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

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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

Findings

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

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

Does this house, apartment, or mobile home have -

- a. hot and cold running water?  
- b. a flush toilet?
- c. a bathtub or shower?
- d. a sink with a faucet?
- e. a stove or range?
- f. a refrigerator?
- g. telephone service from which you can both make and receive calls? Include cell phones.

Yes  No

☐ ☐

☐ ☐

☐ ☐

☐ ☐

☐ ☐
# Phone Service

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

<table>
<thead>
<tr>
<th>ACS Response</th>
<th>Administrative Records Contact Frame</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Phone Service</td>
<td>Phone service</td>
<td>No phone service</td>
<td>Total</td>
</tr>
<tr>
<td>Phone service</td>
<td>1,877,788</td>
<td>202,915</td>
<td>2,080,703</td>
<td></td>
</tr>
<tr>
<td>No phone service</td>
<td>44,813</td>
<td>11,077</td>
<td>55,890</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1,922,601</td>
<td>213,992</td>
<td>2,136,593</td>
<td></td>
</tr>
</tbody>
</table>

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

☐ $0,000.00

☐ None

☐ No
## Condominium

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