

Strength in Numbers

Your Guide to Census 2010 Redistricting Data From the U.S. Census Bureau



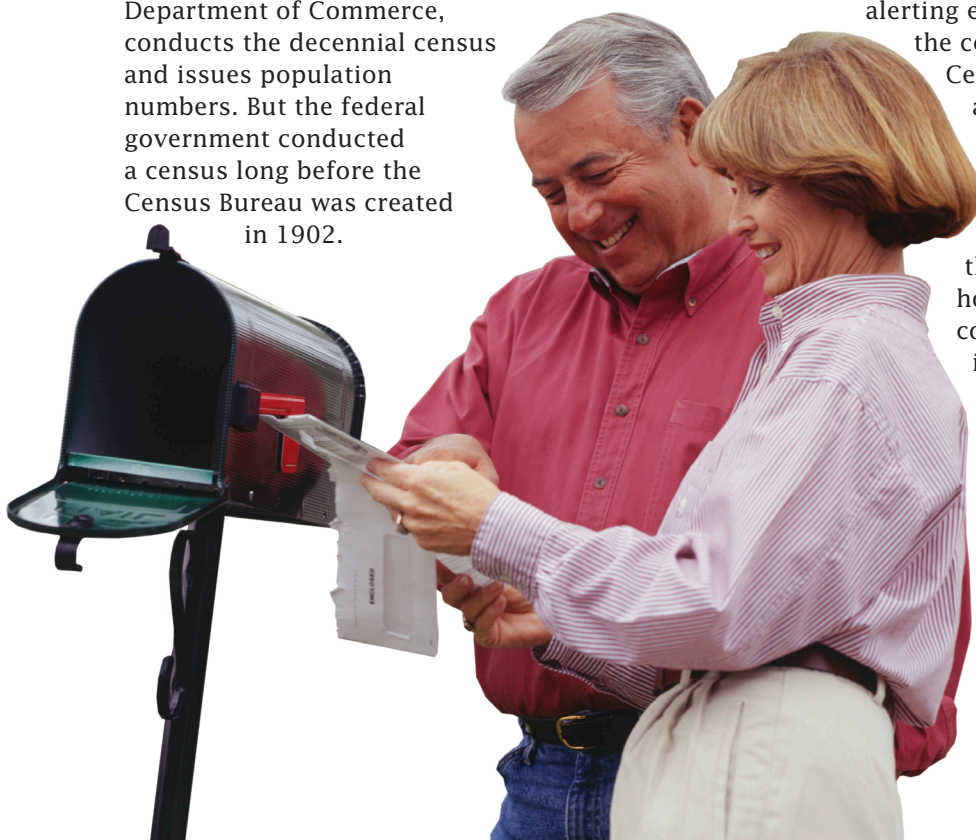
Once every 10 years, Americans stand up to be counted. Downtown and out-of-town, in the mountains and on the farms, we speak up and let our governments know that we intend to be represented in the decisions that they make.

The census gives us an opportunity to be part of the democratic process. Census numbers ensure that our representative districts—for the U.S. Congress and for state legislatures, and in our city and town governments—reflect our numbers, north or south, east or west.

This brochure explains where census numbers come from and the role those numbers have in the way states and localities redraw the boundaries of their legislative districts. The information here looks in particular at the maps and numbers that state governments and others get from the Census Bureau and use in redistricting.

Why a Census?

The U.S. Census Bureau, part of the U.S. Department of Commerce, conducts the decennial census and issues population numbers. But the federal government conducted a census long before the Census Bureau was created in 1902.



The first census was taken in 1790. Article 1, Section 2, of the U.S. Constitution established that the apportionment of the U.S. House of Representatives shall be based upon a national census. The census has many other important uses. It affects our lives in ways we don't often realize. The road you take to work each day, the hospital that serves your community, the schools your children attend, the products your grocery stocks—all these have been influenced by the census.

Governments use census statistics, for example, in planning needed highways or in locating new services or schools. Businesses use census numbers in marketing new products and locating new stores.

The imagination is the only limit upon the uses of the statistics that come out of the census.

The Census at a Glance

In early March 2010, the U.S. Postal Service delivered a letter to households announcing that the 2010 Census would be coming and alerting everyone to watch for the census form. The 2010 Census questionnaire arrived shortly thereafter, and the Census Bureau asked all households to return the forms using April 1, 2010, as the reference date. Some households in hard-to-count areas received the initial questionnaire and then redeliveries of the questionnaire. The Census Bureau used enumerators to take the census in rural areas and check on questionnaires that had not been returned by mail.

The questionnaires were sent to one of

three processing offices, where digital scanners read the unique barcode on each questionnaire through the envelope window to record its return status. The questionnaires were optically scanned and converted to digital images. All information was further processed and tabulated at the Census Bureau's secure computer center in Bowie, Maryland.

Finally, the Census Bureau generates the geographic and summary file data for you to use in redistricting. Media to bring you the data will include DVD-ROMs and the American FactFinder, which is the Census Bureau's data access and dissemination system on the Internet at <www.census.gov>.



Confidentiality Is a Must

Title 13 of the U.S. Code contains the laws governing the Census Bureau. Section 9 of Title 13 assures the confidentiality of information gathered by the Census Bureau. It specifies that neither the Secretary of Commerce nor any other officer or employee of the Department of Commerce—in fact, no one—may use the information furnished under the provisions of this title for any purpose other than the statistical purposes for which the information is supplied.

The law also states that no Census Bureau tabulation can identify any particular establishment or individual and that no

one other than the sworn officers and employees of the Census Bureau can examine information supplied in response to censuses and surveys. Only after 72 years are the census schedules opened to public inspection and use.

Redistricting Must Aim at Equality

The decennial census has played a crucial role in the apportionment of the Congress for more than two centuries. But it is only in the last 35 years that the Census Bureau has played a major role in the redistricting process.

U.S. Supreme Court decisions handed down during the 1960s clarified the Constitution's intention to provide equality of representation for all Americans. In 1964, the *Wesberry v. Sanders* decision held that, "as nearly as is practicable one person's vote in a congressional election is to be worth as much as another's." That same year, in *Reynolds v. Sims*, the Court ruled that state legislative districts must be "as nearly of equal population as is practicable."

Both U.S. congressional districts and state legislative districts must be drawn so that their residents have a fair and equal share in the way they are governed. These Supreme Court decisions increased the states' need for geographically detailed census information in the redistricting process.

The urgency of the states' need for these data led the Congress to pass Public Law (P.L.) 94-171 in December 1975.

Taking the Census

Before we look at the statistics, maps, and electronic geographic files that states will use in redistricting, let's look at the census itself—the undertaking through which the Census Bureau gathers the statistics and the important first step in the redistricting process.

The Census Bureau began to prepare for the twenty-third decennial census long before 2010. For the public, however, the process began in March 2010 when census questionnaires were mailed to most households in the United States. In some rural areas, census takers delivered questionnaires. People filled out the questionnaire using a reference date of April 1, 2010—Census Day—and returned them by mail. In some instances, a census taker visited a household to collect the census information.

To conduct the census, the Census Bureau hires enumerators working out of 494 local census offices nationwide. To process the questionnaires, we use three data capture



centers. People living in populous areas mail their forms directly to a data capture center. In less populous areas, census staff leave a questionnaire at each household for a resident to fill out and mail back in a postage-paid envelope or staff will perform an in-person interview. In all cases, if a form is not received, the Census Bureau attempts to follow up with a personal visit to try to collect the information. The data capture centers are located in Baltimore, Maryland; Jeffersonville, Indiana; and Phoenix, Arizona.

As soon as a form reaches a data capture center, the clock starts ticking for the Census Bureau. These centers use scanners to record the arrival of the questionnaires, so we can keep an automated list of forms returned and those still outstanding.

The data capture centers use optical scanners to capture a picture of each questionnaire

form and extract the data. Once the Census Bureau has completed the processing of the census forms, we begin to compile final data in the our Washington offices. Census Day, April 1, 2010, may be the most conspicuous date on our calendar, but it's not our only one. Now we face several deadlines in processing the final census counts.

The Department of Commerce and the Census Bureau provide census counts to the President and the states by the deadlines set forth in Title 13 of the U.S. Code (U.S.C.) Section 141 (b) and (c). For the 2010 Census, the Secretary of Commerce and the Census Bureau Director will report the total population counts by state to the President by December 31, 2010. By April 1, 2011, the Director will provide the detailed population counts for all areas within each state to the governors and legislative leaders, under the provisions of Public Law 94-171.

U.S. Census Bureau

Dr. Robert M. Groves,
Director

Thomas L. Mesenbourg, Jr.,
Deputy Director

Census 2010 Redistricting
Data Office

Cathy C. McCully,
Chief

James Whitehorne,
Assistant Chief

2010 Census Leadership



Dr. Robert M. Groves,
Director



Thomas L. Mesenbourg,
Deputy Director



Arnold Jackson,
Associate Director for
the Decennial Census

Robert M. Groves is the Director of the U.S. Census Bureau. President Barack Obama nominated Robert M. Groves for director of the U.S. Census Bureau on April 2, 2009, and the Senate confirmed him on July 13, 2009. He began his tenure as director on July 15, 2009. Groves had been a professor at the University of Michigan and director of its Survey Research Center, as well as research professor at the Joint Program in Survey Methodology at the University of Maryland. He was the Census Bureau's Associate Director for Statistical Design, Methodology and Standards from 1990 to 1992, on loan from the University of Michigan.

Thomas L. Mesenbourg is the Deputy Director of the U.S. Census Bureau. Since May 2, 2008, Mesenbourg has been serving as Deputy Director and Chief Operating Officer, overseeing the day-to-day operations of the government's preeminent statistical agency. The Bureau has about 12,000 employees - nearly 5,000 at Suitland, Md., headquarters and the rest are based at regional offices and telephone centers across the country.

Arnold Jackson is the Associate Director for Decennial Census at the U.S. Census Bureau.

He provides executive leadership for all decennial census and related programs, and is principal adviser to the executive staff, providing overall direction, planning and coordination for all decennial census operations. He works closely with the six decennial division chiefs and two program office chiefs to provide overall direction for reengineering the 2010 Census.

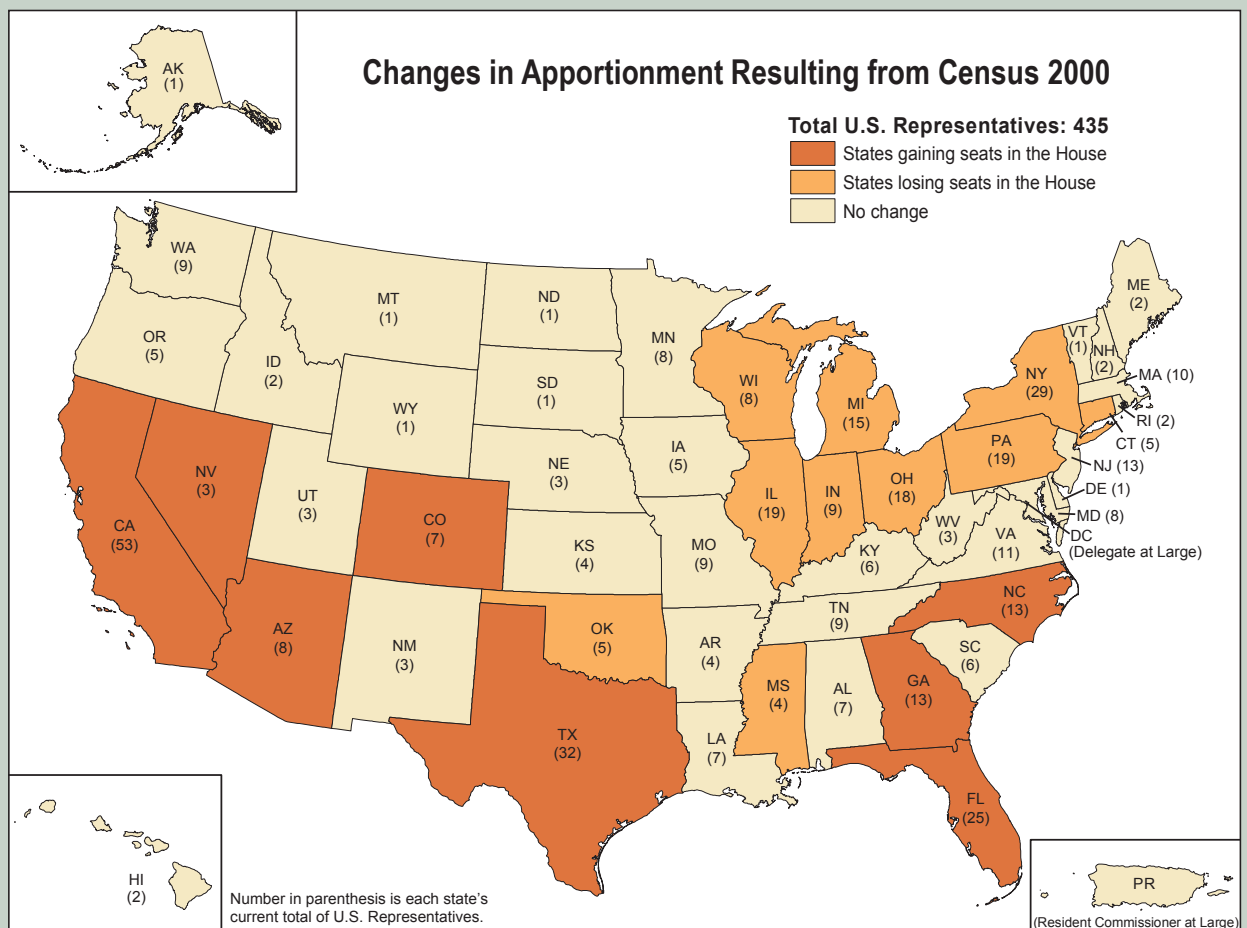
Apportionment *Is the* Fundamental Use

According to the Constitution, the census has one fundamental purpose: to ensure that the representation of each state in the U.S. House of Representatives reflects the relative size of its population as compared with other states.

There are 435 representatives divided up among the 50 states. Each one of these representatives is elected by the voters of a congressional district.

Populous states have more representatives than less populous states. In the 111th Congress, California had 53 representatives. Wyoming, the least populous state, had just one. The map on this page shows how many representatives each state had as a result of Census 2000.

“Apportionment” is the process of determining how many representatives each state is entitled to. How does the Census Bureau figure in this process? Our role is twofold—to conduct the census and, as a part of the Executive Branch, to calculate the apportionment based upon the census results. Once we take the census and compile the results, we then use the method of equal proportions to determine the number of representatives each state receives. But our job doesn’t end there.



In 2000, the South and West Gained Seats!

“One person/one vote” court decisions and legislation have given the Census Bureau a major role in redistricting, the process by

which state governments redraw U.S. congressional and state legislative districts.

Off to the President

The Census Bureau must prepare the final, official state population counts required for the apportionment of the U.S. House of Representatives.

These official counts are to be reported to the President on or before December 31, 2010, a brief 9 months after Census Day. According to the U.S. Code, the President must then report these figures to the Congress. He will do this in early January 2011, during the first week of the 112th Congress.

This report will show:

- The population of each state.
- The number of representatives apportioned to each state.

The apportionment section of the U.S. Code also tells the steps that are to be followed after the Congress receives the President’s report. Within 15 calendar days, the Clerk of the House of Representatives must send to each state’s governor a certificate showing how many representatives the state may send to the next Congress.

With this information and with the data provided by the U.S. Census Bureau, the states and nongovernmental organizations—in fact anyone with access to geographic information system software—will have the ability to design district boundaries using desktop computers, laptop computers, or the Internet.

Method of Equal Proportions Guides Apportionment

How does the method of equal proportions work?

Adopted in 1941 (U.S. Code, Title 2, Section 2a), the method of equal proportions requires the Census Bureau to compile a priority list of states. Priority value is determined by dividing a state’s population by the geometric mean of its current and next House seats.

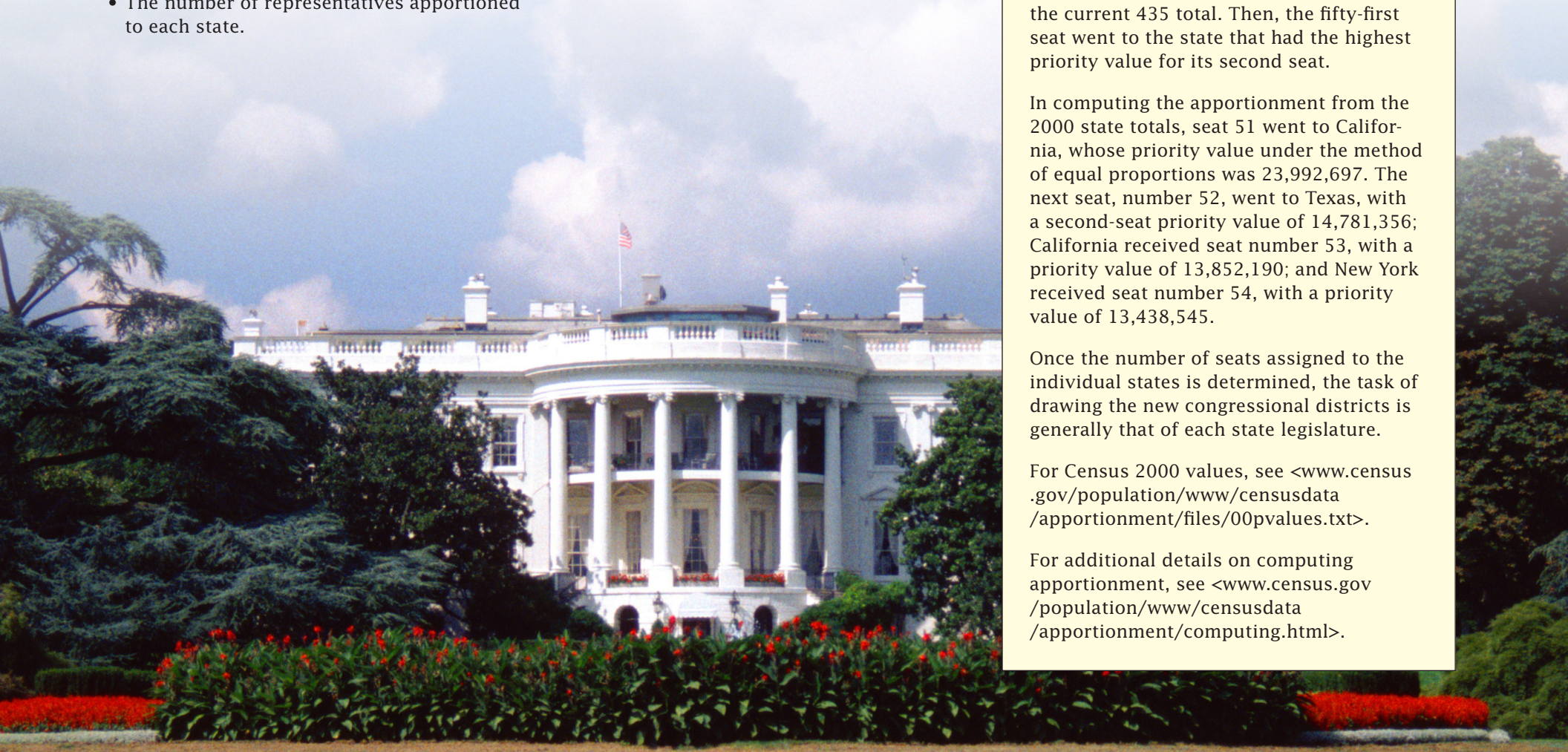
For example, following Census 2000, each of the 50 states was awarded 1 seat out of the current 435 total. Then, the fifty-first seat went to the state that had the highest priority value for its second seat.

In computing the apportionment from the 2000 state totals, seat 51 went to California, whose priority value under the method of equal proportions was 23,992,697. The next seat, number 52, went to Texas, with a second-seat priority value of 14,781,356; California received seat number 53, with a priority value of 13,852,190; and New York received seat number 54, with a priority value of 13,438,545.

Once the number of seats assigned to the individual states is determined, the task of drawing the new congressional districts is generally that of each state legislature.

For Census 2000 values, see <www.census.gov/population/www/censusdata/apportionment/files/00pvalues.txt>.

For additional details on computing apportionment, see <www.census.gov/population/www/censusdata/apportionment/computing.html>.



The Redistricting Process Begins

But wait! The clock is still ticking! The Census Bureau still has another important deadline to meet.

In December 1975, the Congress passed Public Law (P.L.) 94-171. This law requires the Census Bureau to make special preparations to provide redistricting data to the 50 states no later than April 1 of the year following a census (so April 1, 2011, for the 2010 Census). P.L. 94-171 specifies that within 1 year of Census Day, the Census Bureau must send each state the small-area data the state will need to redraw districts for the state legislature.

P.L. 94-171 sets up a voluntary program between the Census Bureau and those states that wish to receive population tabulations for voting districts and other state-specified geographic areas.

Under this program, those responsible for the legislative apportionment or redistricting of each state may devise a plan identifying the voting districts for which they want the specific tabulations and submit it to the Census Bureau.

Beginning in 2005, the Redistricting Data Office of the Census Bureau met with state officials in 46 states. These meetings explained the timeline and programs available for the 2010 Census, providing states the time to prepare and allocate resources in advance of the census. The states also provided the Census Bureau with valuable feedback on census program planning.

The 2010 Census Redistricting Data Program is a five-phase program. During Phase 1 (2005–2006), the Census Bureau collected state legislative district boundaries and associated updates to tabulate legislative districts. This phase also included an aggressive 2010 Census communications plan, with visits to state capitals, to make sure the states were informed and prepared for the upcoming census.

Phase 2 (2008–2010) consisted of the Voting District/Block Boundary Suggestion Project (VTD/BBSP) in which states received TIGER/Line® shapefiles and the MAF/TIGER Partnership Software (MTPS) to electronically collect voting district boundaries, feature updates, suggested block boundaries, and corrected state legislative district boundaries. Both Phase 1 and Phase 2 are voluntary programs that include a step where the state verifies the submitted data.

Phase 3 constitutes the delivery of the data for the 2010 Census. The Census Bureau will deliver the geographic and data products to the majority and minority leadership in the state legislatures, the governors, and any designated P.L. 94-171 liaisons. Once



Cathy McCully, chief, and James Whitehorne, assistant chief, Redistricting Data Office are responsible for ensuring all phases of the redistricting data program are managed successfully, including the delivery of the P.L. 94-171 data by April 1, 2011.

Census 2010 Redistricting Data Program					
Phase 1 and Phase 2 Participation (SLDU/SLDL and VTD/BBSP)					
	VTD	BBSP	SLDU	SLDL	CD
Alabama	x		x	x	x
Alaska	x	x	x	x	AL
Arizona	x	x	x	x	x
Arkansas	x		x	x	x
California	x	x	x	x	x
Colorado	x	x	x	x	x
Connecticut	x		x	x	x
Delaware	x		x	x	AL
District Of Columbia	x		x	##	NV
Florida	x	x	x	x	x
Georgia	x	x	x	x	x
Hawaii	x	x	x	x	x
Idaho	x		x	x	x
Illinois	x	x	x	x	x
Indiana	x	x	x	x	x
Iowa	x		x	x	x
Kansas	x		x	x	x
Kentucky			x	x	x
Louisiana	x	x	x	x	x
Maine	x		x	x	x
Maryland	x	x	x	x	x
Massachusetts	x		x	x	x
Michigan	x	x	x	x	x
Minnesota	x	x	x	x	x
Mississippi	x		x	x	x
Missouri	x		x	x	x
Montana	x (see below)		x	x	AL
Nebraska	x	x	x	##	x
Nevada	x		x	x	x
New Hampshire	x		x	x	x
New Jersey	x		x	x	x
New Mexico	x	x	x	x	x
New York	x		x	x	x
North Carolina	x		x	x	x
North Dakota	x		x	x	AL
Ohio	x		x	x	x
Oklahoma	x	x	x	x	x
Oregon	x (see below)	x	x	x	x
Pennsylvania	x		x	x	x
Rhode Island	Did not participate for Phase 2		x	x	x
South Carolina	x	x	x	x	x
South Dakota	x		x	x	AL
Tennessee	x	x	x	x	x
Texas	x		x	x	x
Utah	x	x	x	x	x
Vermont	x		x	x	AL
Virginia	x		x	x	x
Washington	x	x	x	x	x
West Virginia	x		x	x	x
Wisconsin	x		x	x	x
Wyoming	x		x	x	AL
Puerto Rico	x		x	x	NV
Montana: the following counties submitted VTDs for Phase 2: 001, 005, 007, 009, 011, 013, 017, 019, 023, 025, 029, 031, 033, 035, 037, 043, 049, 051, 059, 063, 065, 067, 069, 073, 075, 079, 081, 085, 089, 091, 093, 095, 103, 105, 109, 111					
Oregon: only county 051 submitted VTDs for Phase 2.					
State Legislative Districts: Original SLDs were collected during Phase 1 of the RDP. Delaware, South Dakota, Indiana, and Utah submitted new plans in 2008.					
All states contain complete coverage for SLDUs.					
## - The District of Columbia has city council wards. Nebraska's legislature is unicameral. Therefore, these two state/state equivalents have no SLDL coverage.					
Congressional Districts: These were last collected for the 110th Congress, and there were no changes for the 111th Congressional Districts for Census 2010.					
AL - At Large Congressional Representation NV - Non-Voting Congressional Delegation					
BBSP - Block Boundary Suggestions CD - Congressional District RDP - Redistricting Data Program SLDL - State Legislative District Lower (House) SLDU - State Legislative District Upper (Senate) VTD - Voting District					

bipartisan receipt of the data is confirmed, the data will be made available online to the public within 24 hours through the American FactFinder. For this census, the P.L. 94-171 data will include population counts for small areas within each state, as well as housing occupied/vacancy counts.

After the Census Bureau provides the data, the states will begin their redistricting. States are responsible for delineating their own congressional and legislative boundaries and their legislatures. Legislatures, secretaries of state, governors, and/or redistricting commissions carry out the process.

During Phase 4 (2011–2013) the Census Bureau's Redistricting Data Office will collect the post-2010 Census state legislative and congressional district plans. We will retabulate the 2010 redistricting data for the 113th Congress and newly drawn state legislative districts. The American Community Survey (ACS) will also present data for these new areas. (See below for more information on the ACS.)

The final phase of the 2010 Census Redistricting Data Program, Phase 5, will be an evaluation and solicitation of recommendations for the 2020 Census. Working with the National Conference of State Legislatures, the Census Bureau will conduct a historical review by the states of the successes and failures of the Census Bureau to meet the P.L. 94-171 mandate. These findings will be used to develop recommendations for the 2020 Census Redistricting Data Program.

MAF/TIGER Partnership Software

Advances in geographic information system (GIS) software and the wide adoption of the use of digital geographic data meant that the 2010 Redistricting Data Program (RDP) could be conducted solely as a digital exchange. During the years before the 2010 Census, the Census Bureau, through a contractor, developed a customized GIS to help states update census-provided geographic data and return the updates to the Census Bureau for inclusion in the MAF/TIGER database. From this, the MAF/TIGER Partnership Software (MTPS) was created. All RDP participants received the MTPS, along with a full suite of data files for their state. The MTPS allowed participants to add linear features, create or update their redistricting entity boundaries, apply block boundary suggestions, and update areal water bodies and area landmarks. In addition, participants could bring in their own geographic data or imagery as a reference tool for making their changes. The MTPS featured data-quality tools to help identify and eliminate some commonly occurring data errors. Once participants completed their work, the MTPS packaged all of the updated information into a single compressed file that could be sent by file transfer protocol (FTP) to the Census Bureau for processing.

Out Goes the Long Form and In Comes the American Community Survey

Designed to replace the long form used in past decennial censuses, the American Community Survey (ACS) is conducted by the Census Bureau in every county, American Indian and Alaska Native Area, and Hawaiian Home Land. It began in 1996 in a sample of counties across the country. Today the survey is conducted in 250,000 households per month throughout all U.S. counties and in all municipios in Puerto Rico, where it is called the Puerto Rico Community Survey. While the 2010 Census focuses on counting the population for purposes of apportionment and redistricting, the ACS provides yearly data similar to that available from the long form used in previous decennial censuses. The questions cover such topics as

journey to work; age; income and housing; race, Hispanic origin, and language spoken at home; military service; and more.

While most redistricting plans are based on the P.L. 94-171 data and other statewide data, the ACS also will be of interest to those drawing plans since plans are routinely analyzed. Experts will analyze demographic characteristics such as citizenship and language ability when reviewing congressional and legislative plans. ACS estimates are released annually as 1-year, 3-year and 5-year estimates based on population thresholds. The 5-year estimates provide ACS data at the nationwide level down to small geographic areas such as state legislative district, census tract, and block group. Many redistricting experts will use 5-year ACS estimates when they review redistricting plans.



Tools To Do the Job

When state officials begin the difficult task of redrawing their districts, they'll have in hand several important tools resulting from census redistricting data:

- 2010 Census Redistricting Data [P.L. 94-171] Summary Files
- 2010 Census P.L. 94-171 Voting District/State Legislative District Reference Maps
- 2010 Census P.L. 94-171 County Block Maps
- 2010 Census Tract Reference Maps
- 2010 Census School District Reference Maps

- 2010 Census Tabulation Geography TIGER/Line® Shapefiles
- 2010 Census Tabulation Geography Block Assignment Files for Congressional Districts, State Legislative District Upper Chambers, State Legislative District Lower Chambers, Voting Districts, Elementary School Districts, Secondary School Districts, and Unified School Districts

The P.L. 94-171 summaries have population totals and summaries by race, Hispanic or Latino, and voting age for all appropriate geographic areas delimited on the maps: state, counties or equivalent areas, state legislative districts, voting districts, county subdivisions, school districts, places, American Indian/Alaska Native/Native Hawaiian areas, census tracts, block groups, and blocks.

New for the 2010 Census, housing unit counts will be included as part of the 2010 Census Redistricting Data [P.L. 94-171] Summary Files. Also for 2010, states recommended including school districts as part of the geographic summary levels and a new table on housing unit occupancy status.

Public Law 94-171 Tabulations

While P.L. 94-171 requires the Census Bureau to furnish only counts of the total population, additional data items are included. Since the inception of the Census Redistricting Data Program for the 1980 census, the Census Bureau has included summaries for the major race groups specified by the Statistical Programs and Standards Office of the U.S. Office of Management and Budget (OMB) in Directive 15 (as issued in 1977 and revised in 1997).

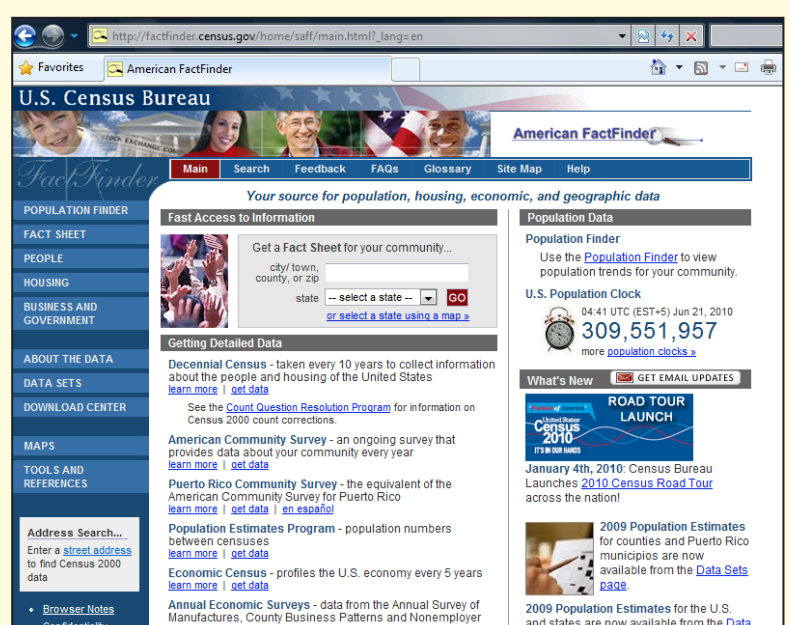
Originally the tabulation groups included White, Black, American Indian/Alaska Native, and Asian/Pacific Islander, plus "some other race." These race data were also cross-tabulated by Hispanic/Non-Hispanic origin.

At the request of the state legislatures and the Department of Justice, for the 1990 Census Redistricting Data Program, voting age (18 years old and over) was added to the cross-tabulation of race and Hispanic origin.

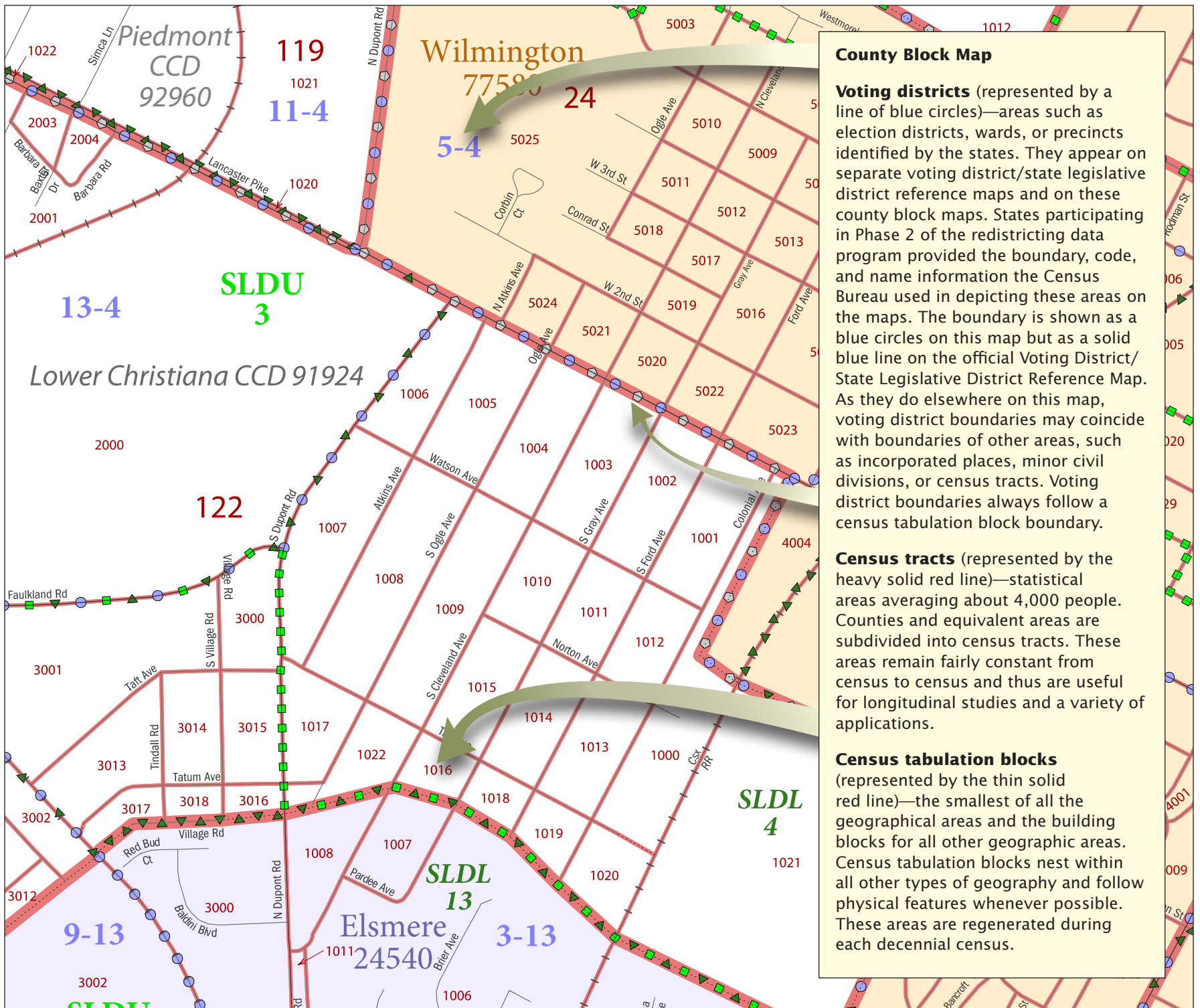
Census Statistics for 2010: The American FactFinder

The American FactFinder (AFF) is a data-access system that gives users facts and information about communities, the economy, and society. The interactive electronic system allows data users access to predefined data products, metadata, and online help, as well as the ability to create custom data products online. This dissemination method allows for a quicker release of the detailed data users want. Users may access data and create their own reports.

The AFF currently offers data from the 2000 decennial census, the American Community Survey, the Population Estimates Program, and the 2002 and 2007 economic censuses, and annual economic surveys. It also will provide data from the 2010 Census. The 2010 Census Redistricting Data [P.L. 94-171] Summary File will be available, by state, through the AFF within 24 hours after the bipartisan acknowledgement of its receipt by each state's designated officials.



The volumes of data collected by the Census Bureau require a large and efficient system of dissemination. With AFF, Census Bureau customers have more flexibility to request the data they need for their geography of interest. The AFF provides for a quick release of detailed data about the nation's people and the economy to meet the needs of data users. To access the American FactFinder, go to the Census Bureau home page at <www.census.gov>.



County Block Map

Voting districts (represented by a line of blue circles)—areas such as election districts, wards, or precincts identified by the states. They appear on separate voting district/state legislative district reference maps and on these county block maps. States participating in Phase 2 of the redistricting data program provided the boundary, code, and name information the Census Bureau used in depicting these areas on the maps. The boundary is shown as a blue circles on this map but as a solid blue line on the official Voting District/State Legislative District Reference Map. As they do elsewhere on this map, voting district boundaries may coincide with boundaries of other areas, such as incorporated places, minor civil divisions, or census tracts. Voting district boundaries always follow a census tabulation block boundary.

Census tracts (represented by the heavy solid red line)—statistical areas averaging about 4,000 people. Counties and equivalent areas are subdivided into census tracts. These areas remain fairly constant from census to census and thus are useful for longitudinal studies and a variety of applications.

Census tabulation blocks (represented by the thin solid red line)—the smallest of all the geographical areas and the building blocks for all other geographic areas. Census tabulation blocks nest within all other types of geography and follow physical features whenever possible. These areas are regenerated during each decennial census.

You Need to Map Things Out!

The data presented in the P.L. 94-171 data set won't mean much until you look at the supporting geographic products and learn a little about the geographic areas. The Census Bureau has made the Census 2010 maps as clear as we can to convey the greatest detail about small areas. The maps are on as few map sheets as possible, are digital, and

are in portable document format (.pdf). The scale varies from county to county depending on area size and population density, and in many areas insets are used to ensure a readable map. We made the maps using our TIGER® system, an automated geographic database the Census Bureau first developed for the 1990 census and updates and maintains to support all Census Bureau censuses and surveys, including the 2010 Census.

This system provides the ability to develop nationwide block-level data that legislatures request. Data users easily can review the .pdf maps or data without ever unfolding a map sheet!

Voting district/state legislative district reference maps (see example, page 7) cover a county or equivalent area and show the outline of voting districts (if defined) and

TIGER/Line® Shapefiles

Think of the TIGER (Topologically Integrated Geographic Encoding and Referencing system) database, as provided in our TIGER/Line® shapefile products, as a huge map of the United States. That's basically what it is. It includes geographic data for visible features on the earth's surface—features such as roads, railroads, and streams. For most features, the TIGER/Line® shapefiles also include attributes, such as the names of the feature, and for streets, the potential address range and associated ZIP Code for each side of the street. The TIGER/Line® shapefiles also include the boundaries and codes for all geographic areas for which the Census Bureau tabulates data, including American Indian/Alaska Native areas, states, counties, townships, cities, and similar functioning general-purpose governments. It also has the boundaries and codes for statistical areas (such as census tracts and census blocks) for which the Census Bureau collects and tabulates data.

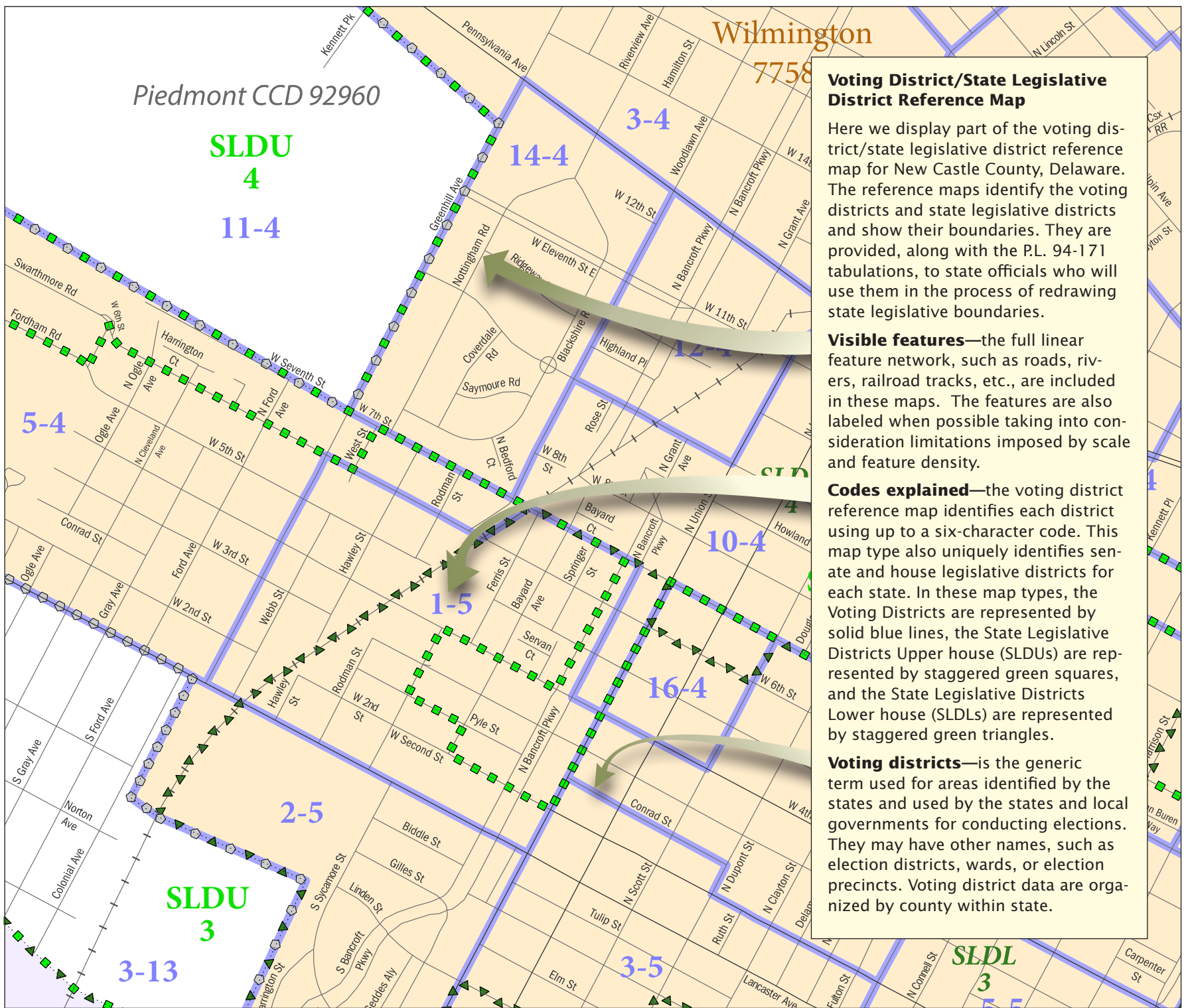
The Census Bureau developed the TIGER system jointly with the U.S. Geological Survey (USGS) in the 1980s. We combined detailed USGS digital data (based on map sheets in which 1 inch equals approximately 1.6 miles) with digital data from the geographic base files used in the 1980 census. We continue to update the TIGER database (streets, address ranges, and political boundaries) based on information we obtain from local and tribal governments, the U.S. Postal Service, and our own field staff.

In the 2000s, we undertook a major realignment of the TIGER database, through the MAF/TIGER Accuracy Improvement Project, using imagery to improve its spatial accuracy. By the time we finished in 2007, TIGER had an accuracy of 7.6 meters or better.

Just before we tabulate the 2010 Census data, we will use the TIGER database to assign the census tabulation block numbers for all census blocks in the entire nation, using the updated base features and geographic area boundaries. This will best ensure that Census 2010 tabulation blocks are meaningful and represent the latest possible information.

Because the TIGER database contains legal and statistical geographic areas and codes, and the underlying street network, users now have a powerful tool to display demographic data graphically. Using the TIGER/Line® shapefiles (the public version of the TIGER database) and appropriate software, you can rapidly determine the impact on the demographic makeup of a district when you move a boundary. You can quickly perform this analysis at all levels, from city blocks to congressional districts.

TIGER/Line® shapefiles will be available with all of the 2010 Census geographic codes shortly before the 2010 Census summary file data become available. All of the 2009 TIGER/Line® shapefiles for the nation comprise approximately 55 gigabytes of compressed data or 92 gigabytes of uncompressed data. The smallest state or state equivalent is about 32 kilobytes uncompressed, while the largest is over 6.7 gigabytes uncompressed. The 2010 TIGER/Line® shapefiles will be in similar size ranges.



state legislative districts. These maps provide a quick picture of areas that can be used as references for constructing new legislative districts. These maps also show the boundaries of the current state legislative districts.

When greater detail is needed, **county block maps** (page 6) are the reference to consult. These maps show the smallest tabulation areas—census blocks—that can be used in the redistricting process. Map sheets are organized by county. For the block map, an index sheet shows the layout of the relationship between individual map sheets within the county.

Voting districts—areas such as election districts, wards, or precincts identified by the states. They appear on separate voting district/state legislative district reference maps and on the county block maps. States participating in the redistricting data program provided the boundary, code, and name information we used in depicting these

areas on the maps. The boundary is shown as a shaded stippled pattern on this map but may be different on the official 2010 Census maps. As they do elsewhere on this map, voting district boundaries may coincide with boundaries of other areas, such as incorporated places, minor civil divisions, or census tracts, and they always follow a census block boundary.

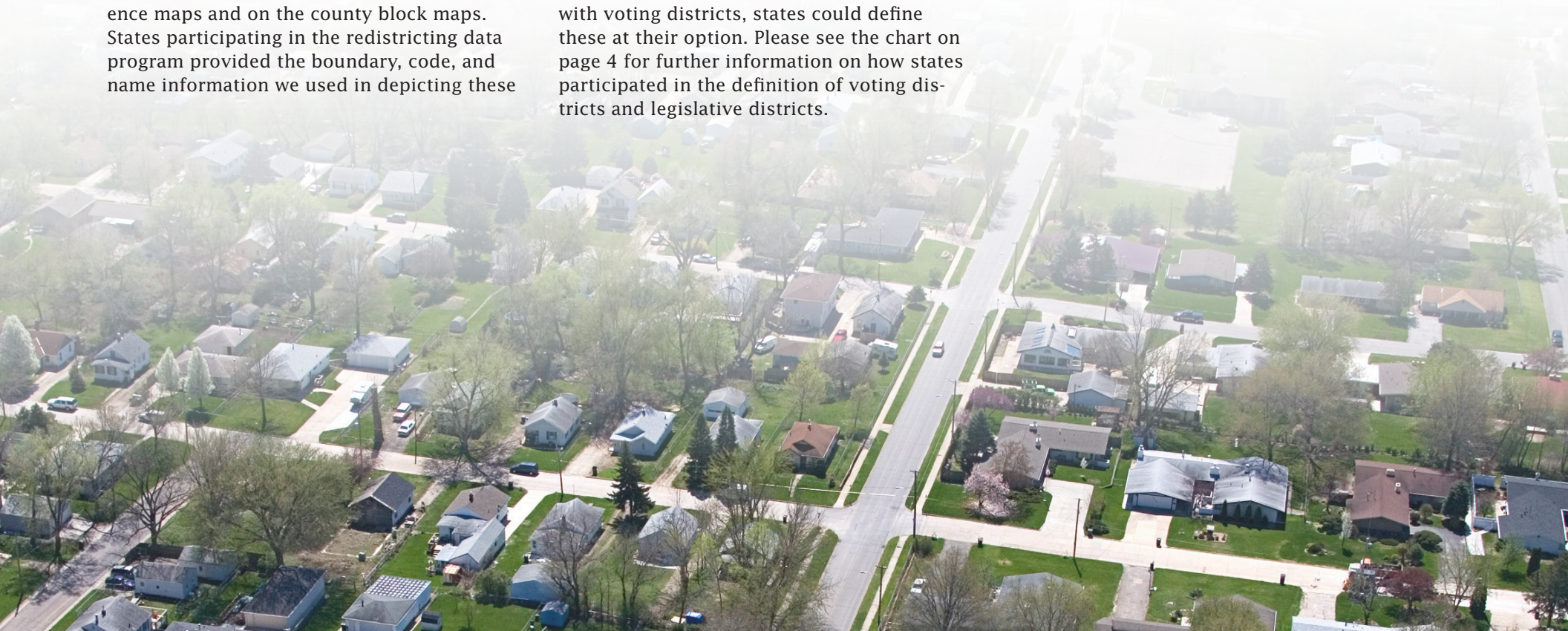
Census tracts—statistical areas averaging about 4,000 people. Counties and equivalent areas are subdivided into census tracts. These areas remain fairly constant from census to census and thus are useful for longitudinal studies and a variety of applications.

Legislative districts—districts used to elect a member to the upper (senate) or lower (house) chambers of state legislatures. As with voting districts, states could define these at their option. Please see the chart on page 4 for further information on how states participated in the definition of voting districts and legislative districts.

Census tabulation blocks—smallest of census geographic areas, normally bounded by streets or other prominent physical features or by the boundaries of geographic areas. They may be as small as a typical city block that's bounded by four streets or larger than 100 square miles in some rural areas. Blocks are identified by a four-digit number, unique within census tracts for the 2010 Census. Nationally, blocks average about 100 people each.

Block groups—a set of census blocks identified by the same first digit within a census tract. For example, all blocks in a census tract in the 1000 range define block group 1.

Once you study the map series and definitions shown here, you'll be ready to work with the statistics for these areas.



Record Layout for P.L. 94-171 Data

Earlier we mentioned that the Census Bureau will furnish each governor and the majority and minority leaders of each state legislature with a full set of their state's census redistricting data. The law requires us to do this by April 1, 2011.

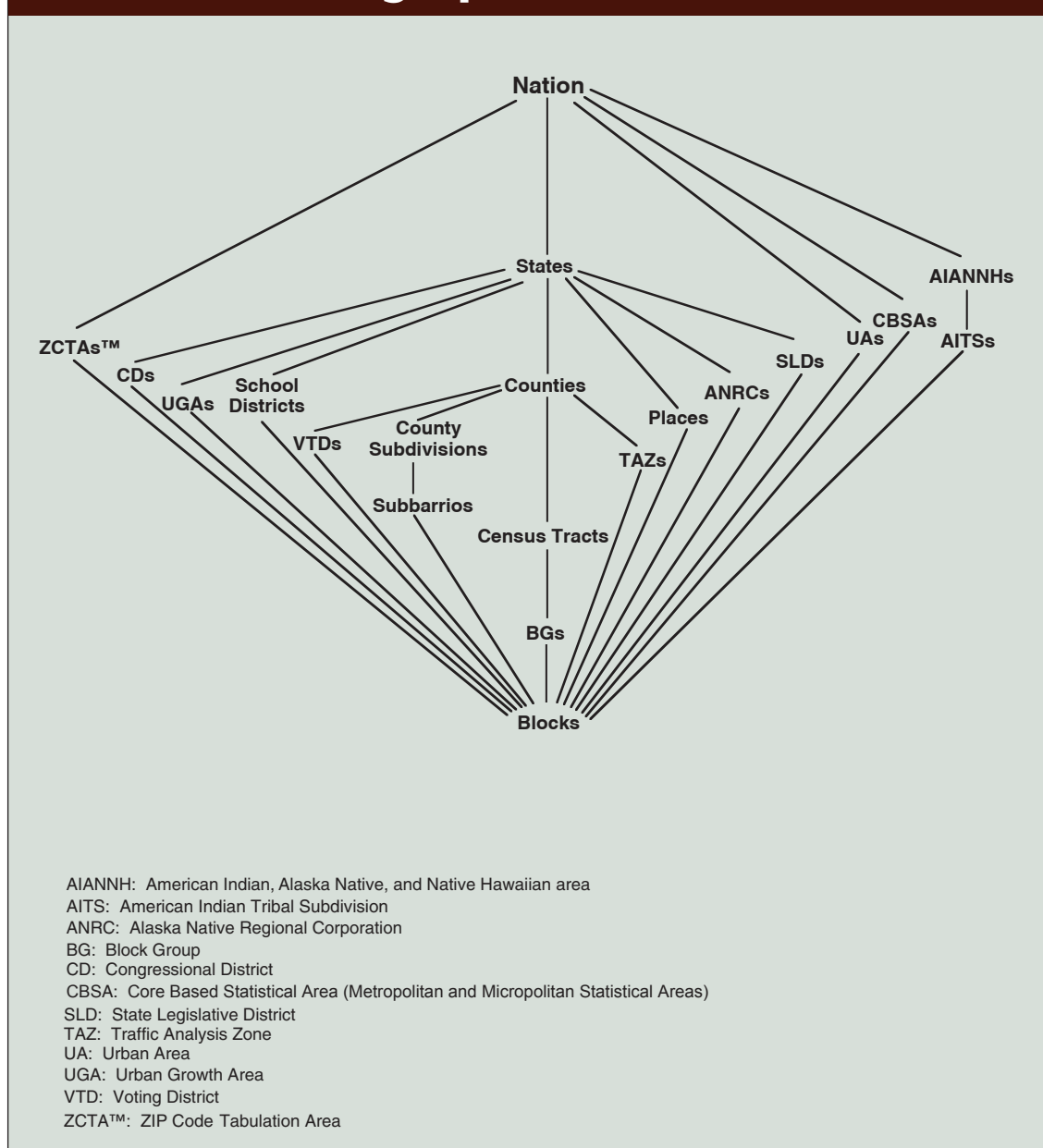
While P.L. 94-171 requires the Census Bureau to furnish only counts of the total population, additional data also will be included. Cathy McCully, chief of the Census 2010 Redistricting Data Office, notes, "We'll provide data on the voting-age population and cross-tabulations of voting age by race characteristics, as well as by Hispanic or Latino." For the 2010 Census, the Census Bureau carried out extensive consultations between 2005 and 2009 with stakeholders in the redistricting process.

During this period, the Census Bureau conducted the 2010 Census Dress Rehearsal in April 2008 in the city of San Joaquin, California. In keeping with the criteria from the 2010 Census, each of the "single race" categories (5 plus "some other race"), plus the 57 possible categories for those who choose more than one race were included. This approach produced up to 63 racial tallies and will provide users the maximum flexibility for analyzing these new data for any area. This flexible design also meets the needs of the Department of Justice for enforcement of civil rights programs.

During the evaluation phase of the program, states will make recommendations for the next census. James Whitehorne, assistant chief of the 2010 Census Redistricting Data Office notes, "We are including a housing unit table on vacancy status in the 2010 P.L. summary levels. This recommendation is similar to the inclusion of housing units during the 1990 Census."

At each step of the process for collecting and tabulating these P.L.94-171 redistricting data, the Census Bureau will take the necessary steps to protect the confidentiality of individual responses.

Hierarchical Relationship of Geographic Entities



Hispanic/Latino origin is not considered a race category. Race and Hispanic/Latino data are obtained from a separate question on the 2010 Census questionnaire. The chart starting on page 9 shows a portion of the computer record layout for how these

data will be arrayed on DVD, along with the geography that will link the P.L. redistricting data to each block, voting district, census tract, city, county, etc.



2010 Census Redistricting Data (Public Law 94-171) Summary File - EXTRACT

SUMMARY TABLE OUTLINES Final v2.0

Table No.	Cell Count	Indent	
P1.		0	RACE [71]
P1.		0	Universe: Total population
P1.	1	0	Total:
P1.	2	1	Population of one race:
P1.	3	2	White alone
P1.	4	2	Black or African American alone
P1.	5	2	American Indian and Alaska Native alone
P1.	6	2	Asian alone
P1.	7	2	Native Hawaiian and Other Pacific Islander alone
P1.	8	2	Some Other Race alone
P1.	9	1	Two or More Races:
P1.	10	2	Population of two races:
P1.	11	3	White; Black or African American
P1.	12	3	White; American Indian and Alaska Native
P1.	13	3	White; Asian
P1.	14	3	White; Native Hawaiian and Other Pacific Islander
P1.	15	3	White; Some Other Race
P1.	16	3	Black or African American; American Indian and Alaska Native
P1.	17	3	Black or African American; Asian
P1.	18	3	Black or African American; Native Hawaiian and Other Pacific Islander
P1.	19	3	Black or African American; Some Other Race
P1.	20	3	American Indian and Alaska Native; Asian
P1.	21	3	American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander
P1.	22	3	American Indian and Alaska Native; Some Other Race
P1.	23	3	Asian; Native Hawaiian and Other Pacific Islander
P1.	24	3	Asian; Some Other Race
P1.	25	3	Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	26	2	Population of three races:
P1.	27	3	White; Black or African American; American Indian and Alaska Native
P1.	28	3	White; Black or African American; Asian
P1.	29	3	White; Black or African American; Native Hawaiian and Other Pacific Islander
P1.	30	3	White; Black or African American; Some Other Race
P1.	31	3	White; American Indian and Alaska Native; Asian
P1.	32	3	White; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander
P1.	33	3	White; American Indian and Alaska Native; Some Other Race
P1.	34	3	White; Asian; Native Hawaiian and Other Pacific Islander
P1.	35	3	White; Asian; Some Other Race
P1.	36	3	White; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	37	3	Black or African American; American Indian and Alaska Native; Asian
P1.	38	3	Black or African American; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander
P1.	39	3	Black or African American; American Indian and Alaska Native; Some Other Race
P1.	40	3	Black or African American; Asian; Native Hawaiian and Other Pacific Islander
P1.	41	3	Black or African American; Asian; Some Other Race
P1.	42	3	Black or African American; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	43	3	American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander
P1.	44	3	American Indian and Alaska Native; Asian; Some Other Race
P1.	45	3	American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	46	3	Asian; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	47	2	Population of four races:
P1.	48	3	White; Black or African American; American Indian and Alaska Native; Asian
P1.	49	3	White; Black or African American; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander
P1.	50	3	White; Black or African American; American Indian and Alaska Native; Some Other Race
P1.	51	3	White; Black or African American; Asian; Native Hawaiian and Other Pacific Islander
P1.	52	3	White; Black or African American; Asian; Some Other Race
P1.	53	3	White; Black or African American; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	54	3	White; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander
P1.	55	3	White; American Indian and Alaska Native; Asian; Some Other Race
P1.	56	3	White; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	57	3	White; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	58	3	Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander
P1.	59	3	Black or African American; American Indian and Alaska Native; Asian; Some Other Race
P1.	60	3	Black or African American; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	61	3	Black or African American; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	62	3	American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	63	2	Population of five races:
P1.	64	3	White; Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander
P1.	65	3	White; Black or African American; American Indian and Alaska Native; Asian; Some Other Race

2010 Census Redistricting Data (Public Law 94-171) Summary File - EXTRACT

SUMMARY TABLE OUTLINES Final v2.0

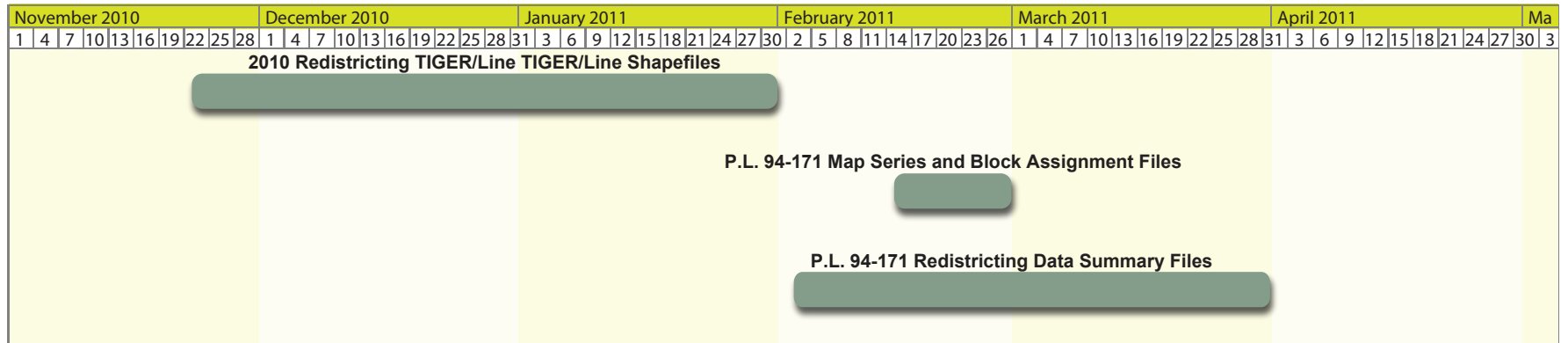
P1.	66	3			White; Black or African American; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	67	3			White; Black or African American; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	68	3			White; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	69	3			Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	70	2			Population of six races:
P1.	71	3			White; Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race
P2.		0			HISPANIC OR LATINO, AND NOT HISPANIC OR LATINO BY RACE [73]
P2.		0			Universe: Total population
P2.	1	0			Total:
P2.	2	1			Hispanic or Latino
P2.	3	1			Not Hispanic or Latino:
P2.	4	2			Population of one race:
P2.	5	3			White alone
P2.	6	3			Black or African American alone
P2.	7	3			American Indian and Alaska Native alone
P2.	8	3			Asian alone
P2.	9	3			Native Hawaiian and Other Pacific Islander alone
P2.	10	3			Some Other Race alone
P2.	11	2			Two or More Races:
P2.	12	3			Population of two races:
P2.	13	4			White; Black or African American
P2.	14	4			White; American Indian and Alaska Native
P2.	15	4			White; Asian
P2.	16	4			White; Native Hawaiian and Other Pacific Islander
P2.	17	4			White; Some Other Race
P2.	18	4			Black or African American; American Indian and Alaska Native
P2.	19	4			Black or African American; Asian
P2.	20	4			Black or African American; Native Hawaiian and Other Pacific Islander
P2.	21	4			Black or African American; Some Other Race
P2.	22	4			American Indian and Alaska Native; Asian
P2.	23	4			American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander
P2.	24	4			American Indian and Alaska Native; Some Other Race
P2.	25	4			Asian; Native Hawaiian and Other Pacific Islander
P2.	26	4			Asian; Some Other Race
P2.	27	4			Native Hawaiian and Other Pacific Islander; Some Other Race
<CONTINUED>					
P4.		0			HISPANIC OR LATINO, AND NOT HISPANIC OR LATINO BY RACE FOR THE POPULATION 18 YEARS AND OVER [73]
P4.		0			Universe: Total population 18 years and over
P4.	1	0			Total:
P4.	2	1			Hispanic or Latino
P4.	3	1			Not Hispanic or Latino:
P4.	4	2			Population of one race:
P4.	5	3			White alone
P4.	6	3			Black or African American alone
P4.	7	3			American Indian and Alaska Native alone
P4.	8	3			Asian alone
P4.	9	3			Native Hawaiian and Other Pacific Islander alone
P4.	10	3			Some Other Race alone
P4.	11	2			Two or More Races:
P4.	12	3			Population of two races:
P4.	13	4			White; Black or African American
P4.	14	4			White; American Indian and Alaska Native
P4.	15	4			White; Asian
P4.	16	4			White; Native Hawaiian and Other Pacific Islander
P4.	17	4			White; Some Other Race
P4.	18	4			Black or African American; American Indian and Alaska Native
P4.	19	4			Black or African American; Asian
P4.	20	4			Black or African American; Native Hawaiian and Other Pacific Islander
P4.	21	4			Black or African American; Some Other Race
P4.	22	4			American Indian and Alaska Native; Asian
P4.	23	4			American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander
P4.	24	4			American Indian and Alaska Native; Some Other Race
P4.	25	4			Asian; Native Hawaiian and Other Pacific Islander
P4.	26	4			Asian; Some Other Race
P4.	27	4			Native Hawaiian and Other Pacific Islander; Some Other Race
<CONTINUED>					

2010 Census Redistricting Data (Public Law 94-171) Summary File - EXTRACT

SUMMARY TABLE OUTLINES Final v2.0

H1.		0	OCCUPANCY STATUS [3]
H1.		0	Universe: Housing units
H1.	1	0	Total:
H1.	2	1	Occupied
H1.	3	1	Vacant

2010 P.L. 94-171 Redistricting Data Products Delivery Timeline



The 2010 Redistricting TIGER/Line® Shapefiles are spatial extracts from the Census Bureau's MAF/TIGER database. These files contain linear features such as roads, railroads, rivers as well as geographies such as American Indian reservations, places, census tracts, census block groups, and census blocks, in addition to many others.

The 2010 P.L. 94-171 Map Series includes County Block Maps, Census Tract Reference Maps, School District Reference Maps, and Voting District Reference Maps.

The 2010 P.L. 94-171 Redistricting Data Summary Files will include four population tables, including total population, total population by race, ethnicity, and voting age (18+). In addition, for the 2010 Census, this file will include a table on occupancy status of housing units

Where to Go to Learn More!

Responsive government at all levels begins with legislative boundaries that reflect an accurate count of the population. We hope this brochure helps you better understand the data and maps that the Census Bureau provides and how you can use them in redistricting. You can learn more about the design and content of other Census Bureau data products from the Census Bureau's Web site,

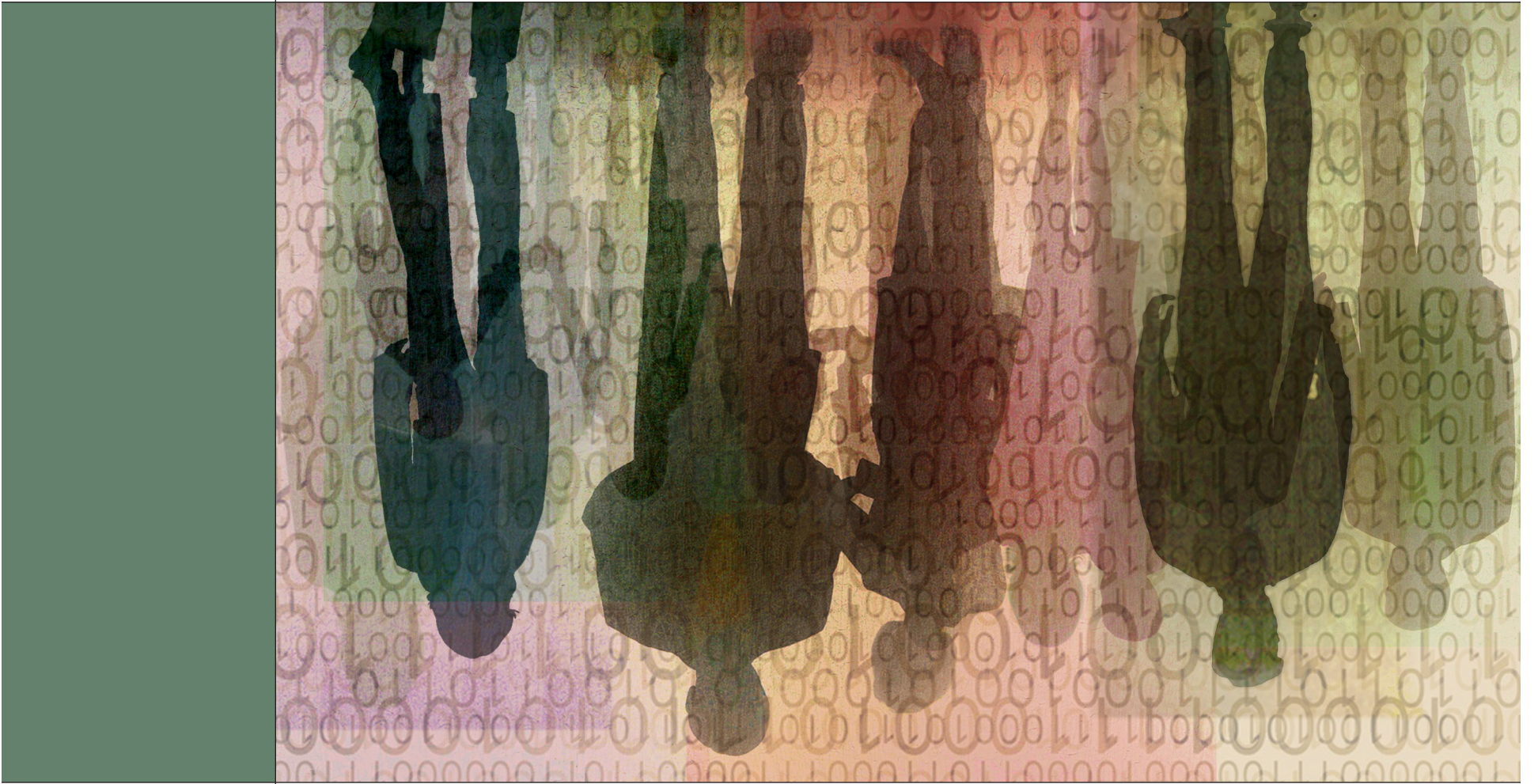
particularly the American FactFinder. Just point your browser to <www.census.gov>. More information about the 2010 Census Redistricting Data Program, can be obtained by calling 301-763-4039 or sending e-mail to <catherine.clark.mccully@census.gov> or <james.whitehorne@census.gov>. You also may write to:

U.S. Census Bureau,
Redistricting Data Office, HQ – 8H019
Washington, DC 20233.

For more information on redistricting data, access the the Redistricting Data Office Web page located at <www.census.gov/rdo> and click on "Redistricting Data" or access the National Conference of State Legislatures Web site at <www.ncsl.org>.

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Your Guide to Census 2010 Redistricting Data From the U.S. Census Bureau

Strength in Numbers

Issued July 2010

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Economics and Statistics Administration
U.S. CENSUS BUREAU
Washington, DC 20233

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