![Mathematica logo — Progress Together]

Final Report

Technical Documentation for the Fiscal Year 2018 Supplemental Nutrition Assistance Program Quality Control Database and the QC Minimodel

October 2019

Kathryn Cronquist, Sarah Lauffer, Chrystine Tadler, and Sarah Hong

ACKNOWLEDGMENTS

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) 2018, SNAP served an average of 39.7 million people monthly and paid out $60.4 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 units 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 data file 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. This chapter provides a roadmap to the report and summarizes key program and database changes since FY 2017.

Chapter II provides an overview of the SNAP QC System, the resulting raw data file, 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.

---

[1] These estimates of 39.7 million participants and $60.4 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 the database is adjusted to exclude ineligible households issued benefits in error and households that received disaster assistance.

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

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 2018 SNAP QC database and explains how to use it. For each variable in the database, the codebook lists the variable name, the variable origin (whether it came from the raw data file 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 2018 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 SNAP QC database. Appendix C provides information on new and changed variables in the FY 2018 SNAP QC database. Appendix D shows how the monthly sampling weights were derived. Appendix E lists the State and region identification codes used on the file. Appendix F contains the parameter values used to determine SNAP eligibility in FY 2018, 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 FY 2018, Indiana implemented a broad-based categorical eligibility (BBCE) policy, effective January 2018, that includes a Temporary Assistance for Needy Families (TANF) resource limit of $5,000. Colorado and West Virginia both increased the gross income limit for their BBCE policies, effective June 2018, from 130 percent of the Federal poverty guidelines to 200 percent of the Federal poverty guidelines. Otherwise, program rules in FY 2018 are the same as those in FY 2017.

Key changes to the FY 2018 SNAP QC database

The contents of the FY 2018 SNAP QC database are very similar to the contents of the FY 2017 SNAP QC database, with a few minor differences. First, there are no data for Rhode Island for February 2018 and June through September 2018 due to suspended QC operations as a result of systems errors. Thus, the full-year weight (FYWGT) in Rhode Island for FY 2018 is the monthly weight (HWGT) divided by 7 instead of HWGT divided by 12, as in all other States. Second, due to incomplete Program Operations data, we used imputed values for units, participants, or benefits in North Carolina, Rhode Island, and the Virgin Islands in order to weight the FY 2018 QC database. Finally, we made minor changes to two algorithms: (1) reconciling reported

---

[3] The portions of the QC Minimodel code that apply to all of FNS's SNAP microsimulation models are documented in the "2011 MATH SIPP+ Microsimulation Model: Programmer's Guide, Technical Description, and Codebook" (Schechter et al. 2014).

person-level deemed income amounts (DEEMi) with reported unit-level income and deduction variables and (2) the individual indicator for adults age 18–49 without disabilities in childless units (NDISCAi). Sections II.C, III.B, and III.C and Appendix C provide more detail about these changes.

II. OVERVIEW OF THE SNAP QC DATABASE

The SNAP QC database is an edited version of the raw data file 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 43,700 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 data file and the processing and edits that convert the data file to the SNAP QC database.

A. The QC System

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

---

[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 equaled the issued benefit, then the error amount is zero and the case finding is "amount correct."

- If the SNAP unit was eligible and the authorized benefit amount varied from the issued benefit, then the difference between the two amounts is recorded as the error amount, and the case finding is either "overissuance" or "underissuance." Error amounts of $37 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 data file

Although most participating SNAP units in the active case file are subject to sampling, 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 solely through a Disaster SNAP program 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

---

[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 2018 tolerance threshold was $37, a decrease of $1 from FY 2017.

The sampling unit within the active case universe is the SNAP unit, as defined in an FNS-approved State manual. State sampling plans must conform to accepted principles of probability sampling. A State may use either a simple random sampling plan or a more complex sampling design that better 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 2018, all States except Guam chose to use the optional minimum sample size. FNS applies adjustments to State payment error rates when the State's QC review completion rate falls below a threshold of 98 percent. In addition, FNS assigned error rates for Rhode Island due to the State's inability to complete a substantial percentage of reviews.

C.   Creation of the SNAP QC database

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

1.   Preliminary processing

After converting the raw data file into a SAS file, we generate and inspect a series of quality assurance counts and frequency distributions for the values of each variable on the file. We assign missing value codes to data that are illogical or out of range, missing from the file, or coded as unknown in the source file.[6] 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, as detailed in later sections

- Found by the reviewer to be eligible but not qualifying for a positive benefit or 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 and percentage of cases dropped from the FY 2018 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 2018

	FY 2018 SNAP QC sample	Percentage of cases sampled	Percentage of cases subject to review
Number of cases sampled	54,854	100.0	n.a.
Cases not subject to review	2,896	5.3	n.a.
Cases deselected to correct for oversampling	0	0.0	n.a.
Cases subject to review	51,958	94.7	100.0
Incomplete cases	7,238	13.2	13.9
Cases completed	44,720	81.5	86.1
Not eligible for SNAP	584	1.1	1.1
Not eligible for a positive benefit	277	0.5	0.5
Eligible for a positive benefit	43,859	80.0	84.4
Dropped due to unresolved inconsistencies	121	0.2	0.2
SNAP units in the final SNAP QC database	43,738	79.7	84.2

Source: FY 2018 Supplemental Nutrition Assistance Program QC sample.

n.a. = not applicable.

---

[6] See the codebook in Chapter V for the valid values for each variable.

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 data file. 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 with non-elderly 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[7]
  - Excess shelter expense deduction or homeless household shelter deduction

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

---

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

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. Some of the constructed variables (for example, unit-level gross income, net income, and unit size) are edited versions of raw variables while others (such as non-elderly individuals with disabilities) are newly created to more easily identify units and individuals with certain characteristics. 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, TANF or Social Security) is constructed by summing the person-level income of that type over all individuals in the SNAP unit. The total SNAP unit gross income, earned income, and unearned income variables are constructed by summing all the appropriate unit income variables.

- **SNAP eligibility and benefit determination variables.** Variables used to determine eligibility and benefits—such as SNAP unit deductions, SNAP unit net countable 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 a non-elderly individual with a disability. In addition, we merge data from Census Bureau files to identify whether a SNAP unit resides in a metropolitan, micropolitan, or rural area.[8]

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 sampling stratum, the monthly number of SNAP participants by State, and the monthly total benefits issued by State. SNAP Program Operations totals are generated from FNS's National Data Bank and reflect actual levels of participation and benefit issuance. In FY 2018, we used imputed values for units, participants, or benefits in North Carolina, Rhode Island, and the Virgin Islands due to incomplete or inaccurate Program Operations data. As a result, the values used to weight the FY 2018 SNAP QC database do not match FNS administrative records. Specific imputations for these three States are as follows:

- **North Carolina.** North Carolina's Program Operations data revealed missing information for units and participants from February through September 2018 and for benefits from July

---

[8] 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.

through September 2018. In addition, the data included smaller than expected participant counts in October through December 2017. To weight the file, we used preliminary estimates provided by FNS for missing months and used the average household size for the month of January 2018 to impute the count of participants receiving SNAP benefits for October through December 2017.

- **Rhode Island.** Rhode Island Program Operations data was missing information for monthly unit and participant counts from February through September 2018. To weight the file, we imputed values for these counts by first computing the average benefit for participants and units from October 2017 through January 2018 and then dividing the benefit amounts included in the data by the average benefit to derive the imputed number of participants and units.

- **Virgin Islands.** There was a discrepancy between the Virgin Islands Program Operations data and the reported disaster SNAP data, which led to an over-adjustment of SNAP units, participants, and benefits for November and December 2017. To weight the file, we imputed values for November and December 2017 using a weighted average of the totals reported for October 2017 and January 2018.

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.[9] FNS 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 data file. In Section III.C, we describe the derivation of the sampling weights in detail. In Table II.2, we compare the aggregate program participation data for FY 2018 to the QC System sample-based estimates.

---

[9] In FY 2018, we identified about 4.2 million units as receiving benefits issued in error. In addition, about 1.5 million 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 $1.8 billion in benefits. As such, the adjusted totals of SNAP units and benefits are lower than indicated by Program Operations data by about 2 and 7 percent, respectively.

Table II.2. Comparison of program data to edited SNAP QC database, FY 2018

Average monthly value	Program data	Program data with adjustments for incomplete data[a]	Adjustments to program data for disaster assistance[b]	Adjustments to program data for ineligible SNAP units	Edited SNAP QC database
Number of SNAP units	19,725,879	20,179,711	127,773	352,914	19,699,024
Number of participants	39,705,148	40,519,120	363,561	884,772	39,270,787
Value of benefits (dollars)	5,033,982,241	5,069,867,791	146,556,640	221,198,700	4,702,112,451
Average SNAP unit size	2.01	2.01	2.85	2.51	1.99
Average benefit per person (dollars)	126.78	125.12	-	250.01	119.74
Average benefit per household (dollars)	255.20	251.24	-	626.78	238.70

[a]In FY 2018, we used imputed values for units, participants, or benefits in North Carolina, Rhode Island, and the Virgin Islands due to incomplete or inaccurate Program Operations data. As a result, these values, used to weight the FY 2018 SNAP QC database, do not match FNS administrative records. Specific imputations for these three States are described in the weighting section of this chapter.

[b]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 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 on 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 2018 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 2018 SNAP QC file.[10]

Step 1. Obtain data

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

INPUT CD	File: FY2018	(ASCII file)
	Record length 2,250	
	54,856 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_SASIFY18.SAS	
INPUT FILE	FY2018	(ASCII; 54,856 records)
OUTPUT FILE	QCFY2018_1.SAS7BDAT	(54,854 records; 721variables)[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	FREQS18.SAS	
	FREQS18A.SAS	
	FREQS18A_ELG.SAS	
	CMP1718A.SAS	
INPUT FILE	QCFY2018_1.SAS7BDAT	(54,854 records; 721 variables)

---

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

[11] We removed two cases from Rhode Island from the file because they were the only Rhode Island cases completed in their respective months.

Figure III.1. FY 2018 SNAP QC file development process
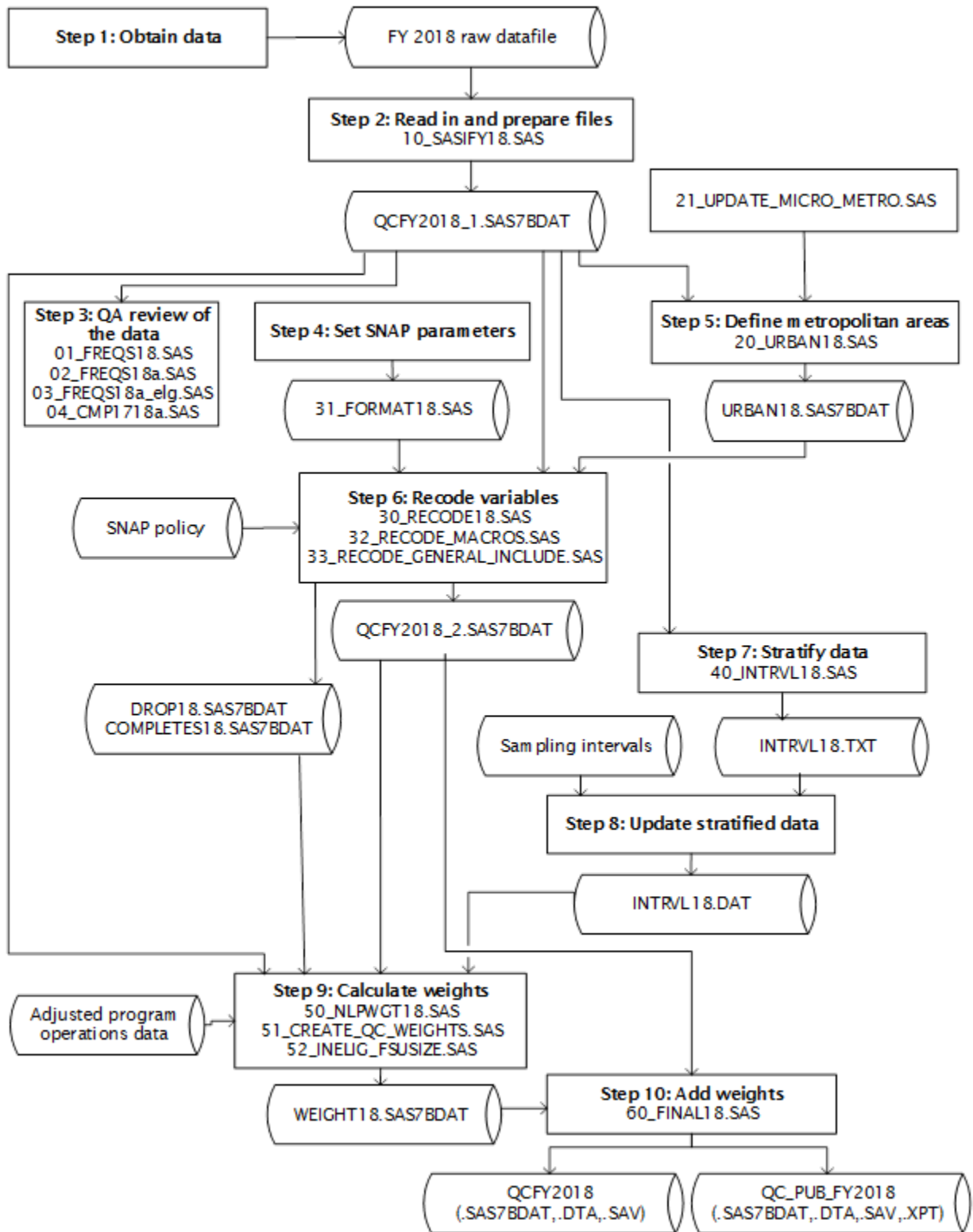
Step 4. Set SNAP parameters

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 use the formats for the program in Step 6.

   OUTPUT PROGRAM   31_FORMAT18.SAS

Step 5. Define metropolitan areas

We added geographic information to the file. Using the local agency code in the raw data file, 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 2017 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 Bureau 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_URBAN18.SAS	
INPUT FILES	QCFY2018_1.SAS7BDAT	(54,854 records; 721 variables)
	METRO2_17.TXT	(ASCII; 1,238 records; 4 variables) (Census 2017 Metropolitan File)
	MICRO2_17.TXT	(ASCII; 661 records; 4 variables) (Census 2017 Micropolitan File)
	FIPS_LAC.TXT	(ASCII; 5,162 records; 6 variables) (Concordance of local area codes.)
OUTPUT FILE	URBAN18.SAS7BDAT	(44,720 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

---

[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.

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 SNAP QC database (43,738 records).

PROGRAM NAME	30_RECODE18.SAS	
INPUT FILES	QCFY2018_1.SAS7BDAT	(54,854 records; 721 variables)
	31_FORMAT18.SAS	(Format library)
	URBAN18.SAS7BDAT	(44,720 records; 5 variables)
OUTPUT FILES	QCFY2018_2.SAS7BDAT	(43,738 records; 1,580 variables)
	COMPLETES18.SAS7BDAT	(44,720 records; 1,582 variables)
	DROP18.SAS7BDAT	(121 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_INTRVL18.SAS	
INPUT FILE	QCFY2018_1.SAS7BDAT	(54,854 records; 721 variables)
OUTPUT FILE	INTRVL18.TXT	(ASCII; 53 records, 4 variables)

Step 8. Update stratified data

No State had a stratified sample in FY 2018, so it was not necessary to edit the INTRVL18.TXT file; we simply saved it as INTRVL18.DAT.

INPUT FILE	INTRVL18.TXT	(ASCII; 53 records; 4 variables)
OUTPUT FILE	INTRVL18.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_NLPWGT18.SAS	
INPUT FILES	QCFY2018_1.SAS7BDAT	(54,854 records; 721 variables)
	QCFY2018_2.SAS7BDAT	(43,738 records; 1,580 variables)
	INTRVL18.DAT	(ASCII; 53 records, 4 variables)
	FY18_ADJUSTED.XLSX	(Excel spreadsheet containing FNS Program Operations data adjusted for disasters)
	COMPLETES18.SAS7BDAT	(44,720 records; 1,582 variables)
	DROP18.SAS7BDAT	(121 records; 1,581 variables)
OUTPUT FILE	WEIGHT18.SAS7BDAT	(44,599 records; 27 variables)

Step 10. Add weights

We merged the file containing weights with the edited SNAP QC file to produce the final FY 2018 SNAP QC files. QCFY2018 is for internal use and includes all variables. QC_PUB_FY2018 is for public use and excludes REVNUM, COUNTYCD, LOCALCOD, AK_AREA, and URBRUR for privacy reasons. The public-use file also excludes two intermediate weighting variables.

PROGRAM NAME	60_FINAL18.SAS	
INPUT FILES	QCFY2018_2.SAS7BDAT	(43,738 records; 1,580 variables)
	WEIGHT18.SAS7BDAT	(44,599 records; 27 variables)
OUTPUT FILES[13]	QCFY2018.SAS7BDAT	(43,738 records; 819 variables)
	QC_PUB_FY2018.SAS7BDAT	(43,738 records; 812 variables)
	QCFY2018.DTA	(43,738 records; 819 variables)
	QC_PUB_FY2018.DTA	(43,738 records; 812 variables)
	QCFY2018.SAV	(43,738 records; 818 variables)
	QC_PUB_FY2018.SAV	(43,738 records; 811 variables)

---

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

QC_PUB_FY2018.XPT   (43,738 records; 812 variables)

After developing the final QCFY2018 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   MINIQC18.SAS

INPUT FILE   QCFY2018.SAS7BDAT   (43,738 records; 819 variables)

OUTPUT FILE   MATHPC.BIN   (43,738 unit records; 96,576 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).

- 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 individual in the unit to construct a measure of the number of members in the SNAP unit under review. An individual 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 2018 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 income (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. Beginning in FY 2018, if the child support exclusion amount is greater than the gross income amount, we set gross income to 0.[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)

---

[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.

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.

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 minus 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

---

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

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 with minor revisions in FY 2017 and FY 2018), if the unit reports no earnings or up to $1 earnings per person in the household, 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 by using the following approach. If the reported earned income deduction indicates zero earnings, we set any person-level earnings to 0. 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

Beginning in FY 2018, if the unit reports an adult age 18–49 without disabilities (DISi = 0) and includes a nonparticipating child (FSAFIL = 19) outside of the unit where RELi = 4 (daughter, stepdaughter, son, or stepson), we change the individual indicator for NDISCAi to 2, indicating that the individual is not an adult without disabilities in a childless unit.

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:

  i.   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 SUA.

  ii. 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:

  i.   QC reviewers recorded a payment error and the calculated benefit is within $5 of the raw benefit adjusted for the error amount.

  ii. QC reviewers recorded no payment errors and the calculated benefit is within $5 of the raw benefit.

  For each condition, we check benefit calculations 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:

_____

[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.

  i. QC reviewers recorded a payment error and the calculated benefit is within $5 of the raw benefit adjusted for the error amount.

  ii. QC reviewers recorded no payment errors and the calculated benefit is within $5 of the raw benefit.

  iii. QC reviewers recorded no payment errors and the calculated shelter deduction is within $5 of the raw shelter deduction.

  iv. 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 benefit calculations with and without allotment adjustments. FY 2018 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 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:

  i. QC reviewers recorded a payment error and the calculated benefit is within $5 of the raw benefit adjusted for the error amount.

  ii. 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.

---

[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.

[18] By the end of FY 2018, standard medical deduction demonstrations were operating in Alabama, Arkansas, California, Colorado, Georgia, Idaho, Illinois, Iowa, Kansas, Massachusetts, Missouri, New Hampshire, North Dakota, Oregon, Rhode Island, South Carolina, South Dakota, Texas, Vermont, Virginia, and Wyoming.

- 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 (GA) benefits, 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 a non-elderly 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 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 $3,500 in countable assets. (See the next section for exceptions.)

We retain on 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) policies

Most States with a BBCE policy align their policy to a program or service that does not include an asset test. However, five States (Idaho, Indiana, Maine, Michigan, and Texas) have an asset

---

[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.

[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.

limit of $5,000 for BBCE units and Nebraska has a financial asset limit of $25,000 for BBCE units.

b. Minnesota Family Investment Program units

MFIP is Minnesota's TANF program, which is 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 2018 was 50 percent after the exclusion of $65 from earned income per wage earner.

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 2018 cash and food portion values.)

Step 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 in the raw data file 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.

---

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

[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).

- The unit has children, positive person-level earnings, and a positive reported earned income deduction equal to 50 percent of the person-level earnings.

Step 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 data file.

- 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.

Step 3. Calculate the earned income deduction. For MFIP units, we calculate the earned income deduction as 50 percent of earnings.

Step 4. Calculate the final deductions. We code all deductions except the earned income deduction and total deduction as missing (.E) for MFIP participants.

Step 5. Calculate the food benefit. 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.

---

[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.

c.   SSI-Combined Application Project units

In FY 2018, 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.[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).

i.   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)

---

[24] New Mexico ended its SSI-CAP demonstration (NMCAP) in March 2014, and the last SSI-CAP benefit was issued in June 2017. There were no NMCAP cases on the file in FY 2018.

[25] The raw variables indicating the actual costs are usually retained.

- Standard Utility Allowance (SUA1 and SUA2)

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	$1,000 or less; greater than $1,000	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 (NJ SNAS)	May 2009	Living alone	65 or older	Unearned	$563 or less; greater than $563	Table F.15
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.16
North Carolina (NCSNAP)	August 2005	Living alone	65 or older	Earned and unearned	Less than $150; $150 or greater	Table F.17
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.18
South Carolina (SCCAP)	October 1995*	Living alone	No age requirement	Unearned	**October 2017—December 2017:** SSI only: $315 or less; greater than $315 SSI and other unearned income: $315 or less; Greater than $315 **January 2018—September 2018:** SSI only: $338 or less; greater than $338 SSI and other unearned income: $338 or less; Greater than $338	Table F.19
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.20
Texas (SNAP-CAP)	September 2002*	Living alone or married	50 or older	Earned or unearned	$400 or less; greater than $400	Table F.21
Virginia (VaCAP)	August 2006	Living alone	65 or older	Unearned	Less than $500; $500 or greater	Table F.22

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

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.22).

- **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 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 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 in 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.19 for SCCAP benefits and income patterns.) If one of the following conditions is true, we flag as MSCAP or SCCAP

---

[26] New York requires NYSNIP participants to be living alone (not just forming one-person SNAP units) and provides data on the QC data file 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.

participants in 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]

- 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 record 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.

---

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

[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.

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

- **SNAP participation and unit size.** According to SNAP-CAP rules, married couples may participate in the program but are treated as separate units. If a unit consists of a married couple, both partners are age 50 or older, and the unit is coded as SNAP participants and receives a SNAP-CAP standard benefit, we keep the first person as an eligible member of the SNAP case under review (FSAFILi = 1) and recode the other as "Eligible SNAP participant in another unit, not currently under review" (FSAFILi = 2). We adjust the variable indicating unit size accordingly (FSUSIZE).

- **Income.** In SNAP-CAP units that originally had more than one individual coded as a SNAP participant, we reset raw gross income (RAWGROSS) equal to the sum of the individual incomes assigned to the one individual who remains a SNAP participant (FSAFILi = 1). In other SNAP-CAP units, we reconcile individual incomes with the original gross income.

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.18.

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.19.

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.20.

ii.   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 on 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)[a]	December 2001*	Living alone	18 or older	Unearned	Less than $320; $320 or greater

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

[a]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.23 lists benefit calculations for all States with a standard shelter expense SSI-CAP program.

d.   Standard medical deduction demonstration programs

Twenty-one 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 a non-elderly 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 adjustment
Alabama	October 2014	HCSUA was reduced by $10.
Arkansas	September 2016	HCSUA was reduced by $4.
California	October 2017	HCSUA was reduced by $3.
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.

Table III.4 *(Continued)*

State	Start date (of current waiver)	Cost neutrality adjustment
Massachusetts	April 2013	HCSUA was reduced by $9.
Missouri	October 2016	HCSUA was reduced by $14.
New Hampshire	October 2015	HCSUA was reduced by $7.
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 $10.
South Carolina	November 2015	HCSUA was reduced by $14.
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 $14.
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 2018.)

---

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

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 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) and (2) 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

---

[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.

period can be obtained by dividing HWGT by the number of months being analyzed. Monthly totals for Rhode Island in months February, June, July, August, and September are not available due to missing data. National 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, where FYWGT is HWGT divided by 7.

IV. DEVELOPMENT OF THE 2018 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

3a.   Input file for Step 1

QCFY2018.SAS7BDAT   Final SNAP QC database, in SAS format

3b.   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)

---

[32] MATH stands for Micro Analysis of Transfers to Households.

3c.　Program for Step 1

sas2bin.SAS

3d.　Output variables for Step 1

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

3e.　Input files for Step 2

MATHPC.HDR	From Step 1
MATHPC.BIN	From Step 1

3f.　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

3g.　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.

3h.　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.

4a.　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)

4b. Create preliminary header file

We edit by hand the MATHPC.HDR file so that its record layout matches the output statement in SAS2BIN.SAS.

4c. Create final binary and header files

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

```
MATHPC.BIN   FILE NAME
09/23/2019   CREATION DATE
09:25:07.48  CREATION TIME
    FY2018   BASE YEAR
    FY2018   YEAR AGED TO
       avg   SIMULATION MONTH
     43738   HOUSEHOLD COUNT
   QC MINI   MODEL LABEL
   2018.00   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 $DIS_i = 1$; and 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 $CTZN > 2$; and sets FSNONCIT to 0 for all other individuals

- Creates a person-level variable FSNABAWD (the number of adults without disabilities age 18–49 in childless units) on the unit head's record, by summing over individuals in the unit with $NDISCA = 1$; and 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 United States, 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_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

3a. 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]

3b. 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

---

[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.

3c. Programs

i.   Subroutines

db_fs_counts	Increments debug counters and prints totals to MATHPC.OUT file.
db_fs_hh_definers	Creates variables that describe fixed characteristics of the SNAP household, such as the geographic indices used in the income screens and benefit calculations; if 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; also storage for the standard medical deduction demonstration program parameters
fs_dbwork	Common storage for some working variables.

3d. 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).

4a. 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
```

4b. 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 multisimulation 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.

4c. 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	

4d. 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                      !! alaska urban is default
        geog_ben = 2
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)
```

4e. 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
```

4f.   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 the 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
        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)
```

---

[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_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-age children, number of toddlers (children under age 2), and number of children older than toddlers

- Number of elderly members

- Number of noncitizens

- Number of able-bodied adults without dependents (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
```

4g. Impute assets, shelter expenses, medical expenses, homeless household shelter deduction, and child support expenses when the 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 non-elderly 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 non-elderly individuals with disabilities in the original unit. If the original unit contains no elderly individuals and no non-elderly 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 non-elderly individuals with disabilities in the policy change simulation relative to the number of elderly individuals and non-elderly 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 21 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
```

4h. 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 2018 SNAP QC DATABASE

In this chapter, we describe the variables on the FY 2018 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 2018 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 data file, 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:

Variable	Description
FSBEN	Final calculated benefit
FSUSIZE	Constructed certified unit size
FSGRINC	Final gross countable unit income
FSNETINC	Final net countable unit income
FSERNDED	Calculated earned income deduction
TPOV	Gross income/poverty level ratio

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 2018 SNAP QC database is a SAS file with 43,738 observations from 12 sample months—October 2017 through September 2018—for all States (except Rhode Island), the District of Columbia, Guam, and the Virgin Islands. Rhode Island has no observations for February 2018 and June through September 2018 due to suspended QC operations as a result of systems errors. 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 2018, the user should select all observations with a YRMONTH code equal to "201801."

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 a 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, where FYWGT equals HWGT divided by 7 because of the five months of unavailable data in this 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 2018 SNAP QC database. The unit-level variables are listed first, followed by the person-level variables and then the detailed error findings variables, for a total of nine categories.

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

1.   Unit-level QC review administrative data

2.   Unit-level demographics and sample weights

3.   Unit-level countable income

4.   Unit-level countable assets

5.   Unit-level expenses and deductions

6.   Unit-level benefits

The person-level variables are divided into two categories:

7.   Person-level characteristics

8.   Person-level income

One category covers detailed error findings variables:

9.   Detailed error findings

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

Note: Detailed information on each variable in the database can be found starting on page 64.

Table V.2. Quick-reference codebook

Variable	Origin*	Description
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 18–49 without disabilities in childless units

Variable	Origin*	Description
FSNELDER	C	Number of elderly individuals in unit
FSNGMOM	C	Indicator of single-female-headed unit
FSNK0T4	C	Number of preschool-age children in unit
FSNK5T17	C	Number of school-age children in unit
FSNKID	C	Number of children in unit
FSNONCIT	C	Number of noncitizens in unit
FSUSIZE	C	Constructed certified unit size
FYWGT	C	Weight used for full-year calculations
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

Variable	Origin*	Description
FSSLFEMP	C	Countable unit self-employment income
FSSOCSEC	C	Countable unit Social Security income
FSSSI	C	Countable unit SSI benefits
FSTANF	C	Countable unit TANF payments
FSUNEARN	C	Countable unit unearned income
FSUNEMP	C	Countable unit unemployment compensation benefits
FSVET	C	Countable unit veterans' benefits
FSWAGES	C	Countable unit wages and salaries
FSWCOMP	C	Countable unit workers' compensation benefits
FSWGESUP	C	Countable unit wage supplementation income
RAWGROSS	R	Reported gross countable unit income
RAWNET	R	Reported net countable unit income

Unit countable and reported assets

Variable	Origin*	Description
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

Variable	Origin*	Description
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

Variable	Origin*	Description
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
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

Variable	Origin*	Description
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 18–49 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 care income
GAi	R	Countable General Assistance benefits
OTHERNi	R	Countable other earned income
OTHGOVi	R	Countable income from other government benefits
OTHUNi	R	Countable other unearned income
SLFEMPi	R	Countable self-employment income
SOCSECi	R	Countable Social Security income
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

Variable	Origin*	Description
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

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

Unit QC review administrative data

Variable	Origin	Description
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, 795)
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, 2487)
CASE	**R**	**CASE CLASSIFICATION**
		Range = (1, 2)
		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
CERTMTH	**R**	**MONTHS IN CERTIFICATION PERIOD**
		Range = (0, 97)
		Number of months SNAP unit was certified to participate during current certification or recertification period

Variable	Origin	Description
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, 54854)
		Position of unit in unedited SNAP QC file (unique unit identifier)
LASTCERT	**C**	**MONTHS SINCE LAST SNAP CERTIFICATION**
		Range = (0, 99)
LOCALCOD	**R**	**LOCAL AGENCY CODE (not retained on public use file)**
		Range = (0, 930)
		Designates local agency and allows grouping of data by county or county equivalent (may be FIPS code or alternative classification)
MED_DED_DEMO	**C**	**INDICATOR OF 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
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 = (20060630, 20180928)
		Date the case was certified or recertified for participation in sample month under review (in yyyymmdd format)

Variable	Origin	Description
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, 990593)
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
STATUS	**R**	**STATUS OF CASE ERROR FINDINGS**
		Range = (1, 3)
		1 = Amount correct
		2 = Overissuance
		3 = Underissuance
YRMONTH	**R**	**SAMPLE YEAR AND MONTH**
		Range = (201710, 201809)
		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 2018, for example, YRMONTH should equal 201801.

Unit demographics and sample weights

Variable	Origin	Description
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, 16)
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, 16)
		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 (DISi = 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
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, 6)
		Number of individuals in the unit that are defined as disabled (DISi = 1)
FSNDISCA	**C**	**NUMBER OF ADULTS AGE 18–49 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 18–49 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, 6)
		Number of children under age 5 in SNAP unit
FSNK5T17	**C**	**NUMBER OF SCHOOL-AGE CHILDREN IN UNIT**
		Range = (0, 11)
		Number of children age 5–17 in SNAP unit
FSNKID	**C**	**NUMBER OF CHILDREN IN UNIT**
		Range = (0, 11)
		Number of children under age 18 in SNAP unit
FSNONCIT	**C**	**NUMBER OF NONCITIZENS IN UNIT**
		Range = (0, 9)
		Number of people with FSAFILi = 1 and CTZNi >= 3

Variable	Origin	Description
FSUSIZE	**C**	**CONSTRUCTED CERTIFIED UNIT SIZE**
		Range = (1, 16)
		Number of people with FSAFILi = 1
FYWGT	**C**	**WEIGHT USED FOR FULL-YEAR CALCULATIONS**
		Range = (3.30, 6214.28)
		Calculated as HWGT/12 for all States except for Rhode Island, where defined as HWGT/7
HWGT	**C**	**MONTHLY SAMPLE WEIGHT**
		Range = (39.55, 74571.40)
		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, 16)
REGION	**C**	**CONSTRUCTED CENSUS REGION CODE**
		Range = (1, 4)
		1 = Northeast
		2 = Midwest
		3 = South
		4 = West
		See Appendix E (Table E.3) for a list of States in each region.
REGIONCD	**R**	**FNS REGION CODE**
		Range = (1, 7)
		1 = Northeast
		2 = Mid-Atlantic
		3 = Southeast
		4 = Midwest
		5 = Southwest
		6 = Mountain Plains
		7 = West
		See Appendix E (Table E.2) for a list of States in each region.

Variable	Origin	Description
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, 746)
		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.
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, Guam, Nebraska, Nevada, New Hampshire, Oklahoma, Utah, Vermont, the Virgin Islands, 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

Unit countable income (monthly dollar amounts)

Variable	Origin	Description
FSCONT	**C**	**COUNTABLE UNIT INCOME FROM CONTRIBUTIONS**
		Range = (0, 2550)
		Sum of CONT1 through CONT16
FSCSUPRT	**C**	**COUNTABLE UNIT CHILD SUPPORT PAYMENT INCOME**
		Range = (0, 2571)
		Sum of CSUPRT1 through CSUPRT16
FSDEEM	**C**	**COUNTABLE UNIT DEEMED INCOME**
		Range = (0, 1771)
		Sum of DEEM1 through DEEM16
FSDIVER	**C**	**COUNTABLE UNIT STATE DIVERSION PAYMENTS**
		Range = (0, 663)
		Sum of DIVER1 through DIVER16
FSEARN	**C**	**COUNTABLE UNIT EARNED INCOME**
		Range = (0, 7500)
		Sum of FSWAGES, FSSLFEMP, and FSOTHERN
FSEDLOAN	**C**	**COUNTABLE UNIT INCOME FROM EDUCATIONAL GRANTS AND LOANS**
		Range = (0, 1958)
		Sum of EDLOAN1 through EDLOAN16
FSEITC	**C**	**COUNTABLE UNIT INCOME FROM EARNED INCOME TAX CREDIT**
		Range = (0, 728)
		Sum of EITC1 through EITC16
FSENERGY	**C**	**COUNTABLE UNIT ENERGY ASSISTANCE INCOME**
		Range = (0, 909)
		Sum of ENERGY1 through ENERGY16
FSFOSTER	**C**	**COUNTABLE UNIT FOSTER CARE INCOME**
		Range = (0, 1302)
		Sum of FOSTER1 through FOSTER16
FSGA	**C**	**COUNTABLE UNIT GENERAL ASSISTANCE BENEFITS**
		Range = (0, 1973)
		Sum of GA1 through GA16
FSGRINC	**C**	**FINAL GROSS COUNTABLE UNIT INCOME**
		Range = (0, 7500)
		Total monthly gross income of unit (sum of FSEARN and FSUNEARN)

Variable	Origin	Description
FSNETINC	**C**	**FINAL NET COUNTABLE UNIT INCOME**
		Range = (0, 6006)
		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, 1620)
		Sum of OTHERN1 through OTHERN16
FSOTHGOV	**C**	**COUNTABLE UNIT INCOME FROM OTHER GOVERNMENT BENEFITS**
		Range = (0, 3948)
		Sum of OTHGOV1 through OTHGOV16
FSOTHUN	**C**	**COUNTABLE UNIT OTHER UNEARNED INCOME**
		Range = (0, 2933)
		Sum of OTHUN1 through OTHUN16
FSSLFEMP	**C**	**COUNTABLE UNIT SELF-EMPLOYMENT INCOME**
		Range = (0, 3711)
		Sum of SLFEMP1 through SLFEMP16
FSSOCSEC	**C**	**COUNTABLE UNIT SOCIAL SECURITY INCOME**
		Range = (0, 3601)
		Sum of SOCSEC1 through SOCSEC16
FSSSI	**C**	**COUNTABLE UNIT SSI BENEFITS**
		Range = (0, 4170)
		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, 1439)
		Sum of TANF1 through TANF16
FSUNEARN	**C**	**COUNTABLE UNIT UNEARNED INCOME**
		Range = (0, 4251)
		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, 2602)
		Sum of UNEMP1 through UNEMP16

Variable	Origin	Description
FSVET	**C**	**COUNTABLE UNIT VETERANS' BENEFITS**
		Range = (0, 3762)
		Sum of VET1 through VET16
FSWAGES	**C**	**COUNTABLE UNIT WAGES AND SALARIES**
		Range = (0, 7500)
		Sum of WAGES1 through WAGES16
FSWCOMP	**C**	**COUNTABLE UNIT WORKERS' COMPENSATION BENEFITS**
		Range = (0, 3665)
		Sum of WCOMP1 through WCOMP16
FSWGESUP	**C**	**COUNTABLE UNIT WAGE SUPPLEMENTATION INCOME**
		Range = (0, 300)
		Sum of WGESUP1 through WGESUP16
RAWGROSS	**R**	**REPORTED GROSS COUNTABLE UNIT INCOME**
		Range = (0, 7500)
		Reported total monthly countable income of unit before applying deductions (see FSGRINC for final value)
RAWNET	**R**	**REPORTED NET COUNTABLE UNIT INCOME**
		Range = (0, 6005)
		Reported total monthly countable income of unit after applying deductions (see FSNETINC for final value)

Unit countable assets

Variable	Origin	Description
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, 18062)
		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, 3997)
LIQRESOR	**C**	**COUNTABLE LIQUID ASSETS UNDER STATE RULES**
		Range = (0, 16657)
OTHNLRES	**C**	**COUNTABLE OTHER NONLIQUID ASSETS UNDER STATE RULES**
		Range = (0, 17136)
RAWLQRES	**R**	**REPORTED LIQUID ASSETS**
		Range = (0, 93800)
RAWOTRES	**R**	**REPORTED OTHER NONLIQUID ASSETS**
		Range = (0, 17136)
RAWRPROP	**R**	**REPORTED REAL PROPERTY**
		Range = (0, 2710)
		Does not include home
RAWVHAST	**R**	**REPORTED NON-EXCLUDED VEHICLES' VALUE**
		Range = (0, 3997)
REALPROP	**C**	**COUNTABLE REAL PROPERTY UNDER STATE RULES**
		Range = (0, 2710)
		Does not include home
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

Variable	Origin	Description
		5 = Vehicle excluded under State TANF standard (vehicle of noncategorically 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 noncategorically 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)

Unit expenses and deductions

Variable	Origin	Description
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, 2666)
		Child support expenses excluded before gross income test rather than before net income test for eligibility
FSCSDED	**C**	**CHILD SUPPORT PAYMENT DEDUCTION**
		Range = (0, 1574)
		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, 2666)
		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, 2045)
		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
FSDEPDE2	**C**	**MARGINAL EFFECTIVENESS OF DEPENDENT CARE DEDUCTION**[37]
		Range = (0, 1856)
		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, 1500)

---

[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
		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, 1500)
		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, 3917)
		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
FSMEDDE2	**C**	**MARGINAL EFFECTIVENESS OF MEDICAL EXPENSE DEDUCTION**
		Range = (0, 4091)
		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, 3917)
		Allowable medical expenses in excess of $35 for elderly adults or individuals with disabilities
FSSLTDED	**C**	**CALCULATED EXCESS SHELTER EXPENSE DEDUCTION**
		Range = (0, 2479)
		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, 2258)
		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, 5674)
		Sum of RENT and UTIL

Variable	Origin	Description
FSSTDDED	**C**	**STANDARD DEDUCTION**
		Range = (141, 457)
		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, 686)
		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, 4744)
		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, 4251)
		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.
RENT	**R**	**RENT/MORTGAGE AMOUNT**
		Range = (0, 3000)
		Some values for SSI-CAP units have been edited to apply standard shelter allowances.

Variable	Origin	Description
SHELCAP	**C**	**MAXIMUM ALLOWABLE SHELTER EXPENSE DEDUCTION**

Range = (421, 854)

SHELCAP varies by region. See Appendix F for values.

Variable	Origin	Description
SHELDED	**R**	**REPORTED SHELTER DEDUCTION**

Range = (0, 99998)

See FSSLTDED for the final value.

Variable	Origin	Description
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
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.

Variable	Origin	Description
UTIL	**R**	**UTILITY AMOUNT**

Range = (0, 5556)

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

Unit benefits

Variable	Origin	Description
AMTERR	**R**	**AMOUNT OF BENEFIT IN ERROR**
		Range = (0, 851)
		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 = (192, 2949)
		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, 2123)
		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
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

Variable	Origin	Description
		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 = (1307, 10134)
		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.
MINIMUM_BEN	**C**	**MINIMUM BENEFIT AMOUNT**
		Range = (15, 29)
		See Appendix Table F.6 for minimum monthly SNAP benefit amounts for FY 2018.
NETSCRN	**C**	**NET INCOME SCREEN**
		Range = (1005, 7794)
		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, 3154)
		Reported amount of SNAP benefits that the unit was certified to receive during the sample month (see FSBEN for final value)

Person-level characteristics: i = 1 to 16

Variable	Origin	Description
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 Indiana, Nevada, North Dakota, Texas, Utah, Vermont, and Wyoming 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
CTZN1 to CTZN16	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

Variable	Origin	Description
DIS1 to DIS16	**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.
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, 1500)
		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
EMPSTA1 to EMPSTA16	**R**	**EMPLOYMENT STATUS—TYPE**
		Range = (1, 8)
		Person 1 through Person 16

Variable	Origin	Description
		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)
FSAFIL1 to FSAFIL16	**R**	**SNAP CASE AFFILIATION**
		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, Hawaii, Idaho, Maryland, Minnesota, North Dakota, and Ohio. 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)

Variable	Origin	Description
		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
FSUN1 to FSUN16	**C**	**POSITION OF HEAD OF SNAP UNIT**
		Range = (0, 9)
		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 18–49 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 18–49 without disabilities in childless unit
		2 = Age 18–49, but not adult without disabilities in childless unit
RACETH1 to RACETH16	**R**	**RACE/ETHNICITY**
		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

Variable	Origin	Description
		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)
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

Variable	Origin	Description
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
YRSED1 to YRSED16	**R**	**HIGHEST EDUCATIONAL LEVEL COMPLETED**
		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

Variable	Origin	Description
		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 postgraduate degree

Person-level countable income (monthly dollar amounts): i = 1 to 16[38]

Variable	Origin	Description
CONT1 to CONT16	**R**	**COUNTABLE INCOME FROM CONTRIBUTIONS**
		Range = (0, 2550)
		Person 1 through Person 16
		Amount of contributions, charity, and in-kind income
CSUPRT1 to CSUPRT16	**R**	**COUNTABLE CHILD SUPPORT PAYMENT INCOME**
		Range = (0, 2216)
		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, 1771)
		Person 1 through Person 16
		Income deemed from sponsor of noncitizen member of unit
DIVER1 to DIVER16	**R**	**COUNTABLE STATE DIVERSION PAYMENTS**
		Range = (0, 663)
		Person 1 through Person 16
EDLOAN1 to EDLOAN16	**R**	**COUNTABLE INCOME FROM EDUCATIONAL GRANTS AND LOANS**
		Range = (0, 1958)
		Person 1 through Person 16
		Educational grants, scholarships, and loans
EITC1 to EITC16	**R**	**COUNTABLE INCOME FROM EARNED INCOME TAX CREDIT**
		Range = (0, 728)
		Person 1 through Person 16
ENERGY1 to ENERGY16	**R**	**COUNTABLE ENERGY ASSISTANCE INCOME**
		Range = (0, 909)
		Person 1 through Person 16
FOSTER1 to FOSTER16	**R**	**COUNTABLE FOSTER CARE INCOME**
		Range = (0, 1419)
		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
GA1 to GA16	**R**	**COUNTABLE GENERAL ASSISTANCE BENEFITS**
		Range = (0, 1973)
		Person 1 through Person 16
OTHERN1 to OTHERN16	**R**	**COUNTABLE OTHER EARNED INCOME**
		Range = (0, 1620)
		Person 1 through Person 16
OTHGOV1 to OTHGOV16	**R**	**COUNTABLE INCOME FROM OTHER GOVERNMENT BENEFITS**
		Range = (0, 3948)
		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, 2933)
		Person 1 through Person 16
		Includes alimony, foster care income, 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, 3474)
		Person 1 through Person 16
		Net income from any self-employment enterprise
SOCSEC1 to SOCSEC16	**R**	**COUNTABLE SOCIAL SECURITY INCOME**
		Range = (0, 2841)
		Person 1 through Person 16
SSI1 to SSI16	**R**	**COUNTABLE SSI BENEFITS**
		Range = (0, 2205)
		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
TANF1 to TANF16	**R**	**COUNTABLE TANF PAYMENTS**
		Range = (0, 1439)
		Person 1 through Person 16
		Assigned to payee or principal person of assistance group

Variable	Origin	Description
UNEMP1 to UNEMP16	**R**	**COUNTABLE UNEMPLOYMENT COMPENSATION UNEMP16 BENEFITS**
		Range = (0, 2602)
		Person 1 through Person 16
VET1 to VET16	**R**	**COUNTABLE VETERANS' BENEFITS**
		Range = (0, 3762)
		Person 1 through Person 16
WAGES1 to WAGES16	**R**	**COUNTABLE WAGES AND SALARIES**
		Range = (0, 7500)
		Person 1 through Person 16
		Amount of wages, salaries, tips, and commission
WCOMP1 to WCOMP16	**R**	**COUNTABLE WORKERS' COMPENSATION BENEFITS**
		Range = (0, 3665)
		Person 1 through Person 16
WGESUP1 to WGESUP16	**R**	**COUNTABLE WAGE SUPPLEMENTATION INCOME**
		Range = (0, 300)
		Person 1 through Person 16
		Earnings above cash assistance and/or SNAP benefit amount

Detailed error findings: i = 1 to 9

Variable	Origin	Description
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, 829)
		Variance 1 through Variance 9
		Dollar amount of variance
DISCOV1 to DISCOV9	**R**	**VARIANCE DISCOVERY**
		Range = (1, 9)
		Variance 1 through Variance 9
		How variance was discovered
		1 = Variance clearly identified from case record (documentation not from an automated match)
		2 = Variance clearly identified from case record (documentation from an automated match)

Variable	Origin	Description
		3 = Variance discovered from recipient interview
		4 = Employer (present or former)
		5 = Financial institution, insurance company, or other business
		6 = Landlord
		7 = Government agency or public records, not automated match
		8 = Government agency or public records, automated match
		9 = Other
E_FINDG1 to E_FINDG9	**R**	**ERROR FINDING**
		Range = (2, 4)
		Variance 1 through Variance 9
		Impact of variance
		2 = Overissuance
		3 = Underissuance
		4 = Ineligible
ELEMENT1 to ELEMENT9	**R**	**VARIANCE ELEMENT**
		Range = (111, 820)
		Variance 1 through Variance 9
		Element of variance
		111 = Student status
		130 = Citizenship and noncitizen status
		140 = Residency
		150 = Unit composition
		151 = Recipient disqualification
		160 = Employment and training programs
		161 = Time-limited participation
		162 = Work registration requirements
		163 = Voluntary quit/reduced work effort
		164 = Workfare and comparable workfare
		165 = Employment status/job availability
		166 = Acceptance of employment
		170 = Social Security number
		211 = Bank accounts or cash on hand
		212 = Nonrecurring lump-sum payment
		213 = Other liquid assets

Variable	Origin	Description
		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

Variable	Origin	Description
NATURE1 to NATURE9	**R**	**NATURE OF VARIANCE**

Range = (6, 308)

Variance 1 through Variance 9

Nature of each variance

6 = Eligible person(s) excluded

7 = Ineligible person(s) included

12 = Eligible person(s) with no income, resources, or deductible expenses excluded

13 = Eligible person(s) with income excluded

14 = Eligible person(s) with resources excluded

15 = Eligible person(s) with deductible expenses excluded

16 = Newborn improperly excluded

20 = Incorrect resource limit applied

24 = Resource should have been excluded

28 = Incorrect income limit applied

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

Variable	Origin	Description
		77 = Unit not entitled to transitional benefits
		79 = Incorrect use of allotment tables
		80 = Improper prorating of initial month's benefits
		97 = Not required to be reported or acted upon based on time frames and reporting requirements for allotment differences below the $50 threshold
		98 = Transcription or computation errors
		99 = Other
		111 = Child support payment(s) not considered or incorrectly applied for initial month(s) of eligibility
		112 = Retained child support payment(s) not considered or incorrectly applied
		120 = Variance/errors resulting from noncompliance with this means-tested public assistance program
		123 = Incorrectly prorated
		124 = Variances resulting from use of automatic Federal information exchange system
		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 = (199805, 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

Variable	Origin	Description
		2 = At time of most recent action by agency
		3 = After most recent action by agency
		9 = Time of occurrence cannot be determined
VERIF1 to VERIF9	**R**	**VARIANCE VERIFICATION**
		Range = (1, 9)
		Variance 1 through Variance 9
		Indicates how each variance was verified
		1 = From case record (verification not from an automated match)
		2 = From case record (verification from an automated match)
		3 = From information provided by recipient
		4 = Employer (present or former)
		5 = Financial institution, insurance company, or other business
		6 = Landlord
		7 = Government agency or public records, not automated match
		8 = Government agency or public records, automated match
		9 = Other

REFERENCES

Lauffer, Sarah, Alma Vigil, Chrystine Tadler, and Elaine Wilcox-Cook. "Technical Documentation for the Fiscal Year 2017 Supplemental Nutrition Assistance Program Quality Control Database and the QC Minimodel." Washington, DC: Mathematica Policy Research, October 2018.

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 2018 SNAP QC DATABASE

We assessed the quality of the data for variables in the FY 2018 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 for FY 2018. Rhode Island experienced suspended QC operations for several months during FY 2018 as a result of systems issues. Due to missing and incomplete data, the edited QC data file does not include information on participants from Rhode Island in February, June, 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 Indiana, Nevada, North Dakota, Texas, Utah, Vermont, and Wyoming

- DPCOSTi and FSDEPDED for State-level tabulations

- FSAFILi for State-level tabulations of nonparticipants in West Virginia

- FSTANF in Minnesota

- URBRUR for State-level tabulations in Alabama, Guam, Nebraska, Nevada, New Hampshire, Oklahoma, Utah, Vermont, the Virgin Islands, and Washington (not retained in public use file)

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, Hawaii, Idaho, Maryland, Minnesota, North Dakota, and Ohio

- 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 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 Indiana, Nevada, North Dakota, Texas, Utah, Vermont, and Wyoming.

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 (20 percent in California, 7 percent in Montana, and 6 percent in Nevada). Furthermore, sample sizes are small in most States. As a result, 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. In West Virginia, a little over 90 percent 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.   TANF recipients in the Minnesota Family Investment Program (MFIP) (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.

5.   Locality (URBRUR)

Four States (Guam, Nebraska, Utah, and the Virgin Islands) 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 four 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 377,000 weighted participants with an ABWDSTi code indicating they are an ABAWD meeting work requirements, 58 percent have a WRKREGi code indicating they are exempt from work registration and thus do not have work requirements. 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 other variables indicating employment and training status. For example, there are a number of cases with contradicting values for participation in employment and training programs, specifically those coded as participating based on WRKREG (work registration status) and not participating based on EMPRG. In addition, we noticed inconsistencies between YRSEDi (years of education) and EMPRGi when defining the participant's level of education completed. 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 12,806 unweighted participants coded as working more than one hour and employed, 363 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 in Section C of this appendix, West Virginia has a very high percentage of missing or unknown values for nonparticipants. Additionally, there are 7 states where more than 5 percent of nonparticipants have missing or unknown values. We recommend caution when using FSAFILi for State-level tabulations of nonparticipants in the District of Columbia, Hawaii, Idaho, Maryland, Minnesota, North Dakota, and Ohio.

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 2018 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 California (FSTANF)

The percentage of weighted California SNAP units that are pure PA units appears to be too high when 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 18–49 without disabilities in childless units (NDISCAi and FSNDISCA)

We recommend use of NDISCAi and FSNDISCA, 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 data file may underestimate the actual number of SSI-CAP units in some States. Therefore, we recommend caution when using SSI_CAP.

---

[1] See Section III.2 for details on States implementing SSI-CAP programs during FY 2018.

9.   Locality (URBRUR)

Because of concerns about the representativeness of the sample within a State, 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 2018 file of likely miscoding of this variable. For example, we found some inconsistencies between WRKREGi and DISi, which captures additional indicators of disability. Eighteen 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 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 2018 SNAP QC raw data file, we were able to resolve some inconsistencies in the raw data file 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 data file 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 data file 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 non-elderly 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 data file 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:

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

  ii.   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.

  iii. 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:

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

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

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

  iv.   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.

   v.   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.

  vi.   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 data file 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 data file 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 in the raw file to 0 for units that are not categorically eligible and to 1 for units reported as categorically eligible. 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 Federal poverty guidelines and either (1) gross income at or below 130 percent of poverty guidelines or (2) only elderly individuals or individuals with disabilities and gross income at or below 200 percent of poverty guidelines

- Arizona, Connecticut, New Jersey, Oregon, and Vermont. All units with gross income at or below 185 percent of Federal poverty guidelines

- 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 Federal poverty guidelines

- Colorado. Through May 2018, all units with net income at or below 100 percent of Federal poverty guidelines and either (1) gross income at or below130 percent of poverty guidelines or (2) at least one elderly individual or individual with a disability and gross income at or below 200 percent of poverty guidelines; as of June 2018, all units with net income at or below 100 percent of poverty guidelines and gross income at or below 200 percent of poverty guidelines

---

[4] Throughout FY 2018, 48 States mandated the use of an SUA rather than actual utility costs. The 48 States include Alaska, which mandates the use of an SUA for the Central geographic region.

- Georgia. All units with (1) gross income at or below 130 percent of Federal poverty guidelines or (2) only elderly individuals or individuals with disabilities and gross income at or below 200 percent of poverty guidelines

- Guam, Minnesota, and New Mexico. All units with gross income at or below 165 percent of Federal poverty guidelines

- Idaho. All units with countable assets at or below $5,000, net income at or below 100 percent of Federal poverty guidelines, and either (1) gross income at or below 130 percent of poverty guidelines or (2) at least one elderly individual or individual with a disability

- Indiana. As of January 2018, all units with countable assets at or below $5,000 and either (1) gross income at or below 130 percent of Federal poverty guidelines 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 Federal poverty guidelines or (2) at least one elderly individual or individual with a disability and gross income at or below 200 percent of poverty guidelines

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

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

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

- Massachusetts. All units with net income at or below 100 percent of Federal poverty guidelines and gross income at or below 200 percent of poverty

- Michigan. All units with gross income at or below 200 percent of Federal poverty guidelines and countable assets at or below $5,000

- Mississippi and Oklahoma. All units with net income at or below 100 percent of Federal poverty guidelines and either (1) gross income at or below 130 percent of poverty guidelines 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 Federal poverty guidelines and gross income at or below 200 percent of poverty guidelines

- Nebraska. All units with net income at or below 100 percent of Federal poverty guidelines, countable financial assets at or below $25,000, and either (1) gross income at or below 130 percent of poverty guidelines 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 Federal poverty guidelines

- New York. All units with (1) gross income at or below 130 percent of Federal poverty guidelines, (2) earned income and gross income at or below 150 percent of poverty

guidelines, (3) at least one elderly individual or individual with a disability and gross income at or below 200 percent of poverty guidelines, or (4) dependent care expenses and gross income at or below 200 percent of poverty guidelines

- Pennsylvania. All units with (1) gross income at or below 160 percent of Federal poverty guidelines or (2) at least one elderly individual or individual with a disability and gross income at or below 200 percent of poverty guidelines

- Rhode Island. All units with (1) gross income at or below 185 percent of Federal poverty guidelines or (2) at least one elderly individual or individual with a disability and gross income at or below 200 percent of poverty guidelines

- Texas. All units with gross income at or below 165 percent of Federal poverty guidelines and countable assets at or below $5,000

- Virgin Islands. All units with (1) gross income at or below 175 percent of Federal poverty guidelines or (2) at least one elderly individual or individual with a disability and gross income at or below 200 percent of poverty guidelines

- West Virginia. Through May 2018, all units with (1) gross income at or below 130 percent of Federal poverty guidelines or (2) only elderly individuals or individuals with disabilities, no earned income, and gross income at or below 200 percent of poverty guidelines; as of June 2018, all units with gross income at or below 200 percent of poverty guidelines

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

    i. 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.

    ii.   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.

    iii.   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:

    i.   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 data file, does not have a related dependent (age 17 or under, RELi = 4 or 5) receiving Social Security in the unit

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

    iii.   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:

    i.   Individuals with a work registration status indicating disability (code all such individuals as disabled)

    ii.   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)

    iii.   Individuals receiving Social Security, veterans' benefits, or workers' compensation (code all such individuals as disabled)

    iv.   Child coded as working fewer than 30 hours per week (code first as disabled)

    v.   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 data file, 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 data file, 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 data file, 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 2018 SNAP QC DATABASE

New variables in the FY 2018 SNAP QC database

None

Variables changed in the FY 2018 SNAP QC database

NDISCAi   The NDISCAi algorithm was slightly adjusted to no longer count as an adult without disabilities in a childless unit (NDISCAi = 1) any nondisabled adults who have a child outside of the SNAP unit (FSAFILi = 19 and RELi = 4).

Note: Information on variables in the FY 2017 SNAP QC database appears in *Technical Documentation for the Fiscal Year 2017 SNAP QC Database and QC Minimodel* (Lauffer et al. 2018).

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 2018 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 2017 to April 2018)

State	October 2017	November 2017	December 2017	January 2018	February 2018	March 2018	April 2018
Alabama	365,285	347,784	356,852	361,926	352,002	355,146	345,670
Alaska	36,269	43,466	41,977	42,141	39,820	38,481	40,167
Arizona	403,825	382,121	390,739	385,366	365,001	371,671	372,828
Arkansas	165,663	163,305	165,203	158,299	164,573	165,782	164,912
California	1,905,239	1,933,402	1,937,703	1,908,755	1,887,188	1,930,404	1,916,236
Colorado	214,307	216,880	219,006	221,558	217,065	223,363	214,815
Connecticut	232,816	226,086	220,717	226,930	218,371	210,236	216,736
Delaware	70,098	70,770	67,528	70,231	66,549	68,492	64,269
District of Columbia	68,307	70,153	69,318	68,972	67,649	69,328	67,353
Florida	1,697,380	1,707,001	1,741,473	1,718,439	1,550,899	1,591,853	1,615,823
Georgia	721,691	701,791	720,326	728,108	715,976	721,797	665,760
Hawaii	85,125	81,632	84,480	83,080	83,692	78,568	81,994
Idaho	69,544	70,133	70,694	71,990	71,259	70,611	69,698
Illinois	959,835	943,720	951,428	900,874	871,244	926,136	871,076
Indiana	278,215	267,976	277,185	275,014	270,161	276,349	273,075
Iowa	169,509	162,500	164,711	162,796	163,986	162,255	159,950
Kansas	105,737	99,525	100,685	99,656	101,523	99,727	99,159
Kentucky	295,656	281,277	291,994	294,685	285,305	295,345	270,638
Louisiana	398,619	411,360	411,453	404,012	405,225	407,406	401,750
Maine	86,809	81,521	87,756	89,310	83,980	86,617	87,342
Maryland	346,445	349,712	347,556	346,528	345,491	343,352	341,188
Massachusetts	443,961	438,965	444,813	441,912	452,517	449,249	451,824
Michigan	684,930	692,680	685,579	685,613	682,509	687,713	656,335
Minnesota	215,676	214,408	203,561	216,851	211,157	205,608	206,074
Mississippi	237,813	237,176	238,934	235,729	234,121	229,767	226,889
Missouri	342,567	336,698	335,300	334,842	330,471	340,848	332,714
Montana	54,410	54,793	54,572	55,170	57,626	56,244	55,344
Nebraska	76,541	76,439	75,637	74,630	73,792	77,340	74,901
Nevada	222,791	222,614	227,568	226,080	222,603	225,033	228,019
New Hampshire	44,607	44,413	43,480	41,936	41,733	44,123	43,037
New Jersey	386,007	389,010	388,538	377,695	369,992	375,222	376,151
New Mexico	208,864	214,955	211,750	218,294	212,774	212,639	214,835
New York	1,534,965	1,499,727	1,578,862	1,580,152	1,548,544	1,560,454	1,485,969
North Carolina	673,635	657,206	651,258	657,691	648,348	649,945	570,515
North Dakota	25,253	25,362	24,041	24,245	25,410	25,306	23,284
Ohio	726,155	696,046	704,617	708,443	699,885	699,189	677,472
Oklahoma	258,370	259,630	267,617	261,217	261,859	248,448	259,879
Oregon	363,125	362,852	372,369	358,733	365,872	360,259	362,792
Pennsylvania	957,037	944,314	940,608	930,824	927,020	945,519	958,143
Rhode Island	92,044	90,864	92,052	93,126	-	92,153	87,613
South Carolina	316,568	315,444	311,030	312,358	304,030	301,166	295,321
South Dakota	40,429	39,644	40,418	40,882	40,832	40,397	39,335
Tennessee	485,196	493,752	491,170	478,237	476,009	457,814	454,876
Texas	1,914,063	1,662,879	1,632,201	1,607,735	1,567,400	1,580,649	1,555,982
Utah	80,060	78,470	77,205	74,984	77,272	77,085	74,576
Vermont	41,550	40,829	41,538	41,802	41,626	40,639	41,032
Virginia	357,405	346,264	338,122	350,119	338,769	337,220	336,877
Washington	500,506	491,541	500,058	508,684	486,572	494,335	502,419
West Virginia	168,536	167,390	166,391	157,290	165,815	161,635	160,600
Wisconsin	327,648	333,834	332,956	318,195	331,212	323,812	328,486
Wyoming	13,414	12,915	13,418	13,605	13,277	13,416	12,138
Guam	15,299	15,110	15,238	15,263	15,188	15,227	14,465
Virgin Islands	13,053	13,337	13,620	13,348	14,038	14,318	12,238
United States	20,498,851	20,081,679	20,233,302	20,074,355	19,565,234	19,835,694	19,460,573

Table D.1b. Calculated weighted unit counts by State (May 2018 to September 2018) and FY average

State	May 2018	June 2018	July 2018	August 2018	September 2018	FY average 2018
Alabama	348,198	351,619	352,537	353,141	353,530	353,641
Alaska	38,633	37,868	37,854	36,938	36,877	39,208
Arizona	357,403	377,929	378,874	371,748	371,499	377,417
Arkansas	158,280	151,837	161,574	155,240	154,379	160,754
California	1,910,021	1,901,189	1,923,253	1,925,471	1,854,196	1,911,088
Colorado	219,975	219,802	220,325	220,510	220,443	219,004
Connecticut	214,108	213,245	214,647	215,144	215,069	218,675
Delaware	64,596	63,522	65,612	64,065	64,496	66,686
District of Columbia	66,334	66,895	66,258	67,251	67,148	67,914
Florida	1,626,298	1,591,097	1,611,450	1,587,429	1,538,857	1,631,500
Georgia	692,836	697,277	687,593	676,339	662,298	699,316
Hawaii	81,647	83,472	80,357	81,261	82,815	82,344
Idaho	69,690	68,249	67,611	66,641	66,167	69,357
Illinois	922,535	900,107	855,510	878,148	873,264	904,490
Indiana	270,630	260,863	258,986	268,115	266,597	270,264
Iowa	159,010	158,359	158,209	155,992	155,002	161,023
Kansas	95,536	97,169	93,431	98,499	99,175	99,152
Kentucky	273,564	282,913	266,766	258,553	253,421	279,176
Louisiana	400,904	394,207	389,063	396,721	388,502	400,769
Maine	87,295	84,578	82,653	82,053	82,114	85,169
Maryland	335,104	339,795	339,411	330,015	330,034	341,219
Massachusetts	450,584	445,528	452,750	447,231	449,592	447,410
Michigan	678,317	651,942	661,145	647,371	648,781	671,909
Minnesota	195,878	193,318	211,658	212,839	211,060	208,174
Mississippi	228,585	228,504	220,387	223,002	221,698	230,217
Missouri	317,573	325,434	326,020	325,911	323,929	331,026
Montana	55,828	54,528	53,034	52,074	51,381	54,584
Nebraska	73,932	74,762	73,095	74,226	72,402	74,808
Nevada	228,121	223,426	225,832	226,232	228,100	225,535
New Hampshire	43,372	42,181	42,368	41,210	39,175	42,636
New Jersey	375,870	367,760	371,068	370,575	368,203	376,341
New Mexico	208,857	219,930	216,717	218,523	204,735	213,573
New York	1,413,354	1,464,371	1,529,813	1,527,019	1,516,368	1,519,966
North Carolina	560,897	565,488	568,520	558,016	528,453	607,498
North Dakota	23,892	24,276	23,899	24,501	24,385	24,488
Ohio	708,849	686,466	673,615	696,365	695,598	697,725
Oklahoma	255,778	264,103	257,542	259,780	259,998	259,519
Oregon	351,383	356,348	353,921	343,348	340,689	357,641
Pennsylvania	958,288	953,940	952,503	940,185	938,798	945,598
Rhode Island	89,728	-	-	-	-	91,083
South Carolina	298,751	292,486	290,793	289,454	288,708	301,342
South Dakota	39,811	38,813	39,171	39,073	38,720	39,794
Tennessee	446,670	448,768	440,071	444,206	438,280	462,921
Texas	1,516,059	1,521,138	1,502,455	1,545,637	1,539,597	1,595,483
Utah	73,001	74,986	72,360	74,644	73,934	75,715
Vermont	39,959	40,353	39,820	40,037	38,460	40,637
Virginia	339,613	349,964	337,727	348,987	325,497	342,214
Washington	493,513	498,479	493,608	485,466	490,400	495,465
West Virginia	161,789	163,326	158,287	161,227	163,296	162,965
Wisconsin	326,150	325,188	312,342	311,429	305,877	323,094
Wyoming	12,933	11,721	11,824	12,172	12,004	12,736
Guam	15,262	14,888	15,572	15,302	15,448	15,189
Virgin Islands	13,739	13,920	12,907	14,108	14,260	13,574
United States	19,388,932	19,278,329	19,252,795	19,259,423	19,003,708	19,699,024

Table D.2a. Calculated weighted individual counts by State (October 2017 to April 2018)

State	October 2017	November 2017	December 2017	January 2018	February 2018	March 2018	April 2018
Alabama	785,805	727,450	759,557	771,467	748,913	752,788	724,303
Alaska	87,631	99,198	96,289	95,057	90,697	89,080	91,453
Arizona	892,481	834,886	858,415	843,360	801,524	804,217	815,766
Arkansas	376,473	374,515	376,748	358,383	373,449	373,710	372,292
California	3,851,064	3,939,974	3,935,409	3,789,881	3,819,198	3,880,547	3,862,202
Colorado	433,072	445,306	442,569	447,712	452,830	450,866	431,043
Connecticut	405,146	389,085	383,976	396,007	376,082	367,973	377,566
Delaware	143,871	144,971	137,623	143,853	135,228	140,031	128,458
District of Columbia	104,276	114,099	107,159	110,385	105,840	110,444	109,856
Florida	3,184,233	3,169,633	3,259,945	3,205,088	2,847,487	2,951,075	3,018,370
Georgia	1,558,235	1,510,629	1,536,615	1,575,914	1,540,292	1,542,681	1,466,652
Hawaii	166,822	152,778	166,262	160,832	163,398	153,111	158,021
Idaho	157,489	157,177	159,944	162,945	160,634	158,999	157,186
Illinois	1,850,175	1,806,956	1,894,355	1,782,533	1,712,070	1,857,143	1,730,615
Indiana	631,379	602,400	621,108	621,329	610,381	619,119	611,377
Iowa	357,780	333,422	338,061	325,409	337,864	330,036	329,820
Kansas	228,305	210,855	214,930	212,524	217,503	212,615	211,375
Kentucky	633,462	593,584	622,874	623,233	600,713	629,226	592,977
Louisiana	855,947	887,559	886,196	868,105	871,728	874,486	861,897
Maine	163,473	148,329	165,590	171,025	152,335	164,625	161,681
Maryland	661,603	663,109	657,260	652,437	649,631	643,615	639,117
Massachusetts	737,959	731,051	766,283	733,741	773,446	765,428	770,424
Michigan	1,306,564	1,286,922	1,247,568	1,276,667	1,262,689	1,288,365	1,200,892
Minnesota	430,555	429,646	399,091	436,161	421,606	411,557	419,592
Mississippi	519,664	522,244	522,618	513,848	510,050	499,280	493,313
Missouri	733,201	727,648	713,480	715,741	678,128	730,786	711,036
Montana	112,363	115,453	110,939	112,356	117,496	116,445	113,999
Nebraska	171,098	171,551	169,582	161,361	165,704	171,343	163,402
Nevada	438,163	417,050	440,988	429,980	422,154	436,109	438,624
New Hampshire	89,437	88,840	85,827	82,366	77,974	87,497	84,184
New Jersey	769,112	780,529	780,144	733,253	724,130	748,932	753,442
New Mexico	443,020	455,138	439,304	456,309	448,485	446,352	445,122
New York	2,771,831	2,645,435	2,833,768	2,831,503	2,788,206	2,768,558	2,644,938
North Carolina	1,209,186	1,184,038	1,165,344	1,168,145	1,167,423	1,175,465	1,159,032
North Dakota	53,403	53,396	49,907	51,433	53,355	53,179	49,416
Ohio	1,454,106	1,365,154	1,416,032	1,431,338	1,412,283	1,383,663	1,344,543
Oklahoma	567,656	570,470	589,367	572,903	563,380	540,028	565,068
Oregon	618,899	628,244	647,852	617,998	623,128	612,505	629,284
Pennsylvania	1,838,086	1,777,497	1,790,206	1,752,187	1,734,814	1,787,207	1,817,145
Rhode Island	149,620	149,368	156,016	157,260	-	155,891	143,922
South Carolina	688,797	666,288	663,721	667,199	652,781	639,103	629,802
South Dakota	90,383	87,816	89,366	89,804	89,328	88,124	85,206
Tennessee	974,233	1,003,103	993,698	961,764	960,596	948,676	945,887
Texas	4,764,694	3,919,084	3,845,396	3,760,605	3,642,147	3,710,811	3,650,170
Utah	196,886	191,829	187,410	182,963	190,010	188,606	180,738
Vermont	74,928	73,470	74,836	75,190	74,582	71,669	72,979
Virginia	751,461	727,520	702,899	731,828	708,225	692,928	697,620
Washington	887,335	873,292	874,320	893,650	831,608	850,837	877,473
West Virginia	330,209	326,891	324,612	298,315	322,186	304,180	303,230
Wisconsin	640,786	665,881	662,704	610,865	659,122	631,961	650,623
Wyoming	30,613	29,228	30,225	30,647	30,109	30,308	27,128
Guam	45,088	44,554	44,826	44,805	44,805	44,749	43,011
Virgin Islands	25,156	26,260	27,365	25,927	28,691	29,131	24,841
United States	41,443,215	40,040,806	40,466,578	39,925,589	38,946,436	39,516,059	38,988,113

Table D.2b. Calculated weighted individual counts by State (May 2018 to September 2018) and FY average

State	May 2018	June 2018	July 2018	August 2018	September 2018	FY average 2018
Alabama	736,127	746,206	748,527	749,192	751,235	750,131
Alaska	88,361	87,402	86,382	85,373	85,222	90,179
Arizona	762,083	819,767	821,725	807,674	803,701	822,133
Arkansas	357,491	344,619	363,548	342,160	350,845	363,686
California	3,833,886	3,747,989	3,871,003	3,871,428	3,718,059	3,843,387
Colorado	442,787	442,154	443,567	440,961	441,856	442,894
Connecticut	366,345	372,045	370,305	370,947	369,942	378,785
Delaware	134,417	124,927	133,599	131,418	129,865	135,688
District of Columbia	104,517	112,925	107,349	112,080	112,589	109,293
Florida	3,041,855	2,960,264	3,005,762	2,947,869	2,870,662	3,038,520
Georgia	1,474,917	1,521,879	1,528,081	1,429,232	1,423,476	1,509,050
Hawaii	157,095	162,499	152,184	155,288	161,550	159,153
Idaho	156,933	153,434	151,046	149,914	147,041	156,062
Illinois	1,839,045	1,789,354	1,713,850	1,765,985	1,757,609	1,791,641
Indiana	606,232	583,752	576,894	602,603	592,720	606,608
Iowa	331,176	326,806	328,902	319,456	317,878	331,384
Kansas	203,486	207,115	201,822	210,506	212,522	211,963
Kentucky	596,564	604,580	566,276	564,225	566,716	599,536
Louisiana	860,352	835,976	828,017	852,608	819,838	858,559
Maine	158,260	153,765	147,320	150,464	148,614	157,124
Maryland	601,162	636,784	635,098	600,972	601,196	636,832
Massachusetts	768,281	752,929	771,705	754,197	765,641	757,591
Michigan	1,267,931	1,198,145	1,233,981	1,203,193	1,218,488	1,249,284
Minnesota	376,012	381,188	423,650	426,388	422,155	414,800
Mississippi	498,490	498,290	477,931	482,081	479,423	501,436
Missouri	669,587	694,031	694,981	694,133	687,075	704,152
Montana	114,533	110,727	109,359	103,424	101,246	111,528
Nebraska	166,549	167,167	164,487	165,890	161,658	166,649
Nevada	438,055	433,877	426,436	430,329	437,137	432,409
New Hampshire	86,049	83,370	84,182	82,648	76,565	84,078
New Jersey	753,629	730,897	743,764	742,303	735,850	749,665
New Mexico	437,778	452,731	446,374	451,637	428,862	445,926
New York	2,581,444	2,589,285	2,721,359	2,713,591	2,688,318	2,714,853
North Carolina	1,070,670	1,014,004	962,911	876,924	743,228	1,074,697
North Dakota	50,451	48,962	49,424	51,183	50,733	51,237
Ohio	1,417,857	1,355,893	1,358,731	1,355,803	1,395,560	1,390,914
Oklahoma	543,903	577,487	564,357	554,465	559,754	564,070
Oregon	595,124	611,731	615,083	575,039	542,514	609,783
Pennsylvania	1,814,910	1,806,510	1,802,599	1,751,930	1,761,908	1,786,250
Rhode Island	152,545	-	-	-	-	152,089
South Carolina	639,566	618,015	618,307	625,759	620,912	644,187
South Dakota	86,607	85,109	85,068	84,361	82,986	87,013
Tennessee	928,440	938,580	911,289	935,869	912,473	951,217
Texas	3,526,872	3,515,933	3,542,173	3,620,064	3,602,528	3,758,373
Utah	170,690	182,473	174,409	181,567	177,597	183,765
Vermont	69,232	71,544	70,260	70,874	66,903	72,206
Virginia	710,189	729,308	695,279	726,202	669,841	711,942
Washington	846,319	867,054	854,522	830,979	850,732	861,510
West Virginia	315,204	315,761	301,220	309,220	315,408	313,870
Wisconsin	641,578	643,401	610,292	582,509	585,456	632,098
Wyoming	29,094	27,144	26,094	27,391	26,987	28,747
Guam	45,499	44,718	44,986	44,193	44,722	44,663
Virgin Islands	28,000	28,308	24,860	28,646	28,933	27,176
United States	38,694,177	38,308,812	38,391,332	38,143,150	37,624,731	39,270,787

Table D.3a. Calculated weighted benefit amounts by State (October 2017 to April 2018)

State	October 2017	November 2017	December 2017	January 2018	February 2018	March 2018	April 2018
Alabama	92,662,546	86,864,507	91,483,327	87,421,359	85,931,098	88,046,565	86,395,026
Alaska	14,625,489	16,461,085	16,283,591	15,952,296	15,492,842	16,105,970	15,415,850
Arizona	103,574,241	109,053,269	98,969,010	91,729,448	95,095,744	95,968,242	94,709,172
Arkansas	40,224,670	40,237,094	38,950,776	37,727,573	39,108,586	39,817,721	38,742,431
California	496,742,166	512,106,668	519,192,445	495,750,230	504,247,237	482,032,102	510,251,610
Colorado	54,061,808	55,676,460	54,266,497	55,927,588	54,389,436	56,190,833	51,506,751
Connecticut	51,552,671	47,936,613	52,026,952	50,983,848	48,439,588	46,617,173	49,377,225
Delaware	15,101,363	15,069,215	14,507,664	15,163,711	15,014,772	13,722,786	14,448,095
District of Columbia	14,221,399	14,509,509	15,429,692	13,482,717	13,820,131	14,788,588	13,772,700
Florida	381,982,707	372,621,591	386,492,282	385,270,588	329,988,406	348,897,309	341,221,592
Georgia	191,162,447	193,650,373	190,871,779	190,381,537	191,899,864	191,837,238	173,957,335
Hawaii	39,949,950	37,044,270	39,614,825	37,828,240	38,712,297	36,368,041	38,303,892
Idaho	16,407,078	16,242,483	16,545,962	17,068,958	16,239,128	16,390,972	16,692,608
Illinois	223,625,795	228,502,084	237,060,148	203,916,557	214,343,857	234,776,595	199,926,851
Indiana	73,288,596	68,556,988	69,164,153	71,883,824	71,809,425	71,826,025	66,673,200
Iowa	34,989,689	35,677,688	35,387,166	34,538,872	35,495,803	34,694,595	32,679,760
Kansas	25,223,485	23,146,991	24,060,246	22,779,569	24,269,354	23,415,240	22,476,949
Kentucky	72,317,269	67,626,692	69,981,508	67,013,723	69,252,965	70,717,807	66,034,028
Louisiana	102,724,588	109,680,678	108,878,050	106,659,334	108,465,229	107,416,496	107,806,227
Maine	18,788,016	16,437,123	18,863,348	17,379,467	16,806,854	17,402,824	16,552,365
Maryland	76,607,048	76,793,568	71,380,385	72,410,956	74,706,497	72,129,650	71,034,424
Massachusetts	91,735,115	95,918,360	92,914,992	91,192,330	95,921,355	95,781,435	93,068,925
Michigan	156,209,195	159,617,948	150,179,246	150,831,747	144,193,922	146,797,930	145,016,482
Minnesota	45,150,908	43,954,297	41,356,497	44,981,684	42,494,459	46,022,152	44,927,846
Mississippi	57,474,994	59,253,012	58,330,933	55,470,232	56,125,395	55,758,777	54,858,528
Missouri	80,465,991	86,075,578	85,148,377	84,414,846	80,800,935	85,577,731	81,911,042
Montana	12,626,865	12,547,400	12,053,707	12,466,915	12,762,690	11,989,207	13,072,801
Nebraska	19,066,840	18,649,597	19,058,122	18,210,705	18,229,741	19,232,268	17,349,970
Nevada	47,979,402	49,718,767	47,934,445	49,604,844	48,653,918	48,330,418	50,160,675
New Hampshire	8,583,621	8,846,836	8,475,305	7,986,784	8,226,535	8,974,494	8,267,204
New Jersey	88,430,903	85,322,796	84,372,643	85,517,318	82,006,831	85,042,876	83,171,435
New Mexico	49,005,105	49,778,867	52,647,381	49,995,808	47,891,812	51,587,794	49,884,342
New York	361,648,238	349,185,827	392,791,847	362,930,812	345,116,433	359,644,152	352,659,161
North Carolina	163,501,242	159,372,052	149,214,305	148,547,892	155,205,880	148,359,542	148,671,826
North Dakota	6,399,233	6,361,233	5,978,669	5,974,693	6,345,071	6,400,315	5,943,190
Ohio	177,548,706	166,070,407	169,498,840	168,162,480	165,819,311	160,980,701	171,257,480
Oklahoma	68,832,916	65,834,987	66,309,659	65,002,277	64,427,679	63,425,852	67,423,262
Oregon	77,044,233	70,224,010	76,560,025	71,648,476	70,609,903	74,728,355	73,738,323
Pennsylvania	210,045,662	209,625,781	209,487,116	206,339,659	201,702,666	207,682,618	211,418,414
Rhode Island	20,544,921	19,467,979	19,206,597	19,657,545	-	21,609,981	18,470,334
South Carolina	78,463,537	79,371,548	76,829,267	78,714,026	77,836,084	74,861,531	73,712,221
South Dakota	11,238,303	10,912,885	11,110,632	11,100,777	11,085,050	11,098,080	10,655,386
Tennessee	119,001,193	124,278,521	118,260,306	122,752,616	116,321,165	114,585,758	109,555,175
Texas	438,280,969	452,495,702	436,362,715	438,977,781	421,818,476	430,657,684	423,370,419
Utah	21,783,036	21,037,669	20,938,174	19,837,208	21,017,237	21,273,044	20,282,951
Vermont	8,885,672	8,787,094	8,916,460	8,762,499	8,903,097	8,615,373	8,849,916
Virginia	85,164,237	84,343,592	81,969,677	85,297,193	86,905,609	79,918,144	78,618,933
Washington	102,722,142	103,030,570	98,549,790	102,207,152	95,953,483	102,563,751	104,801,785
West Virginia	37,364,269	34,759,160	37,307,864	33,416,130	35,596,365	34,879,145	34,184,427
Wisconsin	65,229,520	66,946,890	63,519,890	65,224,812	68,088,496	63,924,092	65,580,272
Wyoming	3,506,565	3,435,991	3,615,256	3,388,457	3,483,243	3,521,292	3,334,094
Guam	7,883,571	8,157,848	7,618,852	8,634,710	7,968,828	8,262,240	7,134,811
Virgin Islands	4,444,439	4,732,537	4,794,544	4,493,804	4,706,861	4,810,670	3,948,915
United States	4,866,094,559	4,862,010,691	4,880,721,938	4,773,014,609	4,669,747,646	4,736,060,174	4,663,278,634

Table D.3b. Calculated weighted benefit amounts by State (May 2018 to September 2018) and FY average

State	May 2018	June 2018	July 2018	August 2018	September 2018	FY average 2018
Alabama	83,990,578	87,851,021	85,385,839	86,312,140	84,743,837	87,257,320
Alaska	14,463,439	14,087,611	14,282,004	14,424,061	14,531,056	15,177,108
Arizona	93,879,188	97,370,990	95,939,286	92,981,153	93,758,323	96,919,005
Arkansas	37,735,266	36,802,932	36,386,247	38,128,810	36,786,310	38,387,368
California	512,635,966	474,786,270	525,194,996	511,967,249	482,056,546	502,246,957
Colorado	54,369,365	53,059,071	52,886,779	54,747,633	52,028,103	54,092,527
Connecticut	47,562,840	46,511,603	47,511,594	48,412,604	48,528,322	48,788,419
Delaware	14,943,103	14,565,022	14,972,355	13,816,857	14,102,106	14,618,921
District of Columbia	12,995,508	15,282,117	14,072,969	15,268,885	14,048,681	14,307,741
Florida	348,630,133	330,601,527	336,056,464	346,024,481	327,388,097	352,931,265
Georgia	176,125,771	177,861,536	180,133,631	176,296,539	165,563,665	183,311,809
Hawaii	38,623,517	38,071,492	36,420,329	37,312,170	38,780,970	38,085,833
Idaho	16,373,628	15,887,920	15,783,623	15,505,824	15,215,442	16,196,136
Illinois	206,987,458	227,053,015	221,341,417	207,366,899	202,610,819	217,292,625
Indiana	68,754,684	65,594,554	64,456,534	67,689,521	65,680,589	68,781,508
Iowa	34,258,076	30,908,695	32,637,877	33,986,290	34,297,094	34,129,300
Kansas	22,848,955	23,954,505	22,150,845	24,239,953	23,414,503	23,498,383
Kentucky	66,144,364	69,209,965	59,453,805	65,062,930	61,878,426	67,057,790
Louisiana	105,728,954	102,027,100	104,299,287	104,476,214	102,304,363	105,872,210
Maine	16,977,487	14,996,807	15,894,870	15,889,587	16,172,351	16,846,758
Maryland	66,361,994	70,433,821	72,906,208	70,054,778	69,715,862	72,044,599
Massachusetts	96,442,805	95,245,167	91,279,795	94,726,560	95,863,826	94,174,222
Michigan	154,143,949	149,871,640	140,262,797	130,020,287	143,536,668	147,556,818
Minnesota	40,683,539	37,893,674	46,140,151	43,478,209	43,641,577	43,393,749
Mississippi	56,796,352	52,893,824	53,669,648	53,292,628	53,218,572	55,595,241
Missouri	78,367,529	80,610,907	82,102,595	82,274,617	80,513,575	82,355,310
Montana	13,120,570	12,518,322	12,227,610	11,575,469	11,593,486	12,379,587
Nebraska	18,443,090	18,482,765	18,139,034	18,184,601	18,243,866	18,440,883
Nevada	49,824,778	49,847,532	49,470,304	48,652,996	44,857,214	48,752,941
New Hampshire	8,241,171	7,827,372	8,048,510	7,770,183	7,494,496	8,228,542
New Jersey	82,471,007	79,640,972	83,882,499	82,784,227	78,743,592	83,448,925
New Mexico	49,813,881	48,317,546	50,054,413	52,894,611	48,584,778	50,038,028
New York	325,544,305	343,197,565	344,289,777	354,408,388	361,746,632	354,430,261
North Carolina	151,188,565	144,812,636	145,430,795	144,593,472	118,176,371	148,089,548
North Dakota	6,191,519	6,014,985	6,020,761	6,123,286	5,899,207	6,137,680
Ohio	167,944,090	162,138,422	164,780,596	141,685,333	168,771,100	165,388,122
Oklahoma	65,683,826	66,939,123	63,099,526	65,224,583	67,322,130	65,793,818
Oregon	71,184,247	73,181,157	70,618,133	66,832,619	65,194,392	71,796,989
Pennsylvania	207,912,205	212,520,704	201,450,392	202,303,691	201,141,075	206,802,499
Rhode Island	18,481,351	-	-	-	-	19,634,101
South Carolina	73,404,039	72,091,939	72,226,312	73,717,881	73,555,453	75,398,653
South Dakota	10,726,158	10,552,249	10,520,960	10,401,982	10,242,167	10,803,719
Tennessee	110,681,277	111,087,203	106,462,823	112,112,069	109,850,348	114,579,038
Texas	400,263,771	414,645,450	408,907,979	405,601,942	413,788,905	423,764,316
Utah	19,162,023	20,138,307	20,190,269	20,524,171	20,363,336	20,545,619
Vermont	8,320,037	8,509,899	8,039,145	8,482,204	7,935,408	8,583,900
Virginia	79,728,982	80,813,531	85,892,488	84,680,454	74,454,776	82,315,635
Washington	97,069,996	103,022,088	95,768,906	99,294,710	102,819,801	100,650,348
West Virginia	35,252,060	34,609,367	33,129,399	34,805,606	33,839,095	34,928,574
Wisconsin	64,789,127	64,543,486	64,124,504	59,168,401	59,941,949	64,256,787
Wyoming	3,319,893	3,085,660	2,875,348	2,972,065	3,051,690	3,299,129
Guam	8,406,974	8,059,997	8,502,796	7,903,280	8,568,860	8,091,897
Virgin Islands	4,704,087	4,604,186	4,703,059	5,036,191	4,388,538	4,613,986
United States	4,618,697,477	4,584,635,250	4,600,478,285	4,571,491,296	4,500,948,346	4,702,112,451

Table D.4. Stratification and weight calculation by State, October 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	94	369,851	81	1	0.0123	365,285	1	79	4,624
Alaska	0	1	66	43,017	51	8	0.1569	36,269	1	42	864
Arizona	0	1	96	403,825	74	0	0.0000	403,825	0	74	5,457
Arkansas	0	1	107	169,516	88	2	0.0227	165,663	0	86	1,926
California	0	1	96	1,973,283	58	2	0.0345	1,905,239	0	56	34,022
Colorado	0	1	98	220,901	67	2	0.0299	214,307	1	64	3,349
Connecticut	0	1	91	236,291	68	1	0.0147	232,816	1	66	3,528
Delaware	0	1	89	70,098	61	0	0.0000	70,098	0	61	1,149
District of Columbia	0	1	95	70,968	80	3	0.0375	68,307	0	77	887
Florida	0	1	115	1,715,830	93	1	0.0108	1,697,380	1	91	18,653
Georgia	0	1	93	740,936	77	2	0.0260	721,691	0	75	9,623
Hawaii	0	1	92	85,125	56	0	0.0000	85,125	0	56	1,520
Idaho	0	1	102	71,200	86	2	0.0233	69,544	0	84	828
Illinois	0	1	93	959,835	67	0	0.0000	959,835	0	67	14,326
Indiana	0	1	104	285,441	79	2	0.0253	278,215	1	76	3,661
Iowa	0	1	89	169,509	82	0	0.0000	169,509	0	82	2,067
Kansas	0	1	91	105,737	79	0	0.0000	105,737	0	79	1,338
Kentucky	0	1	89	302,613	87	2	0.0230	295,656	0	85	3,478
Louisiana	0	1	93	411,688	63	2	0.0317	398,619	0	61	6,535
Maine	0	1	86	90,529	73	3	0.0411	86,809	0	70	1,240
Maryland	0	1	95	351,191	74	1	0.0135	346,445	1	72	4,812
Massachusetts	0	1	93	449,184	86	1	0.0116	443,961	0	85	5,223
Michigan	0	1	98	703,442	76	2	0.0263	684,930	0	74	9,256
Minnesota	0	1	89	220,692	88	2	0.0227	215,676	0	86	2,508
Mississippi	0	1	96	240,578	87	1	0.0115	237,813	1	85	2,798
Missouri	0	1	90	351,465	79	2	0.0253	342,567	0	77	4,449

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
Montana	0	1	81	56,286	60	2	0.0333	54,410	0	58	938
Nebraska	0	1	90	77,650	70	1	0.0143	76,541	0	69	1,109
Nevada	0	1	104	228,361	82	2	0.0244	222,791	2	78	2,856
New Hampshire	0	1	65	44,607	51	0	0.0000	44,607	1	50	892
New Jersey	0	1	102	391,295	74	1	0.0135	386,007	0	73	5,288
New Mexico	0	1	98	220,003	79	4	0.0506	208,864	0	75	2,785
New York	0	1	92	1,577,019	75	2	0.0267	1,534,965	1	72	21,319
North Carolina	0	1	99	673,635	95	0	0.0000	673,635	0	95	7,091
North Dakota	0	1	44	25,253	39	0	0.0000	25,253	0	39	648
Ohio	0	1	98	726,155	79	0	0.0000	726,155	0	79	9,192
Oklahoma	0	1	100	273,392	91	5	0.0549	258,370	0	86	3,004
Oregon	0	1	97	373,354	73	2	0.0274	363,125	0	71	5,114
Pennsylvania	0	1	89	957,037	68	0	0.0000	957,037	0	68	14,074
Rhode Island	0	1	90	94,566	75	2	0.0267	92,044	0	73	1,261
South Carolina	0	1	96	324,384	83	2	0.0241	316,568	0	81	3,908
South Dakota	0	1	62	40,429	59	0	0.0000	40,429	0	59	685
Tennessee	0	1	122	500,358	99	3	0.0303	485,196	0	96	5,054
Texas	0	1	105	1,965,794	76	2	0.0263	1,914,063	0	74	25,866
Utah	0	1	90	80,060	75	0	0.0000	80,060	0	75	1,067
Vermont	0	1	64	41,550	57	0	0.0000	41,550	0	57	729
Virginia	0	1	89	357,405	70	0	0.0000	357,405	0	70	5,106
Washington	0	1	94	507,179	76	1	0.0132	500,506	0	75	6,673
West Virginia	0	1	88	168,536	77	0	0.0000	168,536	0	77	2,189
Wisconsin	0	1	101	335,943	81	2	0.0247	327,648	0	79	4,147
Wyoming	0	1	29	13,414	27	0	0.0000	13,414	0	27	497
Guam	0	1	42	15,299	32	0	0.0000	15,299	0	32	478
Virgin Islands	0	1	28	13,053	25	0	0.0000	13,053	0	25	522

Table D.5. Stratification and weight calculation by State, November 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	95	369,521	85	5	0.0588	347,784	2	78	4,459
Alaska	0	1	67	44,286	54	1	0.0185	43,466	1	52	836
Arizona	0	1	95	398,735	72	3	0.0417	382,121	0	69	5,538
Arkansas	0	1	105	168,810	92	3	0.0326	163,305	0	89	1,835
California	0	1	100	1,963,611	65	1	0.0154	1,933,402	0	64	30,209
Colorado	0	1	99	220,217	66	1	0.0152	216,880	0	65	3,337
Connecticut	0	1	89	229,675	64	1	0.0156	226,086	0	63	3,589
Delaware	0	1	88	70,770	70	0	0.0000	70,770	0	70	1,011
District of Columbia	0	1	92	70,153	76	0	0.0000	70,153	0	76	923
Florida	0	1	118	1,762,066	96	3	0.0313	1,707,001	0	93	18,355
Georgia	0	1	96	736,447	85	4	0.0471	701,791	0	81	8,664
Hawaii	0	1	92	84,833	53	2	0.0377	81,632	0	51	1,601
Idaho	0	1	101	71,021	80	1	0.0125	70,133	0	79	888
Illinois	0	1	96	957,598	69	1	0.0145	943,720	0	68	13,878
Indiana	0	1	103	282,864	76	4	0.0526	267,976	1	71	3,774
Iowa	0	1	90	168,519	84	3	0.0357	162,500	0	81	2,006
Kansas	0	1	91	104,695	81	4	0.0494	99,525	0	77	1,293
Kentucky	0	1	88	299,079	84	5	0.0595	281,277	0	79	3,560
Louisiana	0	1	93	411,360	61	0	0.0000	411,360	0	61	6,744
Maine	0	1	86	90,300	72	7	0.0972	81,521	0	65	1,254
Maryland	0	1	95	349,712	75	0	0.0000	349,712	0	75	4,663
Massachusetts	0	1	94	450,517	78	2	0.0256	438,965	0	76	5,776
Michigan	0	1	96	701,794	77	1	0.0130	692,680	0	76	9,114
Minnesota	0	1	88	216,930	86	1	0.0116	214,408	0	85	2,522
Mississippi	0	1	96	239,934	87	1	0.0115	237,176	1	85	2,790
Missouri	0	1	90	349,648	81	3	0.0370	336,698	0	78	4,317

Table D.5 *(continued)*

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**
Montana	0	1	81	56,429	69	2	0.0290	54,793	0	67	818
Nebraska	0	1	91	77,407	80	1	0.0125	76,439	0	79	968
Nevada	0	1	103	228,322	80	2	0.0250	222,614	1	77	2,891
New Hampshire	0	1	64	44,413	50	0	0.0000	44,413	0	50	888
New Jersey	0	1	102	389,010	69	0	0.0000	389,010	2	67	5,806
New Mexico	0	1	98	220,263	83	2	0.0241	214,955	0	81	2,654
New York	0	1	90	1,577,635	81	4	0.0494	1,499,727	0	77	19,477
North Carolina	0	1	98	671,650	93	2	0.0215	657,206	0	91	7,222
North Dakota	0	1	44	25,362	41	0	0.0000	25,362	0	41	619
Ohio	0	1	98	721,511	85	3	0.0353	696,046	0	82	8,488
Oklahoma	0	1	99	272,612	84	4	0.0476	259,630	0	80	3,245
Oregon	0	1	98	373,219	72	2	0.0278	362,852	0	70	5,184
Pennsylvania	0	1	90	958,201	69	1	0.0145	944,314	0	68	13,887
Rhode Island	0	1	90	95,912	76	4	0.0526	90,864	0	72	1,262
South Carolina	0	1	95	322,780	88	2	0.0227	315,444	0	86	3,668
South Dakota	0	1	62	40,305	61	1	0.0164	39,644	0	60	661
Tennessee	0	1	122	498,690	101	1	0.0099	493,752	0	100	4,938
Texas	0	1	105	1,662,879	70	0	0.0000	1,662,879	0	70	23,755
Utah	0	1	89	79,463	80	1	0.0125	78,470	1	78	1,006
Vermont	0	1	64	41,558	57	1	0.0175	40,829	0	56	729
Virginia	0	1	95	357,257	65	2	0.0308	346,264	0	63	5,496
Washington	0	1	93	506,665	67	2	0.0299	491,541	0	65	7,562
West Virginia	0	1	88	167,390	70	0	0.0000	167,390	0	70	2,391
Wisconsin	0	1	100	333,834	83	0	0.0000	333,834	0	83	4,022
Wyoming	0	1	29	13,393	28	1	0.0357	12,915	0	27	478
Guam	0	1	43	15,110	34	0	0.0000	15,110	0	34	444
Virgin Islands	0	1	29	13,337	24	0	0.0000	13,337	0	24	556

The columns grouped under "Unedited SNAP QC data" are: Sampling interval (a), Stratum sampling size (b), SNAP units in State (program ops data) (e). The columns grouped under "Edited SNAP QC data" are: 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).

Table D.6. Stratification and weight calculation by State, December 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	94	365,886	81	2	0.0247	356,852	0	79	4,517
Alaska	0	1	67	43,726	50	2	0.0400	41,977	0	48	875
Arizona	0	1	94	396,166	73	1	0.0137	390,739	0	72	5,427
Arkansas	0	1	106	168,681	97	2	0.0206	165,203	0	95	1,739
California	0	1	98	1,967,062	67	1	0.0149	1,937,703	1	65	29,811
Colorado	0	1	98	222,180	70	1	0.0143	219,006	0	69	3,174
Connecticut	0	1	89	227,209	70	2	0.0286	220,717	0	68	3,246
Delaware	0	1	88	70,176	53	2	0.0377	67,528	0	51	1,324
District of Columbia	0	1	92	71,217	75	2	0.0267	69,318	0	73	950
Florida	0	1	110	1,741,473	86	0	0.0000	1,741,473	0	86	20,250
Georgia	0	1	94	729,110	83	1	0.0120	720,326	0	82	8,784
Hawaii	0	1	92	84,480	48	0	0.0000	84,480	0	48	1,760
Idaho	0	1	102	71,488	90	1	0.0111	70,694	0	89	794
Illinois	0	1	93	951,428	63	0	0.0000	951,428	0	63	15,102
Indiana	0	1	102	280,739	79	1	0.0127	277,185	0	78	3,554
Iowa	0	1	89	169,046	78	2	0.0256	164,711	0	76	2,167
Kansas	0	1	90	103,406	76	2	0.0263	100,685	0	74	1,361
Kentucky	0	1	88	299,030	85	2	0.0235	291,994	0	83	3,518
Louisiana	0	1	92	411,453	70	0	0.0000	411,453	0	70	5,878
Maine	0	1	85	90,228	73	2	0.0274	87,756	0	71	1,236
Maryland	0	1	94	347,556	60	0	0.0000	347,556	1	59	5,891
Massachusetts	0	1	94	450,172	84	1	0.0119	444,813	0	83	5,359
Michigan	0	1	98	694,970	74	1	0.0135	685,579	1	72	9,522
Minnesota	0	1	87	216,284	85	5	0.0588	203,561	0	80	2,545
Mississippi	0	1	96	238,934	88	0	0.0000	238,934	1	87	2,746
Missouri	0	1	90	349,670	73	3	0.0411	335,300	0	70	4,790

Table D.6 *(continued)*

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
Montana	0	1	81	56,391	62	2	0.0323	54,572	0	60	910
Nebraska	0	1	90	77,627	78	2	0.0256	75,637	0	76	995
Nevada	0	1	104	227,568	86	0	0.0000	227,568	0	86	2,646
New Hampshire	0	1	64	44,256	57	1	0.0175	43,480	0	56	776
New Jersey	0	1	101	388,538	63	0	0.0000	388,538	1	62	6,267
New Mexico	0	1	98	219,894	81	3	0.0370	211,750	0	78	2,715
New York	0	1	90	1,578,862	78	0	0.0000	1,578,862	1	77	20,505
North Carolina	0	1	98	658,186	95	1	0.0105	651,258	0	94	6,928
North Dakota	0	1	43	25,340	39	2	0.0513	24,041	0	37	650
Ohio	0	1	97	721,596	85	2	0.0235	704,617	0	83	8,489
Oklahoma	0	1	99	270,921	82	1	0.0122	267,617	0	81	3,304
Oregon	0	1	98	372,369	78	0	0.0000	372,369	0	78	4,774
Pennsylvania	0	1	88	955,079	66	1	0.0152	940,608	0	65	14,471
Rhode Island	0	1	98	95,638	80	3	0.0375	92,052	0	77	1,195
South Carolina	0	1	94	318,180	89	2	0.0225	311,030	0	87	3,575
South Dakota	0	1	62	40,418	62	0	0.0000	40,418	0	62	652
Tennessee	0	1	121	496,340	96	1	0.0104	491,170	0	95	5,170
Texas	0	1	103	1,632,201	71	0	0.0000	1,632,201	0	71	22,989
Utah	0	1	89	79,380	73	2	0.0274	77,205	0	71	1,087
Vermont	0	1	64	41,538	62	0	0.0000	41,538	0	62	670
Virginia	0	1	94	356,236	59	3	0.0508	338,122	1	55	6,148
Washington	0	1	93	506,725	76	1	0.0132	500,058	1	74	6,758
West Virginia	0	1	87	166,391	73	0	0.0000	166,391	0	73	2,279
Wisconsin	0	1	99	332,956	82	0	0.0000	332,956	0	82	4,060
Wyoming	0	1	29	13,418	28	0	0.0000	13,418	0	28	479
Guam	0	1	43	15,238	35	0	0.0000	15,238	0	35	435
Virgin Islands	0	1	29	13,620	25	0	0.0000	13,620	0	25	545

Table D.7. Stratification and weight calculation by State, January 2018

		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	92	361,926	82	0	0.0000	361,926	0	82	4,414
Alaska	0	1	64	42,141	46	0	0.0000	42,141	0	46	916
Arizona	0	1	93	390,794	72	1	0.0139	385,366	0	71	5,428
Arkansas	0	1	105	166,997	96	5	0.0521	158,299	1	90	1,759
California	0	1	98	1,966,596	68	2	0.0294	1,908,755	0	66	28,921
Colorado	0	1	100	224,723	71	1	0.0141	221,558	0	70	3,165
Connecticut	0	1	90	226,930	66	0	0.0000	226,930	0	66	3,438
Delaware	0	1	83	70,231	59	0	0.0000	70,231	1	58	1,211
District of Columbia	0	1	99	69,868	78	1	0.0128	68,972	0	77	896
Florida	0	1	110	1,718,439	81	0	0.0000	1,718,439	0	81	21,215
Georgia	0	1	94	738,082	74	1	0.0135	728,108	0	73	9,974
Hawaii	0	1	92	84,538	58	1	0.0172	83,080	0	57	1,458
Idaho	0	1	104	71,990	92	0	0.0000	71,990	0	92	783
Illinois	0	1	96	913,562	72	1	0.0139	900,874	0	71	12,688
Indiana	0	1	102	278,730	75	1	0.0133	275,014	0	74	3,716
Iowa	0	1	90	169,139	80	3	0.0375	162,796	0	77	2,114
Kansas	0	1	89	102,313	77	2	0.0260	99,656	0	75	1,329
Kentucky	0	1	87	298,235	84	1	0.0119	294,685	0	83	3,550
Louisiana	0	1	91	404,012	66	0	0.0000	404,012	0	66	6,121
Maine	0	1	84	89,310	72	0	0.0000	89,310	0	72	1,240
Maryland	0	1	93	346,528	76	0	0.0000	346,528	0	76	4,560
Massachusetts	0	1	94	452,823	83	2	0.0241	441,912	0	81	5,456
Michigan	0	1	97	695,407	71	1	0.0141	685,613	0	70	9,794
Minnesota	0	1	88	216,851	88	0	0.0000	216,851	0	88	2,464
Mississippi	0	1	94	235,729	85	0	0.0000	235,729	0	85	2,773
Missouri	0	1	90	348,417	77	3	0.0390	334,842	0	74	4,525

Table D.7 *(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**
Montana	0	1	81	56,817	69	2	0.0290	55,170	0	67	823
Nebraska	0	1	90	77,697	76	3	0.0395	74,630	0	73	1,022
Nevada	0	1	104	228,620	90	1	0.0111	226,080	0	89	2,540
New Hampshire	0	1	64	44,310	56	3	0.0536	41,936	0	53	791
New Jersey	0	1	91	384,097	60	1	0.0167	377,695	5	54	6,994
New Mexico	0	1	98	220,956	83	1	0.0120	218,294	0	82	2,662
New York	0	1	90	1,580,152	81	0	0.0000	1,580,152	0	81	19,508
North Carolina	0	1	97	664,918	92	1	0.0109	657,691	0	91	7,227
North Dakota	0	1	44	25,457	42	2	0.0476	24,245	0	40	606
Ohio	0	1	97	716,778	86	1	0.0116	708,443	0	85	8,335
Oklahoma	0	1	99	269,924	93	3	0.0323	261,217	0	90	2,902
Oregon	0	1	98	372,894	79	3	0.0380	358,733	0	76	4,720
Pennsylvania	0	1	90	959,031	68	2	0.0294	930,824	1	65	14,320
Rhode Island	0	1	30	93,126	26	0	0.0000	93,126	0	26	3,582
South Carolina	0	1	93	315,948	88	1	0.0114	312,358	0	87	3,590
South Dakota	0	1	63	40,882	62	0	0.0000	40,882	0	62	659
Tennessee	0	1	120	492,166	106	3	0.0283	478,237	0	103	4,643
Texas	0	1	103	1,627,342	83	1	0.0120	1,607,735	0	82	19,607
Utah	0	1	88	79,269	74	4	0.0541	74,984	0	70	1,071
Vermont	0	1	64	41,802	59	0	0.0000	41,802	0	59	709
Virginia	0	1	94	355,121	71	1	0.0141	350,119	0	70	5,002
Washington	0	1	94	508,684	74	0	0.0000	508,684	0	74	6,874
West Virginia	0	1	87	167,918	79	5	0.0633	157,290	0	74	2,126
Wisconsin	0	1	100	334,105	84	4	0.0476	318,195	0	80	3,977
Wyoming	0	1	29	13,605	28	0	0.0000	13,605	0	28	486
Guam	0	1	42	15,263	30	0	0.0000	15,263	0	30	509
Virgin Islands	0	1	29	13,904	25	1	0.0400	13,348	0	24	556

Table D.8. Stratification and weight calculation by State, February 2018

		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	93	360,802	82	2	0.0244	352,002	0	80	4,400
Alaska	0	1	63	40,586	53	1	0.0189	39,820	0	52	766
Arizona	0	1	90	380,644	73	3	0.0411	365,001	0	70	5,214
Arkansas	0	1	104	166,465	88	1	0.0114	164,573	0	87	1,892
California	0	1	97	1,941,108	72	2	0.0278	1,887,188	0	70	26,960
Colorado	0	1	99	220,211	70	1	0.0143	217,065	0	69	3,146
Connecticut	0	1	87	224,610	72	2	0.0278	218,371	1	69	3,165
Delaware	0	1	80	68,969	57	2	0.0351	66,549	0	55	1,210
District of Columbia	0	1	89	69,453	77	2	0.0260	67,649	0	75	902
Florida	0	1	95	1,590,666	80	2	0.0250	1,550,899	0	78	19,883
Georgia	0	1	94	724,926	81	1	0.0123	715,976	0	80	8,950
Hawaii	0	1	92	83,692	57	0	0.0000	83,692	0	57	1,468
Idaho	0	1	104	72,069	89	1	0.0112	71,259	0	88	810
Illinois	0	1	88	925,697	68	4	0.0588	871,244	0	64	13,613
Indiana	0	1	102	277,463	76	2	0.0263	270,161	0	74	3,651
Iowa	0	1	89	168,245	79	2	0.0253	163,986	0	77	2,130
Kansas	0	1	88	101,523	79	0	0.0000	101,523	0	79	1,285
Kentucky	0	1	86	292,350	83	2	0.0241	285,305	0	81	3,522
Louisiana	0	1	91	405,225	61	0	0.0000	405,225	0	61	6,643
Maine	0	1	93	89,295	84	5	0.0595	83,980	0	79	1,063
Maryland	0	1	92	345,491	65	0	0.0000	345,491	0	65	5,315
Massachusetts	0	1	94	452,517	81	0	0.0000	452,517	0	81	5,587
Michigan	0	1	96	691,259	79	1	0.0127	682,509	0	78	8,750
Minnesota	0	1	87	213,732	83	1	0.0120	211,157	0	82	2,575
Mississippi	0	1	94	234,121	83	0	0.0000	234,121	0	83	2,821
Missouri	0	1	88	343,346	80	3	0.0375	330,471	0	77	4,292

Table D.8 *(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
Montana	0	1	81	57,626	62	0	0.0000	57,626	0	62	929
Nebraska	0	1	90	76,867	75	3	0.0400	73,792	0	72	1,025
Nevada	0	1	104	227,903	86	2	0.0233	222,603	0	84	2,650
New Hampshire	0	1	64	44,188	54	3	0.0556	41,733	2	49	852
New Jersey	0	1	89	382,534	61	2	0.0328	369,992	1	58	6,379
New Mexico	0	1	98	221,064	80	3	0.0375	212,774	0	77	2,763
New York	0	1	90	1,568,397	79	1	0.0127	1,548,544	0	78	19,853
North Carolina	0	1	96	655,716	89	1	0.0112	648,348	0	88	7,368
North Dakota	0	1	44	25,410	40	0	0.0000	25,410	0	40	635
Ohio	0	1	96	708,634	81	1	0.0123	699,885	0	80	8,749
Oklahoma	0	1	97	267,614	93	2	0.0215	261,859	0	91	2,878
Oregon	0	1	96	370,686	77	1	0.0130	365,872	0	76	4,814
Pennsylvania	0	1	89	958,444	61	2	0.0328	927,020	0	59	15,712
Rhode Island	0	1	0	92,411	0	0	0.0000	0	0	0	0
South Carolina	0	1	101	314,278	92	3	0.0326	304,030	0	89	3,416
South Dakota	0	1	63	40,832	58	0	0.0000	40,832	0	58	704
Tennessee	0	1	117	486,827	90	2	0.0222	476,009	0	88	5,409
Texas	0	1	102	1,590,116	70	1	0.0143	1,567,400	0	69	22,716
Utah	0	1	89	78,289	77	1	0.0130	77,272	0	76	1,017
Vermont	0	1	65	41,626	56	0	0.0000	41,626	0	56	743
Virginia	0	1	94	353,288	73	3	0.0411	338,769	0	70	4,840
Washington	0	1	94	508,038	71	3	0.0423	486,572	0	68	7,155
West Virginia	0	1	87	165,815	70	0	0.0000	165,815	0	70	2,369
Wisconsin	0	1	99	331,212	80	0	0.0000	331,212	0	80	4,140
Wyoming	0	1	29	13,277	29	0	0.0000	13,277	0	29	458
Guam	0	1	43	15,188	39	0	0.0000	15,188	0	39	389
Virgin Islands	0	1	30	14,038	24	0	0.0000	14,038	0	24	585

Table D.9. Stratification and weight calculation by State, March 2018

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	92	359,374	85	1	0.0118	355,146	0	84	4,228
Alaska	0	1	62	40,119	49	2	0.0408	38,481	0	47	819
Arizona	0	1	90	383,107	67	2	0.0299	371,671	0	65	5,718
Arkansas	0	1	104	165,782	91	0	0.0000	165,782	0	91	1,822
California	0	1	98	1,959,216	68	1	0.0147	1,930,404	0	67	28,812
Colorado	0	1	98	223,363	74	0	0.0000	223,363	0	74	3,018
Connecticut	0	1	87	221,756	77	4	0.0519	210,236	0	73	2,880
Delaware	0	1	75	68,492	46	0	0.0000	68,492	0	46	1,489
District of Columbia	0	1	92	69,328	74	0	0.0000	69,328	1	73	950
Florida	0	1	103	1,611,032	84	1	0.0119	1,591,853	0	83	19,179
Georgia	0	1	94	721,797	89	0	0.0000	721,797	0	89	8,110
Hawaii	0	1	92	83,720	65	4	0.0615	78,568	0	61	1,288
Idaho	0	1	103	71,472	83	1	0.0120	70,611	0	82	861
Illinois	0	1	90	940,837	64	1	0.0156	926,136	0	63	14,701
Indiana	0	1	100	276,349	74	0	0.0000	276,349	0	74	3,734
Iowa	0	1	88	166,415	80	2	0.0250	162,255	0	78	2,080
Kansas	0	1	88	101,075	75	1	0.0133	99,727	0	74	1,348
Kentucky	0	1	86	295,345	80	0	0.0000	295,345	0	80	3,692
Louisiana	0	1	91	407,406	62	0	0.0000	407,406	0	62	6,571
Maine	0	1	94	89,865	83	3	0.0361	86,617	0	80	1,083
Maryland	0	1	93	343,352	67	0	0.0000	343,352	0	67	5,125
Massachusetts	0	1	93	449,249	80	0	0.0000	449,249	1	79	5,687
Michigan	0	1	95	687,713	75	0	0.0000	687,713	0	75	9,170
Minnesota	0	1	86	208,211	80	1	0.0125	205,608	0	79	2,603
Mississippi	0	1	93	232,604	82	1	0.0122	229,767	1	80	2,872
Missouri	0	1	89	345,109	81	1	0.0123	340,848	0	80	4,261

Table D.9 *(continued)*

		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**
Montana	0	1	81	57,123	65	1	0.0154	56,244	0	64	879
Nebraska	0	1	90	77,340	76	0	0.0000	77,340	1	75	1,031
Nevada	0	1	103	227,811	82	1	0.0122	225,033	1	80	2,813
New Hampshire	0	1	64	44,123	55	0	0.0000	44,123	3	52	849
New Jersey	0	1	90	381,085	65	1	0.0154	375,222	3	61	6,151
New Mexico	0	1	98	220,325	86	3	0.0349	212,639	0	83	2,562
New York	0	1	90	1,579,719	82	1	0.0122	1,560,454	0	81	19,265
North Carolina	0	1	95	649,945	86	0	0.0000	649,945	0	86	7,558
North Dakota	0	1	44	25,306	38	0	0.0000	25,306	0	38	666
Ohio	0	1	103	706,958	91	1	0.0110	699,189	0	90	7,769
Oklahoma	0	1	97	266,852	87	6	0.0690	248,448	0	81	3,067
Oregon	0	1	96	365,062	76	1	0.0132	360,259	0	75	4,803
Pennsylvania	0	1	90	958,651	73	1	0.0137	945,519	0	72	13,132
Rhode Island	0	1	23	92,153	19	0	0.0000	92,153	0	19	4,850
South Carolina	0	1	101	314,702	93	4	0.0430	301,166	0	89	3,384
South Dakota	0	1	62	40,397	62	0	0.0000	40,397	0	62	652
Tennessee	0	1	114	474,563	85	3	0.0353	457,814	0	82	5,583
Texas	0	1	100	1,580,649	76	0	0.0000	1,580,649	0	76	20,798
Utah	0	1	88	79,197	75	2	0.0267	77,085	0	73	1,056
Vermont	0	1	64	41,340	59	1	0.0169	40,639	0	58	701
Virginia	0	1	93	353,278	66	3	0.0455	337,220	0	63	5,353
Washington	0	1	94	507,010	80	2	0.0250	494,335	0	78	6,338
West Virginia	0	1	87	166,253	72	2	0.0278	161,635	0	70	2,309
Wisconsin	0	1	99	331,615	85	2	0.0235	323,812	0	83	3,901
Wyoming	0	1	29	13,416	26	0	0.0000	13,416	0	26	516
Guam	0	1	42	15,227	33	0	0.0000	15,227	0	33	461
Virgin Islands	0	1	31	14,318	24	0	0.0000	14,318	0	24	597

Table D.10. Stratification and weight calculation by State, April 2018

		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	105	356,702	97	3	0.0309	345,670	2	92	3,757
Alaska	0	1	62	40,167	48	0	0.0000	40,167	0	48	837
Arizona	0	1	97	377,866	75	1	0.0133	372,828	0	74	5,038
Arkansas	0	1	103	164,912	90	0	0.0000	164,912	2	88	1,874
California	0	1	97	1,943,611	71	1	0.0141	1,916,236	0	70	27,375
Colorado	0	1	99	220,953	72	2	0.0278	214,815	0	70	3,069
Connecticut	0	1	86	220,232	63	1	0.0159	216,736	0	62	3,496
Delaware	0	1	63	67,839	38	2	0.0526	64,269	0	36	1,785
District of Columbia	0	1	90	68,228	78	1	0.0128	67,353	0	77	875
Florida	0	1	106	1,615,823	85	0	0.0000	1,615,823	0	85	19,010
Georgia	0	1	93	719,741	80	6	0.0750	665,760	0	74	8,997
Hawaii	0	1	91	83,485	56	1	0.0179	81,994	0	55	1,491
Idaho	0	1	101	70,569	81	1	0.0123	69,698	0	80	871
Illinois	0	1	92	909,506	71	3	0.0423	871,076	0	68	12,810
Indiana	0	1	100	273,075	76	0	0.0000	273,075	0	76	3,593
Iowa	0	1	87	164,332	75	2	0.0267	159,950	0	73	2,191
Kansas	0	1	87	100,481	76	1	0.0132	99,159	0	75	1,322
Kentucky	0	1	85	277,404	82	2	0.0244	270,638	0	80	3,383
Louisiana	0	1	91	401,750	59	0	0.0000	401,750	0	59	6,809
Maine	0	1	93	89,397	87	2	0.0230	87,342	0	85	1,028
Maryland	0	1	93	341,188	61	0	0.0000	341,188	0	61	5,593
Massachusetts	0	1	94	451,824	78	0	0.0000	451,824	0	78	5,793
Michigan	0	1	96	682,588	78	3	0.0385	656,335	0	75	8,751
Minnesota	0	1	83	206,074	78	0	0.0000	206,074	0	78	2,642
Mississippi	0	1	92	229,690	82	1	0.0122	226,889	0	81	2,801
Missouri	0	1	87	341,956	74	2	0.0270	332,714	0	72	4,621

Table D.10 *(continued)*

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
		a	b	e	g	h	i	j	k	l	m
Montana	0	1	81	56,222	64	1	0.0156	55,344	0	63	878
Nebraska	0	1	88	76,071	65	1	0.0154	74,901	0	64	1,170
Nevada	0	1	104	228,019	74	0	0.0000	228,019	0	74	3,081
New Hampshire	0	1	63	43,819	56	1	0.0179	43,037	0	55	782
New Jersey	0	1	87	376,151	66	0	0.0000	376,151	1	65	5,787
New Mexico	0	1	98	219,831	88	2	0.0227	214,835	0	86	2,498
New York	0	1	90	1,566,292	78	4	0.0513	1,485,969	1	73	20,356
North Carolina	0	1	94	570,515	90	0	0.0000	570,515	0	90	6,339
North Dakota	0	1	44	25,224	39	3	0.0769	23,284	0	36	647
Ohio	0	1	101	700,833	90	3	0.0333	677,472	0	87	7,787
Oklahoma	0	1	97	265,923	88	2	0.0227	259,879	0	86	3,022
Oregon	0	1	91	362,792	72	0	0.0000	362,792	0	72	5,039
Pennsylvania	0	1	89	958,143	71	0	0.0000	958,143	0	71	13,495
Rhode Island	0	1	97	90,780	86	3	0.0349	87,613	0	83	1,056
South Carolina	0	1	99	306,259	84	3	0.0357	295,321	0	81	3,646
South Dakota	0	1	61	40,063	55	1	0.0182	39,335	0	54	728
Tennessee	0	1	112	465,579	87	2	0.0230	454,876	0	85	5,351
Texas	0	1	98	1,555,982	76	0	0.0000	1,555,982	1	75	20,746
Utah	0	1	87	77,727	74	3	0.0405	74,576	0	71	1,050
Vermont	0	1	63	41,032	58	0	0.0000	41,032	0	58	707
Virginia	0	1	92	351,524	72	3	0.0417	336,877	0	69	4,882
Washington	0	1	92	502,419	70	0	0.0000	502,419	0	70	7,177
West Virginia	0	1	85	165,189	72	2	0.0278	160,600	0	70	2,294
Wisconsin	0	1	99	328,486	84	0	0.0000	328,486	0	84	3,911
Wyoming	0	1	29	13,149	26	2	0.0769	12,138	0	24	506
Guam	0	1	43	15,292	37	2	0.0541	14,465	2	33	438
Virgin Islands	0	1	27	13,403	23	2	0.0870	12,238	0	21	583

Table D.11. Stratification and weight calculation by State, May 2018

		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	105	355,936	92	2	0.0217	348,198	0	90	3,869
Alaska	0	1	61	39,390	52	1	0.0192	38,633	0	51	758
Arizona	0	1	98	379,064	70	4	0.0571	357,403	0	66	5,415
Arkansas	0	1	102	161,721	94	2	0.0213	158,280	0	92	1,720
California	0	1	96	1,940,828	63	1	0.0159	1,910,021	1	61	31,312
Colorado	0	1	98	219,975	63	0	0.0000	219,975	0	63	3,492
Connecticut	0	1	98	219,669	79	2	0.0253	214,108	0	77	2,781
Delaware	0	1	66	67,532	46	2	0.0435	64,596	0	44	1,468
District of Columbia	0	1	95	67,877	88	2	0.0227	66,334	0	86	771
Florida	0	1	107	1,626,298	77	0	0.0000	1,626,298	0	77	21,121
Georgia	0	1	93	717,580	87	3	0.0345	692,836	0	84	8,248
Hawaii	0	1	92	83,280	51	1	0.0196	81,647	0	50	1,633
Idaho	0	1	100	69,690	82	0	0.0000	69,690	0	82	850
Illinois	0	1	93	935,528	72	1	0.0139	922,535	0	71	12,993
Indiana	0	1	99	270,630	74	0	0.0000	270,630	0	74	3,657
Iowa	0	1	87	162,985	82	2	0.0244	159,010	0	80	1,988
Kansas	0	1	87	99,814	70	3	0.0429	95,536	0	67	1,426
Kentucky	0	1	84	273,564	80	0	0.0000	273,564	0	80	3,420
Louisiana	0	1	90	400,904	65	0	0.0000	400,904	0	65	6,168
Maine	0	1	92	89,398	85	2	0.0235	87,295	1	82	1,065
Maryland	0	1	92	340,106	68	1	0.0147	335,104	0	67	5,002
Massachusetts	0	1	94	450,584	84	0	0.0000	450,584	0	84	5,364
Michigan	0	1	95	678,317	81	0	0.0000	678,317	0	81	8,374
Minnesota	0	1	83	206,611	77	4	0.0519	195,878	0	73	2,683
Mississippi	0	1	91	228,585	85	0	0.0000	228,585	0	85	2,689
Missouri	0	1	87	339,031	79	5	0.0633	317,573	1	73	4,350

Table D.11 *(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
Montana	0	1	80	55,828	61	0	0.0000	55,828	0	61	915
Nebraska	0	1	89	75,904	77	2	0.0260	73,932	0	75	986
Nevada	0	1	104	228,121	76	0	0.0000	228,121	0	76	3,002
New Hampshire	0	1	63	43,372	55	0	0.0000	43,372	3	52	834
New Jersey	0	1	88	375,870	54	0	0.0000	375,870	2	52	7,228
New Mexico	0	1	98	219,707	81	4	0.0494	208,857	0	77	2,712
New York	0	1	90	1,565,561	72	7	0.0972	1,413,354	0	65	21,744
North Carolina	0	1	94	567,199	90	1	0.0111	560,897	0	89	6,302
North Dakota	0	1	44	25,087	42	2	0.0476	23,892	0	40	597
Ohio	0	1	93	708,849	76	0	0.0000	708,849	0	76	9,327
Oklahoma	0	1	97	265,491	82	3	0.0366	255,778	0	79	3,238
Oregon	0	1	99	360,880	76	2	0.0263	351,383	0	74	4,748
Pennsylvania	0	1	89	958,288	77	0	0.0000	958,288	1	76	12,609
Rhode Island	0	1	75	91,067	68	1	0.0147	89,728	0	67	1,339
South Carolina	0	1	97	302,266	86	1	0.0116	298,751	0	85	3,515
South Dakota	0	1	62	39,811	58	0	0.0000	39,811	0	58	686
Tennessee	0	1	108	452,253	81	1	0.0123	446,670	0	80	5,583
Texas	0	1	97	1,537,717	71	1	0.0141	1,516,059	0	70	21,658
Utah	0	1	87	77,295	72	4	0.0556	73,001	0	68	1,074
Vermont	0	1	63	40,636	60	1	0.0167	39,959	0	59	677
Virginia	0	1	92	350,568	64	2	0.0313	339,613	0	62	5,478
Washington	0	1	93	500,273	74	1	0.0135	493,513	0	73	6,760
West Virginia	0	1	86	164,204	68	1	0.0147	161,789	0	67	2,415
Wisconsin	0	1	98	326,150	84	0	0.0000	326,150	0	84	3,883
Wyoming	0	1	28	12,933	26	0	0.0000	12,933	0	26	497
Guam	0	1	45	15,262	36	0	0.0000	15,262	0	36	424
Virgin Islands	0	1	17	13,739	16	0	0.0000	13,739	0	16	859

Table D.12. Stratification and weight calculation by State, June 2018

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	Disqualifica tion 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	105	355,661	88	1	0.0114	351,619	0	87	4,042
Alaska	0	1	61	39,383	52	2	0.0385	37,868	1	49	773
Arizona	0	1	98	383,328	71	1	0.0141	377,929	0	70	5,399
Arkansas	0	1	103	160,875	89	5	0.0562	151,837	0	84	1,808
California	0	1	101	1,930,438	66	1	0.0152	1,901,189	1	64	29,706
Colorado	0	1	97	219,802	75	0	0.0000	219,802	0	75	2,931
Connecticut	0	1	96	218,713	80	2	0.0250	213,245	0	78	2,734
Delaware	0	1	92	67,314	71	4	0.0563	63,522	0	67	948
District of Columbia	0	1	95	67,691	85	1	0.0118	66,895	1	83	806
Florida	0	1	107	1,628,099	88	2	0.0227	1,591,097	0	86	18,501
Georgia	0	1	110	719,296	98	3	0.0306	697,277	0	95	7,340
Hawaii	0	1	91	83,472	53	0	0.0000	83,472	0	53	1,575
Idaho	0	1	100	69,102	81	1	0.0123	68,249	0	80	853
Illinois	0	1	89	913,344	69	1	0.0145	900,107	0	68	13,237
Indiana	0	1	97	268,109	74	2	0.0270	260,863	0	72	3,623
Iowa	0	1	86	162,698	75	2	0.0267	158,359	0	73	2,169
Kansas	0	1	87	99,693	79	2	0.0253	97,169	0	77	1,262
Kentucky	0	1	101	285,923	95	1	0.0105	282,913	1	93	3,042
Louisiana	0	1	90	400,091	68	1	0.0147	394,207	0	67	5,884
Maine	0	1	91	88,606	88	4	0.0455	84,578	0	84	1,007
Maryland	0	1	91	339,795	51	0	0.0000	339,795	0	51	6,663
Massachusetts	0	1	93	451,028	82	1	0.0122	445,528	0	81	5,500
Michigan	0	1	78	673,317	63	2	0.0317	651,942	0	61	10,688
Minnesota	0	1	87	206,036	81	5	0.0617	193,318	0	76	2,544
Mississippi	0	1	91	228,504	84	0	0.0000	228,504	0	84	2,720
Missouri	0	1	87	338,113	80	3	0.0375	325,434	0	77	4,226

Table D.12 *(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	Disqualifica tion 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**						
Montana	0	1	79	55,422	62	1	0.0161	54,528	0	61	894
Nebraska	0	1	88	75,786	74	1	0.0135	74,762	0	73	1,024
Nevada	0	1	104	228,943	83	2	0.0241	223,426	1	80	2,793
New Hampshire	0	1	62	42,962	55	1	0.0182	42,181	3	51	827
New Jersey	0	1	87	373,692	63	1	0.0159	367,760	3	59	6,233
New Mexico	0	1	98	219,930	83	0	0.0000	219,930	0	83	2,650
New York	0	1	90	1,557,053	84	5	0.0595	1,464,371	1	78	18,774
North Carolina	0	1	94	571,842	90	1	0.0111	565,488	0	89	6,354
North Dakota	0	1	44	24,932	38	1	0.0263	24,276	0	37	656
Ohio	0	1	93	704,772	77	2	0.0260	686,466	0	75	9,153
Oklahoma	0	1	98	267,247	85	1	0.0118	264,103	0	84	3,144
Oregon	0	1	93	360,976	78	1	0.0128	356,348	0	77	4,628
Pennsylvania	0	1	89	953,940	65	0	0.0000	953,940	0	65	14,676
Rhode Island	0	1	0	91,110	0	0	0.0000	0	0	0	0
South Carolina	0	1	96	299,368	87	2	0.0230	292,486	0	85	3,441
South Dakota	0	1	61	39,519	56	1	0.0179	38,813	0	55	706
Tennessee	0	1	89	448,768	77	0	0.0000	448,768	0	77	5,828
Texas	0	1	98	1,541,976	74	1	0.0135	1,521,138	0	73	20,838
Utah	0	1	86	76,909	80	2	0.0250	74,986	0	78	961
Vermont	0	1	62	40,353	55	0	0.0000	40,353	0	55	734
Virginia	0	1	92	349,964	66	0	0.0000	349,964	1	65	5,384
Washington	0	1	91	498,479	73	0	0.0000	498,479	0	73	6,828
West Virginia	0	1	96	163,326	76	0	0.0000	163,326	0	76	2,149
Wisconsin	0	1	97	325,188	79	0	0.0000	325,188	0	79	4,116
Wyoming	0	1	28	12,698	26	2	0.0769	11,721	0	24	488
Guam	0	1	43	15,715	38	2	0.0526	14,888	0	36	414
Virgin Islands	0	1	18	13,920	16	0	0.0000	13,920	0	16	870

Table D.13. Stratification and weight calculation by State, July 2018

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
		a	b	e	g	h	i	j	k	l	m
Alabama	0	1	142	355,403	124	1	0.0081	352,537	0	123	2,866
Alaska	0	1	59	37,854	42	0	0.0000	37,854	0	42	901
Arizona	0	1	99	384,136	73	1	0.0137	378,874	1	71	5,336
Arkansas	0	1	102	161,574	89	0	0.0000	161,574	0	89	1,815
California	0	1	96	1,923,253	56	0	0.0000	1,923,253	0	56	34,344
Colorado	0	1	98	220,325	63	0	0.0000	220,325	8	55	4,006
Connecticut	0	1	97	217,399	79	1	0.0127	214,647	1	77	2,788
Delaware	0	1	91	66,653	64	1	0.0156	65,612	0	63	1,041
District of Columbia	0	1	94	67,076	82	1	0.0122	66,258	0	81	818
Florida	0	1	104	1,611,450	81	0	0.0000	1,611,450	0	81	19,894
Georgia	0	1	109	709,773	96	3	0.0313	687,593	0	93	7,393
Hawaii	0	1	91	83,333	56	2	0.0357	80,357	0	54	1,488
Idaho	0	1	96	67,611	78	0	0.0000	67,611	0	78	867
Illinois	0	1	84	884,510	61	2	0.0328	855,510	1	58	14,750
Indiana	0	1	98	269,076	80	3	0.0375	258,986	0	77	3,363
Iowa	0	1	85	160,291	77	1	0.0130	158,209	0	76	2,082
Kansas	0	1	87	99,660	80	5	0.0625	93,431	0	75	1,246
Kentucky	0	1	98	279,320	89	4	0.0449	266,766	0	85	3,138
Louisiana	0	1	89	394,958	67	1	0.0149	389,063	0	66	5,895
Maine	0	1	91	88,020	82	5	0.0610	82,653	0	77	1,073
Maryland	0	1	92	339,411	60	0	0.0000	339,411	0	60	5,657
Massachusetts	0	1	93	452,750	75	0	0.0000	452,750	0	75	6,037
Michigan	0	1	77	672,544	59	1	0.0169	661,145	0	58	11,399
Minnesota	0	1	88	214,119	87	1	0.0115	211,658	0	86	2,461
Mississippi	0	1	90	225,966	81	2	0.0247	220,387	0	79	2,790
Missouri	0	1	85	334,831	76	2	0.0263	326,020	0	74	4,406

Table D.13 *(continued)*

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
Montana	0	1	79	54,998	56	2	0.0357	53,034	1	53	1,001
Nebraska	0	1	87	75,277	69	2	0.0290	73,095	0	67	1,091
Nevada	0	1	104	228,458	87	1	0.0115	225,832	0	86	2,626
New Hampshire	0	1	61	42,368	52	0	0.0000	42,368	2	50	847
New Jersey	0	1	88	371,068	60	0	0.0000	371,068	0	60	6,184
New Mexico	0	1	98	219,426	81	1	0.0123	216,717	0	80	2,709
New York	0	1	90	1,549,426	79	1	0.0127	1,529,813	0	78	19,613
North Carolina	0	1	93	568,520	89	0	0.0000	568,520	0	89	6,388
North Dakota	0	1	43	24,602	35	1	0.0286	23,899	0	34	703
Ohio	0	1	92	701,682	75	3	0.0400	673,615	0	72	9,356
Oklahoma	0	1	97	266,740	87	3	0.0345	257,542	0	84	3,066
Oregon	0	1	93	358,578	77	1	0.0130	353,921	0	76	4,657
Pennsylvania	0	1	89	952,503	68	0	0.0000	952,503	0	68	14,007
Rhode Island	0	1	0	90,923	0	0	0.0000	0	0	0	0
South Carolina	0	1	95	294,174	87	1	0.0115	290,793	0	86	3,381
South Dakota	0	1	61	39,171	59	0	0.0000	39,171	0	59	664
Tennessee	0	1	88	445,861	77	1	0.0130	440,071	0	76	5,790
Texas	0	1	98	1,543,618	75	2	0.0267	1,502,455	0	73	20,582
Utah	0	1	85	75,375	75	3	0.0400	72,360	0	72	1,005
Vermont	0	1	62	39,820	55	0	0.0000	39,820	0	55	724
Virginia	0	1	91	347,961	68	2	0.0294	337,727	0	66	5,117
Washington	0	1	92	493,608	67	0	0.0000	493,608	0	67	7,367
West Virginia	0	1	95	162,875	71	2	0.0282	158,287	0	69	2,294
Wisconsin	0	1	97	324,355	81	3	0.0370	312,342	0	78	4,004
Wyoming	0	1	27	12,387	22	1	0.0455	11,824	0	21	563
Guam	0	1	44	15,572	38	0	0.0000	15,572	1	37	421
Virgin Islands	0	1	15	13,983	13	1	0.0769	12,907	0	12	1,076

Table D.14. Stratification and weight calculation by State, August 2018

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
		Unedited SNAP QC data			**Edited SNAP QC data**						
	Stratum	a	b	e	g	h	i	j	k	l	m
Alabama	0	1	142	356,212	116	1	0.0086	353,141	0	115	3,071
Alaska	0	1	58	37,741	47	1	0.0213	36,938	0	46	803
Arizona	0	1	99	387,025	76	3	0.0395	371,748	0	73	5,092
Arkansas	0	1	103	160,784	87	3	0.0345	155,240	0	84	1,848
California	0	1	97	1,925,471	65	0	0.0000	1,925,471	1	64	30,085
Colorado	0	1	99	224,125	62	1	0.0161	220,510	7	54	4,084
Connecticut	0	1	95	218,217	71	1	0.0141	215,144	0	70	3,073
Delaware	0	1	88	67,691	56	3	0.0536	64,065	1	52	1,232
District of Columbia	0	1	94	67,251	80	0	0.0000	67,251	0	80	841
Florida	0	1	100	1,587,429	83	0	0.0000	1,587,429	0	83	19,126
Georgia	0	1	107	707,797	90	4	0.0444	676,339	0	86	7,864
Hawaii	0	1	90	82,954	49	1	0.0204	81,261	0	48	1,693
Idaho	0	1	97	67,518	77	1	0.0130	66,641	0	76	877
Illinois	0	1	90	878,148	62	0	0.0000	878,148	0	62	14,164
Indiana	0	1	100	271,690	76	1	0.0132	268,115	0	75	3,575
Iowa	0	1	85	160,514	71	2	0.0282	155,992	0	69	2,261
Kansas	0	1	87	99,778	78	1	0.0128	98,499	1	76	1,296
Kentucky	0	1	97	264,429	90	2	0.0222	258,553	0	88	2,938
Louisiana	0	1	89	396,721	71	0	0.0000	396,721	0	71	5,588
Maine	0	1	89	87,381	82	5	0.0610	82,053	0	77	1,066
Maryland	0	1	92	342,016	57	2	0.0351	330,015	1	54	6,111
Massachusetts	0	1	94	452,619	84	1	0.0119	447,231	0	83	5,388
Michigan	0	1	78	666,695	69	2	0.0290	647,371	0	67	9,662
Minnesota	0	1	88	212,839	85	0	0.0000	212,839	0	85	2,504
Mississippi	0	1	90	225,825	80	1	0.0125	223,002	0	79	2,823
Missouri	0	1	86	334,059	82	2	0.0244	325,911	1	79	4,125

Table D.14 *(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	**a**	**b**	**e**	**g**	**h**	**i**	**j**	**k**	**l**	**m**
	Stratum									
Montana	0	1	79	54,864	59	3	0.0508	52,074	1	55	947
Nebraska	0	1	88	75,257	73	1	0.0137	74,226	0	72	1,031
Nevada	0	1	104	229,248	76	1	0.0132	226,232	0	75	3,016
New Hampshire	0	1	61	42,018	52	1	0.0192	41,210	0	51	808
New Jersey	0	1	87	370,575	60	0	0.0000	370,575	1	59	6,281
New Mexico	0	1	98	221,361	78	1	0.0128	218,523	0	77	2,838
New York	0	1	90	1,547,379	76	1	0.0132	1,527,019	0	75	20,360
North Carolina	0	1	93	570,993	88	2	0.0227	558,016	0	86	6,489
North Dakota	0	1	42	24,501	38	0	0.0000	24,501	0	38	645
Ohio	0	1	87	706,916	67	1	0.0149	696,365	0	66	10,551
Oklahoma	0	1	99	268,949	88	3	0.0341	259,780	0	85	3,056
Oregon	0	1	92	358,276	72	3	0.0417	343,348	0	69	4,976
Pennsylvania	0	1	89	954,430	67	1	0.0149	940,185	0	66	14,245
Rhode Island	0	1	0	91,757	0	0	0.0000	0	0	0	0
South Carolina	0	1	94	293,263	77	1	0.0130	289,454	0	76	3,809
South Dakota	0	1	61	39,073	58	0	0.0000	39,073	0	58	674
Tennessee	0	1	90	449,975	78	1	0.0128	444,206	0	77	5,769
Texas	0	1	98	1,545,637	66	0	0.0000	1,545,637	0	66	23,419
Utah	0	1	85	75,695	72	1	0.0139	74,644	0	71	1,051
Vermont	0	1	61	40,037	52	0	0.0000	40,037	0	52	770
Virginia	0	1	91	348,987	63	0	0.0000	348,987	0	63	5,539
Washington	0	1	90	492,935	66	1	0.0152	485,466	0	65	7,469
West Virginia	0	1	95	163,348	77	1	0.0130	161,227	0	76	2,121
Wisconsin	0	1	97	323,722	79	3	0.0380	311,429	0	76	4,098
Wyoming	0	1	26	12,172	23	0	0.0000	12,172	0	23	529
Guam	0	1	44	15,727	37	1	0.0270	15,302	0	36	425
Virgin Islands	0	1	14	14,108	13	0	0.0000	14,108	0	13	1,085

Table D.15. Stratification and weight calculation by State, September 2018

		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	142	353,530	121	0	0.0000	353,530	1	120	2,946
Alaska	0	1	58	37,776	42	1	0.0238	36,877	0	41	899
Arizona	0	1	99	387,196	74	3	0.0405	371,499	0	71	5,232
Arkansas	0	1	103	161,019	97	4	0.0412	154,379	1	92	1,678
California	0	1	96	1,912,140	66	2	0.0303	1,854,196	1	63	29,432
Colorado	0	1	98	223,942	64	1	0.0156	220,443	3	60	3,674
Connecticut	0	1	86	218,232	69	1	0.0145	215,069	1	67	3,210
Delaware	0	1	87	66,885	56	2	0.0357	64,496	0	54	1,194
District of Columbia	0	1	95	67,148	84	0	0.0000	67,148	0	84	799
Florida	0	1	102	1,584,118	70	2	0.0286	1,538,857	0	68	22,630
Georgia	0	1	106	692,402	92	4	0.0435	662,298	0	88	7,526
Hawaii	0	1	90	82,815	49	0	0.0000	82,815	0	49	1,690
Idaho	0	1	96	67,015	79	1	0.0127	66,167	0	78	848
Illinois	0	1	86	873,264	56	0	0.0000	873,264	0	56	15,594
Indiana	0	1	99	270,249	74	1	0.0135	266,597	0	73	3,652
Iowa	0	1	84	159,699	68	2	0.0294	155,002	0	66	2,349
Kansas	0	1	86	99,175	82	0	0.0000	99,175	0	82	1,209
Kentucky	0	1	96	261,868	93	3	0.0323	253,421	0	90	2,816
Louisiana	0	1	89	395,087	60	1	0.0167	388,502	1	58	6,698
Maine	0	1	89	86,740	75	4	0.0533	82,114	0	71	1,157
Maryland	0	1	93	340,855	63	2	0.0317	330,034	0	61	5,410
Massachusetts	0	1	94	449,592	85	0	0.0000	449,592	0	85	5,289
Michigan	0	1	76	659,967	59	1	0.0169	648,781	0	58	11,186
Minnesota	0	1	88	211,060	80	0	0.0000	211,060	0	80	2,638
Mississippi	0	1	89	221,698	79	0	0.0000	221,698	1	78	2,842
Missouri	0	1	85	332,235	80	2	0.0250	323,929	0	78	4,153

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						
Montana	0	1	77	54,289	56	3	0.0536	51,381	0	53	969
Nebraska	0	1	86	74,531	70	2	0.0286	72,402	0	68	1,065
Nevada	0	1	105	228,100	28	0	0.0000	228,100	0	28	8,146
New Hampshire	0	1	60	41,435	55	3	0.0545	39,175	0	52	753
New Jersey	0	1	87	368,203	57	0	0.0000	368,203	0	57	6,460
New Mexico	0	1	98	221,335	80	6	0.0750	204,735	0	74	2,767
New York	0	1	90	1,539,000	68	1	0.0147	1,516,368	0	67	22,632
North Carolina	0	1	93	534,391	90	1	0.0111	528,453	0	89	5,938
North Dakota	0	1	43	24,385	38	0	0.0000	24,385	0	38	642
Ohio	0	1	93	695,598	84	0	0.0000	695,598	0	84	8,281
Oklahoma	0	1	98	268,862	91	3	0.0330	259,998	0	88	2,955
Oregon	0	1	93	355,502	72	3	0.0417	340,689	0	69	4,938
Pennsylvania	0	1	89	953,467	65	1	0.0154	938,798	0	64	14,669
Rhode Island	0	1	0	94,623	0	0	0.0000	0	0	0	0
South Carolina	0	1	93	288,708	81	0	0.0000	288,708	0	81	3,564
South Dakota	0	1	60	38,720	58	0	0.0000	38,720	0	58	668
Tennessee	0	1	89	444,725	69	1	0.0145	438,280	0	68	6,445
Texas	0	1	98	1,539,597	74	0	0.0000	1,539,597	0	74	20,805
Utah	0	1	84	74,882	79	1	0.0127	73,934	0	78	948
Vermont	0	1	61	39,911	55	2	0.0364	38,460	0	53	726
Virginia	0	1	90	346,163	67	4	0.0597	325,497	0	63	5,167
Washington	0	1	91	490,400	64	0	0.0000	490,400	0	64	7,663
West Virginia	0	1	97	163,296	66	0	0.0000	163,296	0	66	2,474
Wisconsin	0	1	96	322,870	76	4	0.0526	305,877	0	72	4,248
Wyoming	0	1	26	12,004	24	0	0.0000	12,004	0	24	500
Guam	0	1	56	15,448	43	0	0.0000	15,448	0	43	359
Virgin Islands	0	1	12	14,260	8	0	0.0000	14,260	0	8	1,783

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

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 2018 SNAP PARAMETERS

Table F.1. SNAP gross income screen, FY 2018

Unit size	Gross income screen (dollars per month)		
	Contiguous United States, Guam, and the Virgin Islands	Alaska	Hawaii
1	1,307	1,632	1,502
2	1,760	2,199	2,023
3	2,213	2,765	2,544
4	2,665	3,332	3,065
5	3,118	3,898	3,586
6	3,571	4,465	4,107
7	4,024	5,031	4,628
8	4,477	5,598	5,150
Each additional person	+453	+567	+522

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

Note: The FY 2018 SNAP gross monthly income limits were based on the 2017 Federal poverty guidelines issued by the U.S. Department of Health and Human Services. FNS derived the FY 2017 gross income limits by multiplying the 2017 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 2018

Unit size	Net income screen (dollars per month)		
	Contiguous United States, Guam, and the Virgin Islands	Alaska	Hawaii
1	1,005	1,255	1,155
2	1,354	1,691	1,556
3	1,702	2,127	1,957
4	2,050	2,563	2,358
5	2,399	2,999	2,759
6	2,747	3,435	3,160
7	3,095	3,870	3,560
8	3,444	4,306	3,961
Each additional person	+349	+436	+401

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

Note: The FY 2018 SNAP net monthly income limits were based on the 2017 Federal poverty guidelines issued by the U.S. Department of Health and Human Services. FNS derived the FY 2018 net income limits by dividing the 2017 poverty guidelines by 12 and rounding up to the nearest dollar.

Table F.3. Deduction amounts, FY 2018

Deduction	Contiguous United States	Alaska	Hawaii	Guam	Virgin Islands
Standard deduction (dollars)					
1 to 2 people	160	273	225	321	141
3 people	160	273	225	321	141
4 people	170	273	225	341	170
5 people	199	273	229	399	199
6 or more people	228	285	263	457	228
Maximum excess shelter expense deduction (dollars)	535	854	720	627	421
Homeless household shelter deduction (dollars)	143	143	143	143	143
Earnings deduction	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 2018

State	If medical expenses are less than or equal to (dollars)	Then medical expense deduction is[a] (dollars)
Alabama	200	165
Arkansas	138	103
California[b]	155	120
Colorado	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	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] If medical expenses exceed the amount in column 2, the medical expense deduction is equal to the actual medical expenses minus $35.

[b] California implemented its program in October 2017.

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

Table F.5. Maximum monthly SNAP benefit, FY 2018

Unit size	Maximum SNAP benefit (dollars)						
	Contiguous United States	Alaska Urban	Alaska Rural I	Alaska Rural II	Hawaii	Guam	Virgin Islands
1	192	230	293	357	358	283	247
2	352	422	538	655	657	519	453
3	504	604	771	938	941	743	648
4	640	767	979	1,191	1,195	944	823
5	760	911	1,162	1,415	1,419	1,121	978
6	913	1,094	1,395	1,698	1,703	1,345	1,173
7	1,009	1,209	1,542	1,876	1,883	1,487	1,297
8	1,153	1,382	1,762	2,145	2,152	1,699	1,482
Each additional person	+144	+173	+220	+268	+269	+212	+185

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

Note: These maximum benefit values are based on the cost of the Thrifty Food Plan in June 2017 for a reference family of four, rounded to the lowest dollar increment.

Table F.6. Minimum monthly SNAP benefit, FY 2018

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	15	18	24	29	29	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 2018

State	Standard Utility Allowances (dollars)							
	HCSUA[a]	LUA[b]	Telephone allowance[c]	Electricity[d]	Water[d]	Sewer[d]	Trash[d]	Other standards[e]
Alabama	352	347	38					
Alaska[f]								
Central	371		40	100	50	43	32	106
Southeast	355		28	78	41	66	25	116
South central	434		31	129	44	47	51	132
Northern	564		31	134	51	60	30	258
Southwest	767		35	171	63	79	17	402
Northwest	848		38	151	61	58	33	507
Arizona								
1 to 3 people	274		32					
4 or more people	370		32					
Arkansas	278		25					
California	397	126	18					
Colorado	469	298	76	56	56	56	56	56
Connecticut	728	320	27					
Delaware	406	281	35	78	78	78	78	78
District of Columbia	325	270	69	67	67	67	67	67
Florida	347	280	45					
Georgia								
10/2017–3/2018	354	306	37					
4/2018–9/2018	357	306	37					
Hawaii								
1 person			26	174	45	88	88	174
2 people			26	190	50	88	88	190
3 people			26	217	55	88	88	217
4 to 5 people			26	268	65	88	88	268
6 people			26	315	75	88	88	315
7 or more people			26	357	90	88	88	357
Idaho	279	223	41	91	91	91	91	91

See notes at the end of the table

Table F.7 (*continued*)

State	HCSUA[a]	LUA[b]	Telephone allowance[c]	Electricity[d]	Water[d]	Sewer[d]	Trash[d]	Other standards[e]
Illinois	394	306	28	70	70	70	70	70
Indiana								
10/2017–4/2018	400	244	29	54	54	54	54	54
5/2018–9/2018	421	253	31	56	56	56	56	56
Iowa	348	249	29					
Kansas	391	246	39					
Kentucky	318	272	36					
Louisiana	346	190	49					
Maine	692	229	45					
Maryland								
10/2017–12/2017	416	254	40					
1/2018–9/2018	420	257	40					
Massachusetts	636	392	45					
Michigan	537		32	133	88	88	20	38
Minnesota	556		41	172				
Mississippi	270	204	30					
Missouri	371	296	60	122	122	122	122	122
Montana	534	192	33	159	159	159	159	159
Nebraska	469	245	45	50	50	50	50	50
Nevada	266	236	17	55	55	55	55	55
New Hampshire	689	251	27	147				
New Jersey	514	302	29					
New Mexico	320	127	42					
New York								
New York City	791	313	30					
Long Island	736	289	30					
Rest of New York	654	265	30					
North Carolina								
1 person	400	276	35					
2 people	440	303	35					
3 people	484	333	35					

Table F.7 (*continued*)

State	HCSUA[a]	LUA[b]	Telephone allowance[c]	Electricity[d]	Water[d]	Sewer[d]	Trash[d]	Other standards[e]
4 people	528	363	35					
5 or more people	576	396	35					
North Dakota	610	230	33	197	197	197	197	197
Ohio	530	342	39	76	76	76	76	76
Oklahoma	330	284	48					
Oregon	454	344	64	56	56	56	56	56
Pennsylvania	580	299	33	56	56	56	56	56
Rhode Island	628		23					
South Carolina	302	220	25					
South Dakota	721	201	48	83	83	83	83	83
Tennessee								
1 person	311	133	27					
2 people	322	133	27					
3 people	334	133	27					
4 people	346	133	27					
5 people	357	133	27					
6 people	369	133	27					
7 people	379	133	27					
8 people	391	133	27					
9 people	405	133	27					
10 or more people	415	133	27					
Texas	342	316	37					
Utah	365	285	65					
Vermont	808	232	36					
Virginia								
1 to 3 people	306		59					
4 or more people	381		59					
Washington	421	328	57					
West Virginia	462	287		74	74	74	74	74
Wisconsin	448	338	31	167	84	84	22	34

Table F.7 (*continued*)

State	HCSUA[a]	LUA[b]	Telephone allowance[c]	Standard Utility Allowances (dollars)				
				Electricity[d]	Water[d]	Sewer[d]	Trash[d]	Other standards[e]
Wyoming	386	262	53					
Guam								
1 person			27	108	37	28	30	30
2 to 3 people			27	124	49	28	30	30
4 people			27	147	67	28	30	60
5 people			27	167	82	28	30	60
6 people			27	191	107	28	30	60
7 people			27	216	131	28	30	90
8 people			27	226	144	28	30	90
9 to 10 people			27	242	165	28	30	90
11 to 16 people			27	248	172	28	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 2018

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	462	420	250	170
2	825	750	437	313
3	1,082	984	532	452
4	1,318	1,198	621	577
5	1,522	1,384	697	687
6	1,753	1,594	773	821
7	1,910	1,736	850	886
8	2,109	1,917	916	1,001
9	2,306	2,096	980	1,116
10	2,497	2,270	1,035	1,235
Each additional person	+189	+172	+53	+119

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

Table F.9. Arizona SSI-CAP (AZSNAP) benefit criteria, FY 2018

Shelter expenses	Benefit (dollars)
October 2017–June 2018	
$0 to $99	25
$100 to $199	62
$200 to $299	96
$300 or greater	140
July 2018–September 2018	
$0 to $99	25
$100 to $199	62
$200 to $299	96
$300 or greater	150

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

Table F.10. Kentucky SSI-CAP (KYSAFE) benefit criteria, FY 2018

Unit size	Shelter expenses	Benefit (dollars)
One person	Less than $200	33
	$200 or greater	75
Two people	Less than $108	82
	$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. Louisiana SSI-CAP (LaCAP) benefit criteria, FY 2018

Shelter expenses	Benefit (dollars)
October 2017–January 2018	
$0 to $100	29
$101 to $399	29
$400 to $699	82
$700 or greater	173
February 2018–September 2018	
$0 to $100	35
$101 to $399	35
$400 to $699	82
$700 or greater	173

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

Table F.12. Maryland SSI-CAP (MSNAP) benefit criteria, FY 2018

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. Michigan SSI-CAP (MiCAP) benefit criteria, FY 2018

Shelter expenses	Benefit (dollars)	Gross income[a] (dollars)
$1,000 or less	171	764
Greater than $1,000	185	764

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

[a]In FY 2018, Michigan had an SSI supplement of $15, making the combined Federal and State SSI amount $764.

Table F.14. Mississippi SSI-CAP (MSCAP) benefits by income and shelter expense patterns, FY 2018

Income type and shelter expenses	Benefit level (dollars)	Gross income (dollars)
October 2017–December 2017		
SSI only		
$335 or less	33	735
Greater than $335	68	735
SSI and other unearned income		
$335 or less	24	755
Greater than $335	59	755
January 2018–September 2018		
SSI only		
$335 or less	27	750
Greater than $335	61	750
SSI and other unearned income		
$335 or less	18	770
Greater than $335	52	770

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. New Jersey SSI-CAP (NJ SNAS) benefit criteria, FY 2018

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. New York SSI-CAP (NYSNIP) benefit criteria, FY 2018

Income and shelter expenses	Monthly benefit amount (dollars)		
	New York	Long Island	Rest of State
October 2017–December 2017			
SSI only			
With positive utility costs			
Rent $247 or less	192	189	164
Rent greater than $247	192	192	192
With no utility costs			
Rent $247 or less	15	15	15
Rent greater than $247	24	24	24
With no shelter costs	15	15	15
SSI and other unearned income			
With positive utility costs			
Rent $247 or less	192	180	155
Rent greater than $247	192	192	192
With no utility costs			
Rent $247 or less	15	15	15
Rent greater than $247	15	15	15
With no shelter costs	15	15	15
January 2018–September 2018			
SSI only			
With positive utility costs			
Rent $251 or less	192	183	158
Rent greater than $251	192	192	192
With no utility costs			
Rent $251 or less	15	15	15
Rent greater than $251	18	18	18
With no shelter costs	15	15	15
SSI and other unearned income			
With positive utility costs			
Rent $251 or less	190	174	149
Rent greater than $251	192	192	192
With no utility costs			
Rent $251 or less	15	15	15
Rent greater than $251	15	15	15
With no shelter costs	15	15	15

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

Table F.17. North Carolina SSI-CAP (NCSNAP) benefit criteria, FY 2018

Shelter expenses	Benefit (dollars)
Less than $150	70
$150 or greater	130

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

Table F.18. Pennsylvania SSI-CAP (PACAP) benefit criteria, FY 2018

Income type and shelter expenses	Benefit (dollars)
SSI only	
Shelter expenses less than $196	111
Shelter expenses $196 or greater	152
SSI and other unearned income	
Shelter expenses less than $196	102
Shelter expenses $196 or greater	143

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

Table F.19. South Carolina SSI-CAP (SCCAP) benefits by income and shelter expense patterns, FY 2018

Income type and shelter expenses	Benefits (dollars)	Gross income (dollars)
October 2017–December 2017		
SSI only		
Shelter expenses $315 or less	27	735
Shelter expenses greater than $315	71	735
SSI and other unearned income		
Shelter expenses $315 or less	18	755
Shelter expenses greater than $315	62	755
January 2018–September 2018		
SSI only		
Shelter expenses $338 or less	27	750
Shelter expenses greater than $338	71	750
SSI and other unearned income		
Shelter expenses $338 or less	18	770
Shelter expenses greater than $338	62	770

Source: U.S. Department of Agriculture, Food and Nutrition Service; FY 2018 raw SNAP QC data file.

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

Table F.20. South Dakota SSI-CAP (SD IN) benefit criteria, FY 2018

Earnings and medical expenses	Benefits (dollars)			
	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.21. Texas SSI-CAP (SNAP-CAP) benefit criteria, FY 2018

Shelter expenses	Benefit (dollars)
$400 or less	65
Greater than $400	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.22. Virginia SSI-CAP (VaCAP) benefit criteria, FY 2018

Shelter expenses	Benefit (dollars)
October 2017–November 2017	
Less than $500	58
$500 or greater	100
December 2017–September 2018	
Less than $500	66
$500 or greater	100

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

Table F.23. Florida (SUNCAP), Massachusetts (BAY STATE CAP), and Washington SSI-CAP (WASHCAP) shelter allowances, FY 2018

Rent/mortgage cutoff for high/low standard rent allowance	Standard rent/mortgage allowance (dollars)
Florida (SUNCAP)	
$305 or less	125
Greater than $305	330
Massachusetts (BAY STATE CAP)	
Less than $453	223
$453 or greater	453
Washington (WASHCAP)	
October 2017–December 2017	
Less than $320	235
$320 or greater	425
January 2018–September 2018	
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

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									

FORM FNS-380-1 (11-12) Previous Editions Obsolete

SBU

Electronic Form Version Designed in Adobe 9.1 Version

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.
2.
3.
4.

4