Using Administrative Records Data in the American Community Survey: Overview

Dorothy Barth, U.S. Census Bureau 2023 FCSM Research and Policy Conference October 24, 2023

Setting the Stage

- Introduce the ACS
- Define the Various Types of Data
- Review the Gates to Implementation
- Connect our Current Work to the Survey Life Cycle

ACS Data Collection





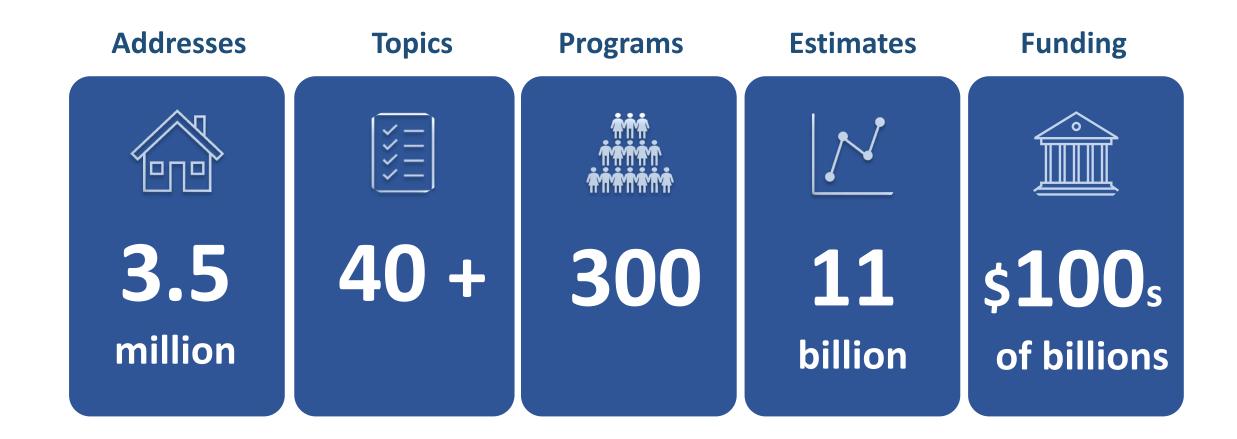




2 months of self-response via internet, mail, or TQA

One month of personal interviews

ACS Quick Facts



ACS Annual Data Releases

- 65,000 + population: 1-year Estimates
- 20,000 + population: 1-year Supplemental Estimates
- Census Tracts and Block Groups: 5-year Estimates

ACS Data Topics

American Community Survey Topics

Social Characteristics

Ancestry
Citizenship Status
Disability Status
Educational Attainment
Fertility
Grandparents as Caregivers
Language Spoken at Home
Marital History
Marital Status
Migration/Residence 1 Year Ago
Period of Military Service
Place of Birth
School Enrollment
Undergraduate Field of Degree
Veteran Status

Year of Entry

Economic Characteristics

Class of Worker
Commuting (Journey to Work)
Employment Status
Food Stamps (SNAP)
Health Insurance Coverage
Income and Earnings
Industry and Occupation
Place of Work
Poverty Status
Work Status Last Year

Demographics Characteristics

Age and Sex Hispanic or Latino Origin Race Relationship to Householder

Housing Characteristics

Computer and Internet Use House Heating Fuel Kitchen Facilities Occupancy/Vacancy Status Occupants Per Room Plumbing Facilities Rent # of Rooms # of Bedrooms Selected Monthly Owner Costs Telephone Service Available Tenure (Owner/Renter) Units in Structure Value of Home Vehicles Available Year Householder Moved Into Unit Year Structure Built

ACS Survey Paradata

Survey paradata are data generated as a by-product of the data collection process.

Examples of paradata from different types of data collection:

- Mail form tracing using tracking numbers
- Internet keystroke or mouse click history
- CAPI contact attempt history records

Administrative Records Data

Administrative records (ad rec) data are data collected from government agencies to administer programs or provide services.

These data are distinct from the data collected exclusively for statistical purposes, like those the Census Bureau produces under the authority of Title 13 U.S. Code.

Some examples are data collected from forms for:

- Social Security benefits
- Tax filing
- Work permits
- Driver licenses

Administrative Records Data

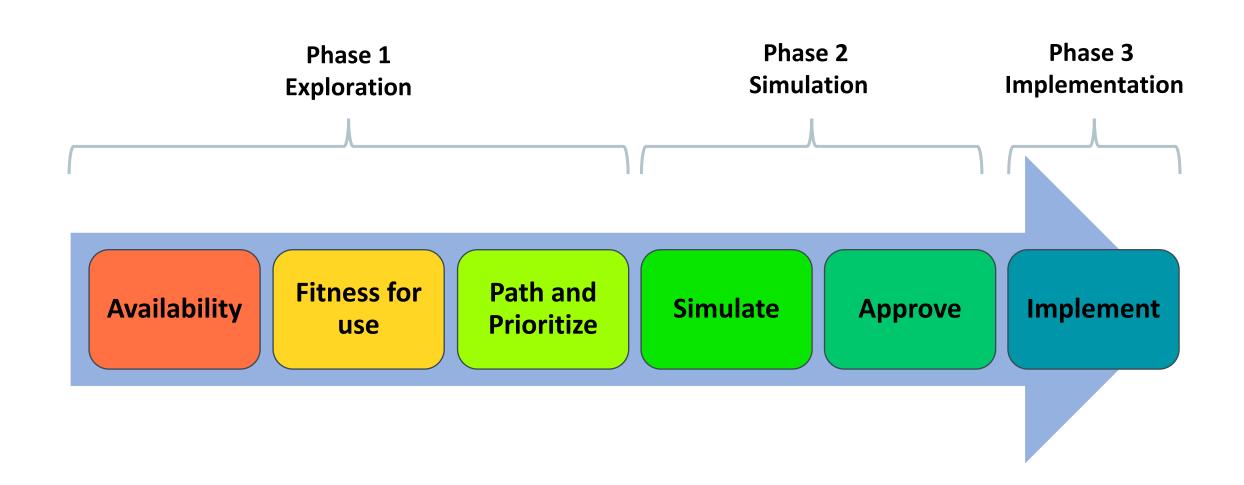
More examples of administrative records data:

- UAA data from USPS
- NIXIE codes from USPS
- Third-party vendor data (example: lot size)

Why use administrative records data?

- Obligated by law (Title 13, U.S. Code) to use existing information in lieu of direct inquiry.
- Allowed to use these data for statistical purposes.
- Committed to reducing respondent burden and improving data quality.

Implementation Phases and Gates



Gates to Implementation

ACS DATA

- Mandated Use
- ACS Product

• Geographic Need

AD REC DATA

- Data Source
- Years Available

• Geography Available

CONTRACT INFO.

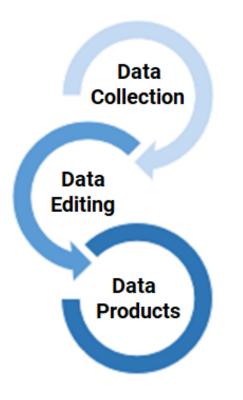
- Annual Cost
- Delivery Frequency

• Link to the ACS sample

Gates to Implementation

COVERAGE	How much Ad Rec data exists at lowest geographic levels?	
CONCEPTUAL ALIGNMENT	How well do the Ad Rec data match when linked to the ACS sample?	
TEMPORAL ALIGNMENT	How well does the Ad Rec data frequency align with the ACS annual publications?	
DISCLOSURE AVOIDANCE	Are individuals or households easily identifiable?	
RISK OVER TIME	Are there risks with the contract agreement or timing of data delivery?	

Survey Life Cycle



OPTIMIZING OPERATIONS	Use administrative data to inform ACS operations and processes.		
FULL REPLACEMENT	Remove the question from the survey.		
PARTIAL REPLACEMENT	Ask the survey question of some, but not all, respondents.		
EDIT AND IMPUTATION	Keep the question on the survey. Use administrative data to replace or edit survey responses and impute missing responses.		
ENHANCE DATA PRODUCTS	Add administrative data to ACS data to create more robust data products.		

Gates to Implementation

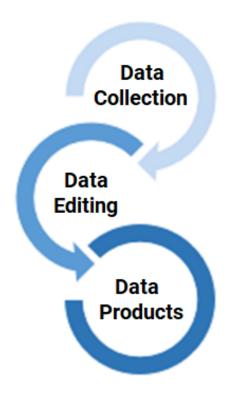
ITEM NONRESPONSE	How much did we reduce or increase item nonresponse?
BIAS	How much did we reduce or increase bias?
RELIABILITY	How much did we reduce or increase the reliability of the ACS data?
DOWNSTREAM IMPACT	Does adding Ad Rec data have a positive or negative impact on other survey items?
OVERALL DATA QUALITY	What is the overall impact to data quality in our published tables and other data products?

Status of Current Administrative Data Research for ACS Topics

Phase 1			Phase 2	Phase 3
Availability	Fitness for use	Path and Prioritize	Simulate	Implement
Tenure, Race, Hispanic Origin,			Agricultural Sales	Acreage
Relationship, Citizenship,			Year Built	
Place of Birth,			Property Value	
Educational Attainment,			Property Taxes	
Veteran Status,		Sex and Age		
Food Stamps, Migration, Income				

Presentations in Today's Session

Survey Life Cycle



OPTIMIZING OPERATIONS	 Predicting Vacant Housing Units in the ACS Adaptive and Responsive Designs with Multiple Competing Criteria
FULL REPLACEMENT	
PARTIAL REPLACEMENT	Implementing an Adaptive Approach to Collect Acreage on the American Community Survey
EDIT AND IMPUTATION	
ENHANCE DATA PRODUCTS	

Thank You

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