Unequal State: Poverty, Income Inequality, and Low Birth Weight in New York State

Map compiled by Amelia Zaino
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First, let’s take a look at the percentage of babies born below the average birth weight to New York moms by county.

How do we measure income inequality?

In this analysis, the Gini coefficient was calculated. A Gini coefficient shows inequality amongst the distribution of a variable. Here, we look at income levels in the different counties.

A Gini coefficient of 0 indicates complete equality while a Gini coefficient of 1 indicates complete inequality.

What does this mean?

There appears to be a closer relationship between low birth rate and income inequality than poverty itself in urban areas. This is likely due to the distribution of resources in urban areas such as healthy food and healthcare.

Urban (and suburban) areas have the greatest levels of income inequality, while not having the greatest levels of poverty. Westchester County, a New York City suburb and part of its metropolitan area, is an example of this.

The correlations calculated below illustrate a more direct relationship between the variables. The closer a correlation is to 1, the stronger the relationship.

Further studies should compare low birth weights and income levels in richer and poorer sections of the urban areas, to perhaps view how resources are distributed.

Low Birth Weight and Income Inequality 0.32
Low Birth Weight and Poverty Levels 0.22

Birth weight data provided by the New York State Department of Health. Demographic data provided by the U.S. Census Bureau. All data is from 2010.