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**Household
After-Tax
Income:
1986**

U.S. Department of Commerce
BUREAU OF THE CENSUS

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Household After-Tax Income: 1986

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SYMBOLS USED IN TABLES

- Represents zero or rounds to zero.
- B Base less than 75,000.
- X Not applicable.

Household After-Tax Income: 1986

INTRODUCTION

This report is the seventh in a series presenting estimates of household after-tax income and taxes paid by households. Previous special studies released by the Census Bureau contained estimates of after-tax household income for 1974 and 1980 through 1985. Data from the 1983 Annual Housing Survey, the Income Survey Development Program, and the Internal Revenue Service were combined with the March 1987 Current Population Survey (CPS) data to derive the estimates shown in this report. The main purpose of this report is to provide estimates of year-to-year changes in household purchasing power and of differences in purchasing power between subgroups of the population.

Four types of taxes were simulated and subsequently deducted from the total money income received by households in order to estimate after-tax income: Federal individual income taxes, State individual income taxes, FICA and Federal retirement payroll taxes, and property taxes on owner-occupied housing. As the after-tax income data shown here are the product of simulations rather than specific questions on tax liability, caution should be used when interpreting relatively small differences in after-tax incomes between subgroups of the population. A discussion of the important limitations of the simulation procedures and underreporting of income in the CPS is contained in the limitations section. A detailed description of the tax simulation methodology is found in appendix A, along with comparisons of the results of the tax simulation with data from the Internal Revenue Service and other administrative sources.

HIGHLIGHTS

(Note: The figures in parenthesis signify the 90-percent confidence interval of the estimates.)

- Mean household income after taxes was \$23,680 (\pm \$132) in 1986, up by 2.6 (\pm .7) percent over the 1985 figure after accounting for the 1.9-percent rise in consumer prices.¹ This was the fifth consecutive annual increase in mean after-tax income.

¹Changes in real income refer to comparisons after adjusting for inflation. The percentage change in prices between 1985 and 1986 was computed by dividing the 1986 average Consumer Price Index for all urban consumers (CPI-U) by the 1985 annual average. See table B-2 for the CPI's from 1947 to 1986.

- Mean household income before taxes was \$30,760 (\pm \$206) in 1986, 3.8 (\pm .8) percent higher than in 1985 after adjusting for price changes.
- Payment of the taxes covered in this report reduced the amount of income available to households by about \$635 (\pm \$13) billion in 1986, or 23.1 (\pm .5) percent of the total money income received.
- Households paid a mean of \$7,650 (\pm \$148) in taxes in 1986, \$570 (\pm \$163) higher than the mean taxes paid in 1985 after adjusting for price changes.
- In 1986, 64.9 (\pm 1.1) percent of households with incomes below the poverty level paid one or more of the types of taxes covered in this study. Taxes paid by poverty households amounted to 8.6 (\pm .8) percent of the total money income received.
- The average percentage of income in 1986 paid in taxes ranged from 11.3 (\pm .6) percent for households with incomes less than \$10,000 to 29.9 (\pm .6) percent for households with incomes of \$50,000 or more.

AFTER-TAX MONEY INCOME

In 1986, mean after-tax household income increased faster than inflation for the fifth consecutive year. The 1986 mean was \$23,680, a 2.6-percent increase over the 1985 figure, after accounting for the 1.9-percent increase in consumer prices (table A). Over the 5-year period from 1981 to 1986, mean after-tax income rose by a total of 12.3 percent after adjusting for price changes (table E-1).

The 1985-86 increase in mean after-tax income evident for all households was also seen for White households and Hispanic households. Income of Black households showed no statistically significant change. Over the 1981-86 period, mean after-tax incomes increased at about the same rate for White households (12.3 percent) and Black households (12.6 percent), while Hispanic households experienced a much lower rate of increase (5.3 percent). As a result, the ratio of Hispanic to White mean after-tax income declined from .82 in 1981 to .77 in 1986.

The after-tax income of households in each of the four regions was higher in 1986 than in 1985. Households in the Northeast experienced the largest increase in mean after-tax income over the 5-year period of 1981 through 1986 (17.4 percent) after adjustment for inflation (table E-2).

Table A. Comparisons of Mean After-Tax Household Income, by Selected Characteristics: 1985 and 1986

(In 1986 dollars)

Characteristic	1985	1986	Percent change
All households	\$23,683	\$23,082	*2.6
Race or Hispanic Origin			
White.....	24,570	23,936	*2.6
Black	16,398	16,094	1.9
Hispanic origin ¹	18,817	18,265	*3.0
Region			
Northeast	24,742	24,103	*2.7
Midwest	22,992	22,332	*3.0
South.....	22,618	21,982	*2.9
West	25,225	24,819	*1.8
Type of Family Household			
Married couples with children ..	29,986	28,936	*3.6
Married couples without children	29,150	28,245	*3.2
Female householder, no husband present, with children	13,134	13,345	-1.6
Age of Householder			
Under 65 years.....	25,535	24,832	*2.8
65 years and over	16,811	16,510	*1.8

*Significant at the 90-percent confidence level.

¹Persons of Hispanic origin may be of any race.

Mean income after taxes for married-couple family households with children (\$29,970) and those without children (\$29,150) increased similarly by 3.6 and 3.2 percent, respectively. There was no statistically significant change in the mean after-tax income for female-maintained family households with no husband present (\$13,130).

The payment of the four types of taxes simulated in this study reduced the income available to households by about \$635 billion in 1986, or about 23 percent of the 2.8 trillion dollars in before-tax income received by all households. The effect of taxes is illustrated in tables B and C by comparisons of the distribution of household income before and after taxes. Following the payment of taxes, the number of households with incomes of \$50,000 or more fell from about 15.0 million to 6.4 million. In contrast, the number of households with incomes less than \$15,000 increased from 27.0 million before taxes to 32.1 million after taxes.

The redistributive effects of taxes is also illustrated by differences in the Gini index of income concentration. This index is a statistical measure of income inequality that ranges from 0.0 (complete equality) to 1.0 (complete inequality). In 1986, the Gini index of .380 after taxes was 7 percent lower than the before-tax index of .407, indicating that the payment of taxes reduces income inequality to a certain extent.

TAXES AND THE POVERTY POPULATION

In 1986, about 65 percent of households with before-tax incomes below the poverty level paid one or more of the four taxes covered in this study. (See table D.) The taxes paid by poverty households amounted to about 9 percent of their before-tax money incomes, and the payment of these taxes reduced the mean income of poverty households from \$4,790 before taxes to \$4,450 after taxes.

The most common type of tax paid by households below the poverty level was FICA payroll taxes: 43 percent paid this type of tax in 1986. Of the 11.2 million poverty households, 35 percent paid property taxes on their homes in 1986; 8 percent of all poverty households paid Federal income taxes in 1986, and 13 percent paid State income taxes. The percentages of poverty households paying Federal and State income taxes both declined by about 2 percentage points between 1985 and 1986. The percentages of poverty households paying FICA payroll and property taxes in 1986 did not change significantly from 1985.

DISTRIBUTION OF TAXES AND TAXES PAID

Ninety-three percent of U.S. households paid one or more of the taxes covered in this study in 1986 (table E). This proportion did not change significantly between 1985 and 1986. In 1986, about 77 percent of all households paid Federal income taxes, 65 percent paid State income taxes, 75 percent paid FICA payroll taxes, and 60 percent paid property taxes on their own homes. There was an increase in the proportion of households paying State income taxes between 1985 and 1986. The proportions of households paying each of the other types of taxes showed no statistically significant changes.

The mean amount of total taxes paid in 1986 was \$7,650, \$570 higher than the 1985 figure after adjusting for price changes. This was the third consecutive annual increase in mean taxes paid. Mean amounts of Federal income taxes (\$5,240), State income taxes (\$1,440), and FICA payroll taxes (\$2,050) were all higher in 1986 than in 1985.

The proportion of before-tax income paid in taxes averaged about 23 percent in 1986 for households paying at least one of the four types of taxes. As shown in table E, Federal income taxes averaged about 14 percent of before-tax income for those households paying this tax. State income tax averaged about 4 percent of before-tax income. Among households paying FICA payroll taxes, the average was about 6 percent of before-tax income. Property taxes accounted for about 2 percent of the before-tax income of households paying this tax.

Table B. Number and Percentage of Households, by Before- and After-Tax Income: 1986

(Numbers in thousands)

Household income	Before taxes		After taxes	
	Number	Percent distribution	Number	Percent distribution
Total	89,479	100.0	89,479	100.0
Under \$5,000	6,657	7.4	7,543	8.4
\$5,000 to \$7,499	5,738	6.4	6,145	6.9
\$7,500 to \$9,999	4,735	5.3	5,903	6.6
\$10,000 to \$12,499	5,128	5.7	6,293	7.0
\$12,500 to \$14,999	4,728	5.3	6,189	6.9
\$15,000 to \$17,499	4,922	5.5	5,930	6.6
\$17,500 to \$19,999	4,380	4.9	5,964	6.7
\$20,000 to \$22,499	4,637	5.2	5,460	6.1
\$22,500 to \$24,999	3,980	4.4	5,265	5.9
\$25,000 to \$27,499	4,230	4.7	4,857	5.4
\$27,500 to \$29,999	3,503	3.9	4,512	5.0
\$30,000 to \$32,499	4,057	4.5	3,814	4.3
\$32,500 to \$34,999	3,021	3.4	3,392	3.8
\$35,000 to \$37,499	3,348	3.7	2,789	3.1
\$37,500 to \$39,999	2,742	3.1	2,573	2.9
\$40,000 to \$44,999	4,934	5.5	3,835	4.3
\$45,000 to \$49,999	3,733	4.2	2,643	3.0
\$50,000 and over	15,007	16.8	6,373	7.1
Median income	\$24,897	(X)	\$20,354	(X)
Mean income	\$30,759	(X)	\$23,683	(X)
Income per household member	\$11,552	(X)	\$8,894	(X)
Index of income concentration407	(X)	.380	(X)

X Not applicable.

Fifty-seven percent of the \$635 billion in taxes paid in 1986 were Federal income taxes. FICA payroll taxes accounted for another 22 percent of the total tax. State income taxes and homeowner property taxes made up 13 and 7 percent of the total, respectively.

The after-tax income data also provide information on the average amount of taxes paid and the percentage of income paid in taxes for households at different positions along the income distribution. The percentage of average income paid in taxes, as shown in table F, gives a good approximation of the effective average tax rates by before-tax income interval. Overall, average tax rates increased slightly between 1985 and 1986, from 22.5 to 23.4 percent. The 1986 tax rates ranged from 11 percent for households with incomes under \$10,000 to 30 percent for households with incomes of \$50,000 or more. Households with incomes

between \$15,000 and \$19,999 experienced a statistically significant increase (1.4 percent) in their average tax rates, as did households with incomes of \$50,000 or more (4.5 percent). Tax rates declined for households in the income categories between \$20,000 and \$34,999 and those in the \$40,000 to \$44,999 range.

Table G shows the composition of aggregate taxes paid, by type of tax and level of before-tax income. There are some major differences in the composition of aggregate tax liability between high- and low-income households. They reflect differences in the mix of taxable and nontaxable sources of income and the relative differences in progressivity among the types of taxes covered in this study. As a result of their generally progressive rate structures, Federal and

Table C. Percent Share of Aggregate Income Received by Each Fifth of Households, Before and After Taxes: 1986

Fifth	Before taxes		After taxes	
	Lower limit	Percent share of aggregate income	Lower limit	Percent share of aggregate income
Lowest fifth	(X)	3.7	(X)	4.4
Second fifth	10,372	9.7	9,282	10.9
Third fifth	19,716	18.2	16,567	17.2
Fourth fifth	30,600	24.3	24,473	24.8
Highest fifth	45,994	48.1	35,255	42.6

X Not applicable.

Table D. Comparisons of Households Below the Poverty Level Paying Taxes: 1986 and 1985

(Numbers in thousands)

Characteristic	1986	1985	Difference, 1986-85
Number below the poverty level ¹	11,217	11,291	-74
Percent of before-tax money income paid in taxes	8.6	7.7	0.9
Percent paying one or more taxes	64.9	64.9	-
Federal income taxes	8.4	10.4	*-2.0
State income taxes	12.9	15.0	*-2.1
FICA payroll taxes	43.2	43.4	-0.2
Property taxes on their own home	35.0	34.0	1.0

- Represents zero or rounds to zero.

*Significant at the 90-percent confidence level.

¹These poverty figures differ slightly from those previously published. For further details, see appendix B.

State income taxes account for a large proportion of aggregate tax liability in households with incomes of \$50,000 or more (79 percent). These types of taxes account for only 13 percent of the aggregate tax liability in households with incomes under \$10,000. In contrast, property and FICA payroll taxes comprise 87 percent of aggregate tax liability in households with incomes under \$10,000 and only 20 percent of the aggregate in those with incomes of \$50,000 or more.

LIMITATIONS ON THE ESTIMATES OF AFTER-TAX INCOME

The estimates of after-tax income shown in this report were derived by simulating the amount of taxes paid by sample households on the March Current Population Survey (CPS) data file. The tax simulation

Table E. Comparisons of Percentage of Households Paying Taxes, Mean Taxes Paid, Percentage of Before-Tax Money Income Paid in Taxes, and Percentage of Taxes Paid, by Type of Tax: 1986 and 1985

(In 1986 dollars)

Type of tax	1986	1985	Difference, 1986-85
Percentage of Households Paying Specified Tax			
One or more taxes	92.7	92.6	0.1
Federal income taxes	77.0	76.9	0.1
State income taxes	65.0	64.5	*0.5
FICA payroll taxes	74.7	74.7	-
Property taxes on own home	60.4	60.3	0.1
Mean Amount of Taxes Paid			
One or more taxes	\$7,647	\$7,081	*\$566
Federal income taxes	5,236	4,765	*471
State income taxes	1,442	1,356	*86
FICA payroll taxes	2,049	1,930	*119
Property taxes on own home ¹	851	827	24
Mean Amount of Taxes of Paid as a Percent of Mean Total Money Income			
One or more taxes	23.4	22.5	*0.9
Federal income taxes	13.9	13.2	*0.7
State income taxes	3.9	3.8	*0.1
FICA payroll taxes	5.7	5.6	*0.1
Property taxes on own home ¹	2.3	2.3	-
Total amount of taxes (billions)	\$634.6	\$580.2	*\$54.4
Percentage of Taxes Paid, by Type of Tax			
One or more taxes	100.0	100.0	(X)
Federal income taxes	56.8	55.9	0.9
State income taxes	13.2	13.3	-0.1
FICA payroll taxes	21.6	22.0	-0.4
Property taxes on own home ¹	7.3	7.6	-0.3
Mean Income of Households Paying Taxes, by Type of Tax			
One or more taxes	\$32,697	\$31,501	(X)
Federal income taxes	37,597	36,169	(X)
State income taxes	37,275	35,678	(X)
FICA payroll taxes	35,897	34,422	(X)
Property taxes on own home ¹	36,480	35,242	(X)

*Significant at the 90-percent confidence level.

- Represents zero or rounds to zero.

X Not applicable.

¹Estimates of 1986 and 1985 property taxes are not directly comparable. See appendix A for details.

Table F. Mean Amount of Taxes Paid as a Percentage of Mean Total Money Income for Households Paying Taxes: 1986 and 1985

Before-tax money income	1986	1985	Percent change
Total.....	23.4	22.5	*4.0
Under \$10,000.....	11.3	10.8	4.6
\$10,000 to \$14,999.....	11.6	11.7	-0.9
\$15,000 to \$19,999.....	14.3	14.1	*1.4
\$20,000 to \$24,999.....	16.4	16.8	*-2.4
\$25,000 to \$29,999.....	18.5	18.9	*-2.1
\$30,000 to \$34,999.....	19.9	20.3	*-2.0
\$35,000 to \$39,999.....	21.5	21.5	-
\$40,000 to \$44,999.....	22.5	22.8	*-1.3
\$45,000 to \$49,999.....	23.5	23.5	-
\$50,000 and over.....	29.9	28.6	*4.5

- Represents zero or rounds to zero.

*Significant at the 90-percent confidence level.

procedures were based on a "statistical" combination of data from the Internal Revenue Service (IRS), summary of State individual income tax regulations, data on the characteristics of persons paying FICA payroll taxes from the Social Security Administration, property tax information from the 1983 Annual Housing Survey (AHS), and the March CPS microdata file. In order to combine these data sets in the estimation process, important assumptions were made that may have affected the accuracy of after-tax income estimates. In addition, the general sampling and nonsampling errors associated with survey data, especially the underreporting of income, must always be kept in mind.

Following is a brief discussion of some of the more important limitations on the estimates and the estimation process. The first limitation that should be mentioned is the difference between CPS and IRS income concepts. One phase of the tax estimation process is the calculation of adjusted gross income (AGI) based on the CPS income. The CPS excludes capital gains (or losses) while AGI for tax purposes includes income from this source. Amounts of capital gains were simulated for the CPS in the tax estimation procedure. (See details in appendix A of this report.) The computation of AGI on Federal individual income tax returns allows "adjustments" and various exclusions from total income. These include Individual Retirement Accounts,

moving expenses, disability income exclusion, alimony paid, and employee business expenses. A simulation of the Individual Retirement Accounts was made using IRS statistics and data reported in the May 1983 CPS supplement. In addition, deductions were simulated for married-couple tax-filing units in which both spouses had earnings. Simulations for the other adjustments were not made. Had these adjustments been simulated, the estimated AGI levels from the CPS would have been lower resulting in slightly higher after-tax incomes. While the overall CPS-estimated AGI was about the same as the IRS figure for 1986, the CPS and IRS amounts differ considerably by income type as discussed later.

Second, an initial step in the tax simulation process is the formation of tax filing units using the survey information on household relationship, marital status, and dependency rules based on income. The CPS records this information for each "permanent" household member as of the time of interview in March. The simulation of tax filing units does not, therefore, account for differences in household composition that may have existed during the year for which taxes were simulated. Because of the CPS household definition, it was also not possible to simulate dependents living outside the household. The exact effect of these limitations is difficult to estimate since some simulated tax units will have too few dependents (exemptions) and some will have too many. It seems likely that, overall, too few exemptions would be simulated. This situation probably results in a slight underestimate of after-tax income levels because all exemptions have not been accounted for.

The combination of IRS tax return statistics with the March CPS income data may have also affected the final estimates to a small degree because the IRS returns include units which are not contained in the CPS universe. These include 1) prior year delinquent returns, 2) returns of Armed Forces members living overseas or on base *without families*, and 3) returns for decedents.

The procedures for simulating Federal and State individual income taxes tend to underestimate the actual variation in taxes paid by AGI level and, therefore, may tend to underestimate the variation in after-tax incomes. This occurs because the simulation procedure used, in some cases, averages within AGI level to assign statuses and amounts to CPS tax filing units. For example, the amount of deductions for units

Table G. Percentage of Aggregate Taxes Paid, by Type of Tax and Level of Before-Tax Income: 1986

Before-tax income level	All taxes	Federal income taxes	State income taxes	FICA payroll taxes	Property taxes
Total.....	100.0	56.8	13.2	21.6	7.3
Under \$10,000.....	100.0	9.2	3.3	28.5	58.8
\$10,000 to \$24,999.....	100.0	40.6	9.8	32.1	16.4
\$25,000 to \$49,999.....	100.0	51.3	12.8	26.8	7.7
\$50,000 or more.....	100.0	64.8	14.4	15.9	4.0

assigned itemizing status were simulated using a matrix containing the IRS ratio of itemized deductions to AGI for all tax units by AGI interval, type of return, number of dependents, and presence of a home mortgage. The true variation in deductions was not simulated since all units within a specified matrix cell were assigned the same proportion of their AGI as deductions. The net effect of this aspect of the simulation procedure on the final after-tax income estimates is not known.

Comparisons of the distribution of AGI derived from the March CPS with that based directly on tax returns indicate significant differences and year-to-year variation in these differences. These differences for 1986 can be examined in table A-3 of appendix A. Year-to-year variations can be examined by referring to similar tables in previous reports. Of note is the relationship between simulated and IRS data for the "\$75,000 and over" category. In 1986, the simulated estimate for number of taxable returns in this AGI interval was 18 percent higher than the IRS figure. The CPS overestimate of taxable returns in this interval is most attributable to the fact that the IRS figure includes numerous "adjustments" to total taxable income that are not reflected in the CPS Federal tax simulation model. Had the CPS simulation allowed for such adjustments as business and moving expenses, the CPS and IRS estimates in this AGI interval would be more comparable.

Finally, another important limitation is the underreporting of money income in the survey. This is a common problem encountered in household surveys that attempt to collect income data. Underreporting results in a downward bias in the estimates of income from the March CPS. While income underreporting is a serious problem in household surveys such as the March CPS, its effect on measures of year-to-year change in levels of income and poverty is much less important because year-to-year variations in underreporting are relatively small. Estimates of underreporting are contained in appendix D.

SUMMARY OF FEDERAL INCOME TAX REVISIONS: 1980-86

Federal income taxes accounted for 57 percent of total taxes covered in this report. As the single most important component of total taxes paid, changes in Federal tax regulations have had a particularly significant effect on the after-tax income of households. The time period covered by the after-tax income series (1980-86) is most notable for the Federal income tax rate reductions mandated by the Economic Recovery Tax Act of 1981. As a result of this legislation, Federal income tax rates were reduced by 5 percent in

October 1981 and 10 percent in July 1982 and 1983. Some of the other important Federal tax revisions that took place during the 1980-86 period are outlined below.

- Beginning in 1982, married couples in which both spouses worked were allowed to deduct 5 percent of the earnings of the lesser-earning spouse (to a maximum of \$1,500). These limits were increased to 10 percent and \$3,000 in 1983.
- Beginning in 1982, all taxpayers with earnings were allowed to open deductible Individual Retirement Accounts (IRA's). Previously, only taxpayers without pension plans were allowed to open deductible IRA's.
- In 1984, Social Security benefits became partially taxable when adjusted gross income was more than \$25,000 (\$32,000 for married couples).
- In 1985, the income limit for the Earned Income Tax Credit was increased from \$10,000 to \$11,000 and the maximum credit was increased from \$500 to \$550.
- In 1985 and 1986, tax brackets and the personal exemption amount were adjusted to account for changes in the cost of living.

RELATED REPORTS

Data based on the Current Population Survey showing the distributions of households, families, unrelated individuals, and persons by before-tax income levels have been published in Series P-60 reports, Nos. 1 to 107, 109, and 114 to 156. Frequently, tables showing the cross-classification of income and other characteristics have been published in the Series P-20 and P-23 reports of the Bureau of the Census and in the Special Labor Force Reports of the Bureau of Labor Statistics. An advance report showing 1986 before-tax income data cross-classified by selected characteristics of families, persons, and households, and the poverty population was issued as Series P-60, No. 157.

NOTE TO USERS

We are interested in your reaction to the usefulness of the information presented here and to the content of the survey questionnaire. (See the facsimile in the appendix.) We welcome the opportunity to improve our survey work, so please send your suggestions or comments to

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U.S. Bureau of the Census
Washington, D.C. 20233

Table 1. All Households, Aggregate Income, Mean Income, Income per Household Member (Before and After Taxes), and Number of Persons in Households, by Before-Tax Money Income Levels and Selected Characteristics: 1986—Con.

(Households as of March 1987. For meaning of symbols, see text)

Before-tax money income level and characteristic	All households		Before taxes					After taxes					Total number of persons in households (thous.)
	Number (thous.)	Percent distribution	Aggregate income		Mean income		Income per household member (dol.)	Aggregate income		Mean income		Income per household member (dol.)	
			Amount (bil. of dol.)	Percent distribution	Value (dol.)	Standard error (dol.)		Amount (bil. of dol.)	Percent distribution	Value (dol.)	Standard error (dol.)		
RACE AND HISPANIC ORIGIN OF HOUSEHOLDER—CON.													
Hispanic Origin¹													
Total	5 418	100.0	125.6	100.0	23 173	381	6 767	102.0	100.0	18 817	268	5 405	18 554
Under \$2,500	204	3.8	.2	.1	889	161	342	.2	.1	742	177	285	530
\$2,500 to \$4,999	393	7.3	1.6	1.2	3 985	48	1 615	1.5	1.5	3 893	50	1 578	971
\$5,000 to \$7,499	427	7.9	2.7	2.1	6 228	52	2 169	2.6	2.5	5 991	55	2 086	1 225
\$7,500 to \$9,999	415	7.7	3.6	2.9	8 628	49	2 797	3.4	3.3	8 079	57	2 619	1 282
\$10,000 to \$12,499	462	8.5	5.2	4.1	11 205	51	3 316	4.7	4.6	10 138	63	3 000	1 560
\$12,500 to \$14,999	347	6.4	4.8	3.8	13 714	53	4 245	4.2	4.1	12 185	80	3 772	1 121
\$15,000 to \$17,499	366	6.8	5.9	4.7	16 127	56	4 771	5.1	5.0	14 029	83	4 150	1 238
\$17,500 to \$19,999	277	5.1	5.1	4.1	18 551	62	5 244	4.4	4.4	16 045	115	4 536	980
\$20,000 to \$22,499	313	5.8	6.6	5.2	21 021	63	6 073	5.6	5.5	17 802	111	5 143	1 082
\$22,500 to \$24,999	248	4.5	5.8	4.6	23 710	63	6 344	4.9	4.8	20 057	138	5 366	919
\$25,000 to \$27,499	277	5.1	7.3	5.8	26 177	64	7 503	6.0	5.9	21 571	132	6 183	967
\$27,500 to \$29,999	187	3.5	5.4	4.3	28 686	77	7 424	4.4	4.3	23 612	172	6 111	724
\$30,000 to \$32,499	209	3.9	6.5	5.2	31 118	74	8 328	5.3	5.2	25 290	172	6 799	781
\$32,500 to \$34,999	157	2.9	5.3	4.2	33 654	73	8 508	4.3	4.2	27 441	216	6 937	619
\$35,000 to \$37,499	161	3.0	5.8	4.6	36 278	78	9 512	4.7	4.6	29 317	243	7 687	613
\$37,500 to \$39,999	125	2.3	4.8	3.8	38 586	85	9 748	3.8	3.7	30 552	276	7 717	465
\$40,000 to \$44,999	218	4.0	9.2	7.3	42 281	140	10 458	7.3	7.2	33 585	268	8 302	880
\$45,000 to \$49,999	134	2.5	6.3	5.0	47 146	179	12 008	5.0	4.9	37 176	325	9 469	527
\$50,000 to \$59,999	239	4.4	13.0	10.4	54 361	287	13 405	10.0	9.8	41 855	359	10 321	970
\$60,000 to \$74,999	158	2.9	10.5	8.3	66 276	504	16 210	7.8	7.7	49 600	525	12 131	645
\$75,000 and over	103	1.9	10.1	8.1	98 169	4 646	23 930	6.7	6.6	66 081	1 852	15 864	423
Median income	18 352	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Standard error	478	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
REGION													
Northeast													
Total	18 873	100.0	622.5	100.0	32 982	250	12 576	466.9	100.0	24 742	157	9 434	48 488
Under \$2,500	366	2.0	.3	—	727	103	401	.1	—	295	118	163	667
\$2,500 to \$4,999	821	4.3	3.4	.5	4 093	29	2 414	3.1	.7	3 816	40	2 251	1 366
\$5,000 to \$7,499	1 282	6.8	7.9	1.3	6 133	24	3 648	7.3	1.6	5 864	36	3 367	2 157
\$7,500 to \$9,999	959	5.1	8.3	1.3	8 681	26	4 512	7.6	1.6	7 887	41	4 099	1 845
\$10,000 to \$12,499	933	4.9	10.4	1.7	11 160	29	5 607	9.3	2.0	9 969	46	5 068	1 857
\$12,500 to \$14,999	810	4.3	11.1	1.8	13 729	30	6 323	9.7	2.1	12 022	55	5 536	1 759
\$15,000 to \$17,499	1 001	5.3	16.2	2.6	16 163	29	7 275	13.8	3.0	13 776	65	6 200	2 224
\$17,500 to \$19,999	973	5.2	18.1	2.9	18 642	27	8 241	15.3	3.3	15 733	65	6 956	2 200
\$20,000 to \$22,499	946	5.0	20.0	3.2	21 104	29	8 652	16.6	3.6	17 521	66	7 184	2 308
\$22,500 to \$24,999	812	4.3	19.2	3.1	23 685	30	9 556	15.7	3.4	19 384	82	7 821	2 013
\$25,000 to \$27,499	888	4.7	23.2	3.7	26 161	31	9 612	18.6	4.0	20 985	78	7 710	2 418
\$27,500 to \$29,999	707	3.7	20.3	3.3	28 658	31	10 563	16.2	3.5	22 935	90	8 454	1 918
\$30,000 to \$32,499	799	4.2	24.9	4.0	31 125	33	10 869	19.4	4.2	24 340	89	8 500	2 288
\$32,500 to \$34,999	622	3.3	20.9	3.4	33 649	33	11 438	16.3	3.5	26 281	107	8 927	1 630
\$35,000 to \$37,499	760	4.0	27.4	4.4	36 090	31	11 960	21.2	4.5	27 656	89	9 232	2 294
\$37,500 to \$39,999	548	2.9	21.2	3.4	38 744	35	12 375	16.4	3.5	29 883	125	9 545	1 716
\$40,000 to \$44,999	1 103	5.8	48.7	7.5	42 283	52	13 729	35.6	7.6	32 280	94	10 481	3 398
\$45,000 to \$49,999	833	4.4	36.4	6.3	47 241	58	14 576	29.8	6.4	35 723	112	11 022	2 700
\$50,000 to \$59,999	1 396	7.1	72.5	11.6	54 290	95	16 836	53.8	11.5	40 313	120	12 502	4 307
\$60,000 to \$74,999	1 043	5.5	69.4	11.1	66 515	162	19 491	50.4	10.8	48 352	170	14 199	3 580
\$75,000 and over	1 327	7.0	141.7	22.8	106 809	1 338	30 498	90.6	19.4	68 257	650	19 490	4 646
Median income	26 494	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Standard error	231	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Midwest													
Total	21 973	100.0	651.4	100.0	29 645	220	11 113	505.2	100.0	22 992	145	8 619	58 617
Under \$2,500	467	2.1	.3	—	604	120	313	.1	—	278	135	144	900
\$2,500 to \$4,999	1 125	5.1	4.4	.7	3 947	26	2 096	4.1	.8	3 664	36	1 946	2 118
\$5,000 to \$7,499	1 453	6.6	9.0	1.4	6 166	25	3 264	8.3	1.7	5 738	37	3 038	2 748
\$7,500 to \$9,999	1 118	5.1	9.7	1.5	8 720	28	4 266	9.0	1.8	8 029	36	3 928	2 285
\$10,000 to \$12,499	1 219	5.5	13.7	2.1	11 210	29	5 377	12.3	2.4	10 095	41	4 842	2 542
\$12,500 to \$14,999	1 188	5.4	16.3	2.5	13 724	27	6 088	14.4	2.9	12 126	45	5 380	2 678
\$15,000 to \$17,499	1 195	5.4	19.3	3.0	16 136	29	7 125	16.7	3.3	13 959	53	6 164	2 706
\$17,500 to \$19,999	1 117	5.1	20.9	3.2	18 679	28	7 923	18.0	3.6	16 074	61	6 818	2 633
\$20,000 to \$22,499	1 159	5.3	24.6	3.8	21 194	29	8 308	20.5	4.1	17 716	64	6 945	2 956
\$22,500 to \$24,999	1 005	4.6	23.8	3.7	23 675	29	8 601	19.7	3.9	19 633	78	7 132	2 766
\$25,000 to \$27,499	1 074	4.9	28.1	4.3	26 182	30	9 680	22.9	4.5	21 302	77	7 875	2 904
\$27,500 to \$29,999	977	4.4	28.0	4.3	28 646	29	10 212	22.6	4.5	23 147	83	8 252	2 741
\$30,000 to \$32,499	1 066	4.9	33.2	5.1	31 157	30	10 320	26.5	5.2	24 854	80	8 232	3 219
\$32,500 to \$34,999	755	3.4	25.4	3.9	33 653	33	11 348	20.1	4.0	26 667	91	8 992	2 239
\$35,000 to \$37,499	870	4.0	31.4	4.8	36 108	35	11 737	24.7	4.9	28 349	92	9 215	2 677
\$37,500 to \$39,999	722	3.3	27.9	4.3	38 634	35	12 013	21.7	4.3	30 028	129	9 337	2 321
\$40,000 to \$44,999	1 211	5.5	51.1	7.9	42 223	56	13 500	39.4	7.8	32 508	91	10 393	3 789
\$45,000 to \$49,999	935	4.3	44.2	6.8	47 315	64	14 466	33.7	6.7	36 022	116	11 013	3 667
\$50,000 to \$59,999	1 429	6.5	77.7	11.9	54 356	100	16 161	58.5	11.6	40 951	117	12 175	4 806
\$60,000 to \$74,999	955	4.3	63.3	9.7	66 235	183	19 285	46.6	9.2	48 776	176	14 202	3 281
\$75,000 and over	932	4.2	99.1	15.2	106 340	1 759	30 477	65.4	12.9	70 144	830	20 103	3 253
Median income	24 851	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Standard error	240	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)

¹Persons of Hispanic origin may be of any race.

Table 2. All Households, Aggregate Income, Mean Income, Income per Household Member (After Taxes), and Number of Persons in Households, by After-Tax Money Income Levels and Selected Characteristics: 1986—Con.

(Households as of March 1987. For meaning of symbols, see text)

After-tax money income level and characteristic	All households		Aggregate income		Mean income		Income per household member (dollars)	Total number of persons in households (thousands)
	Number (thousands)	Percent distribution	Amount (billions of dollars)	Percent distribution	Value (dollars)	Standard error (dollars)		
RACE AND HISPANIC ORIGIN OF HOUSEHOLDER—CON.								
Hispanic Origin¹								
Total	5 418	100.0	102.0	100.0	18 817	268	5 495	18 554
Under \$2,500	213	3.9	.2	.2	804	172	316	542
\$2,500 to \$4,999	429	7.9	1.7	1.7	4 002	46	1 644	1 044
\$5,000 to \$7,499	475	8.8	3.0	2.9	6 323	47	2 184	1 388
\$7,500 to \$9,999	523	9.7	4.6	4.5	8 738	47	2 883	1 596
\$10,000 to \$12,499	522	9.6	5.8	5.7	11 203	46	3 390	1 729
\$12,500 to \$14,999	431	8.0	5.0	5.8	13 747	49	4 179	1 418
\$15,000 to \$17,499	410	7.6	6.6	6.5	16 195	52	4 757	1 397
\$17,500 to \$19,999	353	6.5	6.6	6.5	18 785	56	5 120	1 294
\$20,000 to \$22,499	341	6.3	7.2	7.1	21 213	57	5 748	1 258
\$22,500 to \$24,999	282	5.2	6.7	6.6	23 687	64	6 717	995
\$25,000 to \$27,499	243	4.5	6.4	6.2	26 156	65	6 545	973
\$27,500 to \$29,999	222	4.1	6.4	6.3	28 793	68	7 548	646
\$30,000 to \$32,499	161	3.0	5.0	4.9	31 065	79	7 733	646
\$32,500 to \$34,999	148	2.7	5.0	4.9	33 696	84	8 175	609
\$35,000 to \$37,499	124	2.3	4.5	4.4	36 316	96	8 417	534
\$37,500 to \$39,999	115	2.1	4.5	4.4	38 726	85	9 634	463
\$40,000 to \$44,999	145	2.7	6.2	6.1	42 677	163	10 508	589
\$45,000 to \$49,999	112	2.1	5.3	5.2	47 554	179	11 232	473
\$50,000 to \$59,999	112	2.1	6.1	5.9	54 307	405	12 205	497
\$60,000 to \$74,999	40	.7	2.6	2.6	(B)	(B)	(B)	167
\$75,000 and over	19	.4	1.7	1.6	(B)	(B)	(B)	97
Median income	15 710	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Standard error	322	(X)	(X)	(X)	(X)	(X)	(X)	(X)
REGION								
Northeast								
Total	18 873	100.0	466.9	100.0	24 742	157	9 434	48 498
Under \$2,500	451	2.4	.2	—	352	134	200	782
\$2,500 to \$4,999	986	5.2	4.0	—	4 035	26	2 476	1 607
\$5,000 to \$7,499	1 360	7.2	6.4	1.8	6 198	23	3 541	2 380
\$7,500 to \$9,999	1 133	6.0	9.9	2.1	8 721	26	4 524	2 184
\$10,000 to \$12,499	1 178	6.2	13.3	2.8	11 271	25	5 294	2 508
\$12,500 to \$14,999	1 250	6.6	17.2	3.7	13 739	25	6 344	2 708
\$15,000 to \$17,499	1 309	6.9	21.3	4.6	16 274	24	7 268	2 931
\$17,500 to \$19,999	1 199	6.4	22.5	4.8	18 758	25	7 483	3 018
\$20,000 to \$22,499	1 164	6.2	24.7	5.3	21 236	25	7 807	3 166
\$22,500 to \$24,999	1 118	5.9	26.5	5.7	23 669	26	8 439	3 136
\$25,000 to \$27,499	972	5.1	25.5	5.5	26 252	28	9 227	2 765
\$27,500 to \$29,999	935	5.0	26.8	5.7	28 704	28	9 471	2 833
\$30,000 to \$32,499	807	4.3	25.1	5.4	31 144	30	10 266	2 448
\$32,500 to \$34,999	756	4.0	25.5	5.5	33 752	31	10 551	2 419
\$35,000 to \$37,499	622	3.3	22.6	4.5	36 245	35	11 297	1 997
\$37,500 to \$39,999	549	2.9	21.2	4.5	38 686	38	11 753	1 808
\$40,000 to \$44,999	860	4.6	36.4	7.8	42 374	58	12 918	2 820
\$45,000 to \$49,999	604	3.2	28.7	6.1	47 487	71	14 244	2 015
\$50,000 to \$59,999	795	4.2	43.4	9.3	54 536	122	15 541	2 790
\$60,000 to \$74,999	502	2.7	33.5	7.2	66 857	222	17 242	1 941
\$75,000 and over	322	1.7	30.3	6.5	94 101	1 410	24 581	1 233
Median income	21 224	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Standard error	176	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Midwest								
Total	21 973	100.0	505.2	100.0	22 992	145	8 619	58 617
Under \$2,500	584	2.7	.3	.1	513	113	273	1 096
\$2,500 to \$4,999	1 202	5.5	4.7	.9	3 907	26	2 094	2 243
\$5,000 to \$7,499	1 574	7.2	9.8	1.9	6 202	24	3 271	2 984
\$7,500 to \$9,999	1 385	6.3	12.1	2.4	8 749	26	4 276	2 834
\$10,000 to \$12,499	1 588	7.2	17.9	3.5	11 282	24	5 216	3 434
\$12,500 to \$14,999	1 470	6.7	20.2	4.0	13 728	25	6 093	3 311
\$15,000 to \$17,499	1 528	7.0	24.8	4.9	16 244	24	6 822	3 639
\$17,500 to \$19,999	1 469	6.8	28.1	5.6	18 731	25	7 204	3 899
\$20,000 to \$22,499	1 411	6.4	29.9	5.9	21 181	25	7 615	3 923
\$22,500 to \$24,999	1 446	6.6	34.3	6.8	23 707	24	8 483	4 041
\$25,000 to \$27,499	1 281	5.8	33.6	6.7	26 225	27	8 652	3 884
\$27,500 to \$29,999	1 124	5.1	32.2	6.4	28 677	28	9 136	3 527
\$30,000 to \$32,499	1 010	4.6	31.5	6.2	31 207	30	9 992	3 154
\$32,500 to \$34,999	813	3.7	27.4	5.4	33 751	34	10 388	2 641
\$35,000 to \$37,499	643	2.9	23.3	4.6	36 210	39	11 016	2 113
\$37,500 to \$39,999	631	2.9	24.4	4.8	38 715	37	11 729	2 083
\$40,000 to \$44,999	934	4.2	39.5	7.8	42 327	62	12 394	3 189
\$45,000 to \$49,999	599	2.7	28.4	5.6	47 478	78	13 411	2 119
\$50,000 to \$59,999	604	2.7	32.9	6.5	54 507	157	15 411	2 135
\$60,000 to \$74,999	411	1.9	27.4	5.4	66 555	270	18 404	1 487
\$75,000 and over	238	1.1	22.5	4.4	94 407	1 910	25 527	850
Median income	20 278	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Standard error	173	(X)	(X)	(X)	(X)	(X)	(X)	(X)

¹Persons of Hispanic origin may be of any race.

Table 3. Mean Income of Households and Income per Household Member (Before and After Taxes), by Selected Characteristics: 1986 and 1985

(In 1986 dollars. Households as of March of the following year. An asterisk (*) preceding percent change indicates a statistically significant change at the 90-percent confidence level. For meaning of symbols, see text)

Characteristic	Mean income						Income per household member					
	Before taxes			After taxes			Before taxes			After taxes		
	1986 (dol.)	1985 (dol.)	Percent change	1986 (dol.)	1985 (dol.)	Percent change	1986 (dol.)	1985 (dol.)	Percent change	1986 (dol.)	1985 (dol.)	Percent change
All households.....	30 750	29 625	*3.8	23 683	23 082	*2.6	11 552	11 093	*4.1	8 894	8 643	*2.9
RACE AND HISPANIC ORIGIN OF HOUSEHOLDER												
White.....	32 040	30 641	*3.9	24 570	23 936	*2.6	12 239	11 753	*4.1	9 385	9 121	*2.9
Black.....	20 232	19 707	*2.7	16 398	16 094	1.9	6 952	6 804	*2.2	5 635	5 557	1.4
Hispanic origin ¹	23 173	22 243	*4.2	18 817	18 285	*3.0	6 767	6 480	*4.4	5 495	5 321	3.3
REGION												
Northeast.....	32 982	31 745	*3.9	24 742	24 103	*2.7	12 576	11 942	*5.3	9 434	9 067	*4.0
Midwest.....	29 645	28 691	*3.3	22 992	22 332	*3.0	11 113	10 700	*3.9	8 619	8 328	*3.5
South.....	28 846	27 564	*4.6	22 618	21 982	*2.9	10 826	10 372	*4.4	8 480	8 272	*2.6
West.....	33 040	32 081	*3.0	25 225	24 819	*1.6	12 256	11 916	*2.9	9 357	9 218	1.5
TYPE OF HOUSEHOLD												
Family households.....	35 204	33 821	*4.1	27 068	26 315	*2.9	10 927	10 432	*4.7	8 402	8 117	*3.5
Married-couple families:												
With no related children under 18.....	38 224	36 542	*4.6	29 150	28 245	*3.2	16 152	15 373	*5.1	12 317	11 882	*3.7
With related children under 18.....	39 290	37 556	*4.6	29 966	28 936	*3.6	9 403	8 999	*4.8	7 171	6 910	*3.8
Female householder, no husband present, with related children under 18.....	15 446	15 558	-.7	13 134	13 345	-1.6	4 624	4 613	.2	3 932	3 957	-.6
All other family households.....	27 909	27 094	*3.0	22 071	21 691	1.8	10 370	9 964	*4.1	8 201	7 977	2.8
Nonfamily households.....	19 287	18 916	*2.0	14 945	14 830	.8	15 807	15 808	1.3	12 249	12 236	.1
AGE OF HOUSEHOLDER												
15 to 24 years.....	18 155	18 049	.6	14 894	14 794	.7	7 865	7 829	.5	6 452	6 417	.5
25 to 29 years.....	27 012	26 191	*3.1	21 050	20 530	*2.5	10 206	9 910	*3.0	7 953	7 768	2.4
30 to 34 years.....	31 342	30 511	*2.7	23 927	23 519	*1.7	10 184	9 925	*2.6	7 776	7 651	1.6
35 to 39 years.....	35 975	34 823	*3.3	27 048	26 425	*2.4	10 750	10 277	*4.6	8 082	7 798	*3.6
40 to 44 years.....	39 665	38 177	*3.9	29 737	28 865	*3.0	11 609	11 070	*5.7	8 771	8 370	*4.8
45 to 49 years.....	41 833	39 882	*4.9	31 033	30 074	*3.2	12 993	12 340	*5.3	9 639	9 308	*3.6
50 to 54 years.....	40 235	38 174	*5.4	29 877	28 853	*3.6	13 861	13 280	*4.4	10 293	10 038	2.5
55 to 59 years.....	36 141	35 228	2.6	27 052	26 680	1.4	14 259	13 785	3.4	10 673	10 441	2.2
60 to 64 years.....	31 267	29 987	*4.2	23 921	23 304	*2.6	14 211	13 650	*4.1	10 872	10 804	2.5
65 years and over.....	19 816	19 162	*3.4	16 811	16 510	*1.8	11 285	10 826	*4.2	9 574	9 328	*2.6
SIZE OF HOUSEHOLD												
One person.....	16 442	16 305	.8	12 802	12 835	-.3	16 442	16 305	.8	12 802	12 835	-.3
Two persons.....	31 302	30 083	*4.0	24 115	23 486	*2.7	15 474	14 833	*4.3	11 922	11 576	*3.0
Three persons.....	35 967	34 960	*2.9	27 482	26 992	*1.8	11 646	11 486	*3.1	9 052	8 867	*2.1
Four persons.....	39 696	37 876	*4.8	30 214	29 203	*3.5	9 885	9 418	*5.0	7 524	7 261	*3.6
Five persons.....	39 555	37 197	*6.3	30 708	29 094	*5.5	7 885	7 414	*6.4	6 122	5 799	*5.6
Six persons.....	39 066	36 955	*5.7	30 574	29 469	3.7	6 470	6 117	5.8	5 063	4 879	3.8
Seven persons or more.....	35 159	34 708	1.3	28 804	28 753	.2	4 454	4 407	1.1	3 646	3 651	-.1
TENURE												
Owner occupied.....	36 148	34 722	*4.1	27 456	26 692	*2.9	12 836	12 258	*4.7	9 740	9 424	*3.4
Renter occupied, including no cash rent.....	21 182	20 657	*2.5	16 977	16 729	*1.5	8 862	8 659	*2.3	7 103	7 012	1.3

¹Persons of Hispanic origin may be of any race.

Table 4. Number of Poverty Households, Mean Household Income (Before and After Taxes), and Percent of Households Paying Specified Taxes: 1986

(Households as of March 1987. For meaning of symbols, see text)

Characteristic	Number ¹ (thousands)	Mean household income		Taxes as a percent of total money income	Percent of households paying—					
		Before taxes (dollars)	After taxes (dollars)		One or more taxes	Federal income taxes	State income taxes	FICA payroll taxes	Federal retirement taxes	Property taxes
Total	11 217	4 791	4 452	8.6	64.9	8.4	12.9	43.2	.7	35.0
RACE AND HISPANIC ORIGIN OF HOUSEHOLDER										
White	7 988	4 771	4 389	9.5	68.7	9.3	13.7	44.3	.5	39.3
Black	2 906	4 791	4 452	6.3	55.2	5.5	10.8	39.8	1.1	25.1
Hispanic origin ²	1 321	5 979	5 700	6.3	61.1	12.4	4.5	53.2	.5	20.5
TYPE OF HOUSEHOLD										
Family households	6 820	5 738	5 370	8.5	70.9	8.2	14.9	55.6	.9	34.7
Married-couple families:										
With no related children under 18	1 068	4 266	3 701	13.5	81.1	10.2	10.9	35.6	.3	68.4
With related children under 18	2 040	7 621	7 053	10.1	90.0	13.9	21.4	80.7	1.4	42.1
Female householder, no husband present, with related children under 18	3 119	5 194	5 036	5.1	53.5	3.3	11.6	46.0	.8	18.5
All other family households	594	4 773	4 340	10.6	78.3	10.6	17.2	55.2	.5	48.0
Nonfamily households	4 397	3 323	3 028	8.9	55.6	8.6	9.8	24.1	.3	35.5
AGE OF HOUSEHOLDER										
15 to 24 years	1 227	4 271	4 095	6.2	65.5	11.1	17.5	62.9	.8	8.3
25 to 29 years	1 258	5 241	5 023	6.4	64.0	10.3	17.7	59.2	.7	15.1
30 to 34 years	1 348	5 415	5 108	7.8	68.3	8.6	14.5	59.0	1.5	21.5
35 to 39 years	1 087	5 747	5 361	8.9	73.4	11.9	19.4	62.4	1.5	30.3
40 to 44 years	742	5 747	5 332	9.3	72.1	12.4	16.7	63.4	.8	33.5
45 to 49 years	603	5 214	4 753	10.7	69.9	13.6	17.8	59.5	1.4	39.8
50 to 54 years	616	4 350	3 900	12.0	66.7	13.9	15.0	48.3	.7	43.9
55 to 59 years	740	3 880	3 370	14.1	73.6	12.5	16.5	44.4	.3	53.7
60 to 64 years	769	3 966	3 523	11.7	69.6	5.4	11.0	27.0	—	55.7
65 years and over	2 825	4 370	4 048	7.4	54.2	1.2	2.6	6.9	—	50.6
NUMBER OF EARNERS										
No earners	5 901	4 028	3 793	5.8	36.4	.9	1.7	—	—	36.7
One earner	3 797	5 148	4 778	9.8	95.6	15.1	23.8	89.0	1.0	29.4
Two earners	1 291	6 504	5 882	12.4	98.9	19.3	26.7	96.4	2.5	44.3
Three earners	167	8 129	7 287	13.0	100.0	23.2	45.0	98.6	3.9	55.3
Four earners or more	61	(B)	(B)	(X)	100.0	41.8	43.2	100.0	.4	68.7

¹The household poverty figures differ slightly from those previously published. For further details, see appendix B.

²Persons of Hispanic origin may be of any race.

Table 5. Number and Percent of Households Paying Taxes, by Level of Before-Tax Money Income and Type of Tax: 1986

(Numbers in thousands. Households as of March 1987)

Before-tax money income level	All house- holds	Households paying—											
		One or more taxes		Federal income taxes		State income taxes		FICA payroll taxes		Federal retirement taxes		Property taxes	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	89 479	82 979	92.7	68 873	77.0	58 133	65.0	66 835	74.7	3 347	3.7	54 076	60.4
Under \$5,000 ¹	6 657	3 745	56.3	239	3.6	443	6.6	2 004	30.1	26	.4	2 274	34.2
\$5,000 to \$7,499	5 738	3 843	67.0	775	13.5	905	15.8	2 014	35.1	30	.5	2 340	40.8
\$7,500 to \$9,999	4 735	3 914	82.7	1 283	27.1	1 590	33.6	2 326	49.1	28	.6	2 220	46.9
\$10,000 to \$12,499	5 128	4 706	91.8	2 801	54.6	2 326	45.4	3 129	61.0	62	1.2	2 356	45.9
\$12,500 to \$14,999	4 726	4 512	95.5	3 324	70.3	2 742	58.0	3 113	65.9	92	1.9	2 364	50.0
\$15,000 to \$17,499	4 922	4 790	97.3	4 049	82.3	3 277	66.6	3 584	72.8	104	2.1	2 520	51.2
\$17,500 to \$19,999	4 380	4 319	98.6	3 790	86.5	3 133	71.5	3 217	73.4	119	2.7	2 368	54.0
\$20,000 to \$22,499	4 637	4 617	99.6	4 359	94.0	3 533	76.2	3 750	80.9	121	2.6	2 574	55.5
\$22,500 to \$24,999	3 980	3 976	99.9	3 838	96.4	3 078	77.3	3 268	82.1	126	3.2	2 313	58.1
\$25,000 to \$27,499	4 230	4 220	99.8	4 153	98.2	3 450	81.5	3 563	84.2	192	4.5	2 503	59.2
\$27,500 to \$29,999	3 503	3 501	100.0	3 478	99.3	2 872	82.0	2 975	84.9	163	4.6	2 244	64.1
\$30,000 to \$32,499	4 057	4 054	99.9	4 036	99.5	3 336	82.2	3 535	87.1	197	4.9	2 638	65.0
\$32,500 to \$34,999	3 021	3 021	100.0	3 016	99.8	2 503	82.8	2 675	88.6	159	5.3	2 006	68.4
\$35,000 to \$37,499	3 348	3 348	100.0	3 342	99.8	2 800	83.6	3 048	91.0	183	5.5	2 322	69.4
\$37,500 to \$39,999	2 742	2 740	100.0	2 737	99.8	2 280	83.2	2 472	90.2	155	5.7	2 018	73.6
\$40,000 to \$44,999	4 934	4 933	100.0	4 919	99.7	4 087	82.8	4 557	92.4	306	6.2	3 666	74.3
\$45,000 to \$49,999	3 733	3 733	100.0	3 732	100.0	3 114	83.4	3 446	92.3	254	6.8	2 862	76.7
\$50,000 and over	15 007	15 007	100.0	15 003	100.0	12 666	84.4	14 159	94.3	1 029	6.9	12 489	83.2

¹Includes households with losses.

Table 6. Mean Taxes Paid and Taxes Paid as a Percentage of Mean Before-Tax Income, by Level of Before-Tax Money Income and Type of Tax: 1986

(For meaning of symbols, see text)

Before-tax money income level	One or more taxes		Federal income taxes		State income taxes		FICA payroll taxes		Federal retirement taxes		Property taxes	
	Mean tax (dollars)	Percent	Mean tax (dollars)	Percent	Mean tax (dollars)	Percent	Mean tax (dollars)	Percent	Mean tax (dollars)	Percent	Mean tax (dollars)	Percent
Total	7 647	23.4	5 236	13.9	1 442	3.9	2 049	5.7	2 145	5.0	851	2.3
Under \$5,000 ¹	482	18.1	169	4.8	57	1.7	181	4.6	(B)	.00	620	24.3
\$5,000 to \$7,499	671	10.8	231	3.7	71	1.1	342	5.5	(B)	.00	700	11.2
\$7,500 to \$9,999	850	9.7	383	4.3	103	1.2	497	5.7	(B)	.00	679	7.8
\$10,000 to \$12,499	1 235	11.0	561	5.0	168	1.5	677	6.0	(B)	.00	719	6.4
\$12,500 to \$14,999	1 687	12.2	751	5.5	225	1.6	894	5.9	767	5.7	775	5.6
\$15,000 to \$17,499	2 287	14.2	1 034	6.4	308	1.9	1 007	6.2	846	5.8	814	5.0
\$17,500 to \$19,999	2 700	14.5	1 285	6.9	375	2.0	1 134	6.1	1 088	5.8	776	4.2
\$20,000 to \$22,499	3 400	16.1	1 601	7.6	481	2.3	1 322	6.3	1 346	6.4	736	3.5
\$22,500 to \$24,999	3 981	16.7	1 895	8.0	596	2.4	1 471	6.2	1 401	5.9	756	3.2
\$25,000 to \$27,499	4 799	18.3	2 352	9.0	704	2.7	1 651	6.3	1 645	6.3	743	2.8
\$27,500 to \$29,999	5 371	18.7	2 624	9.2	794	2.8	1 809	6.3	1 869	6.5	763	2.7
\$30,000 to \$32,499	6 199	19.9	3 083	9.8	834	3.0	2 004	6.4	1 850	5.9	834	2.7
\$32,500 to \$34,999	6 720	20.0	3 372	10.0	1 034	3.1	2 105	6.3	1 835	5.5	809	2.4
\$35,000 to \$37,499	7 689	21.3	3 900	10.8	1 188	3.3	2 303	6.4	1 984	5.5	849	2.4
\$37,500 to \$39,999	8 423	21.8	4 372	11.3	1 313	3.4	2 430	6.3	2 316	6.0	872	2.3
\$40,000 to \$44,999	9 499	22.5	4 991	11.8	1 488	3.5	2 594	6.4	2 262	5.3	875	2.1
\$45,000 to \$49,999	11 090	23.5	6 083	12.8	1 759	3.7	2 905	6.1	2 490	5.3	926	2.0
\$50,000 and over	22 518	29.9	14 592	19.4	3 842	5.1	3 798	5.0	3 084	4.4	1 075	1.4

¹Includes households with losses.

Table 7. Total Taxes Paid and Percentage of Total Taxes Paid, by Level of Before-Tax Money Income and Type of Tax: 1986

Before-tax money income level	Total taxes paid (bil. of dol.)	Percent of total taxes paid					
		Total	Federal income taxes	State income taxes	FICA payroll taxes	Federal retirement taxes	Property taxes
Total	634.6	100.0	56.8	13.2	21.8	1.1	7.3
Under \$5,000 ¹	1.8	100.0	2.2	1.4	19.7	.2	76.5
\$5,000 to \$7,499	2.6	100.0	6.9	2.5	26.7	.4	63.5
\$7,500 to \$9,999	3.3	100.0	14.8	4.9	34.7	.3	45.3
\$10,000 to \$12,499	5.8	100.0	27.0	6.7	36.4	.7	29.2
\$12,500 to \$14,999	7.5	100.0	33.2	8.2	33.3	1.0	24.4
\$15,000 to \$17,499	11.0	100.0	38.2	9.2	33.0	.9	18.7
\$17,500 to \$19,999	11.7	100.0	41.8	10.1	31.3	1.1	15.8
\$20,000 to \$22,499	15.7	100.0	44.5	10.8	31.6	1.0	12.1
\$22,500 to \$24,999	15.7	100.0	46.2	11.1	30.5	1.1	11.1
\$25,000 to \$27,499	20.3	100.0	48.2	12.0	29.0	1.6	6.2
\$27,500 to \$29,999	18.8	100.0	48.5	12.1	26.6	1.6	9.1
\$30,000 to \$32,499	25.1	100.0	49.2	12.4	28.2	1.5	8.8
\$32,500 to \$34,999	20.3	100.0	50.1	12.7	27.7	1.4	8.0
\$35,000 to \$37,499	25.7	100.0	50.7	12.9	27.3	1.4	7.7
\$37,500 to \$39,999	23.1	100.0	51.8	13.0	26.0	1.6	7.6
\$40,000 to \$44,999	46.8	100.0	52.4	13.0	26.2	1.5	6.9
\$45,000 to \$49,999	41.4	100.0	54.7	13.2	24.2	1.5	6.4
\$50,000 and over	337.9	100.0	64.8	14.4	15.9	.9	4.0

¹Includes households with losses.

Appendix A. Methodology and Procedures

INTRODUCTION

This section describes the methodology and procedures which were developed to estimate taxes associated with the income information on the March 1987 CPS microdata files. In all, four types of taxes were simulated: 1) Federal individual income taxes, 2) State individual income taxes, 3) property taxes on owner-occupied housing, and 4) payroll taxes.

Development of the after-tax simulation procedures began with the March CPS annual demographic supplement. This microdata file contains demographic and economic information for approximately 58,000 sample households and the persons living in these households. It includes detailed information on household and family relationship; age; marital status; race and ethnicity; educational attainment; weeks and hours worked during the calendar year; occupation, industry, and class of worker of the job held longest during the calendar year; and income amounts for wages and salary, nonfarm and farm self-employment income, interest, dividends, rental income, estates and trusts, royalties, pension income, unemployment compensation, and sources of nontaxable income as described in appendix B.

The second major element in the simulation system was statistical summaries of individual income tax returns compiled by the Internal Revenue Service. These statistics are made available in the IRS publication series, Statistics of Income (SOI). Some unpublished statistical summaries from the IRS were also used to develop these procedures.

A third element was the 1983 Annual Housing Survey microdata file. This element was used to assign property taxes paid to the March CPS sample households residing in owner-occupied housing.

Finally, in order to estimate proportions of tax filers owning homes and itemizing deductions, tabulations were made from Interview No. 5 (6) of the 1979 Income Survey Development Program.

The system for estimating taxes paid and after-tax income created a modified March CPS microdata file. This file was formed by expanding the March CPS format to include variables relevant to the simulation of taxes paid. The detailed tables contained in this report were derived from this modified March CPS data file.

Federal Income Taxes

Simulation of Federal income taxes required up to four separate operations. First was the formation and classification of tax filing units using household relationship, marital status, and dependency rules. Second, was the calculation of adjusted gross income for each of those units. Third was the simulation of amount of Federal income taxes paid. Finally, the calculation of earned income tax credits was made, when applicable.

Formation and classification of Federal income tax filing units. A Federal tax filing "unit" was defined as any individual (or married couple) with either \$400 in self-employment income, \$1,000 in wages or salary, or a total of \$1,000 in interest, dividends, rents and royalties, estates and trusts, or pension income in 1986. These income levels were chosen because they either corresponded to tax laws or helped bring the estimated number of filing units on the CPS in line with 1986 IRS Statistics of Income (SOI) data.

The next step in the formation of Federal tax filing units was the assignment of dependency status. The algorithm for assigning dependency for each tax unit used the following rules:

- All filing primary family householders and spouses were included as dependents on their own tax returns.
- All children under age 15 who were members of the primary family were counted as dependents on the return of the family householder. Children aged 15 and over (except related subfamily members) with a total taxable income of less than \$1,000 were assigned dependency to the tax return of the primary family householder. Children aged 15 and over who were students were assigned dependency to the primary family householder regardless of income level.
- All other primary family members (except related subfamily members) with taxable income of less than \$1,000 were assigned as dependents on the tax return of the primary family householder.
- Related subfamilies having at least one Federal tax filing unit were treated separately in the same manner as primary families. Members of a related

subfamily containing no Federal tax filing unit were assigned dependency to the tax return of the primary family householder.

- All unrelated subfamilies were treated in the same manner as primary families.
- Primary and secondary unrelated individuals age 15 and over were treated as dependents only on their own tax returns.

All simulated filing units were classified into one of three return types. Married couples and persons whose marital status was "married, spouse absent in Armed Forces" were assumed to file joint returns. Unmarried family householders with dependents were assumed to file head of household returns. All other persons classified as Federal tax filing units were assumed to file as single individuals.

Computation of adjusted gross income. Adjusted gross income (AGI) for each simulated tax filing unit was calculated by summing the income amounts from all taxable sources and an imputed amount for capital gains. The sources of CPS income included in AGI were wages and salaries, net farm and nonfarm self-employment income, net rental and royalty income, dividends, interest, estates and trusts, and income from private and government pensions.

Capital gains were imputed to tax filing units based on data obtained from a Statistics of Income (SOI) public use file and reports summarizing information reported on Federal tax returns. These data provide estimates of the probability that a filing unit in a given matrix cell reported capital gains and the mean amount of capital gains for that cell. The variables in this probability matrix were: level of AGI, type of return, and age of tax filer. A Monte Carlo technique was used to randomly assign capital gains: a random number (between 0 and 1) was generated for each filing unit; if that number was less than or equal to the probability of filing units in that matrix cell reporting capital gains, the mean amount of capital gains, as computed above, was added to that unit's AGI. This procedure does not control on other characteristics that might affect the allocation of this source of income.

In the calculation of adjusted gross income, a portion of unemployment compensation was also included in AGI if the sum of AGI and unemployment compensation for that tax unit exceeded \$12,000 (\$18,000 for joint returns). In these cases, the lesser of 1) the amount of unemployment compensation or 2) one-half of the difference between the sum of AGI and unemployment compensation and the income limit was included in AGI.

In 1986, a portion of Social Security income was included in AGI if the sum of AGI and half of the total Social Security amount exceeded \$25,000 (\$32,000

for joint returns). In these cases, the lesser of 1) one-half of the Social Security payments or 2) one-half of the difference between the modified AGI and the income limit was included in AGI.

In 1986, married-couple filing units in which both spouses had earnings were allowed to deduct 10 percent of the earned income of the lesser-earnings spouse (to a maximum of \$3,000). This adjustment is reflected in the 1986 tax model. In addition, payments to Individual Retirement Accounts (IRA's) were simulated for the 1986 tax model. The May 1983 CPS pension supplement (updated annually with SOI data) was used to estimate probabilities of tax-filing units contributing to IRA's and the average amounts contributed. These probabilities were then used to assign IRA contributions to individual tax-filing units on the CPS file. The IRA payments were deducted from the total income received by the tax-filing units in order to compute adjusted gross income.

Computation of taxable income and taxes paid. Taxable income was computed by subtracting the estimated allowable deductions from AGI. The first step in this process consisted of predicting which filing units itemized deductions.

Homeownership was determined to be the most important variable available from the CPS for assigning itemization status to tax filers. Outlined below is a step-by-step description of the procedures used to assign itemization status.

1. A statistical match was made of the March CPS and Annual Housing Survey (AHS) data files in order to assign a monthly mortgage amount and a property tax amount to each owner-occupied unit on the March CPS file.¹
2. Probabilities of itemizing for homeowner, tax-filing units were computed by size of monthly mortgage payment from the 1979 Income Survey Development Program (ISDP) test panel. Probabilities for renters were computed by AGI level.
3. The probabilities described in step 2 were used to randomly assign itemization status within monthly mortgage (or AGI) intervals using the same Monte Carlo technique used in the assignment of capital gains.
4. The amount of itemized deductions for tax filing units was computed using a matrix showing the ratio of itemized deductions to AGI for all units by AGI interval, type of tax return, and presence of a home mortgage. The ratios of itemized deductions to AGI were computed using a 1984 SOI public use file and 1986 SOI data.

¹A detailed description of the CPS-AHS statistical match can be found later in appendix B.

Next, a standard deduction was estimated for each tax filing unit by multiplying the number of exemptions by \$1,090. Taxable income was then estimated by subtracting the itemized and standard deductions from AGI. Tax liability was then computed using the appropriate tax schedule for that simulated return type.

The dependent child care credit was simulated for the 1986 Federal tax model and subtracted from the total tax liability. This credit allows tax filers to deduct a portion of child care expenses while they work or look for work. Data from the June 1982 CPS supplement were used to estimate probabilities of tax filers paying for child care.

The simulation procedures do not capture variations in proportions of income paid in taxes within AGI intervals. The proportion of income paid in taxes for households with similar AGI amounts may differ relative to factors such as race, age of household members, number of household members, and marital status. The extent to which these variations exist has not been measured, therefore, caution should be used when interpreting relatively small differences between the incomes of various subgroups of the population.

The lack of variation in proportions of income paid in taxes within AGI intervals is due in large part to the use of aggregate-level IRS data in the simulation process, as described previously in the appendix. The use of aggregate-level IRS data was necessary because the detailed information needed to simulate tax liability was not available on an individual-level basis (i.e., from a matched CPS-IRS microdata file).

Computation of the earned income tax credit. Earned income tax credits were simulated for the 1986 tax model. These tax credits were used in the calculation of net Federal tax liability and computation of after-tax household income for filing units with one or more dependent children, less than \$11,000 in AGI, and earnings between \$1 and \$11,000.

State Individual Income Taxes

There were 44 States that required payment of individual income taxes in 1986. For the purpose of this model, the definitions of tax filing units and AGI used for the estimation of Federal income taxes were also used for the simulation of State income taxes.

The amounts of State individual income taxes paid were computed by developing a model of each State's income tax regulations. Information on the State tax systems was obtained from a publication entitled, *State Tax Handbook*, October 1, 1986. While every detail of each State's income tax system was not simulated, most of the important aspects were accounted for.

Property Taxes on Owner-Occupied Housing

In 1983, property taxes were estimated using a data file created by the statistical match of the March 1984 CPS and the 1983 AHS. In that statistical match, property tax amounts reported on the 1983 AHS for owner-occupied housing units were assigned to CPS households with similar characteristics (as defined by the matching variables). There was no comparable data file from the AHS for 1984. Property taxes in 1984 were estimated in a two-step process. First, the March 1984 and March 1985 CPS files were statistically matched. The March 1984 property tax amounts (those taken from the 1983 AHS) were then assigned to March 1985 CPS households.

Second, these 1983 amounts were increased based on the rate of increase between 1983 and 1984 in the Bureau of Economic Analysis's figures for residential property taxes adjusted to reflect the increase in the number of households. This same method was used to assign 1985 and 1986 property taxes to owner-occupied households. In effect, the 1986 property tax amounts are 1983 amounts updated to reflect the change in average property taxes between 1983 and 1986. Since the 1985 and 1986 property tax estimates share the same base (the 1983 AHS), year-by-year comparisons are probably not reliable. Property taxes paid on secondary residences, such as vacation homes, could not be simulated. Also, the proportion of rent that pays the property taxes on renter-occupied housing units was not estimated.

The estimation procedures for property taxes paid by homeowners produces estimates that do not correspond precisely with those available from the AHS. These differences are mainly the result of differing universes and use of the statistical matching procedure. The published AHS estimate for property taxes is based on a universe that excludes condominiums, cooperatives, and mobile homes, the simulated universe includes these cases. In 1983 the published AHS estimate of median property taxes was \$564, compared with an estimate of \$541 based on the March CPS simulation.

Payroll Taxes

The Social Security payroll tax (FICA) and the Federal Employee Retirement tax were simulated using occupation of longest job and earnings data reported on the CPS. Social Security payroll taxes were calculated directly from the reported CPS earnings using the Social Security payroll tax formula for 1986. For wages and salary, the tax rate used was 7.15 percent up to a maximum of \$42,000.

The tax rate for self-employment was 12.3 percent of the amount between \$400 and \$42,000. Not all workers were assigned coverage under Social Security and, therefore, a small number were not subject to

Social Security taxes. All Federal employees and specific proportions of workers in certain occupation groups were assigned noncovered status. Unpublished statistics supplied by the Social Security Administration were used to make these assignments.

Retirement taxes paid by each Federal employee were simulated by multiplying their wages and salary amount by the 7.0 percent tax rate. The identification of Federal employees was based on the class of worker of longest job as reported on the survey.² In addition, the portion of Federal workers' payroll tax that pays for Medicare coverage was also simulated. In 1986 this tax was 1.45 percent of the first \$42,000 earned.

COMPARISON OF SIMULATION RESULTS WITH DATA FROM IRS AND OTHER INDEPENDENT SOURCES

The procedures described in the preceding section were translated into a computer simulation model. Tables A-1 through A-3 in this section provide a basic evaluation of the accuracy of this model by presenting comparison of the simulation results with data from independent sources.

Number of Federal Tax Filing Units and Amount of Adjusted Gross Income

Shown in tables A-1 and A-2 are comparisons of IRS and CPS distributions of adjusted gross income and number of returns with specified income types. The 1986 CPS tax simulation yielded 103.5 million Federal tax filing units, about the same as the 1986 preliminary IRS Statistics of Income figure of 103.3 million. The CPS simulated aggregate adjusted gross income was \$2,569.4 billion, which was slightly higher than the preliminary IRS figure of \$2,522.5 billion. While the CPS and IRS adjusted gross income amounts are very close, there are major differences in the components of total adjusted gross income. Although the IRS data indicate a larger amount of interest income than the CPS, the CPS recorded significantly larger amounts of self-employment income. Larger total amounts of self-employment income by the CPS can be attributed to the far fewer number of losses reported in the survey than on tax returns. The reasons for these differences are not fully understood. The smaller amounts of interest income on the CPS can be attributed to survey underreporting.

²According to the National Income and Product Accounts published by the Bureau of Economic Analysis (BEA), neither Social Security (FICA) nor Federal Employee Retirement payments are treated as taxes. Instead, they are both included under Federal Government receipts as "Contributions for Social Insurance." We have included them under the broad heading of taxes here for convenience as both are mandatory deductions from gross earnings.

Table A-1. Comparison of IRS and CPS Simulated Returns, by Adjusted Gross Income: 1986

(Numbers in thousands)

Adjusted gross income	Number of returns		Percent difference
	CPS	IRS	
Total	103,473	103,300	0.2
Under \$2,000	5,604	6,344	*-11.7
\$2,000 to \$3,999	8,016	6,793	*18.0
\$4,000 to \$5,999	6,494	6,837	-5.0
\$6,000 to \$7,999	5,927	6,452	*8.1
\$8,000 to \$9,999	5,391	6,345	*-15.0
\$10,000 to \$11,999	5,420	5,739	-5.6
\$12,000 to \$14,999	7,684	8,031	-4.3
\$15,000 to \$19,999	10,966	11,358	-3.5
\$20,000 to \$24,999	9,483	9,236	2.7
\$25,000 to \$29,999	7,819	7,546	3.6
\$30,000 to \$39,999	12,289	11,535	*6.5
\$40,000 to \$49,999	7,531	7,516	0.2
\$50,000 to \$74,999	7,206	6,472	*11.3
\$75,000 and over	3,641	3,095	*17.6

*Significant at the 90-percent confidence level.

Number of Federal Taxable Returns and Amount of Taxable Income

The 1986 CPS simulation estimated 84.4 million Federal tax filing units with taxable income (after credits). This estimate is not significantly different from the IRS preliminary figure of 84.3 million. (See table A-3.)

While, overall, there are relatively small differences between the simulated CPS number of taxable returns, there are significant differences in many of the AGI intervals as shown in table A-3. The smaller number of returns in the "Under \$5,000" category for the CPS (about 32 percent less) results mainly because the procedures did not simulate tax returns for dependents specifically.

Amount of Federal Income Taxes Paid (Net Tax Liability)

According to the CPS simulation, the total amount of Federal individual income taxes paid in 1986 was \$364.4 billion, about 14 percent of the estimated CPS adjusted gross income. (See table A-3.) This estimate is not significantly different from the IRS total of \$370.9 billion in net tax liability (after credits) for 1986. Overall, the IRS and CPS proportion of taxes paid by adjusted gross income level are quite similar as indicated in table A-3.

State Income Taxes Paid

The CPS tax simulation yielded \$83.8 billion in State income taxes paid in 1986. According to the Bureau of the Census publication entitled "Quarterly Summary

Table A-2. Comparison of IRS and CPS Simulated Number of Federal Individual Income Tax Returns and Adjusted Gross Income, by Type of Income: 1986

(Numbers in thousands and aggregate adjusted gross income in billions of dollars)

Type of income	Number of returns		Aggregate adjusted gross income			
	CPS	IRS	CPS		IRS	
			Amount	Percent distribution	Amount	Percent distribution
Total AGI.....	103,473	103,300	2,569.4	100.0	2,522.5	100.0
Wages and salary.....	87,916	88,587	2,069.8	80.6	2,046.1	81.1
Nonfarm self-employment.....	9,799	12,431	151.3	5.9	90.4	3.6
Farm self-employment.....	1,599	2,533	11.3	0.4	-6.9	-0.3
Interest.....	63,333	65,490	127.9	5.0	168.2	6.7
Dividends, rents, royalties, and estates or trusts.....	17,032	(NA)	67.2	2.6	58.9	2.3
Pensions.....	¹ 12,903	14,850	¹ 101.7	4.0	108.5	4.3
Other income minus adjustments.....	(NA)	(NA)	40.2	1.6	57.3	2.3

NA Not available.

¹Includes nontaxable pensions or the nontaxable portions of pensions.

of State and Local Tax Revenue: October-December 1986," the net amount of individual income taxes collected by the States during calendar year 1986 was \$70.3 billion. The overestimation of State income taxes paid by the CPS tax simulation can be attributed to several factors. First, the simulation did not account for every detail of each State's income tax regulations. Second, the simulation did not include various State tax credits and exemptions which could not be computed from the data available on the March CPS file; these included credits for home energy-saving expenditures, and charitable contributions.

Payroll Taxes

According to the simulation, Social Security payroll taxes totaled \$138.1 billion in 1986. This estimate is not significantly different than the aggregate amount of \$138.0 billion according to figures from the Social Security Administration. Based on administrative statistics from the Office of Personnel Management, Federal retirement taxes totaled \$4.5 billion in 1986. The comparable figure from the tax simulation model was somewhat higher, \$6.0 billion. The higher estimate of Federal retirement tax may have occurred because the CPS wage and salary figure represents

Table A-3. Comparison of IRS and CPS Simulated Number of Taxable Returns, Federal Income Tax, and Income Taxes Paid as a Percent of Adjusted Gross Income: 1986

(Numbers in thousands and taxes in billions of dollars)

Adjusted gross income	Number of taxable returns			Federal income after-tax credits		Federal income taxes as a percent of adjusted gross income	
	CPS	IRS	Percent difference	CPS	IRS	CPS	IRS
Total.....	84,420	84,265	0.2	364.4	370.9	14.2	14.7
Under \$5,000 ¹	2,524	3,734	*-32.4	0.2	0.4	0.4	3.8
\$5,000 to \$5,999 ¹	2,111	2,089	1.1	0.4	0.4	2.1	2.3
\$6,000 to \$7,999.....	3,965	4,199	-5.6	1.4	1.5	3.4	3.3
\$8,000 to \$9,999.....	4,289	5,036	*-14.8	2.2	2.6	4.6	4.6
\$10,000 to \$11,999.....	5,120	5,265	-2.8	3.7	3.7	6.3	5.9
\$12,000 to \$14,999.....	7,513	7,660	-1.9	7.7	7.8	7.6	7.2
\$15,000 to \$19,999.....	10,931	11,129	-1.8	17.2	17.4	9.1	8.8
\$20,000 to \$24,999.....	9,481	9,158	3.5	21.9	20.9	10.4	10.1
\$25,000 to \$29,999.....	7,819	7,496	4.3	23.9	22.8	11.2	11.0
\$30,000 to \$39,999.....	12,289	11,471	*7.1	52.3	48.6	12.4	12.2
\$40,000 to \$49,999.....	7,531	7,503	0.4	47.4	45.8	14.1	13.7
\$50,000 to \$74,999.....	7,206	6,447	*11.8	72.5	62.4	17.0	16.2
\$75,000 and over.....	3,641	3,077	*18.3	113.6	136.7	24.7	27.9

*Significant at the 90-percent confidence level.

¹Single returns with AGI less than \$3,560 and joint returns with AGI less than \$5,830 were not considered taxable under the CPS simulation, even though a small percentage of those returns do incur a tax liability.

the amount received from all jobs, not just Federal employment. Also, there are a number of noncontributory retirement programs within the Federal system which could not be simulated and a small number of employees not covered by any Federal retirement program.³

Amount of Property Taxes

The simulation produced an estimated \$46.0 billion in property taxes for 1986. This compares with the \$50.4 billion figure published in the National Income Accounts by the Bureau of Economic Analysis (BEA).

³For the purpose of these comparisons, the portion of Federal workers' retirement taxes that pay for Medicare coverage was included with FICA payroll taxes.

Appendix B. Definitions and Explanations

Population coverage. This report includes the civilian noninstitutional population of the United States (the 50 States and the District of Columbia) and members of the Armed Forces living off post or with their families on post, but excludes all other members of the Armed Forces.

Household. A household consists of all the persons who occupy a housing unit. A house, an apartment or other group of rooms, or a single room is regarded as a housing unit when it is occupied or intended for occupancy as separate living quarters; that is, when the occupants do not live and eat with any other persons in the structure and there is direct access from the outside or through a common hall.

A household includes the related family members and all the unrelated persons, if any, such as lodgers, foster children, wards, or employees who share the housing unit. A person living alone in a housing unit or a group of unrelated persons sharing a housing unit as partners is also counted as a household. The count of households excludes group quarters.

Money income before taxes. The before-tax money income distributions and income summary measures (such as medians and means) shown in this report are limited to money income before payment of Federal, State, local, or Social Security (FICA) taxes and before any other types of deductions, such as union dues and Medicare premiums. Total money income before taxes is the sum of the amounts received from wages and salaries, self-employment income (including losses), Social Security, Supplemental Security Income, public assistance, interest, dividends, rent, royalties, estates or trusts, veterans' payments, unemployment and workers' compensations, private and government retirement and disability pensions, alimony, child support, and any other source of money income which was regularly received. Capital gains (or losses) and lump sum or one-time payments such as life insurance settlements are excluded.

Money income after taxes. To compute the after-tax money income distributions and summary measures shown in this report, simulated Federal and State income taxes, Social Security (FICA) taxes, and property taxes were deducted from total money income before taxes as defined above. Total money income

after taxes also includes capital gains, which were imputed to some households during the Federal income tax simulation.

Underreporting. As in most household surveys, the estimates of the number of money income recipients and the total amount of money income derived from the March CPS are somewhat less than comparable estimates derived from independent sources, such as the Bureau of Economic Analysis, Social Security Administration, and Veterans Administration. The difference between the survey estimate and the independent estimate is generally termed "underreporting." Underreporting tends to be more pronounced for income sources such as public assistance and welfare, unemployment compensation, and property income (interest, dividends, and net rental income). Estimates of income from wages and salaries tend to have less underreporting than most income types. For 1983 (the latest year for which estimates of underreporting are available), underreporting of total money income was about 10 percent. For further details concerning the reporting of money income, see appendix D.

Poverty definition. Families and unrelated individuals are classified as being above or below the poverty level using the poverty index originated at the Social Security Administration in 1964 and revised by Federal Interagency Committees in 1969 and 1980. The poverty index is based solely on money income and does not reflect the fact that many low-income persons receive noncash benefits such as food stamps, Medicaid, and public housing. The index is based on the Department of Agriculture's 1961 Economy Food Plan and reflects the different consumption requirements of families based on their size and composition. It was determined from the Department of Agriculture's 1955 Survey of Food Consumption that families of three or more persons spend approximately one-third of their income on food; the poverty level for these families was, therefore, set at three times the cost of the economy food plan. For smaller families and persons living alone, the cost of the economy food plan was multiplied by factors that were slightly higher in order to compensate for the relatively larger fixed expenses of these smaller households. The poverty thresholds are updated every year to reflect changes in the Consumer Price Index (CPI). The average poverty threshold for a family of four was \$11,203

in 1986, about 1.9 percent higher than the comparable 1985 cutoff of \$10,989. Weighted average poverty thresholds by size of family are shown in table B-1. For further details, see Current Population Reports, Series P-60, No. 157.

Table B-1. Weighted Average Poverty Thresholds in 1986

Size of family unit	Threshold
One person (unrelated individual).....	\$ 5,572
15 to 64 years	5,701
65 years and over.....	5,255
Two persons	7,138
Householder 15 to 64 years	7,372
Householder 65 years and over	6,630
Three persons	8,737
Four persons	11,203
Five persons.....	13,259
Six persons	14,986
Seven persons.....	17,049
Eight persons.....	18,791
Nine persons or more	22,497

Differences in after-tax poverty concept. In previous reports households have been classified according to the poverty status of the household's primary family or individual. Using this method for determining poverty status, it is possible for households classified as below the poverty level to have total household incomes above the poverty level based on the inclusion of income received by unrelated subfamilies or secondary individuals. The presence of these high-income "poverty" households was thought to be inappropriate for the purpose of this study. Consequently, the poverty universe for this study was modified to exclude households in which the total household income exceeded the poverty threshold for the primary family or individual. This modification resulted in a decline in the number of poverty households from 11,901,000 to 11,217,000 for 1986.

AHS-CPS statistical match. In order to simulate property taxes for owner-occupied housing units, the March 1984 CPS simulation file was statistically matched to a file from the 1983 Annual Housing Survey (AHS). Since the AHS file contained responses to questions on annual property tax expenses the statistical match allowed the transfer of property tax amounts to CPS records when a CPS and AHS household were found to have similar characteristics. The group of variables used to match the two files were: age of householder,

Table B-2. Annual Average Consumer Price Index (CPI): 1947 to 1986

(1977 = 100)

Year	CPI	Year	CPI
1947.....	36.9	1967.....	55.1
1948.....	39.7	1968.....	57.4
1949.....	39.3	1969.....	60.5
1950.....	39.7	1970.....	64.1
1951.....	42.9	1971.....	66.8
1952.....	44.6	1972.....	69.0
1953.....	44.1	1973.....	73.3
1954.....	44.4	1974.....	81.4
1955.....	44.2	1975.....	88.8
1956.....	44.8	1976.....	93.9
1957.....	46.4	1977.....	100.0
1958.....	47.7	1978.....	107.6
1959.....	48.1	1979.....	119.8
1960.....	48.9	1980.....	136.0
1961.....	49.4	1981.....	150.1
1962.....	49.9	1982.....	159.3
1963.....	50.2	1983.....	164.4
1964.....	51.2	1984.....	171.4
1965.....	52.1	1985.....	177.5
1966.....	53.6	1986.....	180.9

Source: Department of Labor, Bureau of Labor Statistics.

tenure, public or subsidized housing status, SMSA and central-city status of the household, household income, household size, number of living quarters, and the race, sex, and educational attainment of the householder. Using a very detailed combination of recodes based on the above variables, the two files were matched. If there was no AHS household with the exact combination of characteristics as a particular CPS household, a match was then attempted at a new level that did not have quite as much detail. This was repeated until a match was found for every CPS household.

Households on the AHS file that did not answer the question dealing with property tax expenses were ineligible for the match. Since monthly mortgage expenses, which were used to simulate itemization status for Federal taxpayers, were also assigned to CPS households using this match, households that did not answer the AHS questions on that subject were similarly excluded from the match.

Index of income concentration. The index of income concentration (or Gini index) is a statistical measure of income inequality ranging from 0 to 1. A measure of 1 indicates perfect inequality, i.e., one person having all the income and the rest having none. A measure of 0 indicates perfect equality, i.e., all persons having equal shares of the income. For a more detailed discussion see Current Population Reports, Series P-60, No. 123.

Appendix C. Source and Reliability of Estimates

SOURCE OF DATA

Data from the American Housing Survey (AHS), the Income Survey Development Program (ISDP), and the Internal Revenue Service (IRS) were combined with Current Population Survey (CPS) data to create simulations of taxes paid, number of tax filing units, adjusted gross income, and other tax characteristics for the March 1986 and 1987 CPS. See the sections of this report entitled "Methodology and Procedures" and "Definitions and Explanations" for more details.

In addition, this report uses unpublished data from the Social Security Administration (SSA); administrative data from the Office of Personal Management (OPM); data from the National Income Accounts prepared by the Bureau of Economic Analysis (BEA); the *State Tax Handbook* from Commerce Clearing House; and the Bureau of the Census publication, *Quarterly Summary of State and Local Tax Revenue: October-December 1986* as information sources. A description of the sources of data from which the tax simulations were made follows. Except for the CPS, these descriptions are brief. The reports described below provide additional information about these data sources.

American Housing Survey. The Bureau of the Census collects housing data for the Department of Housing and Urban Development. The population covered by the sample for the AHS, which was called the Annual Housing Survey before 1984, includes all housing units in the United States. A structure must meet specific criteria developed by the Bureau of the Census before it is termed a "housing unit." For a more detailed description of the sample design see the report Current Housing Reports, Series H-150-83, *Financial Characteristics of the Housing Inventory, Annual Housing Survey: 1983, Part C*, U.S. Department of Commerce.

The AHS is no longer conducted in even-numbered years, and 1985 AHS data were not available in time for this report; therefore, property tax estimates in this report are based on the 1983 AHS. A series of statistical matches was made and estimates were updated to reflect changes after 1983.

Income Survey Development Program. The ISDP was the research and development phase for the Survey of Income and Program Participation (SIPP). The ISDP

was used to examine and resolve design, operational, and technical issues for SIPP. The household sample for the 1979 ISDP was a nationwide multiple frame sample. The majority of sample households in the ISDP came from addresses contacted in the 1976 Survey of Income and Education. The remainder of sample households were selected from a reserve file of sample cases maintained by the Census Bureau. For a more detailed description of this sample design, see the report *Wage and Salary Data from the Income Survey Development Program: 1979 (Preliminary Data from Interview Period One)*, Current Population Reports, Series P-23, No. 118.

Internal Revenue Service Data. Much of the IRS data in this report comes from the Statistics of Income (SOI) series, in particular the SOI bulletin *Individual Income Tax Returns, Preliminary Data: 1986*, winter 1987-88. This report, based on a sample drawn from all tax returns filed through September 1987, presents information on taxpayers' income, exemptions, deductions, credits, and tax. Another report which gives complete information on 1985 tax returns is the SOI report *Individual Income Tax Returns—1985*, April 1988.

Data from other sources. Administrative statistics on Federal retirement taxes from the Office of Personnel Management (OPM) and on Social Security taxes from the Social Security Administration (SSA) are from unpublished records kept by those agencies. Data on property taxes are from administrative statistics published by the Bureau of Economic Analysis (BEA) in the July 1987 issue of *Survey of Current Business*. Data on state income taxes are from administrative records published by the Bureau of the Census in the publication *Quarterly Summary of State and Local Tax Revenue: October-December 1986*. Information on state tax systems is published in *State Tax Handbook*, October 1, 1986, from Commerce Clearing House.

Current Population Survey The CPS estimates in this report came from the March CPS from 1980 through 1987 and from supplementary questions to the March CPS. The Bureau of the Census conducts the CPS for the Bureau of Labor Statistics (BLS).

Basic CPS. The monthly CPS deals mainly with labor force data for the civilian noninstitutional population.

Census Bureau interviewers ask questions relating to labor force participation about each member in every sample household. Since the CPS began in 1948, the Census Bureau has redesigned the sample several times to improve data quality and reliability and to meet changing data needs. The last CPS redesign was phased in beginning in April 1984 and was completed in July 1985. During that time, the sample included housing units in both the old and new designs. The present CPS sample, which represents all 50 States and the District of Columbia, was selected from the 1980 decennial census files. The sample is continually updated to reflect new construction. CPS sample housing units are located in 729 sample areas which include 1,973 counties, independent cities, and minor civil divisions. Each month approximately 59,500 occupied housing units are eligible for interview; of these, about 2,500 are designated "noninterviews," because interviewers cannot find the occupants at home after repeated calls or cannot obtain an interview for some other reason. The following table displays some information about the basic CPS sample designs in use during the referenced data collection periods.

Design of the Basic Current Population Survey

Interview period	Number of sample areas	Housing units eligible	
		Interviewed	Not Interviewed
1986-87.....	729	57,000	2,500
1985.....	629/729	57,000	2,500
1982-84.....	629	59,000	2,500
1980-81.....	629	65,500	3,000

March supplement. In addition to the basic CPS questions described above, interviewers ask supplementary questions every March about money income and work experience for the previous year. To obtain more reliable data for the Hispanic population, the Census Bureau enlarges the March CPS sample to include all households from the previous November with at least one sample person of Hispanic origin (approximately 3,000 in November 1986). Also, for this report, the Census Bureau interviews only those Armed Forces members who live with civilian adults.

Because the CPS is designed primarily to provide labor force estimates, it is not an optimal design for the types of information covered in the supplements. Therefore, estimates from the supplements may vary more than estimates from a sample designed specifically to produce estimates of the items covered in the supplement such as income. See the section on reliability below for a more detailed discussion.

CPS estimation procedure. The procedure to calculate estimates from this survey involves the inflation of the weighted sample results to independent estimates

of the total civilian noninstitutional population of the United States by age, race, sex, and Hispanic origin. These independent estimates are based on statistics from decennial censuses of population; statistics on births, deaths, immigration, and emigration; and statistics on the strength of the Armed Forces. The independent population estimates used in this report come from the 1980 decennial census. The estimation procedure for the data in the report also involves a further adjustment so that husband and wife of a household receive the same weight. Simulation techniques are then used to obtain estimates of after tax income based on CPS data. For more details on this procedure, see the sections of this report entitled "Methodology and Procedures" and "Definitions and Explanations."

RELIABILITY OF ESTIMATES

Because the CPS estimates come from a sample, they may differ somewhat from figures from a complete census using the same questionnaires, instructions, and enumerators. There are two types of errors possible in a sample survey estimate, sampling and nonsampling, and the accuracy of a survey result depends on both types of errors. The full effect of the non sampling error is unknown, so exercise care when interpreting figures based on a relatively small number of cases or on small differences between estimates.

The standard errors provided here primarily measure the CPS sampling error. They also partially measure the effect of some of the CPS nonsampling errors in responses and enumeration, but they do not include any systematic biases in the data. (Bias is the difference, averaged over all possible samples, between the sample estimates and the desired value.)

These standard errors, computed from CPS data alone, do not reflect any sampling or nonsampling errors present in data from other sources. In addition, these standard errors do not entirely apply to estimates from the CPS simulation. No data are available on the size of these additional error sources, so use caution when interpreting such estimates.

Nonsampling variability. Nonsampling variability, or nonsampling error, is variation that would occur whether a sample or a complete census was taken. Nonsampling error is present in both the CPS and other data sources mentioned in this report. The interaction of nonsampling errors when combining data from many surveys may result in an additional component of error. The CPS simulation introduces still another error component. The total extent of these additional errors is unknown.

Nonsampling error arises from many sources. For example, respondents may be unable or unwilling to

provide correct information, may have trouble recalling information, or may interpret questions or define terms differently from what was intended. The data are subject to several potential sources of error: collection errors in recording or coding data, processing errors, and errors in estimating values for missing data. Additionally, the Census Bureau may be unable to obtain information about all cases in the sample, or may fail to represent all units with the sample (undercoverage).

Undercoverage in the CPS results from missed housing units and missed persons within sample housing units. Overall undercoverage is about 7 percent compared with the 1980 decennial census. CPS undercoverage varies with age, sex, and race: generally, undercoverage is larger for males than for females and larger for Blacks and other races combined than for Whites. Ratio estimation to independent age-sex-race Hispanic population controls, as described earlier, partially corrects for the bias from survey undercoverage. However, biases still exist in the estimates to the extent that missed persons are different from interviewed persons in the same age sex-race-Hispanic group. Also, the independent population controls are not adjusted for 1980 census undercoverage.

Answers to income questions often depend on the memory or knowledge of one person. For this reason, recall problems can cause underestimates of income in survey data, because people can easily forget minor or irregular sources of income. Respondents may also misunderstand what the Census Bureau considers income, or may simply lie or refuse to answer the income questions because they think the questions are too personal. For more discussion, see the section entitled "Underreporting of Income."

For additional information on nonsampling error including the possible effect on CPS data when known, refer to Statistical Policy Working Paper 3, *An Error Profile: Employment as Measured by the Current Population Survey*, Office of Federal Statistical Policy and Standards, U.S. Department of Commerce, 1978; and Technical Paper 40, *The Current Population Survey: Design and Methodology*, Bureau of the Census, U.S. Department of Commerce.

Sampling variability. Sampling variability is variation that occurs by chance because a sample was surveyed rather than the entire population. The standard errors given in the following tables are primarily measures of sampling variability, although they also include some of the effect of nonsampling error (see the discussion above).

Standard errors are used to determine the reliability of survey estimates, and to evaluate the statistical validity of conclusions made about the data. For example, a conclusion that the difference between two estimates is statistically significant can be verified using standard errors.

Two procedures, confidence interval estimation and hypothesis testing, are commonly used to test for statistical validity. The confidence interval is a range about the sample estimate constructed so that, if the survey was repeated a large number of times under the same general conditions, the confidence intervals would include the average result of all possible samples with a known probability. For example, approximately 90 percent of intervals with a range of 1.6 standard errors below the estimate to 1.6 standard errors above the estimate include the average result of all possible samples (not accounting for bias). A particular interval may not contain the average result, but one can be 90 percent confident that it does.

Some statements in the report may contain estimates followed by another number. For such statements, simply add that number to and subtract it from the estimate to calculate the upper and lower bounds of the 90-percent confidence interval. For example, if a statement contains the phrase "grew by 1.7 percent (± 1.0)," then the 90 percent confidence interval for the estimate, 1.7 percent, is from 0.7 to 2.7 percent.

Hypothesis testing uses sample estimates to distinguish between true population values. One common type of hypothesis is that two population values are different. Comparing the values of mean after-tax income for 1985 and 1986 is an example.

Tests may be performed at various levels of significance. The significance level of a test is the probability of concluding that two parameters are different when, in fact, they are not. For example, for a statement of difference to pass at the 0.10 significance level, the absolute value of the difference between the estimates must be greater than 1.6 times the standard error of the difference.

The Census Bureau uses as standard statistical testing criteria 90-percent confidence intervals and 0.10 significance levels. Past reports in this series have used 95% confidence intervals and 0.05 significance levels, which require differences of at least 2.0 times the standard error. Consult standard textbooks on statistics for alternative criteria.

Comparability with other data. As described earlier, data obtained from the CPS is not fully comparable with data from other government sources, mostly because of differences in interviewer training and experience and different survey procedures. This is another component of error not reflected in the standard error tables.

Also, because the CPS simulations described in this report include data from other government agencies, the standard error tables do not reflect all sources of error in the CPS simulations. Therefore, exercise caution when using the standard error tables to compare data from the CPS or CPS simulation with data from other agencies.

Note when using small estimates. Summary measures (such as means, medians, and percent distributions) are shown only when the base is 75,000 or greater. Because of the large standard errors involved, there is little chance that summary measures would reveal useful information when computed on a smaller base. Estimated numbers are shown, however, even though the relative standard errors of these numbers are larger than those for the corresponding percentages. These smaller estimates are provided primarily to enable the data user to combine categories as needed.

Take care when interpreting small differences: even a small amount of nonsampling error can distort a seemingly valid hypothesis test if it involves a borderline difference.

New earnings limit in March 1986; comparability with earlier years. Beginning with the income data collected in March 1986, for the 1985 income reports, income between \$100,000 and \$299,999 was coded in more detail than in the past. Formerly, these income levels were included in the "\$100,000 and over" category. As a result, care must be taken when comparing results after 1984, which have the new earnings limit, with results from previous years. This will primarily affect comparisons of mean income. Data exist for 1985 using the old earnings limit; see the tables at the beginning of the report *Household After-Tax Income: 1985*, Current Population Reports, Series P-23 No. 151, U.S. Government Printing Office, Washington, D.C., 1987.

Standard errors for data from surveys other than CPS. To compute standard errors of data obtained from the SOI reports, see the SOI bulletin, *Individual Income Tax Returns, Preliminary Data: 1986*, winter 1987-88. Additional information on standard errors of different taxes and sources of income can be found in the SOI report, *Individual Income Tax Returns, 1985*, May 1988. To compute standard errors of data obtained from the 1983 AHS, see any of Current Housing Reports, Series H-150-83, *Annual Housing Survey: 1983*. Data from other sources (SSA, BEA, OPM, and the publications on State and local taxes) are from administrative records and as such are not subject to sampling error.

STANDARD ERROR TABLES

Standard errors for data from the CPS sample. To derive, at a moderate cost, standard errors that would apply to many estimates, the Census Bureau has made several approximations. Instead of providing an individual standard error for each estimate, generalized sets of standard errors are provided for various

types of characteristics. As a result, the sets of standard errors provided here show the order of magnitude of the standard error of an estimate rather than the precise standard error.

Standard error tables and their use. There are two ways to estimate standard errors from the tables provided. The first way is to use the figures presented in tables C-1 through C-4 to approximate the standard errors of various estimates for households, families, unrelated individuals, and persons. To approximate the standard error for a specific characteristic, multiply the appropriate standard error in tables C-1 through C-4 by the factor for that characteristic given in table C-5. These factors adjust the generalized standard errors for the combined effect of sample design and the estimating procedure on the value of the characteristic.

Use linear interpolation to approximate standard errors for intermediate values not shown in the generalized tables of standard errors (tables C-1 to C-4). Standard errors of estimated means and medians are provided in the detailed tables.

The second method uses the parameters, *a* and *b*, presented in table C-5. Each type of characteristic has its own set of parameters. These parameters were used to calculate the standard errors in tables C-1 through C-4 and the factors in table C-5. They also may be used to calculate the standard errors for estimated numbers and percentages directly. Computing the standard errors directly from the parameters in table C-5 gives more accurate results than using standard error tables C-1 to C-4. Methods for computation follow.

Standard errors of estimated numbers. To approximate the standard error, S_x , of an estimated number

Table C-1. Standard Errors of Estimated Numbers of Households, Families, Unrelated Individuals, and Persons, for 1985 and 1986 CPS and CPS Simulations: Total or White

(Numbers in thousands)

Size of estimate	Standard error ¹	Size of estimate	Standard error ¹
75	12	7,500	117
100	14	10,000	134
250	22	15,000	162
500	31	25,000	203
1,000	43	50,000	264
2,000	61	100,000	299
3,000	75	125,000	284
5,000	96	160,000	217

¹Multiply these values by the appropriate factor from table C-5 to obtain the correct standard error.

Standard errors in this table are calculated using $a = -0.000010$, $b = 1,896$ from table C-5.

Table C-2. Standard Errors of Estimated Numbers of Households, Families, Unrelated Individuals, and Persons, for 1985 and 1986 CPS and CPS Simulations: Black or Hispanic

(Numbers in thousands)

Size of estimate	Standard error ¹	Size of estimate	Standard error ¹
75.....	12	3,000.....	74
100.....	14	5,000.....	91
250.....	23	7,500.....	105
500.....	32	10,000.....	112
1,000.....	45	15,000.....	113
2,000.....	62	20,000.....	95

¹Multiply these values by the appropriate factor from table C-5 to obtain the correct standard error.

Standard errors in this table are calculated using $a = -0.000081$, $b = 2.067$ from table C-5.

shown in this report from the standard error tables, use the formula

$$S_x = fs \quad (1)$$

where f is the appropriate factor from table C-5, and s is the standard error of the estimate obtained by interpolating in table C-1 or C-2.

For a more accurate approximation, use the formula

$$S_x = \sqrt{ax^2 + bx} \quad (2)$$

from which the standard errors in tables C-1 and C-2 were calculated. Here x is the size of the estimate and a and b are the parameters from table C-5 for the particular characteristic. When calculating standard

errors for numbers from cross-tabulations involving different characteristics, use the f factor or set of parameters which gives the largest standard error.

Computing the standard error of an estimated number—Illustration. Table B of this report shows there were 4,230,000 households with before-tax incomes between \$25,000 and \$27,499 in 1986. Using formula (1), the appropriate factor from table C-5 (1.0), and interpolation from table C-1, the approximate standard error is

$$S_x = (1.0)(88,000) = 88,000$$

Alternatively, using formula (2) with $a = -0.000010$ and $b = 1,896$ from table C-5, the approximate standard error is

$$S_x = \sqrt{(-0.000010)(4,230,000)^2 + 1,896(4,230,000)} = 89,000$$

So the 90-percent confidence interval for the number of households with incomes between \$25,000 - \$27,499 before taxes is from 4,088,000 to 4,372,000, i.e., $4,230,000 \pm (1.6)(89,000)$

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 possible samples.

Standard errors of estimated percentages. The reliability of an estimated percentage, whose numerator and denominator are both sample estimates, depends on its size and on the size of its base (i.e., the total on which it is based). An estimated percentage is relatively more reliable than the corresponding estimate of its numerator, particularly if the percentage is 50 percent or greater.

Table C-3. Standard Errors of Estimated Percentages of Households, Families, Unrelated Individuals, and Persons, for 1985 and 1986 CPS and CPS Simulations: Total or White

Base of percentage (thousands)	Estimated percentage ¹				
	2 or 98	5 or 95	10 or 90	25 or 75	50
75.....	2.2	3.5	4.8	6.9	8.0
100.....	1.9	3.0	4.1	6.0	6.9
250.....	1.2	1.9	2.6	3.8	4.4
500.....	0.9	1.3	1.9	2.7	3.1
1,000.....	0.6	1.0	1.3	1.9	2.2
2,000.....	0.4	0.7	0.9	1.3	1.5
3,000.....	0.4	0.6	0.8	1.1	1.3
5,000.....	0.3	0.4	0.6	0.8	1.0
7,500.....	0.2	0.4	0.5	0.7	0.8
10,000.....	0.2	0.3	0.4	0.6	0.7
15,000.....	0.2	0.3	0.3	0.5	0.6
25,000.....	0.1	0.2	0.3	0.4	0.4
50,000.....	0.09	0.1	0.2	0.3	0.3
100,000.....	0.06	0.1	0.1	0.2	0.2
125,000.....	0.06	0.09	0.1	0.2	0.2
160,000.....	0.06	0.08	0.1	0.2	0.2

¹Multiply these values by the appropriate factor from table C-5 to obtain the correct standard error. Standard errors in this table are calculated using $b = 1,896$ from table C-5.

Table C-4. Standard Errors of Estimated Percentages of Households, Families, Unrelated Individuals, and Persons for 1985 and 1986 CPS and CPS Simulations: Black or Hispanic

Base of estimated percentage (thousands)	Estimated percentage ¹				
	2 or 98	5 or 95	10 or 90	25 or 75	50
75	2.3	3.8	5.0	7.2	8.3
100	2.0	3.1	4.3	6.2	7.2
250	1.3	2.0	2.7	3.9	4.6
500	0.9	1.4	1.9	2.8	3.2
1,000	0.6	1.0	1.4	2.0	2.3
2,000	0.5	0.7	1.0	1.4	1.6
3,000	0.4	0.6	0.8	1.1	1.3
5,000	0.3	0.4	0.6	0.9	1.0
10,000	0.2	0.3	0.4	0.6	0.7
15,000	0.2	0.3	0.4	0.5	0.6
20,000	0.1	0.2	0.3	0.4	0.5

¹Multiply these values by the appropriate factor from table C-5 to obtain the correct standard error. Standard errors in this table are calculated using $b = 2,067$ from table C-5.

Table C-5. a and b Parameters and Factors for Calculating Approximate Standard Errors of Estimated Numbers and Percentages of Households, Families, Unrelated Individuals, and Persons for 1985 and 1986 CPS and CPS Simulations

Characteristic	Parameter		factor
	a	b	
INCOME			
Number of households, families, or unrelated individuals:			
Total or White	-0.000010	1,896	1.00
Black and/or other races	-0.000081	2,067	1.00
Hispanic	-0.000185	2,067	1.00
Number of persons:			
Total or White	-0.000011	2,077	1.05
Black and/or other races	-0.000092	2,374	1.07
Hispanic	-0.000189	2,374	1.07
POVERTY			
Number of households, families, or unrelated individuals:			
Total or White	0.000084	2,067	¹ 1.04
Black/other, Hispanic	0.000084	2,067	¹ 1.00
Number of persons:			
Total/White, Black/other, Hispanic	-0.000052	9,628	2.25
NONINCOME			
Number of households, families, or unrelated individuals:			
Total or White	-0.000010	1,778	0.97
Black and/or other races	-0.000068	1,606	0.88
Hispanic	-0.000137	1,606	0.88
Number of persons:			
Total or White	-0.000025	4,480	1.54
Black and/or other races	-0.000265	6,426	1.76
Hispanic	-0.000548	6,426	1.76
Number of persons in households or families:			
Total or White	-0.000031	5,444	1.69
Black and/or other races	-0.000391	9,475	2.14
Hispanic	-0.000807	9,475	2.14

¹Use the factor for these characteristics only to calculate standard errors of percentages. Use the appropriate a and b parameters and formula (2) for standard errors of estimated numbers.

Table C-6. Year-to-Year Correlation Coefficients for Income Characteristics: 1985 and 1986

Characteristic	Households, families, or unrelated individuals		Persons	
	Income	Poverty	Income	Poverty
Total	0.35	0.35	0.30	0.45
White	0.35	0.30	0.30	0.35
Black, other	0.35	0.35	0.30	0.45
Hispanic	0.55	0.55	0.45	0.65

Again, there are two ways to estimate the standard error of a percentage, $S_{x,p}$. To approximate the standard error using the standard error tables, use the formula

$$S_{(x,p)} = fs \quad (3)$$

In this formula, f is the appropriate factor from table C-5 and s is the standard error of the estimate from table C-3 or C-4.

For a more accurate approximation, use

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

from which the standard errors in tables C-3 and C-4 were calculated. Here x is the base of the percentage, p is the percentage ($0 < p < 100$), and b is the parameter from table C-5 for the characteristic in the numerator. When the numerator and denominator are in different categories, use the factor or parameters from table C-5 for the numerator.

Computing the standard error of an estimated percentage illustration. Table B shows that 4.7 percent of the 89,479,000 households had before-tax incomes between \$25,000 and \$27,499 in 1986. Using formula (3), the appropriate factor from table C-5 (1.0), and $s = 0.1$ (interpolating from table C-3), the standard error of 4.7 percent is approximately

$$S_{x,p} = (1.0)(0.1) = 0.1$$

Using formula (4) and $b = 1,896$ from table C-5, the standard error of 4.7 percent is approximately

$$S_{x,p} = \sqrt{(1,896/89,479,000)4.7(100.0 - 4.7)} = 0.10$$

So, rounded to one decimal place, the 90-percent confidence interval for the estimated percentage of households with before-tax incomes of \$25,000 to \$27,499 is from about 4.5 percent to about 4.9 percent, i.e., 4.7 percent \pm (1.6 \times 0.1 percent).

Standard error of a difference. For a difference between two sample estimates, the standard error is approximately

$$S_{(x-y)} = \sqrt{S_x^2 + S_y^2 - 2r S_x S_y} \quad (5)$$

where S_x and S_y are the standard errors of the estimates x and y , and r represents the correlation between the two estimates. The estimates can be numbers, percentages, ratios, etc. For differences between before- and after-tax estimates, assume a value of 0.7 for r . For differences between 1985 and 1986 estimates, use the value of r for the appropriate characteristic from table C-6. For all other differences, assume that r is zero.

Computing the standard error of a difference—illustration. Table 1 of this report shows that the median before-tax 1986 income of owner-occupied households was \$30,587 and the median before-tax 1986 income of renter-occupied households was \$16,843. The published estimates of the standard errors of these medians are \$147 and \$139, respectively. Therefore, the standard error of the estimated difference of \$13,744 is about

$$S_{x-y} = \sqrt{(147)^2 + (139)^2} = 202$$

This means that the 90-percent confidence interval around the difference is from \$13,421 to \$14,067. Because this interval does not contain zero, we can conclude with 90 percent confidence that 1986 median before-tax income for owner-occupied households was higher than 1986 median before-tax income for renter-occupied households.

Standard error of a ratio. Certain mean values for persons in families or households shown in the tables were calculated as the ratio of two numbers. For example, the mean number of persons per family or household is calculated as

$$\frac{x}{y} = \frac{\text{total number of persons in families or households}}{\text{total number of families or households}}$$

Ratios of before- to after-tax estimates are also discussed in this report. For example, the ratio of mean household income before and after taxes is calculated as

$$\frac{x}{y} = \frac{\text{mean household income before taxes}}{\text{mean household income after taxes}}$$

Standard errors for these ratios may be approximated as shown below. There are three cases to consider. In the first two cases, the denominator y represents a count of families or households of a certain class, and the numerator x represents a count of persons with the characteristic of interest who are members of these families or households. In the third case, the numerator x and denominator y represent before- and after-tax estimates.

Case 1: There is at least one person having the characteristic in every family or household of the class: for example, the mean number of persons per family or the mean number of persons per family with a male householder. For ratios of this kind, approximate the standard errors using the following formula:

$$S_{x/y} = \sqrt{\left(\frac{x}{y}\right)^2 \left[\left(\frac{s_x}{x}\right)^2 + \left(\frac{s_y}{y}\right)^2 - 2r \left(\frac{s_x}{x}\right) \left(\frac{s_y}{y}\right)\right]} \quad (6)$$

The standard error of the estimated number of families or households, S_y , and the standard error of the estimated number of persons with the characteristics in those families or households, S_x , may be calculated by methods described earlier. In formula (6), r represents the coefficient of correlation between the numerator and the denominator of the estimate. In the above examples, and for other ratios of this kind, use 0.7 as an estimate of r .

Case 2: The number of persons having the characteristic in a given family or household may be 0, 1, 2, 3, or more; for example, the mean number of persons under 18 years of age per household. For this kind of ratio, use formula (6), but assume r is equal to zero. If r is actually positive (negative), then this will overestimate (underestimate) the standard error of the ratio.

Case 3: The numerator and denominator represent before- and after-tax estimates. For example, the numerator may be the mean income of families or households of a certain type before taxes, and the denominator may be the mean income for the same category of families or households after taxes. For such ratios, S_x and S_y represent the standard errors of before- and after-tax estimates, respectively. Assume that r is equal to .7 for before- and after-tax estimates.

Standard errors of estimated means and medians. Estimated standard errors are provided for the means and medians of the published income distributions

and need not be calculated. However, the methods for calculating these standard errors are provided below in case some users want to combine two or more income distributions.

Standard error of an estimated mean for grouped data. Use the formula

$$S_x = \sqrt{\frac{b}{y} S^2} \quad (7)$$

to approximate the standard error of a mean, where y is the size of the base and b is the appropriate b parameter for the characteristic from table C-5. The variance, S^2 , is equal to

$$S^2 = \sum_{i=1}^c p_i \bar{x}_i^2 - \bar{x}^2 \quad (8)$$

where

\bar{x} = the mean of the distribution, defined by

$$\sum_{i=1}^c p_i \bar{x}_i$$

c = the number of groups: i indicates a specific group, taking on values 1 through c ;

p_i = the estimated proportion of households, families or persons whose values for the characteristic (x -values) fall in group i ; and

$\bar{x}_i = (A_{i-1} + A_i)/2$, where A_{i-1} and A_i are the lower and upper interval boundaries, respectively, for group i .

The value \bar{x}_i is assumed to be the most representative value of the characteristic for households, families or persons in group i . Group c is open-ended, i.e., no upper interval boundary exists. For this group an approximate average value is

$$\bar{x}_c = (3/2) A_{c-1} \quad (9)$$

Contact Statistical Methods Division of the Census Bureau for the method to compute the standard error of a mean for two or more combined distributions.

Note that because the formula for the standard error of a mean involves several approximations, this statistic will generally be different from the tabled value.

Confidence interval and standard error of a median.

The sampling variability of an estimated median depends upon the form of the distribution as well as the size of its base. One way to approximate the standard error

of an estimated median is to determine a 68-percent confidence interval around the median and then compute the standard error from the confidence interval. (See the section on sampling variability for a general discussion of confidence intervals.) The steps below describe this method.

1. Determine the standard error on 50 percent using either formula (3) or formula (4).
2. Add to and subtract from 50 percent the standard error determined in step 1.
3. Using the distribution of the characteristic, estimate the 68 percent confidence interval for the median by calculating the values corresponding to the two points computed in step 2. Call the resultant values U and L, for the upper and lower limits of the interval, respectively. If all income intervals in the calculation are no wider than \$2,500, calculate the upper and lower limits using linear interpolation. Use the following formula along with a cumulative percentage distribution of the characteristic.

$$x_{pN} = \frac{pN - N_1}{N_2 - N_1}(A_2 - A_1) + A_1 \quad (10)$$

where

x_{pN} = estimated value (e.g., income) for which the number of households, families, or persons, pN ($0 \leq p \leq 1$), in the distribution has larger or equal values. When calculating the confidence interval, x_{pN} is equal to U and L for the upper and lower limits, respectively.

p = the values obtained in step 2. Note that x_{pN} estimates the median when $p = 0.50$.

N = total number of households, families, or persons in the distribution.

A_1 and A_2 = the endpoints of the interval containing x_{pN} (note that $A_1 > A_2$).

N_1 and N_2 = the estimated number of households, families, or persons with values of the characteristic greater than or equal to A_1 and A_2 , respectively (note that $N_1 < N_2$ here).

Use Pareto interpolation, formula (11), instead of linear interpolation, formula (10), when any income interval used in the calculation is wider than \$2,500. The formula for Pareto interpolation is

$$x_{pN} = \exp \left[\frac{\ln(pN/N_1)}{\ln(N_2/N_1)} \ln(A_2/A_1) \right] \times A_1 \quad (11)$$

where "exp" is the exponential function, and "ln" is the natural logarithm function. Note that logarithms and antilogarithms using base 10 or any other base produce a mathematically equivalent result.

4. After the limits of the 68% confidence interval are computed, compute the standard error with the formula

$$S_{\text{median}} = \frac{U-L}{2} \quad (12)$$

This procedure can also be used to estimate standard errors for quintiles or other percentiles: simply substitute the proper percentage value for p and follow the steps outlined above. Note that when combining distributions the resulting median or percentile may lie in an open-ended interval. To calculate such standard errors, call Housing and Household Economic Statistics Division of the Census Bureau to obtain the detailed distribution.

Pareto interpolation should only be used when computing standard errors for income, and the median (or percentile) of the income distribution falls in an interval wider than \$2,500. Because the new, more detailed income intervals used in this report have \$2,500 increments up to \$40,000 for households and families, Pareto interpolation is only needed when estimating standard errors of percentiles or medians larger than \$40,000. Therefore, no illustration of the use of Pareto interpolation is given here. If one is needed, see the source and reliability section of Current Population Reports, Series P-60, No. 123.

Computing the standard error of a median using linear interpolation—illustration. Table 1 of this report shows that the median before-tax income in 1986 for owner-occupied households in the United States is estimated to be \$30,587. Table 1 also shows that the base of the distribution for this median is 57,258,000.

1. Using formula (4) and $b = 1,896$, the standard error of 50% on a base of 57,258,000 is about 0.3 percentage points.
2. Adding to and subtracting from 50 percent the standard error found in step 1 to obtain a 68-percent confidence interval on the estimated median yields limits of 49.7 and 50.3 percent.
3. From table 1, the 1986 before-tax income of 26,483,000 (46.3 percent) of all owner-occupied households was at least \$32,500, and the 1986 before-tax income of 29,288,000 (51.2%) of all owner-occupied households was at least \$30,000. Thus, the entire 68% confidence interval falls in the income interval \$30,000 to \$32,499. The upper and lower limits on the confidence interval for the median before tax income can be calculated using linear interpolation. Using formula (10), the lower limit on the estimate is about

$$\frac{(.503)(57,258,000) - 26,483,000}{29,288,000 - 26,483,000} (\$30,000 - \$32,500) + \$32,500 = \$30,434$$

Similarly, the upper limit is approximately

$$\frac{(.497)(57,258,000) - 26,483,000}{29,288,000 - 26,483,000} (\$30,000 - \$32,500) + \$32,500 = \$30,740$$

So the 68-percent confidence interval on the estimated median of \$30,587 is from \$30,434 to \$30,740. Note that in the calculations above, the higher percentage is used to determine the lower limit, and the converse is also true. Numbers of households, families, etc. with certain income levels are added from the largest income level to the endpoint to determine N_1 and N_2 . This is done so that the procedure described above is compatible with the Pareto interpolation, which only works with larger values; adding numbers of families, households, etc. from the lowest value to the endpoints can be done when using linear interpolation with the appropriate changes in the procedure and formulas described above.

4. Finally, the standard error of the median is $(\$30,740 - \$30,434)/2$, or \$153. NOTE: Published standard errors are calculated by the same method as above, but a different result may be obtained because of roundoff errors. For example, for the above illustration, table 1 gives a standard error of \$147.

Standard error of estimated per capita income. Certain mean values in this report represent the per capita income for households of a certain class. The mean per capita income is approximately equal to

$$x = hm/p \quad (13)$$

where

- h = number of households in the class,
 m = mean income for households in the class,
 p = number of persons in households in the class,
 and
 x = mean per capita income of persons in households

in the class. Use the following formula to approximate standard errors for these means:

$$S_x = \sqrt{(hm/p)^2 [(S_m/m)^2 + (S_p/p)^2 + (S_h/h)^2 - 2r(S_p/p)(S_h/h)]} \quad (14)$$

In this formula, r represents the correlation between p and h . There are two cases to consider, depending on the nature of the class:

Case 1: The class represents households containing a fixed number of persons. For example, h could be the number of three-person households. In this case, there is an exact correlation between the number of persons in households and the number of households. Therefore, $r = 1$ for such households.

Case 2: The class represents households of other demographic types, for example, households in distinct regions, households in which the householder is of a certain age group, and owner-occupied and tenant-occupied households. In this and other cases in which the correlation between p and h is not perfect, use .7 as an estimate of r .

Standard error of an estimated aggregate cash value.

Aggregates such as adjusted gross income or aggregate taxes paid as described in "Methodology and Procedures" are computed by multiplying the mean cash value per household or tax filing unit, \bar{x} , by the number of households or tax filing units, y :

$$T = \bar{x}y \quad (15)$$

where T is the aggregate to be computed. Both \bar{x} and y have a standard error, so the standard error of a product must be computed. Approximate the standard error of an aggregate with the formula

$$S_T = \sqrt{\bar{x}^2 S_y^2 + y^2 S_x^2} \quad (16)$$

where S_x is computed using formula (7) and S_y is computed using formula (2). In the above formula, the correlation r between \bar{x} and y is assumed to be zero. If r is actually positive (negative), then this formula will underestimate (overestimate) the standard error of the product. To compute standard errors of mean taxes paid, call Housing and Household Economic Statistics Division of the Census Bureau to obtain detailed distributions.

Appendix D. Underreporting of Income

This appendix discusses some important aspects of underreporting, its measurement, and presents some estimates of underreporting for the base year 1983. The general survey phenomenon that is commonly termed underreporting actually refers to the tendency of household surveys to underestimate the number of income recipients and/or the amount of income received. There are three main causes for underreporting: failure to report receipt of the income type, underreporting of the amount received, and misclassification of the income type received.

Accurately measuring the extent of underreporting of income is difficult for many of the income types. There are two main components of measuring underreporting: the number of income or recipients and the total amount of income received. Measuring the survey undercount of recipients for the March CPS is extremely difficult because independent estimates (benchmarks or controls) for the CPS noninstitutional, "ever-received during the year" recipient concept are

difficult to validate. In addition, some of the administrative sources required for the derivation of independent estimates have significant errors themselves.

The derivation of accurate underreporting estimates for amounts of income is easier but still not without similar problems. In general, better administrative data are available on the annual amount of benefits received, or income earned, than recipients. Some of the more important problems associated with development of the independent controls for amounts are adjusting independent estimates to the CPS noninstitutional population, significant differences between alternate sources of independent estimates, especially for self-employment income, interest, dividends, and rents, and periodic revisions to the sources of independent estimates that delay availability of data and significantly alter estimates of underreporting. Estimates of underreporting for amounts of money income for 1983 are shown in table D-1.

Table D-1. Comparisons of CPS Aggregate Money income in 1983 with Independently Derived Estimates, by Income Type

(Billions of dollars)

Source of income	Independent estimate	CPS estimate	CPS as a percent of independent estimate
Total	2,402.5	2,164.9	90.1
Wages and salaries	1,632.3	1,616.3	99.0
Self-employment	112.6	130.1	115.5
Social Security ¹	155.2	142.3	91.7
Supplemental Security Income	9.0	7.6	84.9
Aid to Families with Dependent Children	13.8	10.5	76.0
Interest, dividends, and rental income	315.3	143.2	45.4
Veterans payments	14.0	8.8	63.3
Unemployment compensation	26.1	19.7	75.5
Workers' compensation	14.1	6.6	47.0
Private, government, and military pensions	110.1	79.7	72.4

¹Includes Railroad Retirement Benefits.

Appendix E. Summary of Key Before- and After-Tax Household Income Statistics for the 1980-86 Period

Table E-1. Household Income Statistics Before and After Taxes: 1980 to 1986

(In 1986 dollars)

Income	1986	1985	1984	1983 ^r	1982 ^r	1981	1980
Mean household income:							
Before taxes	\$30,759	\$29,625	\$28,991	\$28,184	\$27,813	\$27,472	\$28,027
After taxes	23,683	23,082	22,763	22,173	21,499	21,092	21,652
Median household income:							
Before taxes	\$24,897	\$24,072	\$23,662	\$23,131	\$22,913	\$22,995	\$23,565
After taxes	20,354	19,774	19,560	19,179	18,779	18,713	19,362
Mean amount of taxes paid:							
One or more taxes	\$7,647	\$7,081	\$6,754	\$6,549	\$6,864	\$6,893	\$6,893
Federal income taxes	5,236	4,765	4,566	4,542	4,829	5,223	5,337
State income taxes	1,442	1,356	1,261	1,193	1,099	1,067	1,143
FICA payroll taxes	2,049	1,930	1,794	1,715	1,870	1,651	1,482
Property taxes on own home	851	827	817	811	837	783	765
Taxes as a percentage of total money income:							
One or more taxes	23.4	22.5	21.9	21.8	22.6	23.6	23.1
Federal income taxes	13.9	13.2	13.0	13.1	14.1	15.4	15.3
State income taxes	3.9	3.8	3.6	3.5	3.3	3.2	3.3
FICA payroll taxes	5.7	5.6	5.3	5.2	5.2	5.2	4.6
Property taxes on own home	2.3	2.3	2.4	2.4	2.6	2.4	2.3
Share of total income by fifths:							
Before taxes:							
Lowest fifth	3.7	3.9	4.0	3.9	4.0	4.0	4.1
Second fifth	9.7	9.7	9.8	9.9	9.9	10.0	10.2
Third fifth	16.2	16.3	16.4	16.4	16.5	16.7	16.8
Fourth fifth	24.3	24.4	24.6	24.6	24.6	24.8	24.8
Highest fifth	46.1	45.7	45.3	45.2	45.0	44.4	44.2
After taxes:							
Lowest fifth	4.4	4.6	4.7	4.7	4.7	4.9	4.9
Second fifth	10.9	11.0	11.0	11.1	11.3	11.5	11.6
Third fifth	17.2	17.2	17.2	17.4	17.5	17.8	17.9
Fourth fifth	24.8	24.7	24.8	24.8	24.8	25.0	25.1
Highest fifth	42.6	42.6	42.3	42.1	41.8	40.9	40.6

^r Revised. The 1983 and 1982 figures differ from those originally published. For further details, see Series P-23, Nos. 147 and 143.

Nota: For more detail on any of these years, please consult the appropriate report in Series P-23: No. 126 for 1980, No. 132 for 1981, No. 137 for 1982, No. 143 for 1983, No. 147 for 1984, and No. 151 for 1985.

Table E-2. Mean After Tax Income of Households, by Selected Characteristics: 1980 to 1986

(In 1986 dollars)

Characteristic	1986	1985	1984	1983 ^r	1982 ^r	1981	1980
All households	\$23,683	\$23,082	\$22,763	\$22,173	\$21,499	\$21,092	\$21,652
Race and Hispanic origin:							
White	24,570	23,936	23,614	23,011	22,293	21,876	22,424
Black	16,398	16,094	15,622	15,113	14,732	14,567	15,236
Hispanic ¹	18,817	18,265	18,324	17,660	17,371	17,862	18,030
Region:							
Northeast	24,742	24,103	23,224	22,530	21,493	21,070	21,620
Midwest	22,992	22,332	22,025	21,733	21,331	21,088	21,872
South	22,618	21,982	22,116	21,553	20,921	20,383	20,754
West	25,225	24,819	24,319	23,402	22,718	22,330	22,912
Type of household:							
Family households	27,068	26,315	25,899	25,111	24,343	23,999	24,720
Married-couple families:							
With no related children under 18	29,150	28,245	27,925	27,136	26,013	25,461	25,764
With related children under 18	29,966	28,936	28,331	27,359	26,620	26,238	27,302
Female householder, no husband present with related children under 18	13,134	13,345	12,923	12,455	12,366	12,743	13,161
All other family households	22,071	21,691	21,648	20,734	20,014	20,095	20,874
Nonfamily households	14,945	14,830	14,597	14,343	13,743	13,205	13,266
Age of householder:							
15 to 24 years	14,894	14,794	14,486	14,098	14,750	14,678	15,414
25 to 29 years	21,050	20,530	20,408	19,451	19,259	18,865	19,962
30 to 34 years	23,927	23,519	22,847	22,357	22,019	21,862	22,566
35 to 39 years	27,048	26,425	26,147	25,492	24,300	24,073	25,128
40 to 44 years	29,737	28,865	28,070	27,751	26,548	26,528	27,057
45 to 49 years	31,033	30,074	29,309	28,535	27,526	27,023	28,896
50 to 54 years	29,877	28,853	28,611	28,866	27,142	26,774	27,175
55 to 59 years	27,052	26,880	26,727	25,562	25,440	25,009	25,446
60 to 64 years	23,921	23,304	22,752	22,121	21,551	21,013	21,421
65 years and over	16,811	16,510	16,621	16,162	15,560	14,858	14,612

^r Revised. The 1983 and 1982 figures differ from those originally published. For further details, see Series P-23, Nos. 147 and 143.

¹ Persons of Hispanic Origin may be of any race.

Note: For more detail on any of these years, please consult the appropriate report in Series P-23: No. 126 for 1980, No. 132 for 1981, No. 137 for 1982, No. 143 for 1983, No. 147 for 1984, and No. 151 for 1985.

Appendix F. Facsimile of March 1987 CPS-665 Income Supplement

1. INTERVIEWER CHECK ITEM Only CPS-665 for household <input type="checkbox"/> (Fill all applicable) First CPS-665 of continuation h'ld. ... <input type="checkbox"/> (Items on this page) Second CPS-665 of continuation h'ld. ... <input type="checkbox"/> (Transcribe items Third, fourth, etc CPS-665. <input type="checkbox"/> (3, 6-9, 13) from first CPS-665)	FORM CPS-665  U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS CPS-665 INCOME SUPPLEMENT Form Approved - O.M.B. No. 0607-0254 MARCH 1987	SAMPLE A C <input type="checkbox"/> <input type="checkbox"/>	3. CONTROL NUMBER <table border="1"> <tr> <th>6. FBI NO.</th> <th>7. SEGMENT NO.</th> <th>8. SERIAL NO.</th> <th>9. HOUSEHOLD NO.</th> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>0 0 0</td> <td>0 0 0</td> <td>0 0</td> <td>1</td> </tr> <tr> <td>1 1</td> <td>1 1 1 1</td> <td>1 1</td> <td>2</td> </tr> <tr> <td>2 2</td> <td>2 2 2 2</td> <td>2 2</td> <td>3</td> </tr> <tr> <td>3 3 3</td> <td>3 3 3 3</td> <td>3 3</td> <td>4</td> </tr> <tr> <td>4 4 4 4</td> <td>4 4 4 4</td> <td>4 4</td> <td>5</td> </tr> <tr> <td>5 5 5 5</td> <td>5 5 5 5</td> <td>5 5</td> <td>6</td> </tr> <tr> <td>6 6 6 6</td> <td>6 6 6 6</td> <td>6 6</td> <td>7</td> </tr> <tr> <td>7 7 7 7</td> <td>7 7 7 7</td> <td>7 7</td> <td>8</td> </tr> <tr> <td>8 8 8 8</td> <td>8 8 8 8</td> <td>8 8</td> <td>9</td> </tr> <tr> <td>9 9 9</td> <td>9 9 9</td> <td>9 9</td> <td></td> </tr> </table>	6. FBI NO.	7. SEGMENT NO.	8. SERIAL NO.	9. HOUSEHOLD NO.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0 0 0	0 0 0	0 0	1	1 1	1 1 1 1	1 1	2	2 2	2 2 2 2	2 2	3	3 3 3	3 3 3 3	3 3	4	4 4 4 4	4 4 4 4	4 4	5	5 5 5 5	5 5 5 5	5 5	6	6 6 6 6	6 6 6 6	6 6	7	7 7 7 7	7 7 7 7	7 7	8	8 8 8 8	8 8 8 8	8 8	9	9 9 9	9 9 9	9 9	
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13. TYPE INTERVIEW (CPS-665) <input type="checkbox"/> Personal <input type="checkbox"/> Telephone (Fill 13A below) <input type="checkbox"/> Type A Noninterview (Transcribe items 1, 3, 6-10 on this page)																																																			
13A. DESCRIPTION OF LONGEST JOB (Items 47A-E) IN THIS CPS-665: Yes <input type="checkbox"/> No <input type="checkbox"/>																																																			
77. INTERVIEWER CHECK ITEM TENURE (from Control Card item 10) Owned or being bought <input type="checkbox"/> Rented <input type="checkbox"/> No cash rent <input type="checkbox"/>	84. INTERVIEWER CHECK ITEM Owned or being bought in (Ship to 77) Rented or no cash rent marked in (Ship to 77)		91. What type of fuel is used most to heat this house (apartment)? <input checked="" type="checkbox"/> Gas - Probe from underground pipes <input type="checkbox"/> bottled, tank, or LP ... <input type="checkbox"/> Electricity <input type="checkbox"/> Fuel oil, kerosene, etc. ... <input type="checkbox"/> Coal or coke <input type="checkbox"/> Wood <input type="checkbox"/> Other <input type="checkbox"/> No fuel used <input type="checkbox"/>																																																
78. How many housing units are in this structure? 1 <input type="checkbox"/> 5-9 <input type="checkbox"/> 2 <input type="checkbox"/> 10+ <input type="checkbox"/> 3-4 <input type="checkbox"/>	85. Is this house a public housing project that is owned by a local housing authority or other public agency? Yes <input type="checkbox"/> (Ship to 85) No <input type="checkbox"/>																																																		
79. INTERVIEWER CHECK ITEM Some household members 18 years of age or over (Ship to 79) No household members 5-18 years of age (Ship to 81)	86. Did anyone in this household get food stamps at any time during 1986? Yes <input type="checkbox"/> (Ship to 86) No <input type="checkbox"/> (Ship to 91)		92. Since October 1, 1986, was your household without heat for one or more days because you were unable to pay the utility or fuel bill? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																																																
80. During 1986 how many of the children in this household usually ate a complete hot lunch offered at school? <input type="checkbox"/> All <input type="checkbox"/> Some, but not all - Mark number 1 2 3 4 5 6 7 8 9 + <input type="checkbox"/> None	88. How many of the people now living here were covered by food stamps during 1986? All 1 2 3 4 5 6 7 8 9 + <input type="checkbox"/>		93. The government has an energy assistance program which helps pay heating costs. This assistance can be received directly by the household or it can be paid directly to the electric company, gas company or fuel dealer. Since October 1, 1986, has this household received assistance of this type from the federal, state, or local government? Yes <input type="checkbox"/> (Ask 94) No <input type="checkbox"/> (End questions)																																																
81. INTERVIEWER CHECK ITEM (from Control Card item 29) <table border="0"> <tr> <td>A <input type="checkbox"/></td> <td>E <input type="checkbox"/></td> <td>J <input type="checkbox"/></td> </tr> <tr> <td>B <input type="checkbox"/></td> <td>F <input type="checkbox"/></td> <td>K <input type="checkbox"/></td> </tr> <tr> <td>C <input type="checkbox"/></td> <td>G <input type="checkbox"/></td> <td>L <input type="checkbox"/></td> </tr> <tr> <td>D <input type="checkbox"/></td> <td>H <input type="checkbox"/></td> <td>M <input type="checkbox"/></td> </tr> <tr> <td>I <input type="checkbox"/></td> <td>N <input type="checkbox"/></td> <td>O <input type="checkbox"/></td> </tr> </table> If c.c. item 29 is A-I or NA, fill 82 End questions	A <input type="checkbox"/>	E <input type="checkbox"/>	J <input type="checkbox"/>	B <input type="checkbox"/>	F <input type="checkbox"/>	K <input type="checkbox"/>	C <input type="checkbox"/>	G <input type="checkbox"/>	L <input type="checkbox"/>	D <input type="checkbox"/>	H <input type="checkbox"/>	M <input type="checkbox"/>	I <input type="checkbox"/>	N <input type="checkbox"/>	O <input type="checkbox"/>	89. In how many months of 1986 were food stamps received? <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9		94. Altogether, how much energy assistance has been received since October 1, 1986? <input type="checkbox"/> 0 0 0 0 <input type="checkbox"/> 1 1 1 1 <input type="checkbox"/> 2 2 2 2 <input type="checkbox"/> 3 3 3 3 <input type="checkbox"/> 4 4 4 4 <input type="checkbox"/> 5 5 5 5 <input type="checkbox"/> 6 6 6 6 <input type="checkbox"/> 7 7 7 7 <input type="checkbox"/> 8 8 8 8 <input type="checkbox"/> 9 9 9 9																																	
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82. INTERVIEWER CHECK ITEM All or some marked in 80 <input type="checkbox"/> (Ask 83) None marked in 80 or 80 blank <input type="checkbox"/> (Ship to 84)	90. What was the value of all the food stamps received during 1986? (Add monthly amounts to obtain annual figure) \$ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> (Nearest dollar)		95. During 1986 how many of the children in this household received free or reduced price lunches because they qualified for the Federal School Lunch program? <input type="checkbox"/> All <input type="checkbox"/> Some, but not all - Mark number 1 2 3 4 5 6 7 8 9 + <input type="checkbox"/> None																																																
83. During 1986 how many of the children in this household received free or reduced price lunches because they qualified for the Federal School Lunch program? <input type="checkbox"/> All <input type="checkbox"/> Some, but not all - Mark number 1 2 3 4 5 6 7 8 9 + <input type="checkbox"/> None	90. What was the value of all the food stamps received during 1986? (Add monthly amounts to obtain annual figure) \$ <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> (Nearest dollar)	95. During 1986 how many of the children in this household received free or reduced price lunches because they qualified for the Federal School Lunch program? <input type="checkbox"/> All <input type="checkbox"/> Some, but not all - Mark number 1 2 3 4 5 6 7 8 9 + <input type="checkbox"/> None	CODER NUMBER A B C D E F G H J K L M <input type="checkbox"/> <input type="checkbox"/>																																																

FOLLOW-UP INFORMATION — ALL 888'S MUST BE MAILED TO R.O. BY MARCH 28

- (1) Complete items 3, 6-9, 77, 79, and 81 on page 1
- (2) Complete items 18A, 18D, 18G1 for each 14+ person
- (3) Complete items 56E and 67.
- (4) Note Names and Line No.'s of persons needing followup. Also, as necessary note address, telephone, and 'best time to call' information from control card.

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FACSIMILE

NOTES:

IF CIVILIAN 14+, BEGIN WITH ITEM 29A. IF CURRENT ARMED FORCES MEMBER, BEGIN WITH ITEM 48A.

18A. LINE NUMBER	POP. STAT.	18D. AGE	18G1. Sex	OFFICE USE ONLY					INDUSTRY	OCCUPATION
0	0	CIV	1	Male	0	0	0	0	0	0
1	1	14+	1		1	1	1	1	1	1
2	2	0	2		2	2	2	2	2	2
3	3	0	3		3	3	3	3	3	3
4	4	A.F.	4	Female	4	4	4	4	4	4
5	5	0	5		5	5	5	5	5	5
6	6	0	6		6	6	6	6	6	6
7	7	0	7		7	7	7	7	7	7
8	8	0	8		8	8	8	8	8	8
9	9	0	9		9	9	9	9	9	9

<p>29A. Did ... work at a job or business at any time during 1966?</p> <p>Yes <input type="radio"/> (Ship to 33) No <input type="radio"/> 7</p> <p>29B. Did ... do any temporary, part-time, or seasonal work even for a few days during 1966?</p> <p>Yes <input type="radio"/> (Ship to 33) No <input type="radio"/> 7</p> <p>30. Even though ... did not work in 1966, did he/she spend any time trying to find a job or on layoff?</p> <p>Yes <input type="radio"/> 7 No <input type="radio"/> (Ship to 32)</p> <p>31. How many different weeks was ... looking for work or on layoff from a job?</p> <p style="text-align: center;"> <input style="width: 50px; height: 20px;" type="text"/> (Mark weeks) → </p> <p>32. What was the main reason ... did not work in 1966?</p> <p> <input type="radio"/> Ill or disabled and unable to work <input type="radio"/> Retired <input type="radio"/> Taking care of home or family <input type="radio"/> Going to school <input type="radio"/> Could not find work <input type="radio"/> Doing something else </p>	<p>37. Were the (entry in item 36) weeks ... was looking for work (or on layoff) all in one stretch?</p> <p>Yes - 1 stretch <input type="radio"/> No - 2 stretches <input type="radio"/> No - 3+ stretches <input type="radio"/> (Go to 38)</p> <p><i>(If the entries in items 33 and 36 add to 52 weeks, ship to item 39. If not, ask 38)</i></p> <p>38. What was the main reason ... was not working or looking for work in the remaining weeks of 1966?</p> <p> <input type="radio"/> Ill or disabled and unable to work <input type="radio"/> Taking care of home or family <input type="radio"/> Going to school <input type="radio"/> Retired <input type="radio"/> No work available <input type="radio"/> Other (Specify) </p> <p>38. For how many employers did ... work in 1966? If more than one at same time, only count it as one employer.</p> <p>1 <input type="radio"/> (Ship to 41) 2 <input type="radio"/> 3+ <input type="radio"/> (Ask 40)</p> <p>40. Did ... look for work between jobs in 1966?</p> <p>Yes <input type="radio"/> No <input type="radio"/></p> <p>41. In the weeks that ... worked, how many hours did ... usually work per week?</p> <p style="text-align: center;"> <input style="width: 50px; height: 20px;" type="text"/> (Mark weeks) → </p> <p>42. INTERVIEWER CHECK ITEM</p> <p>Number of weeks in item 31 is:</p> <p>1-30 <input type="radio"/> (Ship to 44) 30+ <input type="radio"/> (Ask 43)</p> <p>43. During 1966, were there one or more weeks in which ... worked less than 38 hours? Exclude time off with pay because of holidays, vacation, days off, or sickness.</p> <p>Yes <input type="radio"/> (Ask 44) No <input type="radio"/> (Ship to 46)</p> <p>44. How many weeks did ... work less than 38 hours in 1966?</p> <p style="text-align: center;"> <input style="width: 50px; height: 20px;" type="text"/> (Mark weeks) → </p> <p>46. What was the main reason ... worked less than 38 hours per week?</p> <p> <input type="radio"/> Could not find a full time job <input type="radio"/> Wanted to work part time or only able to work part time <input type="radio"/> Slack work or material shortage <input type="radio"/> Other </p>	<p>48. What was ...'s longest job during 1966? (Compare with entry in CPS-1 item 23)</p> <p>Same as item 23 <input type="radio"/> (Ship to 48A or 48B) Different from item 23 or item 23 blank <input type="radio"/> (Specify in 47A-47E)</p> <p>47A. For whom did ... work?</p> <p>-----</p> <p>47B. What kind of business or industry is this?</p> <p>-----</p> <p>47C. What kind of work was ... doing?</p> <p>-----</p> <p>47D. What were ...'s most important activities or duties?</p> <p>-----</p> <p>47E. CLASS OF WORKER</p> <p>Private <input type="radio"/> P Self-employment <input type="radio"/> SE</p> <p>Federal Gov't. <input type="radio"/> F (Ask Inc.) Yes <input type="radio"/> No <input type="radio"/> SE (Ask 48B)</p> <p>State Gov't. <input type="radio"/> S 48A) Without pay <input type="radio"/> WP (Ship to 48A)</p> <p>Local Gov't. <input type="radio"/> L 48A)</p> <p>48A. How much did ... earn from this employer before deductions during 1966?</p> <p style="text-align: center;"> <input style="width: 50px; height: 20px;" type="text"/> </p> <p>48B. What was ...'s net earnings from this business/farm after expenses during 1966?</p> <p style="text-align: center;"> <input style="width: 50px; height: 20px;" type="text"/> </p> <p>48C. Did ... lose any money during 1966?</p> <p> <input type="radio"/> Lost money <input type="radio"/> No </p> <p>48D. Did ... lose any money from any other work he/she did during 1966?</p> <p>Yes <input type="radio"/> No <input type="radio"/> (Ship to 50A)</p> <p>48E. How much did ... earn from:</p> <p> <input type="radio"/> All other employers? His/her own business after expenses? His/her farm after expenses? </p> <p>Yes <input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/></p> <p style="text-align: center;"> <input style="width: 50px; height: 20px;" type="text"/> <input style="width: 50px; height: 20px;" type="text"/> <input style="width: 50px; height: 20px;" type="text"/> </p> <p>50A. INTERVIEWER CHECK ITEM Longest job (item 46) is farmer?</p> <p>Yes <input type="radio"/> 7 No <input type="radio"/> (Ship to 51A)</p> <p>50B. Other than the farm income we have already talked about, did ... receive any income from agricultural work done for others, recreational services, or government farm programs other than loans?</p> <p>Yes <input type="radio"/> (Probe and make corrections to 48A or 48B) No <input type="radio"/> (Ask 51A)</p> <p>51A. At any time during 1966 did ... receive any State or Federal unemployment compensation?</p> <p>Yes <input type="radio"/> 7 No <input type="radio"/> (Ship to 52A)</p> <p>Any Supplemental Unemployment Benefits (SUB)? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/></p> <p>Any Union unemployment or strike benefits? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/></p>
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<p>52A. During 1966 did ... receive any Worker's Compensation payments or other payments as a result of a job related injury or illness? (Exclude sick pay and disability retirement)</p> <p>Yes <input type="radio"/> 7 No <input type="radio"/> (Ship to 53)</p> <p>52B. What was the source of these payments?</p> <p> <input type="radio"/> State Workers Compensation <input type="radio"/> Employer or employer's insurance <input type="radio"/> Own insurance <input type="radio"/> Other </p> <p>52C. How much compensation did ... receive during 1966?</p> <p style="text-align: center;"> <input style="width: 50px; height: 20px;" type="text"/> </p> <p>53. How long has ... lived in this house (Apt.) 1 year ago; that is, on March 1, 1966?</p> <p>Yes <input type="radio"/> (Ship to 55) No <input type="radio"/> (Ask 54A)</p> <p>54A. Where did ... live on March 1, 1966?</p> <p>1. Name of State, foreign country, U.S. possession, etc. →</p> <p>2. Name of county →</p> <p>3. Name of city, town, village, etc. →</p> <p>54B. Did ... live inside the limits of that city, town, village, etc.?</p> <p>Yes <input type="radio"/> No <input type="radio"/></p> <p>54C. Did ... also live in that house (Apt.) 5 years ago; that is, on March 1, 1962?</p> <p>Yes <input type="radio"/> (Next person) No <input type="radio"/> (Ask 55)</p> <p>55. Where was ... living 5 years ago, on March 1, 1962? (Mark category in reference to ...'s current address)</p> <p> <input type="radio"/> Current house (Apt.) <input type="radio"/> Different house (Apt.) this county <input type="radio"/> Different county, this State <input type="radio"/> Different state (Specify) <input type="radio"/> Outside United States </p>

COMPLETE LINE NUMBER FOR ALL PERSONS 14+ BEFORE BEGINNING QUESTIONS ON EACH PAGE (NAME IS OPTIONAL)

NAME (Optional)	Page 3	Page 4	Page 5	Page 6
LINE NUMBER (from 18A)	0 0 1 1 2 2 3 3 4 5 6 7 8 9			
66. DURING 1988 DID ANYONE IN THIS HOUSEHOLD RECEIVE: 66A. Any Social Security payments from the U.S. Government? Yes <input type="radio"/> 7 No <input type="radio"/> (Skip to 57A)				
66B. Who received Social Security payments either for themselves or as combined payments with other family members? Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>
<i>Complete 56C & 56D for each person with a "Yes" in 56B</i> 66C. In how many months of 1988 did ... receive Social Security payments?	Months 0 1 2 3 4 5 6 7 8 9	Months 0 1 2 3 4 5 6 7 8 9	Months 0 1 2 3 4 5 6 7 8 9	Months 0 1 2 3 4 5 6 7 8 9
66D. How much did ... receive in Social Security payments during 1988? <i>(separate combined payments)</i> NOTE: Social Security checks usually arrive on the 3rd of every month in a gold colored envelope. Amount should be before the Medicare deduction.	\$ 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9 <input type="radio"/> Already included	\$ 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9 <input type="radio"/> Already included	\$ 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9 <input type="radio"/> Already included	\$ 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9 <input type="radio"/> Already included
66E. INTERVIEWER CHECK ITEM <input type="radio"/> Children under 23 present - (Ask 56F) <input type="radio"/> No children under 23 present - (Skip to 57)				
66F. Did anyone in this household receive any separate Social Security payments who were not listed on the Social Security card for the children in this household? Yes <input type="radio"/> <i>(If "Yes," make necessary changes to check 56C and 56D for person receiving)</i>				
67. DURING 1988 DID ANYONE IN THIS HOUSEHOLD RECEIVE: 67A. Any SSI payments, that is, Supplemental Security Income? Yes <input type="radio"/> 7 No <input type="radio"/> (Go to next page)				
67B. Who received SSI? (Anyone else?) <i>(Complete 57C for each person with "Yes" in 57B)</i>	Yes <input type="radio"/> No <input type="radio"/>			
67C. How much did ... receive in Supplemental Security Income during 1988? (Include both Federal and State SSI) NOTE: Federal SSI checks usually arrive on the first of every month in a blue colored envelope. <i>(Go to 57C for next person with "Yes" in 57B or go to next page)</i>	\$ 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9
Medicare Deduction: \$16.80/month	Annual Total for Social Security or Federal SSI = last check x 11.85			

NAME (Optional)	Page 3	Page 4	Page 5	Page 6
LINE NUMBER (Item 18A)				
80A. Does anyone in this household have a health problem or disability which prevents them from working or which limits the kind or amount of work they can do? Yes <input type="radio"/> No <input type="radio"/> (Ship to 60A)				
80B. Who is that? (Anyone else?)	Yes <input type="radio"/> No <input type="radio"/>			
80A. Is there anyone in this household who has a service-connected disability or who ever retired or left a job for health reasons? Yes <input type="radio"/> No <input type="radio"/> (Ship to 61A)				
80B. Who is that? (Anyone else?)	Yes <input type="radio"/> No <input type="radio"/>			
81A. INTERVIEWER CHECK ITEM <input type="radio"/> "No" to both 80A and 60A (Ship to next page) <input type="radio"/> "Yes" in either 80A or 60A				
61B. (Other than Social Security) did ... receive any income in 1988 as a result of this health problem (disability/handicap)? <i>(Complete 61B to 61G for each person with a "Yes" in either 59B or 60B)</i>	Yes <input type="radio"/> No <input type="radio"/> (Ask 61B for next person with "Yes" in 59B or 60B or ship to next page)	Yes <input type="radio"/> No <input type="radio"/> (Ask 61B for next person with "Yes" in 59B or 60B or ship to next page)	Yes <input type="radio"/> No <input type="radio"/> (Ask 61B for next person with "Yes" in 59B or 60B or ship to next page)	Yes <input type="radio"/> No <input type="radio"/> (Ask 61B for next person with "Yes" in 59B or 60B or ship to next page)
61C. What was the source of this income? (Any other income related to this health condition or disability?)				
01. Veterans' disability 02. Worker's compensation 03. Company or union disability 04. Federal Government (Civil Service) disability 05. U.S. military retirement disability 06. State or local gov't. employee disability 07. U.S. Railroad Retirement disability 08. Accident or disability insurance 09. Black Lung miner's disability 10. State temporary sickness 11. Other or don't know (Specify in notes)	Yes <input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/>
61D. Income Source Code	<input type="radio"/> I <input type="radio"/> 1 2 3 4 5 6 7 8 9	<input type="radio"/> I <input type="radio"/> 1 2 3 4 5 6 7 8 9	<input type="radio"/> I <input type="radio"/> 1 2 3 4 5 6 7 8 9	<input type="radio"/> I <input type="radio"/> 1 2 3 4 5 6 7 8 9
61E. How much did ... receive from ... (read source) during 1988? <i>(Complete 61F and 61G for each income source marked or go to 61B for next person with "Yes" in either 59B or 60B or go to next page)</i>	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9
61F. Income Source Code	<input type="radio"/> I <input type="radio"/> 1 2 3 4 5 6 7 8 9	<input type="radio"/> I <input type="radio"/> 1 2 3 4 5 6 7 8 9	<input type="radio"/> I <input type="radio"/> 1 2 3 4 5 6 7 8 9	<input type="radio"/> I <input type="radio"/> 1 2 3 4 5 6 7 8 9
61G. How much did ... receive from ... (read source) during 1988? <i>(Go to 61B for next person with "Yes" in either 59B or 60B or go to next page)</i>	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9

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NAME (Optional)			
LINE NUMBER (from 184)	Page 3	Page 4	Page 5
62A. (Other than Social Security) During 1986 did anyone in this household receive any pension or retirement income from a previous employer or union (pass), or any other type of retirement income? Yes <input type="radio"/> 7 <input checked="" type="radio"/> No <input type="radio"/> (Go to next page)			
62B. Who received pension or retirement income? (Anyone else?)	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>
(Complete 62C-62G for each person with a "Yes" in 62B)			
62C. What was the source of this income? (Any other pension or retirement income?)			
1. Company or union pension (inc. profit sharing)	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>
2. Federal Government (Civil Service) retirement	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>
3. U.S. Military retirement	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>
4. State or local government pension	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>
5. U.S. Railroad Retirement	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>
6. Regular payments from annuities or paid up insurance policies	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>
7. Other sources including IRA or KEOUGH or don't know (Specify in notes)	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>
(Complete 62D and 62E for first "Yes" in 62C)			
62D. INCOME SOURCE CODE	I 2 3 4 5 6 7	I 2 3 4 5 6 7	I 2 3 4 5 6 7
62E. How much did ... receive from (read source) during 1986?	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9
(FIN 62F and 62G for next income source marked or go to 62C for next person with "Yes" in 62B or Skip to next page)			
62F. INCOME SOURCE CODE	I 2 3 4 5 6 7	I 2 3 4 5 6 7	I 2 3 4 5 6 7
62G. How much did ... receive from (read source) during 1986?	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9
(Go to 62C for next person with "Yes" in 62B or Skip to next page)			
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NAME (Optional)	Page 3	Page 4	Page 5	Page 6
LINE NUMBER (from 184)				
63. AT ANYTIME DURING 1998 DID ANYONE IN THIS HOUSEHOLD: 63A. Have money in any kind of savings account or money market fund? Yes <input type="radio"/> No <input type="radio"/> Have any bonds, treasury notes, or certificates of deposit? Yes <input type="radio"/> No <input checked="" type="radio"/> (If "Yes" marked in any, ask 63B, otherwise ship to 64A) Have an interest earning checking account or any other investments which pay interest? Yes <input type="radio"/> No <input type="radio"/>				
63B. Which members of this household had ...? (Anyone else?) (Include each in case of joint accounts or ownership) Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>
(Ask 63C for each person with "Yes" in 63B) 63C. How much did ... receive in interest from these sources during 1998, including even small amounts credited to accounts? (Separate amounts for joint ownership) (Ask 63C for next person with "Yes" in 63B or ask 64)	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 <input type="radio"/> Already included 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 <input type="radio"/> Already included 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 <input type="radio"/> Already included 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 <input type="radio"/> Already included 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9
64. AT ANYTIME DURING 1998 DID ANYONE IN THIS HOUSEHOLD: 64A. Own any shares of stock in corporations (pass) or any mutual fund shares? Yes <input type="radio"/> No <input checked="" type="radio"/> (Ship to 65A)				
64B. Which members of this household? (Anyone else?) (Include each in case of joint ownership) Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>
(Ask 64C for each person with "Yes" in 64B) 64C. How much did ... receive in dividends from stock (mutual funds) during 1998? (Separate amounts for joint ownership) (Ask 64C for next person with "Yes" in 64B or ask 65)	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 <input type="radio"/> None <input type="radio"/> Already included 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 <input type="radio"/> None <input type="radio"/> Already included 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 <input type="radio"/> None <input type="radio"/> Already included 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 <input type="radio"/> None <input type="radio"/> Already included 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9
65. DURING 1998 DID ANYONE IN THIS HOUSEHOLD: 65A. Own any land, business property, apartments, or houses which were rented to others? Yes <input type="radio"/> No <input type="radio"/> Receive income from royalties or from roomers or boarders? (Exclude amounts paid by relatives) Yes <input type="radio"/> No <input checked="" type="radio"/> Receive income from estates or trusts? (Exclude estates or trusts already reported) Yes <input type="radio"/> No <input type="radio"/> (If "Yes" marked in any, ask 65B, otherwise ship to next page)				
65B. Who received this rent (income)? (Anyone else?) (Include each in case of joint ownership) Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>
(Ask 65C for each person with "Yes" in 65B) 65C. How much did ... receive in income from rent (roomers or boarders, estates, trusts, or royalties) after expenses for 1998? (Separate amounts for joint ownership)	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 <input type="radio"/> Lost money <input type="radio"/> Already included 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 <input type="radio"/> Lost money <input type="radio"/> Already included 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 <input type="radio"/> Lost money <input type="radio"/> Already included 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 <input type="radio"/> Lost money <input type="radio"/> Already included 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9

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NAME (Optional)				
LINE NUMBER (Item 18A)	Page 3	Page 4	Page 5	Page 6
88A. During 1988 did anyone in this household attend school beyond the high school level including a college, university or other schools (including vocational, business, or trade schools)? Yes <input type="radio"/> 7 No <input type="radio"/> (Go to next page) <input checked="" type="checkbox"/>				
88B. Did anyone receive any educational assistance for tuition, fees, books, or living expenses during 1988? (Exclude loans or assistance from household members) Yes <input type="radio"/> 7 No <input type="radio"/> (Go to next page) <input checked="" type="checkbox"/>				
88C. Which member received assistance? (Anyone else?)	Yes <input type="radio"/> No <input type="radio"/>			
(Complete 66D to 66H for each person with "Yes" in 66C) 88D. What type of assistance did ... receive? (Any other assistance?)				
a. G.I. Bill or Veterans' educational assistance program	Yes <input type="radio"/> No <input type="radio"/>			
b. Pell Grant or Basic Education Opportunity Grant	Yes <input type="radio"/> No <input type="radio"/>			
c. Some other government assistance	Yes <input type="radio"/> No <input checked="" type="checkbox"/>			
d. Scholarships, grants, etc., from the school	Yes <input type="radio"/> No <input type="radio"/>			
e. Other assistance (employers, friends, etc.) (Exclude assistance from household members)	Yes <input type="radio"/> No <input type="radio"/>			
88E. INTERVIEWER CHECK ITEM G.I. Bill marked "YES" in 88D?	Yes <input type="radio"/> (Ask 66F) No <input type="radio"/> (Ship to 66H)	Yes <input type="radio"/> (Ask 66F) No <input type="radio"/> (Ship to 66H)	Yes <input type="radio"/> (Ask 66F) No <input type="radio"/> (Ship to 66H)	Yes <input type="radio"/> (Ask 66F) No <input type="radio"/> (Ship to 66H)
88F. How much did ... receive in G.I. Bill benefits during 1988?	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9
88G. INTERVIEWER CHECK ITEM Sources other than G.I. Bill marked "Yes" in 88D?	Yes <input type="radio"/> (ASK 66H) No <input type="radio"/> (Ship to next person marked "Yes" in 66C or Go to next page)	Yes <input type="radio"/> (ASK 66H) No <input type="radio"/> (Ship to next person marked "Yes" in 66C or Go to next page)	Yes <input type="radio"/> (ASK 66H) No <input type="radio"/> (Ship to next person marked "Yes" in 66C or Go to next page)	Yes <input type="radio"/> (ASK 66H) No <input type="radio"/> (Ship to next person marked "Yes" in 66C or Go to next page)
88H. How much did ... receive (over) educational assistance during 1988? (Go to 66D for next person marked "Yes" in 88C or Go to next page)	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9	\$ <input type="text"/> 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5 5 5 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9
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NAME (Optional)	Page 3	Page 4	Page 5	Page 6
70. DURING 1998 DID ANYONE IN THIS HOUSEHOLD RECEIVE: 70A. Any child support payments? Yes <input type="radio"/> 7 <input checked="" type="checkbox"/> No <input type="radio"/> (Skip to 71A)				
70B. Who received these payments? (Anyone else?) <i>(Complete 70C for each person with a "Yes" in 70B)</i>	Yes <input type="radio"/> No <input type="radio"/>			
70C. How much did ... receive in child support payments? <i>(Ask 70C for next person with "Yes" in 70B or ask 71)</i>	\$ <input type="text"/> 00000 11111 22222 33333 44444 55555 66666 77777 88888 99999			
71. DURING 1998 DID ANYONE IN THIS HOUSEHOLD RECEIVE: 71A. Any alimony payments? Yes <input type="radio"/> 7 <input checked="" type="checkbox"/> No <input type="radio"/> (Skip to 72A)				
71B. Who received these payments during 1998? (Anyone else?) <i>(Complete 71C for each person with a "Yes" in 71B)</i>	Yes <input type="radio"/> No <input type="radio"/>			
71C. How much did ... receive in alimony payments during 1998? <i>(Ask 71C for next person with "Yes" in 71B or ask 72)</i>	\$ <input type="text"/> 00000 11111 22222 33333 44444 55555 66666 77777 88888 99999			
72. DURING 1998 DID ANYONE IN THIS HOUSEHOLD RECEIVE: 72A. Any (other) regular financial assistance from friends or relatives not living in this household? (Do not include loans) Yes <input type="radio"/> 7 <input checked="" type="checkbox"/> No <input type="radio"/> (Skip to 73)				
72B. Who received this assistance? (Anyone else?) <i>(Ask 72C for each person with a "Yes" in 72B)</i>	Yes <input type="radio"/> No <input type="radio"/>			
72C. How much assistance did ... receive during 1998? <i>(Ask 72C for next person with "Yes" in 72B or go to next page)</i>	\$ <input type="text"/> 00000 11111 22222 33333 44444 55555 66666 77777 88888 99999			
73. Sometimes people forget about small amounts of income, or income received for only part of the year. Did anyone in this household receive income from: 73A. Hobbies, home business, farm, or business interests not already covered? Yes <input type="radio"/> No <input type="radio"/> <i>(If "Yes" marked in any, ask 73B, otherwise go to next page)</i> Any unemployment compensation, welfare, or any other money income not already covered? Yes <input type="radio"/> No <input checked="" type="checkbox"/>	Yes <input type="radio"/> No <input type="radio"/>			
73B. Who received this income? (Anyone else?) <i>(Complete 73C & 73D for each person with a "Yes" in 73B)</i>	Yes <input type="radio"/> No <input type="radio"/>			
73C. What was the source of this income? (Specify) _____ 73D. How much did ... receive (Altogether) in 1998? <i>(Go to 73C for next person with "Yes" in 73B or go to next page)</i>	\$ <input type="text"/> 00000 11111 22222 33333 44444 55555 66666 77777 88888 99999			
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NAME (Optional)	Page 3	Page 4	Page 5	Page 6
LINE NUMBER (Item 18A)	Page 3	Page 4	Page 5	Page 6
74. INTERVIEWER CHECK ITEM Who worked last year? ("YES" in 28A or 28B)	Yes <input type="radio"/> No <input checked="" type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input checked="" type="radio"/>	Yes <input type="radio"/> No <input type="radio"/>
Complete 74A-74E for each person with "Yes" in 74) 74A. Other than Social Security did the (any) employer or union that ... worked for in 1988 have a pension or other type of retirement plan for any of its employees?	Yes <input type="radio"/> (Ask 74B) No <input type="radio"/> Don't know <input type="radio"/> (Ship to 74C)	Yes <input type="radio"/> (Ask 74B) No <input type="radio"/> Don't know <input type="radio"/> (Ship to 74C)	Yes <input type="radio"/> (Ask 74B) No <input type="radio"/> Don't know <input type="radio"/> (Ship to 74C)	Yes <input type="radio"/> (Ask 74B) No <input type="radio"/> Don't know <input type="radio"/> (Ship to 74C)
74B. Was ... included in that plan?	Yes <input type="radio"/> No <input type="radio"/>			
74C. Was ... included in a group health insurance plan on the (any) job he/she held during 1988?	Yes <input type="radio"/> (Ask 74D) No <input type="radio"/> (Go to 74A for next person with "Yes" in 74 or ship to 75) DK <input type="radio"/>	Yes <input type="radio"/> (Ask 74D) No <input type="radio"/> (Go to 74A for next person with "Yes" in 74 or ship to 75) DK <input type="radio"/>	Yes <input type="radio"/> (Ask 74D) No <input type="radio"/> (Go to 74A for next person with "Yes" in 74 or ship to 75) DK <input type="radio"/>	Yes <input type="radio"/> (Ask 74D) No <input type="radio"/> (Go to 74A for next person with "Yes" in 74 or ship to 75) DK <input type="radio"/>
74D. Did ...'s employer or union pay for all, part, or none of the cost of this health plan?	All <input type="radio"/> Part <input checked="" type="radio"/> None <input type="radio"/>	All <input type="radio"/> Part <input type="radio"/> None <input type="radio"/>	All <input type="radio"/> Part <input checked="" type="radio"/> None <input type="radio"/>	All <input type="radio"/> Part <input type="radio"/> None <input type="radio"/>
74E. Other than ... who else in this household was covered by this group health insurance plan? (Go to 74A for next person with "Yes" in 74 or go to 75)	Spouse only <input type="radio"/> Child(ren) only <input type="radio"/> Spouse and child(ren) <input type="radio"/> Self only <input type="radio"/> Other <input type="radio"/>	Spouse only <input type="radio"/> Child(ren) only <input type="radio"/> Spouse and child(ren) <input type="radio"/> Self only <input type="radio"/> Other <input type="radio"/>	Spouse only <input type="radio"/> Child(ren) only <input type="radio"/> Spouse and child(ren) <input type="radio"/> Self only <input type="radio"/> Other <input type="radio"/>	Spouse only <input type="radio"/> Child(ren) only <input type="radio"/> Spouse and child(ren) <input type="radio"/> Self only <input type="radio"/> Other <input type="radio"/>
75. There are several government programs which provide medical care or help pay medical bills. During 1988 was anyone in this household covered by:				
75A. Medicare (for the disabled and elderly)? Yes <input type="radio"/> 7 No <input type="radio"/> (Ship to 75C)				
75B. Who was that? (Anyone else?)	Yes <input type="radio"/> No <input type="radio"/>			
75C. Medicaid (for the needy)? Yes <input type="radio"/> 7 No <input type="radio"/> (Ship to 75E)				
75D. Who was that? (Anyone else?)	Yes <input type="radio"/> No <input type="radio"/>			
75E. CHAMPUS, VA, or military health care? Yes <input checked="" type="radio"/> 7 No <input type="radio"/> (Ship to 75A)				
75F. Who was that? (Anyone else?)	Yes <input type="radio"/> No <input type="radio"/>			
75A. Did anyone in this household have private health insurance at any time during 1988? Do not include accident or disability insurance. Yes <input type="radio"/> 7 No <input type="radio"/> (Go to item 77 on page 1)				
75B. Who was that? (Anyone else?)	Yes <input type="radio"/> No <input type="radio"/>			
75C. Other than ... who else in this household was covered by this plan? (Go to 75C for next person with "Yes" in 75B or item 77 on page 1)	Spouse only <input type="radio"/> Child(ren) only <input type="radio"/> Spouse and child(ren) <input type="radio"/> Self only <input type="radio"/> Other <input type="radio"/>	Spouse only <input type="radio"/> Child(ren) only <input type="radio"/> Spouse and child(ren) <input type="radio"/> Self only <input type="radio"/> Other <input type="radio"/>	Spouse only <input type="radio"/> Child(ren) only <input type="radio"/> Spouse and child(ren) <input type="radio"/> Self only <input type="radio"/> Other <input type="radio"/>	Spouse only <input type="radio"/> Child(ren) only <input type="radio"/> Spouse and child(ren) <input type="radio"/> Self only <input type="radio"/> Other <input type="radio"/>
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