

Managing a Mixed-Mode Survey: The American Community Survey's Experience

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2010 Federal CASIC Workshops
March 18, 2010

Overview of Presentation

Background on the ACS

Overview of each of the three data collection modes

Discussion of management and design challenges

Comments on testing an Internet mode and other future enhancements

The American Community Survey

An on-going sample survey designed to provide communities with reliable and timely demographic, social, economic, and housing data every year

Collects data in every county in the US and Puerto Rico

Includes a housing unit and a group quarters sample

Basic Design of the Housing Unit Survey

Annual sample is selected from the Census Bureau's Master Address File and allocated into 12 monthly sample panels

Each sample panel has a sample size of about 250,000 addresses

Basic Design of the Housing Unit Survey

Three sequential modes of data collection are used over a 3-month time period to collect survey data for each sample panel

Data are aggregated over time to produce 1-year, 3-year, and 5-year estimates

Sequential Modes of Data Collection

	Calendar Month				
Sample Panel	Jan 2010	Feb 2010	March 2010	April 2010	May 2010
Dec 2009	Phone	Personal Visit			
Jan 2010	Mail	Phone	Personal Visit		
Feb 2010		Mail	Phone	Personal Visit	
March 2010			Mail	Phone	Personal Visit


Mail Mode

Approximate workload: 229,000 cases per month

Estimated cost: \$13.70 per case

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Economics and Statistics Administration
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 **THE American Community Survey**

Please complete this form and return it as soon as possible after receiving it in the mail.

This form asks for information about the people who are living or staying at the address on the mailing label and about the house, apartment, or mobile home located at the address on the mailing label.

Start Here

➤ Please print today's date.
Month Day Year

➤ Please print the name and telephone number of the person who is filling out this form. We may contact you if there is a question.

Last Name

First Name MI

Area Code + Number

If you need help or have questions

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Jeffersonville, IN 47132-0001

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The American Community Survey
Form Enclosed

**YOUR RESPONSE IS
REQUIRED BY LAW**

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Mail Mode

Four mailings are used to maximize mail response

- Pre-notice (or advance) letter
- Initial mailing package
- Reminder postcard
- Second mailing package (for nonrespondents)

Mandatory messages used

Mail Mode

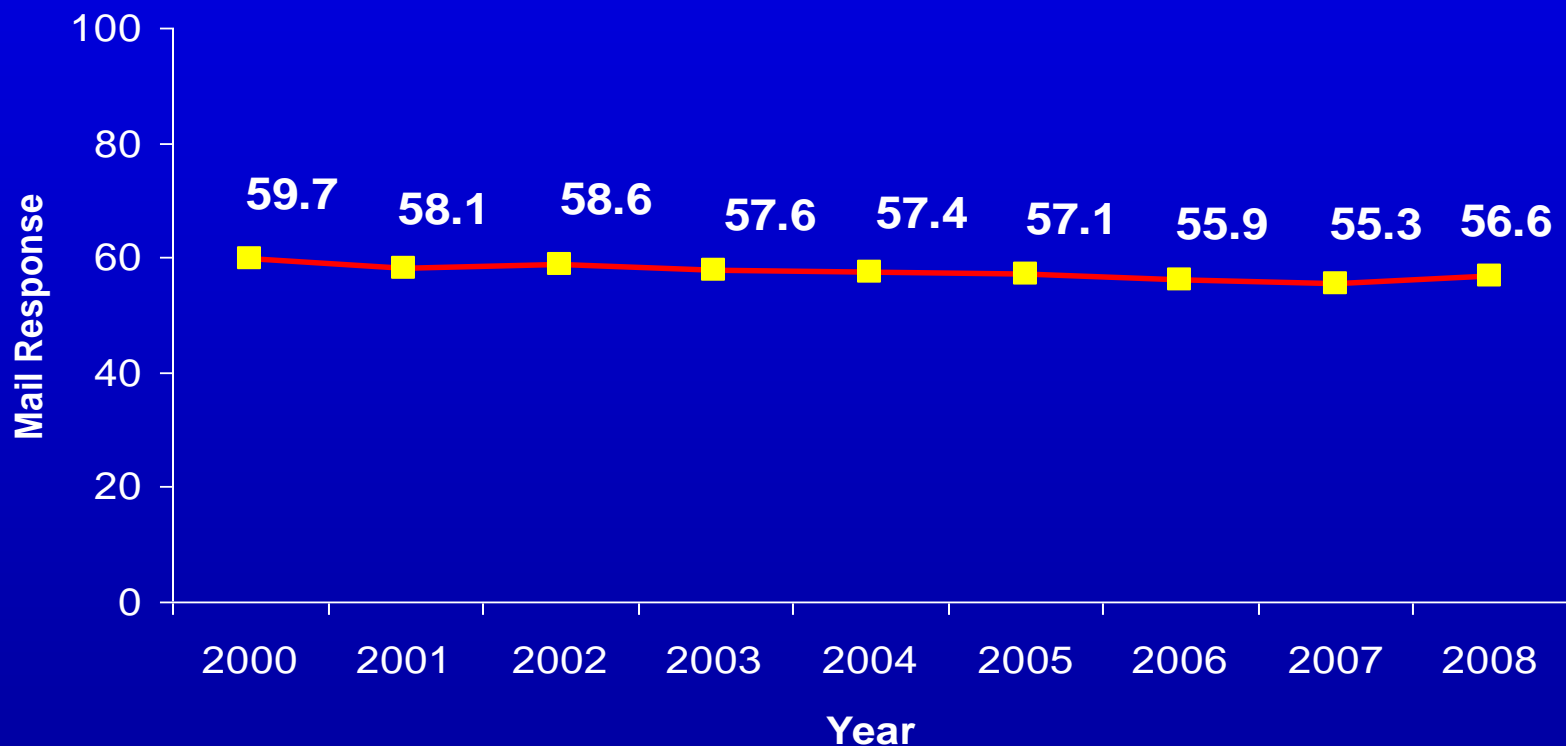
Mail out is in English with Spanish forms available upon request

Toll-free telephone assistance and an instructional booklet are provided to help respondents correctly complete their forms

Data for mail returns are reviewed for completeness with a telephone follow-up to resolve missing and inconsistent responses, as well as collect data for large households

Mail Mode

Mail Response Rates



Source: 2000 – 2008 ACS, weighted mail response rates

Telephone Mode

Approximate workload:
100,000 cases per
month

Estimated cost: \$16.30
per case



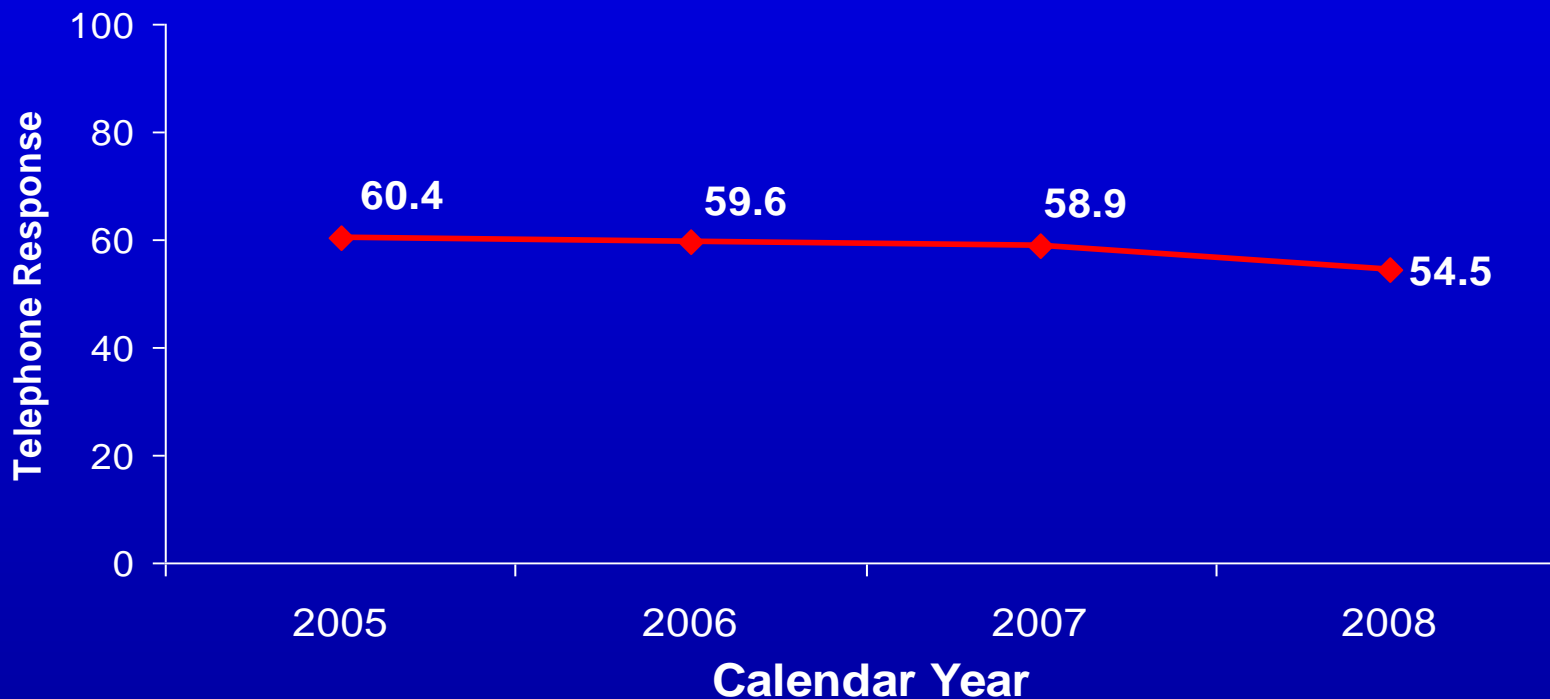
Telephone Mode

About 5 weeks after the initial mailout the workload is identified for telephone follow-up which last about four weeks

Commercial vendors provide telephone numbers and 3 call centers conduct interviews using computer-assisted methods (WebCATI)

Telephone Mode

Telephone Response Rates



Source: 2005 – 2008 ACS, weighted telephone response rates

Personal Visit Mode

Approximate workload:
46,000 cases per month

Estimated cost: \$143.51
per case



Personal Visit Mode

Two universes for personal visit follow-up

- Sample cases with a mailable address but without a mail or telephone response
- Sample cases ineligible for mail

A subsample of each universe is selected for personal visit follow-up

Personal Visit Mode

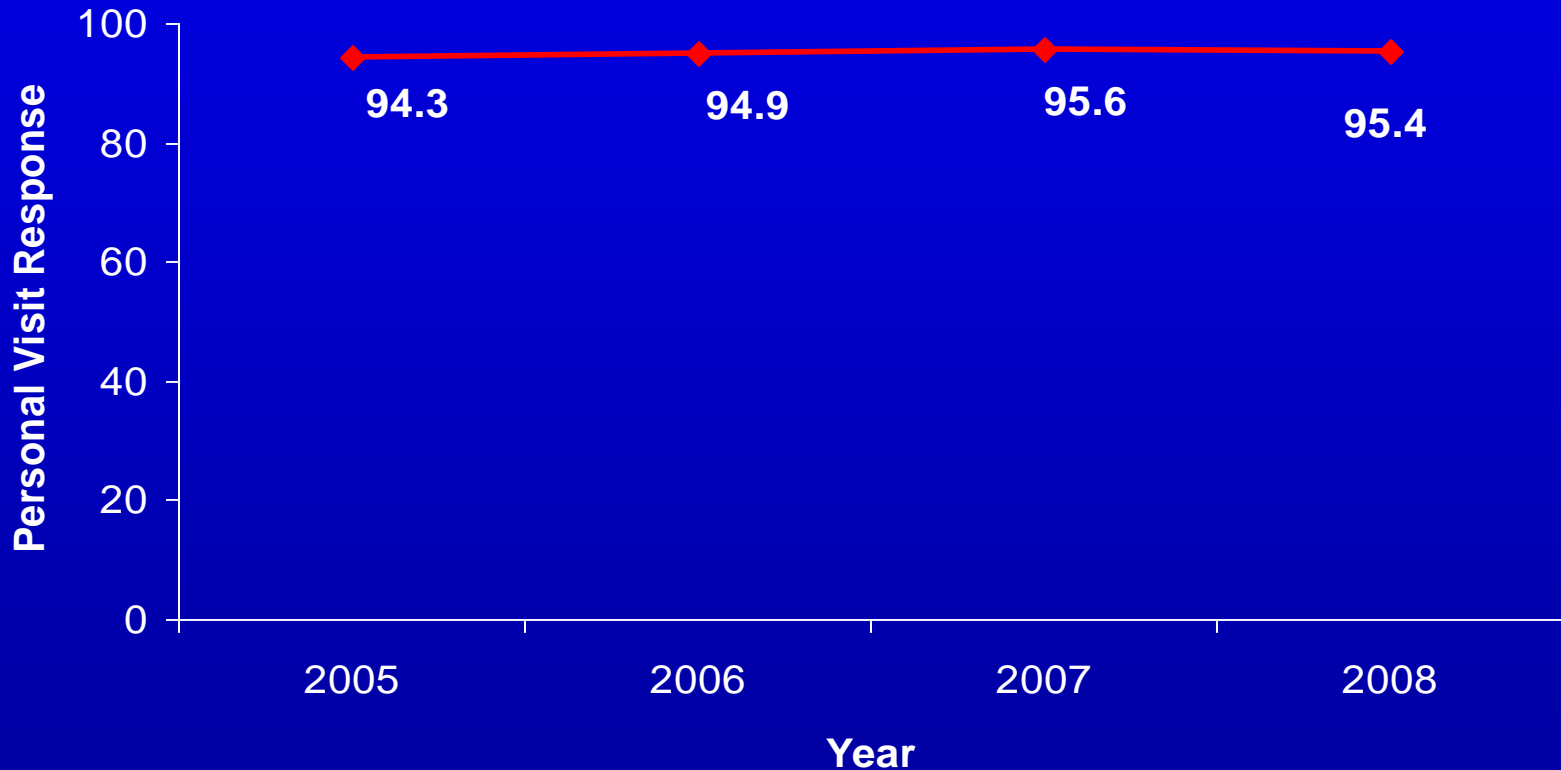
Interviewing is managed out of 12 Census Bureau Regional Offices

Regional offices recruit bilingual staff to ensure data collection from non-English speaking households

Interviewers use laptops with English and Spanish translations

Personal Visit Mode

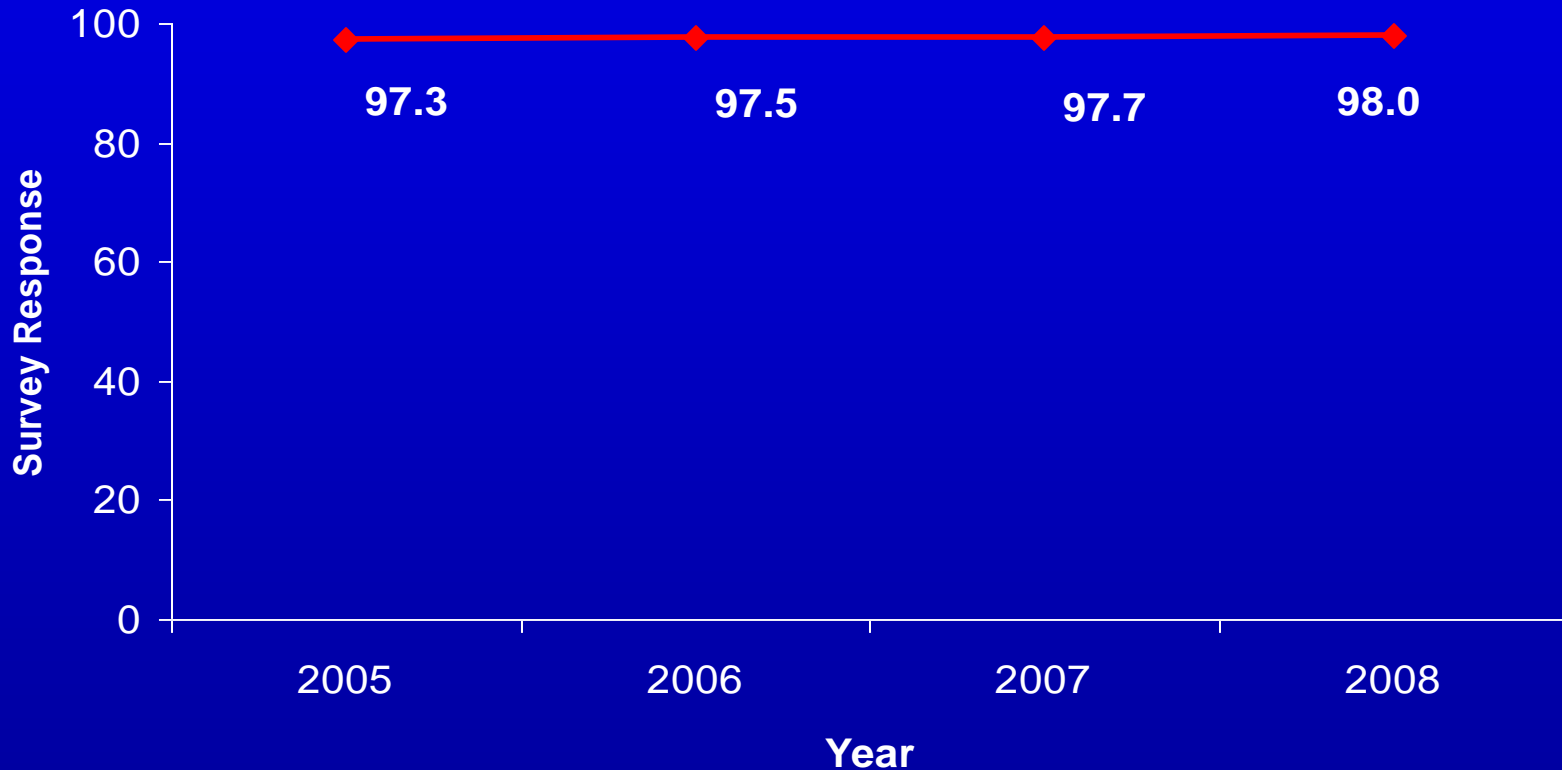
Personal Visit Response Rates



Source: 2005 – 2008 ACS, weighted personal visit response rates

Combination of Modes

Survey Response Rates



Source: 2005 – 2007 ACS, weighted survey response rates

Combination of Modes

An example of the timing of data collection activities for the March 2010 sample panel

FEBRUARY 2010

2/18 – Mail pre-notice letters

2/22 – Mail initial packages and begin mail check-in

2/25 – Mail reminder cards

APRIL 2010

4/1 – CATI interviewing begins

4/26 – CATI interviewing ends

4/28 – Create CAPI workload

MARCH 2010

3/18 – Mail 2nd package

3/29 – Create CATI workload

MAY 2010

5/1 – CAPI interviewing begins

5/31 – CAPI interviewing ends

5/31 – End mail check-in

Mixed Mode Survey Management Challenges: An Overview

Coordination of design changes

Managing relative priorities across modes

Changes in cost and response by mode

Providing appropriate language support by mode

Coordination of Design Changes

Careful attention is given to minimize mode effects while taking advantage of the technology of each mode

Consideration of timing the implementation of design changes across modes versus across panels

Configuration management is required to ensure changes made in all necessary materials

Managing Relative Priorities Across Modes

Scheduling start and stop dates for each operation

Balancing contact attempts between modes

Not all phone nonrespondents will be selected for personal visit, therefore must maximize phone response

Those selected for personal visit will receive additional contacts

Managing Changes in Cost and Response by Mode

Mail and telephone response rates are generally declining, pushing more work into personal visit and increasing program costs

Decisions made to control costs in earlier modes may impact workloads and costs in later modes

Providing Language Support

Majority of language interviewing is done in phone and personal visit modes, therefore most tools have been developed for these modes:

- Spanish version of survey instrument

- Language identification flashcard

- Letters and Brochures have been developed in ten languages

Cognitive testing of the translations is important, but costly and resource-intensive

Language Support for Mail Mode

Appropriate language tools for mail mode can be a challenge

Tested a multi-lingual brochure, and considering implementation in 2011

Spanish questionnaires available upon request

Developing language guides in Chinese and Korean

Testing an Internet Mode for the ACS

Evaluating the feasibility of an ACS Internet response option in English and Spanish

Experiment in 2011 will compare strategies for offering the Internet option in order to maximize combined response by Internet and mail

Testing an Internet Mode for the ACS

Design challenge is to minimize mode effects in design of question wording and presentation on Internet

Planned content reinterview of Internet respondents and follow-up interview about materials and Internet accessibility

Other Future Enhancements

Recently tested an additional mailing for mail nonrespondents not eligible for the telephone mode

Proposed 100% personal visit follow up in Remote Alaska and small American Indian areas

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