

Hack the Census: Census Tools for Developers

20th Annual New Mexico Data User's Conference
November 15, 2018

Presented by: Eric Coyle
Data Dissemination Specialist
U.S. Census Bureau

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Measuring America



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U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU
[census.gov](https://www.census.gov)

Agenda

American Community Survey

- Overview
- Geography

Census Bureau Application Programming Interface (API)

- API Basics
- Using the API
- Building an API Request
- API Demo
- Resources for Learning More

Additional Tools & Resources

Q&A

The American Community Survey Overview

The American Community Survey


The Foundation

The American Community Survey (ACS) is on the leading edge of survey design, continuous improvement, and data quality

- The nation's most current, reliable, and accessible data source for local statistics on critical planning topics such as age, children, veterans, commuting, education, income, and employment
- Surveys **3.5 million** households and informs over **\$675 billion** of Federal government spending each year
 - Visit 20,000 Group Quarter facilities and sample approximately 194,000 residents each year
- Covers **35+ topics**, supports over **300** evidence-based Federal government uses, and produces **11 billion** estimates each year
- Three key annual data releases:
 - 1-year Estimates (for large populations)
 - 1-year Supplemental Estimates (for small populations)
 - 5-year Estimates (for very small populations)

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U.S. DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. CENSUS BUREAU

 **THE American Community Survey**

This booklet shows the content of the American Community Survey questionnaire.


Start Here

Respond online today at:
<https://respond.census.gov/acs>
OR
Complete this form and mail it back as soon as possible.

Please print today's date.
Month Day Year

Please print the name and telephone number of the person who is filling out this form. We may contact you if there is a question.
Last Name
First Name MI
Area Code + Number -

This form asks for information about the people who are living or staying at the address on the mailing label and about the house, apartment, or mobile home located at the address on the mailing label.

 If you need help or have questions about completing this form, please call 1-800-354-7271. The telephone call is free.
Telephone Device for the Deaf (TDD): Call 1-800-582-8330. The telephone call is free.
¿NECESITA AYUDA? Si usted habla español y necesita ayuda para completar su cuestionario, llame sin cargo alguno al 1-877-833-5625. Usted también puede completar su entrevista por teléfono con un entrevistador que habla español. O puede responder por Internet en: <https://respond.census.gov/acs>


For more information about the American Community Survey, visit our web site at: <http://www.census.gov/acs/www/>

How many people are living or staying at this address?
• **INCLUDE** everyone who is living or staying here for more than 2 months.
• **INCLUDE** yourself if you are living here for more than 2 months.
• **INCLUDE** anyone else staying here who does not have another place to stay, even if they are here for 2 months or less.
• **DO NOT INCLUDE** anyone who is living somewhere else for more than 2 months, such as a college student living away or someone in the Armed Forces on deployment.
Number of people

Fill out pages 2, 3, and 4 for everyone, including yourself, who is living or staying at this address for more than 2 months. Then complete the rest of the form.

FORM ACS-1(INFO)(2015)
06-17-2014

OMB No. 0607-0910
OMB No. 0607-0936



ACS vs. 2010 Census

How is the ACS Different from the Census?

	ACS	2010 and 2020 Census
<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>	Information previously on the census “long form”	“Short form” information

The American Community Survey

Content Overview

POPULATION		HOUSING
SOCIAL Ancestry Citizenship Disability Educational Attainment Fertility Grandparents Language Marital Status Migration School Enrollment Veterans	DEMOGRAPHIC Age Hispanic Origin Race Relationship Sex	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
	ECONOMIC Class of Worker Commuting Employment Status Food Stamps (SNAP) Health Insurance Hours/Week, Weeks/Year Income Industry & Occupation	

The American Community Survey

Availability of ACS Data Products

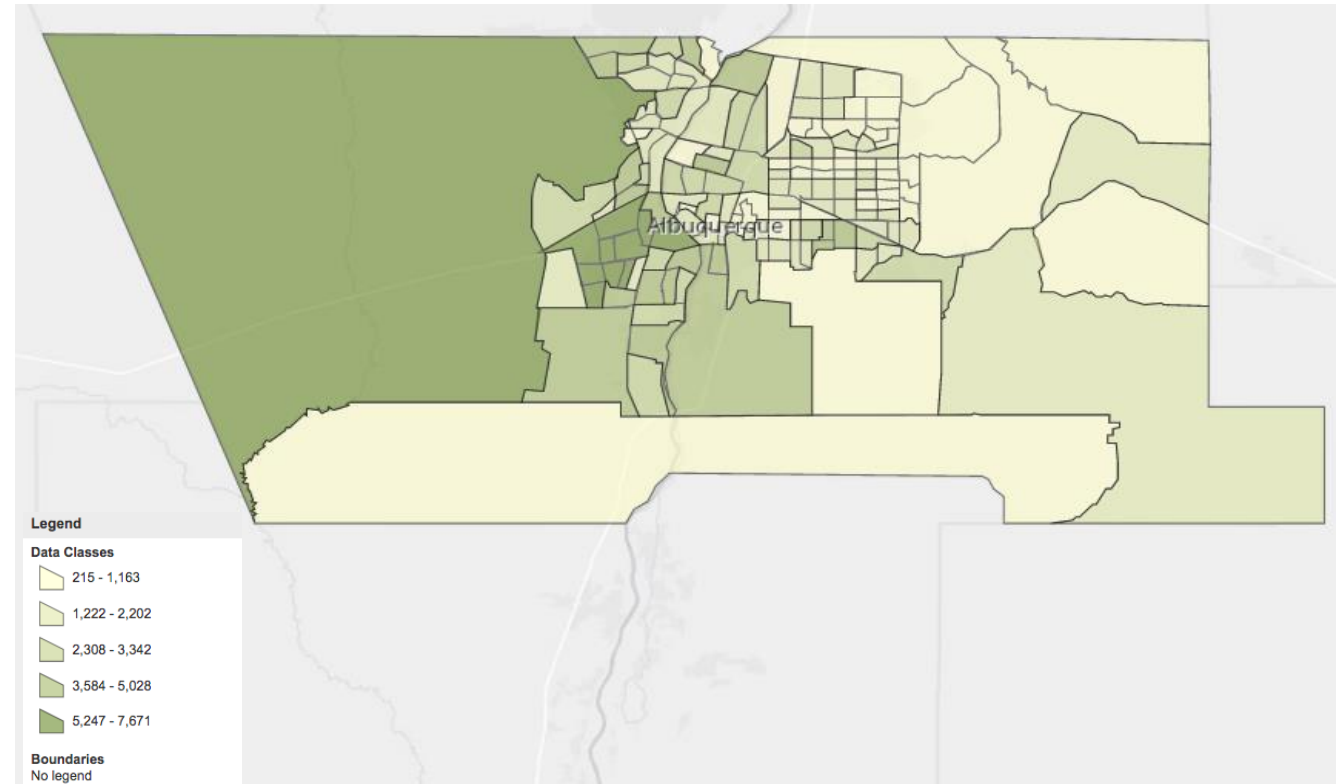
Estimated Population of Geographic Area	2017 1-Year Estimates	2017 1-Year Supplemental Estimates	2013-2017 5-Year Estimates
65,000 or more	X	X	X
20,000 to 64,999		X	X
Less than 20,000			X
Release Date	September 13, 2018	October 18, 2018	December 6, 2018

Census Geography

Selected Census Geographic Concepts—Statistical Areas

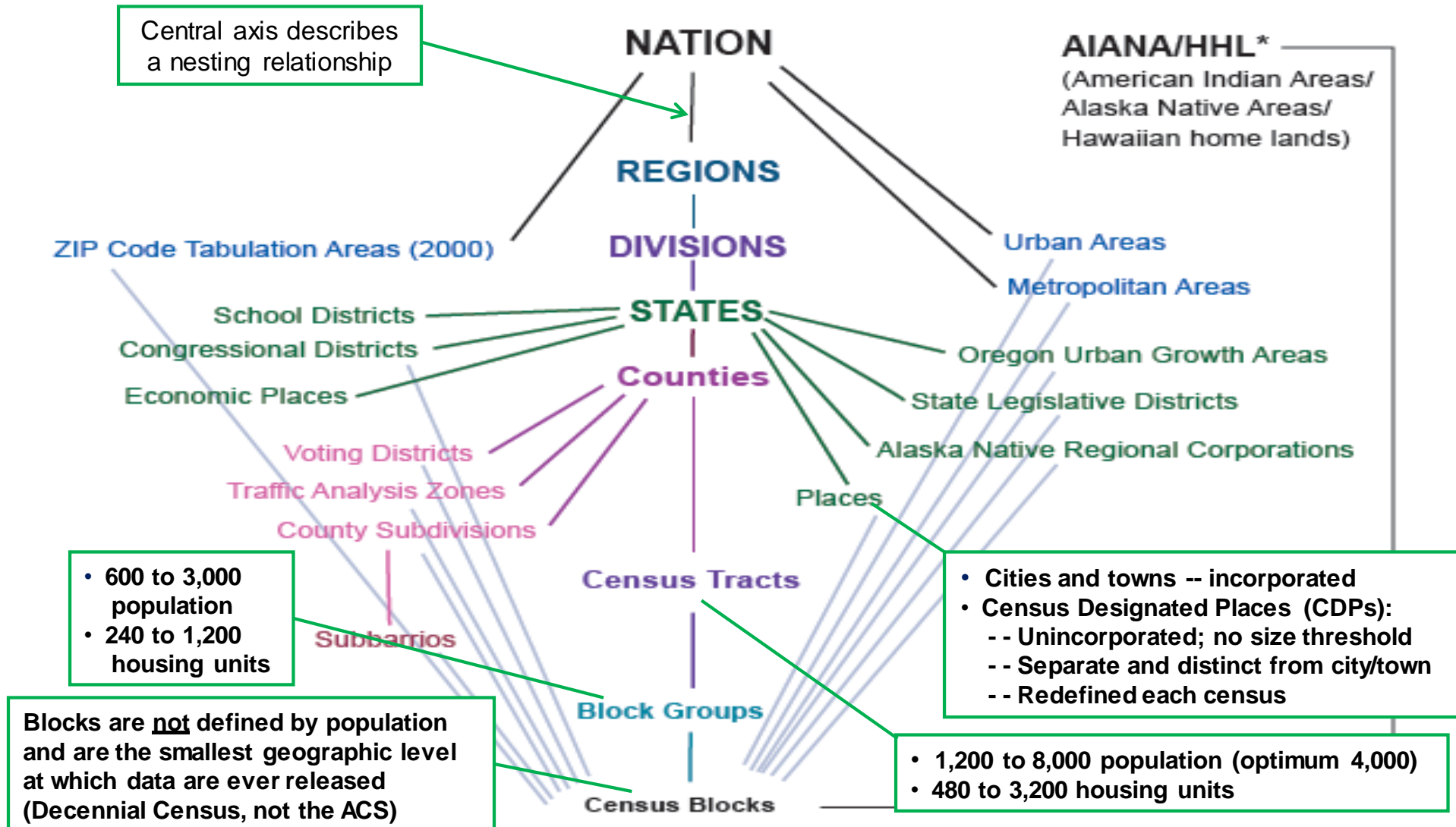
- [Regions](#)
- [Divisions](#)
- [Census County Divisions](#)
- [Census Designated Places](#)
- [Public Use Microdata Areas \(PUMA\)](#)
- [Zip Code Tabulation Areas \(ZCTAs\)](#)
- [Census Tracts](#)
- [Block Groups](#)
- [Block](#)

Hispanic or Latino Origin by Race by Census Tracts in Bernalillo County



Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

Census Geography Hierarchy



API Basics

Types of ACS Tables in API

Tables

Types In API

- **Detailed Tables (B or C)**
- **Subject Tables (S)**

Description

- Most detailed ACS statistics
- Each table covers one primary topic
- May contain cross tabulations

Profiles

Types In API

- **Data Profiles (DP)** - includes %
- **Comparison Profiles (CP)** - includes statistical significance

Description

- Most common ACS statistics
- Derived from tables
- Each profile covers many topics

Table/Profile Numbering

B06004APR

- B=Data Product Type (Base Table)
- 06=Subject (Place of Birth)
- 004=Sequential Number (2 or 3 digits)
- A=Race/Hispanic Origin (White Alone)
- PR=For Puerto Rico Geographies Only

[census.gov/programs-surveys/acs/guidance/which-data-tool/table-ids-explained.html](https://www.census.gov/programs-surveys/acs/guidance/which-data-tool/table-ids-explained.html)

The Census Data API

- Application Programming Interface
- Data Service
- Enables Census Bureau data providers to expose data in a standardized way
- Gives software developers the ability to create custom apps
- Allows data scientists more flexibility to develop data analytics

Advantages

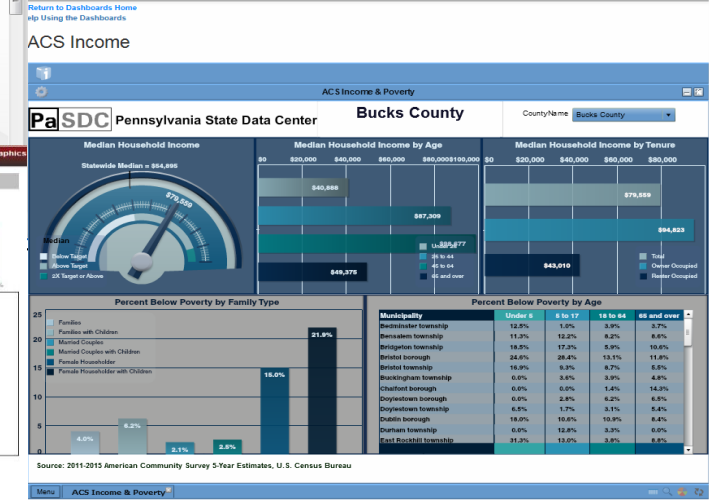
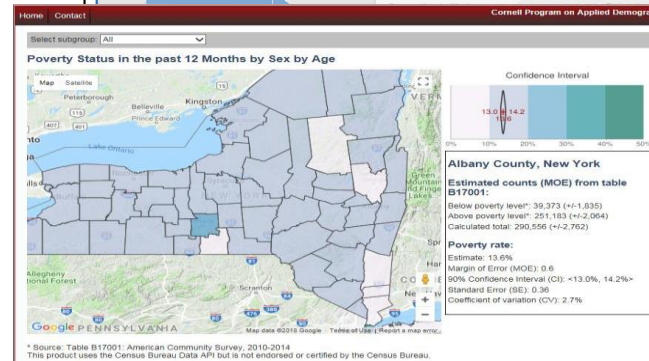
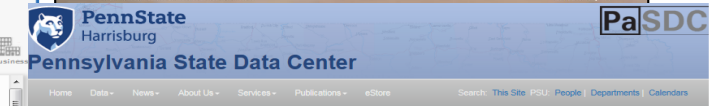
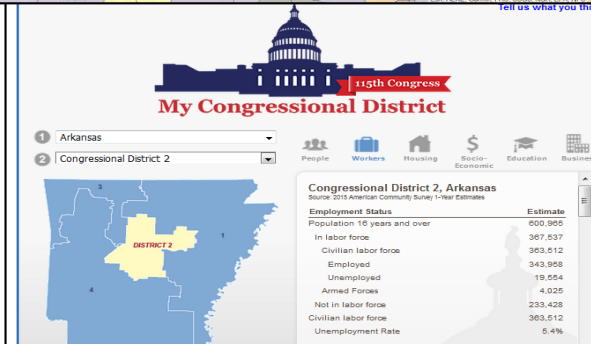
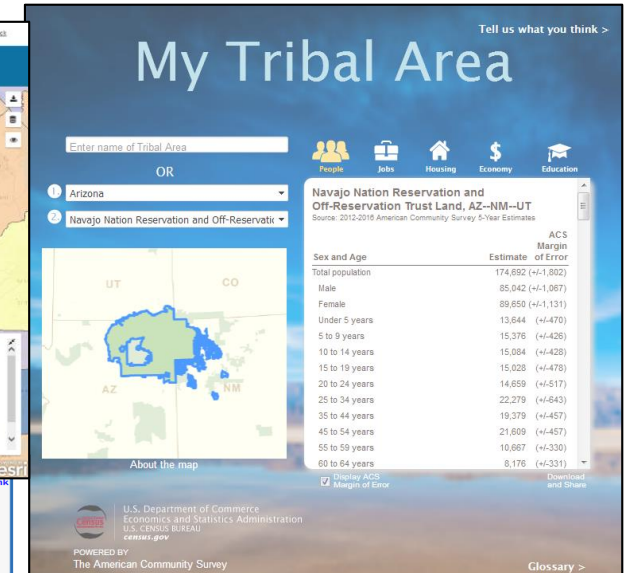
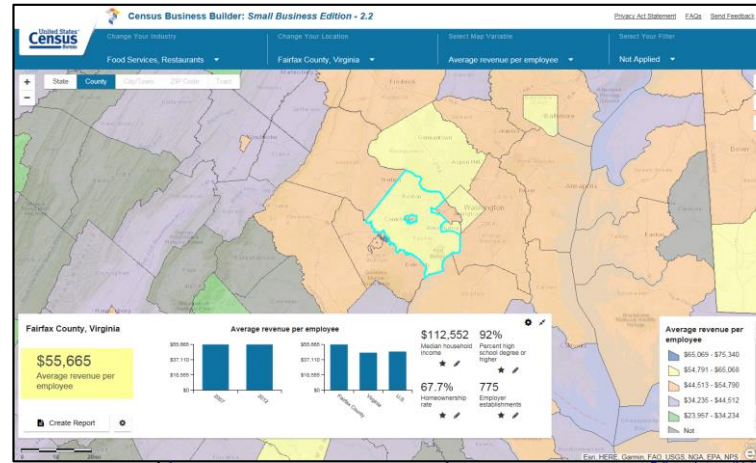
- Reduces the learning curve by standardizing across multiple datasets
- Access only the variables, geographies and table cells needed
- No need to host data on another server
- Gives immediate access to most current data
- No complex interface

Uses

- Supports mobile and web applications
- Drives interactive data visualizations
- Connects to statistical analysis software like R

API: Examples of Use

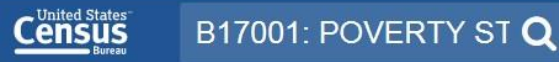
- [Census Business Builder](#)
- [Cleargov](#)
- [Cornell University Poverty Map](#)
- [My Congressional District](#)
- [My Tribal Area](#)
- [PennState SDC Dashboards](#)



Using the API

Example: American Community Survey data.census.gov

This is a preview of the Census Bureau's new data exploration platform to be used to evaluate the look, feel, and functionality of our development. See Release Notes and FAQs for details. For official use, please continue to use our data resources at census.gov/data.html.



[data.ce...](#) > [I..](#) > B17001: POVERTY STATUS IN THE...

POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE

Table ID: B17001

Universe: Population for whom poverty status is determined

[Read Table Notes and Methodology](#)

Switch Dataset:

2016 : ACS 5-Year Estimates Detailed Tables

Transpose Table:

Show Margin of Error:

[Add Geography](#)

POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE

Universe: Population for whom poverty status is determined

Table: B17001

Survey/Program: American Community Survey

	United States		Alabama	Alaska	Arizona	Arkansas				
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error		
Total:	310,629,645	+/- 11,780	4,720,592	+/- 1,153	719,064	+/- 455	6,573,523	+/- 1,516	2,881,404	+/- 1,080
Income in the past 12 months below poverty level:	46,932,225	+/- 284,072	868,666	+/- 11,290	72,826	+/- 2,617	1,165,636	+/- 11,825	542,431	+/- 8,531
Male:	21,012,839	+/- 136,034	375,139	+/- 5,586	34,847	+/- 1,455	540,034	+/- 6,596	242,209	+/- 4,579
Under 5 years	2,349,027	+/- 24,515	43,317	+/- 1,337	4,037	+/- 392	59,903	+/- 1,752	29,219	+/- 1,309
5 years	469,666	+/- 6,702	8,848	+/- 721	979	+/- 179	11,894	+/- 742	5,981	+/- 678
6 to 11 years	2,656,041	+/- 27,475	50,183	+/- 1,856	4,360	+/- 410	70,032	+/- 1,513	32,412	+/- 1,387
12 to 14 years	1,177,177	+/- 11,468	21,853	+/- 1,091	2,263	+/- 391	31,019	+/- 1,235	14,489	+/- 802
15 years	393,261	+/- 5,644	6,805	+/- 620	641	+/- 168	10,602	+/- 629	4,752	+/- 456
16 and 17 years	743,208	+/- 8,566	14,167	+/- 834	1,168	+/- 187	20,241	+/- 997	8,951	+/- 723
18 to 24 years	3,076,564	+/- 20,370	53,676	+/- 1,733	4,674	+/- 389	78,737	+/- 2,245	33,371	+/- 1,264
25 to 34 years	2,571,567	+/- 15,310	44,605	+/- 1,463	4,556	+/- 430	69,046	+/- 1,810	28,008	+/- 1,359
	2,067,813	+/- 15,925	33,938	+/- 1,272	3,559	+/- 354	54,303	+/- 1,571	1 to 10 of 106 columns	< >



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census.gov

Output

`https://api.census.gov/data/2016/acs/acs5
?get=NAME,B17001_002E,B17001_002M&for=state:*`

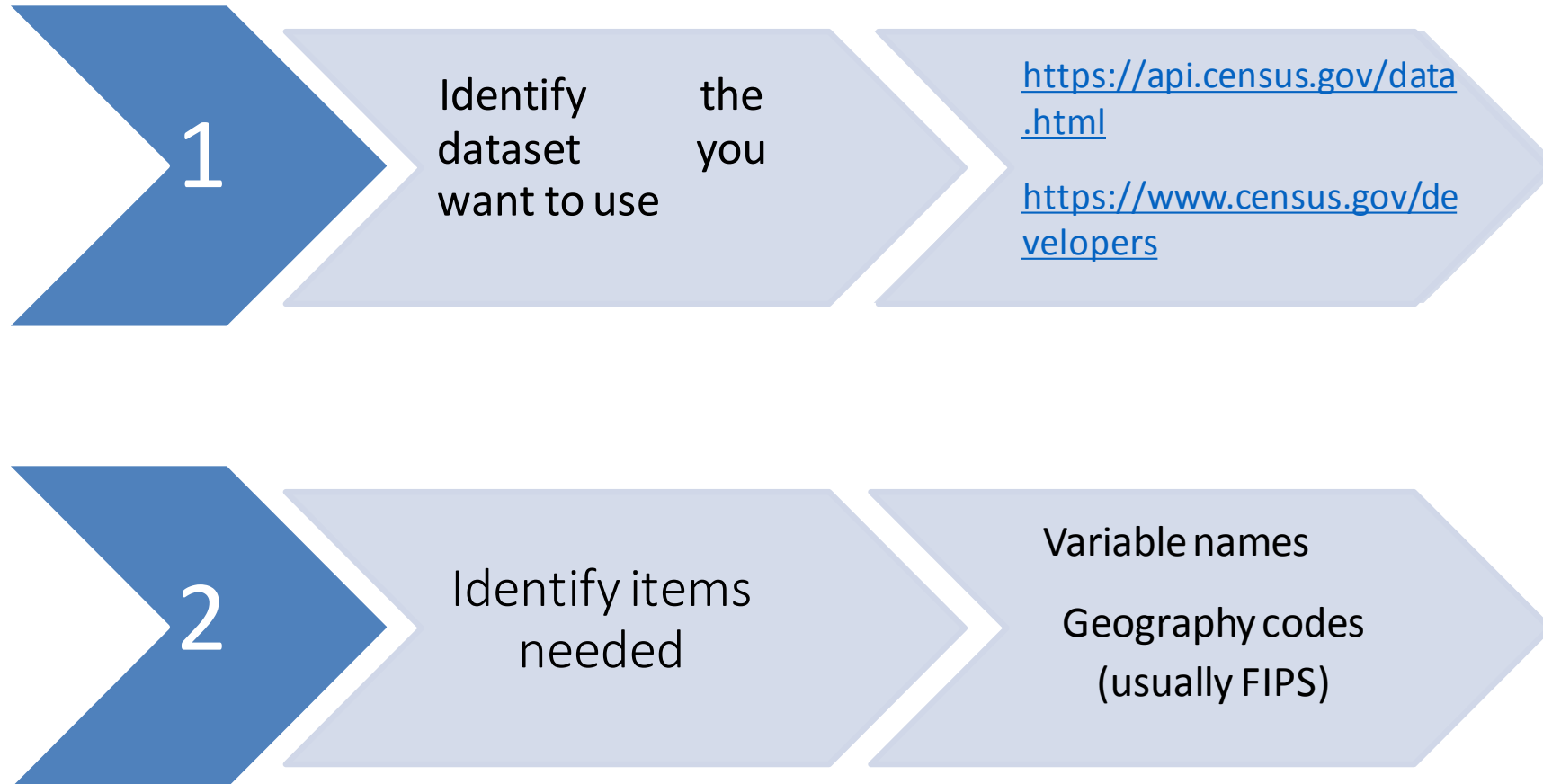
Returns data in json format that looks like this:

```
[["NAME","B17001_002E","B17001_002M","state"],  
["Alabama","868666","11290","01"],  
["Alaska","72826","2617","02"],  
["Arizona","1165636","11825","04"],  
["Arkansas","542431","8531","05"],
```

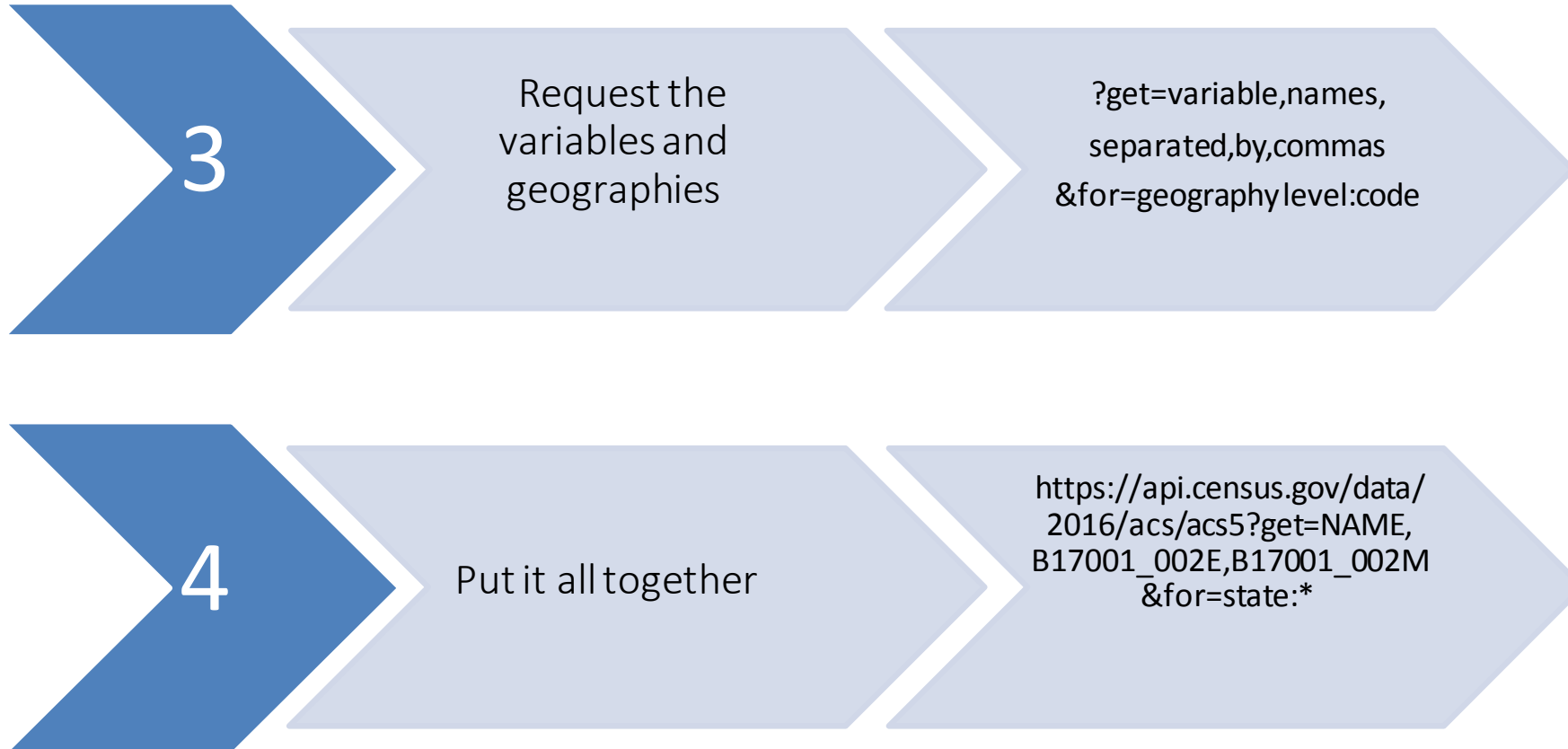
Continued...

Building an API Request

API Request – Four Easy Steps



API Request – Four Easy Steps



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United States Census Bureau
B17001: POVERTY ST Q

[data.ce...](#) > [I.](#) > B17001: POVERTY STATUS IN THE...

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Female:	2,067,813	+/- 15,925	33,938	+/- 1,272	3,559	+/- 354	54,303	+/- 1,571	10,106	+/- 1,060

API Discovery Tool

<https://api.census.gov/data.html>

Census API: Datasets in /data/2016/acs/acs5 and its descendants

Title	Description	Vintage	Dataset Name	Geography List	Variable List	Group List	Tag List	Examples	Developer Documentation	API Base URL
ACS 5-Year Detailed Tables	The American Community Survey (ACS) is an ongoing survey that provides data every year -- giving communities the current information they need to plan investments and services. The ACS covers a broad range of topics about social, economic, demographic, and housing characteristics of the U.S. population. Summary files include the following geographies: nation, all states (including DC and Puerto Rico), all metropolitan areas, all congressional districts (114th congress), all counties, all places, and all tracts and block groups. Summary files contain the most detailed cross-tabulations, many of which are published down to block groups. The data are population and housing counts. There are over 64,000 variables in this dataset.	2016	acs > acs5	geographies	variables	groups	tags	examples	documentation	https://api.census.gov/data/2016/acs/acs5
ACS 5-Year Comparison Profile	The American Community Survey (ACS) is an ongoing survey that provides data every year -- giving communities the current information they need to plan investments and services. The ACS covers a broad range of topics about social, economic, demographic, and housing characteristics of the U.S. population. The comparison profiles include the following geographies: nation, all states (including DC and Puerto Rico), all metropolitan areas, all congressional districts, all counties and all places with a population of 5,000 or more. Comparison profiles are similar to data profiles but also include comparisons with past-year data. The current year data are compared with prior 5-Year data and include statistical significance testing. There are over 3,000 variables in this dataset.	2016	acs > acs5 > cprofile	geographies	variables	groups	N/A	examples	documentation	https://api.census.gov/data/2016/acs/acs5/cprofile
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ACS 5-Year Subject Tables	The American Community Survey (ACS) is an ongoing survey that provides data every year -- giving communities the current information they need to plan investments and services. The ACS covers a broad range of topics about social, economic, demographic, and housing characteristics of the U.S. population. The subject tables include the following geographies: nation, all states (including DC and Puerto Rico), all metropolitan areas, all congressional districts, all counties, all places and all tracts. Subject tables provide an overview of the estimates available in a particular topic. The data are presented as both counts and percentages. There are over 66,000 variables in this dataset.	2016	acs > acs5 > subject	geographies	variables	groups	tags	examples	documentation	https://api.census.gov/data/2016/acs/acs5/subject

Start Your Data Request

https://api.census.gov/data/2016/acs/acs5?get=NAME,B17001_002E,B17001_002M&for=state:*

1

Requests always begin with:
<https://api.census.gov/data>

Add the Dataset Name

https://api.census.gov/data/2016/acs/acs5?get=NAME,B17001_002E,B17001_002M&for=state:*

2

Find the dataset name at:
<https://api.census.gov/data/2016.html>

https://api.census.gov/data/2016/acs/acs5.html

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Start Your Variable Request

https://api.census.gov/data/2016/acs/acs5?get=NAME,B17001_002E,B17001_002M&for=state:*

3

Always start your variable request with **?get=**

Add Your Variables

https://api.census.gov/data/2016/acs/acs5?get=NAME,B17001_002E,B17001_002M&for=state:*

4

Find the variables you want here:

<https://api.census.gov/data/2016/acs/acs5/variables.html>

<https://api.census.gov/data/2016/acs/acs5/variables.html>

Variable ID	Description	Category	Required	Response Rate	Format	Source	Notes
B16010_048E	Estimate!!Total!!Bachelor's degree or higher!!Not in labor force	EDUCATIONAL ATTAINMENT AND EMPLOYMENT STATUS BY LANGUAGE SPOKEN AT HOME FOR THE POPULATION 25 YEARS AND OVER	not required	B16010_048M , B16010_048MA , B16010_048EA	0	int	B16010 N/A
B16010_049E	Estimate!!Total!!Bachelor's degree or higher!!Not in labor force!!Speak only English	EDUCATIONAL ATTAINMENT AND EMPLOYMENT STATUS BY LANGUAGE SPOKEN AT HOME FOR THE POPULATION 25 YEARS AND OVER	not required	B16010_049M , B16010_049MA , B16010_049EA	0	int	B16010 N/A
B16010_050E	Estimate!!Total!!Bachelor's degree or higher!!Not in labor force!!Speak Spanish	EDUCATIONAL ATTAINMENT AND EMPLOYMENT STATUS BY LANGUAGE SPOKEN AT HOME FOR THE POPULATION 25 YEARS AND OVER	not required	B16010_050M , B16010_050MA , B16010_050EA	0	int	B16010 N/A
B16010_051E	Estimate!!Total!!Bachelor's degree or higher!!Not in labor force!!Speak other Indo-European languages	EDUCATIONAL ATTAINMENT AND EMPLOYMENT STATUS BY LANGUAGE SPOKEN AT HOME FOR THE POPULATION 25 YEARS AND OVER	not required	B16010_051M , B16010_051MA , B16010_051EA	0	int	B16010 N/A
B16010_052E	Estimate!!Total!!Bachelor's degree or higher!!Not in labor force!!Speak Asian and Pacific Island languages	EDUCATIONAL ATTAINMENT AND EMPLOYMENT STATUS BY LANGUAGE SPOKEN AT HOME FOR THE POPULATION 25 YEARS AND OVER	not required	B16010_052M , B16010_052MA , B16010_052EA	0	int	B16010 N/A
B16010_053E	Estimate!!Total!!Bachelor's degree or higher!!Not in labor force!!Speak other languages	EDUCATIONAL ATTAINMENT AND EMPLOYMENT STATUS BY LANGUAGE SPOKEN AT HOME FOR THE POPULATION 25 YEARS AND OVER	not required	B16010_053M , B16010_053MA , B16010_053EA	0	int	B16010 N/A
B17001_001E	Estimate!!Total	POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE	not required	B17001_001M , B17001_001MA , B17001_001EA	0	int	B17001 N/A
B17001_002E	Estimate!!Total!!Income in the past 12 months below poverty level	POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE	not required	B17001_002M , B17001_002MA , B17001_002EA	0	int	B17001 N/A
B17001_003E	Estimate!!Total!!Income in the past 12 months below poverty level!!Male	POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE	not required	B17001_003M , B17001_003MA , B17001_003EA	0	int	B17001 N/A
B17001_004E	Estimate!!Total!!Income in the past 12 months below poverty level!!Male!!Under 5 years	POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE	not required	B17001_004M , B17001_004MA , B17001_004EA	0	int	B17001 N/A
B17001_005E	Estimate!!Total!!Income in the past 12 months below poverty level!!Male!!5 years	POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE	not required	B17001_005M , B17001_005MA , B17001_005EA	0	int	B17001 N/A
B17001_006E	Estimate!!Total!!Income in the past 12 months below poverty level!!Male!!6 to 11 years	POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE	not required	B17001_006M , B17001_006MA , B17001_006EA	0	int	B17001 N/A
B17001_007E	Estimate!!Total!!Income in the past 12 months below poverty level!!Male!!12 to 14 years	POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE	not required	B17001_007M , B17001_007MA , B17001_007EA	0	int	B17001 N/A

B17001_002E Highlight All Match Case Whole Words 2 of 2 matches



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

Add Your Geography

https://api.census.gov/data/2016/acs/acs5?get=NAME,B17001_002E,B17001_002M **&for=state:***

5

Find available geographies here:

<https://api.census.gov/data/2016/acs/acs5/geography.html>

<https://api.census.gov/data/2016/acs/acs5/geography.html>

Census Data API: FIPS Geographies in /data/2016/acs/acs5/geography

Reference Date	Geography Level	Geography Hierarchy	Limit
2015-01-01	010	us	
2015-01-01	020	region	
2015-01-01	030	division	
2015-01-01	040	state	
2015-01-01	050	state > county	
2015-01-01	060	state > county > county subdivision	
2015-01-01	140	state > county > tract	
2015-01-01	160	state > place	
2015-01-01	230	state > alaska native regional corporation	
2015-01-01	250	american indian area/alaska native area/hawaiian home land	
2015-01-01	310	metropolitan statistical area/micropolitan statistical area	
2015-01-01	330	combined statistical area	
2015-01-01	350	new england city and town area	
2015-01-01	400	urban area	
2015-01-01	500	state > congressional district	
2015-01-01	950	state > school district (elementary)	
2015-01-01	960	state > school district (secondary)	
2015-01-01	970	state > school district (unified)	
2015-01-01	155	state > place > county	
2015-01-01	070	state > county > county subdivision > place remainder	
2015-01-01	150	state > county > tract > block group	
2015-01-01	795	state > public use microdata area	
2015-01-01	860	zip code tabulation area	
2015-01-01	610	state > state legislative district (upper chamber)	



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Put it all Together

https://api.census.gov/data/2016/acs/acs5?get=NAME,B17001_002E,B17001_002M&for=state:*



6

Returns data in json format

Output

- <https://api.census.gov/data/2016/acs/acs5>
- `?get=NAME,B17001_002E,B17001_002M&for=state:*`
- `[["NAME","B17001_002E","B17001_002M","state"],`
- `["Alabama","868666","11290","01"],`
- `["Alaska","72826","2617","02"],`
- `["Arizona","1165636","11825","04"],`
- `["Arkansas","542431","8531","05"],`
- Continued...

Groups Functionality

- Pull More Than 50 Variables with One Call
- Groups for 2016 ACS5

<https://api.census.gov/data/2016/acs/acs5/groups.html>

- Example for ACS5: Group B17001

[https://api.census.gov/data/2016/acs/acs5?get=group\(B17001\)&for=us:*](https://api.census.gov/data/2016/acs/acs5?get=group(B17001)&for=us:*)

- All variable names will appear first followed by all the values in the output

Stay Connected: The Developers Page

www.census.gov/developers/

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United States Census Bureau

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Developers

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Updates

The Census Bureau has begun rolling out our datasets via APIs. Check out our [Discovery Tool](#). Sign up for our [newsletter](#) to get the latest updates and newest dataset addition. We also invite you to make requests for features / data via our [forum](#).

[Read More](#)

CITY SDK
MYOM: Make Your Own Maps!

Developers' Forum (Gitter.im)

Join the Mailing List

CitySDK Tutorial with Jeff M...
Toolbox for civic innovators to connect local government data

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Latest

Updates Available APIs News

County Business Patterns and Nonemployer Statistics (1986-2016)
April 19, 2018
Annual statistics on U.S. businesses with and without paid employees or payroll at detailed levels of geography and industry. Both surveys use NAICS codes.

International Trade (Time Series: 2005 - present)
March 21, 2018
The International Trade Datasets provide detailed monthly and annual statistics on trade

Is this page helpful? X
Yes No

Available APIs for ACS

www.census.gov/data/developers/data-sets.html

Census.gov > Data > Developers > Available APIs

Developers

- About this Section
- API Forum
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Developers
Events, Res...

Available APIs

We plan on adding more of our publicly available datasets. Here you'll find which of our many data sets are currently available via API. To make specific requests for the release of datasets, please sign up and submit your requests on our Developer Forum.

NEW: We now have a machine-readable dataset discovery service available in beta release. Visit our Discovery Tool page to learn more.

Page 1 of 2 >

American Community Survey 1-Year Data (2011-2016)
September 14, 2017
Areas with populations of 65,000+. Covers a broad range of topics about social, economic, demographic, and housing characteristics of the U.S. population.

American Community Survey 3 Year Data (2012-2013)
September 15, 2016
Areas with populations of 20,000+. Covers a broad range of topics about social, economic, demographic, and housing characteristics of the U.S. population.

American Community Survey 5-Year Data (2009-2016)
September 15, 2016
Data available down to the block-group level. Covers a range of topics about social, economic, demographic, and housing characteristics of the U.S. population.

American Community Survey Migration Flows (2009-2015)
September 15, 2016
Migration flows between counties, minor civil divisions, and metropolitan areas using ACS 5-year data. Flows are crossed by selected characteristics.

American Community Survey Supplemental (2014 - 2016)
October 20, 2017
High-level detailed tables tabulated on the 1-year microdata for geographies with populations of 20,000 or more.

Annual Survey of Entrepreneurs
August 17, 2017
The ASE provides more timely updates on the status, nature, and scope of women-, minority-, and veteran-owned businesses.

Annual Survey of Manufactures API (Time Series: 2002-2016)

Available APIs for ACS

- ACS 1-Year Data (2011-2017)
- ACS 3-Year Data (2012-2013)
- ACS 5-Year Data (2009-2016)
- ACS Migration Flows (2009-2015)
- Supplemental (2014-2017)

API Demo

Live Demo

- For all counties in New Mexico, what percent of people/households:
 - Have a disability
 - Have income below the poverty level
 - Do not have a vehicle at home

Resources for Learning More



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

ACS Website

United States **Census** Bureau

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American Community Survey (ACS)

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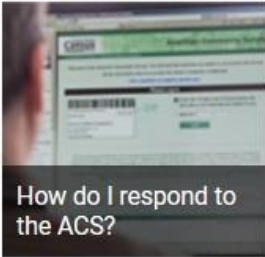
The **American Community Survey (ACS)** helps local officials, community leaders, and businesses understand the changes taking place in their communities. It is the premier source for detailed population and housing information about our nation.

How do I respond to the ACS?

Why do you ask each question?

Where can I get ACS data?



Stats In Action: New Orleans...



New/Modified/Deleted Tables

American Community Survey (ACS)

About the Survey **2016 ACS 1-year Estimates**

Respond to the Survey  

News & Updates

Data

- [New Tables](#)
- [Modified Tables](#)

Guidance for Data Users

Geography & ACS

Technical Documentation

Code Lists, Definitions, and Accuracy

User Notes

Errata

Data Suppression

Table & Geography Changes

Modified Tables

Computer and Internet

- Detailed Table [B28001](#) was modified to match changes in types of computers in the 2016 questionnaire, such as the addition of a category for tablets.
- Detailed Table [B28002](#) was modified to match changes in types of Internet subscriptions in the 2016 questionnaire. For example, individual categories for cable, fiber optic and DSL were deleted. A single category - "Broadband such as cable, fiber optic, or DSL" - was added.

Language

Visualizing Table/Variable Changes

B28002_004E

2016

	United States
	Estimate
Total:	118,860,065
With an Internet subscription	97,307,412
Dial-up with no other type of Internet subscription	510,666
Broadband of any type	96,796,746
Cellular data plan	81,066,266
Cellular data plan with no other type of Internet subscription	12,405,627
Cellular data plan with other type of Internet subscription	68,660,639

2015

	United States
	Estimate
Total:	118,208,250
With an Internet subscription:	91,313,308
Dial-up alone	667,676
DSL:	14,786,484
With mobile broadband	5,959,037
Without mobile broadband	8,827,447
Cable modem	49,444,157

Benefits of API Compared to American FactFinder or Summary File

- Get the exact variables and geographies you need
- Quickly update queries to get data across years: Most variables are consistent from year to year
- Easily merge results: List of geographies is consistent within a particular ACS dataset in the API

Example: Table B07012 “All Parishes in Louisiana”

```

https://api.census.gov/data/2016/acs/acs1?get=B07012_014E,NAME&for=county:*&in=state:22

[[{"B07012_014E": "NAME", "state": "Louisiana", "county": "Ascension Parish"},
{"B07012_014E": "NAME", "state": "Louisiana", "county": "Bossier Parish"},
{"B07012_014E": "NAME", "state": "Louisiana", "county": "Caddo Parish"},
{"B07012_014E": "NAME", "state": "Louisiana", "county": "Calcasieu Parish"}]]
    
```

	Bossier Parish, Louisiana		Caddo Parish, Louisiana	
	Estimate	Margin of Error	Estimate	Margin of Error
Total:	119,649	+/-1,304	240,453	+/-1,304
Moved from different county within same state:	3,786	+/-1,551	3,440	+/-1,551
Below 100 percent of the poverty level	1,419	+/-1,276	1,299	+/-1,276

Accessing Census Data



U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU
[census.gov](https://www.census.gov)

The American Community Survey

Selected Ways to Access Data

- [American FactFinder](#)
- [Application Programming Interface \(API\)](#)
- [Census Business Builder](#)
- [Data Profiles](#)
- [Infographics](#)
- [Longitudinal Employer-Household Dynamics](#)
- [My Congressional District](#)
- [My Tribal Area](#)
- [Narrative Profiles](#)
- [QuickFacts](#)

QuickFacts
Selected: Van Buren County, Michigan; Kalamazoo County, Michigan; UNITED STATES
QuickFacts provides statistics for all states and counties, and for cities and towns with a population of 5,000 or more.

Enter state, county, city, town, or zip code... Select a fact

Table

All Topics	Van Buren County, Michigan	Kalamazoo County, Michigan	UNITED STATES
PEOPLE			
Population			
Population estimates, July 1, 2016, (2016)	78,223	261,654	323,127,013
Population estimates, July 1, 2016, (2016)	78,223	261,654	323,127,013
Population estimates base, April 1, 2010, (2010)	78,265	259,327	308,758,105
Population, percent change - April 1, 2010 (estimates based to July 1, 2016, (2016)	-1.4%	4.5%	4.7%
Population, Census, April 1, 2010	76,250	259,331	308,745,530
Age and Sex			
Persons under 5 years, percent, July 1, 2016, (2016)	6.2%	5.1%	6.2%
Persons under 5 years, percent, April 1, 2010	6.4%	6.3%	6.5%
Persons under 18 years, percent, July 1, 2016, (2016)	23.8%	21.8%	22.8%
Persons under 18 years, percent, April 1, 2010	25.5%	22.7%	24.0%
Persons 65 years and over, percent, July 1, 2016, (2016)	17.2%	14.2%	15.2%
Persons 65 years and over, percent, April 1, 2010	13.8%	12.3%	13.0%
Female persons, percent, July 1, 2016, (2016)	50.2%	51.0%	50.9%
Female persons, percent, April 1, 2010	50.4%	51.0%	50.8%

My Tribal Area
Tell us what you think >

Enter name of Tribal Area
OR
1 Arizona
2 Navajo Nation Reservation and Off-Reservation Trust Land, AZ--NM--UT

Navajo Nation Reservation and Off-Reservation Trust Land, AZ--NM--UT
Source: 2012-2016 American Community Survey 5-Year Estimates

Sex and Age

ACS Margin of Error	Estimate	Estimate of Error
	174,692	(+/-1,002)
Total population	85,042	(+/-1,087)
Male	89,650	(+/-1,131)
Female	13,644	(+/-470)
Under 5 years	15,376	(+/-426)
5 to 9 years	15,054	(+/-428)
10 to 14 years	15,028	(+/-478)
15 to 19 years	14,659	(+/-517)
20 to 24 years	22,279	(+/-643)
25 to 34 years		

My Congressional District
118th Congress

1 Arkansas
2 Congressional District 2

Congressional District 2, Arkansas
Some 2016 American Community Survey 5-Year Estimates

Employment Status	Estimate
Population 16 years and over	600,965
In labor force	367,537
Civilian labor force	363,512
Employed	343,958
Unemployed	19,554
Unemployed persons, percent, July 1, 2016, (2016)	4.9%
Unemployed persons, percent, April 1, 2010	5.3%
Unemployed persons, percent, July 1, 2016, (2016)	3.2%
Unemployed persons, percent, April 1, 2010	3.2%

OnTheMap for Emergency Management
Search: Filter U.S. Census Bureau data for disasters, natural hazards, and weather events. Click for more information on Pacific Storms.

Events as of 11/06/2017

- Hurricanes
- Tropical Depression NINETEEN
- Wildfires
- Abney Fire
- California, Oregon
- Trout Creek Fire
- Tank Hollow Fire
- 2017 Windfall Mt Overwinter 1 Fire
- Bear Mountain Fire
- Federal Disaster Declarations
- DR-4305
- DR-4337

United States Census Bureau
AMERICAN FactFinder

Check out the early preview of our new dissemination platform at data.census.gov.

Community Facts
Find popular facts (population, income, etc.) and frequently requested data about your community.
Enter a state, county, city, town, or zip code
e.g., Atlanta, GA GO

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Advanced Search
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Popular Tables

- Population and Housing
 - Annual Population Estimates (2016 PER, PEFRANNRES)
 - Demographic and Housing Estimates (2015 ACS, DP05)
 - General Housing Characteristics (2015 ACS, DP04)
 - General Demographic Characteristics (2010 Census, DP-1)
- Poverty and Income
 - General Economic Characteristics (2015 ACS, DP03)
- Age, Race, Sex and Education
 - Selected Social Characteristics (2015 ACS, DP02)
 - Educational Attainment (2015 ACS, S1501)

Census Business Builder: Small Business Edition - 2.2

Change Your Industry: Food Services, Restaurants
Change Your Location: Fairfax County, Virginia
Select Map Variables: Average revenue per employee
Select Your Filter: Not Applied

State: County: Fairfax County, Virginia

Average revenue per employee: \$5,665

Average revenue per employee: \$112,552
Median household income: \$67,700
Percent high school degree or higher: 92%
Unemployment rate: 67.7%
Employer establishments: 775

Additional Tools & Resources

Statistics in Schools

Search entire SIS site



Statistics in Schools



STATISTICS
IN SCHOOLS

Educate your students about the value and everyday use of statistics. The Statistics in Schools program provides resources for teaching and learning with real life data. Explore the site for standards-aligned, classroom-ready activities.



Math Activities



History Activities



State Facts for
Students



[census.gov/schools](https://www.census.gov/schools)

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Census.gov > Data > Census Academy

Census Academy

Data Gems
Webinars
Courses - Coming Soon!

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Upcoming Webinars

August 2nd	2018 Economic Programs Webinar Series: Professional/Scientific
September 12th	2018 Economic Programs Webinar Series: Hidden Gems

Data Gem of the Week

DATA GEMS: How to Do...
David Kraiker
Data Dissemination Specialist

Data Gems

All 2018

How Do I Get Business Data for My Location?
July 02, 2018
If you are looking to open or expand your business, check this tip to learn how to access statistics about your market, customers, and other businesses.

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<https://census.gov/academy>


Preview New Data Dissemination on [Data.census.gov](https://data.census.gov)

cedsci.feedback@census.gov'."/>

United States
Census
Bureau

Explore Census Data

The Census Bureau serves as the leading source of quality data about the nation's people and economy.

I'm looking for... 

Help us build this experience

Your input is important as we develop this platform. Start searching and let us know how we can make your experience better.

Email feedback to: cedsci.feedback@census.gov

*For official statistics, continue to use existing data tools on [census.gov](https://www.census.gov), such as American FactFinder

Stay Current

NEWSROOM



The latest news releases and statements from the U.S. Census Bureau. Also, find upcoming events, and useful information for media

[census.gov/newsroom.html](https://www.census.gov/newsroom.html)

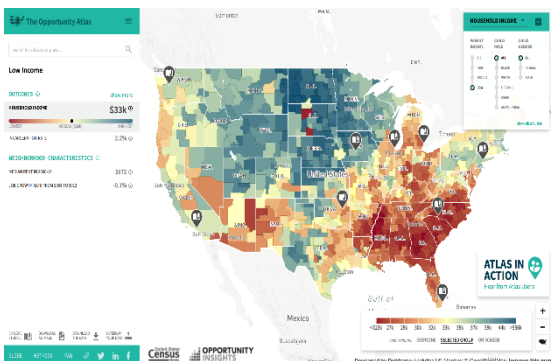
DIRECTOR'S BLOG



This blog gives the director's point of view on everything from Census Bureau news to how we measure America's people, places and economy.

[census.gov/newsroom/blogs/director.html](https://www.census.gov/newsroom/blogs/director.html)

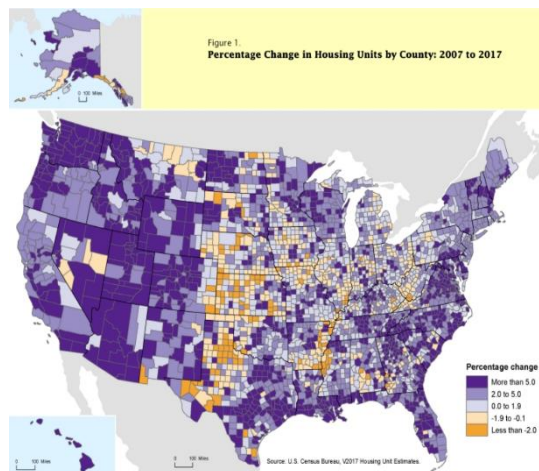
AMERICA COUNTS



Featured stories on various topics such as families, housing, employment, business, education, the economy, emergency preparedness, and population

[census.gov/AmericaCounts](https://www.census.gov/AmericaCounts)

STATS FOR STORIES



Provides links to timely story ideas highlighting the Census Bureau's newsworthy statistics that relate to current events, observances, holidays, and anniversaries

[census.gov/newsroom/stories.html](https://www.census.gov/newsroom/stories.html)
[census.gov/newsroom/facts-for-features.html](https://www.census.gov/newsroom/facts-for-features.html)

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More information on the
American Community Survey:
<https://www.census.gov/acs>



youtube.com/user/uscensusbureau



instagram.com/uscensusbureau/



Census (Non-media inquiries)
800-923-8282

Public Information Office (Media)
301-763-3030

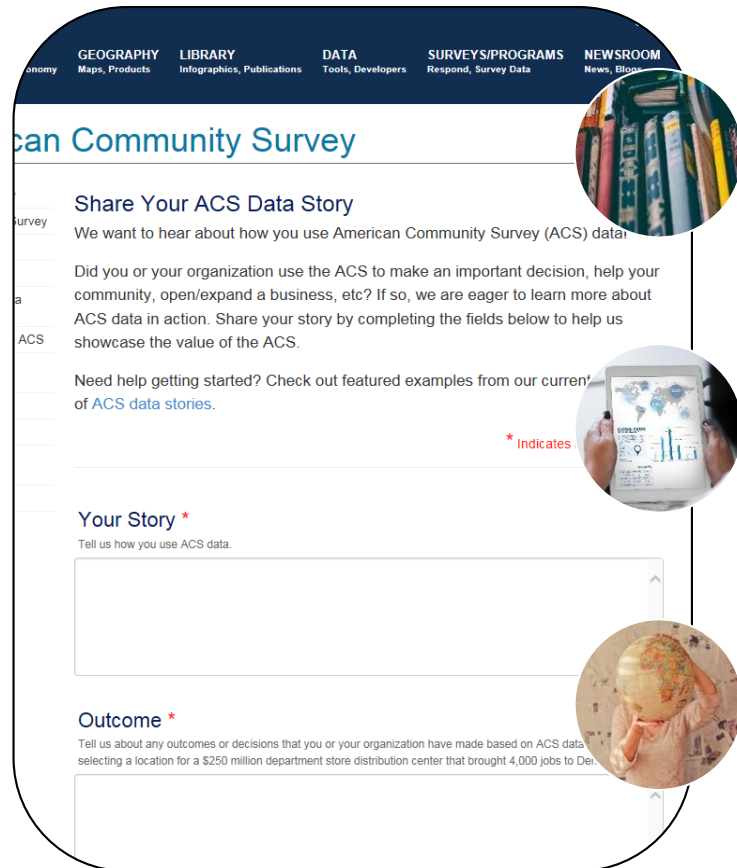


pinterest.com/uscensusbureau/



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The American Community Survey Data Tell Stories. Tell Us Yours!



Your story

Your outcome

Your data details

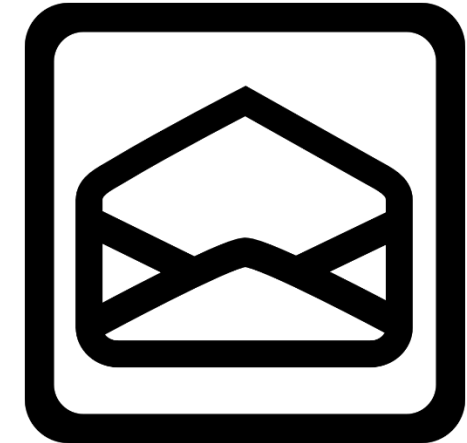
To tell us your story, visit:
census.gov/acs/www/share-your-story/index.php

Additional Resources:
Want Free Training?
Need Local Stats?



U.S. Census Bureau
Data Dissemination Specialist

Eric Coyle
(702) 236-3202
eric.a.coyle@census.gov



Additional Assistance:

Toll-free number:
1-844-ASK-DATA (1-844-275-2342)
census.askdata@census.gov

Q&A and Thank You!



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