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# Housing Poverty in Rural Areas Greater for Racial and Ethnic Minorities

Leslie A. Whitener

**M**any rural areas have grown both economically and in population during the 1990's. Increased metro-to-nonmetro migration has raised questions about the adequacy of existing housing and amenities. The housing cost burden (housing costs as a proportion of income) continues to be a major problem across the United States. While the extent of housing disadvantage varies across rural population groups, it is greater for racial and ethnic minorities than for Whites (Mikesell).

Minorities are an increasing proportion of the rural population, particularly among children and younger adults (Cook). The growth rate from immigration continues to be fairly constant. The low birth rate among non-Hispanic Whites is offset by higher birth rates for minority groups, particularly among relatively recent immigrants. If current trends continue, minorities will approach 50 percent of the U.S. population by the year 2050 (Bureau of the Census). Although the proportion of minorities is lower in the rural than in the

*Despite the higher prevalence of housing poverty in central cities, 4 million households in nonmetro areas were classified as housing poor based on a new multidimensional measure of housing disadvantage. Nonmetro Hispanic, Black, and other minority households were more likely than their White counterparts to be in housing poverty. But the dimensions of poverty operate differently for these groups. Housing quality was a more important factor in determining housing poverty for minority households, while economic need was the most important indicator for White households. Crowding was a particularly salient issue for nonmetro Hispanics.*

urban population, specific minority groups are highly concentrated in some rural regions.

## A Multidimensional Indicator of Housing Poverty

Traditional measures of housing poverty or housing disadvantage have focused on single indicators, such as the lack of complete plumbing, housing cost burden, or structural adequacy of the home (Cook and Krofta; Dolbeare; Whitener). This article introduces a multidimensional measure of housing poverty as a more appropriate tool for understanding differences in housing conditions and socioeconomic well-being. Using data from the 1995 American Housing Survey (see "Data and Definitions" for more detail), this article demonstrates the strengths of this new measure, assesses its utility for understanding rural-urban differences in housing disadvantage, and identifies factors affecting housing poverty among different racial and ethnic minority populations in rural areas.

Poverty measures based solely on economic need have been criticized for their inability to accurately portray well-being. As a result, measures that incorporate a broader range of indicators, including noneconomic dimensions, have been advanced as more conceptually useful. This argument applies to housing poverty as well. Building on work by Gundersen and others, this article develops a multidimensional indicator that combines measures of economic need, housing quality, and perception of neighborhood.

Housing-poor households are those meeting one or more of the following criteria (see "The Measure of Housing Poverty" for more detailed definitions):

- **Economic Need:** Housing costs (including mortgage, taxes, insurance, repairs, rent, etc.) exceed 50 percent of household income from all sources;
- **Housing Quality (Adequacy):** The physical housing structure is defined as moderately or

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severely inadequate based on a standard HUD measure of physical problems using 26 variables covering plumbing, heating, upkeep, hallways, electricity, and kitchen;

- **Housing Quality (Crowding):**

The number of household members exceeds the number of rooms in the unit, as defined by HUD;

- **Neighborhood Quality:**

Households were bothered by at least two of four perceived “poor” neighborhood conditions, including crime, noise, litter or deteriorating housing, or inadequate public services.

Using this multidimensional measure, about 21 million occupied U.S. housing units (22 percent of the total) in 1995 were classified as housing poor (fig. 1). Most (89 percent) qualified as housing poor based on only one component; 11 percent met two or more criteria. Economic need (measured by housing cost burden) identified the largest number of households as



Photo courtesy USDA/OC Photography Division.

housing poor. However, use of this component alone to define housing poverty would have excluded over 30 percent of households as housing disadvantaged. The other components identified smaller populations of need.

Is this measure of housing disadvantage simply measuring eco-

nomie poverty? About 46 percent of the housing poor had incomes below the official poverty level, and another 15 percent were classified as near poor (100-149 percent of poverty). Still, almost 4 in 10 experienced housing disadvantage but were not in economic poverty. At the same time, while most of those not classified as housing poor had incomes well above the poverty level, about 15 percent were poor or near poor but experienced no housing disadvantages. A measure based on poverty level alone would have excluded over half of the housing-poor households identified by the multidimensional measure.

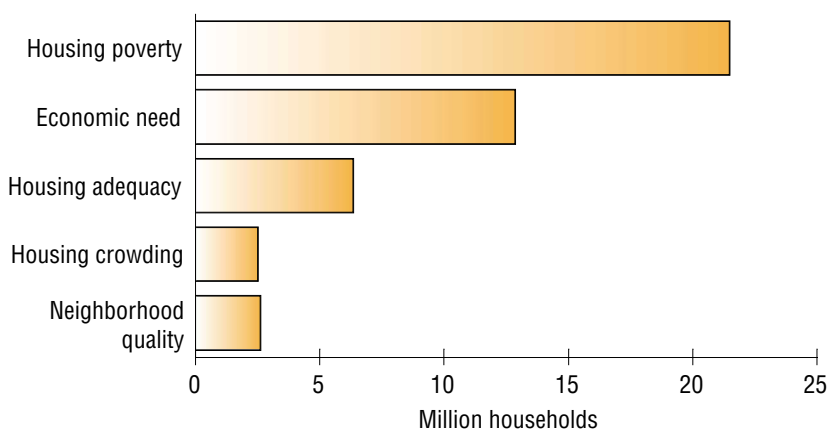
### Housing Poverty Varies by Metro-Nonmetro Residence

Is this measure useful for understanding housing differences in metro and nonmetro areas? The prevalence of housing poverty in metropolitan central cities was considerably higher than for suburbs or nonmetro areas. Almost 30 percent of households in the central cities were classified as housing

Figure 1

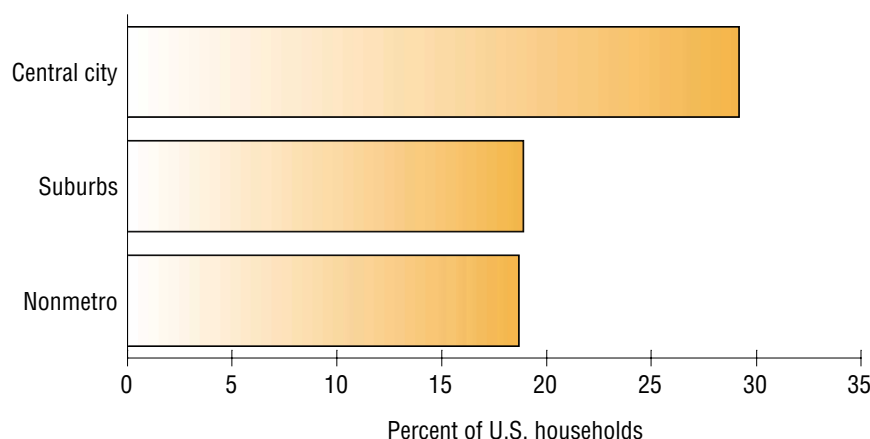
### Dimensions of housing poverty, 1995

Over 21 million U.S. households were housing poor



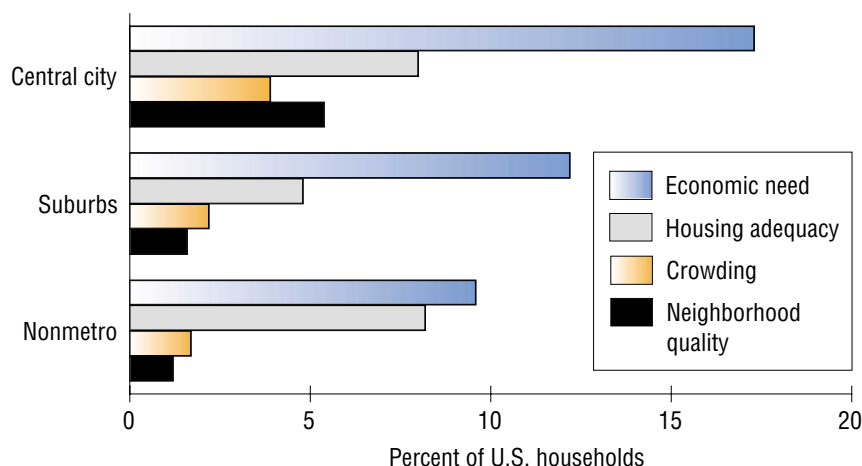
Source: Calculated by ERS from 1995 American Housing Survey.

Figure 2  
**Housing poverty by metro-nonmetro residence, 1995**  
*Housing poverty is more prevalent in central cities*



Source: Calculated by ERS from 1995 American Housing Survey.

Figure 3  
**Dimensions of housing poverty by residence, 1995**  
*Housing adequacy and economic need most characterized nonmetro areas*



Source: Calculated by ERS from 1995 American Housing Survey.

poor compared with about 19 percent for both metro suburbs and nonmetro areas (fig. 2). Still, over 4 million households in nonmetro areas were housing disadvantaged.

Also, the dimensions of housing poverty work differently in metro and nonmetro areas. Central city households were more likely to be

classed as “disadvantaged” on every individual component of the housing measure (except for adequacy in nonmetro areas) than households in either the suburbs or nonmetro areas (fig. 3). Economic need defined the largest proportion of housing poor in each residential area, but was a more prevalent indicator in central cities. In con-

trast to the other areas, structural housing adequacy was almost as important an indicator in nonmetro areas as was economic need.

### Housing Poverty Is More Prevalent Among Rural Minorities

Higher proportions of rural minority households were housing poor compared with White households. About 35 percent of nonmetro Hispanic and 37 percent of Black and other households were classed as housing poor, compared with 17 percent of White households (fig. 4). Central cities had higher proportions of Hispanics in housing poverty (46 percent) than either suburbs or nonmetro areas, but housing poverty for Blacks and others was not appreciably higher in central cities.

Also, the dimensions of housing poverty operate differently for nonmetro minority households. Both Hispanic and Black and other households were more likely than Whites to be classed as “poor” on each dimension of the housing poverty measure (fig. 5). Housing quality (defined by structural adequacy) identified the largest proportion of minority households in nonmetro households. In contrast, economic need was the most important indicator for White households. Housing adequacy and crowding were the most important indicators for Hispanic households, while economic need and housing adequacy were the most critical for Blacks and others.

### Household Characteristics Affect Housing Poverty of Rural Minorities

Minority status affects the characteristics of households in housing poverty. Most Hispanic householders (heads of households) were married (59 percent), male (63 per-

cent), and under 45 years of age (60 percent) (table 1). Over two-thirds of households had more than two members, and most of these had children present. Hispanic households were as likely to own their own home as to rent. Almost half were below the poverty level, with another 22 percent near poverty (100-149 percent of poverty level). About 6 out of 10 lived in the South.

In direct contrast to Hispanics, the majority of Blacks and others were widowed, divorced, separated, or never married (73 percent); were more likely to be female (60 percent); tended to be older (53 percent 45 and over), and were even more likely to live in the South (82 percent). Black and other households were smaller (52 percent with two members or less), and a third had only one person. Blacks and others were slightly more likely than Hispanics to own their home. A considerably larger share (63 percent) of Blacks and others were below poverty, and another 13 percent were near poverty.

White households resembled Hispanic households in terms of householders' marital status and gender, and household poverty status, and were similar to Black and other households in terms of householders' age, household size, and family composition. Whites were most likely to own their home (63 percent). They were also less concentrated in the South and were more evenly distributed in other regions.

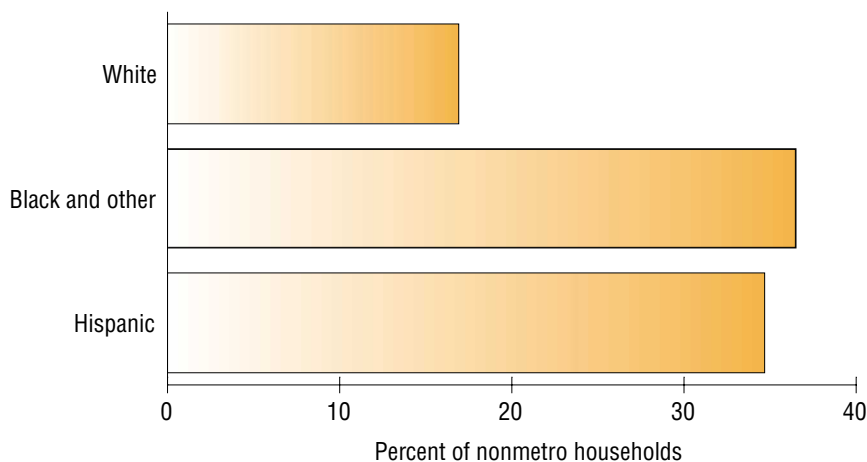
### A Multidimensional Measure of Housing Poverty Captures Important Residential Differences

The multidimensional measure of housing poverty, by incorporating four indicators (economic need, housing adequacy, crowding, and

Figure 4

#### Housing poverty of nonmetro households by minority status, 1995

*Over a third of minorities were classified as housing poor*

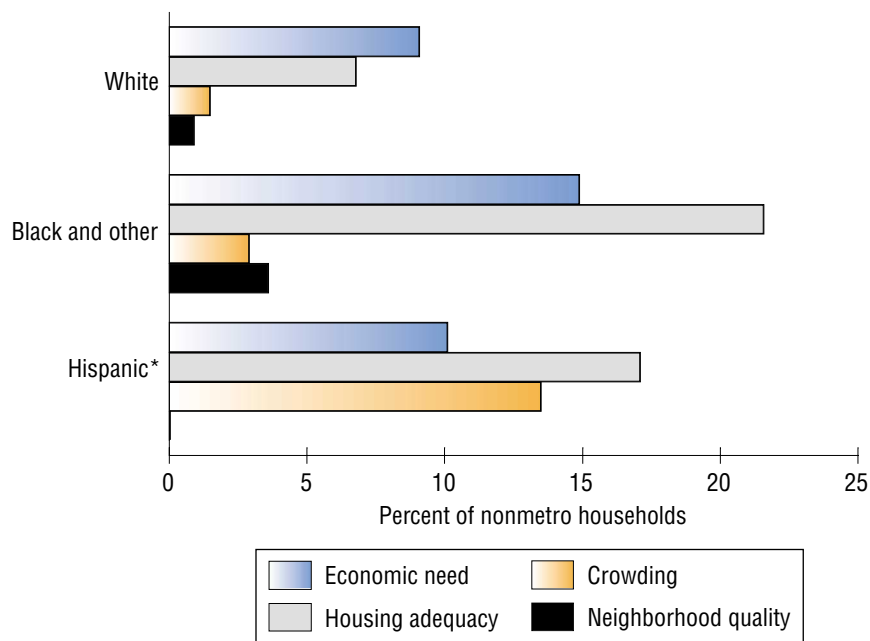


Source: Calculated by ERS from 1995 American Housing Survey.

Figure 5

#### Dimensions of nonmetro housing poverty by minority status, 1995

*Minorities were more likely to be classified as "poor" on each dimension*



\*Less than 1 percent of Hispanics classified as housing poor in neighborhood quality.

Source: Calculated by ERS from 1995 American Housing Survey.



Table 1

**Characteristics of nonmetro households in housing poverty by minority status, 1995***Whites are more likely to own their homes and are more evenly distributed among regions*

Characteristic	White	Black and other	Hispanic
<i>Thousands</i>			
Housing-poor households	3,308	734	250
<i>Percent</i>			
Married	47.2	27.4	58.8
Divorced, separated, or widowed	39.9	44.1	30.8
Never married	12.9	28.5	10.4
Male	57.1	40.1	63.2
Female	42.9	59.9	36.4
Younger than 25	8.2	12.1	10.0
25-44	36.0	35.0	49.6
45-64	29.0	31.6	26.8
65 and older	26.8	21.3	13.6
Northeast	10.9	1.4	2.8
North Central	29.3	8.4	6.0
South	42.4	82.2	57.0
West	17.4	8.0	34.2
Household size:			
1-2	60.5	51.6	33.3
3-4	25.8	30.5	24.9
5 and over	13.7	17.9	41.8
Family composition:			
1 person	33.9	30.0	17.7
2 or more, no children	27.2	22.3	14.8
2 or more, with children	38.9	47.7	67.5
Own home	62.8	51.1	46.8
Rent	34.5	42.9	47.2
Other	2.7	6.0	6.0
Below poverty	51.6	63.0	49.3
101-149% of poverty level	15.1	13.4	21.8
150%-199% of poverty level	8.9	7.9	17.7
200% and over	24.4	15.7	11.2

Source: Calculated by ERS from the 1995 American Housing Survey.

neighborhood quality) into one measure, identifies a broader population of need or disadvantage than does any one indicator. Also, it measures more than economic poverty, and captures a substantial proportion of housing poor who are not economically poor.

This multidimensional measure of housing poverty is useful for understanding housing differences by location. Clearly, it differentiates housing experiences among central city, suburbs, and nonmetro areas, with central city residents having the highest level of housing poverty and nonmetro and suburban residents having the lowest level.

In addition, the dimensions of housing poverty operate differently in metro and nonmetro areas. For example, economic need was a more important indicator in central cities, while both economic need and structural housing adequacy were important in nonmetro places. This variation argues for the use of a multidimensional indicator to capture and address these distinctions.

This measure of housing poverty also highlights differences among rural minorities. Nonmetro Hispanic and Black and other households are more likely than White households to be in housing poverty. But the dimensions operate differently for these groups. For example, housing quality was a more important indicator for minority households, while economic need characterized White households. Crowding was a particularly salient issue for nonmetro Hispanics.

## The Measure of Housing Poverty

Households are defined as housing poor if they meet one or more of the following criteria:

### Economic Need.

Housing costs exceeded 50 percent of household income. Housing costs include monthly mortgage, taxes, insurance, repairs, rent, homeowners' association fees, etc., multiplied by 12 (months). Household income is reported for the 12 months prior to the interview and is the sum of wage and salary income, self-employment income, interest or dividends, stock dividends, Social Security or railroad retirement income, public assistance or welfare payments, alimony or child support, and all other money income for all household members 14 and older, before deductions.

### Housing Quality (Adequacy).

A housing unit has severe physical problems (**severely inadequate housing**) if it has any of the following five problems:

*Plumbing.* Lacking hot or cold piped water or a flush toilet, or lacking both bathtub and shower, all inside the structure for the exclusive use of the unit.

*Heating.* Having been uncomfortably cold last winter for 24 hours or more because the heating equipment broke down, breaking down at least three times last winter for at least 6 hours each time.

*Electric.* Having no electricity, or all of the following three electric problems: exposed wiring, a room with no working wall outlet, and three blown fuses or tripped circuit breakers in the last 90 days.

*Upkeep.* Having any five of the following six maintenance problems: water leaks from the outside, leaks from the inside structure, holes in the floor, holes in the walls or ceilings, more than a square foot of peeling paint or broken plaster, or signs of rats or mice in the last 90 days.

*Hallways.* Having all of the following four problems in public areas: no working light fixtures, loose or missing steps, loose or missing railings, and no elevator.

A unit has moderate physical problems (**moderately inadequate housing**) if it has any of the following five problems, but none of the severe problems.

*Plumbing.* Having the toilets all break down at once, at least three times in the last 3 months, for at least 6 hours each time.

*Heating.* Having unvented gas, oil, or kerosene heaters that give off unsafe fumes as the main source of heat.

*Upkeep.* Having any three of the six upkeep problems mentioned under severe.

*Hallways.* Having any three of the four hallway problems mentioned under severe.

*Kitchen.* Lacking a sink, range, or refrigerator, all for the exclusive use of the unit.

### Housing Quality (Crowding).

A housing unit is considered crowded if the person-per-room ratio is greater than 1:1.

### Neighborhood Quality.

This measure is based on the respondent's opinion and attitude toward the neighborhood, as defined by the respondent. The respondent was asked a two-part question: (1) "Is there anything about the neighborhood that bothers you?" and (2) if yes, "What?" The interviewer coded the responses into categories of crime; noise; litter or housing deterioration; poor city/county services; traffic; undesirable commercial, institutional, or industrial property; people; other. Multiple responses were allowed. Households were defined as "poor" on neighborhood quality if they experienced at least two of four "poor" neighborhood conditions—crime, noise, litter or housing deterioration, and poor city/county services.

The term "housing poverty" is used here because the measure is based in part on economic need (although not the official OMB poverty measure) and to maintain consistency with the housing literature. "Housing disadvantage" is used synonymously with "housing poverty" in this article.

## Data and Definitions

The American Housing Survey (AHS) is conducted biennially by the Bureau of the Census for the U.S. Department of Housing and Urban Development. The AHS is a longitudinal survey designed to provide detailed information on housing structure, use, and plumbing characteristics; equipment and fuel use; housing and neighborhood quality; financial characteristics; and household attributes of current occupants. The national sample is based on about 55,000 units selected for interview in 1995. Data are weighted to reflect the U.S. population. The analysis is based on all occupied housing units, both owned and rented. Residence definitions used in the 1995 AHS are based on 1983 Office of Management and Budget designation for metro and non-metro areas. Racial and ethnic minorities are classed into categories of White, Hispanic, and Black and other. The three groups are not mutually exclusive, since Hispanics may be of either race.

Successful policy efforts to improve the adequacy and affordability of the Nation's housing and neighborhoods will recognize the considerable diversity of housing conditions among nonmetro population groups. At the same time,

the extent of housing poverty in central cities remains a greater challenge to policymakers in terms of numbers and the share that requires assistance.

### For Further Reading . . .

Bureau of the Census, *Population Projections of the United States by Age, Sex, Race, and Hispanic Origin: 1995 to 2050*, Current Population Report P-25, Feb. 1996.

Peggy J. Cook, ed., *Rural Conditions and Trends: Socioeconomic Conditions*, Vol. 9, No. 2, Feb. 1999.

Christine Cook and Janet Krofta, "Affordable Housing in the Rural Midwest," Paper presented at the Research Roundtable Series, *A Home in the Country: The Housing Challenges Facing Rural America*, Washington, DC: Fannie Mae Office of Housing Research, 1995.

Cushing Dolbeare, "Conditions and Trends in Rural Housing," Paper presented at the Research Roundtable Series, *A Home in the Country: The Housing Challenges Facing Rural America*, Washington, DC: Fannie Mae Office of Housing Research, 1995.

Craig Gundersen, "Direct Measures of Poverty and Well-Being: A Theoretical Framework and an Application to Housing Poverty in the United States," Ph.D. Dissertation, University of California, Riverside, 1996.

Housing Assistance Council, *Rural Housing and Welfare Reform: HAC's 1997 Report on the State of the Nation's Rural Housing*, Washington, DC: Housing Assistance Council, 1997.

James J. Mikesell, "Housing Problems Differ Across Types of Rural Households," *Rural Conditions and Trends: Socioeconomic Conditions*, Vol. 9, No. 2, Feb. 1999, pp. 97-101.

Leslie A. Whitener, "Rural Housing Conditions Improve but Affordability Continues To Be a Problem," *Rural Conditions and Trends*, Vol. 8, No. 2, Sept. 1997, pp. 70-74.

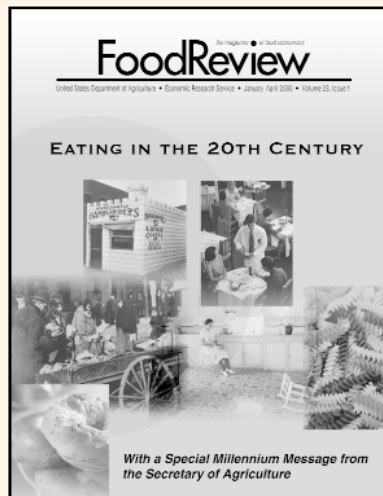


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