

Agility in Action: Research to Enhance the American Community Survey

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U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU
census.gov

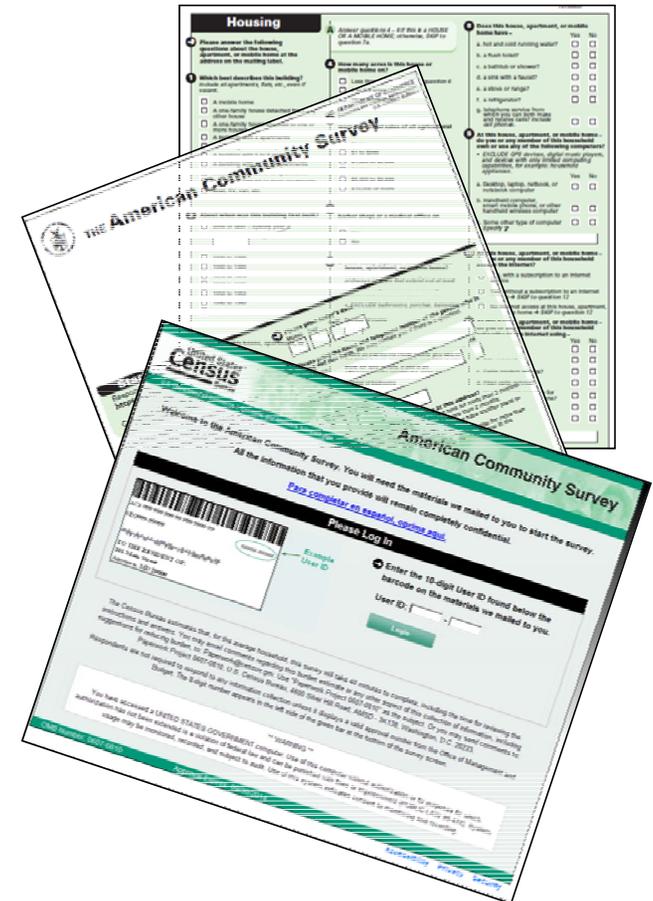
Presentation Outline

- Overview of the ACS
- What We Value
- Turning Our Values into Action
- Research to Enhance the ACS
 - Engaging Respondents through Mail Materials
 - Understanding the Respondent's Experience
 - Changing the ACS to Keep Up with the Times
 - Employing Alternative Data Sources

The American Community Survey

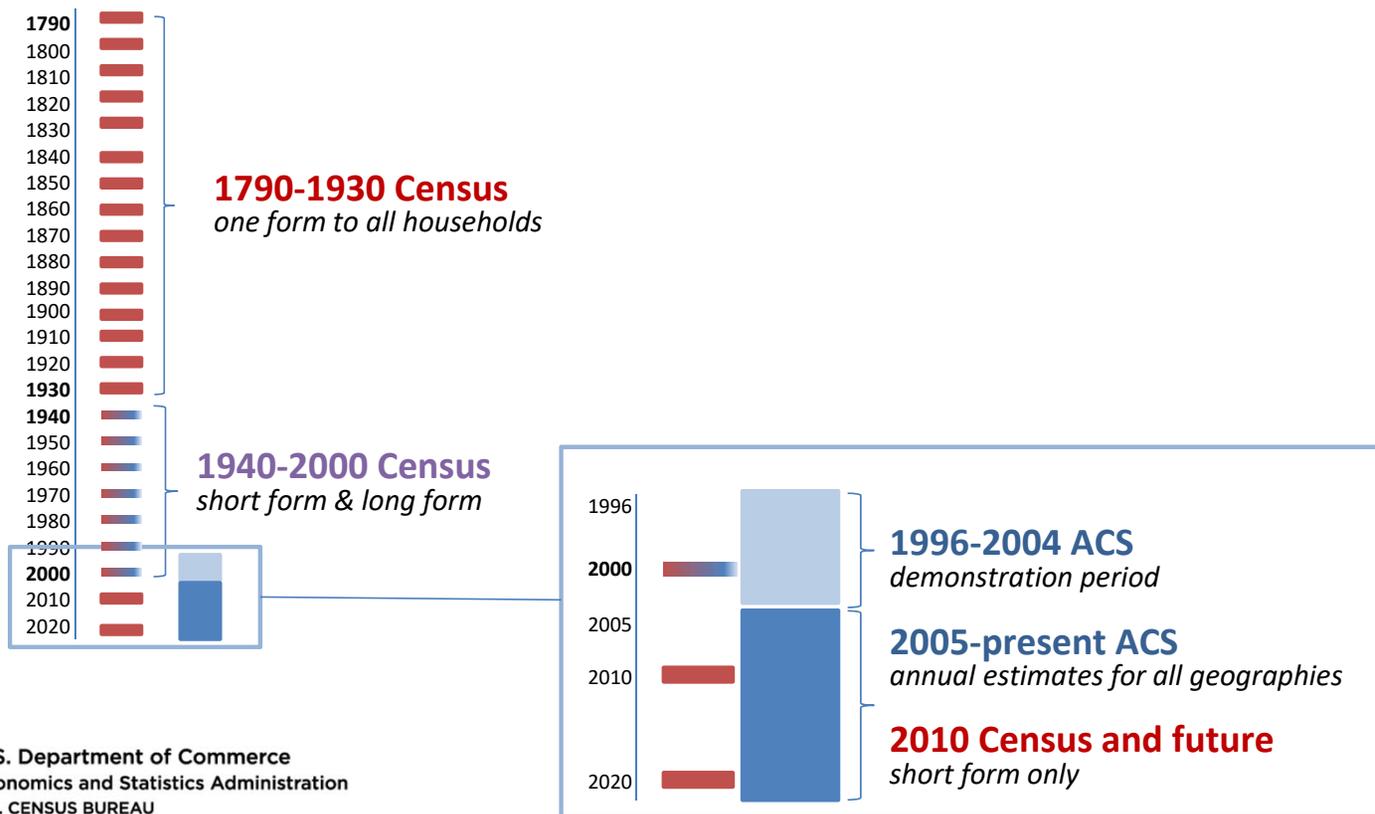
The Basics

- Ongoing monthly survey sent to 3.5 million addresses per year to produce detailed population and housing estimates each year
 - Visit 20,000 Group Quarter facilities and sample approximately 194,000 residents each year
- Designed to produce critical information on small areas and small population groups previously collected on the decennial long form
- Covers 35+ topics and supports over 300 known Federal government uses
- Used to distribute more than \$675 billion federal funds each year
- Data released annually
 - 1-year estimates (12 months of data)
 - 5-year estimates (60 months of data)



The American Community Survey

Decennial Census and the American Community Survey



The American Community Survey

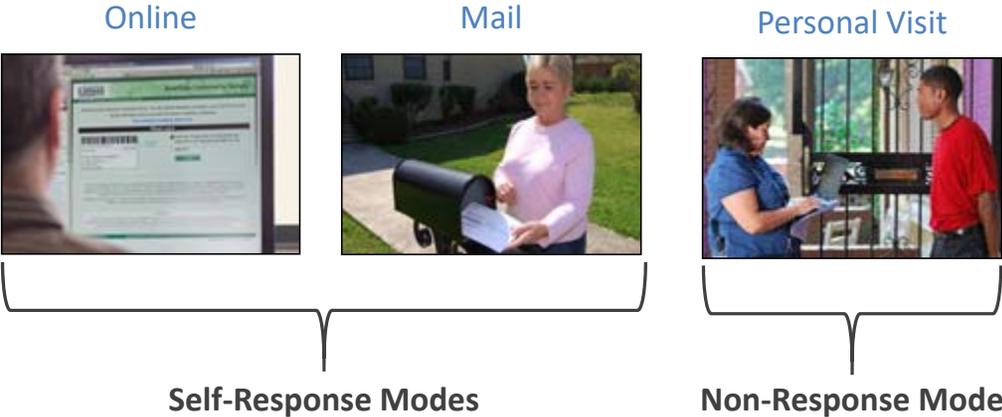
Difference between the 2020 Census and the ACS

	<u>ACS</u>	<u>2020 Census</u>
<i>Purpose.....</i>	Sample estimates	Official counts
<i>Produces.....</i>	Population characteristics	Population totals
<i>New Data Every...</i>	Year	10 years
<i>Data Reflect.....</i>	Period of time	Point in time
<i>Collects.....</i>	Detailed social, economic, housing, and demographic characteristics	Basic demographics

The American Community Survey

Data Collection Process

The ACS has **71 questions** and on average it takes about **40 minutes** to take the survey.



The American Community Survey

Content

11 Billion Estimates, 35+ topics, 1,000 tables ... on an annual basis.

Social

Ancestry
Citizenship
Disability
Educational Attainment
Fertility
Grandparents
Language
Marital Status
Migration
School Enrollment
Veterans

Demographic

Age
Hispanic Origin
Race
Relationship
Sex

Economic

Type of Worker
Commuting
Employment Status
Food Stamps (SNAP)
Health Insurance
Hours/Week, Weeks/Year
Income
Industry & Occupation

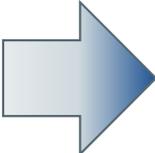
Housing

Computer & Internet Use
Costs (Mortgage, Taxes, Insurance)
Heating Fuel
Home Value
Occupancy
Plumbing/Kitchen Facilities
Structure
Tenure (Own/Rent)
Utilities
Vehicles
Year Built/ Year Moved In

Our Program Priorities



Turning Our Values into Actions

- The ACS is integral to our national information infrastructure.
- Census Bureau undertook sweeping actions to **research** options to **educate**, **communicate**, and **test** enhancements to the ACS, which are detailed in our “Agility In Action” report.
- Our approach has evolved: **Reactive**  **Proactive**

Respondent Advocate

- Resolves survey respondent concerns
- Interacts with major survey stakeholders, including Congress
- Guides and suggests improvements to the respondent experience

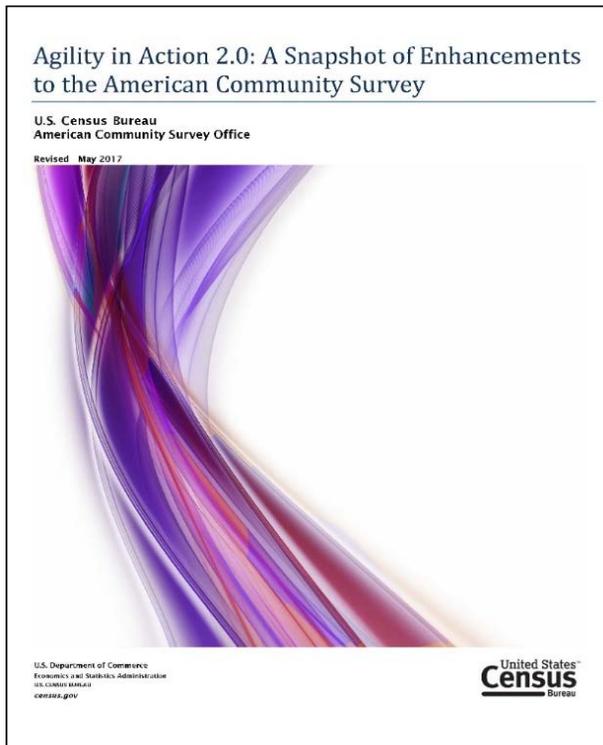
Ensuring We Ask Only What is Necessary

- **Reached** out to our partners at other Federal agencies to reaffirm their data needs
- **Removed** the questions
 - concerning business or medical office on property
 - about flush toilets
- **Retained** the question concerning undergraduate field of degree
- **Retained** the questions concerning marital history
- **Reworded** the questions on computer and internet usage
- **Streamlined** mailing procedures

Stakeholder Engagements

- National Academies of Science Committee for National Statistics (CNSTAT) public workshop (March 8-9, 2016)
- CNSTAT expert meetings – Spring 2016
 - April 7th - Matrix Sampling
 - April 21st – Administrative Records
 - May 24th – Group Quarters Questionnaire
 - June 2nd – Communication and Messaging
- Meetings with Harvard’s Behavioral Insight Group – December 2016

Agility in Action



- As detailed in our latest *Agility in Action* report, we continuously conduct research to improve the quality of:
 - The **experience of people** who take the survey
 - The **survey** itself
 - The **data** we collect
- *Agility in Action* embodies how we listen to and respect those who take the survey.
- It illustrates our commitment to being a responsive survey.
- **Published version 2.0 on May 31, 2017**

Research Advances Quality

Published over 30 papers over the last three years that detail our answers to the following questions:

- What **alternate data sources** can we explore to determine if we can reduce the number of survey questions?
- How can we **improve our survey design**?
- What can we do to **understand** what it is like for people to take the survey?
- How can we **ensure quality data collection** for people who live in institutions like military barracks, colleges, or prisons?
- What are the **best ways to communicate** to the public about the ACS?



Enhancing Mail Materials

- Testing 3 treatments – August 2017
- Each treatment – 24,000 addresses
- Methodological Changes:
 - Used a “How Your Responses Help America” brochure in the initial mail packages
 - Revised the ACS paper questionnaire cover
 - Changed the 5th mailing from a postcard to a letter to include internet login information
- Significantly revised wording in the letters and postcards
- Preliminary findings:
 - None of the experimental treatments achieves the response rates of our current production
 - Replacement of 5th mailing with a letter may have boosted return rates.

Pressure Seal Mailers

- Tested – May 2017
- Replaced letters and postcards in the ACS mail materials with pressure seal mailers
 - Pressure seal mailers are one-page documents with pre-applied adhesive that is folded and sealed with pressure
 - Pressure seal mailers are cheaper to produce than letters inserted into envelopes, but more expensive than postcards
- Evaluated impact on self-response and costs
 - Replacing the reminder letter (2nd mailing) did not negatively impact self-response and would save money
 - Replacing the reminder postcards (4th and 5th mailings) had mixed results for self-response rates and would increase production costs
- Pressure seal mailers will be implemented for the 2nd and 5th mailings later in 2018

Adaptive Strategy

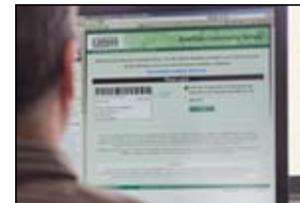
- Tested – October 2017
- Determine whether we can improve the respondent experience and response rates by providing respondents with their choice of response mode in the initial request.
 - Identify areas where paper first (instead of internet first) is the best strategy.
- Two strategies for mailings:
 - Some respondents are sent an internet only option in the first mailing.
 - Others are given a paper questionnaire and the option to choose between the internet and paper.
- Preliminary results indicate that offering a choice of response mode does not improve response rates for the ACS.

Internet Only Option Online



Internet or Paper Form Options

Online

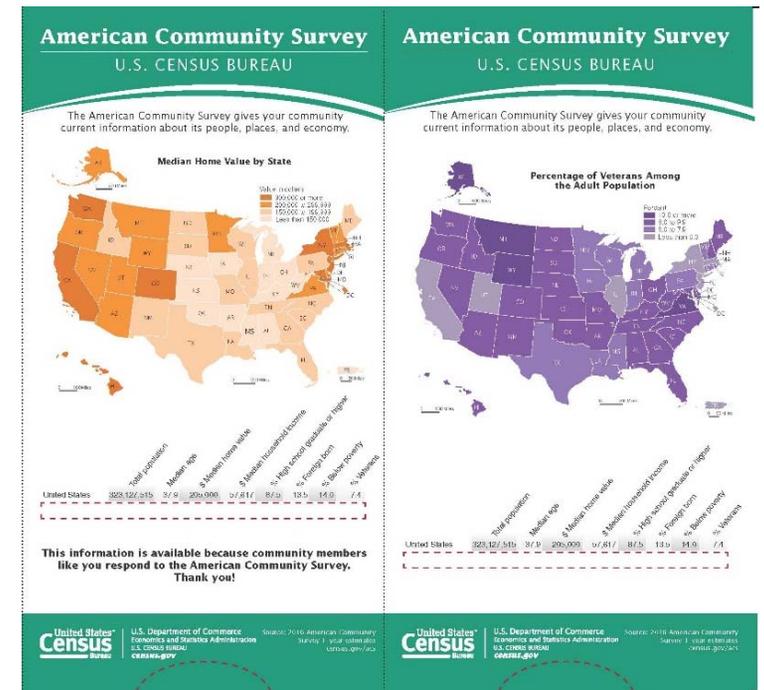


Mail



Data Slide

- Test planned for June 2018
- Idea generated during discussions with Harvard's Behavioral Insight Group
- Include data slide in the invitation sent to ACS respondents
 - Legitimize the survey
 - Present statistics of interest
 - May serve as a reminder to complete the survey



Understanding the Respondent's Experience

- Literature review of how other surveys have conceptualized and measured respondent burden
- Focus groups with respondents – March and April 2017
- Develop and test a series of questions that we could add to the ACS to measure perceptions of burden
- Analyzing the comments we have received from respondents

Changing the ACS to Keep Up with the Times

- **Making the ACS questions clear, easy to understand, and relevant** are key to improving the response rate and the quality of the data.
- The Census Bureau conducts a content test for the ACS about every five years to **determine if wording and layout of questions should be updated.**
- In 2016, we tested changes to questions on 10 topics:
 - Relationship
 - Race and Hispanic Origin
 - Telephone Service
 - Computer and Internet Use
 - Health Insurance*
 - Commuting (Journey to Work)
 - Weeks Worked
 - Industry and Occupation
 - Class of Worker
 - Retirement Income

Content Changes for the 2019 ACS

✓ Computer and Internet Use changes already implemented on the 2016 ACS.

✓ Changes proposed for implementation on the 2019 ACS:

Telephone Service

Commuting (Journey to Work)

Weeks Worked

Class of Worker

Industry and Occupation

Retirement Income

Relationship

Health insurance premiums and subsidies*

✗ Changes not recommended for implementation:

○ Health insurance coverage

• Decennial Drives Decision:

○ In 2020, the ACS will implement the version of the race and Hispanic origin questions that are used on the 2020 Census.

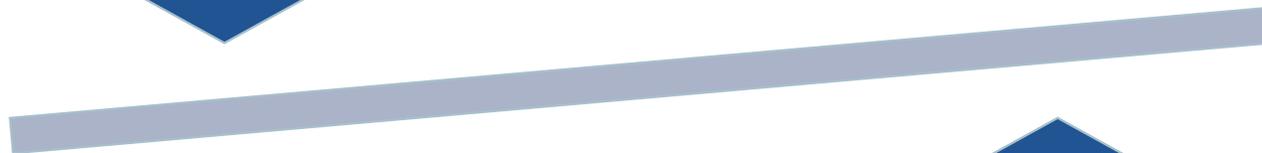
**This content is new to the ACS.*

Employing Alternative Data Sources

Striking a Balance



Declining response rates as well as growing concerns about **privacy and confidentiality** of data challenge our ability to collect information using surveys.



Society demands **more data** at a **rapid pace** to meet the needs of the changing landscape of America's communities.



What are Administrative Records?

- Administrative records and third party data refer to micro data records contained in files collected and maintained by administrative (i.e., program) agencies and commercial entities.
- Government and commercial entities maintain these files for the purpose of administering programs and providing services.
- Administrative records are distinct from systems of information collected exclusively for statistical purposes, such as those the U.S. Census Bureau produces under the authority of Title 13 of the United States Code (U.S.C.).
- The Census Bureau uses, and seeks to use, administrative records developed by federal agencies, tribal, state, and local governments as well as data from commercial entities.

Why Use Administrative Data?

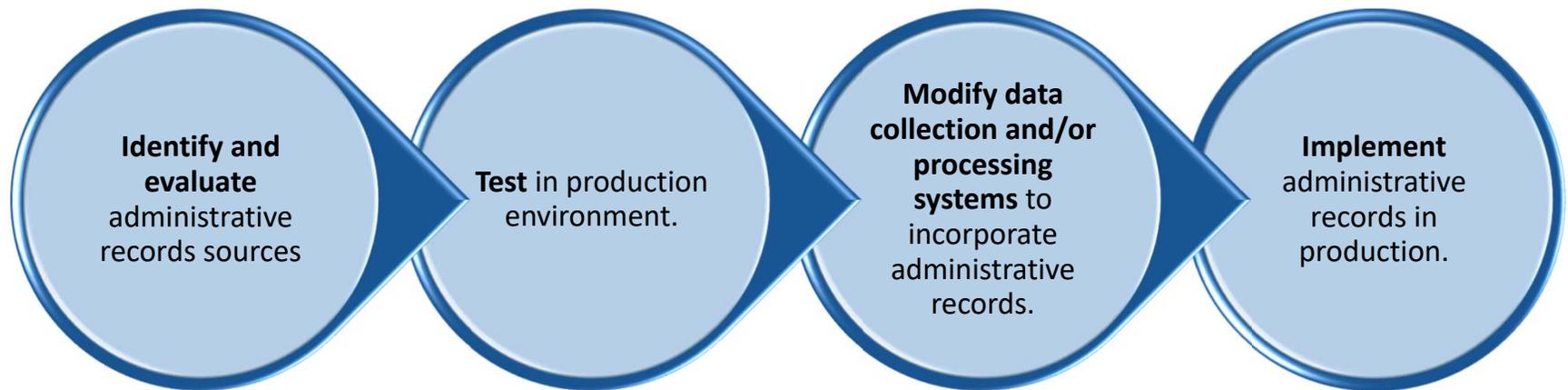
- Reduce the amount of information we request from respondents
- Increase data reliability
- Provide cost savings by reducing the need for follow up visits
- Mandated by Title 13 of the U.S. Code:

To the maximum extent possible and consistent with the kind, timeliness, quality and scope of the statistics required, the Secretary shall acquire and use information available from any source referred to in subsection (a) or (b) of this section instead of conducting direct inquiries.

How Might We Use Administrative Data?

- Replace census and survey questions
- Fill-in-the-blanks during editing and imputation
- Provide additional information to enrich census and survey sources
- Identify vacant housing units to reduce non-response followup costs
- Measure error in census and survey data

Charting the Course



What Have We Done?

- Evaluated the coverage and quality of administrative records (government and third-party sources) to identify the most promising sources.
- Tested direct replacement of ACS housing items (year built, acreage, property value, and real estate taxes) to evaluate impact on data products.
- Tested modeling and direct replacement of ACS income items to evaluate feasibility of replacing or augmenting the ACS income questions.

What Are the Challenges to Using Administrative Data?

- Issues with matching administrative records to census/survey records
- Inconsistencies in geographic coverage (state, county, town, etc.)
- Leveraging data designed for different uses
- Government versus non-government sources
- Time lags and differences in time period covered

The Promise of Administrative Records

- Leveraging existing data sources through linked approaches will be an important component of demographic research in the coming years.
- The field of survey research is shifting and we must do what we can to leverage other data sources to enhance, supplement, or in some cases replace what we gain from surveys.
- The Census Bureau is engaging the use of administrative records at all stages of the survey life cycle.

We Are Committed to Our Program Priorities



Thank you!

Visit Our Website: www.census.gov/acs

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