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U.S. Department of Housing and Urban Development
Office of Policy Development and Research
Washington, D.C. 20410

HOW WELL ARE WE HOUSED?

S. Rural





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ACKNOWLEDGEMENTS

Under a contract with HUD, Professor Anthony Yezzer of George Washington University did the original research leading to these findings and wrote the as-yet-unpublished report from which this summary was prepared. The data were compiled from the 1976 *Annual Housing Survey* and from the following 1976 *Current Population Reports: Series P-60, No. 109* and *Series P-20, No. 306*, published by the Bureau of the Census.

DISCLAIMER

The research findings in this summary are those of the contractor, who is solely responsible for the accuracy and completeness of all information herein.

Foreword

From the very beginnings of this Nation, Americans, with Jefferson as their most distinguished spokesman, have believed in the virtues of rural living. Even today, although – or because – we are more heavily urbanized than ever before, the long romance continues. In a HUD survey taken in 1978,* rural America was thought to have the friendliest people, the least amount of racial discrimination, the lowest taxes, the lowest cost of living, and even the lowest divorce rate.

Whatever the truth behind these widely held perceptions, the facts about rural housing are less rosy. In fact, although our data reveal much inadequate housing, averaging masks the harshest truths: the housing in particular pockets of poverty – Appalachia and the rural South, for example. The pictures provide what the data do not and explain why HUD under the present Administration has become more and more involved in rural initiatives. Much needs to be done.

This account of the condition of housing in rural America is the fifth in our series on housing conditions in the country. Under the general title HOW WELL ARE WE HOUSED? we have previously described the housing of Hispanics, female-headed households, blacks, and the elderly. Still to come is a report on the housing of large families.

When the series is completed, we intend to prepare a composite volume in which, continuing to use the extraordinary resources of the Annual Housing Survey, we will compare the housing conditions of all the groups previously examined. Because later data will then be available, I hope we can report significant improvements.

The people principally responsible for this summary are Ruth Limmer, of the Division of Product Dissemination and Transfer, who wrote it, and Duane McGough, Director of the Division of Housing and Demographic Analysis.



Donna E. Shalala
Assistant Secretary for Policy
Development and Research

November 1979

How Well Are We Housed?

By any measure of physical inadequacy, the housing of those who live in the small communities and open country of rural America is worse than that of the Nation's as a whole.

The worst rural housing found in this summary is lived in by the small number of blacks who have remained in rural areas. Their housing, although owner-occupied at almost the same rate as the general population, has nearly four times the rate of physical deficiencies as the housing of all Americans.

Only 13 percent of rural households live on farms, but their problems are especially severe. Their housing is old (over half was built before World War II), and its rate of physical flaws is significantly higher than the rate not only of the Nation's housing but higher than the rate for all rural housing.

The balance of rural housing, which is considerably newer, is also more flawed than the national average, but not as flawed as we would expect considering that much of it is without access to public water and sewage systems. Nevertheless, because these flaws are among the less easily correctable ones, we cannot take them lightly.

What Do We Mean by Rural?

This summary discusses the housing of that part of the population which is *truly* rural: households that live outside urbanized areas on farms, households that live in open country on what are called "non-farms" (units occupied by people who earn no significant income from farm products), and households located in communities under 2,500 people.



Housing in all three of these locations can be found within what are called standard metropolitan statistical areas (SMSAs). Broadly defined, an SMSA is a county (or counties) that contains a city of at least 50,000 inhabitants. And because there were 228 SMSAs in this country when our data were collected – only Alaska, Wyoming, and Vermont had none – it is not surprising that nearly a third of all rural households live within their boundaries.

We must also note that a rural designation is a shifting one: urban areas often expand to capture the rural areas adjacent to them, and towns can grow (or shrink), thus changing the designation of those who live in them.

The picture drawn here is of rural housing in 1976. The data come from the *Annual Housing Survey* for that year, and they provide the most recent information available.

Who Are Rural Householders?

From American distinctiveness because of survival to racial cost

What percentage in actual poverty exist and involve

This American household prevails still families

Approximately 28 percent of all U.S. households are regarded as rural, and the great majority are white. Only about 6 percent are black, and not quite 2 percent are Hispanic. Most – 87 percent of rural whites and 91 percent of rural blacks – do not farm the land. (Hispanics, because they are not present in sufficient numbers to provide a breakdown into farm/non-farm, are not discussed as a separate group in the remainder of this summary. They do, of course, contribute to the total rural and national data.)

The average rural home is occupied by a married couple. Whatever the husband's race, he is between the ages of 45 and 64. Heads of rental units are younger: more are in the 24- to 29-year-old age bracket than any other.

Among rural blacks, the age differential between owners and renters disappears. Young black families do not move toward ownership in the same proportion as the general rural population.

Yet ownership characterizes the rural household. Of the 20.6 million rural housing units in the United States, almost 78 percent are owner-occupied (in contrast to about 65 percent for all households in the Nation). And rural black households, which number 1.2 million, own their own homes in percentages almost approximating that of the general population – 64 percent.

Another set of facts is relevant here: Of the rural households that own and occupy their own housing, 64 percent live in one-family units on less than ten acres and have no business on their property. Of these, 42 percent own their housing free and clear. For blacks in the same specified group, the free-and-clear figure is 51 percent. (Given the income of rural blacks reported in a later paragraph, this high percentage suggests that the homes of many black households have been inherited.)

Nationally, 14 percent of all multiperson households are headed by women. In rural areas the figure drops to about 9 percent, nearly two-thirds of whom are owners. The situation is different for blacks. Over 27 percent of rural black households with two or more people are headed by women, but of them only slightly more than half own their living units.

One-person households, which nationally comprise 20 percent of all households, make up only 14.5 percent of rural households, but again nearly two-thirds are owner-occupied, in contrast with less than half on the national scene. Rural blacks live alone more frequently – 17 percent, and over half are owners.

The value of owner-occupied homes varies sharply. In the Nation as a whole, the median value was \$32,300 in 1976. Rural housing occupied by the owners had a median value some \$2,700 less – \$29,600. A further breakdown gives us a median value of \$32,200 for farm houses and \$29,600 for non-farms. The housing owned by rural blacks had a median value of \$14,800.

These figures reflect median household incomes. In 1976, the national figures were \$14,400 for owners and \$8,100 for renters. In rural areas, the median was \$12,400 for owners and, again, \$8,100 for renters. But for rural blacks the income drops to \$6,800 for owners and \$4,300 for renters. (The poverty threshold for a four-person farm family that year was \$4,950.)

From these lower-than-average income figures, we might guess that rural housing – and especially rural black housing – is less adequate than housing nationwide. To confirm the guess, let us move on to the substance of this summary.

Table 1
RURAL HOUSEHOLDS AND HOW THEY LIVE/1976*

	SMSA	Non-SMSA	All Locations
A. Geographic Distribution			
Percentage	31%	69%	100%
Number	6,457,000	14,227,000	20,684,000
B. Tenure			
Homeowner	5,101,000	10,996,000	16,098,000
Cash Rent	1,170,000	2,389,000	3,559,000
No Cash Rent	185,000	842,000	1,027,000
C. Physical Characteristics			
1. Year Structure Built			
After March 1970	1,808,000	2,918,000	4,726,000
1965-1970	1,033,000	2,039,000	3,072,000
1960-1964	677,000	1,199,000	1,876,000
1950-1959	877,000	1,822,000	2,699,000
1940-1949	479,000	1,287,000	1,765,000
1939 or Earlier	1,583,000	4,962,000	6,546,000
2. Units in Structure			
1	5,331,000	11,679,000	17,009,000
2-4	306,000	549,000	855,000
5 or More	246,000	163,000	409,000
3. Mobile Home	547,000	1,837,000	2,411,000
4. Hotel, Rm. House	4,000	16,000	19,000
5. Number of Bathrooms			
None or Shared	188,000	975,000	1,163,000
1 Bath, but Separated	13,000	48,000	61,000
1	3,403,000	8,977,000	12,379,000
1.5	1,066,000	1,743,000	2,809,000
2	1,178,000	1,976,000	3,154,000
More than 2	610,000	508,000	1,118,000
6. Type of Heating Equip.			
Central	3,886,000	6,794,000	10,680,000
Steam	848,000	1,065,000	1,913,000
Electric	589,000	1,450,000	2,038,000
Floor, Wall	287,000	966,000	1,254,000
Room Heater	359,000	1,623,000	1,983,000
Other/Inad.	487,000	2,329,000	2,817,000
7. Air Conditioning	3,153,000	6,300,000	9,453,000
8. Alterations During Year (\$100 or more)	786,000	1,149,000	1,935,000
9. Water Source			
Public, or Private Company	3,400,000	6,318,000	9,718,000
Individual Well	2,778,000	7,029,000	9,807,000
Other	279,000	880,000	1,159,000
10. Electricity			
Yes	6,444,000	14,195,000	20,640,000
No	12,000	32,000	45,000
11. Type of Sewage Disposal			
Public Sewer	1,871,000	3,181,000	5,052,000
Septic Tank/Cesspool	4,446,000	10,297,000	14,742,000
Chemical Toilet	5,000	7,000	12,000
Privy	126,000	650,000	776,000
Other	9,000	93,000	101,000

*These rounded-off figures are derived from computer tapes and may vary from those published in Annual Housing Survey reports.

Table 2
THE TOTAL HOUSING PICTURE/1976*

	SMSA	Non-SMSA	All Locations
A. Geographic Distribution			
Percentage	68%	32%	100%
Number	50,534,000	23,546,000	74,080,000
B. Tenure			
Homeowner	30,969,000	17,003,000	47,972,000
Cash Rent	18,862,000	5,513,000	24,375,000
No Cash Rent	703,000	1,030,000	1,773,000
C. Physical Characteristics			
1. Year Structure Built			
After March 1970	7,611,000	3,928,000	11,539,000
1965-1970	6,121,000	2,947,000	9,069,000
1960-1964	5,643,000	2,054,000	7,696,000
1950-1959	9,720,000	3,574,000	13,294,000
1940-1949	5,227,000	2,363,000	7,590,000
1939 or Earlier	16,212,000	8,680,000	24,892,000
2. Units in Structure			
1	31,922,000	18,725,000	50,647,000
2-4	7,441,000	1,807,000	9,248,000
5 or More	9,562,000	944,000	10,506,000
3. Mobile Home	1,609,000	2,070,000	3,679,000
4. Hotel, Rm. House	220,000	56,000	276,000
5. Number of Bathrooms			
None or Shared	681,000	1,265,000	1,946,000
1 Bath, but Separated	196,000	80,000	276,000
1	30,228,000	14,945,000	45,273,000
1.5	7,521,000	3,068,000	10,589,000
2	8,188,000	3,213,000	11,401,000
More than 2	3,620,000	975,000	4,595,000
6. Type of Heating Equip.			
Central	27,119,000	11,698,000	38,818,000
Steam	11,314,000	2,287,000	13,602,000
Electric	2,768,000	2,011,000	4,779,000
Floor, Wall	4,561,000	1,888,000	6,450,000
Room Heater	2,162,000	2,432,000	4,593,000
Other/Inad.	2,609,000	3,229,000	5,839,000
7. Air Conditioning	27,571,000	11,248,000	38,818,000
8. Alterations During Year (\$100 or more)	4,877,000	2,059,000	6,936,000
9. Water Source			
Public, or Private Company	46,448,000	15,421,000	61,869,000
Individual Well	3,818,000	7,231,000	11,049,000
Other	267,000	894,000	1,161,000
10. Electricity			
Yes	50,456,000	23,491,000	73,947,000
No	77,000	55,000	133,000
11. Type of Sewage Disposal			
Public Sewer	42,463,000	11,712,000	54,174,000
Septic Tank/Cesspool	7,904,000	11,041,000	18,945,000
Chemical Toilet	8,000	7,000	15,000
Privy	129,000	674,000	803,000
Other	30,000	112,000	143,000

*These rounded-off figures are derived from computer tapes and may vary from those published in *Annual Housing Survey* reports.

Table 3
INADEQUATE HOUSING SUFFERS FROM ONE OR MORE OF THESE DEFECTS*

Plumbing	unit lacks or shares complete plumbing (hot and cold water, flush toilet, and bathtub or shower inside the structure)
Kitchen	unit lacks or shares a complete kitchen (installed sink with piped water, a range or cookstove, and mechanical refrigerator - not an icebox)
Sewage	absence of a public sewer, septic tank, cesspool, or chemical toilet
Heating**	there are no means of heating, <i>or</i> unit is heated by unvented room heaters burning gas, oil, kerosene, <i>or</i> unit is heated by fireplace, stove, or portable room heater
Maintenance	it suffers from any two of these defects: leaking roof open cracks or holes in interior walls or ceiling holes in the interior floor broken plaster or peeling paint (over 1 square foot) on interior walls or ceilings
Public Hall	it suffers from any two of these defects: public halls lack light fixtures loose, broken, or missing steps on common stairways stair railings loose or missing
Toilet Access	access to sole flush toilet is through one of two or more bedrooms used for sleeping (applies only to households with children under 18)
Electrical	unit has exposed wiring <i>and</i> fuses blew or circuit breakers tripped 3 or more times in last 90 days <i>and</i> unit lacks working wall outlet in 1 or more rooms

*The defects listed here are selected from those enumerated in the *Annual Housing Survey*.

**Does not apply in the South Census Region.

What Are We Measuring?

Physical adequacy. The physical adequacy of housing is concerned with the availability of heating and plumbing, with structural soundness, with the availability of sewage-disposal systems, with the maintenance of the living unit, its design, its electrical system, and its kitchen.

Table 3 lists and defines the eight physical flaws that HUD has specifically selected to define physical inadequacy: PLUMBING, KITCHEN, MAINTENANCE, PUBLIC HALL, HEATING, ELECTRICAL, SEWAGE, and TOILET ACCESS.

Affordability. The measure of affordability used here is the ability of a family to pay for adequate housing, given the space it needs for its size. It is computed as a ratio of the total cost of adequate housing (which for renters includes utilities and property insurance, as well as rent; and, for owners, utilities, property insurance and tax, mortgage, and interest costs) to the household's total cash income. (Data on non-cash income such as food stamps are not available from the *Annual Housing Survey*.)



What Have We Learned?

Nationwide in 1976, housing units with one of the deficiencies defined in Table 3 ran over 7 million or 9.7 percent. The 20.6 million units occupied by rural households in 1976 were flawed at a higher rate – 12.4 percent.

Although MAINTENANCE flaws are most frequent in the housing of the Nation (Table 4), PLUMBING and SEWAGE flaws are the most frequent in rural dwellings (Table 5). The percentage of KITCHEN flaws – 3.3 percent – is also considerably higher in rural areas than it is nationally, where only 1.8 percent of all units are reported to have such deficiencies.

Thus, the deficiencies most difficult and expensive to correct (PLUMBING, SEWAGE, and KITCHEN) mark the rural household. MAINTENANCE flaws are also high, but no higher than for all housing units.

The most likely explanation is that rural households – by their very location at a distance from the piped water and sewer facilities of urban areas – are likely to lack some of the amenities considered essential for standard housing. It is also possible, given the lower median income, that some rural households cannot afford adequate link-ups.

When we compare the physical adequacy of farm and non-farm housing units (Tables 6 and 7), we find that farm units have a higher rate of deficiencies – 15.7 percent as against 11.9 percent for non-farm units. The higher percentages are primarily the result of PLUMBING, SEWAGE, MAINTENANCE, and KITCHEN flaws.

Table 4
NEARLY 10% OF ALL HOUSING WAS FLAWED IN 1976

Type of flaw	Units without flaw	Units with flaw	% of all units with flaw	Inadequate units by number of flaws				
				1 flaw	2 flaws	3 flaws	4 flaws	5+ flaws
Plumbing	72,134	1,946	2.6%	522	656	504	238	26
Kitchen	72,738	1,342	1.8%	311	356	421	228	26
Maintenance	71,034	3,046	4.1%	2,243	456	137	185	26
Public Hall	73,777	303	0.4%	199	84	14	60	0
Heating	72,924	1,156	1.6%	864	149	62	64	19
Electrical	74,012	68	0.1%	19	26	13	2	8
Sewage	73,135	945	1.3%	0	242	445	233	26
Toilet Access	72,728	1,352	1.8%	1,126	201	23	2	0
Totals (in thousands)	66,906	7,174	9.7%*	5,283	1,085	540	239	26

*Because the data in this and other tables are based on samples rather than on a count of all households in the country, the figures given are estimates. Thus, for example, once in ten times the true figure for the summarizing average (9.7%) will vary by 0.3 percentage points. Statistically speaking, the confidence interval for this figure is plus or minus 0.3 percentage points at the 90 percent confidence level.

Table 5
RURAL HOUSING EXHIBITS HIGH RATES OF PLUMBING, SEWAGE, AND KITCHEN FLAWS/1976

Type of flaw	Units without flaw	Units with flaw	% of all units with flaw	Inadequate units by number of flaws				
				1 flaw	2 flaws	3 flaws	4 flaws	5+ flaws
Plumbing	19,521	1,163	5.6%	182	302	449	205	28
Kitchen	19,992	692	3.3%	50	48	373	193	28
Maintenance	19,866	818	4.0%	446	121	69	155	28
Public Hall	20,672	12	0.1%	5	7	0	0	0
Heating	20,153	531	2.6%	339	73	40	55	21
Electrical	20,654	30	0.2%	10	5	5	2	8
Sewage	19,807	877	4.2%	0	218	429	202	28
Toilet Access	20,184	500	2.4%	424	68	8	0	0
Totals (in thousands)	18,117	2,567	12.4%*	1,457	421	459	202	28

*The 90% confidence interval for the summarizing average (12.4%) is plus or minus 0.7 percentage points. The 90% confidence interval for the percentage of units with individual flaws is smaller. What this means is that, in theory, we can say with 90% certainty that the results differ by no more than 0.7 in either direction – if we had surveyed every household.

**Table 6
FARM HOUSING SHOWS A HIGH RATE OF FLAWS/1976**

Type of flaw	Units without flaw	Units with flaw	% of all units with flaw	Inadequate units by number of flaws				
				1 flaw	2 flaws	3 flaws	4 flaws	5+ flaws
Plumbing	2,473	189	7.1%	24	45	75	37	6
Kitchen	2,550	112	4.2%	6	4	61	35	6
Maintenance	2,519	143	5.4%	76	18	11	31	6
Public Hall	2,661	1	0.1%	0	1	0	0	0
Heating	2,577	85	3.2%	55	10	7	8	4
Electrical	2,657	5	0.2%	0	1	2	1	2
Sewage	2,511	150	5.6%	0	34	72	37	6
Toilet Access	2,575	87	3.3%	73	14	1	0	0
Totals (in thousands)	2,244	418	15.7%*	233	63	76	37	6

*The 90% confidence interval for the summarizing average (15.7%) is plus or minus 1.7 percentage points. The 90% confidence interval for the percentage of units with individual flaws is smaller. What this means is that, in theory, we can say with 90% certainty that the results differ by no more than 1.7 in either direction – if we had surveyed every household.

**Table 7
NON-FARM HOUSING IS LESS FLAWED THAN THE RURAL AVERAGE/1976**

Type of flaw	Units without flaw	Units with flaw	% of all units with flaw	Inadequate units by number of flaws				
				1 flaw	2 flaws	3 flaws	4 flaws	5+ flaws
Plumbing	17,039	975	5.4%	157	257	274	165	22
Kitchen	17,443	579	3.2%	44	44	312	158	22
Maintenance	17,347	675	3.7%	370	102	58	123	22
Public Hall	18,011	11	0.1%	5	6	0	0	0
Heating	17,597	425	2.5%	284	62	37	46	18
Electrical	17,997	25	0.1%	10	4	4	2	6
Sewage	17,296	726	4.0%	0	184	357	165	22
Toilet Access	17,609	413	2.3%	352	54	7	0	0
Totals (in thousands)	15,872	2,149	11.9%*	1,223	358	383	165	22

*The 90% confidence interval for the summarizing average (11.9%) is plus or minus 0.7 percentage points. The 90% confidence interval for the percentage of units with individual flaws is smaller. What this means is that, in theory, we can say with 90% certainty that the results differ by no more than 0.7 in either direction – if we had surveyed every household.



In farm units, MAINTENANCE, at 5.2 percent, rises considerably above the national and rural averages of approximately 4 percent. Perhaps this rate can be accounted for by age: over half (55 percent) of farm houses were built prior to World War II. Non-farm units are newer; only 28 percent were built before that time.

As we see in Table 8, rural households headed by blacks have by far the highest percentage of flaws – 39.8 percent. Again PLUMBING, SEWAGE, and KITCHEN stand out, as they do in all rural housing, but now at extraordinarily high rates. Nearly a third of all rural black housing has PLUMBING flaws; about a quarter suffers from SEWAGE and KITCHEN flaws. The fourth-ranked flaw – MAINTENANCE – appears almost four times as often in rural black housing as it does in all rural housing.

The same explanations would seem to obtain as for all rural households, but in the case of rural blacks, we must certainly emphasize income. As already noted, the median income of rural blacks is about half that of all rural households.

Should we choose to divide rural housing on the basis of the race of the head of house, we discover that rural white housing by itself (Table 9) is physically adequate at almost the same rate as national housing (Table 4). Given the ever-present margin for statistical error, the national housing picture and the rural white picture may be considered to overlap – both are about 90 percent adequate. The difference lies in the kinds of flaws rather than in the overall rate of flaws.

Black housing, on the other hand, is very frequently flawed, both on the national and the rural scenes. Twenty-one percent of the housing units occupied by blacks in America have at least one physical deficiency; and nearly 8 percent have two or more. In rural areas almost 40 percent of black housing has at least one flaw and nearly 30 percent has multiple flaws. These rates mean that by a margin of nearly 13 percent black households in rural areas reside in even less adequate accommodations than the heavily urbanized Puerto Ricans – the least well housed of all minorities groups we have examined in this series.

Table 8
THE HOUSING OF RURAL BLACKS IS ALMOST FOUR TIMES MORE FLAWED THAN THE NATIONAL AVERAGE/1976

Type of flaw	Units without flaw	Units with flaw	% of all units with flaw	Inadequate units by number of flaws				
				1 flaw	2 flaws	3 flaws	4 flaws	5+ flaws
Plumbing	1,584	376	31.1%	36	56	186	91	8
Kitchen	917	291	24.1%	10	11	173	90	8
Maintenance	1,019	189	15.6%	44	22	25	90	8
Public Hall	1,206	2	0.2%	0	2	0	0	0
Heating	1,198	10	0.8%	6	1	2	1	1
Electrical	1,195	13	1.1%	2	1	2	2	7
Sewage	894	314	26.0%	0	39	176	91	8
Toilet Access	1,168	40	3.3%	25	12	3	0	0
Totals (in thousands)	728	481	39.8%*	121	72	189	91	8

*The 90% confidence interval for the summarizing average (39.8%) is plus or minus 3.7 percentage points. The 90% confidence interval for the percentage of units with individual flaws is smaller. What this means is that, in theory, we can say with 90% certainty that the results differ by no more than 3.7 in either direction - if we had surveyed every household.

Table 9
WHITES IN RURAL AREAS LIVE IN HOUSING THAT APPROXIMATES THE NATIONAL FLAW RATE/1976

Type of flaw	Units without flaw	Units with flaw	% of all units with flaw	Inadequate units by number of flaws				
				1 flaw	2 flaws	3 flaws	4 flaws	5+ flaws
Plumbing	18,550	773	4.0%	145	241	259	109	18
Kitchen	18,929	394	2.0%	40	36	198	102	18
Maintenance	18,705	618	3.2%	400	95	42	64	18
Public Hall	19,313	10	0.1%	5	5	0	0	0
Heating	18,828	495	2.6%	316	65	41	54	18
Electrical	19,307	16	0.1%	9	4	4	0	0
Sewage	18,769	554	2.9%	0	178	249	108	18
Toilet Access	18,867	456	2.4%	396	55	5	0	0
Totals (in thousands)	17,278	2,045	10.6%*	1,312	340	266	109	18

*The 90% confidence interval for the summarizing average (10.6%) is plus or minus 0.7 percentage points. The 90% confidence interval for the percentage of units with individual flaws is smaller. What this means is that, in theory, we can say with 90% certainty that the results differ by no more than 0.7 in either direction - if we had surveyed every household.

The Economics of Adequate Housing

In previous reports in this series, we have accounted for inadequacies of housing by income, demographic characteristics of tenants, and in some cases by the discriminatory attitudes of private housing and mortgage markets.

In this summary, we have already accounted for the inadequacies of rural housing by pointing to:

- lack of access to public water and sewer systems
- income (especially in the case of blacks)
- age of farm housing

Now let us look at the economics of the issue in a more detailed way.

Table 10 shows how income determines one's chances for adequate housing. Using location as a proxy for the price of housing, Table 10 indicates that for a given region, a household's chance of being inadequately housed declines steadily as its income rises.

Let us see how that works. Consider a family or a household of four with a cash income of \$6,000. Adjusted for family size, the income would appear on Table 10 as \$3,000, which represents an approximation of poverty.

If this family were located in the North Central area - Michigan, for example, or Missouri - it would have a .10 probability of living in an inadequate housing unit. That is, there'd be 1 chance in 10 that the household would live in a unit having one or more physical flaws.

The same family, now with double the adjusted income - \$6,000 - would have only a .04 or 1 chance in 25 of living in inadequate housing if it remained in a North Central State. Again double this adjusted income - \$12,000 - and the probability drops to zero.

Table 10
INCOME DETERMINES ONE'S CHANCES FOR ADEQUATE HOUSING*

Adjusted Income Level	Census Region			
	Northeast	North Central	South	West
Less than \$2,499	.22	.20	.22	.24
\$2,500 to 2,999	.16	.14	.16	.18
\$3,000 to 3,999	.11	.10	.12	.14
\$4,000 to 5,999	.10	.08	.10	.12
\$6,000 to 7,999	.06	.04	.06	.08
\$8,000 to 9,999	.04	.02	.04	.06
\$10,000 to 11,999	.02	.01	.03	.05
\$12,000 to 14,999	.01	.00	.02	.04
\$15,000 to 19,999	.01	.00	.01	.03
Over \$20,000	.01	.00	.01	.03

*Adjusted income is the household's cash income divided by the square root of the number of persons in the household. \$3,000 in adjusted income represents an approximation of poverty for any household size. The probabilities presented refer to a household located in an SMSA with population under 250,000 in 1976.

The standard error of the estimates used to construct this table is such that the 90% confidence level for differences in probabilities is always less than plus or minus .02.

Table 11
THE PROBABILITY OF A POOR RURAL HOUSEHOLD'S LIVING IN INADEQUATE HOUSING IS ABOUT THE SAME ACROSS THE NATION*

Location of housing unit	Census Region			
	Northeast	North Central	South	West
All Rural	.26	.25	.26	.28
Farm of ten acres or more	.23	.21	.23	.25
Farm of less than ten acres	.24	.22	.24	.26
Non-farm on ten acres or more	.26	.25	.27	.29
Non-farm on less than ten acres	.19	.18	.20	.22
Urban area outside SMSA	.23	.21	.23	.25

*The probabilities refer to a household with adjusted income under \$2,500 per year or cash income under \$5,000 for a family of four. In general, the confidence interval for these figures is plus or minus .02 at the 90 percent confidence level.

Table 12
ON THE RURAL SCENE, BLACKS, PEOPLE WHO HEAD LARGE HOUSEHOLDS, AND SINGLE MEN ARE MOST LIKELY TO LIVE IN FLAWED HOUSING WHEN THEY ARE POOR

Age of head	Demographic Characteristics Household size	Sex of head	Race of Household Head	
			White	Black
65+	1 person	F	.20	.55
		M	.40	.76
	2-5 persons	F	.26	.61
		M	.21	.46
30-64	1 person	F	.20	.45
		M	.40	.52
	2-5 persons	F	.25	.50
		M	.26	.42
	6+ persons	F	.42	.55
		M	.32	.54
under 30	1 person	F	.25	.46
		M	.32	.64
	2-5 persons	F	.28	.49
		M	.28	.43

Probabilities refer to a household with an adjusted income (current cash income, including transfer payments, divided by the square root of the number of household members) of less than \$2,500 living in a rural non-farm or farm area in the North Central census region. Comparable relative probabilities of inadequate housing would be found in other regions. In general, the confidence interval for these figures is always less than plus or minus .10 at the 90% confidence level.

Move the poverty-level household to the West, and the odds increase; they would have 1 chance in 7 (.14) of living in inadequate housing.

Table 11 is based on an adjusted cash income of under \$2,500. It shows how such a poor household would fare with housing in rural locations generally, on farms of two different sizes, on non-farms of two different sizes, and, for comparison, in urban areas outside metropolitan areas (SMSAs). Differences of more than .02 in the probabilities are statistically significant.

Regional location seems to have relatively little effect on the probabilities of being ill-housed in rural areas. What counts instead – but only for non-farm households – is acreage. In every region, the poor non-farm household living on 10 or more acres has a greater likelihood of inhabiting physically flawed housing than the same household living on a smaller piece of land.

Table 12 ignores acreage in order to examine the relationship between the probability of flawed housing and the demographic characteristics of the head of the poor household. Here we see still sharper distinctions.

The average rural household is white, non-farming, and male-headed, and it falls within Table 12's categories of 2-5 persons in the 30- to 64-year-old age bracket. The probability of inadequate housing for such a rural household, if it is poor, is .26 – better than 1 chance in 4. The probability for blacks is .42 – uncomfortably close to 1 chance in 2, and almost twice the chance it would face were it to seek housing in the city.



Louise Fairfax

How Many Rural Households Can Afford Adequate Housing?

Up to this point, we have looked at the quality of rural housing and at the probability of living in flawed housing. Now let us approach rural housing from the point of its affordability.

The traditional rule of thumb makes 25 percent of one's current income the "proper" amount to spend on housing, and in fact in 1976, 53 percent of all those who rented spent under 25 percent of income on their living accommodations. But although this quarter-of-income standard is a reasonable one, to avoid rigidity we judge affordability as a ratio between household income and the cost of adequate housing.

The first column of Table 13 shows that 80 percent of all U.S. households are estimated to be able to find unflawed, uncrowded living accommodations for 25 percent or less of their incomes. For 30 percent of income, 84 percent can get adequate housing.

The situation for rural householders is somewhat different. Only 74 percent of rural householders can be expected to find unflawed, uncrowded housing for the traditional 25 percent of income, and only about 79 percent can find it for 30 percent of income.



Table 13
THE COST OF HOUSING FALLS MORE HEAVILY ON RURAL HOUSEHOLDS THAN ON ALL U.S. HOUSEHOLDS

Ratio of adequate housing cost to income	% of all U.S. households	% of rural households
Under 10%	44.0	30.3
Under 20%	74.3	65.6
Under 25%	80.3	74.0
Under 30%	84.4	78.9
Under 35%	87.5	82.4
Under 40%	89.9	85.1
Under 50%	92.9	88.9
Under 60%	94.7	91.2
Under 70%	96.0	92.7

In other words, when seeking standard housing on the open market, rural households more frequently must spend a larger proportion of their incomes for it than the general population has to.

We can put these figures into a deeper perspective, however. First of all, people in rural areas own their living units far more frequently than the average American does. Secondly, rural households approach the national affordability ratios more closely than do black households (of whom 63 percent can find adequate housing for 25 percent of income), female-headed households (53 percent), elderly households (59 percent), and Hispanic households (70 percent).

But when we speak of households – rural, Hispanic, female-headed, whatever – we are speaking of an abstraction. There are very well-to-do households living in idyllic villages in New England and very poor households living in desperation in Southern back country; there are hardscrabble farms and millionaire farmers. Like the rest of America, rural America is a mosaic containing the affluent as well as the poverty-stricken.

Amid the rural averages are people in terrible need – many of them black, many of them minority, many of them old, many of them totally unable to secure adequate housing without outside help. If more Americans want to live in rural areas than in any other location – and they do – they probably do not envision living as some of the rural poor do: in shacks, with privies.

For the Record, 1976

Compared to the housing of the total population, rural housing as a whole is slightly newer because of the recent migration of people back into rural areas. It is also more often owned by the people who live in it than is the housing of the total population. Nevertheless it is more flawed than the housing of the Nation, with SEWAGE, PLUMBING, and KITCHEN deficiencies occurring most frequently.

The housing of the 2.7 million farm households is more physically inadequate than non-farm housing, and the housing occupied by the 1.2 million rural blacks is still more inadequate – more flawed than all other rural housing and more flawed than urban housing.

Another way to estimate how well households live is to estimate how much of their incomes they must spend for adequate housing. We find that 26 percent of rural households (but only 20 percent of the total household population) would have to spend over a quarter of their incomes for adequate, uncrowded housing were they to seek it on the market.

R. Limmer



The likelihood of living in flawed housing in a rural area depends on:

- income
- race
- sex and household size
- whether or not one lives on a farm
- acreage (for non-farm households)

And although not specifically analyzed here, length of residence may also be a factor. (Because our data do not separate the housing of new, often affluent arrivals from the housing of long-term, often poor residents, we cannot confirm with numbers what we are reasonably sure is the case. But new arrivals – unprecedently many – are undoubtedly bidding up the price of land and of available standard housing, thereby making it even more difficult for low-income rural households to obtain better housing for themselves.)



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