



Exploring the Use of External Data in the American Community Survey: Opportunities and Challenges

Amy O'Hara and Deborah Stempowski
December 2, 2015
FCSM Research Conference

Overview

- Objective
- Findings
- Challenges
- Next Steps

Agility in Action -- Key Action Areas

- Using administrative records
- Reducing follow-up contact attempts
- Testing messaging in mail materials
- Modifying survey questions
- Asking less frequently or of fewer respondents
- Communicating with respondents
- Promoting awareness of data uses
- Engaging subject-matter experts
- Advocating for respondents
- Leveraging a communications strategy

<http://www.census.gov/programs-surveys/acs/operations-and-administration/2015-16-survey-enhancements.html>

Agility in Action: A Snapshot of Enhancements to the American Community Survey

U.S. Census Bureau
American Community Survey Office

Revised August 2015



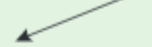
Findings

- Year Built
- Phone Service
- Condominium
- Income
- Residence One Year Ago

Year Built

2 About when was this building first built?

☐ 2000 or later – *Specify year* →



☐ 1990 to 1999

☐ 1980 to 1989

☐ 1970 to 1979

☐ 1960 to 1969

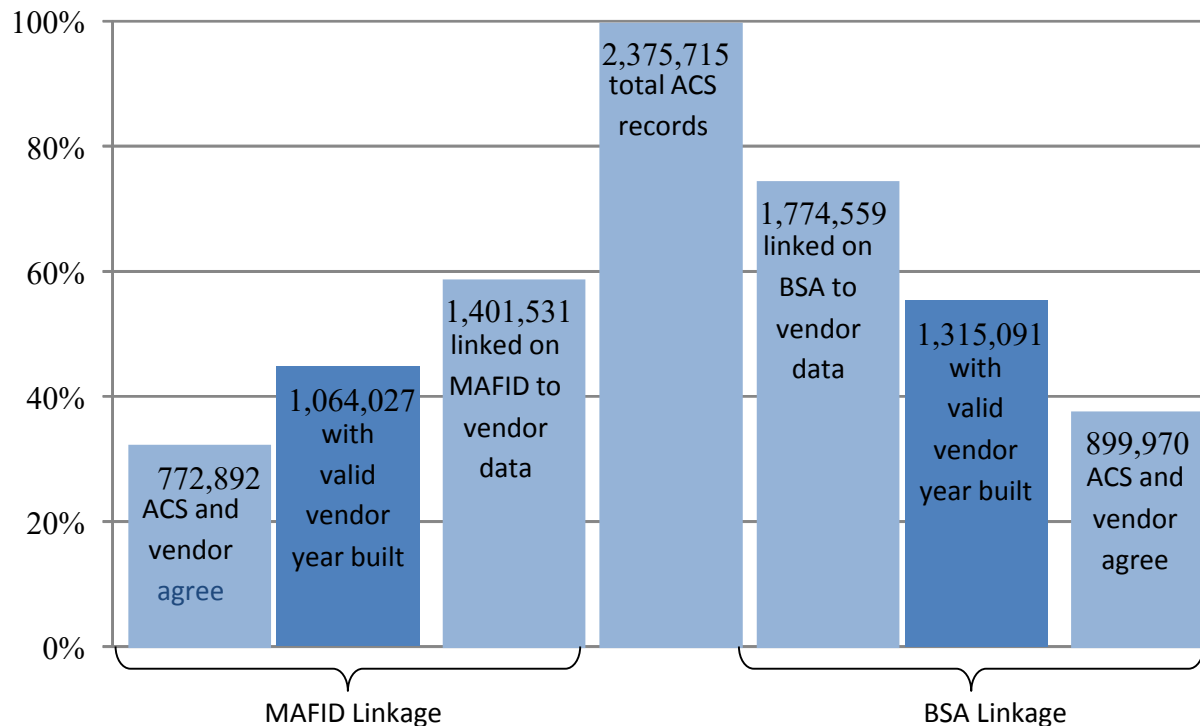
☐ 1950 to 1959

☐ 1940 to 1949

☐ 1939 or earlier

Year Built: MAF ID and BSA Data Linkages

Unedited 2012 ACS records able to link to vendor data, link to vendor year built, and link to same year built category



Source: Unedited 2012 ACS and 2006-2010 vendor data

Phone Service

8 Does this house, apartment, or mobile home have –	Yes	No
a. hot and cold running water?	<input type="checkbox"/>	<input type="checkbox"/>
b. a flush toilet?	<input type="checkbox"/>	<input type="checkbox"/>
c. a bathtub or shower?	<input type="checkbox"/>	<input type="checkbox"/>
d. a sink with a faucet?	<input type="checkbox"/>	<input type="checkbox"/>
e. a stove or range?	<input type="checkbox"/>	<input type="checkbox"/>
f. a refrigerator?	<input type="checkbox"/>	<input type="checkbox"/>
g. telephone service from which you can both make and receive calls? <i>Include cell phones.</i>	<input type="checkbox"/>	<input type="checkbox"/>

Phone Service

Unedited ACS phone service responses (2012) by 2015 CF (shaded cells indicate agreement between data sources)

		Administrative Records Contact Frame		
ACS Response		Phone Service	No phone service	Total
	Phone service	1,877,788	202,915	2,080,703
	No phone service	44,813	11,077	55,890
	Total	1,922,601	213,992	2,136,593
Source: 2012 edited unswapped American Community Survey with unedited phone service responses data and 2015 Contact Frame				

Condominium

16 Is this house, apartment, or mobile home part of a condominium?

☐ Yes → **What is the monthly condominium fee?** *For renters, answer only if you pay the condominium fee in addition to your rent; otherwise, mark the "None" box.*

Monthly amount – Dollars

\$.00

OR

☐ None

☐ No

Condominium

Source	National Coverage	Unit Level Data Available	Condo Fee Data Available
Veterans Administration/Federal Housing Authority Loan Guarantee Programs	No	No	No
Fannie Mae/Freddie Mac Loan Guarantee Programs	No	No	No
National Flood Insurance Plan	No	No	No
Internal Revenue Service	No	No	No
State Databases	Partial	No	No
CoreLogic	No	No	No
CondoSafe (product of CoreLogic)	Partial	Yes	Yes
Real Estate Websites (e.g., Zillow, Redfin)	Partial	Yes	Partial

Income

47 INCOME IN THE PAST 12 MONTHS

Mark (X) the "Yes" box for each type of income this person received, and give your best estimate of the TOTAL AMOUNT during the PAST 12 MONTHS. (NOTE: The "past 12 months" is the period from today's date one year ago up through today.)

Mark (X) the "No" box to show types of income NOT received.

If net income was a loss, mark the "Loss" box to the right of the dollar amount.

For income received jointly, report the appropriate share for each person – or, if that's not possible, report the whole amount for only one person and mark the "No" box for the other person.

a. Wages, salary, commissions, bonuses, or tips from all jobs. Report a amount before deductions for taxes, bonds, dues, or other items.

☐ Yes → TOTAL AMOUNT for past 12 months ☐ No

b. Self-employment income from own nonfarm businesses or farm businesses, including proprietorships and partnerships. Report NET income after business expenses.

☐ Yes → TOTAL AMOUNT for past 12 months ☐ No ☐ Loss

c. Interest, dividends, net rental income, royalty income, or income from annuities and stocks. Report even small amounts credited to an account.

☐ Yes → TOTAL AMOUNT for past 12 months ☐ No ☐ Loss

d. Social Security or Railroad Retirement.

☐ Yes → TOTAL AMOUNT for past 12 months ☐ No

e. Supplemental Security Income (SSI).

☐ Yes → TOTAL AMOUNT for past 12 months ☐ No

f. Any public assistance or welfare payments from the state or local welfare office.

☐ Yes → TOTAL AMOUNT for past 12 months ☐ No

g. Retirement, survivor, or disability pensions. Do NOT include Social Security.

☐ Yes → TOTAL AMOUNT for past 12 months ☐ No

h. Any other sources of income received regularly such as Veterans' (VA) payments, unemployment compensation, child support or alimony. Do NOT include lump sum payments such as money from an inheritance or the sale of a home.

☐ Yes → TOTAL AMOUNT for past 12 months ☐ No

48 What was this person's total income during the PAST 12 MONTHS? Add a zeros in questions 47a to 47h; subtract any losses. If net income was a loss, enter the amount and mark (X) the "Loss" box next to the dollar amount.

☐ None OR TOTAL AMOUNT for past 12 months ☐ Loss

Income

- Among ACS persons age 15 and older, 94% have sufficient identifying information to allow linkage to administrative records.
- 88% of linkable persons age 18 to 64 have at least one of the eight common types of IRS information returns that are currently available to the Census Bureau.
- Of those 65 or older, 98% have an information return.

Income - Wages

- Linkable ACS persons age 15 and over had wage reporting (zero or positive) that agreed with IRS W-2s (absent or present) in 87% of cases.
- In this group, only 6% had reported wages in the ACS but did not have any W-2.
 - This type of “false positive” discrepancy may be due to income type confusion, matching error, or the misalignment of reference period or scope.
 - Wages were present only on the W-2 for another 6% of this universe, revealing underreporting or reference period misalignment.

Income - Pensions

- 87% of linkable ACS persons age 15 and over had ACS-reported retirement, survivor, and disability pension (RSDP) receipt that agreed with the absence or presence of an IRS 1099-R record.
- RSDP income was present only in ACS for 2% of this universe, but was present only on the 1099-R for 12%, possibly reflecting underreporting.

Residence One Year Ago

15 a. Did this person live in this house or apartment 1 year ago?

☐ Person is under 1 year old → *SKIP to question 16*

☐ Yes, this house → *SKIP to question 16*

☐ No, outside the United States and Puerto Rico – *Print name of foreign country, or U.S. Virgin Islands, Guam, etc., below; then SKIP to question 16*

☐ No, different house in the United States or Puerto Rico

b. Where did this person live 1 year ago?

Address (Number and street name)

Name of city, town, or post office

Name of U.S. county or municipio in Puerto Rico

Name of U.S. state or Puerto Rico **ZIP Code**

Residence One Year Ago

- 94% of ACS 2012 persons are validated for linkage
 - 71% ACS reference persons matched a TY2011 1040
 - 51% of the matched ACS-1040 records were at the same MAFID
 - 90% of IRS 1040s match MAF
-
- 679k movers in 2012 ACS, look for match in TY2010
 - Focus on reference persons (218k) and primary filers
 - 68% match to a TY2010 return (148k)
 - 50% are in same county (108k)

Challenges

- Data availability
- Concept and timing alignment
- Resources

Next Steps

- Subject matter teams extend and refine findings to date
- New analyses on acreage, real estate taxes, tenure, number of rooms and bedrooms, self-employment earnings, mortgage, sale of agricultural products, facilities, fuel type, property value, social security benefits, and Supplemental Security Income