B.   **COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS**

1.   **Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g., establishments, State and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection had been conducted previously, include the actual response rate achieved during the last collection.**

The December Food Security Supplement is conducted in conjunction with the CPS, for which the universe is approximately 130 million households, comprising the non-institutionalized civilian population of the United States. From this universe, a stratified, clustered, probability sample of approximately 72,000 household addresses is selected each month. The last collection of CPS-FSS data available was in December 2023. In December 2023, 69,530 housing units were sampled. Of these, 60,279 households were eligible for interview (i.e., were currently residences), and 41,772 (69.3 percent) completed the core labor force survey. All households completing the core labor force questions are asked to answer the supplement questions applicable to their household. For the December 2023 Food Security Supplement, 30,863 households (73.9 percent of those that completed the core labor force interview) responded to the supplement.

The response rate to the core labor force survey in December 2023 (the most recent collection available with the Food Security Supplement) was 69.3 percent. In December 2023, the overall response rate to the Supplement was 51.2 percent when both the response rate to the CPS labor force interview and response rate to the FSS are considered (69.3 percent x 73.9 percent). However, the supplement is reweighted to national control totals and to match the income profile of the core respondents, so food security statistics are less biased by non-response than would be the case without information from the core survey about the supplement non-respondents.

The questions are intended to be asked of the person most knowledgeable

about food shopping and meal preparation in the household. If one person is most knowledgeable about shopping for food but another is most knowledgeable about meal preparation, the person most knowledgeable about meal preparation is interviewed. If there is no one person in the household who is most knowledgeable about the food that is bought or eaten, or if that person is not available for interview, the labor force respondent is encouraged to answer the questions the best they can.

2. **Describe the procedures for the collection of information including:**

- **Statistical methodology for stratification and sample selection,**
- **Estimation procedure,**
- **Degree of accuracy needed for the purpose described in the justification,**
- **Unusual problems requiring specialized sampling procedures, and**
- **Any use of periodic (less frequent than annual) data collection cycles to reduce burden.**

The collection is a supplemental interview associated with the December CPS. The CPS sample is a stratified clustered address-based sample. Census Bureau field staff conduct about one-third of interviews face-to-face in respondents' homes and the remainder by telephone, using computer assisted interviewing technology. Weights for the core (labor force) CPS are calculated beginning with a basic weight for each person, which represents the probability of selection for the survey. The basic weight is adjusted for special sampling situations and failure to obtain interviews from eligible households. A two-stage ratio estimation procedure adjusts the sample population to the known distribution of the entire population by age, gender, race, and Hispanic ethnicity. The Census Bureau also calculates person and household weights for use with the food security supplement data that account for nonresponse to the supplement by households that respond to the core CPS.

Attachment H contains an overview of the CPS sample design and weighting methodology (this 2010 version remains applicable). The statistical properties of these supplemental items will be like those associated with the basic CPS items.

The U.S. Census Bureau provides replicate weights to support balanced repeated replication (BRR) variance estimates. Procedures for estimating variances using these weights are described in U.S. Census Bureau

guidance available at:
https://www.census.gov/data/datasets/time-series/demo/cps/cps-supp_cps-repwgt/cps-food-security.html. In 2023, the standard error for the estimated national percentage of food-insecure households (13.5 percent) was 0.234 percentage points. For the estimated percentage of households with children in which children experience very low food security (1.0 percent), the standard error was 0.145 percentage points. Both these measures are objectives in the Department of Health and Human Services' Healthy People 2030 initiative and the percentage of food-secure households is cited in the current USDA strategic plan. The sampling errors are sufficiently small to support credible monitoring of progress toward these goals.

3. Describe methods to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling, a special justification must be provided for any collection that will not yield "reliable" data that can be generalized to the universe studied.

Response rates and data accuracy for the CPS are maintained at high levels by the U.S. Census Bureau through advance notification of respondents, interviewer training and standardization, computerized tracking of call attempts and callbacks, computerized interviewing, internal consistency edits in the computerized instrument and in data editing, and close monitoring of these data. ERS expects response rates consistent with recent surveys.

ERS conducts an annual psychometric assessment of the food security response data using statistical methods based on Item Response Theory to assess quality of the food security response data nationally and in key subpopulations. This ensures that food security prevalence statistics are comparable over time and across key subpopulations.

Beginning with the December 2014 survey and continuing, ERS has provided a standardized Spanish translation of the entire food security supplement. The Spanish language for the entire supplement was integrated into the computerized interview instruments.

ERS contracts with the U.S. Census Bureau to conduct annual nonresponse bias analysis on the FSS (see the most recent nonresponse

bias analysis available in Attachment I "Evaluating Nonresponse Bias in the 2022 Food Security Supplement to the Current Population Survey"). The U.S. Census Bureau conducted a nonresponse bias study for the 2022 Food Security Supplement to the Current Population Survey. The analysis found evidence of *potential* nonresponse bias for both CPS and FSS households. The study showed that the distributions of FSS respondents and non-respondents differed on some characteristics considered, such as region of residence and age of reference person, but these differences in the distribution of respondents do not necessarily indicate a nonresponse bias problem. The effects of these differences are reduced through noninterview weighting adjustments; however, these noninterview adjustments do not account for demographic information. ERS and the U.S. Census Bureau are exploring ways to incorporate demographic information (i.e., household income and age, gender, race, Hispanic origin and educational attainment of the reference person) into the FSS noninterview adjustment methodology (see the U.S. Census Bureau report on FSS noninterview adjustment methodology in Attachment J "Evaluation of the 2022 December Food Security Supplement Test Noninterview Adjustment Using Logistic Regression"). Additionally, the differences only cause bias if the respondents and nonrespondents report differing rates of food security. The food security status of nonrespondents cannot be determined, so it is difficult to say with certainty whether or to what extent nonresponse may bias the food security estimates. Findings from a presentation by ERS and U.S. Census Bureau researchers at the 2023 Federal Committee for Statistical Methodology (FCSM) Research and Policy Conference showed noninterview weighting adjustments that incorporate additional information (including administrative data) have modest impact on food security estimates (see the FCSM presentation in Attachment K "Addressing Nonresponse Bias in Food Security Measures Using Weighting Adjustments").

The 2023 FSS response rate of 73.9 percent is only slightly below the target of 80 percent and weighting adjusts for differences in known characteristics of respondents and nonrespondents, so nonresponse bias is not likely to be a major concern. However, the U.S. Census Bureau and ERS will continue to monitor FSS response rates and potential sources of bias. ERS continues to work with the U.S. Census Bureau to conduct annual nonresponse bias analyses of the CPS-FSS data.

4. **Describe any tests of procedures or methods to be undertaken. Testing is encouraged as an effective means of refining collections of**

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information to minimize burden and improve utility. Tests must be approved if they call for answers to identical questions from 10 or more respondents. A proposed test or set of tests may be submitted for approval separately or in combination with the main collection of information.

USDA has completed several tests in recent years suggested by the Committee on National Statistics Panel report of 2006. ERS completed cognitive interview testing for modified survey items in 2019 and a split panel test of the updated instrument in September 2020. The findings and recommendations from the cognitive testing (available at: https://www.census.gov/library/working-papers/2021/adrm/rsm2021-06.html) were incorporated into the test instrument which was evaluated by ERS researchers to assess the comparability of food expenditure, food security, and nutrition assistance measures to prior data collections (see the ERS report on the split panel test in Attachment L). The cognitive testing and split panel test formed the basis for the instrument which was updated to the newest version in December 2022 reviewed as part of the previous Information Collection Request package.

ERS and Census Bureau researchers are currently collaborating on assessments of the impact of nonresponse bias for the instrument and developing methodology (through revised weighting algorithms) to lessen the impact of supplement nonresponse bias on the food expenditure, food security, and nutrition assistance statistics produced using the supplement data (see the Census Bureau report on noninterview adjustment methodology in Attachment J and the Federal Committee on Statistical Methodology Policy and Research Conference presentation on that develops new survey weights that correct for nonresponse using administrative data and applies and compares food security estimates based on standard and this new weighing methodology for the supplement in Attachment K).

No further testing is planned in the 2025-27 data collection period covered by this request.

5. **Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.**

The following individuals may be consulted concerning the statistical data collection and analysis operations:

Statistical Design:
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Data Collection/ Survey Design:
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Attachments

A. Proposed Food Security Supplement Questionnaire
B. Copy of Federal Register Notice Regarding This Collection
C. Public Comment Received in Response to Federal Register Notice
D. NASS Review of CPS-FSS Instrument
E. CPS Advance Letter
F. CPS Confidentiality Brochure
G. CPS Fact Sheet Brochure
H. Overview of CPS Sample Design and Methodology
I. U.S. Census Bureau Report "Evaluating Nonresponse Bias in the 2022 Food Security Supplement to the Current Population Survey"
J. U.S. Census Bureau Report "Evaluation of the 2022 December Food Security Supplement Test Noninterview Adjustment Using Logistic Regression"
K. 2023 Federal Committee on Statistical Methodology Research and Policy Conference Presentation "Addressing Nonresponse Bias in Food Security Measures Using Weighting Adjustments"
L. Economic Research Report "Analyses and Findings for the September 2020 CPS-FSS Instrument Split- Ballot Testing"