

## Assessment of efforts to reduce nonresponse bias: 1996 Survey of Income and Program Participation (SIPP)

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# Assessment of Efforts to Reduce Nonresponse Bias: 1996 Survey of Income and Program Participation (SIPP)<sup>1</sup>

PRESTON JAY WAITE, VICKI J. HUGGINS AND STEPHEN P. MACK

*Abstract: Concern over increasing levels of nonresponse in the 1991-1993 SIPP Panels and new information about the existence of bias in time series estimates of poverty from the SIPP surfaced prior to fielding the newly redesigned SIPP 1996 sample. A tremendous amount of effort and expense has been dedicated by the U.S. Census Bureau to reducing nonresponse and adjusting for its bias. This paper will summarize these efforts and provide a preliminary assessment of the success of the efforts for the first year of the 1996 panel. We will discuss the use of monetary incentives, fielding nonresponse surveys, and changes in field staffing and procedures.*

## 1 Introduction

The SIPP is a complex panel survey conducted by the U.S. Census Bureau to provide information for federal policy makers and academia on topics such as part-year poverty, government program participation and eligibility, health insurance coverage, and income distributions. The SIPP has been used as a multi-purpose survey providing *cross-sectional, longitudinal and current event information*. The primary goal of the survey though is a longitudinal one - select a nationally representative sample of households and follow the people in those households to assess changes in their characteristics over time. Quite often, the multi-purpose uses of the data have compromised the longitudinal uses in terms of sample size, data product availability, and important longitudinal analyses.

The 1996 SIPP Panel is the first sample from the new abutting panel design of the survey. The 1984-1993 panels were longitudinal and overlapping - up to 3 panels were in the field simultaneously. Approximately 37,000 sample households will be interviewed every 4 months for about 4 years which will provide analysts with more longitudinal

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<sup>1</sup> The views expressed are attributed to the authors and do not necessarily reflect the views of the U.S. Bureau of the Census.

observations than the old longitudinal design of 2 2/3 years. A new panel will be introduced every 4 years, e.g., 2000 and 2004. The 1996 panel also includes an oversample of the low income population to enhance poverty analyses.

The change from an overlapping panel to an abutting panel design beginning with the 1996 sample supports the primary goals of the SIPP: producing longitudinal estimates of income and program participation, paying most attention to improving the information for people who are economically at risk, and improving the capability to respond to current policy needs in topical areas. However, the change also inherently exacerbates panel nonresponse issues in the SIPP because overlapping panels will not be available for combined panel analyses which help reduce the level of nonresponse.

The Bureau has conducted a great deal of research on nonresponse issues in the SIPP attempting to 1) assess the differences in the responding and nonresponding universes, 2) estimate the effect of attrition on specific estimates such as monthly mean income amounts, poverty and program participation estimates and 3) investigate alternative imputation and weighting procedures to reduce nonresponse bias.

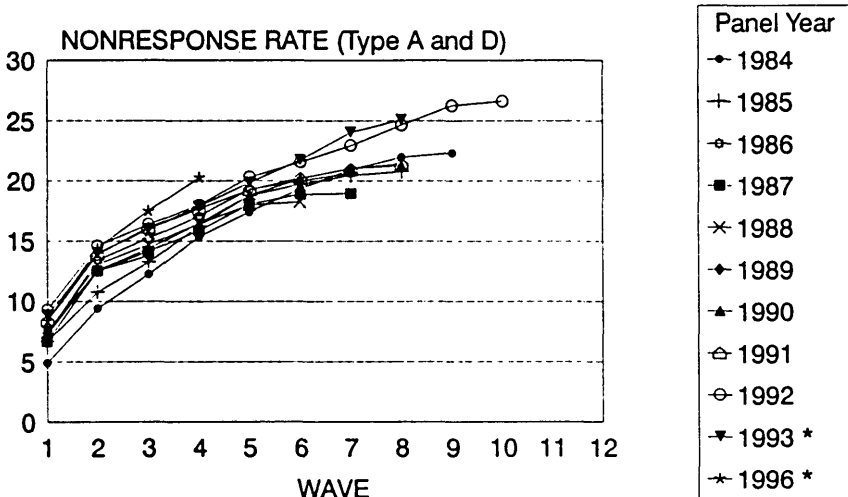
Until recently, there was little evidence that nonresponse bias posed major problems for many important SIPP estimates (Lepkowski et al. 1992, McCormick 1994). Over the past few years though, the Bureau observed some important phenomena in current poverty and low income data series estimates from the SIPP that are cause for concern. Specifically, there is a consistent drop in poverty and some income estimates across panels from the first to second interview that is larger than expected (Huggins and Winters 1995). Also, there is a consistent pattern of decrease in poverty over the life of a panel. These phenomena in and of themselves are troubling, but it becomes even more troubling when the time series carries over from the end of one 4-year panel sample to the beginning of another 4-year panel sample. With the observed decline in poverty estimates over the life of a panel and the higher level reporting at the first interview of a new panel, the jump in the time series resulting from switching to a new panel could be substantial.

Nonresponse rates for the 1984-1990 panels were 5-8% for the first interview and about 21% after eight interviews. Average levels of nonresponse increased in the 1991-1993 panels as compared to earlier panels and the 1995 dress rehearsal first interview response rates were discouragingly low - 88%. The observed bias in poverty statistics described above and the increasing levels of nonresponse since 1990 prompted the Census Bureau to focus even more effort and resources on procedures to reduce nonresponse and improve adjustment methodologies. In the 1996 panel specifically, we

1. Researched the use of monetary incentives at reducing levels of nonresponse.
2. Conducted a nonrespondent study to collect information for improvements in the Wave 1 weighting and to assess whether interview observations may act as good proxy information for weighting. The study was comprised of 2 surveys - one of nonrespondents, one of interviewers.
3. Enhanced field procedures for tracking people who move, updated field evaluation procedures, and stepped up the feedback to Field Division on the importance of high response for longitudinal surveys. We also added clerical staff and improved training of interviewers for conversion of refusals.

Below, we present the picture of nonresponse in SIPP, then we discuss in detail the concerted efforts towards improvement and current results to date as they relate to the success of reducing/adjusting for nonresponse bias in the 1996 SIPP.

**Figure 1: Nonresponse rates for the 1984-1996 Sipp Panels**



\*Preliminary Rates;

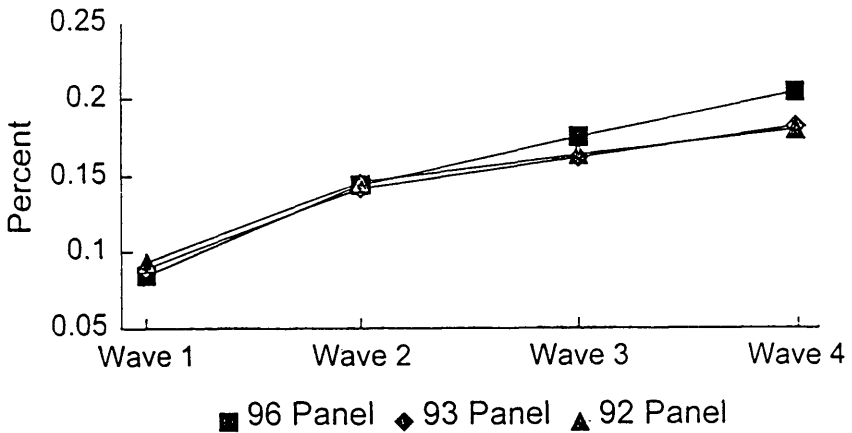
Type A: refused/not at home/temporarily absent; Type D: unlocatable mover

## 2 Patterns of nonresponse and existence of nonresponse bias

As seen in Figure 1, there was a significant increase in nonresponse rates between the 1984 and the 1992 and 1993 panels. When the decision was made to implement a 4 year non-overlapping panel design, we assumed we would reach a nonresponse rate of about 25% after 12 waves of interviews. This in fact became our goal for the 1996 panel. Unfortunately, we now project nonresponse of about 35% after 12 waves. (Wave refers to the 4 month time period it takes to interview the entire sample.)

Figure 2 graphically presents nonresponse rates from the 1992, 1993 and 1996 panels through wave 4. It shows that even with elevated efforts by the Bureau, response rates for the 1996 panel have *not* improved overall compared to the 1992 and 1993 panels.

**Figure 2: Household sample loss rates, Wave 1, 2, 3 and 4**



Figures 3 and 4 present attrition for the 1991 and 1996 panels respectively by poverty/non-poverty status at the time of survey drop out. Comparing the two graphs, it appears that the unlocatable mover nonresponse rates (type D nonresponse) are down in the 1996 panel as compared to the 1991 panel. (Rates for the nonpoverty group at Wave 2 are not statistically different from each other). However, the refusal rates (type A nonresponse) have increased in the 1996 panel. (Rates for the poverty group at Waves 2 and 3 were not statistically different). These are the two major components of household level nonresponse that we attempted to reduce in the 1996 panel.

Figure 3: SIPP 1991 panel wave 2 + nonresponse rates by poverty status

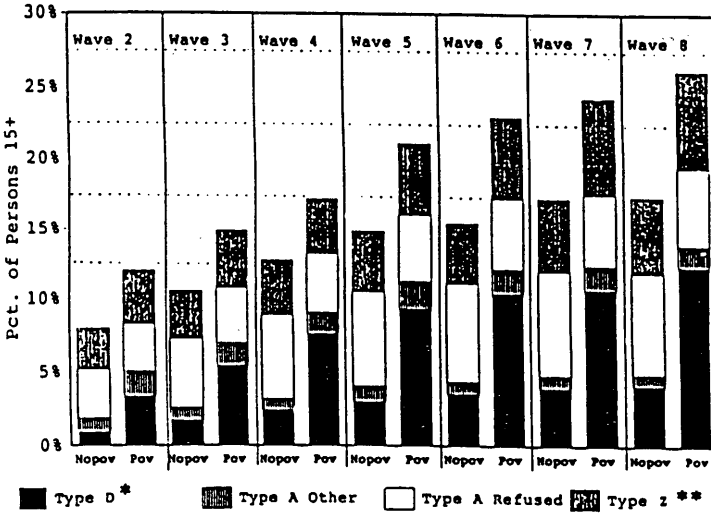
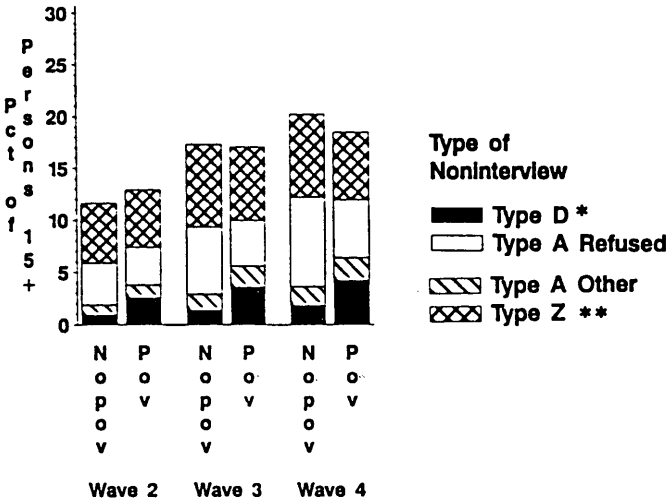


Figure 4: SIPP 1996 panel wave 2 + nonresponse rates by poverty status



\* Unlocatable mover

\*\* Within household person nonresponse

### **3 Efforts to reduce nonresponse in the 1996 SIPP Panel**

#### **3.1 Incentives**

Without some changes in procedure, the Bureau recognized in 1995 that nonresponse could rise to an unacceptable level by the end of a 4-year panel. A plausible means of maintaining higher response rates is to offer incentives to SIPP sample households. Research has shown that incentives are effective at reducing nonresponse in mail surveys, but little has been done in personal visit interviews. One of the few intensive studies on a personal visit survey offered a nice ball point pen, which increased response rates from 76% to 81% (Willimack et al. 1995). SIPP also reported limited success in the 1987 panel with a one-time non-cash incentive (Butler 1991). More specifically, incentives have been shown to decrease refusal rates (Willimack et al. 1995) and are most effective with minorities and undereducated persons (Berlin et al. 1992, Ferber and Sudman 1974). Since these groups of persons are more likely to have low incomes, the incentive may have higher value to them. A major objective of the SIPP is to provide measures of economic well-being among the low income population, so it becomes important to keep this population well represented in the SIPP sample.

We designed the SIPP experiment to answer the following questions:

1. Do incentives reduce nonresponse at the first (Wave 1) interview?
2. Do incentives reduce nonresponse among low income households at the first interview?
3. Do incentives at Wave 1 reduce nonresponse at subsequent interviews?
4. Do incentives at Wave 1 reduce nonresponse at subsequent interviews for the low income population?

At the initial Wave 1 interview of the 1996 SIPP Panel, the incentives were given as early as possible in the personal visit to the addresses of test cases. The incentives were introduced to the respondent as „a token of appreciation“. The respondents were given a paper voucher that resembled cash with the denomination of the incentive printed in the corners. The respondents were instructed to fill in their name and check their address and return it to the Census Bureau in a preaddressed stamped envelope. They were told that they would receive a check for the amount of the incentive in 2 to 3 weeks. Interviewed and noninterviewed households received the incentive; i.e., incentives were given out regardless of the household interview status. Approximately one-fourth of the sample received vouchers for \$10, one fourth received vouchers for \$20, and one-half did not receive vouchers. This corresponded to a sample size of about 10,000 households each per voucher treatment groups and 20,000 for the control group.

Figure 5: Rot 2-4 sample loss

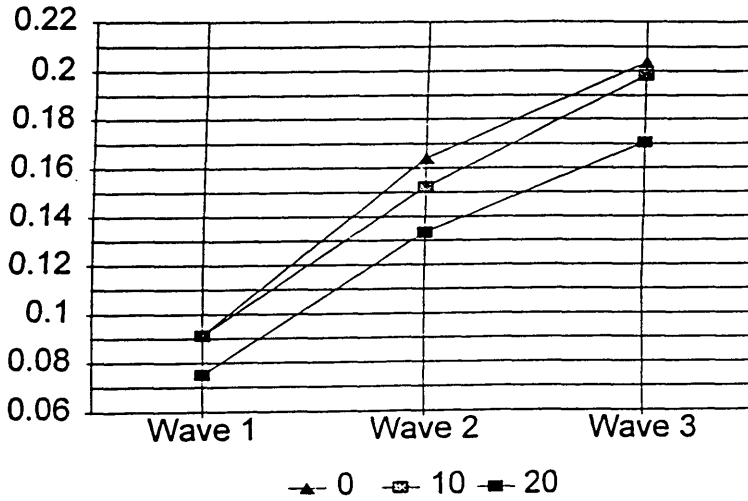
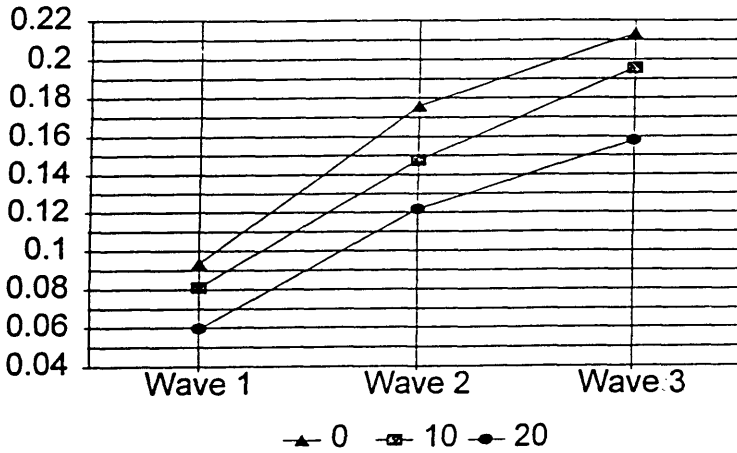


Figure 6: Rot 2-4 sample loss: Poverty stratum





Treatment groups were assigned at the stratification Primary Sampling Unit (PSU) level. Typically, a stratification PSU is made up of one or more counties in the U.S. The PSUs were sorted into 11 blocks based on their 1990 Decennial Census number of households. Each block was composed of 23 to 39 PSUs. The PSUs were ordered by size within each block and then the sample was randomly assigned to the \$0, \$10, and \$20 groups.

Generally, interviewers were assigned to only one treatment group. The exception came when cases had to be reassigned due to reluctant respondents or interviewers leaving. Interviewers were aware of the experiment and the treatment groups, which probably affected their motivation for getting completed interviews.

As shown in Figure 5 and Figure 6, the \$20 incentive significantly reduced overall nonresponse rates and nonresponse rates in the high poverty stratum, i.e., the SIPP design stratum with a high proportion of poverty units. There is also some evidence that the \$10 and the \$20 incentives are effective at Wave 2 at reducing nonresponse rates both overall and in the high poverty stratum. By Wave 3, the evidence is quite substantial that the \$20 incentive is effective both overall and in the high poverty stratum. For more detailed information on the results, see James (1997). There is also evidence that incentives reduce the number of callbacks needed to obtain a complete interview. This is important in balancing the cost of the incentive with the cost of repeated visits. This result is consistent with findings in incentive literature cited earlier.

Evident from the decrease in nonresponse rates in the high poverty stratum, the \$20 incentive is very likely to reduce the nonresponse bias associated with low income households in the SIPP.

This effort in the 1996 panel was a success. We will continue to analyze the data for all waves and look at results for other subgroups such as participants in government programs, Black, Non-Black and Hispanic subgroups.

### **3.2 Nonresponse study**

SIPP Wave 1 nonrespondents are not contacted in subsequent waves, and the Wave 1 nonresponse adjustment is an integral part of each future wave's weighting adjustment. Also, very little is known about nonresponse bias in Wave 1, other than what is available on the sampling frame. Because of this, the quality of Wave 1 nonresponse adjustment is a high priority, especially in light of a four-year panel.

To assess the feasibility of improving adjustments for Wave 1 unit nonresponse in the 1996 Panel, we conducted two surveys:

- *One survey was a mail-out/mail-back questionnaire to gather limited information from nonrespondents after close-out of SIPP data collection for Wave 1. **Nonrespondent Questionnaire** (see appendix, Figure 7)*
- *The other was filled in by our interviewing staff called field representatives (FRs) after each noninterview to collect observational information; **Field Representative Questionnaire** (see appendix, Figure 8)*

Together, the surveys provide insight into the quality of the SIPP Wave 1 noninterview adjustment, as well as providing information to assess Wave 1 nonresponse bias.

### Methodology

To evaluate whether the study results can be used to reduce the nonresponse bias associated with important subject matter estimates such as poverty, program participation, and income distributions, two types of analyses were performed:

1. We compared responses across the two surveys to determine how well FRs served as a resource in imputing for nonresponse. High correlations indicated that field representatives serve well as such a resource. We calculate three measures of association: a nonparametric percent concordance, a continuous simple correlation, and a categorical Cramer V association measure. The Cramer V association measure is described in Kendall and Stuart (1979) and the percent concordance measure is one minus the gross difference rate, commonly used in reinterview analysis. We then consolidated the two surveys, taking answers from the nonrespondent when we had them, taking answers from the FR when we did not. We compared the aggregate to the production database to determine how well responses were in concordance for those households that were eventually converted to completed interviews in production and for those households that remained type A noninterviews. High correlations indicate that responses from FRs and nonrespondents are in agreement with the production database. We calculated the same association measures as discussed above.
2. Distributional properties of respondents and nonrespondents were also analyzed. This was performed at the aggregate level. We produced crosstabulations of key characteristics by their nonrespondent status. FRs filled out questionnaires for type A nonrespondents who, after further follow-up, were finally converted to a completed response. Because of this we were able to partition respondents and nonrespondents into three categories:

- "Early Respondents" are those households that responded in the production database and did not have FR questionnaires filled out.
- "Late Respondents" are those households that responded in the production database and had FR questionnaires filled out because they were originally type A noninterviews.
- "Type A Noninterviews" are those households that have completed FR or nonrespondent questionnaires and are in the production database as type A noninterviews.

Distribution of demographic and housing factors such as tenure, race, and income were compared for the three types of respondents using a polytomous logistic regression. The higher the log odds ratio in absolute value, the stronger the relationship between the demographic or housing factor and whether the household was an early respondent, a late respondent, or a type A noninterview.

The objective here was to determine whether we could correct or weight for nonresponse bias by examining the characteristics of nonrespondents who are reluctant to participate in the initial phases of SIPP but later consent and characteristics of individuals who remain nonrespondents. This analysis should help to identify other variables to be used in developing a new nonresponse adjustment procedure, where original SIPP sample and respondents to study differ.

To obtain as high a response rate as possible from the nonrespondents and to keep the incremental workload for field representatives as low as possible, we kept the nonrespondent questionnaires short (one page front and back for both field representatives and nonrespondents) and changed the mode of the study instrument of nonrespondents from personal interview to mail-out/mail-back. Specifically, we limited the questions to those items used for Wave 2+ nonresponse adjustment and specific measures of interest concerning income, poverty, and program participation. We also asked questions of the nonrespondents that we believed the field representatives could also answer.

For monthly household income, three categories (<1200, 1200-3999, and 4000+) were provided to field representatives while six categories (<500, 500-1199, 1200-2999, 3000-3999, 4000-8999, and 9000+) were provided to nonrespondents because we believed that nonrespondents could provide a more precise estimate of their monthly household income than field representatives. We wanted as many income categories as possible to compare nonrespondents to the respondents in the production database. The six categories are collapsed into the three field representative categories when comparing answers between nonrespondents and field representatives.

Shortening the length and changing the mode of the questionnaire was highly successful in the nonrespondent survey. Of 3,194 type A noninterviews in Wave 1 of the 1996 SIPP Panel, all were sent questionnaires. Counting only those forms that were completely filled in or partially filled by the respondent, and excluding ineligible we obtained a response of 716 questionnaires or a rate of 22%. Of the remaining nonrespondent questionnaires returned to the Bureau, approximately half were undeliverable as addressed or out of scope. We found limited success with the mail-out/mail-back short questionnaire for those from whom we were unable to obtain complete SIPP interviews in a personal interview. We need to determine the proportion of them that were refusals versus not at home, etc. to access what portion of the nonrespondent population was willing to cooperate under this scenario versus the full SIPP experience.

After matching the nonrespondents survey data with the interview observational data, we conclude that *field representatives do as well as nonrespondents* in providing some information. These are the variables with relatively high correlation or Cramer V statistics.

- *race of reference person*
- *number of residents in household*
- *number of children in household*

There are three variables that lead us to conclude that *field representatives do not perform as well as nonrespondents* in providing information. They are:

- *rented in public housing project*
- *received rent subsidy*
- *household monthly income*

For the other variables, we believe that further research is prudent.

This research has led to interesting observations:

1. We did not expect to see the results concerning income when comparing field representatives and nonrespondents. When asked to obtain proxy information or estimate household income themselves, FRs tend to understate household income.
2. We did not expect to see the disparity concerning public housing. That leads us to believe that nonrespondents and field representatives may have differing definitions of public housing projects. In fact, the FR may even be more correct in their definition if they talked to a knowledgeable respondent such as a superintendent. We wish to look into a greater understanding of this issue in the future as it potentially indicates a self-identification problem on the part of respondents and an identification problem

on the part of field representatives, both of which can be problematic to researchers when conducting any poverty survey.

The next step is to develop a new nonresponse adjustment procedure using those variables that we determined were most associated with response. We will construct a test database of all respondents and nonrespondents to Wave 1 and determine which adjustment cells nonrespondent households will reside.

1. *We will reweight nonrespondent households in those adjustment cells and compare those weights to their original nonresponse adjustment.*
2. *We will test whether the values of income, poverty, and program participation estimates show a statistically significant change as a result of the reweighting.*

It is possible to extend this study in the future to incorporate administrative records for nonresponse adjustment. These efforts may be undertaken to validate reporting error. For interviewed cases, we could compare values reported in the survey to values derived from administrative records. We could use auxiliary information where possible (e.g., reinterviews) to determine which measures are biased if they disagree. We could then consider whether the differences are systematic; e.g., due to conceptual or time period differences, and whether such differences could be modeled and then form the basis for adjusted values.

Whatever the case, having two questionnaires supplement for nonresponse brings us a long way in understanding who nonrespondents are and how to adjust for them as necessary. Final results could lead to changes in SIPP Wave 1 weighting and routine collection of nonrespondent and/or field representative data.

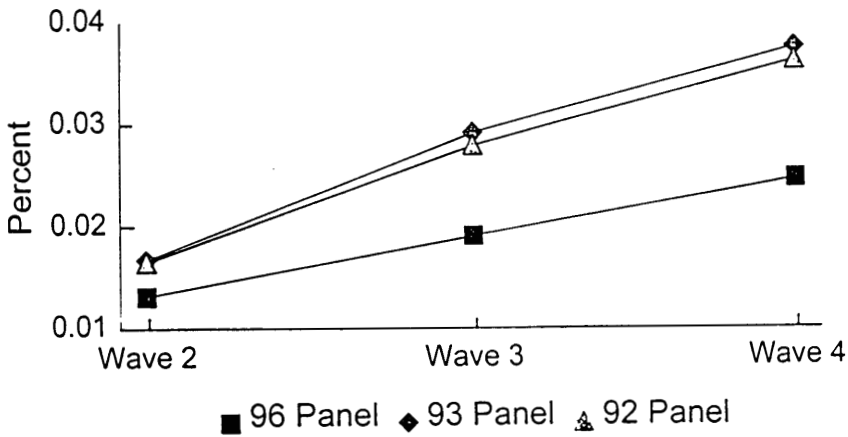
### **3.3 Field improvements**

We implemented several changes in the field work to try to improve response rates. In general, we disseminated more information at all levels in our Field Division to educate and enlighten staff about the existence and harmful effects of nonresponse on longitudinal survey estimates. We focused on following mover activities since Field had not traditionally recognized mover noninterviews as causing serious bias as compared to refusals, not-at-home, and temporarily absent cases. Below are some specific efforts.

### 3.3.1 Centralizing locating activities

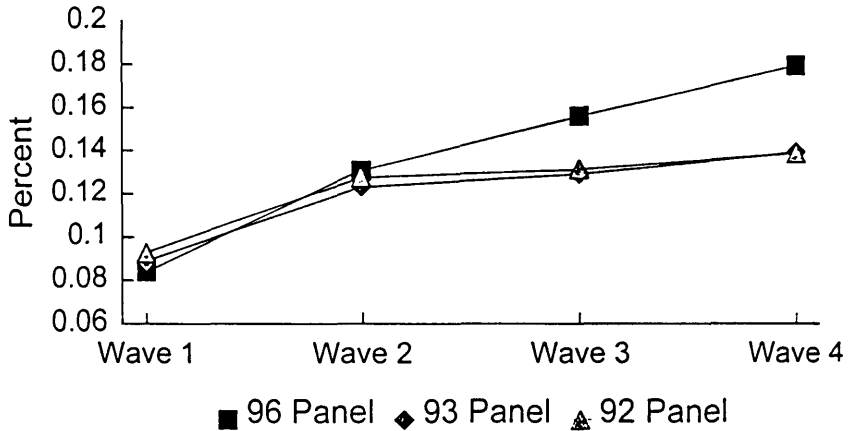
Each Regional Office (RO) hired a clerk to assist the local FRs in tracking SIPP movers. This tracker is not just for SIPP cases exclusively, but for all surveys. Once a case is identified as a type D (unlocated mover) by the FR, the tracker is assigned the case. The locator begins to try to find the mover during what previously had been the resting months, i.e., the months between interviews. FRs and Regional locators would work together, communicating by telephone, for a total of eight months on each case designated as a type D noninterview.

**Figure 9: Type D (unlocated mover) rates: Waves 1, 2, 3 and 4**



As seen in Figure 9, type D rates in the 1996 panel were practically cut in half as compared to the 1992 and 1993 panel rates. Figure 10 indicates however, that type A refusal rates increased - almost by 4 percentage points. The type D improvement is overshadowed by the increase in refusals.

**Figure 10: Type A (refused) rates: Waves 1, 2, 3 and 4**



### 3.3.2 Extending the length of time to track movers

The goal is to increase the rate of successful locations by extending the time to track from 5 months to 9 months. This is accomplished by increasing the number of waves a type D noninterview is reassigned to the field. Previously, it was thought that missing two interviews in a row would make the case longitudinally worthless. However, we plan to implement a new imputation procedure to impute for one or two consecutive missing waves. Therefore conversion after two waves can still benefit longitudinal analysis.

We will begin to tabulate the number of cases that will be improved for longitudinal analyses through this effort after Wave 6 becomes available - this will give two years worth of longitudinal data to evaluate the increase in useable sample.

### 3.3.3 Feedback of total sample loss rates to ROs monthly

The idea behind this initiative was to feedback not only the type A rate but also the type D rate to the ROs. This had not been done systematically in the past. The quality of the SIPP survey is judged by total sample loss, thus the ROs should be judged by the same standards. Field Division is feeding back the *interview* rate to ROs which is defined as the number of interviews divided by assigned workload. This rate is affected by type A, B, C,

and D nonresponse (nonresponse of eligible (A & D) and ineligible (B & C) units). So far, reaction has been negative because this rate is adversely affected by cases that FRs never had a chance to interview, namely type Bs (vacants, converted to business) and type Cs (condemned, demolished).

### 3.3.4 Including type D rates in field representative rating standards

Up until recently, FRs were evaluated on their type A rate and their production time. Thus, locating a mover was a lower priority than keeping refusal rates and production times low. We believe that including type D rates in FRs' ratings reinforces the fact that locating a mover is as important as keeping a reluctant sample household participating. Field Division initially felt that the ROs would disagree with the initiative and simply ignore the standard which is within their rights. The principal reason for disagreement is the difficulty in implementing the standard fairly. There are some areas in the U.S. that have little migration and/or where tracking is easy, but there are also areas that have a high mobility rate and offer few leads for movers. This initiative was implemented with some flexibility accounting for regional differences in migration patterns. This change may contribute to the different pattern of type A and D cases we see in the 1996 panel. Perhaps FRs coded refusals as unlocatable movers in the past. However, changes in rating standards would no longer make that advantageous to them.

### 3.3.5 Automatic and consistent transference of type D noninterviews across regional offices

If a type D is known to move to another RO's area it should *automatically* be transferred, not *optionally* transferred based on past positive or negative experiences with movers or whether it is an interview or not. In the past, we relied on ROs to work this out on an ad-hoc basis but it often caused delays and hard feelings. Computer interviewing makes transference/control of mover cases easier. Field division currently has written guidelines and computer programs that speed up the process and reduce problems.

## 4 Conclusion

Unfortunately, our 75% response rate goal for the 1996 SIPP 12-Wave panel is eluding us. However our efforts did make a positive difference in the following ways:

- *Wave 1 response rates improved with the use of incentives; particularly in the low income population. In addition, attrition rates have dropped significantly for this incentive group over subsequent waves of interviewing.*



- *The collection of nonrespondent data still has potential for improving Wave 1 weighting. We need to complete the analyses and reweighting pieces to determine the best way to use the nonrespondent information.*
- *Recapture of noninterview cases at later interviews will improve the quality of the data for longitudinal analyses, i.e., we should have more useable cases longitudinally.*

We are concerned to think how high nonresponse *may have been* in the 1996 had we not committed substantial resources to minimize its level and reduce its biasing effects.

A question we have raised repeatedly in light of increasing nonresponse is "when is the level of nonresponse unacceptable?" We were used to observing 25% nonresponse in the 1984-1990 panels, so an increase to 28% in the 1991-1993 panels was not alarming. However, 35% from 25% is quite a jump, especially since we know poverty estimates are adversely affected by attrition. We even have to question whether other estimates we evaluated in the past that seemingly were not adversely effected by attrition before now have crossed over and are seriously biased with the new patterns and levels of attrition.

We will continue to investigate the experimental results and apply positive measures to the 1996 and 2000 panels. We are hopeful that we will once again be able to use incentives even if it is a test in 2000 to determine the number of times incentives are needed to minimize nonresponse. We will also continue to document known effects of nonresponse bias and re-visit some of the earlier findings to determine if they are still valid.

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## References

- Berlin, M., L. Mohadjer and J. Waksberg (1992). An Experiment in Monetary Incentives. Proceedings of the Survey Research Section of the American Statistical Association, pp. 393-398.
- Butler, D. (1991). SIPP 87: Gift Experiment Results. Internal Census Bureau Memorandum dated April 2 to R. Singh
- Ferber, R. and S. Sudman (1974). Effects of Compensation in Consumer Expenditure Studies. *Annals of Economic and Social Measurement*, pp. 319-331
- Huggins, V. J. and F. Winters (1995). Income and Poverty Time Series Data from the Survey of Income and Program Participation. Presented at the International Conference on Survey Measurement and Process Quality, Bristol, England
- James, T. M. (1997). Results of the Wave 1 Incentive Experiment in the 1996 Survey of Income and Program Participation. Proceedings of the Survey Research Methods Section of the American Statistical Association. Forthcoming
- Kendall, M. and A. Stuart (1979). *The Advanced Theory of Statistics, Volume 2*. New York, McMillan Publishing Company, Inc.
- Lepkowski, J., S. Pennel, D. Miller and G. Kalton (1992). Time in Panel Effects in the SIPP. Report for Census Bureau JSA Contract 90-28. Ann Arbor, University of Michigan
- McCormick, M. K. (1994). SIPP 1984-1988 Panel: Time-in Sample Effect Study Results. Internal Census Bureau memorandum for the Record
- Willimack, D., H. Schuman, B. Pennel and J. Lepkowski (1995). Nonmonetary Incentives in Face-to-Face Surveys. *Public Opinion Quarterly*, 59, pp. 78-92



**▶ Mark (X) the appropriate box below. If "Yes", provide your best estimate of the amount received for each income type received last month.**

<p><b>6. Last month, did anyone in this household work for pay -</b></p> <p><b>a. on a job?</b></p> <p><input type="checkbox"/> Yes - Total earned by all who worked \$ _____ . 00</p> <p><input type="checkbox"/> No</p> <p><b>b. as self-employed?</b></p> <p><input type="checkbox"/> Yes - Total earned by all who worked \$ _____ . 00</p> <p><input type="checkbox"/> No</p>	<p><b>10. Last month, what was the TOTAL HOUSEHOLD INCOME before deductions? Total household income equals the combined income of all household members from all sources from which money was earned last month.</b></p> <p>Mark (X) one box.</p> <p>1 <input type="checkbox"/> \$ 0 - \$ 499    4 <input type="checkbox"/> \$ 3,000 - \$ 3,999</p> <p>2 <input type="checkbox"/> \$ 500 - \$ 1,199    5 <input type="checkbox"/> \$ 4,000 - \$ 8,999</p> <p>3 <input type="checkbox"/> \$ 1,200 - \$ 2,999    6 <input type="checkbox"/> \$ 9,000 or more</p>
<p><b>7. Last month, did anyone in this household receive income from the following?</b></p> <p><b>a. General Assistance (GA)</b></p> <p><input type="checkbox"/> Yes - How much? \$ _____ . 00</p> <p><input type="checkbox"/> No</p> <p><b>b. Aid to Families with Dependent Children (AFDC)</b></p> <p><input type="checkbox"/> Yes - How much? \$ _____ . 00</p> <p><input type="checkbox"/> No</p> <p><b>c. Supplemental Security Income (SSI)</b></p> <p><input type="checkbox"/> Yes - How much? \$ _____ . 00</p> <p><input type="checkbox"/> No</p> <p><b>d. Foster child payments</b></p> <p><input type="checkbox"/> Yes - How much? \$ _____ . 00</p> <p><input type="checkbox"/> No</p> <p><b>e. Women, Infants, and Children (WIC)</b></p> <p><input type="checkbox"/> Yes - How much? \$ _____ . 00</p> <p><input type="checkbox"/> No</p>	<p><b>11. Does anyone in your household have health insurance with Medicaid?</b></p> <p>1 <input type="checkbox"/> Yes</p> <p>2 <input type="checkbox"/> No</p>
<p><b>8. Last month, did anyone receive pension income from the following?</b></p> <p><b>a. Social Security</b></p> <p><input type="checkbox"/> Yes - How much? \$ _____ . 00</p> <p><input type="checkbox"/> No</p> <p><b>b. Other pensions</b></p> <p><input type="checkbox"/> Yes - How much? \$ _____ . 00</p> <p><input type="checkbox"/> No</p>	<p><b>PGM 4</b></p> <p><b>12. Are your living quarters - Mark (X) one box.</b></p> <p>1 <input type="checkbox"/> Owned or being bought by you or someone in your household?</p> <p>2 <input type="checkbox"/> Rented for cash?</p> <p>3 <input type="checkbox"/> Occupied without payment of cash rent?</p>
<p><b>9. Last month, did anyone get income from the following?</b></p> <p><b>a. Rent from real estate</b></p> <p><input type="checkbox"/> Yes - How much? \$ _____ . 00</p> <p><input type="checkbox"/> No</p> <p><b>b. Dividends from stocks or mutual funds</b></p> <p><input type="checkbox"/> Yes - How much? \$ _____ . 00</p> <p><input type="checkbox"/> No</p> <p><b>c. Interest from bonds, bank accounts (Do not count interest from a checking account.)</b></p> <p><input type="checkbox"/> Yes - How much? \$ _____ . 00</p> <p><input type="checkbox"/> No</p> <p><b>d. Any other income</b></p> <p><input type="checkbox"/> Yes - How much? \$ _____ . 00</p> <p><input type="checkbox"/> No</p>	<p><b>13. Is this residence in a public housing project? Mark (X) one box.</b></p> <p>1 <input type="checkbox"/> Yes</p> <p>2 <input type="checkbox"/> No</p> <p><b>14. Is this residence owned by a local housing authority? Mark (X) one box.</b></p> <p>1 <input type="checkbox"/> Yes</p> <p>2 <input type="checkbox"/> No</p> <p><b>15. If rented, is the government paying part or all of the rent for this property? Mark (X) one box.</b></p> <p>1 <input type="checkbox"/> Yes</p> <p>2 <input type="checkbox"/> No</p>
	<p><b>16. What race is the head of this household? The head of the household is the person who owns or rents this residence. Mark (X) one box.</b></p> <p>1 <input type="checkbox"/> White</p> <p>2 <input type="checkbox"/> Black</p> <p>3 <input type="checkbox"/> American Indian, Eskimo, or Aleut</p> <p>4 <input type="checkbox"/> Asian or Pacific Islander</p> <p><b>17. Is the head of the household Hispanic? (Mexican, Mexican American, Chicano, Puerto Rican, Cuban, Spanish, Latino, or other Spanish/Hispanic/Latino.) Mark (X) one box.</b></p> <p>1 <input type="checkbox"/> Yes</p> <p>2 <input type="checkbox"/> No</p> <p><b>18. What is the highest grade of school that the head of the household completed? Mark (X) one box.</b></p> <p>1 <input type="checkbox"/> 0 - 8th</p> <p>2 <input type="checkbox"/> 9th - 12th; no diploma</p> <p>3 <input type="checkbox"/> High school graduate, some college (no degree), vocational/technical school, Associate's degree</p> <p>4 <input type="checkbox"/> College graduate - any post graduate degree</p> <p><b>Please return in the envelope enclosed or mail to the address on the front page.</b></p> <p><b>THANK YOU FOR YOUR HELP.</b></p>

Figure 8: Field representative questionnaire

Form SIPP/NFR-16003 12-70-98	U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS
<b>SIPP TYPE A RECORD FOR WAVE 1 OF THE 1996 PANEL</b>	
<b>Section I - TYPE A NONINTERVIEWS - To be completed by Field Representative for every Type A transmitted to RO. Answer all items by interview or observation.</b>	
<p><b>1. FR Code</b>  <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/></p> <p><b>2. Date prepared</b>                  Month                      Day                      Year  <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/>   <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/>   <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/></p> <p><b>3. Control number</b>                  PSU                        Segment No.                        Serial No.  <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/>   <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/>   <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/></p> <p><b>4. Name of reference person (owner/renter of house)</b>                  Last                        First                        Initial  <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/>   <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/>   <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/></p> <p><b>5. Household type (Mark (X) one)</b>                  1 <input type="checkbox"/> Female reference person, no husband present, with own children under age 15                  2 <input type="checkbox"/> Reference person is 65 or over                  3 <input type="checkbox"/> Other</p> <p><b>6. Household size</b>                  a. Number of adults age 15 and older ..... <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/>                  b. Number of children age 14 and younger .. <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/>                  c. Total (Sum of lines a and b) ..... <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/></p> <p><b>7. Race of reference person</b>                  1 <input type="checkbox"/> White                  2 <input type="checkbox"/> Black                  3 <input type="checkbox"/> American Indian, Eskimo, or Aleut                  4 <input type="checkbox"/> Asian or Pacific Islander</p> <p><b>8. Tenure</b>                  1 <input type="checkbox"/> Own - SKIP to 11                  2 <input type="checkbox"/> Rent                  3 <input type="checkbox"/> Occupied without payment of cash rent - SKIP to 11</p> <p><b>9. Rented in public housing project</b>                  1 <input type="checkbox"/> Yes                  2 <input type="checkbox"/> No</p> <p><b>10. Received rent subsidy</b>                  1 <input type="checkbox"/> Yes                  2 <input type="checkbox"/> No</p>	<p><b>11. Monthly household income (Combined income of ALL household members.) (Mark (X) one)</b>                  1 <input type="checkbox"/> Low (less than \$1,200)                  2 <input type="checkbox"/> Medium (between \$1,201 and \$3,999)                  3 <input type="checkbox"/> High (\$4,000 or more)</p> <p><b>12. Market/Rental value of housing unit</b>                  a. If owned, what would you estimate to be the market value of the house or condominium? Market value equals the price the unit would sell for if sold today.                  \$ _____ <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/> per month                  b. If rented, what would you estimate to be the monthly rent of the house or apartment?                  \$ _____ <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/></p> <p><b>13. Number of visits and telephone calls to the household before transmitting to RO</b>                  Number of visits to the household ..... <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/>                  Number of telephone calls to the household <input style="width: 20px; height: 15px;" type="text"/> <input style="width: 20px; height: 15px;" type="text"/></p> <p><b>14. Type A non-interview reason at time transmitted to RO (Mark (X) one)</b>                  1 <input type="checkbox"/> No one at home                  2 <input type="checkbox"/> Temporarily absent                  3 <input type="checkbox"/> Refused                  4 <input type="checkbox"/> Unable to locate                  5 <input type="checkbox"/> Language problem                  6 <input type="checkbox"/> Other Type A - Explain _____                  _____                  _____                  _____                  _____</p>
ENTER COMMENTS ON THE BACK!	

