

# Census Geography Tools

- Census Geocoder
- American Factfinder Mapping
- ACS Geodatabase files

# Census Geocoder

- About the Geocoder
- Formatting the address list
- Results
- Comparability

# About the Geocoder

An address lookup tool that converts your address to an approximate coordinate and returns information about the address range in relation to other geographies

- **Input:**

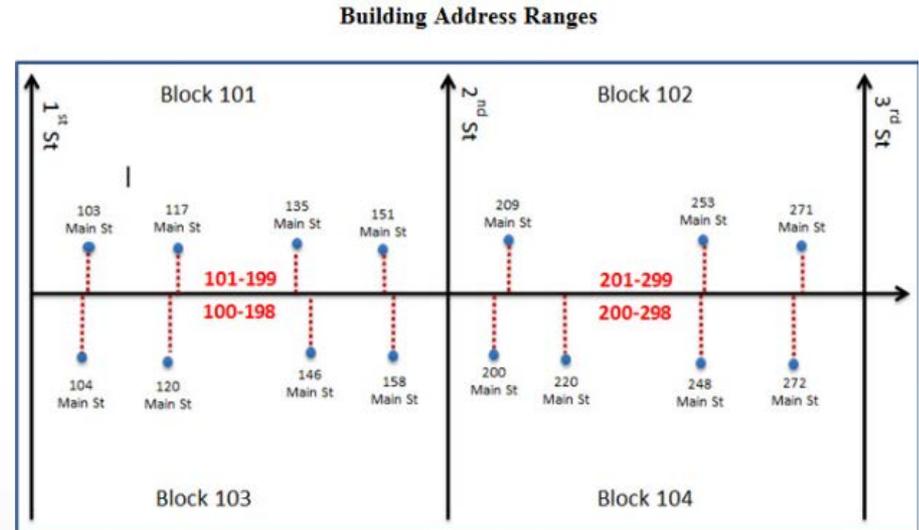
- **Single address** or **batch** submit up to 1,000 addresses at a time.

- **Output:**

- **Location:** latitude and longitude, using the “Find Locations Using...” option.
- **Geographic entities:** for an address using the “Find Geographies Using...” option. Tool returns the state, county, census tract, and block for each address. Additional geographies are available.

# Address Ranges

- Both tools find an address by comparing it to our Address Ranges.
- Each line segment has a range “From House Number” “To House Number”
  - Ex: 1-99 (May only have 3 houses on the block)
- The majority of the address ranges we have are for **residential areas** – there are limited address ranges available in commercial areas.



# How to Format Your Addresses for Batch Processing

- Addresses should be formatted in a single line with comma delimiters. The address should consist of:
  - Unique ID, House Number and Street Name, City, State, ZIP Code
  - City and State, or ZIP Code may be left blank, but there must be the appropriate number of commas to represent the blank data, for example:
    - 1, 1600 Pennsylvania Ave NW, Washington, DC,
    - 2, 1600 Pennsylvania Ave NW, , , 20502
- The following are not valid:
  - 3, 1600 Pennsylvania Ave NW, Washington, DC
  - 4, 1600 Pennsylvania Ave NW, 20502
- The batch geocoder can process up to 1,000 addresses at a time. It may take several minutes to process this many addresses.

# Results

- An interpolated latitude/longitude coordinate is returned along with the address range the Census Bureau has on that stretch of road. That coordinate is then used to determine the geography that the address is within.
- The results can be:
  - Match/Exact
  - Match/Non-Exact
  - Tie
  - No Match
- If a Tie is encountered, there are multiple possible results for that address. The address can be input for single address geocoding to view the multiple results.

# Results for Find Locations Using

- Estimated latitude/longitude coordinate
- TIGER identifier of the street
- Full address range on the road segment



# Results for Find Geographies Using

- Latitude/Longitude
- State
- County
- Census Tract
- Block
- For more geographies in the return, add: “&layers=all” at the end of the URL



# Geocoder - Demo

The screenshot shows a web browser window at the URL `geocoding.geo.census.gov`. The page features the United States Census Bureau logo and a navigation bar with the following categories: Topics (Population, Economy), Geography (Maps, Geographic Data), Library (Infographics, Publications), Data (Tools, Developers), About the Bureau (Research, Surveys), and Newsroom (News, Events, Blogs). A search bar is located in the top right corner.

On the left side, there are three main menu sections:

- FIND LOCATIONS USING...**
  - One Line
  - Address
  - Address Batch
- FIND GEOGRAPHIES USING...**
  - One Line
  - Address
  - Address Batch
  - Geographic Coordinates
- ABOUT DATA...**
  - Benchmarks
  - Vintages

The main content area displays a 'Welcome to Geocoder' message:

**Welcome to Geocoder**

Census geocoder provides interactive & programmatic (REST) access to users interested in matching addresses to geographic locations and entities containing those addresses. Please see the [Services API](#) link below for more information.  
[Geocoding Services API PDF](#) | [HTML](#)

At the bottom of the page, there is a navigation bar with links for Home, Intro, and Contact Us, and a row of five large buttons labeled ABOUT US, FIND DATA, BUSINESS & INDUSTRY, PEOPLE & HOUSEHOLDS, and SPECIAL TOPICS.

# Census.gov: Maps and Data

The screenshot shows the top navigation bar of the Census.gov website. The 'Geography' menu item is circled in red, with a sub-menu containing 'Maps, Products'. Below the navigation bar, a grid of buttons includes 'Geography Main', 'About', 'Education', 'GSS Initiative', 'Interactive Maps', 'Maps & Data' (circled in red), 'Metropolitan & Micropolitan', 'Partnerships', 'Reference', and 'Research'. Below this grid is a '2016 Census Test' section featuring a map of Harris County, Texas, and a text box explaining the test. At the bottom, there are three widgets: 'Population Clock' showing U.S. and World population, 'QUICKFACTS' with a 'Did You Know' fact about Cook County, Illinois, and 'U.S. Census Bureau Economic Indicators' showing various rates like Construction Spending, Rental Vacancy Rate, and Homeownership Rate.

# Maps and Data: Geocoder

You are here: [Census.gov](#) > [Geography](#) > [Maps & Data](#)

## Geography

[Main](#) | [About](#) | [Maps & Data](#) | [Reference](#) | [Partnerships](#) | [Education](#) | [Research](#) | [GSS-I](#) | [Contact Us](#)

### Maps & Data

- [Maps & Data Main Page](#)

### Maps

- [Census Data Mapper](#)
- [Reference](#)
- [Thematic](#)
- [Maps Available for Purchase](#)

### Data

- [TIGER Products](#)
- [Census Geocoder](#)
- [Partnership Shapefiles](#)
- [Relationship Files](#)
- [Gazetteer Files](#)
- [Block Assignment Files](#)
- [Name Lookup Tables](#)
- [Tallies](#)
- [LandView](#)

### Maps & Data

Find geographic data and products such as the TIGER/Line Shapefiles, KMLs, TIGERweb, cartographic boundary files, geographic relationship files, and reference and thematic maps.

### Maps

#### [Census Data Mapper](#)

The Census Data Mapper is a web mapping application intended to provide users with a simple interface to view, save and print county-based demographic maps of the United States.

#### [Reference Maps](#)

Reference maps are designed to show the geographic locations of features and boundaries. These maps usually contain features, such as roads and rivers, and boundaries, such as county, place, census tracts, or many more. These maps do not contain demographic data and are used solely to show the location of and relationship between boundaries and features. For interactive reference maps see TIGERweb.

#### [Thematic Maps](#)

Thematic maps are designed to show demographic, economic, business, or socioeconomic data about or characteristics of an area. Thematic maps tell a story spatially. They show a theme, or special topic, for a geographic area. Thematic maps may use features from reference maps as their base and then display additional data to tell a story about that area.

### Geographic Data

#### [TIGER Products](#)

Geospatial Files and Applications from our MAF/TIGER database. Tools for use in GIS software, Web Mapping Services (WMS) to use in your applications, and browsers to view geographic data.

#### [Census Geocoder](#)

The Census Geocoder allows users to look up the geography an address is located within for up to 1,000 addresses at a time.

#### [Partnership Shapefiles](#)

The Partnership Shapefiles are used in our partner programs to share data with and capture data from our partners.

#### [Relationship Files](#)

Relationship files help users compare different vintages of geography, such as Census 2000 blocks to 2010 Census blocks in text format.



# Geocoder Information Page



U.S. Department of Commerce | Blogs | Index A-Z | Glossary | FAQs

Search

Topics  
Population, Economy

Geography  
Maps, Products

Library  
Infographics, Publications

Data  
Tools, Developers

Surveys/Programs  
Respond, Survey Data

Newsroom  
News, Blogs

About Us  
Our Research

You are here: [Census.gov](#) > [Geography](#) > [Maps & Data](#) > [Census Geocoder](#)

## Geography

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### Maps & Data

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### Maps

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### Data

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- [LandView](#)

## Census Geocoder

The [Census Geocoder](#) is an address look-up tool that converts your address to an approximate coordinate (latitude/longitude) and returns information about the address range that includes the address and the census geography the address is within. The geocoder is available as a web interface and as an API (Representational State Transfer - REST - web-based service).

The tool allows you to look-up a single address or batch submit up to 1,000 addresses at a time. In addition, you can find the location of an address, the latitude and longitude, using the "Find Locations Using..." option. You can also find the census geographic entities for an address using the "Find Geographies Using..." option. The "Find Geographies Using..." option returns the state, county, census tract, and block for each address. Additional geographies are available using the instructions under Documentation below.

When geocoding your address, you need to select a benchmark (time period) and select a vintage of geography. The benchmark is the time period when we created a snapshot of our data (generally done twice a year). For example, Public\_AR\_Census2010 is the snapshot we took of the database in 2010. Public\_AR\_Current is the most recent snapshot we took of our dataset. The vintage of geography is the census or survey that the data relates to. For example, Census2010\_Census2010 are the address ranges from the 2010 Census at the time of the 2010 Census. You can also obtain the 2010 Census address ranges as of our 2013 benchmark. The vintages you see available depends on the benchmark you selected.

### + Data in the Census Geocoder

### + Batch Geocoding Process

### + Single Address Look-up

### + Documentation

### + FAQs

### + Contact Information

# Geocoder Tool

U.S. Department of Commerce | Blogs | Index A-Z | Glossary | FAQs



## Topics

Population, Economy

## Geography

Maps, Geographic Data

## Library

Infographics, Publications

## Data

Tools, Developers

## About the Bureau

Research, Surveys

## Newsroom

News, Events, Blogs

### FIND LOCATIONS USING...

- One Line
- Address
- Address Batch

### FIND GEOGRAPHIES USING...

- One Line
- Address
- Address Batch
- Geographic Coordinates

### ABOUT DATA...

- Benchmarks
- Vintages

### Welcome to Geocoder

#### Welcome to Geocoder

Census geocoder provides interactive & programmatic (REST) access to users interested in matching addresses to geographic locations and entities containing those addresses. Please see the [Services API](#) link below for more information. [Geocoding Services API PDF](#) | [HTML](#)

[Home](#) | [Intro](#) | [Contact Us](#)

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[SPECIAL TOPICS](#)

[NEWSROOM](#)

# Geocoder Demo Backup – Return - Geographies

## Geographies Return for single address:

Input:  
Address: 1600 Pennsylvania Ave NW,  
Washington, DC, 20502  
Benchmark: Public\_AR\_Current (4)  
Vintage: Current\_Current (4)

Matched Address: 1600 PENNSYLVANIA  
AVE NW,  
WASHINGTON, DC, 20502  
Coordinates: X: -77.03535 Y: 38.898754  
Tiger Line Id: 76225813 Side: L  
Address Components:

From Address: 1600  
To Address: 1698  
PreQualifier:  
PreDirection:  
PreType:  
Street Name: PENNSYLVANIA  
SuffixType: AVE  
SuffixDirection: NW  
SuffixQualifier:  
City: WASHINGTON  
State: DC  
Zip: 20502

Geographies:  
Counties:  
OID: 27590331264532  
STATE: 11  
FUNCSTAT: F  
AREAWATER: 18633403  
NAME: District of Columbia  
LSADC: 00  
CENTLON: -077.0162745  
BASENAME: District of Columbia  
INTPTLAT: +38.9041031  
COUNTYCC: H6  
MTFCC: G4020  
COUNTY: 001  
GEOID: 11001  
CENTLAT: +38.9047579  
INTPTLON: -077.0172290  
AREALAND: 158364990  
COUNTYNS: 01702382  
OBJECTID: 632

Census Tracts:  
OID: 20790331304119  
STATE: 11  
FUNCSTAT: S  
NAME: Census Tract 62.02  
AREAWATER: 4970897  
LSADC: CT  
CENTLON: -077.0352173  
BASENAME: 62.02  
INTPTLAT: +38.8809933  
MTFCC: G5020  
COUNTY: 001  
GEOID: 11001006202  
CENTLAT: +38.8801546  
INTPTLON: -077.0363219  
AREALAND: 6539773  
OBJECTID: 63929  
TRACT: 006202

2010 Census Blocks:  
BLKGRP: 1  
OID: 210403964788146  
FUNCSTAT: S  
STATE: 11  
AREAWATER: 0  
NAME: Block 1031  
SUFFIX:  
LSADC: BK  
CENTLON: -077.0365336  
LWBLKTYP: L  
BASENAME: 1031  
BLOCK: 1031  
INTPTLAT: +38.8971157  
MTFCC: G5040  
COUNTY: 001  
GEOID: 110010062021031  
CENTLAT: +38.8971157  
INTPTLON: -077.0365336  
AREALAND: 91475  
OBJECTID: 11078234  
TRACT: 006202

States:  
OID: 27490331294090  
STATE: 11  
FUNCSTAT: A  
NAME: District of Columbia  
AREAWATER: 18633403  
LSADC: 00  
CENTLON: -077.0162745  
STUSAB: DC  
BASENAME: District of Columbia  
INTPTLAT: +38.9041031  
DIVISION: 5  
MTFCC: G4000  
STATENS: 01702382  
GEOID: 11  
CENTLAT: +38.9047579  
INTPTLON: -077.0172290  
REGION: 3  
AREALAND: 158364990  
OBJECTID: 50

# Geocoder Demo Backup – Return Locations

- Locations return for single address:
- Input:  
Street: 1600 Pennsylvania Ave NW City: Washington State: DC Zip: 20502  
Benchmark: Public\_AR\_Current (4)  
Matched Address: 1600 PENNSYLVANIA AVE NW, WASHINGTON, DC, 20502  
Coordinates: X: -77.03535 Y: 38.898754  
Tiger Line Id: 76225813 Side: L  
Address Components:

From Address: 1600  
To Address: 1698  
PreQualifier:  
PreDirection:  
PreType:  
Street Name: PENNSYLVANIA  
SuffixType: AVE  
SuffixDirection: NW  
SuffixQualifier:  
City: WASHINGTON  
State: DC  
Zip: 20502

[Inbox \(4,267\) - avoconn...](#)
[National Archives and ...](#)
[Welcome to NHGIS | N...](#)
[Census Geocoder - U.S. ...](#)

[www.census.gov/geo/maps-data/data/geocoder.html](#)

- Relationship Files
  - Gazetteer Files
  - Block Assignment Files
  - Name Lookup Tables
  - Tallies
  - LandView

## - Batch Geocoding Process

- + How to Format your Address List
- + Results
- Record Layouts for Output

### Finding Geographies Using Option

Column	Column Name	Column Description
1	ID	ID from original address list
2	Address1	Address from original address list
3	Matching Result 1	Results indicating whether or not there was a match for the address (Match, no match)
4	Matching Result 2	Results indicating if the match is exact or not (Exact, non-exact)
5	Address2	Address the original address matches to
6	Latitude, Longitude	Interpolated latitude and longitude for the address
7	TIGER/Line ID	Unique ID for the edge the address falls on in the MAF/TIGER database
8	Side	Side of the street address in on (L for left and R for right)
9	State	State FIPS Code
10	County	County FIPS Code
11	Census Tract	Census Tract Code
12	Census Block	Census Block Code

### Finding Locations Using Option

# Using the Geocoder - LUCA

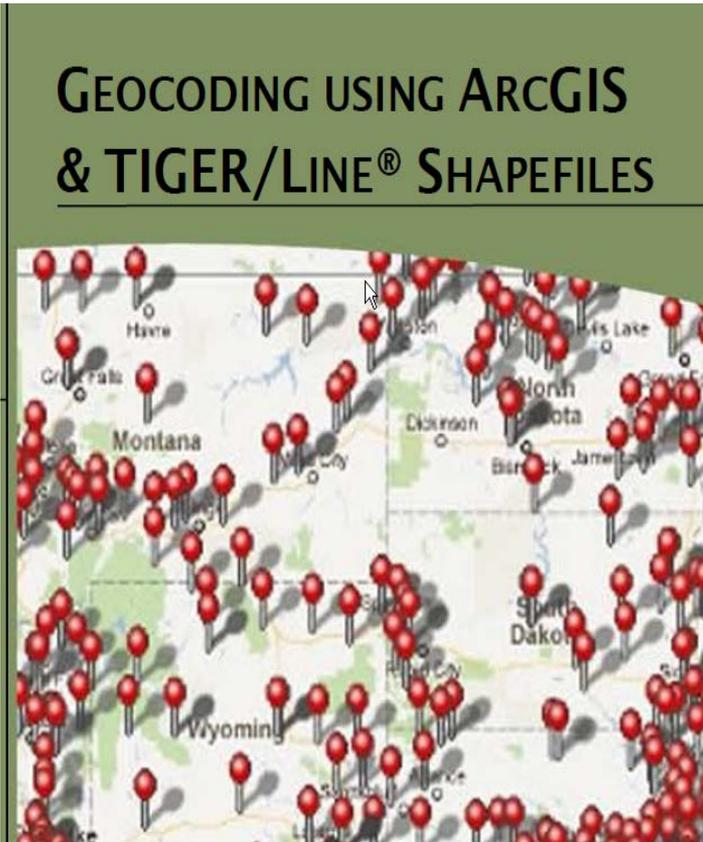
- Format and geocode your local address list
- Compare to Census block counts to determine focus areas

Max character length	Field name	Description
12	Entity ID	Unique code assigned by the Census Bureau to each entity
2	State Code	2-digit Current State Code
3	County Code	3-digit Current County Code
6	Census tract number	6-digit current census tract number, with an implied decimal point between the fourth and fifth digit
4	Census block number	4-digit current census block number
7	Count of housing unit addresses	Census Bureau's most recent count of housing unit addresses
7	Count of group quarters addresses	Census Bureau's most recent count of group quarters addresses

# LUCA Address Count List Review

State	County	Tract	Block	GEOID	Your Addressess	Census addresses	HU difference
99	999	215.04	2086	999990215042086	118	0	-118
99	999	214.02	1019	999990214021019	202	99	-103
99	999	216.04	4004	999990216044004	121	24	-97
99	999	215.07	1072	999990215071072	68	7	-61
99	999	210.13	2022	999990210132022	60	1	-59
99	999	213.00	1022	999990213001022	96	37	-59
99	999	215.04	2030	999990215042030	180	126	-54
99	999	217.02	3014	999990217023014	172	118	-54
99	999	218.00	2010	999990218002010	51	0	-51
99	999	211.01	1042	999990211011042	382	332	-50
99	999	212.02	3035	999990212023035	55	13	-42
99	999	215.07	1001	999990215071001	421	379	-42
99	999	217.04	1009	999990217041009	127	85	-42

# Using GIS to geocode



- Requires GIS software
- TIGER/line(s) needed
  - Address based
    - ADDREFEAT
    - Block (or other geography)
  - Point based
    - Block
- How to brochure
  - <http://www.census.gov/geo/education/howtos.html>

# American FactFinder Mapping Tool

- Demo AFF Mapping Tool to View and Select Census Tracts Within Sacramento City
- View Selected ACS Data
- Create a Thematic Map

# DATA ACCESS TOOL: American FactFinder

## Census Homepage: [census.gov](https://www.census.gov)

Put Cursor Over 'Data', then put cursor over 'Data Tools and Apps'. Lastly, Click on 'American FactFinder'

The screenshot shows the top navigation bar of the Census Bureau website. The 'Data' menu item is highlighted with a red box, and its sub-menu 'Data Tools & Apps' is also highlighted with a red box. A red arrow points from the 'Data Tools & Apps' menu to the 'American FactFinder' link in the sub-menu.

United States Census Bureau

U.S. Department of Commerce | Blogs | Index A-Z | Glossary | FAQs

Search

Topics: Population, Economy  
Geography: Maps, Products  
Library: Infographics, Publications  
Data: Tools, Developers  
Surveys/Programs: Respond, Survey Data  
Newsroom: News, Blogs  
About Us: Our Research

Data Main | **Data Tools & Apps** | Developers | Mobile Apps

Find information using interactive applications to get statistics from multiple surveys.  
Data Tools & Apps Main

American FactFinder  
Census Business Explorer  
Census Explorer  
Easy Stats

Interactive Population Map  
My Congressional District  
Population Clock  
QuickFacts

Product Catalog | Related Sites | Software | Training & Workshops

Visualizations

Demographic & Economic Profiles of Electorates by State

The U.S. Census Bureau presents a variety of statistics that give an overall profile of the state's voting-age population and industries.

POPULATION CLOCK

U.S. Population  
3 2 3 7 7 9 8 1 6

World Population  
7 3 3 1 5 1 5 8 3 4

QUICKFACTS

Did You Know  
15.4%  
of persons in Pennsylvania are 65 years and over

Source: 2010 Census

U.S. Census Bureau Economic Indicators

Business Inventories	\$1,807.1 B	↑*
April 2016 Report Released 10:00 AM EDT, 6/14/16		0.1%
Advance Monthly Retail Sales	\$455.6 B	↑*
May 2016 Report Released 8:30 AM EDT, 6/14/16		0.5%
Monthly Wholesale Inventories	\$587.9 B	↑

# Click on 'Advanced Search' and Click on 'Show Me All'

The screenshot shows the top navigation bar with 'MAIN', 'COMMUNITY FACTS', 'GUIDED SEARCH', 'ADVANCED SEARCH', and 'DOWNLOAD OPTIONS'. A yellow banner below the navigation bar reads: 'Good News! We've released the new American FactFinder. If you're having any issues viewing the new site, ...'. The main content area features a 'Community Facts' section with a description and a search input field containing 'e.g., Atlanta, GA' and a 'GO' button. Below this are four menu items: 'Guided Search', 'Advanced Search' (highlighted with a red box), and 'Download Options'. A partial image of a woman is visible on the right side of the page.

The screenshot shows the top navigation bar with 'MAIN', 'COMMUNITY FACTS', 'GUIDED SEARCH', and 'ADVANCED SEARCH'. The main content area features three menu items: 'Community Facts', 'Guided Search', and 'Advanced Search' (highlighted with a dotted box). Below 'Advanced Search' is a description: 'Search all data in American FactFinder, with access to all geographic types and datasets.' and a 'SHOW ME ALL' button (highlighted with a red box). Below this is a 'Download Options' menu item.

# In the second text box, type 'Sacramento City, California' and Click 'GO'

MAIN

COMMUNITY FACTS

GUIDED SEARCH

ADVANCED SEARCH

DOWNLOAD CENTER

**Search** - Use the options on the left (topics, geographies, ...) to narrow your search results

## Your Selections

'Your Selections' is empty

[load search](#) | [save search](#)

Search using the options below:

### Topics

(age, income, year, dataset, ...)

### Geographies

(states, counties, places, ...)

### Race and Ethnic Groups

(race, ancestry, tribe)

### Industry Codes

(NAICS industry, ...)

### EEO Occupation Codes

(executives, analysts, ...)

*To search for tables and other files in American FactFinder:*

1

Enter search terms and an optional geography and click GO

topic or table name

state, county or place (optional)

topics  race/ancestry  industries  occupations

-- or --

Select from **Topics, Race and Ethnic Groups, Industry Codes, EEO Occupation Codes.**

- these are added to 'Your Selections'
- the Search Results are updated

2

Next, select **Geographies** (states, counties, cities, towns, etc.)

- these are added to 'Your Selections'
- the Search Results are updated

3

Select one or more Search Results and click **View**

# Select 'Sacramento City, California' next to 'Place within State'

Were you looking for...



We couldn't find any results for **Sacramento city, California** as a geography.  
Were you looking for one of the following?



### Geographies:

Geography Name	Geography Type
Sacramento city, California	Place within State
West Sacramento city, California	Place within State
Sacramento city, California	Estimates Universe Place
West Sacramento city, California	Estimates Universe Place
Sacramento city, California	Economic Place
West Sacramento city, California	Economic Place
Sacramento city, CA; Sacramento--Arden-Arcade--Roseville, CA Metro Area	Principal City (or part) within State within Metro/Micro Statistical Area
Sacramento city, CA; Sacramento--Roseville--Arden-Arcade, CA Metro Area	Principal City (or part) within State within Metro/Micro Statistical Area
Sacramento city; Sacramento--Arden-Arcade--Roseville, CA Metro Area; California	Principal city (or part) within Metro/Micro Statistical Area



CANCEL

# Note: 'Sacramento City' has been added to 'Your Selections'

## Click the 'Geographies' Tab

**Search** - Use the options on the left (topics, geographies, ...) to narrow your search results

### Your Selections

#### Search using...

Place within State

Sacramento city, California ✕

clear all selections and  
start a new search

load search | save search

Search Results: 1-25 of 32,233 tables and other products match 'Your Selections'

Refine your search results:

topics  race/ancestry  industries  occupations

Selected:  |  |  |  |

### Search using the options below:

#### Topics

(age, income, year, dataset, ...)

#### Geographies

(states, counties, places, ...)

#### Race and Ethnic Groups

(race, ancestry, tribe)

#### Industry Codes

(NAICS industry, ...)

#### EEO Occupation Codes

(executives, analysts, ...)

	ID	Table, File or Document Title
<input type="checkbox"/>	S0101	AGE AND SEX
<input type="checkbox"/>	S0102	POPULATION 60 YEARS AND OVER IN THE UNITED STATES
<input type="checkbox"/>	S0103	POPULATION 65 YEARS AND OVER IN THE UNITED STATES
<input type="checkbox"/>	S0501	SELECTED CHARACTERISTICS OF THE NATIVE AND FOREIGN-BORN POPULATIONS
<input type="checkbox"/>	S0502	SELECTED CHARACTERISTICS OF THE FOREIGN-BORN POPULATION BY PERIOD OF ENTRY INTO THE UNITED STATES
<input type="checkbox"/>	S0503	SELECTED CHARACTERISTICS OF THE FOREIGN-BORN POPULATION BY REGION OF BIRTH: EUROPE
<input type="checkbox"/>	S0504	SELECTED CHARACTERISTICS OF THE FOREIGN-BORN POPULATION BY REGION OF BIRTH: AFRICA, NORTHERN AMERICA, AND O...
<input type="checkbox"/>	S0505	SELECTED CHARACTERISTICS OF THE FOREIGN-BORN POPULATION BY REGION OF BIRTH: ASIA
<input type="checkbox"/>	S0506	SELECTED CHARACTERISTICS OF THE FOREIGN-BORN POPULATION BY REGION OF BIRTH: LATIN AMERICA
<input type="checkbox"/>	S0601	SELECTED CHARACTERISTICS OF THE TOTAL AND NATIVE POPULATIONS IN THE UNITED STATES
<input type="checkbox"/>	S0701	GEOGRAPHIC MOBILITY BY SELECTED CHARACTERISTICS IN THE UNITED STATES
<input type="checkbox"/>	S0801	COMMUTING CHARACTERISTICS BY SEX

Click the 'Map' Tab.  
Click the Boundaries Icon



Select Geographies

List	Name	Address	Map
------	------	---------	-----

Find address or place

Select Geographies

Select From

most requested geography types

more geography types

Select

-- select a geographic type --

from the map using one of the following selection tools:

# Check the Layer and Label Boxes next to 'Census Tract' and Click 'UPDATE'

The screenshot shows the 'Select Geographies' interface. The 'Boundaries' panel is open, displaying a list of geographic layers. The 'Census Tract' layer is selected, with both its 'Layer' and 'Label' checkboxes checked. The 'UPDATE' button is highlighted with a red box. The map in the background shows the Sacramento Valley area, including Sacramento and West Sacramento.

**Select Geographies** [CLOSE X]

List | Name | Address | Map

Find address or place [Search]

**Boundaries**

Display boundaries from: 2015

Layer	Label	Name
<input type="checkbox"/>	<input type="checkbox"/>	Region
<input type="checkbox"/>	<input type="checkbox"/>	Division
<input type="checkbox"/>	<input type="checkbox"/>	State
<input type="checkbox"/>	<input type="checkbox"/>	County
<input type="checkbox"/>	<input type="checkbox"/>	County Subdivision
<input type="checkbox"/>	<input type="checkbox"/>	Subbarrio
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Census Tract
<input type="checkbox"/>	<input type="checkbox"/>	Block Group
<input type="checkbox"/>	<input type="checkbox"/>	Place
<input type="checkbox"/>	<input type="checkbox"/>	Consolidated City
<input type="checkbox"/>	<input type="checkbox"/>	Alaska Native Regional Corporation
<input type="checkbox"/>	<input type="checkbox"/>	AIA/ANA/HHL
<input type="checkbox"/>	<input type="checkbox"/>	Tribal Subdivision
<input type="checkbox"/>	<input type="checkbox"/>	American Indian Area/Alaska Native Area

Boundary selections in gray may not be visible at the current zoom level.

[CLEAR ALL] [UPDATE]



Use the search bar to center on your location.  
Select **'Census Tract'** form drop-down menu and  
select a mapping tool. Click on the map and drag to  
select census tracts.

Select Geographies

List	Name	Address	Map
------	------	---------	-----

Find address or place

Select From

- most requested geography types
- more geography types

Select

Census Tract

from the map using one of the following selection tools:

- [Circle]
- [Rectangle]
- [Polygon]
- [Lasso]

Click on the map and drag to select using a circle.

# After making all of the Census Tract selections, Click 'Add to Your Selections'

Select Geographies

Find address or place

Select Geographies

Select From

- most requested geography types
- more geography types

Select

Census Tract

from the map using one of the following selection tools:

Click on the map and drag to select using a circle.

Radius: 1.01 miles.

- Census Tract 101.01, Yolo County, California
- Census Tract 102.01, Yolo County, California
- Census Tract 11.01, Sacramento County, California
- Census Tract 12, Sacramento County, California
- Census Tract 20, Sacramento County, California
- Census Tract 21, Sacramento County, California
- Census Tract 5, Sacramento County, California

ADD TO YOUR SELECTIONS

# Note: The Census Tracts have been added to 'Your Selections' Click 'CLOSE X' to close 'Select Geographies'

**Your Selections**

Search using...  
Place within State  
Sacramento city, California ✕  
Census Tract  
11 selected ✕  
clear all selections and start a new search  
load search | save search

**Select Geographies**

Search Results: 1-25 of 5,262 tables and other products match "Your Selections"

List	Name	Address	Map
------	------	---------	-----

Find address or place

Select From  
 most requested geography types  
 more geography types

Select  
Census Tract

from the map using one of the following selection tools:

0 2 4mi  
Zoom Level 44

# Note: There are 5,262 tables available in Search Results

## Click on **‘Topics’** to further refine your search

**Your Selections**

**Search using...**  
Place within State  
Sacramento city, California ✕

Census Tract  
11 selected ✕

[clear all selections and start a new search](#)

[load search](#) | [save search](#)

**Search using the options below:**

**Topics**  
(age, income, year, dataset, ...)

**Geographies**  
(states, counties, places, ...)

**Race and Ethnic Groups**  
(race, ancestry, tribe)

**Industry Codes**  
(NAICS industry, ...)

**Search Results: 1-25 of 5,262 tables and other products match 'Your Selections'**

Refine your search results:

topics  race/ancestry  industries  occupations

**Selected:**

Show results from:

	ID	Table, File or Document Title
<input type="checkbox"/>	S0101	AGE AND SEX
<input type="checkbox"/>	S0601	SELECTED CHARACTERISTICS OF THE TOTAL AND NATIVE POPULATIONS IN THE UNITED STATES
<input type="checkbox"/>	S0701	GEOGRAPHIC MOBILITY BY SELECTED CHARACTERISTICS IN THE UNITED STATES
<input type="checkbox"/>	S0801	COMMUTING CHARACTERISTICS BY SEX
<input type="checkbox"/>	S0802	MEANS OF TRANSPORTATION TO WORK BY SELECTED CHARACTERISTICS
<input type="checkbox"/>	S1002	GRANDPARENTS
<input type="checkbox"/>	S1101	HOUSEHOLDS AND FAMILIES
<input type="checkbox"/>	S1201	MARITAL STATUS
<input type="checkbox"/>	S1301	FERTILITY

# Click on 'Housing', Click on 'Occupancy Characteristics' and Click on 'Owner/Renter (Tenure in Occupied units)'

**Your Selections**

Search using...  
Place within State  
Sacramento city, California ✕

+ Census Tract  
11 selected ✕

[clear all selections and start a new search](#)

[load search](#) | [save search](#)

**Search using the options below:**

**Topics**  
(age, income, year, dataset, ...)

**Geographies**  
(states, counties, places, ...)

**Race and Ethnic Groups**  
(race, ancestry, tribe)

**Industry Codes**  
(NAICS industry, ...)

**EEO Occupation Codes**  
(executives, analysts, ...)

**Search Results: 1-25 of 5,262 tables and other products match 'Your Selections'**

**Select Topics** CLOSE ✕

Select Topics to add to 'Your Selections' ?

- + People
- **Housing**
  - + Basic Count/Estimate
  - + Financial Characteristic
  - **Occupancy Characteristic**
    - Age of Householder (208)
    - Hispanic or Latino Householder (96)
    - Household Size (155)
    - Household Type (380)
    - Occupancy and Vacancy Status (99)
    - Occupants Per Room (69)
    - Owner/Renter (Tenure in Occupied Units) (512)**
    - Race/Ethnicity of Householder (716)
    - Vehicles Available (61)
    - Year Householder Moved Into Unit (60)
  - + Physical Characteristic
- + Year
- + Product Type
- + Program

**Note:** The Race & Ethnicity topic is available under the Race and Ethnic Groups button on the left.

Include archived products in your search ?

<input type="checkbox"/>	S1701	POVERTY STATUS IN THE PAST 12 MONTHS
<input type="checkbox"/>	S1702	POVERTY STATUS IN THE PAST 12 MONTHS OF FAMILIES

# Close the 'Select Topics' Box by Clicking 'CLOSE X'

**Search** - Use the options on the left (topics, geographies, ...) to narrow your search results

**Your Selections**

Search using...  
Housing:Occupancy Characteristic:  
Owner/Renter (Tenure in Occupied Units) ✕

Census Tract  
12 selected ✕

[clear all selections and start a new search](#)

[load search](#) | [save search](#)

Search using the options below:

**Topics**  
(age, income, year, dataset, ...)

**Geographies**  
(states, counties, places, ...)

**Race and Ethnic Groups**  
(race, ancestry, tribe)

**Industry Codes**  
(NAICS industry, ...)

**EEO Occupation Codes**  
(executives, analysts, ...)

**Select Topics** CLOSE X

Select Topics to add to 'Your Selections' ?

- People
- Housing
  - Basic Count/Estimate
  - Financial Characteristic
  - Occupancy Characteristic
    - Age of Householder (80)
    - Hispanic or Latino Householder (12)
    - Household Size (63)
    - Household Type (38)
    - Occupancy and Vacancy Status (38)
    - Occupants Per Room (18)
    - Race/Ethnicity of Householder (80)
    - Vehicles Available (24)
    - Year Householder Moved Into Unit (54)
- Physical Characteristic
- Year
- Product Type
- Program
- Dataset

**Note:** The Race & Ethnicity topic is available under the Race and Ethnic Groups button on the left.

Include archived products in your search ?

<input type="checkbox"/>	B07013	GEOGRAPHICAL MOBILITY IN THE PAST YEAR BY TENURE FOR CURRENT
<input type="checkbox"/>	B08137	MEANS OF TRANSPORTATION TO WORK BY TENURE

# Select table 'S2503 – Financial Characteristics' Clicking 'VIEW'

**Search** - Use the options on the left (topics, geographies, ...) to narrow your search results

## Your Selections

### Search using...

Housing:Occupancy Characteristic:  
Owner/Renter (Tenure in Occupied  
Units) ✕

Place within State  
Sacramento city, California ✕

Census Tract  
11 selected ✕

clear all selections and  
start a new search

load search | save search

## Search using the options below:

### Topics

(age, income, year, dataset, ...)

### Geographies

(states, counties, places, ...)

### Race and Ethnic Groups

(race, ancestry, tribe)

### Industry Codes

(NAICS industry, ...)

### EEO Occupation Codes

(executives, analysts, ...)

## Search Results: 1-25 of 512 tables and other products match "Your Selections"

Refine your search results:    ?

topics  race/ancestry  industries  occupations

1 Selected:   |  |  |  ?

★ - Suggested search results for *Owner/Renter (Tenure in Occupied Units)*

	ID	Table, File or Document Title
<input type="checkbox"/>	B25003	★ TENURE
<input type="checkbox"/>	B11012	★ HOUSEHOLD TYPE BY TENURE
<input type="checkbox"/>	B25032	★ TENURE BY UNITS IN STRUCTURE
<input type="checkbox"/>	B25033	★ TOTAL POPULATION IN OCCUPIED HOUSING UNITS BY TENURE BY UNITS IN STRUCTURE
<input type="checkbox"/>	B25010	★ AVERAGE HOUSEHOLD SIZE OF OCCUPIED HOUSING UNITS BY TENURE
<input type="checkbox"/>	B25026	★ TOTAL POPULATION IN OCCUPIED HOUSING UNITS BY TENURE BY YEAR HOUSEHOLDER MOVED INTO UNIT
<input type="checkbox"/>	B25036	★ TENURE BY YEAR STRUCTURE BUILT
<input type="checkbox"/>	B25118	★ TENURE BY HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2014 INFLATION-ADJUSTED DOLLARS)
<input type="checkbox"/>	QT-H2	★ Tenure, Household Size, and Age of Householder: 2010
<input type="checkbox"/>	QT-H3	★ Household Population and Household Type by Tenure: 2010
<input type="checkbox"/>	S2502	DEMOGRAPHIC CHARACTERISTICS FOR OCCUPIED HOUSING UNITS
<input checked="" type="checkbox"/>	S2503	FINANCIAL CHARACTERISTICS
<input type="checkbox"/>	S2504	PHYSICAL HOUSING CHARACTERISTICS FOR OCCUPIED HOUSING UNITS

# Click 'Create a Map'

Table View 

Actions:  [Modify Table](#) |  [Add/Remove Geographies](#) |  [Bookmark/Save](#) |  [Print](#) |  [Download](#) |  [Create a Map](#)

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official

<< 1 - 18 of 72 >>

Versions of this table are available for the following years:

- 2014** ▶
- 2013
- 2012
- 2011
- 2010

50 of 50

Subject	Census Tract 5, Sacramento County, California						Occupied housing units
	Occupied housing units		Owner-occupied housing units		Renter-occupied housing units		
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	
Occupied housing units	1,835	+/-111	265	+/-85	1,570	+/-123	
HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2014 INFLATION-ADJUSTED DOLLARS)							
Less than \$5,000	7.4%	+/-3.8	0.0%	+/-12.4	8.7%	+/-4.4	8
\$5,000 to \$9,999	2.6%	+/-2.1	0.0%	+/-12.4	3.1%	+/-2.4	11
\$10,000 to \$14,999	12.8%	+/-4.1	0.0%	+/-12.4	14.9%	+/-4.7	14
\$15,000 to \$19,999	6.8%	+/-3.3	2.6%	+/-3.9	7.5%	+/-3.8	10
\$20,000 to \$24,999	6.0%	+/-3.6	0.0%	+/-12.4	7.1%	+/-4.1	3
\$25,000 to \$34,999	4.9%	+/-3.1	7.5%	+/-11.3	4.4%	+/-2.7	9
\$35,000 to \$49,999	14.3%	+/-4.1	20.4%	+/-14.9	13.3%	+/-3.8	16
\$50,000 to \$74,999	21.9%	+/-5.4	15.8%	+/-11.4	22.9%	+/-5.9	12
\$75,000 to \$99,999	11.9%	+/-4.7	20.0%	+/-14.4	10.5%	+/-4.8	2
\$100,000 to \$149,999	8.8%	+/-3.7	23.8%	+/-14.9	6.3%	+/-3.2	4
\$150,000 or more	2.6%	+/-1.7	9.8%	+/-9.2	1.3%	+/-1.3	6
Median household income (dollars)	42,964	+/-7,522	80,536	+/-24,474	40,130	+/-8,600	30

**Note: Each row is a potential thematic map**  
**Select the row you would like to map by clicking on any Estimate within that row**

<< 1 - 18 of 72 >>

Subject	Census Tract 5, Sacramento County, California					
	Occupied housing units		Owner-occupied housing units		Renter-occupied housing units	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Occupied housing units	1,835	+/-111	265	+/-85	1,570	+/-123
HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2014 INFLATION-ADJUSTED DOLLARS)						
Less than \$5,000	7.4%	+/-3.8	0.0%	+/-12.4	8.7%	+/-4.4
\$5,000 to \$9,999	2.6%	+/-2.1	0.0%	+/-12.4	3.1%	+/-2.4
\$10,000 to \$14,999	12.8%	+/-4.1	0.0%	+/-12.4	14.9%	+/-4.7
\$15,000 to \$19,999	6.8%	+/-3.3	2.6%	+/-3.9	7.5%	+/-3.8
\$20,000 to \$24,999	6.0%	+/-3.6	0.0%	+/-12.4	7.1%	+/-4.1
\$25,000 to \$34,999	4.9%	+/-3.1	7.5%	+/-11.3	4.4%	+/-2.7
\$35,000 to \$49,999	14.3%	+/-4.1	20.4%	+/-14.9	13.3%	+/-3.8
\$50,000 to \$74,999	21.9%	+/-5.4	15.8%	+/-11.4	22.9%	+/-5.9
\$75,000 to \$99,999	11.9%	+/-4.7	20.0%	+/-14.4	10.5%	+/-4.8
\$100,000 to \$149,999	8.8%	+/-3.7	23.8%	+/-14.9	6.3%	+/-3.2
\$150,000 or more	2.6%	+/-1.7	9.8%	+/-9.2	1.3%	+/-1.3
Median household income (dollars)	42,964	+/-7,522	80,536	+/-24,474	40,130	+/-8,600
MONTHLY HOUSING COSTS						
Less than \$100	0.5%	+/-0.8	0.0%	+/-12.4	0.6%	+/-0.9
\$100 to \$199	3.0%	+/-1.5	2.6%	+/-3.9	3.1%	+/-1.9
\$200 to \$299	3.9%	+/-2.1	0.0%	+/-12.4	4.6%	+/-2.5
\$300 to \$399	3.9%	+/-2.6	5.7%	+/-7.0	3.6%	+/-2.8
\$400 to \$499	3.5%	+/-2.3	5.7%	+/-6.0	3.2%	+/-2.6
\$500 to \$599	6.4%	+/-3.7	7.9%	+/-9.2	6.1%	+/-3.7
\$600 to \$699	7.2%	+/-3.6	4.9%	+/-5.7	7.6%	+/-4.3
\$700 to \$799	14.1%	+/-5.2	0.0%	+/-12.4	16.5%	+/-6.0
\$800 to \$899	8.7%	+/-3.9	0.0%	+/-12.4	10.1%	+/-4.5
\$900 to \$999	4.0%	+/-2.8	2.3%	+/-3.5	3.2%	+/-2.5
\$1,000 to \$1,499	25.3%	+/-5.5	9.8%	+/-8.7	27.9%	+/-6.1
\$1,500 to \$1,999	8.9%	+/-3.6	17.0%	+/-10.3	7.6%	+/-4.4
\$2,000 or more	8.2%	+/-4.2	44.2%	+/-15.3	2.2%	+/-1.3
No cash rent	2.3%	+/-2.4	(X)	(X)	2.7%	+/-2.1
Median (dollars)	872	+/-68	1,738	+/-487	834	+/-67



# Click 'Show Map'

margin of Error	Estimate	M						
+/-111	265	+/-85	1,570	+/-123	632	+/-64	39	
+/-3.8	0.0%	+/-12.4	8.7%	+/-4.4	8.5%	+/-6.5	0.0%	
+/-2.1	0.0%	+/-12.4	3.1%	+/-2.4	11.7%	+/-7.2	0.0%	
+/-4.1							0.6	0.0%
+/-3.3							0.6	0.0%
+/-3.6							0.9	0.0%
+/-3.1							0.0	30.8%
+/-4.1							0.6	0.0%
+/-5.4							0.2	12.8%
+/-4.7							0.9	0.0%
+/-3.7							0.6	12.8%
+/-1.1							0.6	43.6%
+/-7,522	80,536	+/-24,474	40,130	+/-8,600	30,714	+/-16,684	118,750	
+/-0.8	0.0%	+/-12.4	0.6%	+/-0.9	4.3%	+/-4.4	0.0%	
+/-1.5	2.6%	+/-3.9	3.1%	+/-1.9	0.0%	+/-5.4	0.0%	

Select a Data Value to Map

The selected data values to map are:  
**Renter-occupied housing units; Estimate; MONTHLY HOUSING COSTS - \$2,000 or more by Census Tract**

**SHOW MAP** **CANCEL**

# Click on 'Colors and Data Classes' Icon



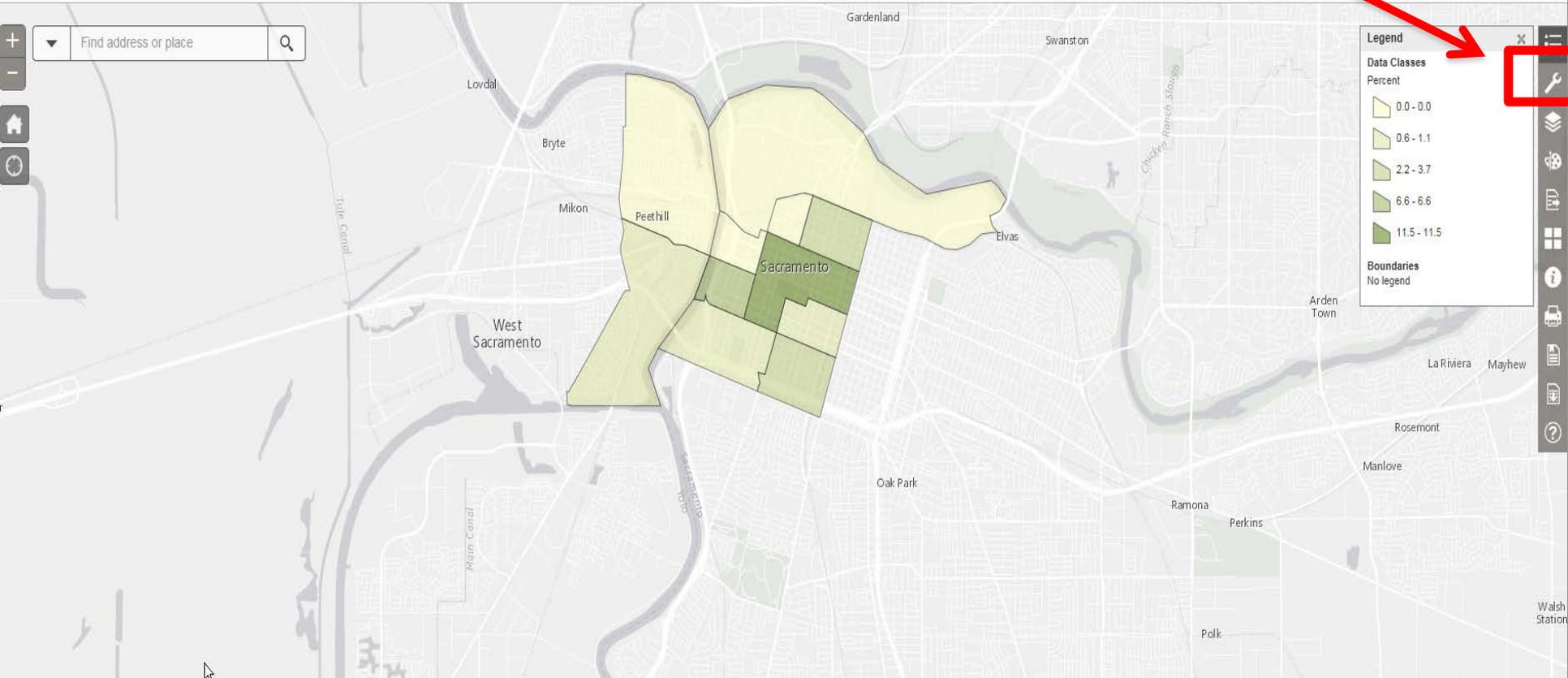
S2503 FINANCIAL CHARACTERISTICS   
2010-2014 American Community Survey 5-Year Estimates

Table View  Map View 

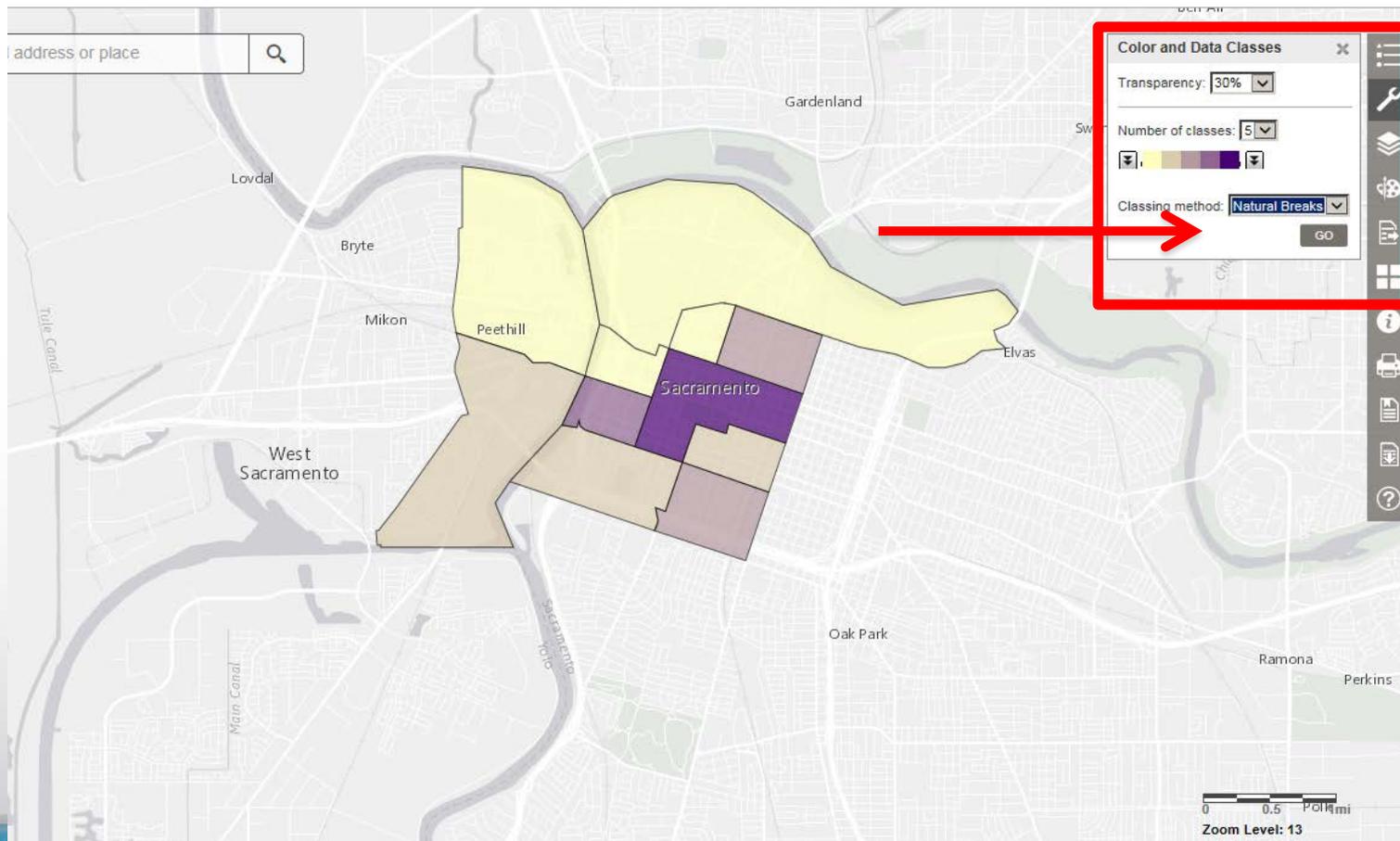
[← BACK TO ADVANCED SEARCH](#)

Actions:  [Bookmark/Save](#)  [Print](#)  [Download](#)  [Create a Different Map](#)

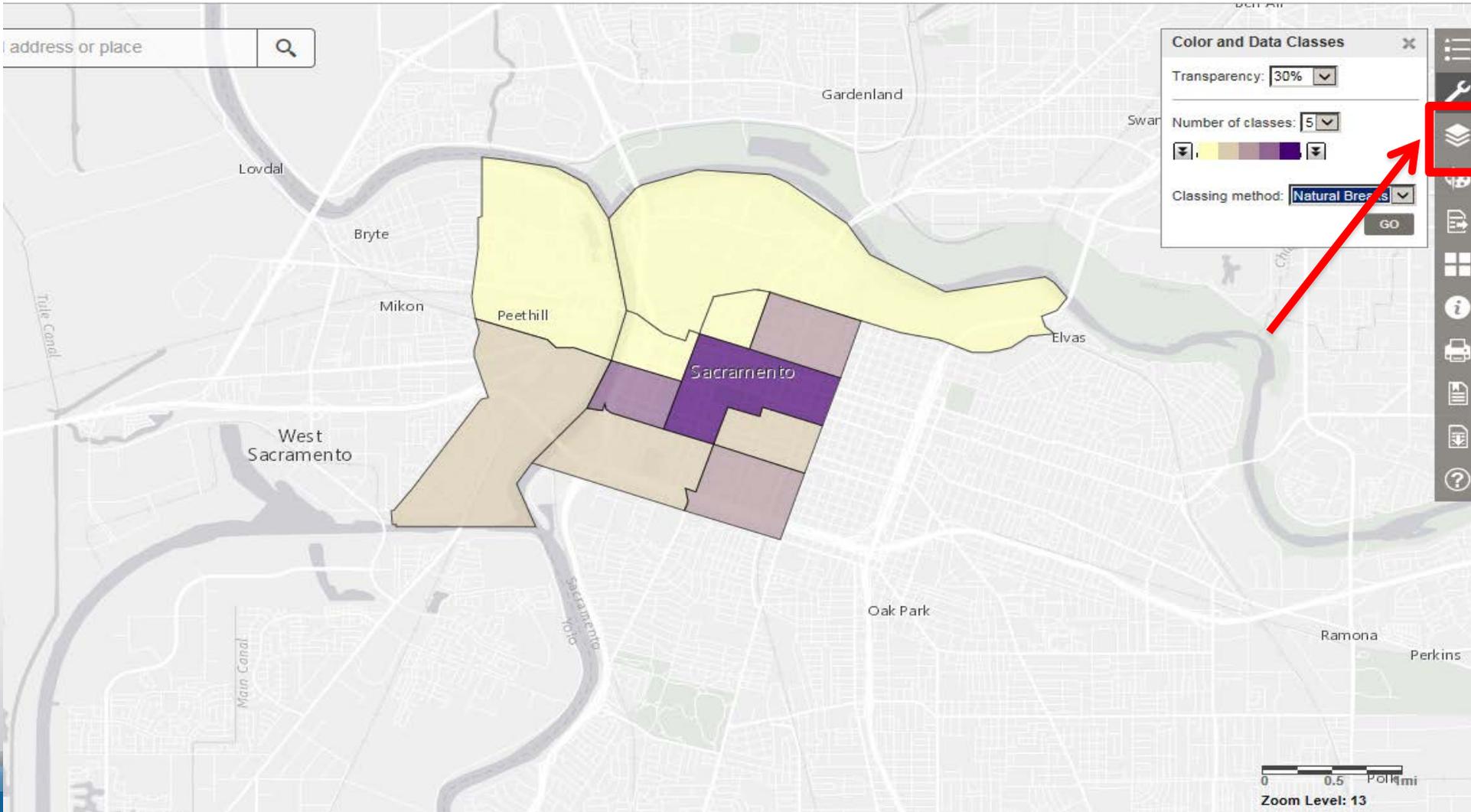
Thematic Map of Renter-occupied housing units; Estimate; MONTHLY HOUSING COSTS - \$2,000 or more  
Geography: by Census Tract



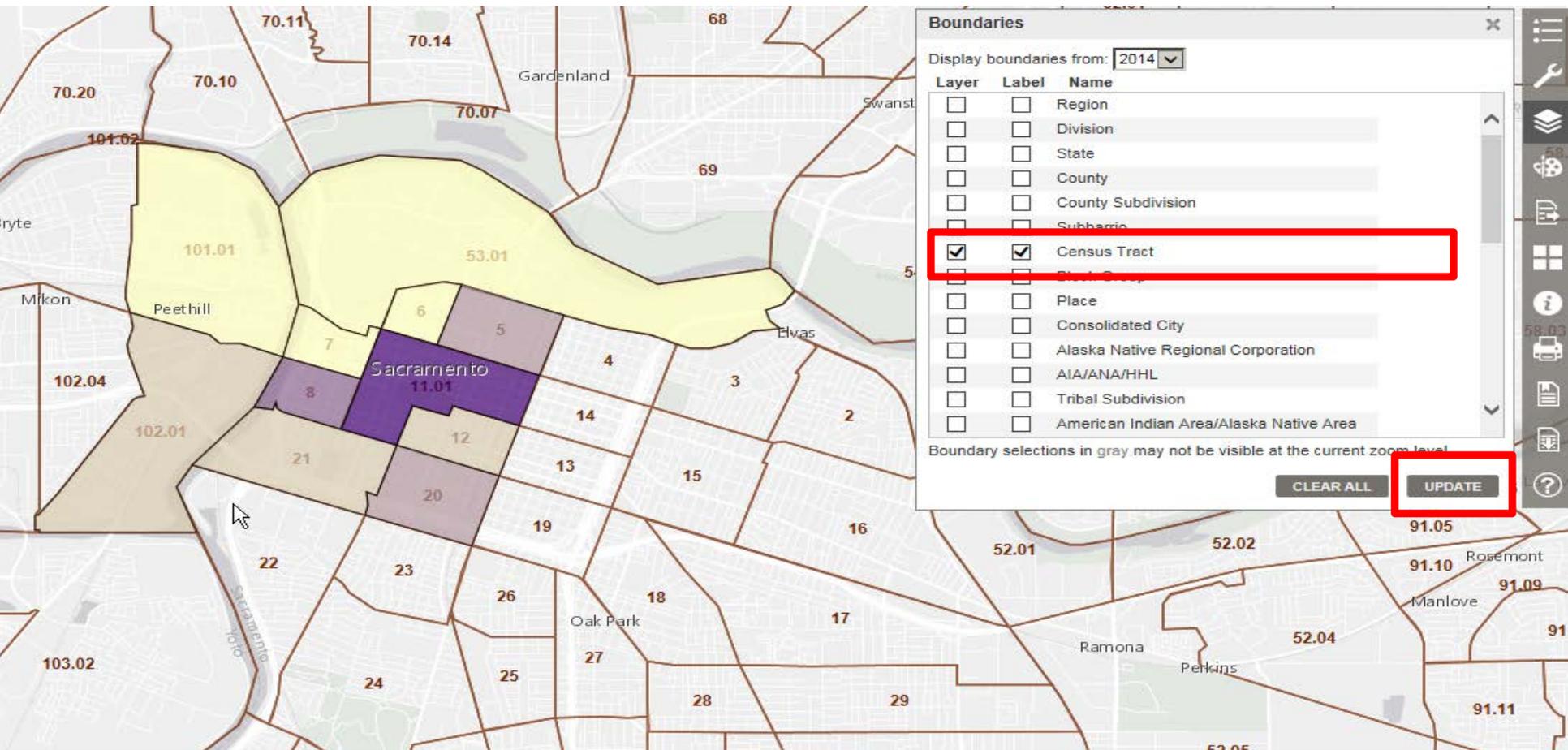
**Note: You can change the transparency to 0% to make colors on the map darker**  
**Under 'Colors and Data Classes' you can change the transparency, number of classes, color range and classing method. Once changes are selected, Click 'GO'**



# Click the Boundaries Icon

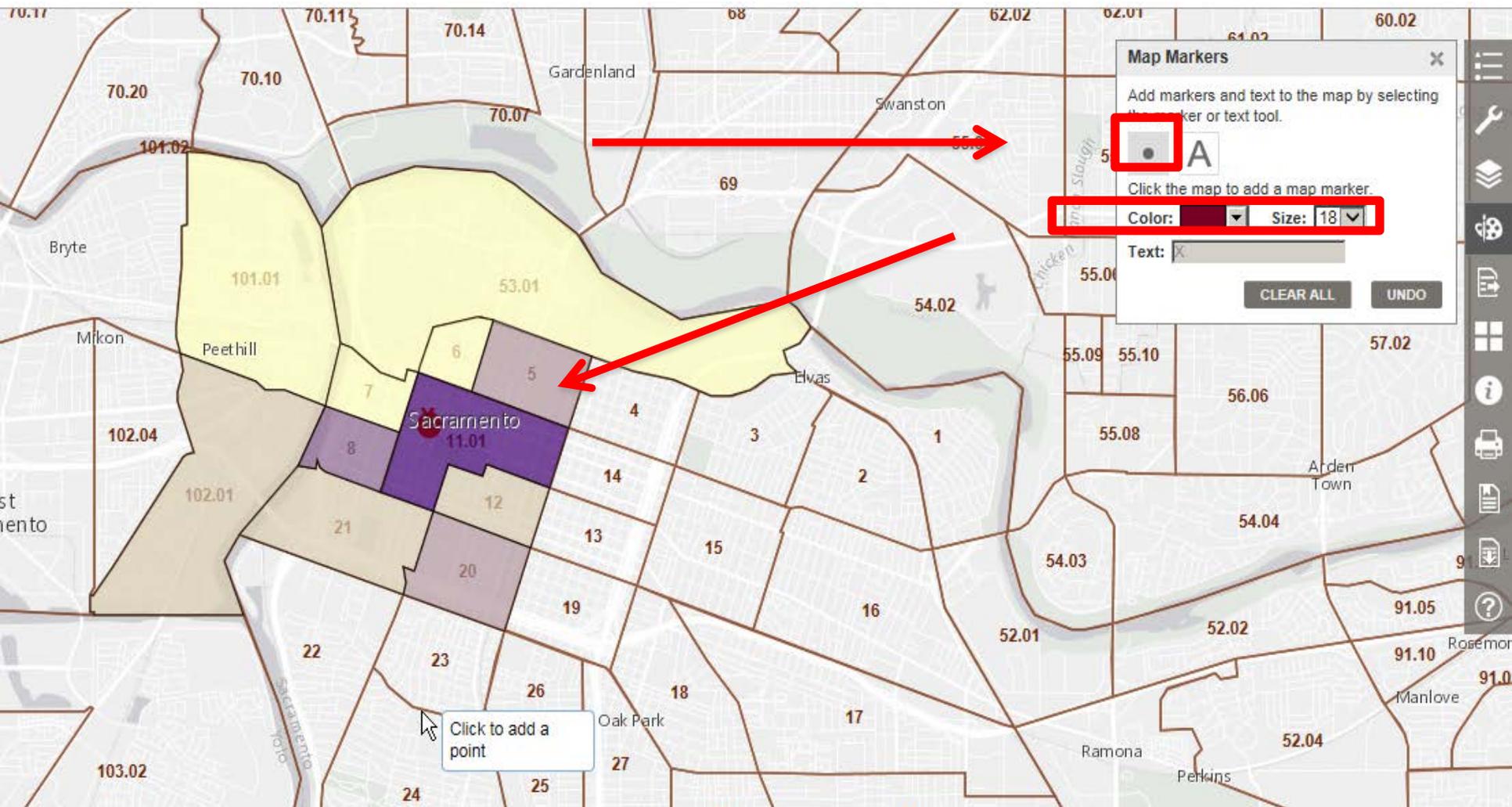


# Check the Layer and Label Boxes next to 'Census Tract' and Click 'UPDATE'

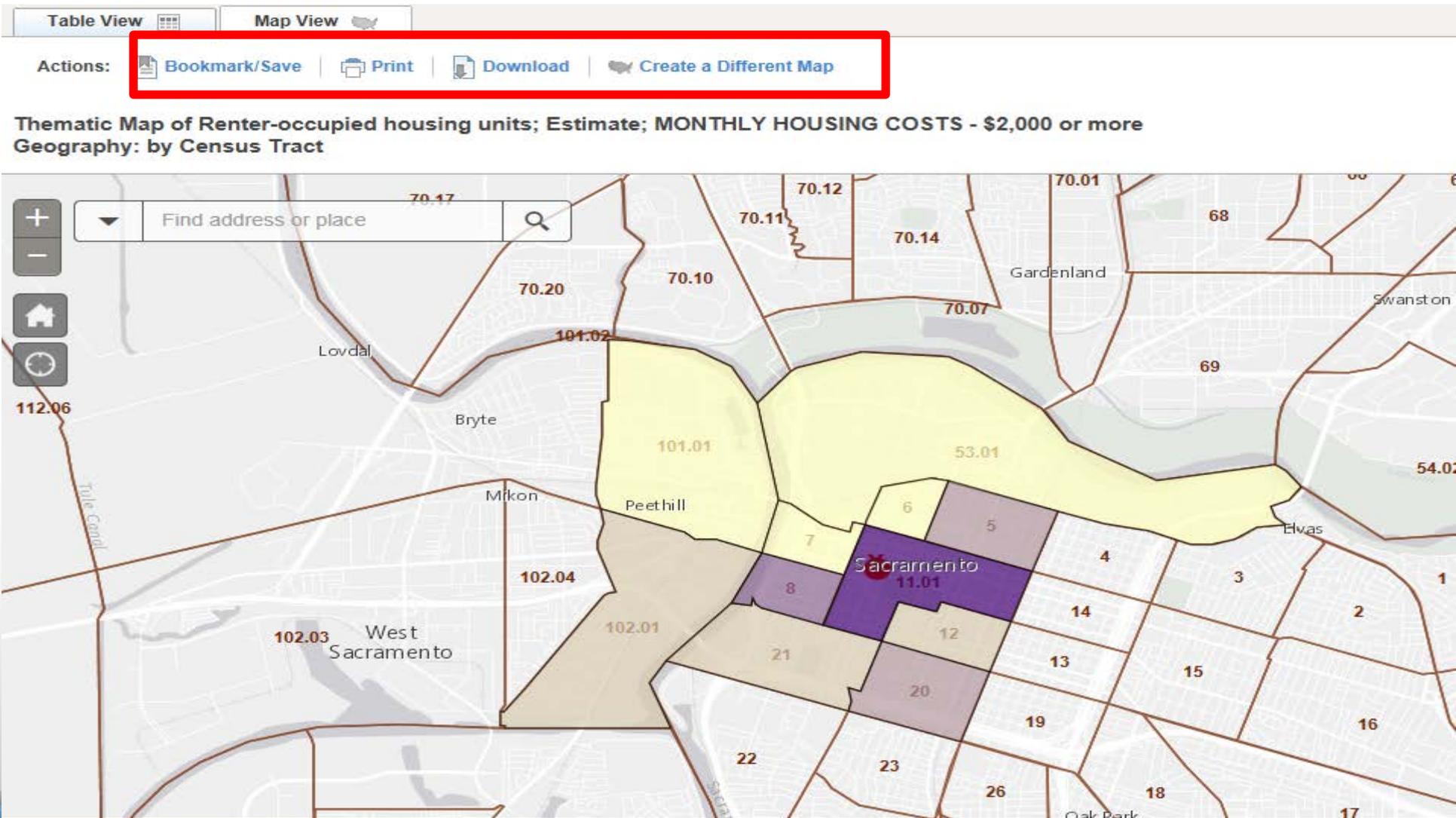




# Select the point marker, color and size. Then click anywhere on the map you would like to mark.



# Note: You can Bookmark, Print or Download the map



## Note: You can Bookmark or Save the Query

**Bookmark/Save**

Copy the URL below and use it to create a bookmark in your Internet browser. ?

[http://factfinder.census.gov/bkmk/tm/1.0/en/ACS/14\\_5YR/S1702](http://factfinder.census.gov/bkmk/tm/1.0/en/ACS/14_5YR/S1702)

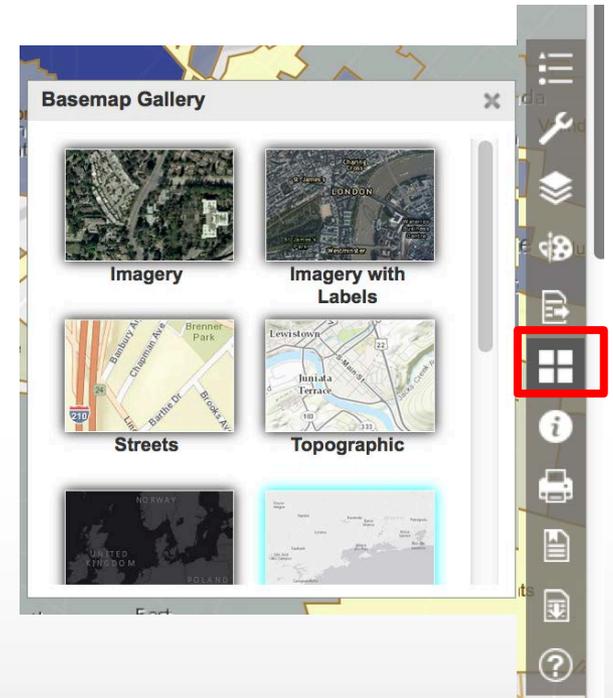
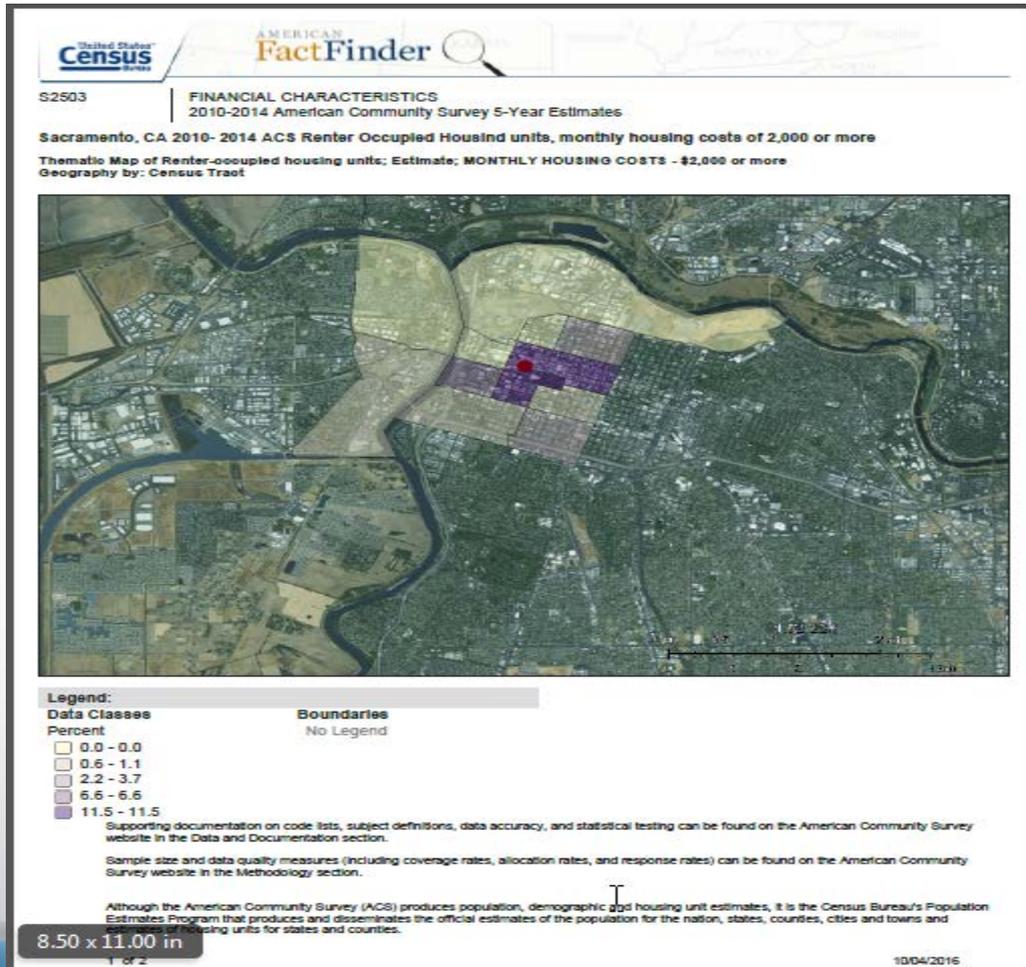
Use the "Save Query" button to save the viewed products' geography and table selections to a file on your local drive. This option does not save the data but only the selections for the currently viewed result.

To retrieve a saved query, use the "Load Search or Query" button on the main page or from "Your Selections" in Advanced Search.

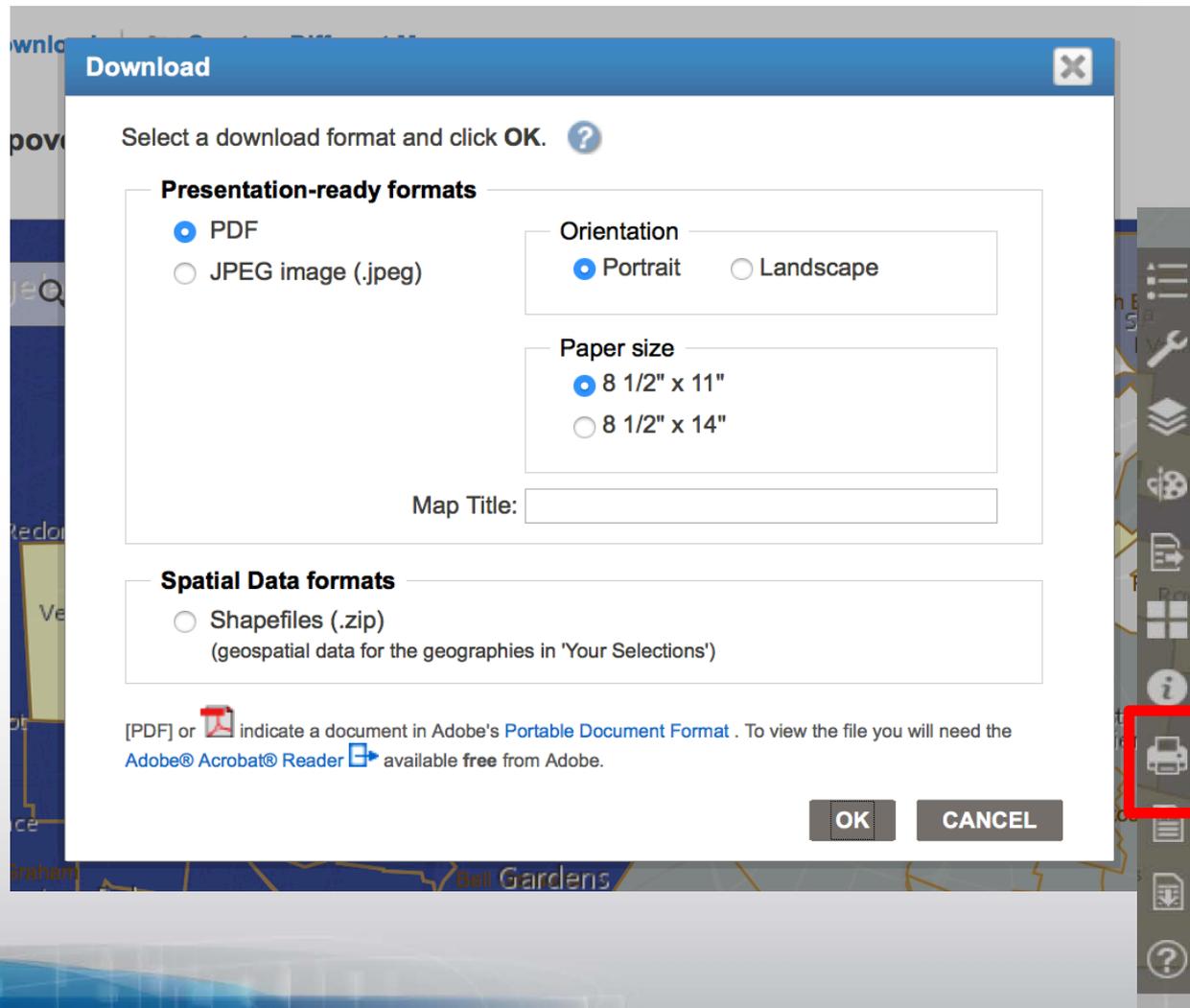
**SAVE QUERY**

**CANCEL**

# Print - PDF



# Note: You Can Download a PDF, JPEG or Shapefiles



# Download data by selecting 'Table view' and 'Download'

The screenshot shows the 'Table Viewer' interface for the 'FINANCIAL CHARACTERISTICS' table (S2503) from the '2010-2014 American Community Survey 5-Year Estimates'. The 'Table View' button is highlighted with a red box. Below it, the 'Download' button in the 'Actions' menu is also highlighted with a red box. A 'Download' dialog box is open, prompting the user to 'Select a download format and click OK.' The dialog offers two main options: 'Comma delimited (.csv) format (data rows only)' and 'Presentation-ready formats'. The CSV option includes sub-options for 'Data and annotations in a single file' (selected), 'Data and annotations in separate files', and 'Include descriptive data element names' (checked). The presentation-ready formats include PDF, Microsoft Excel (.xls), and Rich Text Format (.rtf). For the Excel option, there are sub-options for 'Orientation' (Portrait selected, Landscape) and 'Paper size' (8 1/2" x 11" selected, 8 1/2" x 14").

Versions of this table are available for the following years:

- 2014
- 2013
- 2012
- 2011
- 2010

Sacramento County, California			
	Occupied housing units	Renter-occupied housing units	
Rate	Margin of Error	Estimate	Margin of Error
65	+/-85	1,570	+/-12
0%	+/-12.4	8.7%	+/-4
0%	+/-12.4	3.1%	+/-2
0%	+/-12.4	14.9%	+/-4
0%	+/-3.9	7.5%	+/-3
0%	+/-12.4	7.1%	+/-4
0%	+/-11.3	4.4%	+/-2
0%	+/-14.9	13.3%	+/-3
0%	+/-11.4	22.9%	+/-5
0%	+/-14.4	10.5%	+/-4
0%	+/-14.9	6.3%	+/-3
0%	+/-9.2	1.3%	+/-1
86	+/-24,474	40,130	+/-8,66
0%	+/-12.4	0.6%	+/-0
0%	+/-3.9	3.1%	+/-1
0%	+/-12.4	4.6%	+/-2
0%	+/-7.0	3.6%	+/-2
0%	+/-6.0	3.2%	+/-2

# Another Option: TIGERweb

The screenshot displays the TIGERweb interface. At the top, there is a navigation bar with icons for Layers, Legend, and Task Results. The main header includes the United States Census Bureau logo and the text "TIGERweb Geography Division". A search bar contains the placeholder text "Street, City, State, Zip". To the right of the search bar are several utility icons. Below the header, a sidebar on the left contains a "Select Vintage:" dropdown menu set to "Current". Below this is a list of layers with checkboxes and expand/collapse icons. The main map area shows a topographic map of the United States with various geographic boundaries overlaid. A vertical toolbar on the left side of the map includes icons for home, close, and zoom. A "Landmass" button is located in the top right corner of the map area.

United States Census Bureau

TIGERweb  
Geography Division

Street, City, State, Zip

Layers Legend Task Results

Select Vintage:  
Current

- Labels
- Transportation (Roads and Railroads)
- PUMAs, UGAs, and ZCTAs
- Tribal Census Tracts and Block Groups
- Census Tracts and Blocks
- Military and Other Special Land Use Areas
- School Districts
- Places and County Subdivisions
- American Indian, Alaska Native, and Native Hawaiian Areas
- Legislative Areas
- Census Regions and Divisions
- Urban Areas
- Metropolitan and Micropolitan Statistical Areas and Related Statistical Areas
- Hydrography
- States and Counties

Landmass

# Using ACS geodatabase files in Arcmap

- Location of Census Geodatabases
- Downloading Geodatabase
- Joining feature class to tables
- Using Metadata tables to identify full descriptions

# Background Information

- Geodatabases bring together geography from the 2014 TIGER/Line Shapefiles and data from the 2010-2014 American Community Survey (ACS) 5-year estimates.
- The public and Census partners wanted an easier way to join ACS data to geographic boundaries
- 2010-2014 Geodatabases were created using ArcGIS 10.3
- The Census Bureau doesn't provide the ArcGIS software

# Census.gov

The screenshot shows the Census.gov website interface. At the top right, there is a search bar and links for "U.S. Department of Commerce | Blogs | Index A-Z | Glossary | FAQ". The main navigation bar includes "United States Census Bureau" logo, "Topics" (Population, Economy), "Geography" (Maps, Products), "Library" (Geographics, Publications), "Data" (Tools, Developers), "Surveys/Programs" (Respond, Survey Data), "Newsroom" (News, Blogs), and "About Us" (Our Research). The "Geography" menu item is circled in red. Below the navigation bar is a grid of buttons: "Geography Main", "About", "Education", "GSS Initiative", "Interactive Maps", "Maps & Data" (circled in red), "Metropolitan & Micropolitan", "Partnerships", "Reference", and "Research".

The main content area features a "2016 Census Test" section with a map of Harris County, Texas, and a text box stating: "The 2016 Census Test is being conducted in portions of Harris County, Texas, and Los Angeles County, Calif., and will allow the Census Bureau to study a variety of new methods and advanced technologies that are under consideration for the 2020 Census." Below this are three widgets: "Population Clock" showing U.S. Population (323,478,861) and World Population (7,322,308,310); "QUICKFACTS" with a "Did You Know" fact: "Population per square mile in Cook County, Illinois is 5,495.1"; and "U.S. Census Bureau Economic Indicators" showing Construction Spending (\$1,137.5 B, +0.3%), Rental Vacancy Rate (7.0%, -0.1%PTS), and Homeownership Rate (63.5%).

# TIGER Products

You are here: [Census.gov](#) > [Geography](#) > [Maps & Data](#)

## Geography

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### Maps & Data

Find geographic data and products such as the TIGER/Line Shapefiles, KMLs, TIGERweb, cartographic boundary files, geographic relationship files, and reference and thematic maps.



#### Maps

[Census Data Mapper](#)

The Census Data Mapper is a web mapping application intended to provide users with a simple interface to view, save and print county-based demographic maps of the United States.

#### Reference Maps

Reference maps are designed to show the geographic locations of features and boundaries. These maps usually contain features, such as roads and rivers, and boundaries, such as county, place, census tracts, or many more. These maps do not contain demographic data and are used solely to show the location of and relationship between boundaries and features. For interactive reference maps see TIGERweb.

#### Thematic Maps

Thematic maps are designed to show demographic, economic, business, or socioeconomic data about or characteristics of an area. Thematic maps tell a story spatially. They show a theme, or special topic, for a geographic area. Thematic maps may use features from reference maps as their base and then display additional data to tell a story about that area.

#### Geographic Data

**TIGER Products**

Geospatial Files and Applications from our MAF/TIGER database. Tools for use in GIS software, Web Mapping Services (WMS) to use in your applications, and browsers to view geographic data.

[Census Geocoder](#)

The Census Geocoder allows users to look up the geography an address is located within for up to 1,000 addresses at a time.

[Partnership Shapefiles](#)

The Partnership Shapefiles are used in our partner programs to share data with and capture data from our partners.

[Relationship Files](#)

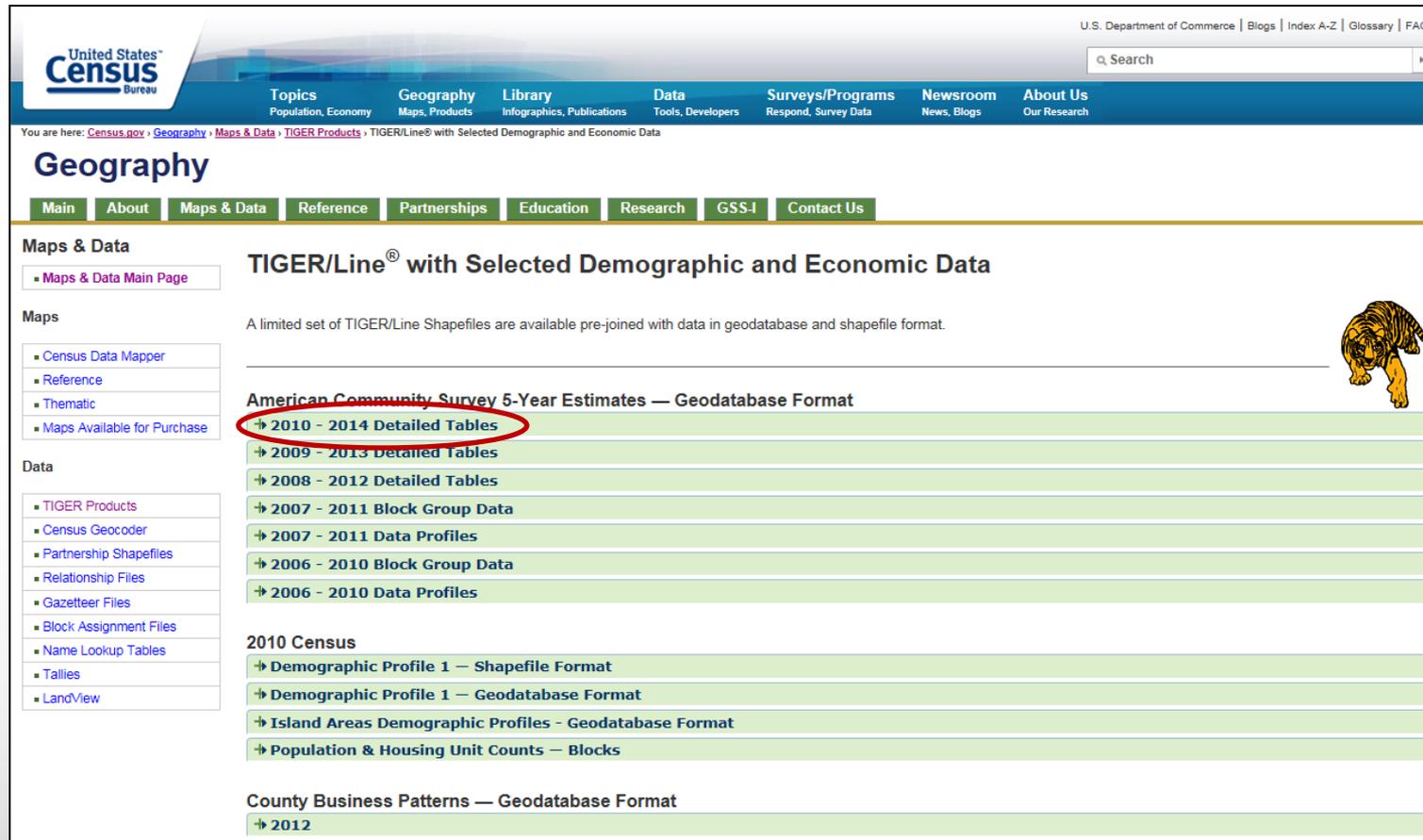
Relationship files help users compare different vintages of geography, such as Census 2000 blocks to 2010 Census blocks in text format.

# TIGER/Line with Selected Demographic and Economic Data

Which product should I use?

Product	Best For...	File Format	Type of Data	Level of Detail	Descriptive Attributes	Vintages Available
<u>TIGER/Line Shapefiles</u>	Most mapping projects--this is our <i>most comprehensive dataset</i> . Designed for use with GIS (geographic information systems).	Shapefiles (.shp) and database files (.dbf)	Boundaries, roads, address information, water features, and more	Full detail (not generalized)	Extensive	2006 - 2015, CD 113
<u>TIGER Geodatabases</u>	Useful for users needing national datasets or all major boundaries for by state. Designed for use in ArcGIS. Files are extremely large.	Geodatabase (.gdb)	Boundaries, roads, address information, water features, and more	Full detail (not generalized)	Limited	2013-2014
<u>TIGER/Line with Selected Demographic and Economic Data</u>	Data from selected attributes from the 2010 Census, 2006-2010 ACS 5-year estimates, 2007-2011 ACS 5-year estimates, 2008-2012 ACS 5-year estimates and County Business Patterns (CBP) for selected geographies. Designed for use with GIS.	Shapefiles (.shp) and Geodatabases	Boundaries, Population Counts, Housing Unit Counts, 2010 Census Demographic Profile 1 attributes, 2006-2010 ACS 5-year estimates data profiles, 2007-2011 ACS 5-year estimates data profiles, CBP data.	Full detail (not generalized)	Limited	2012 CBP, 2010, 2006-2010 ACS, 2007-2011 ACS, 2008-2012 ACS
<u>Cartographic Boundary Shapefiles</u>	Small scale (limited detail) mapping projects clipped to shoreline. Designed for thematic mapping using GIS.	Shapefiles (.shp)	Selected boundaries	Less detail (generalized)	Limited	2014, 2013, 2010, 2000, 1990
<u>KML - Cartographic Boundary Files</u>	Viewing data or creating maps using Google Earth, Google Maps, or other platforms that use KML.	KML (.kml)	Selected boundaries	Less detail (generalized)	Limited	2014, 2013
<u>TIGERweb</u>	Viewing spatial data online or streaming to your mapping application.	Interactive viewer, HTML data files, plus REST and WMS map services	Boundaries, roads, address information, water features, and more	Detailed	Extensive	2012, 2010, 2012 ACS and 2011 ACS

# 2010 – 2014 Detailed Tables



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## TIGER/Line® with Selected Demographic and Economic Data

A limited set of TIGER/Line Shapefiles are available pre-joined with data in geodatabase and shapefile format.

### American Community Survey 5-Year Estimates — Geodatabase Format

- 2010 - 2014 Detailed Tables**
- 2009 - 2013 Detailed Tables
- 2008 - 2012 Detailed Tables
- 2007 - 2011 Block Group Data
- 2007 - 2011 Data Profiles
- 2006 - 2010 Block Group Data
- 2006 - 2010 Data Profiles

### 2010 Census

- Demographic Profile 1 — Shapefile Format
- Demographic Profile 1 — Geodatabase Format
- Island Areas Demographic Profiles - Geodatabase Format
- Population & Housing Unit Counts — Blocks

### County Business Patterns — Geodatabase Format

- 2012



<http://www.census.gov/geo/maps-data/data/tiger-data.html>

# Choose Census Geography of Your Choice

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## TIGER/Line® with Selected Demographic and Economic Data

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### American Community Survey 5-Year Estimates — Geodatabase Format

← 2010 - 2014 Detailed Tables

These geodatabases bring together geography from the 2014 TIGER/Line Shapefiles and data from the 2010-2014 American Community Survey (ACS) 5-year estimates.

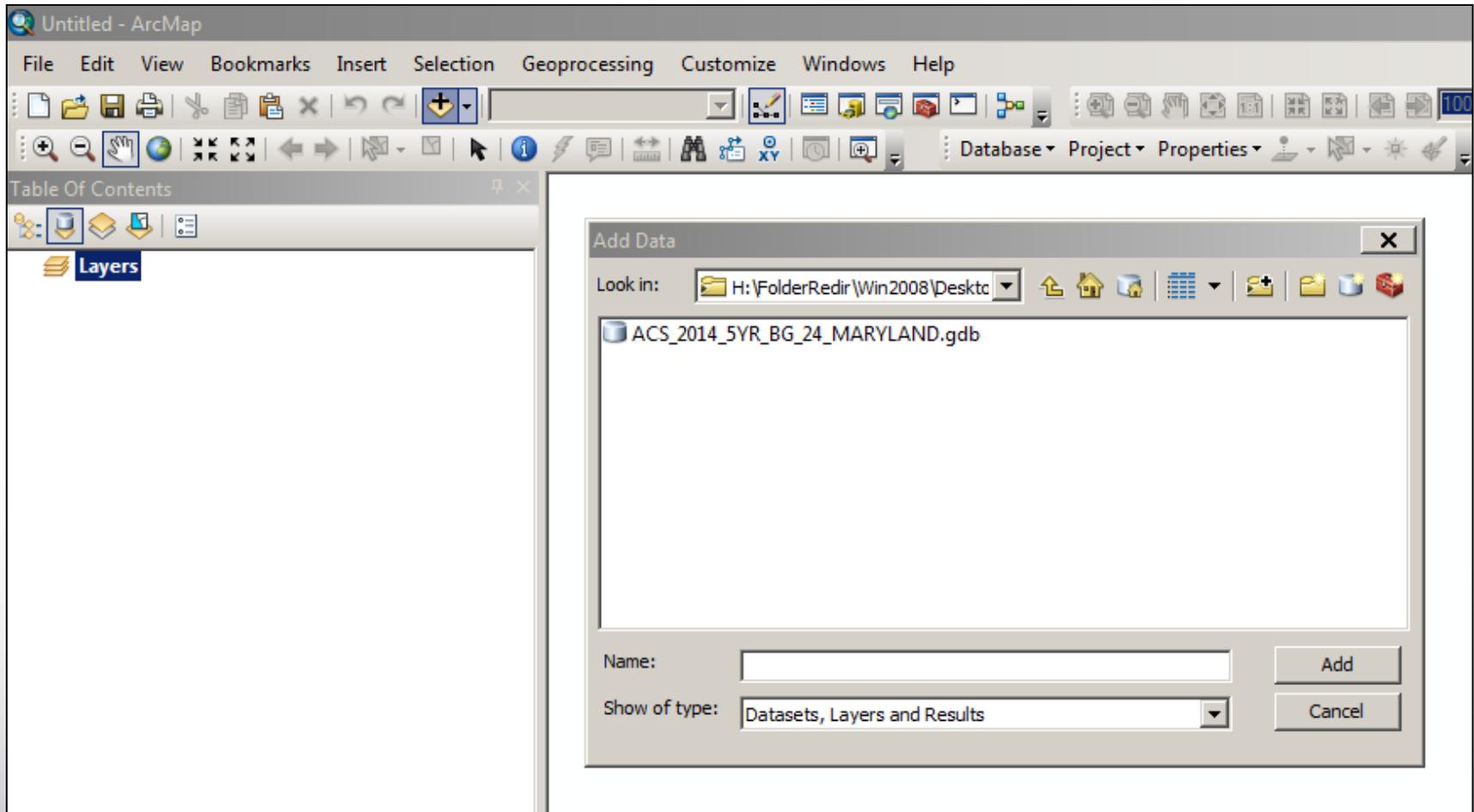
**Download the Geodatabases**

- American Indian Areas
  - [American Indian/Alaska Native/Native Hawaiian Area](#)
  - [Alaska Native Regional Corporation](#)
  - [Tribal Block Group](#)
  - [Tribal Census Tract](#)
- Block Group - select a state:**
  - Select a State
- Census Tract - select a state:
  - Select a State
- [Congressional District \(114th Congress\)](#)
- Core Based Statistical Areas (CBSAs)
  - [Metropolitan/Micropolitan Statistical Area](#)
  - [Metropolitan Division](#)
  - [Combined Statistical Area](#)
  - [New England City and Town Area](#)
  - [New England City and Town Area Division](#)
  - [Combined New England City and Town Area](#)
- [County](#)
- County Subdivision - select a state:
  - Select a State
- [Place](#)
- [Public Use Microdata Area \(PUMA\)](#)
- School Districts - (Note: there is no geographic component for "Remainder of State" demographic data presented in these geodatabases.)

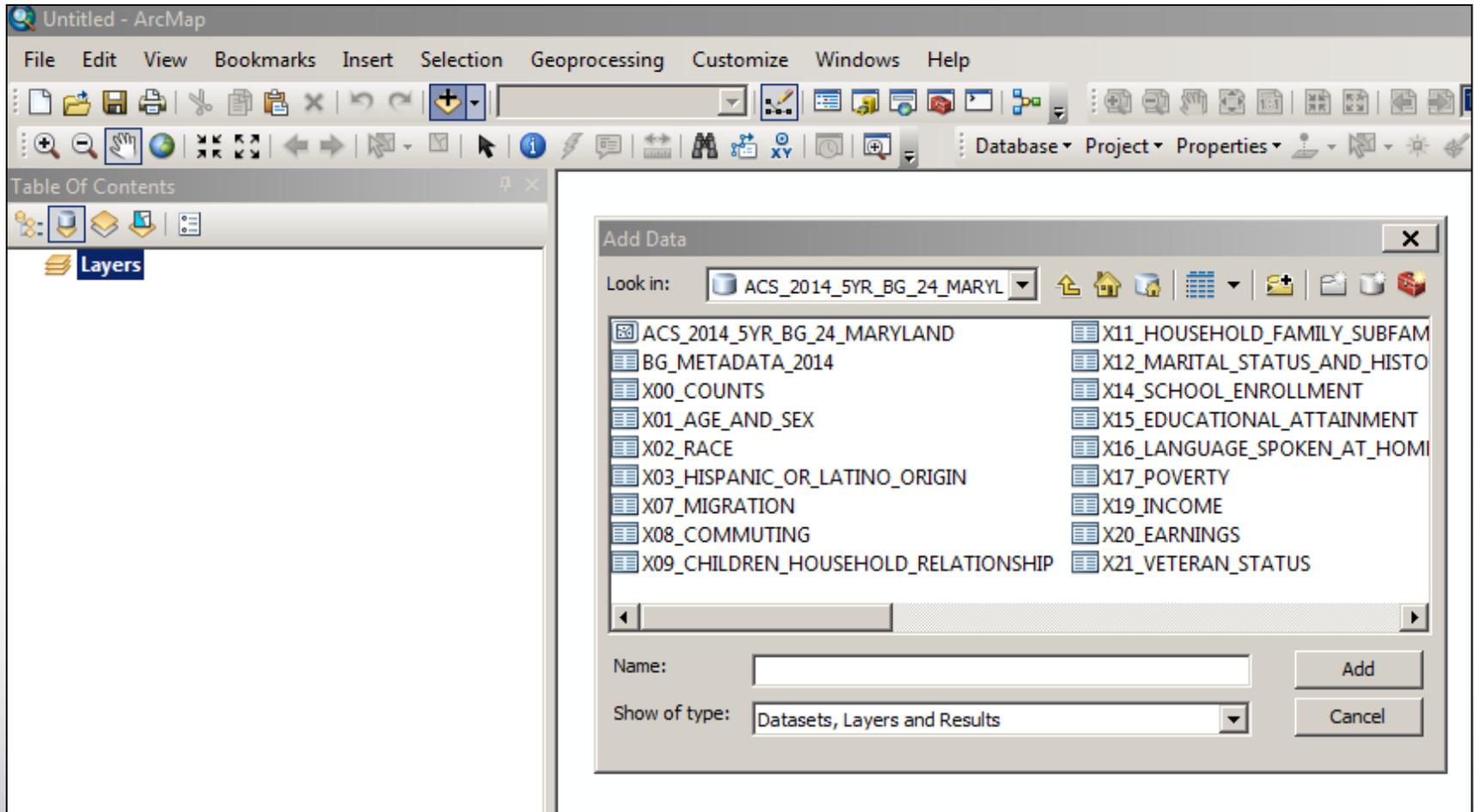
# Zipped Files Once Download is Complete

Name	Date modified	Type
 ACS_2014_5YR_BG_24_MARYLAND.gdb	5/3/2016 3:19 PM	File folder

# Add Data Button to Upload GDB



# Choose Feature Class and Tables



# Feature Class, Age and Sex, & Income

Untitled - ArcMap

File Edit View Bookmarks Insert Selection Geoprocessing Customize Windows Help

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Layers

Add Data

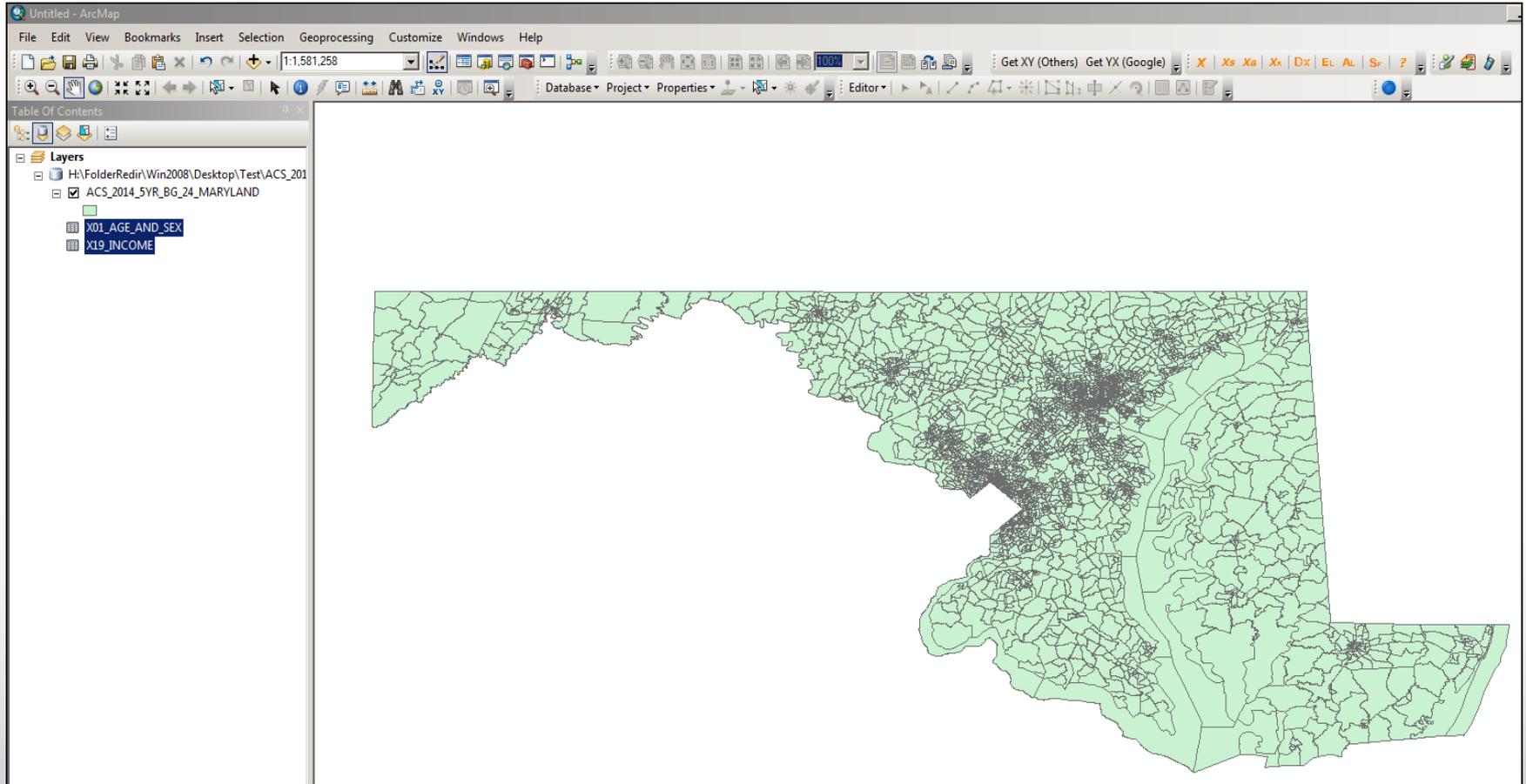
Look in: ACS\_2014\_5YR\_BG\_24\_MARYL

ACS_2014_5YR_BG_24_MARYLAND	X11_HOUSEHOLD_FAMILY_SUBFAM
BG_METADATA_2014	X12_MARITAL_STATUS_AND_HISTO
X00_COUNTS	X14_SCHOOL_ENROLLMENT
X01_AGE_AND_SEX	X15_EDUCATIONAL_ATTAINMENT
X02_RACE	X16_LANGUAGE_SPOKEN_AT_HOMI
X03_HISPANIC_OR_LATINO_ORIGIN	X17_POVERTY
X07_MIGRATION	X19_INCOME
X08_COMMUTING	X20_EARNINGS
X09_CHILDREN_HOUSEHOLD_RELATIONSHIP	X21_VETERAN_STATUS

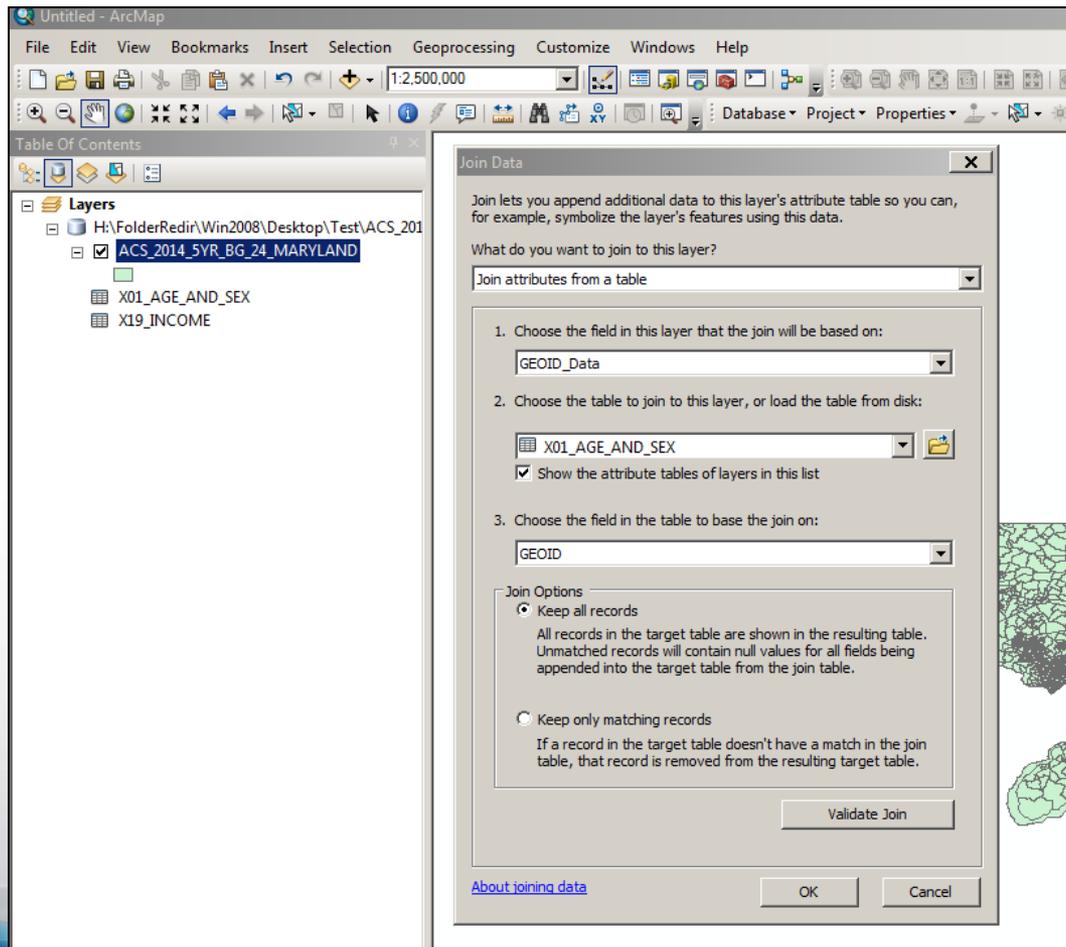
Name: ACS\_2014\_5YR\_BG\_24\_MARYLAND; X01\_AGE\_AND\_SEX; ; Add

Show of type: Datasets, Layers and Results Cancel

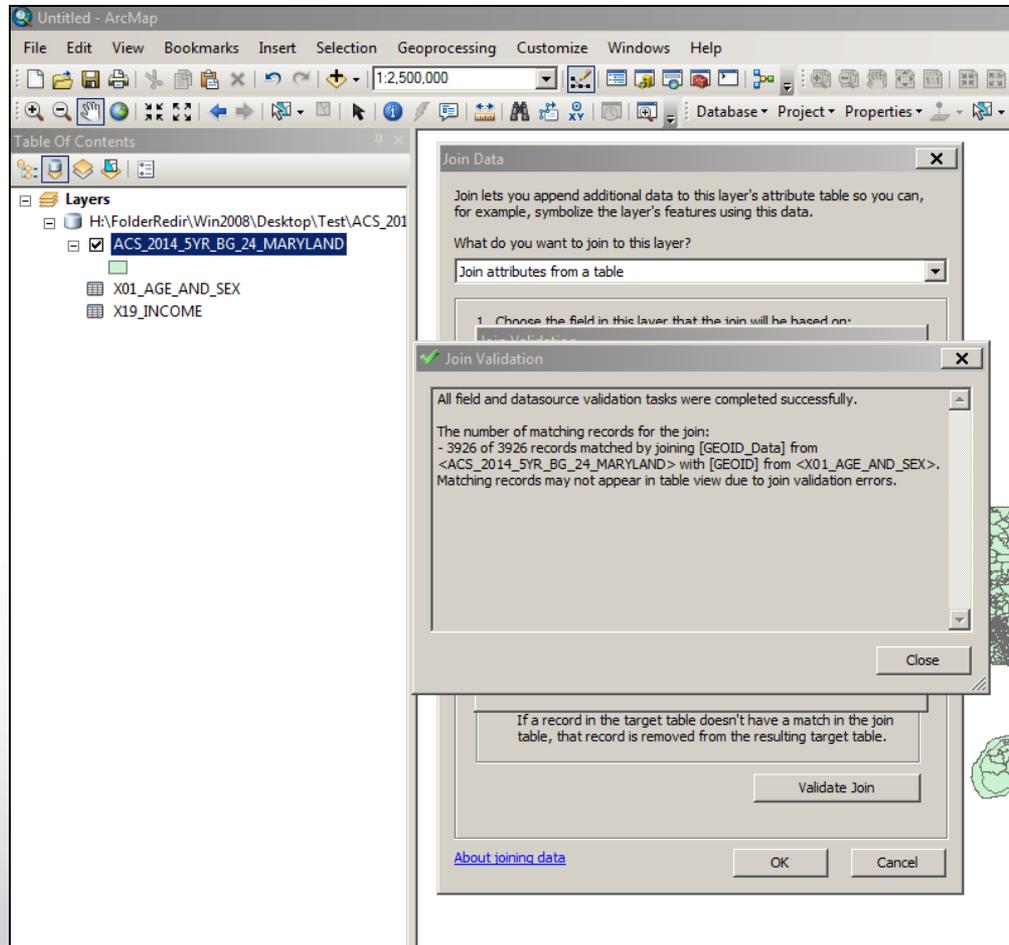
# View in ArcMap



# Joining the Table to the Feature Class



# Validation Check



# Attribute Table When Join Successfully Occurs

ACS_2014_5YR_BG_24_MARYLAND							
	GEOID*	B01001e1	B01001m1	B01001e2	B01001m2	B01001e3	B01001m3
▶	15000US240054112023	863	226	454	156	12	18
	15000US240054111011	2320	203	1106	114	11	12
	15000US240054025033	1725	514	777	268	188	178
	15000US240054082001	1199	232	600	134	3	6
	15000US240054514022	690	299	276	113	33	39
	15000US240054401003	1054	255	525	145	28	30
	15000US240054208003	1234	345	573	199	10	17
	15000US240054906022	1950	264	891	209	16	24
	15000US240054060003	1666	318	925	212	24	28
	15000US240054060004	1674	336	899	217	20	32
	15000US240054111022	573	179	273	92	0	12
	15000US240054015031	1659	321	808	179	37	40
	15000US240253037002	1043	228	480	106	34	38
	15000US240253017022	2521	528	1304	321	82	95
	15000US240253042021	2303	355	1168	209	0	12
	15000US240054405002	462	133	252	89	13	19
	15000US240317010011	3125	344	1488	245	132	61
	15000US240317010013	762	124	363	70	0	12
	15000US240317010022	1797	234	829	127	62	53
	15000US240317010023	823	155	413	96	26	39

# Metadata – Example 1

BG_METADATA_2014		
OBJECTID*	Short_Name	
1	B00001e1	UNWEIGHTED SAMPLE COUNT OF THE POPULATION: Total: Total population -- (Estimate)
2	B00001m1	UNWEIGHTED SAMPLE COUNT OF THE POPULATION: Total: Total population -- (Margin of Error)
3	B00002e1	UNWEIGHTED SAMPLE HOUSING UNITS: Total: Housing units -- (Estimate)
4	B00002m1	UNWEIGHTED SAMPLE HOUSING UNITS: Total: Housing units -- (Margin of Error)
5	B01001e1	SEX BY AGE: Total: Total population -- (Estimate)
6	B01001m1	SEX BY AGE: Total: Total population -- (Margin of Error)
7	B01001e2	SEX BY AGE: Male: Total population -- (Estimate)
8	B01001m2	SEX BY AGE: Male: Total population -- (Margin of Error)
9	B01001e3	SEX BY AGE: Male: Under 5 years: Total population -- (Estimate)
10	B01001m3	SEX BY AGE: Male: Under 5 years: Total population -- (Margin of Error)
11	B01001e4	SEX BY AGE: Male: 5 to 9 years: Total population -- (Estimate)
12	B01001m4	SEX BY AGE: Male: 5 to 9 years: Total population -- (Margin of Error)
13	B01001e5	SEX BY AGE: Male: 10 to 14 years: Total population -- (Estimate)
14	B01001m5	SEX BY AGE: Male: 10 to 14 years: Total population -- (Margin of Error)
15	B01001e6	SEX BY AGE: Male: 15 to 17 years: Total population -- (Estimate)
16	B01001m6	SEX BY AGE: Male: 15 to 17 years: Total population -- (Margin of Error)
17	B01001e7	SEX BY AGE: Male: 18 and 19 years: Total population -- (Estimate)
18	B01001m7	SEX BY AGE: Male: 18 and 19 years: Total population -- (Margin of Error)
19	B01001e8	SEX BY AGE: Male: 20 years: Total population -- (Estimate)
20	B01001m8	SEX BY AGE: Male: 20 years: Total population -- (Margin of Error)
21	B01001e9	SEX BY AGE: Male: 21 years: Total population -- (Estimate)
22	B01001m9	SEX BY AGE: Male: 21 years: Total population -- (Margin of Error)
23	B01001e10	SEX BY AGE: Male: 22 to 24 years: Total population -- (Estimate)
24	B01001m10	SEX BY AGE: Male: 22 to 24 years: Total population -- (Margin of Error)
25	B01001e11	SEX BY AGE: Male: 25 to 29 years: Total population -- (Estimate)
26	B01001m11	SEX BY AGE: Male: 25 to 29 years: Total population -- (Margin of Error)
27	B01001e12	SEX BY AGE: Male: 30 to 34 years: Total population -- (Estimate)
28	B01001m12	SEX BY AGE: Male: 30 to 34 years: Total population -- (Margin of Error)
29	B01001e13	SEX BY AGE: Male: 35 to 39 years: Total population -- (Estimate)
30	B01001m13	SEX BY AGE: Male: 35 to 39 years: Total population -- (Margin of Error)
31	B01001e14	SEX BY AGE: Male: 40 to 44 years: Total population -- (Estimate)

# Metadata – Example 2

Short_Name	Full_Name
B00001e1	UNWEIGHTED SAMPLE COUNT OF THE POPULATION: Total: Total population -- (Estimate)
B00001m1	UNWEIGHTED SAMPLE COUNT OF THE POPULATION: Total: Total population -- (Margin of Error)
B00002e1	UNWEIGHTED SAMPLE HOUSING UNITS: Total: Housing units -- (Estimate)
B00002m1	UNWEIGHTED SAMPLE HOUSING UNITS: Total: Housing units -- (Margin of Error)
B01001e1	SEX BY AGE: Total: Total population -- (Estimate)
B01001m1	SEX BY AGE: Total: Total population -- (Margin of Error)
B01001e2	SEX BY AGE: Male: Total population -- (Estimate)
B01001m2	SEX BY AGE: Male: Total population -- (Margin of Error)
B01001e3	SEX BY AGE: Male: Under 5 years: Total population -- (Estimate)
B01001m3	SEX BY AGE: Male: Under 5 years: Total population -- (Margin of Error)
B01001e4	SEX BY AGE: Male: 5 to 9 years: Total population -- (Estimate)
B01001m4	SEX BY AGE: Male: 5 to 9 years: Total population -- (Margin of Error)
B01001e5	SEX BY AGE: Male: 10 to 14 years: Total population -- (Estimate)
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B01001e6	SEX BY AGE: Male: 15 to 17 years: Total population -- (Estimate)
B01001m6	SEX BY AGE: Male: 15 to 17 years: Total population -- (Margin of Error)
B01001e7	SEX BY AGE: Male: 18 and 19 years: Total population -- (Estimate)
B01001m7	SEX BY AGE: Male: 18 and 19 years: Total population -- (Margin of Error)
B01001e8	SEX BY AGE: Male: 20 years: Total population -- (Estimate)
B01001m8	SEX BY AGE: Male: 20 years: Total population -- (Margin of Error)
B01001e9	SEX BY AGE: Male: 21 years: Total population -- (Estimate)
B01001m9	SEX BY AGE: Male: 21 years: Total population -- (Margin of Error)
B01001e10	SEX BY AGE: Male: 22 to 24 years: Total population -- (Estimate)
B01001m10	SEX BY AGE: Male: 22 to 24 years: Total population -- (Margin of Error)
B01001e11	SEX BY AGE: Male: 25 to 29 years: Total population -- (Estimate)
B01001m11	SEX BY AGE: Male: 25 to 29 years: Total population -- (Margin of Error)
B01001e12	SEX BY AGE: Male: 30 to 34 years: Total population -- (Estimate)
B01001m12	SEX BY AGE: Male: 30 to 34 years: Total population -- (Margin of Error)
B01001e13	SEX BY AGE: Male: 35 to 39 years: Total population -- (Estimate)
B01001m13	SEX BY AGE: Male: 35 to 39 years: Total population -- (Margin of Error)
B01001e14	SEX BY AGE: Male: 40 to 44 years: Total population -- (Estimate)
B01001m14	SEX BY AGE: Male: 40 to 44 years: Total population -- (Margin of Error)
B01001e15	SEX BY AGE: Male: 45 to 49 years: Total population -- (Estimate)
B01001m15	SEX BY AGE: Male: 45 to 49 years: Total population -- (Margin of Error)
B01001e16	SEX BY AGE: Male: 50 to 54 years: Total population -- (Estimate)
B01001m16	SEX BY AGE: Male: 50 to 54 years: Total population -- (Margin of Error)
B01001e17	SEX BY AGE: Male: 55 to 59 years: Total population -- (Estimate)
B01001m17	SEX BY AGE: Male: 55 to 59 years: Total population -- (Margin of Error)
B01001e18	SEX BY AGE: Male: 60 and 61 years: Total population -- (Estimate)
B01001m18	SEX BY AGE: Male: 60 and 61 years: Total population -- (Margin of Error)

# Common Mistakes

- When joining tables to the feature class, use the GEOID\_Data field NOT the GEOID field
- Metadata can be viewed as a table or text document

# Questions?

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**(818)267-1724**

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