

Geographic Adjustments of Supplemental Poverty Measure Thresholds: Using the American Community Survey Five-Year Data on Housing Costs

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Abstract

Key Words: Poverty, geographic adjustments

Introduction

In 2009 the Office of Management and Budget's Chief Statistician formed the Interagency Technical Working Group (ITWG) on Developing a Supplemental Poverty Measure. That group included representatives from the U.S. Census Bureau, Bureau of Labor Statistics, Economics and Statistics Administration, Council of Economic Advisers, U.S. Department of Health and Human Services, and Office of Management and Budget. In March 2010 the Interagency Working Group issued a series of suggestions to the Census Bureau and BLS on how to develop a new Supplemental Poverty Measure (Observations from the Interagency Technical Working Group on Developing a Supplemental Poverty Measure). Their suggestions drew on the recommendations of the 1995 report of National Academy of Sciences (NAS) Panel on Poverty and Family Assistance and the extensive research on poverty measurement conducted over the past 15 years, at the Census Bureau and elsewhere. The new thresholds are not intended to assess eligibility for government programs and will not replace the official poverty thresholds.

The ITWG suggested that the poverty thresholds be adjusted for price differences across geographic areas using the best available data and statistical methodology. They noted that the American Community Survey (ACS) data appear to be the best data currently available, from which one can create a housing price index based on differences in quality-equivalent rental prices of housing across areas and that it would be good to (1) differentiate this price index by Metropolitan Statistical Areas (MSAs) and by non-MSA areas in each State and (2) utilize a 5-year moving average of the data for each year. They also noted that over time this adjustment mechanism may be modified and improved.

I. Background

In the 40 years since the U.S. Bureau of the Budget (predecessor of the Office of Management and Budget) designated the Orshansky poverty thresholds (with certain revisions) as the federal government's official statistical definition of poverty, there have been numerous studies of the official poverty measure and many of these have focused on the question of adjusting the

thresholds to reflect geographic differences in the cost of living.¹ For example, the Education Amendments of 1974 mandated a report on the poverty measure and the final U.S. Department of Health, Education and Welfare report (1976) explained that “because of Congressional interest in the subject (geographic cost-of-living differences), as noted in section 823 of the Education Amendments of 1974, as well as because of concern about the problem among technicians, this study directed considerable effort in an analysis of possibilities for incorporating such differences in a poverty measure” (p. 81-82). The report concluded:

“There may be cost-of-living differences between regions, and among urban, suburban, and rural areas, but the extent and nature of these differences is difficult to identify accurately. Existing sources of data which are both accurate at the state and local level and available on a timely basis cannot provide a reliable proxy measure of poverty. Because cost-of-living differences across areas are not satisfactorily measured by existing data and because there is no agreement on the methodology for making such an adjustment, no geographic adjustment in the poverty threshold is made in the report” (pp. xxiii).

Patricia Ruggles (1990) comprehensively reviewed the critiques of the official measure and described the advantages and disadvantages of numerous reform proposals. While she did not propose a specific geographic cost adjustment mechanism, she did conclude:

“Considering the magnitude of the price differentials seen across regions, a strong case can be made for some adjustment of the poverty thresholds to take account of these differences” (p. 84).

“In general, adjustments are appropriate where the evidence implies that fewer errors would be introduced into the system by the adjustment than would be corrected by it. Although this book opposes most new complications to our system of poverty thresholds, the evidence for real differences in price levels across regions has become too compelling to ignore” (p. 86).

The General Accounting Office (GAO) (1995) was asked to “provide information about the statistical data requirements that would be needed to adjust for geographic differences in living costs.” GAO asked 15 experts to review 12 different methodologies. The conclusion of the GAO report was not any more optimistic than the 1976 HEW report.

“In the collective view of the experts we asked to assess these methodologies, the long-standing problems involved in identifying a method to adjust poverty measurement for geographic differences in COL have not been resolved; data and conceptual problems have prevented any adjustment in the past and continue to do so today.” (p. 3).

¹ The poverty thresholds were originally developed in 1963-1964 by Mollie Orshansky of the Social Security Administration. In May 1965, the U.S. Office of Economic Opportunity adopted Orshansky’s poverty thresholds as a working or quasi-official definition of poverty. In August 1969, the U.S. Bureau of the Budget designated the poverty thresholds as the federal government’s official statistical definition of poverty. For a complete history of the poverty thresholds, see Gordon M. Fisher, “The Development and History of the Poverty Thresholds,” Social Security Bulletin, Vol. 55, No. 4, Winter 1992, pp. 3-14.

II. National Academy of Sciences Panel on Poverty and Family Assistance

The GAO study coincided with the work of a panel of the National Academy of Sciences (NAS) whose comprehensive study of the poverty measure was released in 1995 (Citro and Michael, 1995). This study also looked at the question of geographic adjustment of the thresholds and concluded that:

“Evidence of cost-of-living differences among geographic areas -- such as between metropolitan and nonmetropolitan areas -- suggests that poverty thresholds should be adjusted accordingly, but inadequate data make it difficult to determine appropriate adjustments” (p. 8).

The NAS panel recommended that as a “first and partial step” the thresholds be indexed to reflect variations in housing costs across the country and that further research be conducted to develop refined methods and data by which to adjust the poverty thresholds more accurately for geographic cost-of-living differences for housing and other goods and services.

The NAS panel made a number of specific recommendations regarding the first and partial step of adjusting the thresholds to reflect variations in housing costs. These included:

- Data from the decennial census should be used to develop a housing cost index;
- The housing cost index should be developed to cover several population size categories of metropolitan areas in each of the nine geographic census divisions;
- The U.S. Department of Housing and Urban Development (HUD) methodology for developing fair market rents (FMRs) should be used to construct the index;
- The index should only be applied to the portion of the threshold that represents housing costs – 44 percent;
- Research should be conducted to update the index between the decennial censuses.

The NAS panel developed an index using data from the 1990 census. Following the methodology used by HUD to establish FMRs, the index was based on the 45th percentile of the distribution of rents for two-bedroom units that had complete plumbing facilities, kitchen facilities, and electricity and in which the occupant had moved within the last five years. Index values were developed for each of the 341 metropolitan areas in the country and for nonmetropolitan areas within each state. The panel then grouped the metropolitan areas into six population size categories within each of the nine census regions and aggregated the nonmetropolitan areas by region and recomputed the index values.²

The NAS panel report’s discussion of geographic cost adjustment concludes with the following caveat:

² In order to test this decision to employ regional groupings, the panel compared the set of indexes developed for each of the metropolitan areas to indexes grouped by state (with a metropolitan area and nonmetropolitan area value for each state) and indexes grouped by the nine census divisions. The panel found that the regional indexes produced the index with the smallest share of the population having an index that differed by more than 20 percent from the index produced using the more specific geographies. It further concluded that using the more geographically specific indexes was not desirable because of the limited sample size in smaller metropolitan areas.

“The proposed procedure should not be viewed as the last word on the issue of adjusting poverty thresholds for area differences in the cost of living, but rather a modest step in the right direction” (p. 199).

III. Census Bureau Geographic Adjustment Approaches – NAS Experimental Poverty Measures

In 1999, the researchers at the Census Bureau and BLS applied the NAS panel recommendations to CPS data to produce an alternative set of poverty estimates for 1990 to 1997. (Short, Garner, Johnson and Doyle, 1999). The report included tables showing poverty rates by geographic region but not by state. The analysis found that when the thresholds were adjusted for geographic differences in housing costs, poverty rates were higher in the Northeast and the West and for people living in suburbs.

In a Census Bureau working paper, “Where We Live: Geographic Differences in Poverty Thresholds,” Short (January 2001) reviewed the three-year average state-specific poverty rates for 1992 using the geographic adjustment methodology from the 1999 report. Short described four major shortcomings of the NAS panel’s geographic adjustment methodology: (1) the data used to construct the index was from the 1990 census and therefore could only be updated every ten years; (2) the regional groupings used to construct the index produced some unexplained results given the wide variation in housing costs within geographic divisions;³ (3) the suggested methodology did not control for housing quality across areas; (4) the index recommended by the NAS panel used geographic groupings that created confidentiality problems for release of microdata files.

Short proposed an alternative methodology for making geographic adjustments which addressed some of these shortcomings and applied this method to CPS data for 1997. Her primary recommendation was to replace the outdated housing cost data from the 1990 census with the 1999 HUD FMRs. While acknowledging the limitations of the FMRs, Short concluded that because the FMR estimates were current and available for all 341 metropolitan areas as well as for 2,416 counties outside metropolitan areas, using the FMRs to construct an index was the best alternative. Rather than group the housing cost data by regions and population size categories, Short utilized cluster analysis to group all areas into 15 clusters by housing costs. She compared the results of this cluster analysis to the results using an average metropolitan area and nonmetropolitan area amount for each state and found that the results were similar. Subsequent annual Census Bureau estimates of experimental poverty measures have used the FMR-based methodology.

Since the index addressed only differences in housing costs, the index was applied to only 44 percent of the threshold. This produced a fixed-weight interarea price index with two components – housing and all other goods and services – in which the price of other goods and services is assumed not to vary. The estimate of 44 percent came from the Consumer Expenditure survey tabulations of expenditures for two-adult/two-child families. For families at the 35th percentile of the distribution of spending on food, housing and clothing, housing represented 44 percent of total expenditures assuming miscellaneous expenditures are set at 15 percent of the food, housing and clothing amount. In addition, the index was normalized to keep the national average index equal to one. The raw index numbers were divided by the national average index number so that the national average of the new index was equal to one.

³ For example, there were higher poverty rates than expected in Maine and lower poverty rates than expected in Connecticut.

Since the FMR-index does not control for differences in the housing quality, Short compared these FMR-based indexes (and the resulting state poverty rates) to indexes developed by Malpezzi, Chun and Green (1998) computed by applying hedonic methods to decennial census data for 1990. She found that the Malpezzi indexes were very similar to the FMR indexes, except that they were lower for a few states: Washington, Nevada, Utah, Colorado and New Mexico.

While the FMR-based methodology was able to overcome some of the shortcomings of the methodology recommended by the NAS panel, this methodology has its own set of limitations. HUD estimates FMRs for use in the Section 8 low-income housing program and does not support their use for comparing housing costs across localities.⁴ The FMR index measures only differences in rental housing costs and therefore implicitly assumes that there are not significant geographic differences in the cost of other basic necessities. Using just two housing cost estimates for each state can misrepresent the cost of living in states where there are multiple metropolitan areas with large differences in the cost of living. For example, in New York, the FMR-based methodology uses the same regional cost adjustment for Buffalo as for New York City, despite large differences in their respective housing costs.

IV. American Community Survey: Bishaw Index

The full implementation of the American Community Survey (ACS), as a replacement for the decennial census long form, provides detailed data on housing costs that can be updated each year. Bishaw used ACS data to create a simple geographic cost of living index based on 2007 gross rental costs (Bishaw, 2009). Following the grouping methodology used by the Census Bureau in its experimental poverty measures series, Bishaw assigned each household one of 99 locations based on the state and whether or not the household was in a metropolitan area. (The District of Columbia, New Jersey and Rhode Island have all their population in metropolitan areas.) The geographic cost index for each location was the median gross rent for that location divided by the national median gross rent. Like the FMR-based index, this index was then normalized to set the national average at 1.00 and applied to the 44 percent of the threshold assumed to represent shelter and utility costs.

$$Threshold_i = \frac{\left(.44 \times \frac{MGR_{ij}}{MGR_n} + .56 \right) \times Threshold_n}{NF}$$

i = state j=metro or nonmetro

n = national

MGR = Median gross rent

Threshold = Poverty cutoff (Bishaw's analysis used the official threshold)

NF = Normalization Factor

⁴ In her January 2001 paper, Short lists the following eleven reasons given by HUD for not supporting the use of FMRS to adjust a poverty threshold: (1) FMRs are only developed for use in section 8 certificate and voucher program; (2) they measure rents not total costs; (3) they use gross rents of recent movers; (4) only major metropolitan areas are checked using Random Digit Dialing surveys; (5) rental markets are volatile; (6) for 99 large areas, rents are adjusted using CPI rent and utility factors. While only available for 32 Consolidated Metropolitan Statistical Areas (CMSAs), they are applied to all Primary Metropolitan Statistical Areas (PMSAs) within the CMSAs; (7) there are updates of rent for small areas with Random Digit Dialing procedures that may result in generalizations of rent changes not applicable to all individual areas; (8) the percentile standard is not consistent over time (the 50th percentile from 1975 to 1983, the 45th percentile from 1985 to 1994, and the 40th percentile starting in 1995); (9) the percentile measure is administratively determined and not based on measurement criteria; (10) the treatment of nonmetropolitan areas has changed over time; (11) in 1996 a state minimum FMR was instituted.

Renwick(2009) compared state level NAS-style poverty rates for 2007 using the Bishaw index and the FMR-based index. She found that generally the ACS index resulted in higher poverty rates in nonmetropolitan areas than the FMR-based index. Poverty rates for areas outside metropolitan areas using the ACS index were higher than poverty rates using the FMR-based index in 21 states and lower in only 2 states (Alaska and Colorado). Overall the poverty rate for metro areas was slightly lower using the ACS index but state level changes in poverty rates for metro areas were mixed — higher in 25 states and lower in 15 states.

There are several concerns with the ACS-based index as developed by Bishaw. First, the median gross rent represents the midpoint of the rental distribution regardless of the size of the unit. The median rent in one geographic location might represent the rent for a studio or one bedroom unit while the median rent in another geographic location may represent the rent for a two or three bedroom unit. Second, the ACS index does not control for differences in housing quality. While the FMR index limits data to rental units that meet minimum HUD standards for participation in the Section 8 program, the ACS indexes developed by Bishaw include all rental units, regardless of quality. Since housing quality varies by geographic area, for geographic areas with a higher incidence of substandard rental units, the ACS methodology may underestimate the cost of decent housing. If substandard units were excluded from the distribution, the median rent would be higher. Third, the ACS-based index, like the FMR-based index, represents only differences in housing costs for renters and does not reflect differences in housing costs for homeowners. Fourth, the index provides a single estimate for all metropolitan areas in a state despite significant intra-state differences in housing costs.

Text Box 1

American Community Survey Housing Cost Variables

The data on gross rent were obtained from answers to Housing Questions 11a-d and 15a in the 2009 American Community Survey. Gross rent is the contract rent plus the estimated average monthly cost of utilities (electricity, gas, and water and sewer) and fuels (oil, coal, kerosene, wood, etc.) if these are paid by the renter (or paid for the renter by someone else). Gross rent is intended to eliminate differentials that result from varying practices with respect to the inclusion of utilities and fuels as part of the rental payment. The estimated costs of water and sewer, and fuels are reported on a 12-month basis but are converted to monthly figures for the tabulations. Renter units occupied without payment of rent are shown separately as “No rent paid” in the tabulations.

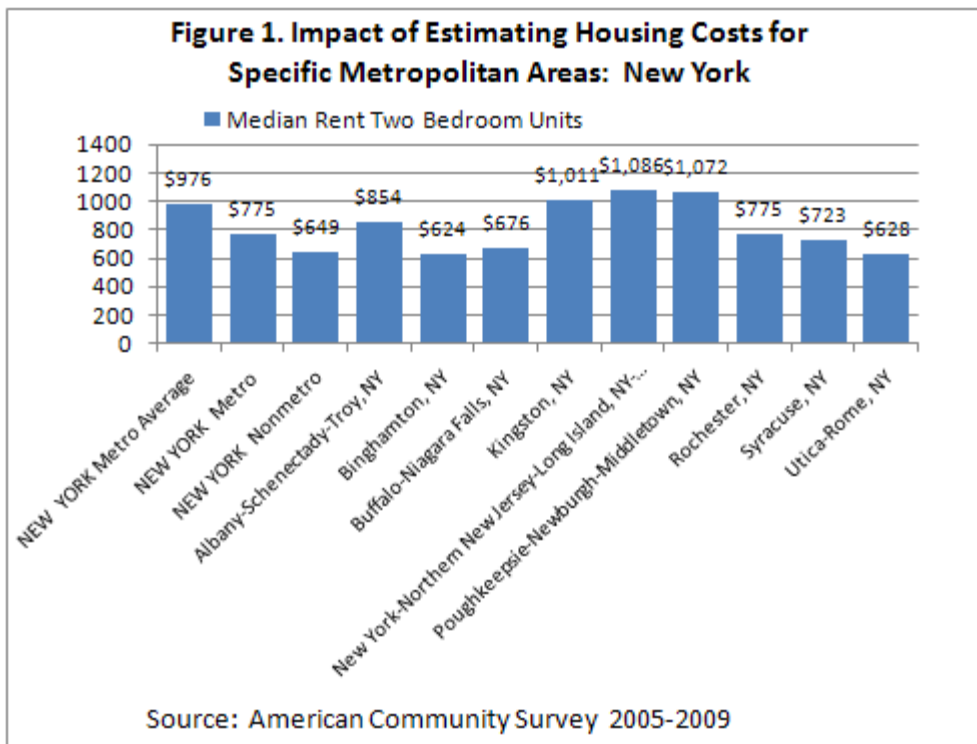
The data on selected monthly owner costs were obtained from Housing Questions 11 and Questions 17 through 21 in the 2009 American Community Survey. The data were obtained for owner-occupied units. Selected monthly owner costs are the sum of payments for mortgages, deeds of trust, contracts to purchase, or similar debts on the property (including payments for the first mortgage, second mortgages, home equity loans, and other junior mortgages); real estate taxes; fire, hazard, and flood insurance on the property; utilities (electricity, gas, and water and sewer); and fuels (oil, coal, kerosene, wood, etc.). It also includes, where appropriate, the monthly condominium fee for condominiums (Question 13) and mobile home costs (Question 21) (installment loan payments, personal property taxes, site rent, registration fees, and license fees). Selected monthly owner costs were tabulated for all owner-occupied units, and usually are shown separately for units “with a mortgage” and for units “not mortgaged.”

V. Creating an ACS-based Index for the Supplemental Poverty Measure

While the ITWG suggestions provide some specific guidance to the Census Bureau and BLS with regards to the development of a regional cost adjustment index for the Supplemental Poverty Measures, there are numerous areas in which the ITWG suggestions are not clear. The following sections of the paper will discuss the options in each of these areas.

A. Geographic groupings – specific metro areas or average for all metro areas in a state?

The ITWG suggests that the geographic index be developed for specific metro areas rather than using an average index number for all metro areas in a single state. Given the wide variation in housing costs across metro areas in a single state, this suggestion is reasonable. Figure 1 shows the range of median rents for New York.



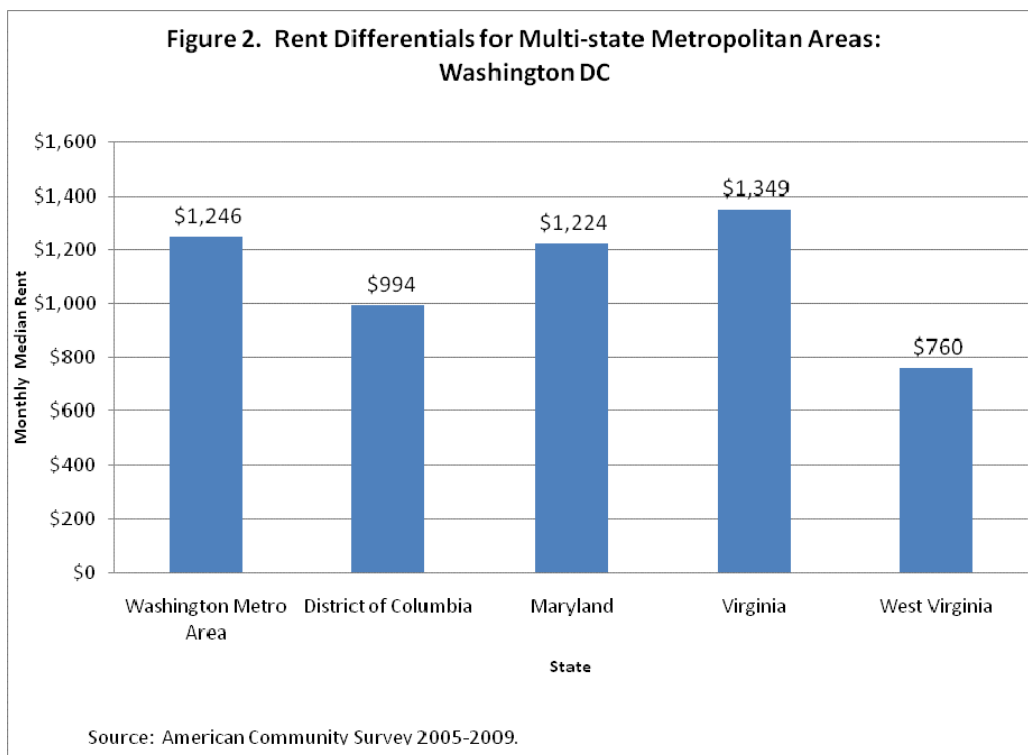
The internal CPS ASEC files identify Core Based Statistical Areas (CBSA) for all households on the file. When the Census Bureau releases the public use version of the file, CBSAs with populations less than 100,000 are not identified. In addition, CBSA codes for portions of CBSAs with populations smaller than 100,000 that could be identified by combining two geographic indicators (e.g. state and CBSA) are also suppressed. The index has been developed with these same geographic limitations. Currently, all definitions for geographic areas on these lists reflect the June 30, 2003 Office of Management and Budget's (OMB) definitions. These are updated every ten years on the CPS ASEC file.

The indices in this paper group metro areas that cannot be disclosed into one group in each state, "other metro". The "other metro" group also includes portions of identifiable CBSAs which cannot be identified or are not in the CPS ASEC sample. For example, the Wisconsin portion of the Minneapolis-St. Paul-Bloomington, MN-WI CBSA is not identified in the CPS ASEC public use data.

Therefore the Wisconsin households in the Minneapolis CBSA in the ACS data will be grouped with Wisconsin’s “Other Metro” areas. The housing costs for these “other metro” areas are be used to create the index used to adjust the thresholds for CPS ASEC households in the Wisconsin portion of the Minneapolis CBSA.

The remaining geographies are categorized as “nonmetro” for each state. In this analysis, micro areas are included in the nonmetro category for each state. Any nonmetropolitan county with an [urban cluster](#) of at least 10,000 persons or more is designated the central county of a micro area. As with metro areas, outlying counties are included if commuting to the central county is 25 percent or higher, or if 25 percent of the employment in the outlying county is made up of commuters from the central county. Because they are county-based and include outlying areas, the total area population reaches well beyond 50,000 for many micro areas. The 2003 inaugural set of 560 micro areas included 674 counties and ranging in size from 13,000 (Andrews, Texas) to 182,000 (Torrington, Connecticut). Micro areas contain about 10 percent of the total populations and just under 60 percent of the nonmetro population. (<http://www.ers.usda.gov/briefing/Rurality/MicropolitanAreas/>)

Many CBSAs cross state lines. For example, the Washington-Arlington-Alexandria, DC-VA-MD-WV includes households in four different states. The median gross rent for the entire CBSA can be very different than the median gross rent for the state delineated portions of the CBSA. Figure 2 shows how these vary for the Washington-Arlington-Alexandria CBSA.



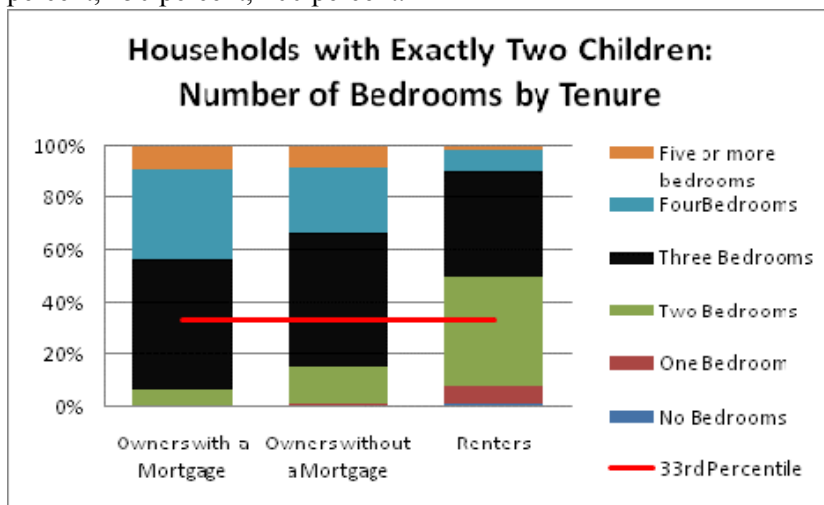
The literature in this field suggests that the geographic boundaries should attempt to roughly approximate labor market areas. Households may be trading off housing costs with commuting expenses. Therefore the same adjustment should be made regardless of whether or not the MSA crosses state lines. Given disclosure concerns, this general rule cannot be followed when a portion of a MSA in a particular state is too small to be disclosed on the CPS ASEC file, as is the case

for the West Virginia portion of the Washington DC metro area. In that case those households will be assigned the index corresponding to “Other Metro” areas in the particular state.⁵

B. Mechanically, how should the index be constructed? How can we take into account differences in quality?

Bishaw’s index used median gross rental costs to create an index from ACS data but there are several different options. Bishaw’s index was based on gross rents for all rental units. In an attempt to “standardize” the housing units, this analysis uses only units with complete kitchen and bathroom facilities. The housing quality filter eliminates a small number of units from the sample. For the five year 2005-2009 ACS data, of 112 million occupied housing units, 1 million (less than 1 percent) were eliminated. This varied considerably by state. In Alaska, 4.7 percent of units were eliminated while in Maryland and Utah only 0.6 percent were eliminated.

Analysis of the housing choices of families with exactly two children (the reference group for the SPM threshold estimates), reveals that renters are most likely to live in two bedroom units. Therefore, several indices were developed using only two-bedroom units. These indices were constructed using the mean, the median rents and the geometric mean of gross rent.⁶ Since differences in rental costs may be different for households near the bottom of the income distribution, an alternative index was estimated using rents at the 33rd percentile of the rental distribution rather than the median.⁷ Another set of indices were estimated using median rent for households with incomes below a given income to poverty ratio, e.g. 200 percent, 150 percent, 100 percent.



Source: American Community Survey: 2005-2009 data

⁵ This is a change from the methodology used in my January 2011 SGE paper. For that analysis separate index values were used for each portion of a multi-state MSA.

⁶ Since 1998, the Bureau of Labor Statistics has used a geometric mean in the calculation of the Consumer Price Index. Monthly Labor Review Online. October 1998, Vol. 121, No. 10, “Incorporating a geometric mean formula into the CPI.” Kenneth V. Dalton, John S. Greenlees, Kenneth J. Stewart.

⁷ Other researchers have used an index based on rental costs for households with incomes near the 33rd percentile of the income distribution. For example, the Institute for Research on Poverty (IRP) developed a cost adjustment for its Wisconsin poverty measure that adjusted the threshold (their analysis did not use three separate thresholds) based on the median annual housing costs for renters within the 28th to 38th percentiles of income in the given region to the median annual costs for renters within the same income range statewide. (Julia Isaacs, Joanna Marks, Timothy Smeeding, and Katherine Thornton, September 2010, Wisconsin Poverty Report: Technical Appendix, p. 26)

Another option is to use the predicted rent from a hedonic estimation of housing outlays. This is the approach developed by analysts at BEA/BLS in their estimates of regional price parities. (Aten, 2011) This hedonic regression could be done as a quantile regression to capture the differences in rent at something below the mean/median of the rental distribution.

The indices were calculated from the five year ACS data using all of these methods.⁸ Table 1 compares these indices and shows the correlation across them. For each index, the table shows the maximum, the minimum, the range, the ratio of the maximum to the minimum. The correlations among the indices were high (>.98). In the interest of simplicity, the median was used to develop the index in this paper. Further research will focus on refining this methodology with particular interest in using hedonic regressions to control for differences in the quality of housing.

C. Should there be a separate index for each of the three thresholds?

The ITWG suggested that some consideration be given to using a different index, or at least a different weight to the index, for the three different thresholds:

“With different thresholds for renters, homeowners with mortgages, and homeowners without mortgages, better data and future research might lead one to utilize different price weights for different groups. At this point, however, the available data are limited and this means that the area housing price adjustments will be similar for all groups and thresholds.” (ITWG, p. 5)

Since shelter and utilities constitute different shares of the three thresholds, it makes sense to weigh the housing cost adjustment by the appropriate share. For 2008, shelter and utilities made up 49.3 percent of the renter threshold, 50.2 percent of the threshold for owners with a mortgage and 41.9 percent of the threshold for owners without a mortgage.⁹

The five-year ACS file provides a large enough sample to look separately at housing costs for each of these three groups of households. The ACS includes questions about gross rent for renters and monthly housing costs for owners. Use of tenure-specific housing costs results in very different adjustments in some areas. Using owners’ outlays to create a separate index for homeowners is problematic, particularly for owners with a mortgage. The outlays of homeowners with a mortgage vary with the terms of the mortgage and the length of tenure as well as the value of the home. Median costs for homeowners in an area with limited mobility may reflect relative housing prices in some previous period more than current housing market conditions. Since rental costs, even using data from the five year ACS sample, more accurately reflect current market conditions only rental outlays are used in the construction of the index.

D. Normalizing

The Census Bureau practice in the NAS-based experimental poverty measures has been to normalize the geographic adjustment mechanism so that the average adjustment for all family units is equal to 1.0. The rationale for this “normalization” has been that the geographic adjustment should not change the average threshold for the nation as a whole. In this analysis, the geographic adjustment mechanism was not normalized.

⁸ At this time the author has not yet been able to run a quantile regression with the large five-year ACS data set.

⁹ The thresholds and shelter “shares” for 2009 used in this paper are taken from Garner (August, 2011).

E. Comparing Adjusted SPM Thresholds to the Official Thresholds

Comparisons between the SPM thresholds and the official poverty thresholds should be done with caution. The official poverty thresholds are meant to represent the cost of all necessary goods and services purchased by families. The SPM thresholds represent only the cost of food, shelter, clothing, utilities and miscellaneous goods. Important adjustments are made to the resources to reflect other “necessary” expenses that are not included in the SMP thresholds, including taxes, work-related expenses and medical out-of-pocket expenses. These items would have to be added to the SPM thresholds or subtracted from the official thresholds before comparing the two amounts.¹⁰

VI. Adjusted Thresholds

The 2009 SPM thresholds as derived by BLS from five years of CE data for two adult, two child *SPM families* are: \$24,450 for owners with a mortgage, \$20,298 for owners without a mortgage and \$23,874 for renters. The official 2009 poverty threshold for a two adult, two child family was \$21,756. Table 2 provides the two adult/two child thresholds for each tenure status for each geographic area using the 2005-2009 ACS data for those geographies included in the 2010 CPS ASEC.¹¹

Single index based on rental outlays:

$$Threshold_{ijt} = \left(HousingShare_t \times \frac{MGRD2B_{ij}}{MGRD2B_n} + (1 - HousingShare_t) \right) \times Threshold_t$$

i = state j=specific metro area, other metro or nonmetro

t= tenure: owner with mortgage, owner without a mortgage, renter

n = national

MGRD2B = Median gross rent for a “decent” two bedroom unit

Threshold = CE-based estimate of threshold

HousingShare = percent of threshold represented by housing and utility expenditures

VII . Poverty Rates

Tables 3, 4 and 5 provide state level poverty estimates using three different poverty measures: the official, the SPM with geographic adjustments, the SPM without geographic adjustments. In order to facilitate comparisons, the official estimates include unrelated children under age 15 in the poverty universe and therefore will not match published estimates of official poverty rates. The SPM with geographic adjustments uses the index based on median gross rents for two-bedroom units with complete kitchens and bathrooms from the 2005-2009 five-year ACS data.¹²

¹⁰ The NAS panel estimated that subtracting these “necessary” expenditures from the 1992 official threshold reduced the threshold for a two adult, two child family from \$14,228 to \$12,000 (Citro and Michael, p. 154).

¹¹ For information on sampling and estimation methods, confidentiality protection, and sampling and nonsampling errors, please see the “American Community Survey Multiyear Accuracy of the Data (3-year 2007-2009 and 5-year 2005-2009)” available at http://www.census.gov/acs/www/data_documentation/documentation_main/.

¹² The poverty rate estimates in this paper are from the Annual Social and Economic Supplement (ASEC) to the 2010 Current Population Survey (CPS). The estimates in this paper (which may be shown in text, figures, and tables) are based on responses from a sample of the population and may differ from actual values because of sampling variability or other factors. As a result, apparent differences between the estimates for two or more groups may not be statistically significant. All comparative statements have undergone statistical testing and are significant at the 90 percent confidence level unless otherwise noted. Standard errors were calculated using replicate weights. Further information about the source and accuracy of the estimates is available at <www.census.gov/hhes/www/p60_236sa.pdf>.

Tables 6 and 7 look more closely at the impact of geographic adjustments on poverty rates and the demographic composition of people in poverty. Table 6 compares poverty rates using the SPM approach with and without geographic adjustments. Adding geographic adjustments reduced the poverty rate of those living outside metropolitan areas by about four percentage points and for those living in the Midwestern and Southern census regions.

Table 7 shows the impact of geographic adjustment on the composition of the population identified as “in poverty”. Without geographic adjustments, 18.4 percent of the poor lived outside metropolitan statistical areas. After geographic adjustment this is reduced by 4.6 percentage points to 13.8 percent. The share of the poor living in the West is increased from 24.5 percent to 28.5 percent by the geographic adjustments.

VIII . Correlation with Other Measures of Material Deprivation

In a December 2008 paper published by the Center for Economic and Policy Research, Shawn Fremstad examined the relationship between state poverty rates using the NAS approach adjusting for differences in housing costs and two other measures of well-being and economic hardship. He found that state poverty rates calculated using the official poverty thresholds (which are not adjusted for geographic cost differences) were better correlated with food insecurity rates and a health and education index (two of the three components of the American Human Development Index) than the NAS poverty rates.

Prior research has found little correlation between deprivation indices and poverty rates . Short looked at income poverty and indicators of material hardship in the Survey of Income and Program Participation and concluded “Income poverty and indicators of material hardship are really two different answers to two different questions.” (Short, 2005) Sullivan et.al. using the Women’s Employment Study found a weak relationship between current income and material hardship. For example, they found that having a mental health disorder explains more than four times as much of the variation in hardship as current disposable income. Average income (over six years of survey) had stronger impact. (Sullivan 2006)

Table 8 provides some summary statistics regarding the correlation of the SPM poverty rates, the official poverty rates and the poverty rates using the SPM without geographic adjustments to a number of measures of deprivation at the state level. The official poverty rates are more highly correlated with the rate of food insecurity than the SPM (with or without geographic adjustments). However, there are a number of hardship indicators with which the SPM geographically adjusted is more closely correlated than the official measure, particularly those which involve housing cost burdens, crowding, homelessness, and foreclosures. Further research could explore the reasons for the mismatch between the geographically adjusted poverty rates and these economic hardship measures and explore the question of whether or not such correlations should serve as the criteria for assessing adjustment strategies.

VIII . Further Research

The ITWG suggested that poverty thresholds be adjusted for price differences across geographic areas using the best available data and statistical methodology. They noted that the American Community Survey (ACS) data appear to be the best data currently available, from which one can create a housing price index based on differences in quality-equivalent rental prices of housing across areas and that it would be good to (1) differentiate this price index by Metropolitan Statistical Areas (MSAs) and by non-MSA areas in each State and (2) utilize a 5-year moving

average of the data for each year. They also noted that over time this adjustment mechanism may be modified and improved.

One area where the adjustment mechanism could be improved would be with regards to differences in transportation costs. If individuals are able to satisfy their transportation needs using public transit and therefore do not need to purchase and maintain an automobile, the resources they need to purchase the rest of the consumption bundle described by the thresholds may be lower. This issue is complex because work-related transportation costs are subtracted from the SPM resource calculation while other transportation needs are reflected in the miscellaneous portion of the threshold. Would the adjustment be made on the threshold side or the resource side of the equation? What would be the appropriate level of geography to make an adjustment? Access to public transit may vary significantly within a single metropolitan statistical area. If housing costs within a metropolitan statistical area vary inversely with commuting distances and costs has the housing adjustment already taken differential transportation costs into account.¹³

The ITWG suggested that the Census Bureau and BLS researchers continue to investigate indices which could be applied to the entire threshold. There has been some promising research on regional variation in the cost of other basic necessities. USDA has developed an index that uses Nielsen Homescan data to measure regional variation in food prices for 52 goods in 35 market groups (Todd, Mancino, Leibtag and Tripodo, 2010). Carillo, Early and Olsen (2009) have developed a panel of price indices for housing, other goods, and all goods for each metropolitan area and the nonmetropolitan areas of each state from 1982 through 2008 using housing cost data from the 2000 HUD Customer Satisfaction Survey, data from 2000 Decennial Census and the price indices for non-housing goods produced each quarter for many urban areas by the Council for Community and Economic Research (formerly the American Chambers of Commerce Research Association or ACCRA). BEA researchers are continuing their research combining CPI price data and ACS housing cost data to create regional price parities. (Aten, 2011). Future research should clearly continue to evaluate these options.

On April 28, 2011 the University of Kentucky Center for Poverty Research (UKCPR), in conjunction with the Brookings Institution and U.S. Census Bureau, sponsored a research forum on the Cost of Living and the Supplemental Poverty Measure. Among the more than 60 attendees were representatives from Agency for Healthcare Research and Quality, the Bureau of Economic Analysis, Bureau of Labor Statistics, Census Bureau, Congressional Research Service, Government Accountability Office, National Academy of Science, Office of the Assistant Secretary for Planning and Evaluation in DHHS, Office of Management and Budget, academia, and think tanks. The goal of the forum was to gather leading economists in a roundtable format (1) to critically evaluate the proposed Census method for geographic adjustment, (2) to offer empirically implementable alternatives to the Census approach (including whether to adjust at all), and (3) to suggest future directions for research on geographic adjustment of poverty thresholds.¹⁴

¹³ For more detailed discussion of the challenges for developing a transportation cost index, see *Research on Commuting Expenditures for the Supplemental Poverty Measure* [PDF - 44k] (Melanie Rapino, Brian McKenzie, Mathew Marlay) available at <http://www.census.gov/hhes/povmeas/methodology/supplemental/research.html> and a forthcoming paper by these same authors, *Research on Commuting Expenditures and Geographic Adjustments in the Supplemental Poverty Measure*, which will be presented at the Joint Statistical Meetings in August 2011.

¹⁴ All papers presented at the forum as well as the summary recommendations from the forum can be found at <http://www.ukcpr.org/Conferences.aspx>

Although the experts expressed a diverse set of opinions on the efficacy and challenges of adjusting the poverty thresholds for differences in regional cost of living, during the roundtable discussion the experts reached *unanimous* consensus on the following:

- Some form of adjustment to the SPM thresholds for geographic differences in cost of living is preferable to no adjustment.
- The current method of adjusting the SPM threshold for housing price differences across regions but not other components of the consumption bundle is reasonable until better data become available.
- The adjustment for geographic housing price differences should be based on quality-adjusted rental costs.
- New sponsored research to inform how and for whom to adjust thresholds for geographic differences in cost of living should be a high priority.

Subsequent Census Bureau research will focus on the priorities identified by this group.

Table 1: Comparing Geographic Index Values

| Geography | Median | Mean | Geomean | 33rd Percentile | Income below 200% poverty | Income below 150% of poverty | Income below 100% of poverty | Hedonic - BEA |
|---------------------|---------------|-------------|----------------|------------------------|----------------------------------|-------------------------------------|-------------------------------------|----------------------|
| Maximum | 1.81 | 1.73 | 1.88 | 1.87 | 1.81 | 1.75 | 1.76 | 1.67 |
| Minimum | 0.58 | 0.55 | 0.57 | 0.60 | 0.59 | 0.59 | 0.59 | 0.55 |
| Range | 1.23 | 1.18 | 1.32 | 1.27 | 1.23 | 1.16 | 1.18 | 1.12 |
| Ratio of Max to Min | 3.14 | 3.16 | 3.32 | 3.10 | 3.09 | 2.97 | 3.00 | 3.05 |

CORRELATION COEFFICIENTS

| | | | | | | | |
|------------------------------|------|------|------|------|------|------|------|
| Median | 0.99 | 0.99 | 0.99 | 1.00 | 1.00 | 1.00 | 0.98 |
| Mean | | 1.00 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Geomean | | | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| 33rd Percentile | | | | 0.99 | 0.99 | 0.99 | 0.98 |
| Income below 200% poverty | | | | | 1.00 | 1.00 | 0.98 |
| Income below 150% of poverty | | | | | | 1.00 | 0.98 |
| Income below 100% of poverty | | | | | | | 0.98 |

Source: American Community Survey 2005-2009. For information on sampling and estimation methods, confidentiality protection, and sampling and nonsampling errors, please see the "American Community Survey Multiyear Accuracy of the Data (3-year 2007-2009 and 5-year 2005-2009)" available at http://www.census.gov/acs/www/data_documentation/documentation_main/.

Table 2. Thresholds for Two Adult Two Child Families: 2009

| | | Index based on Median Rents | Homeowners with Mortgage | Homeowners without a Mortgage | Renters |
|-------|--|-----------------------------|--------------------------|-------------------------------|---------|
| | | Share of threshold | 0.506 | 0.405 | 0.494 |
| | | Threshold from CE* | 24,450 | 20,298 | 23,874 |
| 1001 | ALABAMA Metro | 0.71951 | 20,980 | 17,992 | 20,566 |
| 1002 | ALABAMA Nonmetro | 0.6073171 | 19,592 | 17,070 | 19,243 |
| 2001 | ALASKA Metro | 1.19756 | 26,894 | 21,922 | 26,204 |
| 2002 | ALASKA Nonmetro | 1.16585 | 26,502 | 21,661 | 25,830 |
| 4001 | ARIZONA Metro | 0.94634 | 23,786 | 19,857 | 23,241 |
| 4002 | ARIZONA Nonmetro | 0.77195 | 21,629 | 18,423 | 21,184 |
| 5001 | ARKANSAS Metro | 0.70732 | 20,829 | 17,892 | 20,422 |
| 5002 | ARKANSAS Nonmetro | 0.62195 | 19,773 | 17,190 | 19,415 |
| 6001 | CALIFORNIA Metro | 0.94878 | 23,816 | 19,877 | 23,270 |
| 6002 | CALIFORNIA Nonmetro | 1.01829 | 24,676 | 20,448 | 24,090 |
| 8001 | COLORADO Metro | 0.84146 | 22,489 | 18,995 | 22,004 |
| 8002 | COLORADO Nonmetro | 0.90732 | 23,303 | 19,536 | 22,781 |
| 9001 | CONNECTICUT Metro | 1.18659 | 26,758 | 21,832 | 26,075 |
| 9002 | CONNECTICUT Nonmetro | 1.04878 | 25,053 | 20,699 | 24,449 |
| 10002 | DELAWARE Nonmetro | 0.9439 | 23,756 | 19,837 | 23,212 |
| 10420 | Akron, OH Metropolitan Statistical Area | 0.91341 | 23,379 | 19,586 | 22,853 |
| 10500 | Albany, GA Metropolitan Statistical Area | 0.68415 | 20,542 | 17,701 | 20,149 |
| 10580 | Albany-Schenectady-Troy, NY Metropolitan Statistical Area | 1.04146 | 24,963 | 20,639 | 24,363 |
| 10740 | Albuquerque, NM Metropolitan Statistical Area | 0.88049 | 22,971 | 19,316 | 22,465 |
| 10900 | Allentown-Bethlehem-Easton, PA-NJ Metropolitan Statistical Area | 1.04024 | 24,948 | 20,629 | 24,349 |
| 11020 | Altoona, PA Metropolitan Statistical Area | 0.67195 | 20,391 | 17,601 | 20,005 |
| 11100 | Amarillo, TX Metropolitan Statistical Area | 0.82195 | 22,247 | 18,834 | 21,774 |
| 11300 | Anderson, IN Metropolitan Statistical Area | 0.79268 | 21,885 | 18,594 | 21,429 |
| 11340 | Anderson, SC Metropolitan Statistical Area | 0.69634 | 20,693 | 17,802 | 20,293 |
| 11460 | Ann Arbor, MI Metropolitan Statistical Area | 1.09512 | 25,627 | 21,080 | 24,996 |
| 11500 | Anniston-Oxford, AL Metropolitan Statistical Area | 0.69146 | 20,633 | 17,762 | 20,235 |
| 11540 | Appleton, WI Metropolitan Statistical Area | 0.81463 | 22,157 | 18,774 | 21,688 |
| 11700 | Asheville, NC Metropolitan Statistical Area | 0.84024 | 22,473 | 18,985 | 21,990 |
| 12001 | FLORIDA Metro | 1.09878 | 25,672 | 21,110 | 25,039 |
| 12002 | FLORIDA Nonmetro | 0.80366 | 22,021 | 18,684 | 21,558 |
| 12020 | Athens-Clarke County, GA Metropolitan Statistical Area | 0.86098 | 22,730 | 19,155 | 22,234 |
| 12060 | Atlanta-Sandy Springs-Marietta, GA Metropolitan Statistical Area | 1.06829 | 25,295 | 20,859 | 24,679 |
| 12100 | Atlantic City-Hammonton, NJ Metropolitan Statistical Area | 1.23171 | 27,317 | 22,203 | 26,607 |
| 12260 | Augusta-Richmond County, GA-SC Metropolitan Statistical Area | 0.78415 | 21,780 | 18,524 | 21,328 |
| 12420 | Austin-Round Rock, TX Metropolitan Statistical Area | 1.11829 | 25,913 | 21,270 | 25,269 |
| 12540 | Bakersfield, CA Metropolitan Statistical Area | 0.88537 | 23,032 | 19,356 | 22,522 |
| 12580 | Baltimore-Towson, MD Metropolitan Statistical Area | 1.23293 | 27,332 | 22,213 | 26,621 |
| 12940 | Baton Rouge, LA Metropolitan Statistical Area | 0.87439 | 22,896 | 19,265 | 22,393 |
| 13001 | GEORGIA Metro | 0.8122 | 22,127 | 18,754 | 21,659 |
| 13002 | GEORGIA Nonmetro | 0.65244 | 20,150 | 17,441 | 19,775 |
| 13140 | Beaumont-Port Arthur, TX Metropolitan Statistical Area | 0.80854 | 22,081 | 18,724 | 21,616 |
| 13380 | Bellingham, WA Metropolitan Statistical Area | 0.95976 | 23,952 | 19,967 | 23,399 |
| 13460 | Bend, OR Metropolitan Statistical Area | 0.95366 | 23,877 | 19,917 | 23,327 |
| 13740 | Billings, MT Metropolitan Statistical Area | 0.8122 | 22,127 | 18,754 | 21,659 |
| 13780 | Binghamton, NY Metropolitan Statistical Area | 0.76098 | 21,493 | 18,333 | 21,055 |
| 13820 | Birmingham-Hoover, AL Metropolitan Statistical Area | 0.8439 | 22,519 | 19,015 | 22,033 |
| 14020 | Bloomington, IN Metropolitan Statistical Area | 0.85732 | 22,685 | 19,125 | 22,191 |
| 14060 | Bloomington-Normal, IL Metropolitan Statistical Area | 0.86463 | 22,775 | 19,185 | 22,277 |

Table 2. Thresholds for Two Adult Two Child Families: 2009

| | | Index based on Median Rents | Homeowners with Mortgage | Homeowners without a Mortgage | Renters |
|-------|---|-----------------------------------|--------------------------------|-------------------------------------|---------|
| 14260 | Boise City-Nampa, ID Metropolitan Statistical Area | 0.83902 | 22,458 | 18,975 | 21,975 |
| 14500 | Boulder, CO Metropolitan Statistical Area | 1.18293 | 26,713 | 21,802 | 26,031 |
| 14540 | Bowling Green, KY Metropolitan Statistical Area | 0.74756 | 21,327 | 18,223 | 20,897 |
| 14740 | Bremerton-Silverdale, WA Metropolitan Statistical Area | 1.04329 | 24,986 | 20,654 | 24,385 |
| 15002 | HAWAII Nonmetro | 1.42561 | 29,716 | 23,797 | 28,894 |
| 15180 | Brownsville-Harlingen, TX Metropolitan Statistical Area | 0.70976 | 20,859 | 17,912 | 20,451 |
| 15380 | Buffalo-Niagara Falls, NY Metropolitan Statistical Area | 0.82439 | 22,277 | 18,854 | 21,803 |
| 15940 | Canton-Massillon, OH Metropolitan Statistical Area | 0.7561 | 21,433 | 18,293 | 20,998 |
| 15980 | Cape Coral-Fort Myers, FL Metropolitan Statistical Area | 1.13171 | 26,079 | 21,381 | 25,427 |
| 16001 | IDAHO Metro | 0.7122 | 20,889 | 17,932 | 20,480 |
| 16002 | IDAHO Nonmetro | 0.70366 | 20,784 | 17,862 | 20,379 |
| 16300 | Cedar Rapids, IA Metropolitan Statistical Area | 0.79634 | 21,930 | 18,624 | 21,472 |
| 16580 | Champaign-Urbana, IL Metropolitan Statistical Area | 0.87561 | 22,911 | 19,275 | 22,407 |
| 16620 | Charleston, WV Metropolitan Statistical Area | 0.69634 | 20,693 | 17,802 | 20,293 |
| 16700 | Charleston-North Charleston-Summerville, SC Metropolitan Statistical Area | 0.99024 | 24,329 | 20,218 | 23,759 |
| 16740 | Charlotte-Gastonia-Concord, NC-SC Metropolitan Statistical Area | 0.92683 | 23,545 | 19,696 | 23,011 |
| 16860 | Chattanooga, TN-GA Metropolitan Statistical Area | 0.78902 | 21,840 | 18,564 | 21,386 |
| 16980 | Chicago-Naperville-Joliet, IL-IN-WI Metropolitan Statistical Area | 1.11951 | 25,929 | 21,280 | 25,283 |
| 17001 | ILLINOIS Metro | 0.72927 | 21,101 | 18,072 | 20,681 |
| 17002 | ILLINOIS Nonmetro | 0.69146 | 20,633 | 17,762 | 20,235 |
| 17020 | Chico, CA Metropolitan Statistical Area | 1.02073 | 24,706 | 20,468 | 24,118 |
| 17140 | Cincinnati-Middletown, OH-KY-IN Metropolitan Statistical Area | 0.87073 | 22,851 | 19,235 | 22,349 |
| 17460 | Cleveland-Elyria-Mentor, OH Metropolitan Statistical Area | 0.89146 | 23,107 | 19,406 | 22,594 |
| 17660 | Coeur d'Alene, ID Metropolitan Statistical Area | 0.84512 | 22,534 | 19,025 | 22,047 |
| 17820 | Colorado Springs, CO Metropolitan Statistical Area | 0.95244 | 23,862 | 19,907 | 23,313 |
| 17860 | Columbia, MO Metropolitan Statistical Area | 0.78902 | 21,840 | 18,564 | 21,386 |
| 17900 | Columbia, SC Metropolitan Statistical Area | 0.8622 | 22,745 | 19,165 | 22,249 |
| 17980 | Columbus, GA-AL Metropolitan Statistical Area | 0.80854 | 22,081 | 18,724 | 21,616 |
| 18001 | INDIANA Metro | 0.81951 | 22,217 | 18,814 | 21,745 |
| 18002 | INDIANA Nonmetro | 0.72683 | 21,070 | 18,052 | 20,652 |
| 18140 | Columbus, OH Metropolitan Statistical Area | 0.93049 | 23,590 | 19,727 | 23,054 |
| 18580 | Corpus Christi, TX Metropolitan Statistical Area | 0.97195 | 24,103 | 20,067 | 23,543 |
| 19001 | IOWA Metro | 0.81098 | 22,112 | 18,744 | 21,645 |
| 19002 | IOWA Nonmetro | 0.65488 | 20,180 | 17,461 | 19,804 |
| 19100 | Dallas-Fort Worth-Arlington, TX Metropolitan Statistical Area | 1.06585 | 25,265 | 20,839 | 24,651 |
| 19340 | Davenport-Moline-Rock Island, IA-IL Metropolitan Statistical Area | 0.78415 | 21,780 | 18,524 | 21,328 |
| 19380 | Dayton, OH Metropolitan Statistical Area | 0.83902 | 22,458 | 18,975 | 21,975 |
| 19460 | Decatur, AL Metropolitan Statistical Area | 0.64634 | 20,075 | 17,391 | 19,703 |
| 19500 | Decatur, IL Metropolitan Statistical Area | 0.75 | 21,357 | 18,243 | 20,926 |
| 19660 | Deltona-Daytona Beach-Ormond Beach, FL Metropolitan Statistical Area | 1.05122 | 25,084 | 20,719 | 24,478 |
| 19740 | Denver-Aurora-Broomfield, CO Metropolitan Statistical Area | 1.0878 | 25,536 | 21,020 | 24,909 |
| 19780 | Des Moines-West Des Moines, IA Metropolitan Statistical Area | 0.89146 | 23,107 | 19,406 | 22,594 |
| 19820 | Detroit-Warren-Livonia, MI Metropolitan Statistical Area | 0.99512 | 24,390 | 20,258 | 23,816 |
| 20001 | KANSAS Metro | 0.81829 | 22,202 | 18,804 | 21,731 |
| 20002 | KANSAS Nonmetro | 0.67195 | 20,391 | 17,601 | 20,005 |
| 20100 | Dover, DE Metropolitan Statistical Area | 1.03659 | 24,903 | 20,599 | 24,306 |
| 20260 | Duluth, MN-WI Metropolitan Statistical Area | 0.85 | 22,594 | 19,065 | 22,105 |
| 20500 | Durham-Chapel Hill, NC Metropolitan Statistical Area | 0.97195 | 24,103 | 20,067 | 23,543 |
| 20740 | Eau Claire, WI Metropolitan Statistical Area | 0.79756 | 21,945 | 18,634 | 21,486 |
| 20940 | El Centro, CA Metropolitan Statistical Area | 0.81951 | 22,217 | 18,814 | 21,745 |

Table 2. Thresholds for Two Adult Two Child Families: 2009

| | | Index based on Median Rents | Homeowners with Mortgage | Homeowners without a Mortgage | Renters |
|-------|--|-----------------------------|--------------------------|-------------------------------|---------|
| 21001 | KENTUCKY Metro | 0.6878 | 20,588 | 17,732 | 20,192 |
| 21002 | KENTUCKY Nonmetro | 0.60732 | 19,592 | 17,070 | 19,243 |
| 21340 | El Paso, TX Metropolitan Statistical Area | 0.72195 | 21,010 | 18,012 | 20,595 |
| 21500 | Erie, PA Metropolitan Statistical Area | 0.80122 | 21,991 | 18,664 | 21,530 |
| 21660 | Eugene-Springfield, OR Metropolitan Statistical Area | 0.92439 | 23,515 | 19,676 | 22,982 |
| 21780 | Evansville, IN-KY Metropolitan Statistical Area | 0.83415 | 22,398 | 18,935 | 21,918 |
| 22001 | LOUISIANA Metro | 0.76341 | 21,523 | 18,353 | 21,084 |
| 22002 | LOUISIANA Nonmetro | 0.63902 | 19,984 | 17,330 | 19,617 |
| 22020 | Fargo, ND-MN Metropolitan Statistical Area | 0.7561 | 21,433 | 18,293 | 20,998 |
| 22140 | Farmington, NM Metropolitan Statistical Area | 0.79512 | 21,915 | 18,614 | 21,458 |
| 22180 | Fayetteville, NC Metropolitan Statistical Area | 0.87439 | 22,896 | 19,265 | 22,393 |
| 22220 | Fayetteville-Springdale-Rogers, AR-MO Metropolitan Statistical Area | 0.80122 | 21,991 | 18,664 | 21,530 |
| 22420 | Flint, MI Metropolitan Statistical Area | 0.80122 | 21,991 | 18,664 | 21,530 |
| 22520 | Florence-Muscle Shoals, AL Metropolitan Statistical Area | 0.64756 | 20,090 | 17,401 | 19,717 |
| 22660 | Fort Collins-Loveland, CO Metropolitan Statistical Area | 0.9378 | 23,680 | 19,787 | 23,140 |
| 22900 | Fort Smith, AR-OK Metropolitan Statistical Area | 0.70244 | 20,769 | 17,852 | 20,365 |
| 23001 | MAINE Metro | 0.91463 | 23,394 | 19,596 | 22,867 |
| 23002 | MAINE Nonmetro | 0.7622 | 21,508 | 18,343 | 21,069 |
| 23020 | Fort Walton Beach-Crestview-Destin, FL Metropolitan Statistical Area | 1.01341 | 24,616 | 20,408 | 24,032 |
| 23060 | Fort Wayne, IN Metropolitan Statistical Area | 0.78049 | 21,734 | 18,493 | 21,285 |
| 23420 | Fresno, CA Metropolitan Statistical Area | 0.96341 | 23,997 | 19,997 | 23,442 |
| 23540 | Gainesville, FL Metropolitan Statistical Area | 1.01463 | 24,631 | 20,418 | 24,047 |
| 24001 | MARYLAND Metro | 0.62805 | 19,848 | 17,240 | 19,487 |
| 24002 | MARYLAND Nonmetro | 0.97805 | 24,178 | 20,118 | 23,615 |
| 24340 | Grand Rapids-Wyoming, MI Metropolitan Statistical Area | 0.85122 | 22,609 | 19,075 | 22,119 |
| 24540 | Greeley, CO Metropolitan Statistical Area | 0.85122 | 22,609 | 19,075 | 22,119 |
| 24580 | Green Bay, WI Metropolitan Statistical Area | 0.83902 | 22,458 | 18,975 | 21,975 |
| 24660 | Greensboro-High Point, NC Metropolitan Statistical Area | 0.81707 | 22,187 | 18,794 | 21,717 |
| 24860 | Greenville-Mauldin-Easley, SC Metropolitan Statistical Area | 0.77927 | 21,719 | 18,483 | 21,271 |
| 25001 | MASSACHUSETTS Metro | 0.97561 | 24,148 | 20,097 | 23,586 |
| 25002 | MASSACHUSETTS Nonmetro | 1.8061 | 34,423 | 26,925 | 33,381 |
| 25060 | Gulfport-Biloxi, MS Metropolitan Statistical Area | 0.96341 | 23,997 | 19,997 | 23,442 |
| 25180 | Hagerstown-Martinsburg, MD-WV Metropolitan Statistical Area | 0.92927 | 23,575 | 19,717 | 23,040 |
| 25420 | Harrisburg-Carlisle, PA Metropolitan Statistical Area | 0.92439 | 23,515 | 19,676 | 22,982 |
| 25500 | Harrisonburg, VA Metropolitan Statistical Area | 0.8622 | 22,745 | 19,165 | 22,249 |
| 25860 | Hickory-Lenoir-Morganton, NC Metropolitan Statistical Area | 0.6878 | 20,588 | 17,732 | 20,192 |
| 26001 | MICHIGAN Metro | 0.79146 | 21,870 | 18,584 | 21,415 |
| 26002 | MICHIGAN Nonmetro | 0.74756 | 21,327 | 18,223 | 20,897 |
| 26100 | Holland-Grand Haven, MI Metropolitan Statistical Area | 0.86098 | 22,730 | 19,155 | 22,234 |
| 26180 | Honolulu, HI Metropolitan Statistical Area | 1.61585 | 32,069 | 25,361 | 31,137 |
| 26420 | Houston-Sugar Land-Baytown, TX Metropolitan Statistical Area | 1.01463 | 24,631 | 20,418 | 24,047 |
| 26580 | Huntington-Ashland, WV-KY-OH Metropolitan Statistical Area | 0.70732 | 20,829 | 17,892 | 20,422 |
| 26620 | Huntsville, AL Metropolitan Statistical Area | 0.74512 | 21,297 | 18,203 | 20,868 |
| 26900 | Indianapolis-Carmel, IN Metropolitan Statistical Area | 0.91829 | 23,439 | 19,626 | 22,910 |
| 26980 | Iowa City, IA Metropolitan Statistical Area | 0.90122 | 23,228 | 19,486 | 22,709 |
| 27001 | MINNESOTA Metro | 0.82073 | 22,232 | 18,824 | 21,760 |
| 27002 | MINNESOTA Nonmetro | 0.71951 | 20,980 | 17,992 | 20,566 |
| 27100 | Jackson, MI Metropolitan Statistical Area | 0.82195 | 22,247 | 18,834 | 21,774 |
| 27140 | Jackson, MS Metropolitan Statistical Area | 0.9061 | 23,288 | 19,526 | 22,767 |
| 27260 | Jacksonville, FL Metropolitan Statistical Area | 1.04146 | 24,963 | 20,639 | 24,363 |

Table 2. Thresholds for Two Adult Two Child Families: 2009

| | | Index based on Median Rents | Homeowners with Mortgage | Homeowners without a Mortgage | Renters |
|-------|--|-----------------------------|--------------------------|-------------------------------|---------|
| 27340 | Jacksonville, NC Metropolitan Statistical Area | 0.8378 | 22,443 | 18,965 | 21,961 |
| 27500 | Janesville, WI Metropolitan Statistical Area | 0.86463 | 22,775 | 19,185 | 22,277 |
| 27740 | Johnson City, TN Metropolitan Statistical Area | 0.66829 | 20,346 | 17,571 | 19,962 |
| 27780 | Johnstown, PA Metropolitan Statistical Area | 0.60732 | 19,592 | 17,070 | 19,243 |
| 27900 | Joplin, MO Metropolitan Statistical Area | 0.72927 | 21,101 | 18,072 | 20,681 |
| 28001 | MISSISSIPPI Metro | 0.79512 | 21,915 | 18,614 | 21,458 |
| 28002 | MISSISSIPPI Nonmetro | 0.6378 | 19,969 | 17,320 | 19,602 |
| 28020 | Kalamazoo-Portage, MI Metropolitan Statistical Area | 0.83293 | 22,383 | 18,925 | 21,904 |
| 28100 | Kankakee-Bradley, IL Metropolitan Statistical Area | 0.90366 | 23,258 | 19,506 | 22,738 |
| 28140 | Kansas City, MO-KS Metropolitan Statistical Area | 0.93415 | 23,635 | 19,757 | 23,097 |
| 28660 | Killeen-Temple-Fort Hood, TX Metropolitan Statistical Area | 0.85366 | 22,640 | 19,095 | 22,148 |
| 28700 | Kingsport-Bristol-Bristol, TN-VA Metropolitan Statistical Area | 0.63415 | 19,924 | 17,290 | 19,559 |
| 28740 | Kingston, NY Metropolitan Statistical Area | 1.23293 | 27,332 | 22,213 | 26,621 |
| 28940 | Knoxville, TN Metropolitan Statistical Area | 0.80976 | 22,096 | 18,734 | 21,630 |
| 29001 | MISSOURI Metro | 0.7061 | 20,814 | 17,882 | 20,408 |
| 29002 | MISSOURI Nonmetro | 0.63171 | 19,894 | 17,270 | 19,530 |
| 29100 | La Crosse, WI-MN Metropolitan Statistical Area | 0.80244 | 22,006 | 18,674 | 21,544 |
| 29180 | Lafayette, LA Metropolitan Statistical Area | 0.79268 | 21,885 | 18,594 | 21,429 |
| 29340 | Lake Charles, LA Metropolitan Statistical Area | 0.7878 | 21,825 | 18,554 | 21,371 |
| 29460 | Lakeland-Winter Haven, FL Metropolitan Statistical Area | 0.95854 | 23,937 | 19,957 | 23,385 |
| 29540 | Lancaster, PA Metropolitan Statistical Area | 0.9561 | 23,907 | 19,937 | 23,356 |
| 29620 | Lansing-East Lansing, MI Metropolitan Statistical Area | 0.91341 | 23,379 | 19,586 | 22,853 |
| 29700 | Laredo, TX Metropolitan Statistical Area | 0.83171 | 22,368 | 18,915 | 21,889 |
| 29740 | Las Cruces, NM Metropolitan Statistical Area | 0.71585 | 20,935 | 17,962 | 20,523 |
| 29820 | Las Vegas-Paradise, NV Metropolitan Statistical Area | 1.2061 | 27,000 | 21,992 | 26,305 |
| 29940 | Lawrence, KS Metropolitan Statistical Area | 0.89512 | 23,152 | 19,436 | 22,637 |
| 30001 | MONTANA Metro | 0.80976 | 22,096 | 18,734 | 21,630 |
| 30002 | MONTANA Nonmetro | 0.73171 | 21,131 | 18,092 | 20,710 |
| 30020 | Lawton, OK Metropolitan Statistical Area | 0.74634 | 21,312 | 18,213 | 20,882 |
| 30460 | Lexington-Fayette, KY Metropolitan Statistical Area | 0.81707 | 22,187 | 18,794 | 21,717 |
| 30780 | Little Rock-North Little Rock-Conway, AR Metropolitan Statistical Area | 0.83293 | 22,383 | 18,925 | 21,904 |
| 30980 | Longview, TX Metropolitan Statistical Area | 0.78293 | 21,764 | 18,514 | 21,314 |
| 31001 | NEBRASKA Metro | 0.82073 | 22,232 | 18,824 | 21,760 |
| 31002 | NEBRASKA Nonmetro | 0.67927 | 20,482 | 17,661 | 20,091 |
| 31100 | Los Angeles-Long Beach-Santa Ana, CA Metropolitan Statistical Area | 1.53902 | 31,119 | 24,729 | 30,231 |
| 31140 | Louisville/Jefferson County, KY-IN Metropolitan Statistical Area | 0.80854 | 22,081 | 18,724 | 21,616 |
| 31180 | Lubbock, TX Metropolitan Statistical Area | 0.85976 | 22,715 | 19,145 | 22,220 |
| 31340 | Lynchburg, VA Metropolitan Statistical Area | 0.70366 | 20,784 | 17,862 | 20,379 |
| 31420 | Macon, GA Metropolitan Statistical Area | 0.77561 | 21,674 | 18,453 | 21,228 |
| 31460 | Madera-Chowchilla, CA Metropolitan Statistical Area | 0.89878 | 23,198 | 19,466 | 22,680 |
| 31540 | Madison, WI Metropolitan Statistical Area | 1.04268 | 24,978 | 20,649 | 24,377 |
| 32001 | NEVADA Metro | 1.05244 | 25,099 | 20,729 | 24,492 |
| 32002 | NEVADA Nonmetro | 0.92561 | 23,530 | 19,686 | 22,997 |
| 32580 | McAllen-Edinburg-Mission, TX Metropolitan Statistical Area | 0.74268 | 21,267 | 18,183 | 20,839 |
| 32780 | Medford, OR Metropolitan Statistical Area | 0.93293 | 23,620 | 19,747 | 23,083 |
| 32820 | Memphis, TN-MS-AR Metropolitan Statistical Area | 0.90976 | 23,334 | 19,556 | 22,810 |
| 32900 | Merced, CA Metropolitan Statistical Area | 0.8878 | 23,062 | 19,376 | 22,551 |
| 33001 | NEW HAMPSHIRE Metro | 1.25366 | 27,588 | 22,383 | 26,866 |
| 33002 | NEW HAMPSHIRE Nonmetro | 1.0939 | 25,612 | 21,070 | 24,981 |
| 33100 | Miami-Fort Lauderdale-Pompano Beach, FL Metropolitan Statistical Area | 1.32439 | 28,463 | 22,965 | 27,700 |

Table 2. Thresholds for Two Adult Two Child Families: 2009

| | | Index based on Median Rents | Homeowners with Mortgage | Homeowners without a Mortgage | Renters |
|-------|--|-----------------------------|--------------------------|-------------------------------|---------|
| 33140 | Michigan City-La Porte, IN Metropolitan Statistical Area | 0.81341 | 22,142 | 18,764 | 21,673 |
| 33260 | Midland, TX Metropolitan Statistical Area | 0.94268 | 23,741 | 19,827 | 23,198 |
| 33340 | Milwaukee-Waukesha-West Allis, WI Metropolitan Statistical Area | 0.96341 | 23,997 | 19,997 | 23,442 |
| 33460 | Minneapolis-St. Paul-Bloomington, MN-WI Metropolitan Statistical Area | 1.11463 | 25,868 | 21,240 | 25,226 |
| 33660 | Mobile, AL Metropolitan Statistical Area | 0.80366 | 22,021 | 18,684 | 21,558 |
| 33700 | Modesto, CA Metropolitan Statistical Area | 1.07561 | 25,385 | 20,920 | 24,766 |
| 33740 | Monroe, LA Metropolitan Statistical Area | 0.70732 | 20,829 | 17,892 | 20,422 |
| 33780 | Monroe, MI Metropolitan Statistical Area | 0.87439 | 22,896 | 19,265 | 22,393 |
| 33860 | Montgomery, AL Metropolitan Statistical Area | 0.82317 | 22,262 | 18,844 | 21,789 |
| 34740 | Muskegon-Norton Shores, MI Metropolitan Statistical Area | 0.78537 | 21,795 | 18,534 | 21,343 |
| 34820 | Myrtle Beach-North Myrtle Beach-Conway, SC Metropolitan Statistical Area | 0.92439 | 23,515 | 19,676 | 22,982 |
| 34900 | Napa, CA Metropolitan Statistical Area | 1.48902 | 30,500 | 24,318 | 29,641 |
| 34940 | Naples-Marco Island, FL Metropolitan Statistical Area | 1.25976 | 27,664 | 22,433 | 26,938 |
| 34980 | Nashville-Davidson--Murfreesboro--Franklin, TN Metropolitan Statistical Area | 0.92073 | 23,469 | 19,646 | 22,939 |
| 35002 | NEW MEXICO Nonmetro | 0.66951 | 20,361 | 17,581 | 19,976 |
| 35380 | New Orleans-Metairie-Kenner, LA Metropolitan Statistical Area | 1.05244 | 25,099 | 20,729 | 24,492 |
| 35620 | New York-Northern New Jersey-Long Island, NY-NJ-PA Metropolitan Statistical Area | 1.35366 | 28,825 | 23,205 | 28,045 |
| 35660 | Niles-Benton Harbor, MI Metropolitan Statistical Area | 0.75122 | 21,372 | 18,253 | 20,940 |
| 36001 | NEW YORK Metro | 0.94512 | 23,771 | 19,847 | 23,227 |
| 36002 | NEW YORK Nonmetro | 0.79146 | 21,870 | 18,584 | 21,415 |
| 36100 | Ocala, FL Metropolitan Statistical Area | 0.9122 | 23,364 | 19,576 | 22,839 |
| 36140 | Ocean City, NJ Metropolitan Statistical Area | 1.16463 | 26,487 | 21,651 | 25,816 |
| 36260 | Ogden-Clearfield, UT Metropolitan Statistical Area | 0.8622 | 22,745 | 19,165 | 22,249 |
| 36420 | Oklahoma City, OK Metropolitan Statistical Area | 0.81341 | 22,142 | 18,764 | 21,673 |
| 36500 | Olympia, WA Metropolitan Statistical Area | 1.02805 | 24,797 | 20,529 | 24,205 |
| 36540 | Omaha-Council Bluffs, NE-IA Metropolitan Statistical Area | 0.90732 | 23,303 | 19,536 | 22,781 |
| 36740 | Orlando-Kissimmee, FL Metropolitan Statistical Area | 1.16707 | 26,517 | 21,671 | 25,844 |
| 36780 | Oshkosh-Neenah, WI Metropolitan Statistical Area | 0.78537 | 21,795 | 18,534 | 21,343 |
| 37001 | NORTH CAROLINA Metro | 0.83171 | 22,368 | 18,915 | 21,889 |
| 37002 | NORTH CAROLINA Nonmetro | 0.70732 | 20,829 | 17,892 | 20,422 |
| 37100 | Oxnard-Thousand Oaks-Ventura, CA Metropolitan Statistical Area | 1.66098 | 32,627 | 25,732 | 31,669 |
| 37340 | Palm Bay-Melbourne-Titusville, FL Metropolitan Statistical Area | 1.04024 | 24,948 | 20,629 | 24,349 |
| 37460 | Panama City-Lynn Haven-Panama City Beach, FL Metropolitan Statistical Area | 1.00976 | 24,571 | 20,378 | 23,989 |
| 37860 | Pensacola-Ferry Pass-Brent, FL Metropolitan Statistical Area | 0.91463 | 23,394 | 19,596 | 22,867 |
| 37900 | Peoria, IL Metropolitan Statistical Area | 0.81707 | 22,187 | 18,794 | 21,717 |
| 37980 | Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Metropolitan Statistical Area | 1.15732 | 26,396 | 21,591 | 25,729 |
| 38001 | NORTH DAKOTA Metro | 0.73415 | 21,161 | 18,113 | 20,739 |
| 38002 | NORTH DAKOTA Nonmetro | 0.57561 | 19,200 | 16,809 | 18,869 |
| 38060 | Phoenix-Mesa-Scottsdale, AZ Metropolitan Statistical Area | 1.05 | 25,069 | 20,709 | 24,464 |
| 38300 | Pittsburgh, PA Metropolitan Statistical Area | 0.82195 | 22,247 | 18,834 | 21,774 |
| 38900 | Portland-Vancouver-Beaverton, OR-WA Metropolitan Statistical Area | 0.99634 | 24,405 | 20,268 | 23,831 |
| 38940 | Port St. Lucie, FL Metropolitan Statistical Area | 1.15 | 26,306 | 21,531 | 25,643 |
| 39001 | OHIO Metro | 0.7 | 20,738 | 17,832 | 20,336 |
| 39002 | OHIO Nonmetro | 0.70854 | 20,844 | 17,902 | 20,437 |
| 39100 | Poughkeepsie-Newburgh-Middletown, NY Metropolitan Statistical Area | 1.30732 | 28,252 | 22,824 | 27,498 |
| 39140 | Prescott, AZ Metropolitan Statistical Area | 0.9622 | 23,982 | 19,987 | 23,428 |
| 39340 | Provo-Orem, UT Metropolitan Statistical Area | 0.83659 | 22,428 | 18,955 | 21,947 |
| 39380 | Pueblo, CO Metropolitan Statistical Area | 0.76829 | 21,583 | 18,393 | 21,141 |
| 39460 | Punta Gorda, FL Metropolitan Statistical Area | 1.05488 | 25,129 | 20,749 | 24,521 |
| 39540 | Racine, WI Metropolitan Statistical Area | 0.89146 | 23,107 | 19,406 | 22,594 |

Table 2. Thresholds for Two Adult Two Child Families: 2009

| | | Index based on Median Rents | Homeowners with Mortgage | Homeowners without a Mortgage | Renters |
|-------|---|-----------------------------|--------------------------|-------------------------------|---------|
| 39580 | Raleigh-Cary, NC Metropolitan Statistical Area | 0.99878 | 24,435 | 20,288 | 23,860 |
| 39740 | Reading, PA Metropolitan Statistical Area | 0.93537 | 23,650 | 19,767 | 23,112 |
| 39900 | Reno-Sparks, NV Metropolitan Statistical Area | 1.14878 | 26,291 | 21,521 | 25,629 |
| 40001 | OKLAHOMA Metro | 0.58537 | 19,320 | 16,889 | 18,984 |
| 40002 | OKLAHOMA Nonmetro | 0.6561 | 20,195 | 17,471 | 19,818 |
| 40060 | Richmond, VA Metropolitan Statistical Area | 1.01707 | 24,661 | 20,438 | 24,075 |
| 40140 | Riverside-San Bernardino-Ontario, CA Metropolitan Statistical Area | 1.24756 | 27,513 | 22,333 | 26,794 |
| 40220 | Roanoke, VA Metropolitan Statistical Area | 0.80732 | 22,066 | 18,714 | 21,602 |
| 40380 | Rochester, NY Metropolitan Statistical Area | 0.94512 | 23,771 | 19,847 | 23,227 |
| 40420 | Rockford, IL Metropolitan Statistical Area | 0.85244 | 22,624 | 19,085 | 22,134 |
| 40900 | Sacramento-Arden-Arcade-Roseville, CA Metropolitan Statistical Area | 1.19878 | 26,909 | 21,932 | 26,218 |
| 40980 | Saginaw-Saginaw Township North, MI Metropolitan Statistical Area | 0.78902 | 21,840 | 18,564 | 21,386 |
| 41001 | OREGON Metro | 0.90488 | 23,273 | 19,516 | 22,752 |
| 41002 | OREGON Nonmetro | 0.78537 | 21,795 | 18,534 | 21,343 |
| 41060 | St. Cloud, MN Metropolitan Statistical Area | 0.81463 | 22,157 | 18,774 | 21,688 |
| 41180 | St. Louis, MO-IL Metropolitan Statistical Area | 0.91707 | 23,424 | 19,616 | 22,896 |
| 41420 | Salem, OR Metropolitan Statistical Area | 0.8378 | 22,443 | 18,965 | 21,961 |
| 41500 | Salinas, CA Metropolitan Statistical Area | 1.34146 | 28,674 | 23,105 | 27,901 |
| 41540 | Salisbury, MD Metropolitan Statistical Area | 1.02683 | 24,782 | 20,519 | 24,190 |
| 41620 | Salt Lake City, UT Metropolitan Statistical Area | 0.9622 | 23,982 | 19,987 | 23,428 |
| 41700 | San Antonio, TX Metropolitan Statistical Area | 0.94878 | 23,816 | 19,877 | 23,270 |
| 41740 | San Diego-Carlsbad-San Marcos, CA Metropolitan Statistical Area | 1.51098 | 30,772 | 24,499 | 29,900 |
| 41860 | San Francisco-Oakland-Fremont, CA Metropolitan Statistical Area | 1.68049 | 32,869 | 25,892 | 31,900 |
| 41940 | San Jose-Sunnyvale-Santa Clara, CA Metropolitan Statistical Area | 1.71585 | 33,306 | 26,183 | 32,317 |
| 42001 | PENNSYLVANIA Metro | 0.82561 | 22,292 | 18,864 | 21,817 |
| 42002 | PENNSYLVANIA Nonmetro | 0.69634 | 20,693 | 17,802 | 20,293 |
| 42020 | San Luis Obispo-Paso Robles, CA Metropolitan Statistical Area | 1.3378 | 28,629 | 23,075 | 27,858 |
| 42060 | Santa Barbara-Santa Maria-Goleta, CA Metropolitan Statistical Area | 1.60854 | 31,979 | 25,301 | 31,051 |
| 42100 | Santa Cruz-Watsonville, CA Metropolitan Statistical Area | 1.67927 | 32,854 | 25,882 | 31,885 |
| 42140 | Santa Fe, NM Metropolitan Statistical Area | 1.15122 | 26,321 | 21,541 | 25,657 |
| 42220 | Santa Rosa-Petaluma, CA Metropolitan Statistical Area | 1.42439 | 29,700 | 23,787 | 28,879 |
| 14600 | Bradenton-Sarasota-Venice, FL Metropolitan Statistical Area | 1.16829 | 26,532 | 21,681 | 25,859 |
| 42340 | Savannah, GA Metropolitan Statistical Area | 0.98659 | 24,284 | 20,188 | 23,716 |
| 42540 | Scranton-Wilkes-Barre, PA Metropolitan Statistical Area | 0.75488 | 21,417 | 18,283 | 20,983 |
| 42660 | Seattle-Tacoma-Bellevue, WA Metropolitan Statistical Area | 1.18415 | 26,728 | 21,812 | 26,046 |
| 43340 | Shreveport-Bossier City, LA Metropolitan Statistical Area | 0.80854 | 22,081 | 18,724 | 21,616 |
| 43620 | Sioux Falls, SD Metropolitan Statistical Area | 0.81098 | 22,112 | 18,744 | 21,645 |
| 43780 | South Bend-Mishawaka, IN-MI Metropolitan Statistical Area | 0.87073 | 22,851 | 19,235 | 22,349 |
| 43900 | Spartanburg, SC Metropolitan Statistical Area | 0.70976 | 20,859 | 17,912 | 20,451 |
| 44001 | RHODE ISLAND Metro | 1.23171 | 27,317 | 22,203 | 26,607 |
| 44060 | Spokane, WA Metropolitan Statistical Area | 0.85122 | 22,609 | 19,075 | 22,119 |
| 44100 | Springfield, IL Metropolitan Statistical Area | 0.81098 | 22,112 | 18,744 | 21,645 |
| 44180 | Springfield, MO Metropolitan Statistical Area | 0.75 | 21,357 | 18,243 | 20,926 |
| 44220 | Springfield, OH Metropolitan Statistical Area | 0.78049 | 21,734 | 18,493 | 21,285 |
| 44700 | Stockton, CA Metropolitan Statistical Area | 1.12439 | 25,989 | 21,321 | 25,341 |
| 45001 | SOUTH CAROLINA Metro | 0.69634 | 20,693 | 17,802 | 20,293 |
| 45002 | SOUTH CAROLINA Nonmetro | 0.67439 | 20,422 | 17,621 | 20,034 |
| 45060 | Syracuse, NY Metropolitan Statistical Area | 0.88171 | 22,987 | 19,326 | 22,479 |
| 45220 | Tallahassee, FL Metropolitan Statistical Area | 1.00244 | 24,480 | 20,318 | 23,903 |
| 45300 | Tampa-St. Petersburg-Clearwater, FL Metropolitan Statistical Area | 1.10732 | 25,778 | 21,180 | 25,140 |

Table 2. Thresholds for Two Adult Two Child Families: 2009

| | | Index based on Median Rents | Homeowners with Mortgage | Homeowners without a Mortgage | Renters |
|-------|--|-----------------------------|--------------------------|-------------------------------|---------|
| 45780 | Toledo, OH Metropolitan Statistical Area | 0.80366 | 22,021 | 18,684 | 21,558 |
| 45820 | Topeka, KS Metropolitan Statistical Area | 0.79268 | 21,885 | 18,594 | 21,429 |
| 45940 | Trenton-Ewing, NJ Metropolitan Statistical Area | 1.35854 | 28,886 | 23,245 | 28,103 |
| 46001 | SOUTH DAKOTA Metro | 0.79512 | 21,915 | 18,614 | 21,458 |
| 46002 | SOUTH DAKOTA Nonmetro | 0.62561 | 19,818 | 17,220 | 19,459 |
| 46060 | Tucson, AZ Metropolitan Statistical Area | 0.94512 | 23,771 | 19,847 | 23,227 |
| 46140 | Tulsa, OK Metropolitan Statistical Area | 0.8378 | 22,443 | 18,965 | 21,961 |
| 46220 | Tuscaloosa, AL Metropolitan Statistical Area | 0.83049 | 22,353 | 18,905 | 21,875 |
| 46540 | Utica-Rome, NY Metropolitan Statistical Area | 0.76585 | 21,553 | 18,373 | 21,112 |
| 46660 | Valdosta, GA Metropolitan Statistical Area | 0.77927 | 21,719 | 18,483 | 21,271 |
| 46700 | Vallejo-Fairfield, CA Metropolitan Statistical Area | 1.34024 | 28,659 | 23,095 | 27,887 |
| 42680 | Sebastian-Vero Beach, FL Metropolitan Statistical Area | 1.06707 | 25,280 | 20,849 | 24,665 |
| 47001 | TENNESSEE Metro | 0.7622 | 21,508 | 18,343 | 21,069 |
| 47002 | TENNESSEE Nonmetro | 0.62927 | 19,863 | 17,250 | 19,502 |
| 47020 | Victoria, TX Metropolitan Statistical Area | 0.84268 | 22,504 | 19,005 | 22,019 |
| 47220 | Vineland-Millville-Bridgeton, NJ Metropolitan Statistical Area | 1.09512 | 25,627 | 21,080 | 24,996 |
| 47260 | Virginia Beach-Norfolk-Newport News, VA-NC Metropolitan Statistical Area | 1.07439 | 25,370 | 20,910 | 24,751 |
| 47300 | Visalia-Porterville, CA Metropolitan Statistical Area | 0.81951 | 22,217 | 18,814 | 21,745 |
| 47380 | Waco, TX Metropolitan Statistical Area | 0.87927 | 22,956 | 19,306 | 22,450 |
| 47580 | Warner Robins, GA Metropolitan Statistical Area | 0.89146 | 23,107 | 19,406 | 22,594 |
| 47900 | Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Statistical Area | 1.52317 | 30,923 | 24,599 | 30,044 |
| 47940 | Waterloo-Cedar Falls, IA Metropolitan Statistical Area | 0.75244 | 21,387 | 18,263 | 20,954 |
| 48001 | TEXAS Metro | 0.85122 | 22,609 | 19,075 | 22,119 |
| 48002 | TEXAS Nonmetro | 0.70732 | 20,829 | 17,892 | 20,422 |
| 48140 | Wausau, WI Metropolitan Statistical Area | 0.78537 | 21,795 | 18,534 | 21,343 |
| 48620 | Wichita, KS Metropolitan Statistical Area | 0.78415 | 21,780 | 18,524 | 21,328 |
| 49001 | UTAH Metro | 0.7878 | 21,825 | 18,554 | 21,371 |
| 49002 | UTAH Nonmetro | 0.6939 | 20,663 | 17,782 | 20,264 |
| 49180 | Winston-Salem, NC Metropolitan Statistical Area | 0.76707 | 21,568 | 18,383 | 21,127 |
| 49420 | Yakima, WA Metropolitan Statistical Area | 0.78293 | 21,764 | 18,514 | 21,314 |
| 49620 | York-Hanover, PA Metropolitan Statistical Area | 0.90244 | 23,243 | 19,496 | 22,723 |
| 49660 | Youngstown-Warren-Boardman, OH-PA Metropolitan Statistical Area | 0.72073 | 20,995 | 18,002 | 20,580 |
| 50001 | VERMONT Metro | 0.90244 | 23,243 | 19,496 | 22,723 |
| 50002 | VERMONT Nonmetro | 0.94024 | 23,711 | 19,807 | 23,169 |
| 51001 | VIRGINIA Metro | 0.82927 | 22,338 | 18,894 | 21,860 |
| 51002 | VIRGINIA Nonmetro | 0.68293 | 20,527 | 17,691 | 20,135 |
| 53001 | WASHINGTON Metro | 0.85732 | 22,685 | 19,125 | 22,191 |
| 53002 | WASHINGTON Nonmetro | 0.8122 | 22,127 | 18,754 | 21,659 |
| 54001 | WEST VIRGINIA Metro | 0.72561 | 21,055 | 18,042 | 20,638 |
| 54002 | WEST VIRGINIA Nonmetro | 0.59756 | 19,471 | 16,990 | 19,128 |
| 55001 | WISCONSIN Metro | 0.86707 | 22,805 | 19,205 | 22,306 |
| 55002 | WISCONSIN Nonmetro | 0.76098 | 21,493 | 18,333 | 21,055 |
| 56001 | WYOMING Metro | 0.7622 | 21,508 | 18,343 | 21,069 |
| 56002 | WYOMING Nonmetro | 0.77195 | 21,629 | 18,423 | 21,184 |
| 70750 | Bangor, ME | 0.89756 | 23,183 | 19,456 | 22,666 |
| 70900 | Barnstable Town, MA | 1.37439 | 29,082 | 23,376 | 28,289 |
| 71650 | Boston-Cambridge-Quincy, MA-NH | 1.46341 | 30,183 | 24,108 | 29,339 |
| 71950 | Bridgeport-Stamford-Norwalk, CT | 1.52073 | 30,892 | 24,579 | 30,015 |
| 72400 | Burlington-South Burlington, VT | 1.21951 | 27,166 | 22,103 | 26,463 |
| 72850 | Danbury, CT | 1.57439 | 31,556 | 25,020 | 30,648 |

Table 2. Thresholds for Two Adult Two Child Families: 2009

| | | Index based on Median Rents | Homeowners with Mortgage | Homeowners without a Mortgage | Renters |
|-------|--|--|---|--|----------------|
| 73450 | Hartford-West Hartford-East Hartford, CT | 1.16951 | 26,547 | 21,691 | 25,873 |
| 74500 | Leominster-Fitchburg-Gardner, MA | 1.01463 | 24,631 | 20,418 | 24,047 |
| 75700 | New Haven, CT | 1.30732 | 28,252 | 22,824 | 27,498 |
| 76450 | Norwich-New London, CT-RI (RI portion recoded to P | 1.2061 | 27,000 | 21,992 | 26,305 |
| 76750 | Portland-South Portland, ME | 1.12195 | 25,959 | 21,301 | 25,312 |
| 77200 | Providence-Fall River-Warwick, MA-RI | 1.09268 | 25,597 | 21,060 | 24,967 |
| 77350 | Rochester-Dover, NH-ME (Maine portion not identi | 1.13902 | 26,170 | 21,441 | 25,514 |
| 78100 | Springfield, MA-CT (Connecticut portion not identi | 0.98415 | 24,254 | 20,168 | 23,687 |
| 78700 | Waterbury, CT | 1.0939 | 25,612 | 21,070 | 24,981 |
| 79600 | Worcester, MA-CT (Connecticut portion not identi | 1.12805 | 26,034 | 21,351 | 25,384 |

* Thresholds are for 2009 without imputations for noncash benefits from Garner, August 2011.

Source: Source: American Community Survey 2005-2009. For information on sampling and estimation methods, confidentiality protection, and sampling and nonsampling errors, please see the "American Community Survey Multiyear Accuracy of the Data (3-year 2007-2009 and 5-year 2005-2009)" available at

http://www.census.gov/acs/www/data_documentation/documentation_main/.

**Table 3 - State Poverty Rates Official vs SPM - Geographically Adjusted with the Rent Index: 2009
Using 2008 Thresholds**

| | Official** | SE | SPM Geo Adjusted | SE | Difference | SE DIFF | |
|----|------------|-----|------------------|-----|------------|---------|---|
| AL | 16.8 | 1.6 | 16.4 | 1.3 | -0.4 | 0.9 | |
| AK | 12.1 | 1.1 | 11.2 | 1.0 | -0.9 | 0.9 | |
| AZ | 21.3 | 1.5 | 22.0 | 1.8 | 0.7 | 0.9 | |
| AR | 19.1 | 2.5 | 16.9 | 2.6 | -2.1 | 1.4 | |
| CA | 15.5 | 0.6 | 23.0 | 0.7 | 7.6 | 0.4 | * |
| CO | 12.4 | 1.0 | 15.1 | 1.1 | 2.7 | 0.7 | * |
| CT | 8.6 | 0.7 | 11.3 | 0.9 | 2.7 | 0.7 | * |
| DE | 12.4 | 1.1 | 14.2 | 1.1 | 1.8 | 0.9 | * |
| DC | 18.0 | 1.2 | 23.7 | 1.4 | 5.8 | 1.1 | * |
| FL | 14.6 | 0.8 | 20.0 | 0.9 | 5.3 | 0.5 | * |
| GA | 18.5 | 1.3 | 19.3 | 1.2 | 0.8 | 0.9 | |
| HI | 12.6 | 1.2 | 18.8 | 1.3 | 6.3 | 1.1 | * |
| ID | 13.9 | 2.2 | 11.7 | 1.7 | -2.2 | 1.4 | |
| IL | 13.3 | 0.8 | 14.3 | 0.8 | 1.0 | 0.6 | * |
| IN | 16.4 | 1.3 | 15.5 | 1.3 | -0.9 | 0.8 | |
| IA | 10.9 | 0.9 | 8.1 | 0.9 | -2.8 | 0.8 | * |
| KS | 13.9 | 1.7 | 11.3 | 1.4 | -2.6 | 1.0 | * |
| KY | 17.1 | 1.5 | 13.7 | 1.5 | -3.4 | 1.1 | * |
| LA | 14.3 | 1.6 | 12.9 | 1.1 | -1.4 | 1.5 | |
| ME | 11.6 | 1.0 | 10.1 | 0.9 | -1.5 | 0.7 | * |
| MD | 9.7 | 0.7 | 14.2 | 0.9 | 4.5 | 0.7 | * |
| MA | 10.9 | 1.0 | 13.8 | 1.2 | 2.9 | 0.9 | * |
| MI | 14.2 | 1.0 | 12.7 | 0.9 | -1.5 | 0.6 | * |
| MN | 11.1 | 0.9 | 11.1 | 1.0 | 0.0 | 0.7 | |
| MS | 23.2 | 1.3 | 17.6 | 1.3 | -5.6 | 1.5 | * |
| MO | 15.6 | 1.1 | 13.4 | 1.4 | -2.2 | 1.0 | * |
| MT | 13.5 | 1.6 | 11.2 | 1.6 | -2.3 | 1.2 | * |
| NE | 10.0 | 0.8 | 9.5 | 1.0 | -0.5 | 0.7 | |
| NV | 13.1 | 1.2 | 17.9 | 1.4 | 4.7 | 1.0 | * |
| NH | 7.9 | 0.8 | 10.5 | 0.8 | 2.6 | 0.6 | * |
| NJ | 9.5 | 0.8 | 13.1 | 1.0 | 3.6 | 0.6 | * |
| NM | 19.6 | 1.6 | 15.8 | 1.5 | -3.8 | 1.1 | * |
| NY | 15.9 | 0.7 | 18.1 | 0.7 | 2.2 | 0.6 | * |
| NC | 17.0 | 1.2 | 14.6 | 1.0 | -2.4 | 0.8 | * |
| ND | 11.0 | 1.5 | 8.9 | 1.1 | -2.1 | 0.8 | * |
| OH | 13.5 | 0.8 | 12.0 | 0.7 | -1.5 | 0.6 | * |
| OK | 13.0 | 1.1 | 11.2 | 1.1 | -1.8 | 1.2 | |
| OR | 13.7 | 1.2 | 14.0 | 1.3 | 0.3 | 1.1 | |
| PA | 11.2 | 0.8 | 10.9 | 0.7 | -0.3 | 0.6 | |
| RI | 13.2 | 1.1 | 12.6 | 1.0 | -0.6 | 1.1 | |
| SC | 13.8 | 1.0 | 14.3 | 1.1 | 0.5 | 0.7 | |
| SD | 14.3 | 2.2 | 12.3 | 1.3 | -2.0 | 1.6 | |
| TN | 16.7 | 1.6 | 15.2 | 1.5 | -1.5 | 1.1 | |
| TX | 17.4 | 0.8 | 17.1 | 0.7 | -0.3 | 0.5 | |
| UT | 9.8 | 1.1 | 10.2 | 1.1 | 0.3 | 1.0 | |
| VT | 9.6 | 0.9 | 8.6 | 0.9 | -1.0 | 0.8 | |
| VA | 10.8 | 1.2 | 12.0 | 1.0 | 1.2 | 0.7 | |
| WA | 11.9 | 0.9 | 11.4 | 0.9 | -0.5 | 0.6 | |
| WV | 16.0 | 1.5 | 11.8 | 1.2 | -4.2 | 1.0 | * |
| WI | 11.1 | 1.0 | 10.8 | 0.9 | -0.2 | 0.8 | |
| WY | 9.3 | 0.9 | 8.9 | 1.0 | -0.2 | 1.0 | |

* Statistically difference from zero at the 90 percent confidence level.

** Official estimates do not match published estimates because universe includes unrelated children.

Source: Current Population Survey Annual Social and Economic Supplement: 2010. Further information about the source and accuracy of the estimates is available at <www.census.gov/hhes/www/p60_236sa.pdf>.

**Table 4 - State Poverty Rates Official vs SPM - Not Geographically Adjusted :
2009**

| | Official** | SE | SPM No Geo Adjustment | SE | Difference | SE DIFF | |
|----|------------|-----|-----------------------|-----|------------|---------|---|
| AL | 16.8 | 1.6 | 20.6 | 1.4 | 3.76 | 1.2 | * |
| AK | 12.1 | 1.1 | 10.1 | 1.0 | -2.01 | 0.8 | * |
| AZ | 21.3 | 1.5 | 22.4 | 1.8 | 1.16 | 1.0 | |
| AR | 19.1 | 2.5 | 21.6 | 2.8 | 2.48 | 1.3 | * |
| CA | 15.5 | 0.6 | 16.8 | 0.6 | 1.33 | 0.4 | * |
| CO | 12.4 | 1.0 | 15.2 | 1.1 | 2.85 | 0.7 | * |
| CT | 8.6 | 0.7 | 9 | 0.8 | 0.37 | 0.6 | |
| DE | 12.4 | 1.1 | 12.9 | 1.0 | 0.49 | 0.9 | |
| DC | 18.0 | 1.2 | 16.7 | 1.3 | -1.24 | 1.3 | |
| FL | 14.6 | 0.8 | 17.8 | 0.9 | 3.11 | 0.5 | * |
| GA | 18.5 | 1.3 | 21 | 1.3 | 2.53 | 0.7 | * |
| HI | 12.6 | 1.2 | 11.9 | 1.1 | -0.62 | 1.0 | |
| ID | 13.9 | 2.2 | 15.3 | 2.0 | 1.47 | 1.2 | |
| IL | 13.3 | 0.8 | 14.5 | 0.9 | 1.24 | 0.7 | * |
| IN | 16.4 | 1.3 | 18.1 | 1.2 | 1.7 | 0.8 | * |
| IA | 10.9 | 0.9 | 10.8 | 0.8 | -0.11 | 0.8 | |
| KS | 13.9 | 1.7 | 13.5 | 1.4 | -0.42 | 1.1 | |
| KY | 17.1 | 1.5 | 18.2 | 1.9 | 1.12 | 0.9 | |
| LA | 14.3 | 1.6 | 14.6 | 1.4 | 0.22 | 1.1 | |
| ME | 11.6 | 1.0 | 11.9 | 1.1 | 0.29 | 0.8 | |
| MD | 9.7 | 0.7 | 10.6 | 0.8 | 0.96 | 0.6 | |
| MA | 10.9 | 1.0 | 10.8 | 1.0 | -0.14 | 0.8 | |
| MI | 14.2 | 1.0 | 13.4 | 0.9 | -0.81 | 0.6 | |
| MN | 11.1 | 0.9 | 11.3 | 1.1 | 0.2 | 0.6 | |
| MS | 23.2 | 1.3 | 22.5 | 1.6 | -0.67 | 1.1 | |
| MO | 15.6 | 1.1 | 15.7 | 1.4 | 0.06 | 1.0 | |
| MT | 13.5 | 1.6 | 14.5 | 1.8 | 0.99 | 1.2 | |
| NE | 10.0 | 0.8 | 12.2 | 1.0 | 2.27 | 0.8 | * |
| NV | 13.1 | 1.2 | 14.7 | 1.2 | 1.54 | 0.9 | * |
| NH | 7.9 | 0.8 | 9.4 | 0.7 | 1.51 | 0.6 | * |
| NJ | 9.5 | 0.8 | 10 | 0.9 | 0.51 | 0.6 | |
| NM | 19.6 | 1.6 | 18.2 | 1.5 | -1.34 | 0.9 | |
| NY | 15.9 | 0.7 | 15.5 | 0.7 | -0.33 | 0.5 | |
| NC | 17.0 | 1.2 | 17.2 | 1.2 | 0.21 | 0.7 | |
| ND | 11.0 | 1.5 | 12.5 | 1.3 | 1.53 | 0.8 | * |
| OH | 13.5 | 0.8 | 14.4 | 0.8 | 0.9 | 0.6 | |
| OK | 13.0 | 1.1 | 14.6 | 1.5 | 1.57 | 1.2 | |
| OR | 13.7 | 1.2 | 15.8 | 1.3 | 2.14 | 1.1 | * |
| PA | 11.2 | 0.8 | 12 | 0.7 | 0.82 | 0.5 | |
| RI | 13.2 | 1.1 | 12 | 1.0 | -1.25 | 1.1 | |
| SC | 13.8 | 1.0 | 16.1 | 1.3 | 2.26 | 0.8 | * |
| SD | 14.3 | 2.2 | 15.4 | 1.6 | 1.13 | 1.2 | |
| TN | 16.7 | 1.6 | 19.4 | 1.7 | 2.67 | 1.0 | * |
| TX | 17.4 | 0.8 | 18 | 0.8 | 0.6 | 0.6 | |
| UT | 9.8 | 1.1 | 11.8 | 1.2 | 1.91 | 1.2 | |
| VT | 9.6 | 0.9 | 8.5 | 1.0 | -1.09 | 0.8 | |
| VA | 10.8 | 1.2 | 12.2 | 1.2 | 1.42 | 0.5 | * |
| WA | 11.9 | 0.9 | 11.9 | 0.8 | 0.03 | 0.7 | |
| WV | 16.0 | 1.5 | 15.2 | 1.5 | -0.77 | 1.1 | |
| WI | 11.1 | 1.0 | 12 | 1.0 | 0.84 | 0.8 | |
| WY | 9.3 | 0.9 | 10.9 | 1.1 | 1.62 | 0.9 | * |

* Statistically difference from zero at the 90 percent confidence level.

** Official estimates do not match published estimates because universe includes unrelated children.

Source: Current Population Survey Annual Social and Economic Supplement: 2010. Further information about the source and accuracy of the estimates is available at <www.census.gov/hhes/www/p60_236sa.pdf>.

Table 5 - State Poverty Rates SPM - Geographically Adjusted with the Rent Index vs SPM - Not Geographically Adjusted: 2009

| | SPM Geo Adjusted | SE | SPM Not Geo Adjusted | SE | Difference | SE DIFF | |
|----|------------------|-----|----------------------|-----|------------|---------|---|
| AL | 16.4 | 1.3 | 20.6 | 1.4 | 4.2 | 0.6 | * |
| AK | 11.2 | 1.0 | 10.1 | 1.0 | -1.1 | 0.4 | * |
| AZ | 22.0 | 1.8 | 22.4 | 1.8 | 0.5 | 0.2 | * |
| AR | 16.9 | 2.6 | 21.6 | 2.8 | 4.6 | 0.7 | * |
| CA | 23.0 | 0.7 | 16.8 | 0.6 | -6.2 | 0.4 | * |
| CO | 15.1 | 1.1 | 15.2 | 1.1 | 0.2 | 0.2 | |
| CT | 11.3 | 0.9 | 9.0 | 0.8 | -2.3 | 0.4 | * |
| DE | 14.2 | 1.1 | 12.9 | 1.0 | -1.3 | 0.4 | * |
| DC | 23.7 | 1.4 | 16.7 | 1.3 | -7.0 | 1.0 | * |
| FL | 20.0 | 0.9 | 17.8 | 0.9 | -2.2 | 0.4 | * |
| GA | 19.3 | 1.2 | 21.0 | 1.3 | 1.7 | 0.7 | * |
| HI | 18.8 | 1.3 | 11.9 | 1.1 | -6.9 | 0.8 | * |
| ID | 11.7 | 1.7 | 15.3 | 2.0 | 3.6 | 0.7 | * |
| IL | 14.3 | 0.8 | 14.5 | 0.9 | 0.2 | 0.3 | |
| IN | 15.5 | 1.3 | 18.1 | 1.2 | 2.6 | 0.7 | * |
| IA | 8.1 | 0.9 | 10.8 | 0.8 | 2.7 | 0.5 | * |
| KS | 11.3 | 1.4 | 13.5 | 1.4 | 2.2 | 0.5 | * |
| KY | 13.7 | 1.5 | 18.2 | 1.9 | 4.5 | 1.0 | * |
| LA | 12.9 | 1.1 | 14.6 | 1.4 | 1.7 | 0.7 | * |
| ME | 10.1 | 0.9 | 11.9 | 1.1 | 1.8 | 0.5 | * |
| MD | 14.2 | 0.9 | 10.6 | 0.8 | -3.5 | 0.5 | * |
| MA | 13.8 | 1.2 | 10.8 | 1.0 | -3.0 | 0.5 | * |
| MI | 12.7 | 0.9 | 13.4 | 0.9 | 0.7 | 0.2 | * |
| MN | 11.1 | 1.0 | 11.3 | 1.1 | 0.2 | 0.4 | |
| MS | 17.6 | 1.3 | 22.5 | 1.6 | 4.9 | 1.2 | * |
| MO | 13.4 | 1.4 | 15.7 | 1.4 | 2.3 | 0.3 | * |
| MT | 11.2 | 1.6 | 14.5 | 1.8 | 3.3 | 0.9 | * |
| NE | 9.5 | 1.0 | 12.2 | 1.0 | 2.7 | 0.7 | * |
| NV | 17.9 | 1.4 | 14.7 | 1.2 | -3.2 | 0.6 | * |
| NH | 10.5 | 0.8 | 9.4 | 0.7 | -1.1 | 0.3 | * |
| NJ | 13.1 | 1.0 | 10.0 | 0.9 | -3.1 | 0.5 | * |
| NM | 15.8 | 1.5 | 18.2 | 1.5 | 2.5 | 0.6 | * |
| NY | 18.1 | 0.7 | 15.5 | 0.7 | -2.5 | 0.4 | * |
| NC | 14.6 | 1.0 | 17.2 | 1.2 | 2.6 | 0.6 | * |
| ND | 8.9 | 1.1 | 12.5 | 1.3 | 3.6 | 0.5 | * |
| OH | 12.0 | 0.7 | 14.4 | 0.8 | 2.4 | 0.4 | * |
| OK | 11.2 | 1.1 | 14.6 | 1.5 | 3.4 | 0.9 | * |
| OR | 14.0 | 1.3 | 15.8 | 1.3 | 1.8 | 0.4 | * |
| PA | 10.9 | 0.7 | 12.0 | 0.7 | 1.1 | 0.3 | * |
| RI | 12.6 | 1.0 | 12.0 | 1.0 | -0.6 | 0.2 | * |
| SC | 14.3 | 1.1 | 16.1 | 1.3 | 1.8 | 0.4 | * |
| SD | 12.3 | 1.3 | 15.4 | 1.6 | 3.2 | 0.7 | * |
| TN | 15.2 | 1.5 | 19.4 | 1.7 | 4.1 | 0.6 | * |
| TX | 17.1 | 0.7 | 18.0 | 0.8 | 0.9 | 0.3 | * |
| UT | 10.2 | 1.1 | 11.8 | 1.2 | 1.6 | 0.3 | * |
| VT | 8.6 | 0.9 | 8.5 | 1.0 | -0.1 | 0.5 | |
| VA | 12.0 | 1.0 | 12.2 | 1.2 | 0.3 | 0.5 | |
| WA | 11.4 | 0.9 | 11.9 | 0.8 | 0.5 | 0.4 | |
| WV | 11.8 | 1.2 | 15.2 | 1.5 | 3.5 | 0.6 | * |
| WI | 10.9 | 0.9 | 12.0 | 1.0 | 1.1 | 0.3 | * |
| WY | 9.1 | 1.0 | 10.9 | 1.1 | 1.8 | 0.5 | * |

* Statistically difference from zero at the 90 percent confidence level.

Source: Current Population Survey Annual Social and Economic Supplement: 2010. Further information about the source and accuracy of the estimates is available at <www.census.gov/hhes/www/p60_236sa.pdf>.

Table 6 - Impact of Geographic Adjustments on Poverty Rates - Selected Groups

| | SPM with Geo Adjustment | SE | SPM-Not Geographically Adjusted | SE | Difference | SE | |
|------------------------------------|--------------------------------|-----------|--|-----------|-------------------|-----------|---|
| RESIDENCE | | | | | | | |
| Metro Area- Inside Principal City | 20.3 | 0.4 | 19 | 0.3 | 1.4 | 0.2 | * |
| Metro Area- Outside Principal City | 13.5 | 0.3 | 12.6 | 0.2 | 1.0 | 0.1 | * |
| Outside Metro Area | 13.9 | 0.5 | 18.1 | 0.5 | -4.3 | 0.2 | * |
| REGION | | | | | | | |
| Northeast | 14.1 | 0.4 | 12.5 | 0.3 | 1.6 | 0.2 | * |
| Midwest | 12.5 | 0.3 | 14 | 0.3 | -1.5 | 0.1 | * |
| South | 16.3 | 0.3 | 17.4 | 0.3 | -1.1 | 0.1 | * |
| West | 19.2 | 0.4 | 16.2 | 0.4 | 3.0 | 0.2 | * |
| Tenure Status | | | | | | | |
| Owner- Mortgage | 8.3 | 0.2 | 8.3 | 0.2 | 0.0 | 0.1 | |
| Owner-No Mortgage | 14 | 0.4 | 14.6 | 0.4 | -0.6 | 0.1 | * |
| Renter | 29 | 0.4 | 27.7 | 0.4 | 1.3 | 0.2 | * |
| AGE | | | | | | | |
| Children | 17.9 | 0.3 | 17.5 | 0.31418 | 0.44 | 0.14987 | * |
| Adults | 14.9 | 0.2 | 14.7 | 0.17627 | 0.28 | 0.08001 | * |
| Elderly | 15.6 | 0.4 | 15.7 | 0.35422 | -0.14 | 0.14528 | |

* Statistically different from zero at the 90 percent confidence level.

Source: Current Population Survey Annual Social and Economic Supplement: 2010. Further information about the source and accuracy of the estimates is available at <www.census.gov/hhes/www/p60_236sa.pdf>.

Table 7 - Distribution of People in Poverty by Selected Characteristics: Impact of Geographic Adjustment

| | SPM with Geo Adjustment | SE | SPM-Not Geographically Adjusted | SE | Difference | SE | |
|------------------------------------|--------------------------------|-----------|--|-----------|-------------------|-----------|---|
| RESIDENCE | | | | | | | |
| Metro Area- Inside Principal City | 41.5 | 0.7 | 39.4 | 0.8 | 2.11 | 0.3 | * |
| Metro Area- Outside Principal City | 44.7 | 0.8 | 42.2 | 0.8 | 2.46 | 0.3 | * |
| Outside Metro Area | 13.8 | 0.6 | 18.4 | 0.8 | -4.58 | 0.3 | * |
| REGION | | | | | | | |
| Northeast | 16.1 | 0.4 | 14.5 | 0.3 | 1.62 | 0.2 | * |
| Midwest | 17.3 | 0.4 | 19.7 | 0.4 | -2.4 | 0.2 | * |
| South | 38.1 | 0.5 | 41.4 | 0.5 | -3.28 | 0.3 | * |
| West | 28.5 | 0.5 | 24.5 | 0.5 | 4.05 | 0.2 | * |
| Tenure Status | | | | | | | |
| Owner- Mortgage | 25.8 | 0.5 | 26.2 | 0.5 | -0.36 | 0.2 | |
| Owner-No Mortgage | 18.5 | 0.5 | 19.6 | 0.5 | -1.18 | 0.2 | * |
| Renter | 55.7 | 0.6 | 54.2 | 0.6 | 1.54 | 0.3 | * |
| AGE | | | | | | | |
| Children | 28.1 | 0.3 | 27.8 | 0.3 | 0.22 | 0.1 | |
| Adults | 59.4 | 0.3 | 59.3 | 0.3 | 0.11 | 0.1 | |
| Elderly | 12.5 | 0.3 | 12.9 | 0.3 | -0.33 | 0.1 | * |

* Statistically different from zero at the 90 percent confidence level.

Source: Current Population Survey Annual Social and Economic Supplement: 2010. Further information about the source and accuracy of the estimates is available at <www.census.gov/hhes/www/p60_236sa.pdf>.

Table 8. Correlations between State Poverty Rates and Other Deprivation Measures

| State | Food-Insecure Households (%) | Marginally Attached Workers (per 10,000 working-age Adults) | Renters with Severe Housing-Cost Burden (gross rent > 50% of household income) | Owners Spending 30% or More on Housing (%) | Housing Units with 1.01 or More Occupants per Room (%) | Foreclosures (per 10,000 homes) | Homeless (% of population) | Infant Mortality Rate (per 1,000 live births) | Property Crime (per 100,000) | Incarceration Rate (per 100,000 inhabitants) | Unemployment Rate (% ages 16 and over) | Bankruptcies (filings per 1,000) |
|---------------------|--|--|---|--|---|---|---|--|---|---|--|---|
| CORRELATIONS | | | | | | | | | | | | |
| SPM | 0.233 | 0.558 | 0.533 | 0.468 | 0.579 | 0.412 | 0.482 | 0.393 | 0.589 | 0.480 | 0.530 | 0.290 |
| OFFICIAL | 0.692 | 0.316 | 0.183 | -0.129 | 0.211 | 0.042 | 0.080 | 0.552 | 0.515 | 0.552 | 0.414 | 0.271 |
| SPM_NGA | 0.618 | 0.219 | 0.143 | -0.154 | 0.150 | 0.137 | 0.002 | 0.528 | 0.535 | 0.610 | 0.401 | 0.422 |
| SOURCE: | U.S. Department of Agriculture. <i>Household Food Security in the United States, 2007</i> . Tables 5 & 7. Data are for 2007. | AHDP calculation based on employment data from the Bureau of Labor Statistics, Current Population Survey and population estimates from the U.S. Census Bureau, Population Division. Marginally attached workers include working-age adults who want a job and who are available for work but have given up on searching for employment. This group is excluded from standard counts of the unemployed and from the unemployment rate. Data are for 2009. | U.S. Census Bureau, American Community Survey 2008. Table B25070. Figures do not include home owners or renters living in group quarters, such as college students living in dorms. Gross rent includes average monthly utility costs. Data are for 2008. | U.S. Census Bureau, American Community Survey 2008. Tables GCT2515 and GCT2513. Data are for 2008. | U.S. Census Bureau, American Community Survey 2008. Table GCT2509. Data are for 2008. | RealtyTrac - http://www.realtytrac.com . Data are for April 2010. | National Alliance to End Homelessness. <i>Homelessness Counts, 2007</i> . Table 2. Data are for 2007. | Centers for Disease Control and Prevention. <i>Infant Mortality Statistics from the 2005 Period Linked Birth/Infant Death Data Set</i> . National Vital Statistics Reports 57, no. 2 (July 30, 2008); Table 3. Data are for 2003-2005. | Federal Bureau of Investigation. <i>2008 Crime in the United States</i> . Table 5. Data are for 2008. | Department of Justice, Bureau of Prison Inmates at Midyear 2008 - Statistical Tables. Tables 10, 15, 17. National data, which also include local inmates, not directly comparable with state data. Data are for 2008. | U.S. Department of Labor, Bureau of Labor Statistics, Civilian Noninstitutional Population (preliminary). Data are for May 2010. | American Bankruptcy Institute, Bankruptcy Filing Statistics. http://www.abiworld.org/ . Data are for 2009. |

Source: Data are for 2007. American Human Development Project of the Social Science Research Council. HD Index and Supplemental Indicators by State 2010-2011 Dataset.

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