

Survey of Program Dynamics

Sample Design & Implementation

Because the SPD is based on the 1992 and 1993 SIPP panels, this chapter begins with a brief examination of the SIPP sample design. Additional information on that design is available in the Survey of Income and Program Participation Users' Guide and in the SIPP Quality Profile. Following the discussion of the SIPP sample design, the topic turns to the design of the SPD sample.

The 1992/1993 SIPP Sample Design

The SIPP sample is a multistage, stratified sample of the U.S. civilian noninstitutionalized population. That population includes people living in group quarters, such as dormitories, rooming houses, and religious group dwellings. Foreign visitors who work or attend school in this country and their families were eligible. Crew members of merchant vessels, Armed Forces personnel living in military barracks, and institutionalized people, such as correctional facility inmates and nursing home residents, were not eligible to be in the survey. Also, U.S. citizens residing abroad were not eligible to be in the survey.

Sample selection for SIPP has three stages: the selection of primary sampling units (PSUs); the selection of address units in sample PSUs; and the determination of people and households to be included in the sample for the initial and subsequent waves of each panel. The first two stages are common to all household surveys, whether cross-sectional or longitudinal, that use multistage sample designs. The third stage is an additional requirement for longitudinal surveys.

The samples are located in 284 PSUs, each consisting of a county or group of contiguous counties. Within these PSUs, expected clusters of two living quarters (LQs) were systematically selected from lists of addresses prepared for the 1980 Decennial Census of Population and Housing to form the bulk of the sample. To account for LQs built within each of the sample areas after the 1980 census, a sample containing clusters of four LQs was drawn from permits issued for construction of residential LQs up until shortly before the beginning of the panel. In jurisdictions that do not issue building permits or have incomplete addresses, small land areas were sampled, expected clusters of four LQs within were listed by field personnel, and then these LQs were subsampled. In addition, sample LQs were selected from a supplemental frame that included LQs identified as missed in the 1980 census.

The SIPP is administered in panels and conducted in waves and rotation groups. The original design of SIPP called for an annual selection of a nationally representative sample of households (a panel), with all adults in those households being interviewed once every four months (a wave). Interviews were also conducted with any other adults living with

original sample members at subsequent waves. Each panel was divided into four subsamples of roughly equal size (rotation groups), with one rotation group getting interviewed each month, for information about the previous 4-month period. Since the first panel in 1984, the number of waves per panel has varied from 3 to 13.

People interviewed in the first wave of an SIPP panel are called original sample members. The original sample members are the "units" that are followed longitudinally. If an original sample member (age 15 or older) leaves a household, he or she is followed and interviewed in the new household. If a household was not interviewed for a wave of SIPP, the household was recontacted during the next wave to be brought back into sample. Households that were non-interviews for two waves in SIPP were dropped from further attempts. The exception being households that were not interviewed because they could not be located: for them, a third attempt for contact was permitted.

In preparation of the 1996 redesign of the SIPP, the Census Bureau canceled the 1994 and 1995 panels and extended the 1992 panel an additional wave. The last interview for the 1992 panel took place in April 1995; the last interview for the 1993 panel took place in January 1996.

The 1997-2002 SPD Survey Design

The 1997 SPD bridged the gap in data between the close of the SIPP panels and the start of the SPD by recontacting the interviewed sample people from the 1992 and 1993 SIPP panels. The sample size for the SPD Bridge Survey was 34,609 households. Census field representatives interviewed 30,125 households during the SPD Bridge Survey.

At any given point in time, a household is eligible to be interviewed if it contains an original sample member (age 15 or older). The number of eligible households fluctuates from round to round of interviewing because of household formation and dissolution—and because original sample members move from one (previously eligible) household to another (previously ineligible) household.

The sample for the 1998 SPD was 19,129 households, subsampled from households interviewed in the 1997 SPD Bridge Survey. The 19,129 households selected for the SPD 1998 (and beyond) met one of the following criteria:

- One hundred percent of the households where the primary family or the primary individual has a total family income below 150 percent of the poverty threshold. The number of cases is 6,182.
- One hundred percent of the households where the primary family or the primary individual has a total family income between 150 percent and 200 percent of the poverty threshold, and there are children under 18. The number of cases is 1,075.
- Ninety percent of the households where the primary family or the primary individual has a total family income above 200 percent of the poverty threshold, and there are children under 18. The number of cases is 6,623.
- Eighty percent of the households where the primary family or the primary individual has a total family income between 150 percent and 200 percent of the poverty threshold, and there are no children under 18. The number of cases is 1,461.

- Twenty-seven percent of the households in the balance. The number of cases is 3,707.
- Twenty-seven percent of the SIPP cases that were institutionalized during the SPD Bridge. The number of cases is 81.

Census Bureau field representatives interviewed 16,395 of the eligible households during the 1998 interview period.

The 1999 SPD sample consisted of all eligible households from the 1998 SPD, including households that were interviews, refusals, temporarily absent, and unable to locate. Census Bureau field representatives interviewed 16,659 of the eligible households during the 1999 interview period.

The 2000 SPD sample consisted of all eligible households from the 1999 SPD, supplemented with 3,456 households subsampled from those that were noninterviews for the 1997 SPD Bridge. For 2000, Census Bureau field representatives interviewed 18,716 of the eligible households.

The 2001 SPD sample consists of 20,185 eligible basic SPD cases, 3,616 eligible 1997 SPD Bridge non interviews added in 2000, further supplemented with 5,540 eligible 1992 and 1993 SIPP non interviews (from Waves 2 through 10). For 2001, Census Bureau field representatives interviewed 22,340 of the eligible households.

Methods to Maximize Response

The SIPP respondents provided 9 or 10 waves of detailed data over a three-year period. The SIPP data collection had a burden of 30 minutes per adult respondent per wave. So the average SIPP household (2.1 adults per household) had provided more than 10 hours of their time. At the end of the last wave of the SIPP interviews, respondents were thanked for their time and told that there would be no more interviews. Then, 1 to 2 years later, the respondents were contacted and told they were still in a panel survey. Therefore, it was not surprising that the SPD would have nonresponse problems.

The reduction of sample through attrition is a concern. The SPD inherited a 26.6 percent sample loss rate from the SIPP sample. However, after two years of the SPD, the sample loss rate was 50 percent. Procedures used during 1999 and 2000 helped to slow the sample loss rate.

Sample Attrition Rates for the 1992 and 1993 SIPP Panels and the SPD

Survey	Eligible Households	Interviewed Households	Average Sample Loss Rate (%)	Interview Rate (%)
1992/1993 SIPP	47,273	35,291	26.6	73.4
1997 SPD	48,633	30,125	41.3	58.7
1998 SPD	32,800	16,395	50.0	50.0
1999 SPD	33,200	16,659	49.8	50.2

2000 SPD Basic	33,600	16,845	49.9	50.1
2000 SPD Basic + 97NI	33,600	18,716	44.3	55.7
2001 SPD Basic + 97NI + 1992/93 SIPP NI	34,000	22,340	37.0	63.0
2002 SPD	23,600	12,496	47.0	53.0

Previous studies on the SIPP sample loss have shown that the sample loss is not uniform (Mack and Petroni 1994; Lamas et al. 1994; Zabel 1993). Households in and near poverty are lost at a higher rate than other households. Since poverty households are a key target population in the study of welfare reform, there is some concern about nonresponse bias.

The 1998-2002 SPD uses several techniques to maximize response rates and ensure the accuracy of the information collected. One of the techniques the Census Bureau uses is the special training given to field personnel. This training emphasizes the conversion of nonresponse households or refusals to complete interviews. Field employees are taught to stress the importance of the survey to the respondent, the positive results that can be obtained from the survey if everyone participates fully, and the satisfaction of knowing that the respondents' answers helped their government or other individuals. Another technique is nonresponse follow-up. Senior field representatives attempt to interview any household that refuses to do the study.

Households receive an interim mailout letter approximately two months before the start of interviewing. This letter thanks the respondent for their past participation in the SPD and explains how their continued participation in the SPD helps make decisions that affect all citizens. In addition, the households also receive a fact sheet containing information from previous data collections of the SIPP and the SPD and a change of address card to let regional office (RO) staff know when the household has a new address.

The recontacts and attempts to interview nonrespondents from earlier interviewing cycles have helped to maximize response. The introduction of 3,456 noninterviews has increased the longitudinal response rate of 50 percent in the 1999 SPD to 55.7 percent in the 2000 SPD.

To determine the effectiveness of monetary incentives on improving response rates, an experiment was included in the 1997 SPD. Low income households in a subset of sample clusters received \$20 vouchers. Compared to a group of low income households in a similar subset of sample clusters, the response rate for the voucher households was slightly (but not significantly) higher (Creighton et al. 2000).

No incentives were used in the 1998 SPD. For the 1999 SPD, eligible but not interviewed households from the 1998 SPD received \$40 debit cards in an advance letter, by priority mail, prior to the interview cycle. Each receiving household was allowed to cash the incentive regardless of the 1999 interview outcome. In addition, other households that were reluctant to continue the survey in 1999 were given a \$40 debit card as part of the conversion procedures.

For the 2000 SPD, they distributed a \$40 debit card to households that received (or were eligible for) an incentive in 1999—and to potential refusals. An incentive of \$100 was

offered to a sample of households that had been noninterviews for the 1997 SPD and had not been contacted in 1998 or 1999. The incentive was given whether an interview was obtained or not.

For the 2001 SPD, a \$40 debit card was distributed to households that received incentives in 1999 or 2000 (and gave interviews); to households that were eligible but not interviewed in 1998, 1999, or 2000; to households that refused to participate in the 2001 SPD (but had not refused in the past); and to eligible but not interviewed households from the 1997 SPD.

Households that were part of the 5,540 eligible but not interviewed cases from the 1992 and 1993 SIPP panel received an advance letter containing a \$100 debit card incentive prior to the SPD field representatives visit in 2001 (assuming a valid address was available). The advance letter and incentive were sent via priority mail. Households receiving a \$100 incentive were allowed to cash the incentive regardless of the interview outcome.

In 1998, when the Adolescent SAQ was conducted with the SPD, the response rate was 58 percent. To increase this response, households with adolescents in the Basic and 1997 SPD noninterview sample receive an additional conditional \$40 incentive in 2001. The incentive was provided to the household respondent/parent if all children 12 to 17 completed their Adolescent SAQ. However, households receiving the \$100 incentive did not receive an additional incentive for completion of the Adolescent SAQ.

Following Movers

The SPD rules call for following original sample members (15 years old or older) who move—provided they are not institutionalized, do not live in military barracks, or do not move abroad. People added to a household roster after the initial SIPP interview are called additional people or non-sample people. Non-sample people are not followed to new addresses if they move unless they move with a sample person.

If an entire household moves, an interviewer tries to find the original sample members and interview them at their new address(es). If only some original sample members move, an interviewer completes interviews with all eligible household members at both the original address and the address(es) of those who have moved.