



Food and Nutrition Service

U.S. DEPARTMENT OF AGRICULTURE

# **Technical Documentation for the Fiscal Year 2023 Supplemental Nutrition Assistance Program Quality Control Database and the QC Minimodel**

## **FINAL REPORT**

**April 2025**

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**Disclaimer**

The findings and conclusions in this report are those of the authors and should not be construed to represent any official USDA or U.S. Government determination or policy.

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## 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). SNAP provides millions of Americans with the means to purchase food for a nutritious diet. During fiscal year (FY) 2023, SNAP served an average of 42.2 million people monthly and paid out \$107 billion in benefits, including emergency allotments to supplement SNAP benefits during the COVID-19 public health emergency.<sup>1</sup>

The characteristics of SNAP participants and households and the size of the SNAP caseload change over time in response to changes in program rules as well as economic and demographic trends. 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 that are conducted by State SNAP agencies to assess the accuracy of eligibility determinations and benefit calculations for their SNAP caseloads.<sup>2</sup>

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

This chapter provides a road map to the report and summarizes key program and database changes since FY 2022.

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 is designed to give analysts and new users of the data enough information to be able 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.

Chapter IV provides a technical description of the procedures used to transform the FY 2023 SNAP QC database into the format required by the QC Minimodel and to document the QC-specific portions of the QC Minimodel.<sup>3</sup>

Chapter V contains the codebook for the FY 2023 SNAP QC database and explains how to use the database. For each variable, 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).

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<sup>1</sup> The estimates of 42.2 million participants and \$107 billion in benefits were based on FNS administrative records, available at <https://www.fns.usda.gov/pd/supplemental-nutrition-assistance-program-snap>. 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 (including COVID-19 emergency allotments).

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

<sup>3</sup> 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).

Appendix A provides an assessment of the quality of selected variables in the FY 2023 SNAP QC database. Users should read this appendix before using the SNAP QC database. The appendix recommends against the use of some variables and cautions against or provides a disclaimer for 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 2023 SNAP QC database. Appendix D shows how the monthly sampling weights were derived. Appendix E lists the State and region identification codes used in the file. Appendix F contains the parameter values used to determine SNAP eligibility in FY 2023, 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.

## A. Key program changes since FY 2022

Since the start of the COVID-19 public health emergency in March 2020, several pieces of legislation have contained changes, most temporary, to Federal SNAP rules. The provisions affecting SNAP eligibility rules and participants in FY 2023 are summarized below and discussed in more detail in the Characteristics of Supplemental Nutrition Assistance Program Households: Fiscal Year 2023 report (Monkovic and Ward forthcoming). Comprehensive detail is also available on FNS’s website.<sup>4</sup> Three changes most directly affected the SNAP QC database:

1. **SNAP emergency allotments.** The Families First Coronavirus Response Act (FFCRA) of 2020 authorized emergency supplemental appropriations in response to the COVID-19 public health emergency. Beginning in April 2020, SNAP households receiving less than the maximum SNAP benefit for their household size were eligible for emergency allotments that brought their benefits up to the maximum. Beginning in April 2021, all SNAP households, regardless of benefit level, were eligible for an emergency allotment of at least \$95, or the difference between the calculated benefit amount and the maximum if this difference was greater than \$95. By the start of FY 2023, 17 States—Alaska, Arizona, Arkansas, Florida, Georgia, Idaho, Indiana, Iowa, Kentucky, Mississippi, Missouri, Montana, Nebraska, North Dakota, South Dakota, Tennessee, and Wyoming—had returned to regular benefit amounts without emergency allotments. South Carolina returned to normal benefit amounts in January 2023. Emergency allotment benefits ended for all remaining States and territories in February 2023, although some issued February 2023 benefits in March 2023. See Section B for information on how SNAP emergency allotments are handled in the database.
2. **Time limits on SNAP benefits for adults ages 18–49 without disabilities in childless households.** Adults ages 18–49 without disabilities who do not live with a household member younger than age 18 (called able-bodied adults without dependents, or “ABAWDs”) are normally subject to time limits on their participation. The FFCRA temporarily and partially suspended time limits, beginning on April 1, 2020. This suspension continued through the end of June 2023.

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<sup>4</sup> Food and Nutrition Service. “FNS Documents & Resources.” <https://www.fns.usda.gov/resources>.

3. **Increase in the upper age limit for adults without disabilities in childless households subject to time limits.** The Fiscal Responsibility Act of 2023 (FRA) gradually increased the age at which adults who do not meet certain exceptions, such as having a disability or dependents, could be subject to time-limited SNAP benefits. The upper age limit increased from age 49 to age 50, effective September 1, 2023; age 52, effective October 1, 2023; and age 54, effective October 1, 2024. See Section B for information on how this change is handled in the database.

Some key State policy changes between FY 2022 and FY 2023 included the following:

- Effective October 2022, Connecticut increased the gross income limit of its broad-based categorical eligibility (BBCE) policy from 185 percent to 200 percent of poverty.
- Effective October 2022, Minnesota increased the gross income limit of its BBCE policy from 165 percent to 200 percent of poverty.
- Effective October 2022, Pennsylvania increased the gross income limit of its BBCE policy for households without a member who is elderly or has a disability from 160 percent to 200 percent of poverty, similar to its BBCE gross income limit for households *with* a member who is elderly or has a disability.
- Effective January 2023, New Hampshire increased the gross income limit of its BBCE policy from 185 percent to 200 percent of poverty and removed the requirement that the household include a child under age 22 and a relative of the child.
- Effective July 2023, Michigan removed the asset limit from its BBCE policy.
- Effective April 2023, Louisiana implemented a standard medical deduction demonstration program (SMD).

Although not noted in the previous documentation in this series, effective July 2022, Louisiana increased the gross income limit of its BBCE policy from 130 percent to 200 percent of poverty. No change occurred in the gross income limit of Louisiana's BBCE policy between FY 2022 and FY 2023.

See Chapter III for more information about State SMDs and Appendix B for more information about State BBCE policies.

## B. Key changes to the FY 2023 SNAP QC database

The contents of the FY 2023 SNAP QC database differ in several ways from earlier databases. The changes are the result of three factors: (1) differences in the QC sample; (2) changes to the raw data file, and (3) Federal and State policy changes.

### 1. Differences in the QC sample

As with the FY 2022 database, the FY 2023 database contains data from all 12 sample months of the fiscal year (October 2022 through September 2023). Most States and territories contributed data for all 12 months in each file. However, Delaware does not have any eligible sample data for July 2023 through September 2023. In the FY 2022 database, the exceptions are Alaska, Delaware, the District of Columbia, Rhode Island, and the Virgin Islands, all of which lack sample data for at least one month.

## **2. Changes to the raw data file**

Person-level variables in the raw data file usually include data for up to 16 household members. However, the FY 2023 data file included one 17-person household. We added variables for a 17th household member to accommodate this household.

The QC review codes for the person-level sex variable (SEX<sub>i</sub>) will change in FY 2024 to add a new code for individuals who prefer not to answer. However, three individuals in FY 2023 were assigned the new code. Chapter V describes the new code in the codebook.

## **3. Federal policy changes affecting the contents of the file**

Effective September 2023, the FRA increased the upper age limit of adults subject to time-limited benefits to 50. This change led to changes to the NDICSCAi variable for that month. The NDICSCAi variable defines this population.

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## 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 FY 2023 SNAP QC database contains detailed demographic, economic, and SNAP eligibility information for a nationally representative sample of 43,776 SNAP units.<sup>5</sup> The SNAP QC 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.<sup>6</sup> 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, terminated, or suspended, called *negative cases*, are reviewed to determine whether the denial, termination, or suspension was correct. This information is factored into States’ overall case and procedural error rate (CAPER).<sup>7</sup> The SNAP QC database is normally based on the sample of active cases drawn each month for the 50 States, the District of Columbia, Guam, and the Virgin Islands. The FY 2023 database had data for all States and territories except for Delaware, which did not collect data on any SNAP eligible household for three months—July 2023 through September 2023.

State QC reviewers check data for the sampled cases. They gather financial and demographic information from the sampled unit’s case file, visit the household to reinterview participants, and then determine whether the SNAP unit received the correct SNAP benefit amount. Information from the review 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. The 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 on the basis of their official payment error rates.

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<sup>5</sup> In this technical documentation, “SNAP unit” or simply “unit” refers to individuals who together are certified for and receive SNAP benefits. A household may contain multiple SNAP units and/or individuals who do not receive SNAP benefits. However, because QC sampling is done at the unit level, each record contains data on only one SNAP unit.

<sup>6</sup> QC reviewers follow guidelines from the SNAP Quality Control Review Handbook 310 and the Quality Control Review Schedule 380-1.

<sup>7</sup> The CAPER accounts for both the accuracy of the State agency’s determination and their compliance with federal procedural requirements around the determination. See <https://www.fns.usda.gov/snap/qc/caper> for more information.

Most of the data in the raw data file are the financial and demographic data collected during the review. The issued 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.<sup>8</sup> The reviewer-determined entries are defined as follows:

- If the SNAP unit was eligible and the authorized benefit amount determined by the reviewer equaled the issued benefit, then the error amount is zero and the case finding is entered as “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 an “overissuance” or “underissuance.” In FY 2023, error amounts of \$54 or less were not included in the calculation of State error rates.<sup>9</sup>
- If the reviewer determines that the SNAP unit was ineligible, then the issued benefit amount is recorded as the error amount and the case finding is “ineligible.”

State QC reviewers also check 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 or the 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 that are 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 the following:
  - 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 of the following:
  - 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

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<sup>8</sup> The SNAP benefit does not include the emergency allotments authorized as part of the FFCRA.

<sup>9</sup> This error amount, called the tolerance threshold, is adjusted each year to account for inflation. The tolerance threshold increased from \$48 in FY 2022 to \$54 in FY 2023.

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.

In a typical year, including FY 2023, the standard minimum annual State sample sizes range from 300 reviews 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:

$$\text{Standard minimum} = 300 + 0.042(N - 10,000),$$

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:

$$\text{Optional minimum} = 300 + 0.0153(N - 12,941),$$

where N is the average monthly caseload.

In FY 2023, all States 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.

## 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.<sup>10</sup> We remove records from that file for the following reasons:

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<sup>10</sup> See the codebook in Chapter V for the valid values for each variable.

- 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 had 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)

Table II.1 shows the number and percentage of cases that were dropped from the FY 2023 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 2023**

Category	FY 2023 SNAP QC sample	Percentage of cases sampled	Percentage of cases subject to review
Number of cases sampled	55,115	100.0	n.a.
Cases not subject to review	2,378	4.3	n.a.
Cases deselected to correct for oversampling	0	0.0	n.a.
Cases subject to review	52,737	95.7	100.0
Incomplete cases	6,812	12.4	12.9
Cases completed	45,925	83.3	87.1
Not eligible for SNAP	1,509	2.7	2.9
Not eligible for a positive benefit	484	0.9	0.9
Eligible for a positive benefit	43,932	79.7	83.3
Dropped due to unresolved inconsistencies	156	0.3	0.3
SNAP units in the final SNAP QC database	43,776	79.4	83.0

Source: FY 2023 SNAP QC sample.

n.a. = not applicable.

## 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 the reported unit-level gross income. Such inconsistencies may be rooted in the initial case record information or the data entry process. During data editing, 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.<sup>11</sup>
- Total deductions must equal the sum of the following:
  - Standard deduction
  - Earned income deduction
  - Dependent care deduction
  - Medical expense deduction
  - Child support payment deduction<sup>12</sup>
  - Excess shelter expense deduction or homeless household shelter deduction

Households participating in the Minnesota Family Investment Program (MFIP) or a Supplemental Security Income Combined Application Project (SSI-CAP) are subject to different eligibility and benefit determination rules, and their data are edited accordingly.

In Chapter III, we describe the complex process by which we determine whether a case is internally consistent and, if not, perform the 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 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, Temporary Assistance for Needy Families [TANF] or Social Security) is constructed by summing the person-level income of that type over all individuals in the SNAP unit. The total SNAP unit gross income, earned income, and unearned income variables are constructed by summing all the appropriate unit income variables.

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<sup>11</sup> The 2018 Farm Bill made mandatory the existing State option to provide a standard shelter deduction to homeless households that had qualifying shelter expenses and that were not claiming the excess shelter expense deduction. The 2018 Farm Bill also indexed the homeless shelter deduction to inflation. In FY 2023, the value of the mandated homeless shelter deduction was \$166.81.

<sup>12</sup> In some cases, child support payments are excluded from gross income and are not taken as a deduction.

- **SNAP eligibility and benefit determination variables.** Variables used to determine eligibility and benefits—such as SNAP unit deductions, SNAP unit net countable income, and SNAP unit benefits—are constructed on the basis of SNAP unit countable income and unit demographic characteristics.
- **Characteristics flags.** Characteristics flags identify SNAP units with certain features, such as the presence of an elderly individual or 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.<sup>13</sup>

#### **4. Weighting**

We weight the observations in the raw SNAP QC data file such that the weighted totals match as closely as possible three adjusted SNAP Program Operations totals: (1) the monthly number of SNAP units by State and sampling stratum, (2) the monthly number of SNAP participants by State, and (3) the monthly total benefits issued by State. SNAP Program Operations totals are generated from FNS's National Data Bank (NDB) and reflect actual levels of participation and benefit issuance. Through FY 2022, we adjusted the data as needed to remove units receiving benefits issued through the SNAP disaster assistance program, as well as disaster benefits for ongoing SNAP recipients, COVID-19 emergency allotments, and replacement benefits because these households are not included in the SNAP QC database. Beginning with the FY 2023 file, we used NDB data that already excluded these units and benefits. We used Form 388 (State Issuance and Participation Estimates) data for SNAP units and individuals<sup>14</sup> and Form 46 (Issuance Reconciliation Report) data for SNAP benefit issuance.<sup>15</sup> We used Form 388 data for SNAP benefits in States when Form 46 benefits data were missing (Connecticut and Massachusetts in September 2023 and Rhode Island in August and September 2023) or in States when FNS indicated Form 388 data were more reliable (Minnesota for all months).

For FY 2023, we further revised the disaster-adjusted values for units, individuals, or benefits when we suspected errors in the program data due to larger than average month-to-month changes in the average per person benefit. Specific adjustments were as follows:

- **Units and individuals.** In consultation with FNS, we made adjustments to Program Operations data for units or individuals for six States (Arkansas, New Jersey, North Carolina, Oklahoma, Tennessee, and Texas) and Guam in one or more months. In the data for Guam, North Carolina, and Oklahoma, units appeared to be overestimated in the months we adjusted. In Guam, individuals also appeared to be overestimated. In the data for Arkansas, New Jersey, Tennessee, and Texas, both units and individuals appeared to be underestimated in the months we adjusted. FNS provided revised numbers of units and individuals to use for Guam, New Jersey, and Tennessee based on correspondences with

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<sup>13</sup> A micropolitan statistical area has at least one urban cluster of at least 10,000 people but fewer than 50,000 people and includes adjacent territory that has a high degree of social and economic integration with the core, as measured by commuting ties.

<sup>14</sup> Specifically, we used Form 388, part 3a, which is limited to regular ongoing SNAP participating individuals, and part 4a, which is limited to regular ongoing SNAP participating households. Part 3a and 4a exclude D-SNAP-only participants, and those receiving only disaster supplements, replacement benefits, or other issuances that are not considered regular ongoing.

<sup>15</sup> Specifically, we used Form 46, part 6a, which is limited to regular ongoing benefits. It excludes D-SNAP, disaster supplements, replacements, State/Federal investigator benefits, or other issuances that are not considered regular ongoing.

or notes from the States or territory. For the remaining States, we adjusted the counts of units and individuals by using the average values for the adjacent months for the State.

- **Benefits.** We made adjustments to Program Operations data for benefits in 12 States, Guam, and the District of Columbia in one or more months. The 12 States were Alabama, Arkansas, Georgia, Hawaii, Massachusetts, Michigan, Minnesota, Nevada, Ohio, Oklahoma, Pennsylvania, and Tennessee. In Arkansas, Georgia, Guam, Michigan, Nevada, and Oklahoma, benefits appeared to be overestimated in the months we adjusted, compared with benefit amounts in adjacent months during the fiscal year. In Minnesota and Pennsylvania, the benefits appeared to be underestimated. In Alabama, the District of Columbia, Hawaii, Massachusetts, Ohio, and Tennessee, benefits in one month appeared to be overestimated and those in another month appeared to be underestimated. In three States—Arkansas, Michigan, and Ohio—FNS provided revised benefit amounts. In the remaining States or territories, we adjusted total benefits in one of three ways, depending on the State’s data and prioritizing the simplest approach in the order listed below: (1) by using the average values for the adjacent months for the State, (2) by using the average values of consecutive months if more than one month required adjustments, or (3) by using the average fiscal year value for the State.

The criteria used to determine whether an adjustment was needed for a particular month and State was based on the mean absolute deviation of the average per person benefit and information from FNS. After finalizing adjustments to the State program data, we adjusted the data to remove units that were ineligible for benefits, because these households are not included in the SNAP QC database. The rates of SNAP units and individuals receiving benefits in error, as well as total benefits received in error, are estimated from the raw QC data file. This process for the FY 2023 database was consistent with that for prior file years.

As a result of these adjustments, the totals used to weight the FY 2023 SNAP QC database do not match FNS administrative records. In addition, the QC System sample-based estimates differ slightly from the target numbers for the QC database. The weighting program was unable to match the disaster- and error-adjusted program targets for individuals and benefits in Alaska in March 2023 and so reverted to using the same weight for all households in that State and month. As shown in Table II.2, this approach resulted in negligible differences in the national weighted totals for individuals and benefits, and differences of approximately 1 and 3 percent, respectively, in the fiscal year weighted totals for individuals and benefits in Alaska. Although the draft edited FY 2023 SNAP QC data file contains samples of fewer than 10 households in Alaska in October and December 2022 and Guam in September 2023, the weighting program was able to match the weighting targets in these months. Thus, we kept all months of data in Alaska and Guam on the database. However, we caution against using monthly tabulations in the months in Alaska or Guam that are sub-optimally weighted or too small to produce informative data on subgroup distributions.

Table II.3 compares the aggregate program participation data for FY 2023 to the QC System sample-based estimates. Table II.4 compares average unit size, benefit per person, and household size in the Program Operations data to the QC sample estimates. Appendix Tables D.1 through D.3 present the weighted unit, individual, and benefit totals by State and month. Appendix Tables D.4 through D.6 show the corresponding adjustments to the Program Operations data that yielded the target numbers for those weighted totals. In Chapter III, Section C, we describe the derivation of the sampling weights in detail.

**Table II.2. FY 2023 weighting targets versus SNAP QC data file weighted totals**

	Number of individuals			Amount of benefits		
	Error-adjusted target	SNAP QC weighted total	% difference from target	Error-adjusted target	SNAP QC weighted total	% difference from target
National	40,064,877	40,065,125	0.00	7,102,945,012	7,102,643,960	0.00
Alaska	29,086	29,334	0.85	8,603,454	8,302,402	-3.50

Source: FY 2023 SNAP QC database.

**Table II.3. Comparison of program data to edited SNAP QC database, FY 2023**

Category	Average monthly values		
	Number of households	Number of participants	Value of benefits (dollars)
Program data	22,303,632	42,166,077	7,747,836,756
Adjustments to program data for the following:			
Disaster assistance <sup>a</sup>	37,670	95,399	23,675,590
Smoothing the data <sup>b</sup>	(5,478)	865,778	(15,026,075)
Excluded State-months <sup>c</sup>	(91,312)	(1,073,541)	(24,721,689)
Ineligible SNAP units	987,472	2,213,561	660,963,919
Target numbers for edited SNAP QC database	21,375,279	40,064,879	7,102,945,012
<b>Edited SNAP QC database</b>	<b>21,375,279</b>	<b>40,065,127</b>	<b>7,102,643,960</b>

Source: FY 2023 Program Operations data and SNAP QC database.

<sup>a</sup> Program data values are based on data received from FNS on January 23, 2025, and include regular ongoing SNAP and D-SNAP. These numbers differ from those on FNS's website, which also include disaster supplements, investigator issuances, and replacements. As discussed above, we used NDB data that already excluded disaster assistance households, participants, and benefits and replacement benefits to weight the FY 2023 database.

<sup>b</sup> Disaster assistance represents D-SNAP households, participants, and benefits (including D-SNAP benefits to ongoing households). It may also include return issuances for D-SNAP participants.

<sup>c</sup> We made smoothing adjustments when we suspected errors in the program data due to larger than average month-to-month changes in the average per person benefit or, when requested by FNS, based on their correspondences with or notes from a State or territory

<sup>d</sup> As discussed in Chapters I and II, July through September data for Delaware are not included in the FY 2023 SNAP QC database. This row shows the aggregate effect on the monthly average program totals when the months not included in the SNAP QC database are removed from the calculation.

**Table II.4. Averages in program data compared to edited SNAP QC database, FY 2023**

Category	Average monthly value		
	Average SNAP unit size	Average benefit per person (dollars)	Average benefit per household (dollars)
Program data	1.89	184.30	348.22
Target numbers for edited SNAP QC database	1.87	177.29	332.30
Edited SNAP QC database	1.87	177.28	332.28

Sources: FY 2023 Program Operations data and SNAP QC database.

#### D. Final SNAP QC database

We create two versions of the final SNAP QC database: (1) a restricted-use version that includes all variables and (2) a public-use version that, for privacy reasons, excludes the QC review number (RENUM) and four geographic variables: COUNTYCD, LOCALCOD, AK\_AREA, and URBRUR. We provide a more detailed explanation of the variables on the file in Chapter V.

After we develop the SNAP QC database, 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.

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## III. FY 2023 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 to develop the FY 2023 SNAP QC file.<sup>16</sup>

#### Step 1. Obtain data

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

INPUT FILE	FY2023 Record length 2,250 55,115 records	(ASCII file)
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#### Step 2. Read in and prepare file

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

PROGRAM NAME	10_SASIFY.SAS	
INPUT FILE	FY2023	(ASCII; 55,115 records)
OUTPUT FILE	QCFY2023_1.SAS7BDAT	(55,115 records; 721 variables)

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

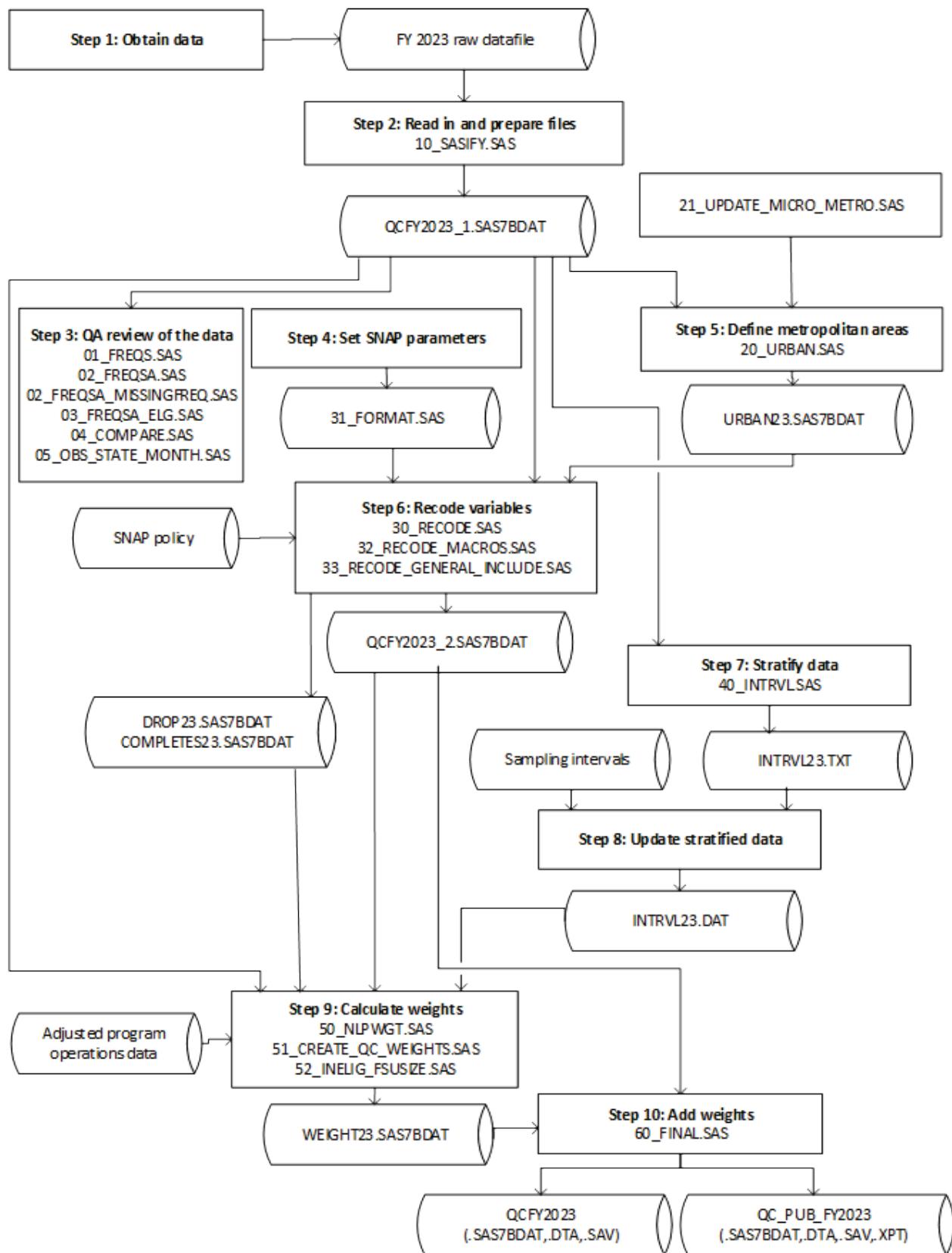
We ran preliminary frequencies on the SAS file and examined them for data corruption, consistency across States and months, and the extent of missing and out-of-range data. In addition, we calculated means and compared them with means for the previous year.

PROGRAM NAMES	01_FREQS.SAS 02_FREQSA.SAS 03_FREQS_ELG.SAS 04_COMPARE.SAS 05_OBS_STATE_MONTH.SAS	
INPUT FILE	QCFY2023_1.SAS7BDAT	(55,115 records; 721 variables)

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<sup>16</sup> Copies of the file development programs are available from FNS upon request.

**Figure III.1. FY 2023 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.<sup>17</sup> We entered them into a SAS format library and used the formats for the program in Step 6.

OUTPUT PROGRAM                    31\_FORMAT.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 2020 and July 2023 Census Bureau files of metropolitan and micropolitan areas by using State and county codes. We added 87 new counties present in the July 2023 file. For 56 counties that had a changed metro-micro status, we decided to retain the status from the 2020 file due to uncertainty about precisely when the change occurred. We coded units as metropolitan or micropolitan, depending on their match to one of the Census Bureau files. We coded those not found in either file as rural, except for those with State-wide local codes, which we coded as missing metropolitan status. 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 did not include cases not subject to review or incomplete cases in the output file.

PROGRAM NAME	20_URBAN.SAS	
INPUT FILES	QCFY2023_1.SAS7BDAT METRO2_20_23.TXT MICRO2_20_23.TXT FIPS_LAC.TXT	(55,115 records; 721 variables) (ASCII; 1,284 records; 4 variables) (Census 2020 and 2023 Metropolitan File) (ASCII; 719 records; 4 variables) (Census 2020 and 2023 Micropolitan File) (ASCII; 5,276 records; 6 variables) (Concordance of local area codes)
OUTPUT FILE	URBAN23.SAS7BDAT	(45,925 records; 5 variables)

#### **Step 6. Recode and standardize variables**

We edited the file to resolve inconsistencies between variables within a unit and created several unit-level variables pertaining to SNAP affiliation, income deductions, the shelter limit, benefit amounts, assets, poverty status, and types of income. Unknown values (9-filled or 0 where a value should have been entered) were set to missing. The program detected inconsistencies between person-level income totals and reported totals and resolved them by using the procedure we detail below (see Section III.B on obtaining file consistency). Units that met all 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.

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<sup>17</sup> SUAs are standard utility allowances that States may use in place of actual utility costs to calculate a household's total shelter expenses. SUAs are mandatory in some States and optional in others.

PROGRAM NAME	30_RECODE.SAS	
INPUT FILES	QCFY2023_1.SAS7BDAT 31_FORMAT.SAS URBAN23.SAS7BDAT	(55,115 records; 721 variables) (Format library) (45,925 records; 5 variables)
OUTPUT FILES	QCFY2023_2.SAS7BDAT COMPLETE23.SAS7BDAT DROP23.SAS7BDAT	(43,776 records; 1,750 variables) (45,925 records; 1,752 variables) (156 records; 1,751 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_INTRVL.SAS	
INPUT FILE	QCFY2023_1.SAS7BDAT	(55,115 records; 721 variables)
OUTPUT FILE	INTRVL23.TXT	(ASCII; 53 records, 4 variables)

### **Step 8. Update stratified data**

None of the States had a stratified sample in FY 2023, so it was not necessary to edit the INTRVL23.TXT file. We simply saved it as INTRVL23.DAT.

INPUT FILE	INTRVL23.TXT	(ASCII; 53 records; 4 variables)
OUTPUT FILE	INTRVL23.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_NLPWGT.SAS	
INPUT FILES	QCFY2023_1.SAS7BDAT QCFY2023_2.SAS7BDAT INTRVL23.DAT FY2023_ADJUSTED.XLSX	(55,115 records; 721 variables) (43,776 records; 1,750 variables) (ASCII; 53 records, 4 variables) (Excel spreadsheet containing FNS Program Operations data adjusted for disasters)
	COMPLETE23.SAS7BDAT DROP23.SAS7BDAT	(45,925 records; 1,752 variables) (156 records; 1,751 variables)
OUTPUT FILE	WEIGHT23.SAS7BDAT	(45,769 records; 27 variables)

### **Step 10. Add weights**

We merged the file containing weights with the edited SNAP QC file to produce the final FY 2023 SNAP QC file. The QCFY2023 file is for internal use and includes all variables. The QC\_PUB\_FY2023 file 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_FINAL.SAS	
INPUT FILES	QCFY2023_2.SAS7BDAT WEIGHT23.SAS7BDAT	(43,776 records; 1,750 variables) (45,769 records; 27 variables)
<b>OUTPUT FILES<sup>18</sup></b>		
SAS DATA FILES	QCFY2023.SAS7BDAT	(43,776 records; 859 variables)
	QC_PUB_FY2023.SAS7BDAT	(43,776 records; 852 variables)
STATA DATA FILES	QCFY2023.DTA	(43,776 records; 859 variables)
	QC_PUB_FY2023.DTA	(43,776 records; 852 variables)
SPSS DATA FILES	QCFY2023.SAV	(43,776 records; 858 variables)
	QC_PUB_FY2023.SAV	(43,776 records; 851 variables)
SAS TRANSPORT FILES	QC_PUB_FY2023.XPT	(43,776 records; 852 variables)

After developing the final QCFY2023 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	SAS2BIN.SAS	
INPUT FILE	QCFY2023.SAS7BDAT	(43,776 records; 859 variables)
OUTPUT FILE	MATHPC.BIN	(43,776 unit records; 93,940 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**

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<sup>18</sup> The SPSS version omits the variable “statename” due to inconsistencies in the way SPSS treats such variables.

- 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 variable to count the number of members in the SNAP unit under review.

#### **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 2023 values (for example, the standard deduction, shelter cap, and maximum benefit)**

#### **Step 7. Reconcile duplicated amounts of wages (WAGESi), Social Security income (SOCSECi), Supplemental Security Income (SSIi), and TANF (TANFi)**

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). If a unit includes duplicate TANF amounts (TANFi), a household head (RELI = 1), and at least one child (RELI = 4), and if the benefit calculated from the deduplicated TANF and reported deductions matches the reported benefit amount, we retain the deduplicated TANF amount for the household head and set other duplicated TANF amounts 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 the following:
  - Contributions (CONTi)
  - Court-ordered child support payments (CSUPRTi)
  - Deemed income (DEEMi)
  - State diversion payments (DIVERi)
  - Educational grants and 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)
  - Temporary Assistance for Needy Families (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. If the child support exclusion amount is greater than the gross income amount, we set gross income to 0.<sup>19</sup>

- 9b. **Does the sum of person-level income match the unit-level gross income?** We compare earned and unearned income for members of the unit and the household to determine whether any combination is equal to the reported unit-level gross income. We check in the following order: (1) all unit income, (2) all unit income plus unearned income from outside the unit, (3) all unit income plus earned income from outside the unit, and (4) all household income.<sup>20</sup> At each stage, we check to see if child support expenses have been excluded from the unit-level gross income. If person-level sums and the unit-level gross income are equal at any stage, we set any income not used to 0.
- 9c. **Does the sum of person-level unearned income and earnings implied by the 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 one of these combinations matches reported net income, we set any income types not used to 0 and recalculate unit-level gross income.

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<sup>19</sup> 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.

<sup>20</sup> "Unit" income is income associated with participating household members. We allow a \$5 difference to account for potential rounding differences.

- 9h. **Are person-level unearned income and earnings implied by the earned income deduction consistent with deductions and unit-level net income?** We check unearned income for members of the unit and the household plus the amount of earnings implied by the reported earned income deduction to determine whether any combination equals the reported unit-level net income plus calculated total deductions. We check in the following order: (1) unit unearned income and (2) household unearned income. If one of these combinations matches reported net income, 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 they 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. If the unit reports no earnings or up to \$1 in 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 someone outside the unit reports the deemed income, then the wages remain with that person. If someone inside the unit reports the deemed income, 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 in wages, (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. If the unit reports \$1 in earnings, has other unearned income ( $FSOTHUN$ ), has an earned income deduction equal to 20 percent of  $FSOTHUN$  (within \$5), and includes an individual outside the unit, we change the other unearned income to wages, allocating the wages to an individual outside the unit using a similar process to the one used for  $FSDEEM$ .
- 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**

In this step, we create TPOV (gross income/poverty ratio) and WRK\_Poor (indicator of working poor unit). Both variables help facilitate analyses but are not necessary for Steps 1-10.

**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 dependent care costs 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. 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.<sup>21</sup> 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:

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

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<sup>21</sup> 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

- 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.<sup>22</sup>

For each condition, we check benefit calculations with and without allotment adjustments. FY 2023 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,<sup>23</sup> 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.
- 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

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utility expenses. Hawaii, for example, employs individual utility standards for electricity, telephones, sewage, trash, and water.

<sup>22</sup> New York's computer system automatically generates an SUA for certain units. Consequently, we do not require a matching net income or a matching shelter deduction for New York SNAP units, as long as the unit is coded as using an HCSUA.

<sup>23</sup> By the end of FY 2023, standard medical deduction demonstrations were operating in Alabama, Arizona, Arkansas, California, Colorado, Georgia, Idaho, Illinois, Iowa, Kansas, Louisiana, Massachusetts, Michigan, Missouri, New Hampshire, North Dakota, Oregon, Rhode Island, South Carolina, South Dakota, Texas, Vermont, Virginia, and Wyoming.

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**

We assess whether units that are not identified as categorically eligible 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).<sup>24, 25</sup> 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).<sup>26</sup>
- Units without an elderly member or an individual with a disability must have total countable assets of \$2,750 or less. Units with an elderly member or an individual with a disability are allowed up to \$4,250 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 BBCE policies**

Most States with a BBCE policy align their policy to a program or service that does not include an asset test. However, three States (Idaho, Indiana, and Texas) have an asset limit of \$5,000 for BBCE units; Michigan had an asset limit of \$15,000 for BBCE units through June 2023; and Nebraska has an 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.<sup>27</sup> MFIP calculates participants' food assistance and cash assistance benefits together; consequently, the SNAP

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<sup>24</sup> 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.

<sup>25</sup> If a household includes an elderly individual or an individual with a disability outside the unit who was found ineligible because of an intentional program violation, a felony drug conviction, fleeing felon status, or noncompliance with a welfare or work requirement (FSAFILi = 8, 9, 11, or 13), the household is excluded from the gross income test.

<sup>26</sup> This test is not performed on SNAP units identified as participating in MFIP or an SSI-CAP demonstration in a State using standard benefits.

<sup>27</sup> More information is available from Minnesota's Department of Human Services website (<http://www.dhs.state.mn.us/>).

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 (see Step 5, below, for details on the food assistance benefit calculation). 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 2023 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 often 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 2023 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:<sup>28</sup>

- 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.
- 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.<sup>29</sup> The final calculated gross income includes any TANF income initially included in the raw data file.

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<sup>28</sup> 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).

<sup>29</sup> With the cash portion of the benefit calculated at the same time as the food portion of the benefit, we do not expect TANF income to be included in a unit’s total gross income. However, in some unit records, TANF income is included, and we accept it as confirmation that the recorded gross income is correct.

- 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 (.E) 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.

c. **SSI-Combined Application Project units**

In FY 2023, 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. 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, and three provide a standard shelter expense deduction.

In the next two sections, we describe the programs in those 17 States 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, those with some inconsistent data as SSI\_CAP = 3, and NYSCAP units as SSI\_CAP = 4. We model 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).<sup>30</sup> More specifically, the variables set to missing for SSI-CAP participants in States with standard SSI-CAP benefits include:

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

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 or mortgage expenses (RENT) value or total shelter expenses (FSSLTEXP) and unit size.

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<sup>30</sup> The raw variables indicating the actual costs are usually retained.

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

<b>State</b>	<b>Start date</b>	<b>Unit composition</b>	<b>Age</b>	<b>Allowed income</b>	<b>Shelter amounts</b>	<b>Benefit calculation</b>
Arizona (AZSNAP)	February 2009	Single-person unit	65 or older	Unearned	\$0 to 99; \$100 to 199; \$200 to 299; \$300 or greater	Table F.9
Kentucky (KYSAFE)	2007	Single-person unit or married	60 or older	Earned and unearned	Less than \$275; \$275 or greater	Table F.10
Louisiana (LaCAP)	2007	Single-person unit	60 or older	Earned and unearned	Less than \$425; \$425 to less than \$749; \$749 or greater	Table F.11
Maryland (MSNAP)	July 2010	Single-person unit	60 or older	Unearned	Less than \$525; \$525 or greater	Table F.12
Michigan (MiCAP)	April 2009	Single-person unit	18 or older	No income except SSI	Less than \$525, \$525 to less than \$750, \$750 or greater	Table F.13
Mississippi (MSCAP)	October 2001*	Single-person unit	No age requirement	Unearned	\$405 or less; greater than \$405	Table F.14
New Jersey (NJ SNAS)	May 2009	Single-person unit	65 or older	Unearned	\$675 or less; greater than \$675	Table F.15
New York (NYSNIP) <sup>a</sup>	March 2003*	Single-person unit	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	Single-person unit	65 or older	Earned and unearned	\$150 or less; greater than \$150	Table F.17
Pennsylvania (PACAP)	2007	Single-person unit	18 or older	Unearned	Less than \$196; \$196 or greater	Table F.18
South Carolina (SCCAP)	October 1995*	Single-person unit	No age requirement	Unearned	\$410 or less; greater than \$410	Table F.19
South Dakota (SD IN)	January 2010	Single-person unit or married	18 or older	Earned and unearned	Less than \$690; \$690 to less than \$800; \$800 to less than \$900; \$900 or greater	Table F.20
Texas (SNAP-CAP)	September 2002*	Single-person unit or married	50 or older	Earned or unearned	\$440 or less; greater than \$440	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.

<sup>a</sup> NYSCAP replaced NYSNIP for units certified or recertified beginning in December 2021. However, this table summarizes the NYSNIP policy because it provides standard benefits.

Starting in December 2021, New York implemented a new SSI-CAP policy, called NYSCAP, that made all single-person households with SSI that want to participate in SNAP eligible for the new program. This program replaced the previous SSI-CAP program in New York, called the New York State Nutrition Improvement Project (NYSNIP). Under NYSNIP, SSI-CAP participants received a standard SNAP benefit based on shelter costs, eligibility for a heating and cooling SUA, presence of other income, and geographic location—unless they opted into regular SNAP.<sup>31</sup> However, under NYSCAP, households receive either the minimum benefit or, if they provide sufficient household information, a benefit amount equal to the regular SNAP benefit calculated under Federal rules. This section, which focuses on SSI-CAP programs with standard benefits, summarizes the NYSNIP rules and includes a short summary of how we identify NYSCAP units.

We use additional 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 participants**

State	Identifying participants	Recoding values	Calculating benefits
Arizona	X		
Kentucky	X		
Louisiana	X		
Mississippi	X	X	X
New Jersey	X		
New York	X		X
Pennsylvania	X		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 participating in an SSI-CAP 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 24 months. We identify as NYSNIP participants one-person units that receive SSI benefits and belong to one of the following groups:<sup>32, 33</sup>

- Units with a recorded benefit adjusted for errors that matches an NYSNIP benefit, and the benefit amount is consistent with the presence of unit income other than SSI, adjusting for the New York SSI supplement of \$87.

<sup>31</sup> See <https://hungersolutionsny.org/federal-nutrition-programs/snap/snap-and-seniors/nysnip/>.

<sup>32</sup> 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.

<sup>33</sup> Because so few NYSNIP eligible units have allotment adjustments, we do not check for units where the recorded benefit plus or minus the allotment adjustment would equal an NYSNIP standard benefit.

- 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.

We modeled NYSCAP participants as single-person households with SSI that were certified or recertified in December 2021 or later with a 36-month certification period. If a household meets both the NYSNIP and NYSCAP criteria, we modeled them as NYSCAP.

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, married individuals who are both age 50 or older and receive SSI benefits may participate in SSI-CAP but each is treated as a one-person unit. We edit all household members other than the first qualifying SSI-CAP participant to be outside of the unit.

QC reviewers in Kentucky and Texas do not include information on SSI receipt for SSI-CAP units in the raw file. We identify units in these States that appeared to be SSI-CAP cases based on their household composition, certification periods, and benefit amounts as SSI-CAP participants, even if they are not coded as receiving SSI.

QC reviewers in Mississippi and South Carolina record income and deductions that are consistent with the standard benefit for MSCAP and SCCAP participants, respectively. 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 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 or mortgage amount for SCCAP to be inconsistent).<sup>34</sup>
- The recorded benefit adjusted for errors equals a standard benefit, and the recorded utility amount equals the MSCAP SUA or standard rent or 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 or mortgage amount equals the standard rent or 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).<sup>35</sup>

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<sup>34</sup> If the recorded benefit equals the minimum benefit, we require both gross income and net income to be consistent with the pattern.

<sup>35</sup> Because so few MSCAP- and SCCAP-eligible units have allotment adjustments, we do not check for units in which the recorded benefit plus or minus the allotment adjustment would equal an MSCAP or SCCAP standard benefit.

In Pennsylvania, most SSI-CAP units follow a consistent pattern in terms of recorded shelter expenses. They receive either (1) rent amounts equal to the shelter standards of \$121 or \$359 and utility amounts equal to the lower standard, or (2) they receive rent amounts equal to \$0 and utility amounts equal to the higher standard. We identify SSI-CAP units using the criteria listed in Table III.1, and note these patterns in shelter expenses.

*Recodes*

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 is not the case, we recode the utility expense values (UTIL) to the MSCAP SUA. 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 or mortgage.  
For most SCCAP participants, QC reviewers record the utility expense value as zero and include them in rent or mortgage expenses (RENT). Through the FY 2022 file, we recoded utilities (UTIL) to the South Carolina HCSUA. Beginning in FY 2023, we left these values as zero because one household had a RENT value lower than the HCSUA.
- **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 to one of these values. We set the sum of individual incomes equal to the raw gross income (RAWGROSS) by adjusting individual incomes proportionately, as necessary.

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

- **SNAP participation and unit size.** If a unit consists of a married couple, both partners are age 50 or older and coded as SNAP participants, and the unit receives a SNAP-CAP standard benefit, we keep the first person as an eligible member of the SNAP case under review (FSAFIL<sub>i</sub> = 1) and recode the other as “Eligible SNAP participant in another unit, not currently under review” (FSAFIL<sub>i</sub> = 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 (FSAFIL<sub>i</sub> = 1). In other SNAP-CAP units, we reconcile individual incomes with the original gross income.

*Benefit calculations*

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. NYSCAP units went through the standard editing process that non-SSI-CAP households undergo.

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	Single-person unit	18 or older	Earned and unearned	\$305 or less; greater than \$305
Massachusetts (BAY STATE CAP)	February 2005	Single-person unit	18 or older	Earned and unearned	Less than \$481; \$481 or greater
Washington (WASHCAP) <sup>a</sup>	December 2001*	Single-person unit	18 or older	Unearned	Less than \$320; \$320 or greater

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

<sup>a</sup> QC reviewers use a special local agency code for WASHCAP units whose applications were processed in an SSA office. We identify as WASHCAP participants all units 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 units meeting the eligibility criteria outlined in Table III.3 who have recorded rent or mortgage amounts equal to any of the standard rent or mortgage allowances for that State.

In Massachusetts, if the recorded rent or 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 or mortgage amount to be the standard allowance and flag the unit as a BAY STATE CAP participant.

#### *Recodes*

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*

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

By the end of FY 2023, 24 States had programs to standardize medical expense deduction amounts when units' medical expenses are greater than \$35 but fall below a State-specific threshold (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.

The standard medical deduction demonstration flag (MEDDED\_DEMO) identifies households in States with standard medical deduction demonstration programs in place during the sample month that have positive countable medical expenses, indicating households eligible for a standard medical deduction.

**Table III.4. States with standard medical deduction demonstrations**

State	Start date (of current waiver)	Cost neutrality adjustment
Alabama	October 2019	HCSUA was reduced by \$8.
Arizona	May 2023	HCSUA was reduced by \$6.
Arkansas	October 2020	HCSUA was reduced by \$4.
California	October 2021	HCSUA was reduced by \$3.
Colorado	October 2020	HCSUA was reduced by \$7.
Georgia	April 2020	HCSUA was reduced by \$7.
Idaho	November 2022	HCSUA was reduced by \$8.
Illinois	June 2021	The standard deduction was reduced by \$7.
Iowa	October 2017	HCSUA and limited utility allowance were reduced by \$4.
Kansas	January 2021	HCSUA was reduced by \$8.
Louisiana <sup>a</sup>	April 2023	HCSUA was reduced by \$4.
Massachusetts	April 2018	HCSUA was reduced by \$7.
Michigan		
10/2022–1/2023	December 2020	HCSUA was reduced by \$10.
2/2023–9/2023	February 2023	HCSUA was reduced by \$6.
Missouri	October 2020	HCSUA was reduced by \$10.
New Hampshire	October 2019	HCSUA was reduced by \$6.
North Dakota	April 2022	HCSUA was reduced by \$10.
Oregon	February 2021	HCSUA was reduced by \$7.
Rhode Island	October 2021	HCSUA was reduced by \$7.
South Carolina	October 2019	HCSUA was reduced by \$10.
South Dakota	May 2022	HCSUA was reduced by \$14.
Texas	January 2022	HCSUA and limited utility allowance were reduced by \$4.
Vermont	December 2022	HCSUA was reduced by \$10.
Virginia	October 2021	HCSUA was reduced by \$6.
Wyoming	January 2017	HCSUA was reduced by \$7.

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

<sup>a</sup> Louisiana newly implemented a standard medical demonstration effective April 2023.

### 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, excluding disaster assistance benefits and benefits issued in error. They are intended to match monthly target levels of SNAP units, individuals, 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.7–D.18:

1. In States that distributed Disaster SNAP benefits, we confirm that the Program Operations counts in the months of the disaster do not include 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).<sup>36</sup> (No State had a stratified sample in FY 2023.)
3. We calculate the disqualification rate by State and stratum by first identifying all disqualified SNAP units, which are those that the reviewers found ineligible (coded as STATUS = 4) or eligible but not qualifying for a benefit (coded as STATUS = 2 with the error amount at least as large as the full benefit). The number of disqualified SNAP units divided by the number of SNAP units with completed reviews is the disqualification rate<sup>37</sup> (Column i).
4. We lower the Program Operations counts of SNAP units by the disqualification rate calculated in Step 3 to derive the final adjusted Program Operations totals (Column j).
5. We remove 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 units 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, individuals, and benefits as closely as possible. 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. For the FY 2023 database, the weighting program was unable to match the disaster- and error-adjusted program targets for individuals and benefits in Alaska in March 2023 and so reverted to using the same weight for all households for that State and month. This approach resulted in negligible

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<sup>36</sup> Column omitted from Appendix D tables due to space limitations but available upon request.

<sup>37</sup> 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.

differences in the national weighted totals for individuals and benefits, and differences of approximately 1 and 3 points, respectively, in the fiscal year weighted totals for individuals and benefits in Alaska.

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 loops over descending minimum allowed values for the replicate weights as a percentage of the preliminary weight, using thresholds of 10 percent, 5 percent, 2 percent, and 1 percent in that order. For each threshold, the algorithm attempts to match increasingly less restrictive combinations of benefit and household size (for eligible households and all households) constraints. If no solution is found, the algorithm defaults to setting the replicate weight equal to the preliminary weight (calculated in Step 6, described above) for that particular State and month. We use the 500 replicate weights to calculate standard errors.

The SNAP QC database 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 period can be obtained by dividing HWGT by the number of months being analyzed. National tabulations of average monthly values for the entire fiscal year can be obtained by using FYWGT, which is typically HWGT divided by 12. For Delaware, which had three missing sample months in FY 2023, FYWGT equals HWGT divided by 9.

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## IV. Development of the 2023 QC Minimodel

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. The model uses a series of algorithms, written in ISO/IEC standard Fortran 95 and organized in the Micro Analysis of Transfers to Households (MATH)<sup>TM</sup> SNAP Module (FSTAMP), to simulate eligibility, benefits, and participation in SNAP. Some of the FSTAMP routines are specific to the SNAP QC database while others are database-independent. This chapter provides a technical description of the procedures specific to the SNAP QC database that are used to transform characteristics of SNAP units in that database into the data elements that conform with inputs used with the database-independent algorithms of FSTAMP. The database-independent algorithms are documented in the “2011 MATH SIPP+ Microsimulation Model: Programmer’s Guide, Technical Description and Codebook” (Schechter et al. 2014).

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

#### 1. Introduction

The QC Minimodel requires a binary file in a particular format (MATH style) 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

QCFY2023.SAS7BDAT	Final SNAP QC database, in SAS format
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##### 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)

##### 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	Description
.	-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
02/12/2025	CREATION DATE
10:31:55.43	CREATION TIME
FY2023	BASE YEAR
FY2023	YEAR AGED TO
10/2022 - 9/2023 avg	SIMULATION MONTH
43776	HOUSEHOLD COUNT
QC MINI	MODEL LABEL
2023.00	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 DISi = 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 CTZNi > 2; and sets FSNONCIT to 0 for all other individuals
- Creates a person-level variable FSNABAWD (the number of adults without disabilities who are in childless units and within the age range subject to time limits) on the unit head's record, by summing over individuals in the unit with NDISCAi = 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
- Creates a person-level variable FSNONGR on the unit head's record that flags units that should not be subject to the gross income test because the household includes an elderly individual or an individual with a disability outside of the unit who was found ineligible because of an intentional program violation, a felony drug conviction, fleeing felon status, or noncompliance with a welfare or work requirement (FSAFILi = 8, 9, 11, or 13); and sets FSNONGR to 0 for all other individuals
- 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 NJSNAS participants.
  - XSCAP\_NY excludes NYSNIP participants.<sup>38</sup>
  - 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).

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<sup>38</sup> NYSCAP participants are retained on the file because, unlike other SSI-CAP units, all SNAP deductions apply to those units.

### 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 <sup>39</sup>

#### 3b. Output files

MATHPC.HDR <sup>40</sup>	ASCII header file that describes the record layout of the output database file, MATHPC.BIN
MATHPC.BIN	SNAP QC database file in standard binary form, in a hierarchical format (unit record, and then person records for individuals in the unit)
MATHPC.TAB	Summary tables (text file)
tables.json	Summary tables (JSON <sup>41</sup> format text file)
MATHPC.OUT	Output file to debug programming code

#### 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 the SNAP unit under review 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.

<sup>39</sup> Individuals on the file include SNAP participants plus nonparticipating household members whose income was considered in the eligibility and benefit determinations of the SNAP unit under review. The presence of other household members may also be noted.

<sup>40</sup> Note that MATHPC.HDR and MATHPC.BIN are created only when the WRFILE is set to T (true).

<sup>41</sup> JSON stands for JavaScript Object Notation, and is defined and documented in ECMA-404 The JSON Data Interchange Syntax.

db_fs_vars	Creates SNAP unit summary variables (for example, FSGRINC, which is the final gross countable unit income, and FSNETINC, which is the final net countable unit income).
db_fs_calc_benefit	Computes benefits for participants in State programs with nonstandard benefit calculations.
db_fs_calc_pure_pa	Calculates FSALLPA, the pure PA flag.
db_fs_set_fsgrttest	Recomputes gross income test for units with child support expenses or units with nonparticipating household members that are elderly or have a disability and have certain SNAP case affiliation codes.
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 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 deflation parameters) 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 effect on the DBLOCS, DBDEFINE, and DBVARS calculations.

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

```
DOSTATS  
XMN_FIP  
XSCAP_xx, where xx is the State abbreviation of a State with an SSI_CAP program.
```

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

#### 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	HDEPDDED	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 read in the replicate 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_fssltxp = l_original_fssltxp%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, ctprrh
    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, ctprrh
    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, ctprrh
    if (fsun(ip) == 0) cycle
    if (fsun(fsun(ip)) /= fsun(ip)) then
        do jp = ip+1, ctprrh
            if (fsun(jp) == fsun(ip)) fsun(jp) = ip
        end do
        fsun(ip) = ip
    end if
end do

```

#### 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 expenses to be subtracted before the net income test [FSCSDED].)

We loop over all individuals in the household:<sup>42</sup>

```

do iunit = 1, ctprrh
  do ip = 1, ctprrh
    if (l_dpcost%iper(ip) > 0) depexp(iunit) = depexp(iunit) + l_dpcost%iper(ip)
    !----- WELFARE Support (Note: missing income values are coded as < 0)
    if (l_tanf%iper(ip) > 0) fstanf(iunit) = fstanf(iunit) + l_tanf%iper(ip)
    if (l_ssi %iper(ip) > 0) then
      fsssi (iunit) = fsssi (iunit) + l_ssi %iper(ip)
      nssi = nssi + 1
    endif
    if (l_ga %iper(ip) > 0) fsga (iunit) = fsga (iunit) + l_ga %iper(ip)
    !---- Earned income
    if (l_wages %iper(ip) > 0) fsearn(iunit) = fsearn(iunit) + l_wages %iper(ip)
    if (l_othern%iper(ip) > 0) fsearn(iunit) = fsearn(iunit) + l_othern%iper(ip)
    if (l_slfemp%iper(ip) > 0) fsearn(iunit) = fsearn(iunit) + l_slfemp%iper(ip)
    !---- Other unearned income
    if (l_othgov%iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + l_othgov%iper(ip)
    if (l_socsec%iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + l_socsec%iper(ip)
    if (l_unemp %iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + l_unemp %iper(ip)
    if (l_vet %iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + l_vet %iper(ip)
    if (l_wcomp %iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + l_wcomp %iper(ip)
    if (l_edloan%iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + l_edloan%iper(ip)
    if (l_csuprt%iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + l_csuprt%iper(ip)
    if (l_deem %iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + l_deem %iper(ip)
    if (l_cont %iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + l_cont %iper(ip)
    if (l_othun %iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + l_othun %iper(ip)
    if (l_diver %iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + l_diver %iper(ip)
    if (l_wgesup%iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + l_wgesup%iper(ip)
    if (l_energy%iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + l_energy%iper(ip)
    if (l_eitc %iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + l_eitc %iper(ip)
    if (l_foster%iper(ip) > 0) fsgrinc(iunit) = fsgrinc(iunit) + l_foster%iper(ip)
  end do ! end of person loop
  fsgrinc(iunit) = fsgrinc(iunit) + fsearn(iunit) + fsssi(iunit) +
                  + fstanf(iunit) + fsga(iunit)
  fsgrinc(iunit) = fsgrinc(iunit) - l_exfscsded%ihhld
end do ! end of unit loop

```

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

- Total members
- Number of adults and number of female adults (those with missing age are included as adults)
- Number of children, number of school-age children (children age 5–17), number of toddlers (children under age 2), and number of children older than toddlers
- Number of elderly members (adults age 60 and older)
- Number of noncitizens

---

<sup>42</sup>All individuals in the household include all individuals in the SNAP unit under review, plus individuals outside the unit who contribute income to the unit.

- Number of adults without disabilities who are in childless households and within the age range subject to time limits
- Number of members with a disability
- Number of female members and number of male members

```

do iunit = 1, ctprrh
    do ip = 1, ctprrh
        if (fsn(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
                fndepl2(iunit) = fndepl2(iunit) + 1
            else
                fndepge2(iunit) = fndepge2(iunit) + 1
            end if
        end if
        if (l_age%iper(ip) >= min_elderly_age) fsnelder(iunit) = fsnelder(iunit)
        + 1
        if (l_ctzn%iper(ip) > 2) fsnoncit(iunit) = fsnoncit(iunit) + 1
        if (l_NDISCA%iper(ip) == 1 .AND. l_fsafile%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:

```
fssltxp(iunit) = nint( orig_fssltxp * float(fsusize(iunit)) / orig_fsusize )
```

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

**Medical expenses.** The QC Minimodel imputes medical expenses based 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_fsnidis > 0) then
        fsmedexp(iunit) = &
            nint (real (orig_fsmedexp * (fsnelder(iunit) + fsndis(iunit)) ) &
            / (orig_fsnelder + orig_fsnidis))
    else if (orig_fsnelder == 0 .and. orig_fsnidis == 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, ctprrh
                --- 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 24 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 (fscspdped(iunit) > 0 .and. fsgrinc(iunit) - fscspdped(iunit) <= GROSS_SCREEN(IUNIT))
FSGRTEST(IUNIT) = 1
```

#### 4h. Select participants

##### i. Purpose

After eligibility is determined for a SNAP unit, the model simulates whether the unit decides to participate. In the QC Minimodel, we simulate all SNAP-eligible units as participants because every unit did in reality participate in SNAP. We believe that this all-eligible-units-participate rule is reasonable in most cases. However, 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 2023 SNAP QC Database

In this chapter, we describe the variables on the FY 2023 SNAP QC database. Section A provides an overview of the types of variables on the file. Section B provides the codebook, which includes a list and detailed description of each variable.

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

For each variable in the FY 2023 SNAP QC database, the codebook provides the name, origin, label, range of values, and a list of values or a 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 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 were 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.

Certain constructed variables, in particular, are widely used in creating the tables that summarize gross and net income, deductions, SNAP benefit amounts, household size, and poverty status 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:

**Table V.1. Constructed variables that are frequently used in the Characteristics of SNAP Households report series**

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.2 lists the missing value conventions used in the restricted use version of the SNAP QC database. The public-use version of the SNAP QC database includes only one value (“.”) for all missing data.

**Table V.2. 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	Variable could not be constructed or calculated due to missing data (pertains to constructed variables only)
-5	.D	For CERTMTH variable, indicates that unit is participating in months not certified
-6	.E	For SSI-CAP and MFIP units, indicates variables that are not relevant in the benefit determination

### 3. Using the SNAP QC database

The FY 2023 SNAP QC database has 43,776 observations for sample months ranging from October 2022 through September 2023 for all States, the District of Columbia, Guam, and the Virgin Islands. Typically, the file includes data from all 12 sample months of the fiscal year for all States, territories, and the District of Columbia. However, Delaware is missing sample data for July 2023 through September 2023.

To conduct analyses for a specific calendar month, the user should select observations sampled in that month by using the year-month (YRMONTH) variable. This 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 2023, the user should select all observations with a YRMONTH code equal to 202301.

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, were computed for each of the independent monthly samples and were based on actual program participation. When analyzing a specific calendar month, the user should use the HWGT variable. However, if the analysis is based on more than one month, and the user wants to calculate an average monthly estimate, the user should divide HWGT by the number of months to be analyzed. The FYWGT variable can be used to tabulate fiscal year averages; it was constructed by averaging HWGT across the number of months for which there are data in the file. Specifically, FYWGT equals HWGT divided by 12, except for Delaware, where the FYWGT equals HWGT divided by 9.

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 17, representing up to 17 people in a household, is attached to each person-level variable.<sup>43</sup> 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.

<sup>43</sup> In a typical year, the SNAP QC database accommodates up to 16 people in a household. However, there was a 17-person household in the FY 2023 data file, so we expanded the upper integer from 16 to 17. See also Chapter I and Appendix C.

## B. Codebook

In this codebook, the unit-level variables are listed first, followed by the person-level variables, and then the detailed error findings variables. There are a total of nine categories, which are detailed below.

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:

1. Person-level characteristics
2. Person-level income

One category covers variables for detailed error findings:

1. Detailed error findings

The categories appear in the codebook in the order shown above, while 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). It also includes recommendations for using variables for which there are concerns.

**Note:** Detailed information on each variable in the database can be found starting [here](#).

**Table V.3. Quick-reference codebook**

Variable	Origin*	Description
<b>Unit QC review administrative data</b>		
<u>ACTNTYPE</u>	R	Type of action
<u>ALLADJ</u>	R	Allotment adjustment
<u>AMTADJ</u>	R	Amount of allotment adjustment
<u>AUTHREP</u>	R	Authorized representative
<u>BENFIX</u>	C	Benefit allotment (SNAP benefit) adjusted for errors
<u>CASE</u>	R	Case classification
<u>CAT_ELIG</u>	C	Indicator of categorical eligibility status
<u>CERTMTH</u>	R	Months in certification period
<u>EXPEDSER</u>	R	Received expedited service
<u>HHLDNO</u>	C	SNAP household identification number
<u>LASTCERT</u>	C	Months since last SNAP certification
<u>LOCALCOD</u>	R	Local agency code (not retained on public-use file)
<u>MED_DED_DEMO</u>	C	Indicator of standard medical deduction demonstration eligibility
<u>MN_FIP</u>	C	Indicator of MFIP participation
<u>PURE_PA</u>	C	Indicator of pure cash public assistance status
<u>RCNTACTN</u>	R	Most recent action on case
<u>REP_SYS</u>	R	Reporting requirement
<u>REVNUM</u>	R	State QC review number (not retained on public-use file)
<u>SSI_CAP</u>	C	Indicator of SSI-CAP participation
<u>STATUS</u>	R	Status of case error findings
<u>YRMONTH</u>	R	Sample year and month
<b>Unit demographics and sample weights</b>		
<u>AK_AREA</u>	C	Alaska region (not retained on public-use file)
<u>CERTHHSZ</u>	R	Certified unit size
<u>COMPOSITION</u>	C	Unit composition
<u>COUNTYCD</u>	C	FIPS code for county (not retained on public-use file)
<u>CTPRHH</u>	C	Number of people in household
<u>FSDIS</u>	C	Indicator of non-elderly individuals with disabilities in unit
<u>FSELDER</u>	C	Indicator of elderly individuals in unit
<u>FSKID</u>	C	Indicator of children in unit
<u>FSNDIS</u>	C	Number of non-elderly individuals with disabilities in unit
<u>FSNDISCA</u>	C	Number of adults without disabilities who are in childless units and within the age range subject to time limits
<u>FSNELDER</u>	C	Number of elderly individuals in unit
<u>FSNGMOM</u>	C	Indicator of single-female-headed unit
<u>FSNK0T4</u>	C	Number of preschool-age children in unit
<u>FSNK5T17</u>	C	Number of school-age children in unit
<u>FSNKID</u>	C	Number of children in unit
<u>FSNONCIT</u>	C	Number of noncitizens in unit
<u>FSUSIZE</u>	C	Constructed certified unit size

Variable	Origin*	Description
<u>FYWT</u>	C	Weight used for full-year calculations
<u>HWGT</u>	C	Monthly sample weight
<u>NONCIT HEAD</u>	C	Unit head citizenship indicator
<u>RAWHSIZE</u>	R	Reported number of people in household
<u>REGION</u>	C	Constructed census region code
<u>REGIONCD</u>	R	FNS region code
<u>STATE</u>	R	FIPS code for State or territory
<u>STATENAME</u>	C	State or territory
<u>STRATUM</u>	R	Stratum identification
<u>TANF IND</u>	C	Indicator of TANF receipt for unit
<u>TPOV</u>	C	Gross income/poverty level ratio
<u>URBRUR</u>	C	Urban/rural indicator (not retained on public-use file)
<u>WRK POOR</u>	C	Indicator of working poor unit
<b>Unit countable income (monthly dollar amounts)</b>		
<u>FSCONT</u>	C	Countable unit income from contributions
<u>FSCSUPRT</u>	C	Countable unit child support payment income
<u>FSDEEM</u>	C	Countable unit deemed income
<u>FSDIVER</u>	C	Countable unit State diversion payments
<u>FSEARN</u>	C	Countable unit earned income
<u>FSEDLOAN</u>	C	Countable unit income from educational grants and loans
<u>FSEITC</u>	C	Countable unit income from earned income tax credit
<u>FSENERGY</u>	C	Countable unit energy assistance income
<u>FSFOSTER</u>	C	Countable unit foster care income
<u>FSGA</u>	C	Countable unit General Assistance benefits
<u>FSGRINC</u>	C	Final gross countable unit income
<u>FSNETINC</u>	C	Final net countable unit income
<u>FSOTHERN</u>	C	Countable unit other earned income
<u>FSOTHGOV</u>	C	Countable unit income from other government benefits
<u>FSOTHUN</u>	C	Countable unit other unearned income
<u>FSSLFEMP</u>	C	Countable unit self-employment income
<u>FSSOCSEC</u>	C	Countable unit Social Security income
<u>FSSI</u>	C	Countable unit SSI benefits
<u>FSTANF</u>	C	Countable unit TANF payments
<u>FSUNEARN</u>	C	Countable unit unearned income
<u>FSUNEMP</u>	C	Countable unit unemployment compensation benefits
<u>FSVET</u>	C	Countable unit veterans' benefits
<u>FSWAGES</u>	C	Countable unit wages and salaries
<u>FSWCOMP</u>	C	Countable unit workers' compensation benefits
<u>FSWGESUP</u>	C	Countable unit wage supplementation income
<u>RAWGROSS</u>	R	Reported gross countable unit income
<u>RAWNET</u>	R	Reported net countable unit income

Variable	Origin*	Description
<b>Unit countable and reported assets</b>		
<a href="#">FSASSET</a>	C	Total countable assets under State rules
<a href="#">FSVEHAST</a>	C	Countable non-excluded vehicles' value under State rules
<a href="#">LIQRESOR</a>	C	Countable liquid assets under State rules
<a href="#">OTHNLRES</a>	C	Countable other nonliquid assets under State rules
<a href="#">RAWLQRES</a>	R	Reported liquid assets
<a href="#">RAWOTRES</a>	R	Reported other nonliquid assets
<a href="#">RAWRPROP</a>	R	Reported real property
<a href="#">RAWVHAST</a>	R	Reported non-excluded vehicles' value
<a href="#">REALPROP</a>	C	Countable real property under State rules
<a href="#">VEHICLEA</a>	R	Reported category for first vehicle
<a href="#">VEHICLEB</a>	R	Reported category for second vehicle
<b>Unit expenses and deductions</b>		
<a href="#">ERN_INC_DED_PCT</a>	C	Percentage used to calculate earned income deduction
<a href="#">EXCL_FSCSDED</a>	C	Child support excluded from gross income
<a href="#">FSCSDED</a>	C	Child support payment deduction
<a href="#">FSCSEXP</a>	R	Reported child support payment deduction
<a href="#">FSDEPDED</a>	R	Reported dependent care deduction
<a href="#">FSDEPDE2</a>	C	Marginal effectiveness of dependent care deduction
<a href="#">FSERNDED</a>	C	Calculated earned income deduction
<a href="#">FSERNDE2</a>	C	Marginal effectiveness of earned income deduction
<a href="#">FSMEDDED</a>	C	Calculated medical expense deduction
<a href="#">FSMEDDE2</a>	C	Marginal effectiveness of medical expense deduction
<a href="#">FSMEDEXP</a>	R	Reported medical expenses
<a href="#">FSSLTDED</a>	C	Calculated excess shelter expense deduction
<a href="#">FSSLTDE2</a>	C	Marginal effectiveness of excess shelter expense deduction
<a href="#">FSSLTEXP</a>	C	Calculated shelter expenses
<a href="#">FSSTDDED</a>	C	Standard deduction
<a href="#">FSSTDDE2</a>	C	Marginal effectiveness of standard deduction
<a href="#">FSTOTDED</a>	C	Total deductions
<a href="#">FSTOTDE2</a>	C	Marginal effectiveness of total deduction
<a href="#">HOMEDED</a>	R	Indicator of homelessness
<a href="#">HOMELESS_DED</a>	C	Amount of homeless household shelter deduction
<a href="#">RAWERND</a>	R	Reported earned income deduction
<a href="#">RENT</a>	R	Rent/mortgage amount
<a href="#">SHELCAP</a>	C	Maximum allowable shelter expense deduction
<a href="#">SHELDED</a>	R	Reported shelter deduction
<a href="#">SUA1</a>	R	Standard utility allowance—usage and entitlement
<a href="#">SUA2</a>	R	Standard utility allowance—prorated
<a href="#">UTIL</a>	R	Utility amount

Variable	Origin*	Description
<b>Unit benefits</b>		
<u>AMTERR</u>	R	Amount of benefit in error
<u>ASSLIM</u>	C	Asset limit
<u>BENMAX</u>	C	Maximum benefit amount
<u>FSASTEST</u>	C	Indicator of passing asset test
<u>FSBEN</u>	C	Final calculated benefit
<u>FSBENSUPP</u>	C	Eligible amount of emergency allotment
<u>FSGRTEST</u>	C	Indicator of passing gross income test
<u>FSMINBEN</u>	C	Received minimum benefit
<u>FSNETEST</u>	C	Indicator of passing net income test
<u>GROSSCRN</u>	C	Gross income screen
<u>MINIMUM_BEN</u>	C	Minimum benefit amount
<u>NETSCRN</u>	C	Net income screen
<u>RAWBEN</u>	R	Reported SNAP benefit received
<u>SUPP_BEN</u>	C	Indicator of eligibility for emergency allotment
<b>Person-level characteristics: i = 1 to 17</b>		
<u>ABWDSTi</u>	R	ABAWD status
<u>AGEi</u>	R	Age
<u>CTZNI</u>	R	Citizenship status
<u>DISI</u>	C	Person-level disability indicator
<u>DPCOSTI</u>	R	Reported dependent care cost
<u>EMPRGI</u>	R	SNAP Employment and Training program status
<u>EMPSTAI</u>	R	Employment status—type
<u>EMPSTBi</u>	R	Employment status—amount
<u>FSAFILI</u>	R	SNAP case affiliation
<u>FSUNI</u>	C	Position of head of SNAP unit
<u>NDISCAi</u>	C	Adult without a disability who is in a childless unit and within the age range subject to time limits status
<u>RACETHi</u>	R	Race/ethnicity
<u>RELI</u>	R	Relationship to head of household
<u>SEXi</u>	R	Sex
<u>WORKi</u>	C	Person-level working indicator
<u>WRKREGI</u>	R	Work registration status
<u>YRSEDi</u>	R	Highest educational level completed
<b>Person-level countable income (monthly dollar amounts): i = 1 to 17</b>		
<u>CONTi</u>	R	Countable income from contributions
<u>CSUPRTi</u>	R	Countable child support payment income
<u>DEEMi</u>	R	Countable deemed income
<u>DIVERi</u>	R	Countable State diversion payments
<u>EDLOANI</u>	R	Countable income from educational grants and loans
<u>EITCi</u>	R	Countable income from earned income tax credit
<u>ENERGYi</u>	R	Countable energy assistance income

Variable	Origin*	Description
<u>FOSTERi</u>	R	Countable foster care income
<u>GAi</u>	R	Countable General Assistance benefits
<u>OTHERNi</u>	R	Countable other earned income
<u>OTHGOVi</u>	R	Countable income from other government benefits
<u>OTHUNi</u>	R	Countable other unearned income
<u>SLFEMPi</u>	R	Countable self-employment income
<u>SOCSECi</u>	R	Countable Social Security income
<u>SSli</u>	R	Countable SSI benefits
<u>TANFi</u>	R	Countable TANF payments
<u>UNEMPi</u>	R	Countable unemployment compensation benefits
<u>VETi</u>	R	Countable veterans' benefits
<u>WAGESi</u>	R	Countable wages and salaries
<u>WCOMPi</u>	R	Countable workers' compensation benefits
<u>WGESUPI</u>	R	Countable wage supplementation income

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

<u>AGENCYi</u>	R	Agency or client responsibility
<u>AMOUNTi</u>	R	Variance dollar amount
<u>DISCOVi</u>	R	Variance discovery
<u>E_FINDGi</u>	R	Error finding
<u>ELEMENTi</u>	R	Variance element
<u>NATUREi</u>	R	Nature of variance
<u>OCCDATEi</u>	R	Variance occurrence date
<u>TIMEPERi</u>	R	Variance time period
<u>VERIFI</u>	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
<b>ACTNTYPE</b>	R	<b>TYPE OF ACTION</b>
		Range = (1, 2) 1 = Certification 2 = Recertification
<b>ALLADJ</b>	R	<b>ALLOTMENT ADJUSTMENT</b>
		Range = (1, 3) 1 = No adjustment 2 = Prorated benefit 3 = Other adjustment
<b>AMTADJ</b>	R	<b>AMOUNT OF ALLOTMENT ADJUSTMENT</b>
		Range = (0, 1152)
<b>AUTHREP</b>	R	<b>AUTHORIZED REPRESENTATIVE</b>
		Range = (1, 2) 1 = Used to make application 2 = Not used to make application
<b>BENFIX</b>	C	<b>BENEFIT ALLOTMENT ADJUSTED FOR ERRORS</b>
		Range = (0, 10001)
<b>CASE</b>	R	<b>CASE CLASSIFICATION</b>
		Range = (1, 3) 1 = Included in error rate calculation 2 = Excluded from error rate calculation—processed by SSA worker 3 = Excluded from error rate calculation, as designated by FNS (for example, demonstration project, simplified SNAP)
<b>CAT_ELIG</b>	C	<b>INDICATOR OF CATEGORICAL ELIGIBILITY STATUS</b>
		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
<b>CERTMTH</b>	R	<b>MONTHS IN CERTIFICATION PERIOD</b>
		Range = (0, 95) Number of months SNAP unit was certified to participate during current certification or recertification period
<b>EXPEDSER</b>	R	<b>RECEIVED EXPEDITED SERVICE</b>
		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
<b>HHLDNO</b>	C	<b>SNAP HOUSEHOLD IDENTIFICATION NUMBER</b>
		Range = (1, 55115) Position of unit in unedited SNAP QC file (unique unit identifier)
<b>LASTCERT</b>	C	<b>MONTHS SINCE LAST SNAP CERTIFICATION</b>
		Range = (0, 65)

Variable	Origin	Description
<b>LOCALCOD</b>	R	<b>LOCAL AGENCY CODE (not retained on public-use file)</b>
		Range = (0, 999) Designates local agency and allows grouping of data by county or county equivalent (may be FIPS code or alternative classification)
<b>MED_DED_DEMO</b>	C	<b>INDICATOR OF STANDARD MEDICAL DEDUCTION DEMONSTRATION ELIGIBILITY</b>
		Range = (0, 1) 0 = No 1 = Yes
<b>MN_FIP</b>	C	<b>INDICATOR OF MFIP PARTICIPATION</b>
		Please note that MN_FIP may 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
<b>PURE_PA</b>	C	<b>INDICATOR OF PURE CASH PUBLIC ASSISTANCE STATUS</b>
		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.
<b>RCNTACTN</b>	R	<b>MOST RECENT ACTION ON CASE</b>
		Range = (20130213, 20230930) Date the case was certified or recertified for participation in sample month under review (in yyyyymmdd format)
<b>REP_SYS</b>	R	<b>REPORTING REQUIREMENT</b>
		Range = (1, 10) 1 = Change reporting with \$125 change in earned income 2 = Change reporting with change of wage rate, salary, or change in employment status 3 = 5-hour change in hours worked and expected to continue over a month 4 = Simplified reporting (exceeding 130% of income poverty guidelines) 5 = Quarterly reporting 6 = Simplified monthly reporting 7 = Transitional benefits (no reporting requirement) 8 = Transitional benefits (reporting requirement) 9 = Other 10 = Reserved
<b>RENUM</b>	R	<b>STATE QC REVIEW NUMBER (not retained on public-use file)</b>
		Range = (1, 979875)
<b>SSI_CAP</b>	C	<b>INDICATOR OF SSI-CAP PARTICIPATION</b>
		We recommend caution when using SSI_CAP, with the understanding that it likely underestimates the actual number of SSI-CAP units. See Appendix A for details. Range = (0, 4) 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 4 = NYSCAP case

Variable	Origin	Description
<b>STATUS</b>	R	<b>STATUS OF CASE ERROR FINDINGS</b>
		Range = (1, 3)
		1 = Amount correct
		2 = Overissuance
		3 = Underissuance
<b>YRMONTH</b>	R	<b>SAMPLE YEAR AND MONTH</b>
		Range = (202210, 202309)
		Allows user to select one or more sample months from the 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 2023, for example, YRMONTH should equal 202301.

**Unit demographics and sample weights**

Variable	Origin	Description
AK_AREA	C	<b>ALASKA REGION (not retained on public-use file)</b>
		Range = (1, 3)
		1 = Alaska Rural I
		2 = Alaska Rural II
		3 = Alaska Urban
CERTHHSZ	R	<b>CERTIFIED UNIT SIZE</b>
		Range = (1, 17)
COMPOSITION	C	<b>UNIT COMPOSITION</b>
		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	<b>FIPS CODE FOR COUNTY (not retained on public-use file)</b>
		Range = (1, 840)
CTPRHH	C	<b>NUMBER OF PEOPLE IN HOUSEHOLD</b>
		Range = (1, 17)
		Number of people in household with nonmissing person-level information
FSDIS	C	<b>INDICATOR OF NON-ELDERLY INDIVIDUALS WITH DISABILITIES IN UNIT</b>
		Range = (0, 1)
		0 = No
		1 = Yes
		A SNAP unit with one or more participating individuals with a disability (DISi = 1)
FSELDER	C	<b>INDICATOR OF ELDERLY INDIVIDUALS IN UNIT</b>
		Range = (0, 1)
		0 = No
		1 = Yes
		A SNAP unit with one or more elderly individuals
FSKID	C	<b>INDICATOR OF CHILDREN IN UNIT</b>
		Range = (0, 1)
		0 = No
		1 = Yes
		A SNAP unit with one or more children under age 18
FSNDIS	C	<b>NUMBER OF NON-ELDERLY INDIVIDUALS WITH DISABILITIES IN UNIT</b>
		Range = (0, 7)
		Number of individuals in the unit that are defined as disabled (DISi = 1)
FSNDISCA	C	<b>NUMBER OF ADULTS WITHOUT DISABILITIES IN CHILLESS UNITS WHO ARE WITHIN THE AGE RANGE SUBJECT TO TIME LIMITS</b>
		Range = (0, 5)
		Number of adults without disabilities in childless SNAP units who are within the age range subject to time limits (age 18-49 for October 2022 through August 2023 and age 18-50 for September 2023).
FSNELDER	C	<b>NUMBER OF ELDERLY INDIVIDUALS IN UNIT</b>
		Range = (0, 2)
		Number of adults age 60 or older in SNAP unit

Variable	Origin	Description
<b>FSNGMOM</b>	C	<b>INDICATOR OF SINGLE-FEMALE-HEADED UNIT</b>
		Range = (0, 1)
		0 = No
		1 = Yes
		A SNAP unit with one adult and one or more children; the adult is female
<b>FSNK0T4</b>	C	<b>NUMBER OF PRESCHOOL-AGE CHILDREN IN UNIT</b>
		Range = (0, 5)
		Number of children under age 5 in SNAP unit
<b>FSNK5T17</b>	C	<b>NUMBER OF SCHOOL-AGE CHILDREN IN UNIT</b>
		Range = (0, 14)
		Number of children age 5–17 in SNAP unit
<b>FSNKID</b>	C	<b>NUMBER OF CHILDREN IN UNIT</b>
		Range = (0, 15)
		Number of children under age 18 in SNAP unit
<b>FSNONCIT</b>	C	<b>NUMBER OF NONCITIZENS IN UNIT</b>
		Range = (0, 10)
		Number of people with FSAFILi = 1 and CTZNi >= 3
<b>FSUSIZE</b>	C	<b>CONSTRUCTED CERTIFIED UNIT SIZE</b>
		Range = (1, 17)
		Number of people with FSAFILi = 1
<b>FYWGT</b>	C	<b>WEIGHT USED FOR FULL-YEAR CALCULATIONS</b>
		Range = (3.83, 6527.96)
		Calculated as HWGT/12, except for Delaware, where it is HWGT/9.
<b>HWGT</b>	C	<b>MONTHLY SAMPLE WEIGHT</b>
		Range = (45.99, 78335.51)
		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.
<b>NONCIT_HEAD</b>	C	<b>UNIT HEAD CITIZENSHIP INDICATOR</b>
		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
<b>RAWHSIZE</b>	R	<b>REPORTED NUMBER OF PEOPLE IN HOUSEHOLD</b>
		Range = (1, 16)
<b>REGION</b>	C	<b>CONSTRUCTED CENSUS REGION CODE</b>
		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.
<b>REGIONCD</b>	R	<b>FNS REGION CODE</b>
		Range = (1, 7)
		1 = Northeast
		2 = Mid-Atlantic
		3 = Southeast
		4 = Midwest

Variable	Origin	Description
		5 = Southwest 6 = Mountain Plains 7 = West  See Appendix E (Table E.2) for a list of States in each region.
<b>STATE</b>	<b>R</b>	<b>FIPS CODE FOR STATE OR TERRITORY</b>
		Range = (1, 78)  See Appendix E (Table E.1) for FIPS code list.
<b>STATENAME</b>	<b>C</b>	<b>STATE OR TERRITORY</b>
		State or territory name. See Appendix E (Table E.1) for list.
<b>STRATUM</b>	<b>R</b>	<b>STRATUM IDENTIFICATION</b>
		Range = (0, 0)  Codes for distinct parts of States with stratified samples; codes in States that are not stratified are recoded to 0.
<b>TANF_IND</b>	<b>C</b>	<b>INDICATOR OF TANF RECEIPT FOR UNIT</b>
		Range = (0, 1) 0 = No 1 = Yes  TANF_IND = 1 if FSTANF > 0 or MN_FIP = 1
<b>TPOV</b>	<b>C</b>	<b>GROSS INCOME/POVERTY LEVEL RATIO</b>
		Range = (0, 621)  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.
<b>URBRUR</b>	<b>C</b>	<b>URBAN/RURAL INDICATOR (not retained on public-use file)</b>
		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, Arizona, Guam, Kansas, Kentucky, Nebraska, Nevada, Tennessee, Utah, the Virgin Islands, and Washington because of the large 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)
<b>WRK_Poor</b>	<b>C</b>	<b>INDICATOR OF WORKING POOR UNIT</b>
		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	<b>COUNTABLE UNIT INCOME FROM CONTRIBUTIONS</b>
		Range = (0, 3000) Sum of CONT1 through CONT16
FSUPRT	C	<b>COUNTABLE UNIT CHILD SUPPORT PAYMENT INCOME</b>
		Range = (0, 2561) Sum of CSUPRT1 through CSUPRT16
FSDEEM	C	<b>COUNTABLE UNIT DEEMED INCOME</b>
		Range = (0, 2350) Sum of DEEM1 through DEEM16
FSDIVER	C	<b>COUNTABLE UNIT STATE DIVERSION PAYMENTS</b>
		Range = (0, 1048) Sum of DIVER1 through DIVER16
FSEARN	C	<b>COUNTABLE UNIT EARNED INCOME</b>
		Range = (0, 8365) Sum of FSWAGES, FSSLFEMP, and FSOTHERN
FSEDLOAN	C	<b>COUNTABLE UNIT INCOME FROM EDUCATIONAL GRANTS AND LOANS</b>
		Range = (0, 2319) Sum of EDLOAN1 through EDLOAN16
FSEITC	C	<b>COUNTABLE UNIT INCOME FROM EARNED INCOME TAX CREDIT</b>
		Range = (0, 934) Sum of EITC1 through EITC16
FSENERGY	C	<b>COUNTABLE UNIT ENERGY ASSISTANCE INCOME</b>
		Range = (0, 1452) Sum of ENERGY1 through ENERGY16
FSFOSTER	C	<b>COUNTABLE UNIT FOSTER CARE INCOME</b>
		Range = (0, 2383) Sum of FOSTER1 through FOSTER16
FSGA	C	<b>COUNTABLE UNIT GENERAL ASSISTANCE BENEFITS</b>
		Range = (0, 4580) Sum of GA1 through GA16
FSGRINC	C	<b>FINAL GROSS COUNTABLE UNIT INCOME</b>
		Range = (0, 9488) Total monthly gross income of unit (sum of FSEARN and FSUNEARN)
FSNETINC	C	<b>FINAL NET COUNTABLE UNIT INCOME</b>
		Range = (0, 8499) 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 receiving a standard SSI-CAP benefit
FSOTHERN	C	<b>COUNTABLE UNIT OTHER EARNED INCOME</b>
		Range = (0, 3135) Sum of OTHERN1 through OTHERN16
FSOTHGOV	C	<b>COUNTABLE UNIT INCOME FROM OTHER GOVERNMENT BENEFITS</b>
		Range = (0, 4049) Sum of OTHGOV1 through OTHGOV16

Variable	Origin	Description
FSOTHUN	C	<b>COUNTABLE UNIT OTHER UNEARNED INCOME</b>
		Range = (0, 4800)
		Sum of OTHUN1 through OTHUN16
FSSLFEMP	C	<b>COUNTABLE UNIT SELF-EMPLOYMENT INCOME</b>
		Range = (0, 5210)
		Sum of SLFEMP1 through SLFEMP16
FSSOCSEC	C	<b>COUNTABLE UNIT SOCIAL SECURITY INCOME</b>
		Range = (0, 6800)
		Sum of SOCSEC1 through SOCSEC16
FSSI	C	<b>COUNTABLE UNIT SSI BENEFITS</b>
		Range = (0, 4570)
		Sum of SSI1 through SSI16
FSTANF	C	<b>COUNTABLE UNIT TANF PAYMENTS</b>
		We recommend against using FSTANF in Minnesota because it is not included as gross income in that State. See Appendix A for details.
		Range = (0, 2185)
		Sum of TANF1 through TANF16
FSUNEARN	C	<b>COUNTABLE UNIT UNEARNED INCOME</b>
		Range = (0, 6863)
		Sum of FSCONT, FSCSUPRT, FSDEEM, FSDIVER, FSEDLOAN, FSEITC, FSENERGY, FSFOSTER, FSGA, FSOTHGOV, FSOTHUN, FSSOCSEC, FSSI, FSTANF, FSUNEMP, FSVET, FSWCOMP, and FSWGESUP
FSUNEMP	C	<b>COUNTABLE UNIT UNEMPLOYMENT COMPENSATION BENEFITS</b>
		Range = (0, 3254)
		Sum of UNEMP1 through UNEMP16
FSVET	C	<b>COUNTABLE UNIT VETERANS' BENEFITS</b>
		Range = (0, 4273)
		Sum of VET1 through VET16
FSWAGES	C	<b>COUNTABLE UNIT WAGES AND SALARIES</b>
		Range = (0, 8365)
		Sum of WAGES1 through WAGES16
FSWCOMP	C	<b>COUNTABLE UNIT WORKERS' COMPENSATION BENEFITS</b>
		Range = (0, 4441)
		Sum of WCOMP1 through WCOMP16
FSWGESUP	C	<b>COUNTABLE UNIT WAGE SUPPLEMENTATION INCOME</b>
		Range = (0, 3433)
		Sum of WGESUP1 through WGESUP16
RAWGROSS	R	<b>REPORTED GROSS COUNTABLE UNIT INCOME</b>
		Range = (0, 16667)
		Reported total monthly countable income of unit before applying deductions (see FSGRINC for final value)
RAWNET	R	<b>REPORTED NET COUNTABLE UNIT INCOME</b>
		Range = (0, 9082)
		Reported total monthly countable income of unit after applying deductions (see FSNETINC for final value)

### Unit countable assets

Variable	Origin	Description
<b>FSASSET</b>	C	<b>TOTAL COUNTABLE ASSETS UNDER STATE RULES</b>
		Please note that only 5 percent of SNAP units have countable assets. See Appendix A for details.
		Range = (0, 8402)
		Sum of LIQRESOR, FSVEHAST, OTHNLRES, and REALPROP
<b>FSVEHAST</b>	C	<b>COUNTABLE NON-EXCLUDED VEHICLES' VALUE UNDER STATE RULES</b>
		Please note that less than 1 percent of SNAP units have non-excluded vehicles. See Appendix A for details.
		Range = (0, 2825)
<b>LIQRESOR</b>	C	<b>COUNTABLE LIQUID ASSETS UNDER STATE RULES</b>
		Range = (0, 8402)
<b>OTHNLRES</b>	C	<b>COUNTABLE OTHER NONLIQUID ASSETS UNDER STATE RULES</b>
		Range = (0, 3250)
<b>RAWLQRES</b>	R	<b>REPORTED LIQUID ASSETS</b>
		Range = (0, 99435)
<b>RAWOTRES</b>	R	<b>REPORTED OTHER NONLIQUID ASSETS</b>
		Range = (0, 30411)
<b>RAWRPROP</b>	R	<b>REPORTED REAL PROPERTY</b>
		Range = (0, 86300)
		Does not include home
<b>RAWVHAST</b>	R	<b>REPORTED NON-EXCLUDED VEHICLES' VALUE</b>
		Range = (0, 5219)
<b>REALPROP</b>	C	<b>COUNTABLE REAL PROPERTY UNDER STATE RULES</b>
		Range = (0, 2500)
		Does not include home
<b>VEHICLEA</b>	R	<b>REPORTED CATEGORY FOR FIRST VEHICLE</b>
		We recommend against using VEHICLEA because of a history of coding inconsistencies. See Appendix A for details.
		Range = (1, 8)
		1 = No vehicle
		2 = Vehicle exempt because used for producing income, as a home, to transport a physically disabled member, for long-distance travel (other than commuting), or to carry fuel or water
		3 = Vehicle exempt because inaccessible resource (equity value \$1,500 or less)
		4 = Vehicle exempt due to categorical eligibility
		5 = Vehicle excluded under State TANF standard (vehicle of non-categorically eligible unit members only)
		6 = Vehicle registered and attributable to an adult unit member or used by a person under age 18 for employment or education (subject to fair market value only)
		7 = Vehicle not registered (equity test only)
		8 = Vehicle not excluded and not included in code 6 (subject to fair market value or equity test, whichever is greater)
<b>VEHICLEB</b>	R	<b>REPORTED CATEGORY FOR SECOND VEHICLE</b>
		We recommend against using VEHICLEB because of a history of coding inconsistencies. See Appendix A for 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)

Variable	Origin	Description
	4	4 = Vehicle exempt due to categorical eligibility
	5	5 = Vehicle excluded under State TANF standard (vehicle of non-categorically eligible unit members only)
	6	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	7 = Vehicle not registered (equity test only)
	8	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
<b>ERN_INC_DED_PCT</b>	C	<b>PERCENTAGE USED TO CALCULATE EARNINGS DEDUCTION</b>
		Range = (0.20, 0.50)
		0.50 for MFIP participants; 0.20 for all other SNAP participants
<b>EXCL_FSCSDED</b>	C	<b>CHILD SUPPORT EXCLUDED FROM GROSS INCOME</b>
		Range = (0, 545)
		Child support expenses excluded before gross income test rather than before net income test for eligibility
<b>FSCSDED</b>	C	<b>CHILD SUPPORT PAYMENT DEDUCTION</b>
		Range = (0, 6418)
		Coded as missing for MFIP units and for SSI-CAP units receiving a standard SSI-CAP benefit
<b>FSCSEXP</b>	R	<b>REPORTED CHILD SUPPORT PAYMENT DEDUCTION</b>
		Range = (0, 6418)
		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.
<b>FSDEPDED</b>	R	<b>REPORTED DEPENDENT CARE DEDUCTION</b>
		We recommend against using FSDEPDED for State-level tabulations because of small sample sizes and inconsistencies between DPCOSTi and FSDEPDED. See Appendix A for details.
		Range = (0, 3844)
		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 except for NYSCAP units.
<b>FSDEPDE2</b>	C	<b>MARGINAL EFFECTIVENESS OF DEPENDENT CARE DEDUCTION<sup>44</sup></b>
		Range = (0, 2987)
		Calculated as FSDEPDE2 = NEWNET-FSNETINC, where NEWNET = MAX (0, FSGRINC-FSSLT3-FSERNDED-FSMEDDED-FSSTDDDED-FSCSDED-HOMELESS_DED) and where FSSLT3 is the shelter deduction calculated without FSDEPDED
		Coded as missing for all MFIP and SSI-CAP units except for NYSCAP units.
<b>FSERNDED</b>	C	<b>CALCULATED EARNED INCOME DEDUCTION</b>
		Range = (0, 1673)
		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 except for NYSCAP units.
<b>FSERNDE2</b>	C	<b>MARGINAL EFFECTIVENESS OF EARNED INCOME DEDUCTION</b>
		Range = (0, 1783)
		Calculated as FSERNDE2 = NEWNET-FSNETINC, where NEWNET = MAX (0, FSGRINC-FSSLT2-FSDEPDED-FSMEDDED-FSSTDDDED-FSCSDED-HOMELESS_DED) and where FSSLT2 is the shelter deduction calculated without FSERNDED
		Coded as missing for all MFIP and SSI-CAP units except for NYSCAP units.
<b>FSMEDDED</b>	C	<b>CALCULATED MEDICAL EXPENSE DEDUCTION</b>
		Range = (0, 1978)
		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 except for NYSCAP units.

<sup>44</sup> The marginal effectiveness variables are calculated as the difference between the actual calculated net income and what the net income would have been without the deduction. Because the combined value of deductions a unit is entitled to 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
<b>FSMEDDE2</b>	C	<b>MARGINAL EFFECTIVENESS OF MEDICAL EXPENSE DEDUCTION</b>
		Range = (0, 1767) Calculated as $FSMEDDE2 = NEWNET - FSNETINC$ , where $NEWNET = \text{MAX}(0, FSGRINC - FSSLT4 - FSDEPDED - FSERNDED - FSSTDDDED - FSCSDED - HOMELESS\_DED)$ and where $FSSLT4$ is the shelter deduction calculated without FSM EDDED Coded as missing for all MFIP and SSI-CAP units except for NYSCAP units.
<b>FSMEDEXP</b>	R	<b>REPORTED MEDICAL EXPENSES</b>
		Range = (0, 1978) Allowable medical expenses in excess of \$35 for elderly adults or individuals with disabilities
<b>FSSLTDED</b>	C	<b>CALCULATED EXCESS SHELTER EXPENSE DEDUCTION</b>
		Range = (0, 4675) 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 $XCOST = \text{MAX}(0, FSSLTEXP - HALFNET)$ and $HALFNET = \text{MAX}(0, \text{ROUND}(FSGRINC - FSSTDDDED - FSERNDED - FSDEPDED - FSMEDDED - FSCSDED)/2)$ . The final value of $FSSLTDED$ is rounded to nearest integer. Coded as missing for MFIP units and for SSI-CAP units receiving a standard SSI-CAP benefit
<b>FSSLTDE2</b>	C	<b>MARGINAL EFFECTIVENESS OF EXCESS SHELTER EXPENSE DEDUCTION</b>
		Range = (0, 2203) Calculated as $FSSLTDE2 = NEWNET - FSNETINC$ , where $NEWNET = \text{MAX}(0, FSGRINC - FSDEPDED - FSERNDED - FSMEDDED - FSSTDDDED - FSCSDED - HOMELESS\_DED)$ . Coded as missing for MFIP units and for SSI-CAP units receiving a standard SSI-CAP benefit
<b>FSSLTEXP</b>	C	<b>CALCULATED SHELTER EXPENSES</b>
		Range = (0, 5360) Sum of RENT and UTIL
<b>FSSTDDDED</b>	C	<b>STANDARD DEDUCTION</b>
		Range = (170, 515) Varies by region. See Appendix F for values. Coded as missing for MFIP units and for SSI-CAP units receiving a standard SSI-CAP benefit.
<b>FSSTDDE2</b>	C	<b>MARGINAL EFFECTIVENESS OF STANDARD DEDUCTION</b>
		Range = (0, 772) Calculated as $FSSTDDE2 = NEWNET - FSNETINC$ , where $NEWNET = \text{MAX}(0, FSGRINC - FSSLT1 - FSDEPDED - FSERNDED - FSMEDDED - FSCSDED - HOMELESS\_DED)$ and where $FSSLT1$ is the shelter deduction calculated without FSSTDDDED Coded as missing for MFIP units and for SSI-CAP units receiving a standard SSI-CAP benefit.
<b>FSTOTDED</b>	C	<b>TOTAL DEDUCTIONS</b>
		Range = (0, 7056) Sum of FSSTDDDED, FSERNDED, FSDEPDED, FSSLTDED, FSMEDDED, HOMELESS\_DED, and FSCSDED Coded as missing for MFIP units and for SSI-CAP units receiving a standard SSI-CAP benefit.
<b>FSTOTDE2</b>	C	<b>MARGINAL EFFECTIVENESS OF TOTAL DEDUCTION</b>
		Range = (0, 4129) Calculated as $FSGRINC - FSNETINC$ Coded as missing for MFIP units and for SSI-CAP units receiving a standard SSI-CAP benefit.
<b>HOMEDED</b>	R	<b>INDICATOR OF HOMELESSNESS</b>
		Range = (1, 3) 1 = Not homeless 2 = Homeless, not receiving homeless shelter allowance 3 = Homeless, receiving homeless shelter allowance

Variable	Origin	Description
<b>HOMELESS_DED</b>	C	<b>AMOUNT OF HOMELESS HOUSEHOLD SHELTER DEDUCTION</b>
		Range = (0, 167)
		Positive value only for those with HOMEDED = 3
		Coded as missing for all MFIP and SSI-CAP units except for NYSCAP units.
<b>RAWERND</b>	R	<b>REPORTED EARNED INCOME DEDUCTION</b>
		Range = (0, 999)
		See FSERNDED for final earned income deduction value.
<b>RENT</b>	R	<b>RENT/MORTGAGE AMOUNT</b>
		Range = (0, 4721)
		Some values for SSI-CAP units have been edited to apply standard shelter allowances.
<b>SHELCAP</b>	C	<b>MAXIMUM ALLOWABLE SHELTER EXPENSE DEDUCTION</b>
		Range = (492, 996)
		SHELCAP varies by region. See Appendix F for values.
<b>SHELDED</b>	R	<b>REPORTED SHELTER DEDUCTION</b>
		Range = (0, 61300)
		See FSSLTDED for the final value.
<b>SUA1</b>	R	<b>STANDARD UTILITY ALLOWANCE-USAGE AND ENTITLEMENT</b>
		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 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.
<b>SUA2</b>	R	<b>STANDARD UTILITY ALLOWANCE-PRORATED</b>
		Range = (1, 2)
		1 = Not prorated
		2 = Prorated
		Some values have been edited to obtain consistency with UTIL. See Appendix B for details.
		Coded as missing for MFIP units and for SSI-CAP units receiving a standard SSI-CAP benefit.
<b>UTIL</b>	R	<b>UTILITY AMOUNT</b>
		Range = (0, 1075)
		Some values have been edited to improve the final benefit calculation. See Appendix B for details.

**Unit benefits**

Variable	Origin	Description
<b>AMTERR</b>	R	<b>AMOUNT OF BENEFIT IN ERROR</b>
		Range = (0, 1265) Dollar amount of any identified error, or the difference between the benefits the State authorized and the benefits the State should have authorized.
<b>ASSLIM</b>	C	<b>ASSET LIMIT</b>
		Range = (2750, 4250) SNAP asset eligibility limit. Categorically eligible units are not subject to an asset limit. See Appendix F.
<b>BENMAX</b>	C	<b>MAXIMUM BENEFIT AMOUNT</b>
		Range = (281, 4092) The maximum possible benefit for a unit, which varies by unit size and region. See Appendix F for schedule.
<b>FSATEST</b>	C	<b>INDICATOR OF PASSING ASSET TEST</b>
		Range = (0, 1) 0 = No 1 = Yes
<b>FSBEN</b>	C	<b>FINAL CALCULATED BENEFIT</b>
		Range = (4, 3690) 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.
<b>FSBENSUPP</b>	C	<b>CALCULATED AMOUNT OF EMERGENCY ALLOTMENT</b>
		Please note that FSBENSUPP measures the emergency allotment amount a household was estimated to have been entitled to, not necessarily the amount received. Range = (95, 1756) Calculated as the larger of \$95 or BENMAX – FSBEN, if in a State that administered emergency allotments in the sample month. Coded as missing in States that had returned to normal benefit amounts by the sample month. Emergency allotments ended after February 2023. See Chapter I and Appendix C for details.
<b>FSGRTTEST</b>	C	<b>INDICATOR OF PASSING GROSS INCOME TEST</b>
		Range = (0, 1) 0 = No 1 = Yes
<b>FSMINBEN</b>	C	<b>RECEIVED MINIMUM BENEFIT</b>
		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 that uses standard SSI-CAP benefits.
<b>FSNETTEST</b>	C	<b>INDICATOR OF PASSING NET INCOME TEST</b>
		Range = (0, 1) 0 = No 1 = Yes Coded as missing for MFIP units and for units participating in an SSI-CAP program that uses standard SSI-CAP benefits.

Variable	Origin	Description
<b>GROSSCRN</b>	C	<b>GROSS INCOME SCREEN</b>
		Range = (1473, 9660)
		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.
<b>MINIMUM_BEN</b>	C	<b>MINIMUM BENEFIT AMOUNT</b>
		Range = (23, 44)
		See Appendix Table F.6 for minimum monthly SNAP benefit amounts.
<b>NETSCRN</b>	C	<b>NET INCOME SCREEN</b>
		Range = (1133, 7432)
		SNAP eligibility limit determined by unit size. Categorically eligible units are not subject to the net income screen. See Appendix F for values.
<b>RAWBEN</b>	R	<b>REPORTED SNAP BENEFIT RECEIVED</b>
		Range = (0, 9998)
		Reported amount of SNAP benefits that the unit was certified to receive during the sample month (see FSBEN for the final edited benefit amount).
<b>SUPP_BEN</b>	C	<b>INDICATOR OF ELIGIBILITY FOR EMERGENCY ALLOTMENT</b>
		Please note that SUPP_BEN is an indicator of eligibility for, not receipt of, the emergency allotment.
		Range = (0, 1)
		0 = No
		1 = Yes
		SUPP_BEN = 1 when FSBENSUPP > 0.

**Person-level characteristics: i = 1 to 17**

Variable	Origin	Description
<b>ABWDST1 to ABWDST17</b>	R	<b>ABAWD STATUS</b>
		We recommend against using ABWDST $i$ for State-level tabulations in Guam, Nevada, and Utah due to small ABAWD sample sizes and recommend caution when using ABWDST $i$ for State-level tabulations in Delaware, Florida, and Wyoming due to somewhat small ABAWD sample sizes. See Appendix A for details.
		Range = (1, 8)
		Person 1 through Person 17
		1 = Not an able-bodied adult without dependents (ABAWD)
		2 = Ineligible householder
		3 = ABAWD meeting work requirements at 7 CFR 273.24(a)(1)
		4 = ABAWD meeting work requirements (in 3 months of eligibility)
		5 = ABAWD in a waived area
		6 = Exempt based on discretionary exemption
		8 = Ineligible householder also coded as an eligible member of the SNAP unit (FSAFIL $i$ = 1)
<b>AGE1 to AGE17</b>	R	<b>AGE</b>
		Range = (0, 98)
		Person 1 through Person 17
		0 = Age less than 1 year
		1 to 97 = Age in years
		98 = Age 98 years or older
<b>CTZN1 to CTZN17</b>	R	<b>CITIZENSHIP STATUS</b>
		Range = (1, 10)
		Person 1 through Person 17
		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
<b>DIS1 to DIS17</b>	C	<b>PERSON-LEVEL DISABILITY INDICATOR</b>
		Range = (0, 1)
		Person 1 through Person 17
		0 = Not disabled
		1 = Disabled
		Non-elderly individuals identified as having a disability 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.

Variable	Origin	Description
DPCOST1 to DPCOST17	R	<b>REPORTED DEPENDENT CARE COST</b>
		We recommend against using DPCOSTi for State-level tabulations because of small sample sizes and inconsistencies between DPCOSTi and FSDEPDED. See Appendix A for details.
		Range = (0, 1620)
		Person 1 through Person 16
		Some values have been edited to obtain consistency with FSDEPDED. See Appendix B for details.
EMPRG1 to EMPRG17	R	<b>SNAP EMPLOYMENT AND TRAINING PROGRAM STATUS</b>
		Range = (0, 9)
		Person 1 through Person 17
		0 = Not participating in E&T
		1 = Participating in non-SNAP E&T (such as TANF)
		2 = Participating in SNAP job search/job search training as a mandatory participant
		3 = Participating in SNAP job search/job search training as a voluntary participant
		4 = Participating in a SNAP E&T workfare/work experience as a mandatory participant
		5 = Participating in a SNAP E&T workfare/work experience as a voluntary participant
		6 = Participating in a SNAP E&T education/training (basic education, remedial education, career/technical education, or other post-secondary) as a mandatory participant
		7 = Participating in a SNAP E&T education/training (basic education, remedial education, career/technical education, or other post-secondary) as a voluntary participant
		8 = Participating in other SNAP E&T component as a mandatory participant
		9 = Participating in other SNAP E&T component as a voluntary participant
EMPSTA1 to EMPSTA17	R	<b>EMPLOYMENT STATUS—TYPE</b>
		Please note that this variable is best used in conjunction with other work-related variables, such as WORKi, to determine participants' employment status. See Appendix A for details.
		Range = (1, 8)
		Person 1 through Person 17
		1 = Not in labor force and not looking for work
		2 = Unemployed and looking for work
		3 = Active-duty military
		4 = Migrant farm laborer
		5 = Nonmigrant farm laborer
		6 = Self-employed, farming
		7 = Self-employed, nonfarming
		8 = Employed by other
EMPSTB1 to EMPSTB17	R	<b>EMPLOYMENT STATUS—AMOUNT</b>
		Please note that this variable is best used in conjunction with other work-related variables, such as WORKi, to determine participants' employment status. See Appendix A for details.
		Range = (1, 5)
		Person 1 through Person 17
		1 = Not employed
		2 = 1–19 hours/week
		3 = 20–29 hours/week
		4 = 30–39 hours/week
		5 = Full-time (40 hours or more)

Variable	Origin	Description
<b>FSAFIL1 to FSAFIL17</b>	R	<b>SNAP CASE AFFILIATION</b>
		We recommend against using FSAFILi for State-level tabulations of nonparticipants in Alaska, Georgia, Louisiana, North Dakota, and West Virginia, and advise caution when using FSAFILi for State-level tabulations of nonparticipants in Arkansas, the District of Columbia, Minnesota, New York, and Ohio. See Appendix A for details.
		Range = (1, 99)
		Person 1 through Person 17
		1 = Eligible member of SNAP case under review and entitled to receive benefits
		2 = Eligible SNAP participant in another unit, not currently under review (code added by Mathematica for use in certain SNAP-CAP units)
		4 = Member is ineligible noncitizen and not participating in State-funded SNAP
		5 = Member not paying/cooperating with child support agency
		6 = Member is ineligible striker
		7 = Member is ineligible student
		8 = Member disqualified for program violation
		9 = Member ineligible to participate due to disqualification or failure to meet work requirements (work registration, E&T, acceptance of employment, employment status/job availability, voluntary quit/reducing work effort, workfare/comparable workfare)
		10 = ABAWD time limit exhausted and ABAWD ineligible to participate due to failure to meet ABAWD work requirements, to work at least 20 hours per week, to participate in at least 20 hours per week in qualifying educational training activities, or to participate in workfare
		11 = Fleeing felon or parole and probation violator
		13 = Convicted drug felon
		14 = Social Security Number disqualified
		15 = SSI recipient in California
		16 = Prisoner in detention center
		17 = Foster care
		18 = Member is ineligible noncitizen and participating in State-funded SNAP
		19 = Individual in the home but not part of SNAP household
		99 = Unknown
<b>FSUN1 to FSUN17</b>	C	<b>POSITION OF HEAD OF SNAP UNIT</b>
		Range = (0, 8)
		Person 1 through Person 17
		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.
<b>NDISCA1 to NDISCA17</b>	C	<b>ADULT WITHOUT A DISABILITY WHO IS IN A CHILDLESS UNIT AND WITHIN THE AGE RANGE SUBJECT TO TIME LIMITS STATUS</b>
		Range = (0, 2)
		Person 1 through Person 17
		0 = Not in universe (AGEi not within the age range subject to time limits)
		1 = Adult without a disability in childless unit within the age range subject to time limits
		2 = Age within the range subject to time limits, but not adult without a disability in childless unit

Variable	Origin	Description
RACETH1 to RACETH17	R	<b>RACE/ETHNICITY</b> <p>We recommend against using RACETHi for national tabulations, due to a high prevalence of unreported race/ethnicity data. In addition, we recommend against using RACETHi in 21 States where at least 10 percent of participants have unreported race/ethnicity and we recommend caution when using RACETHi in six States and the District of Columbia, where 5 to 10 percent of participants have unreported race/ethnicity. See Appendix A for details.</p> <p>Range = (1, 22)</p> <p>Person 1 through Person 17</p> <p>1 = Racial/ethnic data not available because application was not found</p> <p>2 = Not recorded on application</p> <p>Not Hispanic or Latino</p> <p>3 = American Indian or Alaska Native</p> <p>4 = Asian</p> <p>5 = Black or African American</p> <p>6 = Native Hawaiian or other Pacific Islander</p> <p>7 = White</p> <p>Multiple races reported</p> <p>8 = (American Indian or Alaska Native) and White</p> <p>9 = Asian and White</p> <p>10 = (Black or African American) and White</p> <p>11 = (American Indian or Alaska Native) and (Black or African American)</p> <p>12 = Respondent reported more than one race and does not fit into above categories (codes 8 through 11)</p> <p>Hispanic or Latino</p> <p>13 = (Hispanic or Latino) and (American Indian or Alaska Native)</p> <p>14 = (Hispanic or Latino) and Asian</p> <p>15 = (Hispanic or Latino) and (Black or African American)</p> <p>16 = (Hispanic or Latino) and (Native Hawaiian or other Pacific Islander)</p> <p>17 = (Hispanic or Latino) and White</p> <p>Multiple races reported</p> <p>18 = (Hispanic or Latino) and (American Indian or Alaska Native) and White</p> <p>19 = (Hispanic or Latino) and Asian and White</p> <p>20 = (Hispanic or Latino) and (Black or African American) and White</p> <p>21 = (Hispanic or Latino) and (American Indian or Alaska Native) and (Black or African American)</p> <p>22 = (Hispanic or Latino) and respondent reported more than one race and does not fit into above categories (codes 18 through 21)</p>
REL1 to REL17	R	<b>RELATIONSHIP TO HEAD OF HOUSEHOLD</b> <p>Range = (1, 7)</p> <p>Person 1 through Person 17</p> <p>1 = Head of household</p> <p>2 = Spouse</p> <p>3 = Parent</p> <p>4 = Daughter, stepdaughter, son, or stepson</p> <p>5 = Other related person (brother, sister, niece, nephew, grandchild, great-grandchild, cousin)</p> <p>6 = Foster child</p> <p>7 = Unrelated person</p>

Variable	Origin	Description
<b>SEX1 to SEX17</b>	R	<b>SEX</b>
		Please note that the SEX $i$ = 3 value was added to the FY 2023 SNAP QC database. See Appendix B and Appendix C for details.
		Range = (1, 3)
		Person 1 through Person 17
		1 = Male
		2 = Female
		3 = Prefer not to answer
<b>WORK1 to WORK17</b>	C	<b>PERSON-LEVEL WORKING INDICATOR</b>
		Range = (0, 1)
		Person 1 through Person 17
		0 = No
		1 = Yes
		Identifies individuals who are coded as being employed (EMPSTA $i$ > 2), having positive earnings (WAGES $i$ + OTHERNI $i$ + SLFEMPI $i$ > 0), and working one or more hours per week (EMPSTBi > 1).
<b>WRKREG1 to WRKREG17</b>	R	<b>WORK REGISTRATION STATUS</b>
		Please note that the variable is best used in conjunction with other work-related variables to identify reasons for exemption from work registration. See Appendix A for details.
		Range = (1, 5)
		Person 1 through Person 17
		1 = Work registrant
		2 = Federal exemption, physically or mentally unfit for employment
		3 = Federal exemption, care of a child under 6 or an incapacitated person
		4 = Federal exemption, working and/or earning the equivalent of 30 hours per week
		5 = Federal exemption, other
<b>YRSED1 to YRSED17</b>	R	<b>HIGHEST EDUCATIONAL LEVEL COMPLETED</b>
		We recommend against using YRSED $i$ for national tabulations and State-level tabulations in 12 States where at least 10 percent of adults were coded with missing values. We recommend caution when using YRSED $i$ in 10 States and the District of Columbia, where between 5 and 10 percent of adults were coded with missing values. See Appendix A for details.
		Range = (0, 14)
		Person 1 through Person 17
		0 = None
		1 = Grade 1
		2 = Grade 2
		3 = Grade 3
		4 = Grade 4
		5 = Grade 5
		6 = Grade 6
		7 = Grade 7
		8 = Grade 8
		9 = Grade 9
		10 = Grade 10
		11 = Grade 11
		12 = High school graduate or GED
		13 = Postsecondary education (for example, technical education or some college)
		14 = College graduate or postgraduate degree

**Person-level countable income (monthly dollar amounts): i = 1 to 17**

Variable	Origin	Description
CONT1 to CONT17	R	<b>COUNTABLE INCOME FROM CONTRIBUTIONS</b>
		Range = (0, 3000)
		Person 1 through Person 17
		Amount of contributions, charity, and in-kind income
CSUPRT1 to CSUPRT17	R	<b>COUNTABLE CHILD SUPPORT PAYMENT INCOME</b>
		Range = (0, 2561)
		Person 1 through Person 17
		Court-ordered child support payments received from absent parent or responsible person.
DEEM1 to DEEM17	R	<b>COUNTABLE DEEMED INCOME</b>
		Range = (0, 2350)
		Person 1 through Person 17
		Income deemed from sponsor of noncitizen member of unit.
DIVER1 to DIVER17	R	<b>COUNTABLE STATE DIVERSION PAYMENTS</b>
		Range = (0, 1048)
		Person 1 through Person 17
EDLOAN1 to EDLOAN17	R	<b>COUNTABLE INCOME FROM EDUCATIONAL GRANTS AND LOANS</b>
		Range = (0, 2319)
		Person 1 through Person 17
		Educational grants, scholarships, and loans.
EITC1 to EITC17	R	<b>COUNTABLE INCOME FROM EARNED INCOME TAX CREDIT</b>
		Range = (0, 934)
		Person 1 through Person 17
ENERGY1 to ENERGY17	R	<b>COUNTABLE ENERGY ASSISTANCE INCOME</b>
		Range = (0, 1452)
		Person 1 through Person 17
FOSTER1 to FOSTER17	R	<b>COUNTABLE FOSTER CARE INCOME</b>
		Range = (0, 2383)
		Person 1 through Person 17
GA1 to GA17	R	<b>COUNTABLE GENERAL ASSISTANCE BENEFITS</b>
		Range = (0, 4580)
		Person 1 through Person 17
OTHERN1 to OTHERN17	R	<b>COUNTABLE OTHER EARNED INCOME</b>
		Range = (0, 3135)
		Person 1 through Person 17
OTHGOV1 to OTHGOV17	R	<b>COUNTABLE INCOME FROM OTHER GOVERNMENT BENEFITS</b>
		Range = (0, 4049)
		Person 1 through Person 17
		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.

Variable	Origin	Description
<b>OTHUN1 to OTHUN17</b>	<b>R</b>	<b>COUNTABLE OTHER UNEARNED INCOME</b>
		Range = (0, 4800)
		Person 1 through Person 17
		Includes alimony, 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.
<b>SLFEMP1 to SLFEMP17</b>	<b>R</b>	<b>COUNTABLE SELF-EMPLOYMENT INCOME</b>
		Range = (0, 5210)
		Person 1 through Person 17
		Net income from any self-employment enterprise
<b>SOCSEC1 to SOCSEC17</b>	<b>R</b>	<b>COUNTABLE SOCIAL SECURITY INCOME</b>
		Range = (0, 6800)
		Person 1 through Person 17
<b>SSI1 to SSI17</b>	<b>R</b>	<b>COUNTABLE SSI BENEFITS</b>
		Range = (0, 2406)
		Person 1 through Person 17
		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
<b>TANF1 to TANF17</b>	<b>R</b>	<b>COUNTABLE TANF PAYMENTS</b>
		Range = (0, 2185)
		Person 1 through Person 17
		Assigned to payee or principal person of assistance group
<b>UNEMP1 to UNEMP17</b>	<b>R</b>	<b>COUNTABLE UNEMPLOYMENT COMPENSATION</b>
		Range = (0, 3254)
		Person 1 through Person 17
<b>VET1 to VET17</b>	<b>R</b>	<b>COUNTABLE VETERANS' BENEFITS</b>
		Range = (0, 4273)
		Person 1 through Person 17
<b>WAGES1 to WAGES17</b>	<b>R</b>	<b>COUNTABLE WAGES AND SALARIES</b>
		Range = (0, 7526)
		Person 1 through Person 17
		Amount of wages, salaries, tips, and commission
<b>WCOMP1 to WCOMP17</b>	<b>R</b>	<b>COUNTABLE WORKERS' COMPENSATION BENEFITS</b>
		Range = (0, 4441)
		Person 1 through Person 17
<b>WGESUP1 to WGESUP17</b>	<b>R</b>	<b>COUNTABLE WAGE SUPPLEMENTATION INCOME</b>
		Range = (0, 3433)
		Person 1 through Person 17
		Earnings above cash assistance and/or SNAP benefit amount

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

Variable	Origin	Description
AGENCY1 to AGENCY9	R	<b>AGENCY OR CLIENT RESPONSIBILITY</b>
		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	<b>VARIANCE DOLLAR AMOUNT</b>
		Range = (0, 1480)
		Variance 1 through Variance 9
		Dollar amount of variance
DISCOV1 to DISCOV9	R	<b>VARIANCE DISCOVERY</b>
		Range = (1, 9)
		Variance 1 through Variance 9
		How variance was discovered
		1 = Variance clearly identified from case record (documentation not from an automated match)
		2 = Variance clearly identified from case record (documentation from an automated match)
		3 = Variance discovered from recipient interview
		4 = Employer (present or former)
		5 = Financial institution, insurance company, or other business
		6 = Landlord
		7 = Government agency or public records, not automated match
		8 = Government agency or public records, automated match
		9 = Other

Variable	Origin	Description
E_FINDG1 to E_FINDG9	R	<b>ERROR FINDING</b>
		Range = (2, 4)
		Variance 1 through Variance 9
		Impact of variance
		2 = Overissuance
		3 = Underissuance
		4 = Ineligible
ELEMENT1 to ELEMENT9	R	<b>VARIANCE ELEMENT</b>
		Range = (111, 820)
		Variance 1 through Variance 9
		Element of variance
		111 = Student status
		130 = Citizenship and noncitizen status
		140 = Residency
		150 = Unit composition
		151 = Recipient disqualification
		160 = Employment and training programs
		161 = Time-limited participation
		162 = Work registration requirements
		163 = Voluntary quit/reduced work effort
		164 = Workfare and comparable workfare
		165 = Employment status/job availability
		166 = Acceptance of employment
		170 = Social Security number
		211 = Bank accounts or cash on hand
		212 = Nonrecurring lump-sum payment
		213 = Other liquid assets
		221 = Real property
		222 = Vehicles
		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

Variable	Origin	Description
		346 = Other unearned income 350 = Child support payments received from absent parent 361 = Standard deduction 363 = Shelter deduction 364 = Standard utility allowance 365 = Medical expense deductions 366 = Child support payment deduction 371 = Combined gross income 372 = Combined net income 520 = Arithmetic computation 530 = Transitional benefits 560 = Reporting systems 810 = SNAP simplification project 820 = Demonstration projects
NATURE1 to NATURE9	R	<b>NATURE OF VARIANCE</b>
		Range = (6, 306) Variance 1 through Variance 9 Nature of each variance 6 = Eligible person(s) excluded 7 = Ineligible person(s) included 12 = Eligible person(s) with no income, resources, or deductible expenses excluded 13 = Eligible person(s) with income excluded 14 = Eligible person(s) with resources excluded 15 = Eligible person(s) with deductible expenses excluded 16 = Newborn improperly excluded 20 = Incorrect resource limit applied 24 = Resource should have been excluded 28 = Incorrect income limit applied 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)

Variable	Origin	Description
	64 = Incorrect amount used resulting from change in residence	
	65 = Incorrect standard used resulting from change in unit size	
	75 = Benefit/allotment/eligibility incorrectly computed	
	77 = Unit not entitled to transitional benefits	
	79 = Incorrect use of allotment tables	
	80 = Improper prorating of initial month's benefits	
	97 = Not required to be reported or acted upon based on time frames and reporting requirements for allotment differences below the error 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	<b>VARIANCE OCCURRENCE DATE</b>	
	Range = (200112, 999999)	
	Variance 1 through Variance 9	
	Date each variance occurred (year and month)	
	999999 = Unknown	
TIMEPER1 to TIMEPER9 R	<b>VARIANCE TIME PERIOD</b>	
	Range = (1, 9)	
	Variance 1 through Variance 9	
	Time period during which variance occurred	
	1 = Before most recent action	
	2 = At time of most recent action by agency	
	3 = After most recent action by agency	
	9 = Time of occurrence cannot be determined	

Variable	Origin	Description
VERIF1 to VERIF9	R	<b>VARIANCE VERIFICATION</b>
		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

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## References

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## **APPENDIX A**

### **Assessment of the Quality of the Selected Variables in the FY 2023 SNAP QC Database**

We assessed the quality of the data for variables in the FY 2023 SNAP QC database that have changed in recent years or have a history of coding inconsistencies. Based on our assessment, we recommend against using some variables, recommend caution when using others, and suggest understanding the limitations of some of them before their use. Table A.1 summarizes our recommendations, which are also listed and described below. The codebook in Chapter V also summarizes our recommendations regarding the use of each variable if there are any concerns.

More information about our assessment and recommendations is available on request.

### A. Summary of recommendations for the use of certain variables

**Table A.1. Overview of variable recommendations**

Variable	Recommend against use in all instances	Recommend against use in some instances	Recommend caution in some or all instances	Recommend understanding limitations before use
ABWDSTi		X	X	
DPCOSTi and FSDEPDED		X		
EMPSTAi and EMPSTBi				X
FSAFILI		X	X	
FSASSET and FSVEHAST				X
FSBENSUPP				X
FSTANF		X		
MN_FIP				X
RACETHi		X	X	
SSI-CAP			X	
SUPP_BEN				X
URBRUR		X	X	
VEHICLEA and VEHICLEB	X			
WRKREGi				X
YRSEDI		X	X	

Note: Some variables have different recommendations, depending on whether they are being used for national or State tabulations, and, for State tabulations, depending on the State.

Based on our assessment, we recommend against using the following variables in all instances:

- VEHICLEA and VEHICLEB

We recommend against using the following variables in some instances:

- ABWDSTi for State-level tabulations in Guam, Nevada, and Utah
- DPCOSTi and FSDEPDED for State-level tabulations
- FSAFILI for State-level tabulations of nonparticipants in Alaska, Georgia, Louisiana, North Dakota, and West Virginia
- FSTANF in Minnesota

- RACETHi for national tabulations and State-level tabulations in California, Colorado, Connecticut, Delaware, Hawaii, Illinois, Iowa, Louisiana, Minnesota, Mississippi, Nebraska, New Mexico, Oklahoma, Oregon, Rhode Island, Tennessee, Texas, Utah, Vermont, Washington, and Wisconsin.
- URBRUR for State-level tabulations in Alabama, Arizona, Guam, Kansas, Kentucky, Nebraska, Nevada, Tennessee, Utah, the Virgin Islands, and Washington (this variable is not retained in the public-use file)
- YRSEDi for national tabulations and State-level tabulations in Alaska, Arkansas, Connecticut, Idaho, Massachusetts, Michigan, Montana, Nebraska, New Jersey, Oklahoma, Oregon, and South Carolina.

We advise caution when using the following variable in all instances:

- SSI\_CAP

We advise caution when using the following variables in some instances:

- ABWDSTi for State-level tabulations in Delaware, Florida, and Wyoming
- FSAFILI for State-level tabulations of nonparticipants in Arkansas, the District of Columbia, Minnesota, New York, and Ohio
- RACETHi for State-level tabulations in Alaska, Arizona, the District of Columbia, Missouri, New Hampshire, South Dakota, and Wyoming
- URBRUR for tabulations in all States or territories other than Alabama, Arizona, Guam, Kansas, Kentucky, Nebraska, Nevada, Tennessee, Utah, the Virgin Islands, and Washington, where we recommend against using the variable (this variable is not retained in the public-use file)
- YRSEDi for State-level tabulations in California, Colorado, the District of Columbia, Louisiana, Maine, New Mexico, New York, North Dakota, Pennsylvania, South Dakota, and Wisconsin

We recommend understanding potential limitations of the following variables before using them:

- EMPSTAi and EMPSTBi, which are best used in conjunction with other work-related variables, such as WORKi
- FSASSET and FSVEHAST, which are greater than \$0 for only 5 percent of SNAP units and less than 1 percent of SNAP units, respectively.
- MN\_FIP, which may slightly underestimate the number of Minnesota Family Investment Program (MFIP) units
- SUPP\_BEN, which is an indicator of eligibility for—not receipt of—the emergency allotment
- FSBENSUPP, which is the amount a household was estimated to have been entitled to, not necessarily the amount received
- WRKREGi, which is best used in conjunction with other work-related variables

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

## B. Variables not recommended for use in all instances

### 1. Vehicles (VEHICLEA and VEHICLEB)

For more than a decade, we have recommended against using the vehicle variables (VEHICLEA and VEHICLEB) because of coding inconsistencies and we continue to recommend against using these variables in the FY 2023 SNAP QC database. In addition, because QC reviewers are instructed to record possession of vehicles only if a vehicle's value is counted toward a unit's resources, VEHICLEA and VEHICLEB are often missing, limiting the usefulness of the variables for analyses.

## C. Variables not recommended for use in some instances

### 1. Non-elderly childless adult without a disability subject to work registration (ABWDSTi)

We recommend against using ABWDSTi for State-level tabulations in Guam, Nevada, and Utah, due to small sample sizes (fewer than 25 people coded as ABAWDs in the State or territory). This recommendation is in addition to the one to exercise caution when using ABWDSTi in three States due to small sample sizes, as described in Section E.

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

DPCOSTi and FSDEPDED may be used for national tabulations. However, in two States—Maryland and Oregon—we find inconsistencies between DPCOSTi and FSDEPDED in more than 5 percent of units (unweighted). Furthermore, sample sizes are small in most States; around 1 percent of units (unweighted) have a positive dependent care deduction, positive dependent care costs, or both. As a result, we recommend against using DPCOSTi and FSDEPDED for State-level tabulations.

### 3. SNAP case affiliation (FSAFILi)

FSAFILi may be used for tabulations of participants in all instances, but we recommend against its use for some State-level tabulations of nonparticipants—specifically, in the five States that have at least 20 percent of nonparticipants with unknown FSAFILi values—24 percent in Alaska, 21 percent in Georgia, 24 percent in Louisiana, 23 percent in North Dakota, and 95 percent in West Virginia. This recommendation is in addition to the one to exercise caution when using FSAFILi in four States where 5 to 10 percent of nonparticipants have missing or unknown values, as described in Section E. (No State or territory had between 10 and 20 percent of nonparticipants with missing or unknown values.)

### 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, and may not be recorded at all. Specifically, when States transmit a QC record, the national computer system checks that the gross income of the unit is equal to the sum of all reported income types. TANF income is not used in the MFIP benefit calculation, so it is not included in reported gross income. If it were to be recorded on the file, a fatal error in the data transmission would occur. 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. Additionally, we recommend against using FSTANF in Minnesota because TANF income is not included as gross income and is most likely recorded incorrectly, if at all.

## **5. Race/ethnicity (RACETHi)**

Current values for RACETHi allow reporting of multiple races and ethnicities and include values indicating that race/ethnicity data are not available or not recorded. About 17 percent of participants have unreported race/ethnicity data, although the percentage varies considerably by State. Given the large percentage of participants with unreported race/ethnicity data nationally, we recommend against using the variable for national tabulations. We also recommend against using the variable for State-level tabulations in States where at least 10 percent of participants have unknown or unavailable RACETHi values. They include 21 States— California, Colorado, Connecticut, Delaware, Hawaii, Illinois, Iowa, Louisiana, Minnesota, Mississippi, Nebraska, New Mexico, Oklahoma, Oregon, Rhode Island, Tennessee, Texas, Utah, Vermont, Washington, and Wisconsin. This recommendation is in addition to the one to exercise caution when using RACETHi for State-level tabulations in seven States where 5 to 10 percent of participants have unknown or unavailable values, as described in Section E.

## **6. Locality (URBRUR)**

Four States or territories (Guam, Nebraska, Utah, and the Virgin Islands) use Local Agency Codes (LACs) that do not align with geographic areas and therefore cannot be used to classify units as located in a metropolitan, micropolitan, or rural area. In addition, mostly because of the use of LACs that do not align with geographic regions, we could not identify locality for at least 10 percent of units in Alabama, Arizona, Kansas, Kentucky, Nevada, Tennessee, and Washington. For this reason, we recommend against using URBRUR in these States. This recommendation is in addition to the one to exercise caution when using URBRUR for State-level tabulations because of concerns about the representativeness of the sample within a State, as described in Section E.

## **7. Highest educational level completed (YRSEDi)**

We recommend against using YRSEDi for national tabulations because of the high number of missing values. We also recommend against using YRSEDi for State-level tabulations in the 12 States (Alaska, Arkansas, Connecticut, Idaho, Massachusetts, Michigan, Montana, Nebraska, New Jersey, Oklahoma, Oregon, and South Carolina) where at least 10 percent of adults were coded with missing values. This recommendation is in addition to the one to exercise caution when using YRSEDi for State-level tabulations in 11 States where 5 to 10 percent of adults were coded with missing values, as described in Section E.

## **D. Variable recommended for use with caution in all instances**

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

The raw SNAP QC data do not identify units that enter SNAP through an SSI-CAP, so we use an algorithm to identify, recode, and assign benefits for SSI-CAP units in States with these projects.<sup>45</sup>

Because SSI-CAP units are not directly identified in the raw 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.

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<sup>45</sup> Section III.2 has details on States that had SSI-CAP programs in place during FY 2023.

## **E. Variables recommended for use with caution in some instances**

### **1. Non-elderly childless adult without a disability subject to work registration (ABWDSTi)**

We recommend caution when using ABWDSTi for State-level tabulations in Delaware, Florida, and Wyoming, due to somewhat small sample sizes (between 25 and 29 people coded as ABAWDs in the State). This recommendation is in addition to the one against using ABWDSTi where fewer than 25 people are coded as ABAWDs in the State, as described in Section C.

### **2. SNAP case affiliation (FSAFILi)**

In four States and the District of Columbia, between 5 and 10 percent of nonparticipants have missing or unknown values. We advise caution when using FSAFILi for State-level tabulations of nonparticipants in these States—Arkansas, Minnesota, New York, and Ohio—and the District of Columbia. This recommendation is in addition to the one against using FSAFILi in States where at least 20 percent of nonparticipants had missing or unknown values, as described in Section C. (No State or territory had between 10 and 20 percent of nonparticipants with missing or unknown values.)

### **3. Race/ethnicity (RACETHi)**

We recommend caution when using RACETHi for State-level tabulations in Alaska, Arizona, the District of Columbia, Missouri, New Hampshire, South Dakota, and Wyoming, where unknown RACETHi values account for between 5 and 10 percent of their participants. This recommendation is in addition to the one against using RACETHi for national-level tabulations and in State-level tabulations for 21 States, as described in Section C.

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

Because of concerns about the representativeness of the sample within a State, we recommend caution when using URBRUR for State-level tabulations. This recommendation is in addition to the one against using URBRUR in States where locality could not be determined for at least 10 percent of the caseload, as described in Section C.

### **5. Highest educational level completed (YRSEDi)**

In 10 States and the District of Columbia, between 5 and 10 percent of adults were coded with missing values for YRSEDi. For this reason, we recommend caution when using YRSEDi for State-level tabulations in California, Colorado, the District of Columbia, Louisiana, Maine, New Mexico, New York, North Dakota, Pennsylvania, South Dakota, and Wisconsin. This recommendation is in addition to the one against using YRSEDi for national-level tabulations and in State-level tabulations for 12 States, as described in Section C.

## **F. Variables recommended for use after understanding potential limitations**

### **1. Employment status (EMPSTAi and EMPSTBi)**

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 12,173 participants (unweighted) coded as working more than one hour and employed, 361 had no countable

earnings. Given these inconsistencies, we recommend using EMPSTA<sub>i</sub> and EMPSTB<sub>i</sub> in conjunction with other work-related variables to determine participants' employment status. Specifically, we recommend using the person-level work indicator, WORK<sub>i</sub>, which incorporates information from person-level earnings and employment status variables (EMPSTA<sub>i</sub> and EMPSTB<sub>i</sub>).

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

We edit positive values of FSVEHAST, LIQRESOR, OTHNLRES, and REALPROP to \$0 for those 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, many units have no recorded assets. Only 5 percent of SNAP units have recorded assets (FSASSET > 0) in the edited FY 2023 database, and nearly all units have no vehicle assets (FSVEHAST = 0). We recommend using FSASSET and FSVEHAST for tabulations with the understanding that most units have no recorded countable assets.

## **3. Emergency allotment (SUPP\_BEN and FSBENSUPP)**

In FY 2023, we updated the coding of these variables to reflect the State rules in place during the fiscal year. Data users should note that we coded the receipt of emergency allotments and their amounts in the month in which the SNAP unit was entitled to an allotment, which may differ from the month in which the unit received it. Specifically, we estimated a SNAP unit's FSBENSUPP based on its benefit for the sample month. However, some States distributed some emergency allotments in the month following the entitlement month. Because SUPP\_BEN and FSBENSUPP refer to the emergency allotment a SNAP unit was entitled to receive in the sample months, we set those variables to 0 in emergency allotment transition months, which followed the last authorized month of emergency allotment distribution. Consequently, SUPP\_BEN is an indicator of eligibility for, not receipt of, the emergency allotment; FSBENSUPP is the amount a household was estimated to have been entitled to. Emergency allotments ended after February 2023.

## **4. Work registration status (WRKREG<sub>i</sub>)**

The values for the WRKREG<sub>i</sub> variable changed in FY 2021, and the new values remained in place in the FY 2023 data file. Although the national distribution of work registration statuses changed only modestly from FY 2022 to FY 2023, the distribution changed more substantially in certain States and territories.

For example, the percentage of individuals coded as work registrants increased by more than 5 percentage points in Alaska (from approximately 20 to approximately 26 percent) and Kansas (from approximately 6 to approximately 14 percent). Likewise, some States had substantial changes in the percentage coded as exempt from work registration due to a disability, and, among non-elderly adults, those changes did not always correlate positively to changes in the percentage coded as receiving SSI, a proxy for disability. In fact, differences in the percentage of non-elderly adult participants coded as exempt from work registration due to a disability (being physically or mentally unfit for employment) and those receiving SSI were large in some States; 20 States had at least a 10-percentage point difference. For these reasons, even though we recommend using WRKREG<sub>i</sub> to identify work registrants, we recommend using it in conjunction with other work-related variables to identify reasons for exemption from work registration.

## **APPENDIX B**

### **Automated Edits to SNAP Units**

We were able to resolve some inconsistencies in the raw FY 2023 data file through automated edits, as described in this section.

### A. 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.
- 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).

### B. 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, Idaho, Illinois, Iowa, Kansas, Maine, Minnesota, Nebraska, Nevada, New Hampshire, New York, North Dakota, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Texas, Vermont, the Virgin Islands, and Washington. The remaining States exclude the value of all vehicles when determining asset eligibility, so we reset any reported vehicle assets in these States to \$0.

### C. 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 subject to the gross income test (meaning it was not categorically eligible and did not include a member who was elderly or had a disability), and would have passed the gross income test if child support expenses were excluded from gross income, but would not have passed if they were included, we excluded child support expenses from unit gross income and set the child support payment deduction to \$0.

#### D. Dependent care expenses

The QC data file includes units for which the QC reviewers recorded dependent care expenses for the parent instead of the dependent. We corrected for this error as follows:

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

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

- If the dependent care deduction was greater than the total value of dependent care expenses, we set the expenses equal to the deduction by assigning additional dependent care expenses to unit members who originally had positive dependent care expenses.
- If no unit members originally had recorded dependent care expenses, we assigned expenses to unit members in the following order:
  1. If the unit contained at least one member age 0 to 4, we distributed expenses evenly to unit members age 0 to 8.
  2. If the unit did not contain a member age 0 to 4, we distributed expenses evenly to any unit members age 5 to 13.
  3. If the unit did not contain a member age 0 to 13, we distributed expenses evenly to any unit members age 14 to 17.
  4. If the unit did not contain a member age 0 to 17, we distributed expenses evenly to any unit members age 18 or older with SSI.
  5. If the unit did not contain a member age 0 to 17 or an adult with SSI, we distributed expenses to elderly unit members without SSI.

6. If the unit did not contain a member age 0 to 17 or an adult with SSI or an elderly unit member without SSI, we distributed expenses evenly to all unit members.
- In units with positive dependent care expenses, no dependent care deduction, and a calculated benefit that did not match the raw benefit, we set the dependent care deduction equal to the total unit dependent care expenses if doing so resulted in a calculated benefit that matches the raw benefit.

These edits excluded households identified as MFIP or SSI-CAP, except for NYSCAP units because those units are subject to the regular SNAP benefit determination rules.

## E. SUA usage and prorating

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, if necessary. 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 both full and half SUA values (Table F.7).<sup>46</sup> If the utility amount equaled a full SUA value, we confirmed that SUA1 indicated the correct SUA type and that SUA2 was coded as “not prorated.” If the utility amount equaled half of an SUA value, we confirmed that SUA1 indicated the correct SUA type and that SUA2 was coded as “prorated.” However, in States that use individual standards, we checked half SUA values for the HCSUA and LUA, but only full SUA values for the telephone SUA, electricity SUA, or both (telephone plus electricity). If the utility amount did not equal a full or half SUA value and was not coded as prorated, we coded the unit as using individual standards in States with individual standards and as using actual expenses in other States. However, in States where SUA use was 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.<sup>47</sup>

These edits excluded 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”).

## F. 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

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<sup>46</sup> Prorated values are not always equal to half of the full SUA value. However, because of the multitude of possible values, we checked only for values that were half of the full amount.

<sup>47</sup> Throughout FY 2023, 46 States, the District of Columbia, and Guam mandated the use of an SUA rather than actual utility costs. The 46 States include Alaska, which mandates the use of an SUA for the Central geographic region.

## G. 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. Units’ categorical eligibility status is reported in the raw data through CAT\_ELIG, which is set to 0 for units that are not categorically eligible and 1 for units that are. In States with BBCE policies, most units were already identified as categorically eligible. We recoded CAT\_ELIG to 2 for units 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 Federal poverty guidelines or (2) only elderly individuals or individuals with a disability and gross income at or below 200 percent of Federal poverty guidelines
- Arizona, Maine, New Jersey, and Vermont. All units with gross income at or below 185 percent of Federal poverty guidelines
- California, Connecticut, Delaware, District of Columbia, Florida, Hawaii, Kentucky, Louisiana, Maryland, Minnesota, Nevada, North Carolina, Oregon, Pennsylvania, Virginia, Washington, West Virginia, and Wisconsin. All units with gross income at or below 200 percent of Federal poverty guidelines
- Colorado, Massachusetts, 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 Federal poverty guidelines
- Georgia. All units with (1) gross income at or below 130 percent of Federal poverty guidelines or (2) only elderly individuals or individuals with a disability and gross income at or below 200 percent of Federal poverty guidelines
- Guam 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 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 Federal poverty guidelines
- Indiana. 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
- Iowa. All units with gross income at or below 160 percent of Federal poverty guidelines
- Michigan. Through June 2023, all units with countable assets at or below \$15,000 and gross income at or below 200 percent of Federal poverty guidelines; as of July 2023, all units with gross income at or below 200 percent of Federal poverty guidelines

- Nebraska. All units with countable financial assets at or below \$25,000, net income at or below 100 percent of Federal poverty guidelines, and either (1) gross income at or below 165 percent of Federal poverty guidelines or (2) at least one elderly individual or individual with a disability
- New Hampshire. Through December 2022, 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; as of January 2023, all units with gross income at or below 200 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 Federal poverty guidelines, (3) at least one elderly individual or individual with a disability and gross income at or below 200 percent of Federal poverty guidelines, or (4) dependent care expenses and gross income at or below 200 percent of Federal poverty guidelines
- Ohio and South Carolina. All units with (1) gross income at or below 130 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 Federal poverty guidelines
- 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 Federal poverty guidelines or (2) at least one elderly individual or individual with a disability
- 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 Federal poverty guidelines
- Texas. All units with countable assets at or below \$5,000 and gross income at or below 165 percent of Federal poverty guidelines
- 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 Federal poverty guidelines

We recoded CAT\_ELIG to 0 for a small number of cases with a missing value for CAT\_ELIG if the cases were in States without BBCE policies, not identified as pure PA, and pass Federal SNAP eligibility tests.

## H. 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 added 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.

## I. Person-level disability

The QC data file does not directly identify individuals with a disability. We used the following procedure to flag non-elderly individuals likely to have a disability:

- We identified most participants under age 60 with SSI as having a disability. We made exceptions if they were the only individual in the unit receiving SSI and a work registration status indicating a Federal exemption for a reason other than a disability (WRKREGi = 3, 4, or 5), and met any of the following conditions:

1. Individual was an adult (age 18 to 59) living with at least one individual who (a) did not have earned income and (b) had a work registration status indicating disability ( $WRKREGi = 2$ ). In these cases, we coded the first child in the unit with  $WRKREGi = 2$  as having a disability; if there were no children in the unit, we coded the first adult in the unit with  $WRKREGi = 2$  as having a disability. We did not code the adult with SSI and  $WRKREGi = 3, 4$ , or  $5$  as having a disability.
  2. Individual was a child (age 0 to 17) living with at least one other child who (a) did not have earned income and (b) had a work registration status indicating a disability. In these cases, we coded the first child in the unit with  $WRKREGi = 2$  as having a disability. We did not code the child with SSI and  $WRKREGi = 3, 4$ , or  $5$  as having a disability.
  3. Individual did not meet conditions (1) or (2) but was in the labor force ( $EMPSTAi > 1$ ); had earned income; had no Social Security, veterans' benefits, or workers' compensation; and was living with at least one child. In these cases, we coded the first child in the unit as having a disability. We did not code the individual described above with SSI as having a disability.
- We identified as having a disability all non-elderly adult participants who satisfied all three of the following conditions:
    1. Coded as working fewer than 30 hours per week ( $EMPSTBi = 1, 2$ , or  $3$ ) and either of the following:
      - a. Had monthly earnings less than the equivalent of the monthly Federal minimum wage for someone working 30 hours a week
      - b. Did not have a related dependent (age 17 or under,  $RELi = 4$  or  $5$ ) receiving Social Security in the unit
    2. Coded as exempt from work registration due to disability ( $WRKREGi = 2$ )
    3. Received Social Security, veterans' benefits, or workers' compensation
  - We also identified as having a disability all non-elderly adult participants in single-person units who met either of the following conditions:
    - a. Received Social Security and there were no individuals outside of the unit
    - b. Coded as  $WRKREGi = 2$ , had no gross income, and had assets above the limit for units without any elderly individuals or individuals with a disability, but below the limit for units with an elderly individual or individual with a disability
  - In units in which no individual was identified as having a disability per the above criteria (for example, by receiving SSI income), but the unit received a medical expense deduction and had no participating elderly individuals or nonparticipating elderly members with  $FSAFILi = 8, 9, 11$ , or  $13$ , we coded at least one individual as having a disability. We did so by looking for the following types of individuals among those with  $FSAFILi = 1$  (participating individuals) and  $FSAFILi = 8, 9, 11$ , or  $13$  (nonparticipating individuals), stopping when a step coded one or more individuals as having a disability:
    1. Individuals with a work registration status indicating disability (we coded all such individuals as having a disability)
    2. Individuals receiving Social Security, veterans' benefits, or workers' compensation and coded as working fewer than 30 hours per week (we coded all such individuals as having a disability)
    3. Individuals receiving Social Security, veterans' benefits, or workers' compensation (we coded all such individuals as having a disability)

4. Children coded as working fewer than 30 hours per week (we coded the first such child as having a disability)
5. Adults coded as working fewer than 30 hours per week (we coded the first such adult as having a disability)

If the unit did not contain any of the types of individuals listed above, we coded all individuals in the unit as having a disability.

In FY 2023, we identified one adult non-participant as having a disability because they worked less than 30 hours per week, were coded as exempt for work registration due to a disability and received Social Security and SSI income. However, because no participating members of the household had a disability, we did not flag the SNAP unit as containing a member with a disability.

#### **J. Homeless household shelter deduction**

The 2018 Farm Bill mandated a standard shelter deduction for homeless households that had qualifying shelter expenses and were not claiming the excess shelter expense deduction, and then indexed the deduction to inflation. In FY 2023, the value of the homeless shelter deduction was \$166.81. Because there was variation in whether States appeared to round this value up or down, we identified households as receiving the homeless shelter deduction if the reported shelter deduction (SHELDED) was \$166 or \$167.

#### **K. Illogical relationship (RELi) and age (AGEi) codes**

We checked for instances of illogical values between the relationship (RELi) and age (AGEi) codes. Specifically, we checked for six types of inconsistencies: (1) children age 12 or younger coded as a spouse or parent; (2) children age 14 or younger coded as the head of the SNAP household although there was someone older in the SNAP household; (3) adults age 22 or older coded as a foster child; (4) adults age 98 coded as a daughter, stepdaughter, son, or stepson; (5) SNAP households with a child of the household head in which the difference between ages of the older of the household head or their spouse and the child was less than 15 years; and (6) SNAP households with a parent of the household head where the difference between the oldest parent and household head was less than 15 years. We recoded these inconsistencies as follows:

- If a child age 12 or younger was coded as a spouse (RELi = 2) or parent (RELi = 3), we changed the child's relationship to daughter, stepdaughter, son, or stepson (RELi = 4).
- If a child age 14 or younger was coded as the head of household, although there was someone older in the SNAP unit, we changed the child's relationship to daughter, stepdaughter, son, or stepson (RELi = 4) and changed the adult's relationship to household head (RELi = 1).
- If an adult age 22 or older was coded as a foster child (RELi = 6), we changed the adult's relationship to an unrelated individual (RELi = 7).
- If an individual age 98 was coded as a daughter, stepdaughter, son, or stepson, we changed the individual's age to missing.
- If a SNAP household contained a head of household (RELi = 1) or spouse of the head of household (RELi = 2) and child (RELi = 4) in which the difference between ages of the older of the head or spouse and any child was less than 15 years, then for those children with an age difference of less than 15 years, we changed the child's relationship to other related person (RELi = 5).

- If a SNAP household contained a parent of the household head ( $RELi = 3$ ) in which the difference between the ages of any such parents and the household head was less than 15 years, then for those parents with an age difference of less than 15 years, we changed the parent's relationship to other related person ( $RELi = 5$ ).

## L. Citizenship status

We checked for child-only SNAP units where the participating child was coded as a noncitizen. If a participating minor child of the household head ( $FSAFILi = 1$ ,  $AGEi < 18$ , and  $RELi = 4$ ) had a citizenship status ( $CTZNi >= 7$ ) indicating that the child was not an eligible participant, and there was no one outside of the unit ( $FSAFILi > 1$ ), we changed the child's citizenship status to the value for the household head to make the value consistent with the child's eligibility status.

## M. FY 2023 recodes for variables with undefined values

We observed several variables with undefined values in the FY 2023 data file. All of these variables will have updated variable definitions in FY 2024 according to the FY 2024 QC Review Schedule.<sup>48</sup> For each variable, we either recoded undefined values to a missing or analogous value using the FY 2023 variable definition. The specific updates were as follows:

- ABWDSTi. We recoded 22 records with values of 7, which was undefined in FY 2023 and defined in FY 2024 as “Not an ABAWD (meets exception for homeless individuals),” and 9, which was undefined in FY 2023 and defined in FY 2024 as “Not an ABAWD (meets another exemption listed in 7 CFR 273.24(c))” to 1, “Not an ABAWD.”
- CAT\_ELIG. We recoded 27 records with a value of 3, which was undefined in FY 2023 and defined in FY 2024 as “Not categorically eligible” to 0, “Unit not categorically eligible for benefits,” or 2, “Unit recoded as categorically eligible ...”, as appropriate. See Section G for details about how we recoded CAT\_ELIG to 2.
- EMPSTB. We recoded one record with a value of 6, which was undefined in FY 2023 but defined in FY 2024 as “On medical or parental leave” to missing.
- HOMEDED. We recoded one record with a value of 4, which was undefined in FY 2023 but defined in FY 2024 as “Homeless, applying actual expenses toward excess shelter deduction,” to missing. (The record did not have a SHELDED amount equal to the standard HOMEDED amount.)
- STATUS. We recoded one record with a value of 5, which was undefined in FY 2023 but defined in FY 2024 as “Ineligible due to noncompliance,” to 4, “Ineligible.”
- WRKREGi. We recoded 759 records with a value of 0 and 23 records with values of 6 through 9 to 5, “Federal exemption, other.” These values were undefined in FY 2023 and defined as follows in FY 2024: 0, “Not required”; 6, “Federal exemption, complying with work requirement under Title IV of the Social Security Act”; 7, “Federal exemption, applied for or receiving unemployment compensation”; 8, “Federal exemption, regular participant in a drug addiction or alcoholic treatment and rehabilitation program”; 9, “Federal exemption, student enrolled at least half-time in any recognized school, training program, or institution of higher education.”

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<sup>48</sup> The FY 2024 QC Review Schedule is available at <https://www.fns.usda.gov/form/fns-380-1-fy2024>.

## **APPENDIX C**

### **New Variables and Variables That Changed in the FY 2023 SNAP QC Database**

**A. New variables in the FY 2023 SNAP QC database**

All person-level variables for a 17th household member Person-level variables usually include data for up to 16 household members. We added variables for a 17th household member to accommodate a 17-person household in the FY 2023 data file.

**B. Variables that changed in the FY 2023 SNAP QC database**

NDISCAi NDISCAi identifies adults without a disability or dependents who could potentially be subject to time-limited SNAP benefits. Through August 2023, the age range for these individuals was 18–49. The upper age limit increased to 50 effective September 2023. We updated the NDISCAi variable to reflect this increase.

SEXi We updated the SEXi codes to include a new code of 3, “Prefer not to say”, which appeared in the FY 2023 raw SNAP QC data file but will not be defined as such until FY 2024 according to the FNS 310 QC Reviewer’s Handbook.

**C. Variables removed from the FY 2023 SNAP QC database**

None.

Information on variables in the FY 2022 SNAP QC database appears in Technical Documentation for the Fiscal Year 2022 Supplemental Nutrition Assistance Program Quality Control Database and the QC Minimodel (Leftin et al. 2024).

## **APPENDIX D**

### **Derivation of Weights by State and Month**

## Appendix D Derivation of Weights by State and Month

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Tables D.1a through D.3b present the final calculated weighted counts of SNAP units, individuals, and benefit amounts in the FY 2023 SNAP QC database. Tables D.4a through D.6b present the corresponding adjustments to the Program Operations data that yielded the weighted counts in the FY 2023 SNAP QC database. Tables D.7 through D.18 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.7 through D.18 columns	Derivation
Sampling interval	a	Raw data
Stratum sampling size	b	Raw data
SNAP units in stratum (unedited)	c <sup>^</sup>	a*b
Stratum share of State sample	d <sup>^</sup>	c/(sum c over State)
SNAP units in State	e	Adjusted administrative program data used for target
SNAP units in stratum (edited)	f <sup>^</sup>	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

<sup>^</sup> Column omitted from published tables due to space limitations; calculated values are 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 as closely as possible. 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 2022 to April 2023)**

<b>State</b>	<b>October 2022</b>	<b>November 2022</b>	<b>December 2022</b>	<b>January 2023</b>	<b>February 2023</b>	<b>March 2023</b>	<b>April 2023</b>
Alabama	381,317	392,724	395,441	388,313	384,491	394,272	386,504
Alaska	6,995	9,165	9,821	15,048	13,296	16,473	13,566
Arizona	412,747	413,287	413,137	417,385	396,286	422,132	424,519
Arkansas	120,049	118,163	131,279	130,282	122,370	120,139	123,899
California	2,792,913	2,944,785	2,881,309	2,943,031	2,688,291	2,912,850	2,879,136
Colorado	289,072	274,609	293,401	291,143	292,909	288,974	295,067
Connecticut	224,381	221,253	225,221	219,442	221,432	225,697	213,316
Delaware	60,091	60,688	54,981	56,240	58,435	57,214	57,018
District of Columbia	84,139	83,854	79,406	84,633	79,105	82,441	81,562
Florida	1,600,951	1,579,347	1,677,516	1,746,228	1,723,236	1,597,877	1,611,632
Georgia	771,544	799,704	787,951	786,281	798,603	758,302	741,007
Hawaii	18,562	60,217	60,722	75,880	79,527	83,088	76,461
Idaho	60,809	60,507	61,105	60,323	61,529	60,450	61,506
Illinois	1,084,186	1,041,709	1,081,278	1,105,650	1,081,606	1,077,475	1,061,228
Indiana	283,891	271,944	284,407	270,020	277,316	271,765	274,337
Iowa	133,626	131,264	131,453	131,373	129,203	129,945	130,786
Kansas	87,725	87,393	91,716	83,785	80,397	86,267	86,466
Kentucky	252,139	242,359	249,186	243,516	245,120	245,053	260,140
Louisiana	411,542	426,412	438,658	446,765	462,080	446,562	447,581
Maine	89,991	93,942	94,705	95,544	92,295	92,316	93,966
Maryland	297,921	302,647	329,241	333,964	315,837	305,286	356,686
Massachusetts	609,034	636,463	632,382	625,027	649,051	659,501	643,744
Michigan	733,592	741,225	740,266	728,564	748,415	742,832	737,801
Minnesota	222,055	234,376	227,521	235,804	236,439	238,403	229,353
Mississippi	205,230	190,942	191,623	191,776	190,388	182,495	183,675
Missouri	301,024	318,861	329,172	311,930	309,522	311,823	282,603
Montana	42,979	43,612	41,260	42,582	42,851	43,231	42,808
Nebraska	73,579	72,014	76,554	74,698	75,563	76,395	75,620
Nevada	246,514	244,135	247,884	259,581	258,700	255,242	250,056
New Hampshire	32,495	36,949	36,301	35,327	38,430	36,243	38,878
New Jersey	370,937	342,075	308,280	327,029	257,573	265,427	275,211
New Mexico	253,913	254,723	256,279	247,422	246,100	232,357	238,043
New York	1,549,573	1,578,673	1,621,527	1,550,821	1,577,038	1,690,192	1,530,847
North Carolina	789,612	807,449	820,258	813,065	826,900	816,593	774,720
North Dakota	21,080	21,911	22,457	22,295	22,094	22,020	21,040
Ohio	735,639	722,484	741,171	715,783	691,820	732,314	678,764
Oklahoma	314,687	332,533	325,435	299,360	321,111	320,693	319,808
Oregon	353,062	405,442	402,002	414,219	386,224	416,909	397,667
Pennsylvania	878,190	922,185	855,864	890,270	868,729	955,241	999,442
Rhode Island	81,620	83,341	82,101	86,321	80,857	82,687	83,877
South Carolina	299,939	298,320	281,822	294,997	297,343	285,014	260,104
South Dakota	33,415	34,262	33,409	33,180	33,694	34,448	34,560
Tennessee	365,970	394,423	384,501	370,129	371,719	369,816	349,603
Texas	1,541,258	1,585,203	1,605,959	1,602,659	1,541,253	1,514,159	1,398,165
Utah	76,585	72,870	75,941	77,374	75,345	78,424	78,512
Vermont	41,038	41,936	42,034	41,511	40,546	40,994	41,503
Virginia	418,688	427,472	429,195	429,567	430,685	428,748	433,773
Washington	515,211	502,335	521,094	512,833	518,903	498,333	513,141
West Virginia	159,217	163,526	166,470	164,064	165,929	151,399	155,207
Wisconsin	367,752	361,407	371,823	369,466	368,238	368,792	365,931
Wyoming	13,696	13,381	14,481	13,333	14,484	14,088	13,368
Guam	11,290	12,839	12,883	12,672	12,690	12,227	12,975
Virgin Islands	10,694	10,075	10,051	10,972	10,578	10,636	9,011
United States	21,134,157	21,523,417	21,679,935	21,729,479	21,312,576	21,562,252	21,146,190

- No sample data.

**Table D.1b. Calculated weighted unit counts by State (May 2023 to September 2023) and FY average**

State	May 2023	June 2023	July 2023	August 2023	September 2023	FY average 2023
Alabama	390,591	374,413	385,297	390,384	388,962	387,726
Alaska	17,927	18,125	14,224	11,469	12,315	13,202
Arizona	421,726	444,993	433,312	455,642	445,707	425,073
Arkansas	110,686	111,002	121,688	120,467	121,676	120,975
California	2,697,689	2,936,535	2,902,103	2,926,247	2,828,811	2,861,142
Colorado	303,347	295,737	294,080	299,275	301,849	293,289
Connecticut	225,326	228,978	219,816	227,394	229,063	223,443
Delaware	56,442	57,965	-	-	-	57,675
District of Columbia	81,620	81,618	81,594	80,112	80,027	81,676
Florida	1,626,910	1,554,422	1,480,250	1,634,252	1,656,320	1,624,078
Georgia	730,943	731,546	712,225	725,237	716,871	755,018
Hawaii	78,085	79,187	78,425	82,680	86,423	71,605
Idaho	62,480	61,195	62,456	60,799	62,339	61,291
Illinois	1,074,914	1,072,341	1,067,246	1,100,540	1,041,253	1,074,119
Indiana	272,475	271,605	285,100	282,165	282,113	277,262
Iowa	127,723	130,934	127,869	129,790	128,841	130,234
Kansas	87,042	92,662	89,119	88,230	89,145	87,495
Kentucky	253,337	246,470	248,459	228,040	228,232	245,171
Louisiana	434,283	428,691	428,870	423,135	421,678	434,688
Maine	92,467	95,276	93,084	91,811	92,238	93,136
Maryland	343,169	334,779	329,538	326,984	325,526	325,131
Massachusetts	654,340	646,146	656,426	656,771	640,860	642,479
Michigan	753,876	762,709	772,144	767,402	750,139	748,247
Minnesota	232,030	227,156	229,290	232,338	232,663	231,452
Mississippi	193,642	191,621	196,142	195,245	197,501	192,523
Missouri	295,417	298,387	306,468	298,262	312,616	306,340
Montana	42,567	42,583	41,040	41,658	42,038	42,434
Nebraska	77,457	74,779	74,867	74,304	75,663	75,124
Nevada	250,735	254,029	261,984	267,529	268,386	255,398
New Hampshire	38,332	39,635	37,502	41,507	39,446	37,587
New Jersey	324,543	315,926	329,133	295,866	268,246	306,687
New Mexico	250,046	236,272	236,282	228,967	231,683	242,674
New York	1,536,704	1,572,284	1,586,169	1,620,409	1,561,167	1,581,284
North Carolina	801,396	784,540	783,263	754,555	736,477	792,402
North Dakota	20,172	21,627	22,074	22,694	22,527	21,833
Ohio	703,741	707,458	701,173	695,072	712,030	711,454
Oklahoma	359,468	330,937	343,012	327,590	343,855	328,207
Oregon	401,903	406,599	398,328	412,714	403,831	399,908
Pennsylvania	989,535	979,576	978,475	992,312	973,954	940,315
Rhode Island	85,276	87,505	88,319	87,611	88,644	84,847
South Carolina	242,930	222,773	226,135	241,245	261,160	267,649
South Dakota	33,317	34,030	33,041	35,650	34,619	33,969
Tennessee	369,831	368,090	358,937	341,348	348,000	366,030
Texas	1,499,436	1,461,161	1,471,861	1,498,776	1,447,837	1,513,977
Utah	76,732	76,897	74,041	78,221	78,615	76,630
Vermont	39,954	41,217	40,758	40,558	40,305	41,029
Virginia	419,586	421,037	429,956	418,200	416,642	425,296
Washington	502,576	508,714	491,721	497,001	495,012	506,406
West Virginia	155,225	149,477	154,064	150,402	137,645	156,052
Wisconsin	366,294	365,492	364,736	366,096	370,336	367,197
Wyoming	13,790	13,748	13,394	14,118	13,410	13,774
Guam	12,636	12,167	11,032	12,105	12,033	12,296
Virgin Islands	10,470	9,927	10,465	10,653	10,653	10,349
United States	21,243,140	21,312,973	21,176,988	21,401,832	21,107,381	21,375,279

- No sample data.

**Table D.2a. Calculated weighted individual counts by State (October 2022 to April 2023)**

<b>State</b>	<b>October 2022</b>	<b>November 2022</b>	<b>December 2022</b>	<b>January 2023</b>	<b>February 2023</b>	<b>March 2023</b>	<b>April 2023</b>
Alabama	749,436	780,872	785,394	770,510	759,327	779,187	762,223
Alaska	13,583	19,104	22,756	30,904	30,508	40,791	35,093
Arizona	858,255	859,068	832,707	856,634	785,965	865,971	870,275
Arkansas	238,943	218,125	255,499	249,352	239,135	227,227	237,796
California	4,909,799	5,166,416	5,031,248	5,140,997	4,484,328	4,890,951	4,987,166
Colorado	552,462	503,987	556,362	552,605	553,244	545,992	558,587
Connecticut	387,527	382,746	387,126	356,359	376,466	390,706	368,050
Delaware	121,048	122,688	98,969	113,327	116,684	115,096	112,007
District of Columbia	138,398	137,116	122,646	138,316	128,720	134,056	136,162
Florida	2,876,065	2,830,552	3,008,708	3,132,487	3,082,072	2,877,179	2,842,118
Georgia	1,547,804	1,613,871	1,607,719	1,584,114	1,608,998	1,453,372	1,476,294
Hawaii	31,209	107,946	103,323	134,621	139,217	144,354	146,984
Idaho	122,172	120,619	121,139	118,710	123,413	120,800	122,775
Illinois	2,019,106	1,864,964	1,992,834	2,047,036	1,966,066	1,990,748	1,953,359
Indiana	599,932	532,770	600,644	561,174	581,336	560,073	558,406
Iowa	267,682	256,947	260,105	262,182	260,418	259,789	262,186
Kansas	179,538	171,358	182,815	166,736	160,071	170,469	170,038
Kentucky	549,001	528,628	543,976	538,801	518,464	535,186	563,830
Louisiana	811,689	868,463	884,950	900,830	925,237	902,564	907,254
Maine	148,192	163,505	160,813	164,291	151,680	153,780	160,567
Maryland	561,990	571,158	601,065	635,116	628,434	586,973	662,777
Massachusetts	978,861	1,041,027	1,042,558	962,723	1,055,977	1,085,742	1,041,576
Michigan	1,342,605	1,394,717	1,374,778	1,347,811	1,419,908	1,371,077	1,352,237
Minnesota	417,354	458,765	442,906	451,718	459,490	462,709	447,113
Mississippi	408,074	384,100	380,594	382,535	374,896	369,407	364,888
Missouri	612,022	637,048	664,444	630,532	630,434	631,330	589,632
Montana	84,610	85,068	79,894	83,919	84,535	81,972	81,932
Nebraska	148,818	142,752	155,866	149,113	151,517	152,281	147,034
Nevada	458,348	464,151	475,206	491,477	488,817	486,396	474,806
New Hampshire	57,909	69,393	65,122	63,775	71,654	65,523	71,744
New Jersey	725,076	641,589	642,484	658,408	516,018	501,035	488,150
New Mexico	480,495	482,449	475,115	470,661	467,205	429,435	447,132
New York	2,617,933	2,686,458	2,811,618	2,668,551	2,753,447	2,907,497	2,687,545
North Carolina	1,574,428	1,602,051	1,627,594	1,599,258	1,613,550	1,597,893	1,479,647
North Dakota	39,790	41,860	44,736	43,289	43,215	42,486	42,715
Ohio	1,432,039	1,383,960	1,447,559	1,372,776	1,256,500	1,434,816	1,259,937
Oklahoma	648,499	679,589	678,110	601,575	654,154	634,350	634,636
Oregon	579,091	694,123	687,067	722,867	638,190	719,406	677,940
Pennsylvania	1,627,494	1,742,084	1,617,483	1,609,811	1,620,205	1,743,958	1,860,873
Rhode Island	132,702	135,500	135,911	142,054	133,786	132,395	136,046
South Carolina	613,061	608,505	561,937	599,279	602,234	571,467	483,626
South Dakota	67,636	70,998	69,960	70,092	70,459	71,144	71,218
Tennessee	694,273	779,633	760,698	713,308	755,877	715,414	658,721
Texas	3,508,813	3,601,176	3,634,162	3,576,630	3,400,658	3,358,152	3,216,188
Utah	150,001	150,430	153,216	158,864	151,640	156,127	149,504
Vermont	69,629	72,032	72,025	70,679	67,982	70,573	70,766
Virginia	810,247	831,064	832,658	818,973	843,082	818,543	827,418
Washington	892,675	845,878	908,070	869,463	904,727	842,439	900,999
West Virginia	285,431	301,483	306,024	295,689	304,045	263,291	282,469
Wisconsin	700,338	690,662	709,795	695,281	709,098	701,579	703,144
Wyoming	29,144	27,270	30,287	27,395	30,213	29,274	28,115
Guam	32,487	35,240	35,515	35,127	34,443	32,522	35,500
Virgin Islands	21,410	20,013	20,724	21,863	21,078	21,186	17,640
United States	39,925,121	40,621,972	41,104,915	40,860,596	39,948,817	40,246,678	39,624,839

- No sample data.

**Table D.2b. Calculated weighted individual counts by State (May 2023 to September 2023) and FY average**

State	May 2023	June 2023	July 2023	August 2023	September 2023	FY average 2023
Alabama	772,813	748,397	763,060	774,256	771,820	768,108
Alaska	40,836	39,674	30,957	17,872	29,931	29,334
Arizona	877,310	915,684	869,733	936,481	911,401	869,957
Arkansas	223,081	231,002	228,052	224,973	228,772	233,496
California	4,612,824	4,946,334	5,022,130	4,971,431	4,847,054	4,917,556
Colorado	572,261	559,336	539,955	550,293	568,095	551,098
Connecticut	385,636	393,624	369,551	378,111	392,637	380,712
Delaware	115,100	115,977	-	-	-	114,544
District of Columbia	131,564	138,327	133,780	129,153	129,021	133,105
Florida	2,867,945	2,785,677	2,539,624	2,937,381	3,020,241	2,900,004
Georgia	1,476,749	1,478,634	1,416,751	1,451,958	1,457,557	1,514,485
Hawaii	141,243	137,265	146,372	155,774	163,198	129,292
Idaho	125,305	121,496	125,267	120,534	124,486	122,226
Illinois	1,951,465	1,980,885	1,927,327	2,063,875	1,882,516	1,970,015
Indiana	544,495	561,559	599,055	579,791	585,743	572,082
Iowa	252,030	262,826	253,469	260,029	258,629	259,691
Kansas	171,771	185,684	172,414	178,045	176,358	173,775
Kentucky	548,786	513,329	536,826	486,607	497,602	530,086
Louisiana	874,612	844,787	866,107	854,595	852,755	874,487
Maine	158,871	160,176	153,391	152,874	142,951	155,924
Maryland	638,406	640,759	607,141	635,698	567,451	611,414
Massachusetts	1,082,457	1,029,773	1,086,784	1,069,875	1,024,928	1,041,857
Michigan	1,403,855	1,435,014	1,405,748	1,420,945	1,382,135	1,387,569
Minnesota	452,513	434,692	433,021	448,853	452,035	446,764
Mississippi	384,220	383,796	389,536	389,477	396,387	383,992
Missouri	604,931	602,983	625,785	594,558	630,382	621,174
Montana	82,606	80,870	77,090	79,645	82,033	82,014
Nebraska	156,406	144,140	148,274	144,837	153,820	149,571
Nevada	468,436	473,208	488,908	505,874	507,769	481,950
New Hampshire	69,512	74,779	65,921	75,830	72,107	68,606
New Jersey	651,445	637,959	653,365	586,961	551,716	604,517
New Mexico	474,211	413,935	445,710	389,414	414,272	449,169
New York	2,604,905	2,660,502	2,693,539	2,775,372	2,694,602	2,713,497
North Carolina	1,546,202	1,505,762	1,545,556	1,469,494	1,396,172	1,546,467
North Dakota	38,787	41,050	44,487	44,273	42,633	42,443
Ohio	1,315,902	1,345,299	1,374,055	1,303,724	1,367,536	1,357,842
Oklahoma	675,374	671,850	666,344	659,816	652,472	654,731
Oregon	662,689	685,522	666,727	694,273	645,734	672,802
Pennsylvania	1,830,233	1,823,526	1,758,543	1,875,730	1,813,497	1,743,620
Rhode Island	135,458	140,618	143,309	142,563	143,099	137,787
South Carolina	479,910	413,194	449,016	457,262	524,965	530,371
South Dakota	64,183	70,147	68,775	72,704	69,281	69,716
Tennessee	730,513	717,743	694,252	658,161	676,471	712,922
Texas	3,291,584	3,218,433	3,243,335	3,283,526	3,191,231	3,376,991
Utah	152,500	153,349	137,337	144,112	151,013	150,674
Vermont	68,530	69,935	69,121	68,740	68,240	69,854
Virginia	804,170	812,683	835,168	800,302	773,305	817,301
Washington	869,284	888,140	831,822	852,897	848,921	871,276
West Virginia	286,507	275,682	287,509	274,946	262,159	285,436
Wisconsin	703,259	688,256	693,188	696,596	707,007	699,850
Wyoming	27,828	28,091	27,894	29,063	27,674	28,521
Guam	34,065	33,757	31,504	33,013	32,900	33,839
Virgin Islands	20,845	19,195	20,808	21,148	21,398	20,609
United States	39,656,423	39,735,313	39,403,394	39,923,714	39,386,111	40,065,127

- No sample data.

## Appendix D Derivation of Weights by State and Month

**Table D.3a. Calculated weighted benefit amounts by State (October 2022 to April 2023)**

State	October 2022	November 2022	December 2022	January 2023	February 2023	March 2023	April 2023
Alabama	145,814,902	143,462,175	150,923,228	131,439,711	141,431,393	135,817,302	142,153,558
Alaska	3,256,173	6,022,698	6,950,568	14,344,419	11,710,875	8,740,360	11,948,553
Arizona	153,433,166	144,217,497	154,196,469	144,159,169	140,680,703	143,325,326	136,420,230
Arkansas	46,026,082	39,385,144	46,798,293	42,948,270	40,843,784	41,176,057	39,135,853
California	872,895,349	888,063,422	898,701,475	859,248,815	806,484,690	886,856,634	838,207,409
Colorado	103,168,673	94,649,755	107,545,112	98,829,287	104,247,508	107,827,088	97,104,296
Connecticut	78,795,791	74,061,129	75,003,883	68,395,481	67,017,180	70,009,345	66,106,916
Delaware	19,565,166	20,044,730	15,054,353	18,329,847	18,336,247	18,108,746	17,703,135
District of Columbia	25,137,560	23,536,958	24,567,927	23,761,679	21,822,122	25,713,326	24,347,246
Florida	530,493,871	503,542,514	528,316,155	550,618,975	519,003,415	501,359,342	496,559,533
Georgia	258,301,918	293,021,424	245,204,772	268,661,546	274,886,812	261,555,297	242,971,789
Hawaii	11,712,261	41,195,542	41,218,213	51,721,129	54,717,811	57,416,172	59,391,274
Idaho	21,283,157	21,291,645	21,407,018	20,685,813	20,638,003	20,654,320	21,036,470
Illinois	349,383,618	350,086,996	374,488,931	363,627,450	345,349,853	350,847,817	353,611,742
Indiana	108,949,043	109,315,501	108,903,620	108,135,431	107,506,422	103,920,957	103,397,737
Iowa	43,223,835	44,222,315	44,290,819	43,106,612	39,090,512	40,509,853	42,785,467
Kansas	33,052,710	29,516,074	33,120,542	28,500,899	26,876,967	42,349,538	29,214,412
Kentucky	95,851,033	90,960,827	91,769,684	86,119,783	90,093,662	86,644,161	91,781,098
Louisiana	153,667,327	172,714,327	171,346,561	165,201,137	173,758,481	162,338,118	164,748,462
Maine	25,401,735	26,004,043	27,128,163	25,323,342	26,109,813	27,116,081	27,837,377
Maryland	86,393,075	88,444,496	104,605,708	99,502,805	93,974,819	104,402,295	111,033,210
Massachusetts	214,544,433	213,383,974	237,971,169	201,132,865	184,019,542	200,137,209	196,951,812
Michigan	218,926,913	228,505,041	219,185,042	221,026,188	217,819,088	217,498,404	221,337,645
Minnesota	66,637,007	65,794,591	64,485,740	67,320,473	64,270,045	62,244,569	65,576,578
Mississippi	74,221,775	63,174,762	65,283,069	66,626,795	66,197,533	68,295,177	62,788,106
Missouri	112,897,854	120,249,966	124,842,698	120,238,445	116,927,812	120,037,437	107,522,837
Montana	14,367,630	14,964,204	14,510,938	13,836,965	13,509,607	14,351,943	13,264,185
Nebraska	27,030,794	26,098,299	28,087,684	26,404,560	26,349,693	26,589,748	25,882,057
Nevada	75,704,137	82,356,521	78,486,189	79,188,186	80,156,281	83,080,164	71,241,849
New Hampshire	10,453,109	11,978,397	11,455,434	11,003,679	11,681,632	10,750,238	12,181,450
New Jersey	141,401,481	138,850,621	131,158,466	124,405,829	107,443,785	100,054,659	87,956,941
New Mexico	94,446,650	92,603,773	94,033,914	86,567,651	87,021,584	75,128,877	85,369,515
New York	537,185,518	585,507,886	612,529,229	557,805,208	568,935,401	602,923,083	547,056,335
North Carolina	249,100,973	272,229,515	270,250,618	251,662,103	264,589,908	262,055,927	251,700,075
North Dakota	7,605,296	8,127,568	8,554,368	8,687,980	8,137,980	7,977,662	8,208,187
Ohio	257,086,072	273,813,852	258,164,904	238,111,370	238,058,718	236,110,301	221,189,259
Oklahoma	115,143,533	120,979,622	122,016,544	108,475,325	116,282,134	106,122,528	112,745,941
Oregon	100,269,520	115,508,704	99,207,026	117,199,508	107,876,905	116,075,738	109,374,704
Pennsylvania	275,877,154	298,987,784	265,426,895	298,255,600	263,578,933	291,571,831	300,606,619
Rhode Island	26,479,911	26,195,746	26,390,565	26,450,377	25,263,802	25,273,144	24,064,462
South Carolina	111,223,673	112,567,074	107,876,508	106,897,927	104,909,480	102,067,842	89,900,688
South Dakota	13,150,621	14,014,128	13,941,348	13,610,432	13,472,412	13,824,212	13,859,113
Tennessee	142,200,596	147,789,314	154,560,331	137,482,411	143,992,565	140,596,221	120,225,909
Texas	624,142,816	633,451,297	592,680,459	598,417,187	588,935,871	581,848,553	549,808,642
Utah	27,976,022	28,859,586	27,702,390	28,557,199	28,319,835	28,707,486	27,574,105
Vermont	13,068,290	13,635,682	13,869,887	13,028,354	12,989,186	12,566,056	13,195,633
Virginia	141,221,521	139,835,023	149,113,736	137,569,852	129,809,015	137,490,896	136,542,024
Washington	151,131,538	156,233,829	147,229,391	138,895,966	152,881,734	150,742,507	150,065,519
West Virginia	44,263,658	49,709,263	46,907,386	45,343,445	48,216,168	41,564,267	44,022,276
Wisconsin	103,719,352	106,330,568	107,015,314	103,133,324	103,429,909	102,077,158	101,375,336
Wyoming	5,380,450	5,148,745	5,789,718	5,137,356	5,536,155	5,420,799	5,132,437
Guam	9,448,379	10,257,143	11,114,983	10,260,439	9,359,217	9,045,965	9,358,238
Virgin Islands	4,867,841	5,339,859	4,851,488	4,982,778	5,382,297	5,269,729	3,824,121
United States	7,176,980,962	7,386,241,552	7,386,234,922	7,180,377,378	7,039,935,298	7,154,188,468	6,907,398,369

- No sample data.

**Table D.3b. Calculated weighted benefit amounts by State (May 2023 to September 2023) and FY average**

State	May 2023	June 2023	July 2023	August 2023	September 2023	FY average 2023
Alabama	139,645,952	140,328,190	137,088,073	146,014,773	139,664,123	141,148,615
Alaska	9,024,134	10,540,020	6,548,767	3,114,207	7,428,056	8,302,402
Arizona	148,171,991	153,907,531	147,296,555	150,173,242	159,700,952	147,973,569
Arkansas	39,635,734	38,858,976	40,416,888	40,393,811	41,986,455	41,467,112
California	846,863,029	838,902,452	867,587,088	846,092,481	802,494,016	854,366,405
Colorado	104,418,003	99,241,247	92,863,718	99,980,004	95,366,755	100,436,787
Connecticut	73,631,685	68,051,878	72,243,792	68,735,782	69,282,168	70,944,586
Delaware	17,590,778	19,656,313	-	-	-	18,265,480
District of Columbia	23,007,189	24,022,052	24,021,109	24,188,259	22,591,877	23,893,109
Florida	487,496,348	478,535,293	470,855,242	495,036,992	479,540,955	503,446,553
Georgia	235,297,657	268,353,059	272,285,567	255,443,660	253,988,512	260,831,001
Hawaii	55,100,805	55,946,452	54,964,832	61,971,561	61,007,966	50,530,335
Idaho	21,443,691	20,267,965	21,466,406	20,218,320	21,172,186	20,963,749
Illinois	377,028,370	375,594,632	353,379,961	367,187,904	342,657,990	358,603,772
Indiana	103,630,179	104,330,390	109,927,053	104,419,115	110,872,499	106,942,329
Iowa	41,041,118	42,601,312	42,159,659	40,036,192	42,360,438	42,119,011
Kansas	28,826,047	32,373,246	28,363,188	31,574,992	32,091,671	31,321,691
Kentucky	89,036,583	87,530,599	88,019,204	81,444,809	80,076,704	88,277,346
Louisiana	159,754,873	156,341,125	155,792,149	149,664,964	153,807,459	161,594,582
Maine	25,978,178	29,135,356	25,273,679	25,519,789	27,433,161	26,521,726
Maryland	116,263,176	101,247,318	101,846,776	104,729,753	100,477,269	101,076,725
Massachusetts	197,472,209	196,043,364	194,493,921	200,902,270	214,390,211	204,286,915
Michigan	231,742,803	226,313,346	219,503,042	225,482,328	232,202,849	223,295,224
Minnesota	66,237,665	66,126,305	65,924,455	65,480,432	67,713,842	65,650,975
Mississippi	66,952,394	66,111,293	70,284,465	69,531,867	69,617,750	67,423,749
Missouri	111,382,618	108,366,334	113,853,505	110,283,821	112,087,604	114,890,911
Montana	12,744,927	14,002,242	13,028,244	12,876,282	13,777,087	13,769,521
Nebraska	27,811,693	26,703,806	27,221,603	25,189,004	26,910,427	26,689,947
Nevada	75,703,023	77,133,760	79,669,737	79,611,515	79,583,508	78,492,906
New Hampshire	11,426,187	11,719,544	11,352,184	12,545,415	11,637,612	11,515,407
New Jersey	118,598,640	123,155,611	115,125,044	102,225,492	97,883,648	115,688,351
New Mexico	89,390,769	71,541,413	76,121,170	72,223,417	75,067,342	83,293,006
New York	535,519,318	545,957,710	555,665,930	551,571,128	534,397,766	561,254,543
North Carolina	257,132,761	233,920,508	251,107,059	242,887,032	221,756,506	252,366,082
North Dakota	7,430,339	8,057,873	7,894,452	7,950,503	8,100,500	8,061,059
Ohio	235,686,532	243,909,598	248,614,076	239,048,069	248,155,394	244,829,012
Oklahoma	121,634,004	120,230,275	120,767,690	113,496,719	122,264,962	116,679,940
Oregon	118,811,281	102,616,571	118,247,090	105,790,724	97,111,632	109,007,450
Pennsylvania	303,215,524	290,434,318	323,791,344	316,153,190	306,598,790	294,541,498
Rhode Island	24,913,132	26,087,504	25,325,461	24,911,714	26,582,243	25,661,505
South Carolina	77,798,841	65,032,184	79,379,042	76,830,472	90,362,135	93,737,156
South Dakota	12,630,584	13,747,440	13,312,151	14,047,071	13,277,717	13,573,936
Tennessee	136,881,953	136,384,861	137,030,014	129,824,659	135,055,688	138,502,044
Texas	566,571,231	572,670,729	563,030,686	589,162,321	564,756,549	585,456,362
Utah	27,299,646	28,808,927	26,858,798	28,783,055	28,433,773	28,156,735
Vermont	12,219,726	13,111,878	12,635,225	12,476,504	12,718,726	12,959,596
Virginia	130,603,739	136,635,813	139,806,430	136,688,633	131,666,442	137,248,594
Washington	149,695,990	144,301,909	144,818,495	143,957,051	145,614,278	147,964,017
West Virginia	45,513,343	40,790,644	45,751,311	44,880,703	44,385,581	45,112,337
Wisconsin	103,307,912	101,438,020	107,596,332	105,717,864	101,390,065	103,877,596
Wyoming	4,956,122	5,054,973	4,982,232	5,242,388	5,103,444	5,240,402
Guam	9,406,265	8,988,089	8,395,925	8,953,039	9,165,420	9,479,425
Virgin Islands	5,127,559	4,512,268	5,091,802	4,945,323	4,735,429	4,910,875
United States	7,038,704,250	6,975,674,516	7,039,078,622	6,995,610,613	6,896,506,136	7,102,643,960

- No sample data.

**Table D.4a. Adjustments to weighted unit counts by State (October 2022 to April 2023)**

State	October 2022	November 2022	December 2022	January 2023	February 2023	March 2023	April 2023
Alabama	8,290	0	0	4,413	8,640	0	4,294
Alaska	22,538	16,498	9,821	885	6,648	7,845	13,566
Arizona	5,578	5,821	11,319	5,492	23,659	5,412	5,241
Arkansas	(2,344)	13,341	4,450	(15,629)	9,413	8,966	2,525
California	77,581	0	82,323	39,771	317,785	118,127	86,034
Colorado	0	15,919	0	0	4,012	11,876	4,042
Connecticut	0	3,031	0	6,096	5,536	2,565	15,999
Delaware	0	0	6,344	5,306	3,246	1,876	1,933
District of Columbia	0	1,023	4,963	0	4,868	1,071	971
Florida	207,237	121,817	76,981	60,181	0	112,791	61,986
Georgia	8,386	0	16,765	18,286	(0)	17,234	9,623
Hawaii	(5,535)	(47,378)	(47,839)	(63,208)	(47,570)	(69,259)	(62,511)
Idaho	28,289	27,503	26,183	26,661	24,625	26,503	21,604
Illinois	(1,023,377)	(980,514)	(1,019,471)	(1,044,573)	(1,020,077)	(1,015,603)	(999,031)
Indiana	815,147	830,154	826,906	835,630	834,758	836,061	802,730
Iowa	150,265	151,415	152,954	149,448	151,715	154,761	150,770
Kansas	45,901	45,533	41,380	47,588	50,462	45,155	44,320
Kentucky	(157,488)	(147,975)	(156,279)	(151,353)	(153,760)	(153,035)	(167,585)
Louisiana	(159,403)	(173,281)	(184,113)	(191,789)	(206,066)	(187,742)	(187,441)
Maine	335,907	345,012	356,138	364,361	375,865	365,696	353,615
Maryland	(201,181)	(205,389)	(231,028)	(237,334)	(218,684)	(208,354)	(260,341)
Massachusetts	(255,253)	(277,070)	(270,862)	(261,596)	(277,178)	(288,797)	(275,912)
Michigan	(92,504)	(97,361)	(91,458)	(73,774)	(91,637)	(83,331)	(77,336)
Minnesota	531,915	506,849	522,236	521,519	522,228	523,476	527,612
Mississippi	27,791	43,434	44,024	46,677	48,708	58,557	48,226
Missouri	(93,894)	(113,700)	(125,186)	(112,246)	(111,442)	(113,797)	(77,012)
Montana	288,658	289,526	293,308	289,153	286,640	288,081	285,213
Nebraska	(29,757)	(28,402)	(33,002)	(31,313)	(31,855)	(32,299)	(31,861)
Nevada	(169,911)	(167,255)	(170,373)	(181,682)	(181,067)	(176,837)	(172,419)
New Hampshire	217,025	212,611	214,643	227,171	223,314	224,671	216,993
New Jersey	(333,387)	(304,454)	(270,527)	(288,305)	(218,444)	(225,560)	(234,713)
New Mexico	148,371	148,925	150,650	141,630	143,255	165,783	158,261
New York	(1,285,767)	(1,314,631)	(1,356,095)	(1,294,562)	(1,328,076)	(1,446,501)	(1,281,469)
North Carolina	849,791	839,862	850,406	878,740	861,197	895,550	909,212
North Dakota	840,313	785,538	797,802	807,887	813,893	803,169	794,888
Ohio	(712,519)	(699,284)	(718,034)	(692,812)	(669,056)	(709,584)	(656,409)
Oklahoma	429,923	408,476	415,736	435,511	401,230	420,891	404,818
Oregon	22,505	(65,519)	(14,344)	(82,398)	(54,642)	(85,759)	(67,079)
Pennsylvania	(460,400)	(509,986)	(441,680)	(476,051)	(451,852)	(532,015)	(573,770)
Rhode Island	918,165	923,969	929,375	937,490	943,465	939,825	943,327
South Carolina	(214,238)	(211,814)	(194,834)	(207,660)	(209,498)	(197,094)	(172,033)
South Dakota	270,369	267,883	264,517	261,817	263,649	272,833	274,313
Tennessee	(331,912)	(360,161)	(350,437)	(335,622)	(337,364)	(335,368)	(315,043)
Texas	(1,139,207)	(1,172,435)	(1,194,380)	(1,193,569)	(1,124,928)	(1,104,243)	(1,002,962)
Utah	1,508,709	1,535,307	1,552,323	1,545,572	1,505,427	1,458,334	1,440,184
Vermont	37,230	34,284	37,399	35,864	36,511	39,135	39,716
Virginia	(376,999)	(385,536)	(387,161)	(387,376)	(388,810)	(387,047)	(392,270)
Washington	(504,517)	(491,384)	(510,205)	(501,861)	(508,325)	(487,697)	(502,843)
West Virginia	265,452	263,946	262,725	271,553	270,909	289,959	284,591
Wisconsin	154,421	156,384	149,271	150,115	150,665	146,152	147,210
Wyoming	159,995	160,208	159,123	161,669	160,663	150,477	150,008
Guam	356,462	356,258	358,940	360,767	359,384	360,329	356,849
Virgin Islands	3,529	4,335	4,430	3,520	3,906	4,064	5,471
United States	1,186,152	761,331	856,125	816,057	1,185,945	917,303	1,056,108

Note: For more details on the adjustments made, see Section II.C, Creation of the SNAP QC database.

**Table D.4b. Adjustments to weighted unit counts by State (May 2023 to September 2023)**

<b>State</b>	<b>May 2023</b>	<b>June 2023</b>	<b>July 2023</b>	<b>August 2023</b>	<b>September 2023</b>
Alabama	0	17,214	4,378	0	0
Alaska	11,473	12,083	16,357	18,637	15,052
Arizona	15,429	0	16,666	0	11,577
Arkansas	19,873	16,261	3,483	5,093	5,290
California	295,216	83,958	104,901	118,632	214,846
Colorado	0	8,331	7,541	3,938	0
Connecticut	5,564	2,632	11,724	2,584	0
Delaware	3,320	2,366	59,297 <sup>a</sup>	60,327 <sup>a</sup>	58,627 <sup>a</sup>
District of Columbia	1,008	995	1,920	3,204	2,928
Florida	55,463	91,437	115,644	22,084	31,625
Georgia	0	0	26,057	7,798	0
Hawaii	(64,545)	(70,558)	(38,940)	(70,479)	(74,056)
Idaho	21,182	23,046	21,316	23,604	29,242
Illinois	(1,012,434)	(1,009,635)	(1,004,790)	(1,038,375)	(978,914)
Indiana	816,771	815,426	810,990	832,856	787,667
Iowa	154,601	154,084	157,231	158,788	159,910
Kansas	43,519	38,272	40,291	41,560	39,696
Kentucky	(159,332)	(151,462)	(153,627)	(133,354)	(133,964)
Louisiana	(178,222)	(173,722)	(177,522)	(174,126)	(168,698)
Maine	347,685	345,160	335,786	331,324	329,440
Maryland	(246,020)	(236,996)	(231,555)	(228,970)	(227,523)
Massachusetts	(288,293)	(280,933)	(296,469)	(290,992)	(274,643)
Michigan	(90,811)	(99,559)	(107,903)	(102,102)	(83,298)
Minnesota	531,269	535,553	552,506	544,423	536,467
Mississippi	40,966	43,024	38,359	39,675	35,162
Missouri	(97,941)	(97,280)	(104,322)	(95,207)	(109,249)
Montana	283,410	283,778	284,886	288,238	290,116
Nebraska	(33,876)	(31,270)	(32,249)	(31,915)	(33,625)
Nevada	(173,278)	(176,410)	(185,197)	(190,603)	(191,843)
New Hampshire	221,252	223,255	227,330	226,022	228,940
New Jersey	(283,372)	(274,089)	(287,540)	(253,679)	(226,032)
New Mexico	150,860	166,379	123,602	184,013	179,627
New York	(1,283,750)	(1,322,114)	(1,332,598)	(1,371,154)	(1,315,357)
North Carolina	886,814	895,435	891,027	909,649	911,421
North Dakota	797,748	787,688	769,434	750,043	739,641
Ohio	(680,966)	(684,520)	(678,387)	(671,838)	(688,940)
Oklahoma	362,792	394,661	378,784	393,877	377,304
Oregon	(42,435)	(72,104)	(47,859)	(78,227)	(53,167)
Pennsylvania	(563,274)	(554,211)	(555,252)	(566,496)	(546,014)
Rhode Island	946,668	948,047	949,458	956,928	955,886
South Carolina	(154,572)	(134,226)	(137,816)	(152,627)	(172,516)
South Dakota	279,548	277,084	273,583	270,693	263,850
Tennessee	(335,207)	(333,406)	(323,831)	(305,698)	(312,075)
Texas	(1,099,995)	(1,074,667)	(1,133,003)	(1,131,503)	(1,089,046)
Utah	1,422,704	1,404,844	1,281,563	1,420,555	1,392,957
Vermont	38,605	38,272	38,572	40,424	40,057
Virginia	(378,152)	(379,820)	(389,198)	(377,642)	(376,337)
Washington	(492,106)	(498,291)	(481,256)	(486,348)	(484,359)
West Virginia	284,996	286,078	275,892	282,734	292,224
Wisconsin	143,897	143,222	140,644	137,621	132,411
Wyoming	148,491	144,928	142,752	142,639	134,663
Guam	357,474	357,172	357,584	358,014	358,303
Virgin Islands	3,895	4,419	3,538	3,465	3,340
United States	1,033,911	889,831	763,781	828,107	1,018,614

Notes: For more details on the adjustments made, see Section II.C, Creation of the SNAP QC database.

To calculate State fiscal year average adjustments that are comparable to the national average adjustment in Table II.2, subtract the fiscal year average number of units in the SNAP QC database from the fiscal year average number of units in the Program Operations data. Calculate the fiscal year average number of units in the QC data file by averaging across the number of months of data for the State in the SNAP QC database.

<sup>a</sup>This month was excluded from the SNAP QC database due to missing samples. Because no units were included in the SNAP QC database for this month, the adjustment amount represents the total number of units from the Program Operations data.

**Table D.5a. Adjustments to weighted individual counts by State (October 2022 to April 2023)**

<b>State</b>	<b>October 2022</b>	<b>November 2022</b>	<b>December 2022</b>	<b>January 2023</b>	<b>February 2023</b>	<b>March 2023</b>	<b>April 2023</b>
Alabama	26,443	(0)	0	8,375	19,219	(0)	10,145
Alaska	45,799	28,546	15,405	1,627	13,074	12,161	24,509
Arizona	17,280	16,311	51,225	21,551	84,969	18,623	17,290
Arkansas	(5,750)	47,024	8,526	(21,777)	16,182	20,471	3,216
California	142,932	0	164,959	75,603	760,712	388,239	185,373
Colorado	0	50,399	0	0	8,852	24,088	7,071
Connecticut	0	2,754	0	31,612	14,260	2,473	27,376
Delaware	0	0	25,228	11,333	8,153	3,774	6,374
District of Columbia	0	966	14,805	0	9,447	4,324	896
Florida	508,107	316,244	179,719	128,056	0	184,704	157,430
Georgia	31,269	0	16,660	41,687	0	107,296	29,330
Hawaii	4,622	(72,706)	(67,808)	(99,494)	(33,941)	(106,587)	(109,294)
Idaho	36,320	36,089	34,723	35,767	30,847	34,989	32,375
Illinois	(1,896,934)	(1,742,204)	(1,868,973)	(1,924,369)	(1,842,653)	(1,866,857)	(1,828,850)
Indiana	1,432,725	1,504,099	1,452,174	1,485,862	1,477,615	1,488,799	1,432,160
Iowa	332,250	340,058	340,539	332,219	334,473	341,653	331,364
Kansas	88,144	94,154	82,424	95,446	101,975	93,256	92,148
Kentucky	(357,561)	(338,608)	(358,544)	(355,545)	(336,964)	(352,664)	(380,091)
Louisiana	(262,688)	(317,278)	(331,457)	(347,120)	(369,646)	(342,309)	(343,424)
Maine	724,491	733,339	757,002	768,148	796,688	772,380	746,687
Maryland	(394,197)	(402,844)	(430,692)	(467,717)	(460,144)	(419,821)	(497,034)
Massachusetts	(333,394)	(384,520)	(381,386)	(298,294)	(373,956)	(407,589)	(367,934)
Michigan	(280,790)	(329,666)	(303,604)	(268,630)	(337,964)	(285,335)	(264,978)
Minnesota	988,681	935,952	968,050	969,443	971,175	970,690	978,218
Mississippi	46,430	74,665	81,260	85,811	95,392	105,016	89,636
Missouri	(200,987)	(231,374)	(261,552)	(236,466)	(240,389)	(241,389)	(183,651)
Montana	588,696	590,395	596,125	586,095	579,814	584,393	578,164
Nebraska	(63,410)	(57,684)	(70,646)	(64,438)	(66,119)	(66,169)	(61,652)
Nevada	(301,995)	(307,879)	(318,449)	(334,080)	(332,216)	(328,231)	(318,042)
New Hampshire	418,204	405,809	413,361	435,545	425,930	430,324	414,858
New Jersey	(653,931)	(570,502)	(571,168)	(585,439)	(442,648)	(426,568)	(412,475)
New Mexico	298,388	300,451	315,348	285,387	290,487	346,425	322,826
New York	(2,104,805)	(2,173,474)	(2,298,140)	(2,170,995)	(2,272,337)	(2,439,023)	(2,207,007)
North Carolina	1,255,695	1,233,655	1,260,014	1,326,363	1,305,312	1,355,762	1,428,865
North Dakota	1,534,638	1,560,191	1,582,858	1,602,549	1,611,975	1,587,048	1,564,214
Ohio	(1,386,703)	(1,338,405)	(1,402,052)	(1,327,619)	(1,211,695)	(1,390,033)	(1,215,822)
Oklahoma	809,370	768,549	769,449	831,765	747,257	809,547	769,068
Oregon	105,908	(3,411)	3,296	(34,233)	49,039	(47,070)	(6,407)
Pennsylvania	(897,266)	(1,019,916)	(892,246)	(886,944)	(892,754)	(1,008,380)	(1,122,509)
Rhode Island	1,745,156	1,757,051	1,767,335	1,788,108	1,797,425	1,793,725	1,800,712
South Carolina	(473,186)	(467,128)	(419,502)	(456,180)	(458,402)	(427,728)	(340,198)
South Dakota	549,712	541,287	532,903	529,187	531,775	552,274	557,860
Tennessee	(623,289)	(708,635)	(690,150)	(641,918)	(684,868)	(644,270)	(587,503)
Texas	(2,714,907)	(2,786,643)	(2,824,429)	(2,772,285)	(2,583,484)	(2,553,099)	(2,443,077)
Utah	3,427,165	3,475,929	3,505,174	3,479,080	3,353,977	3,221,436	3,194,311
Vermont	84,840	85,047	87,020	88,185	90,255	89,915	87,528
Virginia	(738,719)	(759,032)	(760,633)	(746,688)	(771,323)	(747,203)	(756,652)
Washington	(871,265)	(824,027)	(886,425)	(847,600)	(883,649)	(821,253)	(880,502)
West Virginia	543,123	529,581	526,634	551,919	545,376	594,552	570,408
Wisconsin	216,463	211,076	198,275	210,410	195,629	202,502	197,855
Wyoming	294,333	296,198	293,123	298,113	295,797	275,901	274,352
Guam	667,851	668,894	674,280	679,047	678,048	679,087	671,091
Virgin Islands	8,368	10,064	9,563	8,416	9,135	9,277	12,340
United States	2,411,629	1,778,840	1,589,600	1,904,880	2,655,112	2,183,530	2,288,947

Note: For more details on the adjustments made, see Section II.C, Creation of the SNAP QC database.

## Appendix D Derivation of Weights by State and Month

**Table D.5b. Adjustments to weighted individual counts by State (May 2023 to September 2023)**

State	May 2023	June 2023	July 2023	August 2023	September 2023
Alabama	0	26,971	9,301	0	0
Alaska	23,932	26,448	35,582	47,088	29,626
Arizona	23,333	0	55,948	(0)	30,179
Arkansas	53,351	37,979	9,154	13,641	12,531
California	603,166	319,217	207,901	316,155	431,595
Colorado	0	14,817	28,991	20,844	(0)
Connecticut	12,440	5,214	28,871	16,646	0
Delaware	5,078	5,523	119,272 <sup>a</sup>	121,269 <sup>a</sup>	117,192 <sup>a</sup>
District of Columbia	6,119	2,911	6,081	10,332	9,701
Florida	155,481	183,570	349,598	67,268	48,703
Georgia	0	0	79,197	38,209	0
Hawaii	(104,549)	(115,771)	(46,432)	(122,517)	(129,494)
Idaho	30,792	35,636	31,085	37,010	49,084
Illinois	(1,826,160)	(1,855,249)	(1,802,060)	(1,939,323)	(1,758,030)
Indiana	1,467,953	1,445,052	1,420,049	1,529,278	1,375,870
Iowa	341,965	336,170	345,586	345,531	346,858
Kansas	90,457	77,142	86,657	81,984	82,271
Kentucky	(361,721)	(323,123)	(346,752)	(296,758)	(308,882)
Louisiana	(318,620)	(289,611)	(318,097)	(302,191)	(300,749)
Maine	732,669	731,872	712,716	701,721	709,804
Maryland	(471,404)	(472,872)	(439,024)	(467,970)	(400,035)
Massachusetts	(411,590)	(359,440)	(424,901)	(355,471)	(350,222)
Michigan	(312,738)	(342,778)	(310,270)	(323,401)	(282,212)
Minnesota	985,075	1,000,322	1,028,217	1,013,279	991,814
Mississippi	75,219	74,567	67,676	67,587	55,648
Missouri	(214,460)	(205,230)	(226,590)	(193,620)	(228,137)
Montana	573,093	574,810	577,646	584,079	585,544
Nebraska	(71,587)	(59,419)	(65,329)	(62,296)	(71,787)
Nevada	(312,030)	(316,407)	(333,894)	(350,439)	(352,944)
New Hampshire	423,742	423,779	435,653	430,044	435,662
New Jersey	(575,184)	(560,522)	(576,734)	(509,398)	(474,229)
New Mexico	303,006	365,381	250,249	409,247	378,101
New York	(2,120,329)	(2,179,957)	(2,207,063)	(2,300,018)	(2,228,459)
North Carolina	1,364,291	1,386,805	1,334,830	1,390,622	1,434,129
North Dakota	1,570,205	1,549,783	1,510,003	1,483,284	1,465,233
Ohio	(1,270,991)	(1,300,087)	(1,329,025)	(1,257,851)	(1,321,983)
Oklahoma	722,205	732,264	727,201	732,687	739,928
Oregon	12,685	(2,882)	6,744	(14,936)	35,899
Pennsylvania	(1,092,357)	(1,087,093)	(1,025,158)	(1,137,937)	(1,071,862)
Rhode Island	1,801,315	1,800,816	1,802,171	1,812,179	1,810,300
South Carolina	(335,968)	(269,280)	(305,707)	(313,761)	(381,866)
South Dakota	574,466	565,893	560,019	557,472	544,315
Tennessee	(659,126)	(646,247)	(622,233)	(585,457)	(603,726)
Texas	(2,512,549)	(2,467,058)	(2,588,396)	(2,569,743)	(2,494,097)
Utah	3,139,084	3,088,406	2,851,293	3,139,414	3,069,495
Vermont	90,069	88,755	88,797	91,384	91,248
Virginia	(733,719)	(742,748)	(766,047)	(731,562)	(705,065)
Washington	(848,439)	(867,389)	(811,014)	(831,749)	(827,523)
West Virginia	568,780	571,147	547,659	567,617	571,797
Wisconsin	188,314	199,884	188,830	179,352	168,652
Wyoming	272,878	265,459	261,532	263,080	253,894
Guam	672,480	671,184	672,294	673,420	674,107
Virgin Islands	8,798	10,409	7,861	7,915	7,485
United States	2,338,920	2,155,025	1,899,937	2,083,241	2,265,364

Notes: For more details on the adjustments made, see Section II.C, Creation of the SNAP QC database.

To calculate State fiscal year average adjustments that are comparable to the national average adjustment in Table II.2, subtract the fiscal year average number of individuals in the SNAP QC database from the fiscal year average number of individuals in the Program Operations data. Calculate the fiscal year average number of individuals in the QC data file by averaging across the number of months of data for the State in the SNAP QC database.

<sup>a</sup>This month was excluded from the SNAP QC database due to missing samples. Because no individuals were included in the SNAP QC database for this month, the adjustment amount represents the total number of individuals from the Program Operations data.

**Table D.6a. Adjustments to weighted benefit amounts by State (October 2022 to April 2023)**

<b>State</b>	<b>October 2022</b>	<b>November 2022</b>	<b>December 2022</b>	<b>January 2023</b>	<b>February 2023</b>	<b>March 2023</b>	<b>April 2023</b>
Alabama	(57,815,131)	9,055,591	1,681,242	9,651,280	5,331,397	81,094,432	2,715,462
Alaska	13,956,694	7,733,593	6,155,091	983,838	7,924,979	12,713,493	9,503,264
Arizona	6,083,176	15,589,342	6,340,871	14,700,536	12,726,147	13,349,442	20,434,413
Arkansas	2,761,734	8,978,357	1,512,650	3,169,630	4,368,813	2,953,684	3,423,087
California	62,674,665	55,152,066	57,184,439	77,979,124	115,098,647	48,738,833	93,018,089
Colorado	1,314,069	11,512,018	(418,030)	6,507,035	(145,062)	5,159,146	6,344,517
Connecticut	(1,960,201)	1,795,660	775,172	5,104,980	7,057,108	4,520,288	8,580,338
Delaware	501,745	708,667	5,759,212	2,222,215	2,227,431	2,124,383	2,333,141
District of Columbia	2,746,247	3,551,911	3,470,168	2,125,020	4,913,052	2,643,850	2,382,231
Florida	141,632,307	111,562,930	92,754,004	61,653,810	43,750,867	61,314,932	54,203,202
Georgia	25,875,928	41,548,885	140,166,440	28,164,214	16,311,113	22,616,284	21,434,697
Hawaii	(947,522)	(30,613,733)	(30,496,184)	(41,189,212)	(44,202,775)	(46,861,334)	(48,723,282)
Idaho	42,326,762	41,746,953	41,465,883	40,814,697	45,641,586	41,548,024	40,724,967
Illinois	(327,901,008)	(328,189,727)	(352,335,234)	(342,474,618)	(324,243,229)	(329,367,849)	(332,102,656)
Indiana	273,076,918	274,058,779	277,809,563	267,286,404	271,840,590	284,167,771	273,449,904
Iowa	71,412,982	71,054,704	72,100,746	71,079,753	74,294,796	74,283,083	69,943,106
Kansas	12,849,309	15,961,061	12,228,313	14,580,461	16,331,984	1,001,334	13,889,723
Kentucky	(59,704,432)	(55,502,499)	(56,980,461)	(52,429,168)	(58,113,488)	(37,016,715)	(58,909,496)
Louisiana	(57,604,779)	(76,656,723)	(75,574,092)	(72,408,656)	(80,846,083)	(68,908,258)	(72,620,963)
Maine	144,277,322	148,095,830	150,938,000	149,598,864	151,732,748	144,528,975	140,130,847
Maryland	(56,754,948)	(59,081,797)	(74,945,959)	(71,686,019)	(66,122,085)	(76,124,397)	(82,859,295)
Massachusetts	(106,518,532)	(103,195,913)	(128,545,261)	(93,940,846)	(73,812,904)	(80,641,719)	(80,578,921)
Michigan	15,015,618	(15,861,999)	36,329,452	(47,819,751)	(12,348,958)	95,470,398	(9,062,311)
Minnesota	171,512,392	186,071,154	176,966,160	169,698,383	174,349,146	176,582,382	172,380,305
Mississippi	70,694,505	69,674,170	64,875,490	49,894,340	40,636,699	52,534,811	7,433,404
Missouri	(37,250,323)	(45,576,059)	(50,920,771)	(50,618,617)	(47,146,779)	(50,519,859)	(34,146,311)
Montana	116,714,037	117,137,595	117,738,273	111,544,759	111,509,009	112,793,555	111,381,648
Nebraska	(12,000,788)	(11,075,129)	(13,053,309)	(11,908,618)	(11,653,622)	(11,801,416)	(11,353,741)
Nevada	(46,738,100)	(53,427,228)	(49,474,743)	(51,297,764)	(52,176,930)	(54,887,454)	(43,147,181)
New Hampshire	68,166,941	75,351,798	78,702,814	72,018,600	72,137,320	72,490,851	68,428,167
New Jersey	(128,977,162)	(126,399,043)	(118,670,327)	(111,926,063)	(95,294,298)	(87,809,943)	(75,508,244)
New Mexico	64,600,189	67,882,382	67,595,859	66,680,135	68,481,227	83,932,944	66,767,367
New York	(436,226,583)	(484,194,881)	(510,233,938)	(460,884,485)	(475,598,426)	(509,849,988)	(452,997,355)
North Carolina	370,161,130	351,646,762	371,196,188	381,329,545	356,830,801	364,596,351	365,158,986
North Dakota	266,819,993	270,498,784	273,382,163	267,840,172	269,198,626	265,144,871	260,857,489
Ohio	(248,274,005)	(264,955,298)	(249,302,150)	(229,560,609)	(229,544,716)	(227,521,489)	(212,772,447)
Oklahoma	146,097,230	148,215,340	62,681,875	148,084,694	(21,483,422)	277,560,561	131,896,116
Oregon	27,767,470	13,727,723	29,371,624	7,994,731	16,675,303	8,625,368	14,744,971
Pennsylvania	(146,211,682)	(172,578,854)	(135,848,411)	(175,063,960)	(139,425,756)	(165,794,167)	(174,832,344)
Rhode Island	320,120,624	318,848,282	318,187,362	317,064,637	264,516,329	312,332,199	306,009,835
South Carolina	(83,527,157)	(84,549,922)	(79,331,198)	(79,414,808)	(77,422,931)	(74,245,499)	(62,188,251)
South Dakota	103,832,063	103,159,013	102,144,401	98,224,578	93,060,289	100,986,930	100,277,832
Tennessee	(128,122,901)	(133,744,555)	(140,577,482)	(123,488,187)	(130,353,547)	(126,782,027)	(106,454,786)
Texas	(461,031,643)	(468,775,568)	(427,555,752)	(439,454,960)	(426,097,677)	(421,596,838)	(396,166,107)
Utah	601,995,714	607,663,811	613,641,648	597,570,327	577,969,861	560,028,610	557,905,185
Vermont	15,714,305	15,658,153	15,644,539	15,669,190	15,683,946	16,769,684	15,947,192
Virginia	(127,372,868)	(125,877,703)	(135,167,865)	(124,109,408)	(116,451,154)	(124,237,395)	(123,302,845)
Washington	(145,669,180)	(150,590,888)	(141,725,834)	(133,352,449)	(147,589,809)	(145,423,195)	(144,951,678)
West Virginia	105,147,815	100,207,968	103,417,227	100,390,573	97,266,296	104,564,955	102,358,187
Wisconsin	58,772,773	52,026,370	53,582,680	49,808,991	50,960,265	55,666,274	53,358,638
Wyoming	46,326,503	46,369,984	45,525,312	46,509,221	45,761,585	43,923,971	43,691,157
Guam	101,834,999	100,558,002	100,057,311	98,596,905	97,768,075	98,793,773	97,753,903
Virgin Islands	711,797	287,608	822,838	499,590	131,649	305,392	1,689,697
United States	802,887,011	672,243,724	731,048,012	642,013,033	502,414,034	966,472,289	717,872,849

Note: For more details on the adjustments made, see Section II.C, Creation of the SNAP QC database.

**Table D.6b. Adjustments to weighted benefit amounts by State (May 2023 to September 2023)**

<b>State</b>	<b>May 2023</b>	<b>June 2023</b>	<b>July 2023</b>	<b>August 2023</b>	<b>September 2023</b>
Alabama	5,894,654	5,992,981	8,943,771	823,378	6,677,567
Alaska	13,314,448	11,362,435	16,707,406	23,290,840	10,651,763
Arizona	11,964,749	8,985,299	17,721,385	17,204,583	8,955,537
Arkansas	5,630,191	4,481,319	2,029,673	38,301,191	1,040,611
California	95,246,366	110,010,061	81,539,098	112,341,054	149,624,492
Colorado	(534,300)	4,013,877	8,502,604	2,772,807	6,298,150
Connecticut	1,688,688	7,475,013	3,277,793	6,236,250	5,077,451
Delaware	2,587,946	1,082,595	20,168,391 <sup>a</sup>	20,993,362 <sup>a</sup>	20,352,164 <sup>a</sup>
District of Columbia	3,706,921	2,685,410	17,956,057	(13,107,886)	3,546,417
Florida	69,047,102	63,299,997	55,140,313	50,342,361	74,074,479
Georgia	29,520,089	3,758,076	9,908,786	17,793,735	16,119,008
Hawaii	(44,609,856)	(30,351,628)	(18,946,831)	(52,010,665)	(51,152,284)
Idaho	40,402,935	41,986,339	40,377,319	42,222,486	41,216,134
Illinois	(355,277,068)	(353,779,156)	(331,655,890)	(345,659,642)	(321,168,423)
Indiana	281,326,358	277,762,800	277,575,907	280,047,402	270,637,974
Iowa	73,125,303	72,663,829	74,892,135	77,876,447	74,810,053
Kansas	14,601,494	11,255,625	14,733,864	11,985,744	10,952,119
Kentucky	(55,622,617)	(53,601,951)	(54,139,666)	(47,163,701)	(45,853,541)
Louisiana	(67,166,122)	(64,156,455)	(64,449,820)	(57,184,239)	(61,575,316)
Maine	138,264,345	134,259,783	132,403,005	129,835,106	128,459,570
Maryland	(87,838,667)	(72,608,688)	(73,171,285)	(76,140,400)	(71,899,961)
Massachusetts	(81,290,789)	(79,723,598)	(79,517,390)	(82,716,134)	(96,181,326)
Michigan	(20,407,994)	(15,973,469)	(10,224,587)	(15,040,031)	(547,002)
Minnesota	173,874,915	172,612,665	175,629,555	178,397,006	174,037,328
Mississippi	8,735,300	6,617,562	40,782,666	9,916,265	(674,003)
Missouri	(40,011,349)	(37,085,088)	(41,322,523)	(38,461,008)	(40,162,388)
Montana	109,915,876	111,033,433	111,443,350	113,333,000	113,654,774
Nebraska	(13,385,925)	(12,357,321)	(13,178,637)	(11,206,237)	(13,104,176)
Nevada	(47,912,453)	(49,098,839)	(51,907,162)	(51,767,449)	(51,689,420)
New Hampshire	68,690,922	69,017,022	70,535,890	70,052,911	70,533,584
New Jersey	(105,923,184)	(110,412,124)	(102,459,287)	(89,384,242)	(85,054,870)
New Mexico	60,514,773	77,441,473	72,313,616	77,414,350	73,604,082
New York	(441,609,005)	(453,153,277)	(462,219,763)	(460,342,886)	(445,152,852)
North Carolina	365,103,690	380,631,437	362,093,587	368,366,372	388,481,545
North Dakota	261,110,272	257,329,587	251,820,894	249,186,963	243,545,252
Ohio	(227,085,839)	(235,372,864)	(240,139,868)	(230,414,171)	(239,673,680)
Oklahoma	129,115,166	132,615,532	131,223,148	139,064,327	133,539,226
Oregon	6,866,583	43,654,617	8,446,905	22,083,713	31,839,943
Pennsylvania	(177,324,077)	(164,356,336)	(198,514,425)	(189,331,500)	(179,630,443)
Rhode Island	307,862,268	308,916,042	310,243,099	313,148,087	311,435,757
South Carolina	(49,568,757)	(37,051,985)	(51,518,435)	(48,967,232)	(62,539,938)
South Dakota	102,918,636	101,717,093	101,123,892	102,534,370	99,684,190
Tennessee	(123,063,800)	(122,500,942)	(123,070,759)	(115,679,317)	(120,921,958)
Texas	(414,064,569)	(387,660,201)	(417,581,924)	(445,673,426)	(427,544,227)
Utah	551,232,453	540,399,288	541,650,899	545,384,605	536,973,882
Vermont	17,027,455	16,176,219	16,726,930	17,373,891	16,953,029
Virginia	(117,521,112)	(123,579,671)	(126,833,443)	(123,765,077)	(118,650,536)
Washington	(144,448,303)	(139,126,072)	(139,598,857)	(138,649,314)	(140,291,323)
West Virginia	101,345,121	106,260,635	100,096,492	101,839,715	100,737,166
Wisconsin	50,846,435	52,798,661	46,241,922	47,813,423	51,780,724
Wyoming	43,971,961	43,109,623	42,474,725	42,439,806	42,654,165
Guam	98,451,887	99,052,844	100,052,228	100,086,756	100,073,938
Virgin Islands	311,621	860,971	122,958	297,696	502,084
United States	629,551,137	739,370,478	664,449,710	670,272,207	411,218,824

Notes: For more details on the adjustments made, see Section II.C, Creation of the SNAP QC database.

To calculate State fiscal year average adjustments that are comparable to the national average adjustment in Table II.2, subtract the fiscal year average number of benefits in the SNAP QC database from the fiscal year average number of benefits in the Program Operations data. Calculate the fiscal year average number of benefits in the QC data file by averaging across the number of months of data for the State in the SNAP QC database.

<sup>a</sup>This month was excluded from the SNAP QC database due to missing samples. Because no benefits were included in the SNAP QC database for this month, the adjustment amount represents the total number of benefits from the Program Operations data.

## Appendix D Derivation of Weights by State and Month

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**Table D.7. Stratification and weight calculation by State, October 2022**

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
		a	b		g	h	i	j	k	l	m
Alabama	0	1	101	389,607	94	2	0.0213	381,317	2	90	4,237
Alaska	0	1	41	29,533	38	29	0.7632	6,995	1	8	874
Arizona	0	1	96	418,325	75	1	0.0133	412,747	1	73	5,654
Arkansas	0	1	96	123,250	77	2	0.0260	120,049	0	75	1,601
California	0	1	104	2,870,494	74	2	0.0270	2,792,913	0	72	38,790
Colorado	0	1	88	289,072	69	0	0.0000	289,072	0	69	4,189
Connecticut	0	1	89	224,381	79	0	0.0000	224,381	2	77	2,914
Delaware	0	1	27	60,091	22	0	0.0000	60,091	0	22	2,731
District of Columbia	0	1	100	84,139	76	0	0.0000	84,139	0	76	1,107
Florida	0	1	98	1,600,951	77	0	0.0000	1,600,951	4	73	21,931
Georgia	0	1	100	779,930	93	1	0.0108	771,544	1	91	8,479
Hawaii	0	1	84	89,098	48	38	0.7917	18,562	0	10	1,856
Idaho	0	1	116	60,809	85	0	0.0000	60,809	0	85	715
Illinois	0	1	89	1,099,038	74	1	0.0135	1,084,186	0	73	14,852
Indiana	0	1	88	283,891	71	0	0.0000	283,891	1	70	4,056
Iowa	0	1	86	133,626	84	0	0.0000	133,626	0	84	1,591
Kansas	0	1	88	94,651	82	6	0.0732	87,725	0	76	1,154
Kentucky	0	1	95	252,139	90	0	0.0000	252,139	0	90	2,802
Louisiana	0	1	104	425,898	89	3	0.0337	411,542	0	86	4,785
Maine	0	1	96	96,740	86	6	0.0698	89,991	0	80	1,125
Maryland	0	1	75	353,781	57	9	0.1579	297,921	1	47	6,339
Massachusetts	0	1	93	641,088	80	4	0.0500	609,034	0	76	8,014
Michigan	0	1	93	753,970	74	2	0.0270	733,592	0	72	10,189
Minnesota	0	1	90	233,021	85	4	0.0471	222,055	1	80	2,776
Mississippi	0	1	112	207,130	109	1	0.0092	205,230	0	108	1,900
Missouri	0	1	92	331,637	65	6	0.0923	301,024	0	59	5,102
Montana	0	1	64	43,822	52	1	0.0192	42,979	0	51	843

## Appendix D Derivation of Weights by State and Month

**Table D.7. (continued)**

State	Stratum	Unedited SNAP QC data				Edited SNAP QC data					
		Sampling interval	Stratum sampling size	SNAP units in State (program ops data)	Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum-specific units weight
a	b	e	g	h	i	j	k	l	m		
Nebraska	0	1	88	76,603	76	3	0.0395	73,579	0	73	1,008
Nevada	0	1	95	249,520	83	1	0.0120	246,514	0	82	3,006
New Hampshire	0	1	57	37,550	52	7	0.1346	32,495	0	45	722
New Jersey	0	1	108	402,284	77	6	0.0779	370,937	0	71	5,224
New Mexico	0	1	98	263,806	80	3	0.0375	253,913	0	77	3,298
New York	0	1	90	1,639,403	73	4	0.0548	1,549,573	2	67	23,128
North Carolina	0	1	106	789,612	99	0	0.0000	789,612	0	99	7,976
North Dakota	0	1	38	23,120	34	3	0.0882	21,080	0	31	680
Ohio	0	1	92	744,610	83	1	0.0120	735,639	0	82	8,971
Oklahoma	0	1	108	328,519	95	4	0.0421	314,687	0	91	3,458
Oregon	0	1	86	417,790	71	11	0.1549	353,062	0	60	5,884
Pennsylvania	0	1	91	999,785	74	9	0.1216	878,190	0	65	13,511
Rhode Island	0	1	89	85,701	84	4	0.0476	81,620	0	80	1,020
South Carolina	0	1	99	303,784	79	1	0.0127	299,939	0	78	3,845
South Dakota	0	1	53	34,058	53	1	0.0189	33,415	0	52	643
Tennessee	0	1	100	402,051	78	7	0.0897	365,970	0	71	5,155
Texas	0	1	106	1,585,294	72	2	0.0278	1,541,258	0	70	22,018
Utah	0	1	97	78,268	93	2	0.0215	76,585	0	91	842
Vermont	0	1	65	41,689	64	1	0.0156	41,038	0	63	651
Virginia	0	1	86	424,669	71	1	0.0141	418,688	0	70	5,981
Washington	0	1	88	522,173	75	1	0.0133	515,211	4	70	7,360
West Virginia	0	1	92	173,691	72	6	0.0833	159,217	0	66	2,412
Wisconsin	0	1	100	367,752	93	0	0.0000	367,752	0	93	3,954
Wyoming	0	1	27	14,223	27	1	0.0370	13,696	0	26	527
Guam	0	1	25	13,027	15	2	0.1333	11,290	0	13	868
Virgin Islands	0	1	25	10,694	23	0	0.0000	10,694	0	23	465

## Appendix D Derivation of Weights by State and Month

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**Table D.8. Stratification and weight calculation by State, November 2022**

State	Stratum	Unedited SNAP QC data			Edited SNAP QC data							Stratum-specific units weight
		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		
		a	b	e	g	h	i	j	k	l	m	
Alabama	0	1	102	392,724	92	0	0.0000	392,724	0	92	4,269	
Alaska	0	1	32	25,663	28	18	0.6429	9,165	0	10	917	
Arizona	0	1	98	419,108	72	1	0.0139	413,287	0	71	5,821	
Arkansas	0	1	95	131,504	69	7	0.1014	118,163	0	62	1,906	
California	0	1	110	2,944,785	72	0	0.0000	2,944,785	1	71	41,476	
Colorado	0	1	89	290,528	73	4	0.0548	274,609	0	69	3,980	
Connecticut	0	1	90	224,284	74	1	0.0135	221,253	0	73	3,031	
Delaware	0	1	26	60,688	25	0	0.0000	60,688	0	25	2,428	
District of Columbia	0	1	100	84,877	83	1	0.0120	83,854	0	82	1,023	
Florida	0	1	111	1,597,500	88	1	0.0114	1,579,347	2	85	18,581	
Georgia	0	1	107	799,704	88	0	0.0000	799,704	0	88	9,088	
Hawaii	0	1	84	88,010	38	12	0.3158	60,217	0	26	2,316	
Idaho	0	1	115	61,195	89	1	0.0112	60,507	0	88	688	
Illinois	0	1	89	1,102,098	73	4	0.0548	1,041,709	0	69	15,097	
Indiana	0	1	87	282,679	79	3	0.0380	271,944	0	76	3,578	
Iowa	0	1	85	132,926	80	1	0.0125	131,264	0	79	1,662	
Kansas	0	1	88	94,384	81	6	0.0741	87,393	1	74	1,181	
Kentucky	0	1	96	253,131	94	4	0.0426	242,359	0	90	2,693	
Louisiana	0	1	90	438,954	70	2	0.0286	426,412	0	68	6,271	
Maine	0	1	97	97,258	88	3	0.0341	93,942	0	85	1,105	
Maryland	0	1	77	359,393	57	9	0.1579	302,647	2	46	6,579	
Massachusetts	0	1	93	643,864	87	1	0.0115	636,463	0	86	7,401	
Michigan	0	1	94	741,225	74	0	0.0000	741,225	0	74	10,017	
Minnesota	0	1	91	234,376	87	0	0.0000	234,376	0	87	2,694	
Mississippi	0	1	111	205,161	101	7	0.0693	190,942	1	93	2,053	
Missouri	0	1	92	333,138	70	3	0.0429	318,861	0	67	4,759	
Montana	0	1	65	43,612	48	0	0.0000	43,612	0	48	909	

## Appendix D Derivation of Weights by State and Month

**Table D.8. (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
					g	h	i	j	k	l	m
Nebraska	0	1	88	76,880	79	5	0.0633	72,014	0	74	973
Nevada	0	1	95	249,560	92	2	0.0217	244,135	0	90	2,713
New Hampshire	0	1	57	37,621	56	1	0.0179	36,949	0	55	672
New Jersey	0	1	89	403,648	59	9	0.1525	342,075	0	50	6,841
New Mexico	0	1	98	264,042	85	3	0.0353	254,723	0	82	3,106
New York	0	1	90	1,647,311	72	3	0.0417	1,578,673	0	69	22,879
North Carolina	0	1	108	807,449	98	0	0.0000	807,449	0	98	8,239
North Dakota	0	1	38	23,200	36	2	0.0556	21,911	0	34	644
Ohio	0	1	92	741,009	80	2	0.0250	722,484	0	78	9,263
Oklahoma	0	1	109	339,923	92	2	0.0217	332,533	0	90	3,695
Oregon	0	1	84	412,199	61	1	0.0164	405,442	1	59	6,872
Pennsylvania	0	1	91	1,007,310	71	6	0.0845	922,185	0	65	14,187
Rhode Island	0	1	90	86,506	82	3	0.0366	83,341	0	79	1,055
South Carolina	0	1	99	302,145	79	1	0.0127	298,320	0	78	3,825
South Dakota	0	1	54	34,262	53	0	0.0000	34,262	1	52	659
Tennessee	0	1	102	412,768	90	4	0.0444	394,423	0	86	4,586
Texas	0	1	108	1,608,177	70	1	0.0143	1,585,203	0	69	22,974
Utah	0	1	98	76,220	91	4	0.0440	72,870	0	87	838
Vermont	0	1	64	41,936	60	0	0.0000	41,936	0	60	699
Virginia	0	1	87	427,472	71	0	0.0000	427,472	0	71	6,021
Washington	0	1	87	517,791	67	2	0.0299	502,335	3	62	8,102
West Virginia	0	1	93	173,589	69	4	0.0580	163,526	0	65	2,516
Wisconsin	0	1	101	369,097	96	2	0.0208	361,407	0	94	3,845
Wyoming	0	1	28	14,410	28	2	0.0714	13,381	0	26	515
Guam	0	1	25	12,839	16	0	0.0000	12,839	0	16	802
Virgin Islands	0	1	26	10,951	25	2	0.0800	10,075	0	23	438

## Appendix D Derivation of Weights by State and Month

**Table D.9. Stratification and weight calculation by State, December 2022**

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
		a	b	e	g	h	i	j	k	l	m
Alabama	0	1	102	395,441	89	0	0.0000	395,441	0	89	4,443
Alaska	0	1	27	19,642	18	9	0.5000	9,821	0	9	1,091
Arizona	0	1	98	424,456	75	2	0.0267	413,137	0	73	5,659
Arkansas	0	1	96	135,729	61	2	0.0328	131,279	0	59	2,225
California	0	1	108	2,963,632	72	2	0.0278	2,881,309	0	70	41,162
Colorado	0	1	90	293,401	70	0	0.0000	293,401	0	70	4,191
Connecticut	0	1	90	225,221	74	0	0.0000	225,221	1	73	3,085
Delaware	0	1	34	61,325	29	3	0.1034	54,981	0	26	2,115
District of Columbia	0	1	100	84,369	85	5	0.0588	79,406	0	80	993
Florida	0	1	110	1,716,080	89	2	0.0225	1,677,516	3	84	19,970
Georgia	0	1	108	804,716	96	2	0.0208	787,951	0	94	8,382
Hawaii	0	1	83	87,288	46	14	0.3043	60,722	0	32	1,898
Idaho	0	1	117	61,807	88	1	0.0114	61,105	0	87	702
Illinois	0	1	91	1,111,313	74	2	0.0270	1,081,278	0	72	15,018
Indiana	0	1	88	284,407	76	0	0.0000	284,407	0	76	3,742
Iowa	0	1	85	133,096	81	1	0.0123	131,453	1	79	1,664
Kansas	0	1	86	92,907	78	1	0.0128	91,716	0	77	1,191
Kentucky	0	1	96	254,545	95	2	0.0211	249,186	0	93	2,679
Louisiana	0	1	92	450,843	74	2	0.0270	438,658	1	71	6,178
Maine	0	1	98	98,213	84	3	0.0357	94,705	0	81	1,169
Maryland	0	1	78	361,520	56	5	0.0893	329,241	0	51	6,456
Massachusetts	0	1	93	648,808	79	2	0.0253	632,382	0	77	8,213
Michigan	0	1	95	749,757	79	1	0.0127	740,266	0	78	9,491
Minnesota	0	1	93	235,647	87	3	0.0345	227,521	0	84	2,709
Mississippi	0	1	110	203,986	99	6	0.0606	191,623	0	93	2,060
Missouri	0	1	93	334,568	62	1	0.0161	329,172	0	61	5,396
Montana	0	1	64	43,552	57	3	0.0526	41,260	1	53	778

## Appendix D Derivation of Weights by State and Month

**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
		a	b	e	g	h	i	j	k	l	m
Nebraska	0	1	90	77,511	81	1	0.0123	76,554	0	80	957
Nevada	0	1	95	250,944	82	1	0.0122	247,884	0	81	3,060
New Hampshire	0	1	57	37,753	52	2	0.0385	36,301	0	50	726
New Jersey	0	1	91	406,929	66	16	0.2424	308,280	0	50	6,166
New Mexico	0	1	98	265,432	87	3	0.0345	256,279	0	84	3,051
New York	0	1	90	1,670,664	68	2	0.0294	1,621,527	1	65	24,947
North Carolina	0	1	110	820,258	101	0	0.0000	820,258	0	101	8,121
North Dakota	0	1	38	23,137	34	1	0.0294	22,457	0	33	681
Ohio	0	1	92	741,171	80	0	0.0000	741,171	0	80	9,265
Oklahoma	0	1	109	332,667	92	2	0.0217	325,435	0	90	3,616
Oregon	0	1	86	414,184	68	2	0.0294	402,002	0	66	6,091
Pennsylvania	0	1	91	1,011,476	78	12	0.1538	855,864	0	66	12,968
Rhode Island	0	1	90	86,988	89	5	0.0562	82,101	0	84	977
South Carolina	0	1	89	297,926	74	4	0.0541	281,822	0	70	4,026
South Dakota	0	1	54	34,064	52	1	0.0192	33,409	1	50	668
Tennessee	0	1	102	411,579	76	5	0.0658	384,501	0	71	5,416
Texas	0	1	109	1,628,264	73	1	0.0137	1,605,959	0	72	22,305
Utah	0	1	100	79,433	91	4	0.0440	75,941	0	87	873
Vermont	0	1	65	42,034	62	0	0.0000	42,034	0	62	678
Virginia	0	1	87	429,195	66	0	0.0000	429,195	0	66	6,503
Washington	0	1	87	521,094	75	0	0.0000	521,094	4	71	7,339
West Virginia	0	1	92	173,604	73	3	0.0411	166,470	0	70	2,378
Wisconsin	0	1	102	371,823	95	0	0.0000	371,823	0	95	3,914
Wyoming	0	1	28	14,481	27	0	0.0000	14,481	0	27	536
Guam	0	1	24	12,883	19	0	0.0000	12,883	0	19	678
Virgin Islands	0	1	27	10,889	26	2	0.0769	10,051	0	24	419

## Appendix D Derivation of Weights by State and Month

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**Table D.10. Stratification and weight calculation by State, January 2023**

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
		a	b			h	i				
Alabama	0	1	102	392,726	89	1	0.0112	388,313	0	88	4,413
Alaska	0	1	24	15,933	18	1	0.0556	15,048	0	17	885
Arizona	0	1	98	422,877	77	1	0.0130	417,385	0	76	5,492
Arkansas	0	1	95	133,756	77	2	0.0260	130,282	1	74	1,761
California	0	1	108	2,982,802	75	1	0.0133	2,943,031	0	74	39,771
Colorado	0	1	90	291,143	74	0	0.0000	291,143	0	74	3,934
Connecticut	0	1	90	225,538	74	2	0.0270	219,442	0	72	3,048
Delaware	0	1	85	61,546	58	5	0.0862	56,240	1	52	1,082
District of Columbia	0	1	99	84,633	79	0	0.0000	84,633	0	79	1,071
Florida	0	1	117	1,785,033	92	2	0.0217	1,746,228	3	87	20,072
Georgia	0	1	108	804,567	88	2	0.0227	786,281	1	85	9,250
Hawaii	0	1	83	86,984	47	6	0.1277	75,880	0	41	1,851
Idaho	0	1	115	61,077	81	1	0.0123	60,323	1	79	764
Illinois	0	1	90	1,105,650	72	0	0.0000	1,105,650	0	72	15,356
Indiana	0	1	87	280,821	78	3	0.0385	270,020	0	75	3,600
Iowa	0	1	84	131,373	79	0	0.0000	131,373	0	79	1,663
Kansas	0	1	86	92,163	77	7	0.0909	83,785	0	70	1,197
Kentucky	0	1	96	254,976	89	4	0.0449	243,516	0	85	2,865
Louisiana	0	1	94	459,905	70	2	0.0286	446,765	0	68	6,570
Maine	0	1	98	96,630	89	1	0.0112	95,544	0	88	1,086
Maryland	0	1	96	363,431	74	6	0.0811	333,964	0	68	4,911
Massachusetts	0	1	94	654,790	88	4	0.0455	625,027	0	84	7,441
Michigan	0	1	95	757,323	79	3	0.0380	728,564	0	76	9,586
Minnesota	0	1	92	238,453	90	1	0.0111	235,804	0	89	2,649
Mississippi	0	1	107	199,684	101	4	0.0396	191,776	0	97	1,977
Missouri	0	1	91	331,735	67	4	0.0597	311,930	0	63	4,951
Montana	0	1	64	43,385	54	1	0.0185	42,582	1	52	819

## Appendix D Derivation of Weights by State and Month

**Table D.10. (continued)**

Unedited SNAP QC data				Edited SNAP QC data								Stratum-specific units weight	
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	l		
a	b	e	g	h	i	j	k	l	m				
Nebraska	0	1	89	77,899	73	3	0.0411	74,698	0	70	1,067		
Nevada	0	1	100	262,498	90	1	0.0111	259,581	0	89	2,917		
New Hampshire	0	1	59	38,724	57	5	0.0877	35,327	1	51	693		
New Jersey	0	1	90	389,052	69	11	0.1594	327,029	0	58	5,638		
New Mexico	0	1	98	256,259	87	3	0.0345	247,422	0	84	2,946		
New York	0	1	90	1,691,805	84	7	0.0833	1,550,821	1	76	20,406		
North Carolina	0	1	111	830,182	97	2	0.0206	813,065	0	95	8,559		
North Dakota	0	1	38	22,971	34	1	0.0294	22,295	0	33	676		
Ohio	0	1	91	734,871	77	2	0.0260	715,783	0	75	9,544		
Oklahoma	0	1	109	331,821	92	9	0.0978	299,360	0	83	3,607		
Oregon	0	1	85	414,219	60	0	0.0000	414,219	0	60	6,904		
Pennsylvania	0	1	92	1,023,811	69	9	0.1304	890,270	0	60	14,838		
Rhode Island	0	1	92	87,337	86	1	0.0116	86,321	0	85	1,016		
South Carolina	0	1	89	294,997	70	0	0.0000	294,997	0	70	4,214		
South Dakota	0	1	54	34,507	52	2	0.0385	33,180	0	50	664		
Tennessee	0	1	101	409,090	84	8	0.0952	370,129	0	76	4,870		
Texas	0	1	108	1,622,946	80	1	0.0125	1,602,659	0	79	20,287		
Utah	0	1	99	77,374	91	0	0.0000	77,374	0	91	850		
Vermont	0	1	65	42,191	62	1	0.0161	41,511	1	60	692		
Virginia	0	1	88	435,617	72	1	0.0139	429,567	0	71	6,050		
Washington	0	1	88	519,581	77	1	0.0130	512,833	4	72	7,123		
West Virginia	0	1	92	175,002	80	5	0.0625	164,064	0	75	2,188		
Wisconsin	0	1	102	373,439	94	1	0.0106	369,466	1	92	4,016		
Wyoming	0	1	28	14,492	25	2	0.0800	13,333	0	23	580		
Guam	0	1	25	12,672	18	0	0.0000	12,672	0	18	704		
Virgin Islands	0	1	26	10,972	24	0	0.0000	10,972	0	24	457		

## Appendix D Derivation of Weights by State and Month

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**Table D.11. Stratification and weight calculation by State, February 2023**

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
		a	b								
Alabama	0	1	102	393,131	91	2	0.0220	384,491	1	88	4,369
Alaska	0	1	32	19,944	27	9	0.3333	13,296	0	18	739
Arizona	0	1	98	419,945	71	4	0.0563	396,286	0	67	5,915
Arkansas	0	1	91	131,783	70	5	0.0714	122,370	1	64	1,912
California	0	1	108	3,004,561	76	8	0.1053	2,688,291	0	68	39,534
Colorado	0	1	91	296,921	74	1	0.0135	292,909	0	73	4,012
Connecticut	0	1	90	226,968	82	2	0.0244	221,432	0	80	2,768
Delaware	0	1	87	61,681	57	3	0.0526	58,435	0	54	1,082
District of Columbia	0	1	99	83,973	69	4	0.0580	79,105	0	65	1,217
Florida	0	1	114	1,723,236	84	0	0.0000	1,723,236	2	82	21,015
Georgia	0	1	107	798,603	86	0	0.0000	798,603	1	85	9,395
Hawaii	0	1	84	86,154	52	4	0.0769	79,527	0	48	1,657
Idaho	0	1	116	61,529	91	0	0.0000	61,529	0	91	676
Illinois	0	1	90	1,112,074	73	2	0.0274	1,081,606	0	71	15,234
Indiana	0	1	87	280,918	78	1	0.0128	277,316	0	77	3,602
Iowa	0	1	84	130,859	79	1	0.0127	129,203	0	78	1,656
Kansas	0	1	84	91,360	75	9	0.1200	80,397	0	66	1,218
Kentucky	0	1	97	256,014	94	4	0.0426	245,120	0	90	2,724
Louisiana	0	1	94	468,160	77	1	0.0130	462,080	2	74	6,244
Maine	0	1	90	97,153	80	4	0.0500	92,295	0	76	1,214
Maryland	0	1	98	371,873	73	11	0.1507	315,837	0	62	5,094
Massachusetts	0	1	95	656,778	85	1	0.0118	649,051	1	83	7,820
Michigan	0	1	95	758,667	74	1	0.0135	748,415	0	73	10,252
Minnesota	0	1	93	239,096	90	1	0.0111	236,439	0	89	2,657
Mississippi	0	1	106	198,080	103	4	0.0388	190,388	0	99	1,923
Missouri	0	1	91	329,491	66	4	0.0606	309,522	0	62	4,992
Montana	0	1	64	43,708	51	1	0.0196	42,851	0	50	857

## Appendix D Derivation of Weights by State and Month

**Table D.11. (continued)**

State	Stratum	Unedited SNAP QC data				Edited SNAP QC data						Stratum-specific units weight
		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	I	
a	b	e	g	h	i	j	k	l				m
Nebraska	0	1	90	77,633	75	2	0.0267	75,563	0	73		1,035
Nevada	0	1	99	261,744	86	1	0.0116	258,700	0	85		3,044
New Hampshire	0	1	59	39,129	56	1	0.0179	38,430	0	55		699
New Jersey	0	1	90	389,355	65	22	0.3385	257,573	0	43		5,990
New Mexico	0	1	98	248,962	87	1	0.0115	246,100	0	86		2,862
New York	0	1	90	1,688,097	76	5	0.0658	1,577,038	0	71		22,212
North Carolina	0	1	111	835,987	92	1	0.0109	826,900	0	91		9,087
North Dakota	0	1	38	22,764	34	1	0.0294	22,094	0	33		670
Ohio	0	1	91	722,341	71	3	0.0423	691,820	0	68		10,174
Oklahoma	0	1	109	331,582	95	3	0.0316	321,111	0	92		3,490
Oregon	0	1	86	416,877	68	5	0.0735	386,224	0	63		6,131
Pennsylvania	0	1	92	1,024,322	79	12	0.1519	868,729	0	67		12,966
Rhode Island	0	1	92	87,845	88	7	0.0795	80,857	0	81		998
South Carolina	0	1	90	297,343	72	0	0.0000	297,343	0	72		4,130
South Dakota	0	1	54	34,355	52	1	0.0192	33,694	0	51		661
Tennessee	0	1	103	416,325	84	9	0.1071	371,719	0	75		4,956
Texas	0	1	106	1,580,772	80	2	0.0250	1,541,253	0	78		19,760
Utah	0	1	100	77,057	90	2	0.0222	75,345	0	88		856
Vermont	0	1	65	41,875	63	2	0.0317	40,546	0	61		665
Virginia	0	1	86	436,838	71	1	0.0141	430,685	0	70		6,153
Washington	0	1	87	518,903	72	0	0.0000	518,903	1	71		7,308
West Virginia	0	1	93	175,147	76	4	0.0526	165,929	0	72		2,305
Wisconsin	0	1	102	372,074	97	1	0.0103	368,238	0	96		3,836
Wyoming	0	1	28	14,484	26	0	0.0000	14,484	0	26		557
Guam	0	1	25	13,294	22	1	0.0455	12,690	1	20		634
Virgin Islands	0	1	26	10,578	23	0	0.0000	10,578	0	23		460

## Appendix D Derivation of Weights by State and Month

**Table D.12. Stratification and weight calculation by State, March 2023**

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
		a	b			g	h				
Alabama	0	1	102	394,272	92	0	0.0000	394,272	0	92	4,286
Alaska	0	1	37	24,318	31	10	0.3226	16,473	0	21	784
Arizona	0	1	98	427,544	79	1	0.0127	422,132	0	78	5,412
Arkansas	0	1	92	129,105	72	5	0.0694	120,139	0	67	1,793
California	0	1	111	3,030,938	77	3	0.0390	2,912,850	0	74	39,363
Colorado	0	1	92	300,850	76	3	0.0395	288,974	0	73	3,959
Connecticut	0	1	102	228,262	89	1	0.0112	225,697	0	88	2,565
Delaware	0	1	85	59,090	63	2	0.0317	57,214	0	61	938
District of Columbia	0	1	100	83,512	78	1	0.0128	82,441	0	77	1,071
Florida	0	1	114	1,710,668	91	6	0.0659	1,597,877	1	84	19,022
Georgia	0	1	103	775,536	90	2	0.0222	758,302	0	88	8,617
Hawaii	0	1	84	86,953	45	2	0.0444	83,088	0	43	1,932
Idaho	0	1	116	61,872	87	2	0.0230	60,450	1	84	720
Illinois	0	1	91	1,107,826	73	2	0.0274	1,077,475	0	71	15,176
Indiana	0	1	97	284,706	88	4	0.0455	271,765	0	84	3,235
Iowa	0	1	97	131,422	89	1	0.0112	129,945	0	88	1,477
Kansas	0	1	85	92,018	80	5	0.0625	86,267	1	74	1,166
Kentucky	0	1	97	258,820	94	5	0.0532	245,053	0	89	2,753
Louisiana	0	1	92	458,012	80	2	0.0250	446,562	0	78	5,725
Maine	0	1	91	96,932	84	4	0.0476	92,316	0	80	1,154
Maryland	0	1	98	370,704	68	12	0.1765	305,286	0	56	5,452
Massachusetts	0	1	96	659,501	81	0	0.0000	659,501	0	81	8,142
Michigan	0	1	95	761,879	80	2	0.0250	742,832	0	78	9,523
Minnesota	0	1	95	241,052	91	1	0.0110	238,403	0	90	2,649
Mississippi	0	1	107	198,026	102	8	0.0784	182,495	0	94	1,941
Missouri	0	1	91	331,312	68	4	0.0588	311,823	0	64	4,872
Montana	0	1	65	44,096	51	1	0.0196	43,231	1	49	882

## Appendix D Derivation of Weights by State and Month

**Table D.12. (continued)**

State	Stratum	Unedited SNAP QC data				Edited SNAP QC data						Stratum-specific units weight
		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	I	
a	b	e	g	h	i	j	k	l				m
Nebraska	0	1	90	78,405	78	2	0.0256	76,395	0	76		1,005
Nevada	0	1	98	260,914	92	2	0.0217	255,242	0	90		2,836
New Hampshire	0	1	60	39,867	55	5	0.0909	36,243	0	50		725
New Jersey	0	1	91	398,140	66	22	0.3333	265,427	1	43		6,173
New Mexico	0	1	98	243,691	86	4	0.0465	232,357	0	82		2,834
New York	0	1	90	1,712,143	78	1	0.0128	1,690,192	0	77		21,951
North Carolina	0	1	110	825,189	96	1	0.0104	816,593	1	94		8,687
North Dakota	0	1	37	22,730	32	1	0.0313	22,020	0	31		710
Ohio	0	1	92	741,584	80	1	0.0125	732,314	0	79		9,270
Oklahoma	0	1	109	331,150	95	3	0.0316	320,693	2	90		3,563
Oregon	0	1	85	423,226	67	1	0.0149	416,909	1	65		6,414
Pennsylvania	0	1	92	1,022,512	76	5	0.0658	955,241	0	71		13,454
Rhode Island	0	1	92	87,920	84	5	0.0595	82,687	0	79		1,047
South Carolina	0	1	92	307,281	69	5	0.0725	285,014	2	62		4,597
South Dakota	0	1	54	34,448	54	0	0.0000	34,448	0	54		638
Tennessee	0	1	102	409,916	92	9	0.0978	369,816	0	83		4,456
Texas	0	1	104	1,536,758	68	1	0.0147	1,514,159	0	67		22,599
Utah	0	1	100	80,129	94	2	0.0213	78,424	0	92		852
Vermont	0	1	65	41,701	59	1	0.0169	40,994	0	58		707
Virginia	0	1	89	441,358	70	2	0.0286	428,748	0	68		6,305
Washington	0	1	88	514,944	62	2	0.0323	498,333	2	58		8,592
West Virginia	0	1	93	164,564	75	6	0.0800	151,399	0	69		2,194
Wisconsin	0	1	102	372,555	99	1	0.0101	368,792	1	97		3,802
Wyoming	0	1	28	14,700	24	1	0.0417	14,088	0	23		613
Guam	0	1	24	13,338	12	1	0.0833	12,227	0	11		1,112
Virgin Islands	0	1	25	10,636	22	0	0.0000	10,636	0	22		483

## Appendix D Derivation of Weights by State and Month

**Table D.13. Stratification and weight calculation by State, April 2023**

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
		a	b			g	h				
Alabama	0	1	101	390,798	91	1	0.0110	386,504	1	89	4,343
Alaska	0	1	41	27,132	36	18	0.5000	13,566	0	18	754
Arizona	0	1	101	429,760	82	1	0.0122	424,519	1	80	5,306
Arkansas	0	1	88	125,930	62	1	0.0161	123,899	0	61	2,031
California	0	1	109	2,963,816	70	2	0.0286	2,879,136	0	68	42,340
Colorado	0	1	93	299,109	74	1	0.0135	295,067	0	73	4,042
Connecticut	0	1	102	229,315	86	6	0.0698	213,316	1	79	2,700
Delaware	0	1	86	58,951	61	2	0.0328	57,018	0	59	966
District of Columbia	0	1	100	82,533	85	1	0.0118	81,562	0	84	971
Florida	0	1	112	1,673,618	81	3	0.0370	1,611,632	0	78	20,662
Georgia	0	1	97	750,630	78	1	0.0128	741,007	1	76	9,750
Hawaii	0	1	84	83,110	50	4	0.0800	76,461	0	46	1,662
Idaho	0	1	119	62,197	90	1	0.0111	61,506	1	88	699
Illinois	0	1	89	1,077,067	68	1	0.0147	1,061,228	0	67	15,839
Indiana	0	1	96	281,556	78	2	0.0256	274,337	0	76	3,610
Iowa	0	1	96	130,786	90	0	0.0000	130,786	0	90	1,453
Kansas	0	1	86	92,555	76	5	0.0658	86,466	0	71	1,218
Kentucky	0	1	97	260,140	90	0	0.0000	260,140	0	90	2,890
Louisiana	0	1	90	447,581	78	0	0.0000	447,581	1	77	5,813
Maine	0	1	91	96,345	81	2	0.0247	93,966	0	79	1,189
Maryland	0	1	98	367,832	66	2	0.0303	356,686	0	64	5,573
Massachusetts	0	1	95	660,465	79	2	0.0253	643,744	0	77	8,360
Michigan	0	1	95	756,965	79	2	0.0253	737,801	0	77	9,582
Minnesota	0	1	96	231,901	91	1	0.0110	229,353	0	90	2,548
Mississippi	0	1	106	196,930	104	7	0.0673	183,675	0	97	1,894
Missouri	0	1	90	328,021	65	9	0.1385	282,603	0	56	5,046
Montana	0	1	64	43,759	46	1	0.0217	42,808	1	44	973

## Appendix D Derivation of Weights by State and Month

**Table D.13. (continued)**

State	Stratum	Unedited SNAP QC data				Edited SNAP QC data						Stratum-specific units weight
		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	l	
a	b	e	g	h	i	j	k	l	m			
Nebraska	0	1	89	77,637	77	2	0.0260	75,620	0	75		1,008
Nevada	0	1	96	255,871	88	2	0.0227	250,056	0	86		2,908
New Hampshire	0	1	61	40,498	50	2	0.0400	38,878	0	48		810
New Jersey	0	1	93	396,304	72	22	0.3056	275,211	0	50		5,504
New Mexico	0	1	98	249,378	88	4	0.0455	238,043	0	84		2,834
New York	0	1	90	1,683,932	77	7	0.0909	1,530,847	0	70		21,869
North Carolina	0	1	110	815,928	99	5	0.0505	774,720	0	94		8,242
North Dakota	0	1	37	22,355	34	2	0.0588	21,040	0	32		658
Ohio	0	1	91	724,626	79	5	0.0633	678,764	0	74		9,172
Oklahoma	0	1	109	330,588	92	3	0.0326	319,808	1	88		3,634
Oregon	0	1	96	425,672	76	5	0.0658	397,667	0	71		5,601
Pennsylvania	0	1	92	1,027,204	74	2	0.0270	999,442	0	72		13,881
Rhode Island	0	1	92	88,071	84	4	0.0476	83,877	0	80		1,048
South Carolina	0	1	93	308,873	76	12	0.1579	260,104	1	63		4,129
South Dakota	0	1	54	34,560	51	0	0.0000	34,560	0	51		678
Tennessee	0	1	98	395,203	78	9	0.1154	349,603	0	69		5,067
Texas	0	1	103	1,518,696	63	5	0.0794	1,398,165	0	58		24,106
Utah	0	1	100	81,219	90	3	0.0333	78,512	0	87		902
Vermont	0	1	64	41,503	62	0	0.0000	41,503	0	62		669
Virginia	0	1	89	439,798	73	1	0.0137	433,773	0	72		6,025
Washington	0	1	87	513,141	71	0	0.0000	513,141	2	69		7,437
West Virginia	0	1	93	163,376	60	3	0.0500	155,207	0	57		2,723
Wisconsin	0	1	101	369,824	95	1	0.0105	365,931	0	94		3,893
Wyoming	0	1	27	14,482	26	2	0.0769	13,368	0	24		557
Guam	0	1	25	13,696	19	1	0.0526	12,975	0	18		721
Virgin Islands	0	1	25	10,298	24	3	0.1250	9,011	0	21		429

## Appendix D Derivation of Weights by State and Month

**Table D.14. Stratification and weight calculation by State, May 2023**

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
		a	b			g	h				
Alabama	0	1	101	390,591	89	0	0.0000	390,591	2	87	4,490
Alaska	0	1	45	29,400	41	16	0.3902	17,927	0	25	717
Arizona	0	1	102	437,155	85	3	0.0353	421,726	0	82	5,143
Arkansas	0	1	90	117,197	72	4	0.0556	110,686	1	67	1,652
California	0	1	110	2,992,749	71	7	0.0986	2,697,689	0	64	42,151
Colorado	0	1	94	303,347	77	0	0.0000	303,347	0	77	3,940
Connecticut	0	1	103	230,890	83	2	0.0241	225,326	2	79	2,852
Delaware	0	1	48	59,762	36	2	0.0556	56,442	0	34	1,660
District of Columbia	0	1	101	82,628	82	1	0.0122	81,620	0	81	1,008
Florida	0	1	111	1,682,373	91	3	0.0330	1,626,910	0	88	18,488
Georgia	0	1	94	730,943	78	0	0.0000	730,943	0	78	9,371
Hawaii	0	1	85	83,662	45	3	0.0667	78,085	0	42	1,859
Idaho	0	1	119	62,480	82	0	0.0000	62,480	1	81	771
Illinois	0	1	91	1,089,246	76	1	0.0132	1,074,914	0	75	14,332
Indiana	0	1	97	282,324	86	3	0.0349	272,475	0	83	3,283
Iowa	0	1	97	130,561	92	2	0.0217	127,723	0	90	1,419
Kansas	0	1	87	94,005	81	6	0.0741	87,042	0	75	1,161
Kentucky	0	1	97	256,061	94	1	0.0106	253,337	0	93	2,724
Louisiana	0	1	89	440,152	75	1	0.0133	434,283	0	74	5,869
Maine	0	1	91	97,149	83	4	0.0482	92,467	0	79	1,170
Maryland	0	1	97	366,047	64	4	0.0625	343,169	0	60	5,719
Massachusetts	0	1	95	663,065	76	1	0.0132	654,340	0	75	8,725
Michigan	0	1	95	763,299	81	1	0.0123	753,876	0	80	9,423
Minnesota	0	1	95	234,608	91	1	0.0110	232,030	0	90	2,578
Mississippi	0	1	107	197,476	103	2	0.0194	193,642	0	101	1,917
Missouri	0	1	90	325,977	64	6	0.0938	295,417	1	57	5,183
Montana	0	1	64	43,581	43	1	0.0233	42,567	0	42	1,014

## Appendix D Derivation of Weights by State and Month

**Table D.14. (continued)**

Unedited SNAP QC data				Edited SNAP QC data								Stratum-specific units weight
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 sampling size	
		a	b			g	h	i	j	k	l	m
Nebraska	0	1	89	77,457	76	0	0.0000	77,457	0	76	76	1,019
Nevada	0	1	98	259,584	88	3	0.0341	250,735	0	85	85	2,950
New Hampshire	0	1	63	41,171	58	4	0.0690	38,332	0	54	54	710
New Jersey	0	1	92	400,906	63	12	0.1905	324,543	1	50	50	6,491
New Mexico	0	1	98	252,954	87	1	0.0115	250,046	0	86	86	2,908
New York	0	1	90	1,688,210	78	7	0.0897	1,536,704	0	71	71	21,644
North Carolina	0	1	109	817,920	99	2	0.0202	801,396	1	96	96	8,348
North Dakota	0	1	38	22,775	35	4	0.1143	20,172	0	31	31	651
Ohio	0	1	92	722,260	78	2	0.0256	703,741	0	76	76	9,260
Oklahoma	0	1	110	359,468	101	0	0.0000	359,468	0	101	101	3,559
Oregon	0	1	96	426,261	70	4	0.0571	401,903	0	66	66	6,089
Pennsylvania	0	1	93	1,031,944	73	3	0.0411	989,535	0	70	70	14,136
Rhode Island	0	1	93	88,358	86	3	0.0349	85,276	0	83	83	1,027
South Carolina	0	1	95	312,865	85	19	0.2235	242,930	0	66	66	3,681
South Dakota	0	1	54	34,624	53	2	0.0377	33,317	1	50	50	666
Tennessee	0	1	98	399,417	81	6	0.0741	369,831	0	75	75	4,931
Texas	0	1	102	1,499,436	71	0	0.0000	1,499,436	0	71	71	21,119
Utah	0	1	100	78,559	86	2	0.0233	76,732	0	84	84	913
Vermont	0	1	59	41,434	56	2	0.0357	39,954	0	54	54	740
Virginia	0	1	89	440,221	64	3	0.0469	419,586	1	60	60	6,993
Washington	0	1	90	510,191	67	1	0.0149	502,576	0	66	66	7,615
West Virginia	0	1	93	162,281	69	3	0.0435	155,225	0	66	66	2,352
Wisconsin	0	1	102	370,110	97	1	0.0103	366,294	0	96	96	3,816
Wyoming	0	1	27	14,365	25	1	0.0400	13,790	0	24	24	575
Guam	0	1	24	13,478	16	1	0.0625	12,636	0	15	15	842
Virgin Islands	0	1	25	10,470	22	0	0.0000	10,470	0	22	22	476

## Appendix D Derivation of Weights by State and Month

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**Table D.15. Stratification and weight calculation by State, June 2023**

State	Stratum	Unedited SNAP QC data			Edited SNAP QC data							Stratum-specific units weight
		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 sampling size	
		a	b	e	g	h	i	j	k	l	m	
Alabama	0	1	102	391,627	91	4	0.0440	374,413	0	87	4,304	
Alaska	0	1	47	30,208	45	18	0.4000	18,125	0	27	671	
Arizona	0	1	102	444,993	70	0	0.0000	444,993	0	70	6,357	
Arkansas	0	1	89	118,281	65	4	0.0615	111,002	2	59	1,881	
California	0	1	110	3,020,436	72	2	0.0278	2,936,535	0	70	41,951	
Colorado	0	1	94	304,068	73	2	0.0274	295,737	0	71	4,165	
Connecticut	0	1	103	231,610	88	1	0.0114	228,978	0	87	2,632	
Delaware	0	1	79	60,331	51	2	0.0392	57,965	0	49	1,183	
District of Columbia	0	1	101	82,613	83	1	0.0120	81,618	0	82	995	
Florida	0	1	109	1,645,859	90	5	0.0556	1,554,422	2	83	18,728	
Georgia	0	1	94	731,546	88	0	0.0000	731,546	1	87	8,409	
Hawaii	0	1	86	84,241	50	3	0.0600	79,187	0	47	1,685	
Idaho	0	1	118	62,706	83	2	0.0241	61,195	0	81	755	
Illinois	0	1	90	1,087,031	74	1	0.0135	1,072,341	0	73	14,690	
Indiana	0	1	98	285,018	85	4	0.0471	271,605	0	81	3,353	
Iowa	0	1	96	130,934	88	0	0.0000	130,934	0	88	1,488	
Kansas	0	1	88	95,008	81	2	0.0247	92,662	0	79	1,173	
Kentucky	0	1	96	254,969	90	3	0.0333	246,470	0	87	2,833	
Louisiana	0	1	91	440,436	75	2	0.0267	428,691	3	70	6,124	
Maine	0	1	92	97,783	78	2	0.0256	95,276	0	76	1,254	
Maryland	0	1	99	365,213	72	6	0.0833	334,779	0	66	5,072	
Massachusetts	0	1	97	663,150	78	2	0.0256	646,146	0	76	8,502	
Michigan	0	1	96	762,709	85	0	0.0000	762,709	0	85	8,973	
Minnesota	0	1	97	234,645	94	3	0.0319	227,156	0	91	2,496	
Mississippi	0	1	109	201,107	106	5	0.0472	191,621	1	100	1,916	
Missouri	0	1	90	326,361	70	6	0.0857	298,387	0	64	4,662	
Montana	0	1	64	43,509	47	1	0.0213	42,583	1	45	946	

## Appendix D Derivation of Weights by State and Month

**Table D.15. (continued)**

State	Stratum	Unedited SNAP QC data			Edited SNAP QC data							Stratum-specific units weight
		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 sampling size	
		a	b	e	g	h	i	j	k	l	m	
Nebraska	0	1	90	77,619	82	3	0.0366	74,779	0	79	947	
Nevada	0	1	99	262,890	89	3	0.0337	254,029	0	86	2,954	
New Hampshire	0	1	63	41,837	57	3	0.0526	39,635	0	54	734	
New Jersey	0	1	94	402,651	65	14	0.2154	315,926	0	51	6,195	
New Mexico	0	1	98	250,170	90	5	0.0556	236,272	1	84	2,813	
New York	0	1	90	1,679,975	78	5	0.0641	1,572,284	1	72	21,837	
North Carolina	0	1	108	809,315	98	3	0.0306	784,540	0	95	8,258	
North Dakota	0	1	37	22,938	35	2	0.0571	21,627	0	33	655	
Ohio	0	1	92	725,598	80	2	0.0250	707,458	0	78	9,070	
Oklahoma	0	1	110	334,495	94	1	0.0106	330,937	1	92	3,597	
Oregon	0	1	96	425,365	68	3	0.0441	406,599	0	65	6,255	
Pennsylvania	0	1	93	1,035,552	74	4	0.0541	979,576	0	70	13,994	
Rhode Island	0	1	94	88,547	85	1	0.0118	87,505	0	84	1,042	
South Carolina	0	1	94	311,114	81	23	0.2840	222,773	2	56	3,978	
South Dakota	0	1	55	34,684	53	1	0.0189	34,030	0	52	654	
Tennessee	0	1	102	386,494	84	4	0.0476	368,090	1	79	4,659	
Texas	0	1	101	1,481,741	72	1	0.0139	1,461,161	0	71	20,580	
Utah	0	1	101	79,489	92	3	0.0326	76,897	0	89	864	
Vermont	0	1	59	41,217	55	0	0.0000	41,217	0	55	749	
Virginia	0	1	89	435,555	60	2	0.0333	421,037	0	58	7,259	
Washington	0	1	89	508,714	72	0	0.0000	508,714	2	70	7,267	
West Virginia	0	1	91	158,676	69	4	0.0580	149,477	0	65	2,300	
Wisconsin	0	1	101	369,339	96	1	0.0104	365,492	0	95	3,847	
Wyoming	0	1	27	14,346	24	1	0.0417	13,748	0	23	598	
Guam	0	1	23	12,978	16	1	0.0625	12,167	0	15	811	
Virgin Islands	0	1	24	10,423	21	1	0.0476	9,927	0	20	496	

## Appendix D Derivation of Weights by State and Month

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**Table D.16. Stratification and weight calculation by State, July 2023**

State	Stratum	Unedited SNAP QC data			Edited SNAP QC data							Stratum-specific units weight
		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		
		a	b	e	g	h	i	j	k	l	m	
Alabama	0	1	101	389,675	89	1	0.0112	385,297	0	88	4,378	
Alaska	0	1	48	30,581	43	23	0.5349	14,224	0	20	711	
Arizona	0	1	104	449,978	81	3	0.0370	433,312	0	78	5,555	
Arkansas	0	1	87	125,165	72	2	0.0278	121,688	1	69	1,764	
California	0	1	112	3,006,998	86	3	0.0349	2,902,103	0	83	34,965	
Colorado	0	1	94	301,621	80	2	0.0250	294,080	0	78	3,770	
Connecticut	0	1	103	231,540	79	4	0.0506	219,816	1	74	2,970	
Delaware	0	1	0	59,297	0	0	0.0000	0	0	0	0	
District of Columbia	0	1	102	83,514	87	2	0.0230	81,594	0	85	960	
Florida	0	1	95	1,595,894	69	5	0.0725	1,480,250	0	64	23,129	
Georgia	0	1	98	738,282	85	3	0.0353	712,225	0	82	8,686	
Hawaii	0	1	85	83,772	47	3	0.0638	78,425	0	44	1,782	
Idaho	0	1	118	62,456	92	0	0.0000	62,456	0	92	679	
Illinois	0	1	91	1,096,090	76	2	0.0263	1,067,246	0	74	14,422	
Indiana	0	1	98	285,100	82	0	0.0000	285,100	0	82	3,477	
Iowa	0	1	95	129,410	84	1	0.0119	127,869	0	83	1,541	
Kansas	0	1	88	94,832	83	5	0.0602	89,119	0	78	1,143	
Kentucky	0	1	95	251,348	87	1	0.0115	248,459	0	86	2,889	
Louisiana	0	1	89	428,870	74	0	0.0000	428,870	0	74	5,796	
Maine	0	1	92	97,983	80	4	0.0500	93,084	0	76	1,225	
Maryland	0	1	97	359,957	71	6	0.0845	329,538	0	65	5,070	
Massachusetts	0	1	95	664,241	85	1	0.0118	656,426	0	84	7,815	
Michigan	0	1	96	781,796	81	1	0.0123	772,144	0	80	9,652	
Minnesota	0	1	97	234,501	90	2	0.0222	229,290	0	88	2,606	
Mississippi	0	1	109	202,146	101	3	0.0297	196,142	0	98	2,001	
Missouri	0	1	89	325,926	67	4	0.0597	306,468	0	63	4,865	
Montana	0	1	63	42,618	54	2	0.0370	41,040	0	52	789	

## Appendix D Derivation of Weights by State and Month

**Table D.16. (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
		a	b								
Nebraska	0	1	88	76,787	80	2	0.0250	74,867	0	78	960
Nevada	0	1	100	264,832	93	1	0.0108	261,984	0	92	2,848
New Hampshire	0	1	63	41,593	61	6	0.0984	37,502	0	55	682
New Jersey	0	1	93	409,973	71	14	0.1972	329,133	0	57	5,774
New Mexico	0	1	98	253,571	88	6	0.0682	236,282	0	82	2,881
New York	0	1	90	1,674,290	76	4	0.0526	1,586,169	0	72	22,030
North Carolina	0	1	106	791,508	96	1	0.0104	783,263	1	94	8,333
North Dakota	0	1	38	22,786	32	1	0.0313	22,074	0	31	712
Ohio	0	1	91	721,796	70	2	0.0286	701,173	0	68	10,311
Oklahoma	0	1	110	350,469	94	2	0.0213	343,012	0	92	3,728
Oregon	0	1	94	423,223	68	4	0.0588	398,328	0	64	6,224
Pennsylvania	0	1	93	1,037,777	70	4	0.0571	978,475	0	66	14,825
Rhode Island	0	1	92	88,319	81	0	0.0000	88,319	0	81	1,090
South Carolina	0	1	93	306,624	80	21	0.2625	226,135	1	57	3,967
South Dakota	0	1	55	35,106	51	3	0.0588	33,041	0	48	688
Tennessee	0	1	104	376,884	84	4	0.0476	358,937	0	80	4,487
Texas	0	1	101	1,490,259	81	1	0.0123	1,471,861	0	80	18,398
Utah	0	1	101	79,330	90	6	0.0667	74,041	0	84	881
Vermont	0	1	59	40,758	57	0	0.0000	40,758	0	57	715
Virginia	0	1	89	429,956	65	0	0.0000	429,956	1	64	6,718
Washington	0	1	89	505,380	74	2	0.0270	491,721	1	71	6,926
West Virginia	0	1	89	156,146	75	1	0.0133	154,064	0	74	2,082
Wisconsin	0	1	101	368,616	95	1	0.0105	364,736	1	93	3,922
Wyoming	0	1	26	14,003	23	1	0.0435	13,394	0	22	609
Guam	0	1	23	12,871	14	2	0.1429	11,032	0	12	919
Virgin Islands	0	1	25	10,465	23	0	0.0000	10,465	0	23	455

## Appendix D Derivation of Weights by State and Month

**Table D.17. Stratification and weight calculation by State, August 2023**

State	Stratum	Unedited SNAP QC data			Edited SNAP QC data							Stratum-specific units weight
		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		
a	b	e	g	h	i	j	k	l	m			
Alabama	0	1	101	390,384	98	0	0.0000	390,384	0	98	3,984	
Alaska	0	1	45	30,106	42	26	0.6190	11,469	0	16	717	
Arizona	0	1	105	455,642	78	0	0.0000	455,642	0	78	5,842	
Arkansas	0	1	89	125,557	74	3	0.0405	120,467	0	71	1,697	
California	0	1	112	3,044,879	77	3	0.0390	2,926,247	0	74	39,544	
Colorado	0	1	94	303,213	77	1	0.0130	299,275	1	75	3,990	
Connecticut	0	1	103	229,978	89	1	0.0112	227,394	0	88	2,584	
Delaware	0	1	0	60,327	0	0	0.0000	0	0	0	0	
District of Columbia	0	1	100	83,316	78	3	0.0385	80,112	0	75	1,068	
Florida	0	1	100	1,656,336	75	1	0.0133	1,634,252	0	74	22,084	
Georgia	0	1	108	733,035	94	1	0.0106	725,237	0	93	7,798	
Hawaii	0	1	85	84,403	49	1	0.0204	82,680	0	48	1,723	
Idaho	0	1	118	62,165	91	2	0.0220	60,799	1	88	691	
Illinois	0	1	89	1,115,021	77	1	0.0130	1,100,540	0	76	14,481	
Indiana	0	1	99	288,578	90	2	0.0222	282,165	0	88	3,206	
Iowa	0	1	96	129,790	88	0	0.0000	129,790	0	88	1,475	
Kansas	0	1	101	94,686	88	6	0.0682	88,230	0	82	1,076	
Kentucky	0	1	96	249,009	95	8	0.0842	228,040	0	87	2,621	
Louisiana	0	1	87	423,135	76	0	0.0000	423,135	1	75	5,642	
Maine	0	1	93	98,014	79	5	0.0633	91,811	1	73	1,258	
Maryland	0	1	98	365,779	66	7	0.1061	326,984	0	59	5,542	
Massachusetts	0	1	94	665,300	78	1	0.0128	656,771	0	77	8,529	
Michigan	0	1	96	776,761	83	1	0.0120	767,402	0	82	9,359	
Minnesota	0	1	96	234,920	91	1	0.0110	232,338	0	90	2,582	
Mississippi	0	1	109	203,055	104	4	0.0385	195,245	0	100	1,952	
Missouri	0	1	91	329,896	73	7	0.0959	298,262	0	66	4,519	
Montana	0	1	70	42,389	58	1	0.0172	41,658	1	56	744	

## Appendix D Derivation of Weights by State and Month

**Table D.17. (continued)**

State	Stratum	Unedited SNAP QC data			Edited SNAP QC data							Stratum-specific units weight
		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		
a	b	e	g	h	i	j	k	l	m			
Nebraska	0	1	95	76,926	88	3	0.0341	74,304	1	84	885	
Nevada	0	1	101	267,529	93	0	0.0000	267,529	0	93	2,877	
New Hampshire	0	1	64	42,187	62	1	0.0161	41,507	0	61	680	
New Jersey	0	1	93	412,980	67	19	0.2836	295,866	1	47	6,295	
New Mexico	0	1	98	249,255	86	7	0.0814	228,967	1	78	2,935	
New York	0	1	90	1,664,204	76	2	0.0263	1,620,409	0	74	21,897	
North Carolina	0	1	103	772,737	85	2	0.0235	754,555	0	83	9,091	
North Dakota	0	1	49	23,234	43	1	0.0233	22,694	0	42	540	
Ohio	0	1	92	721,467	82	3	0.0366	695,072	0	79	8,798	
Oklahoma	0	1	110	334,487	97	2	0.0206	327,590	5	90	3,640	
Oregon	0	1	96	425,816	65	2	0.0308	412,714	0	63	6,551	
Pennsylvania	0	1	95	1,044,539	80	4	0.0500	992,312	0	76	13,057	
Rhode Island	0	1	93	88,618	88	1	0.0114	87,611	0	87	1,007	
South Carolina	0	1	92	306,343	80	17	0.2125	241,245	0	63	3,829	
South Dakota	0	1	56	35,650	53	0	0.0000	35,650	0	53	673	
Tennessee	0	1	102	367,273	85	6	0.0706	341,348	0	79	4,321	
Texas	0	1	101	1,498,776	66	0	0.0000	1,498,776	0	66	22,709	
Utah	0	1	102	80,982	88	3	0.0341	78,221	0	85	920	
Vermont	0	1	58	40,558	50	0	0.0000	40,558	0	50	811	
Virginia	0	1	89	433,136	58	2	0.0345	418,200	0	56	7,468	
Washington	0	1	89	503,717	75	1	0.0133	497,001	1	73	6,808	
West Virginia	0	1	89	156,757	74	3	0.0405	150,402	0	71	2,118	
Wisconsin	0	1	101	370,119	92	1	0.0109	366,096	0	91	4,023	
Wyoming	0	1	27	14,118	24	0	0.0000	14,118	0	24	588	
Guam	0	1	24	12,105	15	0	0.0000	12,105	0	15	807	
Virgin Islands	0	1	22	10,653	20	0	0.0000	10,653	0	20	533	

## Appendix D Derivation of Weights by State and Month

**Table D.18. Stratification and weight calculation by State, September 2023**

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
		a	b	e	g	h	i	j	k	l	m
Alabama	0	1	101	388,962	91	0	0.0000	388,962	0	91	4,274
Alaska	0	1	43	27,367	40	22	0.5500	12,315	0	18	684
Arizona	0	1	106	457,284	79	2	0.0253	445,707	0	77	5,788
Arkansas	0	1	89	126,966	72	3	0.0417	121,676	0	69	1,763
California	0	1	113	3,043,657	85	6	0.0706	2,828,811	0	79	35,808
Colorado	0	1	94	301,849	72	0	0.0000	301,849	0	72	4,192
Connecticut	0	1	102	229,063	84	0	0.0000	229,063	0	84	2,727
Delaware	0	1	0	58,627	0	0	0.0000	0	0	0	0
District of Columbia	0	1	109	82,955	85	3	0.0353	80,027	0	82	976
Florida	0	1	101	1,678,703	75	1	0.0133	1,656,320	0	74	22,383
Georgia	0	1	103	716,871	91	0	0.0000	716,871	0	91	7,878
Hawaii	0	1	90	88,433	44	1	0.0227	86,423	0	43	2,010
Idaho	0	1	118	62,339	96	0	0.0000	62,339	1	95	656
Illinois	0	1	89	1,069,780	75	2	0.0267	1,041,253	0	73	14,264
Indiana	0	1	99	288,751	87	2	0.0230	282,113	0	85	3,319
Iowa	0	1	94	128,841	90	0	0.0000	128,841	0	90	1,432
Kansas	0	1	101	94,268	92	5	0.0543	89,145	0	87	1,025
Kentucky	0	1	96	252,980	92	9	0.0978	228,232	0	83	2,750
Louisiana	0	1	88	421,678	72	0	0.0000	421,678	0	72	5,857
Maine	0	1	93	98,003	85	5	0.0588	92,238	0	80	1,153
Maryland	0	1	96	366,217	72	8	0.1111	325,526	1	63	5,167
Massachusetts	0	1	95	666,841	77	3	0.0390	640,860	0	74	8,660
Michigan	0	1	95	769,130	81	2	0.0247	750,139	0	79	9,495
Minnesota	0	1	95	232,663	88	0	0.0000	232,663	0	88	2,644
Mississippi	0	1	110	203,367	104	3	0.0288	197,501	0	101	1,955
Missouri	0	1	91	332,154	68	4	0.0588	312,616	0	64	4,885
Montana	0	1	69	42,038	58	0	0.0000	42,038	0	58	725

## Appendix D Derivation of Weights by State and Month

**Table D.18. (continued)**

State	Stratum	Unedited SNAP QC data			Edited SNAP QC data						
		Sampling interval	Stratum sampling size	SNAP units in State (program ops data)	Units with complete reviews	Ineligible units	Disqualification rate	Adjusted SNAP units in State	Failing units	Stratum sampling size	Stratum-specific units weight
a	b	e	g	h	i	j	k	l	m		
Nebraska	0	1	94	76,543	87	1	0.0115	75,663	0	86	880
Nevada	0	1	100	268,386	88	0	0.0000	268,386	0	88	3,050
New Hampshire	0	1	64	42,214	61	4	0.0656	39,446	0	57	692
New Jersey	0	1	94	411,310	69	24	0.3478	268,246	0	45	5,961
New Mexico	0	1	98	245,810	87	5	0.0575	231,683	0	82	2,825
New York	0	1	90	1,647,898	76	4	0.0526	1,561,167	0	72	21,683
North Carolina	0	1	101	762,168	89	3	0.0337	736,477	0	86	8,564
North Dakota	0	1	48	23,090	41	1	0.0244	22,527	0	40	563
Ohio	0	1	91	721,159	79	1	0.0127	712,030	0	78	9,129
Oklahoma	0	1	111	350,664	103	2	0.0194	343,855	7	94	3,658
Oregon	0	1	96	427,940	71	4	0.0563	403,831	0	67	6,027
Pennsylvania	0	1	94	1,044,530	74	5	0.0676	973,954	0	69	14,115
Rhode Island	0	1	93	88,644	81	0	0.0000	88,644	0	81	1,094
South Carolina	0	1	91	298,469	80	10	0.1250	261,160	0	70	3,731
South Dakota	0	1	57	35,925	55	2	0.0364	34,619	0	53	653
Tennessee	0	1	161	358,791	133	4	0.0301	348,000	0	129	2,698
Texas	0	1	101	1,471,572	62	1	0.0161	1,447,837	0	61	23,735
Utah	0	1	102	80,362	92	2	0.0217	78,615	0	90	874
Vermont	0	1	58	40,305	52	0	0.0000	40,305	0	52	775
Virginia	0	1	89	429,869	65	2	0.0308	416,642	0	63	6,613
Washington	0	1	88	502,747	65	1	0.0154	495,012	0	64	7,735
West Virginia	0	1	89	148,073	71	5	0.0704	137,645	0	66	2,086
Wisconsin	0	1	102	370,336	93	0	0.0000	370,336	1	92	4,025
Wyoming	0	1	27	13,993	24	1	0.0417	13,410	0	23	583
Guam	0	1	24	12,033	8	0	0.0000	12,033	0	8	1,504
Virgin Islands	0	1	14	10,653	14	0	0.0000	10,653	0	14	761

## **APPENDIX E**

### **State and Region Codes**

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

<b>State</b>	<b>FIPS code</b>	<b>State</b>	<b>FIPS code</b>
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)**

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

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

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

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

Source: U.S. Census Bureau.

## **APPENDIX F**

### **FY 2023 SNAP Parameters**

**Table F.1. SNAP gross income screen, FY 2023**

Unit size	Gross income screen (dollars per month)		
	Contiguous United States, Guam, and the Virgin Islands	Alaska	Hawaii
1	1,473	1,841	1,694
2	1,984	2,480	2,282
3	2,495	3,119	2,870
4	3,007	3,759	3,458
5	3,518	4,398	4,047
6	4,029	5,037	4,635
7	4,541	5,676	5,223
8	5,052	6,315	5,811
Each additional person	+512	+640	+589

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

Note: The FY 2023 SNAP gross monthly income limits were based on the 2022 Federal poverty guidelines issued by the U.S. Department of Health and Human Services. FNS derived the FY 2023 gross income limits by multiplying the 2022 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 2023**

Unit size	Net income screen (dollars per month)		
	Contiguous United States, Guam, and the Virgin Islands	Alaska	Hawaii
1	1,133	1,416	1,303
2	1,526	1,908	1,755
3	1,920	2,400	2,208
4	2,313	2,891	2,660
5	2,706	3,383	3,113
6	3,100	3,875	3,565
7	3,493	4,366	4,018
8	3,886	4,858	4,470
Each additional person	+394	+492	+453

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

Note: The FY 2023 SNAP net monthly income limits were based on the 2022 Federal poverty guidelines issued by the U.S. Department of Health and Human Services. FNS derived the FY 2023 net income limits by dividing the 2022 poverty guidelines by 12 and rounding up to the nearest dollar.

**Table F.3. Deduction amounts, FY 2023**

Deduction	Contiguous United States	Alaska	Hawaii	Guam	Virgin Islands
Standard deduction (dollars)					
1 to 2 people	193	330	272	387	170
3 people	193	330	272	387	170
4 people	193	330	272	387	192
5 people	225	330	272	450	225
6 or more people	258	330	296	515	258
Maximum excess shelter expense deduction (dollars)	624	996	840	732	492
Homeless household shelter deduction (dollars) <sup>a</sup>	166.81	166.81	166.81	166.81	166.81
Earned income 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 is 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 for SSI-CAP units receiving a standard SSI-CAP benefit. 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.

<sup>a</sup>Because only whole dollar amounts are recorded in the SNAP QC data, the homeless household shelter deduction was either rounded up to \$167 or rounded down to \$166.

**Table F.4. Standard medical deduction demonstration, FY 2023**

State	If medical expenses are less than or equal to (dollars)	Then medical expense deduction is <sup>a</sup> (dollars)
Alabama	175	140
Arizona		
10/2022–7/2023	160	125
8/2023–9/2023	180	145
Arkansas	138	103
California	155	120
Colorado	200	165
Georgia	136	101
Idaho	179	144
Illinois <sup>b</sup>	185	150
Iowa	160	125
Kansas	175	140
Louisiana <sup>c</sup>	196	161
Massachusetts	190	155
Michigan	200	165
Missouri	170	135
New Hampshire	150	115
North Dakota	175	140
Oregon	205	170
Rhode Island	218	183
South Carolina	210	175
South Dakota	215	180
Texas	170	135
Vermont	191	156
Virginia	235	200
Wyoming	138	103

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

<sup>a</sup> If medical expenses exceed the amount in Column 2, the medical expense deduction is equal to the actual medical expenses minus \$35.

<sup>b</sup> In Illinois, the standard medical deduction for residents of group homes or supportive living facilities was \$450.

<sup>c</sup> Louisiana implemented its program in April 2023.

**Table F.5. Maximum monthly SNAP benefit, FY 2023**

Unit size	Maximum SNAP benefit (dollars)						
	Contiguous United States	Alaska Urban	Alaska Rural I	Alaska Rural II	Hawaii	Guam	Virgin Islands
1	281	351	448	545	538	415	362
2	516	644	822	1,000	987	761	664
3	740	923	1,177	1,432	1,413	1,090	951
4	939	1,172	1,494	1,819	1,794	1,385	1,208
5	1,116	1,391	1,774	2,160	2,131	1,644	1,434
6	1,339	1,670	2,129	2,592	2,557	1,973	1,721
7	1,480	1,846	2,354	2,865	2,826	2,181	1,903
8	1,691	2,109	2,690	3,274	3,230	2,493	2,174
Each additional person	+211	+264	+336	+409	+404	+312	+272

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 2022 for a reference family of four, rounded to the lowest dollar increment.

**Table F.6. Minimum monthly SNAP benefit, FY 2023**

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	23	28	36	44	43	33	29

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, rounded to the nearest dollar increment.

**Table F.7. Standard utility allowances, FY 2023**

State	Standard utility allowances (dollars)							
	HCSUA <sup>a</sup>	LUA <sup>b</sup>	Telephone allowance <sup>c</sup>	Electricity <sup>d</sup>	Water <sup>d</sup>	Sewer <sup>d</sup>	Trash <sup>d</sup>	Other standards <sup>e</sup>
Alabama	571	413	50					
Alaska <sup>f</sup>								
Central	385		15	110	56	55	30	119
Southeast	391		17	83	42	68	24	157
Southcentral	467		20	135	40	63	41	168
Northern	598		18	149	37	37	33	324
Southwest	772		15	175	91	49	12	430
Northwest	865		31	163	60	51	40	520
Arizona								
1 to 3 people	325	143	47					
4 or more people	441	192	47					
Arkansas	306	245	50					
California	560	150	18					
Colorado	531	338	86	64	64	64	64	
Connecticut	921	406	34					
Delaware	545	374	34	75	75	75	75	75
District of Columbia	345	308	72	79	79	79	79	79
Florida	376	303	44					
Georgia	379	335	46					
Hawaii								
1 person		39	298	54	95	95	298	
2 people		39	324	60	95	95	324	
3 people		39	377	66	95	95	377	
4 to 5 people		39	471	78	95	95	471	
6 people		39	556	90	95	95	556	
7 or more people		39	629	108	95	95	629	
Idaho	364	297	29	134	134	134	134	134
Illinois	626	412	81	66	66	66	66	66
Indiana								
10/2022–4/2023	447	266	32	59	59	59	59	59
5/2023–9/2023	502	274	35	60	60	60	60	60
Iowa	517	274	32					
Kansas	442	306	40					
Kentucky	347	294	46					
Louisiana								
10/2022–3/2023	414	227	74					
4/2023–9/2023	410	227	74					
Maine	1,075	363	62					

## Appendix F FY 2023 SNAP Parameters

State	Standard utility allowances (dollars)							Other standards <sup>e</sup>
	HCSUA <sup>a</sup>	LUA <sup>b</sup>	Telephone allowance <sup>c</sup>	Electricity <sup>d</sup>	Water <sup>d</sup>	Sewer <sup>d</sup>	Trash <sup>d</sup>	
Maryland								
10/2022–12/2022	431	264	40					
1/2023–9/2023	505	309	40					
Massachusetts	860	525	60					
Michigan								
10/2022–2/2023	620		30	153	104	104	25	32
3/2023–9/2023	624		30	153	104	104	25	32
Minnesota	586		55	185				
Mississippi	301	221	49					
Missouri	441	347	71	142	142	142	142	
Montana	669	229	33	196	196	196	196	
Nebraska	553	289	50	58	58	58	58	
Nevada	370	322	27	74	74	74	74	
New Hampshire	965	353	37	206				50
New Jersey	730	413	32					
New Mexico	388	120	46					
New York								
New York City	1,002	395	31					
Long Island	932	336	31					
Rest of New York	827	335	31					
North Carolina								
1 person	557	339	40					
2 people	612	372	40					
3 people	672	409	40					
4 people	732	446	40					
5 or more people	798	486	40					
North Dakota	711	253	34	220	220	220	220	220
Ohio	646	410	43	92	92	92	92	92
Oklahoma	391	336	48					
Oregon	452	355	74	57	57	57	57	57
Pennsylvania								
10/2022–2/2023	681	358	34	66	66	66	66	66
3/2023–9/2023	679	358	34	66	66	66	66	66
Rhode Island								
10/2022–4/2023	797		25					
5/2023–9/2023	800		25					
South Carolina	342	235	26					
South Dakota	850	238	54	98	98	98	98	98

## Appendix F FY 2023 SNAP Parameters

State	Standard utility allowances (dollars)							Other standards <sup>e</sup>
	HCSUA <sup>a</sup>	LUA <sup>b</sup>	Telephone allowance <sup>c</sup>	Electricity <sup>d</sup>	Water <sup>d</sup>	Sewer <sup>d</sup>	Trash <sup>d</sup>	
Tennessee								
1 person	403	169	35					
2 people	417	169	35					
3 people	433	169	35					
4 people	450	169	35					
5 people	464	169	35					
6 people	479	169	35					
7 people	493	169	35					
8 people	508	169	35					
9 people	525	169	35					
10 or more people	538	169	35					
Texas	408	372	38					
Utah	400	285	61					
Vermont	1,030	294	36					
Virginia								
1 to 3 people	374		52					
4 or more people	473		52					
Washington	462	365	59					
West Virginia	435	266		74	74	74	74	74
Wisconsin	471	322	29	140	96	96	25	38
Wyoming	456	309	55					
Guam								
1 person		28	162	38	28	30	30	38
2 to 3 people		28	186	50	28	30	30	38
4 people		28	222	69	28	30	30	77
5 people		28	252	85	28	30	30	77
6 people		28	289	111	28	30	30	77
7 people		28	328	136	28	30	30	115
8 people		28	343	150	28	30	30	115
9 people		28	367	171	28	30	30	115
10 people		28	367	171	28	30	30	115
11 or more people		28	377	178	28	30	30	115
Virgin Islands		37						

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

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

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

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

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

<sup>e</sup> A single utility standard for gas/fuel, except in New Hampshire, where it is for basic internet.

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

**Table F.8. Minnesota Family Investment Program (MFIP) benefits, FY 2023**

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	677	615	380	235
2	1,115	1,014	583	431
3	1,436	1,305	686	619
4	1,727	1,570	782	788
5	1,991	1,810	865	945
6	2,305	2,095	947	1,148
7	2,510	2,282	1,030	1,252
8	2,781	2,528	1,102	1,426
9	3,049	2,772	1,172	1,600
10	3,310	3,009	1,232	1,777
Each additional person	+260	+236	+58	+178

Source: Minnesota Department of Human Services (<https://mn.gov/dhs/people-we-serve/children-and-families/economic-assistance/income/programs-and-services/mfip.jsp>).

**Table F.9. Arizona SSI-CAP (AZSNAP) benefit criteria, FY 2023**

Shelter expenses	Benefit (dollars)
\$0 to \$99	97
\$100 to \$199	137
\$200 to \$299	172
\$300 or greater	222

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

**Table F.10. Kentucky SSI-CAP (KYSAFE) benefit criteria, FY 2023**

Unit size	Shelter expenses	Benefit (dollars)
One person	Less than \$275	80
	\$275 or greater	122
Two people	Less than \$275	146
	\$275 or greater	187

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 2023**

<b>Shelter expenses</b>	<b>Benefit (dollars)</b>
Less than \$425	82
\$425 to less than \$749	129
\$749 or greater	220

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

**Table F.12. Maryland SSI-CAP (MSNAP) benefit criteria, FY 2023**

<b>Shelter expenses</b>	<b>Benefit (dollars)</b>
Less than \$525	132
\$525 or greater	217

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

**Table F.13. Michigan SSI-CAP (MiCAP) benefit criteria, FY 2023**

<b>Shelter expenses</b>	<b>Benefit (dollars)</b>	<b>Gross income<sup>a</sup> (dollars)</b>
<b>October 2022–December 2022</b>		
Less than \$525	117	855
\$525 to less than \$750	182	855
\$750 or greater	262	855
<b>January 2023–September 2023</b>		
Less than \$525	117	928
\$525 to less than \$750	182	928
\$750 or greater	262	928

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

<sup>a</sup> In FY 2023, Michigan had an SSI supplement of \$14, making the combined Federal and State SSI amount \$855 for October 2022 through December 2022 and \$928 for January 2023 through September 2023.

**Table F.14. Mississippi SSI-CAP (MSCAP) benefits by income and shelter expense patterns, FY 2023**

Income type and shelter expenses	Benefit level (dollars)	Gross income (dollars)
<b>October 2022–December 2022</b>		
<b>SSI only</b>		
\$405 or less	110	841
Greater than \$405	157	841
<b>SSI and other unearned income</b>		
\$405 or less	101	861
Greater than \$405	148	861
<b>January 2023–September 2023</b>		
<b>SSI only</b>		
\$405 or less	78	914
Greater than \$405	124	914
<b>SSI and other unearned income</b>		
\$405 or less	69	934
Greater than \$405	115	934

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 2023**

Income type and shelter expenses	Benefits (dollars)
<b>October 2022–May 2023</b>	
\$675 or less	127
Greater than \$675	167
<b>June 2023–September 2023</b>	
\$675 or less	238
Greater than \$675	261

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

**Table F.16. New York SSI-CAP (NYSNIP) benefit criteria, FY 2023**

Income and shelter expenses	Monthly benefit amount (dollars)		
	New York	Long Island	Rest of State
<b>October 2022–December 2022</b>			
<b>SSI only</b>			
With positive utility costs			
Rent \$278 or less	281	281	281
Rent greater than \$278	281	281	281
With no utility costs			
Rent \$278 or less	60	60	60
Rent greater than \$278	81	81	81
With no shelter costs	60	60	60
<b>SSI and other unearned income</b>			
With positive utility costs			
Rent \$278 or less	281	281	272
Rent greater than \$278	281	281	281
With no utility costs			
Rent \$278 or less	54	54	54
Rent greater than \$278	72	72	72
With no shelter costs	54	54	54
<b>January 2023–September 2023</b>			
<b>SSI only</b>			
With positive utility costs			
Rent \$300 or less	281	281	255
Rent greater than \$300	281	281	281
With no utility costs			
Rent \$300 or less	38	38	38
Rent greater than \$300	48	48	48
With no shelter costs	38	38	38
<b>SSI and other unearned income</b>			
With positive utility costs			
Rent \$300 or less	281	278	246
Rent greater than \$300	281	281	278
With no utility costs			
Rent \$300 or less	32	32	32
Rent greater than \$300	39	39	39
With no shelter costs	32	32	32

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

**Table F.17. North Carolina SSI-CAP (NCSNAP) benefit criteria, FY 2023**

<b>Shelter expenses</b>	<b>Benefit (dollars)</b>
\$150 or less	156
Greater than \$150	196

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

**Table F.18. Pennsylvania SSI-CAP (PACAP) benefit criteria, FY 2023**

<b>Income type and shelter expenses</b>	<b>Benefit (dollars)</b>
<b>SSI only</b>	
Shelter expenses less than \$196	116
Shelter expenses \$196 or greater	156
<b>SSI and other unearned income</b>	
Shelter expenses less than \$196	110
Shelter expenses \$196 or greater	150

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 2023**

<b>Income type and shelter expenses</b>	<b>Benefits (dollars)</b>	<b>Gross income (dollars)</b>
<b>October 2022–December 2022</b>		
<b>SSI only</b>		
Shelter expenses \$410 or less	90	841
Shelter expenses greater than \$410	100	841
<b>SSI and other unearned income</b>		
Shelter expenses \$410 or less	81	861
Shelter expenses greater than \$410	91	861
<b>January 2023–September 2023</b>		
<b>SSI only</b>		
Shelter expenses \$410 or less	90	914
Shelter expenses greater than \$410	100	914
<b>SSI and other unearned income</b>		
Shelter expenses \$410 or less	81	934
Shelter expenses greater than \$410	91	934

Source: U.S. Department of Agriculture, Food and Nutrition Service; FY 2023 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 2023**

<b>Shelter expenses</b>	<b>Benefit (dollars)</b>
Less than \$690	102
\$690 to less than \$800	217
\$800 to less than \$900	242
\$900 or greater	257

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

**Table F.21. Texas SSI-CAP (SNAP-CAP) benefit criteria, FY 2023**

<b>Shelter expenses</b>	<b>Benefit (dollars)</b>
\$440 or less	134
Greater than \$440	223

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 2023**

<b>Shelter expenses</b>	<b>Benefit (dollars)</b>
Less than \$500	118
\$500 or greater	188

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 2023**

<b>Rent/mortgage cutoff for high/low standard rent allowance</b>	<b>Standard rent/mortgage allowance (dollars)</b>
<b>Florida (SUNCAP)</b>	
\$305 or less	130
Greater than \$305	325
<b>Massachusetts (BAY STATE CAP)</b>	
Less than \$481	223
\$481 or greater	481
<b>Washington (WASHCAP)</b>	
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 BAY STATE CAP cutoffs are listed for reference.

## **APPENDIX G**

### **Quality Control Review Schedule**

## Appendix G Quality Control Review Schedule

Print

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

OMB APPROVED NO. 0584-0299  
Expiration Date: 07/31/2023

### QUALITY CONTROL REVIEW SCHEDULE

Public reporting burden for this collection of information is estimated to average 1.056 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: U.S. Department of Agriculture, Food and Nutrition Services, Office of Policy Support, Room 1014, Alexandria, VA 22302 ATTN: PRA (0584-0299). Do not return the completed form to this address. PRIVACY ACT NOTICE: This report is required under provisions of 7 CFR 275.24 (SNAP). This information is needed for the review of State performance in determining recipient eligibility.. The information is used to determine State compliance, and failure to report may result in a finding of non-compliance.

#### Section 1 - Review Summary

1. QC Review Number	2. Case Number	3. State	4. Local Agency	5. Sample Month and Year	6. Stratum
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
7. Disposition	8. Findings	9. SNAP Allotment Under Review		10. Error Amount	11. Case Classification
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#### 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
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FORM FNS-380-1 (05-19) Previous Editions Obsolete  
(RIN 0584-AE79)

SBU

Electronic Form Designed in AEM 6.4 Version

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### **Section 3 - Household Characteristics**

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

21. Type of Action

22. Length of Cert. Period  
#of months

23. Allotment Adjustment

24. Amount of  
Allotment Adjustment

25. Number of  
Household Members

26. Receipt of  
Expedited Service

27. Authorized Representative  
Used at Application

28. Categorical Eligibility

29. Reporting Requirement

**Resources:**

30. Liquid

31. Property  
(excluding home)

32a. Vehicle

32b. Status  
2nd Vehicle

33. Countable  
Vehicle Assets

34. Other Non-liquid

**Income:**

35. Gross

36. Net

**Deductions:**

37. Earned Income

38. Medical

39. Dependent Care

40. Child Support

41. Shelter

42. Homeless

Additional  
Information on  
Shelter Costs:

43. Rent/Mortgage

44. Use of SUA  
a. Usage      b. Proration

45. Utilities (SUA or Actual)

**Section 4 - Information on Each Household Member**

46. Person Number	47. SNAP Participation	48. Relation to Head of HH	49. Age	50. Sex	51. Race	52. Citizen Status	53. Edu. Level	54. Employment Status	55. SNAP Work Reg.	56. SNAP E & T	57. ABAWD Status	58. Dependent Care Cost
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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
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You may record income on up to 10 individuals by using additional pages.

**Section 6 - Reserved Coding**

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**Section 7 - Optional For State Use**

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