

The Joseph C. Cornwall Center for Metropolitan Studies at Rutgers University-Newark is pleased to present "Map of the Week" — a weekly blog series designed to explore some of the community and economic development and social equity issues present in the Newark, New Jersey region through the use of maps and infographics. The Cornwall Center uses research and demonstration to address key urban and metropolitan problems in Newark and the surrounding region.

Exploring Income Diversity and Segregation in New Jersey

January 25, 2016:

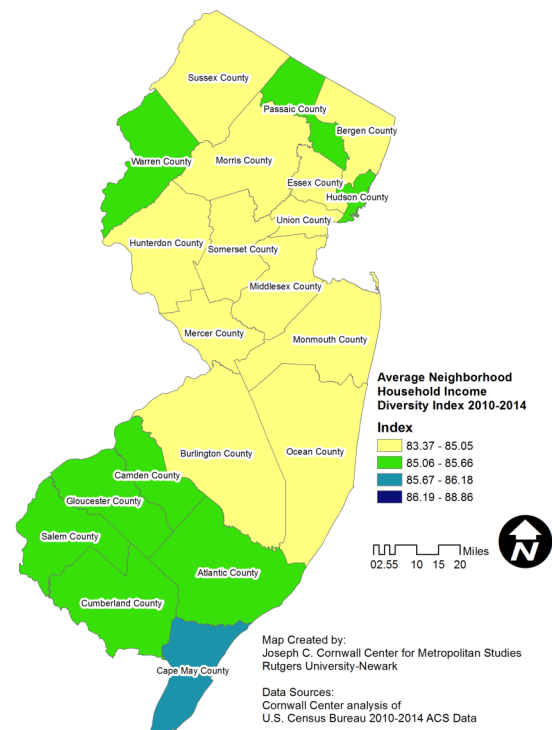
Can New Jersey's Neighborhoods be Considered Mixed Income?

In our most recent post, we concluded that New Jersey's counties are indeed very diverse in terms of household income. Here, we continue our exploration of income diversity in New Jersey by conducting a diversity analysis of New Jersey neighborhoods. This neighborhood-level analysis will help us to understand if, like our counties, our neighborhoods are very diverse (i.e., comprised of more equal shares of households from many of the groups on our income scale), or are more homogeneous (i.e., dominated by large shares of households from one particular or only a few groups on our income scale).

Just as with exploring racial and ethnic diversity, we have conducted this analysis by calculating every neighborhood's Household Income Diversity Index. In order to understand the diversity of the average neighborhood in each county, we then calculated the Average Neighborhood Household Income Diversity Index for all neighborhoods in each county in the US. This will not only allow us to compare New Jersey counties to each other, but also to all other US counties.

Map 1: : Average Neighborhood Household Diversity Index of NJ Counties

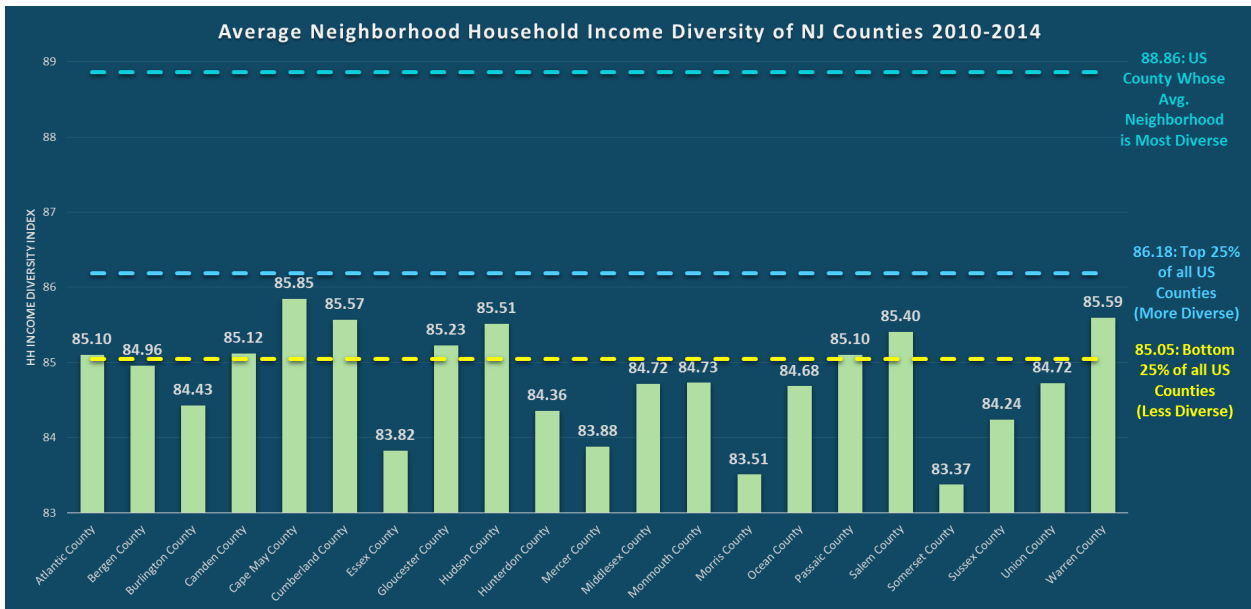
Average Neighborhood Household Income Diversity of NJ Counties



Map 1 shows every New Jersey county shaded by which quartile of US counties its Average Neighborhood Diversity Index Score falls into. The most immediately noticeable feature of this map is that it is overwhelmingly yellow and green. Unlike the map in our previous post, which showed the majority of New Jersey counties falling within the top quartile of Countywide Household Income Diversity, this map is showing the diametric contradiction, where the majority of New Jersey counties are falling within the bottom quartile of Average Neighborhood Household Income Diversity. In fact, the same number of New Jersey counties (12, or 57%) fall within the lowest quartile for Average Neighborhood Diversity as did in the highest quartile for Countywide Diversity.

Chart 1, below, shows how far each New Jersey county falls below the mark of the US county with the highest Average Neighborhood Household Income Diversity Index Score, as well as the cut-off points for the top and bottom quartiles of Average Neighborhood Household Income Diversity for all US counties. Looking at the chart, it certainly seems that most New Jersey Counties are far below the highest US county quartile of Average Neighborhood Household Income Diversity.

Chart 1: Average Neighborhood Household Diversity Index of New Jersey Counties



Data Source: Cornwall Center Analysis of U.S. Census Bureau's 2010-2014 5-year ACS Data

The two tables immediately below are shown to provide a glimpse into how New Jersey and its counties dramatically compare with others in the US. Table 1 shows the top and bottom ten states in terms of the proportion of their counties ranked in the highest quartile of Average Neighborhood Household Income Diversity of all US counties. Six states, including New Jersey, do not have any counties that fall within the top quartile of US counties.

Table 2 shows two New Jersey Counties alongside the ten highest-scoring US counties in terms of Average Neighborhood Household Income Diversity Index Scores. New Jersey's highest scoring county, Cape May County, has an Average Neighborhood Household Income Diversity Index Score of 85.85, good enough to tie for 1,287th place out of all US counties. Essex County, the highest scoring county in all of the US in terms of its Countywide Household Income Diversity Index Score, is tied for 2,963th place out of all 3,142 US counties.

Table 1: Top 10 & Bottom 10 US States by Percentage of Counties That are in the Top US County Quartile of Average Neighborhood Household Income Diversity

STATE	NUMBER OF COUNTIES	NUMBER OF COUNTIES WHOSE AVG N'HOOD DIVERSITY INDEX IS IN TOP 25% OF US COUNTIES	PERCENTAGE OF COUNTIES WHOSE AVG N'HOOD DIVERSITY INDEX IS IN TOP 25% OF US COUNTIES
1) NORTH DAKOTA	53	35	66%
2) OKLAHOMA	77	38	49%
T3) SOUTH DAKOTA	66	32	48%
T3) LOUISIANA	64	31	48%
T3) MONTANA	56	27	48%
T6) ALASKA	29	12	41%
T6) TEXAS	254	105	41%
8) MINNESOTA	87	35	40%
9) NEBRASKA	93	33	35%
10) WEST VIRGINIA	55	18	33%
T42) OHIO	88	8	9%
T42) FLORIDA	67	6	9%
44) MICHIGAN	83	7	8%
45) INDIANA	92	6	7%
T46) ARIZONA	15	0	0%
T46) CONNECTICUT	8	0	0%
T46) DELAWARE	3	0	0%
T46) DISTRICT OF COLUMBIA	1	0	0%
T46) NEW JERSEY	21	0	0%
T46) RHODE ISLAND	5	0	0%

Data Source: Cornwall Center Analysis of U.S. Census Bureau's 2010-2014 5-year ACS Data

Table 2: Top Ten Highest Ranked US Counties by Average Neighborhood Household Income Diversity Index Score

COUNTY	COUNTYWIDE HOUSEHOLD INCOME DIVERSITY INDEX 2010-2014	AVG. NEIGHBORHOOD HOUSEHOLD INCOME DIVERSITY INDEX 2010-2014
1) OLDFHAM COUNTY, TEXAS	88.86	88.86
2) ROGER MILLS COUNTY, OKLAHOMA	88.38	88.38
3) CAMPBELL COUNTY, KENTUCKY	88.35	88.35
4) GRANT COUNTY, NORTH DAKOTA	88.32	88.32
5) DIVIDE COUNTY, NORTH DAKOTA	88.28	88.28
6) SIERRA COUNTY, CALIFORNIA	88.28	88.28
7) GOLDEN VALLEY COUNTY, NORTH DAKOTA	88.25	88.25
8) BURKE COUNTY, NORTH DAKOTA	88.22	88.22
9) GOLIAD COUNTY, TEXAS	88.48	88.21
10) DUNN COUNTY, NORTH DAKOTA	88.17	88.17
T1,287) CAPE MAY COUNTY, NEW JERSEY	87.98	85.85
T2,963) ESSEX COUNTY, NEW JERSEY	89.30	83.82

Data Source: Cornwall Center Analysis of U.S. Census Bureau's 2010-2014 5-year ACS Data

These results suggest that, on average, neighborhoods in New Jersey are very homogeneous in terms of household income earned. This means that individual neighborhoods are more likely to be home to households from only a few of the ten income groups described by the US Census Bureau. As mentioned earlier, this stands in stark diametric contradiction to the fact that New Jersey counties as a whole are considered to be extremely diverse in their household income composition. The fact that such a stark contradiction exists between New Jersey's counties and the individual neighborhoods within hints at a high degree of segregation. This will be discussed thoroughly in our next post, as we examine the difference between a county's Average Neighborhood Household Income Diversity Index Score and its Countywide Household Income Diversity Index Score, while also discussing the impact of such differences.

For now, see Table 3, below, to observe the Average Neighborhood Household Income Diversity Index Score of each New Jersey County.

Table 3: Household Income Diversity Index Score of NJ Counties

COUNTY	INCOME DIVERSITY INDEX 2010-2014	US COUNTY QUARTILE
CAPE MAY COUNTY, NEW JERSEY	85.85	2
WARREN COUNTY, NEW JERSEY	85.59	3
CUMBERLAND COUNTY, NEW JERSEY	85.57	3
HUDSON COUNTY, NEW JERSEY	85.51	3
SALEM COUNTY, NEW JERSEY	85.40	3
GLOUCESTER COUNTY, NEW JERSEY	85.23	3
CAMDEN COUNTY, NEW JERSEY	85.12	3
ATLANTIC COUNTY, NEW JERSEY	85.10	3
PASSAIC COUNTY, NEW JERSEY	85.10	3
BERGEN COUNTY, NEW JERSEY	84.96	4
MONMOUTH COUNTY, NEW JERSEY	84.73	4
UNION COUNTY, NEW JERSEY	84.72	4
MIDDLESEX COUNTY, NEW JERSEY	84.72	4
OCEAN COUNTY, NEW JERSEY	84.68	4
BURLINGTON COUNTY, NEW JERSEY	84.43	4
HUNTERDON COUNTY, NEW JERSEY	84.36	4
SUSSEX COUNTY, NEW JERSEY	84.24	4
MERCER COUNTY, NEW JERSEY	83.88	4
ESSEX COUNTY, NEW JERSEY	83.82	4
MORRIS COUNTY, NEW JERSEY	83.51	4
SOMERSET COUNTY, NEW JERSEY	83.37	4

Data Source: Cornwall Center Analysis of U.S. Census Bureau's 2010-2014 5-year ACS Data

¹Rather than using census block groups as was done with racial and ethnic diversity, we have used census tracts to define neighborhoods. This was done because, unlike demographic information, there is a greater degree of error in dealing with socioeconomic information, such as income, at geographies below the census tract level.

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