

## **Identity Theft Supplement to the National Crime Victimization Survey**

### **B. Collections of Information Employing Statistical Methods**

#### **1. Universe and Respondent Selection**

The sample universe for the ITS is all persons 16 years of age and older in NCVS interviewed households. The NCVS sample of households is drawn from the more than 120 million households nationwide and excludes the military and barracks and institutionalized populations. The national sample of households consists of approximately 105,000 designated addresses located in 542 stratified primary sampling units (PSUs) throughout the United States. The sample consists of seven parts, each of which is designated for interview in a given month and again at 6-month intervals.

Every ten years, the NCVS sample is redesigned. In 2015, the 2000 sample design will begin to be phased out and the 2010 sample design will begin to be phased in. Although the PSUs did not change in 2015, some of the cases assigned to 2015 interviews were selected from the 2010 design procedures from the Master Address File. Beginning in 2016, some PSUs will be removed from sample, some new PSUs will be added to the sample, and some continuing PSUs that were selected for both the 2000 and 2010 designs will remain in sample. The phase-in and phase-out of the designs will occur from January 2016 through December 2017. As part of the 2010 design, new addresses are selected each year from a master list of addresses based upon the 2010 Decennial Census of Population and Housing and addresses from the United States Postal Service. The new sample sizes are larger than in previous years to support state-level estimates in 22 states. In 2016, approximately 75% of the sample will be drawn from the 2010 design, with the remaining 25% from the 2000 design.

The NCVS uses a rotating sample. The sample usually consists of seven groups for each month of enumeration. When the ITS will be in the field, there will be four rotation groups that were selected as part of the 2000 sample design. These four rotation groups will only be in continuing PSUs and will contain about 25% of all ITS sample units. The remaining sample will be divided into seven rotation groups that were selected as part of the 2010 sample design.

Each interview period the interviewer completes or updates the household composition component of the NCVS interview and asks the crime screen questions (NCVS-1) for each household member 12 years old or older. The interviewer then completes a crime incident report (NCVS-2) for each reported crime incident identified in the crime screener. Following either the screener or the administration of

the crime incident report, depending on whether a crime was reported, each household member 16 years of age or older will be administered the ITS. Each household member provides the information by self-response. Proxy respondents are allowable under very limited circumstances and represent less than 3% of all interviews. All forms and materials used to for the NCVS screener and crime incident report have been previously approved by OMB (OMB NO: 1121-0111). The ITS instrument is attached in Appendix A.

The first contact with a household is by personal visit and subsequent contacts may be by telephone. For the second through seventh visits, interviews are done by telephone whenever possible. In 2016, there will be an influx of new units added to the NCVS sample as part of the 2010 sample design. Approximately 57% of sample addresses from January to June in 2016 will be invited to participate in the survey for the first time in person.

For the core NCVS, interviewers are able to obtain interviews with about 87% of household members in 84% of the occupied units in sample in any given month. In 2016, we assume that there will be about 1.195 responding persons who are 16 years or older to the NCVS for each designated sample address. Thus, we expect 125,000 persons age 16 or older to provide NCVS interviews from January through June of 2016. Based on the 2014 ITS response rates, we anticipate that about 90.6%, or about 113,000 persons, will complete the 2016 ITS. In 2018, we expect about 141,000 persons age 16 or older to respond to the NCVS. If 90.6% respond to the ITS, we would expect 128,000 persons to complete the 2018 ITS.

## 2. Statistical Methodology

The ITS is designed to calculate national estimates of identity theft victimization for the target population - the noninstitutional resident population aged 16 years and older. The ITS is administered to all age-eligible NCVS respondents during the 6-month periods from January-June, 2016 and January-June, 2018. The frame used to reach the target NCVS population is the Census Bureau's Master Address File (MAF). The MAF contains all addresses from the most recent decennial census plus updates from the United States Postal Service, state and local address lists, and listings. Sample selection for the NCVS, and by default the ITS, has three stages: the selection of primary sampling units or areas known as PSUs, the selection of

address units in sample PSUs, and the determination of persons and households to be included in the sample.

Survey estimates are derived from a stratified, multi-stage cluster sample. The PSUs composing the first stage of the sample are formed from counties or groups of adjacent counties based upon data from the decennial census and the American Community Survey. The larger PSUs are included in the sample automatically and are considered to be self-representing (SR) since all of them are selected with certainty. The remaining PSUs, called non self-representing (NSR), because only a subset of them are selected, are combined into strata by grouping PSUs with similar geographic and demographic characteristics. For the NCVS, decennial census counts, American Community Survey estimates, and administrative crime data drawn from the FBI's Uniform Crime Reporting Program are also used to stratify the PSUs.

## **SAMPLING**

### **Stage 1. Defining and Selection of PSUs:**

**Defining PSUs** - Formation of PSUs begins with listing counties and independent cities in the target area. For the NCVS, the target area is the entire country. The counties are either grouped with one or more contiguous counties to form PSUs or are PSUs all by themselves. The groupings are based on certain characteristics such as total land area, current and projected population counts, large metropolitan areas, and potential natural barriers such as rivers and mountains. The resulting county groupings are called PSUs.

After the PSUs are formed, the large PSUs and those in large urban areas are designated SR. The smaller PSUs are designated NSR. Determining which PSUs are considered small and which are large depends on the survey's SR population cutoff and whether estimates are desired for the state. An SR PSU must be large enough in population to support at least one field representative with a full monthly workload of approximately 32 cases.

**Stratifying PSUs** - The NSR PSUs are grouped with similar NSR PSUs within state to form strata. Each SR PSU forms its own stratum. The data used for grouping the PSUs consist of decennial census demographic data, American Community Survey data, and administrative crime data. As was stated earlier, NSR PSUs are grouped to be as similar or homogeneous as possible. Just as the SR

PSUs must be large enough to support a full workload so must each NSR strata be of that size. The most efficient stratification scheme is determined by minimizing the between PSU variance and the within PSU variance.

**Selecting PSUs** - The SR PSUs are automatically selected for sample or “selected with certainty.” One NSR PSU is selected from each stratum. The NSR PSUs are sampled with probability proportional to the population size using a linear programming algorithm. Historically, PSUs have been defined, stratified, and selected once every ten years.

## **Stage 2. Preparing Frames and Sampling within PSUs**

**Frame Determination** - To ensure adequate coverage for the target population, the Census Bureau defines and selects sample from address lists called frames. The 2000 and 2010 sample designs use different frame systems. The 2000 design sample was selected from four frames: a unit frame, an area frame, a group quarters frame, and a new construction or permit frame. The 2010 design sample was selected from a unit frame and a group quarters frame.

In the 2000 design, each address in the country was assigned to one and only one of the four frames. Frame assignment depended on four factors:

- 1) what type of living quarters are at the address
- 2) when the living quarters were built,
- 3) where the living quarters were built, and
- 4) how completely the street address was listed.

The main distinction between the frames is the procedures used to obtain the sample addresses.

In the 2010 design, each address in the country was assigned to the unit or group quarters frame based on the type of living quarter. Two types of living quarters are defined in the decennial census. The first type is a housing unit. A housing unit (HU) is a group of rooms or a single room occupied as separate living quarters or intended for occupancy as separate living quarters. A housing unit may be occupied by a family or one person, as well as by two or more unrelated persons who share the living quarters.

The second type of living quarters is group quarters (GQ). Group quarters are living quarters where residents share common facilities or receive formally authorized care. About 3% of the population

counted in the 2010 census resided in group quarters. Of those, less than half resided in non-institutionalized group quarters. About 97 % of the population counted in the 2010 census lived in housing units.

**Within-PSU Sampling** - All the Census Bureau's continuing demographic surveys, such as the NCVS, are sampled together. This takes advantage of updates from the January MAF delivery and American Community Survey data. In the 2010 sample design, about 28.6% of the housing unit sample is selected every year; although 57% of the cases selected for 2016 interviews were selected in 2015 to start the 2010 sample design. The GQ sample is selected every three years. Selection of samples is done one survey at a time (sequentially). Each survey determines how the unit addresses within the frame should be sorted prior to sampling. For the NCVS, each frame is sorted by geographic variables. A systematic sampling procedure is used to select addresses from each frame. A skeleton sample is also selected in every PSU. Every six months new addresses on the MAF are matched to the skeleton frame. The skeleton frame allows the sample to be refreshed with new addresses and thereby reduces the risk of under-coverage errors due to an outdated frame.

Addresses selected for a survey are removed from the frames, leaving an unbiased or clean universe behind for the next survey that is subsequently sampled. By leaving a clean universe for the next survey, duplication of addresses between surveys is avoided. This is done to help preserve response rates by insuring no unit falls into more than one survey sample.

### **Stage 3: Sample within Sample Addresses**

The last stage of sampling is done during initial contact of the sample address during the data collection phase. For the ITS, if the address is a residence and the occupants agree to participate, then an attempt is made to interview every person aged 16 or older who lives at the resident address and completes the NCVS-1. There are procedures to determine who lives in the sample unit and a household roster is completed with their name and other demographic information. If someone moves out (in) during the interviewing cycle, he or she is removed from (added to) the roster.

### **DATA COLLECTION**

The ITS supplement will be administered twice, first from January through June 2016 and second from January through June 2018. In keeping with the definition of identity theft utilized by the FTC and in the 2008 ITS, respondents are asked to report if they have experienced the misuse of an existing credit card, the misuse of another existing account (banking, savings, etc.), the misuse of personal information to open a new account, or the misuse of personal information for other fraudulent purposes in the 12-months prior to the interview.

### 3. Methods to Maximize Response

Census Bureau staff mails an introductory letter (NCVS-572(L), NCVS-573(L)) (see Attachment 6 and Attachment 7) explaining the NCVS to the household before the interviewer's visit or call. When they go to a house, the interviewers carry cards and portfolios identifying them as Census Bureau employees. The Census Bureau trains interviewers to obtain respondent cooperation and instructs them to make repeated attempts to contact respondents and complete all interviews. The interviewer obtains demographic characteristics of noninterview persons and the race of noninterview households for use in the adjustment for nonresponse. ITS response rate reports will be generated on a monthly basis and compared to the previous month's average to ensure their reasonableness.

As part of their job, interviewers are instructed to keep noninterviews to a minimum. Maintaining a low nonresponse rate involves the interviewer's ability to enlist cooperation from all kinds of people and to contact households when people are most likely to be home. As part of their initial training, interviewers are exposed to ways in which they can persuade respondents to participate as well as strategies to use to avoid refusals. Furthermore, the office staff makes every effort to help interviewers reduce their noninterviews by suggesting ways to obtain an interview, and by making sure that sample units reported as noninterviews are in fact noninterviews. Also, survey procedures permit sending a letter to a reluctant respondent as soon as a new refusal is reported by the interviewer to encourage their participation and to reiterate the importance of the survey and their response.

In addition to the above procedures used to ensure high participation rates, beginning in 2011, interviewers were required to complete a two-day refresher training course designed to reinforce standards for collecting accurate data. Following the refresher training, the Census Bureau implemented additional performance measures for

interviewers based on data quality standards. Interviewers are trained to and assessed on administering the NCVS I and the NCVS II exactly as worded to ensure the uniformity of data collection, completing interviews in an appropriate amount of time (not rushing through them), and keeping item nonresponse and “don’t know” responses to a minimum.

The Census Bureau also uses quality control methods to ensure that accurate data is collected. Interviewers are continually monitored by each Regional Office to assess whether performance and response rate standards are being met and corrective action is taken to assist and discipline interviewers who are not meeting the standards. For the core NCVS, interviewers are able to obtain interviews with about 88% of household members in 83% of the occupied units in sample in any given month. Only household members who have completed the NCVS-1 will be eligible for the ITS. Among eligible respondents who completed the NCVS-1, the 2008 ITS had an additional 89% response rate. The Census Bureau conducted an evaluation of nonresponse bias in the 2008, 2012, and 2014 ITS and concluded that there was no evidence of significant nonresponse bias in the estimates of identity theft (Attachment 8).

We expect that approximately 125,000 persons 16 years of age and older in NCVS sample households will have completed the NCVS-1 and be eligible for the ITS from January through June of 2016. Of these, we anticipate that 90.6%, or about 113,000 persons, will complete the ITS. Using the 2014 data, we estimated that 71 persons per 1,000, experienced an incident of identity theft. Assuming a similar rate in 2016, we expect a standard error of about 0.1 and a 1.6% coefficient of variation. At a 95% confidence level, we should be able to detect a difference of less than 4% between the 2014 and 2016 rates.

Upon completion of the 2016 and 2018 ITSs, the Census Bureau will conduct complete analyses of nonresponse, including nonresponse and response rates, respondent and nonrespondent distribution estimates, and nonresponse bias estimates for various subgroups. Should the analyses reveal evidence of nonresponse bias, BJS will work with the Census Bureau to assess the impact to estimates and ways to adjust the weights accordingly.

#### 4. Test of Procedures or Methods

Because the majority of the survey instrument questions have not changed substantially if at all from 2014, there was no need for cognitive testing for the 2014 ITS questionnaire. The instrument is in an automated CAPI instrument form and has been fully tested and performed without incident in 2012/2014.

Interviewers will be provided with an ITS self-study which is mandatory to complete prior to initiating any interviews. Interviewer training is usually conducted a month prior to the first month of interview. This allows the interviewers time to familiarize themselves with the survey content and any special instrument functionality that is specific to conducting interviews for the ITS.

#### 5. Consultants on Statistical Aspects and Data Collection

The Victimization Statistics Unit at BJS takes responsibility for the overall design and management of the activities described in this submission, including developing study protocols, sampling procedures, and questionnaires and overseeing the conduct of the studies and analysis of the data by contractors.

The Census Bureau is responsible for the testing of interview materials and the collection of all data. Ms. Meagan Meuchel is the NCVS Survey Director and manages and coordinates the NCVS and the ITS supplement. Mr. Timothy Kennel of the Demographic Statistical Methods Division of the Census Bureau coordinated consultation on the statistical aspects of the supplement. BJS and Census Bureau staff responsible for the ITS include:

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### C. Attachments

Attachment 1: Identity Theft Supplement to the NCVS survey instrument  
(A1.its14.pdf)

Attachment 2: BJS authorizing statute; Title 42, United States Code, Section 3732  
(A2.bjslegauth.doc)

Attachment 3: *Victims of Identity Theft, 2008* (A3.vit08.pdf)

Attachment 4: *Victims of Identity Theft, 2012* (A4.vit12.pdf)

Attachment 5: Document detailing changes to the ITS instrument from 2008 to 2012  
(A5.changes.pdf)

Attachment 6: Census Bureau introductory letter for new households (A6.NCVS-  
572(L).pdf)

Attachment 7: Census Bureau introductory letter for reinterview households (A7.NCVS-  
573(L).pdf)

Attachment 8: Evaluating Nonresponse Bias in the 2014 Identity Theft Supplement to the  
National Crime Victimization Survey (A8. Nonresponse bias ITS14.pdf)