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.

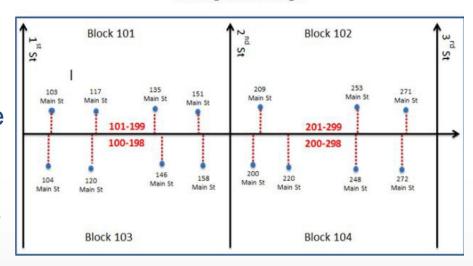
Output:

- 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.

Building Address Ranges





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

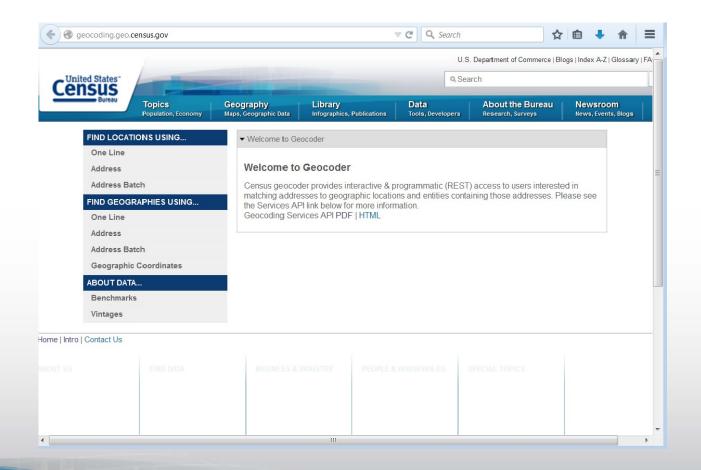


Results for Find Geographies Using

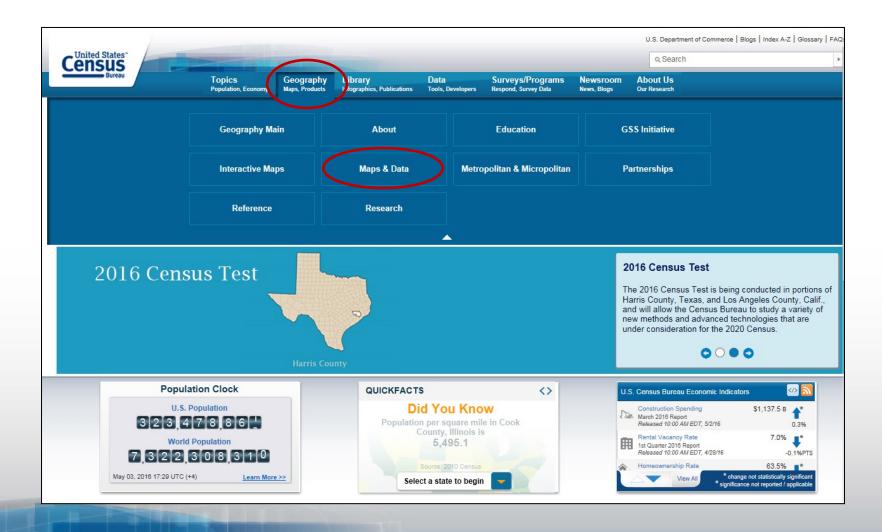
- Latitude/Longitude
- State
- County
- Census Tract
- Block
- For more geographies in the return, add: "&layers=all" at the end of the URL



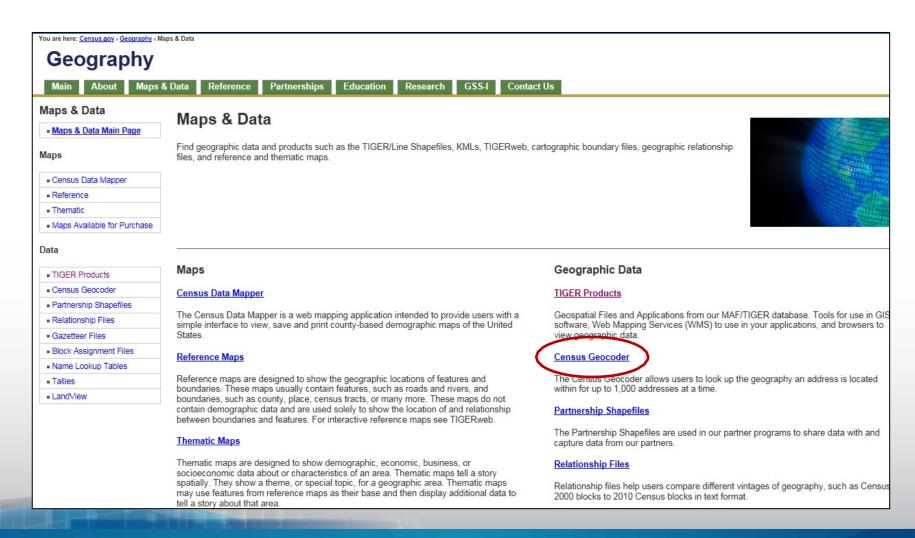
Geocoder - Demo



Census.gov: Maps and Data



Maps and Data: Geocoder



Geocoder Information Page



Tou are nere. Census gov) Geography (maps & Data) Census Geocol

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

Census Geocoder

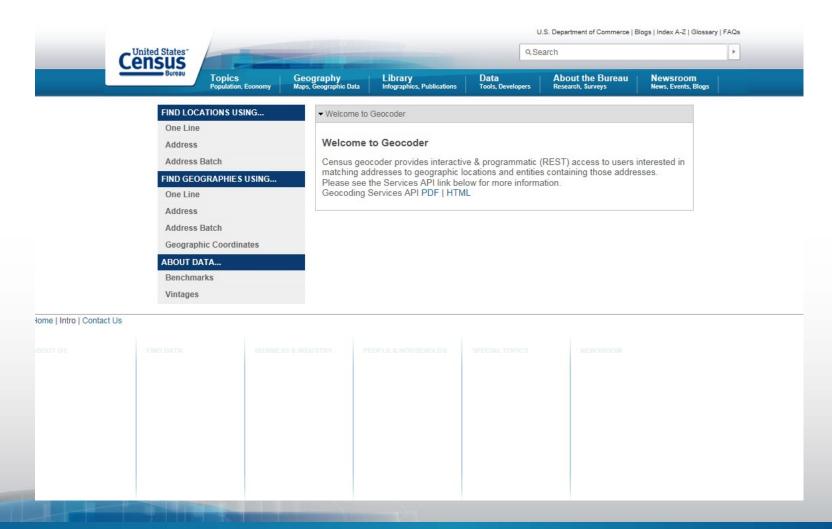
The <u>Census Geocoder</u> is an address look-up tool that converts your address to an approximate coordinate (latitude/longitude) and returns information about the address range that includes the address and the census geography the address is within. The geocoder is available as a web interface and 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



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

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:

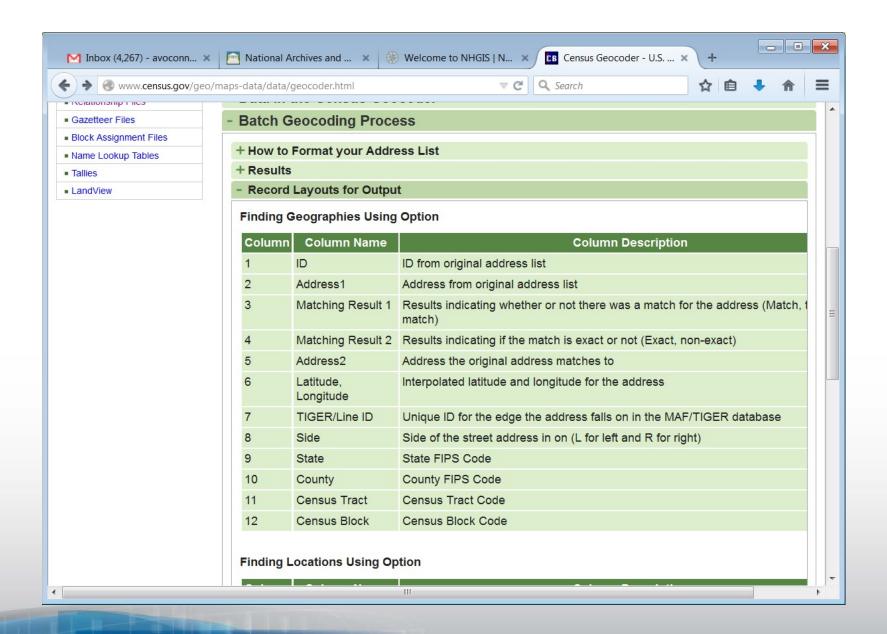
Street Name: PENNSYLVANIA

SuffixType: AVE SuffixDirection: NW SuffixQualifier:

City: WASHINGTON

State: DC Zip: 20502





Using the Geocoder - LUCA

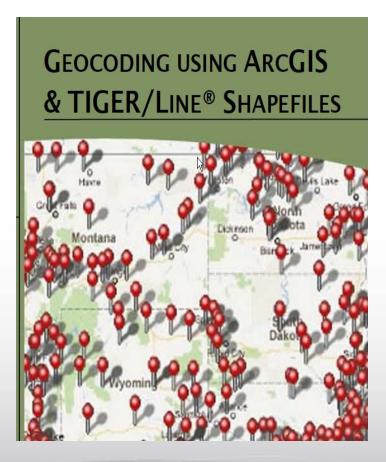
- Format and geocode your local address list
- Compare to Census block counts to determine focus areas

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	С	-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	С	-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/ed ucation/howtos.html

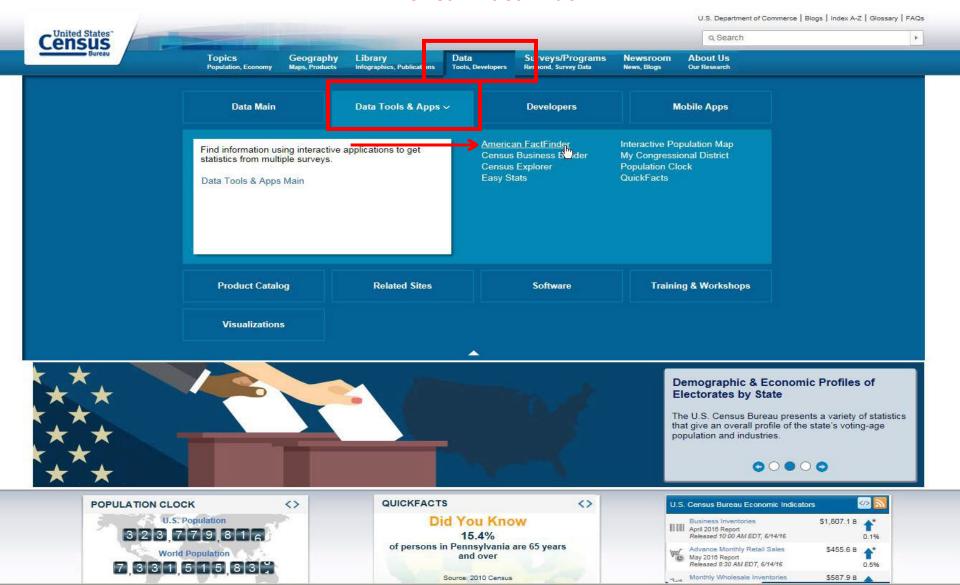
American FactFinder Mapping Tool

- 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

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



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





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

GUIDED SEARCH

MAIN 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, ...)

To search for tables and other files in American FactFinder:

Enter search terms and an optional geography and click GO



ADVANCED SEARCH

DOWNLOAD CENTER

-- or --

COMMUNITY FACTS

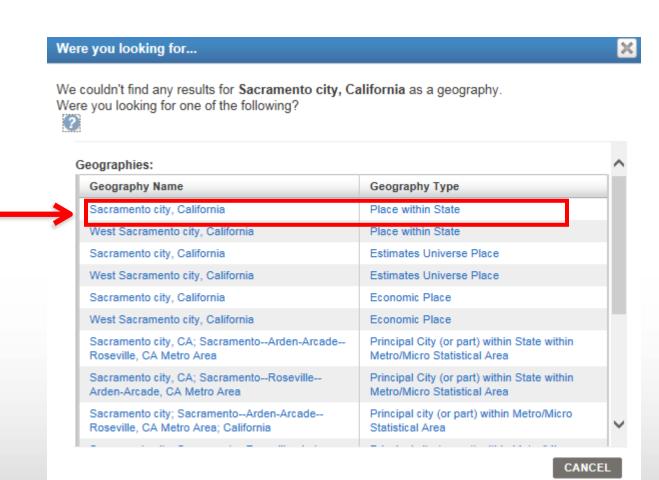
Select from Topics, Race and Ethnic Groups, Industry Codes, EEO Occupation Codes.

- these are added to 'Your Selections'
- · the Search Results are updated
- Next, select Geographies (states, counties, cities, towns, etc.)
 - these are added to 'Your Selections'
 - · the Search Results are updated
- Select one or more Search Results and click View

EEO Occupation Codes

(executives, analysts, ...)

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



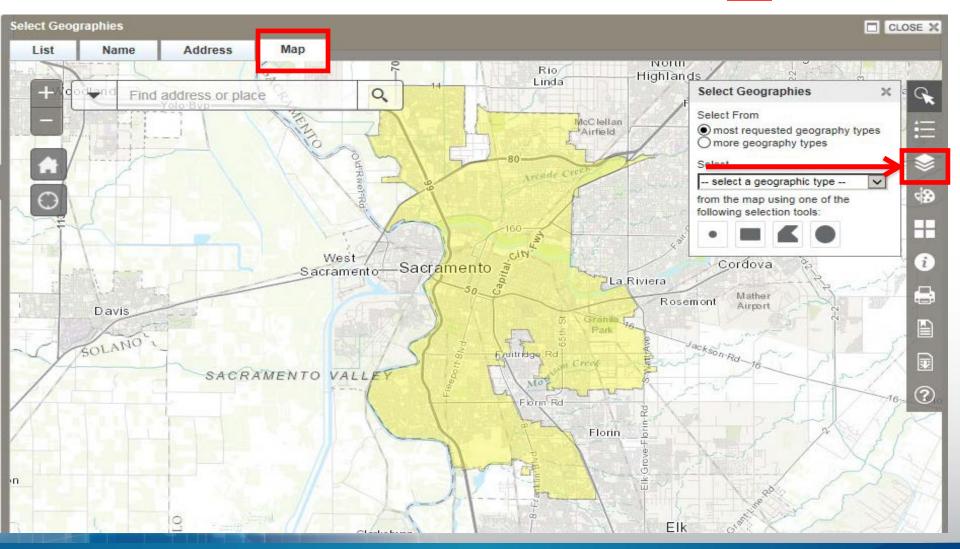


Note: 'Sacramento City' has been added to 'Your Selections' Click the 'Geographies' Tab

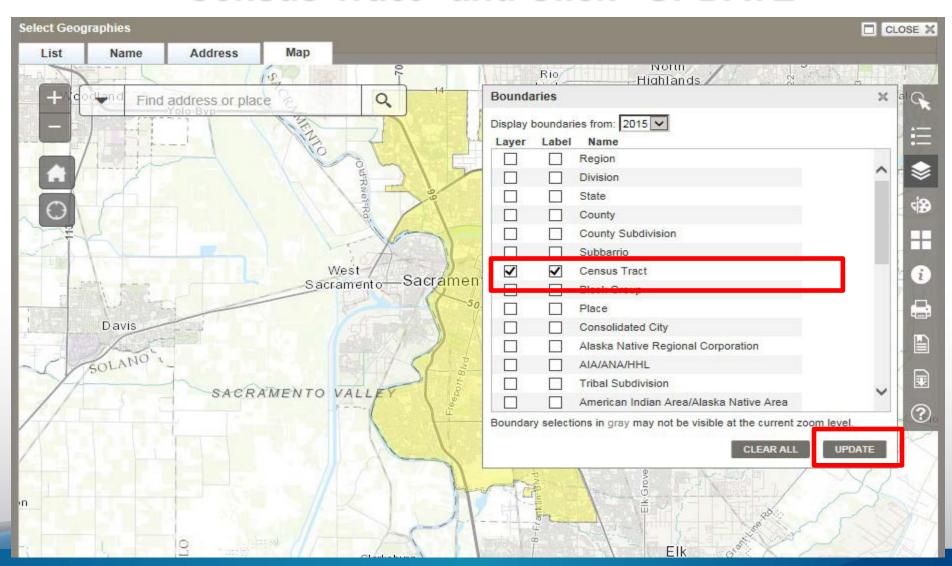
Search - Use the options on the left (topics, geographies, ...) to narrow your search results **Your Selections** Search Results: 1-25 of 32,233 tables and other products match 'Your Selections' Search using... topic or table name state, county or place (optional) Refine your search results: Place within State GO Sacramento city, California 🚯 ♠ topics ○ race/ancestry ○ industries ○ occupations clear all selections and start a new search Selected: Download Compare Clear All load search | save search Search using the options below: Table, File or Document Title ID \$ **Topics** S0101 AGE AND SEX (age, income, year, dataset, ...) S0102 POPULATION 60 YEARS AND OVER IN THE UNITED STATES Geographies S0103 POPULATION 65 YEARS AND OVER IN THE UNITED STATES (states, counties, places, ...) S0501 SELECTED CHARACTERISTICS OF THE NATIVE AND FOREIGN-BORN POPULATIONS Race and Ethnic Groups S0502 SELECTED CHARACTERISTICS OF THE FOREIGN-BORN POPULATION BY PERIOD OF ENTRY INTO THE UNITED STATES (race, ancestry, tribe) S0503 SELECTED CHARACTERISTICS OF THE FOREIGN-BORN POPULATION BY REGION OF BIRTH: EUROPE **Industry Codes** S0504 SELECTED CHARACTERISTICS OF THE FOREIGN-BORN POPULATION BY REGION OF BIRTH: AFRICA, NORTHERN AMERICA, AND OC (NAICS industry, ...) S0505 SELECTED CHARACTERISTICS OF THE FOREIGN-BORN POPULATION BY REGION OF BIRTH: ASIA **EEO Occupation Codes** S0506 SELECTED CHARACTERISTICS OF THE FOREIGN-BORN POPULATION BY REGION OF BIRTH: LATIN AMERICA (executives, analysts, ...) S0601 SELECTED CHARACTERISTICS OF THE TOTAL AND NATIVE POPULATIONS IN THE UNITED STATES S0701 GEOGRAPHIC MOBILITY BY SELECTED CHARACTERISTICS IN THE UNITED STATES \$0801 COMMUTING CHARACTERISTICS BY SEX

Click the 'Map' Tab. Click the Boundaries Icon

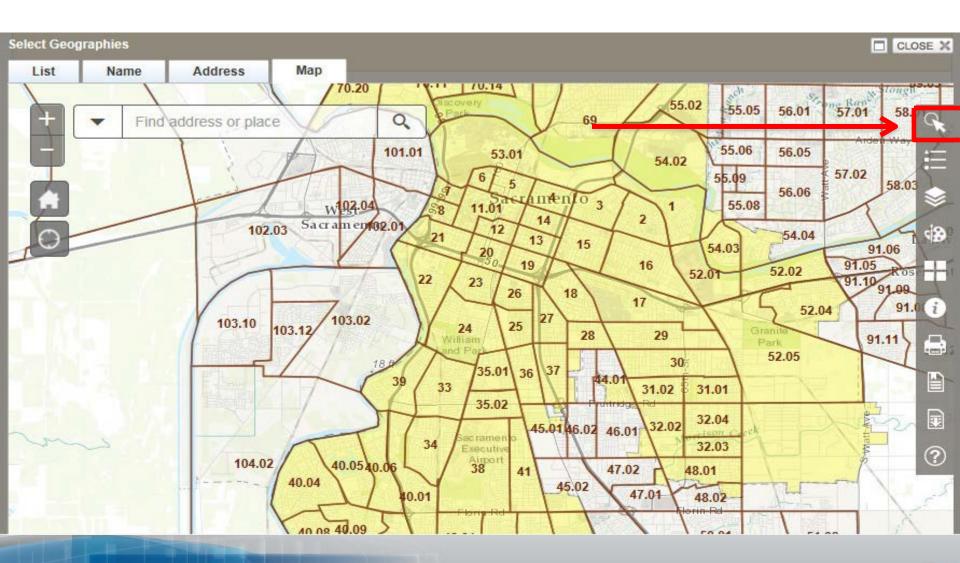




Check the Layer and Label Boxes next to 'Census Tract' and Click 'UPDATE'

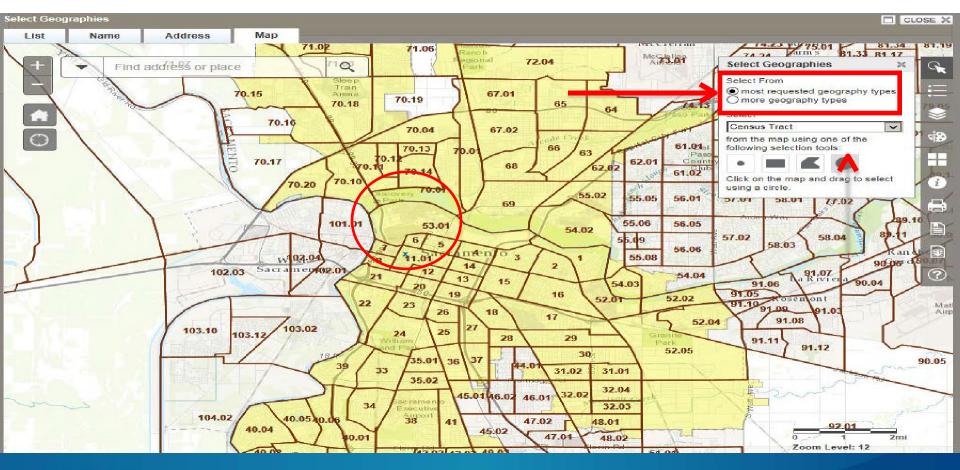


Click the Select Geographies Icon

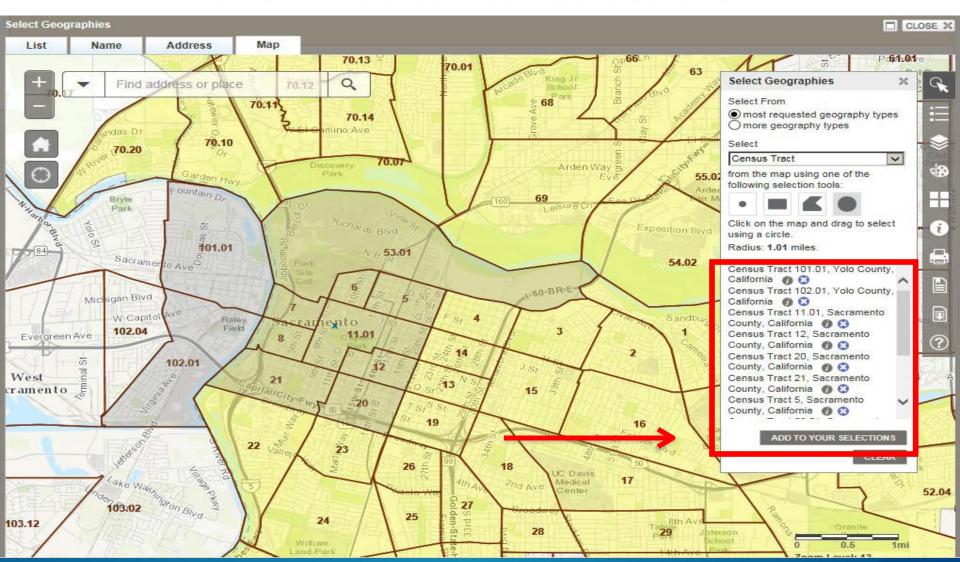




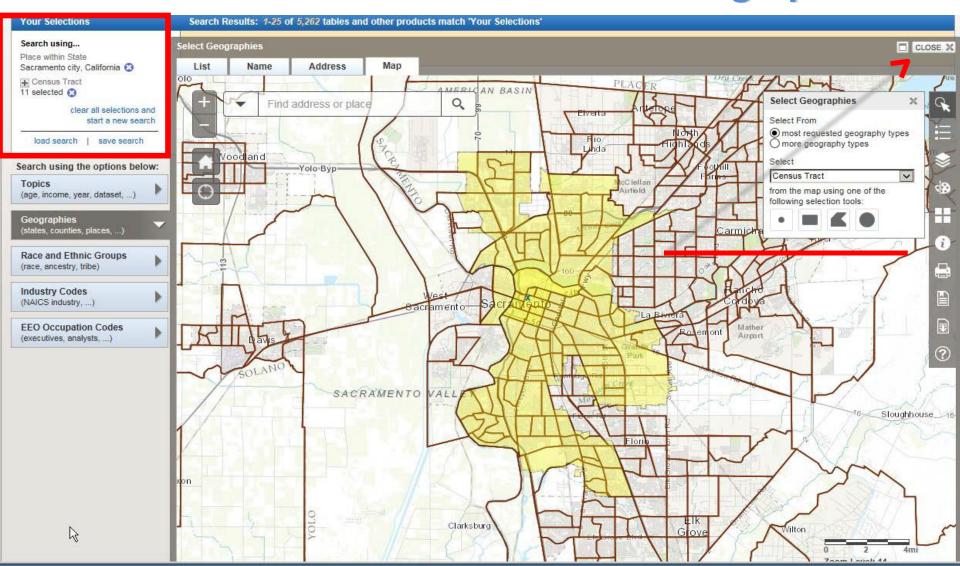
Use the search bar to center on your location. Select 'Census Tract' form drop-down menu and select a mapping tool. Click on the map and drag to select census tracts.



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

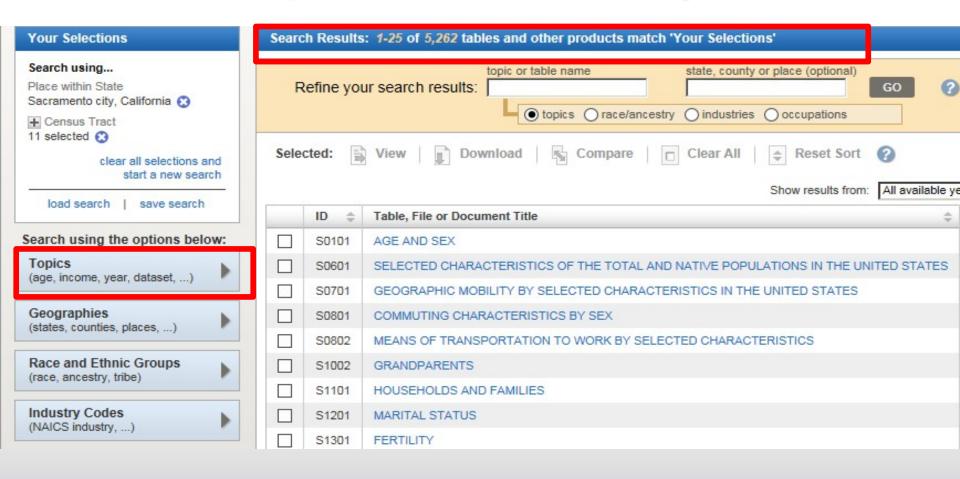


Note: The Census Tracts have been added to 'Your Selections' Click 'CLOSE X' to close 'Select Geographies'

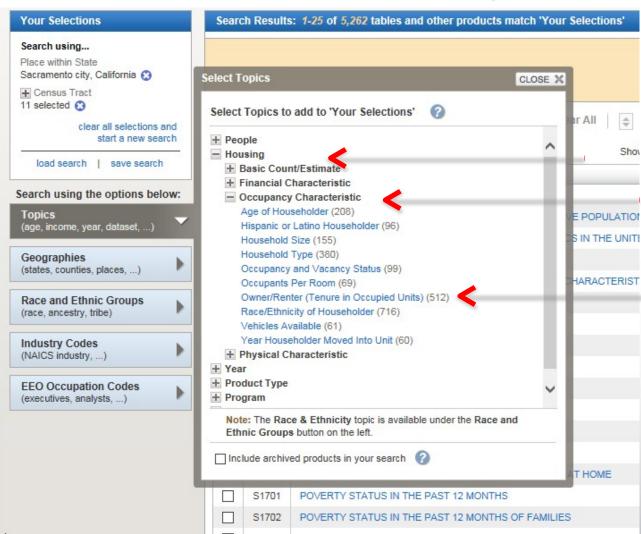


Note: There are 5,262 tables available in Search Results

Click on 'Topics' to further refine your search

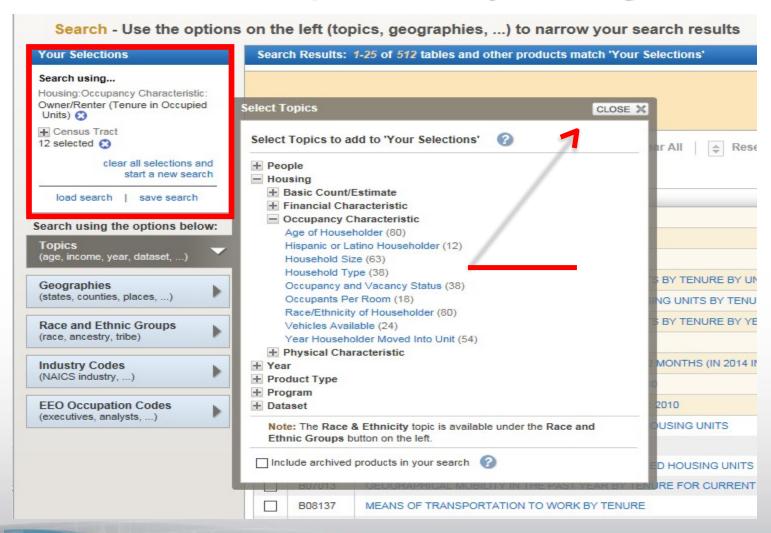


Click on 'Housing', Click on 'Occupancy Characteristics' and Click on 'Owner/Renter (Tenure in Occupied units)'



,

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



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

Search - Use the options on the left (topics, geographies, ...) to narrow your search results **Your Selections** Search Results: 1-25 of 512 tables and other products match 'Your Selections' Search using... topic or table name state, county or place (optional) Refine your search results: Housing:Occupancy Characteristic: GO Owner/Renter (Tenure in Occupied Units) (3) ● topics ○ race/ancestry ○ industries ○ occupations Place within State Sacramento city, California (3) Download Compare Reset Sort (2) 1 Selected: View Clear All → Census Tract 11 selected (3) Suggested search results for Owner/Renter (Tenure in Occupied Units) clear all selections and ID Table, File or Document Title start a new search B25003 TENURE ** load search | save search B11012 HOUSEHOLD TYPE BY TENURE Search using the options below: B25032 TENURE BY UNITS IN STRUCTURE Topics B25033 🌟 TOTAL POPULATION IN OCCUPIED HOUSING UNITS BY TENURE BY UNITS IN STRUCTURE (age, income, year, dataset, ...) B25010 AVERAGE HOUSEHOLD SIZE OF OCCUPIED HOUSING UNITS BY TENURE. Geographies B25026 👚 TOTAL POPULATION IN OCCUPIED HOUSING UNITS BY TENURE BY YEAR HOUSEHOLDER MOVED INTO UNIT (states, counties, places, ...) B25036 TENURE BY YEAR STRUCTURE BUILT Race and Ethnic Groups B25118 TENURE BY HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2014 INFLATION-ADJUSTED DOLLARS) (race, ancestry, tribe) QT-H2 Tenure, Household Size, and Age of Householder: 2010 **Industry Codes** QT-H3 (NAICS industry, ...) Household Population and Household Type by Tenure: 2010. S2502 DEMOGRAPHIC CHARACTERISTICS FOR OCCUPIED HOUSING UNITS EEO Occupation Codes (executives, analysts, ...) ~ S2503 FINANCIAL CHARACTERISTICS

Click 'Create a Map'

Table View !!!

Actions:

Modify Table

Add/Remove Geographies

<< 1 - 18 of 72 >>>



Bookmark/Save



Download



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 office

Versions of this table are available for the following years:

> 2014 2013

2012 2011 2010

	Census Tract 5, Sacramento County, California						
	Occupied housing units		Owner-occupied housing units		Renter-occupied housing units		Oc
0 of Subject	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Esti
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	> >>
------	------	-------	------

	Census Tract 5, Sacramento County, California						
		ed housing inits	Owner-occupied housing units		Renter-occupied housing units		
Subject	Estimate	Margin of Error	Estimate	Margin of Erro	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	4.004		
\$1,000 to \$1,499	25.3%	+/-5.5	9.8%	+/-8.7	27.9%	+/-6.	
\$1,500 to \$1,999	8.9%	+/-3.6	17.0%	+/-10.8	7.6%	+/-4.	
\$2,000 or more	8.2%	+/-4.2	44.2%	+/-15.9	2.2%	+/-3.	
No cash rent	2.3%	+/-2.4	(X)	(X	2.7%	+/-2.	
Median (dollars)	872	+/-68	1,738	+/-487	004	-77-SI	

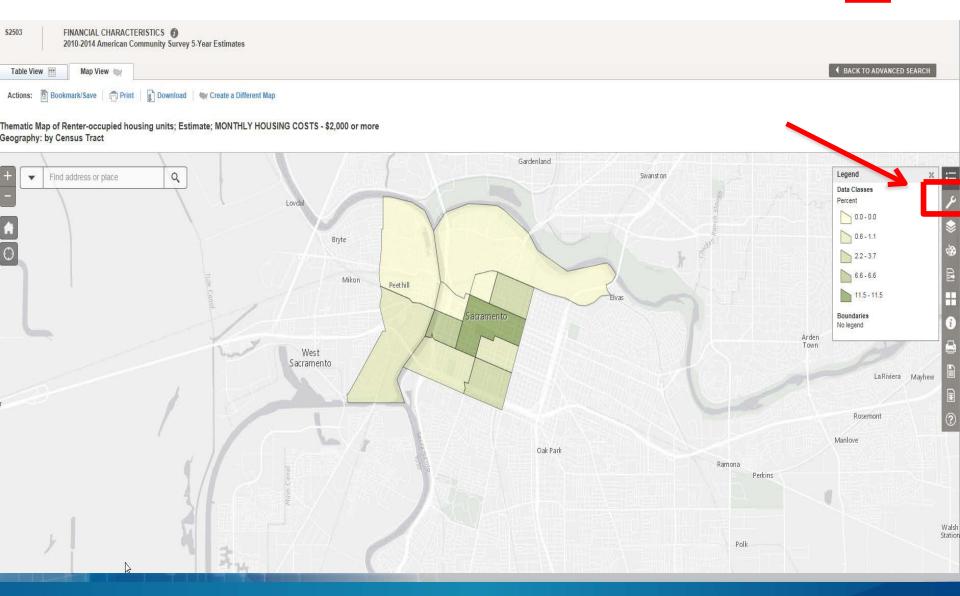


Click 'Show Map'

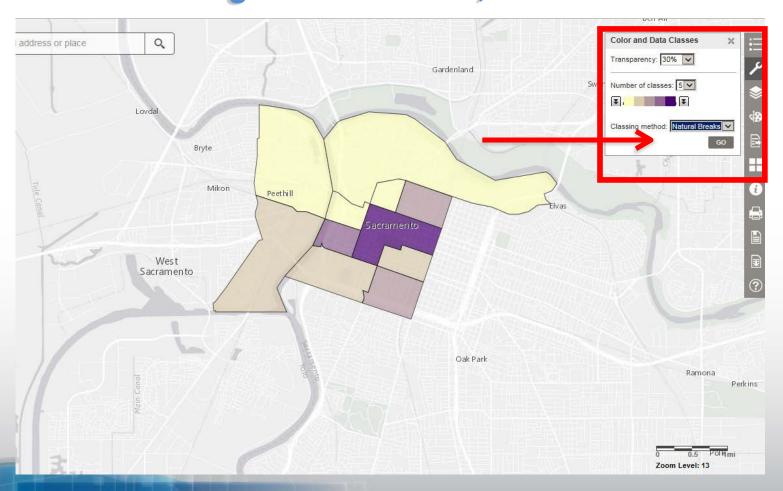
marginioi				maryiii vi		maryiii vi		
Error	Estimate	Margin of Error	Estimate	Error	Estimate	Error	Estimate	N
+/-111	265	+/-85	1,570	+/-123	632	+/-64	39	
+/-3.8	0.0%	+/-12.4	8.7%	+/-4.4	8.5%	+/-6.5	0.0%	
+/-2.1	0.0%	+/-12.4	3.1%	+/-2.4	11.7%	+/-7.2	0.0%	
+/-4.1	Select	a Data Value t	о Мар			3. A	0.0%	
+/-3.3						.6	0.0%	
+/-3.6	Tho.	selected data va	luce to mar	a aro:		.9	0.0%	
+/-3.1		ter-occupied ho			NTIII V	.0	30.8%	
+/-4.1		USING COSTS -				.6	0.0%	П
+/-5.4	"	31110 00313-	\$2,000 OI I	note by census	Tiact	.2	12.8%	
+/-4.7						.9	0.0%	
+/-3/7				SHOW MAP	CAN	CEL .6	12.8%	
+/-1/15	3.070	11-0.2	1.070	-7-1.0	0.070	.,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%	

Click on 'Colors and Data Classes' Icon



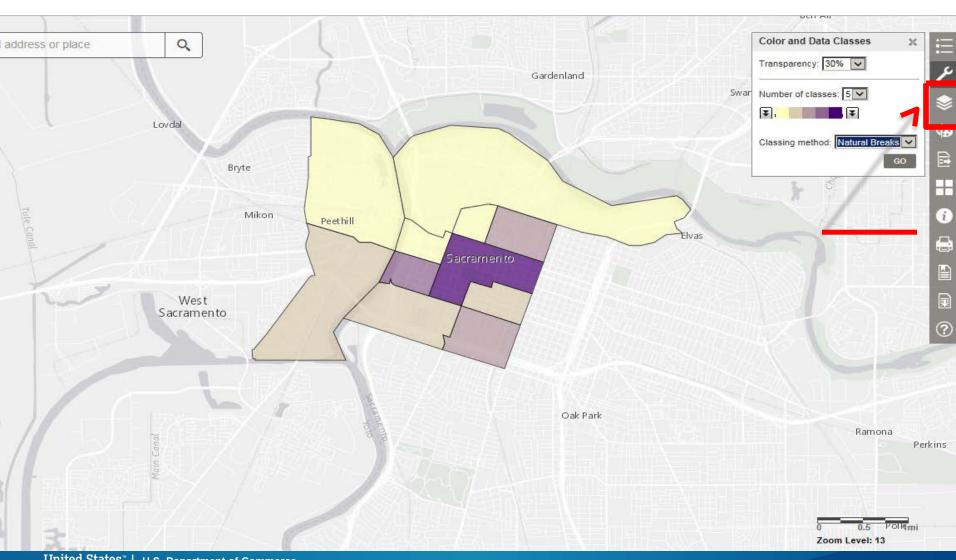


Note: You can change the transparency to 0% to make colors on the map darker Under 'Colors and Data Classes' you can change the transparency, number of classes, color range and classing method. Once changes are selected, Click 'GO'

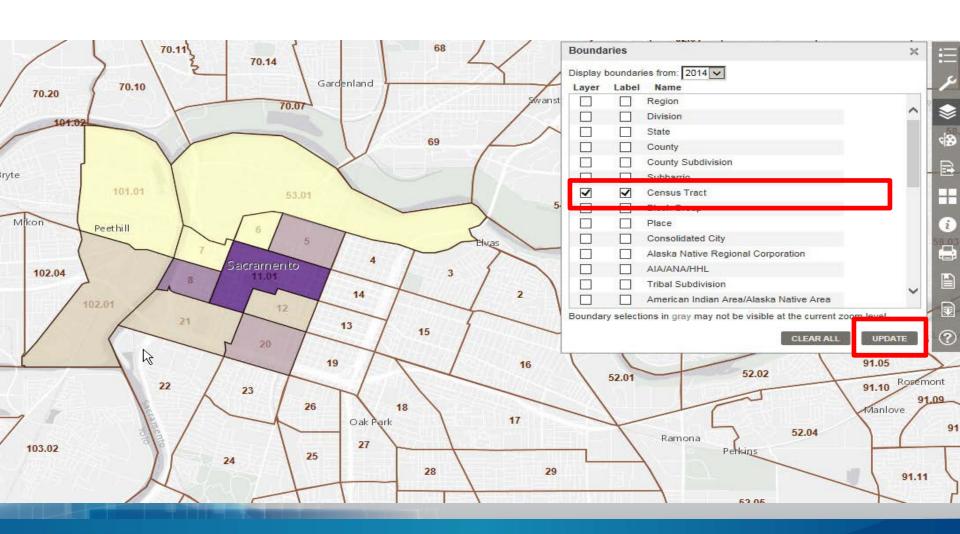


Click the Boundaries Icon

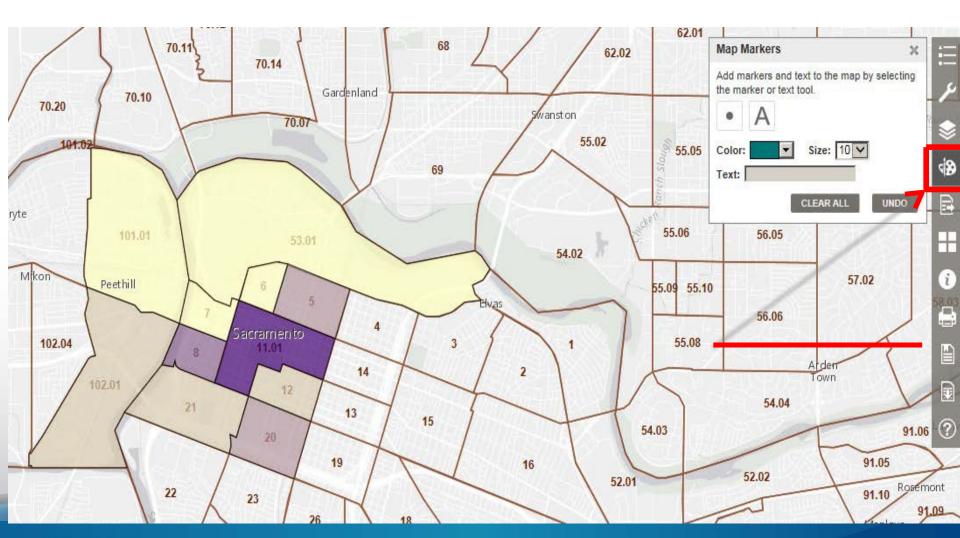




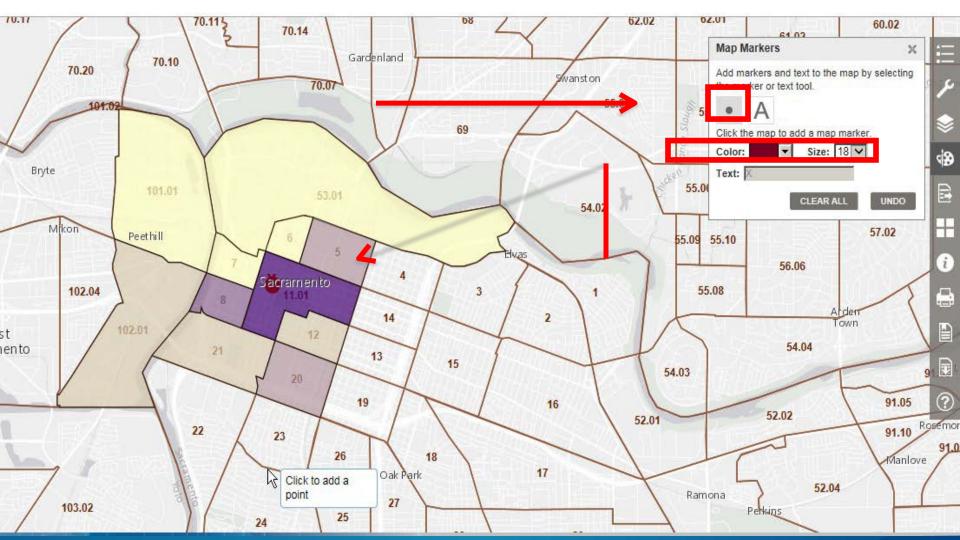
Check the Layer and Label Boxes next to 'Census Tract' and Click 'UPDATE'



Click 'Map Markers' Icon



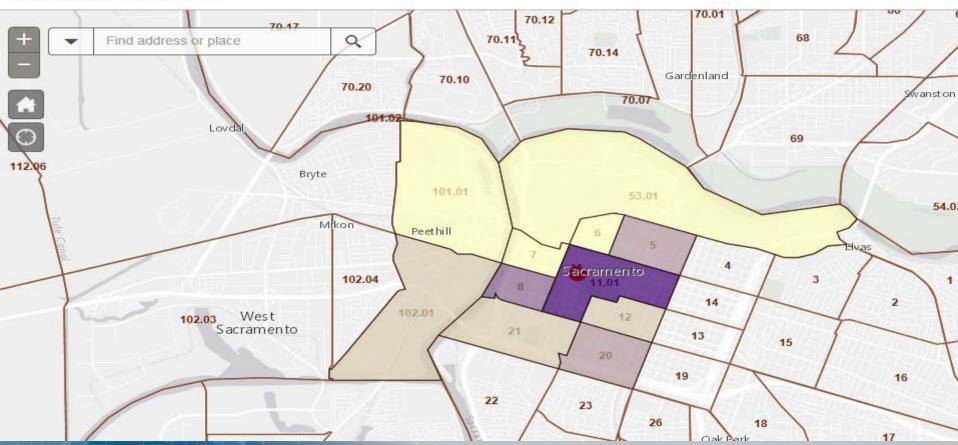
Select the point marker, color and size. Then click anywhere on the map you would like to mark.



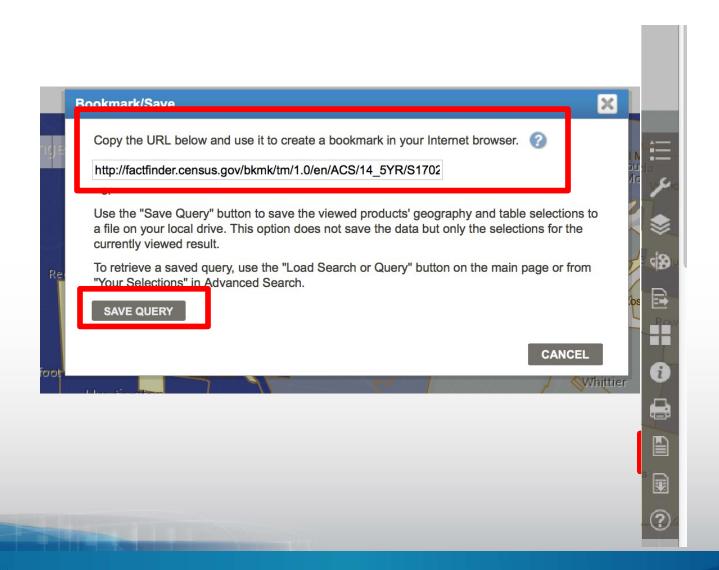
Note: You can Bookmark, Print or Download the map



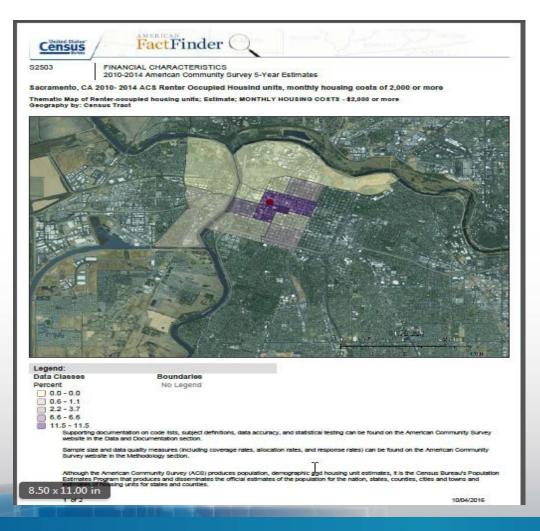
Thematic Map of Renter-occupied housing units; Estimate; MONTHLY HOUSING COSTS - \$2,000 or more Geography: by Census Tract



Note: You can Bookmark or Save the Query

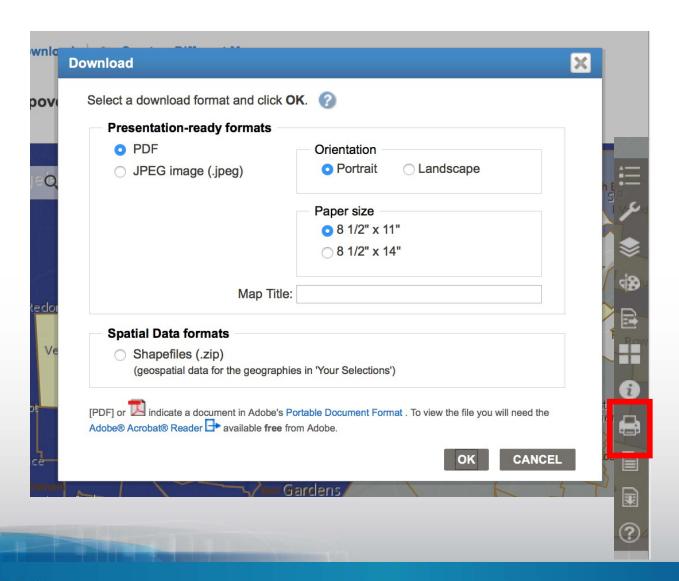


Print - PDF

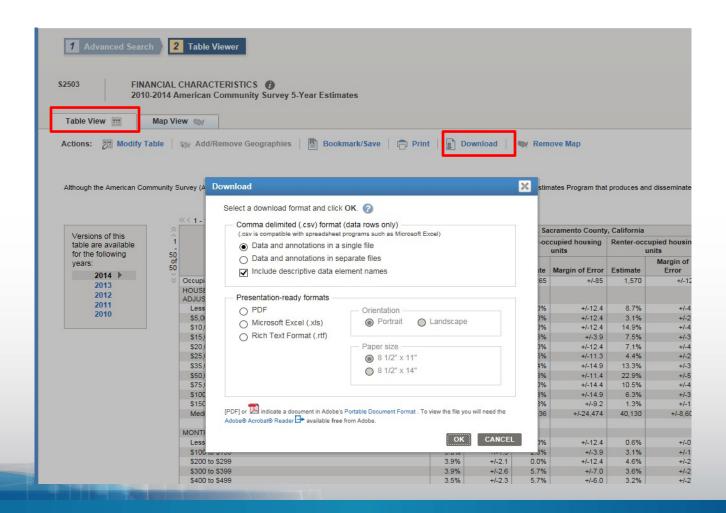




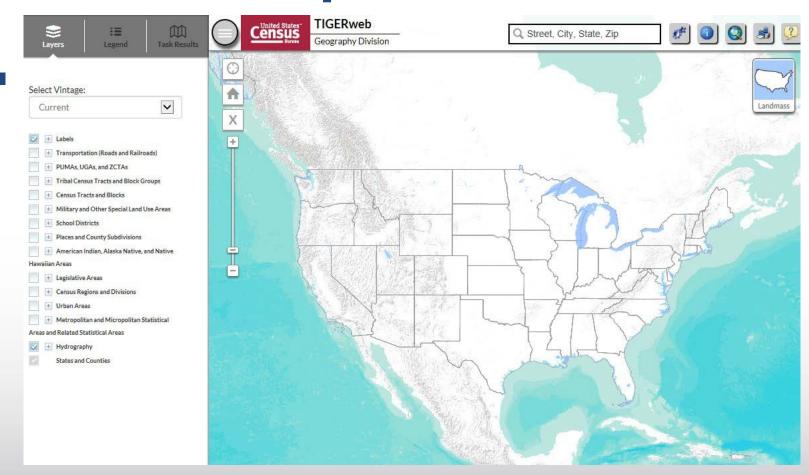
Note: You Can Download a PDF, JPEG or Shapefiles



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



Another Option: TIGERweb



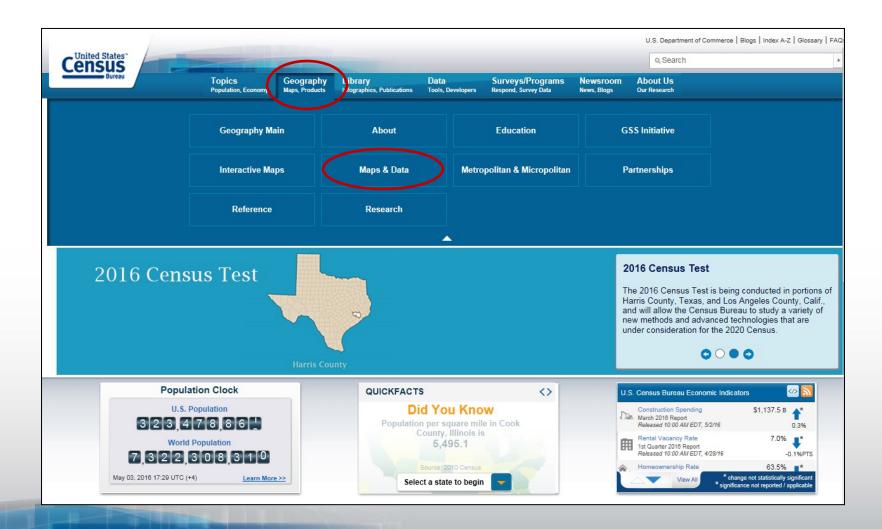
Using ACS geodatabase files in Arcmap

- 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



TIGER Products

You are here: Census.gov > Geography > Maps & Data Geography Maps & Data Reference **Partnerships** Education Research Contact Us Maps & Data Maps & Data Maps & Data Main Page Find geographic data and products such as the TIGER/Line Shapefiles, KMLs, TIGERweb, cartographic boundary files, geographic relationship Maps files, and reference and thematic maps. Census Data Mapper Reference Thematic Maps Available for Purchase Data Maps Geographic Data TIGER Products Census Geocoder Census Data Mapper **TIGER Products** Partnership Shapefiles The Census Data Mapper is a web mapping application intended to provide users with a Geospatial Files and Applications from our MAF/TIGER database. Tools for use in GIS Relationship Files simple interface to view, save and print county-based demographic maps of the United software, Web Mapping Services (WMS) to use in your applications, and browsers to States. view geographic data. Gazetteer Files Block Assignment Files Reference Maps Census Geocoder Name Lookup Tables Reference maps are designed to show the geographic locations of features and The Census Geocoder allows users to look up the geography an address is located Tallies boundaries. These maps usually contain features, such as roads and rivers, and within for up to 1,000 addresses at a time. LandView boundaries, such as county, place, census tracts, or many more. These maps do not

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.

contain demographic data and are used solely to show the location of and relationship

between boundaries and features. For interactive reference maps see TIGERweb.

Partnership Shapefiles

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

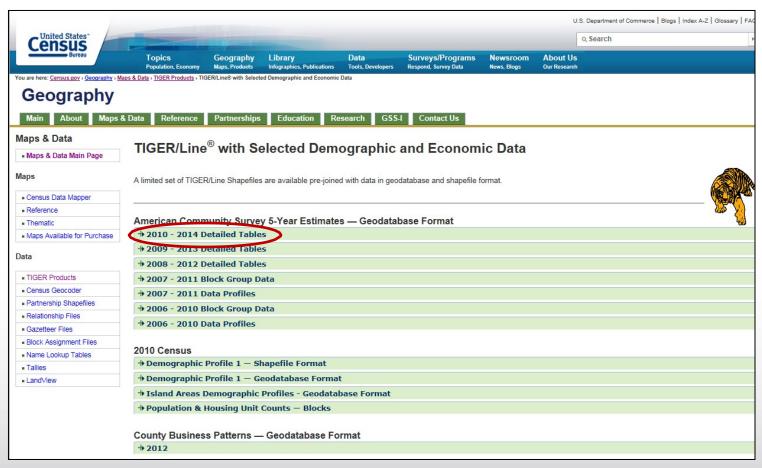
Relationship Files

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

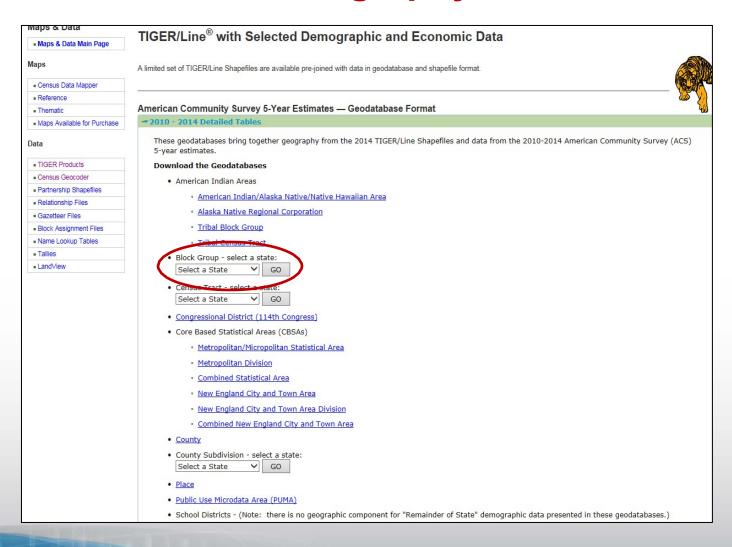
Willell product 5	mich product should ruse:							
Product	Product Best For		Type of Data	Level of Detail	Descriptive Attributes	Vintages Available		
<u>TIGER/Line</u> <u>Shapefiles</u>	Most mapping projectsthis is our <i>most</i> comprehensive dataset. Designed for use with GIS (geographic information 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</u> <u>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		
TIGER/Line with Selected Demographic and Economic Data	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</u> <u>Boundary</u> <u>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 -</u> <u>Cartographic</u> <u>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



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

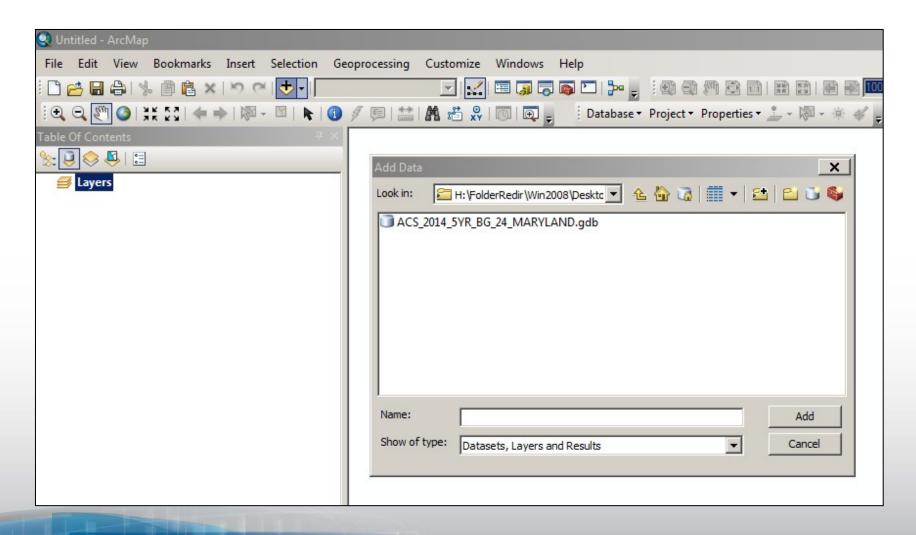
Choose Census Geography of Your Choice



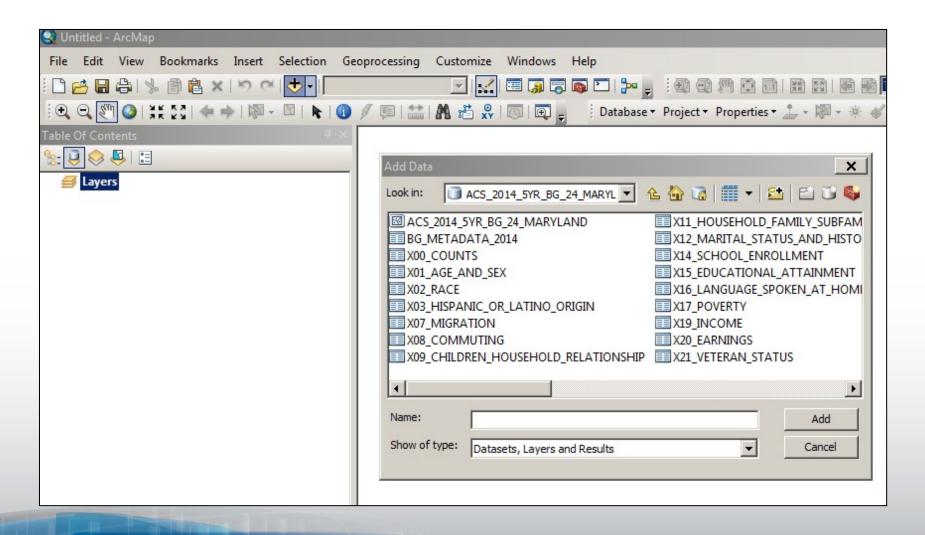
Zipped Files Once Download is Complete

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

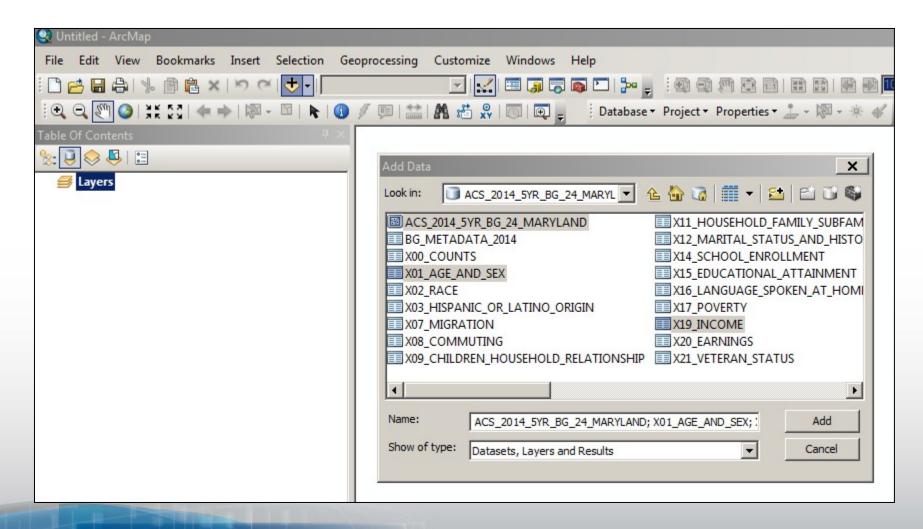
Add Data Button to Upload GDB



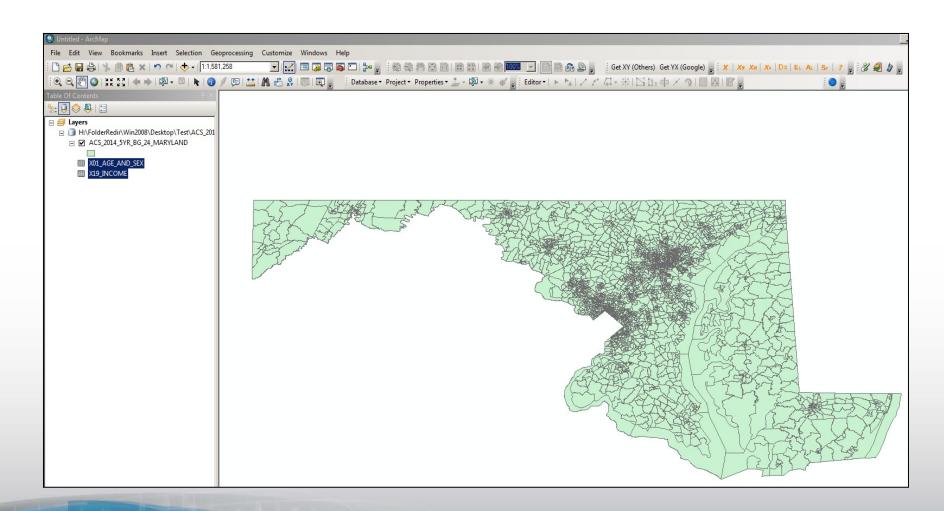
Choose Feature Class and Tables



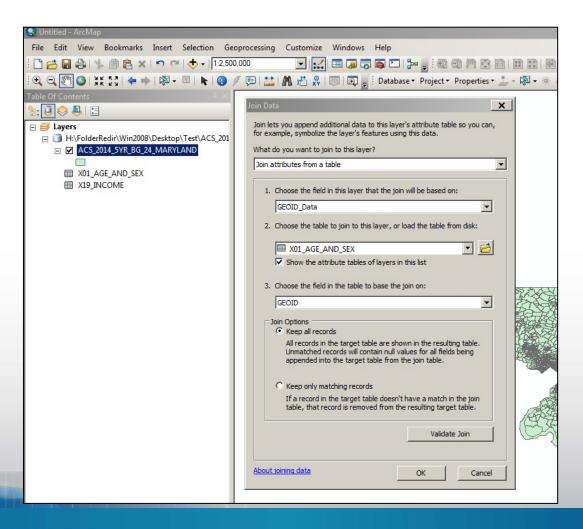
Feature Class, Age and Sex, & Income



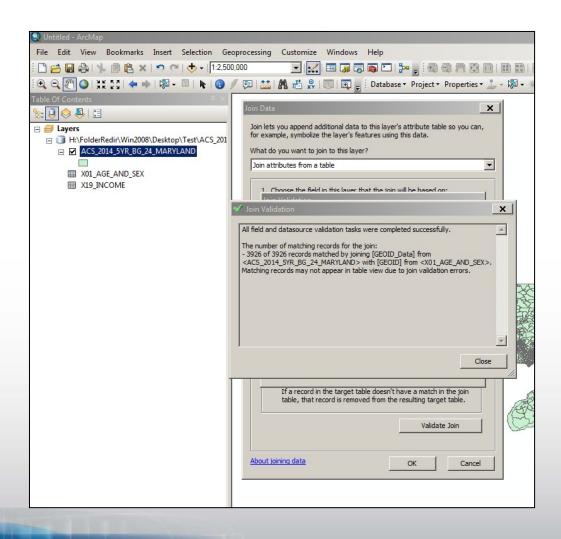
View in ArcMap



Joining the Table to the Feature Class



Validation Check



Attribute Table When Join Successfully Occurs

ΑC	ACS_2014_5YR_BG_24_MARYLAND							
	GEOID *	B01001e1	B01001m1	B01001e2	B01001m2	B01001e3	B01001m3	
Þ	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	G_METADATA_2014							
	OBJECTID *	Short_Name						
Е	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)					
Ш	10	B01001m3	SEX BY AGE: Male: Under 5 years: Total population (Margin of Error)					
Ш	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)					
		B01001e5	SEX BY AGE: Male: 10 to 14 years: Total population (Estimate)					
Ш	14	B01001m5	SEX BY AGE: Male: 10 to 14 years: Total population (Margin of Error)					
		B01001e6	SEX BY AGE: Male: 15 to 17 years: Total population (Estimate)					
Ш		B01001m6	SEX BY AGE: Male: 15 to 17 years: Total population (Margin of Error)					
Щ		B01001e7	SEX BY AGE: Male: 18 and 19 years: Total population (Estimate)					
Ш		B01001m7	SEX BY AGE: Male: 18 and 19 years: Total population (Margin of Error)					
Щ		B01001e8	SEX BY AGE: Male: 20 years: Total population (Estimate)					
Щ		B01001m8	SEX BY AGE: Male: 20 years: Total population (Margin of Error)					
Ш		B01001e9	SEX BY AGE: Male: 21 years: Total population (Estimate)					
Щ		B01001m9	SEX BY AGE: Male: 21 years: Total population (Margin of Error)					
Ш		B01001e10	SEX BY AGE: Male: 22 to 24 years: Total population (Estimate)					
Щ		B01001m10	SEX BY AGE: Male: 22 to 24 years: Total population (Margin of Error)					
Щ		B01001e11	SEX BY AGE: Male: 25 to 29 years: Total population (Estimate)					
Ш		B01001m11	SEX BY AGE: Male: 25 to 29 years: Total population (Margin of Error)					
Ш		B01001e12	SEX BY AGE: Male: 30 to 34 years: Total population (Estimate)					
Ш		B01001m12	SEX BY AGE: Male: 30 to 34 years: Total population (Margin of Error)					
Ш		B01001e13	SEX BY AGE: Male: 35 to 39 years: Total population (Estimate)					
Ш		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)
B01001m5
                SEX BY AGE: Male: 10 to 14 years: Total population -- (Margin of Error)
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)
                SEX BY AGE: Male: 40 to 44 years: Total population -- (Estimate)
B01001e14
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?

Linda Akers Smith

Los Angeles Regional Office

Linda.kane.akers.smith@census.gov

(818)267-1724

Census Geocoder: geo.geocoding.services@census.gov