



KANSAS
HEALTH
INSTITUTE

Informing Policy. Improving Health.

CURRICULUM

PUMS Training Part III: Deep Dive

May 16, 2017 ♦ Kansas Health Institute

LEARNING OBJECTIVES

1. Learn how to access PUMS.
2. Identify considerations for using PUMS.
3. Understand which tools could be used with PUMS.

FINDING PUMS

- Four steps from Census.gov website:
 1. Surveys/Programs (dropdown)
 2. American Community Survey (ACS)
 3. Data Tools and Tables (bottom of page)
 4. PUMS (menu on left side)



Topics

Population, Economy

Geography

Maps, Products

Library

Infographics, Publications

Data

Tools, Develop

Surveys/Programs

Respond, Survey Data

Newsroom

News, Blogs

About Us

Our Research



TRAINING OPPORTUNITIES

We Can Help

Training Opportunities
use Census data
informing your
proposals and
schools and ho

POPULATION CLOCK



U.S. Population

324,989,666

World Population

7,388,823,906

May 05, 2017 17:34 UTC (Eastern+5)

[Learn More >>](#)

QUICKFACTS



Did You Know

Population per square mile in San Diego
County, California is
735.8

Source: 2010 Census

Select a state to begin



U.S. Census Bureau

Manufacturer
March 2017 Rep
Released 10:00

International
March 2017 Rep
Released 8:30 A

Construction



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Surveys/Programs Main

Are you in a Survey?

2010 Census

2017 Census Test

2018 End-to-End Census Test

2010 Census

American Community Survey
(ACS)

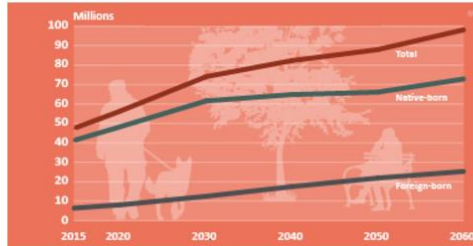
American Housing Survey
(AHS)

Economic Census

Special Census Program

Survey, Data, and
Program Participation

All Surveys & Programs



Older Americans Mo

This edition of Facts for Fe
celebrates the age 65 and

Graphic: An Aging Nation -
U.S. residents 65 and older.

POPULATION CLOCK



QUICKFACTS

Did You Know

23.4%
of persons in San Diego County,
California are under 18 years

Source: 2010 Census

Select a state to begin

U.S. Census Bureau Economic

- Manufacturers' Goods
March 2017 Report
Released 10:00 AM EDT, 5/4/17
- International Trade: Goods
March 2017 Report
Released 8:30 AM EDT, 5/4/17
- Construction Spending

View All

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Census.gov > Our Surveys & Programs > American Community Survey (ACS)

American Community Survey (ACS)

About the Survey

Respond to the Survey

News & Updates

Data

Guidance for Data Users

Geography & ACS

Technical Documentation

Methodology

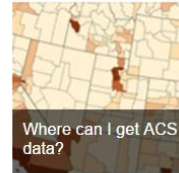
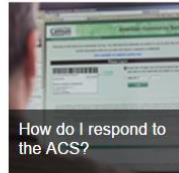
Library

Operations and Administration

Contact Us



The American Community Survey helps local officials, community leaders and businesses understand the changes taking place in their communities. It is the premier source for detailed information about the American people and workforce.



Latest



2016 Data Release

Learn more about upcoming ACS data releases, including the September 14th release of the 2016 ACS 1-year estimates, as well as a preview of Data.census.gov.

2015 ACS 1-Year Supplemental Estimates

Discover 2015 ACS 1-year supplemental estimates. New data is available for geographies with populations of 20,000 or more.

Data Tables and Tools

The ACS provides data tables including Comparison and Selected Population Profiles, and Subject, Detailed, Ranking, and Geographic Comparison Tables.

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American Community Survey

[About the Survey](#)[Respond to the Survey](#)[News & Updates](#)[Data](#)[Data Tables & Tools](#)[Data Profiles](#)[Narrative Profiles](#)[Subject Tables](#)[Ranking Tables](#)[Supplemental Tables](#)[American FactFinder](#)[My Congressional District](#)[Data via FTP](#)[Summary of Data](#)[PUMS Data](#)[Variance Reporting](#)[Race/Ethnicity & AIAN Data](#)[Custom Tables](#)[Guidance for Data Users](#)

Data Tables & Tools

[Tell Us What You Think](#)

Data Profiles Selector

Data Profiles consist of four tables (Social, Economic, Housing, Demographic) to give a broad statistical view of a particular geography. We provide an easy to use [Data Profiles geography selector](#) for the most popular geographies: state, county and place. Our full data website, [American FactFinder](#), provides additional geographies for this table type and many more.

Narrative Profiles

The only place to find the current Narrative Profiles is right here on American Community Survey website. Narrative Profiles contain much of the same information found in the Data Profiles, except it is a text-based report with plenty of colorful graphs and charts. Use the map selector or the dropdown boxes to [generate a Narrative Profile](#) for your favorite place.

Subject Tables

More interested in a particular topic than a particular geography? Check out our listing of ACS Subject Tables. Subject tables have both numbers and percentages making them the versatile choice for data seekers. You can search/filter the listing, and then link to American Factfinder (AFF) where you can change geographies and go back in time! [Choose your subject table here!](#)

Supplemental Tables

Looking for statistics about people and households located in geographies with

Data by Topic

People

- Age and Sex / Age and Sex
- Ancestry
- Disability
- Commuting to Work
- Education
- Employment
- Family/Relationships
- Health Insurance
- Income and Earnings
- Language
- Origins
- Population Change
- Poverty
- Race and Ethnicity
- Veterans

Housing

- Financial Characteristics

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FINDING PUMS



PUMS Data



NOW WHAT?

- Before you download
 - Considerations:
 - One-year? Multiple years?
 - Do you need Person Level and/or Housing Level?

MULTIPLE YEARS

- When do you need multiple years?
 - Single year data estimates
 - Most timely data; but
 - Sample may be too small to answer your question for area of focus
 - Larger combined file may allow for a larger sample and reliable estimates
 - Trade off: timeliness for reliability

IS THE ESTIMATE RELIABLE?

- How do you determine if the estimate is reliable?
- Coefficient of Variation (COV)
 - Standard Error/Estimate
 - Multiplied by 100 (sometimes)
 - Do not use if greater than 30%

STATISTICAL TOOLS

	SAS	STATA	SPSS	R
Strengths	<ul style="list-style-type: none"> • Primary tool of Census • Can weight estimates • Calculate standard errors • Better recoding/variable control 	<ul style="list-style-type: none"> • Can weight estimates • Calculate standard errors • Better recoding/variable control 	<ul style="list-style-type: none"> • Easy to use (GUI) • Can weight estimates • Better recoding/variable control 	<ul style="list-style-type: none"> • Free • Versatile • Can weight estimates • Calculate standard errors • Better recoding/variable control
Limitations	<ul style="list-style-type: none"> • \$\$\$ • Some learning curve 	<ul style="list-style-type: none"> • \$ • Some learning curve • Works in memory 	<ul style="list-style-type: none"> • \$\$ • Cannot calculate standard errors 	<ul style="list-style-type: none"> • Steep learning curve • Works in memory

OTHER TOOLS

	Excel	DataFerrett	IPUMS
Strengths	<ul style="list-style-type: none">• Commonly available• Familiarity• Easy to learn• Can weight estimates	<ul style="list-style-type: none">• No software required• Can recode variables and combine years• Can merge datasets• Weights estimates• Select what you want	<ul style="list-style-type: none">• No software required• Can recode variables and combine years• For more standard users• Weights estimates• Select what you want
Limitations	<ul style="list-style-type: none">• Limited analytical capability• Cannot calculate standard errors	<ul style="list-style-type: none">• A lot of features and can be difficult to use• Need to know what you are looking for• Cannot calculate standard errors	<ul style="list-style-type: none">• Cannot calculate standard errors• Cannot save work

SKILLS

- Basic
 - Excel
 - Pivot tables
- Advanced
 - Research design (method to answer a research question)
 - Knowledge of statistics (what test to run)
 - Data manipulation skills

Thank you.

ANY QUESTIONS?

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