

Where are the Poor? Do Prices Matter?

Supplemental Poverty Measure: Geographic Adjustments

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Motivation – Research Questions

The official poverty measure uses the same thresholds for all families in the United States, regardless of location.

The Supplemental Poverty Measure (SPM) adjusts the housing portion of the thresholds for differences in housing costs, using median rents for two bedroom units. Compared to official poverty estimates, the SPM poverty estimates:

- Increase the share of the poor living in the West and Northeast relative to those living in the South and Midwest, and
- Decrease the share of the poor living outside metropolitan statistical areas and increase the share living inside metropolitan statistical areas.

Question? What would happen if we were to adjust other portions of the thresholds? Specifically, what if we adjust the food portion of the threshold as well as the housing portion?

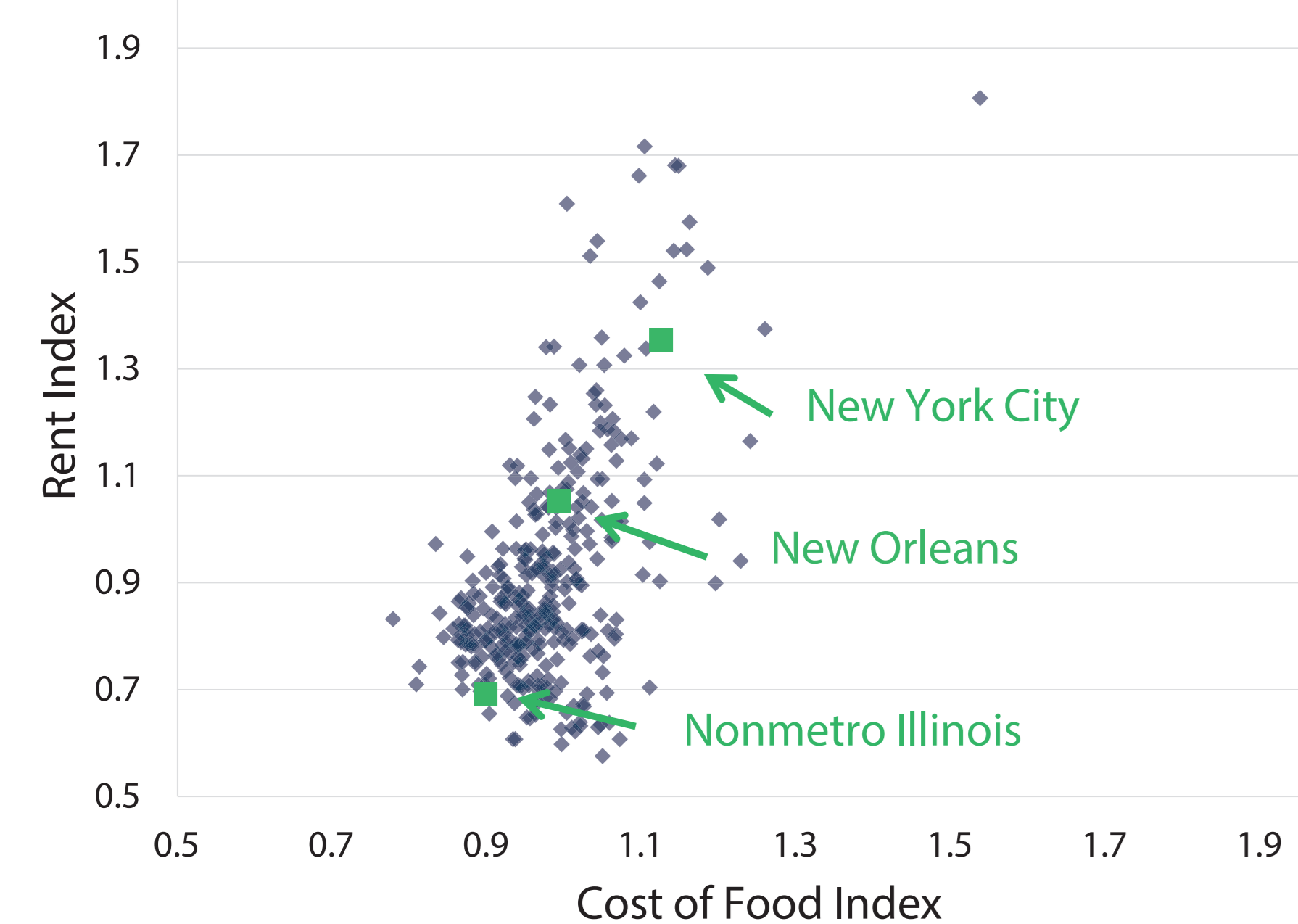
	United States	New York City MSA	New Orleans MSA	Illinois - outside MSA
Official Threshold	\$22,113	\$22,113	\$22,113	\$22,113
Official Poverty	15.3%	15.3%	22.0%	15.7%
Median Rent	\$820	\$1,109	\$863	\$567
SPM Threshold	\$24,391	\$28,678	\$25,027	\$20,651
SPM Poverty Rate	16.0%	18.5%	21.9%	12.9%
Cost of a Meal	\$2.54	\$4.01	\$2.78	\$2.02
Poverty Threshold Adjusted Using Food and Housing	\$24,391	\$29,568	\$24,979	\$19,935
Food/Rent Poverty rate	15.9%	19.7%	21.9%	11.5%

Notes: (1) All thresholds shown are for two adult, two child families for 2010. (2) In addition to the new thresholds, the SPM also utilizes a different resource measure and unit of analysis than the official measure. The food/rent poverty rates shown on this poster use the SPM resource measure and unit of analysis.

The rent index is constructed using the median gross rent for two-bedroom apartments as reported on the American Community Survey 2006-2010. This rent index is applied to the housing portion of the SPM thresholds.

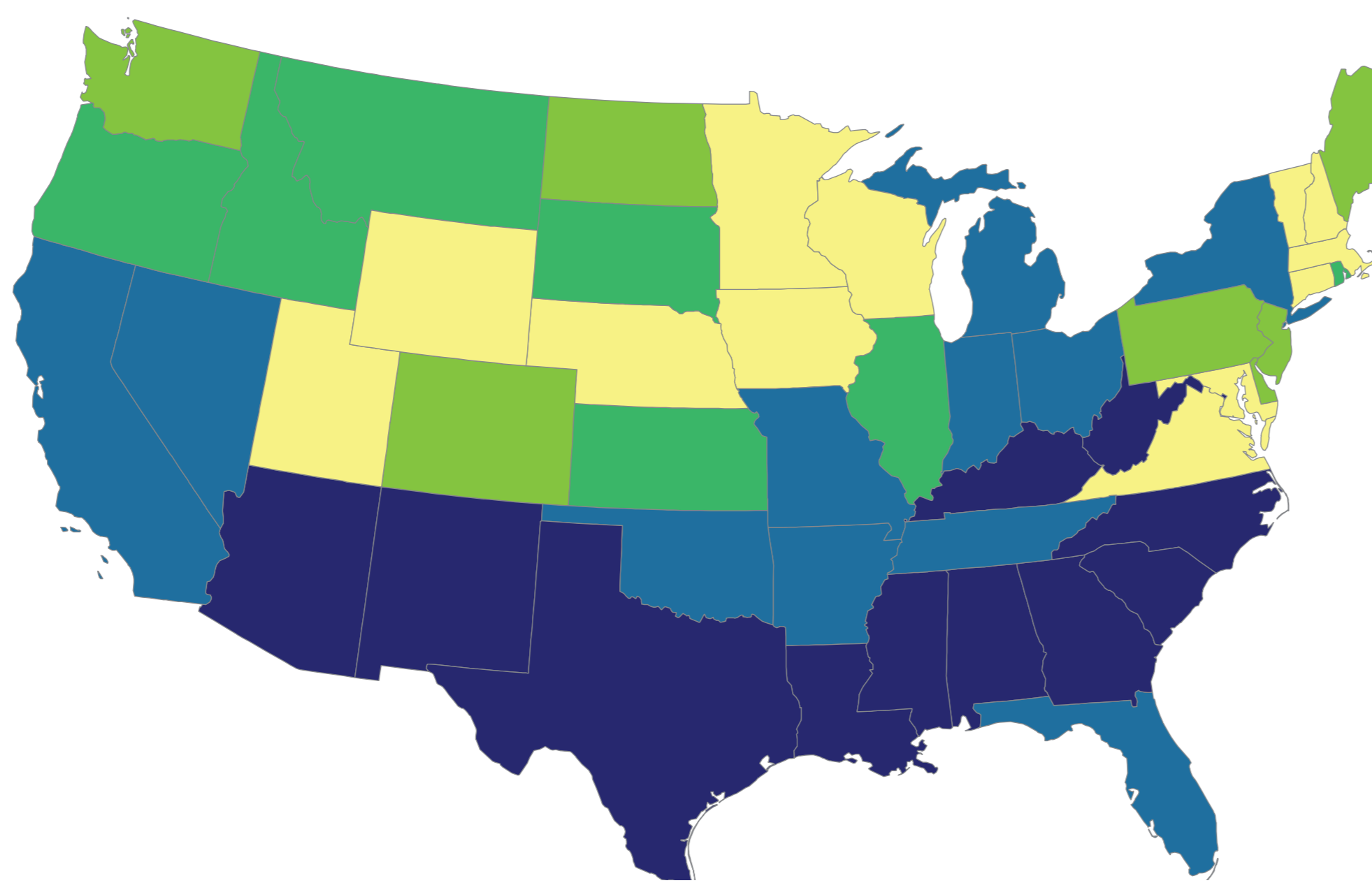
The cost of a meal index was developed by the Map the Meal Gap 2011 report using in-store scanning data and Homescan data provided by the Nielsen Company to Feeding America. This index is applied to the food portion of the SPM thresholds.

The two indices are correlated with each other. The correlation coefficient is 56%.

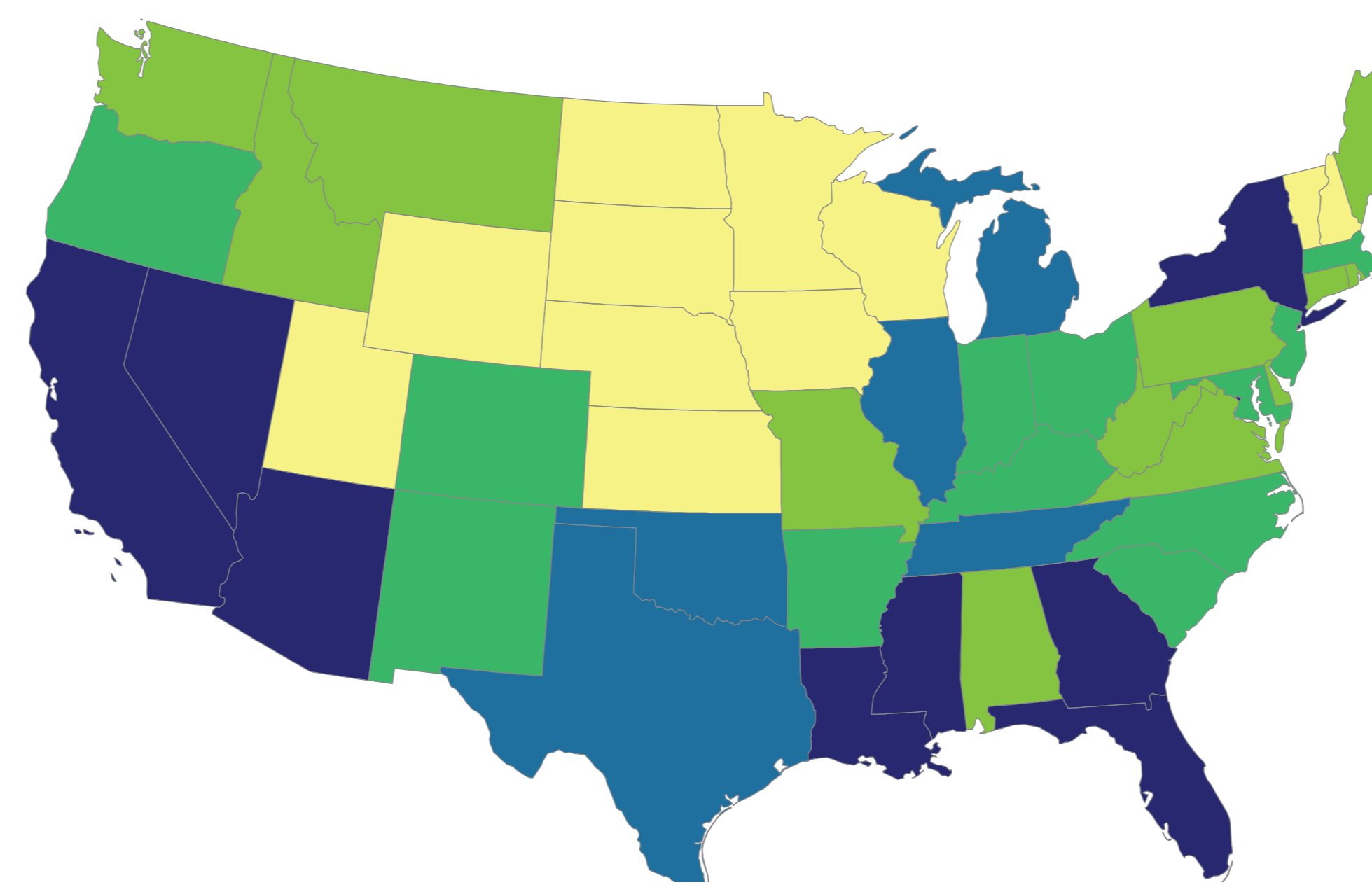


Comparing 2010 State Poverty Rates: Official, SPM and Food/Rent Combined Index

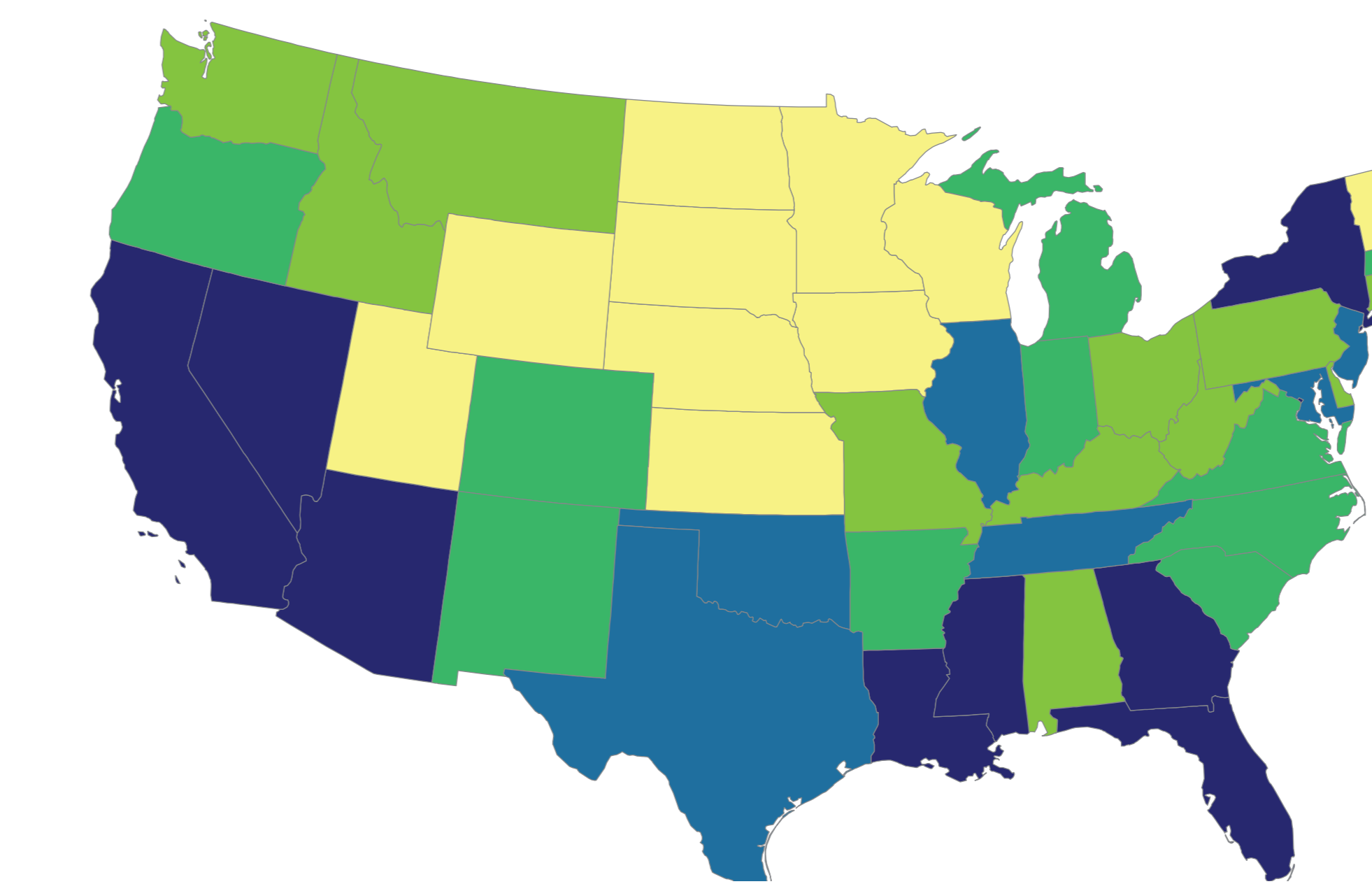
2010 Official Poverty: No Geographic Adjustments



2010 SPM Poverty: Using Rent Index



2010 SPM Poverty: Using Food and Rent Index



Less than or equal to 11 percent | 11.1 to 13.0 percent | 13.1 to 15.0 percent | 15.1 to 17.0 percent | 17.1 percent and higher

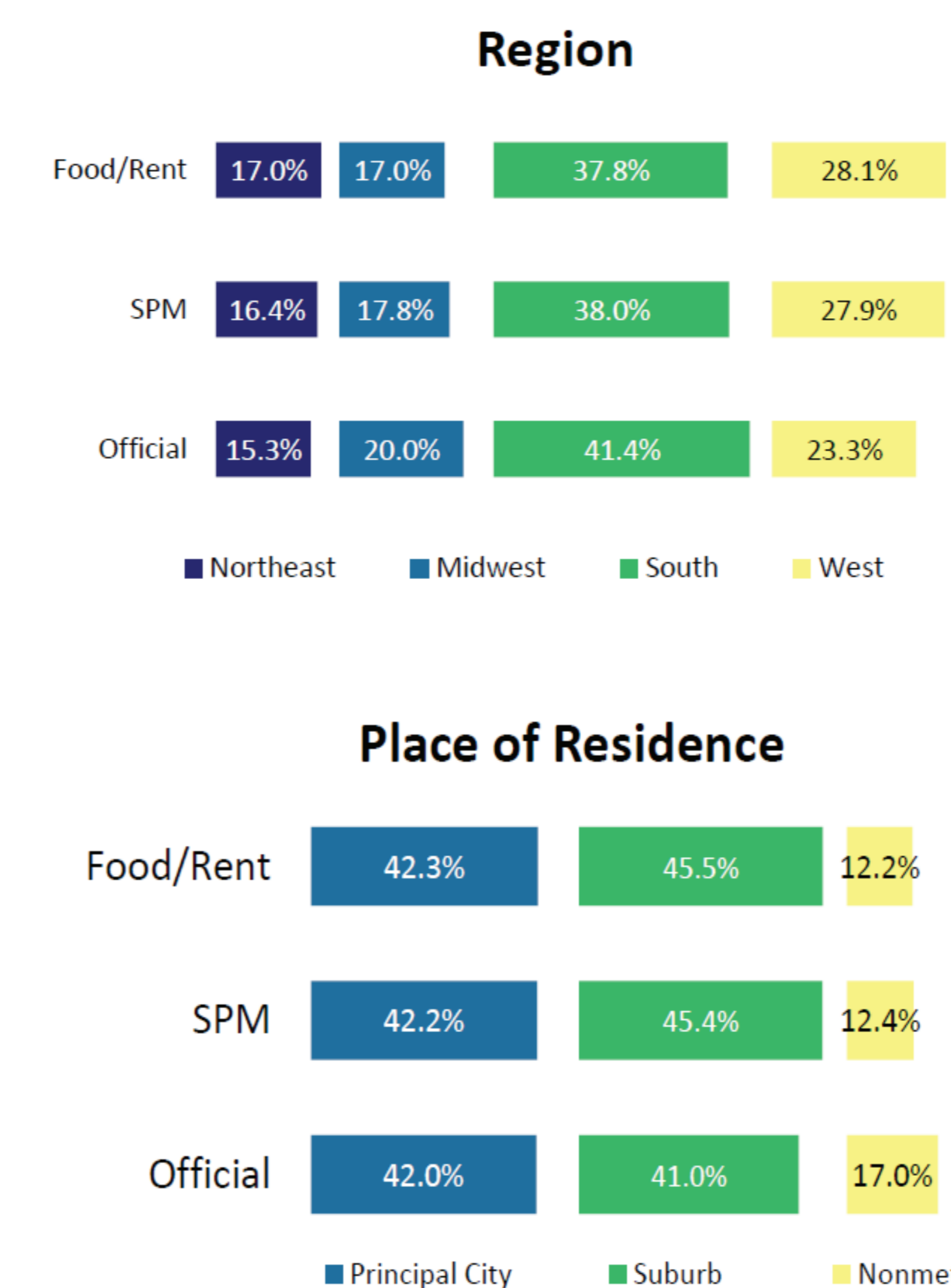
Changes in Poverty Rates by State

	Official	SPM	SPM minus Official	Food/Rent	Food/Rent minus SPM
AL	17.2	12.6	-4.6 *	12.9	0.3 *
AZ	19.0	19.8	0.8	19.7	-0.1
AR	15.3	13.6	-1.7 *	13.5	-0.1
CA	16.4	23.6	7.2 *	24.0	0.4 *
CO	12.4	13.5	1.1 *	13.4	-0.1 *
CT	8.7	11.6	2.9 *	12.6	1.0 *
DE	12.3	12.8	0.5	13.0	0.2
DC	19.5	22.8	3.3 *	24.2	1.4 *
FL	16.1	20.1	4.0 *	20.2	0.1
GA	18.9	19.0	0.1	18.8	-0.2 *
ID	14.0	11.8	-2.2 *	12.2	0.4 *
IL	14.1	15.8	1.7 *	15.1	-0.7 *
IN	16.5	14.2	-2.3 *	13.2	-1.0 *
IA	10.5	8.4	-2.1 *	7.7	-0.7 *
KS	14.6	10.7	-3.9 *	10.5	-0.2
KY	18.0	14.3	-3.7 *	13.0	-1.3 *
LA	21.5	20.2	-1.3	19.9	-0.3
ME	12.8	11.9	-0.9	12.7	0.8 *
MD	10.9	14.2	3.3 *	15.1	0.9 *
MA	11.0	14.1	3.1 *	15.0	0.9 *
MI	15.8	15.1	-0.7	14.4	-0.7 *
MN	10.9	9.8	-1.1 *	9.8	0.0
MS	22.8	17.3	-5.5 *	17.7	0.4
MO	15.2	13.0	-2.2 *	12.6	-0.4 *
MT	14.7	12.7	-2.0	12.6	-0.1

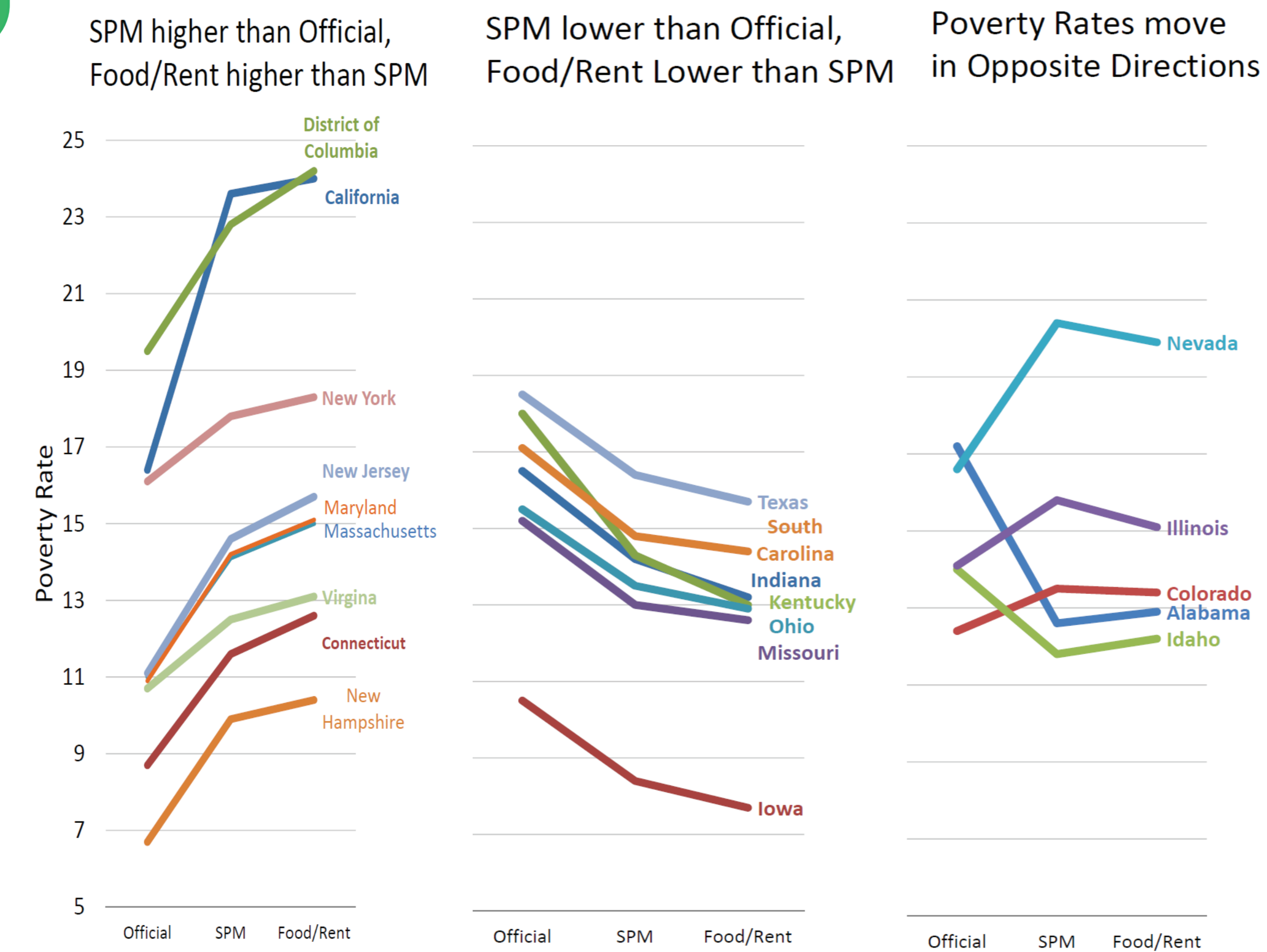
	Official	SPM	SPM minus Official	Food/Rent	Food/Rent minus SPM
NE	10.3	9.8	-0.5	9.1	-0.7 *
NV	16.6	20.4	3.8 *	19.9	-0.5 *
NH	6.7	9.9	3.2 *	10.4	0.5 *
NJ	11.1	14.6	3.5 *	15.7	1.1 *
NM	18.3	14.5	-3.8 *	14.4	-0.1
NY	16.1	17.8	1.7 *	18.3	0.5 *
NC	17.7	13.5	-4.2 *	13.4	-0.1
ND	12.9	10.0	-2.9 *	9.8	-0.2
OH	15.5	13.5	-2.0 *	12.9	-0.6 *
OK	16.4	15.1	-1.3	15.1	0.0
OR	14.8	14.0	-0.8	13.8	-0.2
PA	12.3	11.7	-0.6	11.7	0.0
RI	14.1	12.6	-1.5	13.2	0.6 *
SC	17.1	14.8	-2.3 *	14.4	-0.4 *
SD	13.8	10.5	-3.3 *	10.5	0.0
TN	16.8	15.7	-1.1	15.5	-0.2
TX	18.5	16.4	-2.1 *	15.7	-0.7 *
UT	10.1	11.0	0.9	10.7	-0.3
VT	11.0	9.3	-1.7	10.5	1.2 *
VA	10.7	12.5	1.8 *	13.1	0.6 *
WA	11.8	11.7	-0.1	11.7	0.0
WV	17.2	12.3	-4.9 *	12.2	-0.1
WI	10.3	9.7	-0.6	9.5	-0.2 *
WY	9.9	8.0	-1.9 *	8.1	0.1

*Statistically different from zero at the 90 percent confidence level.
Source: 2011 Current Population Survey Annual Social and Economic Supplement

Distribution of the Poor by Region and Place of Residence: Official, SPM and Food/Rent Index



Effect of the SPM and Food/Rent Geographic Adjustments on Poverty Rates by State*



*States with statistically significant changes in poverty rates between the Official and the SPM and between the SPM and the Food/Rent Poverty Rate.

Conclusions

The overall SPM poverty rate is higher than the official poverty rate, but the overall poverty rate when poverty thresholds are adjusted for both food and housing price differentials is not statistically different than the SPM poverty rate using thresholds adjusted only for housing cost differences. Moving from the SPM thresholds to the food and rent adjusted thresholds results in small but statistically significant changes in the regional distribution of the poverty population. Namely:

- Slightly larger shares of the poverty population lived in the Northeast and the West while the shares living in the South and Midwest were reduced, and
- A slightly larger share of the poverty population lived in the suburbs while the share living outside metropolitan statistical areas was reduced.

The differences in state poverty rates when moving from the SPM to a poverty estimate using both food and rent to adjust the thresholds were statistically significant in 28 states. Poverty rates went up in 14 states and down in 14 states. In 21 of these states, the change in the poverty rate moving from the official to the SPM was also statistically significant.

- In 9 states, the SPM poverty estimate was higher than the official estimate and the food/rent poverty estimate was even higher (California, Connecticut, District of Columbia, Maryland, Massachusetts, New Hampshire, New Jersey, New York and Virginia).
- In 7 states the SPM was lower than the official estimates and the food/rent poverty estimate was lower than the SPM (Indiana, Iowa, Kentucky, Missouri, Ohio, South Carolina, and Texas).
- There were only 5 states in which the two methods moved the poverty rate in opposite directions: Alabama, Colorado, Idaho, Illinois and Nevada.

Adjusting poverty thresholds for differences in food prices in addition to differences in housing costs would not dramatically change poverty estimates.

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