1	58	5,907
Washington	0	1	106	518,658	90	1	0.0111	512,895	0	89	5,763
West Virginia	0	1	93	171,522	75	2	0.0267	166,948	0	73	2,287
Wisconsin	0	1	99	341,794	78	1	0.0128	337,412	0	77	4,382
Wyoming	0	1	31	14,143	29	0	0.0000	14,143	0	29	488
Guam	0	1	43	15,320	35	0	0.0000	15,320	0	35	438
Virgin Islands	0	1	23	12,650	21	0	0.0000	12,650	0	21	602

Table D.12. Stratification and weight calculation by State, June 2017

State		Unedited SNAP QC data		SNAP units in State (program ops data)	Edited SNAP QC data						Stratum-specific units weight
	Stratum	Sampling interval	Stratum sampling size		Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	
State	Stratum	a	b	e	g	h	i	j	k	l	m
Alabama	0	1	114	370,190	101	2	0.0198	362,860	0	99	3,665
Alaska	0	1	63	39,495	54	2	0.0370	38,032	0	52	731
Arizona	0	1	94	406,769	72	2	0.0278	395,470	0	70	5,650
Arkansas	0	1	97	168,099	92	3	0.0326	162,618	0	89	1,827
California	0	1	116	1,963,764	92	0	0.0000	1,963,764	0	92	21,345
Colorado	0	1	94	221,213	64	3	0.0469	210,844	0	61	3,456
Connecticut	0	1	89	232,153	68	0	0.0000	232,153	0	68	3,414
Delaware	0	1	78	70,856	72	4	0.0556	66,920	0	68	984
District of Columbia	0	1	105	70,455	79	1	0.0127	69,563	0	78	892
Florida	0	1	100	1,662,374	85	0	0.0000	1,662,374	0	85	19,557
Georgia	0	1	93	741,444	85	2	0.0235	723,998	0	83	8,723
Hawaii	0	1	80	85,238	55	0	0.0000	85,238	0	55	1,550
Idaho	0	1	97	72,869	85	1	0.0118	72,012	0	84	857
Illinois	0	1	96	966,094	85	1	0.0118	954,728	0	84	11,366
Indiana	0	1	101	290,461	79	4	0.0506	275,754	1	74	3,726
Iowa	0	1	91	170,829	85	3	0.0353	164,800	0	82	2,010
Kansas	0	1	89	107,487	81	2	0.0247	104,833	0	79	1,327
Kentucky	0	1	149	307,598	139	5	0.0360	296,533	0	134	2,213
Louisiana	0	1	97	406,439	62	0	0.0000	406,439	0	62	6,555
Maine	0	1	95	92,479	83	3	0.0361	89,136	1	79	1,128
Maryland	0	1	99	352,612	77	0	0.0000	352,612	0	77	4,579
Massachusetts	0	1	92	442,934	89	1	0.0112	437,957	0	88	4,977
Michigan	0	1	89	713,427	77	0	0.0000	713,427	0	77	9,265
Minnesota	0	1	92	221,402	88	4	0.0455	211,338	0	84	2,516
Mississippi	0	1	91	241,261	80	0	0.0000	241,261	0	80	3,016
Missouri	0	1	86	349,673	73	1	0.0137	344,883	0	72	4,790
Montana	0	1	83	57,980	72	0	0.0000	57,980	0	72	805
Nebraska	0	1	90	78,184	70	0	0.0000	78,184	0	70	1,117
Nevada	0	1	102	225,483	76	1	0.0132	222,516	0	75	2,967
New Hampshire	0	1	66	45,496	53	1	0.0189	44,638	0	52	858
New Jersey	0	1	86	398,972	59	0	0.0000	398,972	0	59	6,762
New Mexico	0	1	98	215,833	82	0	0.0000	215,833	0	82	2,632
New York	0	1	92	1,606,448	77	0	0.0000	1,606,448	1	76	21,137
North Carolina	0	1	84	676,240	78	1	0.0128	667,570	0	77	8,670
North Dakota	0	1	44	25,260	41	1	0.0244	24,644	0	40	616

Table D.12 *(continued)*

State	Stratum	Unedited SNAP QC data		SNAP units in State (program ops data)	Edited SNAP QC data						
		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
Ohio	0	1	94	736,138	83	2	0.0241	718,400	0	81	8,869
Oklahoma	0	1	99	271,835	88	1	0.0114	268,746	0	87	3,089
Oregon	0	1	99	387,997	73	2	0.0274	377,367	0	71	5,315
Pennsylvania	0	1	88	950,894	70	0	0.0000	950,894	0	70	13,584
Rhode Island	0	1	0	95,391	0	0	0.0000	0	0	0	0
South Carolina	0	1	90	332,475	83	0	0.0000	332,475	0	83	4,006
South Dakota	0	1	63	40,864	59	1	0.0169	40,171	0	58	693
Tennessee	0	1	105	508,764	89	2	0.0225	497,331	1	86	5,783
Texas	0	1	103	1,587,363	84	0	0.0000	1,587,363	0	84	18,897
Utah	0	1	86	81,525	78	1	0.0128	80,480	0	77	1,045
Vermont	0	1	63	41,391	59	0	0.0000	41,391	0	59	702
Virginia	0	1	88	359,673	67	4	0.0597	338,200	1	62	5,455
Washington	0	1	105	516,897	90	0	0.0000	516,897	0	90	5,743
West Virginia	0	1	93	170,843	75	5	0.0667	159,453	0	70	2,278
Wisconsin	0	1	99	339,901	85	1	0.0118	335,902	0	84	3,999
Wyoming	0	1	30	13,828	29	1	0.0345	13,351	0	28	477
Guam	0	1	44	15,626	35	0	0.0000	15,626	1	34	460
Virgin Islands	0	1	13	12,590	13	0	0.0000	12,590	0	13	968

Table D.13. Stratification and weight calculation by State, July 2017

		Unedited SNAP QC data			Edited SNAP QC data						
		Sampling interval	Stratum sampling size	SNAP units in State (program ops data)	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	113	368,329	100	1	0.0100	364,646	0	99	3,683
Alaska	0	1	65	41,769	57	3	0.0526	39,571	0	54	733
Arizona	0	1	94	405,746	64	3	0.0469	386,727	0	61	6,340
Arkansas	0	1	97	166,157	92	3	0.0326	160,739	0	89	1,806
California	0	1	114	1,951,592	77	1	0.0130	1,926,247	0	76	25,345
Colorado	0	1	93	218,401	66	1	0.0152	215,092	0	65	3,309
Connecticut	0	1	91	231,354	70	2	0.0286	224,744	0	68	3,305
Delaware	0	1	41	70,026	32	0	0.0000	70,026	0	32	2,188
District of Columbia	0	1	104	69,393	82	1	0.0122	68,547	0	81	846
Florida	0	1	99	1,654,489	79	2	0.0253	1,612,603	0	77	20,943
Georgia	0	1	100	729,372	91	2	0.0220	713,342	0	89	8,015
Hawaii	0	1	80	85,108	51	2	0.0392	81,770	0	49	1,669
Idaho	0	1	95	71,976	85	1	0.0118	71,129	0	84	847
Illinois	0	1	96	961,076	84	0	0.0000	961,076	0	84	11,441
Indiana	0	1	100	288,332	82	1	0.0122	284,816	0	81	3,516
Iowa	0	1	92	169,722	84	1	0.0119	167,702	0	83	2,021
Kansas	0	1	88	107,061	79	2	0.0253	104,351	0	77	1,355
Kentucky	0	1	148	305,204	138	5	0.0362	294,146	1	132	2,228
Louisiana	0	1	96	405,891	65	1	0.0154	399,647	0	64	6,244
Maine	0	1	95	91,761	87	4	0.0460	87,542	0	83	1,055
Maryland	0	1	99	350,409	78	1	0.0128	345,917	0	77	4,492
Massachusetts	0	1	93	444,034	84	0	0.0000	444,034	0	84	5,286
Michigan	0	1	89	710,617	79	2	0.0253	692,627	0	77	8,995
Minnesota	0	1	91	221,088	86	4	0.0465	210,805	1	81	2,603
Mississippi	0	1	94	240,166	88	0	0.0000	240,166	0	88	2,729
Missouri	0	1	86	348,671	78	0	0.0000	348,671	0	78	4,470
Montana	0	1	82	57,587	62	2	0.0323	55,729	0	60	929
Nebraska	0	1	89	77,740	70	1	0.0143	76,629	0	69	1,111
Nevada	0	1	102	225,126	80	0	0.0000	225,126	0	80	2,814
New Hampshire	0	1	65	44,912	56	0	0.0000	44,912	0	56	802
New Jersey	0	1	94	395,303	63	0	0.0000	395,303	0	63	6,275
New Mexico	0	1	98	216,188	81	3	0.0370	208,181	0	78	2,669
New York	0	1	92	1,597,548	77	0	0.0000	1,597,548	0	77	20,747
North Carolina	0	1	97	672,310	91	1	0.0110	664,922	0	90	7,388
North Dakota	0	1	44	25,009	43	1	0.0233	24,427	0	42	582

Table D.13 *(continued)*

State	Stratum	Unedited SNAP QC data		SNAP units in State (program ops data)	Edited SNAP QC data						
		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
Ohio	0	1	93	714,319	77	1	0.0130	705,042	0	76	9,277
Oklahoma	0	1	98	271,082	76	4	0.0526	256,815	0	72	3,567
Oregon	0	1	99	375,766	72	1	0.0139	370,547	0	71	5,219
Pennsylvania	0	1	99	951,487	70	0	0.0000	951,487	0	70	13,593
Rhode Island	0	1	0	95,391	0	0	0.0000	0	0	0	0
South Carolina	0	1	95	328,766	80	1	0.0125	324,656	0	79	4,110
South Dakota	0	1	62	40,597	58	0	0.0000	40,597	0	58	700
Tennessee	0	1	104	501,384	86	0	0.0000	501,384	0	86	5,830
Texas	0	1	104	1,593,222	77	0	0.0000	1,593,222	0	77	20,691
Utah	0	1	84	80,275	75	1	0.0133	79,205	0	74	1,070
Vermont	0	1	62	41,168	56	0	0.0000	41,168	0	56	735
Virginia	0	1	88	356,236	65	0	0.0000	356,236	0	65	5,481
Washington	0	1	104	512,488	83	1	0.0120	506,313	0	82	6,175
West Virginia	0	1	93	169,497	76	0	0.0000	169,497	0	76	2,230
Wisconsin	0	1	98	338,119	89	0	0.0000	338,119	0	89	3,799
Wyoming	0	1	30	13,480	27	0	0.0000	13,480	0	27	499
Guam	0	1	43	15,247	38	0	0.0000	15,247	0	38	401
Virgin Islands	0	1	0	12,354	0	0	0.0000	0	0	0	0

Table D.14. Stratification and weight calculation by State, August 2017

State	Stratum	Unedited SNAP QC data Sampling interval	Stratum sampling size	SNAP units in State (program ops data)	Edited SNAP QC data 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	114	370,478	99	2	0.0202	362,994	0	97	3,742
Alaska	0	1	68	43,181	52	1	0.0192	42,351	0	51	830
Arizona	0	1	94	407,615	73	8	0.1096	362,945	0	65	5,584
Arkansas	0	1	99	169,248	87	6	0.0690	157,576	0	81	1,945
California	0	1	116	1,966,116	82	2	0.0244	1,918,162	0	80	23,977
Colorado	0	1	94	219,487	59	1	0.0169	215,767	0	58	3,720
Connecticut	0	1	88	230,325	66	0	0.0000	230,325	0	66	3,490
Delaware	0	1	51	71,429	39	1	0.0256	69,597	0	38	1,832
District of Columbia	0	1	104	70,329	92	0	0.0000	70,329	0	92	764
Florida	0	1	129	1,660,595	102	0	0.0000	1,660,595	0	102	16,280
Georgia	0	1	100	752,723	83	3	0.0361	725,516	0	80	9,069
Hawaii	0	1	81	85,097	51	0	0.0000	85,097	0	51	1,669
Idaho	0	1	95	71,971	82	0	0.0000	71,971	0	82	878
Illinois	0	1	94	970,013	86	0	0.0000	970,013	0	86	11,279
Indiana	0	1	101	290,248	79	5	0.0633	271,878	0	74	3,674
Iowa	0	1	91	170,526	80	1	0.0125	168,394	0	79	2,132
Kansas	0	1	87	107,055	76	1	0.0132	105,646	0	75	1,409
Kentucky	0	1	77	304,968	73	0	0.0000	304,968	0	73	4,178
Louisiana	0	1	98	411,731	64	0	0.0000	411,731	0	64	6,433
Maine	0	1	94	91,407	84	4	0.0476	87,054	2	78	1,116
Maryland	0	1	100	352,798	61	1	0.0164	347,014	0	60	5,784
Massachusetts	0	1	92	445,728	83	0	0.0000	445,728	0	83	5,370
Michigan	0	1	87	711,458	69	1	0.0145	701,147	0	68	10,311
Minnesota	0	1	91	221,684	90	4	0.0444	211,831	0	86	2,463
Mississippi	0	1	95	241,096	88	0	0.0000	241,096	0	88	2,740
Missouri	0	1	87	350,767	73	3	0.0411	336,352	1	69	4,875
Montana	0	1	82	57,412	63	1	0.0159	56,501	0	62	911
Nebraska	0	1	90	78,084	77	2	0.0260	76,056	0	75	1,014
Nevada	0	1	103	227,608	83	1	0.0120	224,866	0	82	2,742
New Hampshire	0	1	64	44,811	55	0	0.0000	44,811	0	55	815
New Jersey	0	1	95	394,875	70	0	0.0000	394,875	0	70	5,641
New Mexico	0	1	98	219,570	85	3	0.0353	211,820	0	82	2,583
New York	0	1	92	1,593,384	81	2	0.0247	1,554,041	0	79	19,671
North Carolina	0	1	98	675,235	89	0	0.0000	675,235	0	89	7,587
North Dakota	0	1	44	25,208	40	2	0.0500	23,948	0	38	630

Table D.14 *(continued)*

State		Unedited SNAP QC data		SNAP units in State (program ops data)	Edited SNAP QC data						
		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	94	728,154	78	0	0.0000	728,154	0	78	9,335
Oklahoma	0	1	99	273,231	84	0	0.0000	273,231	0	84	3,253
Oregon	0	1	100	375,407	76	1	0.0132	370,467	0	75	4,940
Pennsylvania	0	1	99	955,717	77	0	0.0000	955,717	0	77	12,412
Rhode Island	0	1	0	95,391	0	0	0.0000	0	0	0	0
South Carolina	0	1	95	328,537	85	4	0.0471	313,076	0	81	3,865
South Dakota	0	1	63	40,591	62	1	0.0161	39,936	1	60	666
Tennessee	0	1	104	506,998	83	2	0.0241	494,781	0	81	6,108
Texas	0	1	105	1,602,741	83	0	0.0000	1,602,741	0	83	19,310
Utah	0	1	85	80,840	67	3	0.0448	77,220	0	64	1,207
Vermont	0	1	63	41,211	56	0	0.0000	41,211	0	56	736
Virginia	0	1	89	358,918	66	1	0.0152	353,480	0	65	5,438
Washington	0	1	104	511,684	79	1	0.0127	505,207	0	78	6,477
West Virginia	0	1	93	169,870	74	1	0.0135	167,574	0	73	2,296
Wisconsin	0	1	97	337,204	79	2	0.0253	328,667	1	76	4,325
Wyoming	0	1	29	13,418	28	0	0.0000	13,418	0	28	479
Guam	0	1	42	15,320	41	0	0.0000	15,320	1	40	383
Virgin Islands	0	1	0	12,604	0	0	0.0000	0	0	0	0

Table D.15. Stratification and weight calculation by State, September 2017

State	Stratum	Unedited SNAP QC data		SNAP units in State (program ops data)	Edited SNAP QC data						
		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	113	369,652	91	1	0.0110	365,590	0	90	4,062
Alaska	0	1	70	44,098	53	1	0.0189	43,266	0	52	832
Arizona	0	1	93	405,924	72	7	0.0972	366,459	0	65	5,638
Arkansas	0	1	98	168,946	92	3	0.0326	163,437	0	89	1,836
California	0	1	117	1,964,764	77	0	0.0000	1,964,764	1	76	25,852
Colorado	0	1	93	218,923	65	1	0.0154	215,555	0	64	3,368
Connecticut	0	1	89	231,942	61	3	0.0492	220,535	0	58	3,802
Delaware	0	1	50	70,444	39	1	0.0256	68,638	0	38	1,806
District of Columbia	0	1	104	70,780	92	4	0.0435	67,703	0	88	769
Florida	0	1	128	1,691,205	104	0	0.0000	1,691,205	0	104	16,262
Georgia	0	1	100	766,973	82	3	0.0366	738,913	0	79	9,353
Hawaii	0	1	80	84,918	52	0	0.0000	84,918	0	52	1,633
Idaho	0	1	95	71,554	80	2	0.0250	69,765	0	78	894
Illinois	0	1	97	966,633	92	2	0.0217	945,619	0	90	10,507
Indiana	0	1	99	287,987	70	5	0.0714	267,417	0	65	4,114
Iowa	0	1	91	169,917	87	3	0.0345	164,058	0	84	1,953
Kansas	0	1	88	96,231	71	0	0.0000	96,231	0	71	1,355
Kentucky	0	1	77	303,301	73	1	0.0137	299,146	0	72	4,155
Louisiana	0	1	99	413,360	73	2	0.0274	402,035	0	71	5,662
Maine	0	1	94	90,710	78	3	0.0385	87,221	0	75	1,163
Maryland	0	1	99	351,092	63	0	0.0000	351,092	0	63	5,573
Massachusetts	0	1	92	446,640	80	0	0.0000	446,640	0	80	5,583
Michigan	0	1	88	706,794	74	0	0.0000	706,794	1	73	9,682
Minnesota	0	1	92	219,886	87	2	0.0230	214,831	0	85	2,527
Mississippi	0	1	95	240,863	84	0	0.0000	240,863	0	84	2,867
Missouri	0	1	87	350,541	80	4	0.0500	333,014	0	76	4,382
Montana	0	1	81	56,729	62	1	0.0161	55,814	0	61	915
Nebraska	0	1	89	77,290	73	1	0.0137	76,231	0	72	1,059
Nevada	0	1	103	227,781	78	0	0.0000	227,781	0	78	2,920
New Hampshire	0	1	64	44,592	52	1	0.0192	43,734	0	51	858
New Jersey	0	1	92	393,150	73	0	0.0000	393,150	1	72	5,460
New Mexico	0	1	98	220,566	89	1	0.0112	218,088	0	88	2,478
New York	0	1	92	1,587,180	82	2	0.0244	1,548,468	0	80	19,356
North Carolina	0	1	98	672,802	96	2	0.0208	658,785	0	94	7,008
North Dakota	0	1	44	25,253	39	2	0.0513	23,958	0	37	648

Table D.15 *(continued)*

State	Stratum	Sampling interval a	Stratum sampling size b	SNAP units in State (program ops data) e	Units with complete reviews g	Ineligible units h	Disqualification rate i	Adjusted SNAP units in State j	Failing units k	Stratum sampling size l	Stratum-specific units weight m
		Unedited SNAP QC data			**Edited SNAP QC data**						
Ohio	0	1	92	723,396	79	4	0.0506	686,768	0	75	9,157
Oklahoma	0	1	99	273,896	85	3	0.0353	264,229	1	81	3,262
Oregon	0	1	98	373,646	76	0	0.0000	373,646	0	76	4,916
Pennsylvania	0	1	99	956,538	79	1	0.0127	944,430	0	78	12,108
Rhode Island	0	1	90	95,391	83	1	0.0120	94,242	0	82	1,149
South Carolina	0	1	94	325,156	84	0	0.0000	325,156	0	84	3,871
South Dakota	0	1	62	40,540	58	0	0.0000	40,540	0	58	699
Tennessee	0	1	105	502,039	88	3	0.0341	484,924	0	85	5,705
Texas	0	1	108	1,872,394	83	1	0.0120	1,849,835	0	82	22,559
Utah	0	1	84	80,316	75	4	0.0533	76,032	0	71	1,071
Vermont	0	1	62	41,357	54	0	0.0000	41,357	0	54	766
Virginia	0	1	89	357,598	59	1	0.0169	351,537	0	58	6,061
Washington	0	1	104	509,940	84	1	0.0119	503,869	0	83	6,071
West Virginia	0	1	92	169,612	79	3	0.0380	163,171	0	76	2,147
Wisconsin	0	1	98	335,765	74	1	0.0135	331,228	0	73	4,537
Wyoming	0	1	29	13,332	28	0	0.0000	13,332	0	28	476
Guam	0	1	44	15,345	36	0	0.0000	15,345	1	35	438
Virgin Islands	0	1	0	12,028	0	0	0.0000	0	0	0	0

APPENDIX E

STATE AND REGION CODES

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, Food and Nutrition Service.

Table E.2. SNAP region codes (REGIONCD)

REGIONCD = 1 (Northeast)

Connecticut

Maine

Massachusetts

New Hampshire

New York

Rhode Island

Vermont

REGIONCD = 2 (Mid-Atlantic)

Delaware

District of Columbia

Maryland

New Jersey

Pennsylvania

Virgin Islands

Virginia

West Virginia

REGIONCD = 3 (Southeast)

Alabama

Florida

Georgia

Kentucky

Mississippi

North Carolina

South Carolina

Tennessee

REGIONCD = 4 (Midwest)

Illinois

Indiana

Michigan

Minnesota

Ohio

Wisconsin

REGIONCD = 5 (Southwest)

Arkansas

Louisiana

New Mexico

Oklahoma

Texas

REGIONCD = 6 (Mountain Plains)

Colorado

Iowa

Kansas

Missouri

Montana

Nebraska

North Dakota

South Dakota

Utah

Wyoming

REGIONCD = 7 (West)

Alaska

Arizona

California

Guam

Hawaii

Idaho

Nevada

Oregon

Washington

Source: U.S. Department of Agriculture, Food and Nutrition Service.

Table E.3. Census region codes (REGION)

REGION = 1 (Northeast)	**REGION = 3 (South)**
Connecticut	Alabama
Maine	Arkansas
Massachusetts	Delaware
New Hampshire	District of Columbia
New Jersey	Florida
New York	Georgia
Pennsylvania	Kentucky
Rhode Island	Louisiana
Vermont	Maryland
REGION = 2 (Midwest)	Mississippi
Illinois	North Carolina
Indiana	Oklahoma
Iowa	South Carolina
Kansas	Tennessee
Michigan	Texas
Minnesota	Virginia
Missouri	West Virginia
Nebraska	**REGION = 4 (West)**
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.

APPENDIX F

FY 2017 SNAP PARAMETERS

Table F.1. SNAP gross income screen, FY 2017

Unit size	Gross income screen (dollars per month)		
	Contiguous United States, Guam, and the Virgin Islands	Alaska	Hawaii
1	1,287	1,608	1,481
2	1,736	2,169	1,997
3	2,184	2,730	2,513
4	2,633	3,292	3,028
5	3,081	3,853	3,544
6	3,530	4,414	4,060
7	3,980	4,975	4,575
8	4,430	5,538	5,093
Each additional person	+451	+564	+518

Source: U.S. Department of Agriculture, Food and Nutrition Service.

Note: The FY 2017 SNAP gross monthly income limits were based on the 2016 poverty guidelines issued by the U.S. Department of Health and Human Services. FNS derived the FY 2017 gross income limits by multiplying the 2016 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 2017

Unit size	Net income screen (dollars per month)		
	Contiguous United States, Guam, and the Virgin Islands	Alaska	Hawaii
1	990	1,237	1,140
2	1,335	1,669	1,536
3	1,680	2,100	1,933
4	2,025	2,532	2,330
5	2,370	2,964	2,726
6	2,715	3,395	3,123
7	3,061	3,827	3,520
8	3,408	4,260	3,918
Each additional person	+347	+434	+399

Source: U.S. Department of Agriculture, Food and Nutrition Service.

Note: The FY 2017 SNAP net monthly income limits were based on the 2016 poverty guidelines issued by the U.S. Department of Health and Human Services. FNS derived the FY 2017 net income limits by dividing the 2016 poverty guidelines by 12 and rounding up to the nearest dollar.

Table F.3. Deduction amounts, FY 2017

Deduction	Contiguous United States	Alaska	Hawaii	Guam	Virgin Islands
Standard deduction (dollars)					
1 to 2 people	157	268	221	315	138
3 people	157	268	221	315	140
4 people	168	268	221	337	168
5 people	197	268	227	394	197
6 or more people	226	282	260	451	226
Maximum excess shelter expense deduction (dollars)	517	826	697	607	408
Homeless household shelter deduction (dollars)	143	143	143	143	143
Earnings deduction (percent)	20%	20%	20%	20%	20%

Source: U.S. Department of Agriculture, Food and Nutrition Service.

Note: MFIP relies on 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. Standard medical deduction demonstration, FY 2017

State	If medical expenses are less than or equal to (dollars)	Then medical expense deduction is[a] (dollars)
Alabama	200	165
Arkansas	138	103
Colorado[b]	200	165
Georgia	185	150
Idaho	179	144
Illinois[c]	245	210
Iowa	140	105
Kansas	175	140
Massachusetts	190	155
Missouri	200	165
New Hampshire	150	115
North Dakota	200	165
Oregon[d]	205	170
Rhode Island	176	141
South Carolina	210	175
South Dakota	200	165
Texas	137	102
Vermont	173	138
Virginia	235	200
Wyoming	138	103

Source: U.S. Department of Agriculture, Food and Nutrition Service.

[a]Otherwise, the medical expense deduction is equal to the actual medical expenses minus $35.

[b]Colorado implemented its program in October 2016.

[c]In Illinois, the standard medical deduction for residents of group homes or supportive living facilities was $450.

[d]Oregon implemented its program in February 2017.

Table F.5. Maximum monthly SNAP benefit, FY 2017

Unit size	Maximum SNAP benefit (dollars)						
	Contiguous United States	Alaska Urban	Alaska Rural I	Alaska Rural II	Hawaii	Guam	Virgin Islands
1	194	237	302	368	354	287	250
2	357	435	554	675	650	526	459
3	511	622	794	966	931	753	657
4	649	790	1,008	1,227	1,182	957	835
5	771	939	1,197	1,457	1,404	1,136	991
6	925	1,127	1,437	1,749	1,685	1,364	1,189
7	1,022	1,245	1,588	1,933	1,862	1,507	1,315
8	1,169	1,423	1,815	2,209	2,128	1,723	1,503
Each additional person	+146	+178	+227	+276	+266	+215	+188

Source: U.S. Department of Agriculture, Food and Nutrition Service.

Note: These maximum benefit values were based on the cost of the Thrifty Food Plan in June 2016 for a reference family of four, rounded to the lowest dollar increment.

Table F.6. Minimum monthly SNAP benefit, FY 2017

Unit size	Minimum SNAP benefit (dollars)						
	Contiguous United States	Alaska Urban	Alaska Rural I	Alaska Rural II	Hawaii	Guam	Virgin Islands
1 to 2 people	16	19	24	29	28	23	20

Source: U.S. Department of Agriculture, Food and Nutrition Service.

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 2017

State	Standard Utility Allowances (dollars)							
	HCSUA[a]	LUA[b]	Telephone allowance[c]	Electricity[d]	Water[d]	Sewer[d]	Trash[d]	Other standards[e]
Alabama	339	336	37					
Alaska[f]								
Central	360		34	96	50	43	36	101
Southeast	357		28	76	37	58	25	133
South central	409		26	121	39	45	47	131
Northern	578		40	131	51	59	30	267
Southwest	834		52	173	55	53	14	487
Northwest	891		37	155	60	54	36	549
Arizona								
1 to 3 people	265		33					
4 or more people	358		33					
Arkansas	284		25					
California	389	122	19					
Colorado	459	292	74	55	55	55	55	55
Connecticut	698	307	26					
Delaware	402	279	35	79	79	79	79	79
District of Columbia	316	265	69	66	66	66	66	66
Florida	338	270	39					
Georgia	391	340	35					
Hawaii								
1 person			26	154	45	87	87	154
2 people			26	167	50	87	87	167
3 people			26	191	55	87	87	191
4 to 5 people			26	234	65	87	87	234
6 people			26	274	74	87	87	274
7 or more people			26	310	89	87	87	310
Idaho	396	230	43	94	94	94	94	94
Illinois	388	285	30	64	64	64	64	64
Indiana								
10/2016–4/2017	380	230	27	51	51	51	51	51
5/2017–9/2017	400	244	29	54	54	54	54	54
Iowa	358	253	28					
Kansas	364	225	37					
Kentucky	318	258	36					
Louisiana	349	192	46					
Maine	663	220	43					
Maryland								
10/2016–12/2016	403	245	40					
1/2017–9/2017	416	254	40					
Massachusetts	609	376	43					
Michigan	526		33	131	84	84	21	36
Minnesota	532		38	141				

	Standard Utility Allowances (dollars)							
State	HCSUA[a]	LUA[b]	Telephone allowance[c]	Electricity[d]	Water[d]	Sewer[d]	Trash[d]	Other standards[e]
See notes at the end of the table.								
Mississippi	274	201	29					
Missouri	362	289	59	119	119	119	119	119
Montana	520	190	36	154	154	154	154	154
Nebraska	457	240	51	47	47	47	47	47
Nevada	276	238	26	53	53	53	53	53
New Hampshire	659	240	26	140				
New Jersey	501	294	29					
New Mexico	325	125	40					
New York								
New York City	758	300	33					
Long Island	706	277	33					
Rest of New York	627	254	33					
North Carolina								
1 person	374	226	33					
2 people	411	248	33					
3 people	452	273	33					
4 people	493	298	33					
5 or more people	537	325	33					
North Dakota	596	229	36	194	194	194	194	194
Ohio	513	332	40	73	73	73	73	73
Oklahoma	338	291	48					
Oregon	449	341	56	62	62	62	62	62
Pennsylvania	570	296	33	55	55	55	55	55
Rhode Island	605		23					
South Carolina	299	223	28					
South Dakota	705	197	47	81	81	81	81	81
Tennessee								
1 person	308	133	25					
2 people	319	133	25					
3 people	331	133	25					
4 people	343	133	25					
5 people	353	133	25					
6 people	365	133	25					
7 people	375	133	25					
8 people	387	133	25					
9 people	401	133	25					
10 or more people	411	133	25					
Texas	338	300	36					
Utah	347	267	60					
Vermont	776	222	36					

State	Standard Utility Allowances (dollars)							
	HCSUA[a]	LUA[b]	Telephone allowance[c]	Electricity[d]	Water[d]	Sewer[d]	Trash[d]	Other standards[e]
Virginia								
1 to 3 people	287		56					
4 or more people	357		56					
Washington	411	319	57					
West Virginia	455	246		75	75	75	75	75
Wisconsin	457	307	29	123	81	81	21	35
Wyoming	380	260	58					
Guam								
1 person			27	97	36	27	30	30
2 to 3 people			27	111	47	27	30	30
4 people			27	132	65	27	30	60
5 people			27	149	79	27	30	60
6 people			27	171	103	27	30	60
7 people			27	194	126	27	30	90
8 people			27	202	138	27	30	90
9 to 10 people			27	216	157	27	30	90
11 to 16 people			27	222	162	27	30	90
Virgin Islands			32					

Source: U.S. Department of Agriculture, Food and Nutrition Service.

[a]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.

[b]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.

[c]The telephone allowance is a Standard Utility Allowance used for units that have telephone expenses but do not have any other utility expenses.

[d]Single-utility standard.

[e]A single utility is standard for gas/fuel unless otherwise noted.

[f]Alaska has six HCSUAs determined by utility regions.

Table F.8. Minnesota Family Investment Program (MFIP) benefits, FY 2017

Unit size	Family wage level (1.1*transitional standard) (dollars)	Transitional standard (cash portion and food portion) (dollars)	Cash portion (dollars)	Food portion (dollars)
1	464	422	250	172
2	829	754	437	317
3	1,090	991	532	459
4	1,328	1,207	621	586
5	1,535	1,395	697	698
6	1,766	1,605	773	832
7	1,923	1,748	850	898
8	2,124	1,931	916	1,015
9	2,324	2,113	980	1,133
10	2,517	2,288	1,035	1,253
Each additional person	+191	+174	+53	+121

Source: Minnesota Department of Human Services (http://www.dhs.State.mn.us/).

Table F.9. AZ SSI-CAP (AZSNAP) benefit criteria, FY 2017

Shelter expenses	Benefit (dollars)
$0 to $99	25
$100 to $199	62
$200 to $299	96
$300 or greater	140

Source: U.S. Department of Agriculture, Food and Nutrition Service.

Table F.10. KY SSI-CAP (KYSAFE) benefit criteria, FY 2017

Unit size	Shelter expenses	Benefit (dollars)
One person	Less than $200	30
	$200 or greater	75
Two people	Less than $108	77
	$108 or greater	123

Source: U.S. Department of Agriculture, Food and Nutrition Service.

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

Table F.11. LA SSI-CAP (LaCAP) benefit criteria, FY 2017

Shelter expenses	Benefit (dollars)
October 2016–January 2017	
$0 to $100	34
$101 to $399	54
$400 to $699	85
$700 or greater	110
February 2017–September 2017	
$0 to $100	29
$101 to $399	29
$400 to $699	82
$700 or greater	173

Source: U.S. Department of Agriculture, Food and Nutrition Service.

Table F.12. MD SSI-CAP (MSNAP) benefit criteria, FY 2017

Shelter expenses	Benefit (dollars)
Less than $506	60
$506 or greater	144

Source: U.S. Department of Agriculture, Food and Nutrition Service.

Table F.13. MI SSI-CAP (MiCAP) benefit criteria, FY 2017

Shelter expenses	Benefit (dollars)	Gross income[a] (dollars)
October 2016–December 2016		
Less than $1,000	171	747
$1,000 or greater	185	747
January 2017–September 2017		
Less than $1,000	171	749
$1,000 or greater	185	749

Source: U.S. Department of Agriculture, Food and Nutrition Service.

[a]In FY 2017, Michigan had an SSI supplement of $14, making the combined Federal and State SSI amount $747 for October through December 2016 and $749 for January through September 2017.

Table F.14. MS SSI-CAP (MSCAP) benefits by income and shelter expense patterns, FY 2017

Income type and shelter expenses	Benefit level (dollars)	Gross income (dollars)
October 2016–December 2016		
SSI only		
$335 or less	35	733
Greater than $335	69	733
SSI and other unearned income		
$335 or less	26	753
Greater than $335	60	753
January 2017–September 2017		
SSI only		
$335 or less	34	735
Greater than $335	68	735
SSI and other unearned income		
$335 or less	25	755
Greater than $335	59	755

Source: U.S. Department of Agriculture, Food and Nutrition Service.

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 2017

Shelter expenses	Benefit (dollars)
$563 or less	83
Greater than $563	141

Source: U.S. Department of Agriculture, Food and Nutrition Service.

Table F.16. NM SSI-CAP (NMCAP) benefit criteria, FY 2017

Shelter expenses	Benefit (dollars)
Less than $315	33
$315 or greater	68

Source: U.S. Department of Agriculture, Food and Nutrition Service.

Note: NMCAP ended in May 2014. Participants may remain on the program through their current certification period. The last NMCAP benefit was issued in June 2017.

Table F.17. NY SSI-CAP (NYSNIP) benefit criteria, FY 2017

	Monthly benefit amount (dollars)		
Income and shelter expenses	New York	Long Island	Rest of State
October 2016–December 2016			
SSI only			
With positive utility costs			
Rent $247 or less	194	181	157
Rent greater than $247	194	194	194
With no utility costs			
Rent $247 or less	16	16	16
Rent greater than $247	27	27	27
With no shelter costs	16	16	16
SSI and other unearned income			
With positive utility costs			
Rent $247 or less	187	172	148
Rent greater than $247	194	194	194
With no utility costs			
Rent $247 or less	16	16	16
Rent greater than $247	18	18	18
With no shelter costs	16	16	16
January 2017–September 2017			
SSI only			
With positive utility costs			
Rent $247 or less	194	180	156
Rent greater than $247	194	194	194
With no utility costs			
Rent $247 or less	16	16	16
Rent greater than $247	26	26	26
With no shelter costs	16	16	16
SSI and other unearned income			
With positive utility costs			
Rent $247 or less	187	171	147
Rent greater than $247	194	194	194
With no utility costs			
Rent $247 or less	16	16	16
Rent greater than $247	17	17	17
With no shelter costs	16	16	16

Source: U.S. Department of Agriculture, Food and Nutrition Service.

Table F.18. NC SSI-CAP (NCSNAP) benefit criteria, FY 2017

Shelter expenses	Benefit (dollars)
October 2016–December 2016	
Less than $150	61
$150 or greater	121
January 2017–September 2017	
Less than $150	70
$150 or greater	130

Source: U.S. Department of Agriculture, Food and Nutrition Service.

Table F.19. PA SSI-CAP (PACAP) benefit criteria, FY 2017

Income type and shelter expenses	Benefit (dollars)
SSI only	
Shelter expenses less than $196	109
Shelter expenses $196 or greater	150
SSI and other unearned income	
Shelter expenses less than $196	100
Shelter expenses $196 or greater	141

Source: U.S. Department of Agriculture, Food and Nutrition Service.

Table F.20. SC SSI-CAP (SCCAP) benefits by income and shelter expense patterns, FY 2017

Income type and shelter expenses	Benefits (dollars)	Gross income (dollars)
October 2016–December 2016		
SSI only		
Shelter expenses $310 or less (reported as $310)	27	733
Shelter expenses greater than $310 (reported as $457)	71	733
SSI and other unearned income		
Shelter expenses $310 or less (reported as $310)	18	753
Shelter greater than $310 (reported as $457)	62	753
January 2017–September 2017		
SSI only		
Shelter expenses $310 or less (reported as $310)	27	735
Shelter greater than $310 (reported as $457)	71	735
SSI and other unearned income		
Shelter expenses $310 or less (reported as $310)	18	755
Shelter greater than $310 (reported as $457)	62	755

Source: U.S. Department of Agriculture, Food and Nutrition Service; FY 2017 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 2017

	Benefits (dollars)			
Earnings and medical expenses	Individuals with shelter expenses of $690 or greater	Couples with shelter expenses of $690 or greater	Individuals with shelter expenses less than $690	Couples with shelter expenses less than $690
No earnings				
Medical expenses less than or equal to $35	171	194	40	119
Medical expenses greater than $35	172	269	115	136
Earnings				
Medical expenses less than or equal to $35	149	169	23	21
Medical expenses greater than $35	174	120	120	192

Source: U.S. Department of Agriculture, Food and Nutrition Service.

Table F.22. TX SSI-CAP (SNAP-CAP) benefit criteria, FY 2017

Shelter expenses	Benefit (dollars)
Less than $400	65
$400 or greater	95

Source: U.S. Department of Agriculture, Food and Nutrition Service.

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

Table F.23. VA SSI-CAP (VaCAP) benefit criteria, FY 2017

Shelter expenses	Benefit (dollars)
Less than $500	58
$500 or greater	100

Source: U.S. Department of Agriculture, Food and Nutrition Service.

Table F.24. FL (SUNCAP), MA (BAY STATE CAP), and WA SSI-CAP (WASHCAP) shelter allowances, FY 2017

Rent/mortgage cutoff for high/low standard rent allowance	Standard rent/mortgage allowance (dollars)
FL (SUNCAP)	
$305 or less	152
Greater than $305	372
MA (BAY STATE CAP)	
Less than $453	223
$453 or greater	453
WA (WASHCAP)	
October 2016–March 2017	
Less than $320	235
$320 or greater	400
April 2017–July 2017	
Less than $320	235
$320 or greater	425
August 2017–September 2017	
Less than $320	210
$320 or greater	425

Source: U.S. Department of Agriculture, Food and Nutrition Service.

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.

APPENDIX G

QUALITY CONTROL REVIEW SCHEDULE

U.S. Department of Agriculture - Food and Nutrition Service

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

7. Disposition	8. Findings	9. SNAP Allotment Under Review	10. Error Amount	11. Case Classification

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									
2									
3									
4									
5									
6									
7									
8									

G-3

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)

2

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	Hours	55. SNAP Work Reg.	56. SNAP E & T	57. ABAWD Status	58. Dependent Care Cost

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

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.

Section 7 - Optional For State Use

1. [_____] 1.

2. [_____] 2.

3. [_____] 3.

4. [_____] 4.

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