5th District
# Footprint
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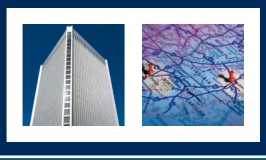

## Income Inequality Within Fifth District Counties

The topic of income inequality has recently received a great deal of attention from the media. In this issue of 5th District Footprint, we look at income inequality within counties as measured by the Gini coefficient index for 2010.[1]

The Gini index ranges from zero to one. In the context of household income, zero and one represent two extremes — a value of zero indicates that all households have an exactly equal share of income while a value of one indicates that one household has all of the income and all others have none. [2]

In the Fifth District, 63 counties (roughly 18 percent) and Washington, D.C., have a higher Gini index value than the U.S. (0.467), which means these areas have a more unequal income distribution than the U.S. as a whole.

Maryland, North Carolina and Virginia have counties with the lowest income inequality, as indicated by the darkest blue shade. Both South Carolina and North Carolina have a greater share of counties with relatively high income inequality, with South Carolina reporting the highest within-county income inequality. As indicated by the red shade, Allendale County, S.C., has the highest income inequality in the Fifth District (0.582).

There does not appear to be a consistent relationship between income levels and inequality. One might expect to see higher median incomes associated with greater income inequality. This certainly holds in D.C., which has relatively high median household income ($60,729) and relatively high income inequality (0.535). However, out of the 80 counties in the Fifth District with higher median income than the U.S. ($50,046), only eight had relatively high income inequality (0.47–0.58). In fact, the county with the highest median household income in the District, Loudoun County, Va. ($119,075), has a Gini index value of 0.367. Furthermore, the county with the highest income inequality in our District (Allendale, S.C.) also had a low median household income ($24,615). In brief, some locations have high rates of poverty and high income inequality.

There appears to be some connection between geographic location and income inequality. We see high Gini index values in urban areas. Four of the five highest Gini index values in the Fifth District are in cities — Norton, Va. (0.539), D.C. (0.535), Richmond, Va. (0.533), and Galax, Va. (0.532). Relatively high inequality is also observed in isolated rural areas such as Northampton County, Va. (0.506), which is between the Chesapeake Bay and the Atlantic Ocean, and Avery (0.529) and Watauga (0.516) counties, located in the Appalachian Mountain Range of North Carolina.

As with any index, it is important to use caution in interpreting the Gini coefficient. In particular, it cannot be used to draw conclusions about the share of income going to a particular quintile of the income distribution. For example, two counties with the same Gini index value can have very different shares of income going to the population with income below the median.

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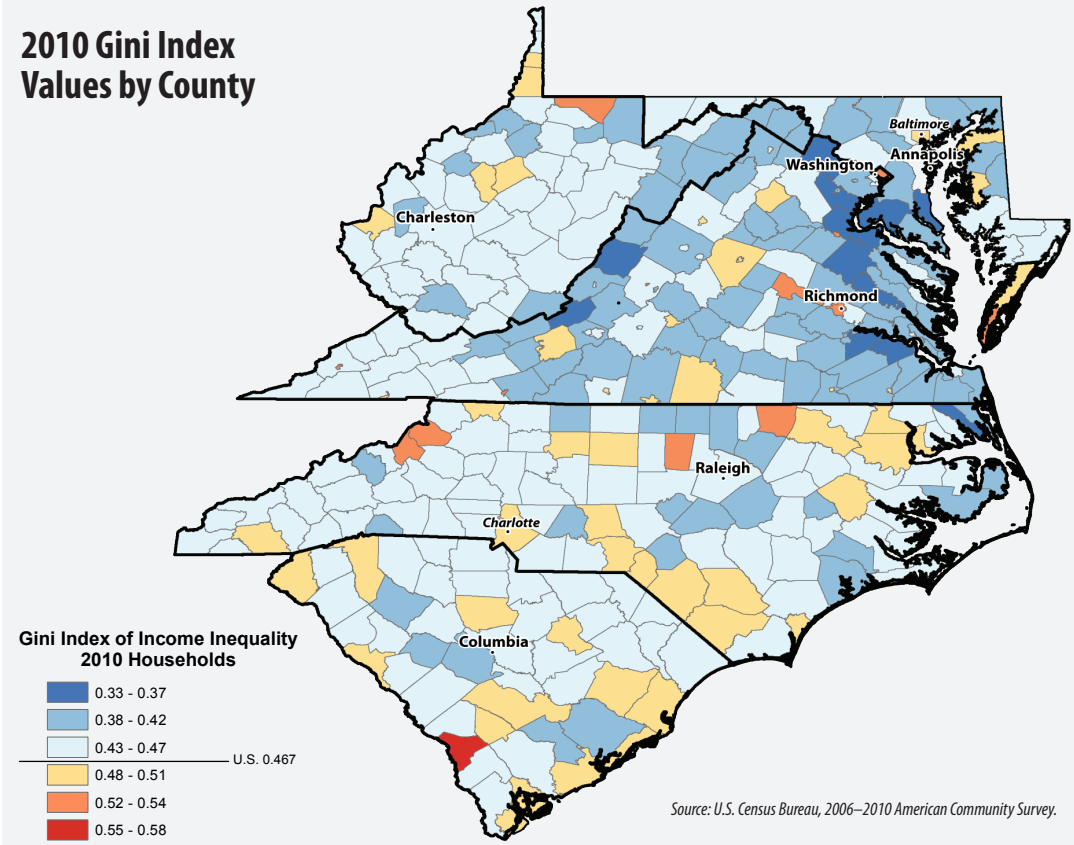


[1] The 2010 Gini index values are based on the American Community Survey 5-Year Estimates, 2006 to 2010.

[2] For more information on measures of inequality like the Gini coefficient, see: Cowell, Frank (2009). Measuring Inequality, Oxford University Press.