

THE INCOME SURVEY DEVELOPMENT PROGRAM:  
A REVIEW

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The most frequently used source of regular data on household income in the United States is the March income supplement to the Current Population Survey (CPS). These annual income questions supplement the regular monthly CPS questions on labor force participation. Though the March supplement provides the best income data now available on a yearly basis:

- o it measures only regular cash income, excluding non-cash income (such as food stamps, housing subsidies, and employer health benefits and pension contributions), and non-recurring payments (capital gains, insurance settlements, gifts, etc.)
- o it contains no measure of assets, few measures of program participation, and insufficient information to accurately estimate program eligibility;
- o it does not provide a sufficient sample of the particular populations of most concern to HEW; e.g., the low-income population and means-tested program participants;
- o it does not measure intra-year income flows;
- o it fails (according to estimates based on administrative records) to account for between 25 and 30 percent of the income from welfare payments, almost 15 percent of Social Security benefits, and over half of the payments from property income;
- o it produces estimates of last year's income based on the current household membership and therefore fails to reflect changes in household composition;
- o it produces income estimates based on a one-year accounting period, while eligibility for many Federal programs is based on monthly or quarterly income; projections of program eligibles, case-loads, and costs based on the March CPS may therefore be biased downward.

The primary purpose of the CPS is to gather information on employment and unemployment. There is limited space and time for additional questions, and there are constraints which would sharply limit a redesign of the survey. The limitations of current statistics have therefore led to numerous proposals for a "new income survey." As early as 1970, consideration was given to a "spring income survey" separate from the March income supplement to the CPS. A comprehensive review of statistics on the distribution of income and poverty, undertaken by the Office of Management and Budget in the spring of 1973, identified deficiencies and called for improved measures of both cash and in-kind income.

The Department of Health, Education and Welfare (HEW), with its major income-tested and income security programs as well as its institutional concern for the poor, was in a position to respond to the growing demand for improved data.

In 1974, the HEW Technical Working Group on income data and models proposed developing a new survey to provide better information on income and related characteristics of the population and on participation in Government programs. Early in 1975, therefore, the Secretary of HEW approved the Income Survey Development Program.

Responsibility within HEW for the new Income Survey Development Program (ISDP) was taken by the Office of the Assistant Secretary for Planning and Evaluation (ASPE). Between October, 1977, and August, 1980, the ISDP conducted four major field studies (described in more detail below) in collaboration with the Bureau of the Census.

#### BASIC DESIGN FEATURES OF THE ISDP SURVEYS

##### A Panel Design with Frequent Interviews

From the first stages of the ISDP surveys have had a longitudinal element: panels of sample persons are interviewed at regular intervals, and followed to new addresses if they move. If part of a sample household moves, later interviews are at both addresses, but if the entire household moves interviewers no longer return to the initial sample address. ISDP Panels were usually interviewed at 3-month intervals, though 6-month reference periods were also tested.

##### Modular Questionnaire Design (with Repeated Income Section)

One of the driving forces behind the decision to build the panel designs around frequent, repeated interviews was the belief that one of the major problems in reporting income, especially variable or irregularly received income types, was the inability of recipients to recall correct amounts after several months had passed. The initial interview was therefore devoted primarily to uncovering and measuring all sources of income for each person in sample. After the first interview, it was possible to use the detailed income profile previously built up to update receipt and amounts of income for the following quarter, along with changes in household composition and labor force participation. This left additional interview time to ask special questions or "topical modules" on new subjects of particular interest. These included:

- o net worth
- o disability
- o health care and health insurance
- o inter- and intra-household income transfers
- o child care arrangements
- o perceptions of programs
- o educational enrollment and expenditures
- o life cycle financial planning and pension coverage
- o household energy consumption

Final interviews, administered in the Spring, asked about taxes for the previous year. This "annual roundup" made it possible to calculate spendable as well as gross income.

#### A Focus on Income, Program, and Wealth Data

Although early discussion of the "new income survey" was usually in terms of collecting income together with other data on program eligibility, participation, and benefits, interest was also expressed in an alternative emphasis on income and wealth.

The two focuses are not mutually exclusive, since means-tested programs frequently have asset screens. The assets included or excluded in calculating eligibility and benefits vary from program to program, since there is no single national set of criteria. To make estimates for a variety of programs, it is necessary to collect information on almost all forms of assets. The survey mechanism developed by the ISDP therefore serves both purposes.

#### Use of Administrative Record Systems as Sampling Frames

Sampling from what are termed "list frames" makes it possible to examine in detail small groups of particular program or policy interest and to match administrative data with survey responses, either as a methodological check on the quality of reporting or as a non-burdensome way of expanding the variables in the data base. The ISDP devoted considerable attention to exploring the theoretical and practical difficulties involved in drawing, locating, and interviewing list frame persons. In addition, access was obtained to tax returns for the limited purpose of drawing names and addresses of persons reporting specific income types or increasing the proportion of the sample with an adjusted gross income above a certain, relatively high cutoff point.

### THE ISDP FIELD SURVEYS

#### The Site Research Test

The first ISDP study, the Site Research Test, was conducted in five urban areas (San Antonio, Houston, Dallas, Milwaukee, and Peoria) between October, 1977, and February, 1978.

Experiments - The Site Research Was designed to provide a controlled experimental test of alternative survey design features. The first test varied the recall period, comparing a single interview in January or February, using a 6-month recall period, with two consecutive interviews in October/January or November/February, both using 3-month recall periods.

The second test compared alternative questionnaire formats. Half the sample was administered the so-called "Long Form". This detailed format, personalized and shortened by a heavy reliance on check items and alternative skip patterns through the instrument, has served as the basis for most later ISDP interviews and will, with modest improvements and refinements, be used in the first SIPP panels. The alternative "Short Form" was generally modelled on the "established" CPS March Income Supplement then in use.

Sample - In addition to an address sample based on the 1970 Census (drawn to produce a random sample of the general population), the Site Research

survey interviewed three samples of program participants drawn from administrative records. These records provided "true" data on income reciprocity against which survey reporting under different experimental procedures could be validated.

A list sample of approximately 850 participants in the Aid to Families with Dependent Children (AFDC) program was drawn for the cities of San Antonio, Houston, and Dallas. A second list sample of approximately 850 persons was drawn from the Supplemental Security Income (SSI) program files centrally maintained by SSA.

The area, AFDC, and SSI frames were sampled on a probability basis with equal numbers of sample units drawn from each frame in each interview period. A third, smaller list sample of 150 elderly households was drawn from SSA records for Milwaukee and Houston to provide experience in interviewing and in operational matters. This sample did not enter into the experimental design.

Data Collection - Personal interviews were conducted in the sample households by Bureau of the Census interviewers. Each person 16 years old or older living in the sample household was eligible to be interviewed in person at the time of the interviewer's visit. When possible, interviewers selected another, related household member to provide information for each eligible person not present at the time of the interview. If there was no acceptable proxy the interviewer attempted personal contact by telephone or return visit. Information on children under 16 years old was obtained from a parent, guardian, or other responsible adult.

Analysis - Results from the Site Research have been analyzed, in part, under contract with Mathematica Policy Research. Analytic studies have also been performed by members of the ISDP Staff and the Bureau of the Census. Public use tapes of the Site Research data have been prepared by for distribution by the National Technical Information Service (NTIS).

#### The 1978 Research Panel

The second phase of the ISDP field work was the 1978 Panel. This took place in 60 Census Primary Sampling Units (PSU's), providing a nationally representative feasibility test. The sample consisted of 1947 area-sample households and 411 SSI recipient households.

Interviewer training for the initial 1978 interviews had been intended as a formal test. One group was to be trained with materials and trainers provided by the Census Bureau, while the other group was to be trained using a set of materials developed for the ISDP by the National Opinion Research Center (NORC). The distinctive feature of the NORC approach was that it attempted to train interviewers not only in administration of the questionnaire, but also in the subject matter with which it was concerned. Particularly, interviewers were taught about the various state, local, and federal transfer programs. Unfortunately, increased cost estimates made it necessary to reduce the designated sample size substantially from 4700 to 2358 households. This sample was too small to employ enough interviewers to demonstrate statistically significant differences. All interviewers were therefore trained for the April wave using the procedures developed by NORC. Subsequent training was developed and conducted by the Bureau, but retained a number of the features

introduced by NORC.

The content of each interview was as follows:

ISDP-303	April 1978	Income profile, attitudes
ISDP-403	July 1978	Income update, program eligibility
ISDP-503	October 1978	Income update, disability, personal history, attitudes
ISDP-603	January 1979	Income update, net worth, life cycle earnings
ISDP-703	April 1979	Annual income round-up, taxes, attitudes

About one quarter of the 1978 Panel (500 households), selected on a random basis, was administered appropriate 1979 Research Panel questionnaires (described below) at quarterly intervals until April, 1980. Because these households had been assured as late as January that April would be their final interview, nonresponses left from about 15% to 24% in the first continuation interview. After this sixth interview there was virtually no increase in non-response.

#### The 1979 Research Panel

The 1979 Panel was substantially larger and more elaborate version of the 1978 Panel, with a more complex sample. The sample size was sufficiently large that many of the data collected are nationally reliable and therefore of interest for more than feasibility and methodological testing purposes. Results from this panel are now being examined as a preliminary demonstration of the potential richness of the forthcoming SIPP data bases. Indeed, for many purposes the 1979 Panel was a dry run of the intended SIPP, though a number of experiments were also incorporated.

The timing and design of the 1979 Panel interview cycle are somewhat complex and difficult to describe, largely because of the decision to adopt a "staggered" interview design in which each quarter's interviewing was spread over three months. The main reason underlying this was one of field convenience. A full-time survey makes it possible to have a full-time dedicated staff of supervisors, clerks, interviewers, and data processors who are familiar with materials and procedures and dedicated to "their" survey. Government policies which provide medical benefits and vacation time only to interviewers who work on regular monthly surveys were also a factor in the decision. The technical arguments for and against a staggered approach are much more evenly balanced.

**Sample Design** - The main, 11,300-household sample was a multiple frame sample for which multiple frame estimation techniques are being developed and tested. The sample was distributed among 130 PSU's nationwide. The area sample, approximately 9,300 households, was drawn from two sources. In 100 PSU's the sample was drawn from addresses contacted in the 1976 Survey of Income and Education. The design oversamples both upper and lower income strata in these PSU's, based on income reported in the SIE.

In the remaining 30 PSU's -- where the SIE was not conducted -- the area sampling frame was a reserve file of sample cases drawn without reference to income.

FIGURE A

#### 1979 Panel Staggered Interview Structure

	Group 1	Group 2	Group 3
<b>Wave 1</b>	+	+	+
ISDP-101A/B	Feb. 79	March 79	April 79
<b>Wave 2</b>	*	*	*
ISDP-101	May 79	June 79	July 79
<b>Wave 3</b>	#	#	#
ISDP-3101	Aug. 79	Sept. 79	Oct. 79
<b>Wave 4</b>	@	@	@
ISDP-4101	Nov. 79	Dec. 79	Jan. 80
<b>Wave 5</b>	=	=	=
ISDP-5101	Feb. 80	March 80	April 80
<b>Wave 6</b>	1/4	1/4	1/4
ISDP-6101	May 80	June 80	July 80

Approximately 1100 households were selected from eligible applicants for Basic Educational Opportunity Grants (BEOGs) for the 1978-1979 academic year. Problems with locating list sample post-secondary students were so severe that first wave interviews were obtained only for a little more than 700 of these households. Several hundred additional BEOGs households were added to the sample in the second wave.

Another list sample of 1000 households was drawn from blind and disabled SSI recipients as of November, 1978. An additional 1,500 SSI households were administered the second and third interviews for research by the Office of Research and Statistics, SSA.

**Experimental Design** - Four formal, controlled experiments were carried out in 1979 Panel interviews. They compared the following alternatives:

QUESTIONNAIRE	Household screening format/ "standard" personal format
RESPONDENT	Emphasize self-reporting rules/ Accept-proxy rules
ASSET INCOME	3-month reporting/ 6-month reporting
ATTITUDES	10-point scale/ 7-point scale

The "household screener" was based on a revised version of the questionnaire used in the April 1978 CPS Income Supplement Test (CPS-665). The second method was based on a revision of the form used in the 1978 Panel (ISDP-303). (This test took place only during the first wave of interviews; later interviews used a single questionnaire with a format based on the second approach.) The respondent test compared reporting and cost in a treatment group where proxy interviews were accepted from any household member contrasted with another group where interviews had to be in person except for extreme situations (respondent physically or mentally incapable, unable to speak English, etc.). Since household screening is not well suited to self-response, the 2x2 test reduced to a 1x3 design. The three treatments were:

- 1) A revised CPS-665 (ISDP-101B), with proxy response
- 2) A revised ISDP-303 (ISDP-101A) with proxy response
- 3) A revised ISDP-303 (ISDP-101A) with self response

During the first wave of interviewing, 1/3 of the sample was administered each treatment. The respondent rules experiment is continued throughout the life of the panel.

Feasibility Studies - Several other procedures were tested in the 1979 Panel. One was the use of off-line, mail-back surveys to collect self-employment income. Since quarters may be more natural accounting periods for self-employment income, and for other reasons relating to the records at hand at the time of interview, this income was measured in a secondary survey which used only calendar-quarter reference periods.

The staggered design which roughly tripled each interviewee's experience with a form, was itself a feasibility study. In addition to the routine Quality Control reinterview, which repeats a small number of key questions to insure that interviewers are not "curbstoning", an expanded reinterview program evaluated discrepancies between interview and reinterview reports. By probing and uncovering the fraction of these inconsistencies caused by interviewers, a measure of interviewer learning was obtained.

A minor innovation which was intended to improve reporting is the distribution to each household of a simple multiple-pocket folder in which bills, pay slips, bank statements, and tax forms can be arranged according to several systems. It was hoped that this gift would not only win good will, but also encourage keeping records so that they would be accessible during the interview.

The content of each interview for this panel was as follows:

ISDP-101A/B	February-April 1979
	Income profile, attitudes
ISDP-101	May-July 1979
	Income update, eligibility, attitudes
ISDP-3101	August-October 1979
	Income update, personal history, attitudes
ISDP-4101	November-December 1979
	Income update, education, child care

ISDP-5101	January-March 1980
	Income update, net worth, pension coverage
ISDP-6101	April-June 1980
	Annual income round-up (inc. in-kind), taxes, energy use, foster care, informal assistance

Details of the ISDP-101 question wording and content were adjusted to fit the needs of the Food and Nutrition Service (FNS) in the Department of Agriculture. Congress has required the Department to undertake a study of the assets of Food Stamps recipients and eligible non-participants to provide data for possible changes in legislation. The 1979 Panel was sufficiently large, and the questionnaire content sufficiently close to FNS data needs, that it was feasible to collect the necessary information as a by-product of the ISDP research study without major changes in content or procedures.

As a consequence of the staggered 1979 Panel design mentioned earlier, the ISDP-4101 was administered only to the 2/3 of the panel interviewed during November and December. As part of the collection of data on education, a wave 4 experiment examined the accuracy of duplicate interviews obtained in person at school and by proxy at parents' households.

At the request of the Department of Energy, a section on winter energy use was added to the ISDP-6101 to assess the national impact of the Emergency Energy Assistance program which had been mandated by Congress. At the request of the Office of Management and Budget (OMB), another series of assistance were also added to analyze existing alternatives to institutional care.

#### Special Frames Study

The Special Frames Study, conducted in July and August, 1980, was the last ISDP field activity. In a sense, it represents a deferred portion of the 1979 Panel. In early planning for the 1979 Panel, it had been intended that small samples (of 200-300 cases) would be drawn from different program records and added to the sample for a single wave of interviewing.

Problems in obtaining access to program record systems of interest exceeded the time and staff resources available, and the study of these list frames was postponed until field work had been completed for the 1979 Panel. The list frame samples were then the subject of a separate field test.

Sampling - The study used small samples from six administrative frames.

It was conducted in 26 1979 Panel PSU's in California, Pennsylvania, Wisconsin, Missouri, and North Carolina. These states were chosen for the Special Frames Study based on accessibility of the administrative files, the location of sufficient experienced ISDP interviewers and supervisors, and the total sample size desired for the Special Frames Study.

Frame	Record Files	Number of Cases
Unemployment Insurance (UI)	State	250
Aid to Families with Dependent Children (AFDC)	State	250
Worker's Compensation (WC)	State	100
Social Security (OASDI)	National	250
Veteran's Payments (VA)	National	250
Tax Records (IRS)	National	800
		2000

Two of the three frames that have national centralized files were sampled in all five States chosen; the Veterans' file was not sampled for North Carolina. The frames sampled in each state were as follows:

State	UI	AFDC	WC	OASDI	VA	IRS
California		X		X	X	X
Wisconsin		X	X	X	X	X
Pennsylvania	X	X	X	X	X	X
Missouri	X			X	X	X
North Carolina	X	X		X		X

Interviewing - The questionnaire used (ISDP-7101) was nearly identical to the ISDP-101A questionnaire used for wave 1 of the 1979 ISDP Research Panel, except for minor changes dealing with Veterans Administration income and food stamp reciprocity. The study was conducted in two stages. In July, the cases from all frames except the IRS were interviewed (intermixed in each interviewer's workload). In August, the IRS addresses were visited.