Comparison of Estimates of Same-Sex Couple Households from the ACS and CPS

by

Daphne Lofquist and Renee Ellis
US Bureau of the Census

Annual Meeting of the Population Association of America, Washington, D.C. March 31-April 2, 2011

^{*}This report is released to inform interested parties of ongoing research and to encourage discussion of work in progress. The views expressed on statistical and methodological issues are those of the authors and not necessarily those of the US Census Bureau.

Background

- There has been a growing demand for estimates of same-sex couples.
 Much of the academic and federal research has focused on the American Community Survey (ACS).
- Research has yet to focus on the variety of Census Bureau surveys, which could be useful if researchers are interested in questions not included on the ACS.
- We use the 2010 Current Population Survey (CPS) as a test comparison to the 2009 ACS.
- Prior to 2010, all reported married same-sex couples in the CPS were changed to be their opposite-sex counterpart. In 2010, for the first time, they were all edited to be same-sex unmarried partners. This change in edits allows us to be able to estimate same-sex couple households in the CPS.
- We believe that comparing the demographics of same-sex couple households using these two surveys will allow us to evaluate the quality of the CPS estimates, along with verifying the overall reliability of the estimates in both surveys.

Surveys

- American Community Survey
 Current Population Survey
- A mandatory survey that is conducted annually over a 12-month calendar period.
- Sample of approximately 3 million households, with a monthly sample size of about 250,000 households.
- The questionnaire is administered through a mailout/mailback paper form, and followed up with computer assisted telephone and in-person interviews (CATI/CAPI).
- The ACS provides state and national data on households.
- Same-sex couples are identified in the ACS using both the household roster and sex item.

- A monthly survey conducted, for the Bureau of Labor Statistics, to assess the employment level in the country.
- Most annual demographic data comes from the Annual Social and Economic supplement of the CPS. The ASEC combines respondents from February, March, and April into a sample size of 99,000 households.*
- The questionnaire is administered through telephone and in-person interviews (CATI/CAPI).
- Same-sex couples are identified using both the household roster and sex item and a subsequent probe on cohabitation.

^{*}Statistics from surveys are subject to sampling and nonsampling error. For more information on the source of the data and accuracy of the estimates, including standard errors and confidence intervals, see Appendix G at http://www.census.gov/apsd/techdoc/cps/cpsmar10.pdf.

Socio-demographic variables

- Age of Householder
 - 6 category breakdown
- Race of Householder
 - White
 - Black or African American
 - Asian
 - Some other race
- Hispanic/Latino origin of Householder
 - Hispanic or Latino of any race
 - White alone, not Hispanic or Latino

- Educational Attainment
 - Householder with at least a Bachelor's degree
 - Both householder and partner with at least a Bachelor's degree
- Employment Status
 - Householder employed
 - Both householder and spouse employed
- Household Income
 - 5 category breakdown

Survey Estimates of Same-Sex Couple Households

 Our analyses compares the socio-demographic characteristics of same-sex couple households between the 2009 ACS and 2010 CPS.

	ACS	<u>CPS</u>
All Same-sex households	581,300	516,396*
Male-male households	253,576 ^a	262,820 ^b
Female-female households	300,890	274923*

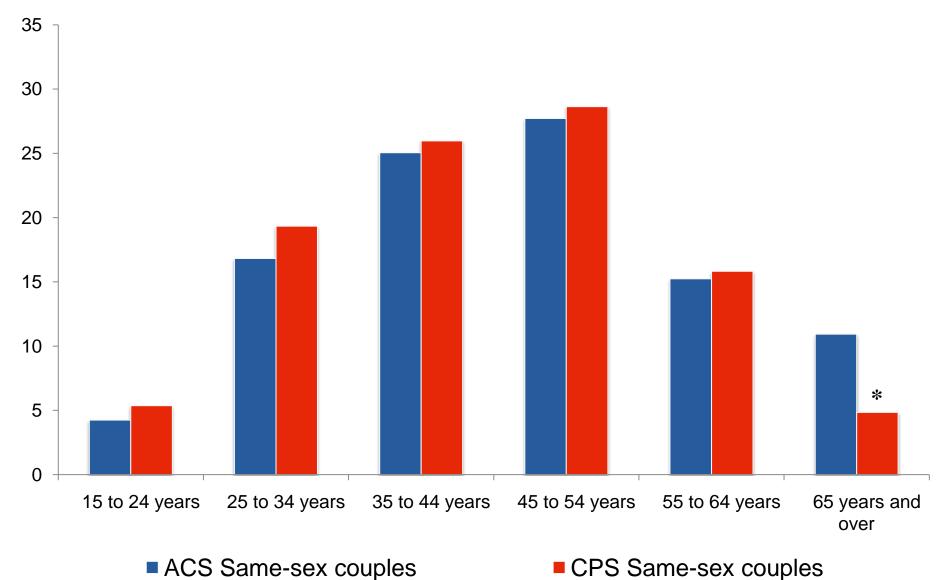
^{*}Significantly different from the ACS.

^a Male-male households are statistically different from female-female households in the ACS

b Male-male households are not statistically different from female-female households in the CPS

Age of Householder

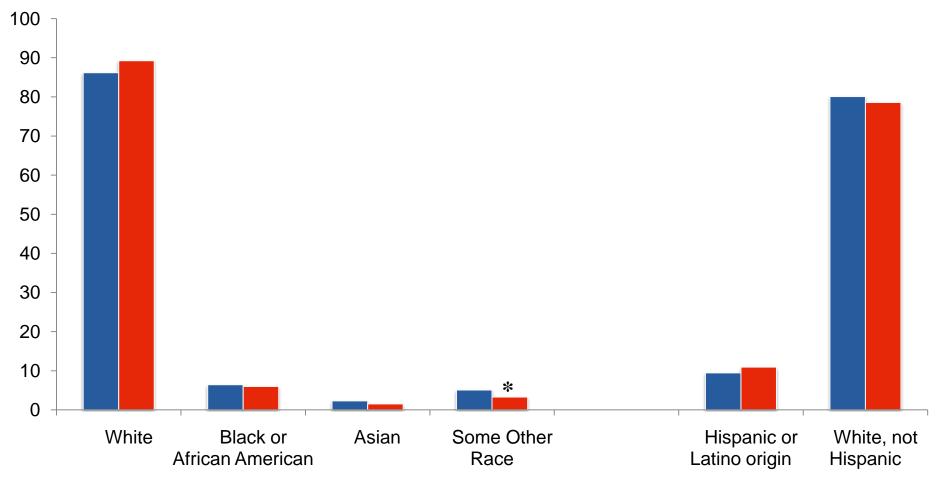
(Percent distribution)



Significantly different from ACS

Race and Hispanic or Latino Origin of Householder

(Percent distribution)

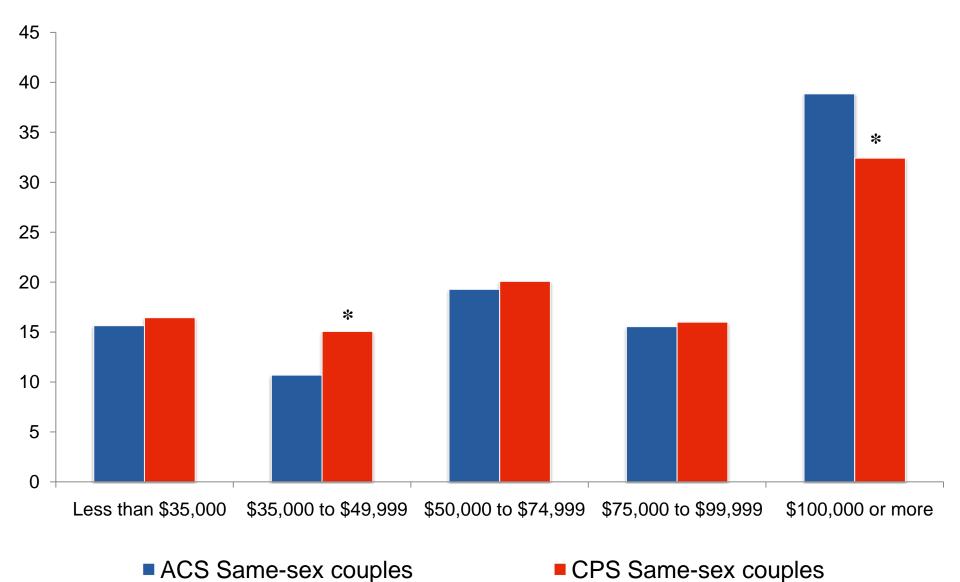


ACS Same-sex couples

■ CPS Same-sex couples

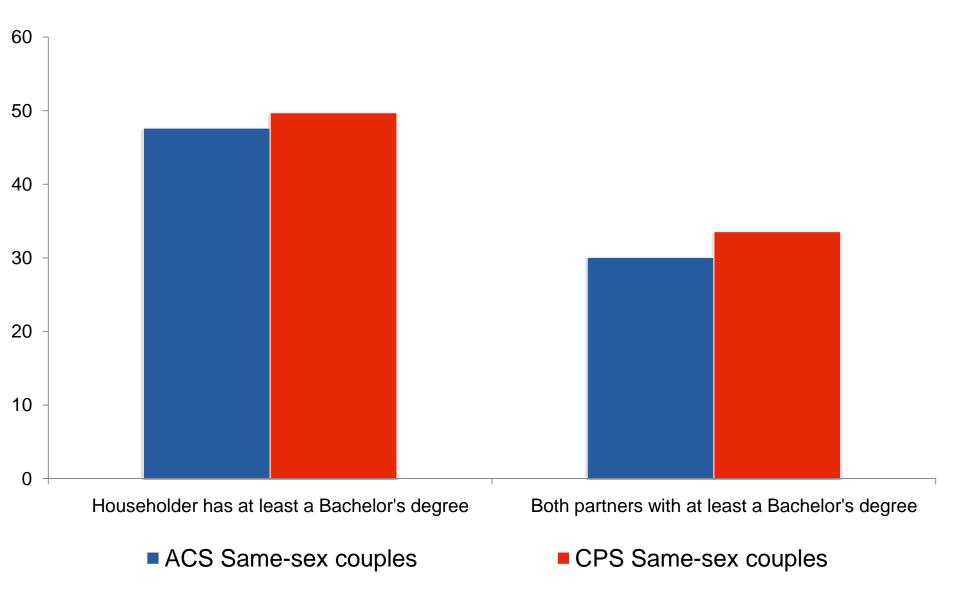
Household Income

(Percent distribution)



Educational Attainment

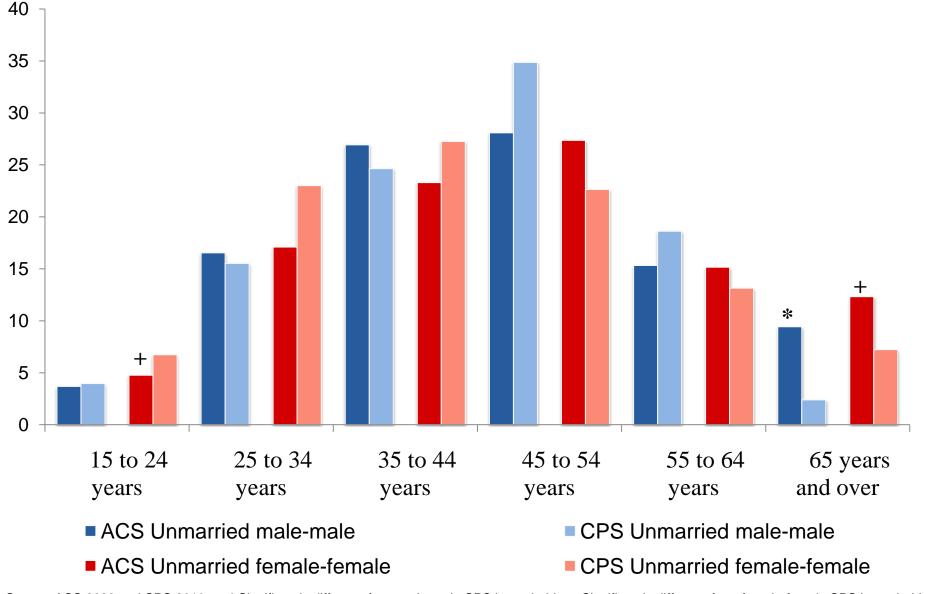
(Percent with stated educational level)



Significantly different from ACS

Age of Householder by Sex

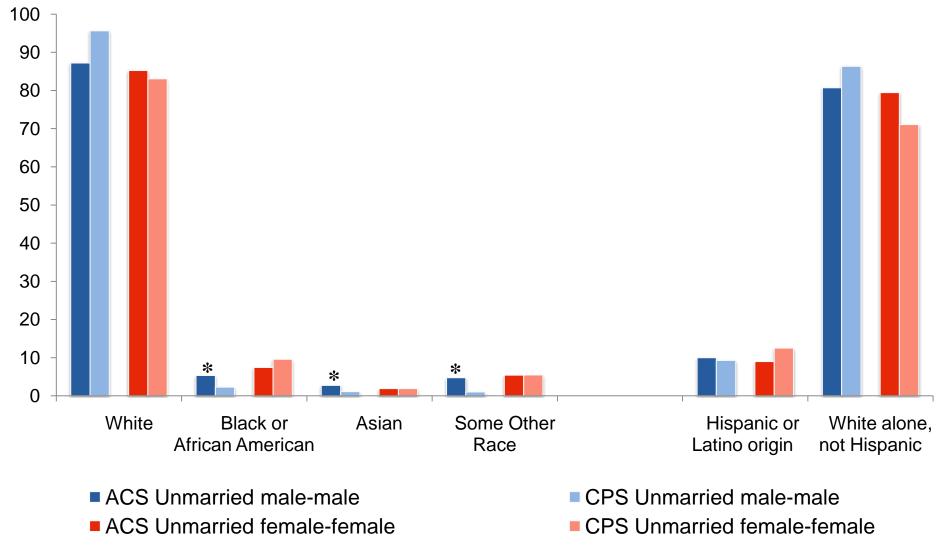
(Percent distribution)



Source: ACS 2009 and CPS 2010 * Significantly different from male-male CPS households. + Significantly different from female-female CPS households

Race and Hispanic or Latino Origin of Householder by Sex

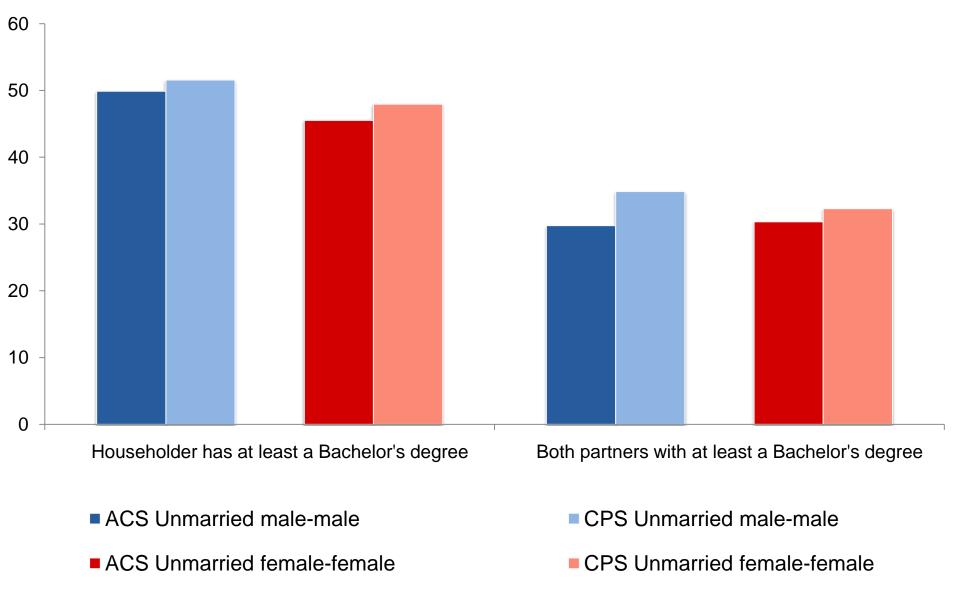
(Percent distribution)



Source: ACS 2009 and CPS 2010 * Significantly different from male-male CPS households. + Significantly different from female-female CPS households

Educational Attainment by Sex

(Percent with stated educational level)



Source: ACS 2009 and CPS 2010 * Significantly different from male-male CPS households. + Significantly different from female-female CPS households

Summary of ACS 2009 and CPS 2010 Comparison

- There are significantly more householders aged 65 years and older in the ACS. This is true for both male-male and female-female relationships.
- The ACS reports 5.1% of householders of some other race compared to 3.3% of householders in the CPS.
- There are significantly more householders in male-male relationships in the CPS who report being black or African American, Asian, or of some other race than in the ACS. No statistical differences between the two surveys for female-female relationships are noted by race.

Summary of ACS 2009 and CPS 2010 Comparison

- The CPS reports significantly more households with an income between \$35,000-\$49,999, while the ACS reports significantly more households with an income of \$100,000 or more.
- Female-female relationships in the ACS report significantly more households with an income of \$100,000 or more than in the CPS.
 There are no significant household income differences between the two surveys for male-male relationships.
- No statistical differences between the two surveys are noted by Hispanic origin or educational levels or employment status.

Exploring Reasons for Differences

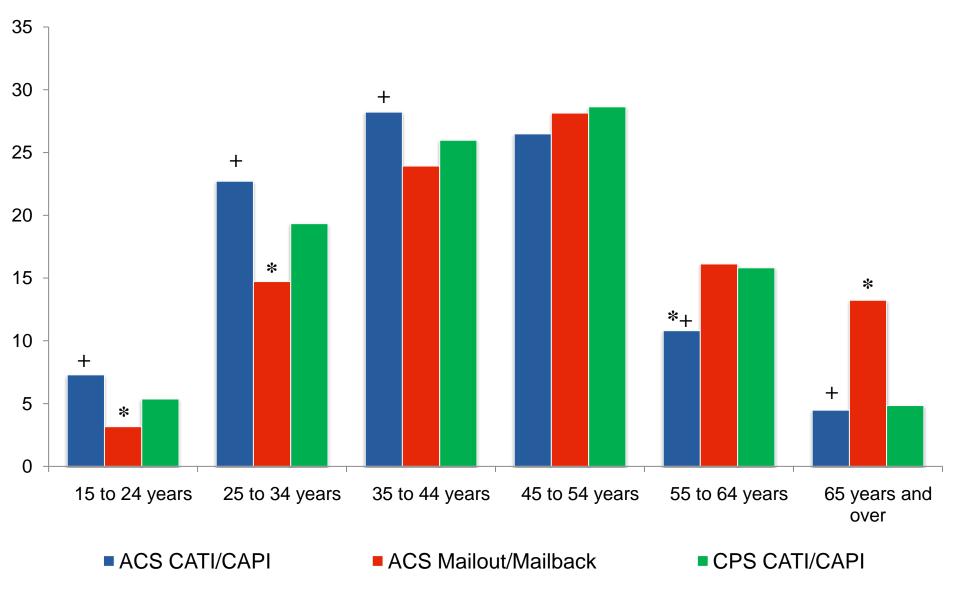
The differences between ACS 2009 and CPS 2010 are fairly small.
 The following analysis explores the possibility that the differences are explained by the mode of data collection.

ACS CATI/CAPI	ACS Mailout/mailback	CPS
152,761*+	428,539*	516,396

^{*} Significantly different from the CPS. + Significantly different from the ACS mailout/mailback.

Age of Householder by Mode

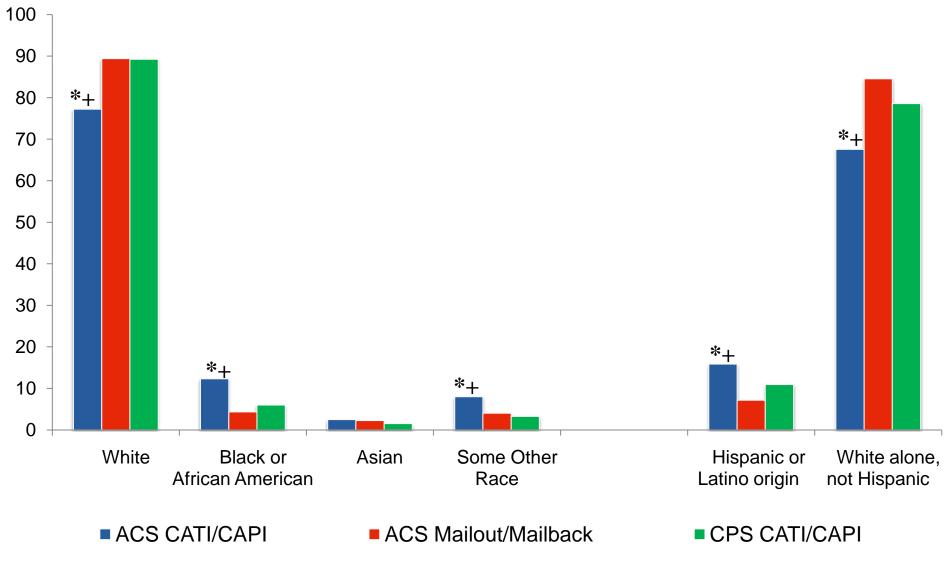
(Percent distribution)



^{*} Significantly different from the CPS. + Significantly different from the ACS mailout/mailback

Race and Hispanic or Latino Origin of Householder by Mode

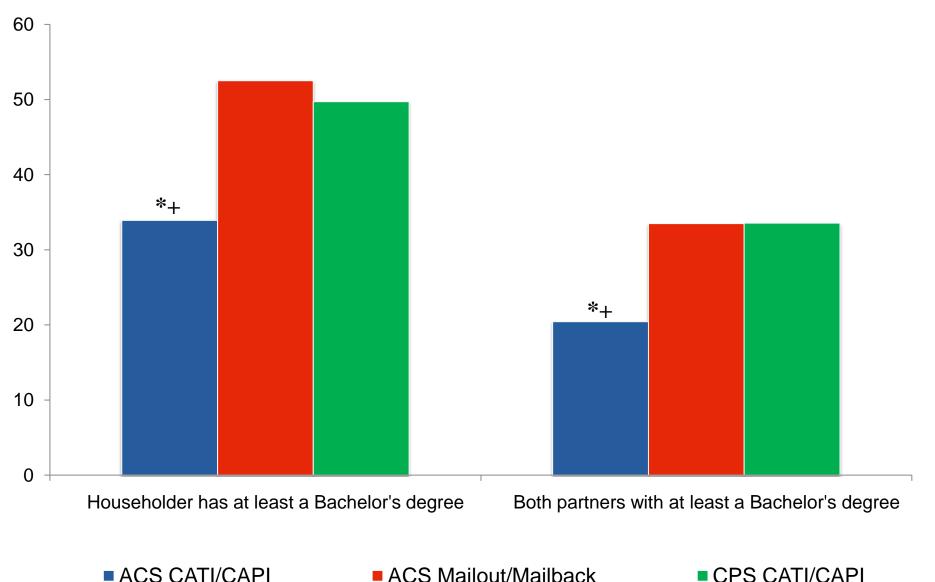
(Percent distribution)



^{*} Significantly different from the CPS. + Significantly different from the ACS mailout/mailback

Educational Attainment by Mode

(Percent with stated educational level)



^{*} Significantly different from the CPS. + Significantly different from the ACS mailout/mailback

Summary of Differences by Mode

- There is a greater percentage of householders who are aged 65 years and over in the ACS mailout/mailback than in both the ACS CATI/CAPI and the CPS.
- The percentage of householders reporting to be white is lower in the ACS CATI/CAPI than in the other survey types. The ACS mailout/mailback has a higher percentage of white alone, not Hispanic or Latino than the ACS CATI/CAPI. The ACS CATI/CAPI has a higher percentage of householders who are black or African American or of some other race, and also respondents of Hispanic or Latino origin than the other surveys.
- Those in the ACS CATI/CAPI report lower educational attainment for the householder and for both partners than in both the ACS mailout/mailback and CPS.
- These comparisons show that the ACS CATI/CAPI respondents are distinctly different from both the ACS mailout/mailback and CPS respondents, the latter two samples are much closer in demographic comparison.

Overall Conclusions

- 1. Although the ACS is considered to be the best survey in the Census Bureau for estimates of same-sex couples, the findings of this study lend support to the idea that other Census Bureau surveys (like the CPS) can produce reasonable and consistent estimates of same-sex couples.
 - By producing reasonable and consistent estimates, the CPS will allow for us to extend research on same-sex couple households through the use of additional economic measures not currently available in the ACS.
 - For example:
 - More detailed questions on income
 - More detailed questions on labor force participation
 - The official poverty measurement
 - A follow-up cohabitation question, which allows us to identify not only householders who are cohabiting but also other cohabiting couples in the household.

2. The ACS's two modal types are very different from each other. These differences reflect those respondents who are willing to complete the survey by mail and those who require subsequent follow-up interviews (ACS CATI/CAPI). This may explain why the CPS, a voluntary survey collected via in-person and telephone interviews, is more similar to the ACS mailout/mailback mode than the ACS CATI/CAPI.

Contact Information

Fertility and Family Statistics Branch Housing and Household Economic Statistics Division US Census Bureau

301-763-2416

Daphne Lofquist

Daphne.A.Lofquist@census.gov

Renee Ellis

Renee.Ellis@census.gov