

What Do We Know About Differences Between CPS and ACS Income and Poverty Estimates?

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August 21, 2006

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1. Review of Methodological and Conceptual Differences--These differences include:

- a. Modes of data collection:** The CPS Annual Social and Economic Supplement (ASEC) uses computer-assisted interviews, either in person or over the phone, and the ACS uses mail out/mailback questionnaires with computer-assisted non-response follow-up interviews either in person or over the phone
- b. Reference periods:** The CPS ASEC is conducted in February-April and asks about income in the previous calendar year and ACS is conducted throughout the year and asks about income received in the previous 12 months
- c. Questionnaire detail:** The CPS ASEC collects information on more than 50 income types and the ACS asks eight income questions; five of these questions ask about multiple sources of income.
- d. Sample Size:** CPS ASEC income and poverty figures are based on a sample of approximately 100,000 addresses. During the 2000-2004 testing phase, the ACS national sample was approximately 800,000 addresses per year. The sample size for the fully implemented ACS is approximately three million addresses per year.
- e. Survey universes:** The CPS universe is the civilian non-institutionalized population of the U.S. The 2000-2005 ACS was limited to people living in housing units. Starting in 2006, the ACS universe was expanded to include those living in non-institutional and institutional group quarters.
- f. Family Definition:** The ACS collects information on the relationship between household members and the householder. The CPS collects this information, and also collects information on the relationship between household members who are not related to the householder. This means that the CPS can treat people related to each other (but not to the householder) as a family unit for poverty determination. The ACS, on the other hand, would treat these people as separate individuals for poverty determination purposes.
- g. Residence Rules:** The ACS uses the concept of current residence, which means that the ACS interviews everyone who is in the housing unit on the day of interview who is living or staying

there for more than two months, regardless of whether or not they maintain a usual residence elsewhere, or who does not have a usual residence elsewhere. The CPS uses a concept of usual residence, which means that the CPS interviews everyone staying at the housing unit at the time of the interview who considers the housing unit as their usual residence or who has no usual residence elsewhere.

If one was to try to characterize CPS/ACS differences into two categories, methodological (differences in how estimates are made) and conceptual (differences in what is being estimated), differences a-d may be thought of as mainly methodological differences, while e-g may be thought of as mainly conceptual differences (though there is certainly room for debate in making these classifications).

For more information, see “Evaluation of Poverty Estimates: A Comparison of the American Community Survey and the Current Population Survey” available online at http://www.census.gov/hhes/www/poverty/acs_cpspovcompreport.pdf.

2. Differences in Timing of Estimates

Attachment A, “Timing of Various Poverty Estimates,” shows that at the national level, the CPS results released in August 2006 were based on a somewhat more recent time period than the ACS results (the CPS results were based on calendar-year 2005, which “centered” them on July 1, 2005, while the ACS results were “centered” on December 15, 2004).

For state-by-state comparisons, the relationship is reversed, as the ACS results are based on a more recent time period than the CPS figures. The CPS uses 3-year averages to examine differences among states. The 2005 ACS results, like the national figures, were “centered” on Dec. 15, 2004, while the CPS 2003-2005 figures were “centered” on July 1, 2004. Interestingly, the Bureau’s Small Area Income and Poverty Estimates (SAIPE) Program will release calendar-year 2004 figures (“centered” on July 1, 2004, just like the CPS figures) in November 2006, which means that the SAIPE Program is now producing state estimates for time periods that are roughly comparable to the CPS and ACS.

3. Comparisons of National Estimates

A. Trends and Point Estimates:

The Census Bureau will not be comparing the income and poverty estimates from the 2005 ACS to those from previous years. Thus, the discussion of income and poverty trends from the two surveys is limited to the 2000-2004 period. The discussion of ACS and CPS-ASEC point estimates below includes the entire 2000-2005 period.

Attachment B, “Comparisons of Income and Poverty Estimates from the American Community Survey and the Current Population Survey: 2000-2004,” shows that in 2004 the ACS and CPS were similar in that both surveys indicated that poverty rose between 2003 and 2004 and that

there was no change in real median household income over this time. Similarly, over the 2000-2004 period, the two surveys provide similar pictures of income trends. Based on the CPS, over the 2000-2004 period, there was one decline in the real household median (between 2002 and 2003), while the ACS has indicated two years of annual decline (in 2001 and 2002). Neither survey has shown an annual increase in the national median over this time. In terms of poverty, again the basic trends are similar. The CPS has shown four years of poverty rate increases over this period (in 2001, 2002, 2003, and 2004), while the ACS has shown three (in 2002, 2003, and 2004).

In terms of point estimates, in 2005, the ACS poverty rate (13.3 percent) was higher than the CPS national rate of 12.6 percent. Typically, this has been the case, as the CPS poverty rate has been lower than the ACS rate in five out of the six years between 2000 and 2005. The only exception was 2003, when the ACS and CPS poverty rates (of 12.7 and 12.5 percent, respectively) were not statistically different. Interestingly, over the 2000-2003 period, the ACS and CPS poverty rates appeared to converge, as the 2000 CPS poverty rate was .9 lower than the ACS poverty rate, yet three years later the two were not statistically different.

The relationship between ACS and CPS median household incomes has not been as consistent as the relationship between the poverty rates of the two surveys. In 2000, the CPS median was about \$700 higher than the ACS figure. In 2001, the two were not statistically different, but in 2002, the ACS figure was about \$600 higher than the CPS figure. Finally, in 2003, 2004, and 2005 the two were not statistically different.

B. Does Reference Period Play a Role?:

One obvious difference between the CPS and ACS income and poverty estimates noted above is that the CPS uses a calendar-year reference period and the ACS uses a rolling 12-month reference period, determined by the interview month. One way to examine the potential effect of these different reference periods is to examine cases based on the one ACS interview month that uses the previous calendar year as its reference period (January, which uses the previous January-December as its reference period). Table 1 examines this issue by comparing the CPS calendar-year 2003 poverty rates for the Nation to the 2004 ACS 12-month figures and the ACS figures based solely on the calendar-year 2003 reference period. Two of these sets of estimates are shown, based on different weighting methods. Regardless of method, when looking at the comparison of poverty rates by characteristic, it does not appear that results based on the “common month” are particularly closer to the CPS estimates than the annual ACS figures. Of course, this is only one year, and further research may find that there are other years with a measurable “reference period” effect.

4. Comparisons of Measures of Sampling and Nonsampling Errors

A. Comparison of Income Aggregates Across Surveys:

As shown in Table 2, the calendar year 2004 CPS ASEC aggregate total money income estimate

of \$6.940 trillion (after subtracting group quarters recipients) was slightly higher than the 2004 ACS aggregate of \$6.862 trillion. There were three types of income in which the ACS aggregate was higher than the CPS figure--self-employment income, public assistance, and retirement income. It is possible that the self-employment difference is at least partially attributable to the misreporting of wages as self-employment income on the ACS. Similarly, it is possible that some of the difference in public assistance and retirement income is attributable to ACS respondents misreporting "other income" such as Unemployment Compensation, educational assistance, or Veterans' Payments.

One of the major differences between the income questions in the CPS and ACS is that the CPS asks separate questions about "other sources" of income such as Unemployment Compensation, Workers' Compensation, Veterans' Payments, educational assistance, child support, alimony, and financial assistance from outside the household. In the ACS, one summary question about "other income" covers all of these sources. The added detail of the CPS questions is probably largely responsible for the .87 ACS/CPS aggregate ratio for this income type.

It is also worth noting that for two types of income (property income and Supplemental Security Income, or SSI) the ACS and CPS aggregates were not statistically different. This may not be surprising in the case of SSI, as the two surveys utilize similar questionnaire detail for this income type. However, in the case of property income, the two aggregates are similar despite the fact that the CPS utilizes a more detailed set of questions than the ACS.

B. Comparison of Standard Errors Across Surveys:

Table 3 compares CPS and ACS state and national poverty rate standard errors based on standard errors from the 2005 ACS and CPS standard errors from income years 2005 and 2003-2005. As indicated in the table, the ACS state poverty rate standard errors are significantly smaller than the comparable CPS single- or three-year poverty rate standard errors. Based on 3-year averages, 38 states have ACS standard errors less than one-half that of the CPS; the CPS/ACS standard error ratios range from .24 (Wisconsin) to .85 (Vermont). Based on single-year CPS figures, 47 states have ACS standard errors less than one-half that of the CPS and the individual state ratios range from .21 (Colorado, Massachusetts, and South Carolina) to .60 (Vermont).

Given the sample size difference between the two surveys, one would expect to see large standard error differences for their estimates. A crude calculation, based strictly on accounting for the different national CPS and ACS sample sizes (100,000 addresses for the CPS and 3,000,000 for the ACS), would indicate an expected ratio of their standard errors (ACS/CPS) for one-year estimates of around .18 ($= [100,000 / 3,000,000]^{.5}$), and for the three-year CPS averages of around .32 ($= [300,000 / 3,000,000]^{.5}$). In fact the standard error ratios for the one-year estimates are all higher than .18, and most ratios of the standard errors for the ACS and three-year CPS ASEC averages exceed .32. The variation of these results from the crude expected ratios could be the result of several factors: (1) the use of population controls to reduce variances in CPS and ACS may be more beneficial in the CPS, particularly at the national level; (2) the

ACS subsamples nonrespondents while the CPS has a higher level of nonresponse, making both the 3,000,000 and 100,000 figures overstatements of the actual realized sample sizes; (3) variation of the standard error ratios across states would result from variation across states in the ratios of CPS to ACS sample sizes; and (4) the crude ratio of .32 for the three-year CPS averages doesn't adjust for variance increases due to positive correlation in the three-year averages induced by the CPS year-to-year sample overlap.

C. Comparison of Response Rates Across Surveys

1. Unit Nonresponse

As indicated in the ACS “Quality Measures” website <<http://www.census.gov/acs/www/UseData/sse/res/us.htm>>, the ACS has a very high response rate. In 2005 and over the 2001-2003 period, the weighted response rate each year was around 97 percent (the 2004 rate was somewhat lower because some survey operations were canceled due to funding reductions). CPS nonresponse rates, as reported in the CPS “Quality Measures” site <<http://www.bls.census.gov/cps/basic/perfmeas/typea.htm>>, are somewhat higher than the ACS rates. For example, in 2005, the CPS response rates for the monthly survey were about 91 percent in February, 90 percent in March, and 92 percent in April (these are the months in which the ASEC is conducted).

Not included in the CPS nonresponse rates cited above are CPS ASEC response rates (the percentage of persons who answer the basic monthly CPS questions who also answer at least some of the supplement questions). For 2005, for example, the ASEC response rate was around 91 percent. Thus, when the two types of nonresponse are added together, close to 20 percent of eligible CPS respondents either do not answer the monthly CPS questions or do not answer any of the ASEC questions on income.

2. Item nonresponse

As may be expected from the ASEC nonresponse rate cited above, income amount figures generated from the CPS ASEC have a higher nonresponse rate than comparable ACS figures. The fact that the ACS is a mandatory survey and the CPS is not certainly plays a role as well. Another factor is the fact that on the CPS, with its more detailed questions, provides respondents with more opportunities to refuse or answer “don’t know” to an income amount question. Shown below are figures that show the percentage of aggregate income for specific income types that are the result of allocation (either because it was reported that a person received a type of income and did not report a dollar amount or reciprocity for an income type was allocated for a person and we subsequently allocated a dollar amount).

Table A: Percentage of Aggregate Income that Resulted from Allocations, for Selected Income Types

Type of Income	CPS ASEC	ACS
Earnings	31.4%	15.9%
Social Security	34.4%	15.5%
SSI	28.7%	14.5%
Public Assistance	30.5%	14.6%
Retirement Income	34.0%	20.9%

Source: Unpublished tabulations from the 2004 ACS and 2005 CPS ASEC.

CPS ASEC amount allocation rates are consistently higher than the comparable ACS rates. All of the selected CPS allocation rates for incomes received in calendar-year 2004 were in the 29-34 percent range, while the comparable allocation rates for the 2004 ACS were in the 15-21 percent range. Given these relatively large allocation percentages, particularly for the CPS, it would appear that imputation methodology differences between the two surveys should be considered as another potential source of differences between the two sets of estimates.

D. Comparison of Coverage Rates Across Surveys

Again, based on the ACS “Quality Measures” website, the overall coverage rate for the ACS in 2005 was about 95 percent (see <http://www.census.gov/acs/www/UseData/sse/cov/us.htm>). The CPS coverage rate is based on persons 16 years old and over. The CPS coverage rate is generally much lower than that of the ACS. The March 2005 CPS coverage rate for persons 16+ was around 89 percent (see <http://www.bls.census.gov/cps/basic/perfmeas/coverage.htm>).

5. Comparison of Geographic Distributions of Poverty and Income Estimates from the CPS and ACS

As Table 4 shows, there were fifteen states in which the 2004-2005 CPS poverty rate was different from the 2005 ACS rate. In thirteen of these states (Arkansas, Florida, Idaho, Louisiana, Minnesota, New Hampshire, New Jersey, Ohio, Oklahoma, Oregon, Texas, Vermont, and West Virginia), the ACS poverty rate was higher than the CPS rate. The two states in which the ACS rate was lower than the CPS rate were Maryland and New York.

As Table 5 shows, there were 19 states in which the 2004-2005 CPS median household incomes were statistically different from the 2005 ACS estimates. In seven states (California,

Connecticut, Georgia, Illinois, Montana, New York, and Virginia) the ACS median was higher and in twelve states (Idaho, Iowa, Minnesota, Nebraska, New Mexico, Oklahoma, Pennsylvania, South Dakota, Utah, Vermont, Washington, and West Virginia) the CPS median was higher. According to the 2005 ACS, of the seven states with higher ACS medians, five (all except Georgia and Montana) are states with medians above the national median. Of the twelve states with lower ACS medians, eight (all except Minnesota, Utah, Vermont, and Washington) had incomes below the national median.

Chi-squared test results on differences in 2004/2005 CPS and 2005 ACS estimates of the geographic distribution of those in poverty¹

Although estimated poverty rates may differ between the CPS and ACS, the question arises as to whether any differences in state poverty rates are due to simple level differences in the estimates from the two surveys, as opposed to differences in their estimates of the geographic distribution of poverty? There are various ways to define “simple level differences” that lead to various hypotheses to test. Chi-squared tests were performed of some of these hypotheses using estimates from the 2005 ACS and the 2004 and 2005 CPS ASEC (two-year averages), and estimates of the variances of these estimates (which are treated as known). As discussed below, the tests were all significant at the .01 level of significance. They thus provide strong evidence that the 2004/2005 CPS and 2005 ACS are estimating different geographic distributions of poverty.

One definition of “simple level difference” is a constant additive level difference in the poverty rates estimated by the two surveys, leading to the null hypothesis $H_{0d}: \pi_{A,i} = \pi_{C,i} + d$ for all states I , where $\pi_{A,i}$ and $\pi_{C,i}$ denote the ACS and CPS “population poverty rates” for state I (the expectations of their corresponding sample estimates). The test performed of H_{0d} assumed that the ACS and CPS poverty rate estimates for the total U.S. have negligible variance compared to the individual state estimates. The test of H_{0d} could then be based on deviations of the ACS and CPS state poverty rate estimates from the corresponding national poverty rates, with these deviations assumed approximately independently normally distributed with known variances. The resulting Chi-squared statistic, which has 51 degrees of freedom, was 81.5, which corresponds to a p-value of .004.

Another definition of “simple level difference” would be a multiplicative relation between the number in poverty estimated by the two surveys, leading to the null hypothesis $H_{0k}: Y_{A,i} = k \times Y_{C,i}$ for all I , where $Y_{A,i}$ and $Y_{C,i}$ denote the number in poverty in the ACS and CPS populations. (This hypothesis approximately corresponds to a multiplicative relation between the poverty rates as well.) If H_{0k} holds then the corresponding “state-to-nation poverty shares” are the same for the two surveys ($Y_{A,i} / \sum_j Y_{A,j} = Y_{C,i} / \sum_j Y_{C,j}$ for all I). The hypothesis H_{0k} is also equivalent to

¹This section and the tests it is based upon were prepared by William Bell and Donald Malec.

$\log(Y_{A,i}) - \log(Y_{C,i}) = \mu$, where $\mu = \log(k)$ is constant over states. It was tested in this form using the logarithms of the ACS and CPS estimates and the corresponding estimated relative variances (which are approximately the variances of the log estimates from a Taylor series linearization). The relative variances were then treated as known. The resulting Chi-squared statistic was 78.6 with 50 degrees of freedom (one degree of freedom is used to estimate μ). This corresponds to a p-value of .006.

Finally, Chi-squared tests were performed to directly test the hypothesis of equal state-to-nation poverty shares, $H_{0s}: r_{A,i} = r_{C,i}$ for all I , where $r_{A,i} = Y_{A,i} / \sum_j Y_{A,j}$ and $r_{C,i} = Y_{C,i} / \sum_j Y_{C,j}$. This was done using the corresponding ACS and CPS sample estimates of the poverty shares and their estimated covariance matrices (obtained by linearization using the estimated sampling variances). This was also done for two transformations of the poverty shares: the arc-sine transformation ($\sin^{-1}(\sqrt{r_{A,i}})$) and generalized logistic transformation ($\log(r_{A,i}/r_{A,51}) = \log(Y_{A,i}/Y_{A,51})$, $I = 1, \dots, 50$). Note that the latter uses the share for the last state as a base value. In fact, for the test with the original and arc-sine transformed shares we dropped the last observation because of the linear constraint on the shares (they add to 1). The three Chi-squared tests thus all have 50 degrees of freedom. They yielded very similar results, with values of the test statistics being 80.0, 78.7, and 81.1, respectively, and corresponding p-values of .004, .006, and .004.

Because the three tests just discussed can be affected by the choice of which state's share gets dropped or used as a base value, the tests were redone for two reorderings of the data. The first time the states were kept in the order of their FIPS (Federal Information Processing Standards) codes, which made Wyoming (which has one of the smallest poverty shares) the last state, and thus the base state. The second time the order of the states was reversed, making Alabama (which has a share near the average share) the last state. The third time California (which has the largest poverty share) was used as the base state. The two re-orderings had minor effects on the test results that would not affect the conclusions.

These types of comparisons were previously made using 2003/2004 CPS two-year average estimates and 2004 ACS estimates. The latter were based on that year's ACS supplemental survey, which had a much smaller sample size than the 2005 full production ACS sample (about 800,000 addresses versus about 3,000,000 addresses). The tests done with these data were significant at the .05 level but not the .01 level. A contributing factor to the higher levels of significance attained by the tests with the new data would be the lower sampling variances of the 2005 ACS versus the 2004 ACS estimates.

Table 1: Poverty Estimates from ACS and CPS

	CPS		ACS Below Poverty				
	Below Poverty: 2003		ACS 2004 annual data		January 2004 data		
	Rate	90-percent C-I (\pm)	Rate	90-Percent	Rate *	Rate**	90-Percent CI (\pm)***
People TOTAL	12.5%	0.2	13.1%	0.2	12.7%	13.1%	0.7
Under 18 years	17.6%	0.5	18.4%	0.3	18.0%	18.5%	1.0
18 to 64 years	10.8%	0.3	11.6%	0.1	11.2%	11.6%	0.3
65 years and older	10.2%	0.4	9.4%	0.2	9.4%	9.7%	0.7
White alone	10.5%	0.2	10.3%	0.1	9.7%	9.9%	0.3
White alone, not Hispanic	8.2%	0.2	8.8%	0.1	8.3%	8.5%	0.3
Black Alone	24.4%	0.9	25.6%	0.6	25.7%	26.2%	2.1
Asian Alone	11.8%	1.2	11.8%	0.5	11.7%	12.2%	1.7
Hispanic origin (of any race)	22.5%	0.8	22.0%	0.4	22.4%	22.9%	1.4
Families TOTAL	10.0%	0.2	10.1%	0.1	9.9%	10.4%	0.3
Married-couple	5.4%	0.2	5.0%	0.1	4.7%	4.9%	0.3
Female householder, no husband present	28.0%	1.0	29.2%	0.4	29.4%	29.9%	1.4

* Computed using mail, CATI, and CAPI survey responses received in Jan 2004 since all these responses report income received in calendar year 2003, as do the 2004 CPS responses.

** Computed as a weighted average of the mail, CATI, and CAPI poverty rates estimated from the Jan 2004 responses. The weights in the average are the mail, CATI, and CAPI response proportions from the units entering the sample in Feb 2004 (and responding in the three modes in Feb - April 2004). This is a more appropriate way of combining results from the mail, CATI, and CAPI responses received in a single month as it allows for variation in the response mode proportions over time by using the observed proportions from a single representative sample of the population. (The previous column can be thought of as using observed response proportions from three different samples.)

*** Calculated by multiplying the confidence interval widths from the full year (2004) ACS sample by 3.4641 (the square root of 12.)

Note: This table is presented for research purposes only; the ACS sample and weighting procedures are not designed to produce monthly estimates.

Table 2. Comparison Between ACS and ASEC Aggregate Income: 2004
(Income in 2004 dollars. ACS income in previous 12 months. ASEC income for calendar year 2004)

Income source	ACS ¹		ASEC ³		Approximate ASEC GQ Income ⁴	ASEC-GQ-ACS	
	Aggregate	Standard Error ²	Aggregate	Standard Error	Aggregate	Difference	Standard Error
Total income	6,862,215,827,030	22,070,959,838	6,942,750,008,000	26,252,083,200	2,613,836,803 *	77,920,344,167	34,297,217,679
Earnings	5,628,622,017,426	18,574,793,289	5,697,349,331,000	25,545,938,944	1,784,752,368 *	66,942,561,206	31,585,090,506
Wage or salary income	5,192,024,937,751	17,160,597,925	5,346,641,906,000	24,288,858,112	1,772,339,674 *	152,844,628,575	29,739,447,700
Self-employment income	436,597,079,675	4,399,492,483	350,707,425,000	11,154,950,144	11,856,610 *	-85,901,511,285	11,991,182,044
Interest, dividends, rental income, or estates and trusts	327,457,132,622	4,494,518,387	322,187,728,000	4,133,911,552	149,324,928	-5,418,729,550	6,106,547,327
Social Security	387,752,851,181	1,218,403,332	425,952,704,000	2,475,546,368	315,807,878 *	37,884,044,941	2,759,136,912
SSI	29,932,313,325	382,817,420	30,563,820,000	547,844,352	25,211,726	606,294,949	668,343,184
Public Assistance	8,665,458,987	150,785,063	6,280,902,000	217,228,320	12,448,126 *	-2,397,005,113	264,431,992
Retirement	343,351,268,848	2,352,826,979	302,558,345,000	3,686,818,048	143,133,727 *	-40,936,057,575	4,373,605,162
Other Income ⁵	136,434,784,641	1,132,239,830	157,857,178,000	2,493,662,464	183,158,050 *	21,239,235,309	2,738,671,122

* Denotes statistically significant at the 90-percent confidence level.

¹Derived using person weights.

²Simulated using CVs from household weighted data.

³Derived from unpublished person level data.

⁴Derived using Householder's weight and household income summary fields

⁵ASEC data includes Unemployment Compensation, Workers' Compensation, Veterans' Benefits, Educational Assistance, Child Support, Alimony, and Financial assistance from outside the household.

Source: Unpublished tabulations from the 2004 ACS and 2005 ASEC. ACS data restricted to households. ASEC aggregate group quarters income is \$2.6 billion.

Table 3: CPS and ACS Poverty Rate Standard Error Comparisons

	CPS		ACS	Ratio of 2005 ACS to	
	2005	2003-2005	2005	2005 CPS	2003-2005 CPS
United States	0.14	0.10	0.06	0.45	0.63
Alabama	1.31	0.93	0.32	0.24	0.34
Alaska	1.14	0.78	0.61	0.54	0.78
Arizona	1.18	0.86	0.29	0.25	0.34
Arkansas	1.25	0.95	0.36	0.29	0.38
California	0.46	0.35	0.15	0.32	0.42
Colorado	1.18	0.77	0.25	0.21	0.33
Connecticut	1.06	0.73	0.30	0.29	0.41
Delaware	1.07	0.74	0.49	0.46	0.66
District of Columbia	1.72	1.14	0.89	0.52	0.78
Florida	0.57	0.44	0.17	0.30	0.38
Georgia	0.88	0.67	0.23	0.26	0.34
Hawaii	0.97	0.71	0.46	0.47	0.64
Idaho	1.08	0.79	0.45	0.42	0.57
Illinois	0.69	0.52	0.18	0.27	0.36
Indiana	1.01	0.69	0.26	0.26	0.37
Iowa	1.18	0.79	0.25	0.22	0.32
Kansas	1.25	0.84	0.32	0.26	0.39
Kentucky	1.31	0.95	0.30	0.23	0.32
Louisiana	1.42	0.99	0.39	0.27	0.39
Maine	1.31	0.87	0.41	0.31	0.47
Maryland	0.97	0.68	0.28	0.29	0.42
Massachusetts	0.90	0.63	0.19	0.21	0.30
Michigan	0.78	0.57	0.18	0.23	0.31
Minnesota	0.91	0.61	0.21	0.23	0.34
Mississippi	1.46	1.02	0.37	0.25	0.36
Missouri	1.03	0.74	0.26	0.25	0.35
Montana	1.28	0.95	0.61	0.47	0.64
Nebraska	1.09	0.77	0.33	0.30	0.43
Nevada	1.17	0.81	0.44	0.38	0.54
New Hampshire	0.86	0.59	0.39	0.45	0.66
New Jersey	0.66	0.50	0.20	0.31	0.41
New Mexico	1.52	1.09	0.46	0.31	0.43
New York	0.64	0.46	0.16	0.25	0.34
North Carolina	0.88	0.68	0.23	0.26	0.34
North Dakota	1.16	0.78	0.51	0.44	0.66
Ohio	0.74	0.53	0.18	0.25	0.35
Oklahoma	1.35	0.88	0.33	0.25	0.38
Oregon	1.25	0.87	0.29	0.23	0.33
Pennsylvania	0.68	0.49	0.15	0.22	0.30
Rhode Island	1.26	0.84	0.60	0.47	0.71
South Carolina	1.31	0.91	0.27	0.21	0.30
South Dakota	1.11	0.81	0.59	0.53	0.72
Tennessee	1.11	0.84	0.31	0.28	0.37
Texas	0.63	0.48	0.17	0.27	0.35
Utah	0.97	0.72	0.35	0.36	0.48
Vermont	1.04	0.73	0.62	0.60	0.85
Virginia	0.80	0.61	0.19	0.24	0.31
Washington	0.94	0.73	0.22	0.23	0.30
West Virginia	1.22	0.87	0.50	0.41	0.57
Wisconsin	0.99	0.72	0.18	0.18	0.24
Wyoming	1.22	0.83	0.54	0.44	0.65

Source: Unpublished tabulations from the 2003-2005 CPS ASEC and 2005 ACS.

Table 4: Comparison of Percent of People in Poverty by State
 CPS 2-Year average (2004-2005) VS 2005 ACS

State	CPS 2-YR AVG 2004-2005		2005 ACS		Difference
	Percent	Standard error	Percent	Standard error	
United States	12.7	0.1	13.3	0.1	*
Alabama.....	16.8	1.1	17.0	0.3	
Alaska.....	9.5	1.0	11.2	0.6	
Arizona.....	14.8	1.0	14.2	0.3	
Arkansas.....	14.5	1.1	17.2	0.4	*
California.....	13.2	0.4	13.3	0.1	
Colorado.....	10.7	1.0	11.1	0.2	
Connecticut.....	9.7	0.9	8.3	0.3	
Delaware.....	9.1	0.9	10.4	0.5	
District of Columbia.	19.1	1.4	19.0	0.9	
Florida.....	11.4	0.5	12.8	0.2	*
Georgia.....	13.7	0.7	14.4	0.2	
Hawaii.....	8.6	0.8	9.8	0.5	
Idaho.....	9.9	0.9	13.9	0.4	*
Illinois.....	11.9	0.6	12.0	0.2	
Indiana.....	12.1	0.8	12.2	0.2	
Iowa.....	11.1	1.0	10.9	0.2	
Kansas.....	12.0	1.0	11.7	0.3	
Kentucky.....	16.3	1.2	16.8	0.3	
Louisiana.....	17.6	1.2	19.8	0.4	*
Maine.....	12.1	1.1	12.6	0.4	
Maryland.....	9.8	0.8	8.2	0.3	*
Massachusetts.....	9.7	0.8	10.3	0.2	
Michigan.....	12.6	0.7	13.2	0.2	
Minnesota.....	7.5	0.7	9.2	0.2	*
Mississippi.....	19.4	1.2	21.3	0.4	
Missouri.....	11.9	0.9	13.3	0.2	
Montana.....	14.0	1.1	14.4	0.6	
Nebraska.....	9.5	0.9	10.9	0.3	
Nevada.....	10.8	1.0	11.1	0.4	
New Hampshire.....	5.5	0.7	7.5	0.4	*
New Jersey.....	7.4	0.6	8.7	0.2	*
New Mexico.....	17.2	1.3	18.5	0.5	
New York.....	14.8	0.5	13.8	0.2	*
North Carolina.....	13.8	0.8	15.1	0.2	
North Dakota.....	10.4	1.0	11.2	0.5	
Ohio.....	11.9	0.6	13.0	0.2	*
Oklahoma.....	13.2	1.1	16.5	0.3	*
Oregon.....	11.9	1.1	14.1	0.3	*
Pennsylvania.....	11.3	0.6	11.9	0.1	
Rhode Island.....	11.8	1.1	12.3	0.6	
South Carolina.....	15.0	1.1	15.6	0.3	
South Dakota.....	12.7	1.0	13.6	0.6	
Tennessee.....	15.4	1.0	15.5	0.3	
Texas.....	16.3	0.5	17.6	0.2	*
Utah.....	9.6	0.9	10.2	0.4	
Vermont.....	7.7	0.9	11.5	0.6	*
Virginia.....	9.3	0.7	10.0	0.2	
Washington.....	10.8	0.8	11.9	0.2	
West Virginia.....	14.8	1.0	18.0	0.5	*
Wisconsin.....	11.3	0.9	10.2	0.2	
Wyoming.....	10.3	1.0	9.5	0.5	

* Statistically significant at the 90-percent confidence level

Source: Unpublished tabulations from the 2005-2006 ASEC and 2005 ACS.

Table 5: Comparison of CPS and ACS Median Household Income by State: 2005
(CPS 2-year average estimates 2004-2005 and ACS estimates in 2005 dollars.)

State	CPS 2-YR AVG 2003-		2005 ACS		Difference (CPS-ACS)
	Median	Standard error	Median	Standard error	
United States	46,071	148	46,242	63	171
Alabama.....	37,502	1,053	36,879	321	-623
Alaska.....	56,398	1,445	56,234	1,095	-164
Arizona.....	45,279	1,008	44,282	391	-997
Arkansas.....	36,406	963	34,999	363	-1407
California.....	51,312	473	53,629	196	* 2317
Colorado.....	51,518	1,208	50,652	335	-866
Connecticut.....	56,889	1,371	60,941	492	* 4052
Delaware.....	50,445	1,051	52,499	858	2054
District of Columbia.	44,949	1,683	47,221	1,172	2272
Florida.....	42,440	603	42,433	165	-7
Georgia.....	44,140	609	45,604	265	* 1464
Hawaii.....	58,854	1,225	58,112	1,193	-742
Idaho.....	45,009	1,105	41,443	510	* -3566
Illinois.....	48,008	755	50,260	205	* 2252
Indiana.....	43,091	941	43,993	305	902
Iowa.....	45,671	1,198	43,609	315	* -2062
Kansas.....	42,233	1,171	42,920	444	687
Kentucky.....	36,750	892	37,369	291	619
Louisiana.....	37,442	1,060	36,729	349	-713
Maine.....	43,317	1,109	42,801	587	-516
Maryland.....	59,762	1,327	61,592	361	1830
Massachusetts.....	54,888	1,428	57,184	421	2296
Michigan.....	44,801	740	46,039	272	1238
Minnesota.....	56,098	966	52,024	222	* -4074
Mississippi.....	34,396	1,012	32,938	373	-1458
Missouri.....	43,266	862	41,974	218	-1292
Montana.....	36,202	787	39,301	585	* 3099
Nebraska.....	46,587	1,160	43,841	462	* -2746
Nevada.....	48,496	1,279	49,169	539	673
New Hampshire.....	57,850	1,407	56,768	605	-1082
New Jersey.....	60,246	1,496	61,672	319	1426
New Mexico.....	39,916	1,371	37,492	454	* -2424
New York.....	46,659	676	49,480	256	* 2821
North Carolina.....	41,820	742	40,729	194	-1091
North Dakota.....	41,362	1,033	41,030	427	-332
Ohio.....	44,349	845	43,493	206	-856
Oklahoma.....	39,292	1,075	37,063	343	* -2229
Oregon.....	43,262	1,021	42,944	353	-318
Pennsylvania.....	45,941	753	44,537	238	* -1404
Rhode Island.....	49,511	1,445	51,458	833	1947
South Carolina.....	40,107	929	39,316	372	-791
South Dakota.....	42,816	990	40,310	539	* -2506
Tennessee.....	39,376	938	38,874	292	-502
Texas.....	42,102	408	42,139	150	37
Utah.....	53,693	934	47,934	574	* -5759
Vermont.....	49,808	1,077	45,686	725	* -4122
Virginia.....	52,383	961	54,240	327	* 1857
Washington.....	51,119	883	49,262	390	* -1857
West Virginia.....	35,467	941	33,452	486	* -2015
Wisconsin.....	45,956	1,053	47,105	239	1149
Wyoming.....	45,817	1,110	46,202	920	385

* Statistically different at the 90-percent confidence level.

Source: Unpublished tabulations from the 2005-2006 ASEC and 2005 ACS.

Timing of Various Poverty Estimates

William Bell
Aug. 1, 2006

Note: For simplicity, the table below shows everything in reference to the most recent release of estimates. For ACS I pretend that it has been in full production mode for enough years that ACS estimates for all domains could have been released. Of course, this is not true, and the timing of the ACS estimates for medium or small counties and school districts will only be relevant years from now when these multi-year estimates are being released.

Estimate Level	Source	Release Date	Reference period on which estimates are based
National	CPS	8/06	calendar year 2005, which centers on 7/1/05
	ACS	8/06	1/04 – 11/05, which centers on 12/15/04
State	CPS	8/06	average of 2003 – 2005, which centers on 7/1/04
	ACS	8/05	1/04 – 11/05, which centers on 12/15/04
	SAIPE	11/06	calendar year 2004, which centers on 7/1/04
Large Counties	ACS	8/06	1/04 – 11/05, which centers on 12/15/04
Medium Counties	ACS	8/06	1/02 – 11/05, which centers on 12/15/03
Small Counties	ACS	8/06	1/00 – 11/05, which centers on 12/15/02
All Counties	SAIPE	11/06	average of 2003 – 2005, which centers on 7/1/04 (county estimates are controlled to state estimates for 2004, which are also centered on 7/1/04)

School Districts: ACS estimates will be on the same schedule as for counties (i.e., dependent on the size of the school district). Current SAIPE school district estimates take the school district-to-county shares of poverty estimated in the previous census and multiply these by the current SAIPE county estimates, whose timing is noted above.

CPS State Change Estimates: CPS produces direct estimates of state year-to-year changes in poverty using 2-year averages. In 8/06 this involved subtracting the 2003-2004 average from the 2004-2005 average, effectively estimating the 2003-2005 change, which is centered around 7/1/04 (the same timing as the 3-year average state level estimates.)

**COMPARISONS OF INCOME AND POVERTY ESTIMATES FROM THE AMERICAN
COMMUNITY SURVEY AND THE CURRENT POPULATION SURVEY: 2000-2004**

Median Household Income (2004 dollars)

	American Community Survey		Annual Social and Economic Supplement of the Current Population Survey	
	Level	Percent change from previous year	Level	Percent change from previous year
2000	\$45,327 #	NA	\$46,058 #	-0.1%
2001	\$45,158	-0.4% #	\$45,062 *	-2.2% * #
2002	\$45,114 #	-0.1% #	\$44,546 * #	-1.1% * #
2003	\$44,686 *	-0.9% *	\$44,482	-0.1%
2004	\$44,684	0.0%	\$44,389	-0.2%

* Indicates statistically significant difference from previous year

Indicates CPS ASEC estimate significantly different from ACS estimate

Poverty

	American Community Survey		Annual Social and Economic Supplement of the Current Population Survey	
	Number in poverty	Poverty Rate	Number in poverty	Poverty Rate
2000	33,311,473 #	12.2 #	31,581,086 #	11.3 #
2001	33,419,993	12.1 #	32,906,511 *	11.7 * #
2002	34,763,085 *	12.4 * #	34,569,951 *	12.1 * #
2003	35,846,289 *	12.7 *	35,861,170 *	12.5 *
2004	37,161,510 *	13.1 * #	36,997,250 *	12.7 * #

* Indicates statistically significant difference from previous year

Indicates CPS ASEC estimate significantly different from ACS estimate

Child Poverty (people 0-17 years)

	American Community Survey		Annual Social and Economic Supplement of the Current Population Survey	
	Number in poverty	Poverty Rate	Number in poverty	Poverty Rate
2000	12,208,555 #	17.3 #	11,587,118 #	16.2 #
2001	11,961,757 *	16.9 #	11,732,684	16.3 #
2002	12,518,168 * #	17.6 * #	12,132,645 #	16.7 #
2003	12,673,283	17.7	12,865,806 *	17.6 *
2004	13,245,202 *	18.4 * #	13,026,595	17.8 #

* Indicates statistically significant difference from previous year

Indicates CPS ASEC estimate significantly different from ACS estimate