# SUPPORTING STATEMENT U.S. Department of Commerce U.S. Census Bureau 2014 Survey of Income & Program Participation Panel OMB Control No. 0607-0977

## B. Collection of Information Employing Statistical Methods

# 1. Universe and Respondent Selection

The SIPP respondent universe is the civilian, noninstitutionalized population based on the 2010 decennial census, which contains approximately 303.5 million individuals. The SIPP uses a multistage stratified sample of the U.S. civilian noninstitutionalized population. The first stage involves the division of the United States into groups of counties called the PSUs, which are assembled into homogeneous groups called strata. Two PSUs are then selected from each stratum. The second stage involves selection of units within the selected PSUs.

Within each PSU, living quarters (LQ) are systematically selected from lists of addresses prepared for the 2010 Decennial Census. Other sampling techniques are used to represent new construction and group quarters. Low-income households were over sampled from the lists of addresses prepared for the census. Basically, we are taking SIPP sample from the 2010 sample redesign. The 2014 SIPP Panel sample consists of approximately 53,000 Wave 1 designated LQs and will yield approximately 42,300 Wave 1 designated occupied LQs at the time of interview in 2016, of which approximately 30,500 will be interviewed in Waves 3 and 4. Each household contains an average of 2.1 eligible respondents (aged 15 years and older); therefore, the 2014 SIPP Panel should contain approximately 64,050 survey respondents in Waves 3 and 4. The Wave 1 response rate was 70%.

## 2014 SIPP Sample Design

The SIPP respondent universe is the civilian, noninstitutionalized population based on the 2010 decennial census, which contains approximately 303.5 million individuals. The SIPP uses a multistage stratified sample of the U.S. civilian noninstitutionalized population. The first stage involves the definition and division of the United States into groups of counties called the PSUs, which are assembled into homogeneous groups called strata. The second stage involves selection of units within the PSU.

The 2014 SIPP Panel is the first sample for the SIPP to be fielded from the 2010 redesign. There are 820 selected PSUs in the 2010 redesigned SIPP. The selected PSUs in the 2010 SIPP sample design cover both urban and rural areas of the United States. PSU definitions and address lists, are all based on the 2010 decennial census. PSUs are formed from one or more contiguous counties. Larger populated PSUs (>100,000 HUs) are identified as self-representing (SR) PSUs, while the remaining PSUs are identified as non-self representing (NSR). SR PSUs are in the SIPP sample with certainty while the NSR PSUs are stratified and selected with a probability proportionate to their size.

During the stratification process, NSR PSUs are grouped together within the same state to form strata. During the PSU selection process, two NSR PSUs are selected from each stratum. There are 344 SR PSUs and 476 NSR PSUs in sample for the 2014 SIPP.

Within each selected PSU, living quarters (LQ) are systematically selected from lists of addresses prepared for the 2010 Decennial Census. The universe of addresses within the sample PSU is divided into two strata, one with a higher concentration of lowincome households and the other with a lower concentration of low income households. In the sampling strata, low income is defined based on the poverty thresholds at the national level for families of certain size and age compositions. For example, the lowincome household cutoff for one person with no related individual is \$17,200, and the lowincome household cutoff with three people is \$29,300. Cut-offs are adjusted by the Consumer Price Index, and applied to the sample frame by household size and also by age of householder for one and two person households. Addresses are sorted by geographic and demographic variables and a systematic selection of units is taken from each stratum. A 23.8% higher sampling rate is used in the stratum with the higher concentration of low-income households, thereby resulting in an oversample of low-income households. Oversampling occurs to the extent that the rise in the variance for the estimate for persons 55 and over is not increased by more than 5%.

The frame for the SIPP is the Master Address File (MAF), which is maintained by the U.S. Census Bureau and is the source of addresses for the American Community Survey, other demographic surveys, and the decennial census. The MAF is updated using the U.S. Postal Service's Delivery Sequence File and various automated, clerical, and field operations.

The addresses selected for the 2014 SIPP sample will not be eligible to be selected for another Census Bureau demographic survey (CPS, SCHIP, NCVS, CE, and AHS) before 5 years after the last SIPP interview.

The base sample for the 2014 SIPP is 38,300 addresses; 13,800 addresses comprise the state expansion sample. Sample was added in 16 states in order to reach a 6% CV on the estimate of low income for 20 states. States requiring the least amount of sample to reach the target CV were chosen. CA, TX, FL, and NY required no additional sample. Sample was added in NC, GA, OH, IL, MI, PA, TN, AZ, IN, MS, KY, LA, AL, SC, AR, and NM.

## 2014 SIPP Weighting

Each year, weights are created for every month and the calendar year at the person-level. Starting in the second year, panel weights at the person-level are produced along with monthly and calendar year weights. Each weight is calculated as the product of three components: the base weight, the household noninterview adjustment factor, and the second stage adjustment factor. The noninterview adjustment is calculated for each noninterview cell based on the following formula: Adjustment factor = sum (interviewed weights + noninterview weights)/sum(interviewed weights), for each cell. These factors are applied to the base weights. There were 512 noninterview household cells in Wave 1. The second stage weights are calculated as a ratio adjustment of the

sum of noninterview weights to the population controls and applied to each cell in five dimensions. The second stage weighting procedure consists of raking (with 400 maximum iteration and 250 tolerance level), cell collapsing, and husband/wife equalization. This procedure is done for each reference month separately.

Each monthly weight for the SIPP 2014 Panel is produced based on the SIPP survey universe corresponding to that month. Therefore, the controls (benchmark population estimates) for second stage raking for each monthly weight are those for the corresponding reference month. Each calendar year weight is produced based on the SIPP survey universe in December of that year. Therefore, the controls for second stage raking for the calendar year weights are those for December of that calendar year. Meanwhile, the panel weight is based on December of the first year, so the controls for second stage raking for the panel weights are those for December 2013.

## 2. Procedures for Collecting Information

In sample households, all people 15 years old and over will be interviewed using regular proxy-respondent rules as described in Attachment D. The Census Bureau has completed two of four waves of the Survey of Income and Program Participation 2014 Panel (SIPP), which began in February 2014. Wave 1 of the SIPP 2014 Panel was conducted from February to June of 2014. Wave 2 was conducted from February to June of 2015. Wave 3 is currently being conducted from April to June of 2016. Wave 4 is scheduled to be conducted from February to June of 2017. Approximately 30,500 households are expected to be interviewed for the 2014 SIPP Panel Waves 3 and 4. We estimate that each household contains 2.1 people aged 15 and above, yielding approximately 64,050 person-level interviews per wave in this panel. Based on Wave 1 results, interviews take approximately 40 minutes per adult on average. Consequently, the total annual burden for 2014 SIPP-EHC interviews will be 42,700 hours per year.

We expect the minimum detectable differences between the 2014 SIPP Panel and the 2008 SIPP Panel monthly participation rates to be approximately 0.7 for TANF and SSI, 1.6 for Food Stamps and WIC, and 1.8 for Medicaid at the 10% level of significance.

### 3. Methods to Maximize Response

In all SIPP Panels, we make special efforts to minimize non-interviews. In each wave, every household in the active sample receives an advance letter that explains the purpose of the survey and why the household's cooperation is important. In the 2014 SIPP Panel each household will be given one of three brochures (Attachments F-H) that contains specific information about the SIPP and how it specifically relates to them in one of the following three areas: (1) Health (insurance, expenditures, etc.); (2) Labor force (retirement, employment, unemployment, etc.); and (3) Families with children (child care, child well-being, etc.). Each household will also receive an eyecatching glossy "SIPP in the News" postcard (Attachment I) which has highlights of when SIPP has been used in major news sources such as the Washington Post. SIPP

also distributes a SIPP Fact Sheet (Attachment E) which gives examples of how SIPP data is used in various government programs. For Type A refusal households, standard procedures include additional visits to the household by another Field Representative (FR) or if needed, a Supervisory Field Representative to convert the household response.

In addition to the methods above, SIPP designed a multi-wave incentive experiment to evaluate the efficacy of incentives as a means of increasing respondent cooperation. In Wave 1, the panel was divided into four groups and each household was randomly assigned to one of the groups. Group 1 was the control group; households in this group were not to be eligible for an incentive in any wave of the 2014 panel. Group 2 was not eligible to receive an incentive in Wave 1, but was eligible for a \$40 debit card for Wave 2. This group was used to test retroactively the efficacy of a propensity model. Group 3 was eligible to receive a \$20 incentive in Wave 1, but was not eligible to receive a debit card in Wave 2. Group 4 was eligible to receive a \$40 incentive in Wave 1. In Wave 2 Group 4 was split in two subgroups: A – did not receive a debit card; and B – was eligible for a \$40 debit card. Consequently, in Wave 2 only two groups were eligible to receive debit cards (Group 2 and 4B). For Wave 3 in 2016, Group 1 will continue as prior waves (no incentive), Group 4A will continue to receive a \$40 debit card, and Group 4B will be determined using an adaptive model with the remaining groups. For those in the modeled groups, roughly 22,500 households, 30% will be eligible for incentives. Selection for the Wave 3 incentive in the modeled groups will be made using a propensity model process. For all waves, we distribute the incentives centrally from our National Processing Center. This centralized distribution eliminates any discretion on the part of the field representatives, ensuring that only eligible households are given (or promised) incentives.

### 4. Tests of Procedures

The 2014 SIPP Panel is the culmination of a program of evaluation and development emerging from a comprehensive reassessment of the SIPP. Five field tests of the SIPP-EHC instrument have taken place (in 2008, 2010, 2011, 2012, and 2013). A new test sample was initiated in 2011, following the successful 2010 feasibility test. The 2012 SIPP-EHC field test was a wave 2 interview of the 2011 SIPP-EHC field test sample. The reference year for waves one and two of the 2011 SIPP-EHC field tests were calendar years 2010 and 2011. An final evaluation of the field test results from the 2011 and 2012 field tests is attached (Attachment K). The 2013 SIPP-EHC tested the full implementation of the re-engineered SIPP, including following movers and feeding back data to respondents from the 2012 interview. These developmental stages were interspersed by a series of smaller, specifically focused content, instrument, and systems tests.

# 5. Contacts for Statistical Aspects and Data Collection

The Census Bureau will collect and process these data. Within the Census Bureau, please consult the following individuals for further information:

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#### Attachments

A. Wave 3 SIPP (2016) Instrument Items Booklet

B. SIPP-105(L1)2016–Advance Letter

C. SIPP-105(L3)2016–Advance Letter with \$40 incentive

D. Respondent Rules

E. SIPP Fact Sheet

F. SIPP Brochure: Health Insurance

G. SIPP Brochure: Families with Children

H. SIPP Brochure: Labor Force and Employment

I. SIPP News Postcard

J. SIPP-INF1-2014 Incentive Flyer Advance Letter \$40

K. Final EHC Evaluation Report

L. CARI FCSM

M. CARI Evaluation Report

N. SIPP PIN letter

O. SIPP-106(L1)2016 Thank You Letter

P. SIPP-106(L2)2016 Thank You Letter (Incentive)

- Q. Incentives FCSM Evaluation R. Federal Register Notice