# 2014-2018 American Community Survey (ACS) 5-Year Estimates

Pre-Embargo Webinar December 10, 2019

Access the Audio and Slides

Toll free number: 1-800-475-0518

Participant passcode: 4731884

Access slides: census.gov/programs-surveys/acs/news/events/acs-5-year-2018.html



## **Speakers**

Host Jewel Jordan

Public Affairs Specialist, Media Relations Branch

**Public Information Office** 

Presenters | Gretchen Gooding

Chief, Outreach and Education Branch

**American Community Survey Office** 

**Tyson Weister** 

Program Analyst

Center for Enterprise Dissemination



## **Webinar Outline**

- Upcoming ACS Data Releases
- ACS Basics
- Changes for 2014-2018 ACS 5-year Release
- How to Access ACS Data
- ACS Website
- Q&A
- Accessing Block Group Data Using data.census.gov



### **ACS Data Release**

### MEDIA EMBARGO: Tuesday, December 17, 2019

- Embargo at 10 a.m. (EST), Includes 2014-2018 ACS 5-Year estimates:
  - 5-Year data products

### PUBLIC RELEASE: Thursday, December 19, 2019

- Release at 12:01 a.m. (EST), Includes 2014-2018 ACS 5-Year estimates:
  - All 5-Year data products
  - Narrative Profile
  - API, QuickFacts, My Tribal Area



## Thursday, December 19th

#### News Release:

 Highlights on the demographic characteristics of the 65 and older population

### Interactive Graphics:

- What can you learn about counties from the ACS?
- What can you learn about people 65 years and older from the ACS?
- 2018 Median Household Income in the United States
- 2018 Poverty Rates in the United States
- 2018 Median Age in the United States





## **Upcoming ACS Releases**

- January 30, 2020
  - 2014-2018 ACS 5-Year Public Use Microdata Sample (PUMS)
  - 2014-2018 ACS 5-Year Variance Replicate Estimate Tables
- February 6, 2020
  - 2018 ACS 1-Year Supplemental Estimates



## **Webinar Outline**

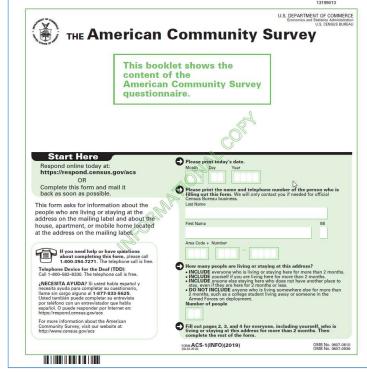
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## The American Community Survey: The Foundation

The American Community Survey 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 addresses and informs over \$675 billion of Federal government spending each year
- Covers **40+ topics**, supports over **300** evidence-based Federal government uses, and produces **11 billion** estimates each year
- Three key annual data releases:
  - 1-year Estimates (areas w/ population of 65,000+)
  - 1-year Supplemental Estimates (areas w/ population of 20,000+)
  - 5-year Estimates (all areas)





## **ACS Content**

POPULATION		HOUSING	
SOCIAL Ancestry Citizenship Citizen Voting Age Population Disability Educational Attainment Fertility Grandparents Language Marital Status Migration School Enrollment Veterans	DEMOGRAPHIC Age Hispanic Origin Race Relationship Sex ECONOMIC Class of Worker Commuting Employment Status Food Stamps (SNAP) Health Insurance Hours/Week, Weeks/Year Income Industry & Occupation	Computer & Internet Use Costs (Mortgage, Rent, Taxes, Insurance) Heating Fuel Home Value Occupancy Plumbing/Kitchen Facilities Structure Tenure (Own/Rent) Utilities Vehicles Year Built/ Year Moved In	



## **5-Year Geography**

- All geographic areas down to the tract and block group level
- Over 579,000 geographic areas
- 87 different geography summary levels available





### **5-Year Estimates**

- Describe the characteristics over a specific period of time, not a single point in time
- Data are pooled across 60 months, weighted to produce estimates, and controlled for age, sex, race, and Hispanic origin
  - 5-year estimates are NOT an average of 1-year estimates
- Estimates are based on geographic boundaries as of January 1 of the last year in the 5-year period
- Dollar-value estimates are inflation adjusted to the most recent year for the period



## When to Use 5-Year Estimates?

- No 1-year estimate is available
- Margins of error for 1-year estimates are larger than desired
- Analyzing data for small population groups
- Comparing various geographies when one or more of them do not receive 1-year estimates



## **5-Year Comparisons**

- Only compare non-overlapping time periods (e.g., 2014-2018 and 2009-2013)
- Only compare 1-yr estimates to 1-yr and 5-yr estimates to 5-yr
- Compare across geographies and subpopulations
- Compare percentages, means, medians and rates instead of totals whenever possible



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### **ACS Methodological Updates Impacting Data Products**

### Industry and Occupation – updated Census codes

Updated to reflect revised North American Industrial Classification
 System (NAICS) and Standard Occupational Classification (SOC) codes

### Poverty Statistics – changes to income deficit

- Calculated using reference period dollar amounts prior to 2018
- Now inflation adjusted to respective calendar year



### **ACS New Tables**

### **Industry and Occupation**

- B24114: Detailed Occupation for the Civilian Employed Population 16 Years and Over
- B24115: Detailed Occupation for the Civilian Employed Male Population 16 Years and Over
- B24116: Detailed Occupation for the Civilian Employed Female Population 16 Years and Over

### **Income and Earnings**

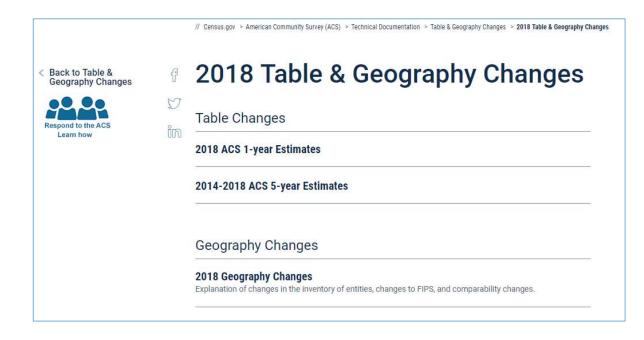
• B19123: Family Size by Cash Public Assistance Income or Households Receiving Food Stamps/SNAP Benefits in the Past 12 Months

### Citizen, Voting-Age Population

- B29001: Citizen, Voting-age Population By Age
- **B29002**: Citizen, Voting-age Population By Educational Attainment
- **B29003**: Citizen, Voting-age Population By Poverty Status
- B29004: Median Household Income For Households With A Citizen, Voting-age Householder (In 2018 Inflation-adjusted Dollars)
- **\$2902**: Citizen, Voting-age Population By Selected Characteristics



## **2018 Table Changes**



- Census.gov/acs→
- Technical
   Documentation →
- Table & Geography Changes →
- 2014-2018 ACS 5year Estimates



# **ACS Modified Tables-Industry & Occupation**

Table IDs	Universe
Occupation and Detailed Occupation	
B24011 – B24012, C24010A-I, C24020	Civilian Employed Population 16 Years and Over
B24021 - B24022	Full-Time, Year-Round Civilian Employed Population 16 Years And Over
B24121 - B24126	Full-Time, Year-Round Civilian Employed Population 16 Years And Over
Industry	
B24031 - B24032	Civilian Employed Population 16 Years And Over With Earnings
B24041- B24042	Full-Time, Year-Round Civilian Employed Population 16 Years And Over With Earnings



# **ACS Modified Tables-Industry, Occupation, & Class of Worker**

Table IDs	Title
C24050	Industry By Occupation For The Civilian Employed Population 16 Years And Over
C24060	Occupation By Class Of Worker For The Civilian Employed Population 16 Years And Over
C24070	Industry By Class Of Worker For The Civilian Employed Population 16 Years And Over



# **ACS Modified Tables-Occupation Subject Tables**

Table IDs	Title
S2401	Occupation By Sex For The Civilian Employed Population 16 Years And Over
S2402	Occupation By Sex For The Full-time, Year-round Civilian Employed Population 16 Years And Over
S2406	Occupation by class of worker for the civilian employed population 16 years and over
S2411	Occupation by sex and median earnings in the past 12 months (in 2018 inflation-adjusted dollars) for the civilian employed population 16 years and over
S2412	Occupation By Sex And Median Earnings In The Past 12 Months (In 2018 Inflation-adjusted Dollars) For The Full-time, Year-round Civilian Employed Population 16 Years And Over



## **ACS Modified Tables-Industry Subject Tables**

Table IDs	Title
S2403	Industry By Sex For The Civilian Employed Population 16 Years And Over
S2404	Industry By Sex For The Full-time, Year-round Civilian Employed Population 16 Years And Over
S2405	Industry By Occupation For The Civilian Employed Population 16 Years And Over
S2407	Industry By Class Of Worker For The Civilian Employed Population 16 Years And Over
S2413	Industry By Sex And Median Earnings In The Past 12 Months (In 2018 Inflation-adjusted Dollars) For The Civilian Employed Population 16 Years And Over
S2414	Industry By Sex And Median Earnings In The Past 12 Months (In 2018 Inflation-adjusted Dollars) For The Full-time, Year-round Civilian Employed Population 16 Years And Over



# **ACS Modified Tables-Poverty**

Table IDs	Title
B17008	Aggregate Income Deficit (Dollars) in the Past 12 Months of Unrelated Individuals by Sex
B17011	Aggregate Income Deficit (Dollars) in the Past 12 Months for Families by Family Type
S1701	Poverty Status in the Past 12 Months
S1702	Poverty Status in the Past 12 Months of Families



# **ACS Modified Tables-Foreign-Born Population**

Table IDs	Title
B05002	Place of Birth by Nativity and Citizenship Status
B05006	Place of Birth for the Foreign-Born Population in the United States
B05006PR	Place of Birth for the Foreign-Born Population in Puerto Rico
S0502	Selected Characteristics of the Foreign-Born Population by Period of Entry into the United States
S0502PR	Selected Characteristics of the Foreign-Born Population by Period of Entry into Puerto Rico
S0504	Selected Characteristics of the Foreign-Born Population by Region of Birth: Africa, Northern America, and Oceania



# Other ACS Data Product Modifications: Detailed Tables and Subject Tables

Topic	Type of Change
Foreign-Born Population	Updated categories for year of naturalization Census occupation codes updated to reflect revised SOC codes
Housing	Updated categories for year moved in Corrected gross rent categories
Income and Earnings	Added estimate for full-time year round workers  Added estimate for number of families by family size  Census occupation codes updated to reflect revised SOC codes
Group Quarters	Improved table titles to indicate the number of group quarters types Added estimates for people not in the labor force for institutional group quarters Census occupation codes updated to reflect revised SOC codes
Disability	Census occupation codes updated to reflect revised SOC codes
Health Insurance	Census occupation codes updated to reflect revised SOC codes
Journey to Work and Migration	Census occupation codes updated to reflect revised SOC codes



# Other ACS Data Product Modifications: Data Profiles and Comparison Profiles

Topic	Type of Change
Industry	Updated census codes to reflect revised North American Industrial Classification System (NAICS)
Occupation	Updated census codes to reflect revised Standard Occupational Classification (SOC) codes
Educational Attainment	Added estimates for high school or higher and bachelor's and higher
Housing	Updated categories for year moved in



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### **5-Year Data Products**

• Data Profiles (5)

(Social, Economic, Housing, Demographic,
Selected Social Characteristics - Puerto Rico)

Comparison Profiles (5)

(2014-2018 and 2009-2013)

- Subject Tables (83)
- Detailed Tables (1,135)
- Narrative Profiles
- Data Tools
  - API, QuickFacts, My Tribal Area, Census Business Builder

#### Language

Among people at least five years old living in Prince George's County, Maryland in 2012-2016, 23 percent spoke a language other than English at home. Of those speaking a language other than English at home, 58 percent spoke Spanish and 42 percent spoke some other language; 46 percent reported that they did not speak English "very well.

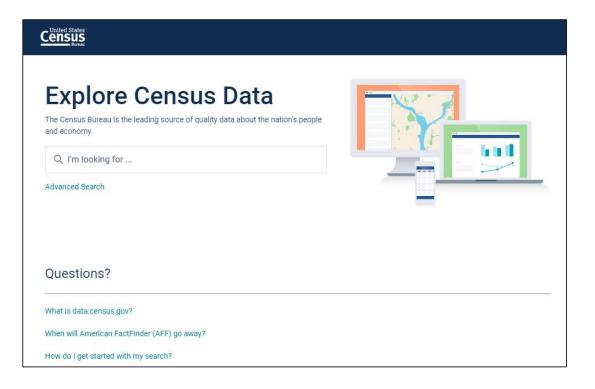
Percent of the Population 5 years and over who Speak a Language other than English in Prince George's County, Maryland in 2012-2016

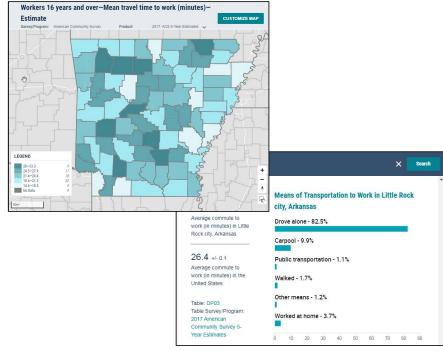
click graph to view data in table format

Spani		Occupied housing units	
WE WILL SERVING THE OTHER MATERIAL SERVINGS AND A STREET	Subject	Estimate	Margin of Error
Other Indo-European languag	Occupied housing units	116,291,033	+/-141,632
	UNITS IN STRUCTURE		
Asian and Pacific Islander languag	1, detached	62.8%	+/-0.1
	1, attached	6.0%	+/-0.1
Other languag	2 apartments	3.6%	+/-0.1
10.3 (4.4.2 (4.7.2) (4.9.2) (4.9.2)	3 or 4 apartments	4.4%	+/-0.1
	5 to 9 apartments	4.7%	+/-0.1
	10 or more apartments	12.7%	+/-0.1
	Mobile home or other type of housing	5.8%	+/-0.1
	YEAR STRUCTURE BUILT		
	2010 or later	1.6%	+/-0.1
	2000 to 2009	14.8%	+/-0.1
	1980 to 1999	27.9%	+/-0.1
	1960 to 1979	26.7%	+/-0.1
	1940 to 1959	16.2%	+/-0.1
	1939 or earlier	12.7%	+/-0.1



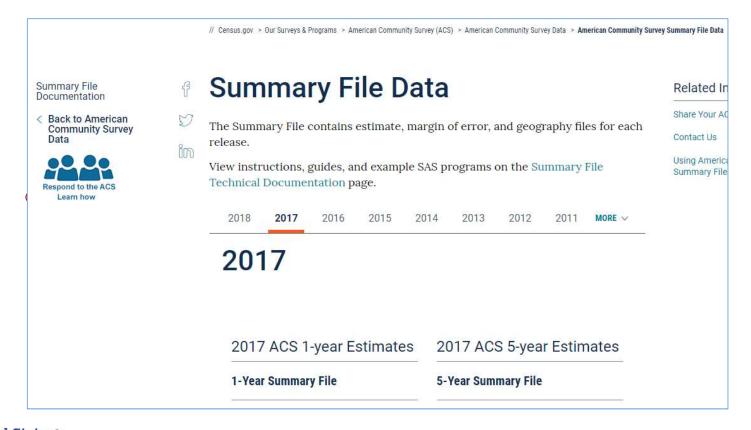
## data.census.gov







# **5-Year Summary File**

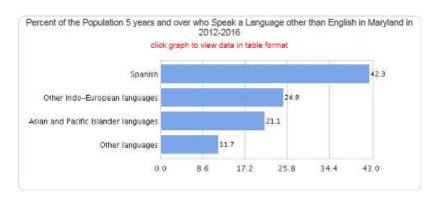




### **Narrative Profile**

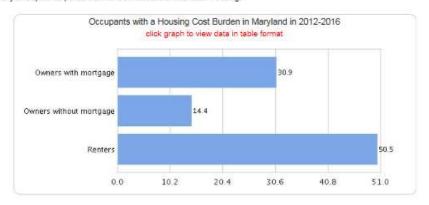
#### Language

Among people at least five years old living in Maryland in 2012-2016, 18 percent spoke a language other than English at home. Of those speaking a language other than English at home, 42 percent spoke Spanish and 58 percent spoke some other language; 37 percent reported that they did not speak English "very well."



#### Housing Costs

The median monthly housing costs for mortgaged owners was \$1,938, nonmortgaged owners \$586, and renters \$1,264. An estimated 31 percent of owners with mortgages, 14 percent of owners without mortgages, and 51 percent of renters in Maryland spent 30 percent or more of household income on housing.



#### ▶ Employment Status and Type of Employer

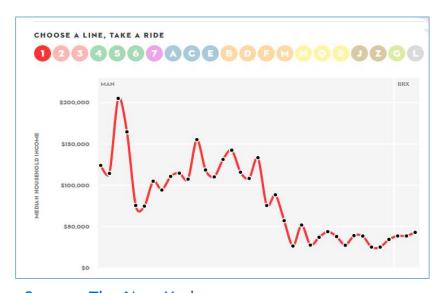
In Maryland, 63 percent of the population 16 and over were employed; 32 percent were not currently in the labor force.

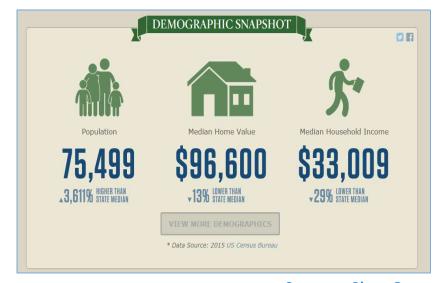
An estimated 73 percent of the people employed were private wage and salary workers; 22 percent were federal, state, or local government workers; and 5 percent were self-employed in their own (not incorporated) business.

Class of worker	Number	Percent
Private wage and salary workers	2,199,093	73.2
Federal, state, or local government workers	880,843	22.0
Self-employed workers in own not incorporated business	142,210	4.7



## **Application Programming Interface (API)**



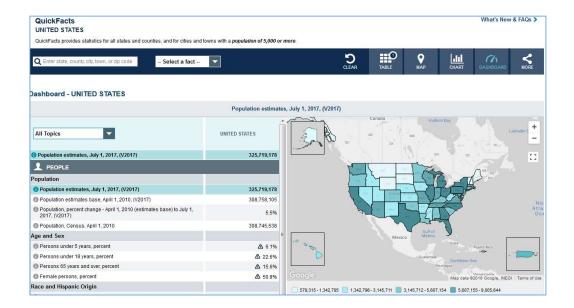


Source: The New Yorker

Source: ClearGov



# **Data Tool Updates**









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## **ACS Website**

// Census.gov > Our Surveys & Programs > 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

< Back to Our Surveys & Programs



### **American Community Survey (ACS)**

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?

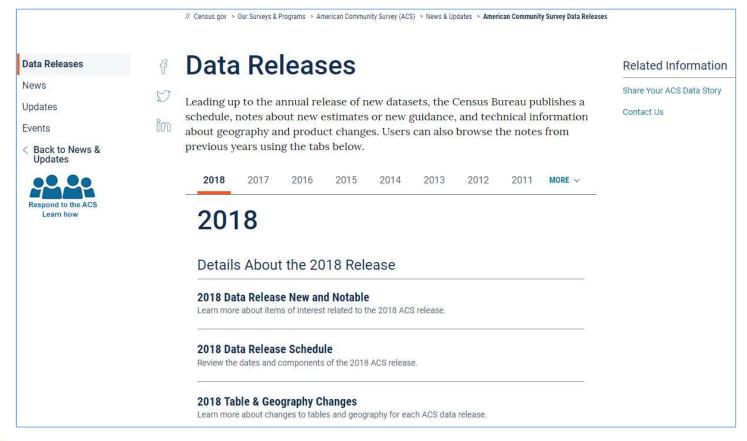




Data



### **Data Release Information**





# **Data User Handbooks and Training Presentations**

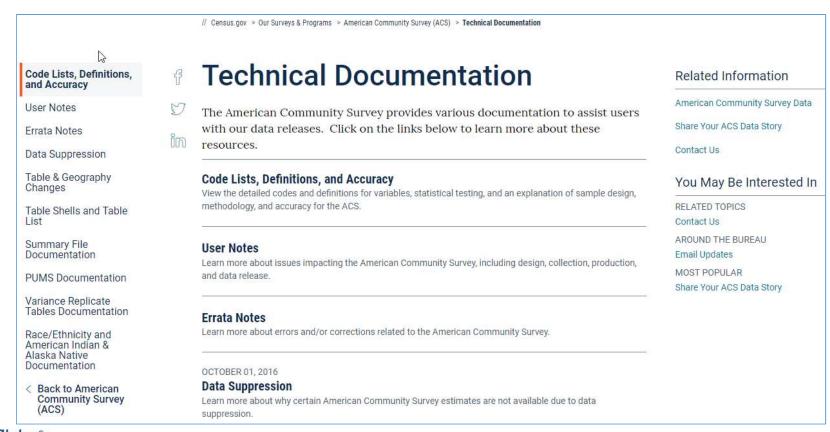
### **Currently Available**

- All Data Users
- American Indian and Alaska Natives
- Summary File
- Rural
- State and Local Government
- Business





# **Technical Documentation**





# **Comparison Guidance**





# **Statistical Testing Tool**

// Census.gov > Our Surveys & Programs > American Community Survey (ACS) > Guidance for Data Users > Statistical Testing Tool

Subjects Included in the Survey

Which Data Table or Tool Should I Use?

When to Use 1-year, 3year, or 5-year Estimates

Handbooks

Comparing ACS Data

### Statistical Testing Tool

Training Presentations

 Back to Guidance for Data Users



## **Statistical Testing Tool**



Comparing American Community Survey (ACS) estimates involves more than determining which statistic is higher or lower. Users should also conduct statistical testing to make sure differences are statistically significant and are unlikely to have occurred by chance. This testing takes into account the margin of error (MOE) associated with survey estimates, which are based on responses from only a sample of the full population.

Looking for an easy way to conduct statistical testing? Try the Census Bureau's new Statistical Testing Tool. Simply copy or download ACS estimates and their MOEs into the spreadsheet to get instant results of statistical tests.



Download Statistical Testing Tool [XLSX - 3.5 MB]

### Related Information

Share Your ACS Data Story

Contact Us

### You May Be Interested In

RELATED TOPICS

Contact Us

AROUND THE BUREAU

**Email Updates** 

MOST POPULAR

Share Your ACS Data Story



# **Questions?**

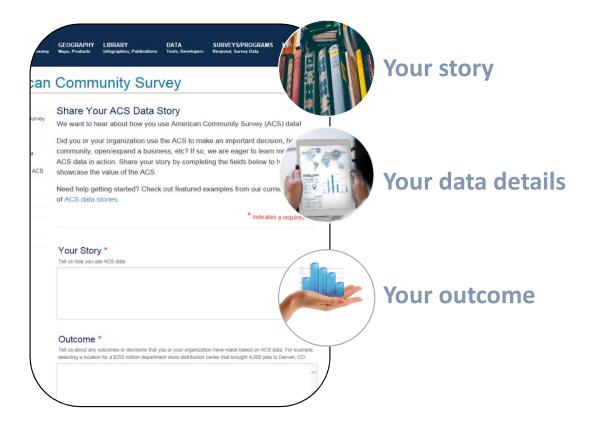


Dial \*1 for the Operator

After Questions Stay for a Demo:
How to Access 5-Year Block Group Data in
data.census.gov



# **Data Tell Stories. Tell Us Yours!**







- Purpose:
  - Improve understanding of the value and utility of ACS data.
  - Promote information sharing among data users about key ACS data issues and applications
- Membership is free and open to all interested ACS data users
- Webinars and special sessions at professional meetings planned
- Users group website and online community

acsdatacommunity.prb.org



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# data.census.gov: Changing the way you get data at the U.S. Census Bureau

# Transitioning from American FactFinder (AFF) to data.census.gov:

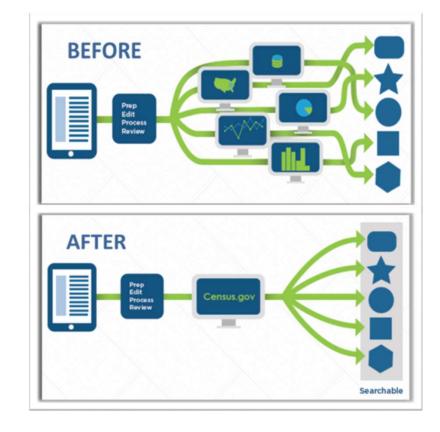
- Streamline access to data
- Maintain best of current tools
- Reduce redundancies and costs
- Provide greater access to Census API

# Most AFF data migrated to the Census API and data.census.gov:

Spring 2020

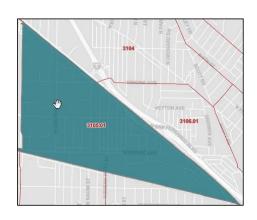
# First major releases exclusively on data.census.gov this September:

- 2017 Economic Census
- 2018 American Community Survey 1-Year Estimates





# What is a Block Group?



Census Tract 3105.01, Los Angeles County, CA



Block Group 1, Census Tract 3105.01, Los Angeles County, CA

Population of:

Block Group 1 = 927

+Block Group 2 = 1,861

+Block Group 3 = 1,217

\_\_\_\_\_

Tract 3105.01 = 4,005

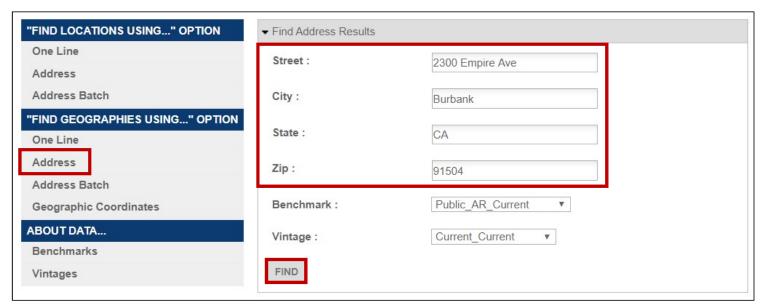
census.gov/programs-surveys/geography/about/glossary.html#par\_textimage\_4



# Census Geocoder Address Lookup

### Find the block group and census tract for an address:

- Click Address under "Find Geographies Using..."
- Enter street address (example: 2300 Empire Ave, Burbank, CA 91504)
- Click Find



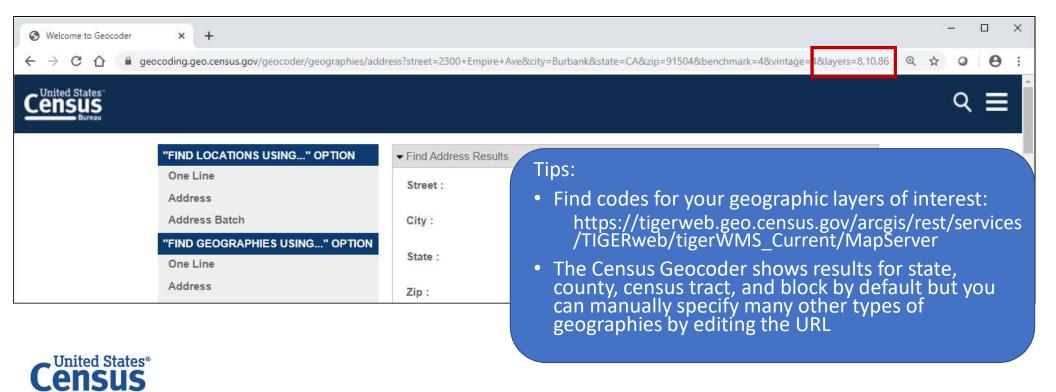
geocoding.geo.census.gov/geocoder



# Census Geocoder Address Lookup (continued)

Edit URL to get results for block group (8), census tract (10) and county (86)

- Add &layers=8,10,86 to the end of the URL
- Press enter



# Census Geocoder Address Lookup (continued)

- View the NAME section under the headings for Census Block Groups, Census Tracts, and Counties
- The street address falls within **Block Group 1, Census Tract 3105.01, Los Angeles County**

Census Block Groups: GEOID: 060373105011

CENTLAT: +34.1917479 AREAWATER: 0

STATE: 06 BASENAME: 1

OID: 208903717305468

LSADC: BG FUNCSTAT: S

INITEDTI AT: +2/ 1017/70

NAME: Block Group 1

OBJECTID: 45724 TRACT: 310501

CENTLON: -118.3325451

BLKGRP: 1

AREALAND: 778981 INTPTLON: -118.3325451

MTFCC: G5030 COUNTY: 037 Census Tracts:

GEOID: 06037310501 CENTLAT: +34.1946547

AREAWATER: 0 STATE: 06

BASENAME: 3105.01 OID: 207903717303996

LSADC: CT FUNCSTAT: S

INTPTLAT: +34.1946547

NAME: Census Tract 3105.01

OBJECTID, 35153

TRACT: 310501

CENTLON: -118.3394509 AREALAND: 1965651 INTPTLON: -118.3394509

MTFCC: G5020 COUNTY: 037 Counties:

GEOID: 06037

CENTLAT: +34.1957768 AREAWATER: 1793485467

STATE: 06

BASENAME: Los Angeles OID: 275901063468976

LSADC: 06 FUNCSTAT: A

INTPTI AT: +34 1963983

NAME: Los Angeles County

OBJECTID: 398

CENTLON: -118.2617650

COUNTYCC: H1

COUNTYNS: 00277283 AREALAND: 10511861492 INTPTLON: -118.2618616

MTFCC: G4020 COUNTY: 037



# **Downloading Block Group Data on data.census.gov**

# Explore Census Data The Census Bureau is the leading source of quality data about the nation's people and economy. Q I'm looking for ... Advanced Search

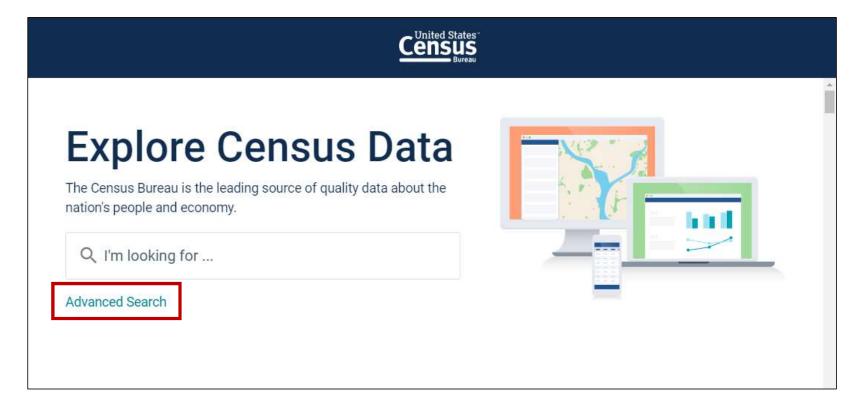
### **Three Easy Steps:**

- 1. Find your table
- 2. Add your geography
- 3. Download data



# data.census.gov

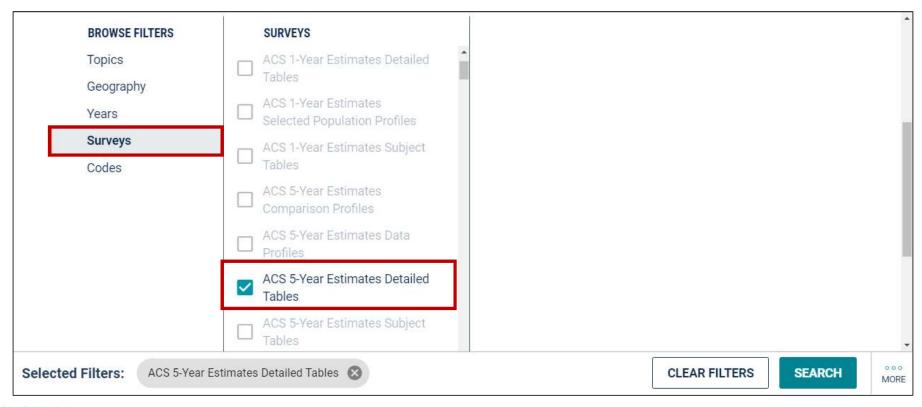
### Click Advanced Search





# **Select Your Dataset**

### Surveys → ACS 5-Year Estimates Detailed Tables





# **Select Year**

### Years $\rightarrow$ **2017**





# **Select Topic**

- Topics → Populations and People → Age and Sex
- Click **Search** in the lower right





# **Find Table**

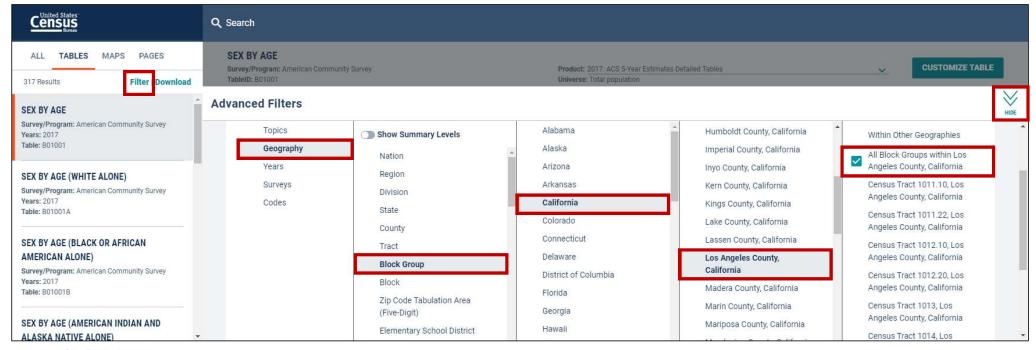
- Click **Tables** in the upper left
- Find and click on your table of interest in the left panel of table results





# **Add Geography**

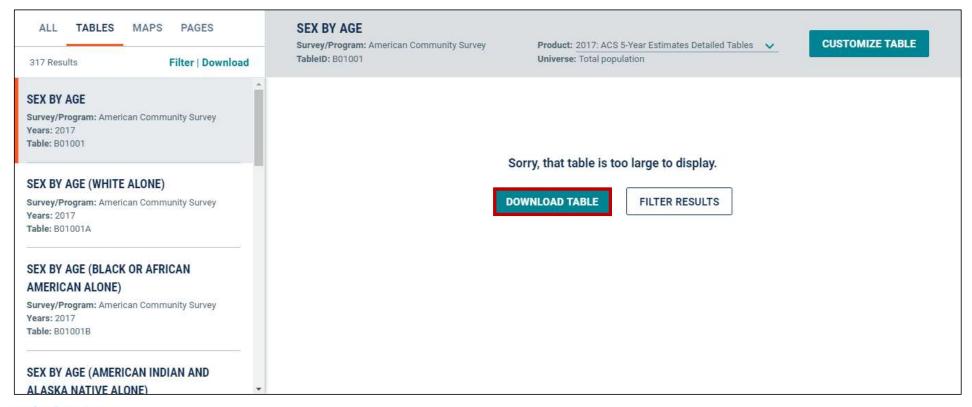
- Click Filter in the left navigation panel
- Geography → Block Group → California → Los Angeles County, CA → All Block Groups in Los Angeles County, CA
- Click the **chevron** in the upper right that says "Hide"





# **Download Table**

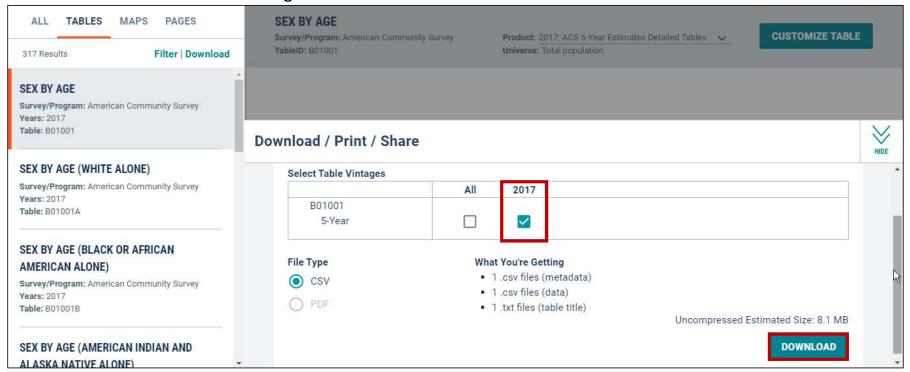
### Click **Download Table**





# **Download Table (continued)**

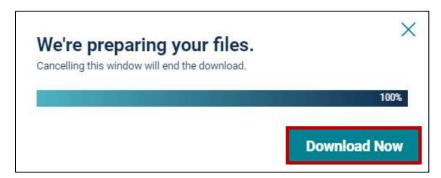
- Confirm the box is checked next to the desired ACS 5-year vintage (example: 2017 ACS 5-year)
- Click **Download** in the lower right



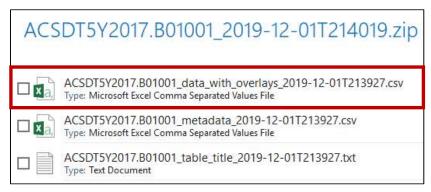


# **Download Table (continued)**

Wait for the download status to reach 100% and then click Download Now

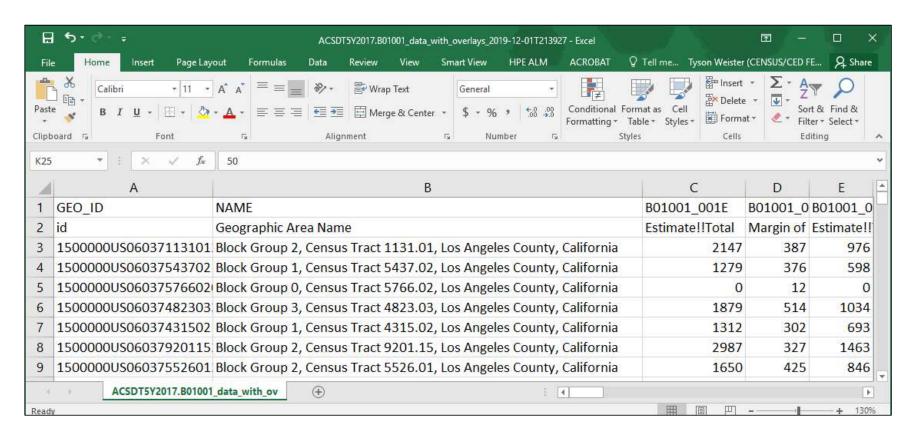


• Open the .csv file that has "data\_with\_overlays" in the naming convention



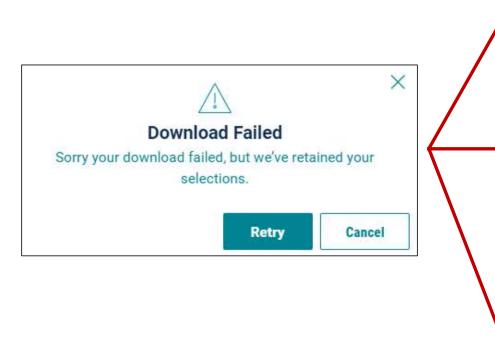


# View Download: Table B01001





# **Overcoming Download Errors**



### Break your download into smaller pieces by using:

- Fewer geographies
- Fewer tables/vintages in a single download
- Smaller tables

Example: Download median income from Detailed Table B19013 instead of Subject Table S1903

### **Download from FTP Sites:**

Links to FTP sites on data.census.gov



### **Census Bureau's Data API**

census.gov/developers



# **Collections of Geographies**

We recently released more check boxes that allow you to select collections of geographies in a single click:

All congressional districts (116th Congress) within:

- Nation
- State

All census tracts within:

- State
- County

All block groups within:

- County
- Census tract

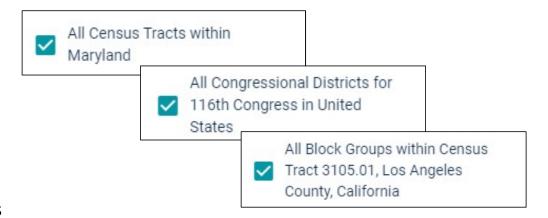
All combined statistical areas (CSAs) in the United States All school districts within state

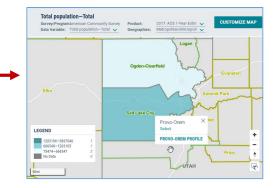
### We are working to add more based on user feedback. In the meantime:

- Use maps on data.census.gov to select small groupings of geographies
- Use FTP site or the API

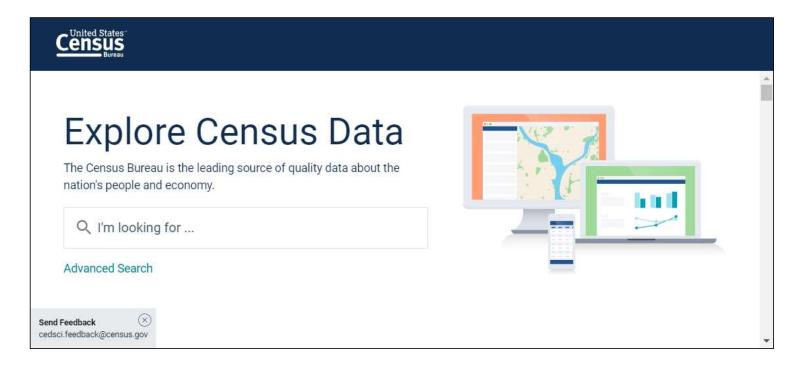


census.gov/data/what-is-data-census-gov.html





# **Our Development Depends on YOUR Feedback**



Check out data.census.gov and provide comments at cedsci.feedback@census.gov



# Stay Connected: Webinars, Tutorials, and Feedback

### data.census.gov Resources page:

https://www.census.gov/data/what-is-data-census-gov.html

### **Census Academy:**

https://census.gov/data/academy/webinars/upcoming.html

- Webinars: Recorded and upcoming webinars on data.census.gov
- Data Gems: A series of short "How-To" videos

**Feedback:** Email comments to cedsci.feedback@census.gov





# **Questions?**



Dial \*1 for the Operator



# **Need Local Stats or Training?**

# We Can Help!

- Regional Data Staff
  - 1-844-ASK-DATA
  - census.askdata@census.gov
- State Data Centers
  - & Census Information Centers
    - census.gov/sdc





# **Questions?**



Dial \*1 for the Operator



# For Further Information

Media Public Information Office

pio@census.gov

301-763-3030

Non-Media Customer Service Center

1-800-923-8282 or 301-763-INFO (4636)

**Email Alerts** 

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**Source Us** 

U.S. Census Bureau's 2014-2018

American Community Survey





**Press Kit**