

**THE SURVEY OF INCOME AND  
PROGRAM PARTICIPATION**

**TESTING TELEPHONE INTERVIEWING  
IN THE SURVEY OF INCOME AND  
PROGRAM PARTICIPATION AND SOME  
EARLY RESULTS**

**No. 71**

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## INTRODUCTION

The Survey of Income and Program Participation (SIPP), is a nationwide household survey which is designed to provide comprehensive information on the economic situation of households and persons in the United States. This survey is one of the first Census Bureau surveys to collect information on cash and noncash income, eligibility and participation in various government transfer programs, labor force status, assets and liabilities, and many other topics on a regular basis to learn how changes in people's lives affect their economic well-being (Nelson et. al., 1985). The multistage stratified sample is drawn from the noninstitutionalized resident population of the United States. A new panel of respondents is selected every year, and is interviewed once every four months for about two and one-half years. Interviewing for the first panel in the SIPP, the 1984 Panel, began in October 1983. Beginning with the introduction of the second panel (1985 Panel) in February 1985, the SIPP has had two or three panels in the field concurrently.

Each panel is divided into four approximately equal subsamples, called "rotation groups"; one rotation group is interviewed in a given month. Thus, one cycle or "wave" of interviewing (using the same questionnaire version) usually takes four consecutive months to complete. At each interview, respondents are asked a core set of questions about their labor force and program participation activities during the previous four-month period. At Waves 2 and beyond of each panel (Waves 3 and beyond for the 1984 Panel), respondents are also asked a set of "topical module" questions which vary by wave and collect information about specific topics of interest such as marital and fertility histories, migration, annual income and taxes, and so on.

When we began the survey we felt that the only way to effectively collect the complex and sometimes sensitive SIPP data was through personal visit interviewing, and so telephone interviewing was discouraged. In fact, in the

1984 Panel at Waves 1 through 5, 95.7 percent of all SIPP interviews were conducted by personal visit, and only 4.3 percent by telephone.

With the introduction of the second and subsequent panels, the costs of conducting the SIPP began to escalate, and we started to think about telephone interviewing as a possible way to save money. With the approval and encouragement of the Office of Management and Budget, we began to pretest telephone interviewing in the SIPP in 1985.

The Census Bureau conducted a small telephone pretest and then a two-phased national telephone test. The pretest (using SIPP cases previously dropped due to a sample reduction) was conducted in two (of 12) regional offices in June 1985. The national test, Phases I and II, was conducted in all 12 regional offices and included live SIPP cases. Phase I cases were interviewed from August–November 1986, and Phase II cases were interviewed from February–April 1987.

Phase I of the test are comparisons of maximum personal visit interviewing versus maximum telephone interviewing. We will refer to this design as a telephone test through the remainder of this paper.

This paper provides a descriptive overview of the pretest and of the two phases of the national test. It describes the sample design, interviewing procedures, and monitoring and feedback systems put in place. The essence of the paper, however, focuses on the analysis completed thus far on Phase I of the test.

## NATIONAL TELEPHONE INTERVIEW TEST

### PRETEST

#### PURPOSE

The first step in testing the use of the telephone to conduct interviews for the SIPP was to determine the practical applicability of using this mode. Because the SIPP questionnaire is long and very complex, we first needed to

see whether it was feasible to make the transition from personal visit to telephone interviewing, given the questionnaire design and subject matter content. We also needed to determine whether telephone interviewing increased unit and specific item nonresponse rates in order to decide whether to take on a full-fledged telephone interview test.

#### SAMPLE AND MATERIALS

We conducted a small telephone pretest in the Chicago and Atlanta regions during the period June 2-28, 1985. We did not want to jeopardize the current sample, and so used "warm contact" households which had been successfully interviewed in previous waves and were scheduled to be interviewed again in June 1985, but which had been dropped from the SIPP due to budget constraints. These households previously received either four or five personal visit SIPP interviews and so had a familiarity with the core questions we would ask. The 1984 Panel Wave 2 questionnaire was used for the pretest since it contained no topical module questions and as such, would provide for a shorter interview than a questionnaire containing topical modules. We felt that the respondents' familiarity with the SIPP interview, coupled with a fairly short interview time, would increase the likelihood of successful interviewing in the pretest. We reasoned that if this pretest failed, it would indicate that the telephone mode could not be successful in the ongoing survey, where most wave questionnaires contain topical modules which lengthen the interview time.

Prior to the interview, respondents were mailed an introductory letter telling them that their next interview would be by telephone. Also included were copies of flashcards to which they would need to refer during the telephone interview.

In preparation for conducting the telephone pretest, interviewers completed a self-study which briefed them on general telephone interviewing procedures (e.g., to isolate themselves from family members during the

interview, to ensure data confidentiality) and instructed them on how to reword certain questions which did not lend themselves to being asked over the telephone. Interviewers were also instructed to maximize self-response interviews; that is, they were told to make at least one call-back to the household in order to have each person in the household aged 15+ years respond for himself or herself.

We asked the interviewers to complete a "debriefing form" at the conclusion of the pretest which enabled them to feed back information to us. They were encouraged to point out procedural and operational problems, and also to express their personal opinions about how easy or difficult it was to interview by telephone.

#### PROCEDURES

A total of 279 households was assigned for the pretest; 169 in Atlanta and 110 in Chicago. The sample in each office was divided into two groups: 50 cases from each region were selected to be telephoned from the regional office (so that Washington personnel could observe the interview by "listening in"), and the remainder of the cases were telephoned from interviewers' homes. When possible, the same interviewer who had conducted personal visit interviewing at a specific household in previous waves also conducted the telephone interview for that household.

#### RESULTS

Of the 279 households assigned, 247 (88.5%) resulted in interviews with 430 person questionnaires completed. Thirty-two households were noninterviews, including only 7 (2.5%) refusals. The balance of the noninterviews were primarily due to households which were telephoned repeatedly but at which no one answered, and to "unfollowable" movers.

From the completed questionnaires we tallied responses to 60 unedited items to measure the data quality. We did not do more because: (1) only 430 questionnaires were completed, which did not provide much of a base for

analysis; (2) interviewers knew that they were participating in a test that would not be counted toward their performance ratings and so may not have put forth the same effort as with their "live" assignments; (3) the data did not undergo our usual clerical and computer editing processes; and (4) the pretest was primarily concerned with the practical applicability of administering a personal visit questionnaire by telephone. The response rates for a few of the 60 selected items are shown in Table 1.

Forty interviewers completed debriefing forms at the conclusion of the pretest. Most interviewers indicated that telephone interviewing worked as well as personal visit interviewing. There were no major complaints from interviewers or their supervisors. They experienced difficulty only in the areas of ring-no answers, and incorrect or disconnected numbers. It seemed that if the interviewers were able to make contact with the household, then they were usually successful in obtaining the interview. Many interviewers stated that they preferred telephone to personal visit interviewing for the SIPP. Further details on the results of the pretest are documented by references 3 (O'Brien) and 4 (Coder).

#### DECISIONS

The observers and interviewers indicated that the SIPP telephone pretest was successful; both the household and the item response rates were reasonable; and respondents reacted positively to the telephone interviewing mode. The next logical step in testing the use of telephone interviews for the SIPP was to implement a statistically-oriented test using live sample cases.

### NATIONAL TELEPHONE INTERVIEW TEST

#### PHASE I

#### PURPOSE

The SIPP telephone pretest demonstrated that it was possible to make the transition from personal visit to telephone interviewing using the SIPP

questionnaire. The objective of Phase I was to determine whether a nationwide sample of currently active SIPP households could be successfully interviewed by telephone. To achieve this, Phase I was designed to provide better estimates of data quality than the pretest by selecting a representative sample, and by subjecting the completed questionnaires to our regular and rigorous clerical and computer edits. A secondary objective was to estimate any cost savings from telephone interviewing.

#### SAMPLE AND MATERIALS

Phase I was conducted over a 4-month period (August–November 1986), using two months of 1986 Panel Wave 2 (August and September) and two months of Wave 3 (October and November) households. We felt that by splitting the test between two waves, the likelihood of a telephone interviewing "disaster" (such as an unacceptably high item nonresponse rate for a given topical module) would be minimized, and that even if a disaster did occur, we still would have enough data to release products for the targeted waves. Sample households within half of the segments in the targeted months were designated as maximum telephone interview cases, and half as maximum personal interview cases based on whether the segment number (a part of the household control number) ended in an even (0,2,4,6,8) or an odd (1,3,5,7,9) digit which would result in a fairly random assignment. Interviewers were expected to use the designated mode for the interview, unless specifically instructed by the supervisor to switch modes, or unless the interviewer or supervisor determined that to use the designated mode would jeopardize the interview.

The regular Wave 2 and Wave 3 questionnaires were used for Phase I. In addition to core questions, the Wave 2 questionnaire contained topical module questions on income reciprocity history, employment history, work disability history, education and training history, family background, household relationships, and marital, migration, and fertility histories. The Wave 3 questionnaire contained topical module questions on child care arrangements

and child support agreements, support for nonhousehold members, job offers, health status and utilization of health care services, long-term care, and the disability status of children.

As in the pretest, we mailed special introductory letters from the Director of the Census Bureau to let respondents know that their next interview may be by telephone, and included the needed reference calendar and flashcards. We also prepared a debriefing form for the interviewers to complete at the conclusion of their assignment in Waves 2 and/or 3. The Phase I debriefing form asked for a synopsis of the interviewers' own experiences with the test such as the number of cases completed by each mode, any difficulties encountered in the administration of the test, their opinions about the usefulness of the telephone in conducting interviews, and general comments. Three hundred interviewers completed debriefing forms. The interviewers' reactions to the Phase I test, summarized in Table 2, provided feedback such as: (1) respondents tended not to use the mini-flashcards which we provided as an interviewing aid; (2) household size should be a factor in deciding whether to interview by phone; and (3) interviewers (or the respondents) should be given the choice as to which mode to use. The complete results are provided by reference 5 (Durant).

#### PROCEDURES

For Phase I, no effort was made to adjust assignments for a given interviewer; that is, assignments were made without taking into account whether the interviewer had any SIPP experience, telephone interviewing experience, or whether the assignments were designated for telephone or for personal visit interviewing. Each selected interviewer completed a telephone self-study (similar to the pretest self-study) prior to beginning his/her telephone assignment. In addition, each interviewer also completed a self-study at Waves 2 and 3 to train them specifically on the topical module questions.

Phase I interviewing was "decentralized"; that is, conducted from the interviewers' homes or some other place besides the regional office. Only a few cases were designated to be completed in the office, so that observers could monitor the interview. Although there were no specific rules for maximizing self-response, the nature of the topical modules lent itself better to self-response than to proxies and the interviewers were instructed to go to the same lengths to get telephone interview self-response as when conducting personal visit interviews. They were also instructed to call back for missing information.

Upon completion of interviewing, the control cards and questionnaires were sent to the regional office for the usual clerical and computer processing.

Some individuals involved in the planning of Phase I were concerned that interviewers would experience an unexpectedly high percentage of interview "break-offs" for telephone interviews. A break-off occurs when the respondent refuses to provide any further information. The point at which this occurs is the "break-off point." Analysts were concerned that if the percentage of break-offs was higher for telephone interviews than for personal visit interviews, then not only would the wave data be adversely affected, but any future interviews with those households would be hindered, thereby affecting the longitudinal data as well.

We devised a system to monitor the level of break-offs by mode. If the level was substantially higher for telephone than for personal visit interviewing, we planned to cancel the balance of the telephone test. In such an event, the telephone-designated cases remaining to be interviewed would be conducted by personal visit. Essentially, the system was for break-offs to be tallied by the clerical staffs in the 12 regional offices during their review of the questionnaires. They sent tally results to Washington on a monthly basis and from those, we calculated national break-off rates. The Phase I

telephone-designated cases did not have an excessive percentage of break-offs, and we did not need to cancel the test.

## RESULTS

### A. Analytic Procedures

The analysis for Phase I of the telephone test which is provided in the following sections is based on unweighted data. Analysis of weighted data will be done as the data become available.

Differences between the designated interview modes were tested with chi-square tests for distributions and t-tests for proportions and means. All tests were conducted at the 10 percent level of significance using design effects of 2.0 (households) and 3.0 (persons) for response type statistics and 1.7 (households) and 5.0 (persons) for all other statistics. Comparisons between the personal visit and telephone interviewing modes are based on designated mode rather than the mode by which the interview was executed. Even if SIPP went to maximum telephone interviewing, there would still be some personal visit interviewing. Therefore, analysis by designated mode provides a truer picture of what the results would be if telephone interviewing was implemented.

Throughout the analysis sections and the tables, all references to Waves 2 and 3 refer only to the telephone test rotations of the waves.

For the discussion on item nonresponse, refusal rates were calculated only for those items for which the questionnaire included "refusal" as a possible response.

Data presented in the tables were obtained during different phases of the processing and editing procedures. Therefore, there may be some discrepancies between tables.

## B. Break-off Rates

As described in the procedures section, clerks in the regional offices reviewed SIPP questionnaires for completeness. The clerks tabulated whether the interview was completed, broken off within the core section, or broken off within the topical module section. Table 3 presents the percentage of break-offs at the national level for Phase I of the telephone test by location of break-off point, month, and designated interview mode. Recall that the topical modules for Wave 2 (August-September) and Wave 3 (October-November) were different. However, as can be seen in the table, break-off rates are quite low and somewhat similar between designated interview modes for each month of the test. The data were collected at the regional office level and examination of the data at this level yields similar results. As a result of these low observed break-off rates, it was decided to complete the telephone test.

## C. Summary Statistics

Various summary statistics were calculated to determine whether the sample cases assigned to the two interview modes were "balanced" by household size and to determine whether certain summary characteristics show differences between the interview modes (percent of cases interviewed by telephone, percent of self response, and mean interview length).

A desirable characteristic for a telephone test is to have a substantial number of telephone designated cases actually interviewed by telephone. Table 4 provides, by designated mode, the percentage of interviewed persons aged 15+ years who had telephone interviews and shows that an estimated 53.9 percent of telephone designated cases were actually interviewed by telephone. However, it is suspected that the true percentage of persons interviewed by telephone for the telephone designated cases may be higher. In keeping with their usual procedures, interviewers were instructed to mark an item on the cover of the SIPP questionnaire if the interview was conducted by telephone.

The interviewers may not have marked the questionnaire item, assuming it was not necessary for persons in the telephone designated households. The 53.9 percent estimate is based on a tally of this unedited item. There was an observed increase from Wave 2 to Wave 3 in the percentage of individuals in personal visit designated households who were actually interviewed by telephone (from 6.2 to 10.0 percent). Interviewers currently work within very strict guidelines on when an interview can be conducted by telephone. Therefore, the Wave 2 to Wave 3 increase may have been a result of interviewers' interpretation that telephone interviewing was becoming more acceptable. However, it may be that interviewers initially disliked telephone interviewing but became more comfortable with the mode as they used it for the telephone test.

The distributions of interviewed households by the number of persons aged 15+ years within the household for the two interview modes given in Table 5, are significantly different. In addition, the average household sizes for interviewed households for the two interview modes are significantly different. This suggests that a balance by household size between the designated interview modes was not achieved. However, since the distributions and average household sizes are for interviewed households, it is not known whether the lack of balance for interviewed household size results from lack of balance in the initial assignment to interview mode or from differential nonresponse rates between the interview modes by household size.

As with any major survey designed for self response, a concern for SIPP is the amount of information obtained from proxy respondents. Included in Table 5 is the percentage of interviews obtained by self and proxy respondents by designated interview mode. The percentage of self-response interviews for personal visit designated cases is significantly different from the percentage for telephone designated cases (64.68 for personal visit versus 62.21 percent

for telephone cases). Self-response is desired; however, SIPP interviewers follow strict rules when determining who can be a proxy respondent, and this may lessen the impact upon the data of using proxy respondents.

The mean interview length per person, also shown in Table 5, is 21.77 minutes for personal visit designated cases and is significantly different from the 20.71 minutes for telephone designated cases. Although the interviewers do not begin timing an interview until the interview actually starts, there was some expectation that the time required to complete telephone interviews would be shorter since the interviewer may be less likely to engage in unrelated conversation with the respondent during the interview on the telephone than in person. However, there are two points which may result in increased mean time for telephone designated cases. First, a reported 46 percent of telephone-designated cases were actually interviewed by personal visit. Second, the telephone time could be longer than expected because the interviewers had to speak more slowly than usual to be understood over the phone, or had to repeat questions more often, or needed to read flashcard categories which the interviewer would normally show to the respondent in a personal visit interview.

#### D. Costs

A major attraction of telephone interviewing is expected cost savings. Analysis of the collected cost data produced inconclusive results. Table 6 provides the percentage of hours and costs as the interviewers allocated them to the personal visit and telephone designated interview modes by month. Note that these values are based on all panels in the field (whether they are in the test or not) for the given month. As mentioned earlier, a secondary objective of Phase I was to estimate any cost savings from telephone interviewing. However, to prevent increased interviewer burden, we were subject to the constraint that no special cost reporting forms could be used. Therefore, we instructed interviewers to charge all interviewing costs

associated with personal visit and telephone designated cases to separate accounting codes. A summary of costs and hours charged to each accounting code could then be created. However, this summary would include all panels in the field.

Calculations based on the hours' data produced an unreasonable estimate of the percentage of time devoted to travel. These results may be due to a problem with the assignment of interviewing costs to the household's designated interview mode. Therefore, we also compared combined mode cost data with the previous year's costs. We were again forced to use data which were for all panels in the field during the months of interest. The data show higher cost, time, and mileage estimates for the telephone test time period. However, there are a number of factors which may have affected these data. First, the lower average assignment size for calendar year 1986 may result in more miles per unit for 1986. Secondly, since the 1984 Panel cases had completed more interviews than the 1985 Panel cases at this point, respondents for the 1984 Panel cases may have been slightly more familiar with the core questions resulting in a lower interview time for 1985. Thirdly, the 1985 Panel Wave 2 questionnaire did not contain any topical modules, and this may have resulted in a reduced interview time for 1985. The 1984 Panel expired in July 1986. Since this was the first time a panel has expired, its effects on the 1986 cost estimates are unknown. Finally, cases designated for telephone interviewing comprised only about one-fourth of all cases in the field for 1986.

As a result of the apparent allocation problem with the data included in Table 6 and the extraneous factors which affect analysis of the year-to-year data, we cannot make a final conclusion on what, if any, effect telephone interviewing has on field cost, time, and mileage estimates.

#### E. Household Nonresponse

One may conjecture that telephone interviewing increases household nonresponse because it is easy for the respondent to simply end the interview by hanging up the telephone. A substantial increase in household nonresponse could have serious consequences for the validity of survey results. Two types of household nonresponse could potentially be affected by interview mode: Type A and Type D. Type A nonresponse households include refusal, no one at home, temporarily absent, unable to locate, or other households. Type D nonresponse occurs when some or all members of a household move to an unknown address or within the country beyond preset limits and cannot be contacted by telephone.

Household nonresponse rates are shown in Table 7 by reason for noninterview and designated interview mode. Type A and D response rates are provided in Table 8 for each month of Phase I of the telephone test by designated interview mode. There are no statistically significant differences between the rates given in Table 8 for personal visit and telephone designated cases. Although not significant, the nonresponse rates for telephone designated cases are lower for three of the four months for Type A nonresponse and lower for one of the four months for Type D nonresponse. The telephone interviewing mode does not have a statistically measurable impact on the household nonresponse rates. Whether this will continue to hold for consecutive telephone interviews is not known at this time.

#### F. Person Nonresponse

Even if a household is an interviewed household, persons within the household may still be nonrespondents as a result of the person's refusal or unavailability. Person nonresponse could adversely affect survey data quality by increasing imputation rates. Since it is seemingly easier for a respondent to terminate or refuse an interview over the telephone, there was concern that there would be an increase in person nonresponse. Although the percentage of

person nonresponse in telephone designated households is higher than that in personal visit designated households as shown in Table 5 (2.7 versus 2.9percent), the difference is not significant. Therefore, there seems to be little effect on person nonresponse from telephone interviewing.

G. Item Nonresponse

The failure of an otherwise cooperative respondent to respond to a particular item is a concern for all surveys, but of particular concern for an income survey like SIPP, because many of the questions we ask are perceived to be of a sensitive nature. Of the item nonresponse rates presented in Tables 9 and 10, the rates for telephone designated interviews are not significantly different from the personal visit rate for any of the items. Although the individual differences are not significant, item nonresponse rates for telephone designated cases were higher than those for personal visit cases for a total of 29 of the 32 items. Item nonresponse may occur as a result of respondent refusal, the respondent not knowing the answer (or being unwilling or unable to retrieve records), or the failure of the interviewer to follow the correct skip pattern. Of these causes, respondent refusal may be most likely to be affected by telephoning. Comparison of refusal rates presented in Table 10 showed no significant differences between personal visit and telephone designated interviews. Although not individually significant, refusal rates for telephone cases are higher for 15 of the 21 items for which refusal rates were calculated. Overall, there is little detectable effect from telephone interviewing on item nonresponse rates. However, the large variance on these estimates may be preventing significant results from being detected. Therefore, we believe that these results show that item nonresponse rates may be slightly affected by telephone interviewing.

H. Future Analysis

Much more analysis of the Phase I test data is required before any final statement can be made on the effect of telephone interviewing on the SIPP.

Some of the data measures discussed in the previous sections will be analyzed further by determining whether there are any differences at the subnational level and by examining weighted data. A major part of the cross-sectional analysis which remains to be completed is comparison of weighted estimates by mode as a measure of data quality. In addition, future analysis will include comparison of a variety of longitudinal estimates by mode. All of the above analysis will be performed as the data are processed and become available.

#### DECISIONS

Household response rates did not seem to be seriously affected by the telephone interviews, and person nonresponse rates were comparable by mode. Item nonresponse rates were affected by telephone interviewing, but only slightly.

Because a major characteristic of the SIPP is its longitudinal design, we need to maintain a good rapport with respondents through eight interviews, over about a two and one-half year period. We did not know if households which had been interviewed by telephone at Waves 2 or 3 would be cooperative if they were contacted again by telephone (with, at the most, one intervening personal interview) for Wave 4. And we did not know the impact of consecutive telephone interviews upon person and item nonresponse. To research these areas, we conducted Phase II of the SIPP National Telephone Interview Test.

### NATIONAL TELEPHONE INTERVIEW TEST

#### PHASE II

#### PURPOSE

Phase II was conducted in order to: (1) learn whether people are willing to furnish the requested data by telephone for two interviews in a row; (2) obtain further information on whether telephone interviewing would result in

cost savings to the survey; and (3) allow observation of the effect upon telephone interviewing of having three panels in the field at the same time.

The decision to test telephone interviews in a subsequent wave was reached after much discussion by Census analysts. We had heretofore operated on the premise that one of the reasons people are willing to give us the information we request is due to the rapport that the interviewer and respondent have built over the interviewing cycles. We were not at all sure that the same type or level of rapport would continue if some of the interviews (and in particular, consecutive interviews) were conducted by telephone. Further, we were not, at that point, able to show whether telephone interviewing would save money. Although we presumed that the telephone mode would save money by reducing travel costs, we hadn't yet compared the total survey costs using telephone and personal visit interviewing.

#### SAMPLE AND MATERIALS

For Phase II, three (of four) months of 1986 Panel Wave 4 households were targeted for telephone interviewing during the period February-April 1987. The sample was again designated by segment number, with even-numbered segments assigned for telephone and odd-numbered segments for personal visit interviewing. Two of the three months' telephone interviewing were with households which had also been interviewed by telephone during Wave 3. The third month's telephone interviewing was with households which had been interviewed by telephone at Wave 2, but by personal visit at Wave 3.

The Wave 4 questionnaire consisted of core questions plus topical module questions on assets and liabilities, retirement expectations and pension plan coverage, and real estate property and vehicles information. We again prepared special Director's letters which notified respondents that the Wave 4 interview may be by telephone, and included mini-flashcards and a reference calendar for their use during the interview.

## PROCEDURES

For Phase II, interviewers had more flexibility in deciding the interview mode for telephone-designated cases. We made this change in response to the Phase I debriefing comments received from the interviewers that they ought to have the choice of mode, since they were aware of the special situations of each of their households. Whereas the personal-visit designated cases were specifically instructed to be completed in person (unless a prior arrangement was made with the household or supervisor to conduct the interview by phone), the telephone-designated cases could be conducted by telephone or personal visit, at the discretion of the interviewer. No prior supervisory approval was required in order to switch modes for telephone-designated cases. However, written justification had to be provided afterwards to the supervisor.

No specific telephone training was required for interviewers who had also worked on the Phase I test. For these people, procedural changes for the Phase II test were communicated to them by memorandum. Interviewers who had no prior SIPP telephone interview experience were required to complete a telephone self-study prior to beginning their assignments. Additionally, all interviewers, regardless of their telephone experience, were required to complete the regular Wave 4 self-study which trained them on the topical module questions.

No "disaster criteria", such as those established for the Phase I test, were put in place for Phase II. That is, we made no plans to cancel the telephone test based on break-offs. However, we did collect break-off information in order to keep abreast of the progress of the test.

## RESULTS

Results are not yet available for Phase II of the telephone test. Planned analysis is similar to that for Phase I, with the addition of determining

whether there is any effect from consecutive telephone interviews which is different from any effects which may be found in the Phase I analysis.

SUMMARY

For some surveys, telephone interviewing has been an effective mode for data collection while reducing survey costs. Whether this will hold for the SIPP is yet to be determined. Although initial results indicate only minimal effects from telephone interviewing, the remaining analysis must be completed before we can firmly state the possible effects on SIPP which would occur if telephone interviewing were implemented. Any final decision on whether and how telephone interviewing would be implemented in SIPP will depend not only on the SIPP National Telephone Interview Test results but also on experiences from the use of maximum telephone interviewing for other Census Bureau surveys.

**Table 1: SELECTED ITEM RESPONSES BY REGIONAL OFFICE  
SIPP 1985 TELEPHONE PRETEST**

ITEM	TOTAL	
	<u>Number</u>	<u>Percent</u>
1 Number of questionnaires edited	430	
2 Check Item R7=Yes (indicating that there were entries in the Income Roster)	158	
3 Number of questionnaires with entries in the Income Roster	150	94.9
4 Check Item R32=Yes (indicating that there were entries in the Asset Roster)	273	
5 Number of questionnaires with entries in the Asset Roster	274	100.4
6 Social security received	91	
7 Social security amount provided	86	94.5
8 Food stamps received	20	
9 Food stamps amount provided	11	55.0
10 Company pension received	16	
11 Company pension amount provided	12	75.0
12 Savings accounts owned	256	
13 Amount in savings accounts provided	187	73.0
14 Funds, Bonds owned	21	
15 Value of funds, bonds provided	17	81.0
16 Stocks owned	53	
17 Amount in stocks provided	27	50.9
18 Rental property owned	37	
19 Value of rental property provided	17	45.9

SIPP National Telephone Interview Test - Phase I

	<u>Number</u>	<u>Percent</u>
1. Total number of cases (households) upon which the Summary is based: personal-visit designation -	1402	47.8
telephone designation -	1533	52.2
2. Total number of telephone-designated cases which were completed by "mixed mode"; that is, within a household one or more questionnaires was administered by telephone and one or more by personal visit -	54	3.5
3a. Total number of telephone-designated cases which were entirely completed by personal visit	316	20.6
b. Main reasons cited for completing these cases in person:		
1. Household respondent requested personal interview	49	
2. Telephone number not available/unable to contact by phone	45/25	
3. Instructed by supervisor to interview in person	22	
4. Difficult interview in previous wave	19	
5. Hearing-impaired respondents	15	
6. Language barrier	9	
4a. Total number of personal visit-designated cases which were entirely completed by telephone	200	14.3
b. Main reasons cited for completing these cases by telephone:		
1. Household respondent requested telephone interview	81	
2. Respondent unavailable for personal visit	25	
3. Instructed by supervisor to interview by phone	8	
5a. Total number of telephone-designated households which did <u>not</u> refer to the reference cards during the interview (these cards were mailed about a week prior to the interview date along with an introductory letter) -	205	13.4
b. Main reasons cited for not referring to cards:		
1. Misplaced between receipt and interview date	103	
2. Too much bother	41	
3. Respondent "did not need them"	27	
6. Total number of telephone-designated households which specifically asked for a personal visit in future waves	113	7.4
7. Total number of telephone-designated households which specifically asked for a telephone interview in future waves	137	8.9
8a. Number of interviewers who indicated that telephone interviewing could be successfully implemented in the SIPP	224*	74.7
b. Main reasons cited:		
1. Respondents prefer phone.	70	
2. Efficient to the respondent and to the Bureau in terms of time/money	57	
3. Flexibility	15	

\*Some interviewers marked Yes and No, citing reasons for each.

SIPP National Telephone Interview Test - Phase I  
(Continued)

9a. Number of interviewers who indicated that telephone interviewing could <u>NOT</u> be successfully implemented in SIPP	88*	29.3
b. Main reasons cited:		
1. Nature of questions/length of interview	26	
2. Rapport/trust impossible to build and maintain over phone	20	
3. Too easy for respondents to hang up	13	
4. More likely to provide estimates by phone/less willing to get records	9	
10a. Number of interviewers who thought that household size should be a factor in deciding whether to interview by phone	249	83.0
b. Maximum number of persons in the household which the interviewers thought could be successfully interviewed by phone at one sitting:		
1. One person	24	
2. Two people	150	
3. Three people	61	
4. Four or more people	25	
11a. Number of interviewers who indicated that integrating telephone interviewing into the SIPP would result in higher person response rates over time	133*	44.3
b. Main reasons cited:		
1. Respondent is less imposed upon	57	
2. Saves time for respondent	29	
3. Respondents don't like visitors	17	
4. Respondent is accessible at odd hours	6	
12a. Number of interviewers who indicated that integrating telephone interviewing into the SIPP would <u>NOT</u> result in higher person response rates over time	160	53.3
b. Main reasons cited:		
1. Easy for the respondent to hang up	43	
2. The mode of interview has no effect	37	
3. Phone too impersonal	32	
4. Respondents prefer personal visit	18	
13. Other interviewer comments/suggestions:		
a. Give interviewers choice as to mode	82	
b. Give respondents choice as to mode/include question at the Wave 1 interview to determine	25/11	
c. Do not use telephone for first few interviews; build rapport by personal visit	18	
d. Whether to phone should depend upon the topical modules	11	
e. Personal visit interviewing probably yields more accurate data	6	
f. For a given household, phone interviewer should be the same as personal-visit interviewer	4	

\*Some interviewers marked Yes and No, citing reasons for each.

**Table 3: Percentage of Breakoffs by Location of Break-off Point, Month, and Designated Interview Mode  
SIPP National Telephone Interview Test - Phase I**

Month/ Designated Interview Mode	Number of Questionnaires	Location of Break-off Point		
		Total	Core	Topical Module
<b>Total</b>				
Personal Visit	11492	1.2	0.1	1.1
Telephone	10147	1.3	0.1	1.2
<b>Wave 2</b>				
<b>August</b>				
Personal Visit	2816	2.2	0.2	2.0
Telephone	2559	1.7	0.3	1.4
<b>September</b>				
Personal Visit	2498	1.5	0.1	1.4
Telephone	2640	1.8	0.1	1.7
<b>Wave 3</b>				
<b>October</b>				
Personal Visit	3089	0.7	0.0	0.7
Telephone	2530	0.3	0.0	0.3
<b>November</b>				
Personal Visit	3089	0.7	0.1	0.6
Telephone	2418	1.3	0.0	1.3

**Table 4: Percentage of Interviewed Persons Aged 15+  
Interviewed by Telephone by Wave and  
Designated Interview Mode  
SIPP National Telephone Interview Test  
- Phase I**

<b>Wave / Designated Mode</b>	<b>Total Interviews</b>	<b>Telephone Interviews</b>	<b>Percent</b>
<b>Total (August - November)</b>			
<b>Personal Visit</b>	<b>12475</b>	<b>998</b>	<b>8.0</b>
<b>Telephone</b>	<b>11433</b>	<b>6161</b>	<b>53.9</b>
<b>Wave 2 (August - September)</b>			
<b>Personal Visit</b>	<b>6497</b>	<b>402</b>	<b>6.2</b>
<b>Telephone</b>	<b>6175</b>	<b>3297</b>	<b>53.4</b>
<b>Wave 3 (October - November)</b>			
<b>Personal Visit</b>	<b>5978</b>	<b>596</b>	<b>10.0</b>
<b>Telephone</b>	<b>5258</b>	<b>2864</b>	<b>54.5</b>

**Table 5: Summary Statistics for Interviewed Households by Designated Interview Mode  
SIPP National Telephone Interview Test - Phase I**

Characteristic	Personal Visit		Telephone	
	Value	Percent	Value	Percent
<b>Household size (15+) *</b>				
<b>Total</b>	5645	100.00	5396	100.00
1	1588	28.13	1519	28.15
2	2711	48.02	2692	49.89
3	790	13.99	750	13.90
4	380	6.73	302	5.60
5	116	2.05	99	1.83
6+	60	1.06	34	0.63
<b>Average household size **</b>				
Persons aged 0+	2.912	NA	2.844	NA
Persons aged 15+	2.103	NA	2.055	NA
<b>Persons aged 15+</b>				
<b>Total</b>	12814	100.00	11774	100.00
<b>Interviewed</b>	12475	97.35	11433	97.10
<b>Noninterviewed</b>	339	2.65	341	2.90
Refusal	232	1.81	202	1.72
Other	107	0.84	139	1.18
<b>Interviewed</b>	12475	100.00	11433	100.00
Self response	8069	64.68	7113	62.21
Proxy response	4406	35.32	4320	37.79
<b>Mean interview length per person</b>	21.77	NA	20.71	NA

NA - Not Applicable

\* Note that the source of the data from which these distributions were obtained is different from the source for all of the other summary statistics.

\*\* These averages were calculated on bases of 6092 (personal visit) and 5729 (telephone).

**Table 6: Interviewer Hours and Costs Charged to the Designated Interview Modes as a Percentage of Total by Month  
SIPP National Telephone Interview Test - Phase I**

Month	Hours		Costs (\$)	
	Personal Visit	Telephone	Personal Visit	Telephone
August	94.1	5.9	95.7	4.3
September	93.0	7.0	94.2	5.8
October	93.9	6.1	94.8	5.2
November	94.8	5.2	95.6	4.4

**Table 7: Household Nonresponse by Reason and Designated Interview Mode  
SIPP National Telephone Interview Test - Phase I**

Reason for Nonresponse	Personal Visit	Percent	Telephone	Percent
<b>Total</b>	<b>503</b>	<b>100.00</b>	<b>423</b>	<b>100.00</b>
<b>Type A noninterview *</b>				
No one home	22	4.37	15	3.55
Temporarily absent	26	5.17	17	4.02
Refused	252	50.10	220	52.01
Other	24	4.77	10	2.36
<b>Type D noninterview</b>	<b>134</b>	<b>26.64</b>	<b>126</b>	<b>29.79</b>
<b>Ineligible units</b>	<b>45</b>	<b>8.95</b>	<b>35</b>	<b>8.27</b>

\* No type A households were categorized as "unable to locate."

**Table 8: Percentage of Household Nonresponse by Month and Designated Interview Mode  
SIPP National Telephone Interview  
Test - Phase I**

	Personal Visit		Telephone	
	Base	Percent	Base	Percent
<b>Type A</b>				
<b>Wave 2</b>				
August	1537	5.7	1404	4.1
September	1438	4.7	1474	3.7
<b>Wave 3</b>				
October	1607	5.9	1459	4.9
November	1536	4.6	1437	5.6
<b>Type D</b>				
<b>Wave 2</b>				
August	1537	1.9	1404	1.8
September	1438	1.5	1474	1.6
<b>Wave 3</b>				
October	1607	1.8	1459	2.0
November	1536	1.9	1437	2.4

**Table 9: Percentage of Item Nonresponse for Labor Force  
Items for Waves 2 and 3 Combined by Designated  
Interview Mode  
SIPP National Telephone Interview Test - Phase I**

Item	Telephone		Personal Visit	
	Base	Nonresponse	Base	Nonresponse
Looking for work or on layoff	3644	0.7	3906	0.3
Weeks looking for work or on layoff	356	5.3	435	3.9
With a job or business each week	6974	0.2	7482	0.1
Absent from job for full weeks	6002	0.0	6408	0.0
Weeks absent from job for full weeks	439	5.2	486	4.7
Weeks with a job or business	958	2.4	1063	2.2
Absent from job for full weeks	958	2.3	1063	2.2
Weeks absent from job for full weeks	37	2.7	67	1.5
Looking for work or on layoff	958	2.4	1063	1.7
Weeks looking for work or on layoff	460	3.9	498	1.8
Hours worked per week	6974	1.6	7482	1.2

**Table 10: Percentage of Item Nonresponse and Refusal for Income Items for Waves 2 and 3 Combined by Designated Interview Mode  
SIPP National Telephone Interview Test - Phase I**

Item / Respondent Type	Telephone			Personal Visit		
	Base	Nonresponse	Refusal	Base	Nonresponse	Refusal
<b>Hourly wage rate</b>						
Total	3671	12.2	4.1	4038	11.4	4.6
Self	2080	7.3	3.6	2402	6.5	3.7
Proxy	1591	18.7	4.8	1636	18.6	5.9
<b>Monthly wage and salary income</b>						
Total	5769	9.4	3.9	6185	9.0	3.5
Self	3447	5.9	3.0	3857	6.0	2.9
Proxy	2322	14.5	5.3	2328	13.8	4.6
<b>Self employment income</b>						
Total	681	18.5	10.9	684	15.4	9.1
Self	410	13.2	8.8	417	11.0	7.9
Proxy	271	26.6	14.0	267	22.1	10.9
<b>Interest earning assets *</b>						
Interest-joint	2055	32.0	8.1	2142	29.9	7.8
-individual	3235	34.7	7.0	3304	34.5	6.5
Balance-joint	473	37.4	11.2	456	34.6	10.1
-individual	844	34.6	5.5	857	32.6	7.5
<b>Other interest earning assets</b>						
Interest-joint	193	40.9	11.9	191	38.2	9.4
-individual	297	39.4	10.1	337	32.3	7.4
Balance-joint	53	56.6	13.2	54	42.6	16.7
-individual	81	56.8	6.2	73	37.0	5.5
<b>Dividend income</b>						
Received-joint	317	18.9	14.8	328	14.6	9.1
-individual	869	13.5	6.9	819	9.4	4.8
Credited-joint	233	40.8	3.0	238	39.9	1.7
-individual	572	30.4	1.2	562	32.2	1.4

\* Includes savings accounts, money market deposit accounts, certificates of deposit, and NOW accounts.