Madison's Legacy:
Federal Statistical Products Based on the American Community Survey

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Madison's Legacy

- Research project aim
- Historical context
- Findings: 86 ACS-based federal statistical products
- Examples by subject, purpose, product type, ACS questions, application of ACS in methodology
- Forthcoming publication

Research Project Aim

- Prepare a web-accessible reference guide that
- identifies and describes in detail federal statistical products reliant on the ACS
- to improve understanding of:
  - the extent to which federal operations rely on ACS,
  - the breadth of ACS contributions to governance, democracy, and economy, and
  - the nature of federal reliance on the ACS in terms of questions and applications.

Historical Context

The ACS is:

- the current iteration of a federal data collection effort

- proposed by James Madison and adopted by Congress in 1790 and

- continuously conducted for 225 years through the decennial census process

- with mandatory response and

- for purposes other than for apportionment.

Congressman Madison (1790)

- [Congress] had now an opportunity of obtaining the most useful information for those who should hereafter be called upon to legislate for their country if this bill was extended so as to embrace some other objects besides the bare enumeration of the inhabitants;

- it would enable them to adapt the public measures to the particular circumstances of the community.

Congressman Madison (1790)

- In order to know the various interests of the United States, it was necessary that the description of the several classes into which the community was divided, should be accurately known;

- on this knowledge the legislature might proceed to make a proper provision for the agricultural, commercial and manufacturing interests, but without it they could never make their provisions in due proportion.

Congressman Madison (1790)

- This kind of information . . . all legislatures had wished for; but this kind of information had never been obtained in any country.

- He wished, therefore, to avail himself of the present opportunity of accomplishing so valuable a purpose.

- If the plan was pursued in taking every future census, it would give [Congress] an opportunity of marking the progress of the society, and distinguishing the growth of every interest. This would furnish ground for many useful calculations . . . .

Congressman Madison (1790)

- [I]n order to accommodate our laws to the real situation of our constituents, we ought to be acquainted with that situation.

- It may be impossible to ascertain it as far as I wish, but we may ascertain it so far as to be extremely useful, when we come to pass laws, affecting any particular description of people.

- [T]he people would suppose the information was required for its true object, namely to know in what proportion to distribute the benefits resulting from an efficient General Government.

President U.S. Grant (1873)

- The Secretary of the Interior recommends that a census be taken in 1875, which recommendation should receive the early attention of Congress.

- The interval at present established between the Federal census is so long that the information obtained as to the material condition, wants, and resources of the nation is of little practical value after the expiration of the first half of that period.

President Gerald Ford (1976)

- Passage of this bill provides us with a major opportunity to improve the statistical information which is often the basis for decisions on major issues of public policy.

- With better information available at 5-year intervals, we will no longer need to rely on data which are often obsolete.

- The historic method of counting the population every 10 years simply does not meet the Nation's current needs.

Findings

- 86 federal statistical products rely on the ACS

- Criteria – a data product that makes use of the ACS and:
  - has unique public value,
  - enhances public or private operations, decisions, research, and/or analysis,
  - is regularly updated, and
  - is publicly available.

- Federal reliance on the ACS is widespread, diverse, and substantial. Dimensions:
  - Subject
  - Purpose
  - Product type
  - Application of ACS in statistical methodology
  - ACS questions used

- In abundant measure, these data products fulfill Madison's intent "to enable them to adapt the public measures to the particular circumstances of the community."

Product Types (with examples)

Estimates	Geographic Designation
Population Estimates (Census)	Medically Underserved Areas/Populations (HHS)
Projections	Geographic Classification
Employment Projections (BLS)	Core-based Statistical Areas (OMB)
Indicators	Occupational Classification
Science & Engineering Indicators (NSF)	Standard Occupational Classification System (BLS)
Index	Data Repository
Consumer Price Index (BLS)	Aging Integrated Database (HHS)

Subjects (with examples)

Communications	**Emergency**
National Broadband Map (Commerce)	Community Preparedness Survey (FEMA)
Crime	**Energy**
Crime Against Persons with Disabilities (Justice)	Residential Energy Consumption Survey (EIA)
Defense	**Environment**
Basic Housing Allowance for the Uniformed Services (Defense)	EnviroAtlas (EPA)
Disabilities	**Geography**
National Health Interview Survey – Disability Questions (HHS)	Rural-Urban County Classification Codes (ERS)
Education	**Health**
School District Demographics Profile (Education)	Health Workforce Projections (HHS)

Subjects (with examples)

Housing	Prices
Fair Market Rents (HUD)	Medicare Geographic Practice Cost Index (HHS)
Immigration	Transportation
Estimates of Unauthorized Immigrants (DHS)	Census Transportation Planning Products (DOT)
Income	Veterans
Median Family Income (HUD)	Veteran Population Projection Model (VA)
Language	Vital Statistics
Culturally and Linguistically Appropriate Standards (HHS)	Births in the United States (HHS)
Population	Voting
Population Projections (Census)	Citizen Voting Age Population (Census)

Purposes (with examples)

Public Policy and Program Planning	**Federal Pay and Benefits**
National Survey of Family Growth (HHS)	Basic Housing Allowance for the Uniformed Services (Defense)
Research	**State Fiscal Management**
Rural-Urban Commuting Area Codes (ERS)	State Personal Income (BEA)
Program Evaluation	**Legal/Regulatory**
Current Population Survey (Census/BLS)	Voting Rights Determination File (Census)
Federal Budget Request	**Business Decision-making**
Estimates of WIC Eligibles and Program Reach (USDA)	OnTheMap (Census)
Federal Assistance Allocation	**Personal Decision-making**
Small Area Income and Poverty Estimates (Census)	Location Affordability Index (HUD)

Applications of ACS in Statistical Methodology (with examples)

Data Input to Arithmetic Formula	Estimation Validation
Assessment of Fair Housing Tool (HUD)	National Household Travel Survey (DOT)
Data Input to Modeled Estimates	Sampling Frame
Financial Outlook for OASDI Trust Funds (SSA)	National Survey of College Graduates (NSF)
Estimation Weights	Sample Stratification
Health Workforce Projections (HHS)	Current Population Survey (Census/BLS)
Estimation Adjustment	Sample Weights
Human Well-being Index (EPA)	National Survey of Veterans (VA)

Applications of ACS in Statistical Methodology (with examples)

Special Tabulations	ACS Occupational Profiles
Equal Employment Opportunity Tabulation (EEOC)	U.S. Health Workforce Chartbook and State Profiles (HHS)
ACS Questions Adoption	ACS Public Use Microdata Set
National Health Interview Survey—Family Disability Questions (NCHS)	Estimates of Unauthorized Immigrants (DHS)
Contextual Variables from ACS	
Health Professional Shortage Areas (HHS)	

Select ACS Questions Relied On (with examples)

P3 – Sex	P7 – Country of Birth
Women's Quick Health Data Online (HHS)	Population Estimates (Census)
P4 – Age	P8 – Citizenship Status
Aging Integrated Database (HHS)	Citizen Voting Age Population (Census)
P5 – Hispanic Origin	P11 – Educational Attainment
Population Projections (Census)	Employment Projections (BLS)
P6 – Race	P12 – Field of Degree
Equal Opportunity Employment Tabulations (EEOC)	National Survey of College Graduates (NSF)

Select ACS Questions Relied On (with examples)

P14 – English Lang. Proficiency	**P20 – Marital Status**
Voting Rights Determination File (Census)	Financial Outlook for OASDI Trust Funds (SSA)
P15 – Residence 1 Year Ago	**P26-27 – Veteran Status**
Current Population Survey (Census/BLS)	Veteran Population Projection Model (VA)
P16 – Health Insurance Coverage	**P29, 35-37 – Labor Force Status**
Small Area Health Insurance Estimates (Census)	Local Area Unemployment Statistics (BLS)
P17-19 – Disabilities	**P30 – Work Location**
Disability Employment Tabulation (DOL)	Core-based Statistical Areas (OMB)

Select ACS Questions Relied On (with examples)

P31-34 – Commuting	**P47-48 – Income**
Census Transportation Planning Products (DOT)	Median Family Income (HUD)
P39-40 – Weeks & Hours Worked	**H1 – Housing Type**
Employment Projections (BLS)	Basic Housing Allowance for the Uniformed Services (Defense)
P41-44 – Industry of Work	**H2 – Age of Housing**
Local Employment (BEA)	OnTheMap for Emergency Management (Census)
P45-46 – Occupation	**H7 – Number of Bedrooms**
Standard Occupational Classification System (BLS)	Regional Price Parities (BEA)

Select ACS Questions Relied On (with examples)

H8 – Utilities	**H15 – SNAP Participation**
Special Tabulations of Households (HUD)	Estimates of WIC Eligibles and Program Reach (USDA)
H10-11 – Internet	**H17 – Rent/Own, Mortgage**
Digital Nation (Commerce)	Federal Financial Institutions Examination Council Database
H12 – Autos	**H18 – Monthly Rent**
Food Access Research Atlas (USDA)	Fair Market Rents (HUD)
H14 – Utilities Cost	**H19 – Housing Value**
Consumer Price Index (BLS)	Comprehensive Housing Affordability Strategy Data (HUD)

Observations

- A large number of federal statistical products rely on the ACS.

- This reliance is broad, diverse, and substantial.

- The shift from the decennial long form to the ACS has stimulated significantly greater use of "long form"-type census data across the federal government.

- Current uses of the ACS in federal statistical products fulfills James Madison's intent orders of magnitude beyond his original proposal.

- As a data resource for federal statistical purposes, the ACS is unique.

Forthcoming Publication

- Web-accessible reference guide to 86 ACS-reliant federal statistical products
- Organized by federal agency
- Standard format includes purpose, responsible unit, authorization, frequency, timing, modes of access, methodology, application of ACS in methodology, ACS questions relied on, major uses
- Summary matrices of product by subject, purpose, questions used, etc.
- Approximately 300 pages in length
- Release – Summer 2015

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