



## From loading dock to downloading

by Carol Morello

Not so many years ago, the task of sending census statistics to the states so they could redraw voting districts involved trips to the loading dock.

Cathy McCully, who heads the redistricting data division, often was on hand to oversee the mailing of boxes stuffed with computer printouts for politicians and cartographers to pore over. Virginia, with an off-year election around the corner, was always in a rush. It sent state troopers and, once, a helicopter to ferry its data to Richmond.

In January, the Census Bureau began sending states details collected in the [2010 Census](#), enumerating [inhabitants down to the block level](#). The census data are far less cumbersome and more attainable than ever. The data are on the [bureau's Web site](#), available for anyone to download and even try their hand at redistricting themselves. But in a theatrical touch, the data were delivered overland to the states the day before it was made public, mostly via Federal Express.

McCully's career of more than three decades at the Census Bureau is a window into the Bureau's drive to make the massive amount of data it collects more timely, accessible, and useful. A District native, McCully, 56, is the daughter of an Air Force colonel who worked in defense intelligence in posts around the world. She attended schools in Alaska, Japan, Hawaii, Texas, Alabama and New York.

Shortly after graduating from what is now Frostburg State University with a degree in geography, she was hired by the Census Bureau in 1977 as a clerk-typist. She was assigned to help create state data centers at state agencies, universities, and libraries to disseminate census data, particularly for use by researchers and business people. Then she was promoted and worked for two decades in the geographical division, developing programs that tabulate data, including one that could be used in redistricting and one that sorted areas by Zip code.

Bureau-developed technology was rapidly revolutionizing the labor-intensive process of [redistricting](#). As recently as the 1970s, politicians drew new districts using colored dry-erase markers on acetate sheets over big maps spread across a floor.

Computer mapping was used in the censuses taken in 1970 and 1980, but its use in redistricting was limited because it was not good at defining small geographical levels, and it was very expensive. Then in 1990, the Census Bureau introduced a digital mapping system known as TIGER (Topologically Integrated Geographic Encoding and Referencing). It could pinpoint data down to the block level, allowing legislators to analyze potential districts and fine-tune them. After TIGER, redistricting became less of an art and more of a science.

*Downloading, p. 14, 2nd paragraph*

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The technology has assisted states in making sure their redistricting complies with the Voting Rights Act of 1965 and court decisions affirming the principle of one person, one vote. Some say it also has enabled incumbent gerrymandering.

A map behind McCully's desk at Census Bureau headquarters in Suitland serves as a reminder that her work does both, ultimately helping determine who sits in Congress.

The map showing North Carolina's voting districts in pastel shades was a gift from the man who drew it after the 1990 Census. Most of the districts were fairly compact. But one meandered across the northeast part of the state, narrowing in one point to the width of a pinhead. It represented North Carolina's attempt to draw a majority-black district in an effort to elect the first black representative from the state in the 20th century.

Some states already have proposed having public contests to come up with the best redistricting plan, and the Census Bureau is ready to help them. All the computer maps and data used by professionals are [or shortly will be] on the Bureau's web site.

"Anybody could be in their basement, unload this and draw their own plan, using all the tools we have," said McCully, who was assigned to the redistricting division just before the 2000 Census.

The detailed state data taken in 2010 will be released in spurts during February and March. Director Robert M. Groves has promised to get the data first to states that have the most pressing needs. That is expected to be the four states with state legislative elections next year—Virginia, Mississippi, New Jersey, and Louisiana.

Other states have local elections that will be affected by redistricting, and McCully allows that she has received calls marked by discreet attempts at a sneak preview of the data. McCully said that Maine is the only state that never presses her to rush. The state's constitution dictates waiting one election cycle before redistricting.

Once the collection of data leaves Suitland, it is out of the bureau's hands. Although the Census Bureau is legally required to provide the data to the states for redistricting, the states can do with the statistics what they wish.

Some states have different rules dictating how they account for students and prisoners in redistricting. Kansas, for example, counts in-state college students as residents of their hometowns, not the town where they go to school. Maryland will count state prison inmates this year as residents of the towns where they lived before being convicted.

"No law says they have to use the data we give them," McCully said. "But they will, and they should. It's the best data in town."