An Examination of Mode of Response for the Foreign-Born Population in the American Community Survey: 2009

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The American Community Survey (ACS)¹ collects household data from respondents via three major modes of response: mail, Computer Assisted Telephone Interviewing (CATI), and Computer Assisted Personal Interviewing (CAPI).² Differences in mode of collection have implications both for data quality and sample collection costs. ^{3 4} This poster presents a number of different frequency tables and graphs to examine variation in collection by mode across demographic variables in the 2009 ACS, with a focus on differences between the native and foreign-born populations. While important to the

¹ The estimates and proportions in this paper are based on weighted estimates. Information on the sample design and weighting of the 2009 American Community Survey may be found at: <u>http://www.census.gov/acs/www/Downloads/data_documentation/Accuracy/ACS_Accuracy_of_Data_200</u>

<u>9.pdf</u>

 $[\]frac{1}{2}$ Group quarters (GQ) data have also been collected in the ACS since 2006 but are excluded from this analysis by mode.

³ For example, Tourangeau and Smith (1996) found that respondents were less likely to report on socially sensitive topics such as drug use and sexual behavior for CAPI than for self-administered methods of data collection. See Chapter Five in Groves et al. (2004) for further discussion of modal effects on data quality and response patterns.

⁴ The estimated cost per case for mail is \$14, for CATI is \$16/case, and for CAPI is \$144/case (Griffin and Hughes, 2010).

overall understanding of mode effects, an examination of causal factors is beyond the scope of this poster. Instead, this poster will demonstrate that mode differences exist, and that they vary according to major demographic characteristics, especially citizenship and nativity.

In the ACS, definitions of native and foreign-born residents are based on the response to the citizenship question. The native population includes anyone who was a U.S. citizen or a U.S. national at birth; this includes respondents who indicated they were born in the United States, Puerto Rico, a U.S. Island Area (such as Guam), or abroad of American (U.S. citizen) parent or parents. The foreign-born population includes anyone who was not a U.S. citizen or a U.S. national at birth. This includes respondents who indicated they were a U.S. citizen by naturalization or not a U.S. citizen. Further details on how the native and foreign-born populations are defined may be found in the ACS Subject Definitions document (2009).

The first part of this poster describes differences by mode in how native and foreignborn answer the ACS, as well as modal differences between naturalized and noncitizens among the foreign born. We find that natives tend to be more likely to respond by mail than the foreign born, who were more likely to respond by CAPI than natives. Among the foreign born, naturalized citizens were more likely to respond by mail than noncitizens, who had higher rates of CAPI response than naturalized citizens. This differential in mail response between naturalized citizens and noncitizens closely resembles the difference between natives and foreign born.

The second part of the poster examines mode effects in more detail by subdividing both the native and foreign-born population by major social and demographic characteristics, such as age, sex, race and Hispanic origin, poverty, and educational attainment. Some of the major findings include:

- For both native and foreign-born householders, males were more likely to respond via mail than females.
- Mail response rates for householders increased with age, with similar patterns being found for both natives and foreign-born.
- The foreign-born population had higher mail response rates for non-Hispanic White and non-Hispanic Asian householders than for Hispanic and non-Hispanic Black householders. The majority of non-Hispanic Black and Hispanic foreign-born responded via CAPI.
- Among those who completed at least a bachelor's degree, native householders had greater mail response rates than foreign-born householders. Natives and foreign-born with at least a Bachelor's degree had higher mail response than for their respective total populations.
- Among householders below the poverty line, the foreign born were more likely than natives to use CAPI and less likely to respond by mail than natives. Natives and foreign-born in poverty had lower mail response than for their respective total populations.

The foreign-born population is further examined in terms of differences by country and region of birth, by year of entry into the United States, and by language spoken at home and ability to speak English. We found that:

- Foreign-born householders from Asia and Europe tended to have higher mail response rates than those from Latin America.
- Foreign-born householders in more recent years of entry tended to have lower mail response rates than householders who have been in the United States longer.
- Among foreign-born householders, higher English-language speaking ability corresponded with greater mail response and lower use of CAPI.

In summary, we found some pronounced differences in modal response in the 2009 ACS. Foreign-born householders respond less often by mail and more often by CAPI than natives do, and among the foreign-born noncitizens respond less often by mail and more often by CAPI than naturalized citizens. Mail response increased with age for both native and foreign-born households. Natives used mail more than the foreign born both among those with at least a bachelor's degree and among householders in poverty. Foreign-born householders had lower mail response rates for those who have been in the country a shorter period of time and among those with lower levels of English language speaking ability. Potential extensions of this research may include exploring causal relationships behind the findings, for example which correlations remain once other factors such as socioeconomic status are controlled for.

References

Griffin, Deborah H., and Todd R. Hughes (2010)."*Mixed Mode Data Collection Methods in the American Community Survey*." Presented at the annual meeting of the American Association for Public Opinion Research, Chicago, IL, May 2010.

Groves, Robert M., Floyd J. Fowler, Jr., Mick P. Couper, James M. Lepkowski, Eleanor Singer, and Roger Tourangeau (2004). <u>Survey Methodology</u>. Hoboken, NJ: Wiley Series in Survey Methodology.

Tourangeau, Roger and T.W. Smith (1996). "Asking sensitive questions: The impact of data collection mode, question format, and question context." *Public Opinion Quarterly* 60:275-304.

U.S. Census Bureau (2009). "American Community Survey Subject Definitions." (http://www.census.gov/acs/www/Downloads/data_documentation/SubjectDefinitions/20 09_ACSSubjectDefinitions.pdf)

U.S. Census Bureau (2009). "American Community Survey Accuracy of the Data." (http://www.census.gov/acs/www/Downloads/data_documentation/Accuracy/ACS_Accu racy_of_Data_2009.pdf)