8-1945

Bulletin No. 321 - Utah Housing in Its Group and Community Aspects

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UTAH HOUSING

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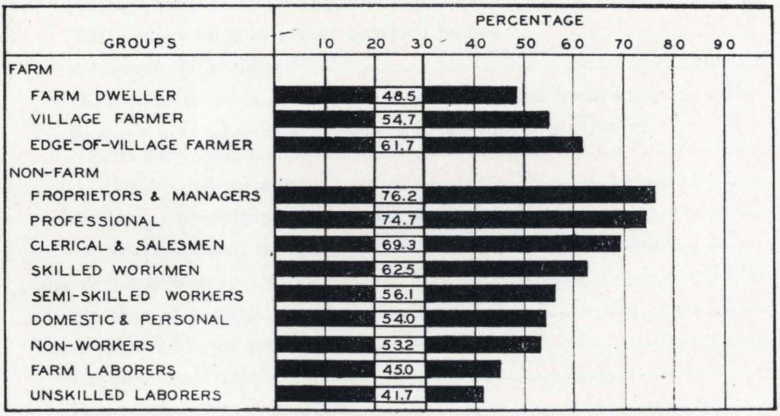

Adequacy of housing as shown by seventeen convenient items for farm and nonfarm groups in Lewiston, Mendon, Plain City, and Tremonton, Utah

Bulletin 321

AGRICULTURAL EXPERIMENT STATION
UTAH STATE AGRICULTURAL COLLEGE
Logan, Utah

AUGUST 1945

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UTAH HOUSING IN ITS GROUP AND COMMUNITY ASPECTS

By Joseph A. Geddes and Carmen Fredrickson[1]

INTRODUCTION

The method employed in this study is to select a comparatively important segment of living—housing—for careful appraisement with the purpose of comparing different groups and localities with respect to it. Comparisons are made (1) between Utah and other states, (2) between counties of Utah, and (3) between four Utah communities. The data include the house, home conveniences, the automobile, the streets adjoining the house, newspapers, magazines, books, and connection with water, sewer, power and telephone lines. The segment is thus not small. The groups are segregated by the vocation, farm and nonfarm, from which the living is made. The communities consist of four northern Utah villages each of a different type. The purpose of the inquiry is to find out how successful the different vocational groups living in different types of communities have been over the years in providing satisfactory homes for their families.

This study, therefore, constitutes an appraisement of housing conditions that exist among the chief rural farm and nonfarm groups in the communities studied.

Selection of Villages for This Study

Lewiston (pop. 1,835, 1940) in Cache County.

Lewiston is an open country community near the center of Cache Valley, with a small compactly settled portion near the center of the area. Several small communities or neighborhoods do a part of their trading in Lewiston. The soil is good and irrigation water is adequate. A sugar factory is located in Lewiston. Nonfarm people composed of merchants, clerks, school teachers, sugar factory employees, a doctor, and a dentist, constitute an active but a small minority of the people.

Mendon (pop. 482, 1940) in Cache County.

Mendon is a farm village true to the original early day pattern.

Plain City (pop. 822, 1940) in Weber County.

Plain City was settled in 1859 as a farm village. Quite early, homes were built for some distance out on six inter-town roads leading out of the five-acre blocked area where the first homes were built. Houses have not been built to any extent on farms lying between the inter-town

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roads. The great majority of the people are farmers. The nonfarm population includes school teachers, storekeepers, factory employees and clerks who work in or near the city of Ogden, ten miles distant.

Tremonton (pop. 2,071, 1940).

Tremonton is located in the northwestern part of the populated portion of Box Elder County. It is a trade center with a large farm population located both on the farms surrounding the blocks and within the blocked area. Farm and nonfarm people, thus, make up the compactly settled portion of the community. Farm dwellers living to the west, south and east of the business section make up approximately 30 percent of the population. There has been but little extension of farm homes along intertown roads. The small communities which do at least some of their trading at Tremonton are: Blue Creek, Howell, Park Valley, Snowville, Bothwell, Thatcher, Penrose, East Tremonton, Elwood, Bear River City, Deweyville, Collinston, Beaver Dam, Fielding, Riverside, and, to some extent, Garland.

Comparatively well represented in these communities are the four principal, more or less unplanned, developments that have come to Utah village communities since the pioneer development: (1) Home building on farms along intercommunity roads. (2) Home building on the farms surrounding the village, irrespective of through streets, and often of any streets. (3) Growth of the nonfarm population in the trade center village with a decline in the leadership and control exercised by farm families. (4) Increase in open country communities where compact settlement has been entirely abandoned and where community centers are few.

Objectives and Methods

This study was organized to ascertain housing and home-convenience conditions among the more important rural groups of Utah.

The data on housing and conveniences were procured from the occupants by field workers during the last two weeks of each of the years 1938, 1939 and 1940. Schedules, with accompanying instructions, were used. Every home was visited, but if the family was not at home, no return visit was made.

The location of the homes on the farm was procured with the aid of an automobile mileage gauge. Results were checked with maps in county courthouse records and at the State Engineer's office.

A considerable body of information about the house and more important conveniences in it is now in the records of the county assessor's office. These data were taken from the county records for each home in the four communities. The assessor's information on houses is not as extensive as that attempted in the schedules, but has the advantage of uniform appraisement.

Definition of Terms:

Farm-dweller family: A farm family living on the farm, outside of the village or town and outside of the edge-of-village farms.

Village-farm family: A farm family whose home is located within the village or town but whose farm is situated in neighboring territory, usually outside the area laid out in blocks. However, a village farm may be found within the clustered area where the acreage is three or more or where the income is $250 or more even though the acreage is less than three.

Edge-of-village family: A farm family living on the edge of the village, that is, both on the farm and in the village, thus coming directly under the influence of both. In many cases these families are located on the periphery of the village. However, they are also found on each side of the principal roads extending out towards other communities and continue as far as village improvements, such as sidewalks, sewer lines, and water mains, go.

Nonfarm family: A family not living on a farm and not operating a farm, and whose chief source of income is from pursuits which in this study are divided into nine classifications as follows: (1) professional, semi-professional and technical workers, (2 proprietors, managers and officials, (3) clerical, salesmen and kindred workers, (4) skilled workers and foremen, (5) semi-skilled workers, (6) unskilled laborers, (7) domestic and personal service, (8) farm laborers, and, (9) non-workers.

Although no single index of fruitfulness of living can be fully adequate, a single index is often a fairly good criterion. A home undoubtedly exercises a strong influence on the social, cultural and spiritual relationships of family members. In somewhat the same way, but a little further removed, are the influences exerted by the community on the home. A community with a highly developed social conscience may exercise tremendous influence on good housing as may be seen in slum clearance, zoning, street improvements, park developments, recreation fields, all of which affect the home. In more than a casual way, therefore, a study of homes may be expected to reveal much concerning good living and community effectiveness.

In rural areas the same social processes are at work as in the cities. In many respects similar situations and similar trends may be observed. In others wide differences exist. An important periphery in rural communities, the edge-of-village area, has many similarities to the truck garden periphery surrounding cities. It is quite different from the slum periphery of big business districts in cities. The village periphery in Utah appears to have an occupational advantage rather than an occupational disadvantage. "Edge" farmers are in a real sense middle way farmers, differing both from village farm families who live in the village and travel to out-lying farms and from farm dweller families who live out on farms at some distance from clustered portions of the village. Not crowded, "edge" families are recipients of the favorable occupational influences of the farms on which they live and also of village physical and social advantages arising from compact settlement.

This study attempts such controlled observation of conditions in the housing field as the use of schedules permits and attempts to relate the findings to some of the basic cooperative processes. A few suggestions in the field of community planning are made.

UTAH HOUSING COMPARED WITH THAT OF OTHER STATES[2]

Value of Houses

THE 1940 CENSUS makes it possible to obtain an overall picture of the larger items in the housing field within the United States. Information related to the value of houses is available on: (1) average value of farm and buildings, (2) median value of owner-occupied houses, (3) proportion of farms mortgaged, and (4) ratio of debt to value. From these data the efforts of different groups and of people living in different areas to establish good homes may be compared.

Average Value of Farms and Buildings Operated by Full Owners
According to census data of 1940 the average value of farm and house in Utah was $6,597 for full owners and $6,162 for part owners. These valuations give the state a rank of 21st and 25th, respectively. However, no other Mountain state has valuations as small. Nevada, with valuations of $16,146 for full owners and $16,495 for part owners, show the best balance, although California's part owners average $18,605, which is higher than Nevada's. Alabama's average for the farm and buildings is the lowest in the nation (appendix table I).

The Median Value of Owner-Occupied Houses
The median value in Utah was $2,071 in 1940. Where the houses only are considered, Utah's position is greatly improved, the rank being 19th among the states and 1st among Mountain states. California only, of the Pacific states, was appreciably higher. In New Mexico, where many houses are occupied by Mexicans and Indians, the median value was $459, which places this state at the bottom of the Mountain states group and of all states. The Southern states, Arkansas and Mississippi, with median values of $605 and $607 are a little higher. Alabama, Kentucky, Oklahoma, Louisiana, and Arizona do not reach a median value of $1,000. Seventeen states range between $1,000 and $2,000. Rhode Island reached a median value of $3,824, New Jersey $4,451, and Connecticut $4,494. While the median value of Utah homes was higher than that of any other neighboring state, it was less than half that found in Connecticut.

[2]The data for the comparisons made in this section are taken from the Sixteenth Census of the United States, 1940.

Adequacy of Housing

Areas also differed greatly in 1940 in the proportion of houses which fell in the low and high value brackets. It is a far cry from the 40.2 percent of homes whose value was under $300 in New Mexico to the 0.3 percent in the same bracket in Massachusetts, Rhode Island, and Connecticut.

In the upper levels of value the difference is likewise marked. In Massachusetts 65 percent of the homes were valued at $3,000 or over. In New Mexico the percentage of this value range was 13.3, which is less than 1 in 8. Similar differences are widespread. Montana had 42.7 percent or more than 2 in 5 valued at $1,000 or under, and 20.9 percent or 1 in 5 at $3,000 or over. Connecticut had only 2.2 percent of its houses in value brackets under $1,000 and 73.5 percent in brackets of $3,000 or over. Southern states like Alabama had more than half (54.5 percent) with values under $1,000 and only 16.9 percent with values exceeding $3,000. Utah was more evenly balanced, with 23.6 percent under $1,000 and 32.6 percent over $3.000 (appendix table II).

Regions also differ greatly in the value bracket in which the largest percentage of homes fall. The highest percentage bracket for each of the Pacific Coast states, and for the North Central states, was the $3,000 to $3,999 bracket. New England states, except Vermont, also reached this highest percentage bracket. The predominating bracket in the West North Central and the South Atlantic states was $1,000 to $1,499. The most strongly represented bracket in the East South Central, the West South Central, and most of the Mountain states was the less than $300 bracket. Utah and Colorado were the exceptions. Colorado's highest percentage bracket was $1,000 to $1,499, while Utah was among the best housed states with the strongest bracket in the $3,000 to $3,999 column.

Differences in Value of Urban, Nonfarm and Farm Houses

It is the urban houses of Utah, however, which sustain the high level of value, for the rural farm house drops to 22nd and the rural nonfarm to 23rd places, respectively, in state comparisons. The median value of owner-occupied houses for the state is $2,071. For rural farm it is $1,233, for rural nonfarm, $1,373, and for urban, $2,861. These values show an ascending trend from the farm to the city. The figures cannot be taken in an absolute sense, however, because urban and rural nonfarm values include the value of the land (lot) whereas, for the farm units the value of the land was excluded. This difference does not invalidate the figures significantly, since the value of country farm land on which the house is built is small in comparison with city lots so that the value of the farm house without the land is only slightly less than if the value of the land were included.

Reasons for Higher Value Houses in Utah With Low Value of Farm Enterprise

Greater Urbanization. Superior houses require greater earnings or the use of more credit. Urbanization usually indicates commercial, manufacturing, and industrial development. When it takes place jobs become diversified and opportunities to improve earnings are more numerous than where a single vocation, like agriculture, dominates. Utah is more urbanized than other Mountain states (fig. 1). The median value of

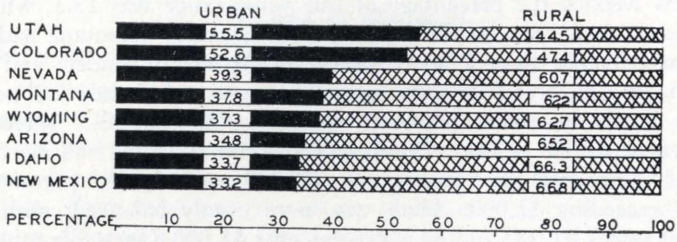

Fig. 1. Proportion of urban and rural population for the eight Mountain states, 1940

urban houses in Utah ($2,861) is more than twice that of rural farm houses ($1,233). However, the median value of owner-occupied farm homes is still comparatively high in Utah, much higher than the low value of the total farm enterprise by itself would warrant (appendix table III).

Larger Proportion of Utah Farms Mortgaged. The proportion of farms mortgaged may be found in columns 1 and 4 of appendix table I. Among full owners 49.1 percent of Utah farms were mortgaged in 1940, and among part owners, 57.4 percent. This gave Utah a rank of 35th for the former and 29th for the latter in comparison with the other states. Thus, more than half of Utah's farms were mortgaged. However, Idaho and Wyoming had larger proportions mortgaged for both full and part owners, and Colorado had a larger proportion for part owners.

War Improved the Ratio of Debt to Value of Farms in Utah. For Utah's full owners this ratio was in 1940, 40.5 percent and for part owners, 45.3 percent. Both were higher than in any other Mountain state except Colorado and higher than in any Pacific Coast state. Credit, thus, could have been partly responsible for Utah's superior houses (as contrasted with other Mountain state houses). In 1930 the ratio of farm debt to value in Utah was 34.8 percent, in 1920 it was 28.8 percent and in 1910, 21.4 percent. Up to 1933 the debt yoke was getting proportionately heavier and the equity of the farmer less in spite of considerable payments on debt. This was the result of declining land

values. From 1910 to 1923 the ratio of farm mortgage debt to value grew steadily, though not uniformly, throughout the country. A moderate decline, quite marked in the Mountain states, took place between 1923-1927. From 1931 to 1933 the ratio increased rapidly. From 1933 to the present the ratio has declined steadily with increased emphasis since 1940. In 1944 the ratio was about as favorable as it was immediately before World War I.[3]

War prices have improved the position of farmers in Utah. The rate of mortgage debt payments failed to increase appreciably before 1941. During 1941 estimated mortgage debt declined $4,562,000 and during 1943, $5,264,000. On January 1, 1944, the total mortgage debt for Utah was estimated to be $22,713,000, which is considerably less than half of the 1923 figure of $52,095,000. Utah farmers were able between Jan. 1, 1940, and Jan. 1, 1944, to reduce outstanding farm mortgage debt by 38 percent. Montana, with a 39.7 percent decrease, is the only state surpassing Utah in debt reduction. Idaho's reduction amounted to 20.5 percent, Oregon to 10.2 percent and California to 14.8 percent during this period.[4]

It would seem that in spite of small farms the Utah farm family has been able to reduce mortgage debt steadily, while the home has improved and significant home conveniences have been added. The existence of near-by towns and cities has no doubt provided employment for some members of farm families, thus increasing the family income. Extensive mining operations have given farmers winter employment.

Social organization and religious beliefs in Utah have also strengthened home building interests. Religious beliefs encourage large families. Urbanization trends are strong here. Compact village settlements in which farm families live make for urbanization in the sense that the advantages of the modern city are to a great degree also available in the village. Reference is here made to electric lights, culinary water, telephone, etc. Important also are the socializing influences of frequent contacts which primary group relationships bring in the village, and which in the aggregate probably stimulate the desire for better homes and better furniture. Still again, the closer contacts which farm people in Utah have with urban families arising out of physical proximity and out of religious practices undoubtedly diffuse knowledge and excite desire.

Size of Utah Houses

Number of Rooms

The 1940 median number of rooms per house in Utah was 4.13, the urban, 4.27, the rural nonfarm, 3.9, and the rural farm, 4.09. The

[3]Agriculture Finance Review, No. 1944, pp. 42, 85-86.
[4]Ibid, p. 41

owner-occupied house with a median number of 4.66 is larger than the tenant occupied, which had 3.38.

Utah houses (median) are a little larger than houses of any of the other Mountain states, and larger also than the houses in the East South Central and West South Central states. They are smaller than in any Pacific Coast state and smaller than the houses in the older Eastern and Northern states. They hold 31st position for all the states in median number of rooms. These comparisons are true in nearly all instances for the urban, the nonfarm, and the farm house. This less than middle position of the Utah house in size is an advantage in some respects. Many homes in the Eastern and Northern states are too large, having been built in an earlier period when families were larger than now.

Utah urban houses show good balance when compared with states of other regions. Five-room urban houses are more numerous than any others. Twenty-two states have fewer one-room and two-room urban houses than Utah.

Utah rural nonfarm houses are smaller than urban houses. The median number of rooms is 3.9 and the most frequent size is four rooms. The household is also larger, numbering 3.71 persons to the house, as compared with 3.35 in the urban house. However, taken as a whole, overcrowding is not serious as there is a little more than one room per person for the entire rural nonfarm group.

The Utah rural farm house is also smaller than the urban house but larger than the nonfarm, being about midway between them, with a median number of rooms of 4.09. The most frequent size is four rooms. However, the size of the household is larger among farm families than among both nonfarm and urban households, the median number in the household declining from 4.29 in the rural farm family to 3.71 in the rural nonfarm and to 3.35 in the urban household.

House overcrowding is thus a rather serious problem in the Utah rural farm home, both relatively and specifically. Unlike the urban and rural nonfarm homes where overcrowding occurs for the less well housed, but not for the group as a whole, the farm home is small even for the median household. More than one room per person is available for the great majority of the urban and rural nonfarm groups. In the Utah farm home the median size of household is larger than the median number of rooms, so that less than one room per person is available. There is more overcrowding in states like Arizona, New Mexico, Georgia, South Carolina, Alabama and Louisiana than in Utah farm groups, but it is a long step from the 35.5 percent of farm homes with three rooms or less in Utah to the 4.4 percent with three rooms or less among farm homes in Vermont.

Practically all Utah houses fall within the range of one to nine rooms. Only 0.5 percent are in the 10 and 11 room category. Most of the states have comparatively more very large homes and more small homes than Utah. In Utah, as previously noted, median sized houses tend to prevail. About three-fourths of all homes are found in the three to six room size. This is a stronger middle grouping than is found in many states.

It may be concluded then, that while there is overcrowding among many people in every classification unit in Utah, overcrowding is not so extensive in the urban or the nonfarm groups. In farm houses overcrowding is so wide-spread that more than half of the homes exhibit it.

Seven Essential Home Conveniences

Important to good living as are houses large enough to prevent overcrowding, equally necessary are home conveniences which lighten labor, bring time for leisure, and make possible cultural growth. The 1940 census provides information on 7 of the more important home conveniences. These conveniences are: radio, electric lights, running water in house, toilet in house, bathtub or shower, mechanical refrigerator and central heat.

Regional and State Differences

Present-day America shows great differences from region to region in the possession of conveniences. Radios and electric lights are found most frequently in all regions, but vary from over 9 in 10 homes on the Pacific Coast and the North Atlantic seaboard states to not more than one in two homes in the East and West South Central states. Central heat is least frequently found in nearly all parts of the country, varying greatly, however, between the north and the south. The Middle Atlantic tops all regions with the 7 conveniences considered as a whole. The East North Central states and the New England states are high. The East South Central and the West South Central are the least well supplied. The Pacific, the Mountain, the West North Central and the South Atlantic states occupy mid-positions of adequacy.

Utah, however, ranks well up with the best supplied states in the possession of the 7 conveniences (table 1). In one item, electric lights, urban Utah ties with urban New York and urban California for first place with an average of 99.3 percent of the homes connected. Rural nonfarm Utah (villages) ranks second among the states with 93.1 percent. If the states are arranged in quartiles with the percentage of homes having the 7 conveniences, Utah groups appear in the upper or first quartile 16 times, in the second quartile 8 times, in the third quartile 3 times, and does not appear at all in the lowest or fourth quartile. This favorable situation in the home conveniences field means much to progressive family living in Utah.

Table 1. *The rank of Utah among the states according to state, urban, rural nonfarm and rural farm groups for 7 conveniences, 1940*

Conveniences	State	Urban	Rural nonfarm	Rural farm
Electric lights	7	1 {N. York Calif.	2	6
Radio	8–Penn.	14	7	7
Mechanical refrigerator	8	11	13	6
Running water in house	10	18	8	10
Bathtub or shower	13–Mich.	10–Md.	15	10
Indoor toilet	16	19–Colo.	18	10
Central heat	25	27	30	25

By taking an average of the percentage of houses having each of the seven conveniences it is possible to get a single index of home convenience adequacy. On this composite basis Utah's average is 69.8 percent, which is a relatively high level. Only 11 states have a composite percentage higher than Utah.

Home Conveniences in Utah

Running Water in the House: With 82.6 percent of the homes supplied with running water in the house in 1940, the people of Utah have obviously made comparatively good use of the opportunity which nearby mountain springs have made available. Not all groups have participated equally in procuring this important convenience (fig. 2).

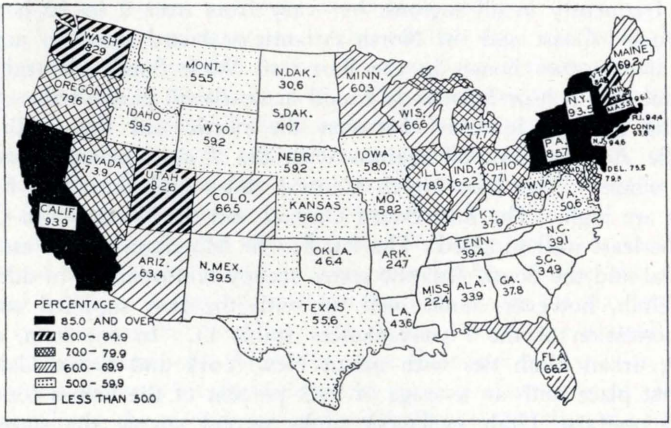

Fig. 2. Homes with running water in the house in the United States, by states, 1940

Urban Utah reaches the high percentage of 94.4, Utah nonfarm, 75.1, and Utah rural farm, 50.5.

Although the Utah urban percentage is high the urban percentages of 17 states are higher, New York topping all the rest with 99.4 percent.

Utah rural nonfarm, although much below Utah urban, achieves a higher rank among the states, being excelled by only seven states. Likewise Utah rural farm homes, half of which (50.5%) have running water, are exceeded by rural farm homes in only nine states.

Electric Lights: Although urban Utah holds top rank with urban California and New York in the proportion of homes with electricity, the state as a whole does not maintain this position (fig. 3). Rhode

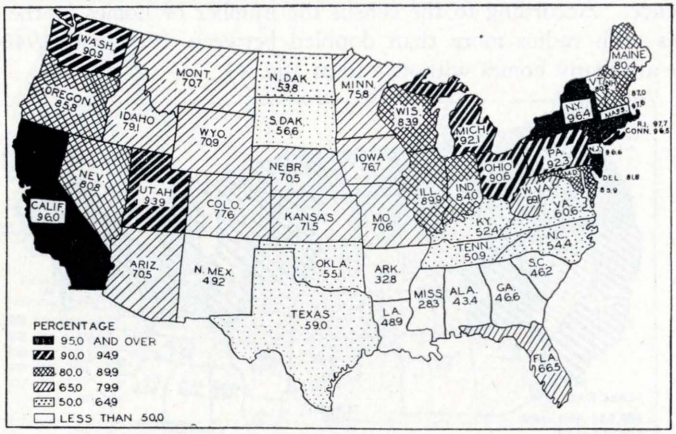

Fig. 3. Homes lighted with electricity in the United States, by states, 1940

Island occupies first place with 97.7 percent of all homes connected, as compared with 93.9 percent for Utah.

Utah urban communities are now well provided with electricity in the house. Rural nonfarm people are not as well situated as the urban, but with a percentage of 93.1 with electric lights they are far better off than the nonfarm people in any other state in the union except Connecticut, which reaches the high percentage of 94.1. Utah farm homes, with 74.5 percent with electric lights, rank well in comparison with farm homes in other parts of the country. Only in Massachusetts (81.4%), California (81.2%), Connecticut (80.4%), New Jersey (80.3%) and Rhode Island (77.7%), are Utah farm homes surpassed with respect to this important convenience.

More than half (55.5%) of the people of Utah live in urban communities where electricity is found in nearly all houses. More than a fourth (27.3%) of the people make a living at rural nonfarm vocations centering mainly in villages where about 14 in 15 homes have electric lights. About one-sixth (17.2%) of the people live in rural farm homes where 3 out of 4 homes have electricity. Thus, most of the homes without electricity are farm homes. But the distribution of electricity is not even in these large groups. In some communities

there are no electric lights. In some counties the great majority of the homes are without them.

Radios: Although great progress has been made in making radios available to the American people, it would be a mistake to assume that they have become a household necessity. They do vie with electric lights for first position among the seven conveniences and they have moved more rapidly into the great majority of homes than any other convenience. According to the census the number of homes in the United States with radios more than doubled between 1930 and 1940. Still there are many homes without radios (fig. 4).

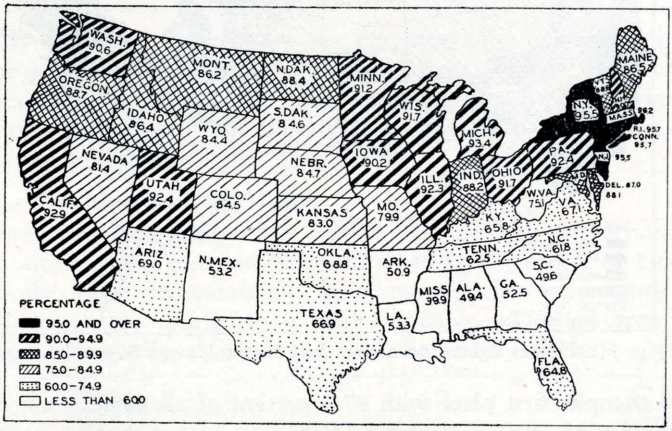

Fig. 4. Home radios in the United States by states, 1940 (based on data from the census of housing)

Utah is well up among the states in the possession of radios, with 92.4 percent of homes with them. This state leads the Mountain states, stands on a par with the Pacific Coast states, and with the industrial states of the north.

Within Utah, urban homes are best supplied with radios, reaching 95 percent, rural nonfarm comes next with 90.2 percent and the rural farm lowest with 86.2 percent. Yet the rural farm homes of Cache County reach 96.1 percent with radios, which is the highest percentage reached by any urban or rural nonfarm group in the state.

Refrigerators: Older states often have higher percentages with certain types of conveniences than the newer states. New England states, with smaller areas, larger populations, and longer periods for development, stand higher than Mountain states in running water in the homes and in electric lights. The advantages though still real, are less pronounced, with newer items like radios and refrigerators. Slightly more than half of the people of Utah (50.8%) have refrigerators in

their homes. This is more favorable than in any other Mountain state or Pacific Coast state except California (57.7%), or New England state except Connecticut (61.5%). Only seven states in the union have more refrigerators proportionately than Utah. They range from a low of 14.8 percent in Mississippi to 61.6 percent in New York, and from 27 percent in New Mexico to 50.8 percent in Utah among Mountain states (fig. 5).

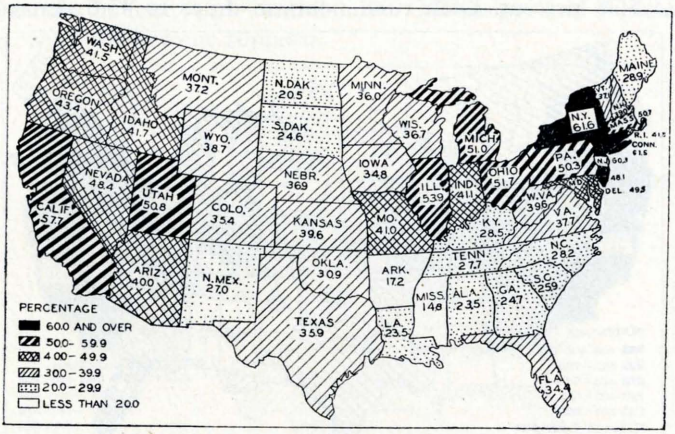

Fig. 5. Home refrigerators in the United States, by states, 1940 (based on data from the census of housing)

Urban Utah, with 59.2 percent of homes with refrigerators, is higher than the state as a whole, but occupies a less favorable position in comparison with urban populations of other states.

Rural nonfarm Utah, with 41 percent with refrigerators, is surpassed by one Mountain state, Nevada, which has 44.1 percent, and by nonfarm groups in 12 other states.

Utah rural farm homes, with 34.6 percent with refrigerators, again lead Mountain states and are exceeded only by rural farm houses in California of the Pacific states and by rural farm houses in five states in the country.

Bathtubs or Showers: In California nine out of ten homes have bathtubs or showers (89.6%), in Mississippi only one home in six (17.6%). New England, the Pacific area, and the Middle Atlantic states have the most homes with bathtubs. The Mountain states occupy a mid-position. Utah leads the Mountain states and is 13th among the states (fig. 6). Eighty-six and eight-tenths percent of the urban houses in Utah have bathtubs. Utah rural nonfarm homes have only a little more than half as many, with 45.6 percent. Utah rural farm homes with bath constitute less than a third (31.5%) of rural farm homes.

More than two-thirds (67.4%) of Utah's homes have a stationary bath or shower. This gives the state leadership in the Mountain area and a rank of 13th among the states. California leads all states. Mississippi is at the foot of the list. A range of 72 percent separates these two states. Again it is the Northeastern and the Pacific Coast states which are most favorably situated. Urban New York leads all states with a percentage of 94.2 of the houses with bath. Urban Utah reaches 86.8 percent, Utah rural nonfarm drops to 45.6 percent, and

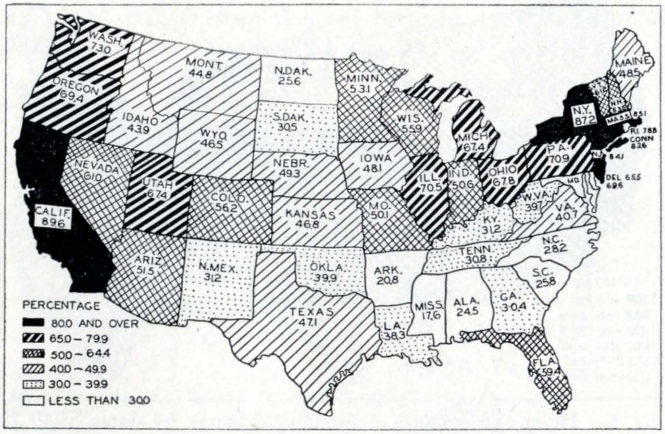

Fig. 6. Homes with stationary bathtub or shower in the United States, by states, 1940 (based on data from the census of housing)

Utah rural farm to 31.5 percent. Again Utah's form of village settlement in which many farm families live in the villages pays its type of dividends.

Indoor Toilets: The indoor toilet, with its more efficient means of sewage disposal, represents a long step forward in sanitary improvement. Massachusetts, with 94 percent of houses with indoor toilets, leads the states. Mississippi, with a percentage of 18.8, trails all of them. Utah, with 68.5 percent, or two homes in three, is in the second quartile among the states, ranking 16th (fig. 7). Utah leads all Mountain states, all states between the mountains and the Mississippi river, but falls behind New England states except Maine, the Middle Atlantic states and most of the East North Central states. In Utah rural farm houses have the best relative ranking position when comparisons are made with these groups in other Mountain states (table 2). Urban Utah ranks 19th, rural nonfarm Utah 18th, rural farm Utah 10th, and yet 88.6 percent of Utah urban homes have indoor toilets and only 30.8 percent of Utah rural farm homes have them.

Central Heat: Southern states do not require the expensive central

heating equipment that is necessary for adequate heating in the Northern states. Regional comparisons, therefore, have only partial validity. Provision for central heat is shown in figure 8. Colorado, with 38.5 percent of the houses with central heat, leads the Mountain states, Utah, with 33.1 percent, is second. Most states in the middle Atlantic, the East North Central, New England and the West North Central states excel Utah. New York is highest with 76.3 percent, or more than three houses in four, with central heat. Mississippi and Arkansas are lowest with 1.8 percent supplied.

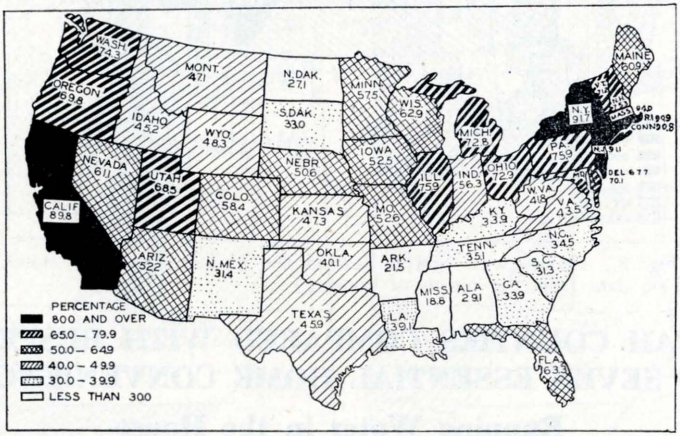

Fig. 7. Homes with indoor toilets in the United States, by states, 1940 (based on data from the census of housing)

Table 2, *Percentage of homes having indoor toilets in the Mountain area by states, 1940*

Mountain states	Total	Urban	Rural nonfarm	Rural farm
Utah	68.5	88.6	46.2	30.8
Nevada	61.1	87.7	50.0	26.2
Colorado	58.4	88.6	37.9	11.6
Arizona	52.2	80.7	46.1	17.3
Wyoming	48.3	83.9	41.1	10.1
Montana	47.1	87.8	35.8	8.4
Idaho	45.2	79.8	39.1	16.8
New Mexico	31.4	64.7	20.4	8.0

Urban Utah falls below urban Montana with respect to central heat in the Mountain area and rural nonfarm Utah is below Montana, Wyoming and Colorado. Montana only, however, excels Utah in the rural farm home category among Mountain states. The small proportion of homes with central heat in Utah—among all groups in the state, 33.1 percent; urban, 48 percent; rural nonfarm, 13.8 percent,

and rural farm, 8.3 percent—suggests how large the task of modernizing Utah houses really is.

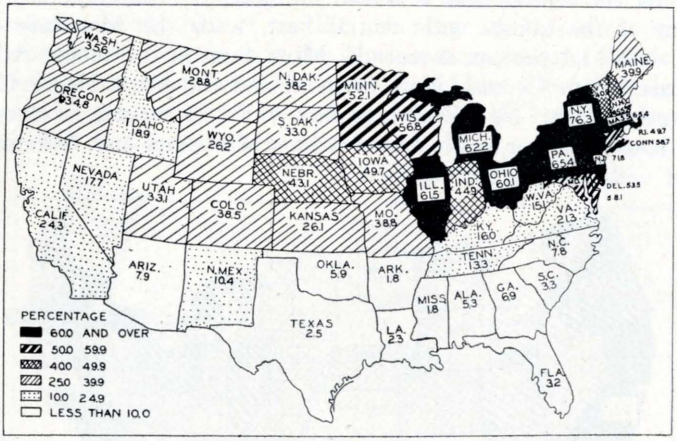

Fig. 8. Homes with central heat in the United States, by states, 1940 (based on data from the census of housing)

UTAH COUNTIES COMPARED WITH RESPECT TO SEVEN ESSENTIAL HOME CONVENIENCES

Running Water in the House

THE HIGH STATE AVERAGE of 82.6 percent of homes with piped water is not maintained evenly over the state. In Salt Lake County, where nearly half of the population of the states lives, the average is 94.1 percent. In Duchesne County only 26.4 percent of the homes are supplied (fig. 9). The range is thus 67.7 percent, which is a wide margin of difference. It is chiefly the rural farm homes and to a lesser degree the rural nonfarm homes which do not have running water in the house. In figures 9 to 15 which follow, comparison should be made with figure 18, which indicates the relative density of population of the counties. The midway county for running water is Iron, which averages 72.8 percent. The 14 counties ranking above and the 14 below Iron may be divided into groupings of seven counties each. The seven top ranking counties are: Salt Lake (94.1%), Weber (89.8%), Carbon (83.9%), Cache (83.4%), Davis (83%), Summit (82.2%) and Utah (79.6%). The seven lowest ranking counties are: Rich (54.6%), Piute (54.1%), Garfield (45.1%), Daggett (39.7%), San Juan (30.8%), Uintah (28.8%) and Duchesne (26.4%).

Running water in the house is not only an important convenience itself, but conditions the emergence of the other conveniences

such as the bathtub, the sink, the indoor toilet. While there are fewer of these conveniences than of running water, the tendency in the counties is for them to follow much the same order; that is to say, if a county has a small percentage of homes with piped water it has a smaller percentage of indoor toilets; if it has a large percentage of homes with piped water it has a large percentage of homes with indoor toilets.

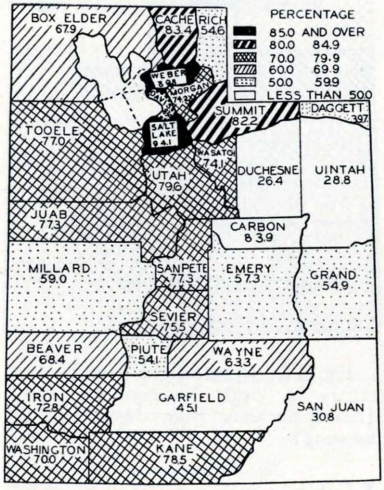

Fig. 9. Homes with running water in the house in Utah, by counties, 1940 (based on data from the census of housing)

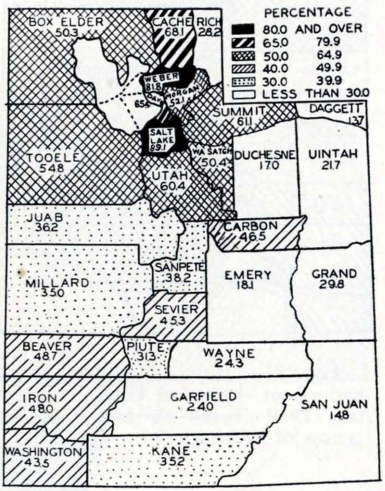

Fig. 10. Homes with indoor toilets in Utah, by counties, 1940 (based on data from the census of housing)

Indoor Toilet

Much the same order prevails here as with running water. Six of the seven counties which occupied the top ranking category with piped water also were highest with indoor toilets. More than two-thirds (68.5%) of the homes of the state have indoor toilets. This is fourth among the conveniences in extent of use (fig. 10).

Bathtub or Shower

Again all seven counties achieving top rank for indoor toilets occupy top rank for bathtub or showers, and all seven with lowest rank for toilets have lowest rank for bathtub or showers. Two-thirds (67.4%) of the homes of Utah have bathtubs or showers. Salt Lake County, with 87.6 percent, and Weber County, with 80.4 percent, are the leaders. San Juan, with 15.1 percent, and Daggett, with 13.1 percent,

fall behind all others. Sanpete's 37.9 percent with bathtubs is in the median position (fig. 11).

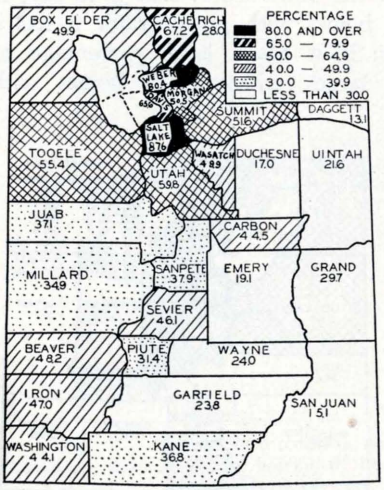

Fig. 11. Homes with stationary bathtub or shower in Utah, by counties, 1940 (based on data from the census of housing)

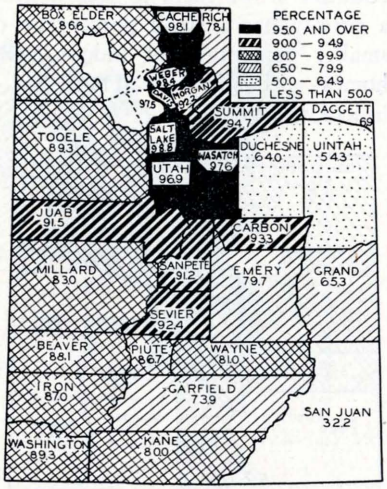

Fig. 12. Homes lighted with electricity in Utah, by counties, 1940 (based on data from the census of housing)

Electric Lights

Electric lights are more universally found in all counties than any other convenience; 93.9 percent of all homes have them. In Salt Lake County 98.8 percent of homes are supplied, in Daggett only 6.9 percent (fig. 12). Electric lights represent the availability of electric power and therefore exercise a determining or conditioning influence on other electric conveniences such as radio and refrigerator.

Radios

Radios are the second most popular convenience in Utah, reaching the high average of 92.4 percent. For this convenience comparisons reveal some departures from well marked trends. For example, Rich County is not only within the group of seven most favorably situated counties with respect to radios, but actually leads all counties. Although it is a rural county with no urban population, radios are found in 95.5 percent of the homes (fig. 13). In this case there seems to be a definite effort by the people in this county to overcome the geographic isolation which farming and cattle raising impose, by establishing contact with the outside world through the radio. Here is an accommodation different

from, but comparable to, the one developed by Utah pioneer leaders to overcome farm isolation by establishing farm residence within the towns and villages. With respect to this item Rich County is unique among the counties.

The county with the smallest proportion of homes with radio is San Juan, where 42.8 percent, or a little more than 2 in 5 homes have them. Radio does not follow population density as fully as do most of the other six conveniences.

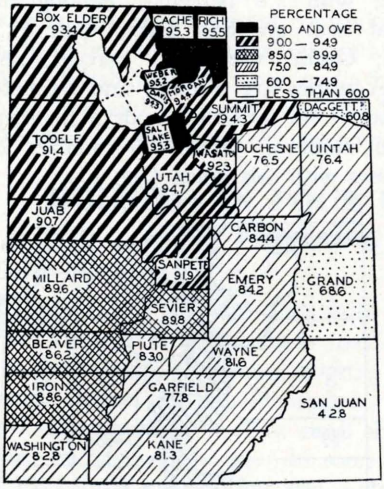

Fig. 13. Home radios in Utah, by counties, 1940 (based on data from the census of housing)

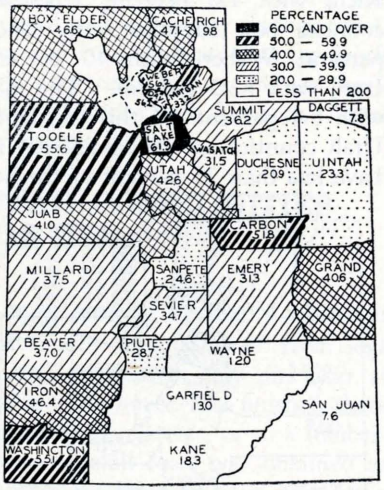

Fig. 14. Home refrigerators in Utah, by counties, 1940 (based on data from the census of housing)

Mechanical Refrigerators

Mechanical refrigerators are found in half of the homes (50.8%) in the state. Salt Lake County rates highest with three-fifths (61.9%) of the homes having them, San Juan is again lowest with 7.6 percent. Summit, with 36.2 percent, is the median county. The seven counties with most refrigerators are: Salt Lake, 61.9 percent; Davis, 56.2 percent; Weber, 56.2 percent; Tooele, 55.6 percent; Washington, 55.1 percent; Carbon, 51.8 percent, and Cache, 47.1 percent. Of these, Davis, Washington, Carbon, Cache, and Tooele are predominantly rural. The seven counties with the smallest percentage with refrigerators are Duchesne, 20.9; Kane, 18.3; Garfield, 13.0; Wayne, 12.0; Rich, 9.8; Daggett, 7.8, and San Juan, 7.6, all rural (fig. 14). Mechanical refrigerators are 6th in order of extensive use among the

seven census conveniences in Utah. Washington County, with its low altitude and southern location, needs refrigerators.

Central Heat

Central heat is found in one-third (33.1%) of Utah homes. Salt Lake County has more than half of its homes heated by central heat (52.5%), Weber, two homes in five. In Wayne County only one home in each 100 has furnace heat. Closely resembling Wayne's lack of modern heating systems is Daggett with 1.5 percent with central heat, Rich, with 1.6 percent, Duchesne, with 2.8 percent. Among the counties best supplied with central heat are Salt Lake, with 52.5 percent; Weber, with 40 percent; Cache, with 27.3 percent, and Iron, with 23.2 percent. The mid-counties are Summit and Sanpete, with 8.4 percent. If this convenience is an index of modern housing, Utah counties are predominantly not modern. Of the 29 counties, 26 have less than 25 percent of the houses with this index (fig. 15).

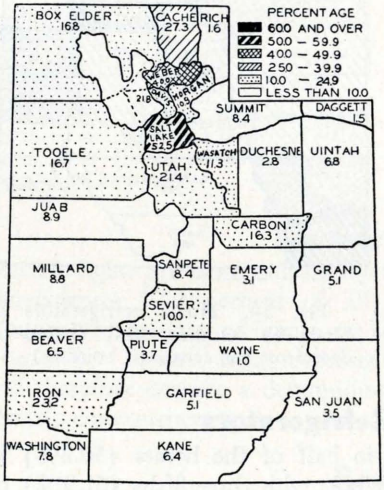

Fig. 15. Homes with central heat in Utah, by counties, 1940 (based on data from the census of housing)

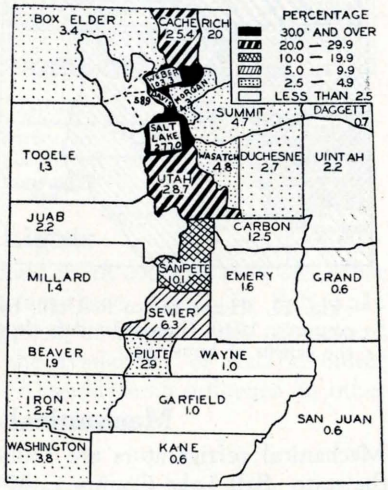

Fig. 16. Population density per square mile for Utah counties, 1940

Rural counties which have moved up from their usual positions among the counties with respect to furnace heat are Iron, with 23.2 percent, and Box Elder, with 16.8 percent. Semi-urban Utah County with 21.4 percent, and rural Davis, with 21.8 percent, rank among the leaders.

On the whole, the seven conveniences of the 1940 census show a tendency to be found where population is most dense (fig. 16). How-

ever, there are interesting exceptions. Farm people in Utah have shown considerable ability in developing forms of social organization—village types of settlement, consolidated schools, cooperative buying and selling agencies—which are placing the Utah rural family in advance of rural families in many areas. Here and there the farmer has narrowed the gulf between his culture and that of city people. In places he has drawn up abreast. Within the limited field of the seven census conveniences it is interesting to note that rural Rich County has more radios per family than Salt Lake County; that rural Davis, Summit, Carbon and semi-urban Cache and Utah Counties are among the leaders with the important conveniences of culinary water, indoor toilet, bath, radio, electric lights, refrigerator, and furnace heat; that far south rural Washington County ranks high with refrigerators and southern rural Iron and far north rural Box Elder Counties with furnaces. Rural Wasatch County has few peers with electric lights.

HOUSING IN FOUR UTAH COMMUNITIES
Financing the House

Early Methods

EARLY UTAH HOUSES were built almost entirely by family labor out of rock from the farm itself or nearby mountains or from logs cut down in the canyons, or from adobe puddled in clay pits near at hand. Labor was usually traded. When the house was finished there was either no debt at all or small obligations to relatives, or to a lumberyard or hardware store. In some cases a small loan was obtained at a bank in a neighboring city. Houses were unpretentious and often crowded.

With the turn of the century mortgage loan associations and insurance companies began extensively to make loans on farms and houses. The new idea of building a house and of having the use of it while it was being paid for developed slowly. Attitudes favorable to this method grew stronger with the coming of local home building societies which began to operate in the larger and some of the smaller cities shortly before World War I.

Government Enters the Housing Field

Early New Deal effort operated first through PWA Housing Division and after November, 1937, through the United States Housing Authority. Financing problems have been attacked by these agencies, particularly the latter, at three principal points: (1) the time of repayment was lengthened and regularized, extending ordinarily from ten to twenty years, (2) interest rates were reduced, and (3) payments on principal were amortized.

Very considerable progress was made by the U. S. Housing Authority in bringing good housing to low income families of wage earners. According to Nathan Straus:

> The average net construction cost of about 130,000 homes built under the U. S. Housing Authority program from November 1937 . . . to the middle of 1941, was $2,720. The average shelter rent per dwelling was $12.79 a month; the average over-all rent, including utilities, such as water, heat, light, cooking fuel, and also refrigeration, where it was supplied, was $17.98 a month. The average income of families rehoused was $832 per year.[5]

No such progress has been made in improving farm homes. The chief government agencies that have aided rural people in building satisfactory homes are the Farm Credit Administration and the Farm Security Administration. Neither of these agencies is primarily a housing agency. Thus far they have not developed comprehensive housing plans, helps or facilities sufficiently strong to influence rural housing.

The need for a strong rural housing program is, nevertheless, very great. Mr. Straus says further:

> The truth is that one farm house out of four has insecure foundations, a leaky roof or unsafe flooring or is otherwise in bad structural condition. About one out of ten is in such a state of delapidation that complete replacement is the only remedy . . . the chief cause of such conditions is indicated in a study of consumer incomes in 1935-36 made by the National Resources Committee. It showed that more than half of the nation's farmers received less than $1,000 a year and that more than a third had annual incomes amounting to less than $750.[6]

Financing Houses in the Four Communities

Credit is now used in building the great majority of new houses in the four villages, although a substantial minority are paid for with cash (table 3). Much of this credit is expensive. Interest rates are often high. Adequate amounts are difficult to obtain and the terms of repayment are not well organized for people with small incomes.

Of the new houses built during the five-year period, 1937-41, in Tremonton, nearly a third (30.5%) have been built with the help of bank loans. In many cases the owners have been able to pay for a large share of the cost from accumulated funds and have paid the balance with bank loans which are flexible and can be paid off at any time. Loans from life insurance companies are infrequent. A few borrow from a relative. More than a sixth (18.6%) were able to pay cash.

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[5]Nathan Straus. The seven myths of housing. New York, A. A. Knopf, 1944. pp. 37-38.

[6]Ibid.

A great difference exists in these four communities in the extent to which they have made use of FHA and also in the extent to which they have used credit. It is stating the case moderately to say that farm people in these communities do not have satisfactory financing facilities to build homes (table 3).

Table 3. *Principal source of funds for construction of homes in Lewiston, Mendon, Plain City and Tremonton, Utah, 1937–41*

Houses built entirely or principally from	Lewiston		Mendon		Plain City		Tremonton	
	no.	*pct.*	*no.*	*pct.*	*no.*	*pct.*	*no.*	*pct.*
Bank loans	4	28.6	1	33.3	2	11.8	18	30.5
Building supply firm	1	7.1	1	33.3	2	11.8	0	—
Cash payment (savings)	2	14.3	0	—	4	23.5	11	18.6
FHA loans	6	42.9	1	33.3	0	—	22	37.3
Farm Security	0	—	0	—	1	5.9	0	—
Life insurance	0	—	0	—	0	—	3	5.1
Loan associations	0	—	0	—	4	23.5	1	1.7
Loans from relatives	1	7.1	0	—	1	5.9	3	5.1
Personal loans, not relatives	0	—	0	—	3	17.6	1	1.6
Total houses	14	100.0	3	100.0	17	100.0	59	100.0

Some of the reasons for the slow movement of FHA into farm home financing in these towns lies in the thinking of the farmers themselves. Rural people do not readily take up with new things. However, in Plain City particularly, there is considerable dissatisfaction with FHA because as farmers they have been refused loans. FHA has been operating since 1937. Certainly during the five-year period (1937-41) in all four communities the farmers have had very largely to build partly finished or basement homes, borrow from banks, or life insurance companies, or relatives, or get material from building supply firms on time. The result is smaller, less well planned, and often unfinished homes.

In Tremonton, however, FHA has come to influence strongly home financing. Here during the five years (1937-41) twenty-two of a total of fifty-nine new homes have been built through FHA. In Lewiston six of fourteen new houses have been built through this channel. In Mendon one new home in three. In Plain City, although seventeen new houses were built during this time, none of the funds came through FHA. It is thus seen that in only two villages of the four is FHA an influence of consequense in home building. States as well as communities differ greatly in the readiness with which they make use of this federal agency. Georgia is said to have made perhaps the greatest strides of any state in the country in both rural and urban re-housing.[7]

[7]Ibid, p. 41.

Utah's legislatures have been slow to pass needed enabling legislation for rural participation.

Characteristics of Loans: While the great majority of the FHA loans in Tremonton are on a 20-year repayment basis, only 27.1 percent of all home loans are 20-year loans. Loans with no definite termination date, but with the understanding that crop conditions will dictate the amount repaid, are numerous in all four communities. These loans, which are often bank loans, are made with the expectation of paying off in large amounts within a comparatively short time. There are few five to ten year loans.

Interest rates generally are higher in the Mountain area than in the heavily populated business centers to the east and west where

Table 4. *Characteristics of loans made to finance construction of new houses in Lewiston, Mendon, Plain City, Tremonton, Utah, 1937–41*

1. Length of loans

Communities	Total number	Number of loans running specified number of years						
		Time undetermined	5 years & under	6 years	10 years	15 years	20 years	30 years
Lewiston	12	4	3	0	1	3	1	0
Mendon	3	2	0	0	0	0	1	0
Plain City	13	6	3	0	1	2	0	1
Tremonton	42	16	0	1	2	6	17	0
Total	70	28	6	1	4	11	19	1

2. Rates of interest

Communities	Total number	Number paying specified interest rate								
		2	4	4½	5	6	6½	7	7½	8
		percent								
Lewiston	12	1	2	3	2	0	1	3	0	0
Mendon	2	0	0	1	0	0	0	1	0	0
Plain City	13	0	0	2	4	3	0	1	2	1
Tremonton	40	1	0	15	8	13	0	1	0	2
Total	67	2	2	21	14	16	1	6	2	3

3. Repayment plan

Communities	Total number	Plan		Payment periods			
		Amortization	Other	Monthly	Annual	Semi-annual	Irregular
Lewiston	12	5	7	9	0	0	3
Mendon	3	1	2	2	0	0	1
Plain City	13	0	13	7	1	1	4
Tremonton	47	22	25	34	5	0	8
Total	75	28	47	52	6	1	16

surplus capital is accumulated (table 4). The FHA rates of 4½ and 5 percent since 1937 have not become the standard. Those who are paying more than 4½ percent are more numerous than those who pay less. Even 8 percent is paid by some.

A large majority of loans (52 of 75) are being repaid on a monthly basis. Only 6 are being liquidated with annual payments.

Reproduction Cost of Houses

The data on cost represent reproduction cost or value as appraised by the State Tax Commission. All houses, whatever their age, are included in table 5.

Table 5. *Average value of homes by farm and nonfarm groups in Lewiston, Mendon, Plain City and Tremonton, Utah*

Groups	Average value			
	Lewiston	Mendon	Plain City	Tremonton
Farm groups	$1,859	$2,067	$1,806	$1,885
Nonfarm groups	1,789	1,828	1,637	2,238
All groups	1,820	1,991	1,760	2,061

Cost evidence points to an unfavorable position of nonfarmers in small communities where farm folk are dominant and a comparatively favorable position in the larger trade centers where nonfarm vocations are well represented.

In Lewiston, Mendon and Plain City the average cost of the house is higher for farm houses than for nonfarm. The reverse is true in Tremonton. The comparatively large amount of business done in Tremonton favorably influences nonfarm workers and reflects its influence on the housing situation. Farmers apparently do not participate as fully as do the professional and trade people in the total results of volume and movement of goods and services in this live trade center. Business is less strongly developed at Lewiston, Mendon and Plain City. Under these circumstances the average farm house is more expensive than the nonfarm. It may be noted also that the range of difference in average cost of house between the three farm groups is much less in all four communities than it is between the nonfarm vocational groups.

In some respects cost is the most satisfactory single index of housing adequacy, particularly where comparisons are to be made of different communities and areas. Other measures of adequacy, such as electricity in the house, piped water, home convenience index, persons per room, condition of repair, recency of last painting, will be treated later.

Table 6. *Reproduction value of houses falling in bracket groupings for farm and nonfarm families in Lewiston, Mendon Plain City and Tremonton, Utah*

	Percent in value brackets															
	Under $500	$500-999	1000-1499	1500-1999	2000-2499	2500-2999	3000-3499	3500-3999	4000-4499	4500-4999	5000-5499	5500-5999	6000-6499	6500-6999	7000-7499	7500-7999
Lewiston	7.3	20.8	20.0	15.5	12.4	10.4	5.6	1.1	2.3	1.7	.6	1.4	0	0	.3	0
Farm dweller	8.5	20.7	19.2	14.0	11.4	11.9	6.2	1.0	2.6	.5	.5	2.1	1.0	0	.5	0
Edge-of-village farmer	0	10.0	30.0	20.0	30.0	0	0	0	10.0	0	0	0	0	0	0	0
Village farmer	0	17.6	29.4	23.5	11.8	5.9	0	0	5.9	5.9	0	0	0	0	0	0
Nonfarmer	5.7	23.8	18.1	18.1	12.4	7.6	5.7	1.9	1.0	3.8	1.0	1.0	0	0	0	0
Mendon	1.0	14.4	21.1	23.1	14.4	9.6	2.9	6.7	5.8	0	1.0	0	0	0	0	0
Farm dweller	0	14.3	42.8	14.3	0	14.3	0	14.3	0	0	0	0	0	0	0	0
Edge-of-village farmer	0	0	12.5	0	25.0	25.0	12.5	25.0	0	0	0	0	0	0	0	0
Village farmer	1.8	10.7	17.9	30.3	16.1	7.1	3.5	5.4	5.4	0	0	0	0	0	0	0
Nonfarmer	0	24.2	24.2	18.2	12.1	9.1	0	3.1	9.1	0	0	0	0	0	0	0
Plain City	5.4	18.1	27.0	18.1	12.4	8.3	6.7	2.1	1.6	0	.5	0	0	0	0	0
Farm dweller	7.7	23.0	21.6	18.5	12.3	4.6	0	0	0	0	0	0	0	0	0	0
Edge-of-village farmer	5.6	0	16.7	11.1	16.7	16.7	22.2	5.5	5.5	0	0	0	0	0	0	0
Village farmer	4.0	12.0	30.0	22.0	16.0	4.0	4.0	4.0	2.0	0	2.0	0	0	0	0	0
Nonfarmer	2.0	24.0	30.0	16.0	10.0	6.0	8.0	2.0	2.0	0	0	0	0	0	0	0
Tremonton	7.4	21.2	16.7	12.5	12.7	7.1	6.5	4.7	4.7	1.6	1.6	.9	1.1	.2	.4	.7
Farm dweller	10.7	33.3	16.7	17.7	11.3	6.7	2.0	1.3	3.3	.7	.7	.7	0	0	0	0
Edge-of-village farmer	0	25.0	8.3	20.8	16.7	12.5	8.3	0	4.2	0	4.2	0	0	0	0	0
Village farmer	2.1	10.6	12.8	10.5	10.6	6.4	8.5	10.6	8.5	4.3	4.3	2.1	2.1	0	2.1	4.3
Nonfarmer	6.4	14.1	19.1	12.3	13.6	6.8	9.1	6.4	5.0	1.8	1.4	.9	1.8	.5	.5	.5

The data in table 6, which include all of the homes in the four comunities, show a strong tendency toward the low cost brackets. More houses fall in the cost bracket $500-$999 than in any other at Lewiston and Tremonton, in the bracket $1,000 to $1,499 at Plain City, and in the bracket $1,500-$1,999 at Mendon. House values in these villages certainly do not follow the normal curve where the extremes at both ends are comparatively few (fig. 17).

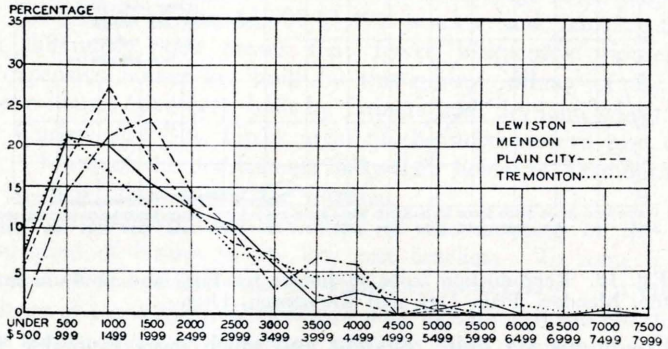


Fig. 17. Reproduction value of houses falling in designated cost brackets, Lewiston, Mendon, Plain City and Tremonton, Utah

Tremonton, the trade center, with a strong farm dweller development in the surrounding area, presents both the least and the most satisfactory housing picture viewed from the cost angle; Mendon, the unmodified farm village, has fewer extremely low cost houses than any of the others. Lewiston, with its predominant open country development and limited clustering, follows more nearly the same pattern as Tremonton with many inadequate houses as well as a fair representation in the higher cost brackets. Plain City, the farm village modified only by an extension of house building along outgoing streets, has practically nothing above the $5,000 level and little above the $3,500, so that concentration is in the low brackets. The median reproduction costs for the four communities are: Tremonton $1,735, Mendon $1,710, Lewiston $1,571, and Plain City $1,499.

Tremonton, dependent on both agriculture and trade, shows a slight advantage over Lewiston, where agriculture is dominant and trade limited. Plain City and Mendon, with dependence on agriculture alone, reflect a smaller range of difference in cost with fewer homes in both the lower and the higher cost categories.

A more detailed picture of reproduction costs of rural houses may be had from figure 18. Quite a few families belonging to the village farm, farm dweller and nonfarm groups are able to build houses costing

upward of $2,500, but very few can afford to spend as much as $4,000 and $5,000. The great majority of the people belonging to these three groups build houses whose reproduction value is $2,000 and less.

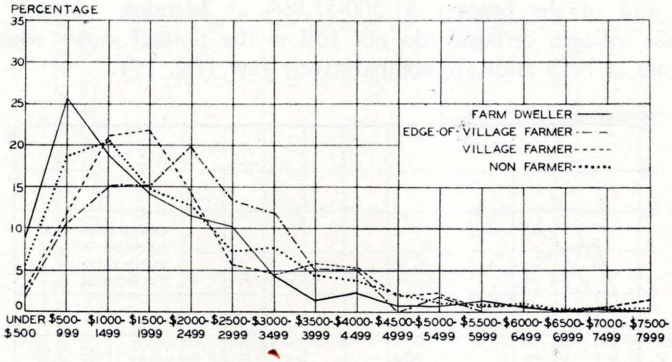


Fig. 18. Reproduction value of houses for farm and nonfarm groups in Lewiston, Mendon, Plain City and Tremonton, Utah

Conditions are quite different and much more favorable for the edge-of-village group. Many of the houses of this group are in the higher cost brackets. The highest percentage of edge-of-village houses are in the cost bracket $2,000-$2,499, whereas, for the farm dweller it is in the bracket $500-$999, and for the village farmer it is the bracket $1,000-$1,499. This favorable position maintained by the edge farmers in the higher cost brackets is indicative of the superior economic position of this group.

The data on cost of houses for Tremonton emphasize the poor position of the farm dweller families in house building (fig. 19). A

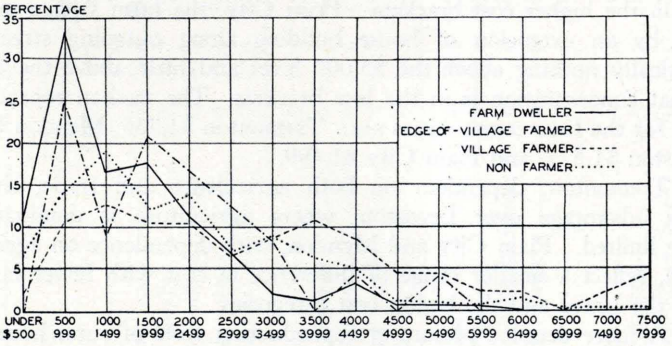


Fig. 19. Reproduction value of farm and nonfarm houses in Tremonton, Utah

few only build houses costing more than $3,000. Houses of nonfarmers are more numerous than houses of edge-of-village farmers in the lowest cost brackets and also more numerous in the higher ones.

It is the village farm house in Tremonton which maintains the best all around position among farm houses in the community or in any of the four communties. For village farmers the percentage of houses in the low cost portion of the chart is smaller than for any other group. In the higher cost brackets the village farm proportion passes the others at the $3,000-$3,499 bracket and remains higher. Stated differently, this means that fewer inexpensive houses and more expensive houses are built by this group. Many of the more expensive houses have been built by farmers with dry-land wheat farms in the Curlew and Blue Creek areas of the northwestern part of the county. Many of the dry farmers make their homes in Tremonton and camp on their farms during the summer.

Various interpretations are made of the meaning of the heavy concentration of houses in the low cost brackets. To some it is an indictment of the effectiveness of American democracy. To others it is evidence of too large a dispersion of area income into specific channels such as higher education or foreign missions. Still others see inexcusable weakness in the system of distribution. But whatever arraignment against the present situation may be justified it must be remembered that it is in line with historical trends. The poor seem always to have been greatly in the majority.

Two lines of inquiry help to bring perspective. First, are housing conditions improving for the masses? Second, how does the area in question compare with other areas at the present time? The first requires historical comparisons, the second comparative measurements.

Cost of New Houses

Wide variation between towns in expensiveness of buildings is seen in new house construction in the five-year period between 1937-41 (table 7). Only in Tremonton are there houses in the higher cost brackets ranging from $6,000 to $11,000. Tremonton also has more new homes than any of the others in practically all cost brackets. While the middle brackets, $2,000 to $6,000, are strongly represented, the inexpensive homes costing $2,000 or less are as numerous. Eleven new houses built in Tremonton or one in seven (14.3%) of all new houses cost less than $1,000. Lewiston has built no expensive new houses and none of the least expensive. Plain City, with poor financing facilities, has built no expensive new homes and has built more in the lowest cost brackets (under $2,000) than in the middle brackets. This is not encouraging.

New house construction was most active in 1940, with 1937

Table 7. *Cost of new houses in Lewiston, Mendon, Plain City and Tremonton, Utah, 1937–41*

Cost	Lewiston		Mendon		Plain City		Tremonton	
	no.	*pct.*	*no.*	*pct.*	*no.*	*pct.*	*no.*	*pct.*
$10,000–$10,999	0	—	0	—	0	—	2	2.6
9,000 9,999	0	—	0	—	0	—	1	1.3
8,000 8,999	0	—	0	—	0	—	1	1.3
7,000 7,999	0	—	0	—	0	—	5	6.5
6,000 6,999	0	—	0	—	0	—	4	5.2
5,000 5,999	1	7.7	0	—	0	—	2	2.6
4,000 4,999	3	23.1	0	—	1	5.9	13	16.8
3,000 3,999	3	23.1	0	—	4	23.5	17	22.1
2,000 2,999	4	30.7	1	33.3	3	17.7	11	14.3
1,000 1,999	2	15.4	0	—	6	35 2	10	13.0
Less than 1,000	0	—	2	66.7	3	17.7	11	14.3
Total number	13	100.0	3	100.0	17	100.0	77	100.0

Table 8. *Cost of new houses related to year of building, Lewiston, Mendon, Plain City and Tremonton, Utah, 1937–41*

Community & year	Total no.	Avg. cost	Cost bracket 6,000 10,999	5,000 5,999	4,000 4,999	3,000 3,999	2,000 2,999	1,000 1,999	Less than 1,000
Lewiston									
1937	3	$3,154			1		2		
1938	0	—							
1939	3	3,134			1	1		1	
1940	5	3,964		1	1	2	1		
1941	2	2,384					1	1	
Mendon									
1937	0	—							
1938	0	—							
1939	1	700							1
1940	1	500							1
1941	1	2,900					1		
Plain City									
1937	6	1,758				2		2	2
1938	4	1,358					1	2	1
1939	0	—					—	—	—
1940	5	2,260				2	1	1	1
1941	2	3,220			1		1		
Tremonton									
1937	15	3,288	1		3	6		2	3
1938	11	3,534	1	1	3	2	1	2	1
1939	7	1,671	0				3	2	2
1940	32	3,378	6		4	6	7	4	5
1941	12	5,840	5	1	3	3			

coming next (table 8). In Plain City construction was slightly greater in 1937 than in 1940. A definite falling off in 1941 may reflect early war conditions and advancing building costs. In these communities, as elsewhere, there was little building between 1932-35 when the prices of materials were low. Hence building actually still moves positively with the price level rather than negatively with the cost of building materials as it should do. In the field of home building this failure to plan ahead is costly. In more than five out of eight (65.4%) newly constructed houses, over half of the funds going into construction was borrowed, indicating that those who built could not afford to do so when prices of building materials and wages were high, but did so nevertheless.

The extent to which credit is used in home building at the present time in these communties is seen in table 9.

Table 9. *Relation of loans to cost of new houses in Lewiston, Mendon, Plain City and Tremonton, Utah, 1937–41*

Percentage loan is of cost	Lewiston		Mendon		Plain City		Tremonton	
	no.	*pct.*	*no.*	*pct.*	*no.*	*pct.*	*no.*	*pct.*
100	5	38.4	1	33.3	4	23.5	4	7.8
90–99.9	0	—	1	33.3	0	—	10	19.6
80–89.9	2	15.4	0	—	1	5.9	6	11.8
70–79.9	0	—	0	—	3	17.6	6	11.8
60–69.9	2	15.4	0	—	2	11.8	4	7.8
50–59.9	1	7.7	0	—	0	—	3	5.9
40–49.9	1	7.7	0	—	2	11.8	1	2.0
30–39.9	0	—	0	—	0	—	3	5.9
20–20.9	0	—	1	33.3	1	5.9	2	3.9
Less than 20	0	—	0	—	0	—	1	2.0
Paid cash	2	15.4	0	—	4	23.5	11	21.5
Total	13	100	3	100	17	100	51	100

Farm and Nonfarm Aspects of Cost of New Houses: In the building of new houses in the three villages both the edge-of-village farmers and the village farmers on the average build more expensive houses (table 10). New farm dweller houses fall definitely in lower cost brackets. This is not in line with the assumption frequently made that a farmer who lives on his farm with his family is more likely to succeed financially. It is possible that the village and "edge" farm families, more influenced by what others do, use more easy credit in building homes.

Among new houses of nonfarm groups it is the professional men and the proprietors, managers and officials who build the better houses, the skilled, semi-skilled, farm laborers, and domestic workers who build few and low cost houses. The range of difference, with the exception of the skilled workers in Lewiston, who sustain a high average in cost, is greater among nonfarm than among farm people.

Table 10. *Cost of new houses by vocational and farm groups for Lewiston, Mendon, Plain City and Tremonton, Utah, 1937–41*

Groups	Lewiston			Mendon			Plain City			Tremonton		
	Total no. 1940	No. of new houses	Avg. cost dol.	Total no. 1940	No. of new houses	Avg. cost dol.	Total no. 1940	No. of new houses	Avg. cost dol.	Total no. 1940	No. of new houses	Avg. cost dol.
Farm groups	183	4	2,736	67	2	600	127	7	2,230	122	27	4,121
Farm dweller	160	4	2,736	6	0	—	61	3	1,356	83	5	2,270
Edge-of-village farmer	17	0	—	51	1	700	19	3	2,581	15	3	4,927
Village farmer	6	0	—	10	1	500	47	1	3,799	24	19	4,481
Nonfarm groups	142	9	3,612	31	1	2,900	77	10	1,811	254	50	3,336
Professional & semi-professional	9	2	3,875	4	0	—	4	0	—	24	8	4,120
Prop. mgr. and officials	16	2	3,188	2	0	—	5	2	2,333	44	20	4,357
Clerical, salesmen and kindred workers	9	1	2,577	0	0	—	11	1	4,000	43	10	3,056
Skilled and foremen	19	3	4,751	3	0	—	8	4	1,169	50	3	2,286
Semi-skilled workers	8	0	—	4	0	—	13	1	3,120	19	3	1,322
Unskilled laborers	35	1	1,557	3	0	—	18	0	—	34	3	581
Domestic and personal service	6	0	—	2	0	—	1	1	1,147	7	1	938
Farm laborers	19	0	—	1	0	—	1	0	—	5	0	—
Non-workers	21	0	—	12	0	—	16	1	500	28	2	1,327
All groups	325	13	3,352	98	3	1,367	204	17	1,983	376	77	3,611

Perhaps the most significant single fact in the new home cost situation is the evident ability of the farmers to sustain a higher average position in Tremonton and Plain City than the nonfarm families.

Painting of Houses

Closely related to the condition of repair is the painting of the house. The data on painting (appendix table IV) show that although paint does preserve materials and improve appearance, a considerable number either do not use it at all or use it sparingly. The number who live in houses that have never been painted is slightly under 10 percent for the four villages: Lewiston, 7.4 percent; Mendon, 10.4 percent; Plain City, 12.7 percent, and Tremonton, 6.6 percent. The number who have not painted their houses for 10 years or more is 45.3 percent at Lewiston, 60.5 at Mendon, 40 percent at Plain City, and 27.5 percent at Tremonton. The extent of neglect in house painting in the four communities is exemplified at Plain City. Here out of a total of 197 houses the 25 that have never been painted are only a little less neglected than the 10 additional houses that have not been painted for 30 years or more, or the 9 that have gone unpainted between 20 and 30 years. Thirty-three were last painted between 10 and 20 years ago. One hundred and eighteen houses have been painted within 10 years. About two houses in every five are badly neglected with respect to painting.

The average number of years since houses were painted in Lewiston is 10.9, in Mendon 9.9, in Plain City 8.4, and in Tremonton 7.0. Over the entire period since founding Tremonton was most active in keeping the houses freshly painted and Lewiston least active.

The comparatively large number of homes comprising from 27.5 percent to 60.5 percent that have not been painted within 10 years is significant (table 11).

Table 11. *Percentage of houses remaining unpainted during successive years Lewiston, Mendon, Plain City, and Tremonton, Utah, 1941*

Years since painted	Lewiston	Mendon	Plain City	Tremonton
Over 1 year	85.2	91.7	92.4	85.3
Over 2 years	74.4	87.5	83.2	76.3
Over 3 years	70.1	77.1	77.0	65.0
Over 4 years	66.1	73.9	67.3	56.6
Over 5 years	61.1	68.7	60.6	46.4
Over 6 years	54.6	67.7	52.5	38.9
Over 7 years	51.3	66.7	51.0	33.2
Over 8 years	49.9	66.7	46.5	31.4
Over 9 years	46.2	61.5	42.0	28.0
Over 10 years	45.3	60.5	40.0	27.5

Table 12. *Percentage of houses painted during 1938-1939-1940 by farm and nonfarm groups in Lewiston, Mendon, Plain City and Tremonton, Utah*

	Lewiston			Mendon			Plain City			Tremonton		
	1940	1939	1938	1940	1939	1938	1940	1939	1938	1940	1939	1938
Farm groups	14.6	10.7	5.4	10.8	6.2	6.2	6.1	7.6	4.5	11.9	7.2	6.7
Farm dweller	14.4	8.6	5.7	25.0	.0	50.0	8.1	11.3	3.2	11.1	6.3	4.2
Edge-of-village farmers	17.6	17.6	5.9	10.0	10.0	20.0	5.6	11.1	0	13.3	6.7	20.0
Village farmer	14.3	28.6	0	9.8	5.9	0	3.8	1.9	7.7	14.3	11.4	11.4
Nonfarm groups	15.0	10.9	2.7	3.2	0	19.4	10.8	12.4	11.6	16.9	10.5	14.9
Professional and semi-professional	22.2	55.6	0	0	0	50.0	50.0	0	50.0	13.3	13.3	13.3
Proprietors, managers, and officials	14.3	14.3	0	0	0	100.0	33.3	0	0	27.1	10.4	16.7
Office workers, salesmen, and kindred workers	16.7	0	0	—	—	—	0	12.5	12.5	24.3	21.6	21.6
Skilled and foremen	25.0	18.8	6.3	0	0	33.3	14.3	28.6	14.3	7.9	13.2	15.8
Semi-skilled workers	22.2	0	0	0	0	0	10.0	20.0	0	16.7	8.3	16.7
Unskilled laborers	8.7	10.9	4.3	0	0	33.3	10.0	5.0	0	5.4	5.4	13.5
Domestic and personal service	20.0	0	0	0	0	0	0	0	50.0	14.3	7.1	0
Farm laborers	15.0	5.0	0	0	0	0	0	25.0	0	37.5	0	6.3
Non-workers	13.6	0	0	8.3	0	0	14.3	14.3	14.3	0	5.3	15.8
All groups	14.8	10.8	4.3	8.3	4.2	10.4	7.6	9.2	6.2	14.7	9.0	11.3

Community habits tend to persist. A study of table 12, dealing with the extent of painting of houses during the years 1938, 1939, and 1940, shows that there was more consistent painting each year at Tremonton than at Lewiston, Mendon, or Plain City. Plain City and Mendon were less active during the three-year period than either of the other communities.

Among farm families the most active group in the most active community (Tremonton) in keeping their houses painted is the edge-of-village families. The farm dwellers are the least active. In two of the three years (1939-1940) the village farm families surpassed the edge families in painting activity.

At Lewiston the edge-of-town families show the best balance in house painting, although in one year (1939) the village farmers ranked highest. The farm dweller families make the poorest showing also at Lewiston.

At Plain City the village farmers led in house painting in 1938 and the farm dwellers in 1939 and 1940. The farm dwellers are the most active for the three years.

Nonfarm families consistently have their houses painted oftener than farm families. The average proportion of nonfarm houses painted for the three years was 9.5 percent, 7.5 percent, 11.6 percent, and 14.1 percent for Lewiston, Mendon, Plain City, and Tremonton, respectively, as against 10.2 percent, 7.7 percent, 6.1 percent, and 8.6 percent for farm houses. Among nonfarm families the houses of those engaged in the professions and as business managers were not painted much oftener than those of farm laborers, domestic workers, unskilled and semi-skilled workers during the three years.

There was some difference in the frequency of house painting by the various groups in different communities. The highest average was reached by the professional group at Lewiston in 1939, by the business group in Mendon in 1938, by the professional group at Plain City in 1938 and 1940, and the domestic and personal in 1938, and by the farm laborer group at Tremonton in 1940. Over a three-year period the four most active nonfarm groups in painting the house were: Lewiston: professional, skilled and unskilled workers, and business men; Mendon: business, professional, skilled and unskilled; Plain City: professional, skilled, domestic and personal, and non-workers; Tremonton: clerical and salesmen, business, farm laborers, and semi-skilled. The least active were: for Lewiston: salesmen, non-workers, farm laborers, and domestic and personal; for Mendon: semi-skilled, domestic and personal, farm laborers, and nonworkers; for Plain City: unskilled, clerical and salesmen, farm laborers, and semi-skilled; for Tremonton: non-workers, domestic and personal, unskilled, and skilled.

On the whole the professional and business workers painted most frequently and the unskilled, the farm laborer and domestic workers painted least. Tremonton is the only community of the four that may be said to be paint conscious.

Materials Used in Construction

Urban Utah prefers brick houses. Even more definitely rural Utah favors the frame house (table 13). Other materials and combinations of materials, such as stucco, concrete blocks, asbestos shingles, log, stone, adobe, are used to a limited extent, but sufficiently to create an impression of variety in the use of building materials.

Table 13. *Residential structures, by exterior material, Lewiston, Mendon, Plain City, and Tremonton, and other Utah groups*

Area	Number reporting	Brick	Wood	Stucco	Rock	Adobe	Other
State	121,462	36.6	51.4	5.7			6.3
Urban	63,372	51.5	37.9	5.7			4.2
Rural nonfarm	36,778	20.2	65.3	5.9			8.6
Rural farm	21,312	20.6	67.7	3.3			8.4
Lewiston	355	9.6	84.7	2.3	0	.3	3.1
Mendon	104	10.6	68.3	3.8	16.3	0	1.0
Plain City	197	26.4	56.3	4.6	.5	3.1	9.1
Tremonton	448	15.7	74.5	6.4	0	.2	3.2

In the four villages the frame house has no important competitor (table 14). However, brick is used quite extensively at Plain City and is next to the most important material in the three villages. At Mendon many old rock houses built in pioneer days still link the present with the past. None of these houses belongs to the modern type of rock house. Some of the materials in the frame houses, such as pine and spruce, are imported into the state from the Pacific Northwest and the hardwoods from the east and south. Rock, brick, and native lumber are available locally.

Stucco has not achieved popularity as a building material either in Utah or in the four villages, nor have the combination materials of frame and brick, or stucco, or adobe, or log, or brick and rock, although the last named is coming into wider use.

Condition of Repair of Houses

The condition of repair a house is in from year to year is definitely related to income (table 14). Costly houses are usually in good repair and houses which cost little are generally in poor repair.

The condition of repair of the house also appears to be related to the established habits of those who live in it (fig. 20). Some of the least expensive houses, and many of the medium cost houses, are in good repair, while a few of the expensive houses are in poor repair.

Table 14. *Condition of repair of houses according to cost of house in Mendon, 1942, and Lewiston, Plain City and Tremonton, Utah, 1938*

Condition of repair	Total number	Percentage of houses in designated cost brackets							
		Under $500	$500-$999	$1,000-$1,499	$1,500-$2,499	$2,500-$3,499	$3,500-$4,999	$5,000-$9,999	$10,000 and over
Lewiston	316								
Good	93	9.4	9.5	17.8	27.8	59.5	42.9	63.6	100.0
Fair	120	15.6	42.9	42.5	45.6	29.7	46.4	27.3	0
Poor	103	75.0	47.6	39.7	26.6	10.8	10.7	9.1	0
Mendon	108								
Good	15	0	16.7	4.5	12.5	30.8	7.7	100.0	
Fair	81	0	55.6	86.4	77.5	69.2	92.3	0	
Poor	12	100.0	27.7	9.1	10.0	0	0	0	
Plain City	197								
Good	63	10.0	19.4	25.5	43.8	42.9	66.7	100.0	
Fair	82	10.0	66.7	51.2	37.5	46.4	22.2	0	
Poor	52	80.0	13.9	23.3	18.7	10.7	11.1	0	
Tremonton	363								
Good	172	25.0	19.0	30.5	38.2	67.2	71.7	82.9	
Fair	138	21.4	38.1	47.5	56.2	32.8	23.9	17.1	
Poor	53	53.6	42.9	22.0	5.6	0	4.4	0	

Certain facts bearing on house repair stand out clearly: (1) About one house in three at Lewiston, one in nine at Mendon, one in four at Plain City and one in seven at Tremonton are in poor repair. Lewiston definitely has the largest percentage of houses in poor repair and Mendon the least. (2) Approximately one house in three at Lewiston and Plain City and one in seven at Mendon and nearly half at Tremonton are regularly in a state of good repair. In most cases of good repair the family income is reasonably adequate. In particular cases the house is not costly but what there is is well kept. Tremonton, thus has more homes in a good state of repair and Mendon has less than the other two communities. (3) Although the two small villages—Mendon and Plain City—have fewer homes in good repair than the two large villages—Lewiston and Tremonton—they have larger proportions in a fair state of repair. Houses in a poor state of repair show no consistent alignment according to size. In fact, other considerations than size, such as type of town and established community habits, seem to have more influence. Thus, Tremonton, a trade center (2,071), and Mendon, a farm village (482), have far smaller percentages of houses in a poor state of repair than Lewiston, an open country community (1,835), or Plain City, a modified farm village (822). (4) In Tremonton there are more houses in good repair than in medium or poor; in Mendon, Plain City and Lewiston the medium repair category is much the largest. Mendon has the smallest proportion in poor repair, followed in order of excellence by Tremonton, Plain City and Lewiston, respectively. (5) In all four villages the proportion of homes in good repair increases quite consistently with increases in the cost of the houses. Homes in fair repair show no definite relationship to cost. The proportion of houses in poor repair declines as cost increases.

Housing Adequacy

The Farm Dweller and the Village Farmer: Has the farm dweller paid a high price in terms of adequate housing by leaving the compactly settled areas to build a house on his farm?

In table 15 comparisons are made of housing conditions for each

Fig. 20. Most of the good things in housing carry back to the way people think. The "dynamics" or "drives" which bring orderly arrangements, neatness in care of buildings and grounds, growing beauty of environment, are things of the spirit, but they are related to education and early nurture. Utah people need to spend a larger proportion of their time on local community problems for it is through the community that they can best strengthen the primary groups of home, neighborhood, and town, so vital to social well?being and social progress

Where a fence is desired, a neat, well painted one adds greatly to the attractiveness of a home

Table 15. *Adequacy of housing in 4 Utah communities by farm dweller, village farm, and edge-of-village farm groups, 1940*

	Lewiston			Mendon			Plain City			Tremonton		
	Farm dweller	Village farmer	Edge of village farmer	Farm dweller	Village farmer	Edge of village farmer	Farm dweller	Village farmer	Edge of village farmer	Farm dweller	Village farmer	Edge of village farmer
Automobile	79.3	42.9	64.7	83.3	56.9	50.0	78.7	75.0	94.5	85.9	85.7	86.7
Bathtub and toilet	59.8	78.6	76.5	0	56.9	80.0	34.4	13.5	61.1	26.6	82.9	66.7
Built last 10 years	5.7	11.8	20.0	0	9.3	25.0	10.8	12.0	42.8	12.0	25.5	33.3
Cement walks	0	55.6	47.1	0	0	0	0	0	0	0	100.0	20.0
Central heat	12.8	7.2	17.6	0	7.8	10.0	1.6	1.9	50.0	11.7	45.7	40.0
Daily newspaper	80.5	78.6	76.5	75.0	92.2	100.0	75.4	76.9	94.4	68.8	62.9	86.7
Electric lights	98.2	100.0	100.0	66.7	100.0	100.0	98.4	98.1	100.0	88.3	100.0	100.0
Good repair	32.5	33.3	47.1	33.3	49.0	60.0	18.0	19.1	15.8	27.7	70.8	33.3
Living room	59.4	66.7	47.1	33.3	68.6	90.0	54.1	70.2	94.7	38.6	95.8	73.3
Painted last 10 years	62.6	85.7	64.7	25.0	43.1	80.0	54.8	55.8	88.9	78.1	91.4	80.0
Piped water	83.5	92.9	88.2	33.3	84.3	100.0	57.4	59.6	77.8	39.1	100.0	86.7
Radio	93.3	100.0	100.0	66.7	98.0	90.0	96.7	94.2	94.5	89.1	97.1	86.7
Refrigerator	50.6	35.7	52.9	16.7	35.3	70.0	31.1	38.5	50.0	50.0	71.4	40.0
Repro. val. over $1,500	51.3	52.9	60.0	50.0	66.7	87.5	47.7	56.0	77.8	38.0	74.5	66.7
Sewerage connection	0	0	0	0	0	0	0	0	0	0	100.0	53.3
One room per person	66.5	78.6	64.7	100.0	55.8	80.0	71.0	72.2	83.3	57.0	80.0	63.3
0.6 bedroom per person	46.5	50.0	47.1	100.0	37.3	50.0	42.9	48.1	72.2	34.4	57.1	40.0
Average percentage of 17 items	51.9	57.1	57.3	40.2	50.7	63.1	45.5	46.5	64.6	44.4	78.9	62.2

of the four communities with respect to seventeen major items that have to do with satisfactory housing. The relative position of the two important groups of Utah farmers, the farm dweller and the village farmer, with regard to these seventeen items is shown as a composite picture in figure 21.

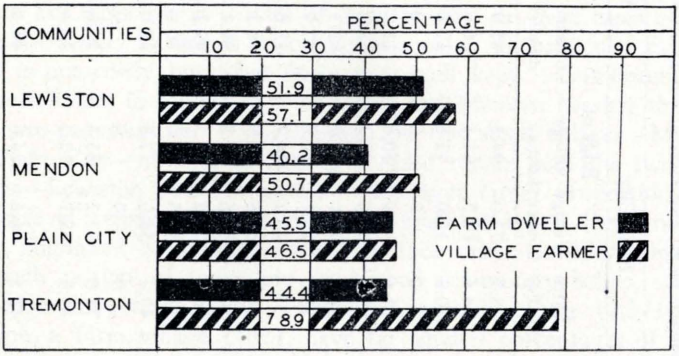


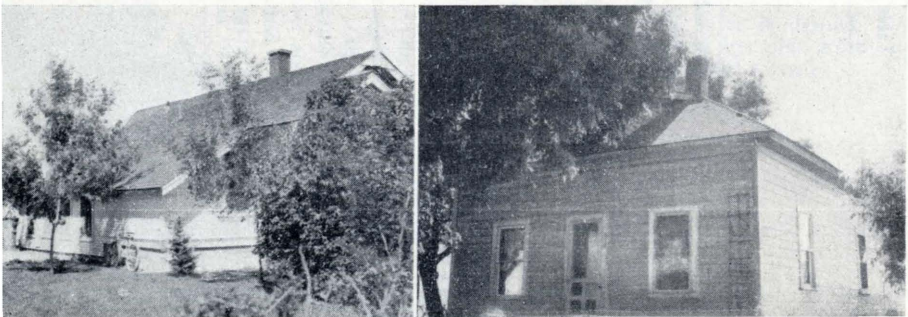
Fig. 21. Average of 17 items covering adequacy of housing in four Utah communities by farm dweller and village farm groups, 1940

As between the village farmer and the farm dweller this composite average indicates that the village farmer has the more satisfactory house. His favorable balance varies from 1 percent at Plain City to 34.5 percent at Tremonton (fig. 22 and 23). While the margin of advantage for the village farmer is small in Plain City it is definite and decisive in the three other villages. Progressiveness about community improvements appears to have some relationship to such things as size of community, business activity, leadership vision qualities in the people, and presence of developed cooperative patterns. Favorable margins in housing increase positively with the increase in basic community assets which influence living conditions such as a community culinary water system or a sewerage system. If a village does not install a water system, as

Fig. 22. Many farm dweller homes are built of good materials and are attractive and comfortable. The great majority have access to electricity. The electric pump brings to those who can afford it a culinary water system with hot water, bath, and indoor toilet. Many farm dwellers do not have them

Left—A farm dweller home, the owner of which is a college graduate.

Right—An older type of farm dweller house emphasizes utility of space and simplicity



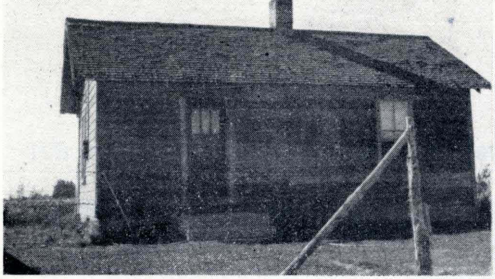


Fig. 23. Slums among farm families are found chiefly in the farm dweller group where isolated homes are frequently far removed from community water systems, sewerage lines, etc. The poor condition of the house is matched by dilapidated farm buildings, unmolested weeds and a general run-down appearance

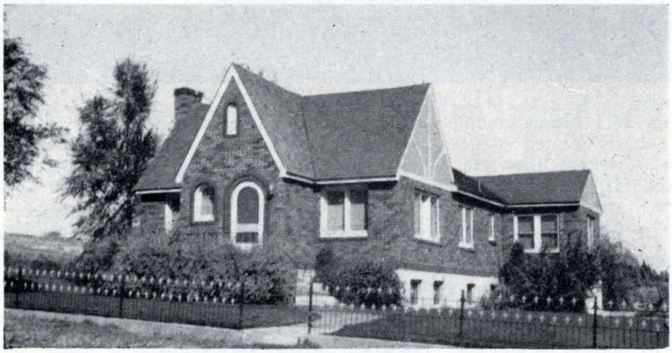
at Plain City, those who live in the compactly settled area have no advantage in piped-in-water conveniences over those who live at a distance from town on the farm. In an aggressive town the size of Tremonton where many public improvements have been installed—piped-in-water, sewerage, electric lights, paved streets and sidewalks, curbing, sidewalk trees—village farm families who live close to such improvements have access to them much more than do farm dwellers at a distance on their farms (fig. 24). If compact settlement does not induce cooperative group effort directed toward the installation of community improvements which condition favorable living, those who live in the compactly settled area may not be appreciably better off than those who live on their farms at a distance.

The location of the farm home in the village carries with it other advantages for the family besides the availability of housing conveniences. For instance, a study of the use made of community agencies and institutions at Plain City in 1931-32 showed that the average number of hours spent per month by families at local community functions was 6.9 for farm dwellers and 9.5 for village farmers.[8]

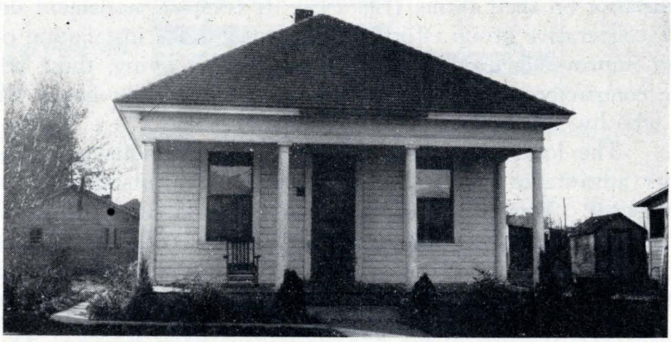
The Favorable Position of the Edge-of-Village Farm Family: The edge-of-village farmer lives on his farm as does a farm dweller but also lives in the village by virtue of the location of his house on the periphery of the clustered area. Under the older square blocked system the "edge" farmers were not numerous. They comprised a single tier of farms immediately surrounding the blocks, the house being located adjacent to and really a part of the village. With the improvement of the inter-town roads and the coming of modern highways the "edge" farmers have increased in number as homes have been built adjacent to these roads.

A comparison of the "edge" homes, as they exist now, with other farm homes (fig. 25) shows the edge home to be superior to the farm dweller home in all four communities by substantial amounts ranging from 5.4 percent at Lewiston to 22.9 percent at Mendon. The margin at Tremonton is 17.8 percent and at Plain City, 19.1 percent. Less marked, but real and convincing, is the superiority of the "edge" home

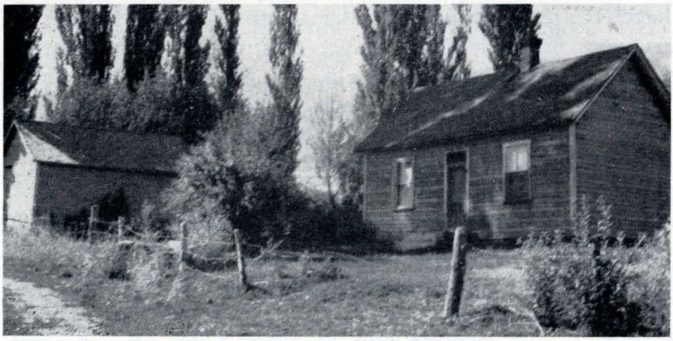
[8]Geddes, Joseph A., Farm versus village living in Utah. Utah Agr. Exp. Sta., Bul. 269, 1935, p. 25.



A beautiful village farm home



A medium type of village farm home



A village farm home in poor condition

Fig. 24. Village farm homes are superior to farm dweller homes in the four villages. They cost more and the conveniences are generally more numerous

over the village farm home at Plain City, Mendon, and Lewiston, with margins of 18.1 percent, 12.4 percent, and 0.2 percent, respectively. Only at Tremonton is the village farm home superior to the "edge" home. The explanation for this exception is to be found chiefly in the availability of extensive dry farm lands to the northwest which have placed the village farm group of Tremonton in a favorable position.

In table 15 comparisons of specific items also are given. The farm dweller fares best comparatively in the possession of an automobile and a daily newspaper. He does less well than the "edge" family and the village farm family in most items (fig. 25). Generally speaking,

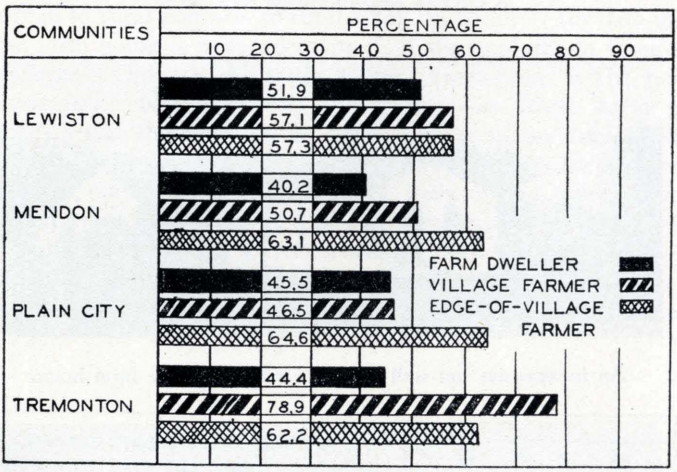
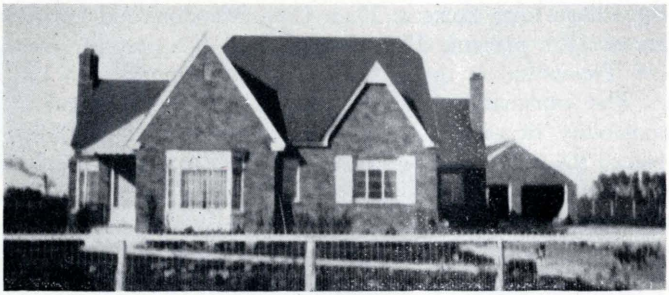


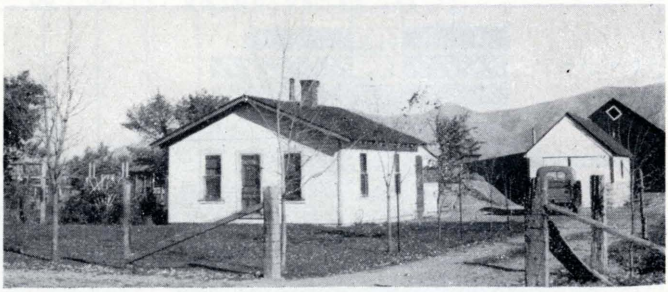
Fig. 25. Average of 17 items covering adequacy of housing in four Utah communities by farm dweller, village farm, and edge-of-village farm groups, 1940

farm families of these villages are well supplied with electric lights, radio, automobile, daily newspaper, and a living room. They are not well provided with cement walks, central heat, new homes built within the last 10 years, adequate bedrooms, refrigerators and homes in good repair.

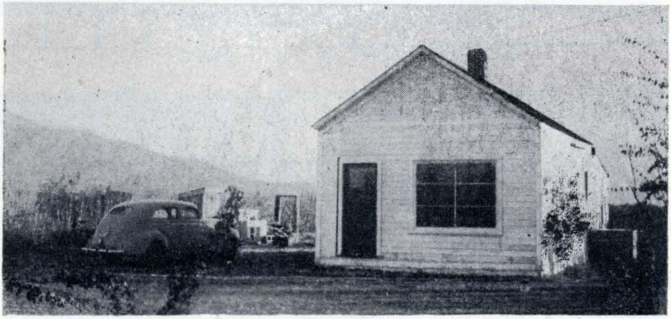
The village farm home excels the farm dweller home in 12 out of 17 items at Lewiston, in 12 at Mendon, in 11 at Plain City, and in 15 at Tremonton. These are imposing margins. The "edge" home excels the farm dweller in 12 out of 16 items at Lewiston, 12 at Mendon, 13 at Plain City, and 15 at Tremonton. The "edge" home excels the village farm home in 6 items at Lewiston, in 12 at Mendon, in 14 at Plain City, but in only 3 at Tremonton. Among farmers, the "edge" family has the best homes. How have they obtained them? By living



A modern edge-of-village farm home



An inexpensive but well cared for edge-of-village farm home



An edge-of-village farm home where few of the accessible home conveniences have been installed

Fig. 26. A considerable margin in good living conditions, above those found among other farm groups, is achieved by the edge-of-village farm families. These "middle way" families are close enough to the important utilities to connect on to them. They also live on their farms and look after them. A problem for community leadership is: can the proportion of "edge" farmers be greatly increased?

on the farm where the family has been better able to look after it, and by living on the periphery of the village close to connection with light, water, sewerage, and pavement facilities, where desire has emerged from dream to reality. Ability and near-by opportunity appear to have combined to bring good housing to "edge" families. The question, Can the proportion of edge families be increased through social planning? is pertinent to the people of Utah.

In small communities where farming is dominant farm people appear to be better housed than nonfarm. It will be remembered that the study of conveniences showed that the trend of excellence decreased from urban to rural nonfarm to rural farm. In figure 27 the data indicate that the farm house is more adequate than the nonfarm in three of the four villages. Only in the trade center, Tremonton, is the nonfarm house superior. Not only does the farm house (three farm groups combined) excel the nonfarm in its possession of an automobile and newspaper, but it provides strong competition with radio, refrigerator, piped water, living room, electric lights, bathtub and indoor toilet, reproduction value over $1,500, rooms per person, and number of bedrooms. Is the superiority of the rural nonfarm home over the rural farm home so definitely indicated in the census true for small communities? The four community data suggest that it is not (appendix table V).

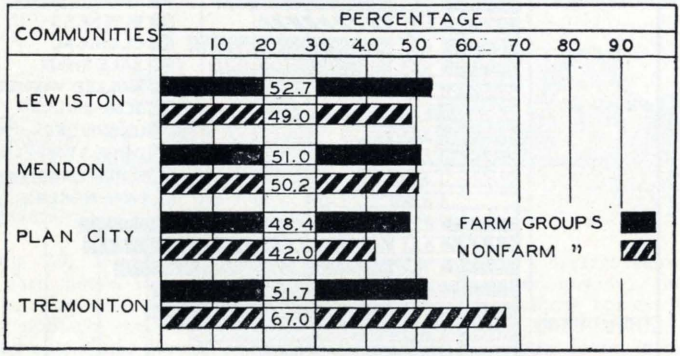


Fig. 27. Average of 17 items covering adequacy of housing of four Utah communities by farm and nonfarm groups, 1940

Nonfarm Housing Adequacy:

The margin of difference in housing adequacy between families that ply nonfarm vocations is greater than between families of the three

farm groups. Nonfarm people in the country, like their city cousins in urban districts, reflect the greater uncertainties, the wider range of economic risks, the greater rewards of success and the larger penalties of failure which grow out of the present economic organization. The range of difference among the three farm groups is 38.7 percent and among the nonfarm homes, 55.3 percent. The farmer, thus, has grounds for his belief that while some have more than he does, others have less (fig. 27).

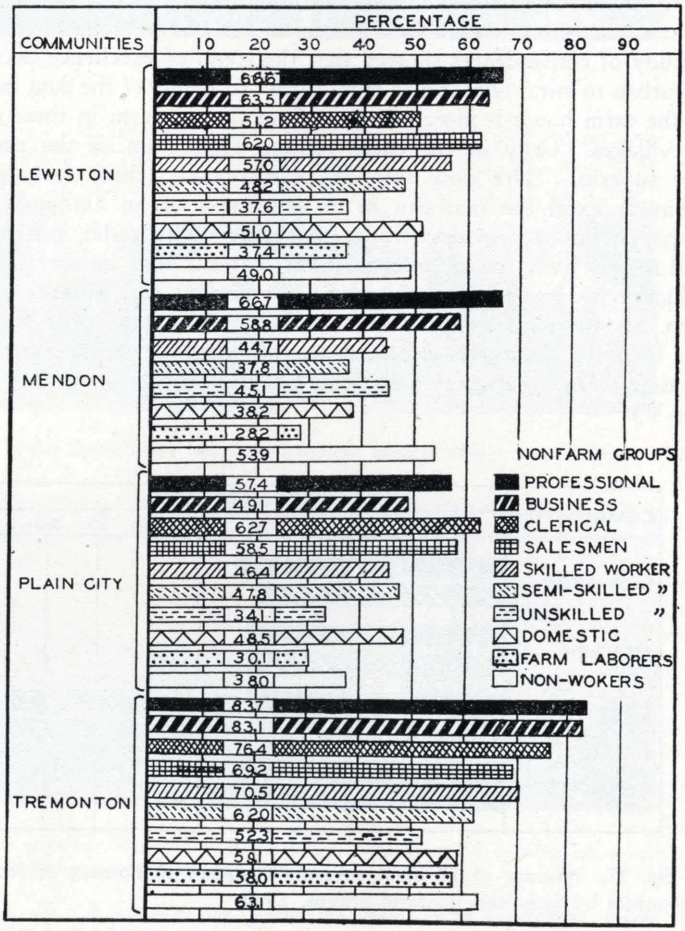


Fig. 28. Average of 17 items covering adequacy of housing of four Utah communities by nonfarm groups, 1940

The Nonfarm Groups: In spite of the tendency for professional men and women to establish themselves in county seats and larger cities, those actually living in rural communities are able to build better homes and provide their families with more favorable housing conditions than any other nonfarm group in three of the four villages studied (fig. 28). In the brisk business center of Tremonton, in the thriving farm district of Lewiston, in the farm village of Mendon, the professional man's house is superior to all other nonfarm homes.

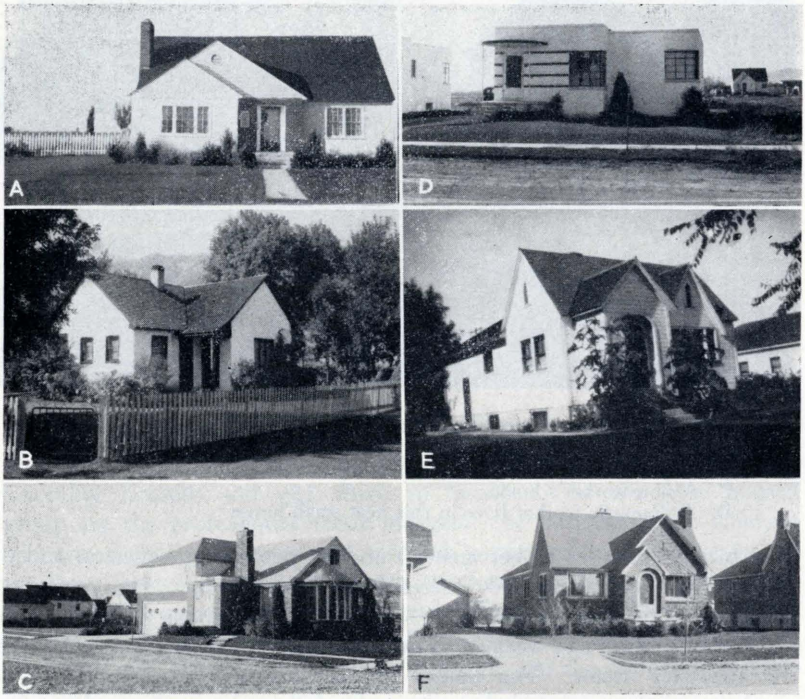


Fig. 29. Nonfarm homes have a composite adequacy average below that of the farm homes in the four villages. In the trade center, however, they are superior. The range of difference is also greater among nonfarm homes. In the favored nonfarm occupations homes are likely to be very good; in the disadvantaged ones slums develop comparable in many ways to those found in modern cities

A. A country doctor builds an attractive home
B. In a village whose streets have many weeds a school teacher sets the community an example of neatness and respectability in upkeep of fences and grounds, including sidewalks
C. A capable business man provides his family with a modern home
D. Salesmen frequently build modern homes
E. A skilled worker's home
F. Some semi-skilled workers, like truckers, build good homes

The business man is a close competitor of the professional man for the most satisfactory house in the larger towns, but falls behind the clerical workers and the clerks in Plain City. The proximity of Plain City to Ogden dwarfs business in this community. About half of the clerical, salesmen and kindred workers, and the skilled and semi-skilled workers maintain good homes in Mendon and Plain City.

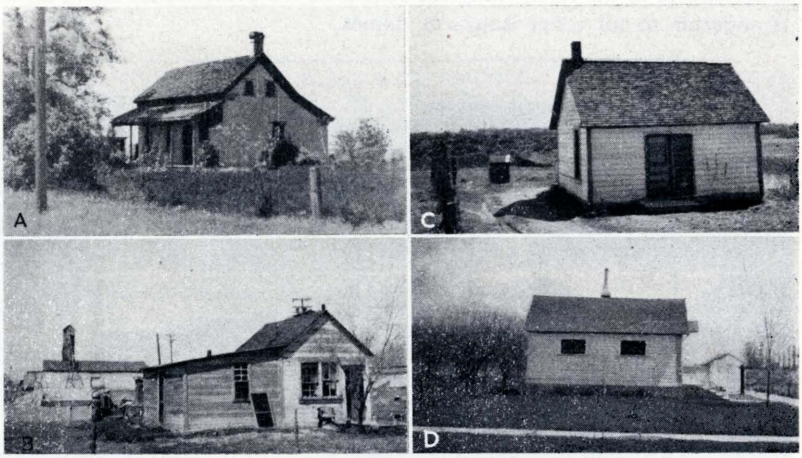


Fig. 30. Homes of vocations groups
A. An old house now occupied by an unskilled worker
B. Employment is irregular and of odd job variety in this house
C. A non-worker's home
D. A domestic worker lives in this neat small house

The proportion rises to between 50 and 60 percent in Lewiston and to an average of about 70 percent at Tremonton. The unskilled worker and the farm laborer quite consistently live in the poorest homes. At Mendon the farm laborers' homes average only 28.4 percent for the 17 adequacy items. The homes of the domestic worker, the non-worker and the semi-skilled workers also fall in the medium categories. At Mendon the non-worker, although comparatively low elsewhere, moves up to third place (fig. 30). Retired farmers are chiefly responsible for the high rating of this group. In Tremonton all nine of the nonfarm groups are able to reach more than 50 percent for the 17 adequacy items, whereas at Plain City only two, and at Mendon, three of nine reach 50 percent. At Lewiston five exceed 50 percent. The nonfarm groups falling lowest at Tremonton do nearly as well as the nonfarm groups doing the best at Plain City and Mendon.

In large numbers of homes of every vocational nonfarm group many of the 17 items requisite for satisfactory living are absent. Even

among the professional group who achieve the most satisfactory results the composite average is only 83.7 percent in Tremonton and 57.4 percent in Plain City. In the less successful vocations of the unskilled and the farm laborers the composite average falls as low as 28.4 percent at Mendon. Only in Tremonton does it raise appreciably above 50 percent. Good living conditions for all of the people are a social goal far from realization in any of the four communities.

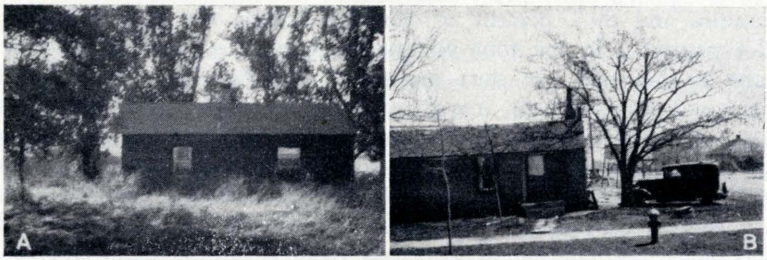


Fig. 31. Slum houses inside the villages are occupied mainly by nonfarm families, whose occupations are: farm laborers, unskilled and semi-skilled workers, domestic workers, non-workers, and irregular workers

A. This house is occupied by a farm laborer. Farm laborers seldom live in modern homes

B. An unskilled worker's home

For conveniences the nine vocations may be considered in three groupings: (1) the three most favorably housed, (2) the three least favorably housed, and (3) those in between. In the best housed group are the professional (four villages), the business (four villages) and the clerical, salesmen and kindred workers (three villages). In the three poorest housed groups are the farm laborers (four villages), unskilled (three villages) and the semi-skilled (two villages). In the three middle groups are the skilled (four villages), the domestic workers (two villages), the semi-skilled (two villages), and the non-workers (two villages).

Particular Items on Nonfarm Housing in the Four Villages:[10]

Electric lights illuminate 96.5 percent of farm homes in the four communities and 97.9 percent of nonfarm homes; the state average is 93.9 percent.

Electric lights are more important to comfortable living than the percentages indicate because other electrical conveniences are possible where wiring has been installed. The farm groups have almost overtaken the nonfarm with this item. In nonfarm ranks, Mendon excels with electric lights in every nonfarm home. Plain City does nearly as well,

[10]Also consult appendix tables VI, VII, VIII, IX.

the only exception being the unskilled, which drops to 95 percent. At Lewiston a 100 percent score is reached by six nonfarm groups. The three which fall short are the domestic (80%), the unskilled (91.3%) and the skilled (93.8%). At Tremonton, electric lights are found in 100 percent of the homes of six nonfarm groups. The farm laborers (93.3%), the nonworkers (94.7%), and the semi-skilled workers (95.7%), have a few homes without electric lights.

Radios are found in 93.7 percent of farm homes in the four communities and 89.7 percent of nonfarm homes; the state average is 92.4 percent. In the four villages reflecting the better farming sections of the state, the state average of 90.2 percent for rural nonfarm and 86.2 percent for the rural farm is reversed, giving the farm group the lead. The farm groups maintain the lead in all four villages except Mendon, where the nonfarm are ahead, with 96.8 percent for nonfarm and 94.0 percent for the farm.

More than nine in ten Utah homes have radios (92.4%). The only home convenience which excels radio is electric lights (93.9%). Nonfarm homes vary in the four villages from a low point of 25 percent among farm laborers at Plain City to 100 percent in various groups. The only nonfarm group at Mendon in which 100 percent does not have radios is the domestic, which has 50 percent. The average percentage with radios for all nonfarm vocational groups is: Lewiston 91.1, Mendon 96.8, Plain City 81.3 and Tremonton 90.1.
Those above and below the respective averages are:

Lewiston —above: professional, proprietors, clerical and salesmen, domestic, skilled, and farm laborers
below: nonworkers, unskilled, and semi-skilled

Mendon —above: professional, proprietors, skilled, semi-skilled unskilled, farm laborers, and nonworkers
below: domestic

Plain City—above: professional, proprietors, clerical and salesmen, domestic, skilled, and semi-skilled
below: nonworkers, unskilled, and farm laborers

Tremonton—above: professional, proprietors, skilled, farm laborers, and clerical and salesmen
below: nonworkers, unskilled, semi-skilled, and domestic

Refrigerators have been installed in 46.7 percent of farm houses and 49 percent of nonfarm houses. The state average is 50.8 percent. Nonfarm groups range from no refrigerators in the domestic and the farm labor groups at Mendon and the nonworker at Plain City to 100 percent in the proprietor group at Mendon, the clerical and salesmen group at Plain City, and the professional at Tremonton. The

groups rating the highest are the clerical, proprietors, and professional. Those rating lowest are the farm laborer, the unskilled, and the non-workers. The average for nonfarm homes at Lewiston is 42.5 percent, at Mendon, 35.5 percent, at Plain City, 34.4 percent, and at Tremonton, 58.8 percent. Thus only Tremonton of the four villages exceeds the state average.

Piped water flows into 70 percent of farm houses in the four communities and 81 percent of nonfarm. The state average is 82.6 percent.

Lewiston homes, although widely scattered, are now virtually all within convenient reach of culinary water mains. The cost has been tremendous, amounting to $250,000, but active leadership and sustained effort have achieved this favorable situation. Under these conditions farm homes with 84.6 percent connected with city water are better supplied than nonfarm with 78.1 percent connected.

Mendon is a farm village perpetuated from early settlement days with few changes. Nearly all the farmers live in the village and therefore have easy access to water mains. Thus favorably situated they have more homes with piped water than nonfarm families, the percentages being 82.1 and 80.6, respectively.

Plain City has no community water system. Small electric pumps have been installed as the financial resources and the desires of the individual family dictate. Isolated farm families are at no comparative disadvantage under these conditions. Actually, with respect to this item, farm families (61.1%) are much better off than nonfarm (43.7%).

At Tremonton where a compact cluster of homes is found in the village with farm homes in the surrounding area a community water system supplies the central area but has not been extended out to the great majority of the farm homes. Only those homes adjacent to the water mains, extending from the east and for a short distance to the west, have easy access to culinary water connection. The cost of extending the mains to many farm homes is well nigh prohibitive. A little more than half of all farm homes (55.9%) have either made connection with the water system or have installed electric pumps. The great majority of nonfarm homes (93.1%) have piped water.

Nonfarm vocations which have been most successful in obtaining piped water are: professional (all four communities, 100%); proprietors (Lewiston 92.9%, Mendon 100%, Plain City 66.7%, Tremonton 100%); clerical and salesmen (Lewiston 100%, Mendon, no clerical workers; Plain City 85.7%, Tremonton 94.1%). Nonfarm vocations which have been least successful are: farm laborers (Lewiston 65%, Mendon 100%, Plain City 25%, Tremonton 86.7%); unskilled workers (Lewiston 65.2%, Mendon 100%, Plain City 30%, Tremonton

89.2%), and domestic and personal workers (Lewiston 80%, Mendon 100%, Plain City 25%, and Tremonton 100%).

Bathtubs and indoor toilets are found in 48.5 percent of farm houses and 55.3 percent of nonfarm. The state averages 54.8 percent. The general tendency for wide differences to exist in nonfarm groups shows strongly with these items. The best showing is made by the professional group at Mendon, the poorest by the farm laborer and the unskilled worker. Five groups at Plain City do not have bathtubs or indoor toilets. However, Plain City has no community water system. Obviously, the "have nots" are not necessarily in isolated communities, for Plain City is only 10 miles from Ogden whose population is about 57,000.

As between communities, Tremonton, with two out of three (67.8%) of nonfarm workers with stationary bath and indoor toilet, has decidedly the most favorable conditions. Plain City, with only one in nine (10.9%) of nonfarm people with these items, has even more decidedly the least favorable. Of Lewiston's nonfarm workers, 53.4 percent, and of Mendon, 48.4 percent, have stationary bath and indoor toilet.

Sewerage connections have been made at Tremonton for 24.2 percent of farm and 97 percent of nonfarm houses. Lewiston, Mendon and Plain City do not have sewerage systems. Tremonton's system is effective in the clustered area where practically all of the nonfarm families live. The high percentages of nonfarm houses of all vocational groups that have sewerage connection is further indication of the more favorable situation of nonfarm families in a live trade center than in other types of communities where farming is dominant. Every house of the professional, business, clerical and salesmen, domestic, and nonworkers is connected, as are more than nine in ten houses of the skilled, semi-skilled, unskilled and farm laborers. Among the semi-skilled only 91.3 percent of the houses are connected.

Central heat is found in 13.7 percent of farm houses and 21.3 percent of nonfarm. The state average is 33.1 percent. Only a small minority of homes either farm or nonfarm in the four villages studied have central heat. However, the nonfarm excel the farm in three villages. Among the nonfarm groups the professional have central heating facilities more frequently than any of the others. The farm laborers, the domestic or personal workers, the semi-skilled and the unskilled are generally without it. At Lewiston five out of nine nonfarm groups have no central heat. At Mendon, four, at Plain City, seven, at Tremonton all nonfarm groups have some central heat, the professional excelling with 66.7 percent. The average percentage of nonfarm homes with central heat at Tremonton is 37.8.

Separate living rooms were found in 60.7 percent of farm houses and 63.7 percent of nonfarm houses. A separate living room is important to a family because it improves opportunities for favorable inter-family member contacts. Where the living room is also used for a dining room and in cases for a kitchen, incidents increase which result in complaints and criticism between family members. In a separate living room a bookshelf, a piano, a radio, a desk, tables, soft lights, a fireplace, comfortable chairs and lounges, which lend themselves to cultural pursuits and to conversational intercourse, are often found.

Although the farm groups have more separate living rooms than the nonfarm in Lewiston, Mendon and Plain City, the nonfarm homes in Tremonton excel the farm homes in this respect to such an extent (70.9% to 54.1%) that the total nonfarm homes in the four communities have a slightly higher percentage of separate living rooms than the farm homes. Among the nonfarm homes those occupied by clerical and salesmen, professional, proprietors and managers most frequently have separate living rooms; those occupied by farm laborers and unskilled workers least frequently have them.

One room per person has been provided for 66.3 percent of farm families and for 58.9 percent of nonfarm. Crowding has always bothered man. However, only the wealthy and the wanderers have been able to release themselves from the emotional eruptions which excessive crowding excites. House crowding is an enemy of individual cultural pursuits and adversely influences successful family living. The standard of one room per person may be used for the purposes of this study.

Nonfarm groups have been less successful in achieving the standard of one room per person than farm groups. This is true at Lewiston, Plain City and Tremonton. At Mendon nonfarm homes are less crowded. Few professional, or business, or clerical, or non-worker homes are crowded. Many farm labor, domestic and personal, unskilled and semi-skilled workers' homes are overcrowded.

Plain City has three nonfarm groups—professional, clerical and salesmen, and non-workers—out of a total of nine in which there is no room overcrowding. Mendon, has three, professional, business, and non-workers; Lewiston has one, professional, and Tremonton none. The average percentages of homes free from room crowding for all the nonfarm groups are: Mendon 80.6, Plain City 65.6, Lewiston 62.3, and Tremonton 51.9.

Six-tenths bedroom per person is found in 44.7 percent of farm houses and 33.8 percent of nonfarm.

Inadequate bedroom space is one of the most serious forms of overcrowding, since it influences habits of growing children and prevents the normal growth of feelings of personal privacy. Farm families have been able to reach the standard of 0.6 bedrooms per person more satisfactorily than nonfarm families. However, a majority of farm houses (55.3%) and a larger majority of nonfarm houses (66.2%) do not reach this standard. Obviously a great deal of bedroom overcrowding exists. More adequate bedroom accommodation in the farm houses is found at Lewiston, Plain City and Tremonton, but not at Mendon.

The nonfarm vocational groups which most frequently have the higher percentages of bedroom adequacy are: the non-workers, the professional classes, and the domestic workers. Those most frequently in the lower percentages are the unskilled, the semi-skilled, the farm laborer, and the proprietors and managers.

The average, reaching the standard of 0.6 bedroom per person for all the nonfarm groups, is: 18.8 percent at Plain City, 32.6 percent at Tremonton, 39.7 percent at Lewiston and 45.1 percent at Mendon.

A State of Good Repair: The total homes in the four villages show only 32.7 percent of farm homes and 40.6 percent of nonfarm in good repair. There is little difference between the farm and nonfarm in state of repair at Lewiston and Mendon. But at Plain City, where many nonfarm workers ride into Ogden to work, and at Tremonton, where nonfarm vocations are in a healthy state, nonfarm homes are in a much better condition of repair than farm homes. The nonfarm vocations have a range with respect to good repair from zero among the domestic and personal workers of Plain City and Mendon and the farm laborers of Tremonton and Mendon to 100 percent among the professional group at Mendon. The two vocational groups rating highest in good repair are the professional and proprietors, and managers and officials; the lowest four groups are the farm laborers, the domestic and personal, the unskilled and the non-workers.

Houses built within the last 10 years (1931-1940) constitute 12.5 percent of farm homes and 21.7 percent of nonfarm.

New house building is slow with farm families, amounting to 12.5 percent in 10 years for the four villages. At this rate it would take 80 years to replace these houses and depreciation is faster than this. The farm dwellers of Mendon built no new houses during the 10-year period. In strong contrast the "edge" farmers at Plain City excelled all the farm

groups of the four communities with a strong building program amounting to 42.8 percent in 10 years. Nonfarm replacements are, on the whole, faster than farm. A little over a fifth (21.7%) of nonfarm homes were built in the four villages during the decade 1931-1940. At this rate, if population remained constant, full replacement would take place in about 46 years.

But great differences exist between families in the nine nonfarm vocational groups. At Lewiston the farm laborers, domestic and semi-skilled built no new homes during 10 years. At Mendon skilled workers only did so. At Tremonton and Plain City all nonfarm workers except farm laborers built new homes between 1931-1940.

Painted During Last 10 Years: Sixty and seven-tenths percent of the farm houses and 72.3 percent of the nonfarm were painted during the last 10 years. Farm homes do not get as much paint as nonfarm. The only exception to this is at Lewiston, where 64.4 percent of farm homes have been painted between 1931-40, as against 59.3 percent of nonfarm. At Mendon no farm laborer or domestic and personal service worker painted his house between 1931-40, whereas at Tremonton every house in five of the nine nonfarm groups—business, clerical and salesmen, skilled, semi-skilled and farm laborers—was painted during the 10-year period. Again the unskilled, the farm laborer, and the domestic and personal worker paint least.

Reproduction value over $1,500 is found in 53.1 percent of farm houses and in 56.0 percent of nonfarm. The selection of any house value as a dividing line between the desirable and the undesirable is arbitrary. In 1938-39 the Farm Security Administration built 559 homes for migrant farm laborers at an average cost of $1,469.[11] Under Utah conditions it would be difficult for private families to build a modern house for $1,500. In any case, the percentage of houses costing above $1,500 in the several groups under comparison should be a fair criterion of the ability of these groups to build satisfactory homes. More nonfarm homes fall in the category over $1,500 than farm homes, but this is owing to the favorable nonfarm home situation at Tremonton. In the other three villages more farm homes are in the higher category than nonfarm.

Of the nine nonfarm vocational groups the professional, proprietors, and the skilled workmen have the highest percentages living in houses with a valuation over $1,500 and the farm laborer, the semi-skilled, the unskilled, and the nonworker have the lower percentages.

[11]National Association of Housing Officials, Housing Year Book, Chicago, Illinois, 1940, p. 188.

Daily newspapers arrive at 77.7 percent of farm homes and 69.6 percent of nonfarm homes in the four communities.

Utah farm families are not willing to permit the greater isolation inherent in farming to keep them from knowing what is going on. Rural free delivery makes it possible for virtually all of them to take a daily paper and the great majority do so. Decidedly more farmers subscribe for a daily paper than nonfarmers.

In the nonfarm groups of the four communities it is the unskilled (53.8%), the farm laborer (57.5%), the domestic and personal service (60%), and the semi-skilled (69.9%), whose percentages of subscriptions for daily newspapers are lowest. It is the professional man (93.3%), the business man (87.3%), the clerical worker (78.7%), and the skilled worker (75.9%) whose percentages are highest.

Automobiles are owned by 77.5 percent of farm families and 60.1 percent of nonfarm. Seven out of ten families in the four villages have automobiles. Those who get along without an automobile are found most numerously among farm families living in the villages, and among the farm laborers, the nonworkers, and the domestic and personal workers of the nonfarm groups. The group with the most automobiles is the professional, with 77.8 percent at Lewiston, 75 percent at Mendon, 100 percent at Plain City, and 80 percent at Tremonton. The group with the fewest automobiles is the non-worker, with 28.6 percent at Lewiston, 41.7 percent at Mendon, 42.8 percent at Plain City, and 31.6 percent at Tremonton.

Cement sidewalks have been laid in front of 9.0 percent of farm homes and 54.4 percent of nonfarm homes in the four communities.

There are no cement walks in the two smaller communities of Plain City and Mendon. Nonfarm people have about six times the proportion of houses with sidewalks that farm people have.

At Lewiston business men have done far better than any group in providing this asset. Semi-skilled workers have built no sidewalks in this community. At Tremonton a much stronger program of cement sidewalk building is found. Every nonfarm group has constructed cement sidewalks and the average for all of them reaches the high percentage of 92.7. Four reach 100 percent.

The overall housing picture is unfavorable to farm dwellers. In figure 21, the combined data for the four villages show definitely that larger proportions of houses whose reproduction value is (1) under $500 and (2) under $1,000 belong to farm dwellers than to village farmers and edge-of-village farmers. Likewise, smaller proportions of farm dweller homes fall in the bracket $1,500 and above than among the other two

farm groups. In other words, the farm dwellers build more inexpensive homes and fewer expensive homes than do the village farm families. Likewise, the 1940 census information on seven important conveniences shows that rural nonfarm homes excel rural farm homes with respect to them. Further confirming these trends, but also showing which farm groups fall lowest, the field workers in this study found that for 17 items covering good living conditions the farm dweller home fell below the village farm home and the edge-of-village home (table 15). On this basis, the best served farm group (either "edge" or village farmer) has improved on the position of the farm dwellers by the following percentages: At Lewiston 5.4, at Mendon 22.9, at Plain City 19.1, and at Tremonton 34.5. These are large margins of difference. Not only does the farm dweller build more low-cost houses and fewer high-cost houses, but he participates less in modern housing. The percentage of new houses built during the last 10 years is uniformly smaller for him than for the village farm and edge-farm families. He paints less frequently and on the whole he pays less attention to repairs (table 16). He has fewer radios and fewer basic conveniences such as piped water, sewer connection, central heat and refrigerators. He has proportionately more automobiles and a higher percentage take a daily newspaper.

Table 16. *Houses of farm groups of 4 Utah villages compared with respect to (1) recency of building (2) recency of painting and (3) state of repair*

	Percentage			
Houses	Lewiston	Mendon	Plain City	Tremonton
Built last 10 years				
Farm dweller	5.7	0	10.8	12.0
Village farmer	11.8	9.3	12.0	25.5
Edge-of-village farmer	20.0	25.0	42.8	33.3
Painted last 10 years				
Farm dweller	62.6	25.0	54.8	78.1
Village farmer	85.7	43.1	55.8	91.4
Edge-of-village farmer	64.7	80.0	88.9	80.0
Village farmer	33.3	49.0	19.1	70.8
Edge-of-village farmer	47.1	60.0	15.8	33.3
In good repair				
Farm dweller	32.5	33.3	18.0	27.7

Why has the farm dweller thus fallen behind?

Obviously:

1. Not because he is denied the companionship and help of his family. They live with him.

2. Not because he spends a great deal of time traveling to and from his farm as does the village farmer.

3. But mainly because his home is approximately 1/8 of a mile to six miles (four villages) from the point of connection with the village water system, sewer system, etc., and the cost of making connection is often prohibitive.

4. But probably also because ecological forces are slowly sifting and distributing the farm population in and around the villages, giving those with a head start and with greater survival characteristics more favorable locations. A young wife who is used to hot water conveniences may prefer to rent a home in the village while her husband travels to and from an isolated farm rather than settle down on the farm where water must be carried from a well. Many facts encountered in this study suggest the presence of such ecological influences. Among such are: the smaller average cost of the farm dweller house, the greater number of years since it was last painted, the poorer condition of repair, the greater overcrowding, the slower rate of installation of electric lights and the greater lagging of refrigerator installations after electric lights have come. Some of these conditions can justly be attributed to unfavorable situations or to social habit, but not all of them.

RELATION OF FINDINGS TO VILLAGE AND SMALL TOWN PLANNING[12]

THE DISCUSSION and recommendations on planning for small towns as presented in this section are based on the sociological study of four communities in Utah. The use of results of this study and recommendations on community planning apply only to the sociological phases. It is recognized that in the development of a complete program for community planning, phases other than the sociological should be considered. Some of these factors include the physical setting, the reorganization of the farm layout, the economic factors as to costs and benefits, and the engineering feasibility of the project. It is, therefore, not intended to cover these items in this report nor to make definite recommendations within these fields.

Early recognition of the uniqueness of village planning is important in community growth. A rigid system would be utterly inappropriate. In mountain country, topography differs in every community. Uniqueness is basic to good planning. Suggestions that appear later are not intended for rigid application but are merely descriptions of conditions which show that effort should be directed to the field of planning. Good plans would reduce taxes and bring large social gains—but such plans reach far into the future.

Criticism of over-rigidity in conforming to the section township lines for roads and for farm shapes is increasing. Agronomists point out that contour farming increases production and saves effort. Irrigation engineers insist that more attention be given to the lay of the land. Highway engineers complain at the wastes of automobile bottlenecks in gridiron planned cities and of round-about travel over unnecessary grades. Soil experts see virtue in dividing lines that take into consideration soil types. Topography, soil, and natural resources each have distinctive influences. Agricultural economists and rural sociologists see unnecessarily high cost and inadequate social returns in an unplanned distribution of the population. Thus, apart from climate and natural resources many considerations operate against rigid lines in community, county, and regional planning. Such considerations do not mean that the gridiron basis of land classification is a mistake. The square blocked villages of Utah have much in their favor. Basically they should undoubtedly remain as a foundation for planning.

Modern Housing and the Farm Dweller

America is now directing its attention, as England, Sweden and some of the cities of Europe have already done, to the achievement of

[12]Appendix I should be read in connection with this section.

minimum standards of modern housing for all the people. How can farm dwellers have piped water, electric lights, radio, telephones, refrigerators, central heat, garbage collection, and ready access to health, educational and religious services, not for a few of the well-to-do only, but for all? They do not have many of these conveniences and services now. This study finds that edge-of-village families have better houses and more satisfactory conveniences than farm dwellers in all four villages studied.

In figure 32 the location of present edge-of-village homes in Lewiston is shown. The question is raised: Is it possible through individual and group planning to increase the number of "edge" farm homes without change in the organization of streets? The answer is yes. For years edge-of-village farm families have been building out a little farther along the four principal roads that extend north-south, east-west from the center of town. If the farm frontage on these streets were decreased and the farm extended somewhat farther back many more could be accommodated fairly close to the clustered portion of the community. "Edge" families close enough to town to connect up with a sewer line or a cement sidewalk without undue cost would thus increase.

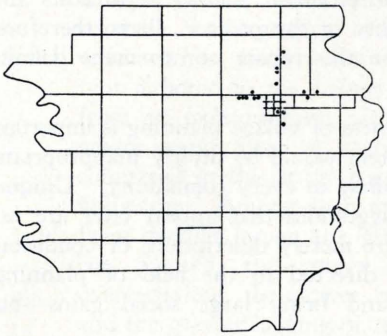


Fig. 32. Present location of edge-of-village farm homes in Lewiston, Utah, 1940

When town planning gets genuinely under way in a community like Lewiston several things connected with this study should receive consideration. Among these are:

Road Improvement

The improvement of roads has brought answers to many problems. The trouble is there are numerous roads and it is costly to improve them. Are there too many roads in and out of many Utah villages? Are they in the right places? Should there be primary and secondary roads in farming areas around villages and towns or should all roads around square mile sections be improved irrespective of extent of use? If many farm people find it necessary to sell farm produce at a trade center and to buy supplies there, should they be required to travel around several square mile sections rather than go directly through them?

The close relationship that exists between good housing and a well planned system of roads has not been fully developed. In Utah a

tremendous amount of time is spent in traveling from the home to the farm over roads much longer than they need be. The farmer has been hauling gravel for a long time and paying taxes that are climbing higher. Local taxes will undoubtedly continue to increase as the demand for local improvements expands. There is a solution in the study and realignment of roads in the light of the uses to which they are and may be expected to be put that goes deep towards the root of the problem. For along with the roads as basic determinants go many of the other local improvements which condition family well being. Such replanning of local roads would undoubtedly take much the same direction that the replanning of federal, state, and county highways is slowly taking. Every time an alternative highway is built and an unnecessary road obliterated the traveler rejoices. The farmer, however, continues to haul heavy loads year after year over roads in his own township that are unnecessarily long and round about. Improvements of these poorly planned roads further entrench and fix a bad arrangement. Just as a road around square mile sections is unsuited to highways where the principal idea is to arrive at a destination so is it also unsuited to the needs of farmers living around trade centers who haul tremendous tonnage to markets, purchase an increasing number of goods and supplies from merchants, and use community centers to enrich the living of the family.

Federal and state highways are slowly conforming to the requirements of the automobile in spite of the old gridiron conformation suited to horse and buggy uses. When modern surfacing began in earnest after World War I, the improvements were made on top of the old roads. Between 1916, when federal aid for highways began, and 1936, $1,987,655,000 of federal aid highway funds was made available to the states. The present yearly allotments to the states total $163,500,000.[13]

From the standpoint of this inquiry three types of roads are important to the farm people who till the soil in the hinterland of trade centers. They are: (1) the federal and state highways, one or more of which frequently passes through or close by such centers, (2) primary or well maintained roads, and (3) roads required for entrance and egress to farms. The second of these—the primary roads—if properly located and well constructed and maintained in harmony with automobile requirements, constitutes the basic necessity for farm dwellers if they are to participate fully in modern living at cost within their reach.

[13]Ezra C. Knowlton, chief engineer, Utah State Road Commission, Defense highways, Second Annual Engineering Conference. Proceedings, University of Utah, 1941.

The conception of the town's principal or primary road that is envisioned here is a road or roads which serves the more heavily populated farm areas outside the clustered portion of the community. The primary road thus conceived is not superimposed on any horse and buggy

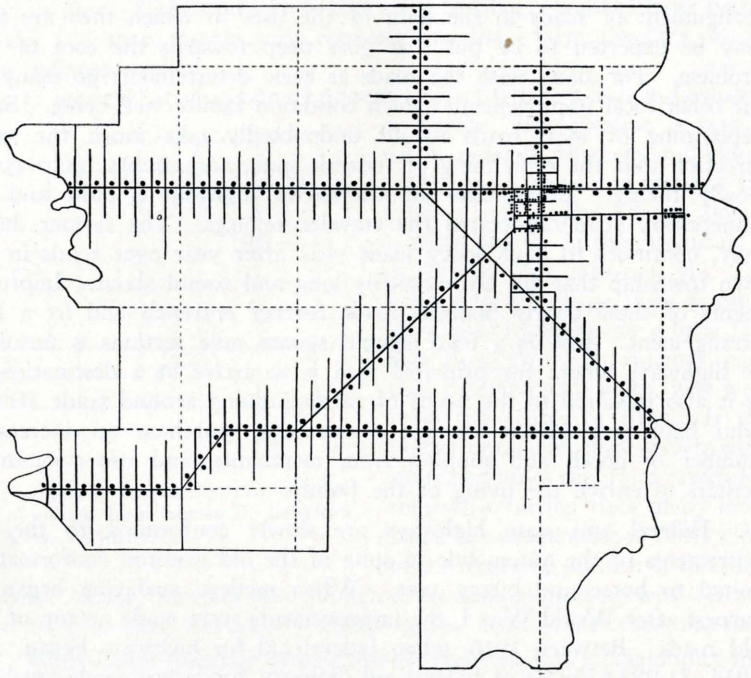


Fig. 33. Suggested location of houses and roads and alteration of shapes of farms in Lewiston, Utah. The two diagonal roads suggested would save farmers and housewives of Lewiston tremendous amounts of time, reduce cost of marketing and purchasing, increase the volume of business done in Lewiston and pave the way for better housing at reduced cost for conveniences and utilities

roads unless these happen to coincide with the shortest distance to community centers. This road is thought of as wide, well maintained and carrying, perhaps, underground water and conduit lines required for modern living. Since it lies within the natural community its planning and beautification are the work of the community.[14]

[14]Communities vary greatly in roadside improvement activities. Of Lancaster, Pa., A. S. Wing writes: "Nothing has been said so far about the concerted efforts of such communities as Lancaster, Pa., to line their highways with plantings of climbing roses, crepe myrtle and others. Nothing is quite so indicative of community spirit and morale as the successful culmination of a roadside planting enterprise." Nature Magazine, June-July 1942, p. 320.

A larger opportunity to increase the number of edge-of-village homes would come were leaders at Lewiston able to induce the state road commission to build, as a post-war employment project with federal cooperation, a diagonal highway from Richmond through Lewiston connecting with the road to Preston, Idaho. If this were developed cooperatively such a road could become of primary importance and of the kind described extending northwest from its emergence on the Lewiston flat to the Lewiston-Preston road a mile west of Main street. Were still more roads needed at a later date after experience with improvement projects had demonstrated the relative wisdom and economy of such planning, one other diagonal road could be added to connect the second ward on the southwest with the main business area. These roads, though limited in number, if properly constructed would serve the purposes for which roads are built far better than the large number of roads now in use. Figure 33 roughly indicates where homes would tend to be built under such planning in the course of several decades of development.

The Shape of the Farm in Relation to Good Housing

The present shape of all farms at Lewiston may be seen in figure 34. It will be noted that the oblong farm predominates. If more farms with these same shapes were connected with the roads, great cultural, social and economic gains would be realized in time. The square farm may be workable in strictly open country, but in a natural community made up of clustered business and residential groups, plus a surrounding farm population, increasing cumbersomeness develops. Neither the farmer. himself, nor the taxing bodies can afford to bring to a single farm family the utilities that are necessary to good living where so much frontage is involved and the utilities required for modern living are many.

The 40-rod square irrigated farms bordering an intersecting road provide a half-mile frontage, whereas, if one of the intersecting roads is eliminated a 40 rod frontage that is 80 rods or 160 rods deep increases the size of the farm and keeps the frontage down. As with the narrow 4 rod wide city lots, decreased frontage means better care. Furthermore, neighbors are brought closer together and there are enough people to stand the cost of having such things as piped water in the house. If a farm is to be both a place to live and a means of making a living, the shape of the farm becomes a powerful conditioning factor in determining the possibilities of improving family living as the years pass. With reorganization of the farm layout fewer public roads would make possible maintenance at a higher level.

The Importance of Location of the House on the Farm

Residential plats and division suburbs have become commonplace in cities. This is because the city business man has been able to give more at-

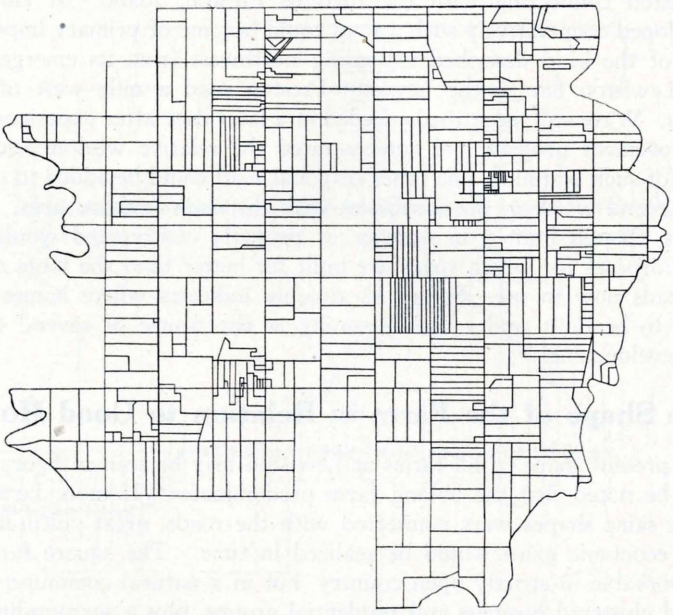


Fig. 34. Present location of farms in Lewiston, Utah. Oblong farms are now very numerous even under the restraining influence of a road system that follows section lines. The majority of the farmers prefer it to the square farm even though they have not as yet in a substantial way related this shape of the farm to the problem of building a road system that would minister to a superior type of family living

tention to group approaches to factors that influence his home than has the farmer. The farmer has been an individualist in home building as he has in his farm business. Gradually the farmer has been learning that many business and production problems can be solved by getting together with his neighbors which cannot be solved by working alone.[15]

[15]Irrigation has aided and probably paved the way for many group cooperations that have moved culture forward among peoples that have developed noteworthy civilizations, such as the Babylonians and the Pueblo Indians. Irrigation itself is a group enterprise which demands cooperation at many points—in the building of the canal, in paying for it, in distributing the water. Habits of cooperation may go from one field to another, until a people learn how to alter materially the limiting environments that surround them. On the other hand irrigation can, where water supply is limited and many communities share the sources of supply, become a source of inter-community conflict rather than of inter-community cooperation. It may also, where an area is over-populated, give

Housing problems are in a very real way group problems. Should isolated houses continue to be built? Many trends in modern life are forcing attention to the group basis on which the problem rests. Under consolidation in Utah small schools in outlying farm areas have been replaced by larger ones where more students, better buildings, and abler teachers are available. Should the home itself be built where it can be reached by culinary water, sewer, electric power and light lines? The system of primary roads suggested at Lewiston would constitute a very real invitation to build and in some cases to move the house so that it immediately adjoins and faces such a road. So located, the house could be connected with all the important utilities which have gone so far towards making modern housing possible. The sidewalks and water mains would be close at hand and connection would be inexpensive. Not only this, but the cost of the utility lines would be much less and the number who stand the cost greatly increased. Whittled thus at both ends the tax burden (cost in relation to return) could not help but greatly decline. Consider also the great reduction in school bus transportation, shopping distances, and haul to market that these changes would bring.

Good Housing and Post-War Planning

Assumptions—During the post-war era it is assumed:

1. That modern housing will come to rural people.
2. That the automobile will be the dominant land vehicle.
3. That the automobile will gradually force more road building programs suited to its use.

It is obvious that the facts encountered in this study support community planning. In view of the fact that Utah's many communities are without expert assistance of types needed for guidance in these fields, the attention of post-war planning bodies is directed to the community as an important base for planning.

Some possible projects:

Project 1. Construction of a primary road system within the natural community to connect with and functionally to become a part of the state and federal highway system.

Project 2. Installation of culinary water mains along primary roads. If adequate water rights are not already owned they should be acquired.

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rise to quarrels between neighbors and the growth of small non-cooperative attitudes. At the present time when cooperative effort is being directed towards increasing sources of supply through building mountain reservoirs to conserve spring and fall runoffs the influence of irrigation is definitely positive. Such an influence as the geographic pattern of clustered area and surrounding farm dweller irrigated area certainly invites cooperative enterprise. Whether such experience is likely to be extended from irrigation to other fields such as road buildings, housing, utilities in the home, depends, no doubt, on the progressiveness of the people.

Project 3. Installation of sewerage lines along all primary roads.

Project 4. Underground placement (in many communities) of electric lights and telephone wire conduit lines along primary roads.

Project 5. Construction of cement sidewalks along both sides of primary roads.

Project 6. Beautification of primary roads and small park areas along important roads. Preliminary to this should be devised at the outset a system for upkeep and maintenance that would be adequate. The improvements suggested for these roads should be a part of and in harmony with a general scheme of community planning.

It will have become clear before now that the three-fold direction of planning suggested in this chapter: (1) the construction of a few primary roads, (2) the narrowing of the shape of farms, (3) the building of new homes adjoining these roads, means a great increase in the number of edge-of-village farm families and a great decrease in the number of farm dweller families. All of the farm families living on the primary roads would be edge-of-village families, that is, they would both live on the farm yet have all the advantages of living in the village. Here alone among farm families are combined the wholesome influences of the farm on the entire family and also the socializing influences of compact neighborly community enterprises. The advantages are both economic and social. Even under present conditions edge-of-village farm families have far outstripped farm dweller families in providing good home living conditions. But the difference goes further, the influences penetrate deeper. The farmer retains his share in town leadership better as an edge-of-village man than he does farther out on the more isolated farm. Likewise, his family retains the family strengths and cohesions of the farm dweller family much more successfully than does the village farm family because the family of the latter is not so closely associated with the farm enterprise. Cooperations induced by efforts directed to common ends tend to be greater and dissensions (divorce) less. Among other advantages that should not be overlooked is the great consideration for the taxpayers' purse that is innate in the suggestions here made. Every important improvement the housewife wants can be had at only a fraction of the cost required if the horse and buggy roads are maintained. Trips to town from the home located on a primary road will be at less expense. Produce marketed will be at less cost. School busses will have shorter routes. Planning for the future is an important undertaking. When unemployment periods come, long range plans should already be matured. The home community is one of the places that needs it.

SUMMARY AND CONCLUSIONS

1. The median value of Utah owner-occupied houses in 1940 was $2,071. This gives the state a ranking of 19th among the states and of 1st among the Mountain states. The average value of farm and buildings, however, is only $6,597 for full owners and $6,162 for part owners, which places Utah in the last position among Mountain states. Thus a fairly good house exists on a farm of small value.

2. The Middle Atlantic states, the New England states, except Maine, the East North Central states, except Indiana, and the Pacific Coast states, except Oregon, have owner-occupied houses of higher median value than Utah. The West South Central states, the East South Central states, and most of the South Atlantic states, the West North Central states, except Minnesota and Iowa, and the Mountain states have owner-occupied houses of smaller median value than Utah.

3. Utah is more evenly balanced in the proportion of houses below and above the median valuation of $2,071 than many states, particularly with respect to very poor and very good houses. In Utah 23.6 percent of the houses have a valuation under $1,000, but 36.6 percent have a value of $3,000 or over. In Arkansas the median value is $605, which is far below Utah's, but the median value of houses in Connecticut is $4,494, and only 2.2 percent fall below $1,000, whereas 73.5 percent are valued in excess of $3,000.

4. The ratio of debt to value of houses in Utah is high. In 1940 this ratio was 40.5 percent for full owners and 45.3 percent for part owners. This is higher than in other Mountain states except Colorado, and higher than in Pacific Coast states. However, many states have higher ratios. The state rank of Utah for ratio of debt to value is 27 for full owners and 33 for part owners. The ratio of farm debt to value in 1930 was 34.8 percent, in 1920 it was 28.8 percent, and in 1910 it was 21.4 percent. From 1933 to the present the ratio has steadily declined, with increased emphasis since 1940.

5. Utah houses are a little larger than those in other Mountain states, or in the Southern states, but smaller than Pacific Coast states and the older Eastern and Northern states. The five-room house is most favored in urban Utah and the four-room house in rural Utah.

6. There is much overcrowding in Utah rural farm homes. The median size of household, 4.29, is larger than the median number of rooms, 4.09, showing that there is less than one room per person in more than half of the houses. There is more rural overcrowding in the Southern states than in Utah, but the 35.5 percent of Utah farm houses with three rooms or less compares most unfavorably with the 4.4 percent with three rooms or less in Vermont.

7. Utah homes are comparatively well supplied with the seven con-

veniences enumerated in the 1940 census. California only, of the states west of the Continental Divide, is more favorably situated. States with a composite average higher than Utah number **11.**

8. The Utah average for the seven 1940 census conveniences are:

(1) For running water in the home, state average, 82.6 percent; urban, 94.4 percent; rural nonfarm, 75.1 percent; rural farm, 50.5 percent.

(2) For electric lights, state average, 93.9 percent; urban, 99.3 percent; rural nonfarm, 93.1 percent; rural farm, 74.5 percent.

(3) For radio, state average, 92.4 percent; urban, 95 percent; rural nonfarm, 90.2 percent; rural farm, 86.2 percent.

(4) For refrigerators, state average, 50.8 percent; urban, 59.2 percent; rural nonfarm, 41 percent; rural farm, 34.6 percent.

(5) For bathtubs or showers, state average, 67.4 percent; urban, 86.8 percent; rural nonfarm, 45.6 percent; rural farm, 31.5 percent.

(6) For indoor toilets, state average, 68.5 percent; urban, 88.6 percent; rural nonfarm, 46.2 percent; rural farm, 30.8 percent.

(7) For furnace, state average, 33.1 percent; urban, 48 percent; rural nonfarm, 13.8 percent; rural farm, 8.3 percent.

9. Utah counties show wide variation in the extent to which they have acquired the seven 1940 census conveniences. Comparisons show:

(1) For running water in the house, state average, 82.6 percent; highest county, Salt Lake, 94.1 percent; lowest county, Duchesne, 26.4 percent.

(2) For electric lights, state average, 93.9 percent; highest county, Salt Lake, 98.8 percent; lowest county, Daggett, 6.9 percent.

(3) For radio, state average, 92.4 percent; highest county, Rich, 95.5 percent; lowest county, San Juan, 42.8 percent.

(4) For refrigerators, state average, 50.8 percent; highest county, Salt Lake, 61.9 percent; lowest county, San Juan, 7.6 percent.

(5) For bathtub or shower, state average 67.4 percent; highest county, Salt Lake, 87.6 percent; lowest county, Daggett, 13.1 percent.

(6) For indoor toilets, state average, 68.5 percent; highest county, Salt Lake, 89.1 percent; lowest county, Duchesne, 17 percent.

(7) For furnace, state average, 33.1 percent; highest county, Salt Lake, 52.5 percent; lowest county, Wayne, 1 percent.

10. Early means of financing the building of homes in Utah were from family savings, credit at the lumberyard, the hardware stores,

loans from relatives, and sometimes from a wealthy townsman who made personal loans. Bank loans came later. Interest rates were high and repayment conditions difficult. Building loan associations became numerous in the cities during the early decades of the century and through them savings and credit were reduced to organized methods. The entrance of government into the housing field did not develop extensively until after World War I.

11. Although United States Housing Authority made considerable progress before World War II in replacing city slum buildings with modern apartments, little headway was made in eliminating slum dwellings from farms. In 1941 twenty-two FHA homes were found in Tremonton, five in Lewiston, one in Mendon, and none in Plain City. Interest rates as high as 6 to 8 percent are still frequently paid. Amortization is seldom found where the house is built through private credit.

12. Even more definitely than urban Utah prefers brick houses, rural Utah prefers frame. Brick houses are quite numerous in all four villages, rock in Mendon only.

13. The average values of houses in the four villages are: $1,637 at Plain City, $1,789 at Lewiston, $1,828 at Mendon, and $2,238 at Tremonton.

14. The proportion of houses whose values fall below $500 are: Mendon, 1 percent; Plain City, 5.2 percent; Lewiston, 7.3 percent, and Tremonton, 7.4 percent. The ones falling under $1,000 are: Mendon, 15.4 percent; Plain City, 23.3 percent; Lewiston, 28.1 percent, and Tremonton, 28.6 percent. The proportions with values of $3,000 or more are: Plain City, 10.9 percent; Lewiston, 13.0 percent; Mendon, 16.4 percent; Tremonton, 22.4 percent.

15. Houses in the four villages that have never been painted constitute: in Tremonton, 6.6 percent; in Lewiston, 7.4 percent; in Mendon, 10.4 percent, and in Plain City, 12.7 percent.

16. The average number of years since houses were painted are: at Tremonton, 7; at Plain City, 8.4; at Mendon, 9.9, and at Lewiston, 10.9.

17. Vocational groups who painted their houses most frequently during the three-year period 1938-40 were: (1) professional, (2) business, (3) clerical, (4) skilled, (5) farm dwellers, and (6) edge-of-village farmer. The vocational groups who were least active in painting their houses during this period, in order of ascending activity, were: (1) non-worker, (2) farm laborer, (3) domestic worker, (4) semi-skilled, (5) unskilled, (6) village farmer.

18. The composite average of 17 items pertaining to good housing shows the village farmer to be more favorably situated than the farm

dweller in all four villages. The edge-of-village farm house is superior to both the farm dweller and village farm houses at Plain City, Mendon and Lewiston. It is inferior to the village farm home at Tremonton.

19. Nonfarm housing is both better and not as good as farm housing. The composite average shows a range of difference between the farm groups of 38.7 percent and between the nonfarm of 56.1 percent. The village farmers at Tremonton rank highest with 78.9 percent, the farm dwellers at Mendon are lowest with 40.2 percent. The professional group at Tremonton, with a composite of 83.7 percent, is highest among nonfarm vocations and the farm laborers lowest at Mendon with 28.4 percent.

20. In general, the professional and business groups are the best housed and the farm laborers and the unskilled workers are the poorest housed in the four villages.

21. The general picture of housing in rural Utah, as shown in this study, is one of considerable inequality. Among the numerous poorly housed no minimum group or social standard prevails. Neither through government nor through cooperatives has any appreciable influence shown itself in behalf of the poorest one-third of the population. In only one community of the four studied has the government, through FHA, entered as an important influence, and in this town it is not the poorer groups who have been aided. Farm credit has not yet organized a housing division for farm people.

Looking forward, there are many evidences that the people of America, through federal, state and local government, will enter the housing field much more strongly in the post-war period than they have between the two great wars, and that the poorly housed will not be forgotten. How strongly the American cooperatives will enter this field is not yet clear. In some areas, such as South Bend, Indiana, the cooperative or mutual housing associations have been able to reduce administrative expenses to about one-half those achieved by the public or government housing projects in the same community. With the entrance of one or both of these agencies into the housing situation in rural Utah there will gradually come to be a greater interest in community planning and group effectiveness.

Appendix I

COMMUNITY ASPECTS OF EARLY UTAH PLANNING

Original Plat for the City of Zion

UTAH HOUSING cannot be adequately understood apart from its early setting. From the very first there has been a clear recognition among the Mormons of the close relationship between the community and the house as mutually conditioning factors. Joseph Smith followed up his conception of an earthly Zion with a plan to build it. With the launching of this plan he became one of America's early city planners. Effort was of course directed to the conditions which existed in 1833. In the early design is evidence of planning:

1. Against overcrowding; a home was planned for each family. There were to be 20 lots to each 10-acre block and 8-rod wide streets.
2. To insure the use of superior building materials. All houses were to be built of brick or stone.
3. For adequate space for public buildings near the center of the mile square division—three 16-acre blocks were to be reserved for public buildings.
4. For cleanliness, at a time when sewerage systems and garbage removal were not deemed practicable—pens and barns were not to be built within the city, but on a designated area outside the residential portion of the city where animals were to be kept.
5. For central, convenient location of public buildings—only a few homes would be more than a half-mile from the central tier of blocks reserved for public buildings.
6. Against over-encroachment of routine and mechanization by providing each city family with one-half acre for gardens. A one-half acre of truck garden and orchard is enough to keep a city family physically healthy and cooperative.
7. Against rural isolation by having the farm family live in the city.
8. Stimulation to cooperative socializing undertakings through, (1) compact, but never crowded, living achieved by the physical organization already described, and (2) through a cooperative system of living known as the United Order, which was expected to eliminate poverty. It was confidently expected that in such a community no slums would or could develop, for under this plan the competitive economic processes through which the weak, the ill, the unemployed soon find themselves where recovery is difficult are strongly modified by safeguards

which were calculated to sustain independence. Neither was there place for the isolated farm home far separated from the conveniences and socializing influences of compact community living, for the farmers were to live in the city.

This plan, with certain modifications that were devised at Nauvoo, Illinois, became the model for Salt Lake City and the cities, towns and villages which were established in the mountains of Utah during the colonization period.

These towns and villages were all in the beginning farm villages; that is, the farm families lived in the villages and traveled to and from their farms outside the residential area. Nearly all the people of the small communities were farmers. Destined to operate for a hundred years, not under the United Order but under capitalism, these villages have shown a good deal of pattern persistence. Many, however, have become altered in important respects. Among the more important characteristics of these early farm villages were:

1. Wide streets running parallel predominating north-south and east-west, usually 8 rods or 6 rods in width;[16]
2. A main street extending north-south parallel with the mountain ranges, but occasionally east-west:
3. Square blocks, containing either 10 or 5 acres. The 5-acre blocks were divided into 4 lots of 1¼ acres each, the 10-acre blocks originally contained 20 lots of a little less than ½ acre each and were designed for urban conditions. All the people, farm and nonfarm, lived in the village under conditions of compact settlement.
4. A public square consisting of one full block near the center of the village. The square was reserved for recreation and public gatherings.
5. Shade trees around the public square and on the outside of the sidewalks where locust, mulberry, boxelder, poplars and walnuts were found in many villages.
6. Small lateral ditches ran adjacent to the shade trees. From these ditches came the irrigation water for the gardens, orchards, lawns and shrubbery that grew within the lots.
7. A village canal or canals. These connected with the laterals and extended up into the near-by canyon through which a mountain stream flowed. These irrigation canals were built

[16]In Nauvoo the streets were six rods in width, instead of eight, and the lots were five acres instead of ten. Many smaller Utah villages followed the Nauvoo plan. It may be roughly considered to have been the model for rural communities and the Zion plan the model for urban communities.

by all the men and boys of the village and were as much a part of the physical structure of the community as anything in it.

8. Barns, pens, corrals, built in the lots within the village, sometimes in the back of the lots, often adjoining the street near the center of the block. This was an important departure from the early design.
9. A church building and a school building located on or near the public square. Frequently one building served as church and school. The store was not far away.
10. Roads leading to neighboring towns. In early days they were dirt roads. Gravel and surfacing came later.
11. A rather rigid system of land ownership designated to maintain equality. The early Mormons were slow to accept the inequalities of capitalism that have now become so strongly entrenched. Equality in land ownership was sought in, (1) the 1¼ acre lots made available to each home owner (Nauvoo plan), (2) in the 20-acre farms into which the land was divided, and (3) in the common pasture which was available to all under regulations set up. Later, when a 20-acre farm was found to be too small for a large family or families, it was difficult to purchase a plot adjoining so that a farm dweller, and more particularly a village farmer, found his farm land scattered in a number of places. Separation of land still plagues the farmers of these communities.
12. Leadership in the Mormon bishop. There was no mayor or president of a town board until much later. The trustees of the school were elected by the people. In both spiritual and temporal things the ward bishop usually took the initiative.
13. Strong social solidarity. Unification of authority under religious motivation tended to increase the unity which compact settlement encouraged.

Farmer and non-farmer mingled together in a society in which social enterprises were undertaken which required a high type of cooperative effort. The people met together often because they had important things to consider. To build a 5 to 20 mile canal without money to finance it meant ability to move together. To lay out the town, build the meeting house, the school house and later the social hall under the same kind of financing assured the men and women of the community a socialized experience. These people had back of them a great migration experience. It is generally agreed that they learned how to work together. Difficult things which an individualistic society could not have done, they did, and grew strong in cooperative

spirit as they did them. Two things are worthy of note and emphasis: (1) The community had important things (projects) to do, and (2) virtually all the people had a share in doing them. Since every farmer lived in the village, village affairs were his affairs. The existence and persistence of the pioneer concept that the rural farmer and the rural non-farmer (villager) have essentially common interests and should work out their problems cooperatively in their own interests and in the interest of the community is a valuable residue of the early Utah idea of the compact community. The value of this residue may be seen in the numerous and widespread efforts that are now being made in progressive communities to bring farm families into more active relationships with town people in trade, education, religion and health matters. The consolidated school, the bigger store, the better church, the cooperative store, or service station grow out of such thinking. Devisive attitudes between farm and nonfarm interests did not arise until later on. Strong social solidarity prevailed in the early farm village and cooperative effort achieved significant results.

There were also certain disadvantages in the farm village plan:

1. A certain amount of waste of good soil resulted from streets being wider than early day traffic required.
2. Few abutting property owners had time to keep street weeds down and to continue the early effort to beautify the streets.
3. Families living in corner areas or on outgoing roads found the distance to community centers long.
4. Customary land tenure holdings, particularly 20-acre fields, made unification of farm holdings difficult for the individual farmer.
5. Location of the house in the village apart from the farm separated the family from farm work, made it difficult to make a family enterprise out of farming, removed the farmer from direct oversight and control of machinery and crops and, to a degree, introduced controversial factors into the family. If he kept his animals on his lot, unsightly and unclean barnyards and pens within the village were necessary.

Modification of the Utah Farm Village

How the physical frame-work of the Zion of Independence could be adapted to the overlordship of the capitalistic order when the inhospitality of the slave owning "old settlers" of Jackson County, Missouri, made it necessary to abandon the United Order could be known only through experience. Nauvoo, Illinois, was built a little later under capitalism and became known as Nauvoo the Beautiful. Salt Lake City

and the cities, towns and villages of the Great Basin area represent a hundred years of effort to build large and small communities basically similar in many ways to the original design. But important changes have come. In Cache County, for instance, may be found today one city (11,868 in 1940) basically the same as originally planned, two farm villages that have remained true to type, eleven modified farm villages which retain much of the old village patterns, and nine open country farm communities, very different from farm villages.

Modification has taken four principal directions: (1) Farm homes have been built rather extensively along the highways and streets running from the village. Here and there "string" towns have emerged. In most cases clustering has remained more nearly square or circular with homes extending outward along principal streets. (2) Farm homes have become numerous outside the blocked areas on surrounding farm land. The farm dwellers who live on these more isolated farms have superceded some of the village farmers living inside the blocked territory, but have not displaced them entirely. Both farm dwellers and village farmers are found in comparatively large numbers in such communities. (3) A third departure from the original Utah farm village is in reality an abandonment. It is found in the open country communities where every home is located on the farm to which it belongs and community centers consist of a church, a consolidated school and possibly a service station and/or store. (4) A fourth modification is seen in the growth of the trade center where nonfarm, business, professional, skilled and unskilled workers have become more numerous than the farmers and tend to assume leadership in community affairs. Usually farmers live either in the town or on their farms near by. These trade centers, many of which are county seats, have come to exercise a strong influence over surrounding smaller communities and neighborhoods, some of which are declining and all of which are being profoundly influenced by good roads and rapid means of communication.

Table I. *Proportion of farms mortgaged, average value of farms and buildings and ratio of debt to value for farms operated by full owners and part owners, and median value of owner-occupied dwelling units for the United States by states and regions, 1940*

	Farms operated by full owners			Farms operated by part owners			Median val. owner-occupied homes
	Proportion mortgaged	Avg. value farm & bldg.	Ratio of debt to val.	Proportion mortgaged	Avg. value farm & bldg.	Ratio of debt to val.	
New England							
Maine	34.0	4,022	43.9	47.8	4,601	48.9	1,809
New Hampshire	39.5	3,733	40.0	45.1	5,193	42.2	2,397
Vermont	53.6	4,779	42.9	59.6	5,453	44.6	2,318
Massachusetts	51.4	5,864	41.6	62.2	7,915	45.3	3,797
Rhode Island	39.9	7,473	38.4	50.7	8,874	40.3	3,824
Connecticut	50.7	7,714	36.0	60.4	11,518	35.6	4,494
Middle Atlantic							
New York	45.7	5,933	41.6	54.1	6,875	45.8	4,095
New Jersey	50.1	7,962	41.4	58.2	9,388	45.6	4,451
Pennsylvania	33.5	5,082	42.5	41.9	5,980	44.4	3,026
East North Central							
Ohio	37.5	5,720	41.7	48.7	6,344	44.8	3,076
Indiana	46.8	5,824	38.1	60.1	6,118	42.2	2,030
Illinois	37.6	10,925	42.6	46.5	9,875	44.8	2,979
Michigan	44.9	4,545	41.1	55.6	4,747	45.5	2,489
Wisconsin	57.7	6,359	54.8	63.1	5,838	58.8	2,502
West North Central							
Minnesota	52.2	7,104	51.2	63.5	6,667	54.8	2,288
Iowa	57.7	12,397	52.5	64.2	11,126	55.9	2,085
Missouri	43.9	4,047	48.1	57.5	4,096	54.9	1,627
North Dakota	58.1	6,993	54.3	70.5	5,502	64.1	1,329
South Dakota	49.5	7,361	57.0	65.2	5,430	63.2	1,297
Nebraska	54.6	9,694	56.3	68.2	8,649	59.0	1,793
Kansas	46.5	8,232	44.0	64.5	7,840	48.8	1,479

Table I (continued). *Proportion of farms mortgaged, average value of farms and buildings and ratio of debt to value for farms operated by full owners and part owners, and median value of owner-occupied dwelling units for the United States by states and regions—1940*

	Farms operated by full owners			Farms operated by part owners			Median val. owner-occupied homes
	Proportion mortgaged	Avg. value farm & bldg.	Ratio of debt to val.	Proportion mortgaged	Avg. value farm & bldg.	Ratio of debt to val.	
South Atlantic							
Delaware	37.9	5,280	41.5	40.0	5,103	44.4	3,671
Maryland	38.0	6,428	42.3	47.9	6,087	50.0	2,874
Virginia	23.7	5,414	33.7	28.9	4,949	37.8	1,704
West Virginia	18.3	3,789	33.7	21.0	3,972	38.0	1,611
North Carolina	26.2	3,484	35.9	31.5	2,640	37.9	1,126
South Carolina	32.3	4,024	34.9	33.4	3,853	35.1	1,090
Georgia	35.5	3,515	39.4	38.6	3,453	38.6	1,257
Florida	27.0	6,282	28.5	34.8	6,409	31.8	1,870
East South Central							
Kentucky	25.2	4,555	36.9	30.5	3,009	41.7	911
Tennessee	26.1	3,930	36.5	34.6	2,970	39.5	1,000
Alabama	40.5	2,617	40.1	43.1	2,530	41.4	855
Mississippi	40.1	2,864	40.8	43.2	3,189	46.5	607
West South Central							
Arkansas	29.1	3,206	37.3	35.1	3,179	39.8	605
Louisiana	31.6	3,706	38.2	34.3	4,922	43.7	928
Oklahoma	39.3	5,556	39.3	55.5	6,288	41.6	926
Texas	31.9	8,324	35.7	44.4	9,687	38.4	1,271

Table I (continued). *Proportion of farms mortgaged, average value of farms and buildings and ratio of debt to value for farms operated by full owners and part owners, and median value of owner-occupied dwelling units for the United States by states and regions—1940*

	Farms operated by full owners			Farms operated by part owners			Median val. owner-occupied homes
	Proportion mortgaged	Avg. value farm & bldg.	Ratio of debt to val.	Proportion mortgaged	Avg. value farm & bldg.	Ratio of debt to val.	
Mountain							
Montana	44.1	7,219	38.7	56.6	8,658	39.5	1,269
Idaho	53.6	7,432	39.6	65.0	9,175	42.4	1,318
Wyoming	52.1	8,002	37.0	66.8	11,597	38.7	1,482
Colorado	47.9	7,266	42.2	62.3	6,986	45.1	1,759
New Mexico	17.1	7,382	30.4	42.4	8,665	35.0	459
Arizona	19.2	10,597	33.4	50.5	15,251	38.7	971
Utah	49.1	6,597	40.5	57.4	6,162	45.3	2,071
Nevada	34.9	16,146	38.9	44.9	16,495	38.9	1,751
Pacific							
Washington	46.3	5,987	36.6	59.5	12,150	40.4	2,101
Oregon	46.7	7,074	35.1	61.0	11,239	40.7	1,958
California	48.8	13,156	35.3	60.3	18,605	37.8	3,360

Table II. *Distribution of owner-occupied houses by value brackets for the United States—1940*

Area (Dollars)	Under 300	300 499	500 699	700 999	1,000 1,499	1,500 1,999	2,000 2,499	2,500 2,999	3,000 3,999	4,000 4,999	5,000 5,999	6,000 7,499	7,500 9,999	10,000 14,999	15,000 19,999	20,000 & over
	Percent in value brackets															
United States																
New England																
Maine	5.6	5.2	8.2	8.1	15.8	11.6	10.9	7.2	11.7	5.7	4.3	2.9	1.4	1.0	0.2	0.2
New Hampshire	2.6	2.2	4.1	5.0	13.1	13.1	12.3	10.0	15.9	8.2	5.7	3.9	1.9	1.3	0.4	0.3
Vermont	2.2	2.6	5.4	7.1	14.4	11.3	11.1	8.3	14.1	7.7	6.2	4.6	2.4	1.9	0.4	0.3
Massachusetts	0.3	0.4	1.0	1.4	5.6	7.4	10.2	8.8	18.8	14.0	10.5	9.6	6.1	3.8	1.2	1.0
Rhode Island	0.3	0.3	0.8	1.1	5.6	7.5	11.0	8.6	18.0	14.1	11.0	10.2	5.7	3.6	1.2	1.0
Connecticut	0.3	0.3	0.7	0.9	3.6	4.8	8.2	7.5	16.7	14.1	11.9	12.4	8.3	5.8	1.9	2.4
Middle Atlantic																
New York	0.5	0.7	1.6	2.2	6.2	6.3	8.3	7.2	15.7	13.3	11.2	11.3	7.3	5.0	1.6	1.6
New Jersey	0.5	0.4	1.1	1.1	4.4	5.5	8.3	7.0	15.9	12.9	12.2	12.7	8.4	6.0	1.9	1.7
Pennsylvania	1.3	1.8	3.0	4.1	9.3	9.5	11.5	9.0	17.1	11.0	7.8	6.4	3.7	2.6	0.9	1.0
East North Central																
Ohio	1.9	2.2	3.4	4.5	9.3	9.2	9.7	8.6	16.6	11.6	8.1	6.9	4.1	2.4	0.8	0.8
Indiana	3.8	4.4	6.6	8.6	14.5	11.7	10.1	8.1	13.0	7.5	4.9	3.5	1.8	1.1	0.3	0.2
Illinois	2.6	3.1	4.6	4.9	9.9	8.4	9.4	7.4	14.8	10.5	8.6	7.4	4.0	2.6	0.9	0.9
Michigan	2.8	2.8	4.5	5.9	12.1	11.2	10.9	9.2	15.7	9.3	5.9	4.8	2.5	1.4	0.5	0.4
Wisconsin	3.4	2.7	4.4	6.0	11.7	10.7	11.1	8.7	15.2	9.9	6.3	4.9	2.8	1.6	0.4	0.3
West North Central																
Minnesota	5.0	3.5	5.2	6.2	12.7	11.4	10.4	8.0	14.9	9.5	5.7	3.9	1.9	1.1	0.3	0.2
Iowa	2.8	3.4	6.0	7.8	15.3	12.8	12.0	9.3	13.8	7.3	4.5	2.9	1.2	0.7	0.2	0.1
Missouri	8.7	7.6	9.1	9.1	13.2	9.1	7.8	6.2	10.3	6.1	4.4	3.6	2.2	1.5	0.5	0.5
North Dakota	9.2	7.6	11.1	10.7	17.3	11.3	8.7	5.4	8.2	4.3	2.8	2.0	0.8	0.4	0.1	0.1
South Dakota	11.9	6.9	10.3	10.9	17.0	10.9	8.6	5.7	8.2	4.1	2.7	1.6	0.7	0.4	0.1	0
Nebraska	4.3	4.6	8.3	9.3	16.4	12.3	10.6	8.0	12.0	5.9	3.8	2.3	1.3	0.7	0.2	0.1
Kansas	5.8	6.9	10.0	11.8	16.8	11.8	9.2	7.0	10.0	4.6	2.9	1.9	1.0	0.5	0.2	0.2

Table II (continued). *Distribution of owner-occupied houses by value brackets for the United States—1940*

Area (Dollars)	Under 300	300 499	500 699	700 999	1,000 1,499	1,500 1,999	2,000 2,499	2,500 2,900	3,000 3,999	4,000 4,999	5,000 5,999	6,000 7,499	7,500 9,999	10,000 14,999	15,000 19,999	20,000 & over
	Percent in value brackets															
South Atlantic																
Delaware	1.4	1.7	3.0	3.9	8.2	7.5	8.0	6.6	14.5	11.0	10.6	10.4	6.1	3.7	1.5	1.9
Maryland	2.0	2.2	3.4	4.1	9.7	10.1	11.6	9.1	15.9	9.4	6.9	6.1	4.3	3.3	1.0	0.8
Virginia	9.2	7.2	9.3	7.7	13.0	8.7	8.3	5.2	9.2	5.5	4.9	4.7	3.3	2.4	0.7	0.6
West Virginia	10.0	7.4	9.7	7.4	13.4	9.4	8.7	5.7	9.7	5.5	4.4	3.6	2.2	1.9	0.6	0.5
North Carolina	12.5	10.6	12.0	11.0	15.2	9.3	6.7	4.3	6.4	3.5	2.6	2.2	1.6	1.3	0.4	0.3
South Carolina	17.1	10.9	11.3	8.5	12.6	6.7	5.9	3.6	7.5	4.4	3.9	3.0	1.9	1.7	0.6	0.5
Georgia	11.1	10.7	12.0	9.1	13.9	8.3	7.2	4.9	8.0	4.3	3.5	2.7	1.9	1.4	0.5	0.4
Florida	10.2	6.8	8.9	6.2	11.6	8.4	7.9	6.5	11.5	6.3	5.7	3.5	2.4	2.2	0.9	1.1
East South Central																
Kentucky	11.9	11.2	8.2	10.3	6.5	5.6	4.1	7.2	4.4	3.3	2.9	1.8	1.1	0.3	0.2	0
Tennessee	16.1	12.3	12.1	9.4	13.1	7.9	6.0	4.4	6.9	3.9	2.8	2.2	1.3	0.9	0.3	0.3
Alabama	17.7	14.3	13.3	9.1	12.0	6.9	5.9	4.0	6.4	3.4	2.6	1.9	1.1	0.9	0.3	0.3
Mississippi	26.3	16.2	14.1	8.8	10.3	4.9	4.0	3.0	4.9	2.4	2.1	1.3	0.8	0.5	0.2	0.1
West South Central																
Arkansas	27.4	15.6	13.4	8.1	11.1	5.9	4.5	3.1	4.7	2.1	1.7	1.0	0.6	0.4	0.1	0.1
Louisiana	19.6	12.9	11.1	8.4	11.1	6.7	6.3	3.8	6.5	4.0	3.2	2.6	1.7	1.3	0.5	0.4
Oklahoma	21.9	10.9	11.0	8.3	12.0	7.6	6.0	4.9	7.0	3.6	2.6	1.9	1.1	0.8	0.3	0.2
Texas	15.1	9.7	10.0	8.4	12.6	8.9	7.3	5.8	9.2	4.4	3.0	2.3	1.4	1.1	0.4	0.4
Mountain																
Montana	16.4	8.5	10.4	7.4	13.8	9.2	7.7	5.9	8.6	4.6	3.4	2.4	1.1	0.6	0.1	0.1
Idaho	14.8	7.9	10.1	8.2	14.2	10.2	8.4	6.6	9.4	4.6	2.6	1.6	0.7	0.4	0.1	0.1
Wyoming	14.0	7.8	10.2	6.4	11.9	8.2	7.7	5.8	9.6	6.8	5.0	3.7	1.6	0.9	0.1	0.1
Colorado	11.1	6.4	8.0	7.2	12.2	9.8	8.7	7.2	11.6	6.7	4.5	3.2	1.7	1.1	0.3	0.3
New Mexico	40.2	12.3	9.4	5.8	7.7	4.6	3.9	2.8	5.1	2.9	2.2	1.5	0.7	0.6	0.2	0.1
Arizona	29.6	7.9	7.8	5.3	9.3	6.8	6.4	5.1	8.8	4.8	3.4	2.2	1.1	0.9	0.3	0.4
Utah	5.1	4.5	7.0	7.0	13.6	11.2	10.7	8.3	14.3	8.2	4.5	3.1	1.3	0.8	0.2	0.2
Nevada	18.0	5.7	7.7	4.5	10.6	7.2	6.5	5.4	10.4	6.6	6.6	5.0	3.0	1.9	0.5	0.5
Pacific																
Washington	5.9	4.0	6.3	6.0	13.2	12.5	10.7	9.9	14.4	7.1	4.2	2.9	1.4	1.0	0.3	0.3
Oregon	7.8	4.7	7.0	6.6	13.3	11.5	9.7	9.1	13.7	6.9	4.2	2.7	1.3	0.9	0.3	0.3
California	3.0	1.7	2.7	2.7	6.9	7.6	9.0	9.5	19.1	12.4	9.6	7.2	4.0	2.6	0.9	1.0

Table III. *Average value and median value of owner-occupied houses for the states, for urban, for rural nonfarm, and for rural farm by states for the United States (1940 Census)*

United States	State		Urban		Rural nonfarm		Rural farm	
	Average value	Median value	Average value	Median value	Average value	Median value	Average value	Median value
					dollars			
New England								
Maine	2,258	1,809	3,285	2,873	1,938	1,483	1,671	1,406
New Hampshire	2,814	2,397	3,445	3,048	2,332	1,893	2,283	2,026
Vermont	2,849	2,318	4,663	4,141	2,403	2,057	2,067	1,709
Massachusetts	4,460	3,797	4,693	3,981	3,432	2,997	3,328	2,974
Rhode Island	4,425	3,824	4,568	3,941	3,482	3,045	3,551	2,940
Connecticut	5,545	4,494	5,469	4,575	6,008	4,682	4,306	3,454
Middle Atlantic								
New York	4,907	4,095	5,581	4,730	4,202	3,352	2,650	2,180
New Jersey	5,182	4,451	5,598	4,848	4,185	3,599	3,754	3,069
Pennsylvania	3,686	3,026	4,288	3,562	2,895	2,221	2,389	1,851
East North Central								
Ohio	3,627	3,076	4,433	3,816	2,645	2,024	2,012	1,642
Indiana	2,525	2,030	3,318	2,933	1,933	1,434	1,537	1,279
Illinois	3,592	2,978	4,374	3,766	2,280	1,715	1,721	1,384
Michigan	2,985	2,489	3,754	3,310	2,185	1,749	1,692	1,393
Wisconsin	2,998	2,502	4,131	3,701	2,532	2,136	1,648	1,466
West North Central								
Minnesota	2,688	2,288	3,749	3,511	2,167	1,876	1,510	1,335
Iowa	2,402	2,085	3,081	2,769	1,774	1,479	1,933	1,797
Missouri	2,433	1,627	3,707	3,005	1,926	1,316	1,065	796
North Dakota	1,754	1,329	3,482	3,319	1,452	1,185	1,287	1,121
South Dakota	1,696	1,297	2,864	2,571	1,414	1,139	1,209	1,001
Nebraska	2,195	1,793	3,099	2,793	1,685	1,375	1,481	1,277
Kansas	2,004	1,479	2,532	2,111	1,819	1,247	1,393	1,125

Table III (continued). *Average value and median value of owner-occupied houses for the states, for urban, for rural nonfarm and for rural farm by states for the United States (1940) Census*

United States	State		Urban		Rural nonfarm		Rural farm	
	Average value	Median value	Average value	Median value	Average value	Median value	Average value	Median value
	dollars							
South Atlantic								
Delaware	4,583	3,671	5,449	4,743	4,501	3,381	2,593	1,778
Maryland	3,134	2,874	3,691	3,050	3,908	2,984	2,537	1,862
Virginia	2,667	1,704	4,402	3,629	2,650	1,769	1,440	969
West Virginia	2,425	1,611	4,425	3,579	1,986	1,460	1,141	812
North Carolina	1,864	1,126	3,719	2,827	1,811	1,249	909	671
South Carolina	2,056	1,090	4,108	3,368	1,981	1,346	813	572
Georgia	2,075	1,257	3,132	2,560	2,212	1,314	899	649
Florida	2,835	1,870	3,957	2,966	1,878	1,158	1,119	663
East South Central								
Kentucky	1,818	911	3,389	2,907	2,001	1,068	799	483
Tennessee	1,762	1,000	3,023	2,436	1,902	1,121	808	556
Alabama	1,631	855	2,948	2,341	1,513	909	681	486
Mississippi	1,249	607	2,520	1,875	1,291	689	696	436
West South Central								
Arkansas	1,194	605	2,474	1,960	1,032	585	594	424
Louisiana	1,873	928	3,211	2,314	1,282	643	697	476
Oklahoma	1,653	926	2,629	2,088	978	526	784	551
Texas	1,991	1,271	2,882	2,273	1,465	889	944	682
Mountain								
Montana	1,797	1,267	2,944	2,567	1,365	937	1,035	673
Idaho	1,730	1,318	2,600	2,363	1,342	933	1,214	968
Wyoming	2,112	1,482	3,339	3,119	1,649	1,160	1,073	693
Colorado	2,334	1,759	3,175	2,715	1,555	997	1,250	859
New Mexico	1,219	459	2,437	1,715	824	362	546	268
Arizona	1,793	971	2,891	2,488	1,555	812	883	264
Utah	2,419	2,071	3,129	2,861	1,744	1,373	1,477	1,233
Nevada	2,576	1,751	4,271	3,838	1,624	963	1,070	1,344
Pacific								
Washington	2,473	2,101	3,099	2,743	2,009	1,624	1,581	1,270
Oregon	2,374	1,958	3,167	2,860	1,909	1,434	1,417	1,095
California	3,885	3,360	4,489	3,840	2,826	2,388	1,989	1,702

Table IV. *Date houses were last painted in Lewiston, Mendon, Plain City, and Tremonton, Utah*

Years	Lewiston		Mendon		Plain City		Tremonton	
	no.	*percent*	*no*	*percent*	*no.*	*percent*	*no.*	*percent*
1941	—	—	11	11.5	—	—	—	—
1940	52	14.8	8	8.3	15	7.6	65	14.7
1939	38	10.8	4	4.2	18	9.2	40	9.0
1938	15	4.3	10	10.4	12	6.2	50	11.3
1937	14	4.0	3	3.2	19	9.7	37	8.4
1936	18	5.0	5	5.2	13	6.7	45	10.2
1935	23	6.5	1	1.0	16	8.1	33	7.5
1934	12	3.3	1	1.0	3	1.5	25	5.7
1933	5	1.4	0	—	9	4.5	8	1.8
1932	13	3.7	5	5.2	9	4.5	15	3.4
1931	3	.9	1	1.0	4	2.0	2	.5
1930	15	4.3	3	3.2	8	4.1	16	3.6
1929	2	.5	2	2.1	2	1.0	5	1.1
1928	8	2.3	3	3.2	11	5.6	15	3.4
1927	1	.3	5	5.2	0	—	2	.5
1926	4	1.1	3	3.2	1	.5	5	1.1
1925	20	5.7	2	2.1	4	2.0	13	2.9
1924	2	.5	0	—	1	.5	0	—
1923	3	.9	0	—	3	1.6	3	.7
1922	2	.5	1	1.0	1	.5	1	.2
1921	1	.3	0	—	2	1.0	0	—
1920	12	3.4	2	2.1	4	2.0	10	2.3
1919	0	—	0	—	1	.5	1	.2
1918	7	2.0	2	2.1	2	1.0	3	.7
1917	1	.3	1	1.0	0	—	0	—
1916	0	—	0	—	0	—	0	—
1915	10	2.8	1	1.0	1	.5	1	.2
1914	1	.3	1	1.0	0	—	0	—
1913	2	.5	0	—	1	.5	0	—
1912	4	1.1	2	2.1	0	—	2	.5
1911	0	—	0	—	0	—	0	—
1910	15	4.3	2	2.1	2	1.0	5	1.1
1909	1	.3	0	—	0	—	0	—
1908	0	—	0	—	0	—	1	.2
1907	0	—	0	—	0	—	0	—
1906	0	—	0	—	0	—	0	—
1905	3	.9	0	—	2	1.0	0	—
1904	0	—	0	—	0	—	0	—
1903	2	.5	0	—	1	.5	0	—
1902	0	—	0	—	0	—	1	.2
1901	0	—	0	—	0	—	0	—
1900	6	1.7	1	1.0	4	2.0	2	.5
1895	1	.3	0	—	1	.5	1	.2
Not painted..	26	7.4	10	10.4	25	12.7	29	6.6
Not reported	11	3.1	6	6.2	2	1.0	6	1.3
Total.....	352	100.0	96	100.0	197	100.0	442	100.0
Avg. no. yrs. since houses were painted		10.9		9.9		8.4		7.0

Table V. *Margins of superiority of village farm and edge-of-village farm homes over farm dweller homes by adequacy items in 4 Utah villages, 1940*

Adequacy items present	Lewiston			Mendon			Plain City			Tremonton		
	Farm dweller	Village farmer	Edge of village farmer	Farm dweller	Village farmer	Edge of village farmer	Farm dweller	Village farmer	Edge of village farmer	Farm dweller	Village farmer	Edge of village farmer
	Actual percentage	Margin of difference		Actual percentage	Margin of difference		Actual percentage	Margin of difference		Actual percentage	Margin of difference	
Automobile	79.3	—36.4	—14.6	83.3	—26.4	—33.3	78.7	—3.7	+15.8	85.9	—.2	+.8
Bathtub and toilet	59.8	+18.3	+16.7	0	+56.9	+80.0	34.4	—20.9	+26.7	26.6	+56.3	+40.1
Built last 10 years	5.7	+ 6.1	+14.3	0	+ 9.3	+25.0	10.8	+ 1.2	+32.0	12.0	+13.5	+21.3
Cement walks	0	+55.6	+47.1	0	0	0	0	0	0	0	+100.0	+20.0
Central heat	12.8	— 5.6	+ 4.8	0	+ 7.8	+10.0	1.6	+ .3	+48.4	11.7	+34.0	+28.3
Daily newspaper	80.5	— 1.9	— 4.0	75.0	+17.2	+25.0	75.4	+ 1.5	+19.0	68.8	— 5.9	+17.9
Electric lights	98.2	+ 1.8	+ 1.8	66.7	+33.3	+33.3	98.4	— .3	+ 1.6	88.3	+11.7	+11.7
Good repair	32.5	+ .8	+14.6	33.3	+15.7	+26.7	18.0	+ 1.1	— 2.2	27.7	+43.1	+ 5.6
Living room	59.4	+ 7.3	—12.3	33.3	+35.3	+56.7	54.1	+16.1	+40.6	38.6	+57.2	+34.7
Painted last 10 years	62.6	+23.1	+ 2.1	25.0	+18.1	+55.0	54.8	+ 1.0	+34.1	78.1	+13.3	+ 1.9
Piped water	83.5	+ 9.4	+ 4.7	33.3	+51.0	+66.7	57.4	+ 2.2	+20.4	39.1	+60.9	+47.6
Radio	93.3	+ 6.7	+ 6.7	66.7	+31.3	+23.3	96.7	— 2.5	— 2.2	89.1	+ 8.0	— 2.4
Refrigerator	50.6	—14.7	+ 2.3	16.7	+18.6	+53.3	31.1	+ 7.4	+18.9	50.0	+21.4	—10.0
Reprod. val. over $1,500	51.3	+ 1.6	+ 8.7	50.0	+16.7	+37.5	47.7	+ 8.3	+30.1	38.0	+36.5	+28.7
Sewerage connection	0	0	0	0	0	0	0	0	0	0	+100.0	+53.3
One room per person	66.5	+12.1	— 1.8	100.0	—44.2	—20.0	71.0	+ 1.2	+12.3	57.0	+23.0	+ 6.3
0.6 bedroom per person	46.5	+ 3.5	+ .6	100.0	—62.7	—50.0	42.9	+ 5.2	+29.3	34.4	+22.7	+ 5.6
Average percentage of 17 items	51.9	+ 5.2	+ 5.4	40.2	+10.5	+22.9	45.5	+ 1.0	+19.1	44.4	+34.5	+17.8

Table VI. *Adequacy of housing in Lewiston by nonfarm groups, 1940*

Adequacy items present	percentage									
	Prof. and semi-professional	Prop. mgrs. & officials	Clerical salesmen & kindred	Skilled	Semi-skilled	Un-skilled	Domestic	Farm laborer	Non-worker	Average
Number in group	9	14	6	16	9	46	5	20	21	146
Automobile	77.8	85.7	83.3	93.8	66.2	54.2	60.0	55.0	28.6	60.3
Bathtub and toilet	77.8	78.6	66.7	75.0	66.7	39.1	60.0	30.0	52.4	53.4
Built last 10 years	20.0	14.3	16.7	18.2	0	15.4	0	0	4.2	11.4
Cement walks	22.2	85.7	50.0	25.0	0	17.4	60.0	10.0	42.9	28.8
Central heat	33.3	14.3	0	6.2	0	0	0	5.0	0	4.8
Daily newspaper	88.9	71.4	83.3	81.4	77.8	58.7	80.0	50.0	61.9	66.4
Electric lights	100.0	100.0	100.0	93.8	100.0	91.3	80.0	100.0	100.0	95.9
Good repair	22.2	50.0	44.4	47.4	12.5	25.7	33.3	14.3	42.1	32.4
Separate living room	77.8	68.8	88.9	73.7	62.5	42.9	66.7	31.6	38.1	54.9
Painted last 10 years	66.7	64.3	71.4	81.3	77.8	41.3	20.0	35.0	38.1	59.3
Piped water	100.0	92.9	100.0	87.5	77.8	65.2	80.0	65.0	85.7	78.1
Radio	100.0	100.0	100.0	93.8	88.8	87.0	100.0	95.0	81.0	91.1
Refrigerator	66.7	78.6	66.7	56.3	55.6	26.1	60.0	15.0	42.9	42.5
Reproduc. val. over $1,500	90.0	53.6	60.0	72.7	0	15.4	66.7	50.0	33.3	51.4
Sewerage connection	0	0	0	0	0	0	0	0	0	0
One room per person	100.0	78.6	66.7	43.8	66.7	41.3	80.0	55.0	95.2	62.3
0.6 bedroom per person	88.9	42.9	50.0	18.8	66.7	17.4	20.0	25.0	85.7	39.7
Average percentage of all 17 items	66.6	63.5	62.8	57.0	48.2	37.6	51.0	37.4	49.0	49.0

Table VII. *Adequacy of housing in Mendon by nonfarm groups, 1940*

Adequacy items present	percentage									
	Prof. and semi-professional	Prop. mgrs. & officials	Clerical salesmen & kindred	Skilled	Semi-skilled	Un-skilled	Domestic	Farm laborer	Non-worker	Average
Number in group	4	2	0	3	4	3	2	1	12	31
Automobile	75.0	50.0	0	66.7	50.0	66.7	50.0	0	41.7	**51.6**
Bathtub and toilet	100.0	50.0	0	33.3	50.0	0	50.0	0	50.0	48.4
Built last 10 years	0	0	0	20.0	0	0	0	0	0	4.0
Cement walks	0	0	0	0	0	0	0	0	0	0
Central heat	25.0	0	0	33.3	0	33.3	0	0	50.0	48.4
Daily newspaper	100.0	100.0	0	33.3	66.7	33.3	100.0	83.3	100.0	80.6
Electric lights	100.0	100.0	0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Good repair	100.0	50.0	0	33.3	50.0	33.3	0	0	50.0	48.4
Separate living room	75.0	100.0	0	33.3	50.0	33.3	50.0	100.0	50.0	54.8
Painted last 10 years	100.0	100.0	0	66.7	25.0	66.7	0	0	50.0	50.0
Piped water	100.0	100.0	0	33.3	25.0	100.0	100.0	100.0	91.7	80.6
Radio	100.0	100.0	0	100.0	100.0	100.0	50.0	100.0	100.0	96.8
Refrigerator	25.0	100.0	0	33.3	50.0	33.3	0	0	33.3	35.5
Reproduc. val. over $1,500	100.0	50.0	0	40.0	0	66.7	50.0	0	75.0	60.0
Sewerage connection	0	0	0	0	0	0	0	0	0	0
One room per person	100.0	100.0	0	66.7	50.0	66.7	50.0	0	100.0	80.6
0.6 bedroom per person	50.0	0	0	66.7	25.0	33.3	50.0	0	58.3	45.1
Average percentage of all 17 items	66.7	58.8	0	44.7	37.8	45.1	38.2	28.4	53.9	50.2

Table VIII. *Adequacy of housing in Plain City by nonfarm groups, 1940*

Adequacy items present	percentage									
	Prof. and semi-professional	Prop. mgrs. & officials	Clerical salesmen & kindred	Skilled	Semi-skilled	Un-skilled	Domestic	Farm labor	Non-worker	Average
Number in group	2	3	7	7	10	20	4	4	7	64
Automobile	100.0	66.7	71.4	85.7	90.0	75.0	50.0	50.0	42.8	71.9
Bathtub and toilet	.0	0	28.6	28.6	10.0	5.0	0	0	0	10.9
Built last 10 years	50.0	28.6	14.3	100.0	14.3	9.1	100.0	0	7.7	20.0
Cement walks	0	0	0	0	0	0	0	0	0	0
Central heat	0	0	14.3	0	0	0	25.0	0	0	1.6
Daily newspaper	100.0	100.0	85.7	42.9	70.0	55.0	75.0	75.0	42.8	64.1
Electric lights	100.0	100.0	100.0	100.0	100.0	95.0	100.0	100.0	100.0	98.4
Good repair	25.0	60.0	36.4	50.0	53.8	22.2	0	11.1	12.5	33.8
Separate living room	50.0	60.0	72.7	62.5	53.8	55.6	100.0	0	62.5	59.7
Painted last 10 years	100.0	66.7	87.5	100.0	90.0	40.0	75.0	75.0	100.0	64.9
Piped water	100.0	66.7	85.7	42.9	50.0	30.0	25.0	25.0	28.6	43.7
Radio	100.0	100.0	100.0	85.7	100.0	80.0	100.0	25.0	42.8	81.3
Refrigerator	50.0	66.7	100.0	28.6	50.0	10.0	50.0	25.0	0	34.4
Reproduc. val. over $1,500	100.0	85.7	57.1	0	57.1	27.3	0	0	23.1	44.0
Sewerage connection	0	0	0	0	0	0	0	0	0	0
One room per person	100.0	33.3	100.0	33.3	54.5	55.0	75.0	75.0	100.0	65.6
0.6 bedroom per person	0	0	62.5	28.6	18.2	20.0	50.0	50.0	83.3	18.8
Average percentage of all 17 items	57.4	49.1	60.0	46.4	47.8	34.1	48.5	30.1	38.0	42.0

Table IX. *Adequacy of housing in Tremonton by nonfarm groups, 1940*

Adequacy items present	percentage									
	Prof. and semi-professional	Prop. mgrs. & officials	Clerical salesmen & kindred	Skilled	Semi-skilled	Un-skilled	Domestic	Farm labor	Non-worker	Average
Number in group	15	44	34	32	23	37	14	15	19	233
Automobile	80.0	84.1	55.9	65.6	47.8	40.6	28.6	66.7	31.6	57.9
Bathtub and toilet	93.3	90.9	73.5	78.1	24.8	51.4	28.6	66.7	68.4	67.8
Built last 10 years	40.0	38.7	32.0	40.7	36.4	25.0	28.6	0	6.0	29.5
Cement walks	100.0	100.0	91.2	90.6	91.3	78.4	100.0	93.3	100.0	92.7
Central heat	66.7	63.7	41.2	34.4	21.8	21.6	14.3	33.3	26.4	37.8
Daily newspaper	93.3	90.9	76.5	84.4	65.2	48.7	42.8	60.0	68.4	71.3
Electric lights	100.0	100.0	100.0	100.0	95.7	100.0	100.0	93.3	94.7	98.7
Good repair	75.0	65.9	76.5	36.0	63.2	58.8	28.6	0	35.7	46.1
Separate living room	75.0	93.2	88.4	68.0	78.9	32.4	57.1	60.0	71.4	70.9
Painted last 10 years	86.7	100.0	100.0	100.0	100.0	48.6	78.6	100.0	63.2	81.5
Piped water	100.0	100.0	94.1	96.9	78.3	89.2	100.0	86.7	89.5	93.1
Radio	100.0	97.7	91.2	93.8	87.0	86.5	64.3	93.3	84.2	90.1
Refrigerator	100.0	88.6	64.7	65.6	47.8	32.4	35.7	33.3	36.8	58.8
Reproduc. val. over $1,500	80.0	76.0	56.0	63.0	45.5	25.0	57.1	0	44.0	60.5
Sewerage connection	100.0	100.0	100.0	96.9	91.3	91.9	100.0	93.3	100.0	97.0
One room per person	80.0	79.5	64.7	59.4	43.5	48.6	85.7	73.3	89.5	51.9
0.6 bedroom per person	53.3	43.2	17.6	25.0	26.1	10.8	57.1	33.3	63.2	32.6
Average percentage of all 17 items	83.7	83.1	72.4	70.5	62.0	52.3	59.2	58.0	63.1	67.0