

3. CASE STUDIES USING ACS DATA

Case Study #1: Exploring Ancestry Data in My Congressional District

Skill Level: Beginner

Subject: Ancestry

Type of Analysis: Analyzing characteristics of a congressional district

Tool Used: My Congressional District

The ancestry question on the U.S. Census Bureau’s American Community Survey (ACS) measures the characteristics of ethnic groups, beyond the Hispanic origin and race questions. Data based on this question help create a more detailed picture of cultural groups. Members of Congress and their staffs may be interested in this information to better understand the characteristics of their constituents. Federal agencies also use these data to enforce the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, and national origin.¹⁵

Accessing data on ancestry and other district-specific information is quick and easy using the My Congressional District tool on the Census Bureau’s Web site (see Figure 3.1).¹⁶ My Congressional District combines the latest data from the ACS and County Business Patterns to provide a detailed set of social, economic, housing, and demographic characteristics for every congressional district for the current legislative session in the United States.



¹⁵ U.S. Census Bureau, *American Community Survey (ACS) Handbook of Questions and Current Federal Uses*, <www.census.gov/programs-surveys/acs/operations-and-administration/2014-content-review/federal-uses.html>.

¹⁶ U.S. Census Bureau, My Congressional District, <www.census.gov/mycd/>.

From the Web site, use the drop-down boxes (labeled 1 and 2) to choose your state and district (see Figure 3.2). If you do not know the district number, you can use the ZIP code search tool, which links users to the U.S. House of Representatives district lookup tool.

Figure 3.2. Selecting District From My Congressional District Drop-Down Menu

My Congressional District

115th Congress

California

2 Select a District

- Congressional District 34
- Congressional District 35
- Congressional District 36
- Congressional District 37
- Congressional District 38
- Congressional District 39
- Congressional District 40
- Congressional District 41
- Congressional District 42
- Congressional District 43
- Congressional District 44
- Congressional District 45
- Congressional District 46
- Congressional District 47
- Congressional District 48
- Congressional District 49
- Congressional District 50
- Congressional District 51
- Congressional District 52
- Congressional District 53

People Workers Housing Socio-Economic Education Business

My Congressional District gives you quick and easy access to selected statistics collected by the U.S. Census Bureau through the [American Community Survey \(ACS\)](#) and [County Business Patterns \(CBP\)](#). The ACS provides detailed demographic, social, economic, and housing statistics every year for the nation's communities. CBP provides annual statistics for businesses with paid employees at a detailed geography and industry level. My Congressional District is powered by ACS and CBP data through the [Census Application Programming Interface \(API\)](#).

Sources: 2017 American Community Survey 1-Year Estimates and 2016 County Business Patterns

United States Census Bureau
U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU
census.gov

POWERED BY
The American Community Survey and County Business Patterns

Source: U.S. Census Bureau, My Congressional District, <www.census.gov/mycd/>.

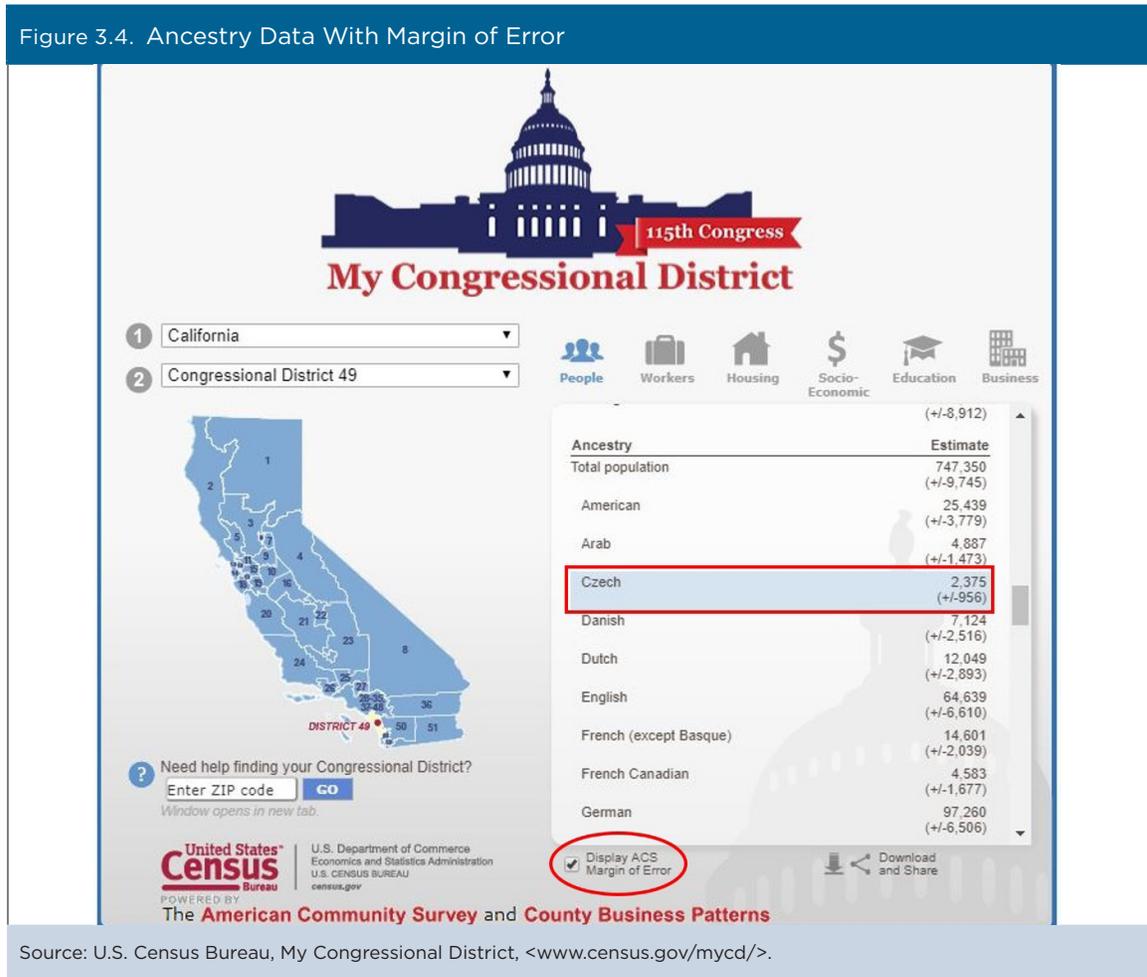
After you have selected your district, the right side of the window updates with demographic, socioeconomic, housing, and employment information about the district. Information is arranged by subject area: People, Workers, Housing, Socio-Economic, Education, and Business.

Nativity information is found within the “People” topic, which is the default display when a user first chooses a district (see Figure 3.3). Information for Sex and Age are displayed first, but you can use the gray bar on the right to scroll down to information about Ancestry. Members of Congress and their staffs can use this information to better understand the ancestral makeup of their constituents. For example, in 2017, there were 2,375 people of Czech ancestry in California Congressional District 49.



To view information in any of the other subject areas, click on the associated icon.

Users who are interested in knowing the margin of error—or level of uncertainty—associated with the estimates can view that information by checking the box “Display ACS Margin of Error” below the data table (see Figure 3.4). The estimate of people with Czech ancestry has a margin of error of +/-956, indicating a high likelihood that the true value of this estimate falls somewhere between 1,419 and 3,331 in California Congressional District 49.



The My Congressional District tool offers several options for downloading and sharing data (see Figures 3.5 and 3.6). Clicking on the “Download and Share” icon allows users to download a comma-separated values (CSV) file with all the data for their district or for all districts in their state. Users can also share their results on social media platforms or download a widget, which can be embedded on a Web site to display the most recent data available for the selected congressional district.

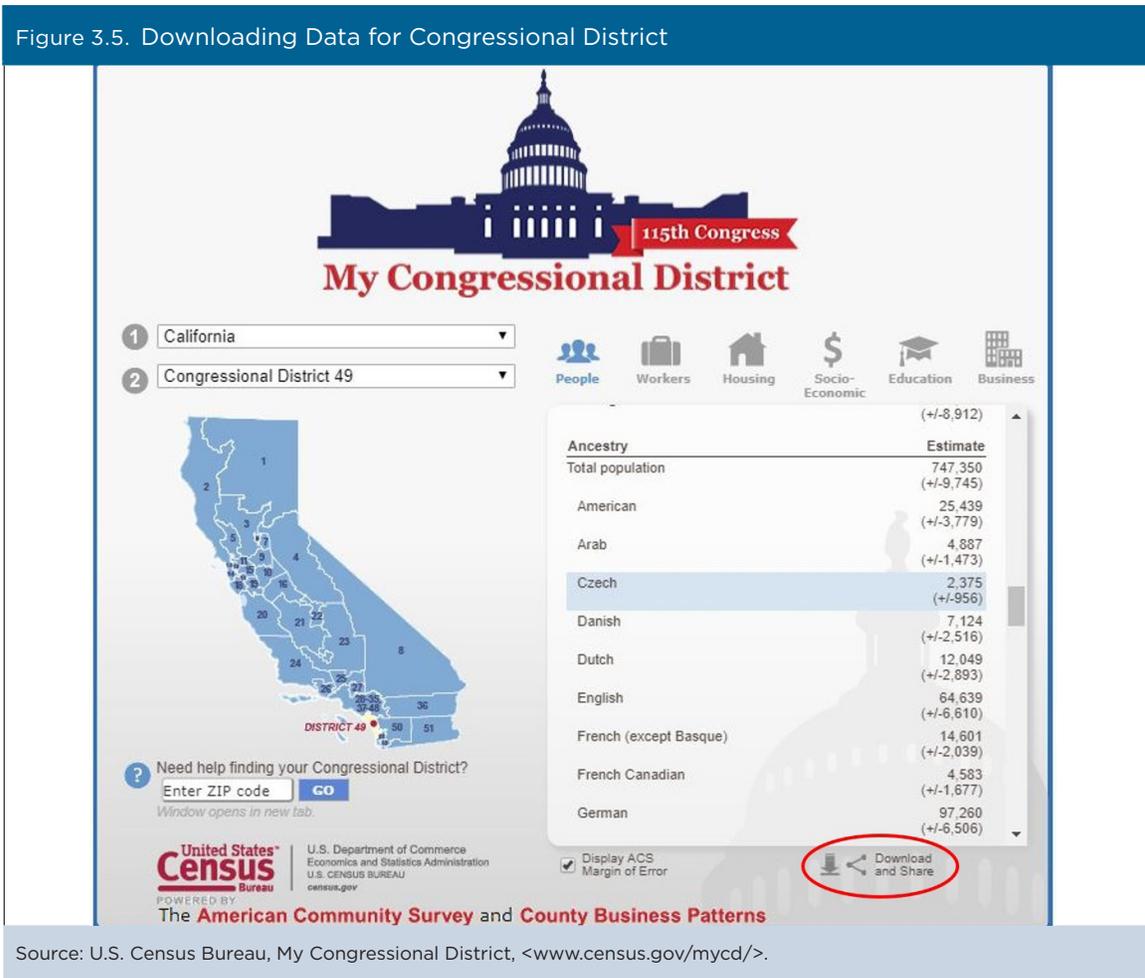


Figure 3.6. Downloading and Sharing Data for Congressional District



Data displayed in the application are for the most recent year available. Details on exact year and data source, as well as any important notes, can be found by scrolling to the bottom of each data table.

ACS estimates for other geographic areas can be found in data.census.gov, the Census Bureau's primary tool for accessing population, housing, and economic data from the ACS, the Puerto Rico Community Survey, the decennial census, and many other Census Bureau data sets.¹⁷ [Data.census.gov](https://data.census.gov) provides comprehensive access to ACS tables for a wide range of geographic areas, including states, congressional districts, cities, counties, census tracts, and block groups.

¹⁷ U.S. Census Bureau, [Data.census.gov](https://data.census.gov), <<https://data.census.gov>>.

Case Study #2: Finding Selected Housing Characteristics for a Congressional District

Skill Level: Intermediate/Advanced

Subject: Housing

Type of Analysis: Analyzing housing characteristics within a congressional district

Tool Used: Data.census.gov

The U.S. Census Bureau's My Congressional District tool offers a quick and easy solution for finding the latest American Community Survey (ACS) data on population and housing characteristics in a congressional district.¹⁸ What if a congressional staffer needs more detailed information? For example, suppose they need to find information about the distribution of rental cost burden within his or her district to assess the potential demand for a rental assistance program.

To answer this question, go to the data.census.gov Web site at <<https://data.census.gov/>>. Choose Advanced Search under the search bar that says, "I'm looking for ..." This brings you to the Advanced Search window (see Figures 3.7 and 3.8).

Figure 3.7. Data.census.gov

The screenshot shows the Data.census.gov website. At the top, there is a dark blue header with the United States Census Bureau logo. Below the header, the main content area is white. On the left, there is a search bar with the placeholder text "I'm looking for ...". Below the search bar, there is a red oval highlighting the "Advanced Search" link. To the right of the search bar, there is an illustration of a desktop monitor, a laptop, and a smartphone, each displaying different data visualizations like maps and charts. Below the search bar and illustration, there are three columns of links: "Questions?", "Release Notes", and "Stay Connected".

United States
Census
BUREAU

Explore Census Data

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

I'm looking for ...

Advanced Search

Questions?

- What is data.census.gov?
- When will American FactFinder (AFF) go away?
- How do I get started with my search?
- How do I save my results or search?
- How do I access data by race, Hispanic origin, ancestry, or country of birth?
- What are the known issues and defects

Release Notes

- More data available
- Table enhancements
- Export to Excel
- Multiple table download
- Bug fixes
- Full Release Notes

Stay Connected

- Recorded Webinar: New Updates to data.census.gov - June 2019
- Tutorials
- Our development depends on YOUR feedback
Tell us how to make your experience better.
- cedsci.feedback@census.gov

Source: U.S. Census Bureau, data.census.gov, <<https://data.census.gov/>>.

¹⁸ U.S. Census Bureau, My Congressional District, <www.census.gov/mycd/>.

Figure 3.8. Using Advanced Search in Data.census.gov

United States
Census
Bureau

Search

// Search / Advanced Search

Advanced Search

Table ID (e.g., DP05)

Narrow search with filters

FIND A FILTER

e.g. 336111 - Automobile Manufacturing

BROWSE FILTERS

- Topics
- Geography
- Years
- Surveys
- Codes

Please select a filter to narrow your search.

Selected Filters: CLEAR FILTERS SEARCH

Source: U.S. Census Bureau, data.census.gov, <https://data.census.gov>

To find information on a congressional district, start with the “Geography” filter and click “Congressional District.” Congressional districts are nested within states, so first select your state. Then select your district number, making sure to select the correct legislative session (for example, 115th Congress). Ensure that a check mark appears next to the district you have selected and that the geography shows as a selected filter at the bottom of the screen (see Figure 3.9).

TIP: If you also add the year to your selections under the “Years” filter (for example, Years>2017), you do not have to worry about selecting the wrong legislative session as the congressional district will default to the corresponding session.

Figure 3.9. Selecting a Congressional District in Data.census.gov

The screenshot displays the 'Advanced Search' page on Data.census.gov. The interface includes a search bar at the top with the text 'Search'. Below the search bar, the page title 'Advanced Search' is visible, followed by a field for 'Table ID (e.g., DP05)'. A section titled 'Narrow search with filters' contains a search input with the text 'e.g. 336111 - Automobile Manufacturing'. The main content area is divided into four columns of filters: 'BROWSE FILTERS', 'GEOGRAPHY', 'WITHIN STATE', and 'COLORADO'. In the 'BROWSE FILTERS' column, 'Geography' is selected. In the 'GEOGRAPHY' column, 'Congressional District' is selected. In the 'WITHIN STATE' column, 'Colorado' is selected. In the 'COLORADO' column, 'Congressional District 2 (115th Congress), Colorado' is selected, indicated by a checkmark. At the bottom of the page, the 'Selected Filters' section shows 'Congressional District 2 (115th Congress), Colorado'. There are 'CLEAR FILTERS' and 'SEARCH' buttons at the bottom right.

Source: U.S. Census Bureau, data.census.gov, <<https://data.census.gov>>.

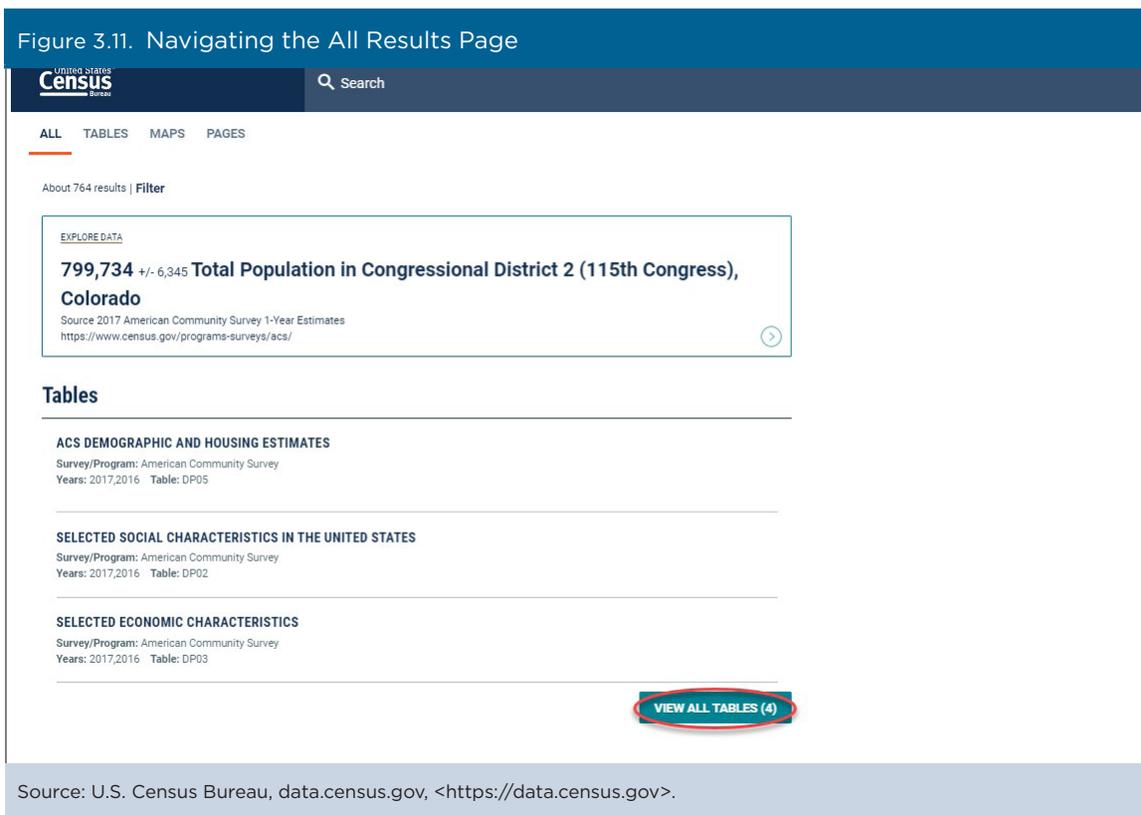
After selecting the congressional district, you can choose the data product of interest. In this example, we are interested in a table called DP04: “Selected Housing Characteristics,” which is a data profile that includes frequently requested housing data. To select this table, click on “Surveys” to display a list of available data products. Then select “ACS 1-Year Estimates Data Profiles” (see Figure 3.10) and click “Search” in the bottom right corner.

Figure 3.10. Selecting a Data Product in Data.census.gov

The screenshot shows the 'Advanced Search' page on Data.census.gov. The 'BROWSE FILTERS' sidebar on the left has 'Surveys' selected. The 'SURVEYS' list on the right includes 'ACS 1-Year Estimates Data Profiles' with a checked checkbox. The 'Selected Filters' bar at the bottom shows 'Congressional District 2 (115th Congress), Colorado' and 'ACS 1-Year Estimates Data Profiles'. A 'SEARCH' button is highlighted in red in the bottom right corner.

Source: U.S. Census Bureau, data.census.gov, <<https://data.census.gov>>.

Clicking “Search” with your selected filters brings you to the All Results page. This page has a quick statistic at the top of the page relevant to your search. Underneath, there is a list of the three most relevant tables. To view the full list of available data profiles, select “View All Tables” (see Figure 3.11).



Selecting the option to view all tables brings you to the Table Results page with a full list of relevant tables in the left pane and a preview of each selected table in the right pane. Click on “Selected Housing Characteristics” to preview the table, and select “Customize Table” in the upper right corner to view the table with all download and customization options (see Figure 3.12).

Figure 3.12. Selecting the Table From the Tables Pane

The screenshot displays the U.S. Census Bureau's data portal interface. On the left, a navigation pane lists several categories: 'ACS DEMOGRAPHIC AND HOUSING ESTIMATES', 'SELECTED SOCIAL CHARACTERISTICS IN THE UNITED STATES', 'SELECTED ECONOMIC CHARACTERISTICS', and 'SELECTED HOUSING CHARACTERISTICS'. The 'SELECTED HOUSING CHARACTERISTICS' category is highlighted with a red circle. The main content area shows a table titled 'SELECTED HOUSING CHARACTERISTICS' for 'Congressional District 2 (115th Congress), Colorado'. The table has four columns: 'Estimate', 'Margin of Error', 'Percent', and 'Percent Margin of Error'. The data is organized into sections: 'HOUSING OCCUPANCY', 'UNITS IN STRUCTURE', and 'YEAR STRUCTURE BUILT'. A 'CUSTOMIZE TABLE' button is circled in red in the top right corner of the table area.

Congressional District 2 (115th Congress), Colorado				
	Estimate	Margin of Error	Percent	Percent Margin of Error
HOUSING OCCUPANCY				
∨ Total housing units	381,482	+/-3,953	381,482	(X)
Occupied housing units	315,832	+/-4,108	82.8%	+/-0.9
Vacant housing units	65,650	+/-3,644	17.2%	+/-0.9
Homeowner vacancy rate	0.7	+/-0.3	(X)	(X)
Rental vacancy rate	4.3	+/-1.1	(X)	(X)
UNITS IN STRUCTURE				
∨ Total housing units	381,482	+/-3,953	381,482	(X)
1-unit, detached	238,941	+/-4,832	62.6%	+/-1.1
1-unit, attached	26,189	+/-2,183	6.9%	+/-0.6
2 units	7,410	+/-1,378	1.9%	+/-0.4
3 or 4 units	12,595	+/-2,138	3.3%	+/-0.6
5 to 9 units	21,906	+/-2,472	5.7%	+/-0.6
10 to 19 units	22,518	+/-2,313	5.9%	+/-0.6
20 or more units	40,119	+/-2,919	10.5%	+/-0.7
Mobile home	11,717	+/-1,855	3.1%	+/-0.5
Boat, RV, van, etc.	87	+/-107	0.0%	+/-0.1
YEAR STRUCTURE BUILT				

Source: U.S. Census Bureau, data.census.gov, <<https://data.census.gov>>.

Now you can view the table with customization and download options displayed at the top (see Figure 3.13). You can scroll through the table for information, and you have the option to collapse sections by clicking on the down arrow next to each category. You also have the option to transpose the table, show and hide margins of error using the “Margin of Error” button, and move and/or lock different columns by dragging and dropping the column headers.

Figure 3.13. Viewing the Table in the Customize Table Page

The screenshot shows the 'SELECTED HOUSING CHARACTERISTICS' table for Congressional District 2 (115th Congress), Colorado. The table has four columns: Estimate, Margin of Error, Percent, and Percent Margin of Error. The data is organized into two main sections: HOUSING OCCUPANCY and UNITS IN STRUCTURE. The HOUSING OCCUPANCY section includes rows for Total housing units, Occupied housing units, Vacant housing units, Homeowner vacancy rate, and Rental vacancy rate. The UNITS IN STRUCTURE section includes rows for Total housing units, 1-unit detached, 1-unit attached, 2 units, 3 or 4 units, 5 to 9 units, and 10 to 19 units. The table also features a toolbar with various options like 'Margin of Error', 'Transpose Table', 'Download', and 'Print'.

	Estimate	Margin of Error	Percent	Percent Margin of Error
HOUSING OCCUPANCY				
Total housing units	381,482	+/-3,953	381,482	(X)
Occupied housing units	315,832	+/-4,108	82.8%	+/-0.9
Vacant housing units	65,650	+/-3,644	17.2%	+/-0.9
Homeowner vacancy rate	0.7	+/-0.3	(X)	(X)
Rental vacancy rate	4.3	+/-1.1	(X)	(X)
UNITS IN STRUCTURE				
Total housing units	381,482	+/-3,953	381,482	(X)
1-unit, detached	238,941	+/-4,832	62.6%	+/-1.1
1-unit, attached	26,189	+/-2,183	6.9%	+/-0.6
2 units	7,410	+/-1,378	1.9%	+/-0.4
3 or 4 units	12,595	+/-2,138	3.3%	+/-0.6
5 to 9 units	21,906	+/-2,472	5.7%	+/-0.6
10 to 19 units	22,518	+/-2,313	5.9%	+/-0.6

Source: U.S. Census Bureau, data.census.gov, <https://data.census.gov>.

To view information about rental cost burden, scroll down to the very bottom of the table to a section titled “Gross Rent as a Percentage of Household Income (GRAPI)” (see Figure 3.14). This section includes a distribution of rental cost as a percentage of household income, so you can use cost burden limits proposed or set by the program to determine which categories you would like to include in your reporting.

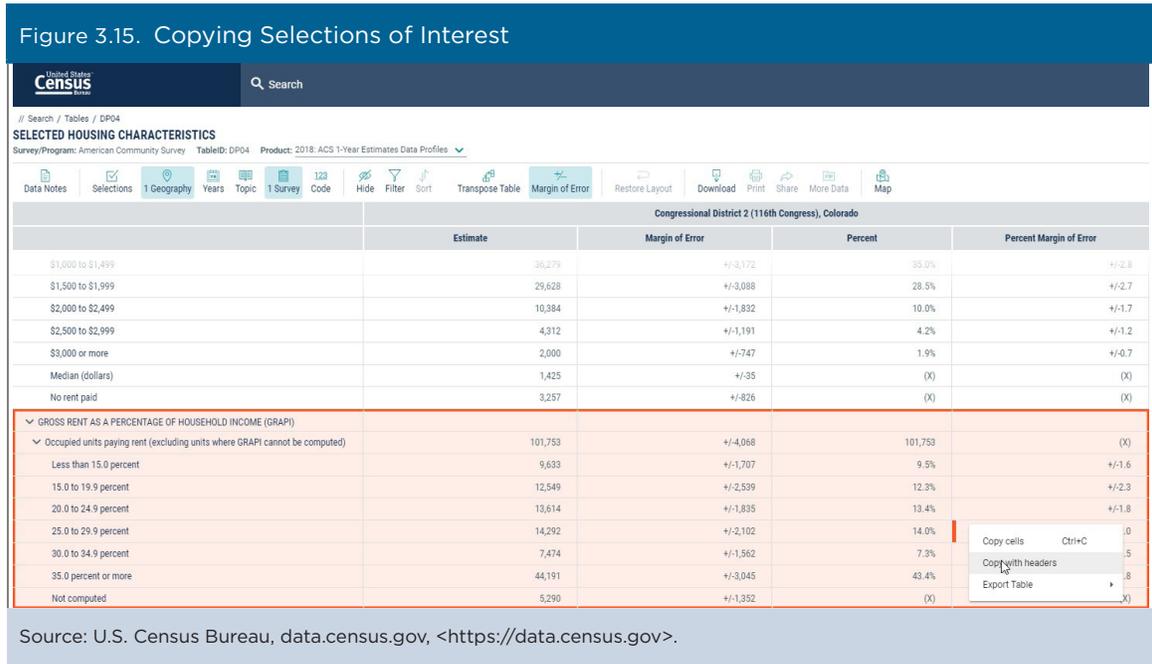
Figure 3.14. Finding Gross Rent as a Percentage of Household Income (GRAPI)

The screenshot shows the 'SELECTED HOUSING CHARACTERISTICS' table for Congressional District 2 (115th Congress), Colorado, focusing on the 'GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME (GRAPI)' section. The table has four columns: Estimate, Margin of Error, Percent, and Percent Margin of Error. The GRAPI section includes rows for various percentage ranges of gross rent as a percentage of household income, from less than 15.0 percent to 35.0 percent or more, as well as 'Not computed'.

	Estimate	Margin of Error	Percent	Percent Margin of Error
\$1,500 to \$1,999	25,036	+/-2,733	23.4%	+/-2.5
\$2,000 to \$2,499	9,338	+/-1,220	9.5%	+/-1.2
\$2,500 to \$2,999	3,394	+/-1,039	3.4%	+/-1.0
\$3,000 or more	3,937	+/-1,009	4.0%	+/-1.0
Median (dollars)	1,398	+/-30	(X)	(X)
No rent paid	3,725	+/-1,091	(X)	(X)
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME (GRAPI)				
Occupied units paying rent (excluding units where GRAPI cannot be computed)	97,049	+/-4,203	97,049	(X)
Less than 15.0 percent	8,759	+/-1,587	9.0%	+/-1.6
15.0 to 19.9 percent	8,847	+/-1,580	9.1%	+/-1.6
20.0 to 24.9 percent	10,331	+/-1,817	10.6%	+/-1.8
25.0 to 29.9 percent	10,971	+/-1,596	11.3%	+/-1.5
30.0 to 34.9 percent	11,153	+/-1,785	11.5%	+/-1.7
35.0 percent or more	46,988	+/-3,150	48.4%	+/-2.6
Not computed	5,236	+/-1,283	(X)	(X)

Source: U.S. Census Bureau, data.census.gov, <https://data.census.gov>.

If you would like to save this specific block of data from the table, the easiest way to do this is to highlight the section of interest, right click, and then select “Copy with headers.” Your selection is then copied into your clipboard with the column headers as well as the geography name (in this case, the name of the congressional district) and can be pasted into another application (see Figure 3.15).



If you would like to download the table in CSV format, click on “Download” in the tool bar at the top of the page (see Figure 3.16). You can then change the year or select multiple years. When you finish making your selections, click “Download” in the bottom right corner.

Figure 3.16. Downloading the Full Table as a CSV File

Download Tables

Select Table Vintages

	All	2017	2016
DP04 1-Year	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

File Type

CSV
 PDF

What You're Getting

- 1 .csv files (metadata)
- 1 .csv files (data)
- 1 .txt files (table title)

Uncompressed Estimated Size: 62.7 KB

DOWNLOAD

Less than 15.0 percent	8,759	+/-1,587	9.0%	+/-1.6
15.0 to 19.9 percent	8,847	+/-1,580	9.1%	+/-1.6
20.0 to 24.9 percent	10,931	+/-1,817	10.6%	+/-1.8
25.0 to 29.9 percent	10,971	+/-1,596	11.3%	+/-1.5
30.0 to 34.9 percent	11,153	+/-1,785	11.5%	+/-1.7
35.0 percent or more	46,988	+/-3,150	48.4%	+/-2.6

Source: U.S. Census Bureau, data.census.gov, <<https://data.census.gov>>.

Case Study #3: Poverty and Income Data for New Markets Tax Credit

Skill Level: Intermediate/Advanced

Subject: Poverty

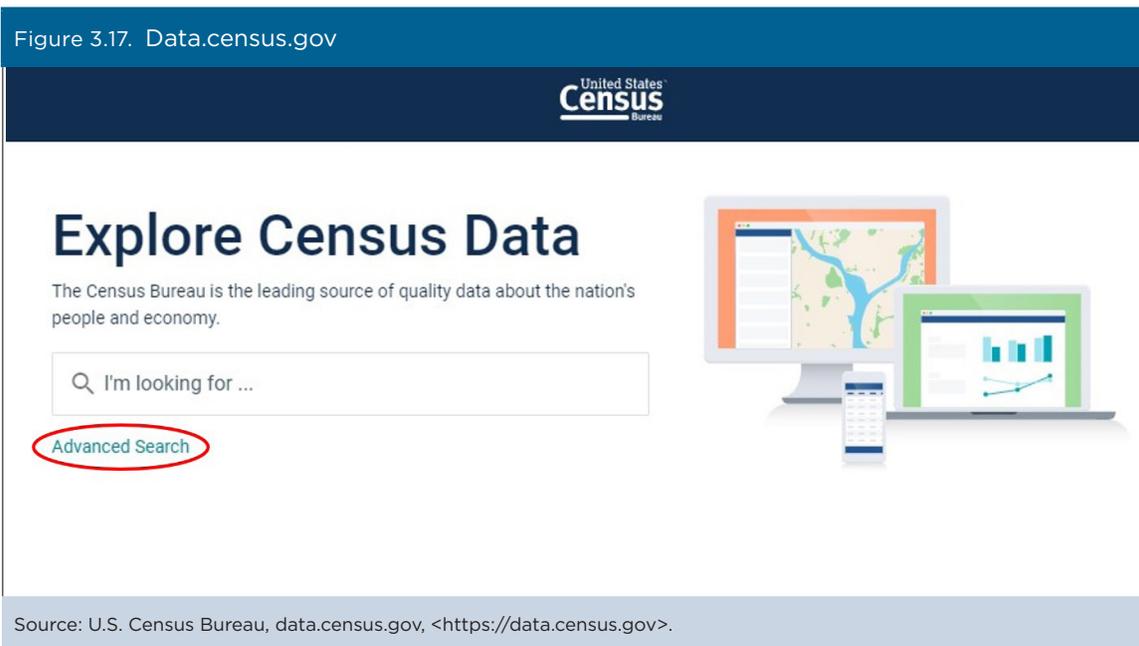
Type of Analysis: Analyses of poverty estimates within a community

Tool Used: Data.census.gov

New Market Tax Credits (NMTC) provide a way for certified Community Development Entities (CDEs) to provide below-market rate financing for qualified businesses in low-income communities. The program is administered by the U.S. Department of the Treasury through a competitive application process. One of the qualifying criteria is that the business or development project must be in a low-income community. According to U.S. Code, low-income communities are census tracts where the poverty rate is at least 20 percent, or the median family income is less than 80 percent of the state or metropolitan statistical area median family income.¹⁹

Congressional staff can use the American Community Survey (ACS) to determine which census tracts within their districts qualify as “low income” and whether a potential project is in an eligible census tract. For example, assume you are a staff member in the office of Virginia’s 6th District and want to determine whether four census tracts in the city of Roanoke would qualify as low-income communities under NMTC criteria.

Start by navigating to the data.census.gov Web site at <<https://data.census.gov>>. Click “Advanced Search” under the search bar. This will bring you to the Advanced Search page (see Figures 3.17 and 3.18).



¹⁹ Legal Information Institute, 26 U.S. Code § 45D. New markets tax credit, <www.law.cornell.edu/uscode/text/26/45D>.

Figure 3.18. Using Advanced Search in Data.census.gov

The screenshot shows the 'Advanced Search' page on Data.census.gov. At the top left is the 'United States Census Bureau' logo. To its right is a search bar with a magnifying glass icon and the text 'Search'. Below the logo, the breadcrumb path '// Search / Advanced Search' is visible. The main heading is 'Advanced Search'. Underneath, there is a text input field for 'Table ID (e.g., DP05)'. A section titled 'Narrow search with filters' contains a sub-heading 'FIND A FILTER' and a search input field with the example text 'e.g. 336111 - Automobile Manufacturing' and a magnifying glass icon. To the left of the main content area is a 'BROWSE FILTERS' sidebar with a vertical line separator, listing 'Topics', 'Geography', 'Years', 'Surveys', and 'Codes'. The main content area contains the text 'Please select a filter to narrow your search.' At the bottom of the page, there is a 'Selected Filters:' label, a 'CLEAR FILTERS' button, a teal 'SEARCH' button, and a 'MORE' button with a three-dot menu icon. A source note at the bottom reads: 'Source: U.S. Census Bureau, data.census.gov, <https://data.census.gov>.'

To access information about census tracts in Roanoke, Virginia:

- Begin with the Geography filter. Select “Geography” in the navigation pane on the left side of the screen. This expands a list of all the available geographic levels.
- Move the white button to the right to show Summary Levels.
- Select “140 - Census Tract.”
- Then scroll to select “Virginia” from the “140 - Census Tract (State)” filter.
- Next, scroll to select “Roanoke city, Virginia” from the “Virginia (County)” filter.
- Scroll to check the boxes of your desired tracts from the “Roanoke city, Virginia” filter. For this case study, check Census Tracts 9, 10, 24, and 25, of Roanoke city, Virginia (see Figure 3.19).
- Then click “Search” in the bottom right corner.

Figure 3.19. Selecting Geographic Areas by Using Advanced Search Filters

The screenshot displays the 'Advanced Search' interface on the U.S. Census Bureau website. The page title is 'Advanced Search' and it shows a search for 'Table ID (e.g., DP05)'. Under 'Narrow search with filters', there is a search bar for 'FIND A FILTER' with the example 'e.g. 336111 - Automobile Manufacturing'. The main area is divided into five filter columns: 'BROWSE FILTERS', 'GEOGRAPHY', '140 - CENSUS TRACT (STATE)', 'VIRGINIA (COUNTY)', and 'ROANOKE CITY, VIRGINIA'. In the 'GEOGRAPHY' column, '140 - Census Tract' is selected. In the '140 - CENSUS TRACT (STATE)' column, 'Virginia' is selected. In the 'VIRGINIA (COUNTY)' column, 'Roanoke city, Virginia' is selected. In the 'ROANOKE CITY, VIRGINIA' column, 'Census Tract 24, Roanoke city, Virginia' and 'Census Tract 25, Roanoke city, Virginia' are checked. At the bottom, the 'Selected Filters' section shows 'Census Tract 9, Roanoke city, Virginia', 'Census Tract 10, Roanoke city, Virginia', 'Census Tract 24, Roanoke city, Virginia', and 'Census Tract 25, Roanoke city, Virginia'. There are 'CLEAR FILTERS' and 'SEARCH' buttons at the bottom right.

Source: U.S. Census Bureau, data.census.gov, <<https://data.census.gov>>.

On the search results page, you can preview a list of available tables by selecting either “View All Tables” or by clicking on “Tables” at the top of the page (see Figure 3.20).

Figure 3.20. Viewing Available Tables for Selected Census Tracts

The screenshot shows the U.S. Census Bureau search results page. At the top, there is a search bar and navigation tabs: ALL, TABLES (highlighted in red), MAPS, and PAGES. Below the tabs, it says "About 2,680 results | Filter". The main content area is titled "Tables" and lists several table categories:

- AGE AND SEX**
Survey/Program: American Community Survey
Years: 2018,2017,2016,2015,2014,2013,2012,2011,2010 Table: S0101
- SELECTED CHARACTERISTICS OF THE TOTAL AND NATIVE POPULATIONS IN THE UNITED STATES**
Survey/Program: American Community Survey
Years: 2018,2017,2016,2015,2014,2013,2012,2011,2010 Table: S0601
- GEOGRAPHIC MOBILITY BY SELECTED CHARACTERISTICS IN THE UNITED STATES**
Survey/Program: American Community Survey
Years: 2018,2017,2016,2015,2014,2013,2012,2011,2010 Table: S0701

The "AGE AND SEX" table is expanded, showing the following data:

	Total		Percent	
	Estimate	Margin of Error	Estimate	
∨ Total population	6,245	+/-779	(X)	
∨ AGE				
Under 5 years	571	+/-258	9.1%	
5 to 9 years	586	+/-269	9.4%	
10 to 14 years	558	+/-207	8.9%	
15 to 19 years	666	+/-187	10.6%	

At the bottom right of the page, there is a button labeled "VIEW ALL TABLES (1340)" which is also highlighted in red.

Source: U.S. Census Bureau, data.census.gov, <https://data.census.gov>.

On the left side of the page, you will see a list of available tables, while the right side of the page will display a preview of the selected table. To find your desired table, you can either use the scroll bar or enter an additional filter. Since the desired table is not shown on the first page, select “Filter.” Select “Topics,” and then use the filters to select “Income and Poverty,” “Poverty,” and “Poverty” again. To preview the available poverty tables, collapse the filter menu by clicking the chevron above “Hide” in the upper right corner of the filter window (see Figure 3.21).

Figure 3.21. Selecting Table Topic Filters

Source: U.S. Census Bureau, data.census.gov, <<https://data.census.gov>>.

Select “Poverty Status in the Past 12 Months” to preview the table. For the purposes of this case study, we are using 2017 ACS 5-year estimates. You can select the desired survey year by clicking on the “Product” selection and then selecting “2017: ACS 5-Year Estimates Subject Tables.” You can either view the table in data.census.gov or download the table to view the data in another format. For this example, we will view the table in data.census.gov (see Figure 3.22).

Figure 3.22. Viewing the Table in Data.census.gov

Estimate	Margin of Error	Percent below poverty level		Estimate	Margin of Error	Estimate	Margin of Error
		Estimate	Margin of Error				
2,297	+/-639	38.9%	+/-9.2				+/-198
1,097	+/-321	53.9%	+/-17.9	610	+/-118	275	+/-105
428	+/-232	76.2%	+/-17.0	160	+/-66	56	+/-44
669	+/-386	45.4%	+/-21.2	450	+/-109	219	+/-91
1,097	+/-521	53.9%	+/-17.9	610	+/-118	275	+/-105
1,017	+/-224	31.6%	+/-7.0	1,558	+/-279	506	+/-118
384	+/-152	30.0%	+/-10.8	585	+/-210	142	+/-79
633	+/-191	32.6%	+/-8.2	973	+/-154	364	+/-86
300	+/-118	31.3%	+/-10.5	175	+/-47	52	+/-37
183	+/-84	28.2%	+/-12.8	108	+/-32	21	+/-20
987	+/-264	35.9%	+/-9.6	1,082	+/-243	281	+/-99
1,310	+/-454	41.5%	+/-11.0	1,194	+/-196	521	+/-151
439	+/-299	28.5%	+/-16.1	596	+/-164	168	+/-71
1,835	+/-567	45.6%	+/-10.5	1,315	+/-263	556	+/-185
11	+/-19	28.9%	+/-52.7	0	+/-12	0	+/-12
0	+/-17	0.0%	+/-18.1	5	+/-9	0	+/-12
0	+/-17	-	**	0	+/-12	0	+/-12

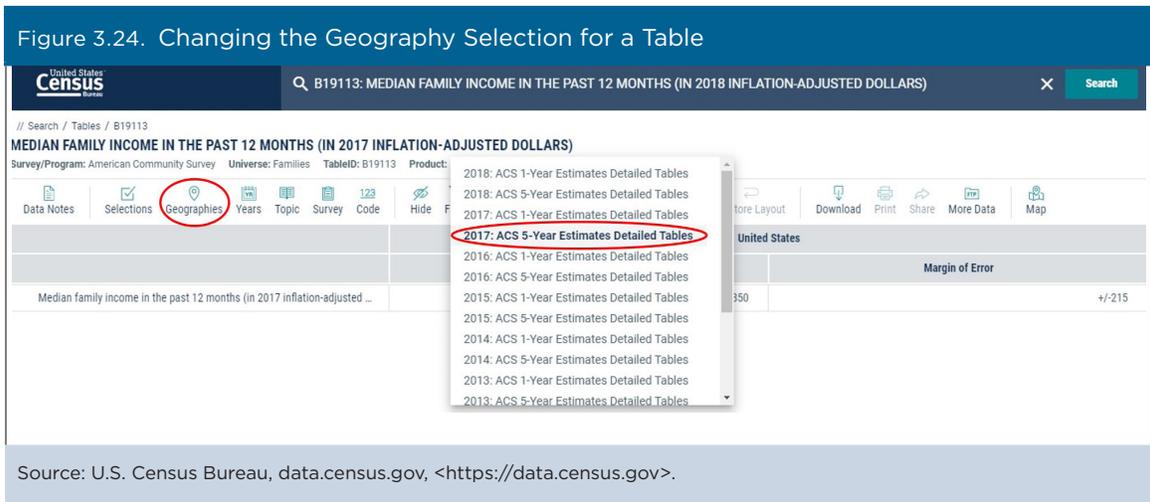
Source: U.S. Census Bureau, data.census.gov, <<https://data.census.gov>>.

Use the horizontal scroll bar to view all the tract-level estimates and their associated margins of error. In this example, all four tracts have poverty rates higher than 20 percent. To make sure that the lower bound of the confidence interval for each poverty rate estimate does not fall below 20 percent, subtract the margin of error from each poverty rate estimate. For example, the poverty rate for Census Tract 9 is 38.9 percent and the margin of error is 9.2 percent. The lower bound is 38.9 minus 9.2 or 29.7 percent. The lower bound remains above 20 percent for all four of these census tracts.²⁰

The second criteria for NMTC eligibility is a requirement that the median family income for a census tract not exceed 80 percent of the median family income for the metropolitan statistical area (if the tract is part of a metropolitan or micropolitan statistical area) or for the state (if the tract is not part of a metropolitan statistical area). Since we already know the table ID that contains these data, type “B19113” into the search bar at the top of the page. Then select “Median Family Income in the Past 12 Months (In 2017 Inflation-Adjusted Dollars)” (see Figure 3.23).



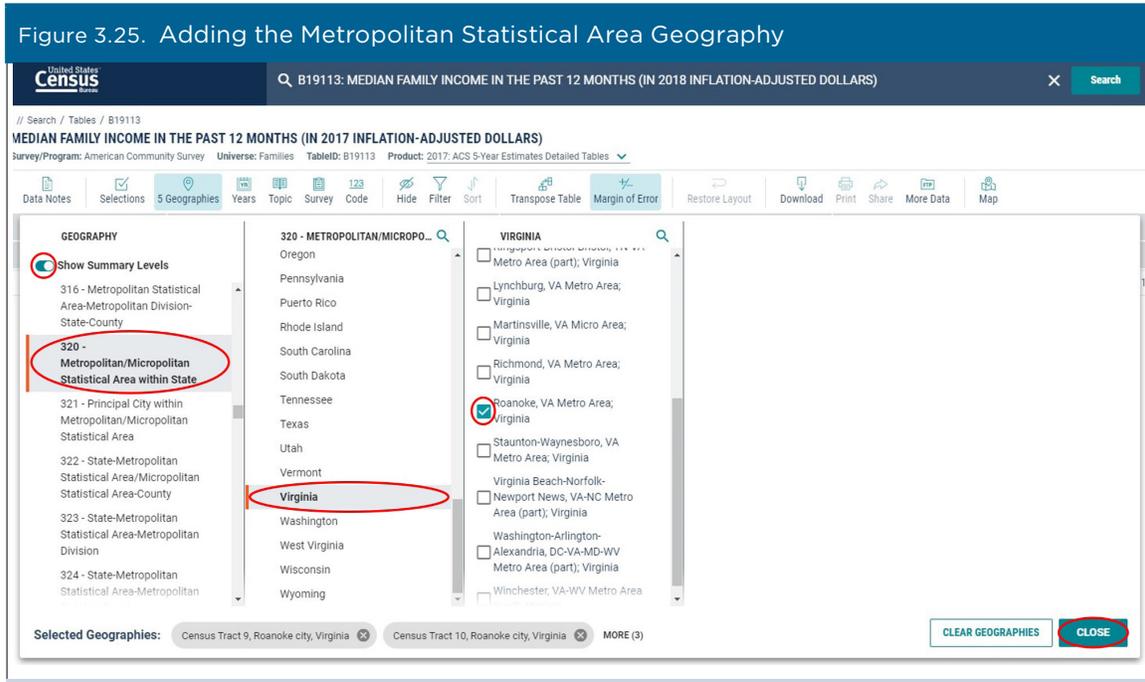
Click on the “Product” selection and select “2017: ACS 5-Year Estimates Subject Tables.” Since the table shows the United States as the default geography, you need to filter by geography to add the census tracts and metropolitan statistical area required for your analysis. Select “Geographies” (see Figure 3.24).



²⁰ Statistical testing would be needed to determine whether this poverty estimate is significantly different from 20 percent. For more information, see the section on “Understanding Error and Determining Statistical Significance” in the Census Bureau’s handbook *Understanding and Using American Community Survey Data: What All Data Users Need to Know*, <www.census.gov/programs-surveys/acs/guidance/handbooks/general.html>.

Add the four census tracts to your “Selected Filters.” Because these four tracts are part of the Roanoke, VA Metro Area, add this area to your filters, as shown in Figure 3.25.

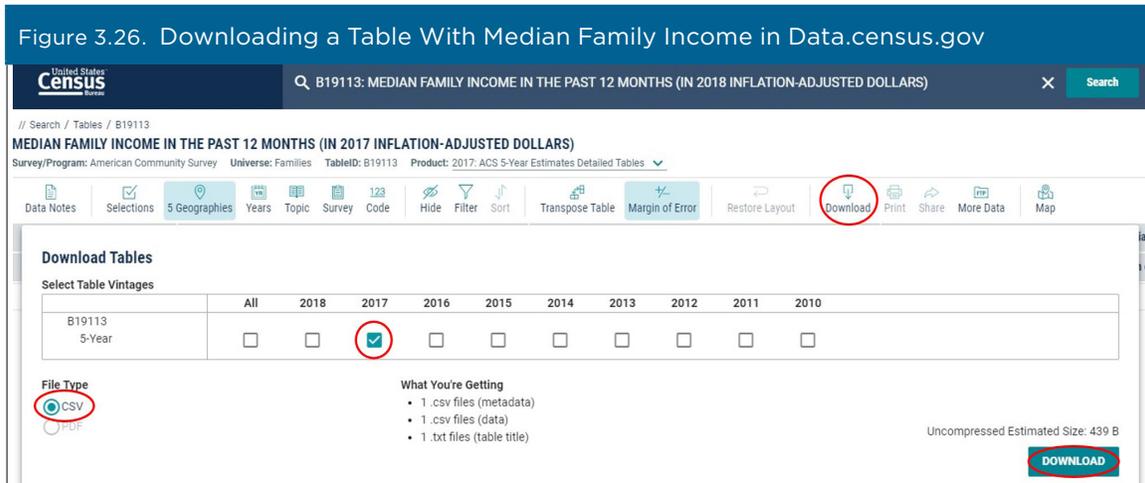
Figure 3.25. Adding the Metropolitan Statistical Area Geography



Source: U.S. Census Bureau, data.census.gov, <<https://data.census.gov>>.

After closing the filter menu, make sure that the 2017 ACS 5-year estimates are selected. Then select “Download” from the menu at the top of the screen. Check that the default download specifications in the “Download Tables” window are correct and select “Download” again (see Figure 3.26).

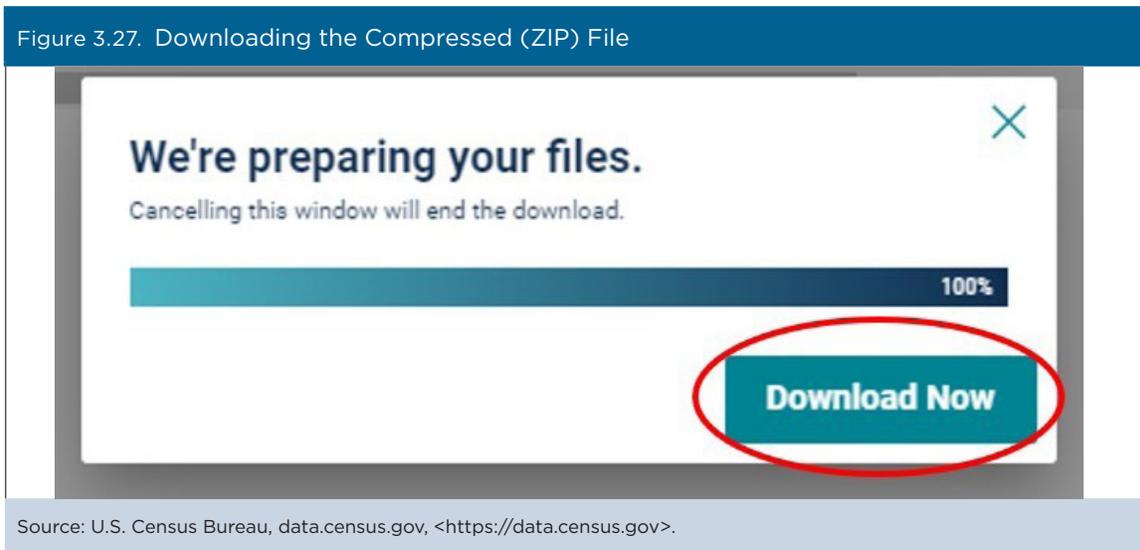
Figure 3.26. Downloading a Table With Median Family Income in Data.census.gov



Source: U.S. Census Bureau, data.census.gov, <<https://data.census.gov>>.

Select “Download Now” after the file is prepared (see Figure 3.27).

Figure 3.27. Downloading the Compressed (ZIP) File



From the compressed folder, open the file with “data_with_overlays” shown in the file name to analyze the data in a spreadsheet.

Divide median family income for each of the tracts by the median family income of the Roanoke Metropolitan Statistical Area (\$66,334). The results suggest that none of the tracts have median family income values that exceed 80 percent of the median family income for the Roanoke Metropolitan Statistical Area. However, a statistical test would be needed to confirm that this is correct. For more information about statistical tests, see the section on “Understanding Error and Determining Statistical Significance” in the Census Bureau’s handbook *Understanding and Using American Community Survey Data: What All Data Users Need to Know*.²¹

²¹ U.S. Census Bureau, *Understanding and Using American Community Survey Data: What All Data Users Need to Know*, <www.census.gov/programs-surveys/acs/guidance/handbooks/general.html>.