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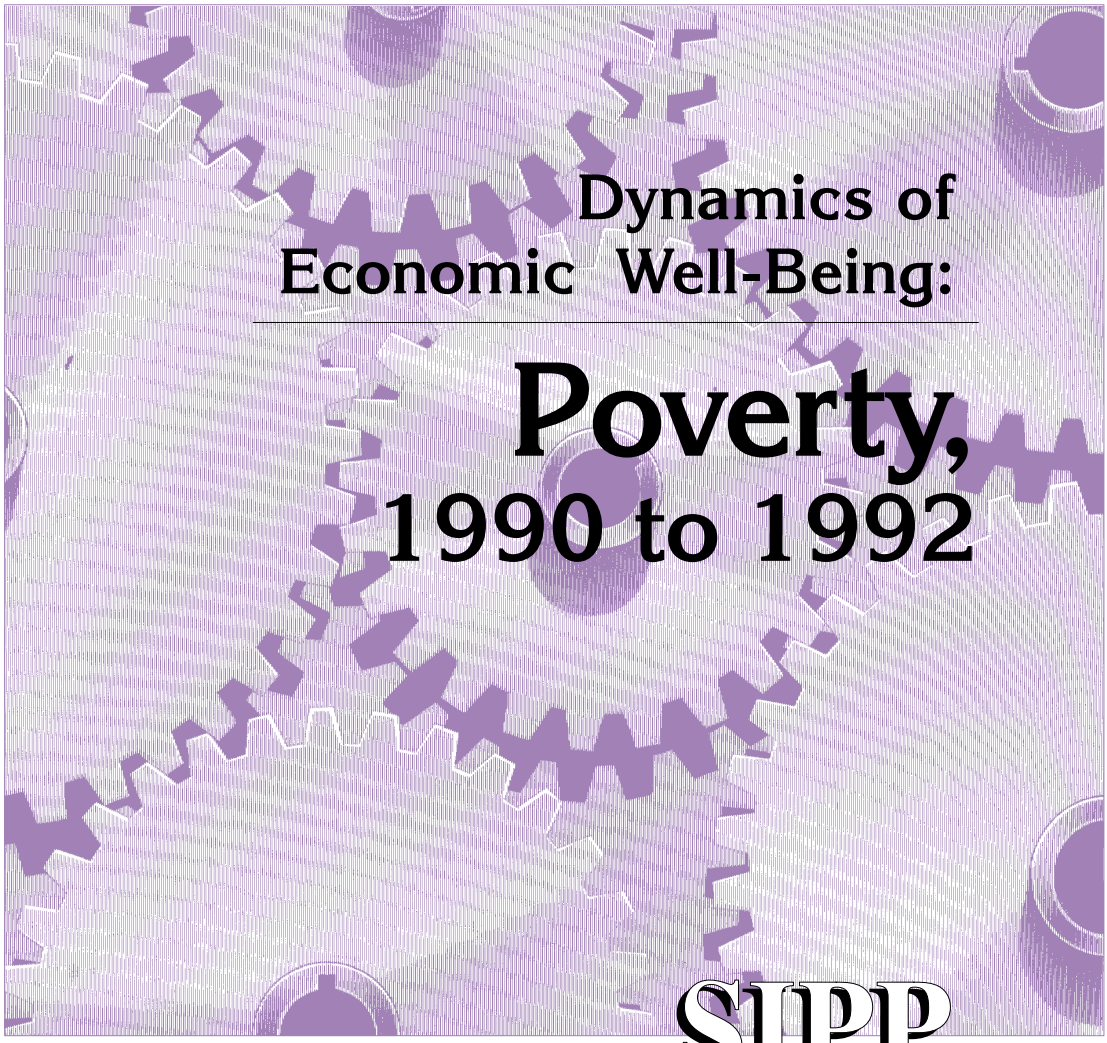

Dynamics of Economic Well-Being:

Poverty, 1990 to 1992

SIPP
Survey of Income and Program Participation

by Martina Shea

U.S. Department of Commerce
Economics and Statistics Administration
BUREAU OF THE CENSUS

Acknowledgments

This report was prepared under the general direction of **Kathleen S. Short**, Chief, Poverty and Wealth Statistics Branch. The tables for this report were programmed and prepared by **Caroline Carbaugh** under the general direction of **Angela M. Feldman-Harkins**, Chief, Computer Programming and Applications Staff. Statistical assistance was provided by **Astrid V. Clarke, Bernadette D. Proctor,** and **Jean E. Tash.** Overall direction was provided by **Charles T. Nelson**, Assistant Division Chief (Economic Characteristics), Housing and Household Economic Statistics Division. Peer review was provided by **John Coder,** (Housing and Household Economic Statistics Division), **William Prosser** (Department of Health and Human Services), and **Larry Radbill** (Joint Economic Committee).

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Data collection was conducted by the Bureau of the Census interviewers under the overall direction of **Stanley D. Matchett**, Chief, Field Division.

Sampling, estimation and statistical review were conducted by **Vicki Huggins**, Chief, Survey of Income and Program Participation Branch, and **Suzanne Dorinski,** Demographic Statistical Methods Division.

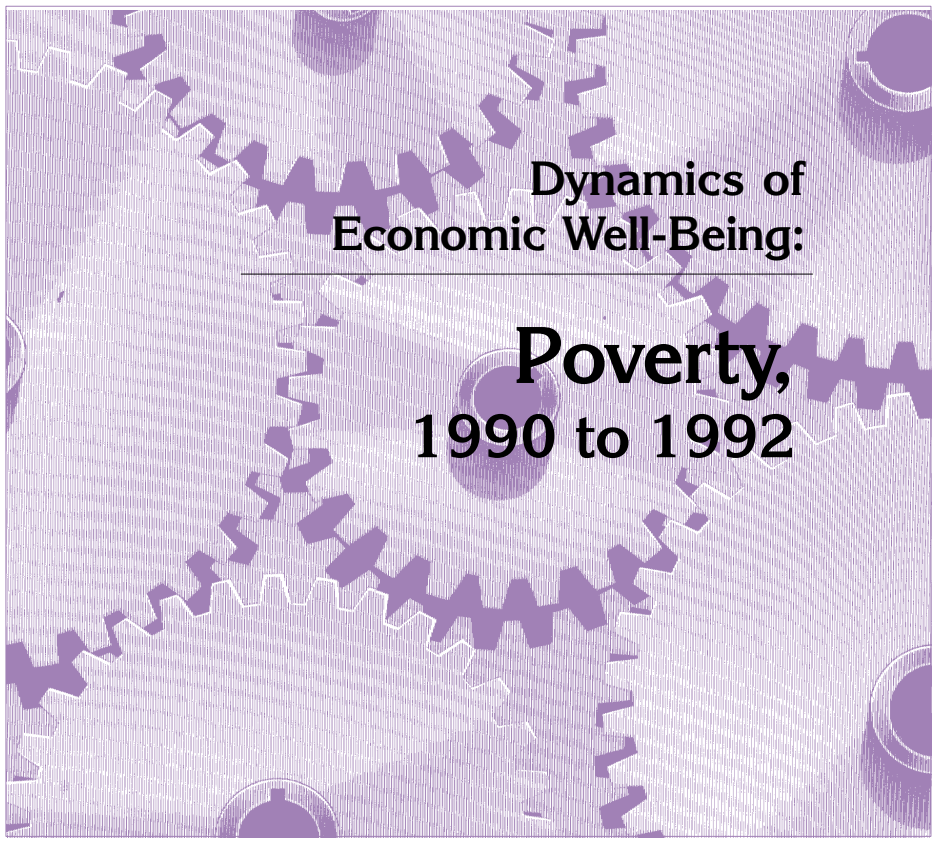
The staff of Administrative and Publications Services Division, **Walter C. Odom**, Chief, provided publication planning, design, composition, and printing planning and procurement; **Frances B. Scott** edited and coordinated the publication.

CURRENT POPULATION REPORTS

Household Economic Studies

P70–42

Issued January 1995



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SUGGESTED CITATION

Shea, Martina, *Dynamics of Economic Well-Being: Poverty, 1990 to 1992*
U.S. Bureau of the Census. Current Population Reports, P70-42,
U.S. Government Printing Office, Washington, DC, 1995.

For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

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Dynamics of Economic Well-Being: Poverty, 1990 to 1992

INTRODUCTION

This report uses data from the Survey of Income and Program Participation (SIPP) to examine the incidence of poverty at a point in time and over a 32-month period. It presents data from the complete panel file of the 1990 SIPP which covers the time period from October 1989 through August of 1992. Descriptions of the SIPP program and the 1990 panel file are contained in appendixes A and D, respectively.

SIPP enables comparisons of poverty rates among groups of persons of different demographic and socioeconomic characteristics. It also can be used to study the distribution of poverty spell durations. The panel file contains monthly information on income as well as on many other characteristics which can vary over the panel, such as residence and labor force status. Efforts were made during the life of the panel to follow persons who moved to ensure that the sample remained representative of the noninstitutional population of the United States. Persons are characterized by the income and poverty status of their respective family unit based on living arrangements each month during the period of study.

It should be noted that some longitudinal estimates presented here are based on responses of persons who were interviewed in all eight waves of the 1990 panel. Other longitudinal estimates are based on respondents interviewed in all waves of a particular calendar year. Insofar as persons who left the panel differed in their experience of poverty from those who did not, these longitudinal estimates may be biased.

All demographic surveys, including CPS and SIPP, are affected by undercoverage of the population. This undercoverage results from missed housing units and missed persons within sample households. Compared to the level of the 1980 Decennial Census, overall undercoverage in SIPP is about 7 percent. Undercoverage varies with age, sex, and race. For some groups, such as 20 to 24 year old Black males, the undercoverage is as high as 27 percent compared to the census. It is important to note that the survey undercoverage is an addition to the decennial census undercoverage, which in 1980 was estimated to be about 1 percent overall and about 8.5 percent for Black males. The weighting procedures used by the Census Bureau partially correct for the bias due to undercoverage. However, its final impact on estimates is unknown.

The detailed tables cover the years 1990 and 1991 from the 1990 SIPP panel, as well as the years 1987 and 1988 from the 1987 panel of SIPP for some of the measures (appendix E). The later panel coincided with the latest recessionary period from July 1990 to March 1991, while no recession took place during the 1987 panel. This could explain some of the data described below.

Technical note. Some of the estimates presented below are distributions of spell duration for individuals with different characteristics. We use a survival analysis technique to derive these distributions and the resulting estimates of median spell duration for persons observed entering a spell of poverty during the 32 months of the panel. We consider only individuals who were present in the survey all 32 months. One alternative would have been to include all persons up until the time of attrition. It is, however, extremely difficult to come up with appropriate weights for such an analysis and it was therefore not attempted here.

Spells of poverty must have an observed beginning, i.e. have to be preceded by one or more months of ''nonpoverty'' during the panel. In addition, periods of poverty must last at least 2 months in order to be counted as spells. Furthermore, poverty spells must be more than 1 month apart in order to be counted as separate spells. If two potential spells are separated by only 1 month, they count as one spell. The connecting month is counted as part of the resulting spell. A spell is observed either until it ends or until it is right-censored.[1] [2]

[1] Since an individual must have completed interviews for all months of the panel in order to be included in the sample, rightcensoring occurs only if an individual is still poor in the last month of the panel.

[2] The probability of exiting a spell in month t, given that the person was experiencing a spell in the beginning of that month, is defined as

$$h(t)=\frac{\text{exits }(t)}{\text{prog }(t)-(\text{rcens }(t)/2)}$$

where exits(t) denotes the number of spell exits in month t, prog(t) is the number of spells that were in progress in the beginning of month t, and rcens(t) is the number of spells which were right-censored in month t.

The survival rate in month t, which is the probability that a spell lasts longer than t months, can then be written as

$$S(t) = \prod_{k=1}^{t} (1-h(k))$$

The survival function evaluated at t gives the probability that an *entrant* into poverty is still poor t time periods later.

The median survival time or spell duration M can be estimated by linear interpolation. Let [t, t+1) be the interval such that S(t)>=.5 and S(t+1)< .5. Then

$$\hat{M} = t + \frac{S(t)-1/2}{S(t)\text{-}S(t+1)}$$

Since a poverty spell must be preceded by a period of nonpoverty, left-censored spells are not included in our analysis. Observations are left-censored when the beginning of a spell of interest is not observed, that is, a spell began at some time before the reference period.

While dynamic estimates may be unbiased for spells with observed beginnings in the reference period, there remains concern about the deletion of left-censored spells from such analyses. There may be particular characteristics of persons, associated with the experience of very long spells, that precludes their inclusion in our sample. For example, in our analysis, which is restricted to persons in sample the entire period, selecting spells with observed beginnings leads to a sample without those persons who were poor from the first month of life onward. Even if one defines the spells of those ''born into poverty'' as spells with observed beginnings, the problem of unavailable appropriate weights make their inclusion all but impossible. Studies of spells with observed beginnings might result in reasonable estimates of spell distribution and median duration *for such spells with observed beginnings*, but it might result in downward biased estimates of the median duration of *all spells.*

HIGHLIGHTS

(The numbers in parentheses denote the 90-percent confidence intervals)

- In an average month of 1990, 31.8 (±1.1) million persons were poor, representing 12.9 (±0.4) percent of the population. About 45.6 (±1.4) million persons were poor at least 2 months in 1990.
- In an average month of 1991, 33.9 (±1.1) million persons were poor, representing 13.6 (±0.5) percent of the population, and an increase of 2.1 million over 1990. About 48.5 (±1.5) million persons were poor at least 2 months in 1991.
- A substantial proportion of the population was poor on a long-term basis: 4.5 (±0.3) percent or 10.6 (±0.8) million were poor all 24 months of 1990 and 1991.
- Half of all poverty spells lasted longer than 4.0 (±0.4) months. While half of all spells experienced by Whites lasted longer than 3.9 (±0.1) months, half of all spells experienced by Blacks and persons of Hispanic origin lasted longer than 5.8 (±1.0) and 4.9 (±0.5) months, respectively.
- Seven (±0.4) percent of persons in married-couple families were poor in an average month of 1990, but 35 (±1.7) percent of persons in female householder families. Likewise, persons in married-couple families were much less likely to be poor continuously for all 24 months of 1990 and 1991 than persons in female-householder families, 1 (±0.2) versus 18 (±1.7) percent.
- Blacks were almost three times as likely as Whites to be poor in an average month, and persons of Hispanic origin had a poverty rate intermediate between Whites and Blacks.
- Every fifth (±1.0) child was poor in an average month of 1990, compared to 11 (±0.5) percent of non-elderly adults and 9 (±1.0) percent of the elderly.
- Forty (±3.9) percent of the unemployed were poor in an average month of 1990, followed by 12 (±1.3) percent of part-time workers, and 4 (±0.4) percent of full-time workers. The proportion of those not in the labor force who were poor was intermediate between part-time workers and the unemployed, 18 (+0.9) percent.
- Twenty-one (±2.1) percent of persons who were poor in 1990 were not poor in 1991. Children and the elderly, although not significantly different from one another, were less likely to exit poverty than non-elderly adults.
- There was a greater probability of becoming poor in the recessionary period of 1990-91 and a lower probability of leaving poverty compared with the 1987-88 period during which only 2.2 (±0.3) percent became poor while one-fourth (±2.8) of the poverty population became nonpoor.

POVERTY: 1990 TO 1992

SIPP allows us to deal with the static as well as the dynamic aspects of poverty. It is the latter aspect that provides additional insight into the nature of poverty. Unlike the poverty and income data collected in the Current Population Survey (CPS), which does not allow analysis of change in income and poverty status for particular individuals, longitudinal data make it possible to measure movement along the income distribution and into and out of poverty for the same persons over the life of the panel.

The SIPP collects income information and family composition on a monthly basis. Thus, poverty status can be determined on a monthly basis, by comparing monthly family income to monthly thresholds. Monthly thresholds rise from month to month by the same percentage as the Consumer Price Index (CPI). In addition, annual poverty estimates can be obtained by summing monthly family income over the year and comparing it to the sum of the 12 corresponding monthly thresholds, based on family size and composition in each month.

These annual poverty estimates based on the SIPP differ from the official poverty estimates that are based on the March Supplement to the CPS. In the CPS, poverty status is based on responses to income questions which refer to income received in the previous calendar year. Annual poverty thresholds are based on

family composition fixed as of the survey date and assumed to be constant over the previous year (in the case of 1990 poverty status, the data were collected in the March 1991 CPS).[3]

Most of the estimates in this report are based on a monthly determination of poverty status. It is useful to obtain poverty estimates based not only on yearly income but also on monthly income, in order to capture short-term economic hardship. In addition, eligibility for means-tested assistance programs is based on monthly rather than annual income.

Our analysis focuses on four *monthly* measures of poverty as derived from the SIPP:

a) the number and percent of persons who were poor in an average month of 1990 (1991).
b) the number and percent of persons who were poor 2 months or more during 1990 (1991).
c) the number and percent of persons who were poor each month of 1990 and 1991. Phrases like long-term and chronic poverty are used interchangeably to denote this type of poverty.
d) the length and distribution of poverty spells.

In addition, this report will examine transitions into and out of poverty during 1990 and 1991 based on an *annual* measure of poverty:

e) the number and percent of persons who were poor in one year but not the other, i.e. exits from and entries into poverty.
f) the number and percent of persons who were poor in both 1990 and 1991.

Examining poverty with longitudinal data allows one to distinguish between short and long term poverty. There are reasons to be concerned about persons who are poor for very long periods in contrast to persons who remain poor for only short periods. Much public policy debate is concerned with persons and families who remain poor for long periods of time. The official measure of poverty does not allow us to distinguish between short and long spells of poverty. SIPP, however, allows longitudinal analysis of poverty.

Monthly Measures of Poverty

About 31.8 million persons were poor in an average month of 1990, and 33.9 million were poor in 1991, representing 12.9 and 13.6 percent of the population, respectively (table A). Substantially more persons were poor for 2 or more months than in an average month, showing considerable movement in and out of poverty. About 45.6 million persons were poor at least 2 months in 1990, representing 18.9 percent of all persons, significantly smaller than the 48.5 million (19.8 percent) in 1991. A substantial proportion of the population was poor on a long-term basis: 4.5 percent (10.6 million) were poor all 24 months of 1990 and 1991 (see table B and figures 1 and 2).

The median duration of poverty spells that began after October 1989 was 4.0 months for all persons, the same as during the 1987 panel.[4] This means that half of all poverty spells lasted longer than 4 months. Figure 3 shows the percent distribution of poverty spells by spell lengths. While 50 percent of spells lasted 2 to 4 months, smaller proportions of spells fell into subsequent length categories: for instance, while 19.0 percent of spells lasted between 5 and 8 months, only 8.0 percent lasted between 9 and 12 months.

Family and Marital Status. Single-parent families generally have female householders, and persons in female householder families are much more likely to be poor than persons in married-couple families. As can be seen in tables A and B, 35.2 percent of persons in female householder families were poor in an average month of 1990, 43.1 percent were poor at least 2 months, and 17.6 percent were poor continuously for 24 months. The corresponding proportions of persons in married-couple families who were poor were significantly smaller, 7.0, 12.7, and 1.4 percent respectively. Unrelated individuals had poverty rates that were between those in female-householder and married-couple families.

Comparisons over time show few differences. However, persons in married-couple families, in contrast to persons in other types of families, were less likely to be poor in an average month of 1990 (7.0 percent) than of 1987 (7.9 percent).

The length of time spent in poverty differed by family type. Persons in female householder families had significantly longer poverty spells than persons in married-couple families. The median poverty spell experienced by persons in female householder families lasted 6.5 months, compared to 3.8 months for persons in married-couple families (see table B).

Marital status of persons 18 years and older is correlated with poverty. Married persons were less likely to be poor than never married persons, and the latterwere less likely to be poor than separated, divorced, or widowed persons. Table A shows that the average monthly poverty rate for married persons was 5.8 percent in 1990, significantly lower than the 15.1 percent for

[3] Comparisons of CPS and SIPP annual poverty estimates can be made by fixing household composition in the SIPP as of March of the following year. Significant differences in poverty rates still remain. Appendix D describes possible sources of differences in estimates from the two surveys. See also Coder and Scoon-Rogers' forthcoming working paper ''Evaluating the Quality of Income Data Collected in the Annual Supplement to the March Current Population Survey and the Survey of Income and Program Participation.''

[4] Restricting the observation period of the 1990 panel to 28 months, i.e. the length of the 1987 panel, did not significantly change the estimated median spell duration.

Figure 1.
Poverty Rates: 1990 and 1991
Percent

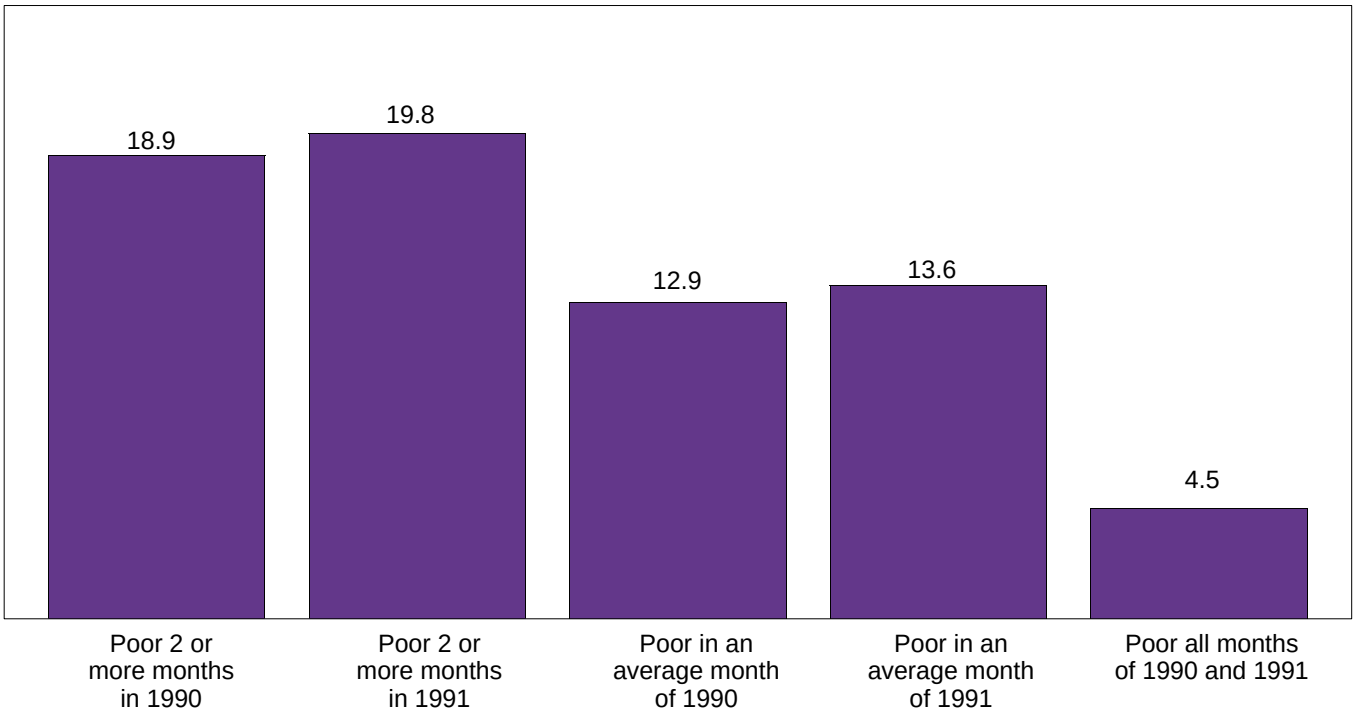
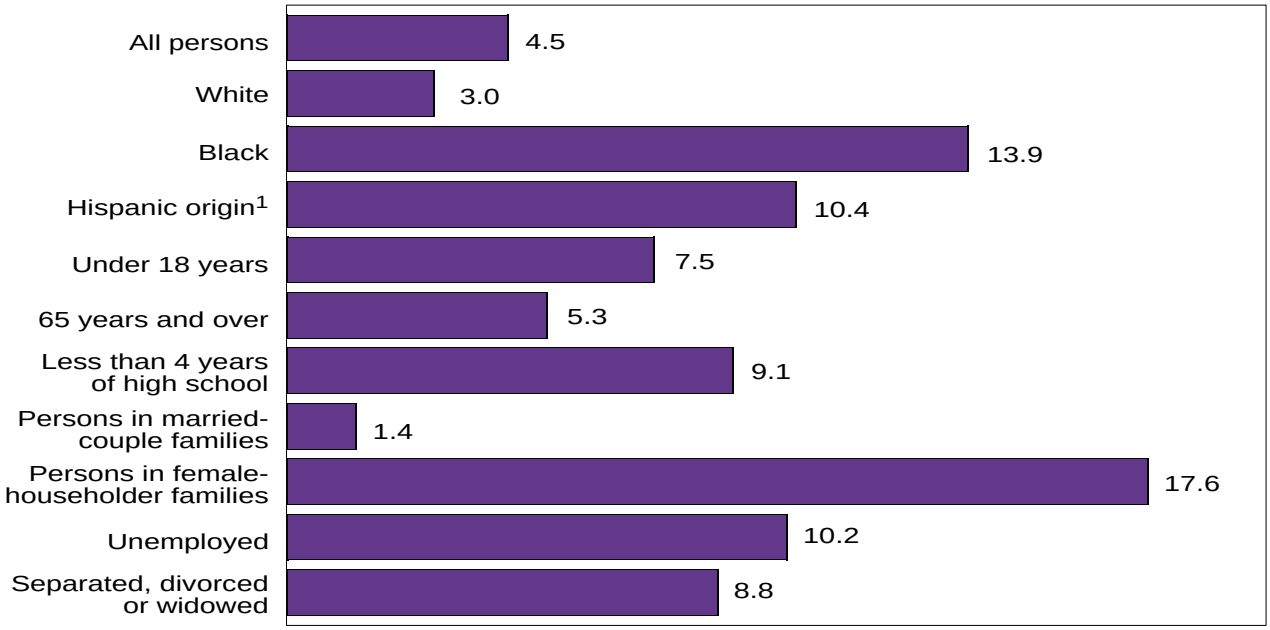


Figure 2.
Percent of Persons Who Were Chronically Poor, by Various Characteristics: 1990 to 1991
Percent



[1] Persons of Hispanic origin may be of any race.

Table A. **Poverty Status, by Family and Marital Status: 1991, 1990, and 1987**

[In thousands. Bases for percentages can be found in the detailed tables]

Family and marital status	Persons poor in an average month						Persons poor 2 or more months					
	1991		1990		1987		1991		1990		1987	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	33,866	13.6	31,818	12.9	31,980	13.3	48,477	19.8	45,638	18.9	44,811	19.1
Family Status												
In families	26,488	12.4	24,494	11.6	25,350	12.2	39,343	18.7	36,507	17.5	36,831	17.9
In married-couple families	12,624	7.4	11,852	7.0	13,211	7.9	22,682	13.3	21,509	12.7	21,666	13.0
In families with a female householder, no spouse present	12,989	36.7	11,960	35.2	11,495	35.0	15,410	45.4	14,044	43.1	14,014	43.4
Unrelated individuals	7,378	20.4	7,324	20.4	6,630	20.5	9,134	26.9	9,131	27.6	7,980	27.0
Marital Status (persons 18 years and over)												
Married	6,595	6.1	6,298	5.8	7,171	6.8	11,993	11.1	11,563	10.7	12,003	11.3
Separated, divorced, or widowed	6,665	19.4	6,404	18.8	6,508	20.1	8,476	26.3	8,067	25.3	8,523	28.0
Never married	6,645	16.1	6,090	15.1	5,347	14.1	9,134	23.1	8,336	21.9	6,858	19.4

Table B. **The Chronically Poor and Median Spell Durations, by Family and Marital Status: 1990 to 1991 and 1987 to 1988**

[In thousands. Bases for percentages can be found in the detailed tables]

Family and marital status	Persons poor all 24 months of 2-year period				Median duration of poverty spells in the 1990 panel (in months)
	1990-91		1987-88		
	Number	Percent	Number	Percent	
Total	10,619	4.5	10,162	4.4	4.0
Family Status					
In families	8,031	3.9	7,975	3.9	4.0
In married-couple families	2,299	1.4	2,976	1.8	3.8
In families with a female householder, no spouse present	5,571	17.6	4,872	15.6	6.5
Unrelated individuals	2,589	8.1	2,187	7.7	4.1
Marital Status (persons 18 years and over)					
Married	1,290	1.2	1,598	1.5	3.8
Separated, divorced, or widowed	2,675	8.8	2,311	8.0	4.9
Never married	1,835	4.9	1,455	4.2	4.4

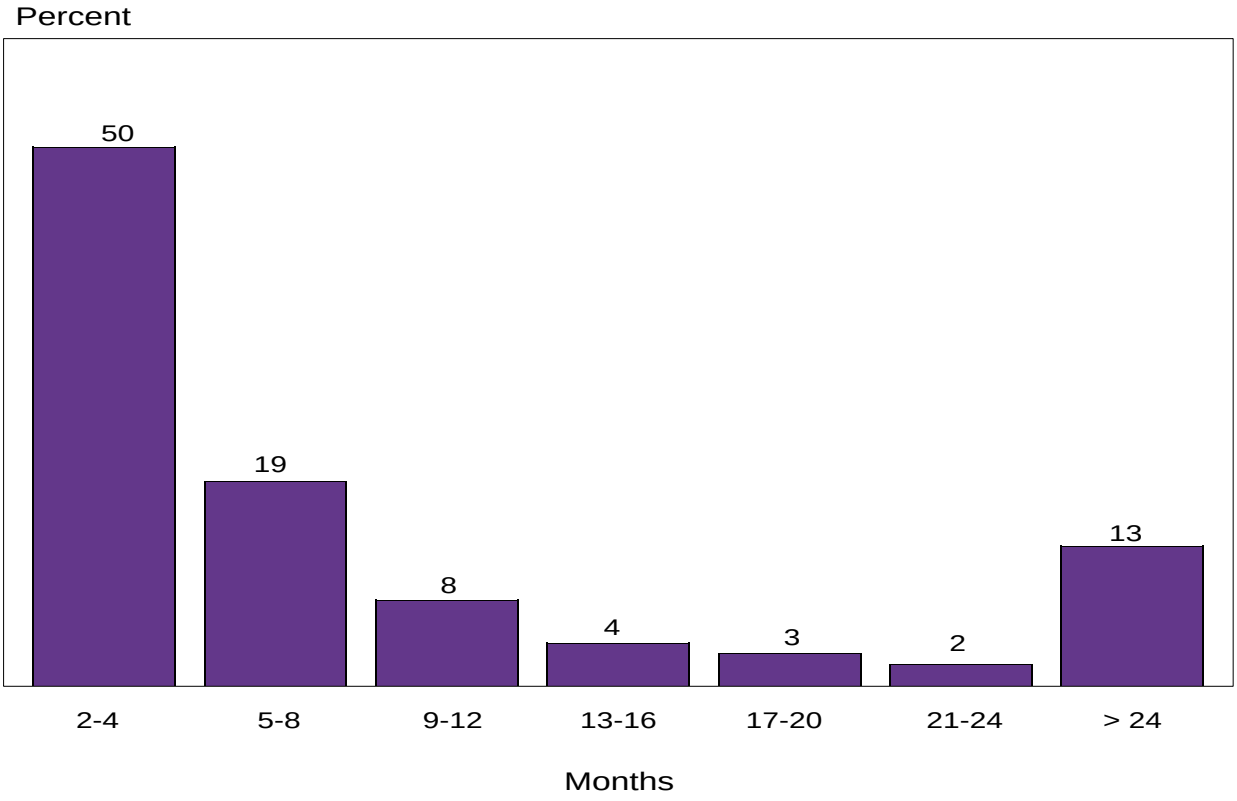
never married persons and the 18.8 percent for separated, divorced, or widowed persons. The same pattern held also for persons who were poor for at least 2 months (table A) and for the chronically poor (table B). Married persons who became poor during the 1990 panel also had significantly shorter median poverty spells than persons who were separated, divorced, or widowed, 3.8 versus 4.9 months (see table B).

As was the case with persons in married-couple families, married persons were less likely to be poor in an average month of 1990 than of 1987. At the same time, there was a significant increase in never married persons' likelihood of being poor for at least 2 months during the year. While 19.4 percent were poor 2 or more months in 1987, 21.9 percent were so in 1990.

Race and Hispanic Origin[5]**.** There was a strong correlation between race and Hispanic origin and poverty. Whites were significantly less likely to be poor than persons who were Black or of Hispanic origin. Blacks were almost three times as likely as Whites to be poor in an average month, and persons of Hispanic origin had a

[5]Persons of Hispanic origin may be of any race.

Figure 3.
Distribution of Poverty Spells, by Spell Length: 1990 to 1992



poverty rate intermediate between Whites and Blacks (table C). The long-term poverty rate was 3.0 percent for Whites, 10.4 percent for persons of Hispanic origin, and 13.9 percent for Blacks. While Whites were less likely than others to be poor for 2 or more months during 1990, there was no significant difference between Blacks and persons of Hispanic origin.

Despite much higher poverty rates for Blacks and persons of Hispanic origin, the majority of poor persons were White, regardless of the measure used. Whites constituted 66.7 percent of the poverty population in an average month of 1990, 70.2 percent of those who were poor 2 or more months during the year, and 56.2 percent of the long-term poor.

Blacks and persons of Hispanic origin had significantly longer poverty spells than Whites, as can be seen in table C and figure 4. While White persons experienced a median spell duration of 3.9 months, Blacks had a median duration of 5.8 months and persons of Hispanic origin of 4.9 months (The Hispanic/Black difference was not statistically significant).

Age. Children were much more likely to be poor than persons in other age groups. One in five children (20.1 percent) were poor in an average month of 1990, compared to 10.5 percent of non-elderly adults and 9.4 percent of the elderly (see table D). Even more pronounced is the difference in long-term poverty between children and non-elderly adults, 7.5 versus 3.0 percent.

Reflecting a tendency toward longer spells of poverty, the elderly and children made up a larger fraction of the long-term poor than of the average monthly poverty population and of those who were poor 2 or more months during the year. The elderly accounted for 13.2 percent of the long-term poor, but only 8.7 percent of those who were poor in an average month. For children, the corresponding fractions were 45.4 and 40.9 percent. In contrast, non-elderly adults accounted for 41.4 percent of the long-term poor, but 50.3 percent of those who were poor in an average month. As can be seen in table D, of the 3.5 million elderly who were poor 2 or more months during 1990, 1.4 million or 39.8 percent were poor during the entire 2-year period. The respective rates for children and non-elderly adults were 27.3 and 18.0 percent.

Median poverty spell durations during the 1990 panel were 3.9 months for non-elderly adults, 4.4 months for children, and 6.2 months for the elderly. However, these duration differences were not statistically significant (figure 4).

Education. There is a strong association between poverty and education of persons 18 years and older. Table E shows that 20.8 percent of persons without a

Table C. **Poverty Status, by Race and Hispanic Origin: 1990**

[In thousands. Bases for percentages can be found in the detailed tables]

Race and Hispanic origin	Persons poor in an average month		Persons poor 2 or more months		Persons poor all 24 months of 1990-91		Median duration of poverty spells in the 1990 panel (in months)
	Number	Percent	Number	Percent	Number	Percent	
Total	31,818	12.9	45,638	18.9	10,619	4.5	4.0
White	21,233	10.2	32,042	15.7	5,969	3.0	3.9
Black	9,152	30.1	11,621	39.2	4,060	13.9	5.8
Hispanic origin[1]	5,465	26.1	7,345	37.5	1,949	10.4	4.9

[1]Persons of Hispanic origin may be of any race.

high school diploma were poor in an average month of 1990, but only 9.3 percent of those with a high school diploma, and 5.5 percent of those with 1 or more years of college. This relationship also held for long-term poverty and for poverty that lasted at least 2 months.

Persons without a high school diploma had significantly longer poverty spells than persons with a high school diploma and persons with 1 or more years of college, 5.3 versus 3.9 and 3.7 months respectively. Median durations did not differ significantly between those with a high school degree and those with 1 or more years of college (table E and figure 4).

Employment Status. Unemployed persons were more likely than other labor force groups to be poor. About 39.8 percent of the unemployed were poor in an average month of 1990, followed by 11.6 percent of part-time workers, and 3.7 percent of full-time workers. The proportion of those not in the labor force who were poor was intermediate between part-time workers and the unemployed, 18.2 percent. Long-term poverty rates and the percent of persons who were poor 2 months or more varied likewise with employment status, as can be seen in table E.[6]

There were significant differences in poverty spell lengths between full-time workers and persons out of the labor force. Full-time workers had a median spell duration of 3.6 months, compared to 5.0 months for persons out of the labor force, as can be seen in table E and figure 4.

Disability Status. As shown in table E, persons with a work disability were much more likely to be poor than others. While 9.0 percent of persons without a disability were poor in an average month of 1990, 17.8 percent of persons with a disability were poor. About 25.8 percent of persons with a disability were poor at least 2 months in 1990 and 7.3 percent were poor in all months of 1990 and 1991. The respective poverty rates for persons without a disability were 14.4 and 2.3 percent.

[6]The unemployed were not significantly more likely than persons out of the labor force to be poor all 24 months.

Disability status did not significantly affect the length of poverty spells. Half of the spells experienced by the disabled lasted longer than 4.9 months, compared to 3.9 months for persons who were not disabled.

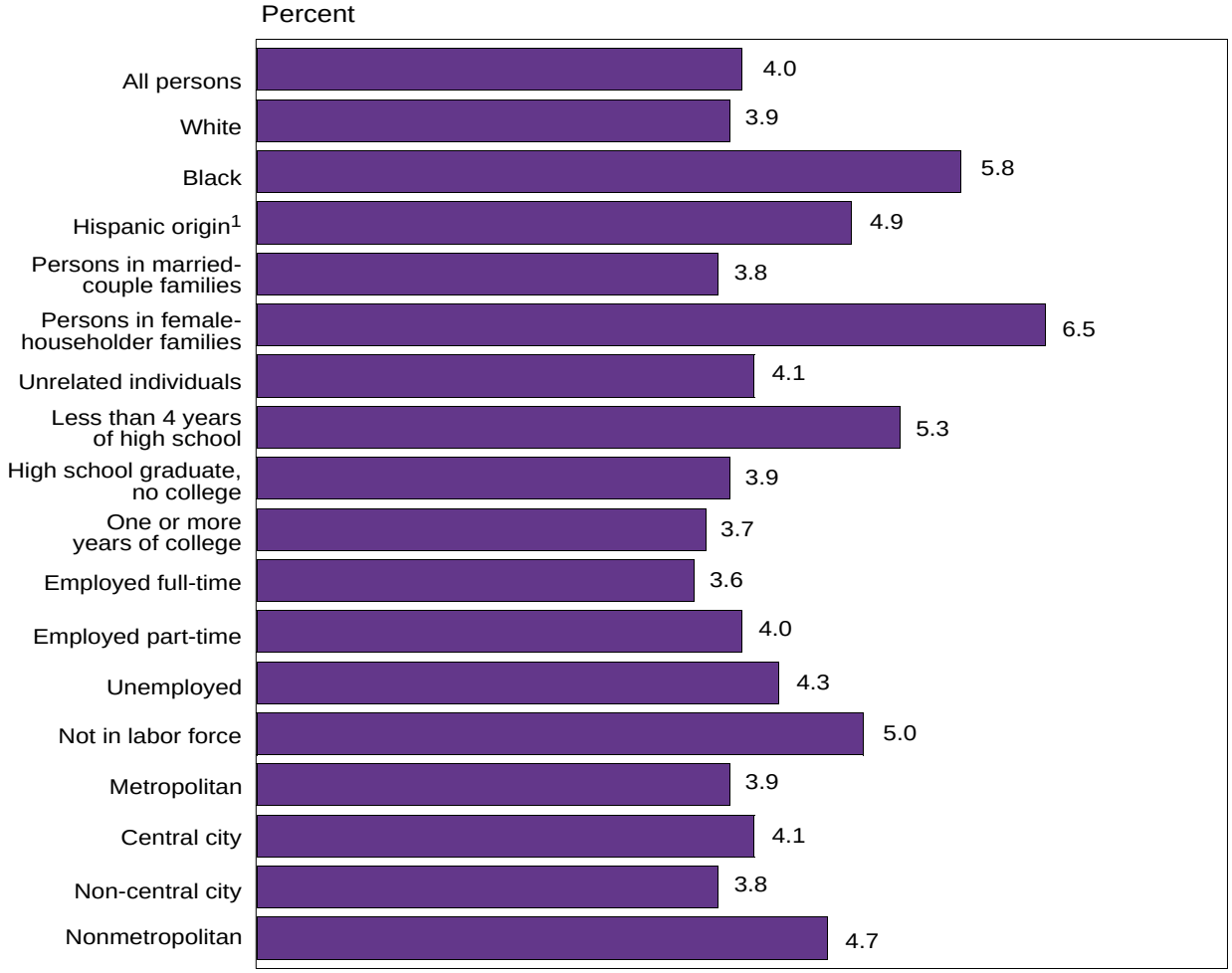
Residence. Residents of non-metropolitan areas were more likely to be poor than metropolitan residents. However, central city residents did not differ from non-metropolitan residents in their likelihood of being poor in an average month or at least 2 months (see table F). Central city residents were, however, more likely than non-metropolitan residents to be permanently poor, 7.2 versus 5.3 percent. Persons who live in the suburbs had the lowest poverty rates of any group. For instance,the average monthly poverty rate of suburban residents was 8.0 percent, followed by 11.8 percent of metropolitan residents as a whole, 16.4 percent of persons in non-metropolitan areas, and 17.6 percent of central city residents.

Metropolitan residents in general and suburban residents specifically had much shorter median spell durations than their counterparts outside metropolitan areas, 3.9, 3.8, and 4.7 months, respectively as can be seen in figure 4.

Region. Southern residents had a higher likelihood of living in poverty than persons in other regions. Table F shows that their average monthly poverty rate was 15.9 percent in 1990, compared to 11.9 percent for the Midwest, 11.6 percent for the West, and 10.2 percent for the Northeast. Average monthly poverty rates of Midwestern and Western residents were not significantly different. The Northeast had the lowest average monthly poverty rates and the smallest percentage of persons who were poor for at least 2 months. The West, however, had the smallest long-term poverty rate, 2.9 percent, compared to 4.2 percent for the Northeast, 4.3 percent for the Midwest, and 5.7 percent for the South. The long-term poverty rates for the Northeast and Midwest were not statistically different.

There were no significant differences in poverty spell lengths by region. Point estimates of median durations ranged between 3.8 months for Northeastern residents and 4.4 months for Southern residents.

Figure 4.
Median Durations of Poverty Spells, by Various Characteristics: 1990 to 1992



[1] Persons of Hispanic origin may be of any race.

Table D. **Poverty Status, by Age: 1990**

[In thousands. Bases for percentages can be found in the detailed tables]

Age	Persons poor in an average month		Persons poor 2 or more months		Persons poor all 24 months of 1990-91	
	Number	Percent	Number	Percent	Number	Percent
Total	31,818	12.9	45,638	18.9	10,619	4.5
Under 18 years	13,027	20.1	17,672	27.7	4,820	7.5
18 to 64 years	16,009	10.5	24,454	16.4	4,401	3.0
65 years and over	2,783	9.4	3,512	12.5	1,399	5.3

Table E. **Poverty Status, by Education, Employment, and Disability Status: 1990**

[In thousands. Bases for percentages can be found in the detailed tables]

Characteristic	Persons poor in an average month		Persons poor 2 or more months		Persons poor all 24 months of 1990-91		Median duration of poverty spells in the 1990 panel (in months)
	Number	Percent	Number	Percent	Number	Percent	
Total	31,818	12.9	45,638	18.9	10,619	4.5	4.0
Educational Attainment (persons 18 years and over)							
Less than 4 years of high school	8,392	20.8	11,229	29.2	3,366	9.1	5.3
High school graduate, no college	6,350	9.3	9,927	14.6	1,776	2.7	3.9
1 or more years of college	4,050	5.5	6,809	9.6	658	0.9	3.7
Employment and Labor Force Status (persons 18 years and over)							
Employed full-time	3,544	3.7	8,712	9.2	392	0.4	3.6
Employed part-time	2,407	11.6	4,098	19.5	465	2.2	4.0
Unemployed	2,048	39.8	2,494	46.9	502	10.2	4.3
Not in labor force	10,793	18.2	12,662	22.5	4,441	8.3	5.0
Disability Status (persons 15 to 69 years)							
With a work disability	5,304	17.8	7,149	25.8	1,899	7.3	4.9
With no work disability	12,944	9.0	20,378	14.4	3,239	2.3	3.9

Table F. **Poverty Status, by Residence and Region: 1990**

[In thousands. Bases for percentages can be found in the detailed tables]

Residence and region	Persons poor in an average month		Persons poor 2 or more months		Persons poor all 24 months of 1990-91		Median duration of poverty spells in the 1990 panel (in months)
	Number	Percent	Number	Percent	Number	Percent	
Total	31,818	12.9	45,638	18.9	10,619	4.5	4.0
Residence							
Metropolitan	22,444	11.8	32,036	17.4	7,593	4.2	3.9
Central city	13,309	17.6	17,194	24.2	4,947	7.2	4.1
Non-central city	9,135	8.0	14,841	13.1	2,645	2.4	3.8
Nonmetropolitan	9,374	16.4	13,602	23.9	3,027	5.3	4.7
Region							
Northeast	5,139	10.2	6,980	14.4	2,007	4.2	3.8
Midwest	7,345	11.9	10,472	16.9	2,689	4.3	3.9
South	13,458	15.9	19,606	23.8	4,570	5.7	4.4
West	5,876	11.6	8,579	17.7	1,354	2.9	4.2

Annual Measures of Poverty

While year-to-year changes in the total number and percent of persons in poverty are, in general, relatively small, the poverty population is actually much more dynamic than is commonly thought. In fact, many more people change poverty status from one year to the next than are indicated by simply looking at the net change in the poverty rate.

SIPP annual poverty estimates can be obtained by summing monthly family income over the year and comparing it to the sum of the 12 corresponding monthly thresholds, based on family size and composition in each month. Based on persons interviewed over the 2-year period, 18.8 million persons who were poor in 1990 remained poor in 1991. In addition, there was a 1.1 million increase in the number of persons in poverty between 1990 and 1991.[7] This increase, however, may more accurately be viewed as the net result of the poverty transitions experienced by 11.3 million persons,

[7]The number of poor persons as measured by the CPS was 33.5 million in 1990 and 35.7 million in 1991. This increase was much larger than the one measured by the SIPP over the same time period.

as 5.1 million moved out of poverty and 6.2 million persons moved into poverty, representing 21.2 and 2.9 percent of the respective populations.

Exit rates in table G reveal much the same picture as the previous section. Characteristics associated with shorter median spell durations are also associated with higher exit rates. For instance, persons in married-couple families were much more likely to exit poverty than persons in other type families, 28.6 versus 12.2 percent, consistent with their significantly shorter poverty duration. Likewise, Blacks were less likely than Whites to exit poverty, and children and the elderly, although comparable to one another, were less likely than non-elderly adults to exit poverty.

The years 1987 and 1988 were a period of economic upswing, while 1990 and 1991 were recession years. Thus, one would expect a higher probability of becoming poor and a lower probability of leaving poverty behind in the 1990-91 period than in 1987-88. Table G shows a greater probability of becoming poor in the recessionary period of 1990-1991 and a lower probability of leaving poverty compared with the 1987-88 period during which only 2.2 percent became poor while one-fourth of the poverty population became nonpoor.

In addition to examining changes in poverty, SIPP also allows us to characterize long-term poverty. Comparing an annual measure to a monthly measure, two types of long-term poverty can be described. Using an annual measure of poverty, about 19 million persons who were poor in 1990 were also poor in 1991, as can be seen in table H. Using a monthly measure of poverty, in the previous section, resulted in a smaller estimate of the long-term poor, 10.6 million. In order to be counted as ''chronically'' poor in the previous section, a person had to be poor in each of the 24 months of 1990 and 1991. To be counted as long-term poor on an annual basis, persons had to meet a less stringent requirement: the average income had to fall below the average monthly threshold for 2 years in a row. As a result, long-term poverty rates were higher based on the annual measure than based on the monthly measure.

The profile of the long-term poor differed in some instances, depending on which measure was used. This difference reflects the more chronic nature of poverty experienced by some groups. As can be seen in table H, while Blacks made up 34.4 percent of the long-term poor based on an annual measure, they made up a higher 38.2 percent of the chronically poor. Likewise, the elderly, who generally experience only minor fluctuations in income, represented a significantly larger portion of the chronically poor than of those poor 2 years in a row, 13.2 versus 10.2 percent. Persons in

Table G. **Percent of Persons Entering and Exiting Poverty: 1990 to 1991 and 1987 to 1988**

[In thousands. Bases for percentages can be found in the detailed tables]

Characteristic	Above poverty in 1990	Entered poverty in 1991	Above poverty in 1987	Entered poverty in 1988	Below poverty in 1990	Exited poverty in 1991	Below poverty in 1987	Exited poverty in 1988
Total	211,962	2.9	206,068	2.2	23,849	21.2	24,922	25.7
Race and Hispanic Origin								
White	183,754	2.5	180,270	1.9	14,826	23.3	15,363	30.0
Black	21,152	6.5	19,405	5.3	7,829	17.4	8,402	17.0
Hispanic origin[1]	14,627	8.3	13,461	4.1	3,938	14.3	3,982	18.1
Age								
Under 18 years	50,549	4.3	49,028	3.3	10,183	19.0	10,544	22.9
18 to 64 years	136,229	2.6	132,784	2.0	11,440	24.5	12,007	30.0
65 years and over	25,185	1.7	24,256	1.3	2,226	14.2	2,371	16.2
Family Status								
In married-couple families both years	154,532	1.9	151,562	1.3	8,007	28.6	9,586	31.0
In other family types both years	23,222	5.9	22,986	5.8	9,886	12.2	9,391	18.6

[1]Persons of Hispanic origin may be of any race.

Table H. **Profile of the Long-Term Poor: 1990 to 1991**

[In thousands]

Characteristic	Annual measure[1]		Monthly measure[2]	
	Number	Percent distributiion	Number	Percent distribution
Total	18,797	100.0	10,619	100.0
Race and Hispanic Origin				
White	11,368	60.5	5,969	56.2
Black	6,471	34.4	4,060	38.2
Hispanic origin[3]	3,374	17.9	1,949	18.4
Age				
Under 18 years	8,248	43.9	4,820	45.4
18 to 64 years	8,641	46.0	4,401	41.4
65 years and over	1,909	10.2	1,399	13.2
Family Status				
In married-couple families both years	5,715	30.4	2,299	21.7
In other family types both years	8,679	46.2	5,732	54.0

[1]Requires persons' average income to fall below the average monthly threshold in 1990 and in 1991.
[2]Requires persons to be poor in each of the 24 months of 1990 and 1991.
[3]Persons of Hispanic origin may be of any race.

family types other than married-couple made up a significantly larger portion of the chronically poor than of those poor 2 years, 54.0 versus 46.2 percent, respectively. On the other hand, persons in married-couple families accounted for 30.4 percent of those poor for 2 years, but only 21.7 percent of those who were chronically poor. These differences in distribution in the different poverty populations attest to differences in intensity and permanency of poverty of some groups relative to others.

Table 1. **Average Monthly Poverty, by Selected Characteristics: 1990 and 1991**

[Numbers in thousands]

Characteristic	1990			1991		
		Poor			Poor	
	Total	Number	Percent	Total	Number	Percent
All persons	247,175	31,818	12.9	249,775	33,866	13.6
Race and Hispanic Origin						
White	208,336	21,233	10.2	210,266	22,864	10.9
Not of Hispanic origin[1]	190,472	16,672	8.8	191,574	17,677	9.2
Black	30,401	9,152	30.1	30,813	9,472	30.7
Hispanic origin	20,964	5,465	26.1	21,787	6,161	28.3
Not of Hispanic origin	226,211	26,353	11.6	227,988	27,705	12.2
Age						
Under 18 years	64,866	13,027	20.1	65,712	13,961	21.2
18 to 64 years	152,633	16,009	10.5	153,924	17,121	11.1
65 years and over	29,676	2,783	9.4	30,139	2,783	9.2
Sex						
Male	120,334	13,343	11.1	121,696	14,587	12.0
Female	126,841	18,476	14.6	128,079	19,279	15.1
Educational Attainment (persons 18 years and over)						
Less than 4 years of high school	40,444	8,392	20.8	40,426	8,618	21.3
High school graduate, no college	68,575	6,350	9.3	68,867	6,923	10.1
1 or more years of college	73,290	4,050	5.5	74,770	4,364	5.8
Disability Status (persons 15 to 69 years)						
With a work disability	29,766	5,304	17.8	29,316	5,407	18.4
With no work disability	143,067	12,944	9.0	144,681	14,144	9.8
Residence						
Metropolitan	190,166	22,444	11.8	191,052	24,039	12.6
Central city	75,586	13,309	17.6	78,651	14,503	18.4
Non-central city	114,580	9,135	8.0	112,401	9,537	8.5
Nonmetropolitan	57,009	9,374	16.4	58,723	9,826	16.7
Region						
Northeast	50,271	5,139	10.2	50,210	5,675	11.3
Midwest	61,772	7,345	11.9	63,262	8,084	12.8
South	84,387	13,458	15.9	84,554	13,687	16.2
West	50,745	5,876	11.6	51,748	6,420	12.4
Family Status						
In families	211,306	24,494	11.6	213,689	26,488	12.4
In families with related children under 18 years	135,778	21,747	16.0	137,277	23,545	17.2
In married-couple families	170,324	11,852	7.0	171,218	12,624	7.4
In married-couple families with related children under 18 years	106,788	9,959	9.3	107,053	10,708	10.0
In families with a female householder, no spouse present	33,959	11,960	35.2	35,415	12,989	36.7
In families with a female householder no spouse present, with related children under 18 years	25,354	11,277	44.5	26,623	12,229	45.9
Unrelated individuals	35,869	7,324	20.4	36,085	7,378	20.4
In non-family households	33,065	6,317	19.1	33,420	6,347	19.0

See footnotes at end of table.

Table 1. **Average Monthly Poverty, by Selected Characteristics: 1990 and 1991**—Continued

[Numbers in thousands]

Characteristic	1990			1991		
		Poor			Poor	
	Total	Number	Percent	Total	Number	Percent
Employment and Labor Force Status (persons 18 years and over)						
Employed full-time	97,094	3,544	3.7	95,567	3,532	3.7
Employed part-time	20,731	2,407	11.6	21,709	2,520	11.6
Unemployed	5,148	2,048	39.8	6,344	2,483	39.1
Not in labor force	59,333	10,793	18.2	60,442	11,370	18.8
Marital Status (persons 18 years and over)						
Married	107,843	6,298	5.8	108,371	6,595	6.1
Separated, divorced, or widowed	34,092	6,404	18.8	34,361	6,665	19.4
Never married	40,374	6,090	15.1	41,331	6,645	16.1
Family Size						
1 person (unrelated individual)	35,863	7,319	20.4	36,077	7,376	20.4
2 persons	57,023	4,703	8.2	57,165	4,857	8.5
3 persons	47,172	4,804	10.2	48,160	5,445	11.3
4 persons	55,865	5,779	10.3	56,761	6,002	10.6
5 persons	30,164	4,226	14.0	30,363	4,632	15.3
6 or more persons	21,089	4,986	23.6	21,248	5,553	26.1
Access to Health Insurance						
Covered by health insurance	215,277	21,695	10.1	217,614	23,625	10.9
Private insurance	191,564	8,892	4.6	192,021	9,227	4.8
Medicare	32,127	3,261	10.2	32,576	3,288	10.1
Medicaid	19,110	12,364	64.7	21,379	13,971	65.4
Not covered by health insurance	31,898	10,123	31.7	32,161	10,241	31.8
Receipt of Public Assistance						
Received public assistance[2]	28,461	16,805	59.0	30,859	18,463	59.8
Did not receive public assistance	218,713	15,013	6.9	218,916	15,403	7.0

[1]Persons of Hispanic origin may be of any race.

[2]Public assistance programs include AFDC, General Assistance, Supplemental Security Income, food stamps, Medicaid, and housing assistance.

Table 2. **Persons Poor 2 or More Months, by Selected Characteristics: 1990 and 1991**

[Numbers in thousands]

Characteristic	1990 panel			1990			1991		
		Persons ever poor over the panel			Persons ever poor during the year			Persons ever poor during the year	
	Total	Number	Percent	Total	Number	Percent	Total	Number	Percent
All persons	235,811	62,414	26.5	241,534	45,638	18.9	244,658	48,477	19.8
Race and Hispanic Origin									
White	198,579	45,854	23.1	203,507	32,042	15.7	205,468	34,359	16.7
Not of Hispanic origin[1]	182,646	38,160	20.9	186,770	25,780	13.8	187,679	27,175	14.5
Black	28,982	13,983	48.2	29,672	11,621	39.2	30,342	11,947	39.4
Hispanic origin	18,565	9,088	49.0	19,565	7,345	37.5	20,756	8,431	40.6
Not of Hispanic origin	217,246	53,325	24.5	221,969	38,293	17.3	223,901	40,046	17.9
Age									
Under 18 years	63,995	23,471	36.7	63,902	17,672	27.7	64,765	18,874	29.1
18 to 64 years	146,555	34,904	23.8	149,553	24,454	16.4	151,137	26,014	17.2
65 years and over	25,261	4,038	16.0	28,078	3,512	12.5	28,755	3,589	12.5
Sex									
Male	113,681	27,848	24.5	117,064	19,714	16.8	118,795	21,514	18.1
Female	122,131	34,566	28.3	124,470	25,924	20.8	125,862	26,963	21.4
Educational Attainment (persons 18 years and over)									
Less than 4 years of high school	35,816	13,400	37.4	38,443	11,229	29.2	39,065	11,454	29.3
High school graduate, no college	66,284	14,704	22.2	67,986	9,927	14.6	67,285	10,773	16.0
1 or more years of college	69,716	10,838	15.5	71,203	6,809	9.6	73,542	7,376	10.0
Disability Status (persons 15 to 69 years)									
With a work disability	25,567	8,698	34.0	27,688	7,149	25.8	26,471	7,094	26.8
With no work disability	140,149	30,392	21.7	141,611	20,378	14.4	144,425	22,302	15.4
Residence									
Metropolitan	179,368	43,837	24.4	184,601	32,036	17.4	186,601	33,943	18.2
Central city	68,170	21,815	32.0	71,093	17,194	24.2	74,670	18,902	25.3
Non-central city	111,198	22,022	19.8	113,508	14,841	13.1	111,931	15,041	13.4
Nonmetropolitan	56,444	18,577	32.9	56,933	13,602	23.9	58,057	14,534	25.0
Region									
Northeast	47,959	10,328	21.5	48,416	6,980	14.4	49,466	8,131	16.4
Midwest	62,050	15,253	24.6	62,106	10,472	16.9	63,105	11,611	18.4
South	79,006	25,459	32.2	82,439	19,606	23.8	82,151	19,484	23.7
West	46,795	11,373	24.3	48,573	8,579	17.7	49,937	9,250	18.5
Family Status									
In families	204,127	51,522	25.2	208,505	36,507	17.5	210,751	39,343	18.7
In families with related children under 18 years	134,944	42,933	31.8	135,441	31,453	23.2	136,496	33,619	24.6
In married-couple families	167,119	33,665	20.1	169,821	21,509	12.7	170,924	22,682	13.3
In married-couple families with related children under 18 years	107,945	27,328	25.3	107,680	17,775	16.5	107,809	18,684	17.3
In families with a female householder, no spouse present	31,436	16,285	51.8	32,546	14,044	43.1	33,926	15,410	45.4
In families with a female householder, no spouse present, with related children under 18 years	24,026	14,530	60.5	24,486	12,981	53.0	25,591	14,113	55.1
Unrelated individuals	31,684	10,892	34.4	33,029	9,131	27.6	33,906	9,134	26.9
In non-family households	29,691	9,793	33.0	30,699	8,099	26.4	31,490	8,033	25.5

See footnotes at end of table.

Table 2. **Persons Poor 2 or More Months, by Selected Characteristics: 1990 and 1991**—Continued

[Numbers in thousands]

Characteristic	1990 panel			1990			1991		
		Persons ever poor over the panel			Persons ever poor during the year			Persons ever poor during the year	
	Total	Number	Percent	Total	Number	Percent	Total	Number	Percent
Employment and Labor Force Status (persons 18 years and over)									
Employed full-time	94,159	15,197	16.1	95,043	8,712	9.2	94,596	8,831	9.3
Employed part-time	20,055	5,500	27.4	20,967	4,098	19.5	22,743	4,430	19.5
Unemployed	4,874	2,925	60.0	5,314	2,494	46.9	5,385	2,737	50.8
Not in labor force	52,727	15,319	29.1	56,309	12,662	22.5	57,168	13,605	23.8
Marital Status (persons 18 years and over)									
Married	105,375	17,954	17.0	107,732	11,563	10.7	108,031	11,993	11.1
Separated, divorced, or widowed	29,999	9,640	32.1	31,865	8,067	25.3	32,242	8,476	26.3
Never married	36,441	11,348	31.1	38,035	8,336	21.9	39,620	9,134	23.1
Family Size									
1 person (unrelated individual)	31,684	10,892	34.4	33,024	9,125	27.6	33,906	9,134	26.9
2 persons	53,640	9,575	17.9	56,119	6,986	12.4	56,179	7,080	12.6
3 persons	44,879	10,427	23.2	46,104	7,260	15.7	47,197	8,144	17.3
4 persons	56,052	12,689	22.6	56,055	8,622	15.4	56,500	9,244	16.4
5 persons	29,634	9,506	32.1	29,747	6,293	21.2	30,284	6,877	22.7
6 or more persons	19,922	9,325	46.8	20,487	7,352	35.9	20,590	7,999	38.8
Access to Health Insurance									
Covered by health insurance	206,997	44,530	21.5	210,838	31,333	14.9	214,314	34,042	15.9
Private insurance	186,507	30,293	16.2	188,731	17,671	9.4	190,018	18,274	9.6
Medicare	27,696	4,686	16.9	30,278	4,081	13.5	31,247	4,193	13.4
Medicaid	16,456	13,425	81.6	17,252	12,948	75.0	19,794	15,026	75.9
Not covered by health insurance	28,815	17,884	62.1	30,696	14,305	46.6	30,344	14,435	47.6
Receipt of Public Assistance									
Received public assistance[2]	25,933	20,308	78.3	27,149	19,015	70.0	28,889	20,826	72.1
Did not receive public assistance	209,878	42,106	20.1	214,386	26,623	12.4	215,769	27,651	12.8

[1]Persons of Hispanic origin may be of any race.

[2]Public assistance programs include AFDC, General Assistance, Supplemental Security Income, food stamps, Medicaid, and housing assistance.

Table 3. **Persons Poor Each Month of 1990 and 1991, by Selected Characteristics**

[Numbers in thousands]

Characteristic	Total	Persons poor entire 24 months	
		Number	Percent
All persons	237,417	10,619	4.5
Race and Hispanic Origin			
White	199,844	5,969	3.0
Not of Hispanic origin[1]	183,702	4,343	2.4
Black	29,147	4,060	13.9
Hispanic origin	18,791	1,949	10.4
Not of Hispanic origin	218,625	8,671	4.0
Age			
Under 18 years	63,838	4,820	7.5
18 to 64 years	147,355	4,401	3.0
65 years and over	26,224	1,399	5.3
Sex			
Male	114,607	3,771	3.3
Female	122,809	6,848	5.6
Educational Attainment (persons 18 years and over)			
Less than 4 years of high school	36,792	3,366	9.1
High school graduate, no college	66,802	1,776	2.7
1 or more years of college	69,985	658	0.9
Disability Status (persons 15 to 69 years)			
With a work disability	25,940	1,899	7.3
With no work disability	140,774	3,239	2.3
Residence			
Metropolitan	180,493	7,593	4.2
Central city	68,676	4,947	7.2
Non-central city	111,818	2,645	2.4
Nonmetropolitan	56,923	3,027	5.3
Region			
Northeast	48,202	2,007	4.2
Midwest	62,423	2,689	4.3
South	79,624	4,570	5.7
West	47,167	1,354	2.9
Family Status			
In families	205,379	8,031	3.9
In families with related children under 18 years	135,060	7,450	5.5
In married-couple families	168,147	2,299	1.4
In married-couple families with related children under 18 years	108,115	1,905	1.8
In families with a female householder, no spouse present	31,589	5,571	17.6
In families with a female householder, no spouse present, with related children under 18 years	23,972	5,427	22.6
Unrelated individuals	32,037	2,589	8.1
In non-family households	30,033	2,341	7.8
Employment and Labor Force Status (persons 18 years and over)			
Employed full-time	94,597	392	0.4
Employed part-time	20,725	465	2.2
Unemployed	4,920	502	10.2
Not in labor force	53,337	4,441	8.3

See footnotes at end of table.

Table 3. **Persons Poor Each Month of 1990 and 1991, by Selected Characteristics**—Continued

[Numbers in thousands]

Characteristic	Total	Persons poor entire 24 months	
		Number	Percent
Marital Status (person 18 years and over)			
Married	106,079	1,290	1.2
Separated, divorced, or widowed	30,428	2,675	8.8
Never married	37,072	1,835	4.9
Family Size			
1 person (unrelated individual)	32,037	2,589	8.1
2 persons	54,131	1,542	2.8
3 persons	45,131	1,625	3.6
4 persons	56,209	1,799	3.2
5 persons	29,882	1,411	4.7
6 or more persons	20,026	1,654	8.3
Access to Health Insurance			
Covered by health insurance	208,669	8,248	4.0
Private insurance	187,583	1,267	0.7
Medicare	28,467	1,626	5.7
Medicaid	16,789	6,622	39.4
Not covered by health insurance	28,747	2,372	8.2
Receipt of Public Assistance			
Received public assistance[2]	26,539	8,380	31.6
Did not receive public assistance	210,878	2,239	1.1

[1]Persons of Hispanic origin may be of any race.

[2]Public assistance programs include AFDC, General Assistance, Supplemental Security Income, food stamps, Medicaid, and housing assistance.

Table 4. **Spells of Poverty for Persons Who Became Poor During the 1990 SIPP Panel, by Selected Characteristics**

[Numbers in thousands]

Characteristic	Total spells	Percentage of spells right-censored	Survival rates of poverty spells after--								Median spell duration
			1 month	4 months	8 months	12 months	16 months	20 months	24 months	28 months	
All persons	62,574	26.9	1.0000	0.5023	0.3091	0.2263	0.1828	0.1543	0.1299	0.1208	4.0
Race and Hispanic Origin											
White	48,763	25.3	1.0000	0.4885	0.2851	0.2054	0.1623	0.1387	0.1201	(B)	3.9
Not of Hispanic origin[1]	40,440	24.7	1.0000	0.4737	0.2680	0.1908	0.1509	0.1281	0.1113	(B)	3.9
Black	11,715	33.3	1.0000	0.5532	0.3975	0.2990	0.2594	0.2043	0.1756	(B)	5.8
Hispanic origin	9,557	28.2	1.0000	0.5662	0.3596	0.2658	0.2120	0.1836	(B)	(B)	4.9
Not of Hispanic origin	53,017	26.7	1.0000	0.4904	0.2995	0.2188	0.1773	0.1489	0.1243	0.1144	4.0
Age											
Under 18 years	21,148	27.5	1.0000	0.5223	0.3217	0.2448	0.2075	0.1746	0.1456	(B)	4.4
18 to 64 years	38,134	25.9	1.0000	0.4844	0.2948	0.2104	0.1636	0.1365	0.1137	(B)	3.9
65 years and over	3,292	34.9	1.0000	0.5790	0.3913	0.2852	0.2367	0.2224	(B)	(B)	6.2
Sex											
Male	29,655	25.5	1.0000	0.4864	0.2907	0.2112	0.1677	0.1409	0.1200	(B)	3.9
Female	32,919	28.2	1.0000	0.5167	0.3257	0.2399	0.1965	0.1664	0.1389	(B)	4.3
Educational Attainment (persons 18 years and over)											
Less than 4 years of high school	12,816	32.2	1.0000	0.5625	0.3768	0.2904	0.2318	0.1968	0.1729	(B)	5.3
High school graduate, no college	16,089	26.0	1.0000	0.4797	0.2891	0.2120	0.1649	0.1332	0.1199	(B)	3.9
1 or more years of college	12,522	21.7	1.0000	0.4347	0.2420	0.1447	0.1103	0.1012	(B)	(B)	3.7
Disability Status (persons 15 to 69 years)											
With a work disability	8,162	30.4	1.0000	0.5382	0.3734	0.2893	0.2327	0.1905	0.1632	(B)	4.9
With no work disability	34,110	25.0	1.0000	0.4779	0.2822	0.1955	0.1495	0.1246	0.1025	(B)	3.9
Residence											
Metropolitan	43,135	26.5	1.0000	0.4868	0.3034	0.2197	0.1751	0.1499	0.1226	(B)	3.9
Central city	21,825	29.4	1.0000	0.5029	0.3335	0.2514	0.2022	0.1716	0.1585	(B)	4.1
Non-central city	21,310	23.6	1.0000	0.4706	0.2731	0.1875	0.1472	0.1281	0.0805	(B)	3.8
Nonmetropolitan	19,439	27.8	1.0000	0.5365	0.3218	0.2406	0.1997	0.1639	0.1460	(B)	4.7
Region											
Northeast	9,738	25.7	1.0000	0.4552	0.2612	0.2119	0.1759	0.1534	(B)	(B)	3.8
Midwest	15,376	27.0	1.0000	0.4886	0.3064	0.2184	0.1771	0.1390	0.1192	(B)	3.9
South	24,963	28.3	1.0000	0.5233	0.3321	0.2365	0.1916	0.1565	0.1284	(B)	4.4
West	12,496	25.0	1.0000	0.5136	0.3047	0.2268	0.1772	0.1674	0.1304	(B)	4.2
Family Status											
In families	50,714	26.5	1.0000	0.5011	0.3039	0.2237	0.1813	0.1518	0.1264	0.1209	4.0
In families with related children under 18 years	42,231	27.1	1.0000	0.5090	0.3111	0.2353	0.1943	0.1612	0.1331	0.1283	4.2
In married-couple families	35,600	22.8	1.0000	0.4605	0.2592	0.1859	0.1433	0.1140	0.0876	(B)	3.8
In married-couple families with related children under 18 years	29,247	23.3	1.0000	0.4658	0.2616	0.1954	0.1549	0.1210	0.0918	(B)	3.8
In families with a female householder, no spouse present	13,627	36.3	1.0000	0.6042	0.4219	0.3265	0.2858	0.2533	0.2318	(B)	6.5
In families with a female householder, no spouse present, with related children under 18 years	11,892	36.8	1.0000	0.6145	0.4371	0.3379	0.2977	0.2630	0.2388	(B)	6.8
Unrelated individuals	11,860	28.8	1.0000	0.5073	0.3316	0.2377	0.1886	0.1657	(B)	(B)	4.1
In non-family households	10,737	29.0	1.0000	0.5088	0.3364	0.2396	0.1869	0.1696	(B)	(B)	4.2

See footnotes at end of table.

Table 4. **Spells of Poverty for Persons Who Became Poor During the 1990 SIPP Panel, by Selected Characteristics**—Continued

[Numbers in thousands]

Characteristic	Total spells	Percentage of spells right-censored	Survival rates of poverty spells after--								Median spell duration
			1 month	4 months	8 months	12 months	16 months	20 months	24 months	28 months	
Employment and Labor Force Status (persons 18 years and over)											
Employed full-time	14,022	23.8	1.0000	0.4194	0.2518	0.1822	0.1452	0.1207	0.0930	(B)	3.6
Employed part-time	6,829	22.4	1.0000	0.5016	0.2728	0.1759	0.1262	0.1027	(B)	(B)	4.0
Unemployed	5,548	26.9	1.0000	0.5209	0.3114	0.2115	0.1727	0.1379	(B)	(B)	4.3
Not in labor force	15,027	31.1	1.0000	0.5447	0.3597	0.2686	0.2107	0.1849	0.1692	(B)	5.0
Marital Status (persons 18 years and over)											
Married	20,096	22.9	1.0000	0.4490	0.2533	0.1783	0.1326	0.1055	0.0814	(B)	3.8
Separated, divorced, or widowed	9,597	33.6	1.0000	0.5439	0.3750	0.2831	0.2346	0.2101	0.1897	(B)	4.9
Never married	11,734	27.3	1.0000	0.5231	0.3278	0.2276	0.1795	0.1539	0.1374	(B)	4.4
Family Size											
1 person (unrelated individual)	11,860	28.8	1.0000	0.5073	0.3316	0.2377	0.1886	0.1657	(B)	(B)	4.1
2 persons	9,389	27.7	1.0000	0.5035	0.3160	0.2238	0.1785	0.1577	0.1441	(B)	4.1
3 persons	9,698	25.6	1.0000	0.5032	0.2998	0.2111	0.1622	0.1319	(B)	(B)	4.1
4 persons	13,035	23.9	1.0000	0.4569	0.2679	0.1979	0.1548	0.1250	0.1085	(B)	3.7
5 persons	9,522	27.6	1.0000	0.4938	0.3109	0.2518	0.1856	0.1561	(B)	(B)	4.0
6 or more persons	9,070	28.8	1.0000	0.5680	0.3413	0.2465	0.2377	0.2020	0.1572	(B)	4.9
Access to Health Insurance											
Covered by health insurance	40,201	26.4	1.0000	0.4868	0.2957	0.2155	0.1818	0.1548	0.1340	(B)	3.9
Private insurance	30,544	20.6	1.0000	0.4228	0.2284	0.1514	0.1175	0.0918	0.0713	(B)	3.6
Medicare	3,811	37.3	1.0000	0.5868	0.4223	0.3168	0.2688	0.2541	(B)	(B)	6.9
Medicaid	9,307	46.0	1.0000	0.6960	0.5220	0.4337	0.4003	0.3635	0.3463	(B)	8.7
Not covered by health insurance	22,373	27.8	1.0000	0.5302	0.3331	0.2459	0.1838	0.1524	0.1221	(B)	4.6
Receipt of Public Assistance											
Received public assistance[2]	15,674	40.2	1.0000	0.6536	0.4646	0.3781	0.3332	0.2924	0.2734	(B)	7.1
Did not receive public assistance	46,900	22.5	1.0000	0.4513	0.2560	0.1742	0.1317	0.1076	0.0835	(B)	3.8

B Base less than 200,000.

[1]Persons of Hispanic origin may be of any race.

[2]Public assistance programs include AFDC, General Assistance, Supplemental Security Income, food stamps, Medicaid, and housing assistance.

Table 5. **Transitions Into and Out of Poverty, by Selected Characteristics: 1990 to 1991**

[Numbers in thousands]

Poverty status in 1990	Total	Poverty status in 1991	
		Poor	Nonpoor
All persons			
Total	235,811	24,998	210,814
Poor	23,849	18,797	5,052
Nonpoor	211,962	6,201	205,761
Race and Hispanic Origin			
White			
Total	198,579	15,996	182,583
Poor	14,826	11,368	3,458
Nonpoor	183,754	4,628	179,125
Black			
Total	28,982	7,854	21,128
Poor	7,829	6,471	1,359
Nonpoor	21,152	1,383	19,769
Hispanic origin[1]			
Total	18,565	4,584	13,980
Poor	3,938	3,374	564
Nonpoor	14,627	1,210	13,417
Age			
Under 18	67,032	10,446	50,286
Total	10,183	8,248	1,936
Poor	50,549	2,198	48,350
Nonpoor			
18 to 64			
Total	147,668	12,225	135,444
Poor	11,440	8,641	2,800
Nonpoor	136,229	3,585	132,644
65 and over			
Total	27,411	2,326	25,084
Poor	2,226	1,909	316
Nonpoor	25,185	417	24,768
Sex			
Male			
Total	113,681	10,079	103,602
Poor	9,286	7,191	2,095
Nonpoor	104,395	2,888	101,507
Female			
Total	122,131	14,919	107,212
Poor	14,564	11,606	2,957
Nonpoor	107,567	3,313	104,254
Educational Attainment (persons 18 years and over)			
Less than 4 years of high school			
Total	36,701	7,111	29,590
Poor	6,717	5,575	1,141
Nonpoor	29,984	1,535	28,449
High school graduate, no college			
Total	66,051	5,008	61,043
Poor	4,596	3,489	1,107
Nonpoor	61,455	1,519	59,936
1 or more years of college			
Total	72,328	2,433	69,895
Poor	2,354	1,485	868
Nonpoor	69,974	948	69,026

See footnotes at end of table.

Table 5. **Transitions Into and Out of Poverty, by Selected Characteristics: 1990 to 1991**—Continued

[Numbers in thousands]

Poverty status in 1990	Total	Poverty status in 1991	
		Poor	Nonpoor
Region			
Northeast			
Total	47,722	3,881	43,841
Poor	3,768	2,936	832
Nonpoor	43,954	946	43,008
Midwest			
Total	62,034	6,168	55,866
Poor	5,664	4,692	972
Nonpoor	56,371	1,476	54,894
South			
Total	79,138	10,897	68,242
Poor	10,809	8,426	2,383
Nonpoor	68,329	2,470	65,859
West			
Total	46,916	4,052	42,865
Poor	3,608	2,744	865
Nonpoor	43,308	1,308	42,000
Family Status			
In married-couple families both years			
Total	162,539	8,700	153,840
Poor	8,007	5,715	2,292
Nonpoor	154,532	2,985	151,547
In other family types both years			
Total	33,108	10,043	23,065
Poor	9,886	8,679	1,207
Nonpoor	23,222	1,364	21,858
Unrelated individual both years			
Total	28,132	4,480	23,652
Poor	4,390	3,593	797
Nonpoor	23,742	887	22,855
Work Experience (persons 18 years and over)			
Worked year-round, full-time both years	68,330	824	67,506
Total	813	473	340
Poor	67,517	351	67,167
Nonpoor			
Worked, not year-round, full-time both years	32,448	3,521	28,928
Total	3,141	2,202	939
Poor	29,307	1,318	27,989
Nonpoor			
Did not work either year			
Total	43,563	7,137	36,426
Poor	7,125	6,125	1,000
Nonpoor	36,438	1,013	35,425
Receipt of Public Assistance			
Received public assistance both years[2]			
Total	36,867	17,310	19,558
Poor	16,883	14,497	2,386
Nonpoor	19,985	2,813	17,172
Did not receive public assistance either year			
Total	181,680	5,460	176,220
Poor	5,096	3,147	1,949
Nonpoor	176,584	2,313	174,272

[1]Persons of Hispanic origin may be of any race.

[2]Public assistance programs include AFDC, General Assistance, Supplemental Security Income, food stamps, Medicaid, and housing assistance.

Appendix A. Overview of the SIPP Program

BACKGROUND

The Survey of Income and Program Participation (SIPP) provides a major expansion in the kind and amount of information available to analyze the economic situation of households and persons in the United States. The information supplied by this survey is expected to provide a better understanding of changes in the well-being of the population and the relationship to the demographic and social characteristics of individuals. The data collected in SIPP will be especially useful in studying Federal transfer programs, estimating program cost and effectiveness, and assessing the effect of proposed changes in program regulations and benefit levels. Analysis of other important national issues such as tax reform, Social Security program costs, and national health insurance can be expanded and refined, based on the information from this new survey.

The first interviews in the SIPP took place in October 1983, nearly 8 years after the research and developmental phase, the Income Survey Development Program (ISDP), was initiated by the Department of Health, Education, and Welfare, in 1975. Between 1975 and 1980 extensive research was undertaken to design and test new procedures for collecting income and related socioeconomic data on a subannual basis and in a longitudinal framework. Much of the work centered around four experimental field tests that were conducted in collaboration with the Bureau of the Census to examine different concepts, procedures, questionnaires, and recall periods. Two of the tests were restricted to a small number of geographic sites; the other two were nationwide. In the first nationwide test, the 1978 Research Panel, approximately 2,000 households were interviewed. Because of the relatively small number of interviews, controlled experimental comparisons of alternatives were not possible; however, the panel did demonstrate that many new ideas and methods were feasible. It also laid a foundation for the largest and most complex test: the 1979 Research Panel. This panel consisted of a nationally representative sample of 8,200 households and provided a vehicle for feasibility tests and controlled experiments of alternative design features.

In the fall of 1981, virtually all funding for ISDP research and planning of the continuing SIPP program was deleted from the budget of the Social Security Administration. The loss of funding for fiscal year 1982 brought all work on the new survey to a halt. In fiscal year 1983, however, money for initiation of the new survey was allotted in the budget of the Bureau of the Census. Work began almost immediately in preparation for the survey start in October 1983. The design of the questionnaire for the first interview was similar in structure to that used in the 1979 ISDP panel study with two important exceptions. First, the reference period for the questions was extended from 3 months to 4 months in order to reduce the number of interviews and, therefore, lower costs. Second, the questions covering labor force activity were expanded in order to provide estimates that were closer, on a conceptual basis, to those derived from the Current Population Survey (CPS). The design also incorporated a number of other modifications resulting from experience with the 1979 pilot study.

SURVEY CONTENT

There are three basic elements contained in the overall design of the survey content. The first is a control card used to record basic social and demographic characteristics for each person in the household at the time of the initial interview. Because households are interviewed a total of eight or nine times, the card is also used to record changes in characteristics and to record the dates when persons enter or leave the household. Finally, during each interview, information on each source of income reviewed and the name of each job or business is transcribed to the card so that this information can be used in the updating process in subsequent interviews.

The second major element of the survey content is the core portion of the questionnaire. The core questions are repeated at each interview and cover labor force activity, the types and amounts of income received during the 4-month period, and participation status in various programs. Some of the important elements of labor force activity are recorded separately for each week of the period. Income recipiency and amounts are recorded on a monthly basis with the exception of amounts of property income (interest, dividends, rent, etc.). Data for these types are recorded as totals for the 4-month period. The core also contains questions covering attendance in postsecondary schools, private health insurance coverage, public or subsidized rental housing, low-income energy assistance, and school breakfast and lunch participation.

The third major element is the various supplements or topical modules that will be included during selected household visits. The topical modules cover areas that need not be examined every 4 months. Certain of these topical modules are considered to be so important that they are viewed as an integral part of the overall survey. Other topical modules have more specific and more limited purposes. Topical modules which were covered in the various waves of the 1990 SIPP panel are shown in table A-1. (For a definition of the term ''wave,'' see table A-2 and the following section.)

SAMPLE DESIGN

The sample design for the first SIPP panel in 1984 consisted of about 20,000 households selected to represent the noninstitutionalized population of the United States. The subsequent 1990 panel used in this report had a sample size of approximately 21,900 households. Table A-2 shows the sample design for the 1990 panel of SIPP. Each household in the sample was scheduled to be interviewed at 4-month intervals over a period of 2-1/2 years beginning in February 1990. The reference period for the questions is the 4-month period preceding the interview. For example, households interviewed in February 1990 were asked questions for the months October, November, and December 1989 and January 1990. This household was interviewed again in June 1990 for the February through May period. The sample households within a given panel are divided into four subsamples of nearly equal size. These subsamples are called rotation groups and one rotation group is interviewed each month. In general, one cycle of four interviews covering the entire sample, using the same questionnaire, is called a wave. This design was chosen because it provides a smooth and steady work load for data collection and processing.

SIPP panels have been introduced in February of each succeeding year. This overlapping design provides a larger sample size from which cross-sectional estimates can be made. The overlap also enhances the survey's ability to measure change by lowering the standard errors on differences between estimates for two points in time.

Table A-1. **Topical Modules for the 1990 SIPP Panel**

Wave	Modules
1	None
2	Recipiency history Employment history Work disability history Education and training history Marital history Migration history Fertility history Household relationships
3	Work schedule Childcare arrangements and child support agreements Support for nonhousehold members Functional limitations and disability Utilization of health care services
4	Assets and liabilities Retirement expectations and pension plan coverage Real estate property and vehicles
5	Annual income and retirement Accounts Taxes School enrollment and financing
6	Childcare arrangements and child support agreements Support for nonhousehold members Functional limitations and disability Utilization of health care services Spells outside of the work force
7	Selected financial assets Medical expenses and work disability Real estate, shelter costs, dependent care, and vehicles
8	Annual income and retirement accounts Taxes School enrollment and financing

Table A-2. **Design of the 1990 SIPP Panel**

Rotation	Wave	Interview month	Reference months
2	1	Feb. 90	Oct., Nov., Dec. (89), Jan.(90)
3	1	March 90	Nov., Dec. (89), Jan.,Feb.(90)
4	1	April 90	Dec.,(89), Jan., Feb., Mar.(90)
1	1	May 90	Jan., Feb., Mar., Apr.(90)
2	2	June 90	Feb., Mar., Apr., May (90)
3	2	July 90	Mar., Apr. May, Jun.(90)
4	2	Aug. 90	Apr., May Jun., Jul.(90)
1	2	Sept. 90	May, Jun., Jul., Aug. (90)
2	3	Oct. 90	Jun., Jul., Aug., Sept. (90)
3	3	Nov. 90	Jul., Aug., Sept., Oct. (90)
4	3	Dec. 90	Aug., Sept., Oct., Nov. (90)
1	3	Jan. 91	Sept., Oct., Nov., Dec. (90)
2	4	Feb. 91	Oct., Nov., Dec. (90), Jan (91)
3	4	March 91	Nov., Dec. (90), Jan., Feb. (91)
4	4	April 91	Dec. (90), Jan., Feb., Mar. (91)
1	4	May 91	Jan., Feb., Mar., Apr. (91)
2	5	June 91	Feb., Mar., Apr., May (91)
3	5	July 91	Mar., Apr., May, Jun. (91)
4	5	Aug. 91	Apr., May, Jun., Jul. (91)
1	5	Sept. 91	May, Jun., Jul., Aug. (91)
2	6	Oct. 91	Jun., Jul., Aug., Sept. (91)
3	6	Nov. 91	Jul., Aug., Sept., Oct. (91)
4	6	Dec. 91	Aug., Sept., Oct., Nov. (91)
1	6	Jan. 92	Sept., Oct., Nov., Dec. (91)
2	7	Feb. 92	Oct., Nov., Dec. (88), Jan. (92)
3	7	March 92	Nov., Dec. (91), Jan., Feb. (92)
4	7	April 92	Dec. (91), Jan., Feb., Mar. (92)
1	7	May 92	Jan., Feb., March, April (92)
2	8	June 92	Feb., Mar., Apr., May (92)
3	8	July 92	Mar., Apr., May, Jun. (92)
4	8	Aug. 92	Apr., May, Jun., Jul. (92)
1	8	Sept. 92	May, Jun., Jul., Aug. (92)

SURVEY OPERATIONS

Data collection operations are managed through the Census Bureau's 12 permanent regional offices. A staff of interviewers assigned to SIPP conduct interviews by personal visit each month with most interviewing completed during the first 2 weeks of that month. Completed questionnaires are transmitted to the regional offices where they undergo an extensive clerical edit before being entered into the Bureau's SIPP data processing system. Upon entering this processing system the data are subjected to a detailed computer edit. Errors identified in this phase are corrected and computer processing continues.

Two of the major steps of computer processing are the assignment of weights to each sample person and imputation for missing survey responses. The weighting procedures assure that SIPP estimates of the number of persons agree with independent estimates of the population within specified age, race, and sex categories. The procedures also assure close correspondence with monthly CPS estimates of households. In almost all cases, a survey nonresponse is assigned a value in the imputation phase of processing. The imputation for missing responses is based on procedures generally referred to as the ''hot deck'' approach. This approach assigns values for nonresponses from sample persons who did provide responses and who have characteristics similar to those of the nonrespondents.

The longitudinal design of SIPP dictates that all persons 15 years old and over present as household members at the time of the first interview be part of the survey throughout the entire 2 1/2 year period. To meet this goal, the survey collects information useful in locating persons who move. In addition, field procedures were established that allow for the transfer of sample cases between regional offices. Persons moving within a 100-mile radius of an original sampling area (a county or group of counties) are followed and continue with the normal personal interviews at 4-month intervals. Those moving to a new residence that falls outside the 100-mile radius of any SIPP sampling area are interviewed by telephone. The geographic areas defined by these rules contain more than 95 percent of the U.S. population.

Because most types of analysis using SIPP data will be dependent not on data for individuals but on groups of individuals (households, families, etc.), provisions were made to interview all ''new'' persons living with original sample persons (those interviewed in the first wave). These new sample persons entering the survey through contact with original sample persons are considered as part of the sample only while residing with the original sample person.

Appendix B. Definitions and Explanations

Population coverage. The estimates in this report are restricted to the civilian noninstitutional resident population of the United States and members of the Armed Forces living off post or with their families on post.

Weights. Five sets of weights were used in this report. Monthly weights for calendar years 1990 and 1991 were used in deriving average monthly poverty figures for each year. Estimates of the number of persons who ever were poor during the panel, who were poor all of 1990 and 1991, and who experienced a change in poverty status from 1990 to 1991 were based on the 1990 panel weight. Calendar year weights for 1990 and 1991 were used to obtain estimates of the number of persons who were ever participated during a given year.

Race and Hispanic origin. The population is divided into two groups on the basis of race: White and Black. Persons of Hispanic origin were determined on the basis of a question that asked for self-identification of the person's origin (or the origin of some other household member) from a ''flashcard'' listing ethnic origins. Hispanics were those who indicated that their origin was Mexican, Puerto Rican, Cuban, Central or South American, or some other Hispanic origin. Persons of Hispanic origin may be of any race.

Householder. The instructions call for listing first the person (or one of the persons) in whose name the home is owned or rented. If the house is owned jointly by a married couple, either the husband or the wife may be listed first, thereby becoming the reference person, or householder, to whom the relationship of the other household members is recorded. One person in each household is designated as the ''householder.'' The number of householders, therefore, is equal to the number of households.

Family. The term ''family'' refers to a group of two or more persons related by birth, marriage, or adoption who reside together; all such persons are considered as members of one family. For example, if the son of the person who maintains the household and the son's wife are members of the household, they are treated as members of the parent's family. Every family must include a householder; two or more people living in the same household who are related to one another, but are not related to the householder, form an ''unrelated subfamily.''

Subfamily. A subfamily is a married couple with or without children, or one parent with one or more own single children under 18 years old living in a household but not including among its members the person or couple maintaining the household. Because a subfamily does not include a householder, it is by definition excluded from the count of families. There are two kinds of subfamilies, related and unrelated.

Related subfamily. A related subfamily is a subfamily whose members are related to the person or couple maintaining the household. The most common example of a related subfamily is a young married couple sharing the home of the husband's or wife's parents. Members of a related subfamily are also members of the householder's family.

Unrelated subfamily. An unrelated subfamily is a subfamily whose members are not related to the person or couple maintaining the household. Persons in unrelated subfamilies are not part of the householder's family, but are classified by family status as if they were separate families. They are included in the overall count of family members.

Married-couple family. A married couple, as defined for census purposes, is a husband and wife enumerated as members of the same household. The married couple may or may not have children living with them. The expression ''husband-wife'' or ''married-couple'' before the term ''household,'' or ''family'' indicates that the household, or family, is maintained by a husband and wife.

Unrelated individuals. The term ''unrelated individuals'' refers to persons 15 years old and over (other than inmates of institutions) who are not living with any relatives. An unrelated individual may (1) constitute a one-person household, (2) be part of a household including one or more other families or unrelated individuals, or (3) reside in group quarters such as a rooming house. Thus, a widow living by herself or with one or more other persons not related to her, a lodger not related to the householder or to anyone else in the household, and a servant living in an employer's household with no relatives are examples of unrelated individuals. The poverty status of unrelated individuals is determined independently of other household members' incomes.

Educational attainment. The definitions of educational attainment relate to persons 18 years old and older. Data on years of school completed were derived from the combination of answers to questions concerning the highest grade of school attended by the person and whether or not that grade was finished. The questions of educational attainment apply only to progress in ''regular'' schools. Such schools included public, private, and parochial elementary and high schools (both junior and senior), colleges, universities, and professional schools (whether day schools or night schools). Thus, regular schooling is that which may advance a person toward an elementary school certificate, a high school diploma, or a college, university, or professional school degree.

Metropolitan areas. The population residing in metropolitan statistical areas (MSAs) as defined in June 1984 constitutes the metropolitan population. MSAs are defined by the Office of Management and Budget for use in the presentation of statistics by agencies of the Federal Government. An MSA is a geographic area consisting of a large population nucleus, together with adjacent communities which have a high degree of economic and social integration with that nucleus. The definitions specify a boundary around each large city so as to include most or all its suburbs. Entire counties form the MSA building blocks, except in New England where cities and towns are used. The former term SMSA was changed to MSA in 1983.

An area qualifies for recognition as an MSA if (1) it includes a city of at least 50,000 population, or (2) it includes a Census Bureau-defined urbanized area of at least 50,000 with a total metropolitan population of at least 100,000 (75,000 in New England). In addition to the county containing the main city or urbanized area, an MSA may include other counties having strong commuting ties to the central county. If specified conditions are met, certain large MSAs are designated as consolidated MSAs (CMSAs) and divided into component primary MSAs (PMSAs).

Non-metropolitan areas. The territory outside metropolitan statistical areas is referred to here as non-metropolitan.

Central cities. The largest city in each MSA is always designated a central city. There may be additional central cities if specified requirements, designed to identify places of central character within the MSA, are met. Although the largest central cities are generally included in the title of the MSA, there may be central cities that are not part of the title. The balance of the MSA outside the central city or cities often is regarded as equivalent to ''suburban areas.''

Non-central cities. The territory outside central cities of metropolitan statistical areas but within MSAs is referred to here as outside central cities or ''suburban areas.''

Labor force and employment status. The definitions of labor force and employment status relate to persons 18 years old and older.

Full-time employed. A person was employed full-time in a given month if he or she worked at least one week during that month and at least 35 hours during a usual week of employment.

Part-time employed. A person was employed part-time in a given month if he or she worked at least one week during that month and less than 35 hours during a usual week of employment.

Unemployed. A person was unemployed in a given month if he or she had no job during the month and spent one or more weeks looking for employment or on layoff.

Not in the labor force. A person was not in the labor force in a given month if he or she held no job during the month and spent no time looking or on layoff.

Disability. Respondents were asked every wave whether they have a physical, mental, or other health condition which limits the kind or amount of work they can perform. On the longitudinal file (which was used for this analysis) a person is recorded as disabled if he/she answered yes to this question at least once during the panel.

Reference periods for the characteristics age, education, employment status, family status, marital status, family size, residence, region, receipt of assistance, and health insurance coverage. While residence, region, and employment status are observed each wave, the other characteristics are observed each month. In order to calculate average monthly statistics, the characteristics are used as they prevail in the particular month. In order to determine the number of persons who ever or always were poor during a given time period, the characteristics are used as of the first month (wave) of the time period in question. When looking at spells of poverty, the characteristics of persons experiencing the spells are as of the month (wave) during which the spell began.

Income. The cash income concept used in this report includes the sum of all income received from any of the sources listed in table B-1. Rebates, refunds, loans and capital gain or loss amounts from the sale of assets, and interhousehold transfers of cash such as allowances are not included.

Table B-1. **Income Sources Included in Monthly Cash Income**

Earnings from employment
- Wages and salary
- Nonfarm self-employment income
- Farm self-employment income

Income from assets (property income)
- Regular/passbook savings accounts in a bank, savings and loan or credit union
- Money market deposit accounts
- Certificate of deposit
- NOW, Super NOW, or other interest-earning checking accounts
- Money market funds
- U.S. Government securities
- Municipal or corporate bonds
- Other interest-earning assets
- Stocks or mutual fund shares
- Rental property
- Mortgages
- Royalties
- Other financial investments

Other income sources
- Social Security
- U.S. Government Railroad Retirement
- Federal Supplemental Security Income
- State administered Supplemental Security Income
- State unemployment compensation
- Supplemental unemployment benefits
- Black lung payments
- Worker's compensation
- State temporary sickness or disability benefits
- Employer or union temporary sickness policy
- Payments from a sickness, accident, or disability insurance policy purchased on your own
- Aid to Families with Dependent Children (AFDC), (ADC)
- General Assistance or General Relief
- Indian, Cuban, or refugee assistance
- Foster child care payments
- Other welfare
- Child support payments
- Alimony payments
- Pensions from a company or union
- Federal civil service or other Federal civilian employee pensions
- U.S. military retirement
- National Guard or Reserve Forces retirement
- State government pensions
- Local government pensions
- Income from paid-up life insurance policies or annuities
- Estates and trusts
- Other payments for retirement, disability or survivors, G.I. Bill/VEAP education benefits
- Income assistance from a charitable group
- Other unemployment compensation (Trade Adjustment Act benefits, strike pay, other)
- Veterans' compensation or pensions
- Money from relatives or friends
- Lump sum payments
- Income from roomers or boarders
- National Guard or Reserve pay
- Incidental or casual earnings
- Other cash income not included elsewhere

Accrued interest on Individual Retirement Accounts, KEOGH retirement plans, and U.S. Savings bonds are also excluded. This definition differs somewhat from that used in the annual income reports based on the March CPS income supplement questionnaire. The data in those reports, published in the Current Population Reports, Series P-60, are based only on income received in a regular or periodic manner and, therefore, exclude lump-sum or one-time payments, such as inheritances, or insurance settlements which are included as income in SIPP. Educational assistance, which is included in the March CPS income concept, is not included in the SIPP income concept.

The income amounts represent amounts actually received during the month, before deductions for income and payroll taxes, union dues, Part B Medicare premiums, etc.

The SIPP income definition includes three types of earnings: wages and salary, nonfarm self-employment, and farm selfemployment. The definition of nonfarm self-employment and farm self-employment is not based on the net difference between gross receipts or sales on the one hand and operating expenses, depreciation, etc. on the other. Rather, the monthly amounts for these income types are based on the salary or other income received from the business by the owner of the business or farm during the 4-month period.

While the income amounts from most sources are recorded monthly for the 4-month reference period, property income amounts such as interest, dividends, and rental income were recorded as totals for the 4-month period. These totals were distributed equally between months of the reference period for purposes of calculating poverty status in this report.

Poverty definition. The poverty definitions used in this report are based on the government's official definition but were calculated on a monthly basis using the family composition at that time rather than fixing it throughout the year as is done in the Current Population Survey. These data differ from the official figures and are not part of the standard data series on poverty established by Directive 14 from the Office of Management and Budget. Official figures are published annually from the March Current Population Survey in the P-60 Series of Current Population Reports.

The poverty definition is based on an index developed at the Social Security Administration in 1964 and revised by Federal interagency committees in 1969 and 1981. The poverty concept is a statistical measure based on the Department of Agriculture's 1961 Economy Food Plan. It reflects the different consumption requirements of families in relation to their size and composition, and the age of the family householder. A ratio of food expenditures to income of one-third, based on the Department of Agriculture's 1955 Survey of Food Consumption, was used to derive the original poverty thresholds from the economy food plan. The poverty thresholds have been updated annually based on changes in the Consumer Price Index.

Weighted average poverty thresholds for 1990 and 1991 are shown below in table B-2.

Table B-2. **Weighted Average Poverty Thresholds in 1990 and 1991**

Characteristic	Thresholds	
	1990	1991
One person (unrelated individual)	$6,652	$6,932
15 to 64 years	6,800	7,086
65 years and over	6,268	6,532
Two persons	8,509	8,865
Householder 15 to 64 years	8,794	9,165
Householder 65 years and over	7,905	8,241
Three persons	10,419	10,860
Four persons	13,359	13,924
Five persons	15,792	16,456
Six persons	17,839	18,587
Seven persons	20,241	21,093
Eight persons	22,582	23,532
Nine persons or more	26,848	27,978

For further discussion of the poverty definition, see Current Population Reports, Series P-60, No. 188, Income, Poverty, and Valuation of Noncash Benefits: 1993.

Income-to-poverty ratio. The income-to-poverty ratios used in this report incorporates an adjustment in every month for family size and composition. The poverty threshold for each family is calculated based on the size and composition of that family in each month. For unrelated individuals, individual income is divided by the appropriate one-person-family poverty threshold. Monthly estimates of poverty are obtained by comparing monthly family income to monthly thresholds. In order to obtain the income-to-poverty ratio during a certain period, the family income of a person is summed over each month of that period and divided by the sum of the respective monthly poverty thresholds.

Thus, a person's annual poverty status in this report was determined by comparing the sum of the person's family income each month against the sum of the appropriate monthly poverty thresholds. If the person's family income (personal income if an unrelated individual) was below the sum of the monthly poverty thresholds, the person was classified as below the poverty level for the year shown.

Public Assistance. Persons are considered recipients of public assistance if they receive assistance from one or more of the following programs: Aid to Families with Dependent Children (AFDC), General Assistance, Supplemental Security Income, food stamps, Medicaid, and housing assistance.

AFDC. Title VII of the Social Security Act permits States to give cash assistance to needy children who lack financial support of one parent because a parent is continuously absent from home, incapacitated, dead, or unemployed.[1] The Federal and State government share in the cost of benefit payments and administrative outlays and some States require local governments to share costs. Able-bodied AFDC recipients are required by federal law to register for training and employment services. Mothers receiving AFDC payments are required to assign their child support rights to the State and to cooperate in establishing paternity of a child born out of wedlock.

Persons are considered participants in AFDC if they are identified as primary recipients or if they are covered under other persons' allotment.

General Assistance. General Assistance consists of a host of state and local programs to provide cash assistance to needy persons not qualifying for AFDC or SSI. Eligibility rules vary from State to State, and often from county to county within a State, ranging from aid to mostly unemployable single adults (District of Columbia), to workfare programs, where recipients work in exchange for the assistance (New York).

Persons are considered participants in General Assistance if they are identified as primary recipients or if they are covered under other persons' allotment.

Federal and State rent assistance. There are several programs designed to ''remedy the unsafe and unsanitary housing conditions and the acute shortage of decent, safe, and sanitary dwellings for families of low income.''[2] Among these, the most important are Low Rent Public Housing and Sections 8, 236, and 101 of the U.S. Housing Act, all of which are funded in full by the Federal Government. Under sections 8 and 101, Federal funds are used to subsidize private sector housing. The difference between the ''fair market'' rent and the rent charged to the tenant is paid to the owner by the government. Under an interest reduction program (e.g. section 236), the amount of interest paid on the mortgage by the owner is reduced and the subsequent savings are passed on to low-income tenants in the form of lower rent charges.

Participation in public housing is determined by two factors: program eligibility and the availability of housing. Income standards for initial and continuing occupancy vary by local housing authority, although the limits are constrained by Federal guidelines. Rental charges, which, in turn, define net benefits, are set by a Federal statute not to exceed 25 percent of net monthly money income.

[1]The Family Support Act of 1988 requires all jurisdictions with AFDC programs to extend benefits to children in two-parent families in which the principal earner is unemployed (AFDC-UP). Jurisdictions with such a program already in place must continue year round support for such families. Other jurisdictions have to cover such families for 6 out of 12 months. The law took effect October 1, 1990 for the States and the District and two years later for the outlying areas.

[2]From P.L. 75-412, ''The United States Housing Act of 1937,'' declaration of policy.

A recipient unit can either be a family of two or more related persons or an individual who is handicapped, elderly, or displaced by urban renewal or natural disaster.

Federal law mandates that, as a total among all assisted housing programs, at most 25 percent of units being re-rented and 5 percent of units that become available can be rented to households with incomes between 50 and 80 percent of the area median.[3] All other units are to be reserved for families at or below 50 percent of the area median.

SIPP survey respondents were asked whether their residence is owned by a local housing authority or whether the Federal, State or local government is paying part of the rent. A ''yes'' to either question identified the respondent and others living at the same residence as participants in a Public or subsidized rental housing program.

Food stamps. The Food Stamp Act of 1977 defines this Federally funded program as one intended to ''permit low-income households to obtain a more nutritious diet.''[4] Food purchasing power is increased by providing eligible households with coupons which can be used to purchase food. The Food and Nutrition Service of the U.S. Department of Agriculture (USDA) administers the Food Stamp Program through State and local welfare offices. The Food Stamp Program is the major national income support program which provides benefits to all low-income and low-resource households regardless of household characteristics (e.g., sex,age, and disability). The questions on participation in the Food Stamp Program in SIPP were designed to identify households in which one or more of the current members received food stamps. Once a food stamp household was identified, a question was asked to determine the number of current household members covered by food stamps. Questions also were asked about the number of months food stamps were received and the total face value of all food stamps received during the period.

Medicaid. The Medicaid Program is designed ''to furnish medical assistance on behalf of needy families with dependent children, and of aged, blind, or permanently and totally disabled individuals whose incomes and resources are insufficient to meet the costs of necessary medical services.''[5] The program is administered by State agencies through grants from the Health Care Financing Administration of the Department of Health and Human Services. Funding for medical assistance payments consists of a combination of Federal, State, and in some cases, local resources.

Medicaid is for the most part a categorical program with complex eligibility rules which vary from State to State. There are two basic groups of eligible individuals: the categorically eligible and the medically needy. The major categorically eligible groups are all Aid to Families with Dependent Children (AFDC) recipients and most Supplemental Security Income (SSI) recipients. Other categorically eligible groups are those who meet basic State cash assistance eligibility rules (the aged, blind, or disabled; needy single parents with children; and, in some States, needy unemployed parents with children who are not currently receiving money payments), and needy persons who meet categorical eligibility standards but are institutionalized for medical reasons (e.g., low-income elderly persons in nursing homes). However, such institutionalized persons are not included in the SIPP universe and, therefore, are not reflected in these statistics.

In roughly one-half of the States, coverage is extended to the medically needy: persons meeting categorical age, sex, or disability criteria whose money incomes and assets exceed eligibility levels for cash assistance but are not sufficient to meet the cost of medical care. In such States, qualifying income and asset levels are usually above those set for cash assistance. Families with large medical expenses relative to their incomes and assets may also meet medically needy eligibility standards in these States.

The Medicaid question in SIPP attempted to identify all adults who were covered by Medicaid. The term ''covered'' means enrolled in the Medicaid program, e.g. had a Medicaid medical assistance card or incurred medical bills which were paid for by Medicaid. In order to be counted, the person did not have to receive medical care paid for by Medicaid. Coverage was assigned in situations where it was not reported but should have been, i.e. where persons were categorically eligible through their reported participation in other cash transfer programs.

Supplemental Security Income. Authorized as Title XVI of the Social Security Act by the Social Security Amendments of 1972 and implemented in 1974, the SSI program provides cash benefits, paid monthly, to aged, blind, and disabled persons who are financially needy according to criteria governing both income and assets. The program is allied with optional State Supplementation Programs (SSPs), which raise the levels of payments to amounts desired by individual states. SSI/SSP, which covers people of all ages, replaced federal grants

[3]See P.L. 100-242 of the ''Housing and Community Development Act of 1987''.

[4]From Ttitle XIII of P.L. 95-113, ''The Food Stamp Act of 1977,'' declaration of policy.

[5]From Title XIX of the 1965 Amendments to P.L. 89-97, The Social Security Act, ''Grants to States for Medical Assistance Programs,'' declaration of policy.

to the states for old-age assistance and aid to blind and permanently and totally disabled adults. A person is considered a participant in the SSI program during a given month, if he/she received payments from the U.S. Government or from a State or local welfare office during that month.

Symbols. A dash (—) represents zero or rounds to zero, ''B'' means that the base for the derived figure is less than 200,000, and ''X'' means not applicable.

Rounding. Percentages are rounded to the nearest tenth of a percent; therefore, the percentages in a distribution do not always add to exactly 100.0 percent. The totals, however, are always shown as 100.0. Moreover, individual figures are rounded to the nearest thousand without being adjusted to group totals, which are independently rounded; percentages are based on the unrounded numbers.

Appendix C. Source and Accuracy of the Estimates

SOURCE OF DATA

The SIPP universe is the noninstitutionalized resident population living in the United States. This population includes persons living in group quarters, such as dormitories, rooming houses, and religious group dwellings. Not eligible to be in the survey are crew members of merchant vessels, Armed Forces personnel living in military barracks, and institutionalized persons, such as correctional facility inmates and nursing home residents. Also not eligible are United States citizens residing abroad. Foreign visitors who work or attend school in this country and their families are eligible; all others are not eligible. With the exceptions noted above, field representatives interview eligible persons who are at least 15 years of age at the time of the interview.

The SIPP sample for the 1987 and 1990 panels is located in 230 Primary Sampling Units (PSUs) each consisting of a county or a group of contiguous counties. Within these PSUs, we systematically selected expected clusters of two living quarters from lists of addresses prepared for the 1980 decennial census to form the bulk of the sample. To account for living quarters built within each of the sample areas after the 1980 census, we selected a sample containing clusters of four living quarters from permits issued for construction of residential living quarters up until shortly before the beginning of the panel.

In jurisdictions that have incomplete addresses or do not issue building permits, we sampled small land areas, listed expected clusters of four living quarters, and then subsampled. In addition, we selected a sample of living quarters from a supplemental frame that included living quarters identified as missed in the 1980 census.

The 1990 panel differs from other panels as a result of oversampling for low income households. The panel contains an oversample of Black-headed households, Hispanic-headed households, and female-headed family households with no spouse present and living with relatives.

For the 1987 and 1990 panels, the first interviews occurred during February, March, April, or May of 1987 and 1990, respectively. Interviews for approximately one-fourth of the sample took place in each of these months creating four subsamples. The four subsamples distribute interviewing workloads and are called rotation groups. One round of interviewing for the sample covering all four rotations is called a wave. For the remainder of the panel, interviews for each person occurred every 4 months. At each interview, the reference period was the 4 months preceding the interview month.

Occupants of about 93 percent of all eligible living quarters participated in the first interview of the panel. For later interviews, field representatives interviewed only original sample persons (those in Wave 1 sample households and interviewed in Wave 1) and persons living with them. The Census Bureau automatically designated all first-wave noninterviewed households as noninterviews for all subsequent interviews.

For the 1987 panel, field representatives conducted personal interviews for all waves. For the 1990 panel, field representatives conducted personal interviews in the first through sixth waves only. The remaining interviews for the 1990 panel were designated telephone interviews. Even though headquarters designated an interview as personal or telephone, the field representatives may have conducted either type of interview depending on the circumstances of a case.

For personal interviews, we followed original sample persons if they moved to a new address, unless the new address was more than 100 miles from a SIPP sample area. If the original sample persons moved farther than 100 miles from a SIPP sample area, we attempted telephone interviews. When original sample persons moved to remote parts of the country and were unreachable by telephone, moved without leaving a forwarding address, or refused the interview, additional noninterviews resulted.

We classified a person as interviewed or noninterviewed for the entire panel and both calendar years based on the following definitions. Interviewed sample persons are—

(1) those for whom self or proxy responses were obtained for each reference month of all seven interviews for the 1987 panel or eight interviews for the 1990 panel, and all three interviews for each calendar year; or

(2) those for whom self or proxy responses were obtained for the first reference month of the interview period and for each later reference month until they were known to have died or moved to an ineligible address (foreign living quarters, institutions, or military barracks).

Details on interview-status classification are in ''Weighting of Persons for SIPP Longitudinal Tabulations'' (paper by Judkins, Hubble, Dorsch, McMillen, and Ernst in the *1984 Proceedings of the Survey Research Methods Section, American Statistical Association*). Details on patterns of nonresponse are in ''Weighting Adjustment for Partial Nonresponse in the 1984 SIPP Panel'' (paper by Lepkowski, Kalton, and Kasprzyk in the *1989 Proceedings of the Survey Research Methods Section, American Statistical Association*).

Table C-1. **Statistics of Person 0+ for Longitudinal Panels and Calendar Years: 1987 and 1990**

Panel	Initially eligible	Classified as interviewed	Person nonresponse rate (percent)
87P	33,100	24,400	26
87CY	33,100	26,400	20
88CY	34,800	25,800	26
90P	61,700	43,700	29
90CY	61,700	49,600	20
91CY	67,400	47,500	30

Some estimates are based on monthly averages from cross-sectional files. Nonresponse rates for the months on the files vary from 7 percent to 20.5 percent for the 1987 panel and from 7 percent to 21 percent for the 1990 panel. (See ''SIPP 86 and 87: Source and Accuracy Statement for 1986 and 1987 Panel Public Use files - Revision,'' dated January 17, 1990, and ''SIPP 90: Source and Accuracy Statement for 1990 Panel Public Use Files - Revision 2,'' dated May 13, 1992.)

Some respondents did not respond to some of the questions. Therefore, the overall nonresponse rate for some items, especially sensitive income and money related items, is higher than the person nonresponse rate. For more discussion of nonresponse, see the *Quality Profile for the Survey of Income and Program Participation*, May 1990, by T. Jabine, K. King, and R. Petroni, available from Customer Services, Data Users Services Division (301-763-4100).

ESTIMATION

We used several stages of weight adjustments in the estimation procedure to derive the SIPP longitudinal person weights. We gave each person a base weight equal to the inverse of his/her probability of selection. We applied two noninterview adjustment factors. One adjusted the weights of interviewed persons in interviewed households to account for households that were eligible for the sample but which field representatives could not interview at the first interview. The second compensated for person noninterviews occurring in subsequent interviews. The Bureau used complex techniques to adjust the weights for nonresponse, but the success of these techniques in avoiding bias is unknown. For more detail on noninterview adjustment for longitudinal estimates, see *Nonresponse Adjustment Methods for Demographic Surveys at the U.S. Bureau of the Census*, November 1988, Working paper 8823, by R. Singh and R. Petroni.

We applied another factor to each interviewed person's weight to account for the SIPP sample areas not having the same population distribution as the strata they are from.

We performed an additional stage of adjustment to longitudinal person weights to reduce the mean square error of the survey estimates. We accomplished this by ratio adjusting the sample estimates to agree with monthly Current Population Survey (CPS) type estimates of the civilian (and some military) noninstitutional population of the United States at the national level by demographic characteristics including age, sex, and race, as of the specified control date. For the 1987 panel, the control date is March 1, 1987. For the 1990 panel, the control date is March 1, 1990. The 1987 calendar year and 1988 calendar-year control dates are January 1, 1987, and January 1, 1988, respectively. The 1990 calendar year and 1991 calendar-year control dates are January 1, 1990, and January 1, 1991, respectively. The Bureau brought CPS estimates by age, sex, and race into agreement with adjusted estimates from the 1980 decennial census. Adjustments to the 1980 decennial census estimates reflect births, deaths, immigration, emigration, and changes in the Armed Forces since 1980. Also, we controlled SIPP estimates to independent Hispanic controls.

ACCURACY OF ESTIMATES

We base SIPP estimates on a sample. The sample estimates may differ somewhat from the values obtained from administering a complete census using the same questionnaire, instructions, and enumerators. The difference occurs because a sample survey estimate is subject to two types of errors: nonsampling and sampling. We can provide estimates of the magnitude of the SIPP sampling error, but this is not true of nonsampling error. The next few sections describe SIPP nonsampling error sources, followed by a discussion of sampling error, its estimation, and its use in data analysis.

Nonsampling Variability. We attribute nonsampling errors to many sources; they include the following:

- Inability to obtain information about all cases in the sample.

- Definitional difficulties.
- Differences in the interpretation of questions.
- Inability or unwillingness on the part of the respondents to provide correct information.
- Inability to recall information.
- Errors made in collection (e.g. recording or coding the data).
- Errors made in processing the data.
- Errors made in estimating values for missing data.
- Biases resulting from the differing recall periods caused by the interviewing pattern used.
- Undercoverage.

We used quality control and edit procedures to reduce errors made by respondents, coders, and interviewers. More detailed discussions of the existence and control of nonsampling errors in the SIPP are in the *SIPP Quality Profile*.

Undercoverage in SIPP resulted from missed living quarters and missed persons within sample households. It is known that undercoverage varies with age, race, and sex. Generally, undercoverage is larger for males than for females and larger for Blacks than for non-Blacks. Ratio estimation to independent age-race-sex population controls partially corrects for the bias resulting from survey undercoverage. However, biases exist in the estimates when persons in missed households or missed persons in interviewed households have characteristics different from those of interviewed persons in the same age-race-sex group. Further, we did not adjust the independent population controls for undercoverage in the census.

A common measure of survey coverage is the coverage ratio, the estimated population before ratio adjustment divided by the independent population control. Table C-2 shows CPS coverage ratios for age-sex-race groups for 1992. The CPS coverage ratios can exhibit some variability from month to month, but these are a typical set of coverage ratios. Other Census Bureau household surveys like the SIPP experience similar coverage.

Comparability with Other Estimates. Exercise caution when comparing data from this report with data from other SIPP publications or with data from other surveys. Comparability problems are from varying seasonal patterns for many characteristics, different nonsampling errors, and different concepts and procedures. Refer to the *SIPP Quality Profile* for known differences with data from other sources and further discussion.

Table C-2. **1992 CPS Coverage Ratios**

Age	Non-Black		Black		All persons		
	Males	Females	Males	Females	Males	Females	Total
0-14	0.963	0.965	0.927	0.926	0.957	0.959	0.958
15	0.962	0.949	0.899	0.919	0.952	0.944	0.948
16	0.969	0.936	0.923	0.907	0.962	0.932	0.947
17	0.981	0.975	0.945	0.862	0.975	0.957	0.966
18	0.939	0.926	0.883	0.846	0.930	0.913	0.922
19	0.860	0.872	0.754	0.801	0.844	0.861	0.853
20-24	0.913	0.927	0.734	0.832	0.889	0.913	0.901
25-26	0.927	0.940	0.688	0.877	0.897	0.931	0.914
27-29	0.910	0.954	0.707	0.864	0.885	0.941	0.914
30-34	0.893	0.948	0.691	0.883	0.870	0.939	0.905
35-39	0.910	0.949	0.763	0.899	0.895	0.942	0.919
40-44	0.929	0.951	0.824	0.906	0.919	0.946	0.933
45-49	0.956	0.966	0.903	0.956	0.951	0.965	0.958
50-54	0.940	0.961	0.807	0.877	0.927	0.951	0.940
55-59	0.944	0.941	0.826	0.825	0.932	0.928	0.930
60-62	0.965	0.956	0.792	0.850	0.948	0.944	0.946
63-64	0.905	0.907	0.669	0.872	0.884	0.903	0.894
65-67	0.935	0.979	0.783	0.875	0.921	0.969	0.947
68-69	0.925	0.942	0.789	0.831	0.913	0.931	0.923
70-74	0.926	0.993	0.856	1.014	0.920	0.995	0.962
75-99	0.977	0.989	0.764	0.912	0.961	0.983	0.975
15+	0.928	0.953	0.782	0.883	0.912	0.944	0.929
0+	0.936	0.955	0.827	0.895	0.923	0.947	0.935

Sampling Variability. Standard errors indicate the magnitude of the sampling error. They also partially measure the effect of some nonsampling errors in response and enumeration, but do not measure any systematic biases in the data. The standard errors mostly measure the variations that occurred by chance because we surveyed a sample rather than the entire population.

USES AND COMPUTATION OF STANDARD ERRORS

Confidence Intervals. The sample estimate and its standard error enable one to construct confidence intervals, ranges that would include the average result of all possible samples with a known probability. For example, if we selected all possible samples and surveyed each of these under essentially the same conditions and with the same sample design, and if we calculated an estimate and its standard error from each sample, then—

Approximately 90 percent of the intervals from 1.645 standard errors below the estimate to 1.645 standard errors above the estimate would include the average result of all possible samples.

Approximately 95 percent of the intervals from 1.960 standard errors below the estimate to 1.960 standard errors above the estimate would include the average result of all possible samples.

The average estimate derived from all possible samples is or is not contained in any particular computed interval.

However, for a particular sample, one can say with a specified confidence that the confidence interval includes the average estimate derived from all possible samples.

Hypothesis Testing. One may also use standard errors for hypothesis testing. Hypothesis testing is a procedure for distinguishing between population characteristics using sample estimates. The most common type of hypothesis tested is (1) the population characteristics are identical versus (2) they are different. One can perform tests at various levels of significance, where a level of significance is the probability of concluding that the characteristics are different when, in fact, they are identical.

Unless noted otherwise, all statements of comparison in the report passed a hypothesis test at the 0.10 level of significance or better. This means that, for differences cited in the report, the estimated absolute difference between parameters is greater than 1.645 times the standard error of the difference.

To perform the most common test, compute the difference $X_A - X_B$, where X_A and X_B are sample estimates of the characteristics of interest. A later section explains how to derive an estimate of the standard error of the difference $X_A - X_B$. Let that standard error be s_{DIFF}. If $X_A - X_B$ is between -1.645 times s_{DIFF} and +1.645 times s_{DIFF}, no conclusion about the characteristics is justified at the 10 percent significance level. If, on the other hand, $X_A - X_B$ is smaller than -1.645 times s_{DIFF} or larger than +1.645 times s_{DIFF}, the observed difference is significant at the 10-percent level. In this event, it is commonly accepted practice to say that the characteristics are different. Of course, sometimes this conclusion will be wrong. When the characteristics are, in fact, the same, there is a 10-percent chance of concluding that they are different.

Note that as we perform more tests, more erroneous significant differences will occur. For example, at the 10-percent significance level, if we perform 100 independent hypothesis tests in which there are no real differences, it is likely that about 10 erroneous differences will occur. Therefore, interpret the significance of any single test cautiously.

Note Concerning Small Estimates and Small Differences. We show summary measures in the report only when the base is 200,000 or greater. Because of the large standard errors involved, there is little chance that estimates will reveal useful information when computed on a base smaller than 200,000. Also, nonsampling error in one or more of the small number of cases providing the estimate can cause large relative error in that particular estimate. We show estimated numbers, however, even though the relative standard errors of these numbers are larger than those for the corresponding percentages. We provide smaller estimates primarily to permit such combinations of the categories as serve each user's needs. Therefore, be careful in the interpretation of small differences since even a small amount of nonsampling error can cause a borderline difference to appear significant or not, thus distorting a seemingly valid hypothesis test.

Standard Error Parameters and Tables and Their Use. Most SIPP estimates have greater standard errors than those obtained through a simple random sample because we sampled clusters of living quarters for the SIPP. To derive standard errors at a moderate cost and applicable to a wide variety of estimates, we made a number of approximations. We grouped estimates with similar standard error behavior and developed two parameters (denoted ''a'' and ''b'') to approximate the standard error behavior of each group of estimates. Because the actual standard error behavior was not identical for all estimates within a group, the standard errors we computed from these parameters provide an indication of the order of magnitude of the standard error for any specific estimate. These ''a'' and ''b'' parameters vary by characteristic and by demographic subgroup to which the estimate applies. Use base ''a'' and ''b'' parameters found in tables C-3 and C-4 for panel and calendar-year estimates from the 1987 panel and the 1990 panel. Use the parameters in tables C-5 and C-6 for annual estimates based on monthly averages from the 1987 and 1990 panels.

For users who wish further simplification, we also provide general standard errors in tables C-7 and C-8. Note that you need to adjust these standard errors by a factor from tables C-3 through C-6. The standard errors resulting from this simplified approach are less accurate. Methods for using these parameters and tables for computation of standard errors are given in the following sections.

Methodology for Choosing the Correct Table for Computation of Standard Errors. As mentioned earlier, this report uses both longitudinal and cross-sectional estimates. It is important in calculating standard errors to use the appropriate ''a'' and ''b'' parameters for the estimate of interest.

The following information is for users who wish to calculate standard errors for estimates given in the report:

Estimate	Use table(s):
Persons ever poor or persons poor all of 2 years selected.	C-3,C-4
Average monthly poverty rate	C-5,C-6
Median spell duration	*

* The standard errors for these estimates have already been calculated and are given in tables C-9 and C-10.

Standard Errors of Estimated Numbers. There are two ways to compute the approximate standard error, s_x, of an estimated number shown in this report. The first uses the formula

$$s_x = fs \qquad (1)$$

where f is a factor from tables C-3 through C-6, and s is the standard error of the estimate obtained by interpolation from table C-7. Alternatively, approximate s_x using the formula,

$$s_x = \sqrt{ax^2 + bx} \qquad (2)$$

from which we calculated the standard errors in table C-7 . Here x is the size of the estimate and a and b are the parameters in tables C-3 through C-6 associated with the particular type of characteristic. Use of formula 2 will provide more accurate results than the use of formula 1. When calculating standard errors for numbers from crosstabulations involving different characteristics, use the factor or set of parameters for the characteristic that will give the largest standard error.

Illustration. Suppose the 1990 SIPP estimates that 31.8 million persons were poor in the average month of 1990. The appropriate ''a'' and ''b'' parameters and the f factor from table C-6, and the general standard error from table C-7 are

$$a = -0.0000663 \quad b = 15{,}294 \quad f = 0.63 \quad s = 1{,}018{,}000$$

Using formula (1), the approximate standard error is

$$sx = 0.63x\ 1{,}018{,}000 = 641{,}340$$

The 90-percent confidence interval is from 30,745,000 to 32,855,000. Using formula (2), the approximate standard error is

$$s_x = \sqrt{(-0.0000663)(31{,}800{,}000)^2 + (15{,}294)(31{,}800{,}000)} = 648{,}000$$

The 90-percent confidence interval is from 30,734,000 to 32,866,000. Therefore, a conclusion that the average estimate derived from all possible samples lies within a range computed in this way would be correct for roughly 90 percent of all samples.

Standard Errors of Estimated Percentages. The reliability of an estimated percentage, computed using sample data for both numerator and denominator, depends on the size of the percentage and its base. When the numerator and denominator of the percentage have different parameters, use the parameter (or appropriate factor) from tables C-3 through C-6 indicated by the numerator.

Calculate the approximate standard error, $s_{(x,p)}$, of an estimated percentage p using the formula

$$s_{(x,p)} = fs \qquad (3)$$

where p is the percentage of persons with a particular characteristic such as the percent of persons receiving housing assistance.

In this formula, f is the appropriate ''f'' factor from tables C-3 through C-6, and s is the standard error of the estimate obtained by interpolation from table C-8.

Alternatively, approximate it by the formula:

$$s_{(x,p)} = \sqrt{\frac{b}{x}(p)(100 - p)} \qquad (4)$$

from which we calculated the standard errors in table C-8 . Here x is the total number of persons in the base of the percentage, p is the percentage ($0 \le p \le 100$), and b is the ''b'' parameter in tables C-3 through C-6 associated with the characteristic in the numerator of the percentage. Use of this formula will give more accurate results than use of formula (3) above.

Illustration. Suppose the 1990 SIPP estimates that 4.5 percent of the population was poor each month of 1990 and 1991. The base for the percentage is 237,417,000. The appropriate ''b'' parameter and ''f'' factor from table C-4 and the appropriate general standard error from table C-8 are

$$b = 22{,}724 \quad f = 0.77 \quad s = 0.3 \text{ percent}$$

Using formula (3), the appropriate standard error is

$$s_x = 0.77 \text{ x } 0.3 = 0.2 \text{ percent}$$

Using formula (4), the approximate standard error is

$$s_x = \sqrt{\frac{22{,}724}{237{,}417{,}000}(4.5)(100 - 4.5)} = 0.2 \text{ percent}$$

The 90-percent confidence interval is from 4.2 to 4.8 percent. Therefore, a conclusion that the average percentage derived from all possible samples lies within a range computed in this way would be correct for roughly 90 percent of all samples.

Standard Error of a Difference. The standard error of a difference between two sample estimates, x and y, is approximately equal to

$$s_{(x-y)} = \sqrt{s_x^2 + s_y^2 - 2rs_xs_y} \qquad (9)$$

where s_x and s_y are the standard errors of the estimates x and y and r is the correlation coefficient between the characteristics estimated by x and y. The estimates can

be numbers, averages, percents, ratios, etc. Underestimates or overestimates of standard error of differences result if the estimated correlation coefficient is overestimated or underestimated, respectively. In this report, variances provided for differences in spell length contain a nonzero correlation coefficient. For all other estimates, we assume r is zero.

Illustration. Suppose the SIPP estimates that 9.1 percent of all persons who had not completed high school were poor each month of 1990 and 1991 compared with 2.7 percent of high school graduates. The bases for these percentages are 36,792,000 and 66,802,000, respectively. The standard errors for these percentages are computed using formula 4 to be 0.6 percent and 0.3 percent. Assuming that these two estimates are not correlated, the standard error of the estimated difference of 6.4 percentage points is

$$s_{(x-y)} = \sqrt{(0.6)^2+(0.3)^2} = 0.7 \text{ percent}$$

Suppose that it is desired to test at the 10-percent significance level whether persons not completing high school had higher poverty rates than high school graduates. To perform the test, compare the difference of 6.4 percent to the product 1.645 x 0.7=1.2 percent. Since the difference is greater than 1.645 times the standard error of the difference, the data show that the proportion of high school graduates poor each month of 1990 and 1991 is less than that of persons not completing high school.

Table C-3. **SIPP Generalized Variance Parameters for Estimates from the 1987 Longitudinal Panel File**

Characteristics of persons	Weights								
	1987 panel			1987 calendar year			1988 calendar year		
	a	b	f	a	b	f	a	b	f
Total or White*									
18+ poverty	- 0.0001807	30,767	0.90	- 0.0001685	28,695	0.87	- 0.0001719	29,290	0.88
All others	- 0.0001654	38,147	1.00	- 0.0001543	35,577	0.97	- 0.0001574	36,290	0.98
Black	- 0.0005115	14,113	0.61	- 0.0004770	13,162	0.59	- 0.0004866	13,426	0.59

Table C-4. **SIPP Generalized Variance Parameters for Estimates From the 1990 Longitudinal File**

[Table revised since release of printed report]

Characteristics of persons	Weights								
	1990 panel			1990 calendar year			1991 calendar year		
	a	b	f	a	b	f	a	b	f
Total*									
18+ poverty	- 0.0001077	18,329	0.69	- 0.0000965	16,418	0.66	- 0.0001002	17,051	0.67
All others	- 0.0000985	22,724	0.77	- 0.0000882	20,356	0.73	- 0.0000916	21,140	0.74
White	- 0.0001093	25,185	0.81	- 0.0000979	22,560	0.77	- 0.0001016	23,429	0.78
Black	- 0.0004066	11,300	0.54	- 0.0003642	10,122	0.52	- 0.0003782	10,512	0.52
Hispanic	- 0.0000778	13,256	0.58	- 0.0000697	11,874	0.56	- 0.0000724	12,332	0.57

* Use the ″All others″ parameter for 0+ poverty and any other type of tabulation not covered by the characteristic ″18+ poverty.″

Table C-5. **SIPP Indirect Generalized Variance Parameters for Annual Estimates Based on Monthly Averages from the 1987 Cross-Sectional Files**

Characteristics of persons	1987 calendar year			1988 calendar year		
	a	b	f	a	b	f
Total or White						
18+ poverty	- 0.0001286	21,888	0.76	- 0.0001401	23,857	0.79
All others	- 0.0001177	27,137	0.84	- 0.0001283	29,579	0.88
Black	- 0.0003639	10,040	0.51	- 0.0003967	10,944	0.54

Table C-6. **SIPP Indirect Generalized Variance Parameters for Annual Estimates Based on Averages From the 1990 Cross-Sectional Files**

[Table revised since release of printed report]

Characteristics of persons	1990 calendar year			1991 calendar year		
	a	b	f	a	b	f
Total						
18+ poverty	- 0.0000725	12,336	0.57	- 0.0000790	13,446	0.59
All others	- 0.0000663	15,294	0.63	- 0.0000723	16,671	0.66
White	- 0.0000735	16,951	0.67	- 0.0000801	18,476	0.70
Black	- 0.0002737	7,605	0.45	- 0.0002983	8,289	0.47
Hispanic	- 0.0000524	8,922	0.48	- 0.0000571	9,725	0.50

Table C-7. Standard Errors of Estimated Numbers of Persons

[Numbers in thousands]

Size of estimate	Standard error	Size of estimate	Standard error
200	87	50,000	1,222
300	107	80,000	1,412
600	151	100,000	1,470
1,000	195	130,000	1,471
2,000	275	140,000	1,449
3,000	336	150,000	1,414
5,000	432	200,000	1,007
8,000	543	220,000	622
11,000	632	230,000	155
13,000	684		
15,000	731		
17,000	775		
22,000	871		
26,000	938		
30,000	998		

Table C-8. Standard Errors of Estimated Percentages of Persons

Base of estimated percentage (thousands)	≤ 1 or ≤ 99	2 or 98	5 or 95	10 or 90	25 or 75	50
200	4.3	6.1	9.5	13.1	18.9	21.8
300	3.5	5.0	7.8	10.7	15.4	17.6
600	2.5	3.5	5.5	7.6	10.9	12.6
1,000	1.9	2.7	4.3	5.9	8.5	9.8
2,000	1.4	1.9	3.0	4.1	6.0	6.9
3,000	1.1	1.6	2.5	3.4	4.9	5.6
5,000	0.9	1.2	1.9	2.6	3.8	4.4
8,000	0.7	1.0	1.5	2.1	3.0	3.5
11,000	0.6	0.8	1.3	1.8	2.5	2.9
13,000	0.5	0.8	1.2	1.6	2.3	2.7
15,000	0.5	0.7	1.1	1.5	2.2	2.5
17,000	0.5	0.7	1.0	1.4	2.1	2.4
22,000	0.4	0.6	0.9	1.2	1.8	2.1
26,000	0.4	0.5	0.8	1.1	1.7	1.9
30,000	0.4	0.5	0.8	1.1	1.5	1.8
50,000	0.3	0.4	0.6	0.8	1.2	1.4
80,000	0.2	0.3	0.5	0.7	0.9	1.1
100,000	0.2	0.3	0.4	0.6	0.8	1.0
130,000	0.2	0.2	0.4	0.5	0.7	0.9
140,000	0.2	0.2	0.4	0.5	0.7	0.8
150,000	0.2	0.2	0.3	0.5	0.7	0.8
200,000	0.1	0.2	0.3	0.4	0.6	0.7
220,000	0.1	0.2	0.3	0.4	0.6	0.7
230,000	0.1	0.2	0.3	0.4	0.6	0.6
235,000	0.1	0.2	0.3	0.4	0.6	0.6
240,000	0.1	0.2	0.3	0.4	0.5	0.6

Table C-9. **Standard Errors of Survival Rates and Median Spell Durations for Persons Who Became Poor During the 1990 SIPP Panel, by Selected Characteristics**

Characteristic	Standard errors of survival rates for program spells after-								Standard error of median spell duration
	1 month	4 months	8 months	12 months	16 months	20 months	24 months	28 months	
All spells	0.00000	0.01258	0.01220	0.01162	0.01142	0.01142	0.01181	0.01258	0.22459
Race and Hispanic Origin									
White	0.00000	0.01511	0.01429	0.01348	0.01307	0.01307	0.01368	(B)	0.07963
Not of Hispanic origin[1]	0.00000	0.01637	0.01536	0.01434	0.01374	0.01374	0.01414	(B)	0.08486
Black	0.00000	0.02034	0.02088	0.02061	0.02048	0.02048	0.02170	(B)	0.58446
Hispanic origin	0.00000	0.02462	0.02477	0.02401	0.02370	0.02416	(B)	(B)	0.32364
Not of Hispanic origin	0.00000	0.01366	0.01308	0.01251	0.01212	0.01212	0.01251	0.01328	0.06735
Age									
Under 18 years	0.00000	0.02157	0.02099	0.02021	0.02001	0.02001	0.02079	(B)	0.34977
18 to 64 years	0.00000	0.01440	0.01388	0.01318	0.01266	0.01266	0.01318	(B)	0.07458
65 years and over	0.00000	0.04663	0.04812	0.04762	0.04829	0.04862	(B)	(B)	1.65936
Sex									
Male	0.00000	0.01825	0.01748	0.01651	0.01592	0.01592	0.01670	(B)	0.09321
Female	0.00000	0.01738	0.01700	0.01622	0.01603	0.01603	0.01680	(B)	0.30515
Educational Attainment (persons 18 years and over)									
Less than 4 years of high school	0.00000	0.02487	0.02540	0.02505	0.02505	0.02540	0.02645	(B)	0.60601
High school graduate, no college	0.00000	0.02202	0.02099	0.02013	0.01961	0.01927	0.01961	(B)	0.10666
1 or more years of college	0.00000	0.02443	0.02241	0.01972	0.01837	0.01837	(B)	(B)	0.12133
Disability Status (persons 15 to 69 years)									
With a work disability	0.00000	0.03429	0.03467	0.03390	0.03371	0.03429	0.03602	(B)	0.76085
With no work disability	0.00000	0.01695	0.01618	0.01502	0.01444	0.01425	0.01502	(B)	0.08666
Residence									
Metropolitan	0.00000	0.01488	0.01450	0.01373	0.01335	0.01335	0.01411	(B)	0.07630
Central city	0.00000	0.02129	0.02091	0.02014	0.01976	0.01957	0.02014	(B)	0.38939
Non-central city	0.00000	0.02066	0.01936	0.01806	0.01750	0.01769	0.01899	(B)	0.10239
Nonmetropolitan	0.00000	0.02300	0.02260	0.02161	0.02121	0.02121	0.02181	(B)	0.41435
Region									
Northeast	0.00000	0.03070	0.02828	0.02717	0.02661	0.02624	(B)	(B)	0.12840
Midwest	0.00000	0.02555	0.02458	0.02342	0.02284	0.02284	0.02381	(B)	0.12388
South	0.00000	0.01994	0.01974	0.01897	0.01839	0.01839	0.01916	(B)	0.36002
West	0.00000	0.02827	0.02709	0.02572	0.02532	0.02532	0.02709	(B)	0.42991
Family Status									
In families	0.00000	0.01391	0.01353	0.01275	0.01256	0.01237	0.01295	0.01333	0.24348
In families with related children under 18 years	0.00000	0.01532	0.01493	0.01416	0.01396	0.01396	0.01435	0.01493	0.25405
In married-couple families	0.00000	0.01664	0.01528	0.01432	0.01374	0.01354	0.01335	(B)	0.08319
In married-couple families with related children under 18 years	0.00000	0.01843	0.01707	0.01610	0.01571	0.01533	0.01513	(B)	0.09700
In families with a female householder, no spouse present	0.00000	0.02534	0.02665	0.02646	0.02646	0.02702	0.02926	(B)	0.68953
In families with a female householder, no spouse present, with related-children under 18 years	0.00000	0.02704	0.02853	0.02835	0.02853	0.02909	0.03170	(B)	0.85595
Unrelated individuals	0.00000	0.02784	0.02746	0.02634	0.02616	0.02653	(B)	(B)	0.53060
In non-family households	0.00000	0.02924	0.02887	0.02775	0.02738	0.02775	(B)	(B)	0.57367

See footnotes at end of table.

Table C-9. **Standard Errors of Survival Rates and Median Spell Durations for Persons Who Became Poor During the 1990 SIPP Panel, by Selected Characteristics**—Continued

Characteristic	Standard errors of survival rates for program spells after-								Standard error of median spell duration
	1 month	4 months	8 months	12 months	16 months	20 months	24 months	28 months	
Employment and Labor Force Status (persons 18 years and over)									
Employed full-time	0.00000	0.02215	0.02069	0.01955	0.01906	0.01873	0.01938	(B)	0.10914
Employed part-time	0.00000	0.03066	0.02879	0.02597	0.02441	0.02409	(B)	(B)	0.50219
Unemployed	0.00000	0.03233	0.03174	0.02938	0.02819	0.02819	(B)	(B)	0.51222
Not in labor force	0.00000	0.02123	0.02139	0.02091	0.02075	0.02075	0.02171	(B)	0.45032
Marital Status (persons 18 years and over)									
Married	0.00000	0.01975	0.01819	0.01698	0.01628	0.01594	0.01611	(B)	0.09355
Separated, divorced, or widowed	0.00000	0.02830	0.02864	0.02830	0.02813	0.02847	0.03000	(B)	0.56432
Never married	0.00000	0.02554	0.02520	0.02367	0.02316	0.02316	0.02435	(B)	0.47506
Family Size									
1 person (unrelated individual)	0.00000	0.02784	0.02746	0.02634	0.02616	0.02653	(B)	(B)	0.53060
2 persons	0.00000	0.03049	0.02940	0.02796	0.02706	0.02724	0.02796	(B)	0.71074
3 persons	0.00000	0.02969	0.02861	0.02699	0.02573	0.02519	(B)	(B)	0.46604
4 persons	0.00000	0.02664	0.02495	0.02327	0.02252	0.02195	0.02289	(B)	0.15948
5 persons	0.00000	0.03068	0.02958	0.02903	0.02866	0.02848	(B)	(B)	0.14146
6 or more persons	0.00000	0.03263	0.03244	0.03089	0.03089	0.03108	0.03128	(B)	0.40545
Access to Health Insurance									
Covered by health insurance	0.00000	0.01489	0.01434	0.01342	0.01324	0.01324	0.01379	(B)	0.07355
Private insurance	0.00000	0.01664	0.01484	0.01339	0.01266	0.01230	0.01230	(B)	0.07418
Medicare	0.00000	0.04766	0.04986	0.04986	0.05060	0.05133	(B)	(B)	2.14489
Medicaid	0.00000	0.02795	0.03139	0.03248	0.03339	0.03484	0.03629	(B)	0.90005
Not covered by health insurance	0.00000	0.02026	0.02007	0.01932	0.01894	0.01894	0.01969	(B)	0.36759
Receipt of Public Assistance									
Received public assistance[2]	0.00000	0.02268	0.02471	0.02489	0.02563	0.02655	0.02766	(B)	0.61954
Did not receive public assistance	0.00000	0.01413	0.01300	0.01206	0.01131	0.01112	0.01131	(B)	0.06596

B Base less than 200,000.
[1]Persons of Hispanic origin may be of any race.
[2]Public assistance programs include AFDC, General Assistance, Supplemental Security Income, food stamps, Medicaid, and housing assistance.

Table C-10. **Standard Errors of Survival Rates and Median Spell Durations for Persons Who Became Poor During the 1987 SIPP Panel, by Selected Characteristics**

Characteristic	Standard errors of survival rates for program spells after-							Standard error of median spell duration
	1 month	4 months	8 months	12 months	16 months	20 months	24 months	
All spells	0.00000	0.01757	0.01732	0.01635	0.01586	0.01635	0.01854	0.09027
Race and Hispanic Origin								
White	0.00000	0.02001	0.01929	0.01808	0.01712	0.01712	(B)	0.10127
Not of Hispanic origin[1]	0.00000	0.02142	0.02046	0.01902	0.01805	0.01805	(B)	0.11313
Black	0.00000	0.02490	0.02552	0.02521	0.02536	0.02583	(B)	0.39679
Hispanic origin	0.00000	0.05143	0.05167	0.04997	0.04803	(B)	(X)	0.83206
Not of Hispanic origin	0.00000	0.01880	0.01831	0.01709	0.01684	0.01709	0.01929	0.10009
Age								
Under 18 years	0.00000	0.03107	0.03107	0.03008	0.02959	0.03107	(B)	0.63375
18 to 64 years	0.00000	0.02004	0.01916	0.01764	0.01699	0.01720	(B)	0.10236
65 years and over	0.00000	0.06047	0.06335	0.06438	0.06561	0.06561	(B)	2.67385
Sex								
Male	0.00000	0.02580	0.02457	0.02309	0.02236	0.02309	(B)	0.12775
Female	0.00000	0.02401	0.02401	0.02304	0.02255	0.02304	(B)	0.46074
Educational Attainment (persons 18 years and over)								
Less than 4 years of high school	0.00000	0.03359	0.03446	0.03381	0.03359	0.03467	(B)	0.56778
High school graduate, no college	0.00000	0.03047	0.02918	0.02637	0.02486	0.02486	(B)	0.14481
1 or more years of college	0.00000	0.03472	0.03043	0.02764	0.02679	(B)	(B)	0.16715
Disability Status (persons 15 to 69 years)								
With a work disability	0.00000	0.04901	0.04926	0.04780	0.04756	0.04926	(B)	1.31030
With no work disability	0.00000	0.02358	0.02212	0.02042	0.01944	0.01969	(B)	0.12153
Residence								
Metropolitan	0.00000	0.02070	0.01974	0.01854	0.01805	0.01854	(B)	0.10110
Central city	0.00000	0.02910	0.02766	0.02646	0.02622	0.02694	(B)	0.13230
Non-central city	0.00000	0.02921	0.02801	0.02538	0.02394	0.02490	(B)	0.15324
Nonmetropolitan	0.00000	0.03283	0.03357	0.03259	0.03209	0.03234	(B)	0.72577
Region								
Northeast	0.00000	0.04385	0.04337	0.04217	0.04144	0.04193	(B)	0.19758
Midwest	0.00000	0.03612	0.03512	0.03362	0.03263	0.03338	(B)	0.18929
South	0.00000	0.02837	0.02884	0.02717	0.02670	0.02694	(B)	0.48627
West	0.00000	0.03694	0.03327	0.03107	0.02960	0.03131	(B)	0.16880
Family Status								
In families	0.00000	0.01957	0.01908	0.01786	0.01737	0.01786	(B)	0.10031
In families with related children under 18 years	0.00000	0.02164	0.02140	0.02017	0.01968	0.02041	(B)	0.11560
In married-couple families	0.00000	0.02322	0.02175	0.01980	0.01906	0.01906	(B)	0.10999
In married-couple families with related children under 18 years	0.00000	0.02640	0.02467	0.02221	0.02147	0.02147	(B)	0.12830
In families with a female householder, no spouse present	0.00000	0.03433	0.03786	0.03810	0.03880	0.03998	(B)	0.71487
In families with a female householder, no spouse present, with related children under 18 years	0.00000	0.03671	0.04092	0.04185	0.04255	0.04466	(B)	0.84874
Unrelated individuals	0.00000	0.04072	0.04025	0.03885	0.03814	0.03838	(B)	0.63887
In non-family households	0.00000	0.04190	0.04167	0.04026	0.03980	0.04050	(B)	0.70228

See footnotes at end of table.

Table C-10. **Standard Errors of Survival Rates and Median Spell Durations for Persons Who Became Poor During the 1987 SIPP Panel, by Selected Characteristics**—Continued

Characteristic	Standard errors of survival rates for program spells after-							Standard error of median spell duration
	1 month	4 months	8 months	12 months	16 months	20 months	24 months	
Employment and Labor Force Status (persons 18 years and over)								
Employed full-time	0.00000	0.03175	0.02903	0.02527	0.02402	(B)	(B)	0.16919
Employed part-time	0.00000	0.04479	0.04316	0.03970	0.03746	(B)	(B)	0.19950
Unemployed	0.00000	0.04917	0.04878	0.04545	0.04074	0.04055	(B)	0.90892
Not in labor force	0.00000	0.02883	0.02863	0.02802	0.02802	0.02904	(B)	0.66054
Marital Status (persons 18 years and over)								
Married	0.00000	0.02706	0.02488	0.02248	0.02160	0.02138	(B)	0.13311
Separated, divorced, or widowed	0.00000	0.03712	0.03859	0.03775	0.03712	0.03754	(B)	0.76541
Never married	0.00000	0.03749	0.03620	0.03469	0.03404	0.03447	(B)	0.18961
Family Size								
1 person (unrelated individual)	0.00000	0.04072	0.04025	0.03885	0.03814	0.03838	(B)	0.63887
2 persons	0.00000	0.03993	0.04039	0.03788	0.03674	0.03697	(B)	0.63435
3 persons	0.00000	0.04057	0.04011	0.03596	0.03411	0.03411	(X)	0.82747
4 persons	0.00000	0.03680	0.03395	0.03181	0.03158	(B)	(X)	0.18281
5 persons	0.00000	0.04541	0.04278	0.04039	0.03991	0.04087	(B)	0.20554
6 or more persons	0.00000	0.04857	0.04955	0.04955	0.04906	(B)	(X)	0.77758
Access to Health Insurance								
Covered by health insurance	0.00000	0.02153	0.02084	0.01991	0.01968	0.02060	(B)	0.10418
Private insurance	0.00000	0.02407	0.02175	0.01967	0.01898	0.01921	(B)	0.10877
Medicare	0.00000	0.06317	0.06547	0.06570	0.06684	0.06776	(B)	1.74347
Medicaid	0.00000	0.03987	0.04685	0.05023	0.05383	0.06352	(B)	4.32466
Not covered by health insurance	0.00000	0.02724	0.02700	0.02487	0.02416	0.02345	(B)	0.37661
Receipt of Public Assistance								
Received public assistance[2]	0.00000	0.03231	0.03623	0.03785	0.03900	0.04246	(B)	1.22085
Did not receive public assistance	0.00000	0.01973	0.01804	0.01588	0.01515	0.01515	(B)	0.09382

B Base less than 200,000. X Not applicable.
[1]Persons of Hispanic origin may be of any race
[2]Public assistance programs include AFDC, General Assistance, Supplemental Security Income, food stamps, Medicaid, and housing assistance.

Appendix D. Description of SIPP 1990 Panel File and Data Quality

DESCRIPTION OF SIPP 1990 PANEL FILE

The estimates presented in this report are based on the SIPP 1990 panel file. This file contains monthly data for persons over a 32-month period. The staggered SIPP design (described in appendix A) means that the actual reference periods are October 1989 to May 1992, November 1989 to June 1992, December 1989 to July 1992, and January 1990 to August 1992. The period covered by the 1990 longitudinal panel file consists of 32 interview months (eight interviews) for rotations 1, 2, 3, and 4. Data from all four rotation groups are available only for the reference period January 1990 through May 1992.

ATTRITION BIAS

Each person in the panel file has been assigned three weights: a weight for calendar year 1990, a weight for calendar year 1991, and a weight for the 32-month reference period.[1] In order to receive a non-zero weight, a person must have an observation for each month of the relevant reference period or have a complete set of observations up until the time he or she died, became institutionalized, or moved to Armed Forces barracks or out of the country. The data shown in this report are affected if characteristics of persons with an incomplete set of observations differed from those with a complete set.

Table D-1 shows three categories of sample persons by sex, age, and program participation status. The numbers in the table are unit counts; they are not weighted. The category ''complete set of interviews obtained'' includes 43,799 persons. The next category, ''Interviewed in first wave, left sample for reasons other than death, institutionalization, or a move to Armed Forces barracks or out of the country'' includes 14,489 persons. The final category includes 10,827 persons who were not members of a SIPP household during the first wave of interviews, but who subsequently became members of a sample household.

A comparison of the first two columns shows that the characteristics of those who completed the full set of interviews are reasonably close to the characteristics of those who dropped out of the sample. The major differences in the age distribution are for young adults and for the elderly. Young adults are underrepresented and the elderly are overrepresented in the group of persons who completed the full set of interviews. The data in table D-1 are, as noted, unweighted, and any potential problem caused by unrepresentative age distributions are minimized when the file is weighted to independent controls.

TIME-IN-SAMPLE BIAS

The use of the panel file to obtain estimates for 1990 and 1991 raises the issue of time-in-sample bias. There is ample evidence that certain measures vary according to the number of times the respondent has been visited. In the CPS, for example, the measured unemployment rate is always higher for the group of households being interviewed for the first time than for the groups being interviewed for the second or later times.

Time-in-sample bias arises when a person's response to a survey question (or the interviewer's method of asking a question) is influenced by what occurred in a previous visit. The overlapping SIPP sample design provides the data that allows for an examination of the presence of time-in-sample bias in SIPP estimates. That is, it is possible in SIPP to obtain estimates for a given time period from two or more separate panels and the amount of time respondents will have spent in the SIPP panel will differ for each of the panels. For example, estimates for each of the four quarters of 1991 can be obtained from both the 1990 and 1991 panels (respondents in the 1990 panel will have had more visits).

Quarterly estimates for the years 1984 to 1992 are shown in table D-2. Estimates from each panel file are shown separately for comparison. The estimates shown are the number of poor nonfarm households as well as the number of households receiving various government benefits.

The figures in table D-2 provide very little evidence regarding the existence of time-in-sample bias for several reasons. First, most of the observed differences are smaller than the differences that could be explained by sampling error. Second, a single observation is not sufficient to identify a pattern of bias. Third, differences may be attributable to attrition bias rather than time-in-sample bias. In spite of these qualifications, however,

[1]The panel file does not contain month weights. Month weights necessary for cross-sectional estimates were extracted from the wave files.

the observed relationships offer some reason to be cautious in interpreting the differences between the 1990 and 1991 estimates that have been presented earlier in this report.

OTHER ISSUES OF DATA QUALITY

Two major determinants of the quality of income data collected in household surveys are the magnitude of missing responses and the accuracy of the responses that are provided. This appendix has been included to supply information concerning nonresponse rates for selected income questions, the average amounts of income reported in the survey or assigned in the imputation of missing responses, and the extent to which the survey figures underestimate numbers of income recipients and amounts of income received.

Nonresponse in this discussion refers to missing responses to specific questions or ''items'' on the questionnaire. Noninterviews or complete failure to obtain cooperation from any household member have not been considered in this examination of nonresponse rates. Adjustments to account for noninterviews are made by proportionally increasing the survey weights of interviewed households. Missing responses to specific questions are assigned a value in the imputation phase of the data processing operation.

Nonresponse is a very important factor in assessing the quality of survey data. Nonresponses to income questions cannot be considered random since experience has shown that persons with the highest nonresponse rates have reported characteristics such as education levels and occupations that, in general, differ from population averages. The most frequent causes of nonresponse are the inability of the respondent to answer the question because of either a 1) lack of knowledge or 2) refusal to answer. The first reason is especially important in situations of proxy response when one household member answers questions for another household member not present at the time of the interview. The practice of accepting proxy interviews from household members deemed ''qualified'' to answer is a standard procedure in the CPS and most other surveys conducted by the Bureau. During the eight interviews of the 1990 panel, an average of 36 percent of the interviews were taken from proxy respondents.

Nonresponses are assigned values prior to producing estimates from the survey data. The procedure used to assign or impute responses for missing data for SIPP are of a type commonly referred to as a ''hot deck'' imputation method. This process assigns values reported in the survey by respondents to nonrespondents. The respondent from whom the value is taken is termed the ''donor.'' Values from donors are stored in a matrix defined by demographic and economic data available for both donors and nonrespondents. Each cell of the matrix defines a unique combination of demographic and economic characteristics. For example, the imputation of an amount for monthly wage and salary income is based on eight different variables. These were 1)occupation, 2)sex, 3)age, 4)race, 5)educational attainment, 6)weeks worked, 7)usual hours worked per week, and 8)place of residence.

The second important determinant of data quality and probably the one examined most closely by users of the income data collected in household surveys is the accuracy of reported (and imputed) amounts. In general, household surveys have a tendency to underestimate the number of persons receiving income and the average amount received. These problems result for a variety of reasons including random response error, misreporting of sources of income, failure to report the receipt of income from a specified source, and failure to report the full amount received. The net effect of these kinds of problems is, for most income types, underestimation or underreporting of income amounts. The extent of underreporting is measured by comparing survey estimates with independently derived estimates, usually based on administrative data that are, generally, more reliable than the estimates derived from the survey. It should be noted that the independent estimates are subject to errors themselves. In addition, independent estimates do not reflect income attributable to the ''underground'' economy, some of which may be reported in the survey.[2] AFDC and food stamp participation for January 1992 were 25.3 and 23.4 percent lower in the 1990 SIPP panel than the numbers from administrative records of the Departments of Health and Human Services and Agriculture.

COMPUTATION OF POVERTY STATUS IN SIPP AND COMPARISON WITH CPS ESTIMATES

Official poverty data in the CPS are based on questions on income received in the preceding calendar year which are asked in the March supplement. Family composition is fixed as of the survey date and assumed to be constant over the previous year (in the case of 1990 poverty status, the data were collected in March 1991). In this report using the 1990 SIPP panel, income information was collected for each month. Family composition data was updated on a monthly basis also. A

[2]For a general discussion of these problems, see Thomas B. Jabine, Karen F. King, and Rita J. Petroni, SIPP Quality Profile, Bureau of the Census, May 1990, pp.145-146. For a more specific discussion of the quality of the income data from the SIPP, see Denton R. Vaughn, ''Reflections on the Income Estimates from the Initial Panel of the Survey of Income and Program Participation,'' in Individuals and Families in Transition: Understanding Change Through Longitudinal Data, U.S. Department of Commerce, Bureau of the Census, March 1988, pp. 333-413. The Census Bureau is currently updating this evaluation with an analysis of the income data from the SIPP 1990 panel.

person's annual poverty status was determined by comparing the sum of the person's monthly income (family income or unrelated individual income as appropriate) against the sum of the appropriate monthly poverty thresholds. If the sum of the monthly incomes was below the sum of the monthly poverty thresholds, the person was classified as below the poverty level for the year.

Poverty estimates vary considerably between the CPS and SIPP. In 1990, the CPS based poverty rate was 13.5 percent, compared to 10.3 percent based on SIPP. When household composition was fixed as of March of 1991, in order to make the SIPP estimate more comparable to the CPS estimate, the poverty rate rose to 10.8 percent, still significantly less than the CPS rate.

Other than treatment of changes in household composition, there are several other differences between CPS and SIPP that should be noted in comparing results from the two surveys. First, the shorter recall period in SIPP results in more accurate data on the receipt of transfer income. This difference would tend to result in SIPP poverty estimates that are lower than CPS poverty estimates. A second difference concerns the way in which self-employment income is recorded. It is possible to record negative amounts in CPS, but not in SIPP. This difference would also tend to result in SIPP estimates of poverty that are lower than CPS estimates. It is also possible because of its more frequent interviews that SIPP has better reporting of intermittent income than does the CPS. If such income tends to cluster at the lower end of the earnings distribution, this would tend to lower the number of poor.

Paradoxically, wage and salary income estimates tend to be lower in SIPP than in the CPS. It is possible that persons tend to report net rather than gross wage and salary income in the SIPP. This would tend to result in SIPP estimates of poverty that are higher than the CPS estimates for those persons/families with wage and salary income.

Tables D-3 and D-4 compare selected poverty rates and year-to-year changes in these rates from the March 1991 and 1992 CPS (in which 1990 and 1991 poverty statistics were collected) with the 1990 SIPP panel file figures. In general, SIPP estimates are considerably lower, with the CPS poverty rate for 1990 being over three percentage points greater than the comparable SIPP estimate.

The total weighted number of persons in 1990 will fall short of the independent estimates of the total population because some persons with positive weights are excluded from the analysis, namely, those who died, were institutionalized, or moved to Armed Forces barracks or out of the country. The total estimate for 1991 will fall short of independent estimates for the same reasons and because of natural increase and net migration between 1990 and 1991.

Table D-1. **Percent Distribution: Three Categories of Sample Persons: 1990 SIPP Panel**

Characteristic	Complete set of interviews obtained[1]	Interviewed in first wave, left sample for reasons other than death, institutionalization, or move to Armed Forces barracks or out of the country	Not a member of sample household during first wave, interview obtained in second or later waves
Total	43,799 (100.0)	14,489 (100.0)	10,827 (100.0)
Sex			
Male	47.0	50.4	51.0
Female	53.0	49.6	49.0
Age at First Interview			
Under 18 years	28.6	27.4	38.0
Under 6 years	10.7	9.4	25.1
18 to 24 years	8.6	15.6	20.8
25 to 44 years	31.5	33.3	27.5
45 to 64 years	18.6	16.5	10.4
65 years and over	12.7	7.3	3.2
75 years and over	5.1	2.6	1.1
Program participation, first month in sample:			
Persons 18 years and over	31,267 (100.0)	10,523 (100.0)	6,711 (100.0)
Participated in major assistance program	9.1	10.5	11.4
AFDC or general assistance	2.0	2.9	2.7
Food stamps	4.4	5.1	5.8
Medicaid	5.5	5.9	7.1
Public/subsidized housing	3.9	4.8	2.8
SSI	2.3	1.8	2.2
Did not participate	90.9	89.5	88.6
Covered by private health insurance	79.7	70.2	67.9
Provided through employer	44.2	39.2	39.5
Not covered by private health insurance	20.4	29.8	32.1

[1]Includes 10,832 persons who died, were institutionalized, or moved to Armed Forces barracks or out of the country during the 32-month period.

Table D-2. **Average Monthly Nonfarm Poverty and Household Participation in Means-Tested and Nonmeans-Tested Government Programs—SIPP Panels: First Quarter 1984 to Fourth Quarter 1993**

[In thousands]

Panel, year, and quarter	All households	Nonfarm poor households	Received Government benefits	Received means-tested benefits	Received AFDC or other non-SSI public assistance	Received SSI	Received food stamps	Covered by Medicaid	Lived in public or subsidized housing	Received nonmeans-tested benefits	Received Social Security or RR	Received unemployment compensation
1984 Panel												
1984: 1st quarter	83,643	11,722	39,050	16,052	3,870	2,880	6,462	7,593	3,615	30,578	23,479	2,659
2nd quarter	84,002	11,124	37,712	14,460	3,832	2,975	6,303	7,559	3,669	29,973	23,525	2,047
3rd quarter	84,609	11,050	36,674	13,188	3,565	3,002	5,989	7,242	3,670	29,747	23,475	1,784
4th quarter	84,945	11,160	38,347	15,276	3,585	3,008	6,107	7,211	3,584	30,308	23,559	2,240
1985: 1st quarter	84,948	10,922	39,158	15,403	3,763	3,020	6,230	7,458	3,546	31,238	23,821	2,944
2nd quarter	85,614	10,783	37,725	13,921	3,651	3,085	5,955	7,264	3,486	30,485	23,955	2,062
3rd quarter	86,249	10,872	37,143	13,013	3,598	3,036	5,886	7,370	3,502	30,339	23,938	1,757
4th quarter	86,585	10,688	38,547	15,274	3,622	3,064	5,839	7,461	3,583	30,379	23,864	1,824
1985 Panel												
1985: 1st quarter	85,228	11,585	(NA)	(NA)	3,536	2,990	5,999	7,277	3,751	(NA)	23,559	2,872
2nd quarter	85,875	10,929	(NA)	(NA)	3,554	3,116	5,808	7,460	3,778	(NA)	23,781	2,232
3rd quarter	86,561	11,088	(NA)	(NA)	3,526	3,211	5,624	7,501	3,844	(NA)	23,838	1,883
4th quarter	86,832	10,978	(NA)	(NA)	3,499	3,200	5,676	7,517	3,889	(NA)	23,929	2,075
1986: 1st quarter	86,911	10,890	(NA)	(NA)	3,591	3,114	5,800	7,589	3,868	(NA)	24,145	2,617
2nd quarter	86,940	10,463	(NA)	(NA)	3,502	3,168	5,617	7,456	3,847	(NA)	24,130	2,112
3rd quarter	87,180	10,873	(NA)	(NA)	3,462	3,201	5,573	7,499	3,813	(NA)	24,150	2,037
4th quarter	87,607	10,872	(NA)	(NA)	3,516	3,181	5,641	7,575	3,710	(NA)	24,264	2,206
1986 Panel												
1986: 1st quarter	87,134	11,711	40,711	16,422	3,753	3,107	6,588	7,593	4,172	31,702	24,013	2,443
2nd quarter	87,192	11,185	40,125	16,034	3,858	3,270	6,524	7,901	4,347	31,272	24,102	2,001
3rd quarter	87,313	11,144	39,427	14,999	3,680	3,290	6,180	7,879	4,239	31,448	24,310	2,062
4th quarter	87,721	11,081	40,620	16,418	3,780	3,270	6,212	8,041	4,199	31,697	24,523	1,985
1987: 1st quarter	88,118	11,471	41,243	16,654	3,885	3,347	6,340	8,265	4,172	32,268	24,567	2,356
2nd quarter	88,367	11,022	39,781	15,123	3,848	3,395	6,218	8,278	4,179	31,619	24,612	1,720
3rd quarter	88,645	10,839	39,358	14,975	3,794	3,482	5,900	8,288	4,204	31,067	24,572	1,442
4th quarter	89,058	10,634	40,846	16,431	3,718	3,399	5,789	8,189	4,160	31,532	24,747	1,579
1987 Panel												
1987: 1st quarter	88,131	11,291	40,543	15,793	3,717	3,075	6,230	7,707	3,883	32,216	24,529	2,616
2nd quarter	88,237	10,691	39,345	14,857	3,597	3,222	6,142	7,795	3,979	31,470	24,702	1,869
3rd quarter	88,601	10,648	38,681	13,605	3,485	3,208	5,881	7,759	3,861	31,670	25,198	1,624
4th quarter	89,067	10,558	40,395	15,748	3,425	3,194	5,833	7,818	3,941	32,073	25,150	2,179
1988: 1st quarter	89,719	10,630	40,853	15,921	3,607	3,172	5,916	7,919	4,053	32,282	25,410	1,996
2nd quarter	89,963	10,212	39,418	14,527	3,534	3,159	5,824	7,986	4,006	31,615	25,403	1,448
3rd quarter	90,401	10,354	38,201	13,285	3,382	3,150	5,706	7,909	4,001	31,279	24,947	1,296
4th quarter	90,481	10,461	40,102	15,314	3,329	3,186	5,813	7,876	4,012	31,952	25,228	1,495
1988 Panel												
1988: 1st quarter	89,858	11,547	41,438	16,741	3,318	3,496	5,996	7,882	4,488	32,334	25,399	2,164
2nd quarter	90,066	11,020	40,078	15,160	3,356	3,747	5,948	8,265	4,557	32,012	25,456	1,655
3rd quarter	90,488	11,154	39,634	14,320	3,375	3,793	5,851	8,530	4,515	32,262	25,641	1,593
4th quarter	90,517	10,855	41,316	16,860	3,417	3,790	6,038	8,556	4,563	32,297	25,573	1,540
1989: 1st quarter	91,144	10,677	41,775	16,829	3,477	3,682	6,133	8,405	4,746	32,796	25,762	2,087
2nd quarter	91,614	10,548	40,740	15,272	3,362	3,624	5,892	8,274	4,716	32,753	25,959	1,565
3rd quarter	91,841	10,858	39,866	14,142	3,275	3,645	5,856	8,455	4,556	32,549	25,975	1,380
4th quarter	92,103	11,144	42,048	16,380	3,265	3,721	6,108	8,730	4,252	32,579	26,369	1,382
1989 Panel												
1989: 1st quarter	91,394	10,949	41,101	16,408	3,744	3,388	5,787	8,104	4,575	32,470	25,621	1,907
2nd quarter	91,819	10,256	40,160	15,078	3,604	3,522	5,725	8,190	4,563	32,510	25,890	1,631
3rd quarter	92,083	10,538	39,496	13,878	3,597	3,620	5,640	8,299	4,441	32,505	26,154	1,473

See footnote at end of table.

Table D-2. **Average Monthly Nonfarm Poverty and Household Participation in Means-Tested and Nonmeans-Tested Government Programs—SIPP Panels: First Quarter 1984 to Fourth Quarter 1993**—Continued

[In thousands]

Panel, year, and quarter	All households	Nonfarm poor households	Received Government benefits	Received means-tested benefits	Received AFDC or other non-SSI public assistance	Received SSI	Received food stamps	Covered by Medicaid	Lived in public or subsidized housing	Received nonmeans-tested benefits	Received Social Security or RR	Received unemployment compensation
1990 Panel												
1990: 1st quarter	91,776	10,864	42,687	16,690	3,523	3,239	5,939	8,348	4,576	33,472	26,257	2,407
2nd quarter	92,308	10,462	41,827	15,303	3,696	3,315	6,184	8,607	4,470	33,397	26,412	2,011
3rd quarter	92,722	11,055	41,419	14,397	3,711	3,354	6,254	8,871	4,452	33,686	26,745	1,921
4th quarter	92,421	11,381	43,554	17,130	3,722	3,369	6,334	9,014	4,431	33,939	26,529	2,288
1991: 1st quarter	93,058	11,548	44,708	17,776	3,879	3,482	6,631	9,326	4,502	34,922	26,702	3,354
2nd quarter	93,278	11,367	43,316	16,230	4,004	3,418	6,664	9,462	4,490	34,434	26,732	2,818
3rd quarter	93,443	11,555	42,568	15,212	4,150	3,475	6,750	9,853	4,513	34,364	26,705	2,681
4th quarter	93,289	11,545	44,975	17,921	4,045	3,516	6,857	10,015	4,452	34,944	26,642	3,183
1992: 1st quarter	93,879	11,679	46,292	18,448	4,089	3,744	7,152	10,339	4,504	36,286	26,943	4,244
1991 Panel												
1991: 1st quarter	93,313	12,453	44,115	18,203	4,051	3,593	6,814	9,652	4,836	34,047	26,189	3,120
2nd quarter	93,545	11,876	43,439	17,131	4,152	3,799	6,945	9,996	4,845	34,103	26,299	2,861
3rd quarter	93,774	12,162	42,903	16,149	4,003	3,936	6,975	10,313	4,830	34,214	26,369	2,714
4th quarter	93,649	12,294	45,301	18,677	3,927	3,902	7,055	10,281	4,706	34,846	26,456	3,236
1992: 1st quarter	94,157	12,422	46,455	18,962	4,057	3,957	7,358	10,533	4,871	36,180	26,685	4,502
2nd quarter	94,588	12,240	44,958	17,557	4,062	4,173	7,248	10,678	4,772	35,509	26,591	4,076
3rd quarter	94,095	12,291	43,665	16,556	3,987	4,152	7,199	10,813	4,621	34,902	26,533	3,550
4th quarter	94,546	12,339	45,629	19,175	4,099	4,128	7,251	10,981	4,558	34,864	26,339	3,378
1992 Panel												
1991: 4th quarter	92,932	11,917	44,691	18,746	3,958	3,597	7,060	9,818	4,294	33,884	26,099	3,164
1992: 1st quarter	93,473	11,939	45,925	19,063	4,171	3,723	7,573	10,224	4,446	35,291	26,195	4,630
2nd quarter	94,432	11,876	45,012	18,030	4,298	3,961	7,693	10,865	4,560	35,231	26,265	4,289
3rd quarter	94,260	11,964	43,952	16,721	4,117	3,978	7,634	11,048	4,493	35,001	26,362	3,696
4th quarter	94,410	12,266	46,047	19,499	4,137	4,124	7,634	11,232	4,397	35,089	26,481	3,535
1993: 1st quarter	94,805	12,713	46,661	19,790	4,339	4,083	7,895	11,387	4,409	35,760	26,583	4,075
2nd quarter	94,905	12,553	45,093	18,370	4,442	4,154	7,876	11,639	4,426	35,056	26,623	3,416
3rd quarter	95,796	12,296	44,776	17,422	4,372	4,322	7,808	11,939	4,364	35,332	26,619	3,396
4th quarter	96,109	12,288	46,689	19,920	4,250	4,276	7,592	11,787	4,466	35,260	26,636	3,158
1993 Panel												
1992: 4th quarter	94,633	12,594	46,234	19,858	4,512	3,625	7,848	11,219	4,827	34,495	26,232	3,166
1993: 1st quarter	94,924	13,011	47,265	20,215	4,831	3,861	8,594	11,636	5,137	35,299	26,657	3,712
2nd quarter	94,981	13,009	46,261	18,833	4,904	4,113	8,645	11,839	5,098	35,220	26,826	3,461
3rd quarter	95,982	13,213	45,540	17,737	4,870	4,198	8,727	12,127	5,025	35,334	27,027	3,178
4th quarter	96,327	12,954	47,670	20,357	4,865	4,254	8,623	12,123	5,075	35,494	27,042	3,228

NA Not available.

Table D-3. **Comparison of CPS and SIPP Poverty Rates, by Selected Characteristics: 1990 and 1991**

[Estimates from SIPP based on 1990 panel file]

Characteristic	Percent below the poverty level		Percentage point difference CPS-SIPP	CPS/SIPP
	CPS[1]	SIPP		
1990				
Age				
Total	13.5	10.1	3.4	1.34
Under 18 years	20.6	16.8	3.8	1.23
18 to 64 years	10.7	7.7	3.0	1.39
65 years and over	12.2	8.1	4.1	1.51
Sex				
Male	11.7	8.2	3.5	1.43
Female	15.2	11.9	3.3	1.28
Race and Hispanic Origin				
White	10.7	7.5	3.2	1.43
Black	31.9	27.0	4.9	1.18
Hispanic origin[2]	28.1	21.2	6.9	1.33
1991				
Age				
Total	14.2	10.6	3.6	1.34
Under 18 years	21.8	17.2	4.6	1.27
18 to 64 years	11.4	8.3	3.1	1.37
65 years and over	12.4	8.5	3.9	1.46
Sex				
Male	12.3	8.9	3.4	1.38
Female	16.0	12.2	3.8	1.31
Race and Hispanic Origin				
White	11.3	8.1	3.2	1.40
Black	32.7	27.1	5.6	1.21
Hispanic origin[2]	28.7	24.7	4.0	1.16

[1]Standard errors for the 1990 and 1991 Current Population Survey poverty rates can be derived from appendices B of Current Population Reports, Series P-60; Number 175 (181), ″Poverty in the United States: 1990 (1991).″

[2]Persons of Hispanic origin may be of any race.

Table D-4. **Comparison of 1990 to 1991 Year-to-Year Percentage Point Changes in Poverty Rates Between CPS and SIPP**

Characteristic	CPS	SIPP
Age		
Total	0.7	0.5
Under 18 years	1.2	0.4
18 to 64 years	0.7	0.6
65 years and over	0.2	0.4
Sex		
Male	0.6	0.7
Female	0.8	0.3
Race and Hispanic Origin		
White	0.6	0.6
Black	0.8	0.1
Hispanic origin[1]	0.6	3.5

[1]Persons of Hispanic origin may be of any race.

Appendix E. Supplementary Tables: 1987 and 1988

Table E-1. **Average Monthly Poverty, by Selected Characteristics: 1987 and 1988**

[Numbers in thousands]

Characteristic	1987			1988		
		Poor			Poor	
	Total	Number	Percent	Total	Number	Percent
All persons	239,784	31,980	13.3	242,187	30,524	12.6
Race and Hispanic Origin						
White	202,888	21,327	10.5	204,970	20,478	10.0
Not of Hispanic origin[1]	186,249	16,806	9.0	187,798	16,119	8.6
Black	29,009	9,226	31.8	29,263	8,818	30.1
Hispanic origin	19,025	5,066	26.6	19,629	4,910	25.0
Not of Hispanic origin	220,759	26,914	12.2	222,559	25,614	11.5
Age						
Under 18 years	63,505	12,954	20.4	63,711	12,493	19.6
18 to 64 years	148,099	16,239	11.0	149,906	15,293	10.2
65 years and over	28,181	2,787	9.9	28,571	2,738	9.6
Sex						
Male	116,569	14,076	12.1	117,840	13,429	11.4
Female	123,215	17,904	14.5	124,347	17,095	13.7
Educational Attainment (persons 18 years and over)						
Less than 4 years of high school	42,884	9,223	21.5	42,771	8,697	20.3
High school graduate, no college	67,043	6,207	9.3	67,358	5,858	8.7
1 or more years of college	66,353	3,595	5.4	68,348	3,476	5.1
Disability Status (persons 15 to 69 years)						
With a work disability	27,096	5,268	19.4	26,262	4,704	17.9
With no work disability	142,007	13,631	9.6	144,200	13,115	9.1
Residence						
Metropolitan	184,173	22,088	12.0	185,663	21,071	11.3
Central city	76,125	13,829	18.2	78,991	12,981	16.4
Non-central city	108,048	8,259	7.6	106,672	8,090	7.6
Nonmetropolitan	55,611	9,892	17.8	56,524	9,453	16.7
Region						
Northeast	48,261	5,568	11.5	48,215	5,482	11.4
Midwest	60,010	7,252	12.1	61,407	6,943	11.3
South	81,186	12,579	15.5	81,314	12,056	14.8
West	50,327	6,580	13.1	51,252	6,043	11.8

See footnotes at end of table.

Table E-1. **Average Monthly Poverty, by Selected Characteristics: 1987 and 1988**—Continued

[Numbers in thousands]

Characteristic	1987			1988		
		Poor			Poor	
	Total	Number	Percent	Total	Number	Percent
Family Status						
In families	207,433	25,350	12.2	209,208	24,004	11.5
In families with related children under 18 years	135,105	21,940	16.2	135,546	20,999	15.5
In married-couple families	167,944	13,211	7.9	169,147	11,708	6.9
In married-couple families with related children under 18 years	107,111	10,803	10.1	107,502	9,654	9.0
In families with a female householder, no spouse present	32,805	11,495	35.0	33,562	11,607	34.6
In families with a female householder, no spouse present, with related children under 18 years	24,624	10,670	43.3	24,731	10,829	43.8
Unrelated individuals	32,352	6,630	20.5	32,979	6,520	19.8
In non-family households	30,209	5,821	19.3	31,000	5,825	18.8
Employment and Labor Force Status (persons 18 years and over)						
Employed full-time	92,066	3,390	3.7	94,612	3,189	3.4
Employed part-time	20,196	2,228	11.0	20,687	2,284	11.0
Unemployed	5,750	2,538	44.1	4,850	2,008	41.4
Not in labor force	58,267	10,870	18.7	58,327	10,550	18.1
Marital Status (persons 18 years and over)						
Married	105,957	7,171	6.8	106,404	6,317	5.9
Separated, divorced, or widowed	32,376	6,508	20.1	32,779	6,287	19.2
Never married	37,947	5,347	14.1	39,294	5,427	13.8
Family Size						
1 person (unrelated individual)	32,350	6,629	20.5	32,979	6,520	19.8
2 persons	53,399	4,796	9.0	52,980	4,367	8.2
3 persons	47,005	5,205	11.1	48,712	4,866	10.0
4 persons	56,808	5,783	10.2	56,379	5,401	9.6
5 persons	30,142	4,087	13.6	30,186	3,755	12.4
6 or more persons	20,080	5,480	27.3	20,950	5,614	26.8
Access to Health Insurance						
Covered by health insurance	207,409	21,256	10.2	211,496	20,594	9.7
Private insurance	182,892	8,468	4.6	188,116	8,168	4.3
Medicare	30,207	3,198	10.6	30,711	3,201	10.4
Medicaid	17,474	12,071	69.1	17,502	11,875	67.8
Not covered by health insurance	32,375	10,724	33.1	30,691	9,930	32.4
Receipt of Public Assistance						
Received public assistance[2]	27,412	17,354	63.3	27,027	16,979	62.8
Did not receive public assistance	212,372	14,625	6.9	215,161	13,545	6.3

[1]Persons of Hispanic origin may be of any race.

[2]Public assistance programs include AFDC, General Assistance, Supplemental Security Income, food stamps, Medicaid, and housing assistance.

Table E-2. **Persons Poor 2 or More Months, by Selected Characteristics: 1987 and 1988**

[Numbers in thousands]

Characteristic	1987 panel			1987			1988		
		Persons ever poor over the panel			Persons ever poor during the year			Persons ever poor during the year	
	Total	Number	Percent	Total	Number	Percent	Total	Number	Percent
All persons	230,989	56,868	24.6	234,841	44,811	19.1	237,817	42,936	18.1
Race and Hispanic Origin									
White	195,633	41,079	21.0	198,719	31,298	15.8	200,936	29,553	14.7
Not of Hispanic origin[1]	180,177	34,425	19.1	182,985	25,543	14.0	184,260	23,860	12.9
Black	27,807	13,361	48.0	28,413	11,479	40.4	28,952	11,485	39.7
Hispanic origin	17,443	7,434	42.6	17,871	6,442	36.0	18,842	6,354	33.7
Not of Hispanic origin	213,546	49,434	23.1	216,970	38,370	17.7	218,975	36,582	16.7
Age									
Under 18 years	63,349	21,518	34.0	63,097	17,427	27.6	63,318	16,755	26.5
18 to 64 years	142,966	31,308	21.9	145,063	23,952	16.5	147,192	22,646	15.4
65 years and over	24,675	4,041	16.4	26,682	3,432	12.9	27,307	3,536	12.9
Sex									
Male	111,506	25,721	23.1	113,523	19,992	17.6	115,536	19,164	16.6
Female	119,484	31,147	26.1	121,318	24,820	20.5	122,281	23,772	19.4
Educational Attainment (persons 18 years and over)									
Less than 4 years of high school	38,834	13,582	35.0	40,936	11,938	29.2	41,047	11,067	27.0
High school graduate, no college	64,861	13,115	20.2	66,243	9,580	14.5	66,083	9,101	13.8
1 or more years of college	63,945	8,653	13.5	64,566	5,866	9.1	67,369	6,014	8.9
Disability Status (persons 15 to 69 years)									
With a work disability	24,149	7,915	32.8	25,419	7,047	27.7	24,501	6,253	25.5
With no work disability	139,091	28,201	20.3	140,522	20,775	14.8	143,480	20,101	14.0
Residence									
Metropolitan	175,188	39,078	22.3	179,100	30,409	17.0	181,276	29,938	16.5
Central city	68,772	20,360	29.6	71,459	17,385	24.3	75,238	17,316	23.0
Non-central city	106,416	18,718	17.6	107,640	13,024	12.1	106,039	12,622	11.9
Nonmetropolitan	55,801	17,790	31.9	55,742	14,402	25.8	56,540	12,998	23.0
Region									
Northeast	45,181	9,248	20.5	46,833	7,562	16.1	46,501	7,424	16.0
Midwest	60,717	13,464	22.2	60,365	10,498	17.4	61,444	9,913	16.1
South	77,407	22,061	28.5	79,147	17,402	22.0	80,010	16,860	21.1
West	47,684	12,095	25.4	48,497	9,349	19.3	49,862	8,740	17.5
Family Status									
In families	202,704	47,703	23.5	205,281	36,831	17.9	206,852	35,006	16.9
In families with related children under 18 years	135,081	39,377	29.2	135,189	30,877	22.8	135,619	29,692	21.9
In married-couple families	166,004	30,241	18.2	167,281	21,666	13.0	168,633	20,089	11.9
In married-couple families with related children under 18 years	108,689	24,002	22.1	107,988	17,226	16.0	108,639	16,379	15.1
In families with a female householder, no spouse present	31,224	15,934	51.0	32,303	14,014	43.4	32,555	13,986	43.0
In families with a female householder, no spouse present, with related children under 18 years	23,635	14,270	60.4	24,396	12,789	52.4	24,036	12,559	52.3
Unrelated individuals	28,285	9,164	32.4	29,560	7,980	27.0	30,965	7,930	25.6
In non-family households	26,760	8,445	31.6	27,851	7,278	26.1	29,249	7,242	24.8

See footnotes at end of table.

Table E-2. **Persons Poor 2 or More Months, by Selected Characteristics: 1987 and 1988**—Continued

[Numbers in thousands]

Characteristic	1987 panel			1987			1988		
		Persons ever poor over the panel			Persons ever poor during the year			Persons ever poor during the year	
	Total	Number	Percent	Total	Number	Percent	Total	Number	Percent
Employment and Labor Force Status (persons 18 years and over)									
Employed full-time	88,470	11,926	13.5	88,671	7,488	8.4	91,937	7,176	7.8
Employed part-time	19,896	4,952	24.9	20,465	3,687	18.0	20,901	3,559	17.0
Unemployed	6,732	3,953	58.7	7,107	3,633	51.1	5,321	2,556	48.0
Not in labor force	52,543	14,519	27.6	55,501	12,577	22.7	56,340	12,890	22.9
Marital Status (persons 18 years and over)									
Married	104,695	16,664	15.9	105,935	12,003	11.3	106,054	10,674	10.1
Separated, divorced, or widowed	28,890	9,819	34.0	30,441	8,523	28.0	30,933	8,004	25.9
Never married	34,056	8,866	26.0	35,369	6,858	19.4	37,511	7,504	20.0
Family Size									
1 person (unrelated individual)	28,285	9,164	32.4	29,560	7,980	27.0	30,965	7,930	25.6
2 persons	51,329	9,209	17.9	52,640	7,100	13.5	52,324	6,686	12.8
3 persons	46,445	10,551	22.7	46,967	8,193	17.4	48,443	7,086	14.6
4 persons	55,646	11,284	20.3	56,199	8,140	14.5	55,850	7,911	14.2
5 persons	29,320	7,620	26.0	29,602	6,063	20.5	30,407	6,068	20.0
6 or more persons	19,964	9,038	45.3	19,873	7,335	36.9	19,827	7,254	36.6
Access to Health Insurance									
Covered by health insurance	201,175	40,154	20.0	204,064	30,977	15.2	208,391	29,110	14.0
Private insurance	177,841	25,147	14.1	179,801	16,424	9.1	185,503	15,515	8.4
Medicare	26,269	4,478	17.0	28,298	3,855	13.6	29,313	4,015	13.7
Medicaid	16,644	13,597	81.7	17,297	13,469	77.9	17,126	13,003	75.9
Not covered by health insurance	29,814	16,714	56.1	30,778	13,834	44.9	29,426	13,826	47.0
Receipt of Public Assistance									
Received public assistance[2]	27,140	21,130	77.9	27,803	20,365	73.2	26,565	19,333	72.8
Did not receive public assistance	203,850	35,738	17.5	207,038	24,446	11.8	211,252	23,603	11.2

[1]Persons of Hispanic origin may be of any race.

[2]Public assistance programs include AFDC, General Assistance, Supplemental Security Income, food stamps, Medicaid, and housing assistance.

Table E-3. **Persons Poor Each Month of 1987 and 1988, by Selected Characteristics**

[Numbers in thousands]

Characteristic	Total	Persons poor entire 24 months	
		Number	Percent
All persons	231,363	10,162	4.4
Race and Hispanic Origin			
White	195,936	5,544	2.8
Not of Hispanic origin[1]	180,480	3,848	2.1
Black	27,862	4,175	15.0
Hispanic origin	17,443	1,854	10.6
Not of Hispanic origin	213,920	8,308	3.9
Age			
Under 18 years	62,899	4,799	7.6
18 to 64 years	143,377	3,989	2.8
65 years and over	25,086	1,374	5.5
Sex			
Male	111,742	4,076	3.6
Female	119,621	6,087	5.1
Educational Attainment (persons 18 years and over)			
Less than 4 years of high school	39,309	3,504	8.9
High school graduate, no college	65,101	1,399	2.1
1 or more years of college	64,055	460	0.7
Disability Status (persons 15 to 69 years)			
With a work disability	24,294	1,768	7.3
With no work disability	139,510	3,159	2.3
Residence			
Metropolitan	175,508	6,936	4.0
Central city	68,923	4,767	6.9
Non-central city	106,585	2,169	2.0
Nonmetropolitan	55,855	3,226	5.8
Region			
Northeast	45,242	1,792	4.0
Midwest	60,793	2,205	3.6
South	77,573	4,668	6.0
West	47,756	1,496	3.1
Family Status			
In families	202,930	7,975	3.9
In families with related children under 18 years	134,746	7,403	5.5
In married-couple families	166,214	2,976	1.8
In married-couple families with related children under 18 years	108,360	2,472	2.3
In families with a female householder, no spouse present	31,240	4,872	15.6
In families with a female householder, no spouse present, with related children under 18 years	23,629	4,837	20.5
Unrelated individuals	28,433	2,187	7.7
In non-family households	26,908	1,985	7.4
Employment and Labor Force Status (persons 18 years and over)			
Employed full-time	88,175	302	0.3
Employed part-time	20,231	380	1.9
Unemployed	6,944	666	9.6
Not in labor force	53,114	4,015	7.6

See footnotes at end of table.

Table E-3. **Persons Poor Each Month of 1987 and 1988, by Selected Characteristics**—Continued

[Numbers in thousands]

Characteristic	Total	Persons poor entire 24 months	
		Number	Percent
Marital Status (person 18 years and over)			
Married	104,910	1,598	1.5
Separated, divorced, or widowed	28,982	2,311	8.0
Never married	34,571	1,455	4.2
Family Size			
1 person (unrelated individual)	28,433	2,187	7.7
2 persons	51,464	1,414	2.7
3 persons	46,495	1,423	3.1
4 persons	55,666	1,152	2.1
5 persons	29,331	1,354	4.6
6 or more persons	19,974	2,631	13.2
Access to Health Insurance			
Covered by health insurance	201,737	8,083	4.0
Private insurance	178,355	1,319	0.7
Medicare	26,514	1,524	5.7
Medicaid	16,739	6,382	38.1
Not covered by health insurance	29,626	2,079	7.0
Receipt of Public Assistance			
Received public assistance[2]	27,344	8,225	30.1
Did not receive public assistance	204,019	1,938	0.9

[1]Persons of Hispanic origin may be of any race.

[2]Public assistance programs include AFDC, General Assistance, Supplemental Security Income, food stamps, Medicaid, and housing assistance.

Table E-4. **Spells of Poverty for Persons Who Became Poor During the 1987 SIPP Panel, by Selected Characteristics**

[Numbers in thousands]

Characteristic	Total spells	Percentage of spells right-censored	Survival rates of poverty spells after-							Median spell duration
			1 month	4 months	8 months	12 months	16 months	20 months	24 months	
All persons	51,071	27.8	1.0000	0.4969	0.2980	0.2080	0.1658	0.1368	0.0920	4.0
Race and Hispanic Origin										
White	38,836	26.4	1.0000	0.4844	0.2798	0.1913	0.1454	0.1112	(B)	3.9
Not of Hispanic origin[1]	33,747	26.0	1.0000	0.4692	0.2711	0.1806	0.1382	0.1097	(B)	3.8
Black	10,209	33.4	1.0000	0.5522	0.3774	0.2706	0.2413	0.2352	(B)	5.3
Hispanic origin	5,831	29.4	1.0000	0.5527	0.3370	0.2696	0.2104	(B)	(X)	5.4
Not of Hispanic origin	45,239	27.6	1.0000	0.4897	0.2929	0.1995	0.1599	0.1358	0.0923	3.9
Age										
Under 18 years	16,728	29.7	1.0000	0.5279	0.3304	0.2388	0.1907	0.1482	(B)	4.6
18 to 64 years	31,336	25.6	1.0000	0.4725	0.2688	0.1802	0.1408	0.1155	(B)	3.9
65 years and over	3,007	39.6	1.0000	0.5780	0.4155	0.3209	0.2854	0.2854	(B)	6.6
Sex										
Male	24,222	26.1	1.0000	0.4672	0.2708	0.1912	0.1559	0.1264	(B)	3.8
Female	26,848	29.3	1.0000	0.5236	0.3223	0.2230	0.1746	0.1460	(B)	4.5
Educational Attainment (persons 18 years and over)										
Less than 4 years of high school	10,919	32.3	1.0000	0.5533	0.3747	0.2817	0.2380	0.2023	(B)	5.4
High school graduate, no college	13,558	26.1	1.0000	0.4683	0.2657	0.1629	0.1117	0.0984	(B)	3.8
1 or more years of college	9,865	21.9	1.0000	0.4206	0.1988	0.1311	0.1104	(B)	(B)	3.6
Disability Status (persons 15 to 69 years)										
With a work disability	6,464	31.7	1.0000	0.5354	0.3488	0.2498	0.2221	0.1853	(B)	5.0
With no work disability	28,598	25.1	1.0000	0.4652	0.2564	0.1728	0.1315	0.1112	(B)	3.8
Residence										
Metropolitan	35,898	25.9	1.0000	0.4803	0.2770	0.1871	0.1490	0.1257	(B)	3.9
Central city	18,048	27.2	1.0000	0.4745	0.2797	0.2058	0.1757	0.1563	(B)	3.9
Non-central city	17,851	24.6	1.0000	0.4864	0.2743	0.1678	0.1213	0.0933	(B)	3.9
Nonmetropolitan	15,172	32.3	1.0000	0.5371	0.3492	0.2587	0.2067	0.1643	(B)	4.9
Region										
Northeast	8,051	28.7	1.0000	0.4826	0.3381	0.2324	0.1764	0.1534	(B)	3.9
Midwest	12,863	28.1	1.0000	0.4684	0.2960	0.2128	0.1667	0.1305	(B)	3.8
South	18,501	29.9	1.0000	0.5542	0.3205	0.2179	0.1839	0.1611	(B)	5.1
West	11,656	23.4	1.0000	0.4471	0.2366	0.1697	0.1282	0.0910	(B)	3.7
Family Status										
In families	42,215	27.2	1.0000	0.4920	0.2962	0.2040	0.1622	0.1313	(B)	4.0
In families with related children under 18 years	34,157	27.8	1.0000	0.4998	0.3027	0.2116	0.1716	0.1376	(B)	4.0
In married-couple families	29,125	23.1	1.0000	0.4347	0.2509	0.1654	0.1330	0.0987	(B)	3.7
In married-couple families with related children under 18 years	23,265	23.2	1.0000	0.4354	0.2472	0.1627	0.1330	0.0969	(B)	3.7
In families with a female householder, no spouse present	11,370	38.3	1.0000	0.6504	0.4257	0.3163	0.2437	0.2246	(B)	6.6
In families with a female householder, no spouse present, with related children under 18 years	9,594	39.6	1.0000	0.6627	0.4486	0.3401	0.2696	0.2456	(B)	6.9
Unrelated individuals	8,856	30.5	1.0000	0.5204	0.3065	0.2275	0.1833	0.1622	(B)	4.3
In non-family households	8,315	31.4	1.0000	0.5272	0.3104	0.2278	0.1931	0.1701	(B)	4.5

See footnotes at end of table.

Table E-4. **Spells of Poverty for Persons Who Became Poor During the 1987 SIPP Panel, by Selected Characteristics**—Continued

[Numbers in thousands]

Characteristic	Total spells	Percentage of spells right-censored	Survival rates of poverty spells after- 1 month	4 months	8 months	12 months	16 months	20 months	24 months	Median spell duration
Employment and Labor Force Status (persons 18 years and over)										
Employed full-time	11,348	22.2	1.0000	0.4254	0.2195	0.1280	0.1004	(B)	(B)	3.6
Employed part-time	5,513	25.9	1.0000	0.4743	0.2736	0.1715	0.1149	(B)	(B)	3.9
Unemployed	4,144	25.5	1.0000	0.5423	0.3139	0.2209	0.1496	0.1452	(B)	4.8
Not in labor force	13,337	31.6	1.0000	0.5137	0.3267	0.2450	0.2155	0.1916	(B)	4.3
Marital Status (persons 18 years and over)										
Married	17,203	22.8	1.0000	0.4316	0.2416	0.1570	0.1269	0.0967	(B)	3.7
Separated, divorced, or widowed	8,251	33.1	1.0000	0.5798	0.3711	0.2635	0.2009	0.1839	(B)	5.3
Never married	8,889	28.8	1.0000	0.4872	0.2770	0.1965	0.1613	0.1497	(B)	3.9
Family Size										
1 person (unrelated individual)	8,856	30.5	1.0000	0.5204	0.3065	0.2275	0.1833	0.1622	(B)	4.3
2 persons	8,539	29.1	1.0000	0.5454	0.3350	0.2206	0.1680	0.1445	(B)	5.1
3 persons	8,430	25.5	1.0000	0.5210	0.3229	0.1767	0.1373	0.1303	(X)	4.4
4 persons	11,024	25.8	1.0000	0.4296	0.2367	0.1684	0.1435	(B)	(X)	3.6
5 persons	7,379	26.3	1.0000	0.4549	0.2566	0.1976	0.1858	0.1258	(B)	3.8
6 or more persons	6,842	30.3	1.0000	0.5281	0.3509	0.2863	0.1901	(B)	(X)	5.3
Access to Health Insurance										
Covered by health insurance	30,968	27.9	1.0000	0.4722	0.2949	0.2189	0.1757	0.1527	(B)	3.9
Private insurance	23,993	22.6	1.0000	0.4016	0.2147	0.1402	0.1140	0.1021	(B)	3.5
Medicare	3,449	38.0	1.0000	0.5743	0.3993	0.3077	0.2715	0.2606	(B)	6.1
Medicaid	6,247	50.7	1.0000	0.7499	0.5978	0.5246	0.4214	0.3458	(B)	13.5
Not covered by health insurance	20,103	27.5	1.0000	0.5355	0.3027	0.1910	0.1507	0.1141	(B)	4.5
Receipt of Public Assistance										
Received public assistance[2]	11,406	43.1	1.0000	0.6923	0.5273	0.4363	0.3613	0.3038	(B)	9.0
Did not receive public assistance	39,664	23.4	1.0000	0.4397	0.2273	0.1365	0.1044	0.0850	(B)	3.7

B Base less than 200,000. X Not applicable.

[1]Persons of Hispanic origin may be of any race.

[2]Public assistance programs include AFDC, General Assistance, Supplemental Security Income, food stamps, Medicaid, and housing assistance.

Table E-5. **Transitions Into and Out of Poverty, by Selected Characteristics: 1987 to 1988**

[Numbers in thousands]

Poverty status in 1987	Total	Poverty status in 1988	
		Poor	Nonpoor
All persons			
Total	230,989	23,144	207,846
Poor	24,922	18,520	6,402
Nonpoor	206,068	4,624	201,444
Race and Hispanic Origin			
White			
Total	195,633	14,194	181,439
Poor	15,363	10,747	4,616
Nonpoor	180,270	3,447	176,823
Black			
Total	27,807	8,009	19,798
Poor	8,402	6,973	1,429
Nonpoor	19,405	1,036	18,369
Hispanic origin[1]			
Total	17,443	3,812	13,632
Poor	3,982	3,260	722
Nonpoor	13,461	551	12,910
Age			
Under 18			
Total	59,571	9,763	49,808
Poor	10,544	8,133	2,411
Nonpoor	49,028	1,630	47,398
18 to 64			
Total	144,791	11,073	133,717
Poor	12,007	8,398	3,608
Nonpoor	132,784	2,675	130,109
65 and over			
Total	26,627	2,307	24,320
Poor	2,371	1,988	383
Nonpoor	24,256	319	23,937
Sex			
Male			
Total	111,506	9,779	101,726
Poor	10,645	7,791	2,855
Nonpoor	100,860	1,989	98,872
Female			
Total	119,484	13,364	106,119
Poor	14,276	10,729	3,547
Nonpoor	105,207	2,635	102,572
Educational Attainment (persons 18 years and over)			
Less than 4 years of high school			
Total	39,542	7,332	32,210
Poor	7,740	6,262	1,477
Nonpoor	31,803	1,070	30,733
High school graduate, no college			
Total	58,008	3,762	54,246
Poor	3,914	2,609	1,305
Nonpoor	54,095	1,153	52,942
1 or more years of college			
Total	73,868	2,287	71,581
Poor	2,725	1,515	1,210
Nonpoor	71,143	771	70,372

See footnotes at end of table.

Table E-5. **Transitions Into and Out of Poverty, by Selected Characteristics: 1987 to 1988**—Continued

[Numbers in thousands]

Poverty status in 1987	Total	Poverty status in 1988	
		Poor	Nonpoor
Region			
Northeast			
Total	45,181	4,051	41,130
Poor	3,825	3,134	690
Nonpoor	41,356	917	40,439
Midwest			
Total	60,717	5,160	55,557
Poor	5,765	4,004	1,761
Nonpoor	54,953	1,156	53,796
South			
Total	77,407	9,828	67,579
Poor	10,562	8,177	2,384
Nonpoor	66,845	1,650	65,195
West			
Total	47,684	4,105	43,580
Poor	4,770	3,204	1,566
Nonpoor	42,914	901	42,013
Family Status			
In married-couple families both years			
Total	161,148	8,605	152,543
Poor	9,586	6,613	2,973
Nonpoor	151,562	1,992	149,570
In other family types both years			
Total	32,377	8,985	23,392
Poor	9,391	7,642	1,749
Nonpoor	22,986	1,343	21,643
Unrelated individual both years			
Total	25,738	4,148	21,590
Poor	4,392	3,496	896
Nonpoor	21,346	652	20,694
Work Experience (persons 18 years and over)			
Worked year-round, full-time both years			
Total	66,178	753	65,425
Poor	881	459	422
Nonpoor	65,298	294	65,004
Worked, not year-round, full-time both years			
Total	32,940	3,122	29,818
Poor	3,208	2,028	1,179
Nonpoor	29,733	1,093	28,639
Did not work either year			
Total	42,409	6,967	35,443
Poor	7,227	6,096	1,131
Nonpoor	35,182	870	34,311
Receipt of Public Assistance			
Received public assistance both years[2]			
Total	24,897	15,513	9,383
Poor	16,387	14,040	2,347
Nonpoor	8,509	1,473	7,037
Did not receive public assistance either year			
Total	194,934	5,620	189,314
Poor	6,209	3,321	2,888
Nonpoor	188,725	2,299	186,426

[1]Persons of Hispanic origin may be of any race.

[2]Public assistance programs include AFDC, General Assistance, Supplemental Security Income, food stamps, Medicaid, and housing assistance.