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AGRICULTURAL ECONOMIC REPORT NO. 193

RURAL HOUSING:
Trends and Prospects

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ABSTRACT

The quality of rural housing has improved markedly since World War II; from 38 percent standard in 1950 to 67 percent in 1960 and nearly 80 percent in 1968. Rural housing has shared in the general upgrading of housing which resulted from the postwar building boom. New construction and renovation has exceeded new household formations by a wide enough margin to permit a general shifting up and abandonment or demolition of the poorest units. Rural America however, still had higher percentages of substandard housing than did urban areas in 1968: 17.1 percent of nonmetropolitan housing was substandard compared with 5.7 percent in the central cities of the SMSA's and 4.0 percent outside the central cities of the SMSA's. The substandard rural housing is heavily concentrated in the southeastern States. The analysis emphasizes rural aspects of the private sector construction industry, mobile homes, the financing of housing, government programs, and projections.

Key Words: Rural housing, housing construction, home rental and ownership, housing cost, mobile homes, financing housing, Federal and local housing programs.

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HIGHLIGHTS

The quality of rural housing has improved markedly since 1950, when 62 percent was substandard; that is, it lacked one of the basic items of plumbing or was dilapidated. In 1960, 33 percent was substandard, and sample data for nonmetropolitan areas in 1968 indicate that the proportion had declined to 20 percent.

New construction and renovation has outpaced the formation of new households in both rural and urban areas and has contributed to the improvement of quality.

Rural housing is still inferior to urban. A 1968 census survey showed 17.1 percent substandard outside the Standard Metropolitan Statistical Areas, 5.7 percent in the central cities, and 4.0 percent in the suburbs. The substandard rural housing is concentrated in the southeastern States.

Quality of housing, of course, rises with increased income, but only up to a point. Very poor people spend perhaps more than 50 percent of their income on housing, but the percentage falls off as income increases, and generally levels off at about the median income. When farm people have more money to spend, their tastes do not usually run to luxury housing.

Farmers had lower quality homes than other rural people, reflecting their production-oriented attitudes, the greater average age of farm homes, and the greater expense of providing water and sewerage to outlying farmsteads, compared with rural people living in or near towns and suburbs. Rural Negroes and other minority groups had sharply lower quality housing at all income levels than the total rural population; lack of access to adequate housing seems to be a major cause of this situation.

Mortgage credit is less available and more expensive in rural areas. Housing loans by Farmers Home Administration are helping to fill this gap. They are made principally to families of low to moderate incomes but very poor households cannot afford loans even at nominal rates of interest.

RURAL HOUSING: TRENDS AND PROSPECTS

by

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INTRODUCTION

The Housing and Urban Development Act of 1968 set a goal of adequate housing for all U.S. citizens within 10 years. If we are to reach that goal--and know we have reached it--a considerable volume of statistics and other research information will be needed. Much of that research has not yet been done. This publication, however, pulls together some of what is now known, and draws some inferences from that knowledge to provide a better basis for decisions about rural housing.

A historical perspective highlights the residential building boom which has persisted during most of the period since World War II. The second major section draws comparisons between the proportions of substandard housing--farm, rural, and urban--by regions and by race. These use Bird's data, 1/ drawn largely from the 1960 Census of Housing, but they also include the recent Census Bureau sample study of housing conditions during August 1968.

The national relationships between housing quality and such socioeconomic variables as household income, housing expenditures, race, tenure, and farm or rural nonfarm location are analyzed. Income is shown to be a primary determinant of housing quality among the poor.

The report covers a considerable range of actions to meet the needs for rural housing, with emphasis on the 1960's. Residential construction is primarily a private sector activity. Over recent decades, it is shown to have exceeded the formation of new households in both rural and urban areas. The rural and urban impacts of major sources of mortgages finance are summarized, including a section on the rural credit gap.

1/ Bird, Ronald, and others. Status of Rural Housing in The United States, U.S. Dept. Agr., Agr. Econ. Rpt. No. 144, table 15. Sept. 1968.

Mobile homes have become a sizable factor in the housing supply, but precise data on their rural-urban impact are not available. Advance reports from the 1967 Census of Construction Industries were drawn upon for a basic description of the diversity of the residential construction component. Price indexes provide a rough index of the comparatively slow rate of technological progress. The role of national and local governments in helping to meet housing needs is developed, with emphasis on the housing loan programs of the Farmers Home Administration.

The final section of the report deals with projections. A formal set of national projections was developed by the Department of Housing and Urban Development (HUD), toward a goal of adequate housing for all Americans by 1978. These are assessed annually. The rural component of these projections is estimated.

HISTORICAL TRENDS IN U.S. HOUSING

New Construction

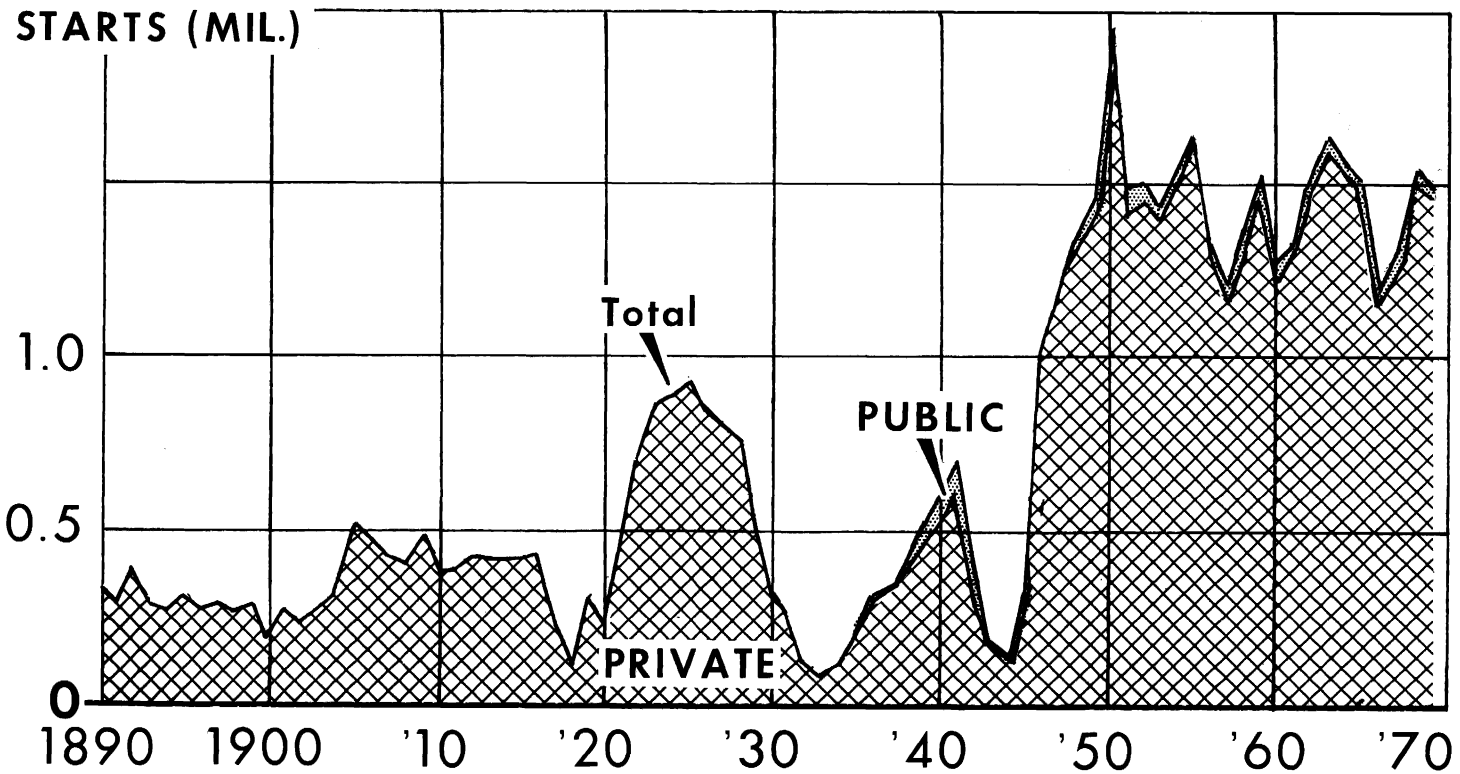
Recording of statistical data on U.S. housing began in 1890. The number of starts of nonfarm housing units constitutes the closest approach to a series on new construction of residential units (fig. 1).

The annual data on housing starts dramatize the extreme fluctuations in the residential construction industry. The decline during World War I reflected the shortages of materials and manpower. The building boom of the 1920's reflected pent-up demands from World War I, supported by the adequate purchasing power of a prosperous decade. In that decade, new starts were equal to 41 percent of the opening inventory of occupied housing. The stagnation of building during the Great Depression reflected a minimum demand as people "made-do" with the existing stock. The short-lived increase in housing starts in the late 30's was interrupted by the shortages of building materials during World War II.

The sustained high rate of residential construction since World War II is the most significant development in housing over the past 78 years. It substantially exceeds the previous peak rate of new construction in the prosperous 1920's.

In the 1950's, 15 million new housing units were started--more than double the number started in the 1920's, but in the same proportion (41 percent) of the opening inventory. That building boom has already continued more than 20 years. The unprecedentedly high general level of residential construction which has prevailed since 1947 has, however, been marked by several setbacks in construction activity. These occurred during the Korean conflict of 1950-53, the monetary restraint periods of 1955-57 and 1959-60, and that of 1965-66,

NONFARM HOUSING STARTS, 1890-1969



SOURCE: BUREAU OF CENSUS, HOUSING CONSTRUCTION STATISTICS, 1890 TO 1964, TABLE A, AND HOUSING STARTS, C-20-70-3.

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Figure 1

accompanying the Viet Nam buildup. 2/

The 78-year history of housing starts demonstrates that increases in residential construction are vulnerable to three types of disruption. Periods of armed conflict require that resources be devoted to higher priority needs. In the 1930's, housing was hard-hit by unemployment and other manifestations of sharply reduced consumer purchasing power. But, boom times may also reduce housing starts as interest rates soar and scarce money supplies are bid away from the mortgage market. Apparently, residential construction is most active when times are good enough to provide adequate consumer demand but not so good as to require monetary restraint.

Housing constructed by public agencies is shown for 1935 to date as the narrow band at the top of the time series in figure 1. Publicly constructed housing has been a comparatively small portion of the total. The Federal Government and other public agencies have, however, had considerable impact on residential construction as will be shown.

Persons per Household

Since 1890, the number of occupied housing units in the United States has increased at a more rapid rate than the population (table 1). The average number of persons per household has correspondingly declined.

Comments in the 1950 Census of Housing point out that the decline in the average size of household in the last 60 years is attributable mainly to a decline in the birth rate. Further, the total number of smaller households has been augmented by changes in the pattern of family living and the longer life-span. According to census analysts, households in the past usually contained not only the head, wife, and children, but often older or single relatives of the family and sometimes servants. This pattern has changed, with fewer households including relatives and servants. The long-term trend is one of "spreading out," with each adult group having its own household. Of particular importance is the increasing number of older people. The growing tendency of these people to maintain separate households has been an important factor in contributing to an increasingly larger number of small households.

Farm Households

The number of farm housing units increased gradually through 1940; since then, it has declined rapidly. The major growth in rural housing units has been in the nonfarm sector.

2/A particularly thorough analysis of recent cycles is contained in a Federal Home Loan Bank Board article entitled, "Cycles in Mortgage Credit Availability and the 1966 Experience," published in A Study of Mortgage Credit, by the Senate Subcommittee on Housing and Urban Affairs, Committee Print, May 22, 1967, pp. 19-40.

Ownership and Rentals

Since 1890, more farmers have been homeowners than renters (table 2). The ownership percentage declined until 1940, but recovered to record levels in 1960.

Table 1.--Occupied housing units and population, 1890-1969

Year	Occupied Units	Population	Persons per unit	Farm units
	Mil.	Mil.	Persons	Mil.
1890.....	12.7	62.9	5.0	4.8
1900.....	16.0	76.0	4.8	5.7
1910.....	20.3	92.0	4.5	6.1
1920.....	24.4	105.7	4.3	6.8
1930.....	29.9	122.8	4.1	6.6
1940.....	34.9	131.7	3.8	7.1
1950.....	42.8	150.7	3.5	5.7
1960.....	53.0	180.7	3.4	3.6
1969.....	61.8	197.3	3.2	2.9

Sources: 1890-1950 from 1950 Census of Housing, vol 1, pt 1, tables J and L.
1960 from 1960 Census of Housing, vol 1, pt 1, tables F and I.
1969 from Current Population Reports, Bureau of the Census, Series P-60, No. 65, Oct. 31, 1969

Before 1940, most nonfarm households rented their dwellings. During the 1940's and 1950's the proportion of ownership rose rapidly, reflecting the full employment and higher income during and after World War II, the sale of existing rented homes for owner occupancy, and new construction aided by more liberal home-financing terms.

Until 1940, only a quarter of the Negro and other minority race household heads were owners. Their percentage of ownership rose in the 40's and 50's. During the eight decades of record, there has been comparatively little difference between the farm and nonfarm ownership percentages for households of minority races.

COMPARATIVE STATUS OF RURAL HOUSING

In evaluating rural housing, I have relied extensively on comparisons with

housing in urban areas. Available data for 1950, 1960, and 1968 provide comparisons for those dates and also yield measures of comparative progress. 3/ The geographic variations in rural housing, as measured by regional differences, are significant.

Table 2.--Percentage of housing owner-occupied, 1890-1960

Year	Proportion owned by--			
	All households		Minority races	
	Nonfarm	Farm	Nonfarm	Farm
1890.....	36.9	65.9	16.8	22.4
1900.....	36.5	64.4	20.4	27.6
1910.....	38.4	62.8	--	--
1920.....	40.9	58.1	--	--
1930.....	46.0	53.9	27.1	21.7
1940.....	41.1	53.2	23.9	23.1
1950.....	53.4	65.7	35.2	33.2
1960.....	61.0	73.8	38.4	37.3

Sources: 1890-1950: Census of Housing 1950, vol. 1, pt. 1, table L.
1960: Census of Housing 1960, vol. 1, pt. 1, table N.

Numbers of Rural and Urban Units

Nearly all the gain in the number of housing units since 1950 has occurred in urbanized areas (table 3). Two factors contribute to this: one is the movement from rural to urban areas and the second is definitional. As population density rises, many places earlier defined as rural are redefined as urban. On the basis of recent trends, it appears likely that the number of rural homes will continue to grow only slowly.

The number of farm households has continued to decline from a peak of 7.1 million in 1940 to 2.9 million in 1969. The number of rural nonfarm households has increased since 1950, but have represented a nearly constant proportion at just over 20 percent of the total.

The Standard Metropolitan Statistical Areas (SMSA's) provide an alternative classification of rural and urban. There are fewer households in the SMSA's than in the census definition of urban areas. Correspondingly, the households outside the SMSA's are more numerous than those in the census rural areas. The rates of change were not substantially different during the 1950's; 96 percent of the total gain in households was urban and 93 percent was within

3/ Housing Characteristics, Bureau of the Census Series H-121, No. 17, February 1970.

Table 3.--Housing units in the United States, by urbanization, 1950 to 1969

Urbanization	1950		1960		1966		1969	
	Thou.	Pct.	Thou.	Pct.	Thou.	Pct.	Thou.	Pct.
1. All housing units....	45,983	100.0	58,326	100.0	64,911	100.0	67,460	100.0
2. Vacancies.....	3,157	6.9	5,302	9.1	6,819	10.5	5,655	9.15
3. Households.....	42,826	93.1	53,024	90.9	58,092	89.5	61,805	91.85
4. Occupied units total	42,826	100.0	53,024	100.0	58,092	100.0	61,805	100.0
5. Urban.....	28,492	66.5	38,320	72.3	42,879	73.8	58,935	95.4
6. Rural nonfarm.....	8,613	20.1	11,137	21.0	11,999	20.7		
7. Farm.....	5,721	13.4	3,566	6.7	3,214	5.5	2,870	4.6
8. Inside SMSA's.....	24,514	57.2	34,000	64.1	38,399	66.1	N.A.	N.A.
9. Not in SMSA.....	18,312	42.8	19,024	35.9	19,693	33.9	N.A.	N.A.
10. Farmers Home Rural	--	--	17,100	32.2	--	--	N.A.	N.A.

Sources: 1950 and 1960: Census of Housing
1966 and 1969:

1. Computed from number occupied and vacancy rate.
2. Vacancy rates from "Housing Vacancies", Census, Series H-111, Nos. 56 & 57, table 10.
3. Number of households as of March, from "Current Population Report", Census, Series P-60, No. 65.
4. Same as households, line 3, by definition.
5. 1966-Unpublished data from "Survey of Economic Opportunity".
6. Same as item 5.
7. 1966-Census, Series P-20, No. 176; 1969: Census, Series P-60, No. 65.
8. Social and Economic Conditions of Negroes in the U.S., BLS Rpt. No. 322, Oct. 1967.
10. Includes places of 2,500 to 5,500 population.

N.A. = not available

SMSA's.

The Farmers Home Administration housing loan programs are available to households in places of 2,500 to 5,500 population as well as all those in the rural areas defined by the census. A tabulation from the 1960 census showed units within places of 2,500 to 5,500 population. Adding this to the 14,744,000 occupied units in census rural areas gives a total of 17.1 million households within their jurisdiction. This figure is 90 percent as large as the 19.0 million households not in SMSA's.

Quality of Housing

Commonly used standards of housing quality are (1) the presence of all the common plumbing fixtures--private flush toilet, hot running water, and bathtub or shower, and (2) not be dilapidated. Housing meeting these criteria is referred to as"standard." Thus, substandard housing is any unit which is structurally dilapidated or lacks one or more of the common plumbing fixtures. The numbers and percentages of standard and substandard housing units provide useful comparisons over time and among various groupings.

By 1950, nearly all homes had electricity, so this is now considered standard. Other housing quality factors listed in census data include heating units and fuels, absence of crowding (as indicated by less than 1 person per room), and the presence of such items as TV, radio, telephone, food freezer, and air conditioning. Understandably, the census does not attempt to measure some important but more subjective quality factors, such as light, ventilation, and character of the neighborhood.

Since 1950, the percentage of standard quality housing at all levels of urbanization has gained substantially (fig. 2, drawn from appendix table 1). The U.S. percentage rose from 71 in 1950 to 92 in 1968. Higher percentages of housing within the SMSA's are of standard quality; the 1968 survey indicated 96 percent standard, compared with 84 percent outside the SMSA's.

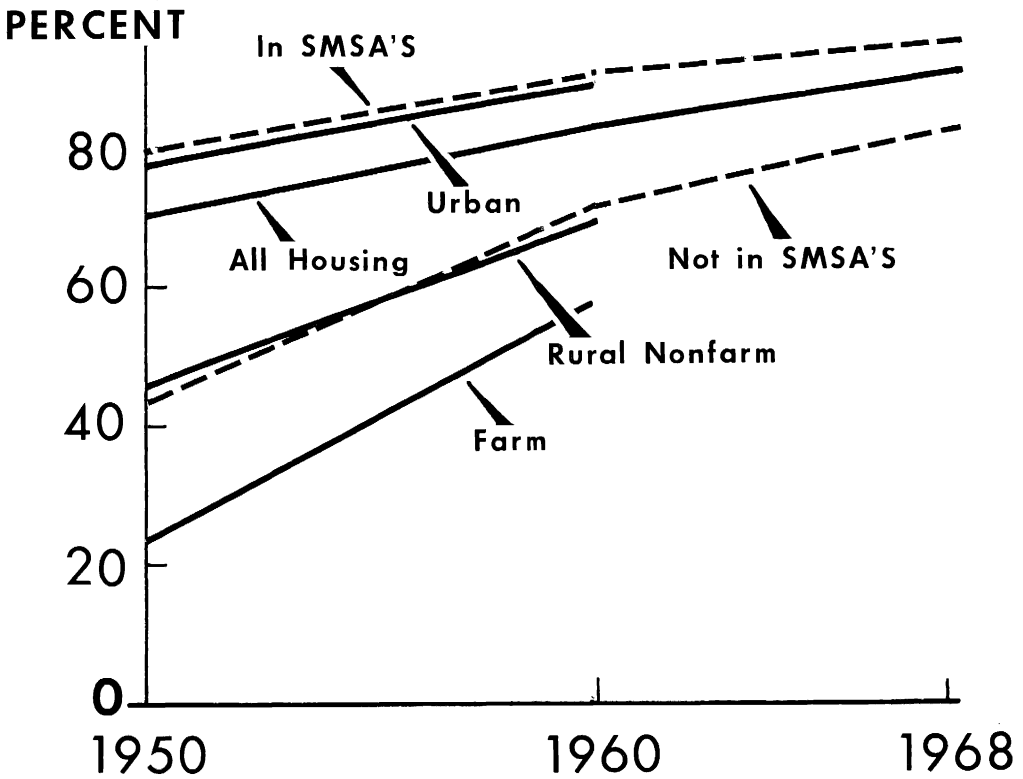
The percentage of farm housing meeting the modest qualifications of standard is still substantially below the rural nonfarm and urban percentages. However, the disparity is much less than it was in 1960, and the rate of quality improvement has been faster in rural areas. This partly reflects the low starting point, but it indicates that rural areas are finally attaining some of the housing amenities.

The Geography of Quality Housing

Regionally, the percentages of housing with flush toilets closely approximate the percentages of standard housing, inasmuch as plumbing is a major determinant of standard quality. For the United States, 87 percent of all units had a flush toilet in 1960, compared with 84 percent of all units comprising standard housing.

Figure 3 shows that, for the Nation, the percentage of units with flush toilets rises with urbanization. However, there was considerable regional

STANDARD QUALITY HOUSING BY URBANIZATION, 1950-68



SOURCE: APPENDIX TABLE 1.

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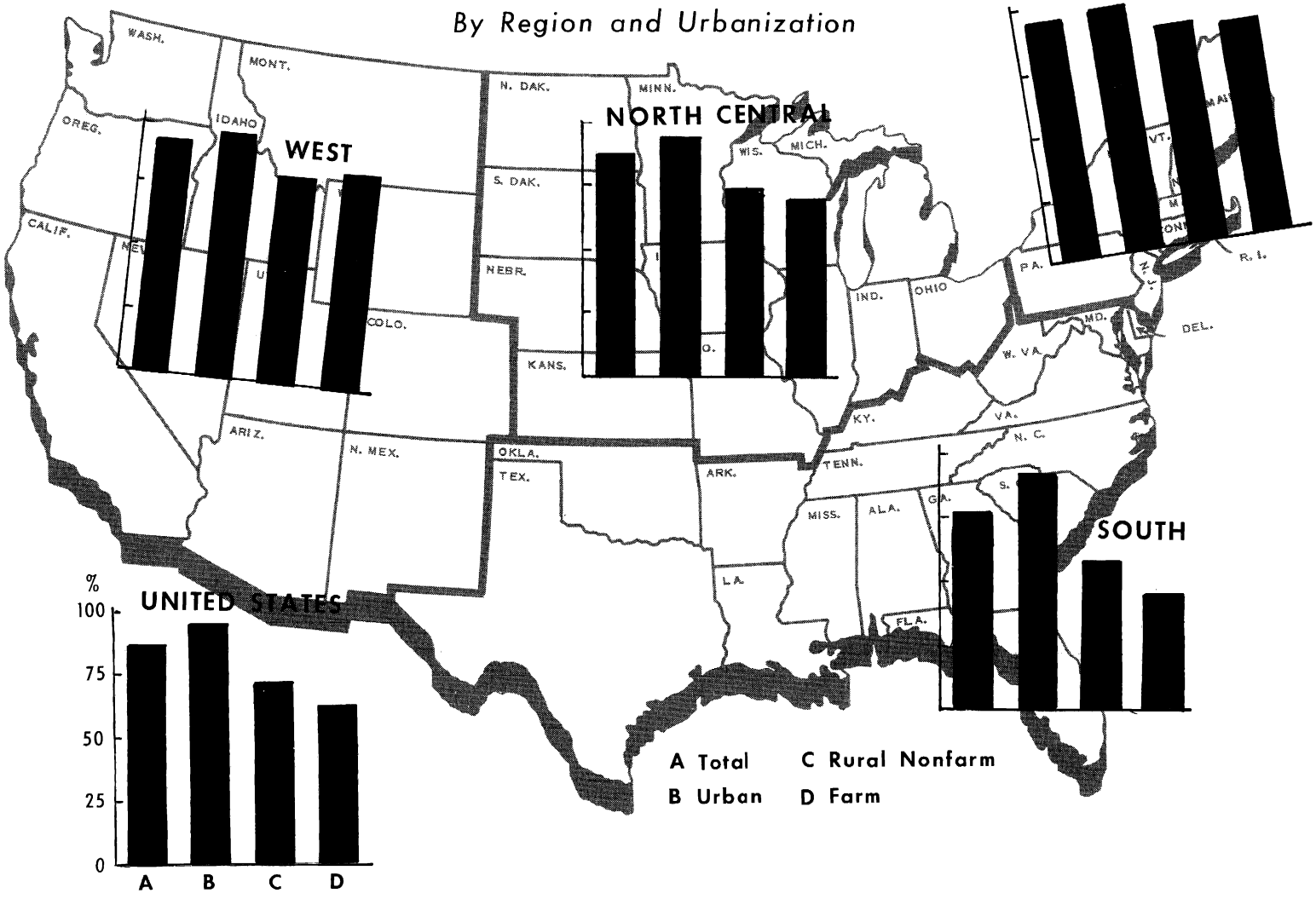
Figure 2

HOUSING WITH FLUSH TOILET, 1960

By Region and Urbanization



SOURCE:
APPENDIX TABLE 2.

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Figure 3

variation in percentages of households with flush toilets in 1960. Rural plumbing deficiencies, as indicated by this measure, were far more prevalent in the Southern region than elsewhere. The rural deficiencies were least in the Pacific and Northeast regions. Moreover, in the Mountain and Pacific regions, proportionally more farmhouses had flush toilets than did rural nonfarmhouses.

SOME SOCIOECONOMIC ASPECTS OF HOUSING

Household income is the principal socioeconomic variable available from census data relating to housing. The 1960 census provided tabulations of housing quality against household income, by race, tenure, and urbanization.

A somewhat related set of data is available in the Bureau of the Census Consumer Purchases Studies of 1960-61. These show the percentages spent on housing at various levels of income by farm, rural nonfarm, and urban households.

The purchase of new housing represents a very large investment. Census reports that the average 1968 construction cost per residential unit was $14,975. This was nearly double the median household income of $7,700.

Substantial correlations between income and quality of housing have been noted by the President's Committee on Urban Housing in its 1968 report; 4/ Beyer and Rose in their 1957 study of farm housing; 5/ and Reid in her 1962 monograph. 6/ In a study of housing conditions in South Carolina, based on county data from the 1960 Census of Housing, Edwards and Jones found that median family income had a higher correlation with the proportion of housing that was in sound condition and had all the essential items of plumbing than any of the other socioeconomic variables tested, including increase in population, employment in nonfarm occupation, change in infant mortality rates, admissions to State Hospital, and changes in public assistance cases. 7/

Income and Housing Quality, 1960

In figures 4A and 4B, income is compared with quality of housing as measured by the percentages which were standard; the all household data section of the

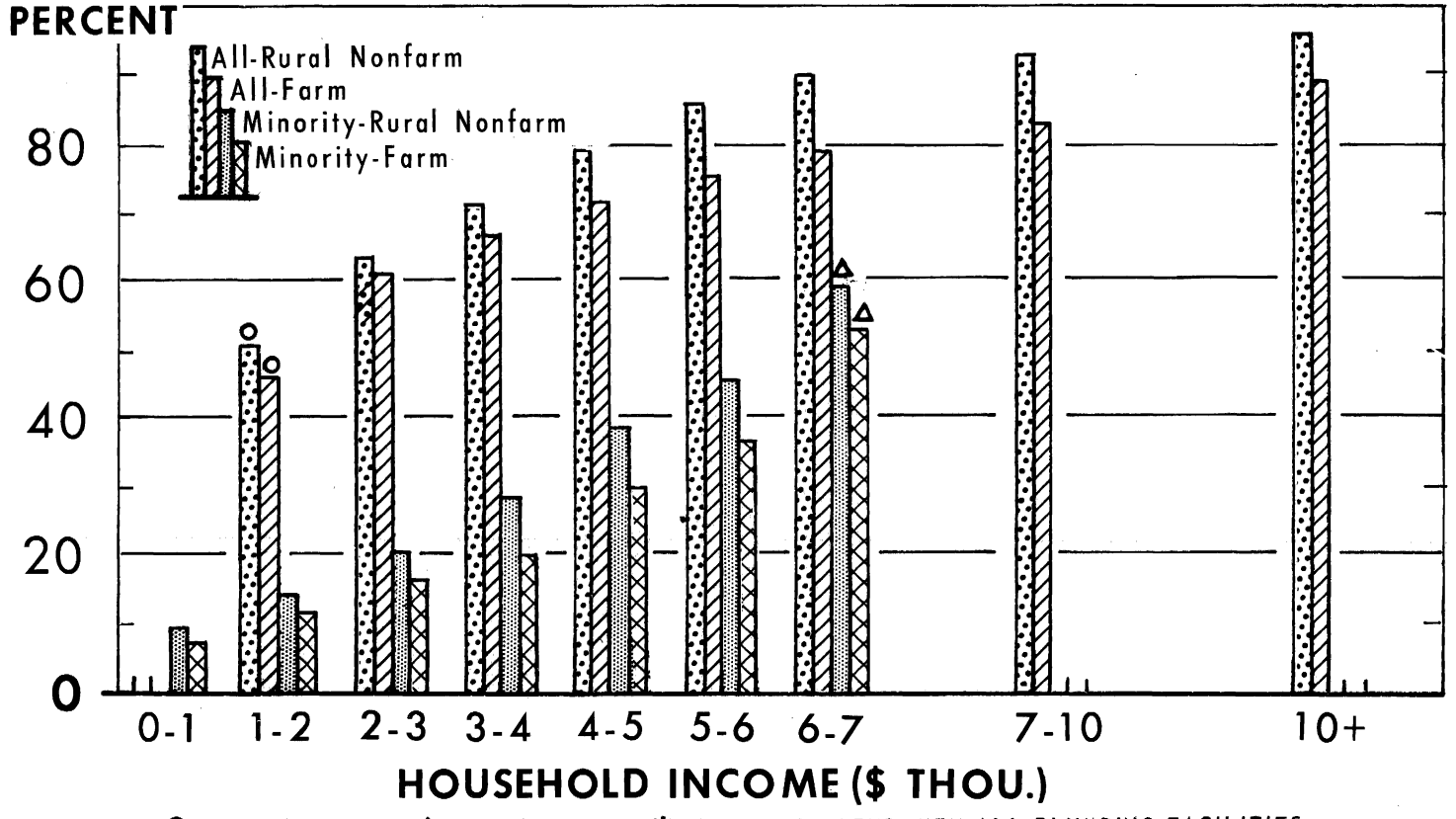
4/ President's Committee on Urban Housing, A Decent Home, Dec. 1968. tables 1-8, p.44.

5/ Beyer, Glen H. and Rose, J. Hugh, Farm Housing, John Wiley & Sons, table 15, p.30.

6/ Reid, Margaret G. Housing and Income, University of Chicago Press. 1962.

7/ Edwards, Allen D. and Jones, Dorothy G., Housing in South Carolina: Its Socio-Economics Context, S.C. Expt. Sta. Bul. 511, Apr. 1964, table 3, p.22.

RURAL HOUSING OF STANDARD QUALITY*
OWNER-OCCUPIED



O UNDER $2,000. Δ OVER $6,000. * NOT DILAPIDATED WITH ALL PLUMBING FACILITIES.

SOURCE: APPENDIX TABLES 3A AND 3B.

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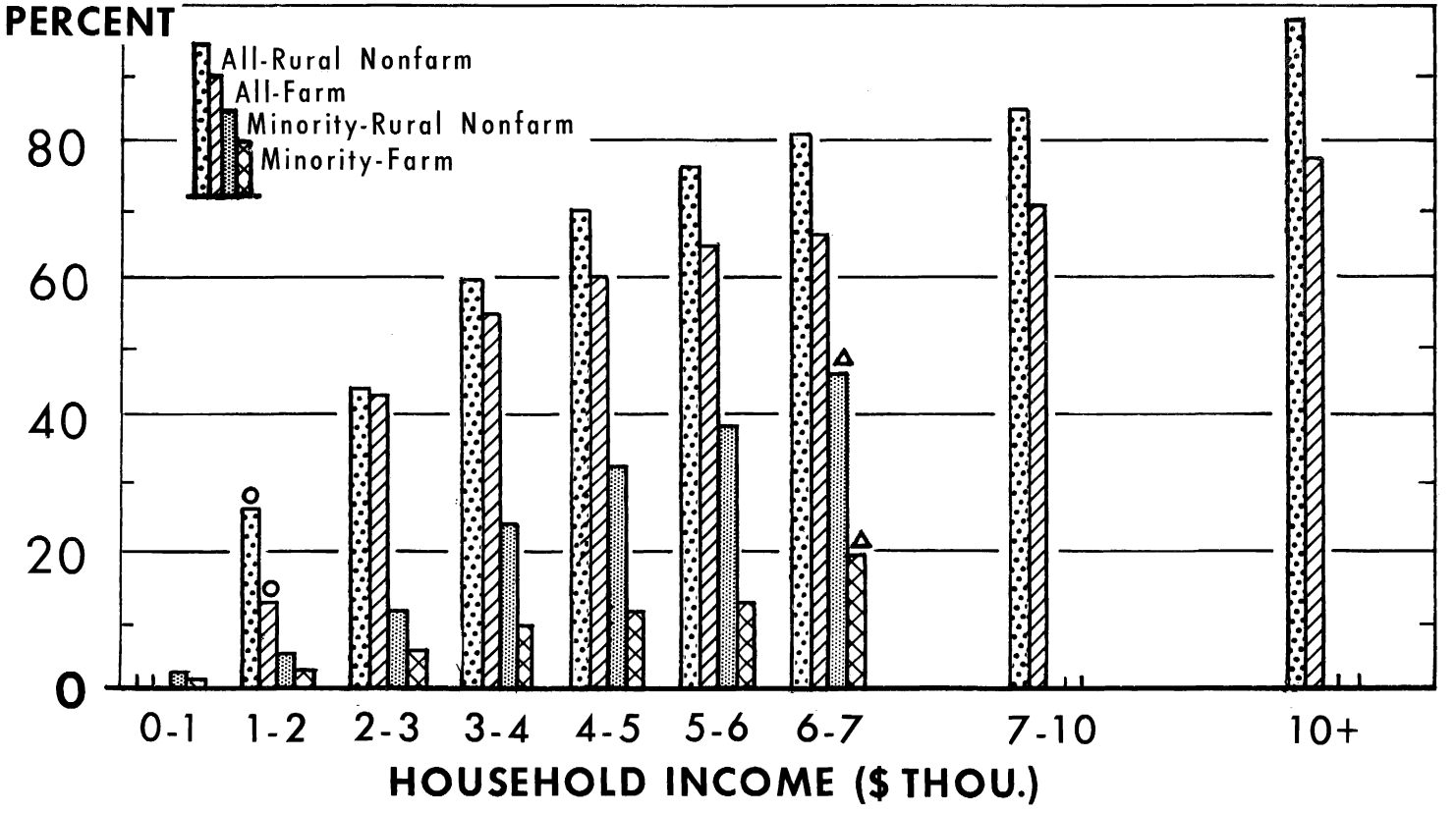
Figure 4A

RURAL HOUSING OF STANDARD QUALITY*
RENTER-OCCUPIED



O UNDER $2,000. Δ OVER $6,000. * NOT DILAPIDATED WITH ALL PLUMBING FACILITIES.

SOURCE: APPENDIX TABLES 3A AND 3B.

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Figure 4B

figure cover all the farm and rural nonfarm homeowners and renters. For these four major categories of households, the income-quality relationship is strong, especially at the lower levels of income. For family incomes up to about $6,000, housing quality is greatly improved at each higher level of income. Above that income level, the quality improvement is less marked. Apparently, the fairly modest standard of adequacy was substantially achieved at family incomes of about $6,000.

The two lower series in each graph are for Negro and other minority group households. They had sharply lower proportions of standard housing at each income level than the total population. The markedly lower quality of the housing of minority races at each level of income suggests that lack of access to adequate housing must be a major factor.

Farmers had somewhat lower quality housing than rural nonfarmers with comparable incomes; this probably reflects the production-oriented attitudes of farm families, the greater age of farmhouses, and the greater expense of providing water and sewerage to isolated farmhouses, compared with rural nonfarm housing located in or near small towns and suburbs. There is also a question of whether the farm and rural nonfarm income data are comparable. Bird points out that the lower quality of farm housing is partly a regional phenomenon that is concentrated in the South. 8/ In other regions of the country, the quality of farm housing is about the same as that of rural nonfarm units.

The quality of housing achieved by renters at the various levels of family income was below that of homeowners for each subgroup. The order of precedence was the same; farm housing was of lower quality than rural nonfarm, and housing of the minority races was of lower quality than for the total population.

Incomes and Housing Expenditures

Data for this section are based on the 1960-61 Consumer Expenditure Survey, conducted by the Bureau of Labor Statistics and the Agricultural Research Service. Sample households were interviewed to obtain detailed information on their income and expenditures (fig. 5).

In all three groups--farm, rural nonfarm, and urban--low-income families spent a larger percentage of their cash incomes on housing than high-income families. Housing, like food, is classed as a necessity rather than a luxury, in terms of Engel's Law, where luxuries are defined as items on which the percentage of income spent on the item rises at the higher incomes. It will be noted that the declining percentages apply both to shelter (rent on rental housing, or interest, taxes, insurance, and repairs on owned housing) and to such related housing expenses as utilities, fuel, furnishings, and operating costs.

Households with annual incomes below $1,000 show very high percentages

8/ Bird, Ronald. See Footnote 1.

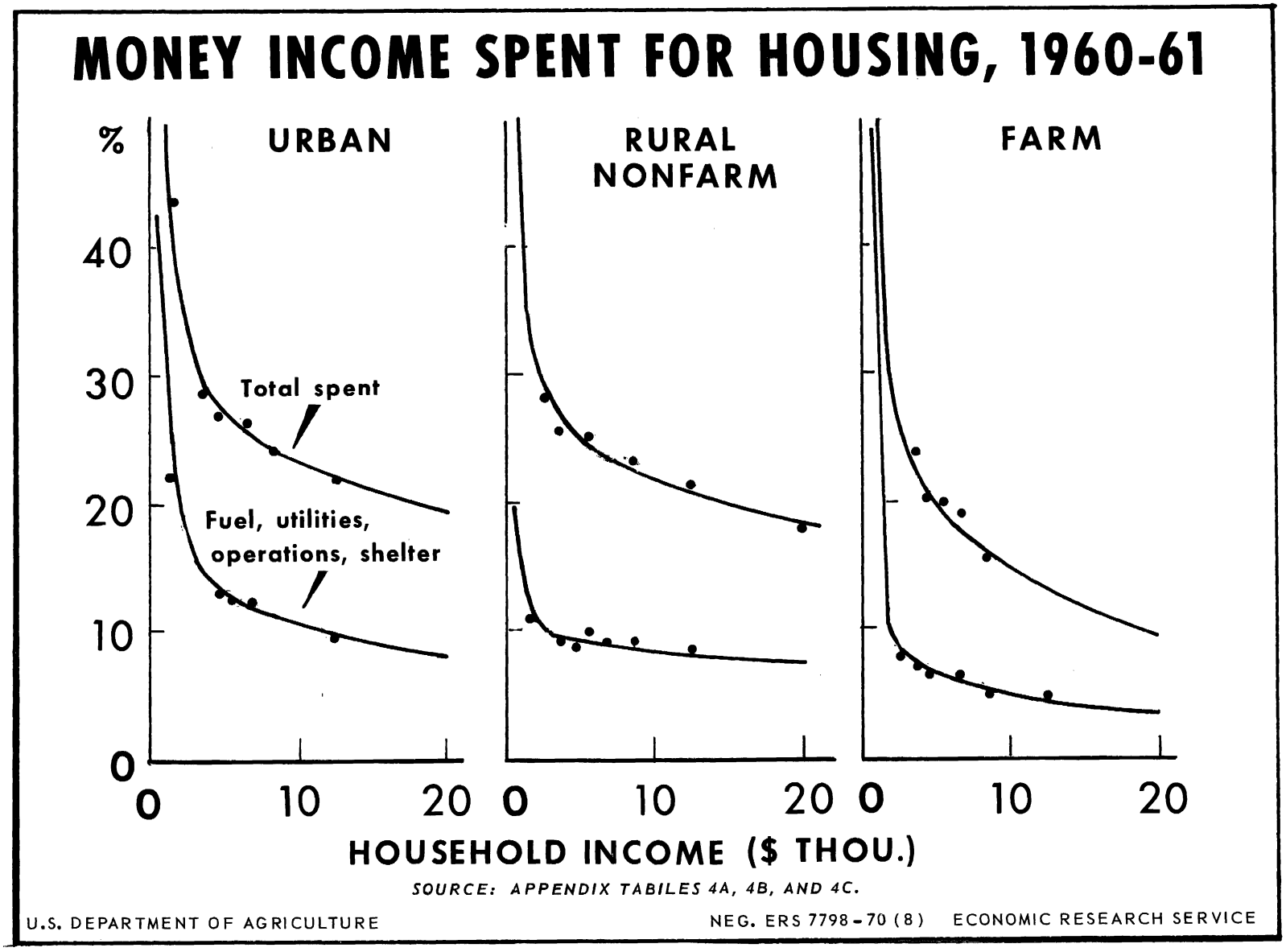
MONEY INCOME SPENT FOR HOUSING, 1960-61
%
URBAN
RURAL NONFARM
FARM
40
30
20
10
0
Total spent
Fuel, utilities, operations, shelter
0
10
20
HOUSEHOLD INCOME ($ THOU.)
SOURCE: APPENDIX TABILES 4A, 4B, AND 4C.
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Figure 5

spent for housing, some well over 50 percent. The very low income families draw on savings or borrow to supplement their current cash receipts. Thus, farm families with incomes under $1,000 had average money incomes of only $114, but total expenditures of $2,004. Their average expenditures on housing was $533.

Farm households spent a substantially lower proportion of their income on housing than rural nonfarm or urban households. Farmers' lower expenditures on housing reflected a higher proportion of ownership, lower quality, greater average age of house, and a considerable number of tenant shacks for which no cash rent is charged. The fact that land values are so much lower in the farm areas also helps explain the lower costs of shelter.

MEETING THE NEEDS FOR RURAL HOUSING

Some references have already been made to the ways in which rural housing needs are met or left unmet. The section on historical trends highlighted the fact that residential construction in the United States is mainly done by the private sector. However, it was noted that financial aids and other Government activities have played a growing role in recent years. The third standard, and the immediately preceding section analyzed some of the reasons for this inferior status of rural housing.

Data for the period since World War II show the extent to which private and public efforts have upgraded rural housing and helped reduce the gap between rural and urban housing quality.

Rural-Urban Construction Trends in the 1960's

Data on housing starts inside and outside the Standard Metropolitan Statistical Areas (SMSA's) have been available only from 1959. Before then, only nonfarm starts were covered, and before 1945 these were separated into urban and rural nonfarm housing.

Since 1959, housing starts have exceeded the formation of new households in all sectors. The recent excess of housing starts is available to cover demolitions and other losses. It also contributes to the improved quality of housing, both rural and urban (fig. 2). Conceivably, some portion of the excess of new construction could also result in higher vacancy rates. Data on vacancies are shown in table 4.

There has been some new construction of farm housing even though the total number of farm households has declined. The excess of new construction over new household formation appears to be about as large proportionately outside the SMSA's where total household numbers have advanced only slowly, as in the SMSA's where the growth in number of households has been rapid. We have also seen (fig 2). that the average quality of rural housing, both farm and nonfarm, has been improving. This suggests that the new construction and repair industry has been reaching rural areas as effectively as it has the urban areas. It also reflects the housing jump in rural suburban areas.

The 1966-67 Downturn

The abrupt decline in residential construction in 1966-67 and the continued strong demand for housing have led to reduced vacancy rates in rental housing units (table 4). One might expect that a reduction in new construction would result in fewer vacancies, but other factors are also involved. One complication is that starts include all new construction and most of it is destined for ownership rather than rental. Also, the recent upward shift in demand must be considered; the sustained high rate of economic activity in the late 1960's prompted individuals and new families to seek independent housing. Vacancy rates might have declined even if a high level of new construction had been maintained.

The 1966 downturns in new construction and vacancies were slightly more pronounced in the SMSA's than in the rural areas. In 1966, housing starts in the SMSA dropped 22 percent below 1965 and rental vacancy rates declined, compared with the nonmetropolitan decline of 18 percent in starts and a rise in rental vacancies. The subsequent recovery has been greater within the SMSA's. Also, rental vacancy rates tend to average higher outside the SMSA's.

The 1966 downturn in new construction was apparent in all four regions. Subsequently, rental vacancy rates also dropped in each region. The reduction in starts and in vacancy rates was greatest in the West, but rental vacancy rates have also tended to be higher there than in other regions.

The 1969 Downturn

The annual rate of new privately owned housing units started declined in every month of 1969 except September. The January annual rate was 1,878,000, and the December annual rate was 1,245,000. The 1969 total of 1,463,000 units compared with 1,508,000 private starts in 1968.

The drop resulted from the monetary stringency, including high rates of interest, a decline in savings at insured savings and loan associations, and a national policy of monetary restraint.

The reduction in the rate of residential starts appears to have been more severe in rural areas. The only current indicator available is the classification of starts in and out of the SMSA's. Private starts during 1969 were 98 percent of the corresponding 1968 figure in the SMSA's and 94 percent outside. This is contrary to the 1966 experience, but it is not clear what factors account for the difference.

Residential Finance

At the end of 1968, savings and loan associations were the largest holders of residential mortgages (table 5). They held one-third of all mortgages and 43 percent of the mortgages on one-to four-family dwellings. They also had the biggest gain in mortgage holdings during 1968. Other major sources of mortgage credit included commercial banks, mutual savings banks, life insurance companies, and Federal Government agencies. Nearly a quarter

Table 4.--New construction and vacancy rates for rental properties, 1959-69

Year & quarter	U.S. Starts	U.S. Vacancies	Northeast Starts	Northeast Vacancies	North Central Starts	North Central Vacancies	South Starts	South Vacancies	West Starts	West Vacancies	In SMSA's Starts	In SMSA's Vacancies	Not in SMSA's Starts	Not in SMSA's Vacancies
	Thous.	Pct.	Thous.	Pct.	Thous.	Pct.	Thous.	Pct.	Thous.	Pct.	Thous.	Pct.	Thous.	Pct.
1959	1,553.5	6.4	279.6	3.5	374.8	6.6	521.7	8.5	377.4	8.1	1,076.8	5.0	476.7	9.0
1960	1,296.0	7.4	236.5	4.4	303.7	7.7	441.3	8.6	314.5	10.5	889.0	6.5	407.0	9.3
1961	1,365.0	7.9	265.1	4.4	289.0	8.6	487.6	9.4	323.3	10.2	947.9	7.0	417.1	9.6
1962	1,492.4	7.4	273.7	4.2	295.0	8.3	541.2	8.9	382.5	9.0	1,053.5	6.9	438.9	8.7
1963	1,642.0	7.5	271.9	4.6	334.2	8.1	600.3	8.3	435.6	9.7	1,151.6	7.3	490.4	7.7
1964	1,561.5	7.5	261.8	4.7	346.0	7.3	593.6	8.2	360.0	10.5	1,092.7	7.5	468.9	7.3
1965	1,509.6	7.5	281.4	5.0	368.5	6.7	588.4	8.1	271.3	11.3	1,035.2	7.4	474.5	7.9
1966	1,196.2	7.0	215.7	4.8	297.4	6.0	482.8	7.7	200.5	10.4	808.4	6.5	387.8	8.3
1967	1,321.9	6.2	223.5	4.3	343.9	5.3	531.3	7.2	223.0	8.5	920.3	5.5	401.6	7.8
1968:														
1Q	1,540	5.5	196	3.4	399	5.0	607	6.8	280	7.3	N.A.	4.9	N.A.	7.1
2Q	1,481	5.7	231	3.5	362	4.8	592	7.2	302	7.6	N.A.	4.9	N.A.	7.5
3Q	1,593	5.4	308	3.4	391	5.4	637	6.8	289	6.2	N.A.	4.7	N.A.	7.1
4Q	1,637	4.9	198	3.1	389	4.7	761	6.2	387	6.1	N.A.	4.5	N.A.	6.1
Average	1,547.7	5.4	236.9	3.3	378.2	5.0	633.7	6.7	298.9	6.8	1,118.4	4.8	429.3	6.9
1969:														
1Q	1,729	5.0	268	2.9	528	4.9	665	6.6	268	5.9	N.A.	4.3	N.A.	6.9
2Q	1,521	5.1	248	2.9	331	4.8	593	6.4	349	6.4	N.A.	4.5	N.A.	6.5
3Q	1,440	5.0	180	2.8	352	5.5	571	6.3	337	5.8	N.A.	4.4	N.A.	6.5
4Q	1,344	4.7	161	2.2	284	5.6	569	6.4	330	4.7	N.A.	4.3	N.A.	5.9
Average	1,496.6	5.0	212.8	2.7	356.2	5.2	603.2	6.4	324.5	5.7	1,093.7	4.4	402.9	6.4

Sources: Vacancy Rates from Census, H-111 series.

Starts are annual or annual rates, inclusive of farm housing from series C-20 Census, table 5, adjusted to table 1 by adding public construction from table 4.

N.A. ≡ not available

Table 5.--Residential finance, 1968

Item	All residential		Nonfarm, 1 to 4-family dwellings	
	End of year	Increase in 1968	End of year	Increase in 1968
	Billion dollars			
Mortgage debt on 12/31/68 by holder:				
Saving and loan associations..	130.8	9.0	110.3	7.0
Life insurance companies.....	70.0	2.5	29.0	0.8
Mutual savings banks.....	53.5	3.0	35.0	1.6
Commercial banks.....	65.7	6.7	38.8	3.5
Federal government agencies...	21.7	3.3	13.2	2.5
Individuals and others.....	55.8	2.8	24.9	1.4
	397.5	27.3	251.2	15.2
Nonfarm, by type of financing:				
FHA: insured.....	93.4	5.2	50.6	3.2
VA guaranteed.....			33.8	1.3
Conventional.....	276.6	20.0	166.8	10.7
Farm.....	27.5	2.0	--	--
Construction cost of housing units started.....	--	23.2	--	16.3
Value of private residential construction put in place.....	--	22.4	--	--

Sources:

Mortgage debt:
All residential - Economic Report of the President, 1970, tables C-58 and C-59
1-to 4-family- HUD Trends, October 69, p23

Construction cost: Housing Starts, C 20-69-11, Table A-1
All construction covers private and public; 1-unit only, private sector
Value Put in Place, C 30-69-10, Table 1, "New housing units".

of the residential mortgages outstanding were backed by FHA and VA, and the rest were conventionally financed.

Table 5 also indicates that most residential construction relies on mortgage financing. The Bureau of the Census reports on housing starts includes estimated costs. For the 1,584,000 units started in 1968, the estimated cost was $23.2 billion, an average of $14,976 per unit. This compares with a $26.9 billion increase in mortgages outstanding. The mortgage figure is, of course, the net increase of new mortgages less repayments made. Also, it includes mortgages on resales and refinancing, as well as on new homes. For one-family dwellings, the predominant form of rural housing, the construction cost of the 875,000 privately owned nonfarm starts was $16.3 billion, compared with a $15.2 billion increase in mortgage debt on one-to four-family units.

The Rural Credit Gap

Each of five research studies conducted during the past decade has shown that mortgage credit is substantially less available in rural than in urban areas. 9/ For example, Williams (item 3 below) concludes, "This study indicates (1) that rural areas have access to relatively few sources of home mortgage financing, (2) that amounts and terms of housing credit are less favorable in rural areas than in larger towns and cities, and (3) that rural facilities for tapping the credit resources of larger institutions in the larger places are inadequate."

These conclusions are confirmed by the other studies and reflect basic rural-urban differences, including the following:

1. The local bank is often the only financial institution in rural communities. Its small resources are subject to too many other calls to permit any large volume of long-term housing loans. In

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9/ (1.) Jones, Lawrence A., Rural Home Financing Through the Voluntary Mortgage Credit Program, U.S. Dept. Agr. ERS-270, July, 1966.

(2.) Sargent, Robert L., Jack R. Davidson, and Lawrence A. Jones, Availability of Rural Housing Credit in Montana, Mont. Agr. Exp. Sta. Bul. 586, June 1964.

(3.) Williams, Dorwin, Lawrence A. Jones, and Frank Miller, Financing Rural Homes in Missouri, Mo. Agr. Exp. Sta. Bul. 857, Apr. 1964.

(4.) Williams, Dorwin, A Profile of Rural Home Buyers and Builders and Their Use of Housing Credit, Mo. Agr. Exp. Sta. of Auburn University, Auburn, Ala., May 1962.

the various studies cited, maturities averaged less than 10 years, and less than one-fifth of bank assets were invested in real estate mortgages.

2. Lending risks are greater on rural houses due to remote location, lower construction standards, lack of public utilities and community services, and greater difficulty in establishing market values.

3. Rural housing loans are less profitable to lenders because of greater costs of appraisal and service and low density.

4. FHA-HUD insurance and VA guarantees have also been seriously impeded by the factors associated with the low density of rural construction activity. Jones' study (item 1, footnote 9) of the FHA-HUD effort to extend housing loans to rural areas showed that even the special effort of the Voluntary Home Mortgage Credit Program had limited effect.

The rural credit gap was officially recognized by Congress in 1950 in the form of authorization of the direct loan program of the Veterans Administration. Of the 3,084 counties in the United States, 2,158 entire counties and parts of 292 others have been designated as areas where private credit is not generally available.

Mobile Homes

The 1960 Census of Housing enumerated 767,000 trailers used as housing. They comprised 1.3 percent of the housing stock. About a tenth of the trailers, 82,000, were on permanent foundations and the rest were mobile.

The rural-urban distribution was as follows:

	Trailers		All housing units
	Number	Percent	Percent
Urban	372,006	49	70
Rural	394,559	51	30
Rural nonfarm	367,140	47	24
Farm	27,419	4	6
Total	766,565	100	100

In contrast to the total housing inventory, mobile homes were used most extensively in rural nonfarm areas, because trailer parks tend to be located in suburban areas. A sizable proportion of them are found in California, Arizona, and Florida.

Mobile homes are not included in the current data on housing starts and

other construction information. However, data from the Mobile Homes Manufactures Association are published regularly by Commerce in its Construction Review and by HUD in its Housing and Urban Development Trends. The rapid growth of this form of housing is shown by the annual output of mobile homes, not including travel trailers, as follows:

	Number	Percent of all conventional housing starts
1960	103,700	8.1
1961	90,200	6.7
1962	118,000	8.1
1963	150,840	9.2
1964	181,320	12.3
1965	216,470	14.3
1966	217,300	18.2
1967	240,360	18.2
1968	317,950	20.5
1969	389,690	26.3

During 1969, shipments of mobile homes were up 23 percent from 1968.

An increasing proportion of U.S. households relies on mobile homes for housing. Beyer points out that they are substantially cheaper per square foot than conventional housing, especially when the built-in equipment is considered. He considers the shortage of mobile home parks to be the most serious limitation on the expanded use of mobile homes. 10/

A HUD-Census survey of mobile home residents disclosed that this type of housing appeals particularly to young families who have recently moved to a job in a medium-sized town outside any SMSA. 11/ Contrary to popular belief, the elderly comprise a smaller than proportionate share of mobile home dwellers. Mobile home household heads over 65 years of all comprised only 9.3 percent of the total, whereas 19.4 percent of all household heads were over 65.

10/ Beyer, Glenn H., Housing and Society, MacMillan, 1965, See pp. 266-228.

11/ Housing Surveys, Parts 1 and 2, U.S. Department of Housing and Urban Development, November 1968.

Efficiency in the Construction Industry

In terms of competitive attributes, housing is an industry with many small firms rather than a few large ones. The 1967 Census of Construction Industries shows 90,576 general contract builders, who did $11.1 billion worth of residential construction in 1967. In addition, there were 12,070 operative builders, those constructing buildings on their own account for sale to others, who built $3.9 billion of residential structures. These two groups account for over three-fourths of the $19.1 billion value of all the 1,322,000 housing units started in 1967. The huge number of firms involved minimizes the likelihood of monopolistic practices. In fact, the operators are so numerous and small-scale as to raise a question of whether they can achieve such economies of scale as might be available.

The extent to which an industry approaches the ideal of pure competition in the conduct of its affairs is indicated by expenditures on advertising or other sales promotion, methods of determining price and output and tactics used against rival firms. With respect to conduct factors, the local housing codes constitute a serious handicap to technological progress. A report on the subject by the Advisory Commission on Intergovernmental Relations is highly critical of the present codes. 12/

The efficiency of the industry's performance is, of course, the key attribute. One indication of good performance is that the industry has built housing faster than new households have formed since World War II. The only decades before World War II in which housing starts exceeded new household formation were the 1890's and 1920's. The postwar building boom reduced the average number of persons per unit and has resulted in higher average quality, as the poorest units have been abandoned.

Housing prices are an index of technological progress which is another measure of the industry's performance. The extent to which price changes reflect technology depends on the degree to which the industry has approached the competitive equilibrium position in the period chosen for the price comparisons. If the industry was at equilibrium at the beginning and end of a period, price changes would accurately measure cost-saving technological advances. The housing industry conforms reasonably well to Bain's competitive model, but the equilibrium assumption is doubtful. However, using 3-year averages to provide a reasonably broad timespan for equilibrium conditions to become established, we note that the GNP implicit price deflator for residential structures averaged 60 percent higher in 1966-68 than 1947-49, compared with a 51-percent rise in the total index. In agriculture, by contrast, the extremely rapid pace of technological advance has provided abundant output for the growing population at a 1966-68 index of prices received by farmers 4 percent lower than 1947-49 levels. Consumer durables, at an 18-percent increase, had the least price rise of any of the broad categories of GNP prices shown in the 1969 Report of the Council of Economic Advisors. These data support the common impression that there has been considerably greater technological advanc and application of mass production methods in the manufacture of appli-

12/ Advisory Commission on Intergovernmental Relations, Building Codes: A Program for Intergovernmental Reform, Jan. 1966.

ances and in agriculture than in the production of housing.

The wage rate component of construction costs has risen somewhat more rapidly than the total costs. Hourly earnings in 1966-68 averaged $4.13, compared with $1.68 in 1947-49. This is an increase of 146 percent, more than double the 60-percent rise in construction costs. The other major component in construction costs is the price of construction materials, which rose only 43 percent. If labor and materials are about equally weighted in the index of total costs of construction, the 60-percent rise in total cost and 43-percent rise in materials costs reflect an increase of about 77 percent in the labor cost component. Evidently, labor productivity gains were substantial, since a 146-percent increase in wage rates resulted in only a 77-percent increase in labor costs.

These few indicators leave us with a mixed view of the residential construction industry. On-site construction, out-moded building codes, and consumer traditionalism make technological progress difficult. Yet the great need for low cost methods of housing construction keeps the public sector and some firms in the industry active in the development of mass-production technology.

Local Governments

Local government's concern with housing is mainly with building codes. The codes originally stipulated minimum standards of safety, space, ventilation, and light to control serious conditions in the tenements of eastern cities. Although minimum standards are still important, a report on building codes by the Advisory Commission on Intergovernmental Relations criticized many aspects of the codes. The report pointed out that the diversity of codes and arbitrary provisions in many of them seriously handicap centralized manufacture, the use of new materials, and other innovations. Codes are less prevalent in rural than in urban jurisdictions. Also, renewal and public housing have been mainly urban rather than rural in character. Thus, in rural areas it appears that local governments have not had a major role in housing.

Federal Government

The Federal Government's roles in the field of housing are more varied. The most significant Federal programs have been those of the Federal Housing Administration in backing low downpayment amortized long-term mortgages, and the adoption of a similar program by the Veterans Administration. These programs contributed greatly to the post-World War II building boom in single-family dwellings.

In a broader context, the postwar building boom was mainly in the suburban portion of the urban areas. In a paper for the Congressional Joint Economic Committee, Professor Friedan of MIT pointed out that the building boom was not an unmixed blessing. 13/ Middle-class households used the more

13/ Friedan, Bernard J., Congressional Joint Economic Committee, Federal Programs for the Development of Human Resources, Joint Committee Print, 90th Cong., 2nd sess., 1968, p. 581.

liberal mortgages pioneered by FHA and VA to move to the suburbs. This, in turn, left space in the central cities that attracted an influx of poor people from the rural areas, further stimulating the move to the suburbs. Much of the central city housing had complete plumbing and central heating, which apparently provided the newcomers higher quality housing. Yet poor maintenance, unemployment, and other social problems have offset some of the apparent gains in housing quality.

The FHA-VA mortgage programs, in practice, use private sector money and construction. Furthermore, in recent years most mortgages have been conventional, rather than guaranteed or insured by VA or FHA. Inasmuch, therefore, as these mortgage programs are financially self-contained and no Treasury funds are involved, they can be viewed as essentially private sector activity, so again, Government participation is minor.

FHA also operates a home-improvement loan program. Peak activity was reached in 1953 with 2¼ million loans totalling $1-1/3 billion. In 1968, there were 433,759 loans for $656 million. 14/ These cover only a small proportion of all home improvements; Census reports that residential alternations and repairs to single-family, owner-occupied properties totaled over $7 billion in 1967.

Federal income tax laws allow a deduction for interest paid on home mortgages. This is an important stimulus to homeownership. The Nation has experienced almost continuous inflation since 1933 and continuing rises in price levels and real estate values are expected. This steady rise in values encourages owning rather than renting.

The Department of Housing and Urban Development (HUD) was created in 1965. This action brought together the various Federal programs in housing and related fields under cabinet level direction and constituted an increase of Federal commitment to this field of activity. A recent product of the increased focus of national attention on housing and urban problems is the Housing and Urban Development Act of 1968. A principal new feature of this legislation is the authorization for interest supplements to low-income households. The interest supplements have made housing available to families with lower incomes than could previously be reached, but still may not reach many of those at poverty levels of income because they cannot afford even the amounts needed to repay the principal plus 1-percent interest.

HUD's "Operation Breakthrough" emphasizes new building methods, both for single-unit and multiunit construction. The demonstration projects which have been planned for 10 sites and involve 22 housing systems will be large enough to provide reliable cost data and to test consumer acceptance. Local codes will be modified to reflect performance criteria rather than rigid specifications.

14/ United States Senate, Progress Report on Federal Housing Programs, Committee on Banking and Currency, Committee Print, 5-9-67, and 1968 HUD Statistical Yearbook, p.89.

Farmers Home Administration

In rural areas, including the rural nonfarm population in towns up to 5,500, the Farmers Home Administration of USDA has been the most active Federal agency. Its principal housing activity is the making of supervised mortgage loans. The need for more effective assistance than is provided by the FHA-VA mortgage insurance programs was developed earlier in the discussion of the "Rural Credit Gap." Farmers Home helps supply this need by making mortgage loans to rural households who cannot obtain conventional or FHA-or-VA-backed mortgages. Like FHA and VA, Farmers Home approves the loans and checks on construction. However, it goes farther, by counseling the borrower, collecting the payments, and handling any defaults by negotiation and by foreclosure and resale, where necessary.

The Farmers Home Administration made an average of 3,500 housing loans per year in 1950-54, 3,100 in 1955-59, and 11,300 in 1960-64. The agency's loans have expanded rapidly to 15,000 in fiscal 1965, 31,000 in 1966, 47,000 in 1967, 51,696 in fiscal 1968, and 51,595 in fiscal 1969. This is an impressive growth rate, even though it remains small in relation to needs or to private sector activity. Another indicator of the scope of the Farmers Home program is to compare it with total starts in rural areas. Census data show that total housing starts outside SMSA's averaged 423,000 per year from 1960 through 1969.

The Farmers Home Administration housing loans reach mainly those households with low-to-moderate incomes. Since these are loans rather than grants, they do not reach many households in the poverty class; of the 47,514 loans made under Section 502 in fiscal 1968, 6 percent were to households with incomes under $3,000. This compares with 20 percent of all U.S. households having incomes of less than $3,000 in 1967. However, few Farmers Home housing loans went to those with substantial incomes; 2.3 percent of their borrowers had household incomes over $10,000, compared with 30 percent of all households. It is to be expected that the interest-supplement loans authorized by the 1968 Act will make it feasible to reach households with somewhat lower incomes. Farmers Home made 11,886 such loans in 1969, but data on borrowers' incomes are not yet available.

A LOOK AHEAD

The Department of Housing and Urban Development (HUD) has estimated the number of housing units that would need to be constructed or rehabilitated during the next 10 years to provide adequate housing for the entire population by 1978.15/ Starting from a base of 59.7 million occupied units in 1967, of which 5.8 million were substandard, they projected a need for the construction of 24.5 million new units and rehabilitation of 3.7 million units, a total of 28.2 million by 1978.

15/ The President, First Annual Report on Housing Goals, 91st Cong., 1st sess., H. Doc. No. 91-63, Jan. 23, 1969, pp. 48-52.

The major components of these projections are as follows:

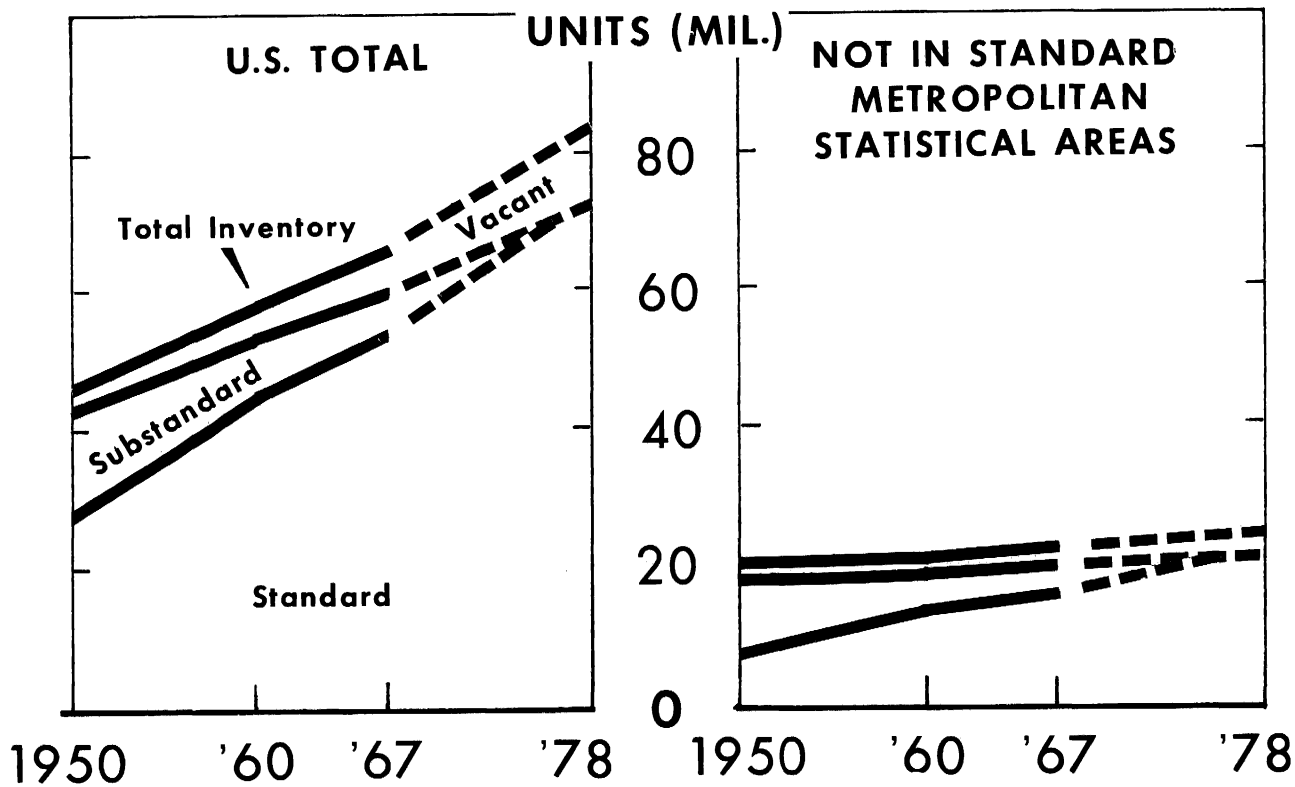
		Mil. units
1.	For net additional household formation	13.1
2.	To permit an increase in vacant units, including seasonal units	4.4
3.	To compensate for units abandoned because of population shifts	1.0
4.	To compensate for demolition, casualty, and other losses of nondilapidated units	2.0
5.	To permit the removal of all existing dilapidated units	2.0
6.	To permit the removal of all units becoming dilapidated over the decade	2.0
7(a).	Rehabilitation of nondilapidated, substandard units without public assistance	1.7
	Subtotal: New units and unassisted rehabilitation	26.2
7(b).	Rehabilitation of nondilapidated, substandard units with public assistance	2.0
	The total need, including publicly assisted rehabilitation	28.2

HUD estimated that in 1978, the incomes of 6 million households would be below the level at which they could obtain adequate housing--owned or rented--at expenditures within 25 percent of their income.

Most of the increase in housing in the 1950's and 1960's was in urban areas. The right-hand portion of figure 6 shows that the number of households not in the Standard Metropolitan Statistical Areas (SMSA's) has grown only slowly. These trends reflect both a migration from rural to urban areas and the fact that SMSA's are continually being redefined to take in territory that was formerly rural. Thus, most of the projected rise in housing construction is likely to occur in urban areas or areas that will be reclassified as urban.

Considerable attention has been given to the desirability of stemming the migration from rural areas to the central cities. One goal is to make rural America more attractive and economically viable so as to furnish improved alternatives in the rural areas. In 1967, only a third of all households lived outside the SMSA's. However, over half of the 10-year estimate

HOUSING INVENTORY, 1950-1967 AND PROJECTIONS TO 1978



SOURCE: APPENDIX TABLE 6.

U.S. DEPARTMENT OF AGRICULTURE NEG. ERS 7801-70 (8) ECONOMIC RESEARCH SERVICE

Figure 6

of publicly assisted construction and rehabilitation would be needed there. The greater need arises because more than half of the presently substandard housing is nonmetropolitan and because more of the low-income households are in rural areas.

The Housing and Urban Development Act of 1968 authorizes interest-supplement payments by the Federal Government as the chief new means of making new housing available to lower income families. As with previously existing loan programs, ownership and rental housing would continue to be provided by the private sector at market rates of interest. Households whose rents exceeded 25 percent of their income, or whose payments on housing being purchased exceeded 20 percent of their income, would be eligible for payment of part of the interest charges. On long-term mortgages at current high rates of interest, these could amount to over half of the amortized payment. In rural areas, the Farmers Home Administration is authorized to make interest-supplement loans, either as agent for HUD or as an insured loan under its own program.

The First Annual Report on National Housing Goals modified the estimated total starts for the 10 years to 24.2 million units, at annual rates of 1,625,000 in fiscal 1969, rising to 1,900,000 in fiscal 1970, and to a peak rate of 2,975,000 in fiscal 1978. 16/ Reported starts of conventional housing totalled 1,599,000 in fiscal 1969 and mobile home shipments were 362,550. The report cites the possibility that some portion of these are placed on foundations and are therefore included in the Census data on starts. 17/ However, it appears unlikely that many are so included, so the total of housing units added in fiscal 1969 was probably more than 1.9 million. Conventional starts dropped to an annual average rate of 1,427,000 for the first 5 months of fiscal 1970, reflecting the restrictive effects of the tight money policy. Mobile home shipments have recently been at an annual rate of 400,000 units, leaving only a small prospective deficit from the projected requirements for fiscal 1970.

The most pessimistic estimates of the prospects for achieving the 1978 housing goals cite only the regularly reported conventional starts, which have been falling far short of projections in recent months. The more optimistic include the mobile homes. Those mobile homes which are occupied are counted as housing units in the 10-year census enumerations. Until the 1970 data become available, it will not be known how many are used as second or vacation homes or as offices. Also, the 1970 Census will provide data on how many of the 1960 mobiles are still in use, thus providing evidence on the rate of deterioration.

There is also room for optimism on the rate of construction of conventionally-built housing. It is reasonable to expect that a return to more normal economic and monetary conditions would result in a recovery from the 1969 downturn, similar to that following the 1966-67 period of credit stringency. More impetus is also being provided by Federal programs than in the

16/ House Doc. 91-63, Jan 23, 69, p. 17, table 5, sum of columns 2 & 4.
17/ Ibid., pp. 12-13.

previous recovery. The 1968 act provided interest-supplement loans and expanded support to the secondary mortgage market. Also, "Operation Breakthrough" provides major new impetus to industry efforts to develop mass production methods of construction and marketing.

APPENDIX TABLES

Appendix Table 1.--Quality of occupied housing, United States, 1950, 1960 and 1968

Item	1950 Number	1950 Proportion	1960 Number	1960 Proportion	1968 Number	1968 Proportion
	Thous.	Pct.	Thous.	Pct.	Thous.	Pct.
All Units						
Total	42,826	100	53,024	100	60,726	100
Standard	27,665	71	44,550	84	55,018	91
Urban						
Total	28,492	100	38,320	100		
Standard	22,252	78	34,638	90		
Rural Nonfarm						
Total	8,613	100	11,137	100		
Standard	3,993	46	7,833	70		
Farm						
Total	5,721	100	3,566	100		
Standard	1,390	24	2,080	58		
Inside SMSA						
Total	24,514	100	34,000	100	39,323	100
Standard	19,502	80	30,788	91	37,435	95
Outside SMSA						
Total	18,312	100	19,024	100	21,503	100
Standard	8,163	44	13,762	72	17,826	83

Sources: 1950: Census of Housing, Vol. 1, Pt. 1, Tables 7 & 23.
1960: Census of Housing, Vol. 1, Pt. 1, Table 9.
1968: Percentages: Housing Characteristics, U.S. Bur. of Census, Series H-121, No. 17, Feb. 1970
Number of occupied units (Households) are in proportion to Population Estimates and Projections, U.S. Bur. of Census, Series P-25, No. 440, 3-3-70.

Appendix Table 2.--Housing with flush toilet, by urbanization and region, 1960

	All units		Urban		Rural nonfarm		Farm	
	Number	With toilet	Number	With toilet	Number	With toilet	Number	With toilet
	Thousand	Percent	Thousand	Percent	Thousand	Percent	Thousand	Percent
Northeast	14,799	94	11,653	96	2,906	86	240	84
North Central	16,797	87	11,380	94	3,935	74	1,482	70
South	17,173	77	10,323	92	5,343	58	1,507	45
West	9,557	93	7,408	96	1,812	82	337	85
United States	58,326	87	40,764	94	13,996	71	3,566	62

Source: Bird, Ronald, and others, Status of Rural Housing in The United States, U.S. Dept. Agr., Agr. Econ. Rpt. No. 144, table 15.

Appendix Table 3A-- Housing quality in terms of plumbing, by income group, 1960

Item	Rural nonfarm			Farm		
	Total units	Sound & Deter. all plbg.		Total units	Sound & Deter. all plbg.	
	No.	No.	Pct.	No.	No.	Pct.
Owner-occupied:						
Under $2,000	1,679,067	851,817	50.7	829,866	382,360	46.1
$2,000 - $2,999	724,227	460,904	63.6	366,014	220,128	60.1
$3,000 - $3,999	780,702	558,820	71.6	318,354	211,075	66.3
$4,000 - $4,999	888,495	704,500	79.3	274,129	195,657	71.4
$5,000 - $5,999	946,946	813,248	85.9	225,577	171,553	75.6
$6,000 - $6,999	762,582	686,415	90.0	162,849	128,642	79.0
$7,000 - $9,999	1,260,357	1,174,593	93.2	257,025	213,669	83.1
$10,000 & over	786,679	757,685	96.3	199,070	178,421	89.6
Totals	7,829,055	6,007,982	76.7	2,632,884	1,701,505	64.6
Median income	$4,800	--	--	$3,400	--	----
Renter-occupied:						
Under $2,000	1,009,800	262,116	26.0	406,495	79,546	12.0
$2,000 - $2,999	435,091	190,937	43.9	156,868	67,624	43.1
$3,000 - $3,999	448,329	267,674	59.7	118,985	65,019	54.6
$4,000 - $4,999	424,488	297,374	70.1	82,317	49,497	60.1
$5,000 - $5,999	347,062	264,969	76.3	56,487	36,388	64.4
$6,000 - $6,999	226,397	183,479	81.0	34,636	22,969	66.3
$7,000 - $9,999	294,462	250,273	85.0	48,102	33,994	70.7
$10,000 & over	122,500	108,283	88.4	29,547	23,050	78.0
Totals	3,308,129	1,825,105	55.2	933,437	378,087	40.5
Median income	$3,500	--	--	$2,400	--	--

Source: 1960 Census of Housing, vol. VI, table 3 - Percent sound and deteriorating with all plumbing.

Appendix Table 3B.--Quality of housing units for Negroes and other minority races, by income, 1960

Income in 1959	Total units	Rural nonfarm			Farm		
		units	Sound & deter. all plbg.		units	Sound & deter. all plbg.	
	No.	No.	No.	Pct.	No.	No.	Pct.
Renter-occupied:							
Under $1,000	251,921	160,124	4,987	3.1	91,797	944	1.0
$1,000 - $1,999	171,628	115,593	6,079	5.2	56,035	1,372	2.4
$2,000 - $2,999	94,981	73,781	8,423	11.4	21,200	1,144	5.4
$3,000 - $3,999	49,245	40,651	9,903	24.4	8,594	744	9.0
$4,000 - $4,999	27,462	23,104	7,450	32.2	4,358	482	11.1
$5,000 - $5,999	15,280	12,775	4,868	38.1	2,505	313	12.5
$6,000 & over	21,949	18,667	8,594	46.0	3,282	637	19.4
Totals	632,466	444,695	50,304	11.3	187,771	5,636	3.0
Owner-occupied:							
Under $1,000	169,920	127,403	12,098	9.5	42,517	3,036	7.1
$1,000 - $1,999	119,114	91,537	12,832	14.0	27,577	3,040	11.0
$2,000 - $2,999	82,924	68,039	13,646	20.0	14,885	2,449	16.4
$3,000 - $3,999	55,214	46,387	13,272	28.6	8,827	1,729	19.6
$4,000 - $4,999	38,871	32,840	12,559	38.2	6,031	1,782	29.5
$5,000 - $5,999	23,916	20,149	9,113	45.2	3,767	1,372	36.4
$6,000 & over	43,304	35,431	20,919	59.0	7,873	4,132	52.5
Totals	533,263	421,786	94,439	22.4	111,477	17,540	15.7

Source: 1960 Census of Housing, vol. VI, table 6.

Appendix Table 4A.--Housing expenditures and income of farm families, 1961

Money income after taxes	Income and Receipts[1]	Expenditures: Total Housing	Shelter	Fuel, util.	Operations	Furnishing	Other	Percentages of income: Total Housing	Shelter	Fuel, util.	Operations	Furnishing	Other
		Dollars						Percent					
Average	4,522	919	310	232	156	219	2	20.3	6.9	5.1	3.5	4.8	-
Under $1,000	114	533	192	156	89	92	4	467.4	168.4	137.7	78.1	80.7	2.5
$1,000-1,999	1,578	515	166	159	84	105	1	32.6	10.5	10.1	5.3	6.7	-
$2,000-2,999	2,549	655	209	182	109	154	1	25.7	8.2	7.1	4.3	6.1	-
$3,000-3,999	3,557	857	273	218	146	219	1	24.1	7.7	6.1	4.1	6.2	-
$4,000-4,999	4,583	942	311	241	160	227	3	20.5	6.8	5.3	3.5	4.9	-
$5,000-5,999	5,623	1,128	368	269	203	286	2	20.1	6.6	4.8	3.6	5.1	-
$6,000-7,499	6,720	1,283	454	310	199	316	4	19.1	6.8	4.6	3.0	4.7	-
$7,500-9,999	8,744	1,392	479	316	246	350	1	15.9	5.5	3.6	2.8	4.0	-
$10,000-14,999	11,864	1,587	577	340	270	390	10	13.4	4.9	2.9	2.3	3.3	-
$15,000 & over	21,873	2,115	805	414	411	481	4	9.7	3.7	1.9	1.9	2.2	-

1/ Average money income, after taxes, and other money receipts.

Sources: Consumer Expenditures and Income, U.S. Dept. Agr. Consumer Expenditure Survey Report No. 35, Aug. 1966, table 29A.

Appendix Table 4B.--Housing expenditures and income of rural nonfarm families, 1961

Money income after taxes	Income and receipts[1]	Expenditures: Total housing	Shelter	Fuel, util.	Operations	Furnishing	Other	Percentages of income: Total housing	Shelter	Fuel, util.	Operations	Furnishing	Other
	Dollars							Percent					
Average	4,775	1,195	452	275	222	240	6	25.0	9.6	5.7	4.6	5.0	0.1
Under $1,000	631	347	125	124	56	40	2	55.0	19.8	19.7	8.9	6.3	0.3
$1,000-1,999	1,590	521	178	173	91	77	2	32.8	11.2	10.9	5.7	4.9	0.1
$2,000-2,999	2,641	755	260	220	131	140	4	28.6	9.9	8.3	5.0	5.3	0.1
$3,000-3,999	3,581	947	336	259	169	177	6	26.4	9.4	7.2	4.7	5.0	0.1
$4,000-4,999	4,602	1,150	416	278	207	240	9	25.0	9.0	6.0	4.5	5.3	0.2
$5,000-5,999	5,551	1,424	559	303	250	309	3	25.6	10.0	5.5	4.5	5.4	0.2
$6,000-7,499	6,773	1,609	623	344	309	328	5	23.7	9.1	5.1	4.6	4.8	0.1
$7,500-9,999	8,484	1,995	794	369	389	438	5	23.5	9.2	4.4	4.6	5.2	0.1
$10,000-14,999	11,830	2,598	1,046	467	511	545	29	21.9	8.9	3.9	4.3	4.6	0.2
$15,000 & over	22,451	4,062	1,730	543	906	773	110	18.1	7.8	2.4	4.0	3.4	0.5

1/ Average money income after taxes and other money receipts.

Source: Consumer Expenditures and Income, Suppl. 3 to BLS Rpt. No. 237-88, U.S. Dept. of Labor, table 29A.

Appendix Table 4C.--Housing expenditures and incomes of urban families, 1960-61

Money income after taxes	Income and receipts[1]	Expenditures: Total housing	Shelter	Fuel, util.	Operations	Furnishing	Other	Percentages of income: Total Housing	Shelter	Fuel, util.	Operations	Furnishing	Other
	Dollars							Percent					
Average	5,988	1,595	749	244	319	277	6	26.6	12.6	4.1	5.3	4.6	-
Under $1,000	738	534	314	102	77	40	1	72.3	42.6	13.8	10.4	5.4	0.1
$1,000-1,999	1,578	692	383	129	115	64	1	43.9	24.3	8.2	7.3	4.1	-
$2,000-2,999	2,557	913	495	155	159	103	1	35.7	19.4	6.1	6.2	4.0	-
$3,000-3,999	4,024	1,165	584	181	224	175	1	29.0	14.6	4.5	5.6	4.3	-
$4,000-4,999	4,942	1,339	650	211	255	220	3	27.0	13.1	4.3	5.2	4.4	-
$5,000-5,999	5,817	1,561	738	251	289	276	7	26.8	12.7	4.3	5.0	4.8	-
$6,000-7,499	6,781	1,820	842	281	348	344	5	26.8	12.4	4.2	5.1	5.1	-
$7,500-9,999	8,621	2,095	944	318	418	404	11	24.3	11.1	3.7	4.8	4.7	-
$10,000-14,999	11,822	2,645	1,141	368	597	525	14	22.4	9.8	3.1	5.1	4.4	-
$15,000 & over	22,270	4,419	1,841	488	1,261	783	46	19.8	8.4	2.2	5.7	3.5	-

1/ Average money income, after taxes, and other money receipts.

Source: Consumer Expenditures and Income. Bureau of Labor Stat., USDL, Suppl 3-Part A to BLS Rpt. 37-38, table 29A.

Appendix Table 5.--Housing units started, 1959-69

Year	Total	Nonfarm	Farm	Including farms		Excluding farms		Farm	
				In SMSA	Not in SMSA's	In SMSA	Not in SMSA's	In SMSA	Not in SMSA's
	Thousands								
1959	1,553.5	1,531.3	22.2	1,076.8	476.7	1,076.1	455.2	0.7	21.5
1960	1,296.0	1,274.0	22.0	889.0	407.0	887.6	386.4	1.4	20.6
1961	1,365.0	1,336.8	28.2	947.9	417.1	946.2	390.6	1.7	26.5
1962	1,492.4	1,468.7	23.7	1,053.5	438.9	1,052.7	416.0	0.8	22.9
1963	1,642.0	1,614.8	27.2	1,151.6	490.4	1,150.0	464.8	1.6	25.6
1964	1,561.0	1,534.7	26.9	1,092.7	468.9	1,092.5	442.2	0.2	26.7
1965	1,509.6	1,487.5	22.1	1,035.1	474.5	1,034.5	453.0	0.6	21.5
1966	1,196.2	1,172.8	23.4	808.4	387.8	807.4	365.4	1.0	22.4
1967	1,321.9	1,298.7	23.2	920.3	401.6	919.7	379.0	0.6	22.6
1968	1,547.7	1,523.6	24.1	1,118.4	429.3	1,117.6	406.0	0.8	23.3
1969	1,496.6	1,479.0	17.6	1,093.7	402.9	1,092.6	386.4	1.1	16.5
1960-69	14,429.0	14,190.6	238.4	10,110.6	4,318.4	10,100.8	4,089.8	9.8	228.6

Source: Bureau of Census, Housing Starts, C-20 series.

Appendix Table 6.--Housing, 1950-67 and projections to 1978

Item	United States				Not in SMSA's			
	1950	1960	1967	1978	1950	1960	1967	1978
	Thousands							
Total housing units	45,983	58,326	66,372	83,960	20,100	21,100	23,200	25,200
Vacancies	3,157	5,302	6,637	11,083	1,800	2,100	3,500	3,800
Occupied units (households)	42,826	53,024	59,735	72,877	18,300	19,000	19,700	21,400
New construction		15,003	10,309	24,500		NA	3,100	7,800
Other additions		3,407	544	-		NA	200	-
Demolitions and other losses		6,067	2,807	6,912		NA	2,300	5,800
Net additions to inventory		12,343	6,711	17,588		1,000	1,100	2,000
Quality of occupied units:								
Standard	27,700	44,500	53,900	72,877	8,200	13,700	16,200	21,400
Substandard	15,100	8,500	5,800	0	10,100	5,300	3,300	0

Sources: 1950 and 1960 from Census of Housing
1967 and 1978: (a) United States estimates from HUD, published in "Hearings before the Subcommittee on Housing and Urban Affairs, Senate Committee on Banking and Currency, Mar. 21 and 22, 1968" pp. 1345-1347. Quality in 1967 in proportion to 1966 Survey of Economic Opportunity as shown in "Social and Economic Conditions of Negroes in the United States", BLS Report No. 332, Oct. 1967. Goal for 1978 is to eliminate substandard housing.

(b) Not in SMSA's: Occupied units (households) in 1967 from BLS Report No. 332; 1978 at same percentage of total gain in households as in 1960-67.
Vacancy rate @ 15% as in 1967.
New Construction: 1960-67 from table 4; 1967-78 in proportion.
Quality: 1967 from BLS Report No. 332; goal assumes no substandard units by 1978.

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