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 Supplement is conducted in conjunction with the CPS, for which the universe is approximately 127 million households, comprising the non-institutionalized civilian population of the United States. From this universe, a stratified, clustered, probability sample of approximately 73,000 household addresses is selected each month. Of these, an average of 60,947 households were eligible for interview (i.e., were currently residences) in 2012 through 2017, and 53,139 (87.2 percent) completed the core labor force survey. All households completing the core labor force questions will be asked to answer the Supplement questions applicable to their household. Based on average responses in the December 2012 through 2017 Food Security Supplements, approximately 41,311 households (77.7 percent of those that completed the core labor force interview) are expected to respond to the Supplement. 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.

   The response rate to the core labor force survey (average 2012 through 2017) was 87.2 percent. The response rate to the Supplement was 67.8 percent (87.2 percent x 77.7 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.

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 take into account nonresponse to the supplement by households that respond to the core CPS.

Attachment F 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 similar to those associated with the basic CPS items.

The Census Bureau provides replicate weights to support balanced repeated replication (BRR) variance estimates. Procedures for estimating variances using these weights are described in Census Bureau guidance available at: http://thedataweb.rm.census.gov/ftp/cps_ftp.html#cpsrepwgt. In 2017, the standard error for the estimated national percentage of food insecure households (11.8 percent) was 0.191 percentage points. For the estimated percentage of households with children in which children experience very low food security (0.7 percent), the standard error was

0.085 percentage points. Both these measures are objectives in the Health and Human Services Healthy People 2020 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 maxmize 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 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 in December 2012, Census Bureau staff who conduct CPS Food Security Supplement interviews in Spanish were provided with a standardized translation of the questions that are used to determine households' food security status in order to minimize bias in comparing food security statistics between Hispanic and non-Hispanic households. Beginning with the December 2014 survey, ERS provided a standardized Spanish translation of the entire Supplement. Prior to 2012, interviewers translated "on the fly" when interviewing households that could only be interviewed in Spanish. The Spanish language for the entire supplement was integrated into the computerized interview instruments.

ERS contracted with the U.S. Census Bureau to conduct a nonresponse bias analysis on the FSS after the FSS response rate dropped to 75 percent in 2015 (see Attachment H "Evaluating Nonresponse Bias in the 2015 Food Security Supplement to the Current Population Survey"). Census conducted a nonresponse bias study for each year of FSS data from 2011 through 2015. 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, such as age and race of reference person, but these differences do not necessarily indicate a nonresponse bias problem. The effects of these differences are reduced through noninterview weighting adjustments. 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. The 2012 to 2017 average FSS response rate of 77.7 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, Census and ERS will continue to monitor FSS response rates and potential bias.

4.   **Describe any tests of procedures or methods to be undertaken. Testing is encouraged as an effective means of refining collections of 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 suggested by the Committee on National Statistics Panel report of 2006. No further testing is planned in the 2019-2021 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:
David Hornick
Demographic Statistics Methods Division
U.S. Census Bureau
(301) 763-4183

Data Collection/ Survey Design:
Lisa A. Clement
Demographic Surveys Division
U.S. Census Bureau
(301) 763-5482

Analysis of Food Security Data
Alisha Coleman-Jensen
Food Assistance Branch
Economic Research Service, USDA
(202) 694-5456

Attachments

A. Proposed December 2019 Food Security Supplement Questions
B. Copy of Federal Register Notice regarding this collection
C-1. Rifkin Comment received in response to Federal Register notice
C-2. Jean Public Comment received in response to Federal Register notice
D. CPS Advance Letter
E. Confidentiality Brochure
F. Overview of CPS Sample Design and Methodology
G. Spanish language version of the survey instrument
H. Census Report "Evaluating Nonresponse Bias in the 2015 Food Security Supplement to the Current Population Survey"