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Persistent Poverty Across the Rural-Urban Continuum

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Persistent Poverty Across the Rural-Urban Continuum¹

Kathleen K. Miller and Bruce A. Weber²

Abstract: Persistent poverty is overwhelmingly rural and is very geographically concentrated. We have redefined the USDA ERS persistent poverty classification to include metropolitan counties meeting the 20 percent or higher poor criterion and we extend the time period through the 2000 Census. With this updated definition, there are 382 counties that have had poverty rates of 20 percent or more in each decennial census between 1960 and 2000. These persistent poverty counties are overwhelmingly rural (95 percent) and disproportionately rural (16 percent of nonmetro counties versus 2 percent of metro). The local economic environment in persistent poverty counties is much less favorable than in the nation as a whole. Per capita income is lower and unemployment rates higher in persistent poverty counties. Employment is more concentrated in services, extractive, construction/maintenance, and production/transportation occupations. Residents of persistent poverty counties tend to have lower education levels, and persistent poverty counties generally have larger shares of minority populations. The number of persistent poverty counties reduced considerably during the 1990s, but the “leavers” were disproportionately metropolitan, making persistent poverty increasingly a rural problem.

Persistent poverty is overwhelmingly rural and it is very concentrated geographically. In this paper, we examine these striking regularities in U.S. economic geography, seeking to understand the causes and dynamics of poverty across the rural urban continuum. We also consider how alternative characterizations of “persistent poverty” and “rural and urban” might deepen our understanding of poverty and place.

The paper has four sections. In the first, we examine how poverty and persistent poverty vary across the Rural Urban Continuum Codes and Urban Influence Codes developed by the USDA Economic Research Service (ERS). We start with the very useful “persistent poverty” classification developed by ERS that defines nonmetropolitan counties as persistent poverty counties if the poverty rate is 20 percent or higher in each decennial census between 1960 and 1990. We redefine persistent poverty to include metropolitan counties meeting the 20 percent or more poor criterion and we extend the time period through the 2000 Census. We also examine where poverty is concentrated in the United States and how persistent poverty varies across the

¹ Paper prepared for the American Agricultural Economics Association / Rural Sociological Society Annual Meeting, July 2003 in Montreal, Quebec, Canada. This paper draws heavily on an earlier paper by Kathleen K. Miller, Mindy S. Crandall and Bruce A. Weber, “Persistent Poverty and Place: How Do Persistent Poverty and Poverty Demographics Vary Across the Rural-Urban Continuum”, prepared for the November 2002 conference on Measuring Rural Diversity sponsored by the US Department of Agriculture Economic Research Service, the Southern Rural Development Center, and the Farm Foundation. This paper is available on the web at: <http://srdc.msstate.edu/measuring/miller.pdf>

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new Core Based Statistical Area definitions for counties, developed recently by the Office of Management and Budget.

In the second section, we examine how the demographic characteristics of the population vary across the rural-urban spectrum, comparing persistent poverty county demographics with those of all counties. The third section examines the dynamics of poverty and place. We examine the location, rurality and demographics of counties that escaped persistent poverty statues between 1990 and 2000, and how those characteristics compare to counties that remained in persistent poverty. We then identify the new entrants into high poverty since 1960.

In the fourth section, we consider implications of reconceptualizing both "persistent poverty" and "rural and urban diversity". First, we explore the "persistent poverty" county classification, and how alternative definitions of persistent poverty counties might alter the conclusions one reaches about the geography of persistent poverty. We do this by exploring how defining persistent poverty with a different base year such as 1970 or 1980 affects the number of "persistent poverty" counties. We then explore what happens to "persistent poverty" if we raise the poverty threshold to 30 and 40 percent in defining persistent poverty counties. We then examine how conclusions about rural and urban persistent poverty change if one looks at poverty persistence in individual households rather than counties. Using PSID data, this analysis examines rates of persistent household poverty by looking at how the percent of households who remain in poverty for all 5 years during the 1993-98 period varies across central metro county to remote rural county continuum (an aggregation of Beale codes). Finally, we briefly explore how conclusions about the geography of poverty change if one divides metropolitan areas into "central city" and "suburb", and nonmetropolitan areas into "adjacent" and "nonadjacent."

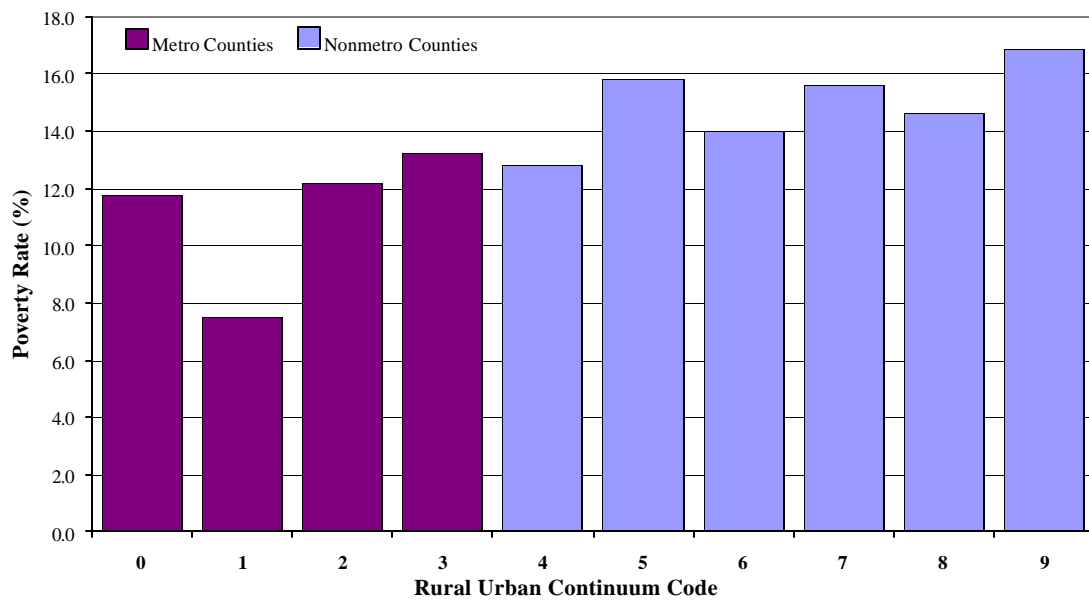
Poverty and Place

Perhaps the first important fact about poverty and place is that poverty rates vary across the rural-urban continuum³. As can be seen from Figure 1 and Table 1, poverty rates⁴ are lowest in the suburbs (the fringe counties of large metropolitan areas) and highest in remote (not adjacent to metropolitan) rural areas. The paper concludes with a brief discussion of implications for research about poverty and place.

³ We use the terms "rural" and "nonmetropolitan" and "urban" and "metropolitan" interchangeably, but are aware of the difficulties in using the terms in this way. The Office of Management and Budget (OMB) has classified each county as metropolitan or non-metropolitan based on presence of a city with more than 50,000 people and/or commuting patterns that indicate interdependence with the "core" city. The U.S. Census designates, on a much finer level, each area as rural or urban, using a definition of 2500 people as the cutoff for urban populations. Urban populations are defined as those living in a place of 2500 or more and rural populations live in places with less than 2500 population or open country. Despite significant populations that are both urban and non-met as well as rural and metropolitan, the terms are often used interchangeably. Both of these schemes leave much to be desired in terms of poverty research. The Met/Nonmet classification uses a county geography that is often too coarse, leaving residents who are clearly rural in metropolitan counties. The second, using a simple cutoff of population, fails to take into account geographic proximity.

⁴ Poverty rates in the Census are for the previous calendar year, since the Census question in the 2000 Census, for example, asks about income in 1999. When we identify poverty rates with a particular decennial Census, the poverty rate is for the previous calendar year.

Figure 1. Poverty Rate by Rural Urban Continuum Code, 1999



Source: U.S. Census Bureau and ERS, USDA

Table 1. Poverty Rates by Rural-Urban Continuum Code, 2000

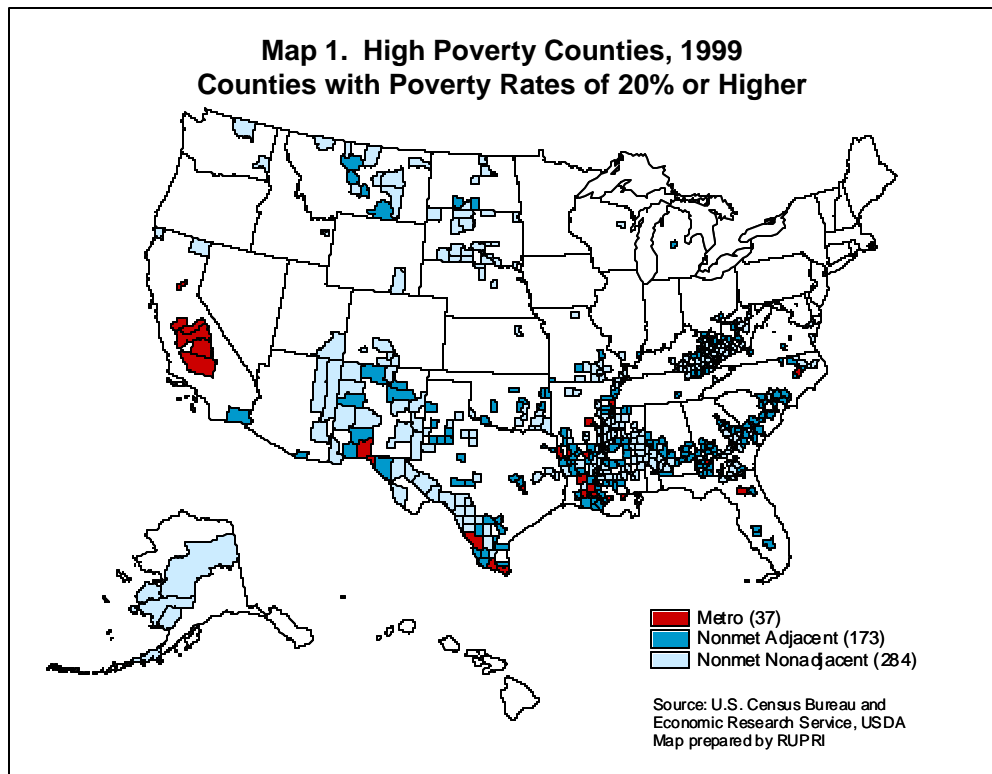
Rural-Urban Continuum Group	Number of Counties	Number of People in Poverty	Group Poverty Rate	Minimum County Poverty Rate	Maximum County Poverty Rate
<u>Metro:</u>					
Central counties of metro areas of 1 million population or more	179	14,907,145	11.8	2.6	30.7
Fringe counties of metro areas of 1 million population or more	132	853,007	7.5	2.1	25.3
Counties in metro areas of 250,000 to 1 million population	320	7,374,421	12.2	3.5	35.9
Counties in metro areas of fewer than 250,000 population	205	2,847,424	13.2	2.9	31.2
<u>Nonmetro:</u>					
An urban population of 20,000 or more, adjacent to a metro area	138	1,290,545	12.8	4.5	31.4
An urban population of 20,000 or more, not adjacent to a metro area	114	1,082,504	15.8	6.0	37.8
An urban population of 2,500 to 19,999, adjacent to a metro area	614	2,437,644	14.0	4.6	50.9
An urban population of 2,500 to 19,999, not adjacent to a metro area	656	2,077,803	15.6	5.1	52.3
Completely rural, or less than 2,500 urban population, adjacent to a metro area	248	406,821	14.6	4.0	35.8
Completely rural, or less than 2,500 urban population, not adjacent to a metro area	532	621,894	16.9	0.0	56.9

Source: U.S. Census Bureau and Economic Research Service, USDA

Poverty rates are for 1999, Rural Urban Continuum classifications are for 1993

This pattern holds for both the continuum codes of the Economic Research Service: the Rural-Urban Continuum (the so-called Beale codes) and the Urban Influence (UI) classifications. Each of these classifications has its strengths and limitations. The Rural-Urban Continuum (RUC) codes have a richer metropolitan classification, allowing one to distinguish central counties from fringe counties (“suburbs”) in large metropolitan areas and to distinguish medium-sized from small metropolitan places. The UI codes collapse metropolitan counties into large and small, and then provide a richer set of categories to describe nonmetropolitan counties. Nonmetropolitan counties in the UI system are classified according to their adjacency to a large or small metropolitan area, and by the size of the largest city within the particular adjacency/nonadjacency category. (Because high poverty and persistent poverty counties are primarily nonmetropolitan, and in order to take advantage of the richness of the UI nonmetropolitan categories, the UI classification will be used in subsequent discussion of rural-urban patterns in this paper)⁵.

High poverty counties are geographically concentrated: counties with poverty rates of 20 percent or more are concentrated in the Black Belt and Mississippi Delta in the south, in Appalachia, the lower Rio Grande Valley and counties containing Indian Reservations in the southwest and Great Plains. (Map 1)



Persistent Poverty Counties

⁵Each of the tables and graphs has been produced with both the Beale and the UI classifications. The results with the Beale codes are available from the authors on request.

There are 382 counties (12 percent or almost one in eight counties) in the United States that have had poverty rates of 20 percent or more in each decennial census between 1960 and 2000. Persistent poverty counties are overwhelmingly rural (95 percent of persistent poverty counties are nonmetropolitan) and disproportionately rural (while only 2 percent of metropolitan counties are persistent poverty counties, almost one in six --16 percent – among nonmetropolitan counties is in this category). Furthermore, persistent poverty increases as county population centers become smaller and as places become more remote from urban centers. While less than 7 percent of nonmetro counties adjacent to large metropolitan areas are persistent poverty counties, almost 20 percent of completely rural counties not adjacent to metropolitan areas are persistent poverty counties (Figure 2 and Table 2). Like the high poverty counties discussed previously, these counties are also concentrated in the same four regions (Map 2).

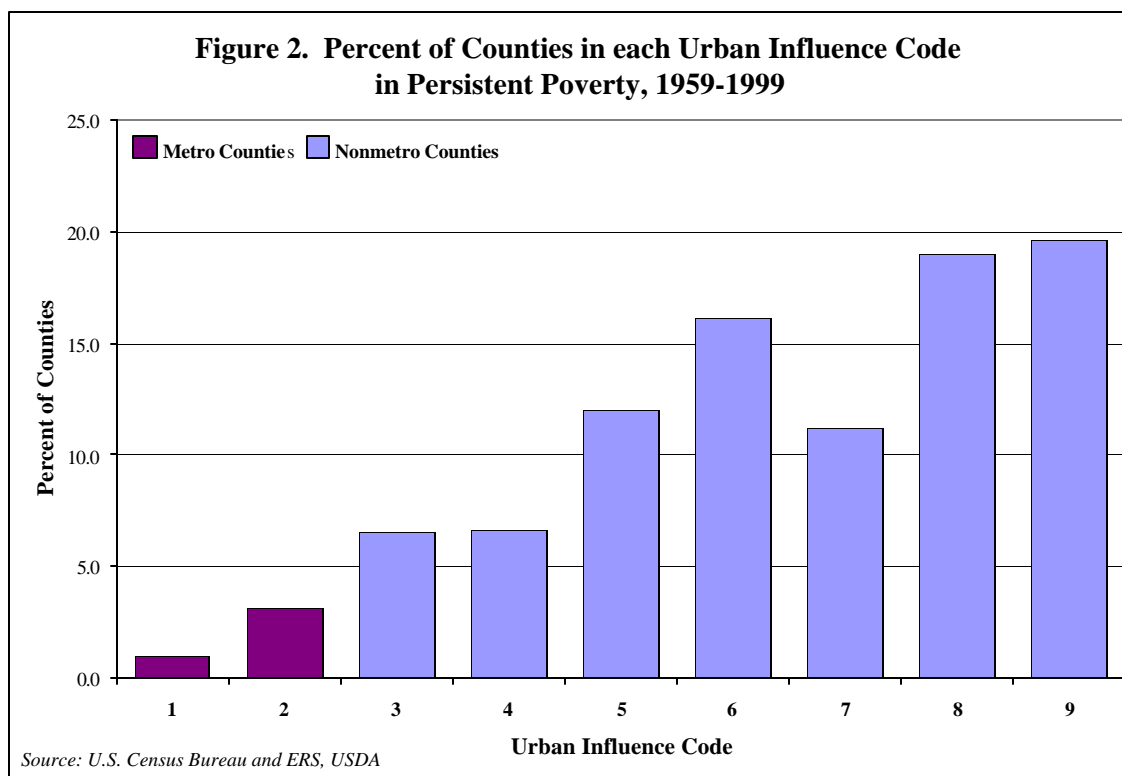
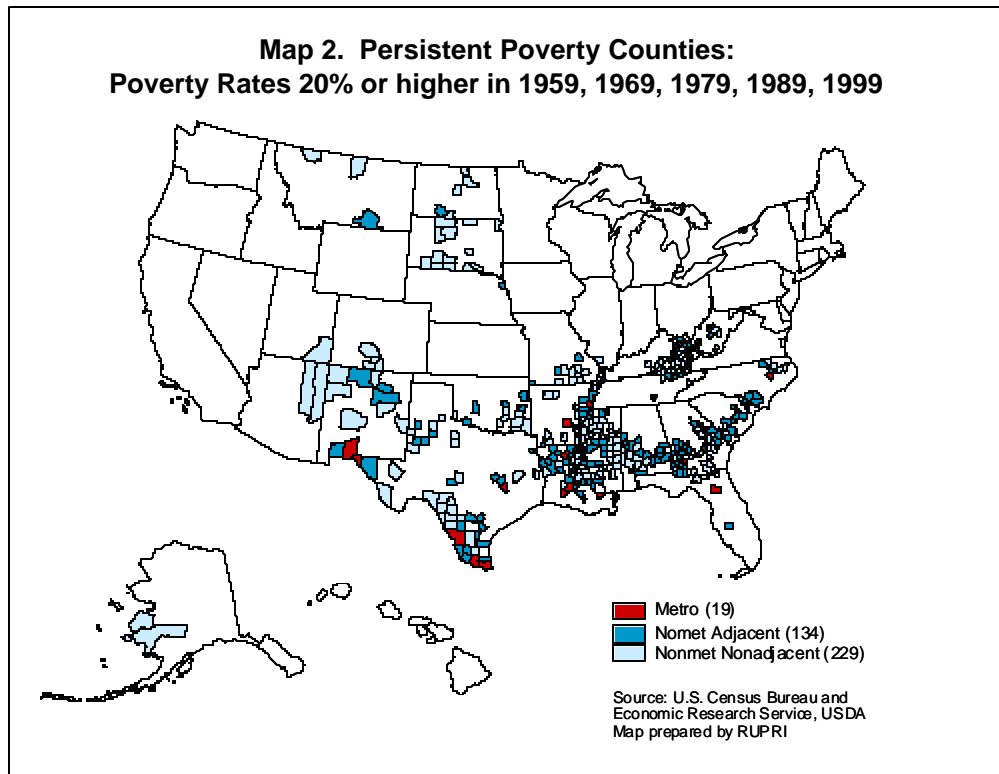


Table 2. Distribution of 382 Persistent Poverty Counties by Urban Influence Codes

Urban Influence Code	Number of Counties	Persistent poverty counties as of 2000	
		Number of Counties	Percent of Counties
Large Metro- counties in metro areas of 1 million population or more	299	3	1.0
Small Metro - counties in metro areas of fewer than 1 million population	514	16	3.1
Adjacent to a large metro area and contains a city of at least 10,000 residents	62	4	6.5
Adjacent to a large metro area and does not contain a city of at least 10,000 residents	122	8	6.6
Adjacent to a small metro area and contains a city of at least 10,000 residents	184	22	12.0
Adjacent to a small metro area and does not contain a city of at least 10,000 residents	620	100	16.1
Not adjacent to a metro area and contains a city of at least 10,000 residents	232	26	11.2
Not adjacent to a metro area and contains a town of 2,500 to 9,999 residents	547	104	19.0
Not adjacent to a metro area and does not contain a town of at least 2,500 residents	506	99	19.6
All Counties	3,086*	382	12.4

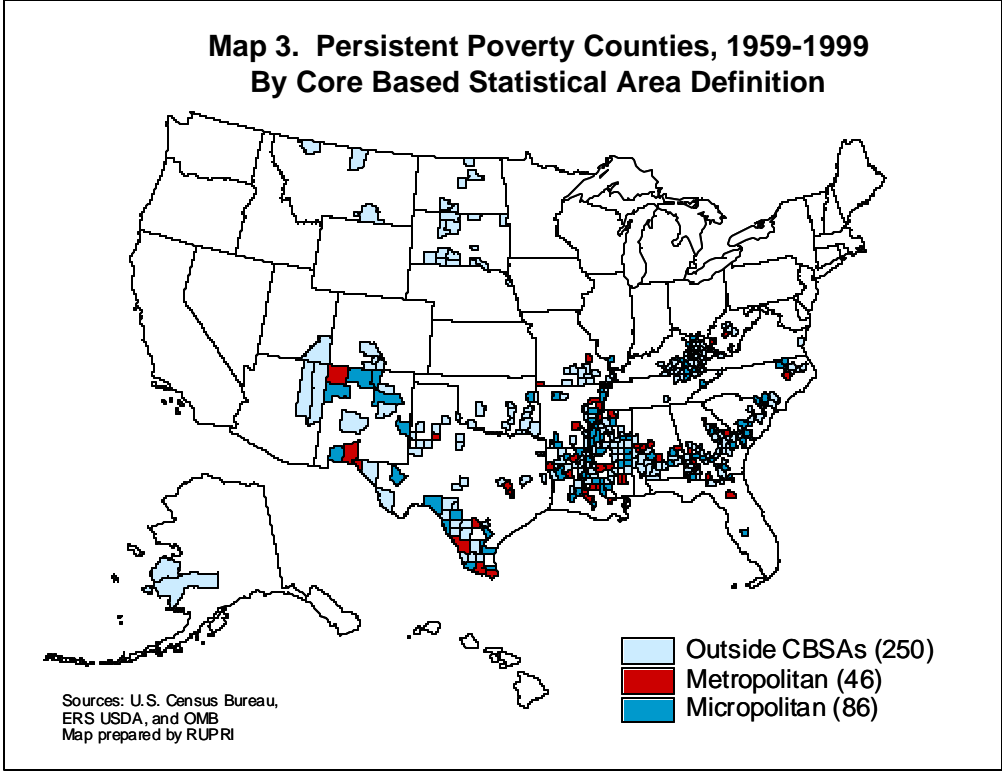
Source: U.S. Census Bureau and Economic Research Service, USDA
 *complete data with poverty rates in all decennial census years are available for 3,086 counties



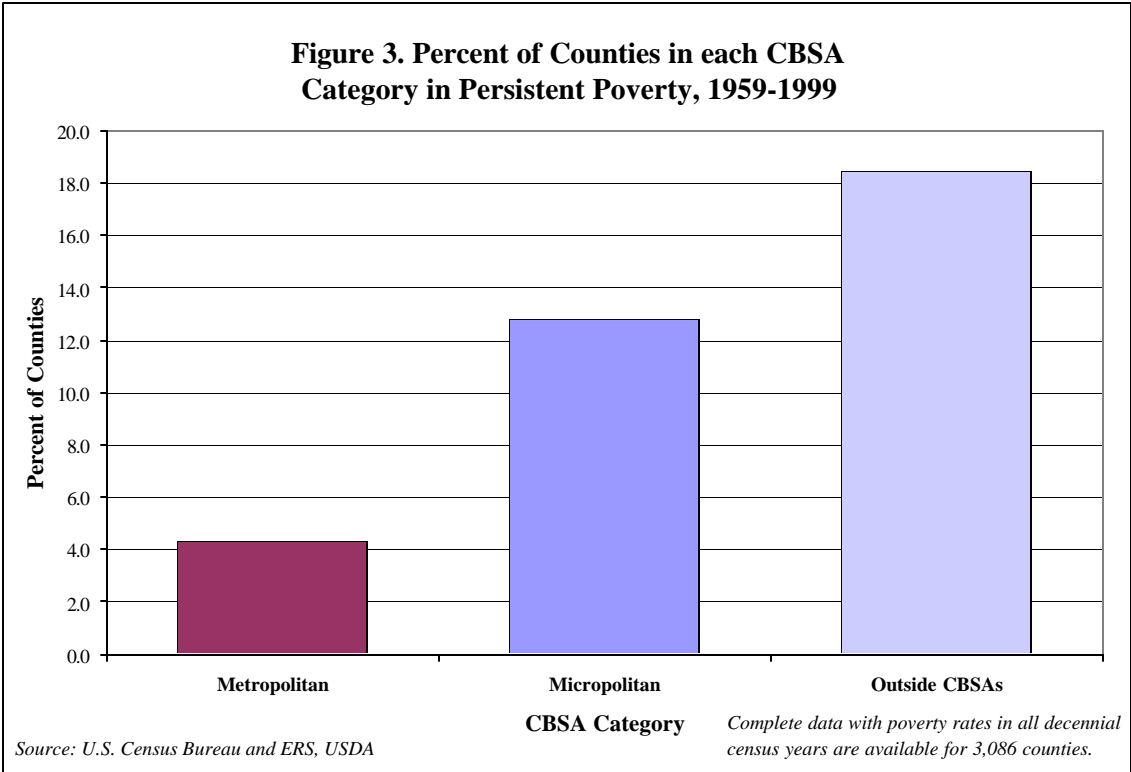
Core Based Statistical Areas

The Office of Management and Budget (OMB) has adopted new standards for defining metropolitan areas, which replace and supersede the 1990 standards for defining metropolitan areas. These new standards are collectively known as Core Based Statistical Areas (CBSAs). These areas are geographic entities consisting of a county or counties associated with at least one core of at least 10,000 population, plus adjacent counties having a high degree of social and economic integration with the core, as measured through commuting ties. Areas with an urban core of 50,000 or more population are designated as metropolitan areas, and areas with an urban core between 10,000 and 49,999 are designated as micropolitan areas. Surrounding counties in which 25 percent or more of the labor force commutes to a core metropolitan or micropolitan county are included in the area. Counties not classified as metropolitan or micropolitan are designated as “outside CBSAs.”

Map 3 shows the CBSA designations of the 382 persistent poverty counties. Over 65 percent of persistent poverty counties are outside CBSAs, 22.5 percent are micropolitan and 12 percent are metropolitan.



With this new classification system, persistent poverty counties are predominantly rural (outside Core Based Statistical Areas). Only 4.3 percent of metropolitan counties are persistent poverty, while 18.5 percent of counties outside CBSAs are persistent poverty counties (Figure 3)



Demographic and Economic Characteristics of Persistent Poverty Counties

Table 3 and Figures 4-9 compare persistent poverty counties to all counties and show how demographic characteristics vary across the Urban Influence Codes for both groups of counties. Not surprisingly, persistent poverty counties generally have lower education and income levels, and higher unemployment levels than all counties. The pattern for education across UI codes for both PP and all counties seems to suggest that smaller and more remote rural places are more disadvantaged. The most striking differences are in the minority populations (Figure 6). Across all categories of urban influence, the share of minority population (those who are not white or who are Hispanic) is higher in persistent poverty counties than in all counties. Within persistent poverty counties, minority shares are highest in metro, and nonmetro counties with large urban populations that are either adjacent to small metro areas or nonadjacent.

The local economic environment in persistent poverty counties is much less favorable than in the nation as a whole. Per capita income is lower and unemployment rates higher in persistent poverty counties. Employment is more concentrated in service, farm/forestry/fishing, construction/maintenance, and production/transportation occupations. The patterns generally hold across the rural urban continuum. Figures 10-11 and Table 4 show how these characteristics vary across the UI codes.

The ERS economic typology classification groups counties into six economic categories. Figure 12 compares the typology across all nonmetro counties to nonmetro persistent poverty counties. Government and nonspecialized counties are more likely to be in persistent poverty than are all nonmetro counties. It is important to note that the nonspecialized counties reflect both those with strong, diversified economies, as well as counties with weak economies caused by shifts away from traditional rural industries (farming, mining, and manufacturing.) The proportion of services dependent counties in persistent poverty is significantly lower than for all nonmetro counties.

Table 3. Comparison of Demographic Characteristics Across Urban Influence Codes

Number of Counties	All	1	2	3	4	5	6	7	8	9
All Counties	3,086	299	514	62	122	184	620	232	547	506
Persistent poverty	382	3	16	4	8	22	100	26	104	99
Persistent Poverty Leavers, 1990-2000	189	2	15	1	9	7	56	12	40	47
Percent of Population Under 18										
All Counties	25.7	26.0	25.5	25.7	25.3	25.1	25.2	25.4	25.4	24.8
Persistent poverty	28.1	26.6	30.0	28.0	27.5	26.4	27.3	28.8	27.7	26.7
Persistent Poverty Leavers, 1990-2000	25.3	28.0	25.6	18.0	26.8	26.6	24.9	25.6	25.0	24.0
Percent of Population 65 and Over										
All Counties	12.4	11.3	12.8	13.4	14.6	14.0	15.1	13.4	15.5	17.0
Persistent poverty	12.1	12.4	10.0	11.9	12.3	11.8	13.4	11.7	13.3	14.4
Persistent Poverty Leavers, 1990-2000	13.6	11.0	11.3	8.9	13.6	13.5	14.2	12.1	15.7	17.0
Percent Minority Population										
All Counties	30.8	38.9	25.8	18.3	16.8	18.6	17.5	20.6	17.0	14.1
Persistent poverty	51.5	65.6	67.8	35.8	42.7	54.1	43.4	52.0	38.0	30.9
Persistent Poverty Leavers, 1990-2000	29.7	28.2	37.4	39.9	36.0	34.7	31.3	28.1	20.2	14.8
Percent of Population 25+ with High School Diploma or Higher										
All Counties	80.4	81.3	81.4	78.7	75.8	78.3	75.2	79.6	75.1	73.7
Persistent poverty	66.4	73.0	65.9	68.4	61.6	70.8	64.2	68.9	64.8	62.7
Persistent Poverty Leavers, 1990-2000	71.0	73.1	74.3	73.1	68.0	71.0	69.4	73.6	69.0	69.7
Percent of Population 25+ with Bachelor's Degree or Higher										
All Counties	24.4	28.8	23.1	16.5	13.9	16.8	13.3	19.4	14.2	13.0
Persistent poverty	14.8	22.4	19.3	13.2	8.5	17.1	9.9	16.3	11.3	9.8
Persistent Poverty Leavers, 1990-2000	13.9	11.5	19.5	18.3	10.4	14.0	11.4	17.9	10.9	9.9
Mean of Median Household Income										
All Counties	\$35,318	50,035	39,709	37,762	36,869	34,784	32,845	33,627	31,433	29,689
Persistent poverty	\$24,980	28,133	29,157	26,825	26,245	26,780	25,790	25,937	24,492	23,074
Persistent Poverty Leavers, 1990-2000	\$ 29,583	41,068	33,279	31,468	31,023	30,358	29,876	30,297	28,584	27,802

Source: U.S. Census Bureau and Economic Research Service, USDA

Mean median household income is calculated as the mean of counties in each category; all other variables were calculated based on total populations in each category

Figure 4. Percent of Population Under 18 by Urban Influence Code, 2000

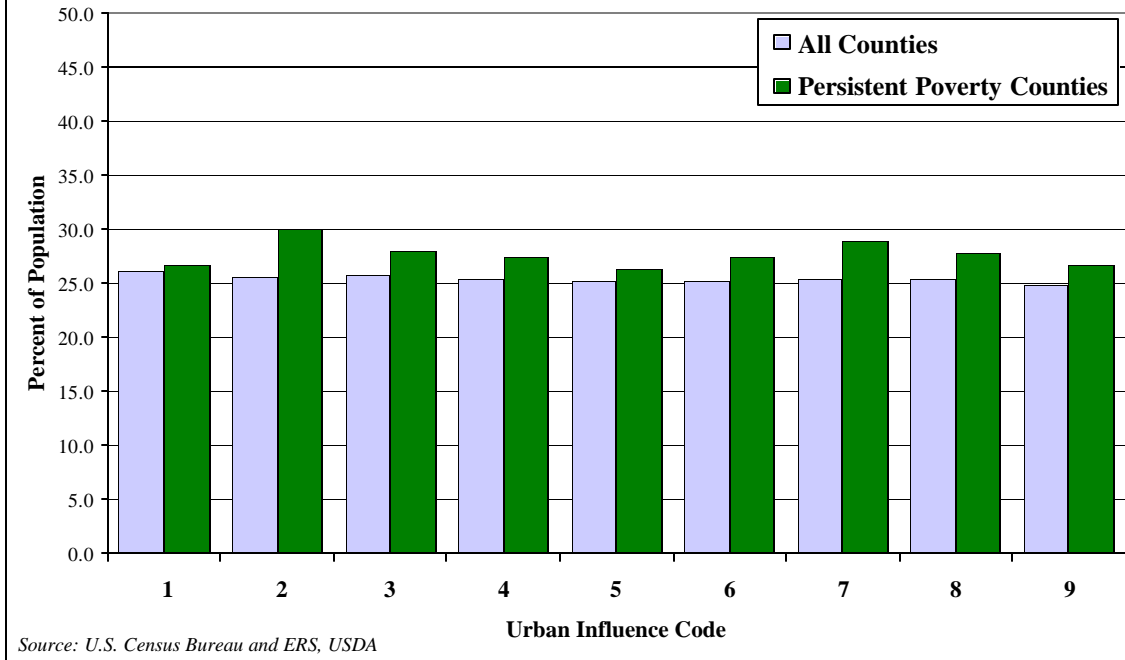


Figure 5. Percent of Population 65 and Over by Urban Influence Code, 2000

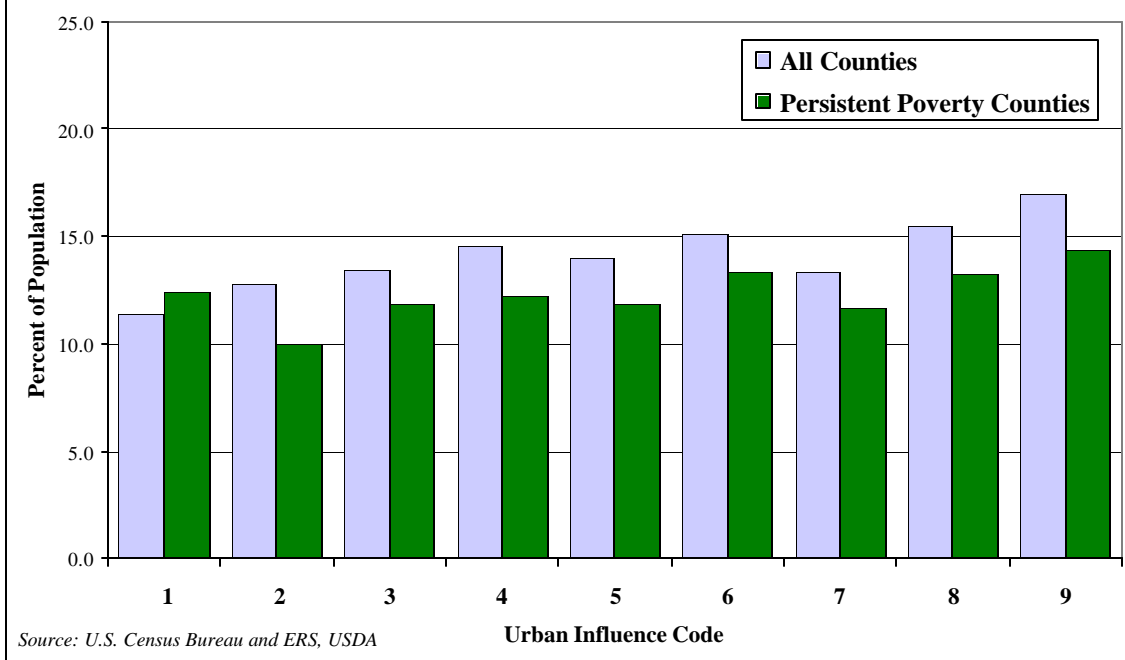


Figure 6. Percent Minority Population by Urban Influence Codes, 2000

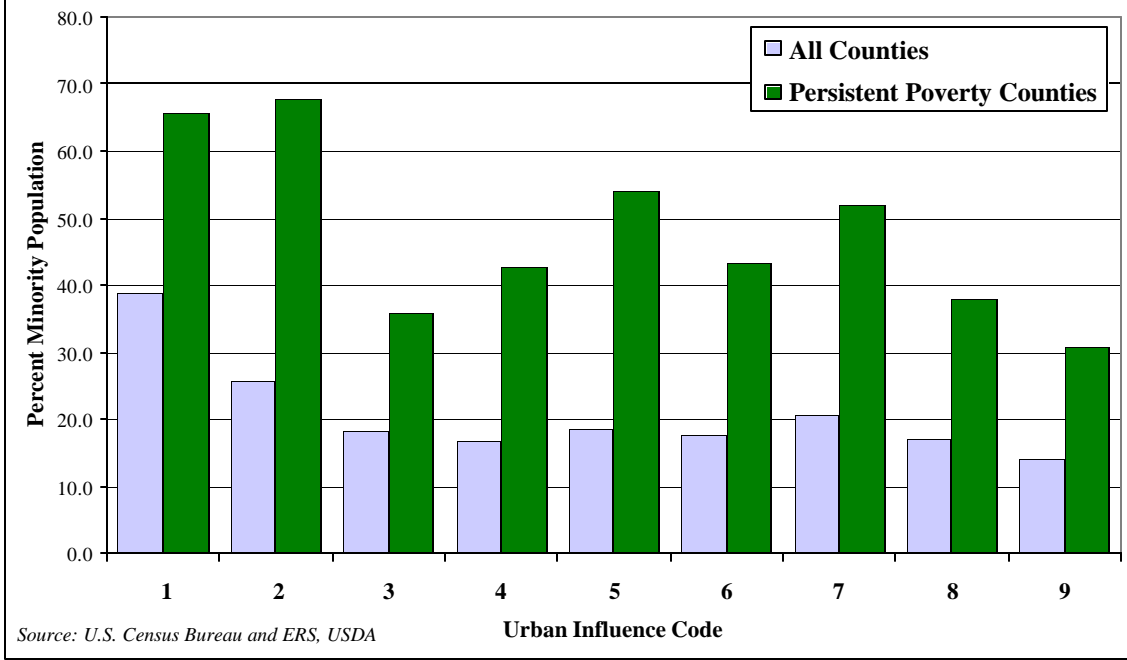


Figure 7. Percent of Population with High School Degree or Higher by Urban Influence Code, 2000

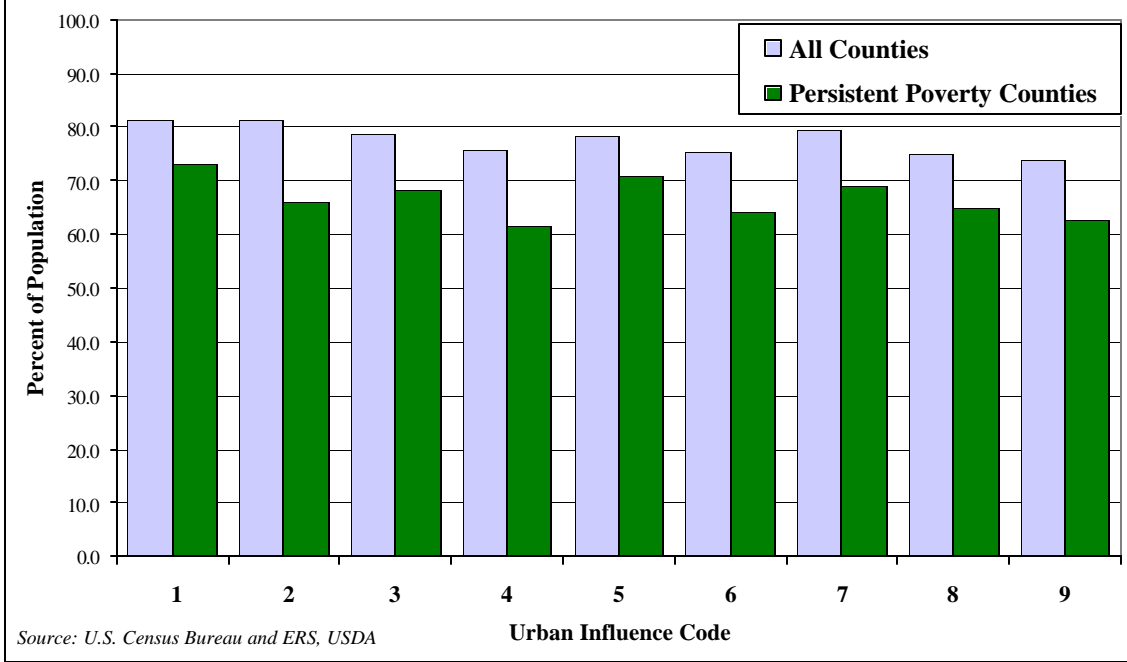


Figure 8. Percent of Population with Bachelor's Degree or Higher by Urban Influence Code, 2000

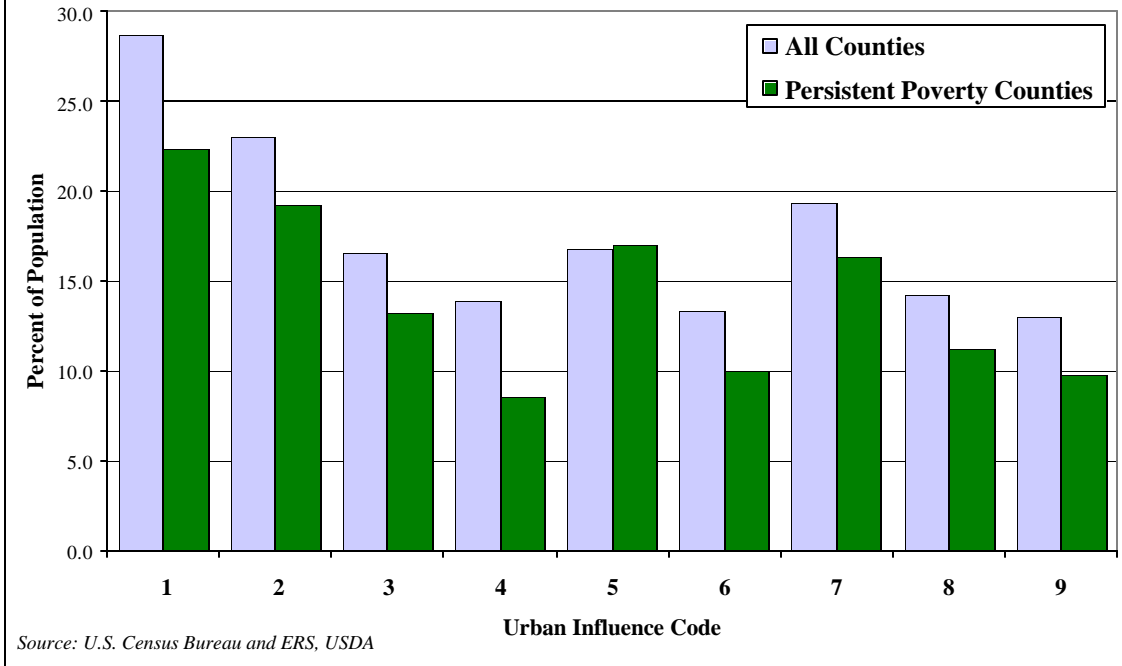


Figure 9. Average Median Household Income by Urban Influence Codes, 1999

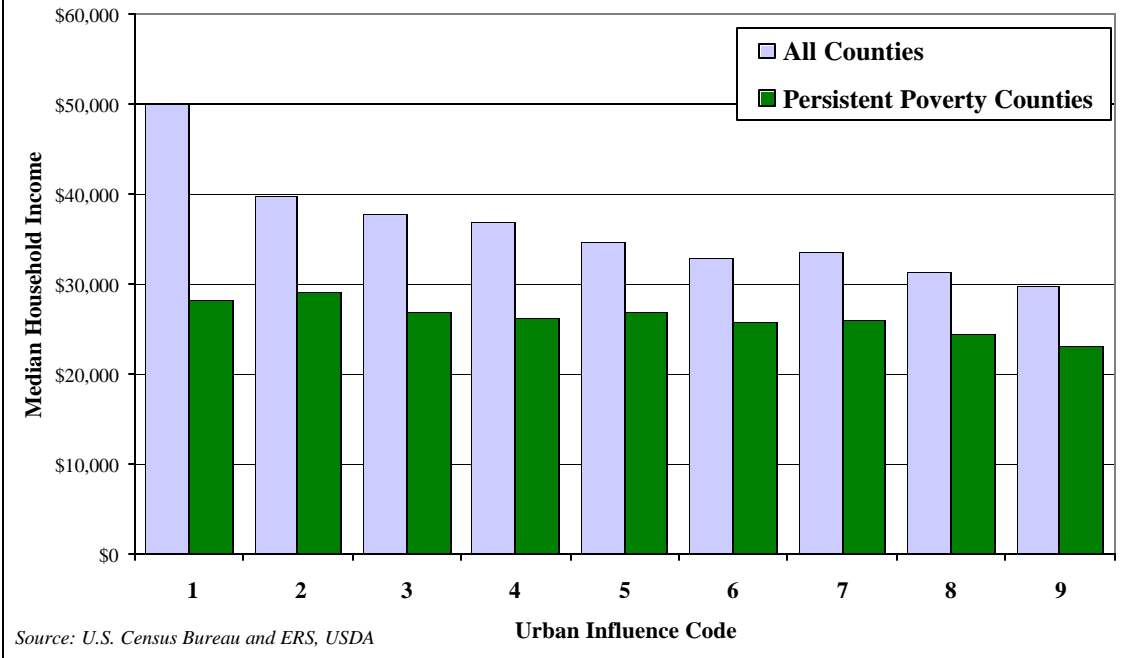


Table 4. Comparison of Economic Characteristics across Urban Influence Codes

	All	1	2	3	4	5	6	7	8	9
Unemployment Rate										
All Counties	5.8	5.7	5.7	5.9	5.3	6.0	5.8	6.5	6.4	6.0
Persistent poverty	9.3	10.1	9.6	9.0	7.6	8.9	8.4	10.0	9.2	9.3
Persistent Poverty Leavers, 1990-2000	6.6	5.1	6.6	8.8	7.2	6.8	6.4	6.8	6.5	6.1
Mean of Per Capita Income										
All Counties	\$17,484	23,288	19,458	17,797	17,751	17,120	16,155	16,899	16,016	15,560
Persistent poverty	\$13,051	15,930	14,573	13,459	12,888	13,791	13,311	13,456	13,042	12,189
Persistent Poverty Leavers, 1990-2000	\$15,090	17,961	16,447	14,508	15,228	15,197	15,000	15,533	14,707	14,825
Employment Distribution by Occupation										
All Counties										
Management, professional and related	33.6	37.0	32.2	26.7	25.7	27.7	25.4	29.0	26.3	27.3
Service	14.8	14.1	15.4	15.8	15.3	15.7	15.5	16.7	16.2	16.0
Sales and office	26.7	27.8	26.9	24.0	22.9	23.9	22.4	24.9	22.5	21.0
Farming, fishing and forestry	0.7	0.3	0.8	1.5	1.6	1.3	2.1	1.5	2.3	3.4
Construction, extraction and maintenance	9.5	8.5	9.7	11.0	13.5	10.9	12.6	10.6	12.1	12.7
Production, transportation, material moving	14.6	12.3	14.9	20.9	21.1	20.6	22.1	17.4	20.5	19.6
Persistent Poverty Counties										
Management, professional and related	27.4	32.1	31.0	24.9	20.9	27.1	23.0	28.0	25.0	24.9
Service	17.2	21.6	17.4	16.2	16.8	16.9	16.3	16.8	16.3	16.2
Sales and office	23.9	26.2	26.3	24.1	22.3	23.9	21.4	24.8	22.4	19.8
Farming, fishing and forestry	1.8	0.3	1.1	1.7	1.9	1.5	2.8	1.6	2.5	3.3
Construction, extraction and maintenance	11.3	6.8	10.0	12.5	14.8	11.5	13.4	11.0	12.8	12.8
Production, transportation, material moving	18.5	13.0	14.3	20.7	23.5	19.0	23.1	17.8	21.1	23.0

Source: U.S. Census Bureau and Economic Research Service, USDA

Per capita income is calculated as the mean of counties in each category, other variables are calculated based on total populations in each category.

Figure 10. Mean Per Capita Income by Urban Influence Codes, 2000

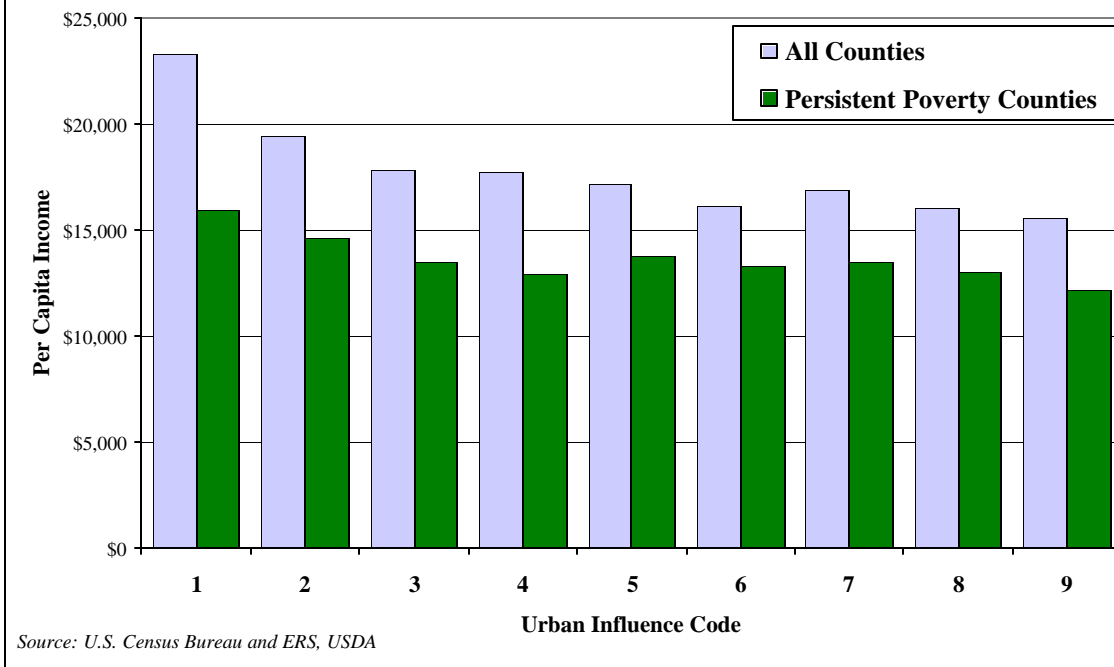
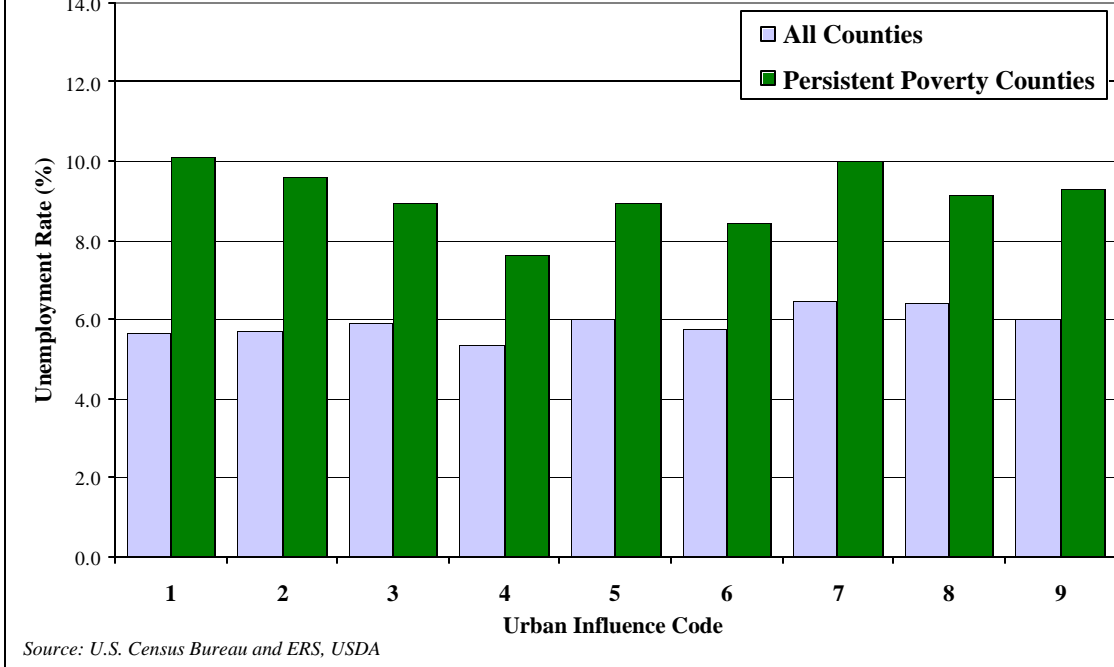
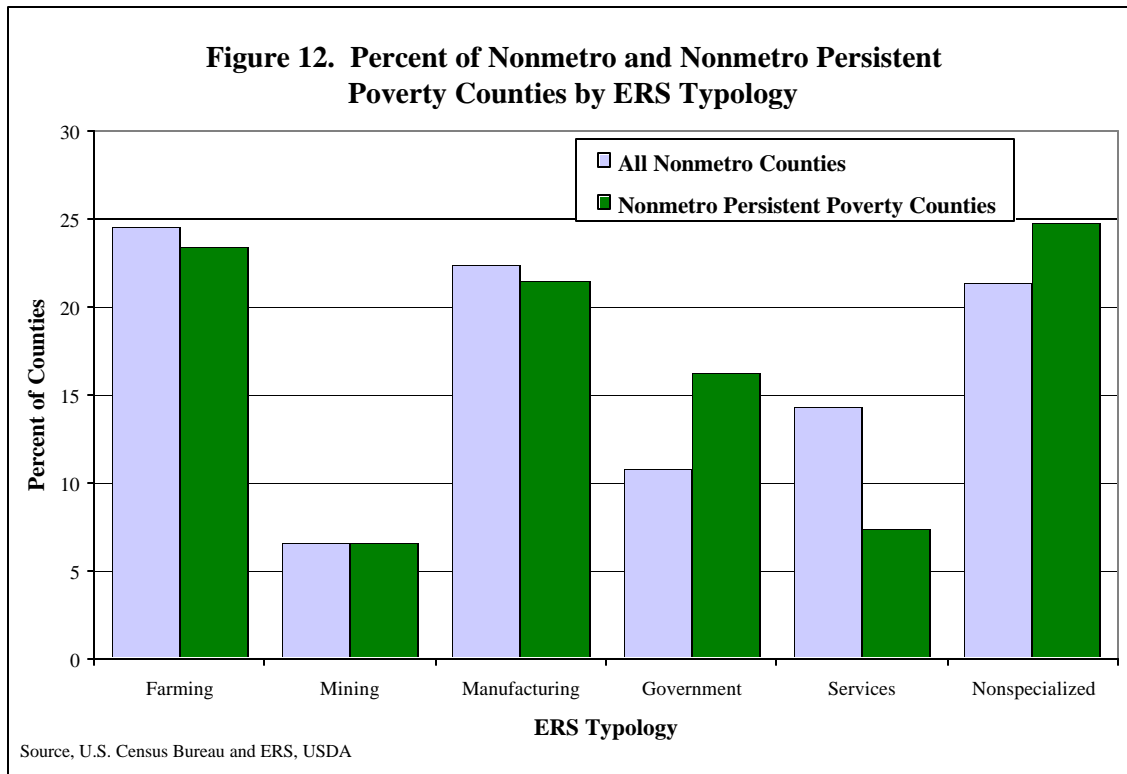


Figure 11. Unemployment Rates by Urban Influence Codes, 2000





Persistent Poverty Dynamics

The 2000 census results showed a dramatic decline in the number of persistent poverty (PP) counties. In 1990, there were 571 counties with 20% or more of the population in poverty in each decennial census since 1960. In 2000, that number had declined to 382, a 33 percent decrease.

***“Persistent Poverty Leavers”*: Counties leaving persistent poverty between 1990 and 2000**

The majority of the 189 counties that left persistent poverty status were those that had the lowest poverty rates in 1990 (Figure 13). In contrast, the majority of persistent poverty counties had poverty rates between 25 and 40 percent in 1990. The metropolitan counties were more likely to be leavers than the nonmetropolitan counties, and nonmetro adjacent counties were more likely to be leavers than were nonadjacent nonmetro counties. Forty percent of the large metro persistent poverty counties, and nearly half of the small metro persistent poverty counties in 1990 saw their poverty rate drop below 20 percent by 2000. Forty five percent of nonmetro counties adjacent to large metro areas saw their poverty rate decline below 20 percent. In contrast, only 34 percent of the nonmetro persistent poverty counties adjacent to small metro areas, and 30 percent of the nonmetro nonadjacent persistent poverty counties saw their poverty rates decline below 20 percent in 2000 (Figure 14). Persistent poverty is increasingly a problem of remote rural areas.

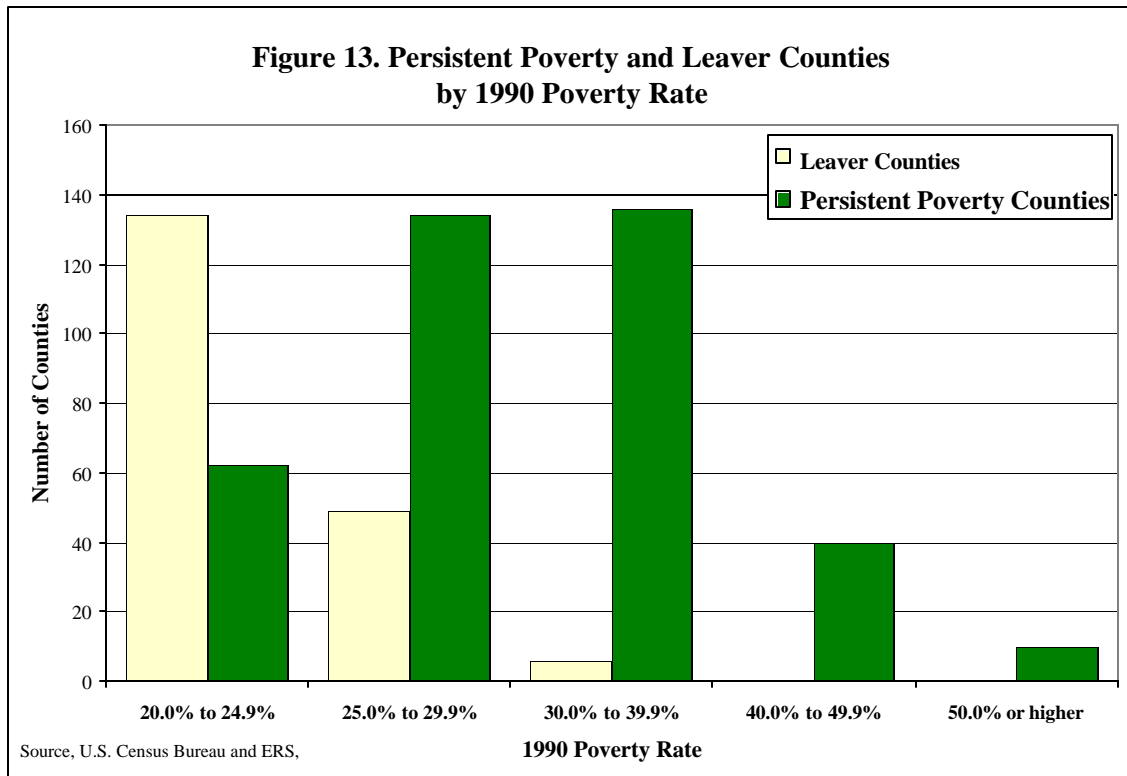
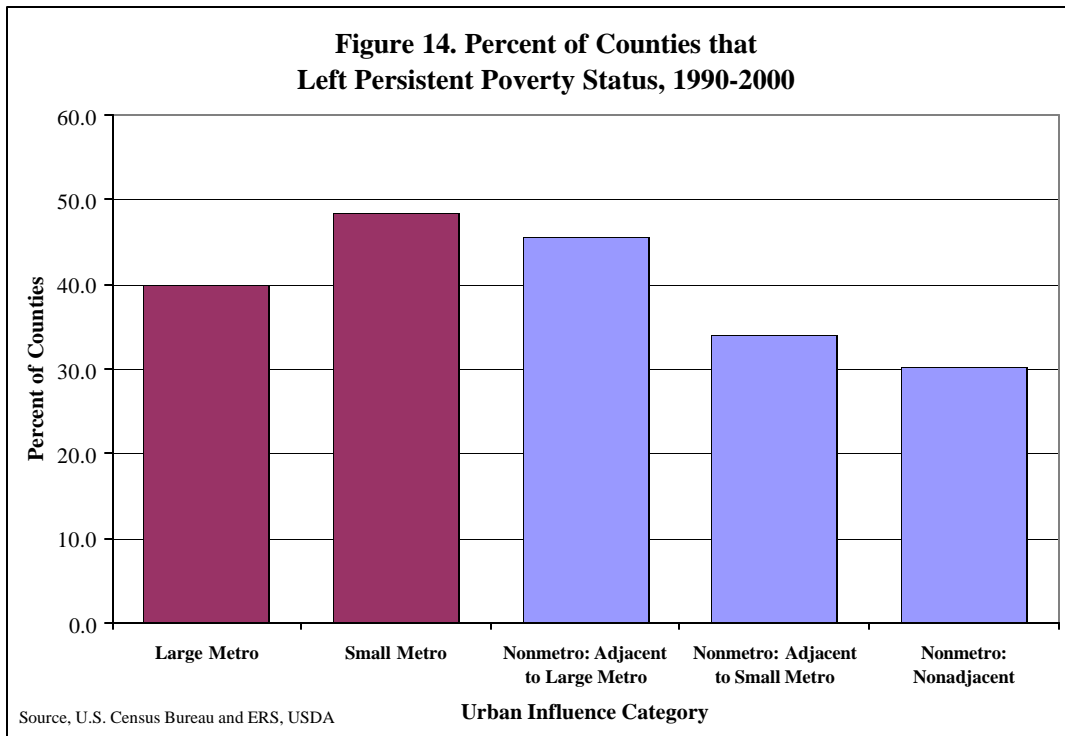


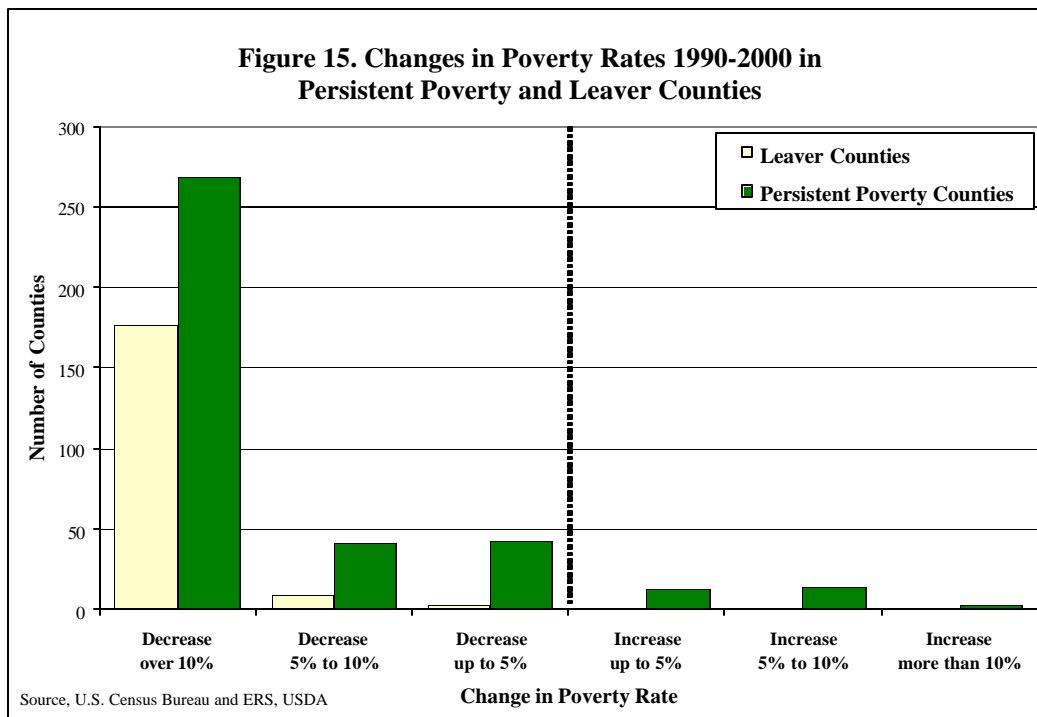
Table 5. Distribution of Persistent Poverty Leavers by Urban Influence Code

Urban Influence Code	Number of 1990 Persistent Poverty Counties	Left Persistent Poverty 1990-2000	
		Number of Leaver Counties	Percent of 1990 P.P. Counties
Large Metro- counties in metro areas of 1 million population or more	5	2	40.0
Small Metro - counties in metro areas of fewer than 1 million population	31	15	48.4
Metropolitan counties			47.2
Adjacent to a large metro area and contains a city of at least 10,000 residents	5	1	20.0
Adjacent to a large metro area and does not contain a city of at least 10,000 residents	17	9	52.9
Adjacent to a small metro area and contains a city of at least 10,000 residents	29	7	24.1
Adjacent to a small metro area and does not contain a city of at least 10,000 residents	156	56	35.9
Nonmetropolitan adjacent counties			35.3
Not adjacent to a metro area and contains a city of at least 10,000 residents	38	12	31.6
Not adjacent to a metro area and contains a town of 2,500 to 9,999 residents	144	40	27.8
Not adjacent to a metro area and does not contain a town of at least 2,500 residents	146	47	32.2
Nonmetropolitan nonadjacent counties			30.2
All Counties	571	189	33.1

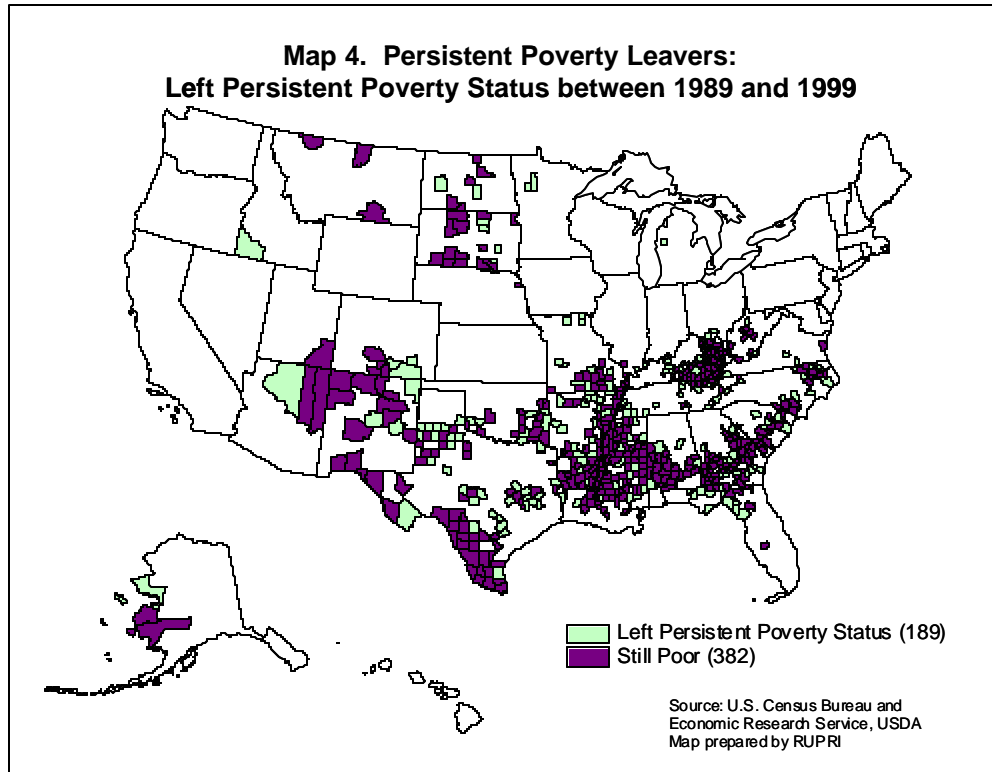
Source: U.S. Census Bureau and Economic Research Service, USDA



By definition, all of the leaver counties had declines in their poverty rates between 1990 and 2000. The majority of leavers (90 percent) had poverty rate declines of more than 10 percent. (Figure 15). Among persistent poverty counties, the majority (70 percent) experienced declines of more than 10 percent. Thirty counties, however, experienced increases in poverty rates between 1990 and 2000, three of those counties by more than 10 percent.



As one looks at the geographic distribution of these counties, it is clear that there are leavers in every region and if there is a pattern, it seems to be that the leavers are on the fringes of persistent poverty regions. Very few of the leavers are in the center of a concentration of persistent poverty counties. (Map 4).



The “persistent poverty leaver counties” (PPL) have a smaller share of populations under 18 years old and a higher share over 65 than the counties that remained in persistent poverty status in 2000. (Table 3) This generally held across the rural-urban continuum. These PPL counties also had much lower shares of minority populations (30 percent minority versus 52 percent for the PP counties). The only exception to this across the continuum was in large-town-centered nonmetro counties adjacent to large metro areas (UI3), where the shares of minority population was higher for PPL than for the PP counties. These “leaver” counties have median family incomes about 20 percent higher than PP counties. The difference is particularly large in the two large metro leaver counties, where median family income is over 40 percent larger than in PP counties.

Unemployment rates are lower and per capita incomes higher in PPL counties, although the employment structure is not very different between the PPL and the PP stayers. (Table 4)

Entry and Exit from High Poverty Status: 1960-2000

The dynamics of the 1990s is the most recent part of a forty-year history of counties moving into and out of high-poverty (poverty rates of 20 percent or more) status. Table 6 summarizes the movements of counties into and out of this status. In 1960, 2395 counties (78 percent of counties) had poverty rates of 20 percent or more. During the 1960s, almost half (44 percent) of

these counties saw their poverty rates decline to less than 20 percent, while only 5 counties moved above the 20 percent line from below.

	1960	1970	1980	1990	2000
Initial High Poverty Counties (>=20%)	2395				
- Leavers ⁶	-	1063	655	106	189
= Persistent Poverty Counties	-	1332	677	571	382
+ New Entrants ⁷	-	5	4	13	5
+ Returnees ⁸	-	-	34	237	29
- New and Returnee Leavers ⁹	-	-	4	22	199
= High Poverty Counties		1337	716	838	484

This left 1332 counties in 1970 whose poverty rates were 20 percent or more in both 1960 and 1970. These counties were the 1970 “Persistent Poverty” counties. During the 1970s, 655 of these counties saw poverty rates drop to below 20 percent, leaving 677 “Persistent Poverty” counties in 1980. During the 1970s, 4 of the 5 counties that had entered high poverty status in 1970 left high poverty status. But 38 counties saw their poverty rates increase to 20 percent or more (4 that had not had high poverty in 1960 or 1970, and 34 that had been among high poverty counties in 1960 but not 1970). The net effect of this set of changes left 716 counties in 1980 with “high poverty” status.

During the 1980s, 106 of the 677 1980 Persistent Poverty counties “left” persistent poverty status in 1990, leaving 571 counties that had had poverty rates of 20 percent or more in every decade since 1960. In addition, about half (22) of the counties that had entered high poverty status in 1970 and 1980 had decreases in their poverty rates to below 20 percent in 1990. However, the overall number of counties with poverty rates of 20 percent or more increased by 17 percent between 1980 and 1990. This was because there were 237 “returnees” and 13 new entrants.

In the 1990s, there was more exit and less entry than in the previous decade. One third (189) of the 571 counties that had been persistent poverty counties in 1990 saw poverty rates dropped below 20 percent in 2000, leaving 382 “persistent poverty” counties in 2000. And 199 additional counties (over half of the counties that had entered high poverty status since 1960) left high poverty status in 2000. Only 34 counties were new entrants and returnees. The net effect of these changes was that the number of counties with poverty rates of 20 percent or more dropped 42 percent from 838 to 484.

⁶ Counties with poverty rates of 20 percent or more since 1960 whose poverty rates fall below 20 percent in this decade.

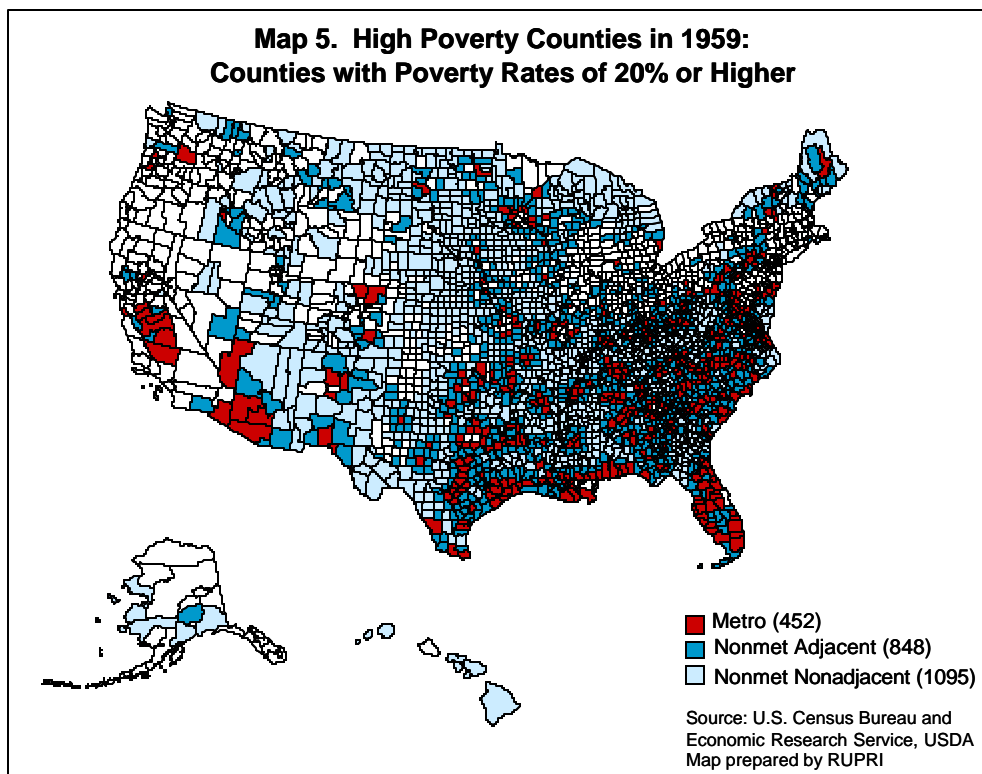
⁷ Counties with poverty rates below 20 percent since 1960 whose poverty rate increases to 20 percent or more in this decade.

⁸ Counties that had been leavers in a previous period whose poverty rate returned to 20 percent or higher in this decade.

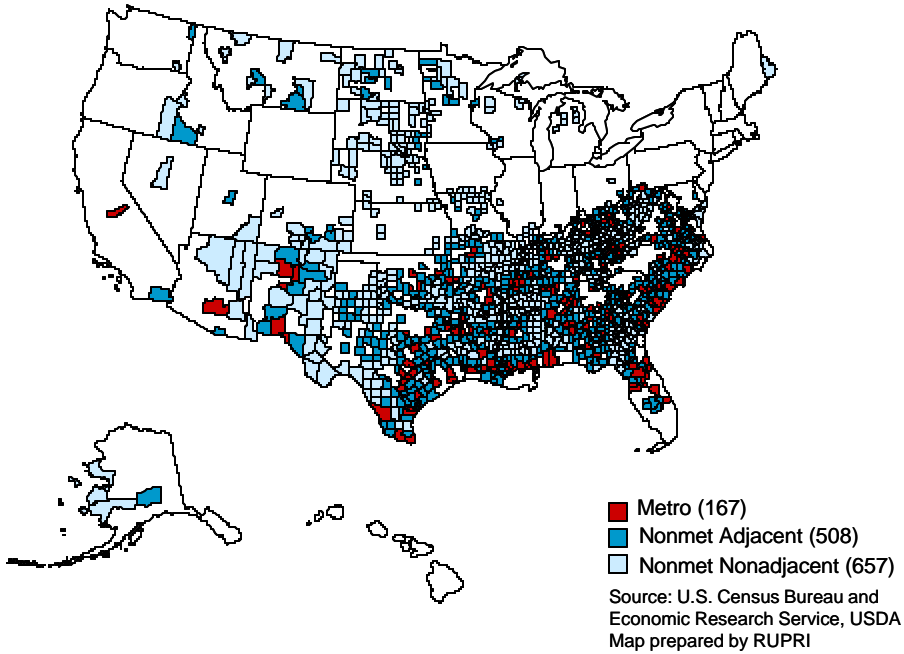
⁹ Counties that were New Entrants and Returning Counties in a prior decade whose poverty rate in this decade fell below 20 percent.

Over three quarters (382 or 79 percent) of the 484 counties with poverty rates of 20 percent or more in 2000 were persistent poverty counties: they had had poverty rates of 20 percent or more in every decade since 1960. Nineteen percent (92) of the high poverty counties in 2000 had had high poverty rates in 1960, had subsequently moved out of high poverty and returned to poverty rates of 20 percent or higher in 2000. Only 2 percent (10) of the 484 counties with high poverty in 2000 had not been high poverty counties in 1960.

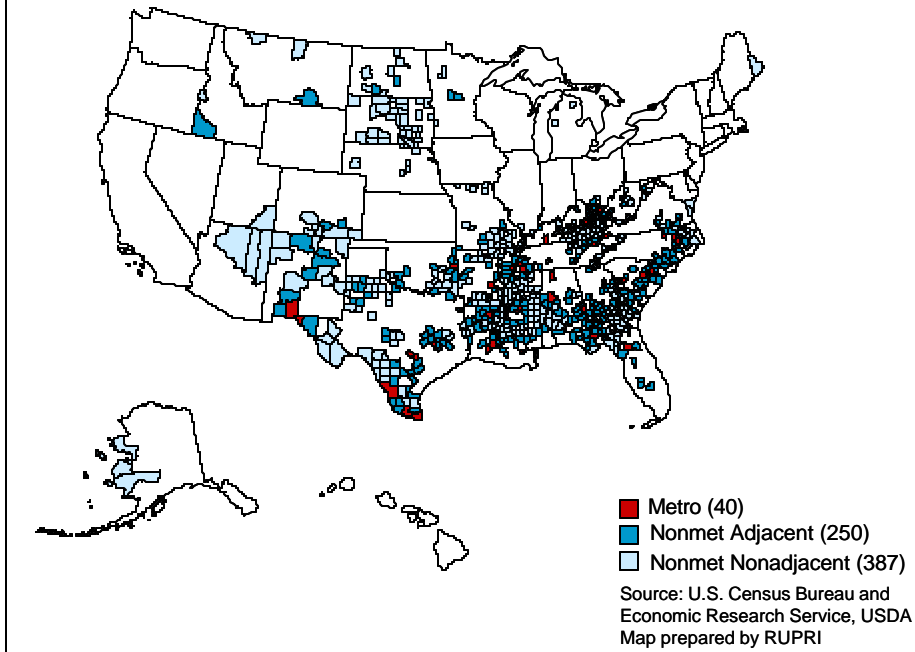
Whereas high poverty rates were found in practically every state in 1960 (Map 5), by 1970 high poverty persisted primarily in the south, Appalachia, the southwest and northern Great Plains (Map 6). In subsequent decades, persistent poverty continued in these regions and became more concentrated in the Mississippi Delta, Appalachia, the Black Belt, The Ozarks, the lower Rio Grande Valley, and the Indian reservations in the Southwest and Northern Great Plains (Maps 7-9).



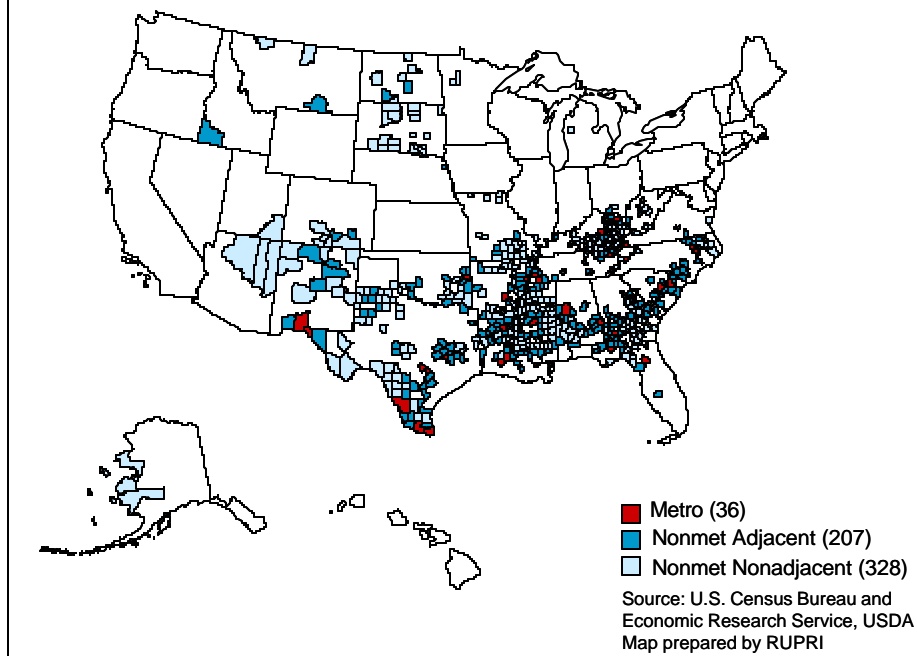
**Map 6. Persistent Poverty in 1969:
Counties with Poverty Rates of 20% or Higher in 1959 and 1969**



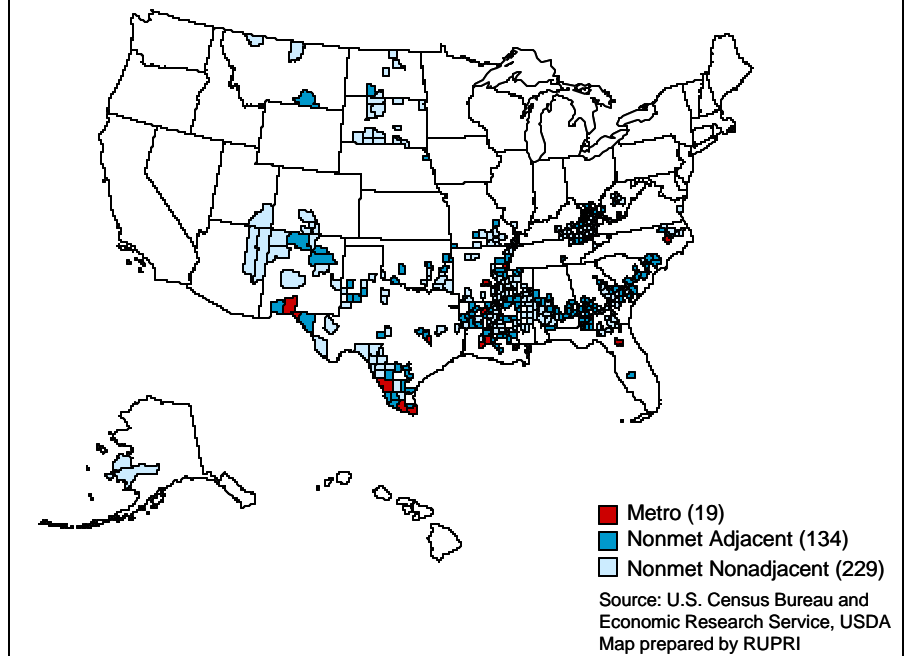
**Map 7. Persistent Poverty in 1979:
Counties with Poverty Rates of 20% or Higher in
1959, 1969, and 1979**



**Map 8. Persistent Poverty in 1989:
Counties with Poverty Rates of 20% or Higher in
1959, 1969, 1979, and 1989**



**Map 9. Persistent Poverty in 1999:
Counties with Poverty Rates of 20% or Higher in
1959, 1969, 1979, 1989, and 1999**



Alternative Characterizations of Persistent Poverty across the Rural-Urban Continuum

The patterns of persistent poverty across the rural-urban continuum might be sensitive to the definitions we used. To examine whether these patterns are robust, we examine them under alternative definitions of “persistent poverty” and “rural and urban”.

Alternative County-based Persistent Poverty Definitions

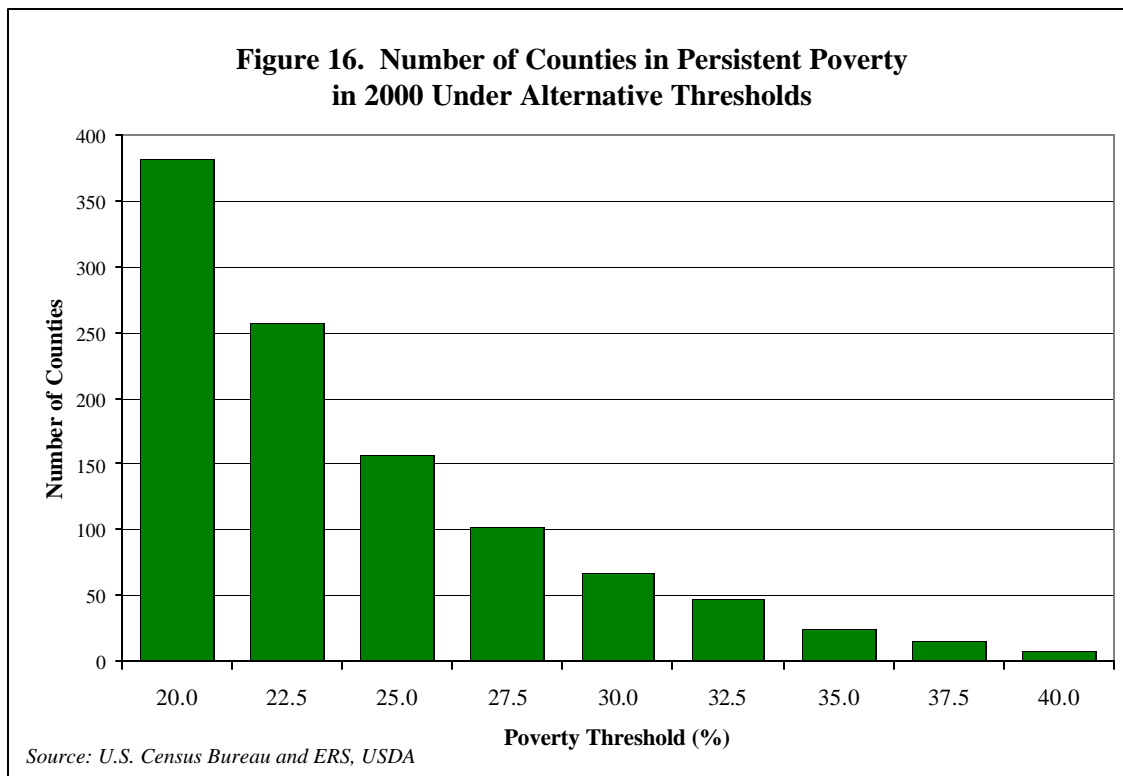
Suppose that “persistent poverty” were defined differently. What difference would it make in the number of counties and where would they be? We discuss two alternative county-based definitions of “persistent poverty”: (1) selection of a different base year; (2) selection of a different “high poverty” threshold.

Selection of a different base year would not make much difference in the number (or likely the location) of persistent poverty counties. Table 7 shows the “erosion” of persistent poverty counties that occurs in each base year. This table is based on the complete poverty dynamics transition diagram in Appendix B. Appendix B shows the transitions from high poverty (poverty rate of 20 percent or more) (“poor”) to low poverty (poverty rate of less than 20 percent) (“nonpoor”) in each decade.

Base Year	1960	1970	1980	1990	2000
1960 (Current definition)	2395	1332	677	571	382
1970		1337	678	572	382
1980			716	588	394
1990				838	450
2000					484

The first row shows the number of persistent poverty counties in each decade using the current base year of 1960. If 1970 had been used as the base year, the number of counties in persistent poverty in 2000 would be unchanged, and use of a 1980 base year would have added only 12 counties to the number considered “persistent poverty counties” in 2000 (increasing the number to 394). Selecting 1990 as a “base year” would define as persistent poverty counties those with poverty rates 20 percent or above for both 1990 and 2000. This would substantially increase the number of counties defined as persistent poverty counties to 450. Including only two decades, however, would weaken the concept of persistence considerably.

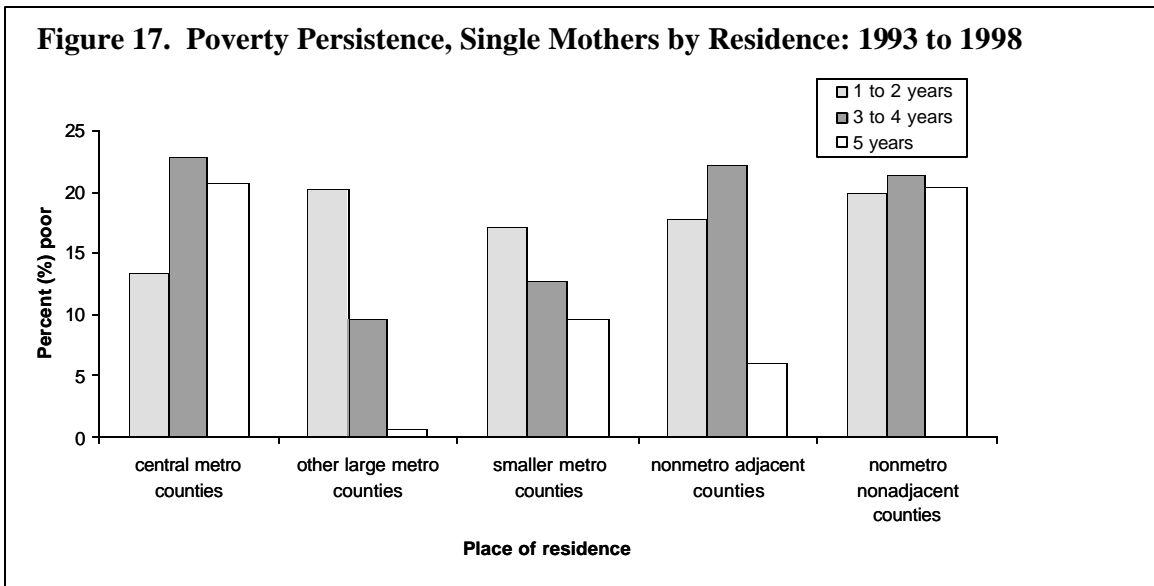
Suppose that instead of the 20 percent threshold, we use a 30 or 40 percent threshold for persistent poverty. Under this conception, a county would be considered to be a persistent poverty county only if it had poverty rates of 30 (40) percent in every decade since 1960. Table 11 shows that this higher threshold would have substantially reduced the number of counties considered “persistent poverty counties”. Figure 14 shows how the number of persistently poor counties changes as the poverty threshold for defining “persistent poverty” increases from 20 to 40 percent by 2.5 percentage point increments. From Table 8, it is evident that nonmetro nonadjacent counties are most resistant to increases in the threshold to 30 percent, and the Nonmetro adjacent slightly more resistant to increasing the threshold to 40 percent. Maps 10 and 11 show the locations of these “very high persistent poverty counties” and “extremely high persistent poverty counties”.



Metro Status	20 Percent	30 Percent	40 Percent
Metro	19	3	0
Nonmetro Adjacent	134	13	2
Nonmetro Nonadjacent	229	51	5
Total	382	67	7

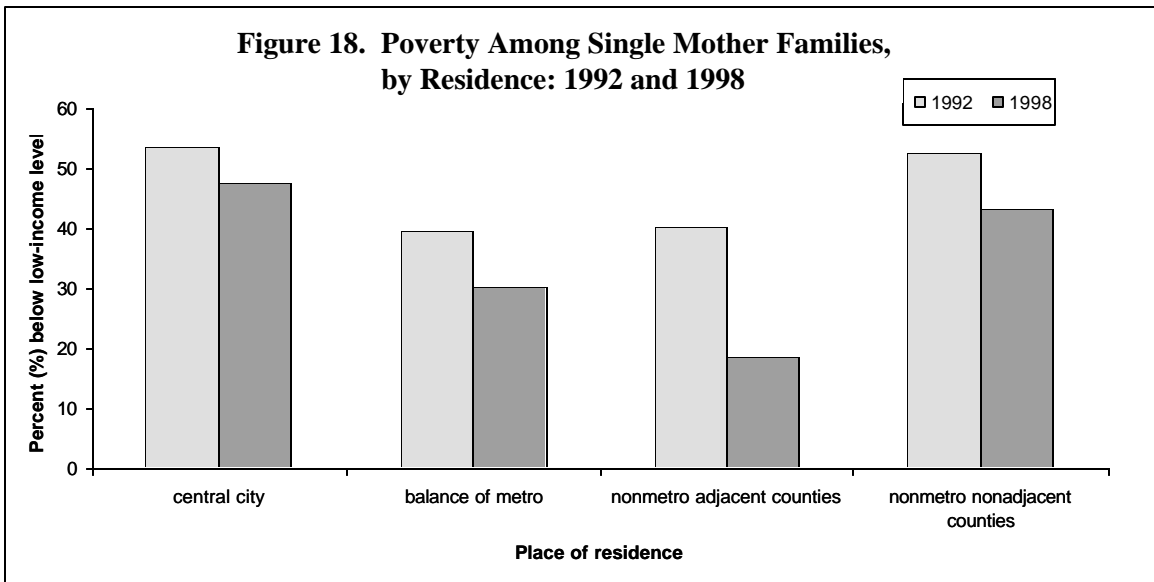
An Alternative “Persistent Poverty” Concept: Persistently Poor Households

A recent report by Brookings Institution offers two other perspectives on the ways of conceptualizing poverty persistence and the urban- rural continuum. In this report, Fisher and Weber show how the persistence of poverty among single mothers (the percent of single mothers who were poor for 5 years during the 1993-98 period) varies across a central county to remote rural county continuum (an aggregation of Beale codes). Using data from the Panel Study of Income Dynamics (PSID), they find that poverty is most persistent in central counties of large metropolitan areas and nonmetro nonadjacent counties (over 20 percent of the single mother families were poor all 5 years). The percentages were much lower for the other “fringe” metro counties (less than 5 percent), smaller metro counties (around 10 percent), and adjacent nonmetro counties. (about 5 percent). This concept of persistence complements the point in time poverty rates of the ERS persistent poverty concept. (See Figure 17)



An Alternative Rural-Urban Continuum: Central City to Remote Rural County

The Brookings report also suggests a rural-urban continuum that distinguishes central city and “suburb” in metropolitan counties, and adjacent and nonadjacent for nonmetropolitan counties. Using a combination of Current Population Survey and PSID data, they find that poverty rates for single mother families are highest in 1998 in Central cities and nonadjacent nonmetro (“remote rural”) counties (around 45 percent), and much lower in “suburbs” (around 30 percent) and adjacent nonmetro counties (about 20 percent). (See Figure 18) They argue that the central city/”suburb” dichotomy better captures geographic variations in economic well-being than the county based metropolitan classification that aggregates the central city and the suburbs in large metropolitan areas.



Implications for Place-Policy-Attentive Research

What have we learned about the geography of poverty and persistent poverty? Several conclusions can be drawn:

- With a county-based classifications (Rural Urban Continuum code or Urban Influence code), poverty rates are highest in more remote rural counties and lowest in metropolitan counties, and the increase is almost monotonically increasing as counties become more rural and more isolated from urban influence. If one uses a Rural Urban Continuum code, the very low poverty rates of the “suburbs” of large metro areas are apparent.
- Persistent poverty is most prevalent in the most remote rural places (the percent of counties that are persistent poverty counties increases almost monotonically as one moves across the continuum from central metro counties to completely rural counties). See Figure 20.
- Persistent poverty is increasingly a rural problem, as the counties leaving persistent poverty status during the 1990's were disproportionately metropolitan. (Figure 22)

What have we learned about ways of characterizing geographic diversity in America? Several lessons have been learned about the classification systems used to understand poverty differentials across the rural urban continuum:

- (1) County-based classifications tend to highlight the rural disadvantage. The Rural Urban Continuum Code, with its richer metropolitan classification, captures the suburban advantage better than the Urban Influence Code. The Urban Influence Code, with its ability to distinguish the interaction of large and small metro adjacency and city size, focuses attention on the advantages of adjacency to large metro areas and of having a city of at least 10,000 regardless of metropolitan adjacency.
- (2) The ‘persistent poverty’ classification is an extremely useful classification for identifying areas of concentration of vulnerable populations: three-quarters of the counties with poverty rates of 20 percent or more in 2000 are persistent poverty counties.
- (3) Redefining “persistent poverty” by changing the base year to 1970 would not change the number or location of persistent poverty counties; changing the base year to 1980 would add 12 counties to the 382 counties defined as persistent poverty counties in 2000 under the current definition.
- (4) Redefining “persistent poverty” by increasing the poverty threshold by 10 or 20 percentage points would dramatically reduce the number of persistent poverty counties: instead of the 382 persistent poverty counties (defined at the 20 percent threshold), there would only be 67 persistent poverty counties with a 30 percent threshold and 7 persistent poverty counties with a 40 percent threshold.

- (5) Focusing on the 484 “high poverty (20 percent or more poverty rate in 2000)” counties rather than the 382 “persistent poverty counties” would direct increased attention to the 92 “returnee” counties (that had had high poverty rates in 1960 and whose poverty rates declined below and then increased above the 20 percent threshold by 2000) and the 10 “new entrant” counties (that had a lower than 20 percent poverty rate in 1960 but whose poverty rates had increased above 20 percent by 2000).

What might be said about the design of future geographic classification systems? A couple of observations can be made:

- (1) Analysts should consider developing a rural-urban continuum classification that allows identification of both central urban cores and remote rural places, which are the locations of the most serious economic distress. Two possibilities are
 - a. if one constrains the system to a county-based classification, there would be merit in considering a hybrid that used the Metropolitan designations of the Rural-Urban Continuum codes and the Nonmetropolitan designations of the Urban Influence codes or
 - b. if the analysis is done at a high enough level of geographic aggregation so that confidentiality is not a concern, a hybrid of the Census “central city/remainder of metro [‘suburb’]” classification and the ERS “adjacent nonmetro/nonadjacent nonmetro [“remote rural”] classification would provide a classification that shows similar rates of distress in central cities and remote rural places.
- (2) The new Core Based Statistical Area (CBSA) classification dramatically changes the way that “rural” is defined and conceptualized. Any new “rural-urban continuum” will need to be compatible with the CBSA system.

An important theme in this paper is that an appreciation of the geography of poverty and other social conditions should consider "urban diversity" as well as "rural diversity". Both urban cores and remote rural counties have high poverty levels. Attention to both urban and rural poverty is desirable not only because it provides a more defensible geographic context, but also because doing so has the potential to help those concerned about rural areas find common cause with urban interests. These alliances could strengthen the development of place-based policy to the benefit of both urban and rural areas.

References

Fisher, Monica G. and Bruce A. Weber, *The Importance of Place in Welfare Reform: Common Challenges for Central Cities and Remote-Rural Areas*, Research Brief 1, Center on Urban and Metropolitan Policy, The Brookings Institution, 11 pp., June 2002.

Appendix A. Poverty Dynamics Transition Table: Number of counties poor (poverty rates 20% or more) and not poor in each year.

1960		1970		1980		1990		2000	
<i>poor</i>	2,395	<i>poor</i>	1,332	<i>poor</i>	677	<i>poor</i>	571	<i>poor</i>	382
								<i>not poor</i>	189
						<i>not poor</i>	106	<i>poor</i>	12
								<i>not poor</i>	94
				<i>not poor</i>	655	<i>poor</i>	193	<i>poor</i>	43
								<i>not poor</i>	150
						<i>not poor</i>	462	<i>poor</i>	8
								<i>not poor</i>	454
		<i>not poor</i>	1,063	<i>poor</i>	34	<i>poor</i>	13	<i>poor</i>	9
								<i>not poor</i>	4
						<i>not poor</i>	21	<i>poor</i>	2
								<i>not poor</i>	19
				<i>not poor</i>	1,029	<i>poor</i>	43	<i>poor</i>	11
								<i>not poor</i>	32
						<i>not poor</i>	986	<i>poor</i>	7
								<i>not poor</i>	979
<i>not poor</i>	691	<i>poor</i>	5	<i>poor</i>	1	<i>poor</i>	1	<i>poor</i>	-
								<i>not poor</i>	1
						<i>not poor</i>	-	<i>poor</i>	-
								<i>not poor</i>	-
				<i>not poor</i>	4	<i>poor</i>	1	<i>poor</i>	-
								<i>not poor</i>	1
						<i>not poor</i>	3	<i>poor</i>	-
								<i>not poor</i>	3
		<i>not poor</i>	686	<i>poor</i>	4	<i>poor</i>	3	<i>poor</i>	3
								<i>not poor</i>	-
						<i>not poor</i>	1	<i>poor</i>	-
								<i>not poor</i>	1
				<i>not poor</i>	682	<i>poor</i>	13	<i>poor</i>	2
								<i>not poor</i>	11
						<i>not poor</i>	669	<i>poor</i>	5
								<i>not poor</i>	664

Appendix B. Shares of population in County Groups Defined by ERS Classifications

RUCC	Number of Counties	Percent of Counties	Total Population	% of Total Population
0	167	5.4	127,895,337	45.7
1	132	4.3	11,595,790	4.1
2	315	10.2	62,104,823	22.2
3	199	6.4	22,183,815	7.9
4	133	4.3	10,403,694	3.7
5	113	3.7	7,103,656	2.5
6	607	19.7	17,998,795	6.4
7	649	21.0	13,707,020	4.9
8	248	8.0	2,892,066	1.0
9	523	16.9	3,752,214	1.3
Total	3,086*	100.0	279,637,210	100.0

UI	Number of Counties	Percent of Counties	Total Population	% of Total Population
1	299	9.7	139,491,127	49.9
2	514	16.7	84,288,638	30.1
3	62	2.0	4,015,106	1.4
4	122	4.0	2,859,373	1.0
5	184	6.0	10,651,399	3.8
6	620	20.1	13,768,677	4.9
7	232	7.5	10,698,389	3.8
8	547	17.7	10,306,290	3.7
9	506	16.4	3,558,211	1.3
Total	3,086*	100.0	279,637,210	100.0

**Complete data with poverty rates in all decennial census years are available for 3,086 counties.*