

Geography at the U.S. Census Bureau

June 28, 2018



Artemis O'Connor
Geographer

Geographic Activities at the Census Bureau

- **MAF/TIGER Database.**
- **Collecting Data.**
- **Geographic Terms.**
- **Digital Products.**
- **Maps.**
- **Interactive Mapping.**
- **Geocoding.**
- **International Projects.**



The Geographic Foundation: MAF/TIGER

The Master Address File (MAF).

The Topologically Integrated
Geographic Encoding and
Referencing Database (TIGER).



Sources of Address and Street Data

Addresses.

U.S. Postal Service Delivery Sequence File (DSF).

Field data collection.

Partner supplied address lists.

Commercial data.

Streets.

Field data collection.

Partner supplied files.

Imagery analysis.

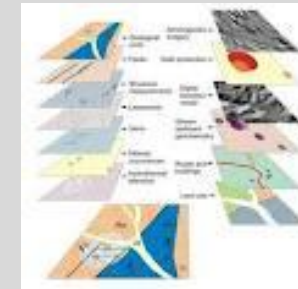
Address Updates



123 Testdata Road
Anytown, CA 94939

Lat 37 degrees, 9.6 minutes N
Lon 119 degrees, 45.1 minutes W

Address & Street Updates



Sources of Boundary Data

Governments – Tribal, State, and Local.

Legal vs. statistical boundaries.



Mason-Dixon Line separating the states of Maryland and Pennsylvania.
Photo courtesy of Michael Ratcliffe, 2015

How to Find Geographic Terms

The screenshot shows the United States Census Bureau website. 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 menu includes "Topics", "Geography" (circled in red), "Library", "Data", "Surveys/Programs", "Newsroom", and "About Us". Below the navigation menu, there are several buttons: "Geography Main", "About", "Education", "GSS Initiative", "Interactive Maps", "Maps & Data", "Metropolitan & Micropolitan", "Partnerships", "Reference" (circled in red), and "Research".

The main content area features a "2016 Census Test" section with a map of Harris County, Texas, and a text box explaining the test. Below this, 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 economic metrics.

Geographic Terms and Concepts

You are here: [Census.gov](#) > [Geography](#) > [Reference](#) > Geographic Terms & Concepts

Geography

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

Reference

- [Reference Main Page](#)

Definitions

- [Geographic Areas Reference Manual](#)
- [Geography Web Atlas](#)
- [Hierarchy Diagrams](#)
- [Terms & Concepts](#)

Reference

- [Centers of Population](#)
- [Change Notes](#)
- [County Adjacency File](#)
- [Federal Register Notices](#)
- [Gazetteer Files](#)
- [Geographic Codes](#)
- [Guide to State and Local Geography](#)
- [Incorporations, Mergers, Consolidations, and Disincorporations](#)
- [Resources for Mapping Census Data](#)
- [State Area Measurements](#)
- [Substantial County Changes](#)

2010 Geographic Terms and Concepts

This site provides definitions of geographic terms and concepts as well as a description of the different methods used to present information for geographic entities in U.S. Census Bureau data products. The site contains definitions for all geographic area terms and concepts recognized by the Census Bureau and that may appear in any Census Bureau product presenting demographic and housing data (geographic terms and concepts unique to the economic census and other specialized surveys and censuses are not included in this document).

The inclusion of a particular term or concept on this site does not imply that data for that geographic entity or attribute appear in each data product. For instance, data for tribal census tracts and tribal block groups will appear only in products providing data according to the American Indian Nation-based geographic hierarchy (see the [American Indian Area/Alaska Native Area/Hawaiian Home Lands Hierarchy Diagram](#) [PDF]). As another example, because urban areas are defined on the basis of decennial census population counts, data for urban areas do not appear in initial decennial census data products. In addition, the description of both the hierarchical and inventory approaches to presenting data for geographic entities does not imply that both formats are used in each data product.

The information contained in this site is also available in a [printer-friendly PDF version](#).

View the 2000 Geographic Terms and Concepts in [PDF](#) format.

A	B	C	D	E	F	G	H	I	J	L	M	N	O	P	R	S	T	U	V	W	Z
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A

- [Alaska Native Regional Corporation \(ANRC\)](#) (see [American Indian, Alaska Native, Native Hawaiian Area](#))
- [Alaska Native Village \(ANV\)](#) (see [American Indian, Alaska Native, Native Hawaiian Area](#))
- [Alaska Native Village Statistical Area \(ANVSA\)](#) (see [American Indian, Alaska Native, Native Hawaiian Area](#))
- [American Indian, Alaska Native, and Native Hawaiian Area](#)
- [American Indian Off-Reservation Trust Land](#) (see [American Indian, Alaska Native, Native Hawaiian Area](#))
- [American Indian Reservation](#) (see [American Indian, Alaska Native, Native Hawaiian Area](#))
- [American Indian Tribal Subdivision](#) (see [American Indian, Alaska Native, Native Hawaiian Area](#))
- [American National Standards Institute \(ANSI\) Codes](#) (see [Codes for Geographic Entities](#))
- [American Samoa](#) (see [Island Areas of the United States](#))
- [Area Measurement](#)

Is this page helpful? Yes No

How to Find Geographic Data

The screenshot shows the U.S. Census Bureau website with the following elements:

- Header:** United States Census Bureau logo, U.S. Department of Commerce | Blogs | Index A-Z | Glossary | FAQ, and a search bar.
- Navigation Menu:** Topics (Population, Economy), **Geography** (Maps, Products), Library (Infographics, Publications), Data (Tools, Developers), Surveys/Programs (Respond, Survey Data), Newsroom (News, Blogs), and About Us (Our Research).
- Main Content Area:** A grid of buttons including Geography Main, About, Education, GSS Initiative, Interactive Maps, **Maps & Data** (circled in red), Metropolitan & Micropolitan, Partnerships, Reference, and Research.
- 2016 Census Test:** A section featuring a map of Harris County, Texas, and text explaining the test: "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."
- Population Clock:** Displays U.S. Population (323,478,861) and World Population (7,322,308,310) as of May 03, 2016.
- QUICKFACTS:** A "Did You Know" fact: "Population per square mile in Cook County, Illinois is 5,495.1" (Source: 2010 Census).
- Economic Indicators:** A table showing metrics like Construction Spending (\$1,137.5 B), Rental Vacancy Rate (7.0%), and Homeownership Rate (63.5%) with up/down arrows and release dates.

Geography: Maps and Data

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.



Geography: Maps and Data: TIGER Products

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 - 2016, CD 113
<u>TIGER Geodatabases</u>	Useful for users needing national datasets or all major boundaries 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	2013-2016
<u>TIGER/Line with Selected Demographic and Economic Data</u>	Data from selected attributes from the 2010 Census, 2006-2010 through 2010-2014 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 through 2010-2014 ACS 5-year estimates data profiles, CBP data.	Full detail (not generalized)	Limited	2012 CBP, 2010, 2006-2010 to 2010-2014 ACS 5-Year Estimates
<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	2013-2015, 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	2013-2015
<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	Current, 2015 ACS, 2014 ACS, 2010 Census

TIGER/Line How to Guides

The screenshot shows the 'Geography' section of the U.S. Census Bureau website. At the top, there is a navigation menu with links for Main, About, Maps & Data, Reference, Partnerships, Education, Research, GSS-I, and Contact Us. Below the menu, the 'Education' section is highlighted in the left sidebar, with a sub-menu containing links for Education Main Page, Blogs, Brochures, Census Geography Topics, Geographic Terms and Concepts, Guide to State and Local Geography, How Tos (which is currently selected), and Presentations. The main content area is titled 'How To Guides' and features a section for 'TIGER/Line Shapefiles' with a descriptive paragraph. Below this, there are three sub-sections: 'Brochures' with five links to PDFs, 'Presentation' with one link to a PDF, and 'Geocoding' with one link to a PDF.

Geography

Main About Maps & Data Reference Partnerships Education Research GSS-I Contact Us

Education

- Education Main Page
- Blogs
- Brochures
- Census Geography Topics
- Geographic Terms and Concepts
- Guide to State and Local Geography
- How Tos
- Presentations

How To Guides

TIGER/Line Shapefiles

The Working with TIGER/Line Shapefiles series is an overview of how to access and use the US Census Bureau's TIGER/Line Shapefiles. Each section is a short how-to guide for accessing and using the TIGER/Line Shapefiles as well as joining data from the US Census Bureau to the TIGER/Line Shapefiles.

Brochures

- [Downloading TIGER/Line Shapefiles \[PDF\]](#)
- [Opening TIGER/Line Shapefiles into ArcGIS \[PDF\]](#)
- [Downloading Data from American FactFinder to use with TIGER/Line Shapefiles \[PDF\]](#)
- [Joining Census Data to TIGER/Line Shapefiles \[PDF\]](#)
- [Creating a Thematic Map \[PDF\]](#)

Presentation

- [Downloading Data and Joining Walk Through \[PDF\]](#)

Geocoding

- [Geocoding with TIGER/Line Shapefiles \[PDF\]](#)

Gazetteer

Geography

- Main
- About
- Maps & Data
- Reference
- Partnerships
- Education
- Research
- GSS-I
- Contact Us

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U.S. Gazetteer Files

The U.S. Gazetteer Files provide a listing of all geographic areas for selected geographic area types. The files include geographic identifier codes, names, area measurements, and representative latitude and longitude coordinates.

Post-2010 Census U.S. Gazetteer Files

Download U.S. gazetteer files for American Indian/Alaska Native/Native Hawaiian Areas, census tracts, Congressional Districts, counties, county subdivisions (minor civil divisions/census county divisions), places, school districts (elementary, secondary, and unified), state legislative districts (upper and lower), urban areas, and ZIP Code tabulation areas (ZCTAs). These gazetteer files match the vintage of the American Community Survey (ACS) data available from the Census Bureau for that year. For example, the 2012 Census U.S. Gazetteer files match the 2012 ACS data.

- [2017 Census U.S. Gazetteer files](#)
- [2016 Census U.S. Gazetteer files](#)
- [2015 Census U.S. Gazetteer files](#)
- [2014 Census U.S. Gazetteer files](#)
- [2013 Census U.S. Gazetteer files](#)
- [2012 Census U.S. Gazetteer files](#)

2010 Census U.S. Gazetteer Files

Download [2010 Census U.S. Gazetteer files](#) for places, counties, county subdivisions, census tracts, American Indian Areas, school districts, state legislative districts and ZIP Code Tabulation Areas (ZCTAs). The vintage matches the 2010 Census data available from the Census Bureau.

Population and housing unit counts are available in most of the files.

Gazetteer

[+ County Subdivisions](#)
[+ Current American Indian, Alaska Native, and Hawaiian Home Lands Legal and Statistical Areas](#)
[+ Current American Indian Off-Reservation Trust Lands](#)
[+ Current Hawaiian Home Lands](#)
[- Places](#)

Some records contain special characters.

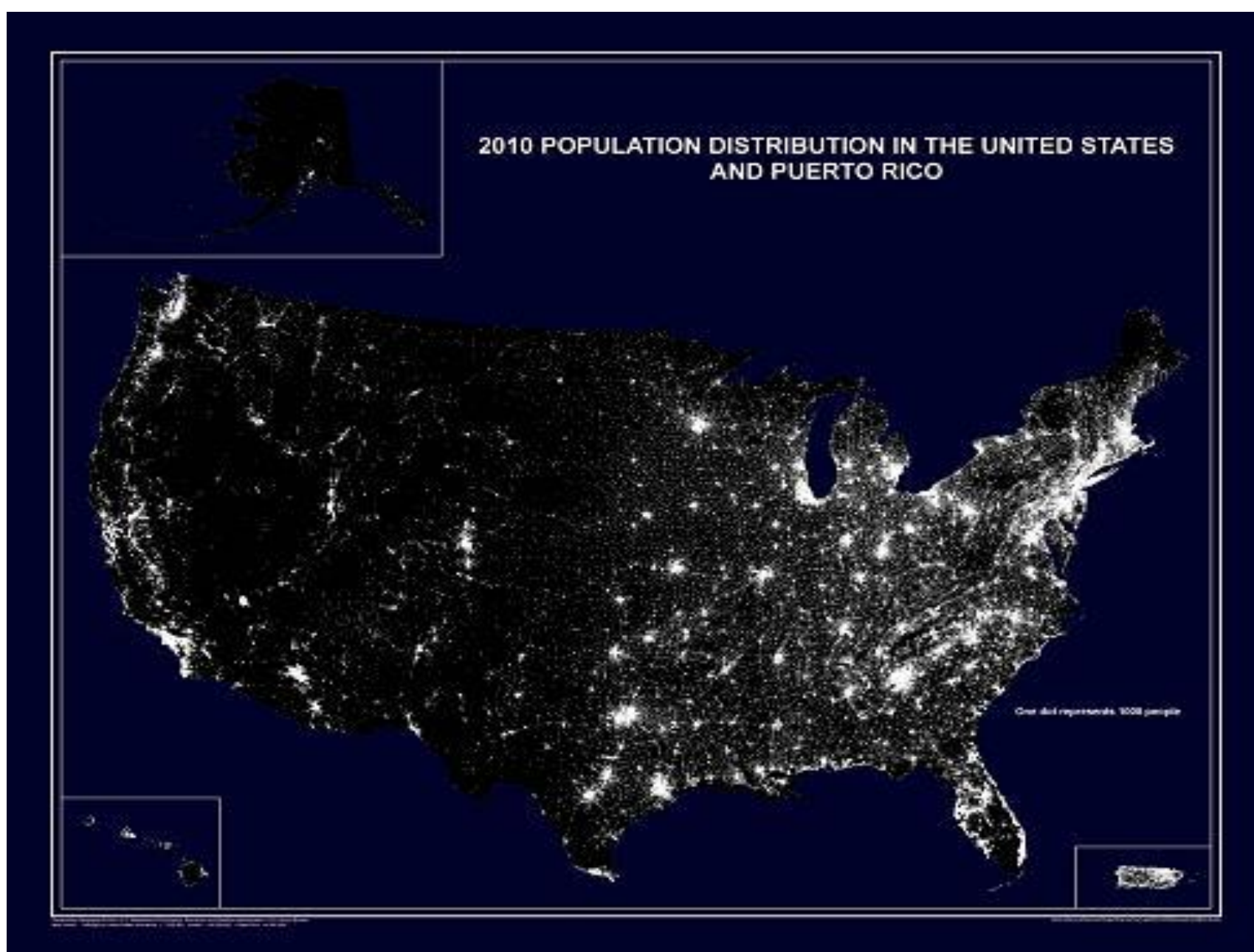
[Download the National Places Gazetteer Files \(1.1MB\)](#)

Download a Single State Places Gazetteer File:

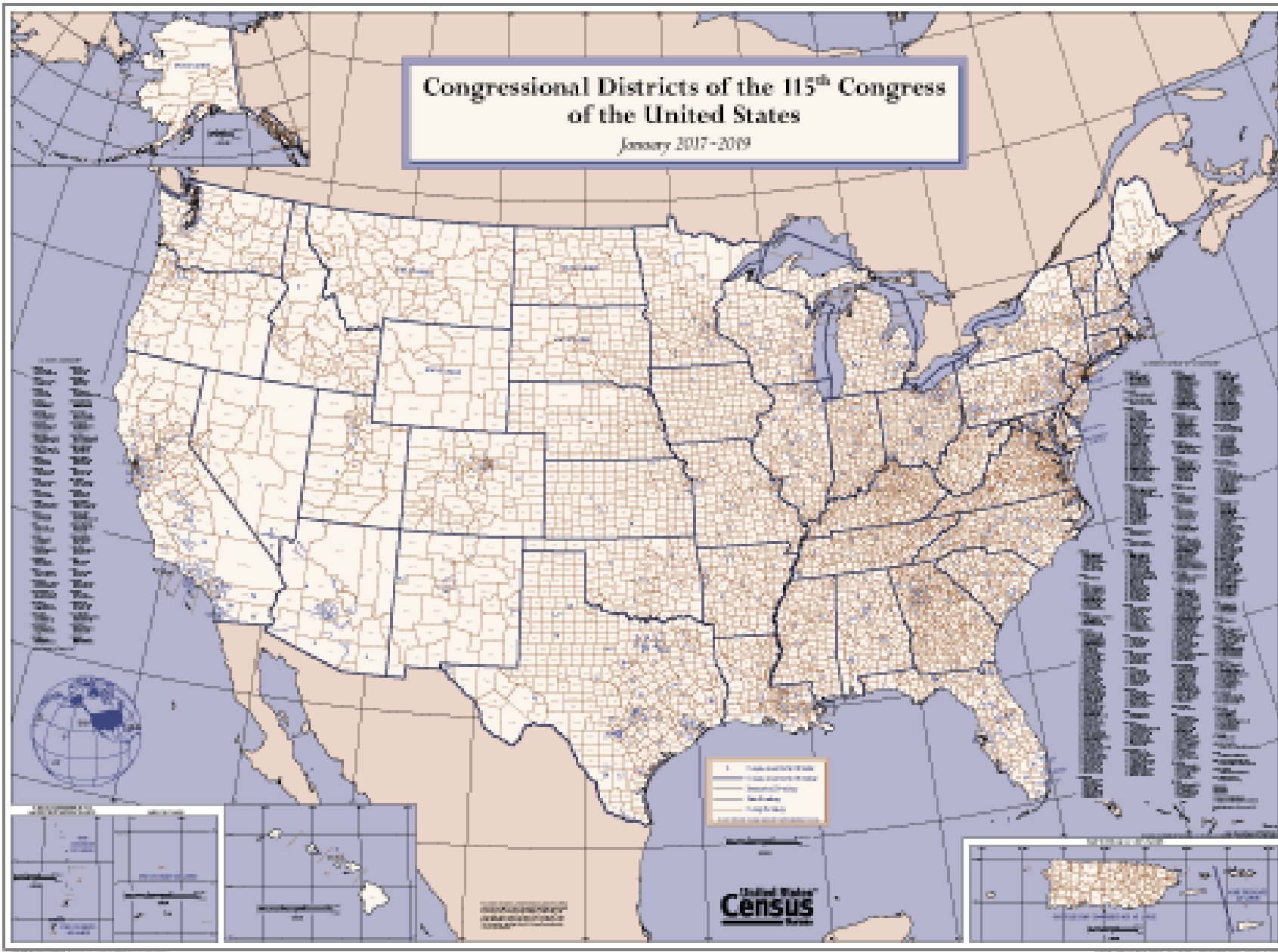
Column	Label	Description
Column 1	USPS	United States Postal Service State Abbreviation
Column 2	GEOID	Geographic Identifier - fully concatenated geographic code (State FIPS and Place FIPS)
Column 3	ANSICODE	American National Standards Institute code
Column 4	NAME	Name
Column 5	LSAD	Legal/Statistical area descriptor
Column 6	FUNCSTAT	Functional status of entity
Column 7	ALAND	Land Area (square meters) - Created for statistical purposes only
Column 8	AWATER	Water Area (square meters) - Created for statistical purposes only
Column 9	ALAND_SQMI	Land Area (square miles) - Created for statistical purposes only
Column 10	AWATER_SQMI	Water Area (square miles) - Created for statistical purposes only
Column 11	INTPTLAT	Latitude (decimal degrees) First character is blank or "-" denoting North or South latitude respectively
Column 12	INTPTLONG	Longitude (decimal degrees) First character is blank or "-" denoting East or West longitude respectively

Gazetteer

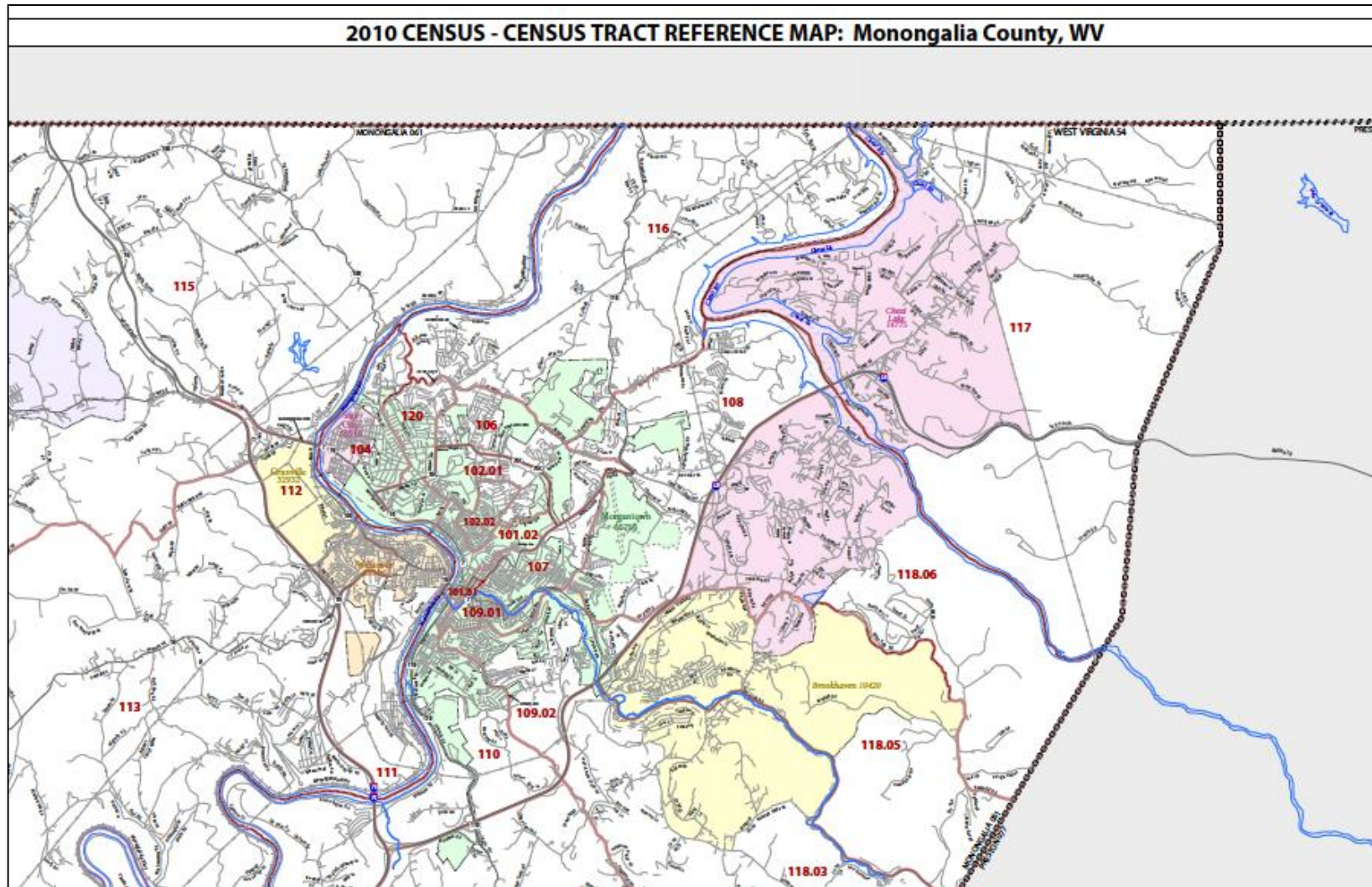
USPS	GEOID	ANSICODE	NAME	LSAD	FUNCSSTAT	ALAND	AWATER	ALAND_SQMI	AWATER SQMI	INTPTLAT	INTPTLONG
IA	1900190	02393877	Ackley city	25	A	6345496	87634	2.45	0.034	42.551695	-93.052272
IA	1900235	02393878	Ackworth city	25	A	1424991	0	0.55	0.	41.364227	-93.472303
IA	1900370	02393880	Adair city	25	A	5692351	43131	2.198	0.017	41.50015	-94.642953
IA	1900505	02393882	Adel city	25	A	12128966	45774	4.683	0.018	41.607127	-94.011863
IA	1900595	02393888	Afton city	25	A	2555195	0	0.987	0.	41.027618	-94.195373
IA	1900640	02393889	Agency city	25	A	1683184	0	0.65	0.	40.997475	-92.307229
IA	1900730	02393892	Ainsworth city	25	A	968090	0	0.374	0.	41.290083	-91.554514
IA	1900775	02393896	Akron city	25	A	3204051	0	1.237	0.	42.826698	-96.557011
IA	1900865	02393901	Albert City city	25	A	1410863	0	0.545	0.	42.781602	-94.949139
IA	1900910	02393905	Albia city	25	A	8252356	0	3.186	0.	41.027115	-92.803847
IA	1900955	02393907	Albion city	25	A	1541417	0	0.595	0.	42.112526	-92.988741
IA	1901000	02393909	Alburnett city	25	A	2119208	6646	0.818	0.003	42.148865	-91.621784
IA	1901045	02393911	Alden city	25	A	4424406	39849	1.708	0.015	42.509422	-93.373123
IA	1901090	02393915	Alexander city	25	A	11054932	0	4.268	0.	42.804419	-93.478647
IA	1901135	00467384	Algona city	25	A	11654210	16085	4.5	0.006	43.073979	-94.229926
IA	1901180	02393920	Alleman city	25	A	6995552	0	2.701	0.	41.815845	-93.60946
IA	1901270	02393922	Allerton city	25	A	2948535	1619	1.138	0.001	40.708229	-93.368641
IA	1901315	02393924	Allison city	25	A	7593442	0	2.932	0.	42.751747	-92.795761
IA	1901495	02393929	Alta city	25	A	2791436	0	1.078	0.	42.671679	-95.30451
IA	1901540	02393930	Alta Vista city	25	A	1957220	0	0.756	0.	43.196771	-92.417027
IA	1901585	02393936	Alton city	25	A	4923621	0	1.901	0.	42.987667	-96.009424
IA	1901630	02393939	Altoona city	25	A	25264305	0	9.755	0.	41.646112	-93.475804
IA	1901675	02393943	Alvord city	25	A	712754	0	0.275	0.	43.341789	-96.302594
IA	1901720	02629957	Amana CDP	57	S	2912035	0	1.124	0.	41.802483	-91.874062
IA	1901855	02393947	Ames city	25	A	65289343	521634	25.208	0.201	42.02602	-93.627747
IA	1901990	02393950	Anamosa city	25	A	6536790	23963	2.524	0.009	42.108825	-91.275205
IA	1902035	02583477	Anderson CDP	57	S	851814	0	0.329	0.	40.798309	-95.60849
IA	1902080	02393955	Andover city	25	A	496217	0	0.192	0.	41.979923	-90.252985
IA	1902125	02393957	Andrew city	25	A	690480	0	0.267	0.	42.153216	-90.591931
IA	1902260	02393959	Anita city	25	A	4606516	0	1.779	0.	41.443745	-94.765883
IA	1902305	02393960	Ankeny city	25	A	76594462	659	29.573	0.	41.728724	-93.602521
IA	1902350	02393965	Anthon city	25	A	1828415	0	0.706	0.	42.388134	-95.865633
IA	1902395	02393966	Aplington city	25	A	2156758	0	0.833	0.	42.581981	-92.88388
IA	1902485	02393972	Arcadia city	25	A	2549298	0	0.984	0.	42.086197	-95.043192
IA	1902530	02393975	Archer city	25	A	243141	0	0.094	0.	43.115104	-95.744099
IA	1902620	02393980	Aredale city	25	A	2569353	0	0.992	0.	42.833195	-93.005368
IA	1902755	02393983	Arion city	25	A	1229681	0	0.475	0.	41.948161	-95.462322
IA	1902800	02393984	Arispe city	25	A	1338961	3486	0.517	0.001	40.946302	-94.219259
IA	1902845	02393986	Arlington city	25	A	2715152	0	1.048	0.	42.748787	-91.671048
IA	1902935	02393989	Armstrong city	25	A	2267792	0	0.876	0.	43.39441	-94.483206
IA	1903025	02393992	Arnolds Park city	25	A	4101647	1510	1.584	0.001	43.353251	-95.113696
IA	1903115	02393993	Arthur city	25	A	393675	0	0.152	0.	42.335361	-95.34694
IA	1903160	02393994	Asbury city	25	A	8177382	0	3.157	0.	42.512705	-90.784582





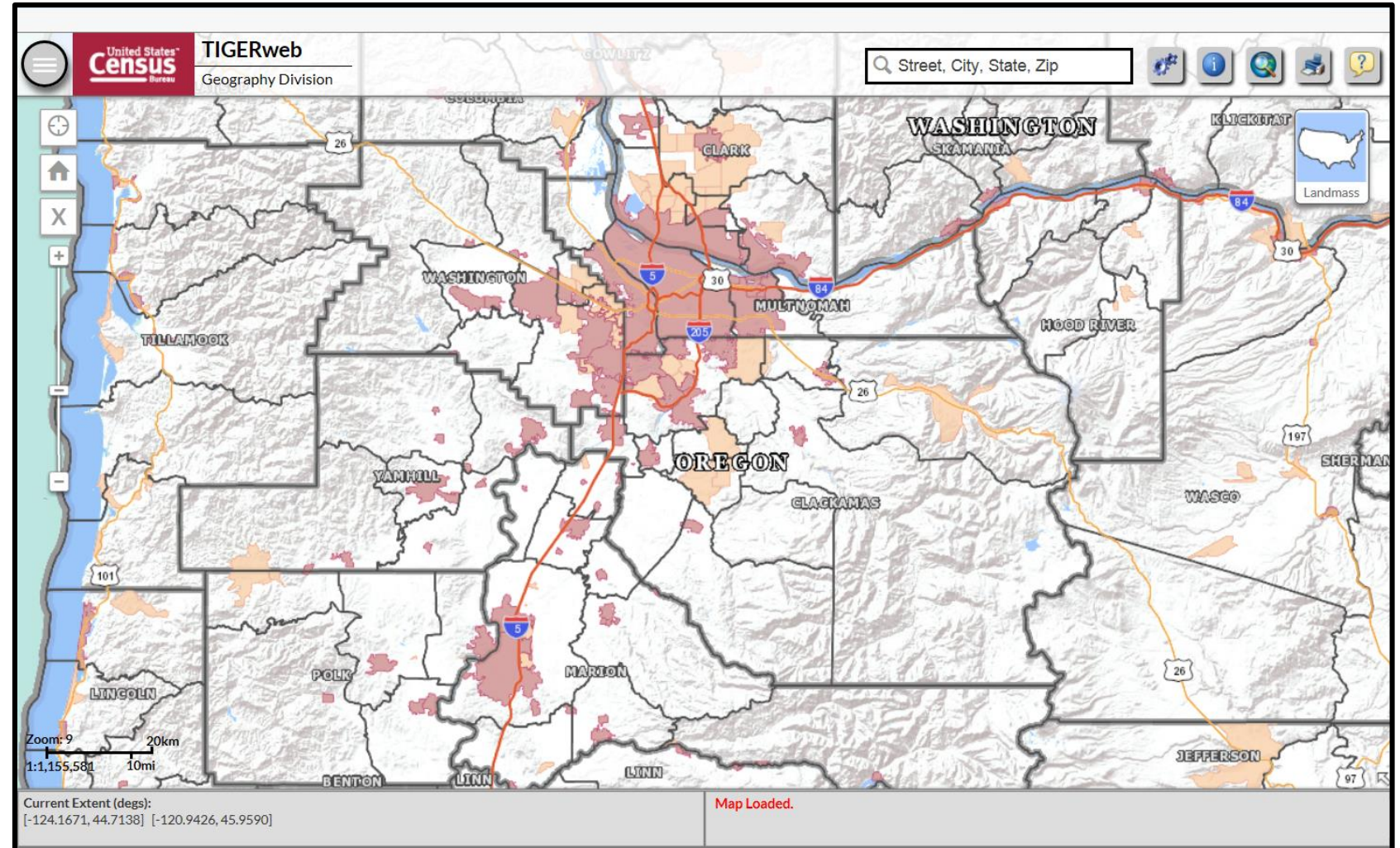


Reference Maps – Tract Maps



Interactive Maps

- TIGERweb.
- Census Data Mapper.
- Census Flows Mapper.
- Response Area Outreach Mapper (ROAM).
- Census Business Builder.



Interactive Maps

The screenshot shows the U.S. Census Bureau website. The top navigation bar includes 'Topics', 'Geography' (circled in red), 'Library', 'Data', 'Surveys/Programs', 'Newsroom', and 'About Us'. Under 'Geography', there are sub-links for 'Maps, Products', 'Geographics, Publications', 'Tools, Developers', 'Respond, Survey Data', 'News, Blogs', and 'Our Research'. Below this, a grid of buttons includes 'Geography Main', 'About', 'Education', 'GSS Initiative', 'Interactive Maps' (circled in red), 'Maps & Data', '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 explaining the test. Below this 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 data for Construction Spending, Rental Vacancy Rate, and Homeownership Rate.

Interactive Maps

Geography

About this Section

Education

GSS Initiative

Interactive Maps

Maps & Data

Metropolitan and
Micropolitan

Partnerships

Reference

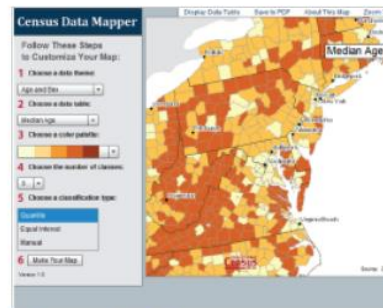
Research

Interactive Maps

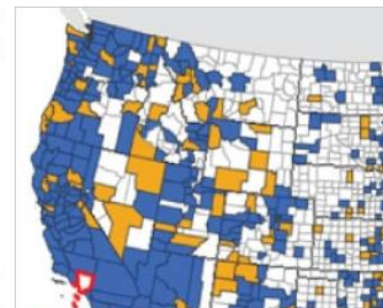
Work with interactive mapping tools from across the Census Bureau.



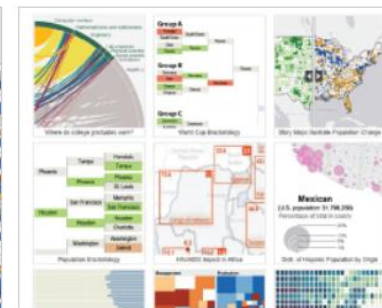
Census Business Builder



Census Data Mapper



Census Flows Mapper



Data Visualization Gallery



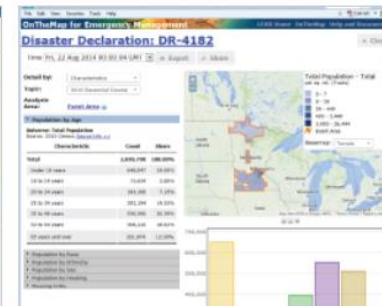
Interactive Population Map



Metro/Micro Thematic Map Viewer



OnTheMap (Employment)



OnTheMap for Emergency Management

TIGERweb Applications

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

Search

United States Census Bureau

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: [tigerweb.geo.census.gov](#) > TIGERweb Applications

TIGERweb

Home | **TIGERweb Applications** | WMS | REST Services | Data Files | TIGERweb Geography

Contact Us

Email us at: geo.tigerweb@census.gov

[Click here](#) to sign up for updates on TIGERweb and other Census Bureau Topics.

[TIGERweb Brochure](#)

MAP SERVICES

DATA

GEOID	STATE	PLACE	PLACENS	BASENAME
0100124	01	00124	02403054	Abbeville
0100460	01	00460	02403063	Adamsville
0100484	01	00484	02405123	Addison
0100676	01	00676	02405125	Akron
0100820	01	00820	02403069	Alabaster
0100988	01	00988	02403074	Albertville
0101132	01	01132	02403077	Alexander City
0101228	01	01228	02403080	Aliceville
0101396	01	01396	02405136	Allgood
0101660	01	01660	02405146	Allison

TIGERweb Overview

TIGERweb is a web-based system that allows users to visualize our TIGER (Topologically Integrated Geographic Encoding and Referencing database) data in several ways:

- [TIGERweb and TIGERweb Decennial Applications](#).
- [TIGERweb WMS](#)
- [TIGERweb REST Services](#)

The applications allow users to select features and view their attributes, to search for features by name or geocode, and to identify features

TIGERweb or TIGERweb Decennial

The screenshot displays the TIGERweb application interface. At the top, there is a navigation bar with the United States Census Bureau logo and a search box. Below this, a menu lists various categories: Topics (Population, Economy), Geography (Maps, Products), Library (Infographics, Publications), Data (Tools, Developers), Surveys/Programs (Respond, Survey Data), Newsroom (News, Blogs), and About Us (Our Research). The main content area features a breadcrumb trail: "You are here: tigerweb.geo.census.gov > TIGERweb Applications". Below this, the "TIGERweb" title is prominently displayed, followed by a set of navigation buttons: Home, TIGERweb Applications (highlighted in orange), WMS, REST Services, Data Files, and TIGERweb Geography.

On the left side, a sidebar titled "TIGERweb Applications" contains two main sections, both circled in red:

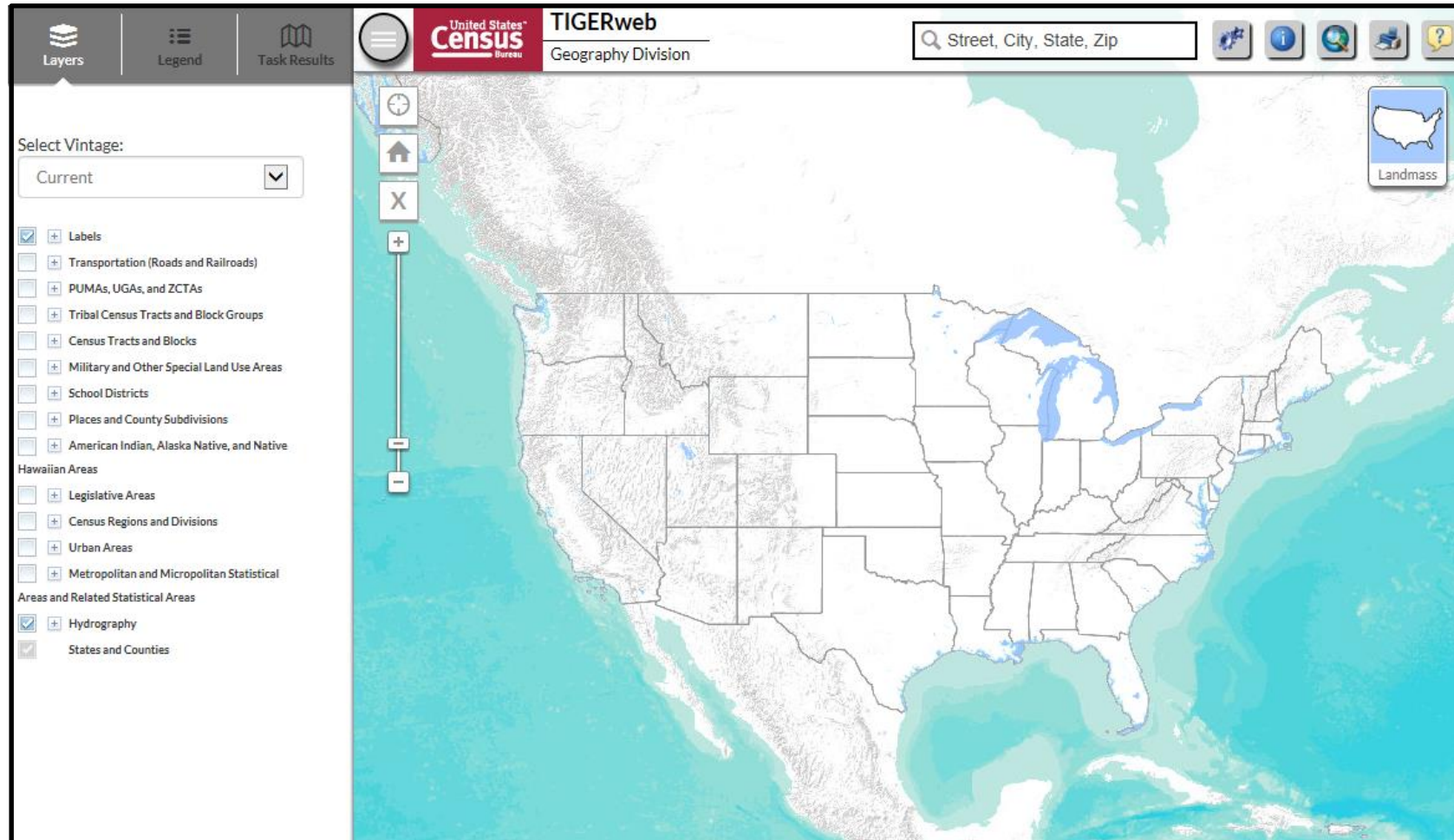
- TIGERweb** (circled in red)
Contains:
 - Current (BAS 2016)
 - ACS 2015
 - ACS 2014
 - 2010 Census (adjusted boundaries)
 - Current (BAS 2016) Physical Features
- TIGERweb Decennial** (circled in red)
Contains:
 - 2010 Census
 - Census 2000 (adjusted boundaries)
 - 2010 Census Physical Features

Below the sidebar, there are links for "Legend" and "TIGERweb User Guide", along with a note: "Note: These links will open new browser windows." and a statement: "The applications need:".

The main map area shows a geographic view of the Eastern United States, including parts of Pennsylvania, Maryland, Delaware, Virginia, and West Virginia. The map is overlaid with various geographic layers, such as Census Tracts and Blocks, and includes a search bar for "Street, City, State, Zip". A legend on the left side of the map allows users to select different vintages and features to display.

At the bottom of the screenshot, a section titled "TIGERweb and TIGERweb Decennial Applications" provides a brief description: "The TIGERweb and TIGERweb Decennial web-based applications allow the users to visualize our TIGER(Topologically Integrated Geographic Encoding and Referencing database) data. The applications allow users to select features and view their attributes, to search for features by name or geocode, and to identify features by selecting them from a map. The TIGERweb and TIGERweb Decennial

TIGERweb



TIGERweb Finding an Address

The screenshot displays the TIGERweb interface in a web browser. The address search bar contains "1600 PENNSYLVANIA AVE NW, WASHINGTON, DC, 20502". The map shows the United States with a red location pin in Washington, DC. The interface includes a left sidebar with a layer selection menu, a top navigation bar with the United States Census Bureau logo, and a status bar at the bottom showing "Geocoding Complete." and current extent coordinates.

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

nsylvania Ave NW, Washington, DC, 20502

1600 PENNSYLVANIA AVE NW, WASHINGTON, DC, 20502

Zoom: 3
1:73,957,191 2000km 1000mi

Current Extent (degs):
[-152.7783, -2.3512] [-40.4541, 66.8348]

Geocoding Complete.

TIGERweb - Results

The screenshot displays the TIGERweb interface. At the top, there is a navigation bar with 'Layers', 'Legend', and 'Task Results' tabs. The 'Task Results' tab is active, showing a search bar with the address '1600 Pennsylvania Ave NW, Washington, DC, 20502'. Below the search bar, the 'Geocoder Results' section displays the following information:

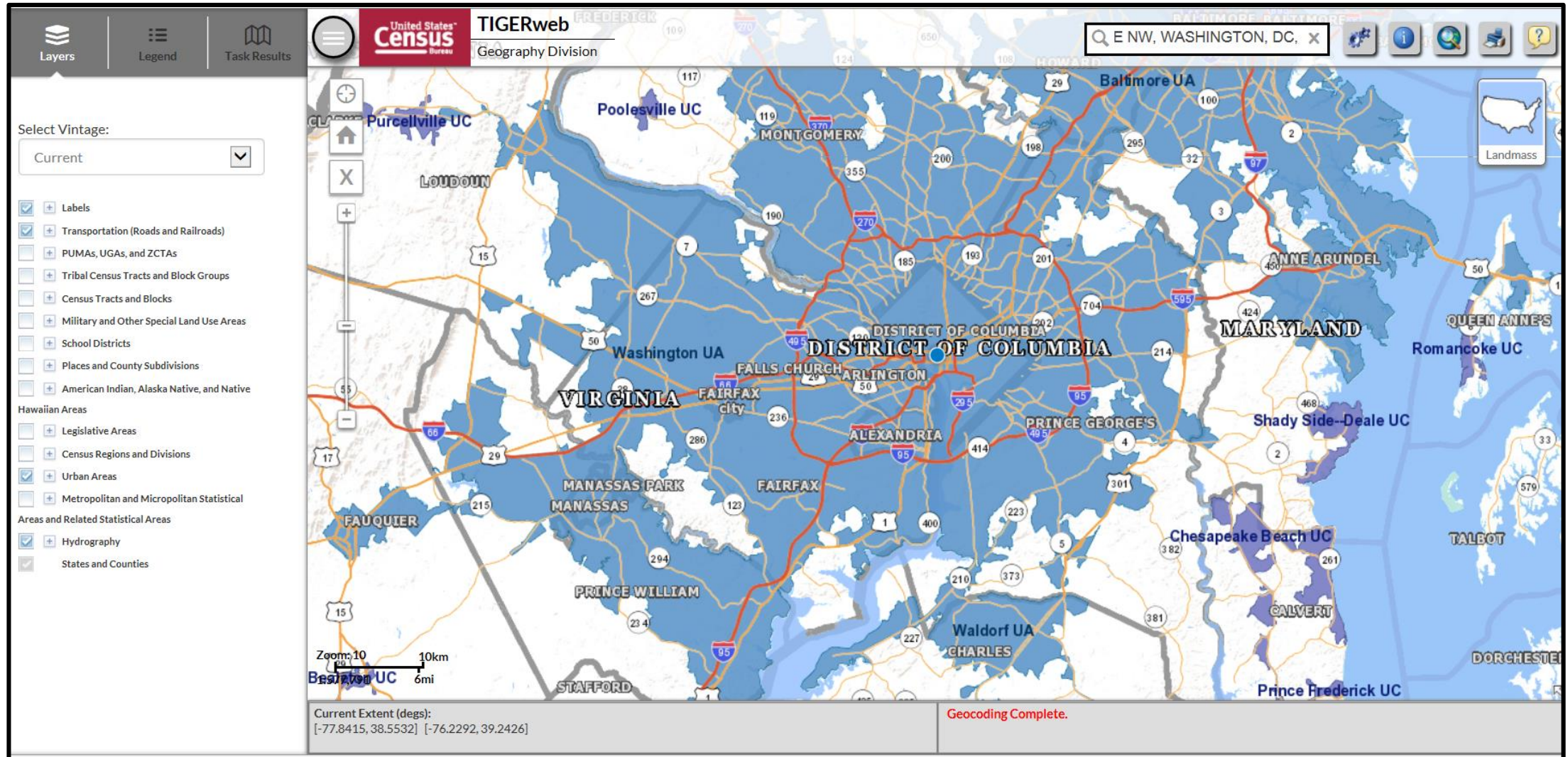
- Search Address**: 1600 Pennsylvania Ave NW, Washington, DC, 20502
- Matched Address**: 1600 PENNSYLVANIA AVE NW, WASHINGTON, DC, 20502
- Coordinates**: Longitude: 77.03535°W, Latitude: 38.898754°N
- Tiger Line ID**: 76225813

The main map area shows a zoomed-in view of the address. The text 'DISTRICT OF COLUMBIA' and 'DISTRICT OF COLUMBIA' is displayed on the map. A scale bar indicates a zoom of 18, with a scale of 1:2,257. A 'Landmass' button is visible in the top right corner of the map area.

TIGERweb – Urban Areas

The screenshot displays the TIGERweb interface for the District of Columbia. The search bar at the top right contains the text "E NW, WASHINGTON, DC, X". The interface includes a "Layers" panel on the left with a "Select Vintage:" dropdown set to "Current". The "Urban Areas" layer is checked and highlighted in blue. Other layers include "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", "Metropolitan and Micropolitan Statistical Areas and Related Statistical Areas", "Hydrography", and "States and Counties". The map shows the District of Columbia with major streets labeled: "JACKSON PL NW", "MADISON PL NW", "PENNSYLVANIA AVE NW", "W EXECUTIVE AVE NW", "E EXECUTIVE AVE NW", "15TH ST NW", "NEW YORK AVE NW", and "G ST NW". The text "WASHINGTON UA" and "DISTRICT OF COLUMBIA" is visible on the map. A scale bar at the bottom left indicates "Zoom: 18" and "1:2,257" with markers for "40m" and "200ft". The status bar at the bottom right displays "Geocoding Complete." and the current extent coordinates: "Current Extent (degs): [-77.0385, 38.8974] [-77.0322, 38.9001]".

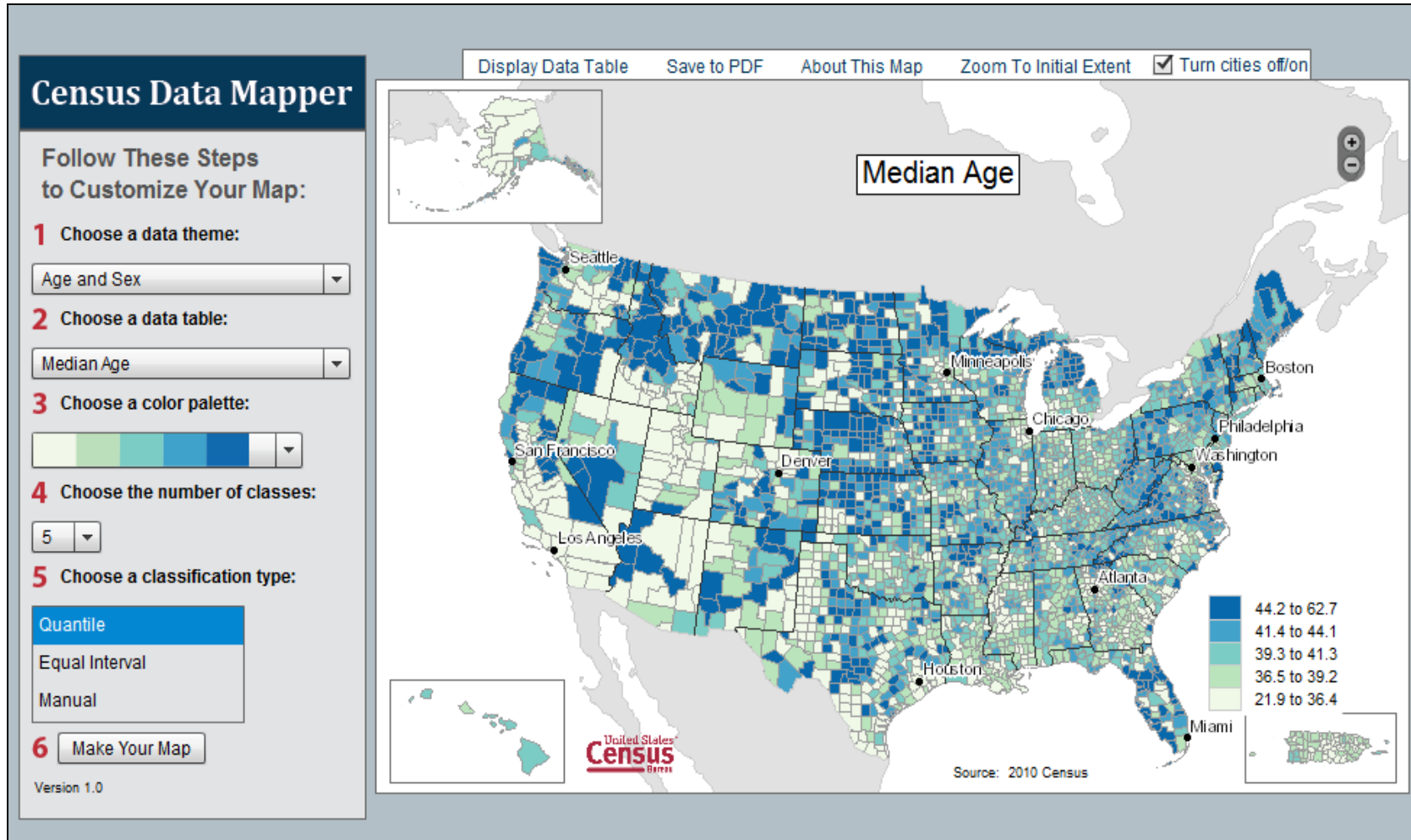
TIGERweb – Urban Areas



TIGERweb – Turning on Layers

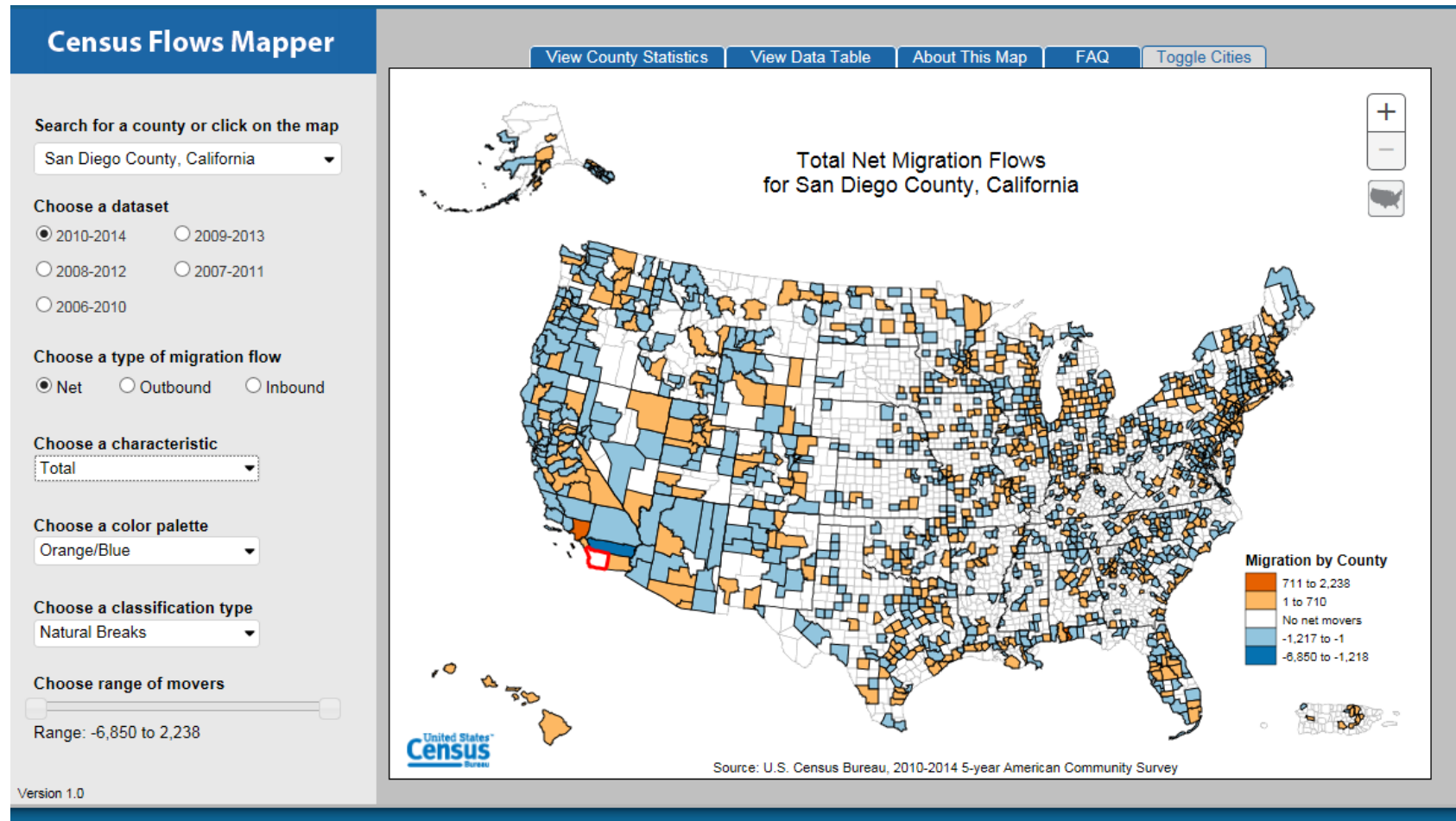
The screenshot displays the TIGERweb interface for the United States Census Bureau. The top navigation bar includes 'Layers', 'Legend', and 'Task Results' tabs. The 'Layers' panel on the left shows a 'Select Vintage' dropdown set to 'Current' and a list of layers with checkboxes. The map area shows a grid of census tracts and block groups, with labels like 'Washington', 'DISTRICT OF COLUMBIA', 'CT 101', 'CT 58', 'CT 62.02', 'BG 1', and 'BG 2'. A 'Landmass' button is visible in the top right of the map area. The bottom status bar shows 'Geocoding Complete.' and 'Current Extent (degs): [-77.0391, 38.8953] [-77.0254, 38.9041]'. A scale bar indicates 200m and 600ft.

Census Data Mapper

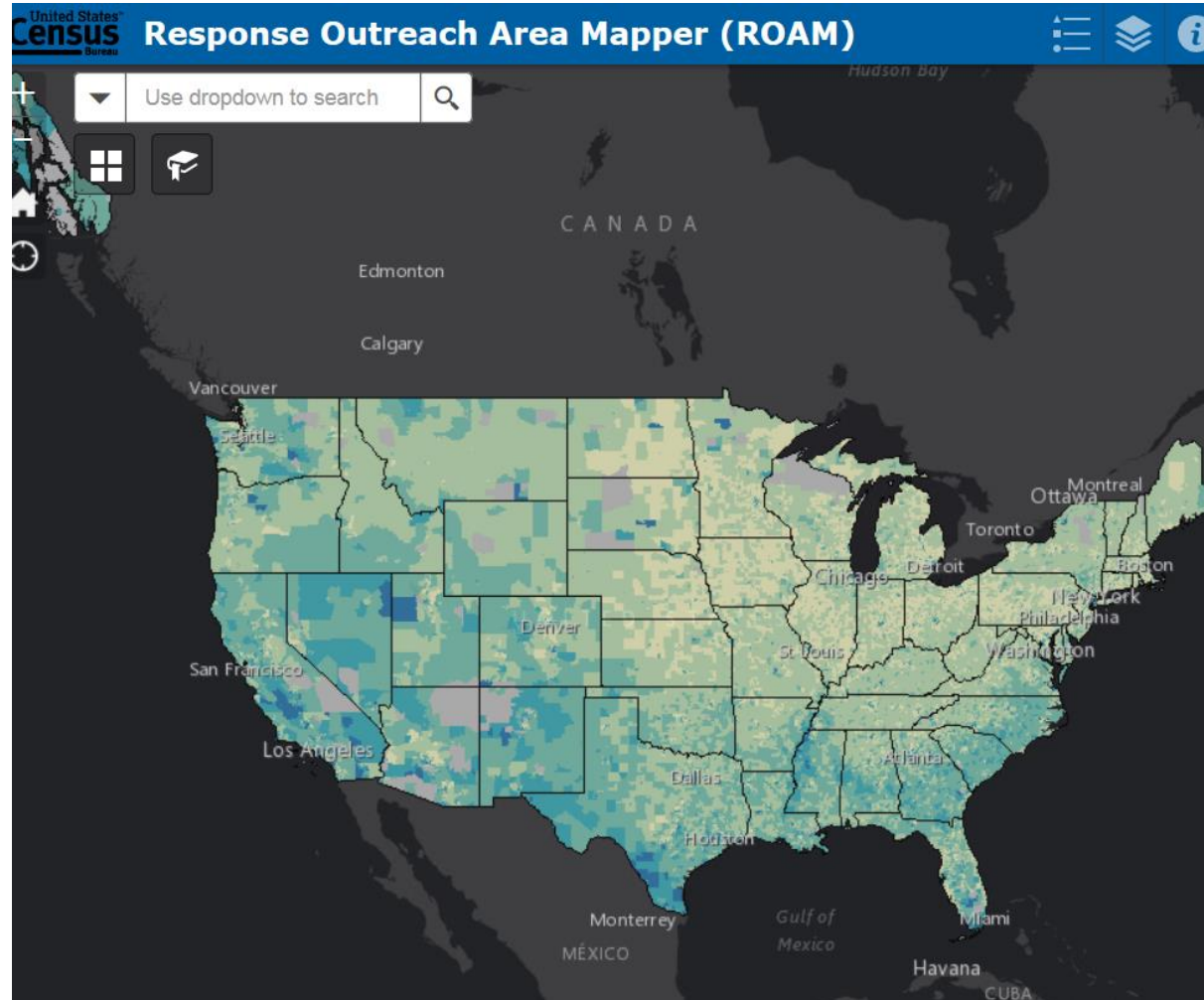


Census Flows Mapper

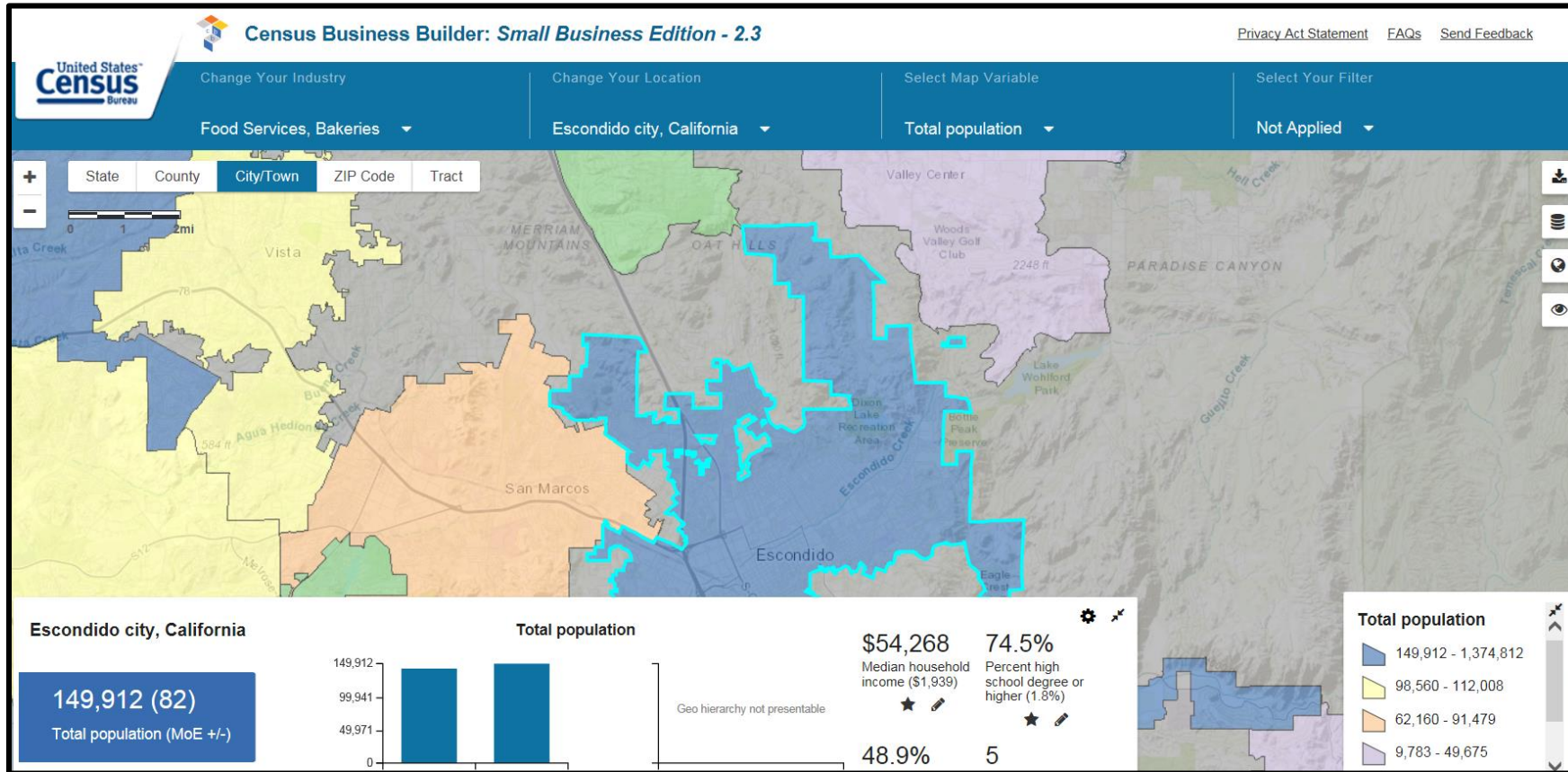
Geographical Mobility/Migration



Response Outreach Area Mapper (ROAM)



Census Business Builder



Census Geocoding Service

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Maps

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Data

- TIGER Products
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- Gazetteer Files
- Block Assignment Files
- Name Lookup Tables
- Tallies

Census Geocoder

For governments interested in the Local Update of Census Addresses Operation block count lists, they can be found on the [2020 Census LUCA webpage](#).

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 10,000 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 most recent 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

Geocoding Service

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

United States Census Bureau

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Population, Economy

GEOGRAPHY
Maps, Products

LIBRARY
Infographics, Publications

DATA
Tools, Developers

SURVEYS/PROGRAMS
Respond, Survey Data

NEWSROOM
News, Blogs

ABOUT US
Our Research

Search

"FIND LOCATIONS USING..." OPTION

- One Line
- Address
- Address Batch

"FIND GEOGRAPHIES USING..." OPTION

- 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](#)

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E-Stats
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NAICS
Governments
Longitudinal Employer-Household Dynamics (LEHD)
Survey of Business Owners

PEOPLE & HOUSEHOLDS
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2010 Census
American Community Survey
Income
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Population Estimates
Population Projections
Health Insurance
Housing
International
Genealogy

SPECIAL TOPICS
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Statistics in Schools
Tribal Resources (AIAN)
Emergency Preparedness
Statistical Abstract
Special Census Program
Data Linkage Infrastructure
Fraudulent Activity & Scams
USA.gov

NEWSROOM
News Releases
Release Schedule
Facts for Features
Stats for Stories
Blogs

Geocoder Results

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: 18676161
NAME: District of Columbia
LSADC: 00
CENTLON: -077.0162863
BASENAME: District of Columbia
INTPTLAT: +38.9041031
COUNTYCC: H6
MTFCC: G4020
COUNTY: 001
GEOID: 11001
CENTLAT: +38.9047577
INTPTLON: -077.0172290
AREALAND: 158351429
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: 6539774
OBJECTID: 52967
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: 1760924
TRACT: 006202

States:
OID: 27490331294090
STATE: 11
FUNCSTAT: A
NAME: District of Columbia
AREAWATER: 18676161
LSADC: 00
CENTLON: -077.0162863
STUSAB: DC
BASENAME: District of Columbia
INTPTLAT: +38.9041031
DIVISION: 5
MTFCC: G4000
STATENS: 01702382
GEOID: 11
CENTLAT: +38.9047577
INTPTLON: -077.0172290
REGION: 3
AREALAND: 158351429
OBJECTID: 54

To include more in a return, type: **&layers=all** at the end of the return URL. You will see the Congressional District, Incorporated Places, and Unified School District among other geographies.

International Programs

International Programs

About this Program
Demographic and Socioeconomic Analysis
Training and Technical Assistance
Global Population Mapping
HIV/AIDS Database
International Data Base (IDB)
Fact Sheets
Glossary
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Newsroom

Global Population Mapping and Spatial Analysis

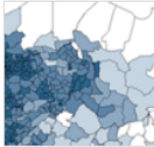
The U.S. Census Bureau has supplied global subnational data for five decades. The essential role of population data in humanitarian relief and disaster planning was described in a 2007 National Research Council report. Our most recent efforts have sought to fulfill the needs described in this report.

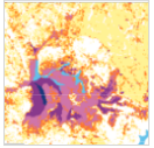
Our products provide data on global population patterns according to both administrative areas and grid cells. Data inputs include census data from every country and territory that conducts a census, administrative boundary maps from national and international mapping agencies, and high- and medium-resolution satellite imagery. Population data can be projected forward to the present and linked to administrative boundary maps to allow mapping of population density and other variables.

Administrative areas (ADMs) include the equivalents of U.S. states, counties, and townships in each country and territory in the world. We gather administrative boundary maps from national sources, online repositories, and federal and international agencies, then assess their quality and how well they link with the ADMs that appear in each country's or territory's census. While ADMs in the U.S. largely remain constant from year to year, internal boundaries are frequently redrawn in some other countries.

National census data are produced by the world's 200+ national statistical agencies. We constantly update our data archive with the latest census results worldwide, using data from statistical agencies' websites and the public International Collection of the U.S. Census Bureau Library. Census data can be projected forward to the current date, and linked to subnational maps.

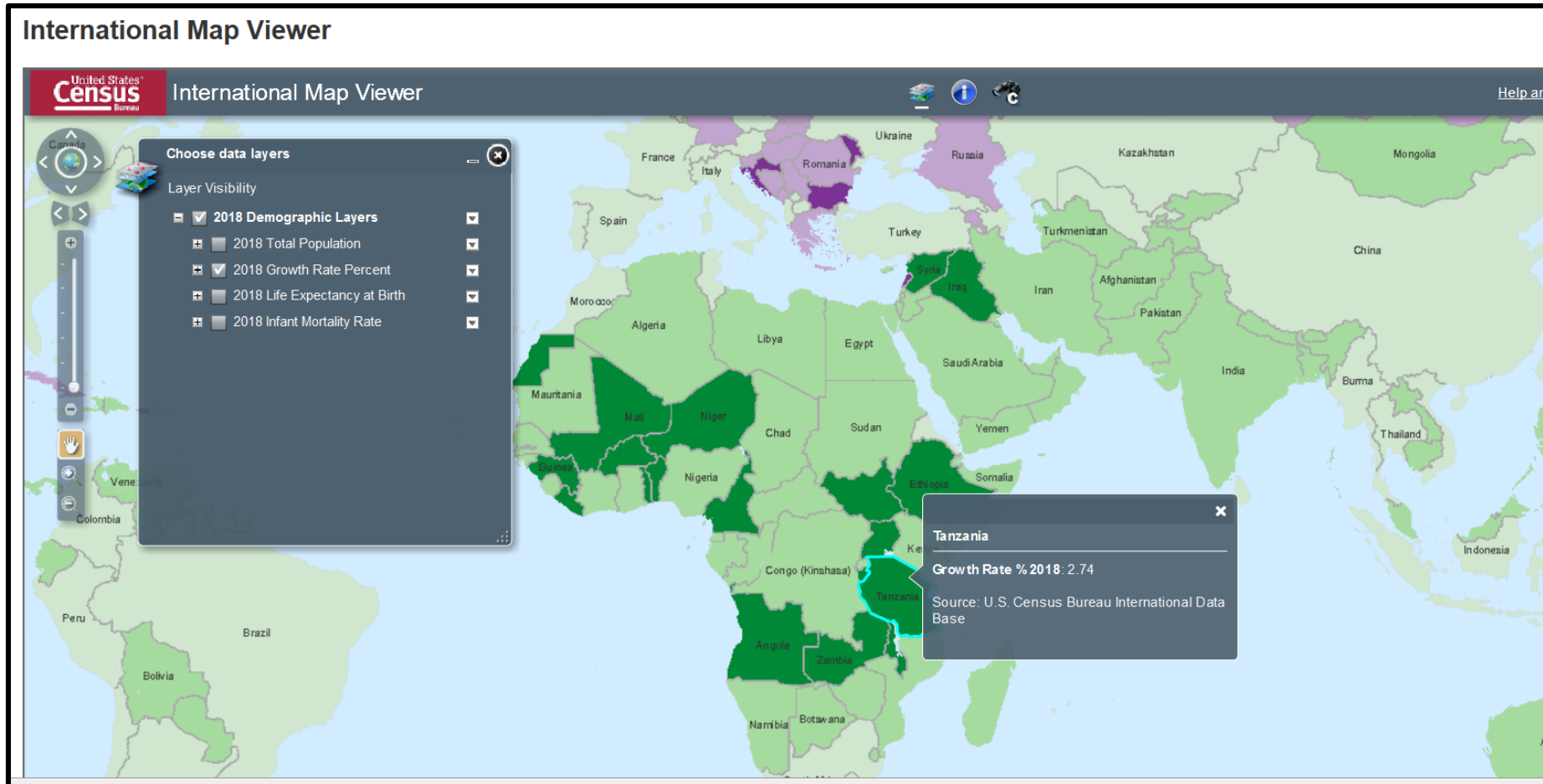
Geospatial Data Products

 **Subnational Population by Sex, Age, and Geographic Area**
Subnational population tables and geographic boundaries for countries.

 **Gridded Population Mapping (Demobase) 1998-present**
Summary of and files for the Demobase gridded population products.

Additional Resources

International Programs – International Map Viewer



International Programs - Demobase

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Census.gov > Time Series > DEMO > INTERNATIONAL-PROGRAMS > Gridded Population Mapping (Demobase) 1998-present

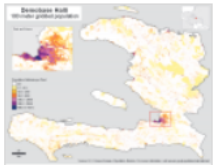
Geographies

- Mapping Files
- Mapping Tools
- Reference Files
- Reference Maps

Gridded Population Mapping (Demobase) 1998-present

Demobase is an interagency project, led by the U.S. Census Bureau, to develop methods for creating high-resolution gridded population maps based on a combination of census data and satellite image analysis. Census data are tied to subnational administrative areas, but disasters do not follow political boundaries. Using our data sets, one can obtain population estimates for any geographic area such as a city neighborhood.

In 2010, the Demobase team won the Census Bureau Director's Award for Innovation.




Gridded Population Mapping (Demobase Haiti) 2010

These visualizations provide information about the demobase for Haiti.

Data Download

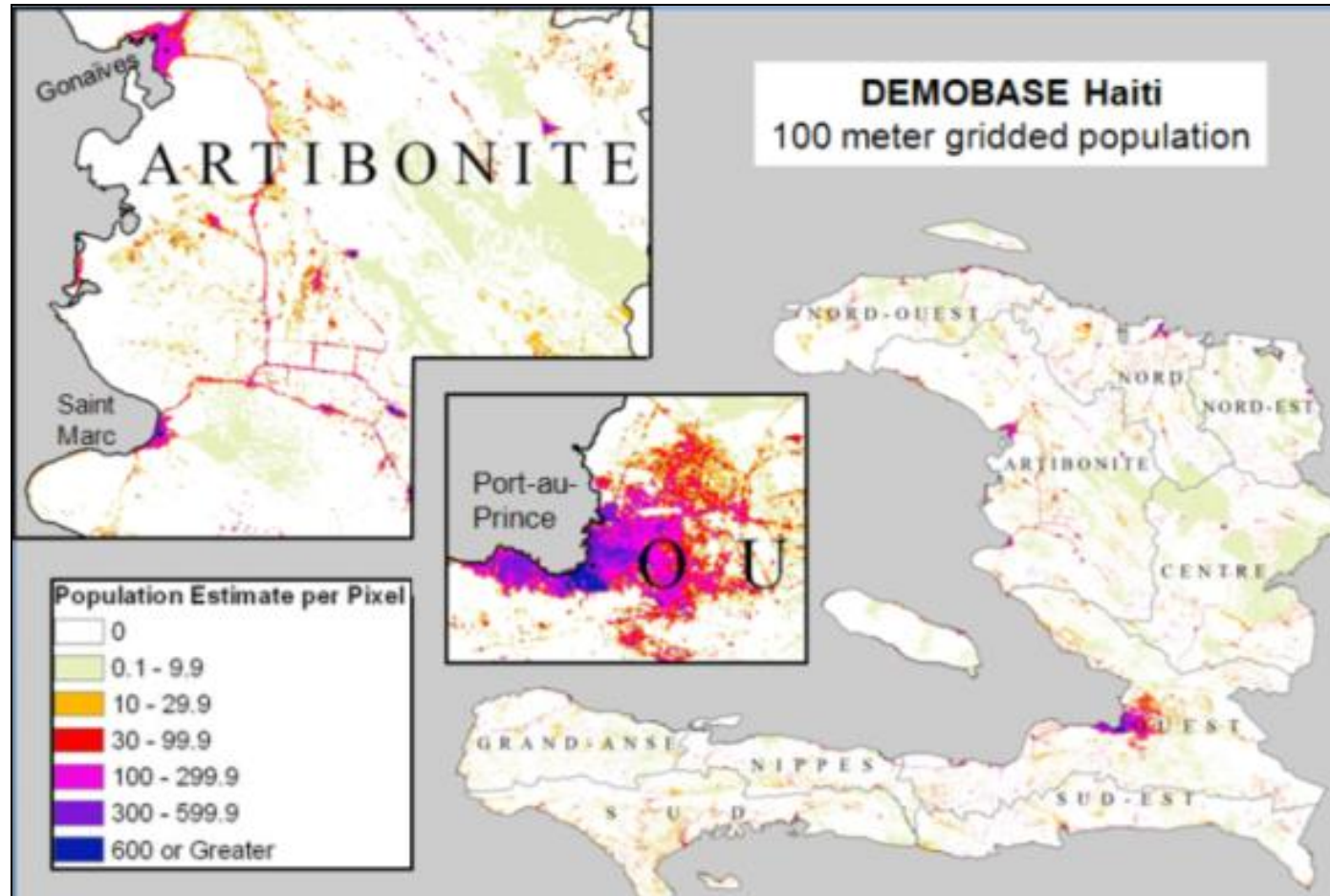
- Gridded population estimates, 2003 [<1.0 MB]
- 1st administrative level (Departments) with census data, 2003 [<1.0 MB]
- 2nd administrative level (Communes) with census data, 2003 [<1.0 MB]
- 2nd administrative level (Communes) population estimates, 2009 [<1.0 MB]
- 3rd administrative level (Sections) with census data, 2003 [<1.0 MB]

Related Information



International Programs Mapping Files

International Programs - Demobase



Questions?

Geography Help Desk

301 763-1128

geo.geography@census.gov

