

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: 85 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

- 85 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)

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

Subjects (with examples)

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

Subjects (with examples)

Housing

Fair Market Rents (HUD)

Immigration

Estimates of Unauthorized Immigrants (DHS)

Income

Median Family Income (HUD)

Language

Culturally and Linguistically Appropriate Standards (HHS)

Population

Population Projections (Census)

Prices

Medicare Geographic Practice Cost Index (HHS)

Transportation

Census Transportation Planning Products (DOT)

Veterans

Veteran Population Projection Model (VA)

Vital Statistics

Births in the United States (HHS)

Voting

Citizen Voting Age Population (Census)

Purposes (with examples)

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

Applications of ACS in Statistical Methodology (with examples)

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

Applications of ACS in Statistical Methodology (with examples)

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

Select ACS Questions Relied On (with examples)

P3 – Sex

Women's Quick Health Data Online
(HHS)

P4 – Age

Aging Integrated Database (HHS)

P5 – Hispanic Origin

Population Projections (Census)

P6 – Race

Equal Opportunity Employment
Tabulations (EEOC)

P7 – Country of Birth

Population Estimates (Census)

P8 – Citizenship Status

Citizen Voting Age Population
(Census)

P11 – Educational Attainment

Employment Projections (BLS)

P12 – Field of Degree

National Survey of College Graduates
(NSF)

Select ACS Questions Relied On (with examples)

P14 – English Lang. Proficiency

Voting Rights Determination File
(Census)

P15 – Residence 1 Year Ago

Current Population Survey
(Census/BLS)

P16 – Health Insurance Coverage

Small Area Health Insurance
Estimates (Census)

P17-19 – Disabilities

Disability Employment Tabulation
(DOL)

P20 – Marital Status

Financial Outlook for OASDI Trust
Funds (SSA)

P26-27 – Veteran Status

Veteran Population Projection Model
(VA)

P29, 35-37 – Labor Force Status

Local Area Unemployment Statistics
(BLS)

P30 – Work Location

Core-based Statistical Areas (OMB)

Select ACS Questions Relied On (with examples)

P31-34 – Commuting

Census Transportation Planning Products (DOT)

P39-40 – Weeks & Hours Worked

Employment Projections (BLS)

P41-44 – Industry of Work

Local Employment (BEA)

P45-46 -- Occupation

Standard Occupational Classification System (BLS)

P47-48 – Income

Median Family Income (HUD)

H1 – Housing Type

Basic Housing Allowance for the Uniformed Services (Defense)

H2 – Age of Housing

OnTheMap for Emergency Management (Census)

H7 – Number of Bedrooms

Regional Price Parities (BEA)

Select ACS Questions Relied On (with examples)

H8 – Utilities

Special Tabulations of Households (HUD)

H10-11 – Internet

Digital Nation (Commerce)

H12 – Autos

Food Access Research Atlas (USDA)

H14 – Utilities Cost

Assessment of Fair Housing Tool (HUD)

H15 – SNAP Participation

Estimates of WIC Eligibles and Program Reach (USDA)

H17 – Rent/Own, Mortgage

Federal Financial Institutions Examination Council Database

H18 – Monthly Rent

Fair Market Rents (HUD)

H19 – Housing Value

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 85 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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