

OKLAHOMA
AGRICULTURAL AND MECHANICAL COLLEGE
AGRICULTURAL EXPERIMENT STATION
Lippert S. Ellis, Acting Director

A Social and Economic Study of Relief Families in Ottawa County, Oklahoma, 1934

By

ROBERT T. McMILLAN

Research Assistant in Sociology and Rural Life
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(Formerly Assistant State Supervisor of Rural Research
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SUMMARY

1. The rapid development of lead and zinc mining during the World war and post-war boom led to the excessive population growth and the deplorable relief situation in Ottawa county.
2. Approximately one-half the population in the county, as reported in the 1930 census, was receiving relief in December, 1934. Sixty-four percent of the persons residing in the open country, 60 percent of those in villages, 47 percent of the town population, and 35 percent of the city residents were depending upon the ERA for a major portion of their living.
3. Unemployment was the chief reason given for the need of relief by 46 percent of the households. The drouth was assigned by 20 percent of the households on relief as the main source of their distress. About 24 percent of the relief heads were widows, aged, and disabled persons. The remaining 10 percent gave either undersized farms, low farm income, poor land, or lack of adequate farming equipment as the principal reason for their need of assistance.
4. The extreme age groups indicated the largest incidence of dependency. Persons between the ages of 25 and 44 years were under-represented on the relief rolls as compared with the proportion in this age group reported by the 1930 census. Only five percent of the persons in the sample were over 64 years of age. A higher proportion of persons over 45 years of age was found in the urban centers than in the rural districts.
5. Of the 1511 relief households surveyed, one-fourth had six or more persons, one-half had from three to five persons, and the remaining one-fourth contained one or two persons. All households averaged 4.2 persons, the rural having 4.5 persons as compared with 3.8 persons in urban households.
6. Of the total number of families, 73 percent were classed in the normal family type, consisting of a husband and wife with or without children. Broken families, in which one or both parents were missing, accounted for 16 percent. The non-family type, or single persons, comprised 11 percent of the cases. One-third of the households reported additional members, indicating the necessity of "doubling" families as a result of economic distress.
7. Nearly three-fourths of the relief households possessed dependents either under 16 or over 64 years of age. Persons over 64 years of age were found in about one-fifth of the households.
8. The extent of employability is indicated by the fact that three-fourths of the households had both males and females 16 to 64 years of age, while only 4 percent of the households reported neither male nor female members within these age limits.
9. An excessive amount of marital discord prevails in the county, which may be explained by the apparent disrespect for conventions in mining communities. At least one-twelfth of relief heads were separated or divorced. The proportion of widowed female heads exceeded that of male heads in the same classification by four and one-half times. Relatively few single persons were on relief. Domestic discord and tension were less noticeable in the rural than in the urban households.

10. Two-fifths of the marriages in which the date of formation was reported occurred in the 10-year interval from 1925 to 1934. Relatively more of the younger families were found in the urban than in the rural communities.
11. The net fertility of married women between the ages of 14 and 45 years as indicated by these data, showed an irregularly declining trend during the 15-year period ending in 1934. Rural communities had consistently higher net fertility ratios than urban centers. An increasing net fertility ratio was definitely not a concomitant of widespread relief in this county.
12. Of the 1511 relief heads, 27 percent were unskilled laborers, many of whom had mining experience; 21 percent were farm tenants, as compared with 11 percent who reported farm ownership; miners made up 12 percent of the total; farm laborers accounted for 6 percent, and 11 percent reported "no usual occupation," while the remaining 12 percent were classed in "all other occupations."
13. The age distribution of relief heads showed that 45 percent were 45 years of age or over. Farm owners, farm laborers, white-collar workers, and those heads without a usual occupation were represented preponderantly in the age groups over 44 years. On the other hand farm tenants, miners, and unskilled laborers were concentrated in the younger age groups.
14. The low educational status of heads is considered responsible for the apparently weak socio-economic structure of relief families.
15. One out of every eight relief heads under 64 years of age claimed to be either partially or totally incapacitated by disease or physical disability.
16. A tabulation of the employment status of children away from home, based upon the usual occupation of the parent-head, showed that a larger proportion of children from agricultural than from non-agricultural groups was gainfully employed.
17. A majority of the relief heads migrating into Ottawa county from outside Oklahoma came from the adjoining states of Missouri, Kansas, and Arkansas. The largest movement occurred between 1914 and 1923, the period of most extensive mining development.
18. In the total relief population studied, 53 percent were under 25 years of age, two-thirds of whom resided in rural communities.
19. Over one-fourth of the males and nearly one-fifth of the females between the ages of 16 and 24 years had not reached the eighth grade in school. Less than one-third of the persons in this age group had completed the eighth grade.
20. Married persons between the ages of 16 and 24 years inclusive had a lower educational attainment than the total relief population of the same ages. The widest variations were noted in urban communities.
21. Ownership of home or farm was reported by 24 percent of the families under study. The average assessed value of the real properties reported was only \$314.

22. Approximately one-half of the farms operated by relief families were less than 50 acres in size. Three-fourths of the farms were smaller than 100 acres while the remainder contained 100 acres or more. One-third of the owners and one-fourth of the tenants had no work stock. One-sixth of the farm operators had no milk cows. Seven-eighths of the farm households kept poultry but not in sufficient numbers to provide more than enough eggs and meat for home use.
23. Scarcely one-fourth of the farm operators possessed a minimum of farm equipment such as a combination of plow, harrow, cultivator, and wagon. A large majority of farmers were without any of these implements, excepting the plow.
24. The average indebtedness of all households reporting debts was \$159. Mortgages on the home or farm, chattel loans, and obligations incurred for food ranked as the most important debts.
25. An arbitrary classification of the physical aspects of relief households, based upon descriptions in case histories, indicated that one-third of the households were rated as "poor," one-half were either "good" or "fair," and only two percent were classed as "excellent." The condition of 17 percent of the households was unknown.
26. An analysis of the history and amount of relief advances shows discrimination had been practiced against large size families with regard to the length of time families were advanced relief and in the amount of advances.
27. In the conclusions reached as a result of this study, the permanency of subsidy from public sources is regarded as inevitable. However, a more intensive use of agricultural resources and the strengthening of social organization among the groups at the lower economic levels appear to be steps whereby public agencies could effect material reductions in relief costs.

A SOCIAL AND ECONOMIC STUDY OF RELIEF FAMILIES IN OTTAWA COUNTY, OKLAHOMA, 1934

ROBERT T. McMILLAN

PART I

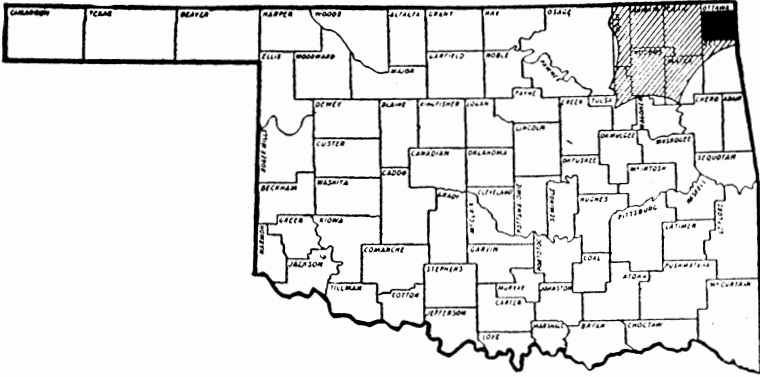
INTRODUCTION

One of the more distressed areas in Oklahoma is Ottawa county, in which is located the largest lead and zinc mines of the Tri-State region. Because of the extensive unemployment resulting from the depression in the mining industry, many economic and social problems peculiar to this county confront relief officials. Limited research funds did not permit extensive investigations into the resources of the county. This cross-section study of the entire Ottawa county relief load as of December, 1934, through the use of case histories, gives a comprehensive picture of existing social conditions in both rural and urban communities.

The county has become populated far beyond its capacity of self-sufficiency, but employment opportunities elsewhere are not readily available for the absorption of the surplus miners and unskilled laborers. Therefore, the primary problem is to increase the utility of land resources within the county. This will necessitate a more intensive agriculture and a more efficient social organization. Government agencies can provide technical and administrative assistance as well as subsidy or credit. Part IV of this study seeks to answer the question: Can the economy of Ottawa county be revitalized to the extent that the surplus population can be re-established upon a self-supporting basis?

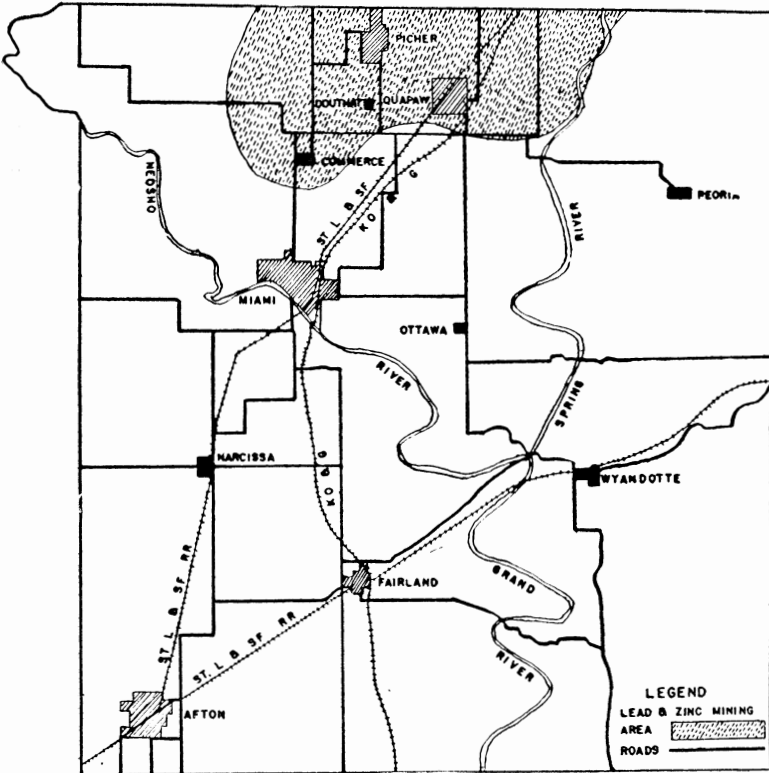
Scope of the Study. A one-third sample of all the rural and urban families receiving work, direct, or both work and direct relief in December, 1934, from the Ottawa county FERA forms the basis for this study. The random method was used in selecting the cases. For every third case drawn from the numerically-arranged files, the data from the corresponding case history was transcribed to a convenient schedule, designed to obtain most of the uniform information available. This schedule form appears in the appendix.

The limitations of the data are many, for the reason that untrained case workers were required to conduct interviews, determine the eligibility for relief, plan budgets, and do a major portion of the clerical work involved in administering to case loads ranging from 200 to 350 families per case worker. For this reason alone it would seem likely that many precautions necessary in order to procure thoroughly dependable information would have been neglected. At the time of this survey the County FERA organization had been in operation only 10 months, and the records in general were both inaccurate and incomplete. Very little usable data were secured on the current employment status or the past occupational history of the heads of families. Also, many households were either made up of more than one family or contained extra persons who were living with the natural family group. Omissions of the sex, age, and relationship to the head of the family occurred because the extra persons were not always included in the relief family group, although the records indicated they were considered a part of the household and ate at the family table.



MAP I.—Ottawa County, Oklahoma and the Area Represented.

NOTE: The conclusions in this report apply to Ottawa County in particular and the shaded area in general.



MAP II.—Ottawa County, Oklahoma.

In tabulation care was taken to exclude any questionable entries. This accounts, in many tables, for the large number of "unknown" items reported. With these statements on the quality of the data and on the precautions exercised to present the material carefully and impartially, the findings of the study in general are submitted as applicable to the relief population of Ottawa county in 1934.

Location and Topography. Ottawa county is located in the northeast corner of Oklahoma at the western edge of the region known as the Ozark Highlands. It is rectangular in shape, extending about 23 miles from north to south and 21 miles in width, and covers an area of approximately 480 square miles. The line between this county and Craig county is defined on the west by the 95th meridian west longitude. On the north and east borders are the states of Kansas and Missouri, respectively. Delaware county lies to the south.

Topographically, the southeastern part of the county is typical of the Ozark region, being rough to hilly and heavily wooded. The Cherokee prairies, characterizing three-fourths of the area, are gently undulating with a native covering of blue-stem grass. Soils have been derived from the immediately underlying shales and sandstones. In the Ozark portion the soils are cherty. The average elevation of the area is 800 feet.

The drainage system of the county consists chiefly of the Neosho and Grand rivers with numerous small tributaries emptying into these streams. The Grand river enters the territory slightly east of the center on the north side and flows south across the county along a zigzag course. Just below the center of the county and slightly to the southeast, the Neosho, which runs in a southeasterly direction from the northwest corner, meets the larger Grand river. The more important smaller streams and creeks are the Spring, Cowskin, Little Elm, Hudson, Horse, Sycamore, Warren's Branch, and Tar creek. Drainage is inadequate, however. An insufficiency of lime and organic matter limits the productivity of the soils. Rainfall averages about forty inches annually.

Agriculture of Ottawa County. Although the importance of agriculture has been overshadowed by the mining industry, the declining activity in the latter has raised the question as to whether farming offers a partial solution to the unemployment problems. The brief outline here describes only the general aspects of the agricultural economy, leaving the problems involved for a subsequent portion of the discussion.

According to the 1930 census, approximately 72 percent of the land area is in farms, and 37 percent of the farm land is in crops. A general type of farming predominates, with a fair degree of diversification of crops.¹ Dairying and beef cattle have become increasingly important due to proximate markets and a plentiful supply of hay and other feeds. There are about nine head of cattle for each 100 acres of farm land. The average value of the farms in 1935 was \$2,602, or \$24 an acre.

Of the 1811 farms in the county in 1930, 31 percent were classified in the Farm Census as general; 16 percent were self-sufficing; cash-grain farms accounted for 9 percent; dairy farms 8 percent; and the remainder was distributed among the abnormal, unclassified, and other relatively unimportant types.

The farming trends in the county point to smaller and more numerous units which, in recent years, have been characteristic of the eastern half of Oklahoma. Although the proportion of the land in farms remained practically unchanged between 1930 and 1935, the number of farms increased

¹ Crop data from the 1935 Farm Census are not comparable to those of 1930 for the reasons that the drought prevailing during most of 1934 term and the operation of the AAA program reduced drastically the production of the leading crops and other farm enterprises.

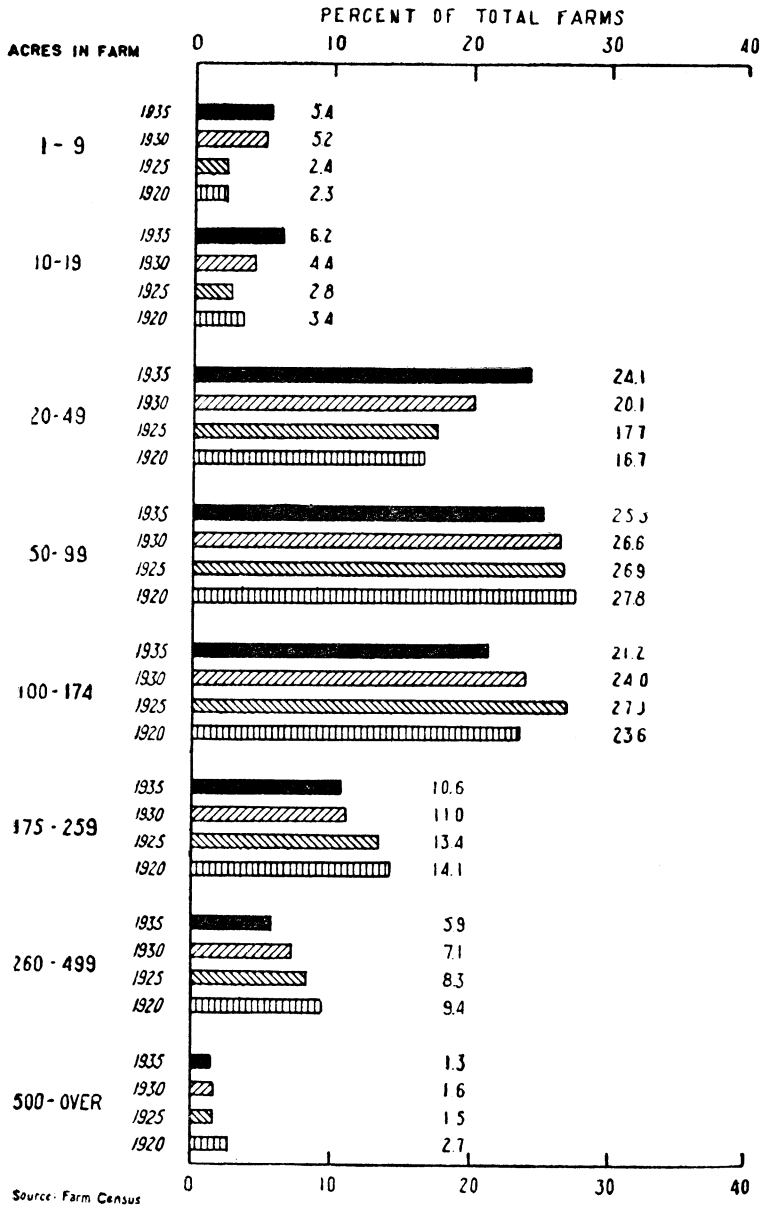


Fig. 1.—Percentage Distribution of Farms by Size in Ottawa County for the Census Periods 1920-1925-1930-1935.

from 1811 to 1999, a change of 10 percent. The average acreage per farm in 1935 was 110 as compared with 122 in 1930, a decrease of 10 percent. Incidentally, there were 31 percent more farms in 1935 than in 1920, and during the same period the average size was reduced 23 percent. Between 1930 and 1935 the proportion of all farms operated by tenants increased from 50 percent to 55 percent. Figure 1 shows the percentage distribution in the size of farms as given by the Farm Census in 1920, 1925, 1930 and 1935. The increase in the small farms in proportion to the total number of farms indicates a landward movement of many families whose probable intention is to combine part-time farming with other employment.

Mining and Population Growth. Lead and zinc mining is so closely associated with the recent population growth of the county that the earlier farm movement is but a prelude to the later spectacular economic and social developments.

Cattlemen entered Ottawa county and adjacent territory as early as 1870, leasing the verdant grazing lands from the Cherokee Indians. The proximity to Kansas City cattle markets was helpful to extensive range development over the next two decades. The first railroad was built across the territory in 1885, and by 1890 cattle-grazing had given way to closer settlement, coinciding with the rapid expansion of cultivable farming in other sections of Oklahoma. Farmers from Kansas, Missouri, Arkansas, and the Appalachian states farther distant migrated to the county.

At the time of statehood in 1907, Ottawa county had a population of 12,827, according to the Special Census taken in Oklahoma that year. Until 1915 the influx of people was due principally to agricultural development. The advent of the World War, with its tremendous demands for raw materials, stimulated prospecting in Oklahoma and Kansas, and rich lead and zinc fields were discovered in Ottawa county. Intensive exploitation of mines followed and, as the older Missouri mines were abandoned, a great population movement pointed toward Ottawa county. The accompanying table indicates the extent of this movement.

Table 1.—Population Growth in Ottawa County*

Year	Population	Number of Persons per Square Mile	Percent of Change
1907	12,827	26.9	-----
1910	15,713	32.9	22.5
1920	41,108	86.2	161.6
1930	38,542	80.8	— 6.2**

* Figures were taken from Duncan, O. D., *Population Trends in Oklahoma*, Okla. Exp. Sta. Bul. 224, March, 1935.

** Decrease.

Large numbers of agricultural workers from the hill country of adjoining states participated in the swift migration to the new mining centers, resulting in a 25,000 increase in population from 1915 to 1920. The mushroom towns of Picher, Cardin, Lincolnville, Quapaw, Commerce, and Peoria displaced the Indian tepees of the Quapaw, Modoc, Peoria, Shawnee, Wyandotte, and Seneca tribes, principal owners and occupants of the mining area. In the decade from 1910 to 1920 Ottawa was exceeded only by Tulsa county in the proportion of population increase for all Oklahoma counties.

The lead and zinc industry of the Tri-State region rapidly became one of the foremost of its kind in the world. During the World War 60 percent of the United States zinc production and about 15 percent of the world's output was supplied by the district. The Oklahoma portion ac-

counted for about two-thirds of this supply. Oklahoma also assumed a leading position in the mining of lead, a secondary product of the zinc industry. In 1925, the peak year, 80,000 tons yielded a gross value of \$13,-,910,000.

Table 2.—Mine Production of Lead and Zinc in Ottawa County, 1907-1935.

Year	Lead Short Tons	Value	Zinc Short Tons	Value	Total Value
1907	532	\$ 56,392	1,657	\$ 195,526	\$ 251,918
1908	1,781	149,604	4,529	425,726	575,330
1909	3,427	294,722	7,806	843,048	1,137,770
1910	2,888	254,144	6,394	690,552	944,696
1911	2,501	225,090	5,150	587,100	812,190
1912	3,388	304,920	5,769	796,122	1,101,042
1913	6,288	548,064	11,664	1,306,368	1,854,432
1914	7,556	589,368	13,992	1,427,284	2,016,652
1915	7,306	686,784	14,257	3,534,248	4,221,032
1916	12,115	1,671,870	28,708	7,696,888	9,368,758
1917*	26,358	4,533,576	85,535	17,510,340	22,043,916
1918	56,097	7,965,774	161,401	29,374,982	37,340,756
1919	53,872	5,710,432	178,410	26,047,860	31,758,292
1920	65,394	10,463,040	219,727	35,595,774	46,058,814
1921	41,552	3,739,680	121,372	12,137,200	15,876,880
1922	62,856	6,914,160	209,682	23,902,748	30,817,908
1923	66,904	9,366,560	242,421	32,969,256	42,335,816
1924	71,358	11,417,280	269,137	34,987,810	46,405,090
1925	79,946	13,910,604	283,371	43,072,392	56,982,996
1926	69,704	11,152,640	272,567	40,885,050	52,037,690
1927	51,680	6,511,680	206,611	26,446,208	32,957,888
1928	43,687	5,067,692	180,252	21,990,744	27,058,436
1929	46,513	5,860,638	192,042	25,349,544	31,210,182
1930	23,052	2,305,200	136,153	13,070,688	15,375,888
1931	13,210	977,540	78,132	5,938,032	6,915,572
1932	10,634	638,040	63,437	3,806,220	4,444,260
1933	18,038	1,334,812	91,065	7,649,460	8,984,272
1934	16,747	1,239,278	107,772	9,268,392	10,507,670
1935	23,500	-----	134,000	-----	13,672,000

SOURCE: Data from U. S. Bureau of Mines. *Mineral Resources* 1907-1931 and *Mineral Yearbook*, 1932-35.

* Figures from 1907 to 1917 were for primary lead and zinc; later figures represent tons of ore mined.

With the ending of the World War, the industry suffered a severe setback from the deflation of metal prices in 1920 and 1921, but post-war national recovery led to a resumption of the upward trend. In 1925, the zinc production from 185 mines reached an all-time high of 283,371 tons with a gross value of \$43,000,000.¹ A swollen supply of zinc, due to over-production, a decline in the demand, and increased competition from lower cost producers, led to a gradual contraction of the industry. Of the 10,000 miners employed in the Tri-State region in 1926, 7,500 were estimated to have been

¹ Data from U. S. Bureau of Mines. *Mineral Resources* 1907-1931 and *Mineral Yearbook*, 1932-35.

employed in Ottawa county.² In 1932, approximately 2,000 miners remained on the payrolls. Since that date, recovery has been relatively slow, although in the spring of 1936 about 6,000 were reported at work in 75 mines.³

The Ottawa portion of the area on which the mines are located is about 10 miles in length and 5 miles in width. Much of the land belongs to Indians who received two allotments, one of 120 acres and one of 40 acres, at the time Oklahoma became a state. The unsold allotments have yielded millions of dollars in income to the Indians, while most of the land sold was unproductive mining land and the small 40-acre parcels are responsible for many families being on the relief rolls.

In this brief review of the population growth and exploitation of a 400 million dollar industry, one can readily recognize the social problems arising out of the dynamic situation. The fusion of all the cosmopolitan segments inevitably resulted in little respect for disciplined social organization. Oil and mining booms have their flocks of human parasites such as gamblers, prostitutes, petty racketeers, and surplus laborers bent upon attaching themselves to local groups. There follows a moral breakdown, accompanied by unscrupulous business ethics, greed, vice, excessive drunkenness and debauchery, and a disregard for wholesome family life. These anti-social forms of conduct often may leave behind them a trail beset with numerous vexing social and economic problems for many years after the extractive industry upon which a community has been built has begun to give way to a more stable form of business and commercial activity.

Population Centers. The non-farm and urban populations of Ottawa county are about equally dependent upon the two major industries—agriculture and mining. Mining centers, in general, have suffered population losses induced by declining industry. In several instances villages spawned by the boom are now practically deserted.

Miami, the county seat and the largest city, with 8,064 inhabitants in 1930, is located near the center of the county. It is three miles south of the lower edge of the mining region. Few miners live in Miami, but many of the officials maintain their homes and financial headquarters there. The city rates next to Joplin, Missouri, as a center for the Tri-State mining region. Its business buildings, schools, churches, and homes mirror mining wealth. The general environment in the city does not reveal the corrupt social influences so prevalent in mining centers. Although the business men are vitally interested in the lead and zinc industry, they have strengthened their functions by encouraging agriculture, especially dairying and improved stock raising. A packing plant, cheese factory, and several creameries are established there, along with four wholesale grocery concerns, two broom factories, two furniture plants, foundries, machine shops, an ice plant, bottling company, and numerous smaller manufacturing plants. Two or three small sand, gravel, and crushed rock enterprises are in operation, but shipping rates prevent broad expansion in these lines.

Picher is situated 17 miles north of Miami and just one mile south of the Kansas border. At the hub of the county's mining region, it was founded in 1916 and four years later had a population of 9,678. By 1930 the number had been reduced to 7,773, a decrease of approximately 20 percent. This city is a typical mining center with but few substantial buildings scattered among the hundreds of unpainted boxed structures, either without foundation or supported by stones only at each corner. Screens and windows are missing and broken, and a majority of the two- and three-room hovels are generally in a dilapidated condition. The yards usually are cluttered with

² Figures were taken from a report issued by the Tri-State Zinc and Lead Ore Producers Association in January, 1935.

³ The Daily Oklahoman, May 31, 1936. In the same news release 2,000 families were reported on the relief rolls and the membership of relief families in the Townsend Club was 1,500.

trash, including a worn-out automobile. These homes, many of which are located on lands belonging to the mines, range in value from \$50 to \$500. Huge piles of crushed rock and refuse from the mines occupy much of the area in and about the city.

In this environment is housed what may be described as the most contentious mining element in the State. Having grown cynical and despairing in attitude from long periods of unemployment, the mining population manifest unmistakable signs of discontent. Their lives have been gravely affected by inability to cope with their economic distress. Violence broke out several times during the depression, with unemployed miners storming stores to get food. Much agitation against county relief agencies has been generated largely in this city.

Diseases, especially silicosis, and to a lesser extent, venereal disorders and other maladies plague this and other mining centers in the area. Marital discord is commonplace among mining families. Many persons, male and female, live together spurning conventions in order to conserve food and shelter and to secure such other satisfaction as this co-habitation affords. Two, three, and four families are often found occupying one small house. With all their incivilities, miners generously share their abodes with those who are less fortunate than themselves.

Picher is essentially a miner's town and no resources other than mining of lead and zinc have been developed there. The outlook for maintaining its present population is exceedingly gloomy, even taking into consideration the possible recovery of the industry to fairly prosperous levels.

Commerce, classified by the Census as a town, had a population of 2,608 in 1930. It is located about midway between Miami and Picher, and as an economic entity its chief source of income is from mining.

Other mining centers, classed as villages and hamlets, are Douthat, Quapaw, Hockerville, North Miami, Cardin, Peoria, Zincville, North Century, and Lincolnville. The last-named hamlet had a population of 1,000 in 1920, and all of the others have experienced decreases since that date.

Chief among the villages serving farming territories is Afton, with a population of 1,219 in 1930. All of the farm centers, Fairland, Wyandotte, Bluejacket, Narcissa, and Ottawa are concentrated in the south half of the county. Numerous cross-road hamlets such as Ogechee, Traber, Ozark, Oseuma, and Jefferson are also in the southern part of the county.

Population Centers 1930	Below 50 in Population	
Miami	8064	*Zincville
Picher	7773	North Century
Commerce	2608	Lincolnville
Douthat	2040	Ogechee
Quapaw	1340	Traber
Afton	1219	Ozark
Fairland	679	Oseuma
Hockerville	550	Jefferson
North Miami	503	
Cardin	437	
Wyandotte	271	
Bluejacket	271	
*Narcissa	216	
Peoria	189	
*Ottawa	65	

*Unincorporated, private estimate.

Communication. Ottawa county is easily accessible from such cities as Tulsa, 100 miles from Miami, Joplin, 40 miles northeast of Miami, and Kansas City, which is 135 miles beyond Joplin. All of these points are connected by the Frisco railroad. At Afton there is a railroad terminal and a branch of the road traverses the county eastward through Fairland and Wyandotte and thence to Seneca, Missouri. The Kansas, Oklahoma, and Gulf Railroad parallels the Frisco from Miami through the mining territory to Joplin. From Miami the line extends southward across the county by way of Fairland. The Northeast Oklahoma Railway, an electric line, serves the mining area, operating between Miami and Picher.

The county highway system is a network of improved roads. Two Federal paved highways, Numbers 66 and 69, run north and south through the county connecting the principal mining and agricultural centers with Joplin and Tulsa. Another national highway, Number 60, extending east and west across the county, is the main artery between Neosho, Missouri, and Bartlesville, Oklahoma, via Wyandotte, Fairland, and Afton. The lateral dirt roads are well-graded and reach the more remote parts of the county.

PART II

SOCIAL DESCRIPTION OF OTTAWA COUNTY RELIEF POPULATION

Distribution of Relief Population.¹ Approximately one-half of the population of Ottawa county, as reported in the 1930 census, was receiving relief in December, 1934. (See Figure 2.) Rural areas had higher proportions of their population on relief than urban centers, 64 percent of the persons residing in the open country and 60 percent of the village residents being dependent upon the ERA for their living as compared with 47 percent of the town and 35 percent of the city populations. Numerically, it is estimated 19,200 persons received some type of assistance exclusive of commodities in the month for which the sample was taken. Of this number, 12,500 persons lived in the rural areas, and 6,700 resided in urban communities. The number of families represented in these estimates was 4,500.²

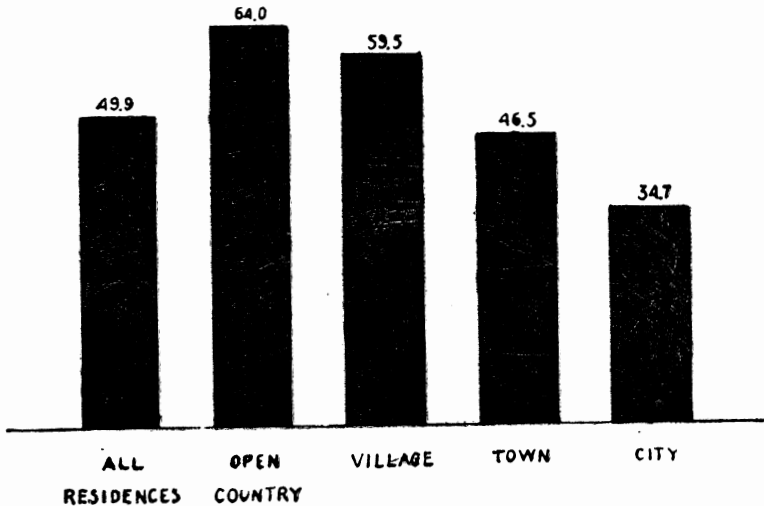


Fig. 2.—Percent of 1930 Population Living in Rural and Urban Relief Households in December 1934.

¹ The relief population estimates were determined by tripling the number of persons in the one-third sample. The 1930 Census furnished the most reliable population figures on the county, and it is believed that the losses, if any, up to the time of the study were relatively small.

² In the December report of the county FERA, 4,633 cases were shown as relief. Officials explained that commodities were advanced to several families not eligible for work or direct relief. Another report for the same month stated that there were 1,318 miners on the relief rolls. Later analysis in this study, based upon data from case histories, indicates that there is an under-representation of miners in the sample. This is explained by pointing out that many unskilled laborers in the sample probably possess mining experience.

A comparison of the resident distribution of the general population in 1930 and of persons in relief households in December, 1934, emphasized the fact that the relief problem in this county is centered largely in the rural, that is, village and farm areas. Data in Table 3 show that 52 percent of the population was rural in 1930, but the rural relief population in December 1934 accounted for 65 percent of the total population in the sample. In the centers with more than 2,500 inhabitants approximately 35 percent of the population resided in relief households.

Table 3.—Resident Distribution of the General Population in 1930 and of Persons in Relief Households in December 1934.

Place of Residence	POPULATION IN 1930		ESTIMATED RELIEF POPULATION DECEMBER 1934*	
	Number	Percent	Number	Percent
Total population	38,542	100.0	19,200	100.0
Rural	20,117	52.2	12,500	65.1
Urban	18,425	47.8	6,700	34.9
Open country	12,337	32.0	7,900	41.0
Village	7,780	20.2	4,600	24.1
Town	2,608	6.7	1,200	6.3
City	15,817	41.1	5,500	28.6

* The estimates were calculated by multiplying the number of persons in the one-third sample by 3 and rounding figures to the nearest 100.

Age and Sex Composition. Age is a primary factor in relief. Old people and children are readily associated with dependency. Persons between 16 and 64, on the other hand, are ordinarily capable of self-support. Therefore, the presence of large numbers of dependents on the relief rolls complicates the problem of meeting relief needs by work programs alone. Other measures in the form of pensions and direct relief grants are necessary.

Table 4.—Percentage Distribution of Persons on Relief in 1934 and of the General Population of Ottawa County in 1930 by Age Groups.

Age Groups	PERSONS IN RELIEF HOUSEHOLDS			GENERAL POPULATION 1930 CENSUS		
	Total	Rural	Urban	Total	Rural	Urban
All ages	100.00	100.0	100.0	100.0	100.0	100.0
0 to 15 years	35.1	36.6	32.3	36.3	39.2	33.0
16 to 24	16.9	16.7	17.3	17.4	16.5	18.2
25 to 44	22.5	21.9	23.9	27.2	24.2	30.6
45 to 64	16.1	14.8	18.4	14.8	15.3	14.6
65 and over	5.0	4.9	5.1	4.3	4.8	3.6
Age unknown	4.4	5.1	3.0	--	--	--

From Table 4, it will be seen that persons in the 35 to 44 year age group were under-represented by almost 5 percent in the relief population as compared with the general population. In the groups below 25 years of age the proportions in the relief and in the general population were practically identical. However, for 45 years of age and over there was a slight over-representation in the relief as compared with the general pop-

ulation. The group 25 to 44 years of age constituted only about 23 percent of all persons receiving relief, although it comprised a little over 27 percent of the general population. As the ages increased the excess in the proportion of relief persons to all persons became larger. In the younger age groups differences were small and may have been due, in part, to the additional "age unknown" group in the relief classification.

The urban groups 45 years of age and over were more heavily represented proportionally on the relief rolls than the rural groups of corresponding age. This is to be expected, since miners within these age limits are usually considered unemployable by the mine operators. Also, in the relief population widowed persons and old couples are found more often in non-farm than in farm communities.

The separation of males and females receiving relief into age groups reveals wide differences in the sex composition. Although it is well known that in newly settled agricultural regions and in mining areas males exceed females in number, the pronounced variations in the upper age groups serve to emphasize this fact. A supporting explanation for the heavy excess of males is that the general population of Oklahoma may still be regarded as being in a youthful phase of its growth cycle, a characteristic of which is a disproportionately high degree of masculinity. In the older age groups this seems to be a phenomenon of survival of male migrants who came to the territory in excessively large proportions around 1890.³

Table 5.—Number of Males to Every 100 Females in the Rural and Urban Relief Population Compared with the 1930 Population of Ottawa County, by Age Groups.

Age Group	Ottawa County 1930*	RELIEF POPULATION 1934		
		Total	Rural	Urban
All ages -----	105.0	108.7	111.6	103.4
0 to 14 years--	99.5	109.6	106.3	116.9
15 to 24 -----	98.0	109.5	117.5	96.4
25 to 44 -----	106.8	108.4	116.1	96.3
45 to 64 -----	122.1	107.9	113.4	100.0
65 and over--	127.5	135.3	153.1	109.1
Age unknown	75.0	72.1	71.6	74.1

* SOURCE: Fifteenth Census of United States 1930, Okla. Population Bul., 2nd Series, p. 18.

Size of Relief Households. There is a tendency for dependence upon relief to be associated with large size families for several reasons. Large families usually have more persons who must be fed, clothed, and sheltered relative to the number of wage earners than small families. The number of working members does not increase necessarily with an increase in the size of the household. Particularly is this true with younger families. Because large families are more common in lower socio-economic levels, factors, such as poor education and the lack of native ability and resources are often indicative of the failure of self-support.

Of the 1511 relief households surveyed, 25 percent had 6 or more persons, 50 percent had from 3 to 5 persons, inclusive, and the remaining 25 percent contained 1 or 2 persons (Table 6). The proportion of one- and two-person households was much larger in urban centers than in rural

³ Cf. Otis Durant Duncan, *Population Trends in Oklahoma*, Okla. Agri. Exp. Sta. Bul. 224, p. 17, for evidence on this point.

areas which may be explained by the presence of more aged couples and widowed persons in the relief population of urban than in rural communities. Households having 7 or more persons comprised 17.9 percent of those in rural as compared with only 9.1 percent of those in urban areas. All households averaged 4.2 persons, the rural having 4.5 persons as compared with 3.8 members in urban households.

Table 6.—Percentage Distribution of Relief Households by Number of Persons per Household for Rural and Urban Communities.

Persons per Household	Total	Rural	Urban	Cumulative Percentage Total Households
Total households	100.0	100.0	100.0	-----
One person	6.4	4.2	9.9	100.0
Two	17.9	15.7	21.5	93.6
Three	18.4	18.7	18.0	75.7
Four	17.3	16.5	18.7	57.3
Five	15.0	16.2	12.9	40.0
Six	10.5	10.2	9.9	25.0
Seven	6.1	7.7	3.6	14.5
Eight	3.9	5.0	2.2	8.4
Nine	2.1	2.2	2.0	4.5
Ten or more	2.4	3.0	1.3	2.4

It is also desirable to know the distribution of the population within the various size households. In the column showing the cumulative percentage of persons in households by size, in Table 6, 25 percent lived in households having 6 or more persons; 76 percent of all persons were in households having 3 or more persons. The data are clearly presented in Figure 3, in which both the percentages of households by size and of the persons living in each size of household are plotted. Whereas 60 percent of the households had 4 persons or less, only 39 percent of all persons lived in households of similar sizes. This is to be expected because under existing pattern of family life the number of households and of persons cannot increase in the same proportions where families have one or more children. The largest percent of households of given size were those with 3 persons, but the largest proportion of persons resided in five-person households.

Table 7.—Distribution of Persons and Dwellings in Relief Households According to the Number of Rooms in Dwellings.

Number of Rooms in Dwelling	PERCENT OF DWELLINGS		PERCENT OF PERSONS		AVERAGE NUMBER OF PERSONS PER ROOM	
	Rural	Urban	Rural	Urban	Rural	Urban
Total	100.0	100.0	100.0	100.0	1.4	1.3
One	9.1	13.2	7.8	10.0	3.9	2.9
Two	27.1	26.3	25.5	24.3	2.1	1.8
Three	27.1	22.2	28.4	23.0	1.6	1.3
Four	21.8	21.7	22.3	23.5	1.2	1.0
Five	8.1	9.9	8.3	12.2	.9	.9
Six	3.6	3.6	3.9	4.2	.8	.8
Seven	.9	.7	.9	.8	.6	.6
Eight or more	1.4	.5	1.9	.5	.6	.3
Unknown	.9	1.9	1.0	1.5	--	--

Assuming an average of one person per room counting all rooms in a house as a necessary minimum ratio for comfort, over-crowding appeared to be generally prevalent in houses of fewer than 5 rooms, and on this basis it constituted a more serious problem for the rural than for the urban relief populations studied. In the urban sample two-room dwellings represented the modal size, while in the rural group two- and three-room dwellings occurred in equal proportions, although the median appeared in the three-room group (Table 7). Of the total population, 60 percent lived in one-, two-, or three-room houses. Generally, rural families were more densely housed than urban families. The range in numbers of persons per room for rural areas was from .6 in seven- and eight-room houses to 3.9 in one-room abodes. In urban centers the number of persons per room ranged from 2.9 in the smallest to .3 in the largest houses.

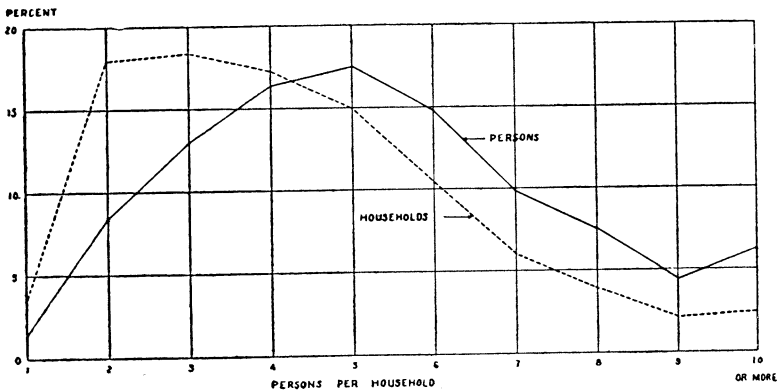


Fig. 3.—Percentage Distribution of Households by Size and of Persons Living in These Households.

Types of Families. In seeking solutions for relief problems, administrators now recognize that the extent of “employability” is as important as the matter of employment. The aged people, widows with children, and those persons physically handicapped who cannot be rehabilitated easily must be cared for by pensions and other forms of direct assistance. Therefore, analysis of types families should indicate to some extent unemployability.

The normal family types, consisting of a husband and wife, or husband, wife, and children, either of which may be with or without other persons, accounted for 73 percent of all households (Table 8). For the United States as a whole, and for Cleveland and Payne counties taken together in Oklahoma, the comparable figures were 70 percent and 73 percent respectively.⁵ The broken family types, in which one parent is missing and which may or may not have other members in addition to the children, represented another 16 percent of the households. For the country as a whole broken families comprised 13 percent and for Cleveland and Payne counties in

⁴ “Household,” “family,” and “case” are used interchangeably in this report. The relief case from which the data were taken included all members living in the household without regard to the degree of relationship to the head.

⁵ Federal Emergency Relief Administration. *Unemployment Relief Census October, 1933.* Report No. 3, pp. 35 and 64-65.

Oklahoma 9 percent of the total families in 1933.⁶ The non-family types, that is, the man or woman who is living alone or who may have "other" persons in the household, accounted for 11 percent of the households in Ottawa county; 18 percent in the two Oklahoma counties mentioned above, and 17 percent throughout the entire country.⁷

Table 8.—Percentage of Relief Households Classified by Type of Family, and the Average Number of Persons Included in the Family Group and as "Other" Members.

Type of Family	Percent of Households	Average Number Persons Per Household	Average Number Persons Per Family	Average Number Other Persons in Households
Total and average.....	100.0	4.2	3.5	.7
Husband-Wife-Children ..	39.3	4.9	4.9	----
Husband-Wife-Children- Others	14.9	6.5	4.4	2.1
Husband-Wife	11.0	2.0	2.0	----
Mother-Children	8.1	3.3	3.3	----
Husband-Wife-Others	7.7	4.3	2.0	2.3
Mother-Children-Others ..	3.8	4.8	2.8	2.0
Man	3.6	1.0	1.0	----
Man-Others	2.9	2.7	1.0	1.7
Father-Children	2.9	3.2	3.2	----
Woman	2.3	1.0	1.0	----
Woman-Others	1.8	3.6	1.0	2.6
Father-Children-Others ...	1.2	5.1	2.7	2.4

One of the distinctive facts of relief family organization which comes to light in this analysis is the high proportion of families having "other persons" in the household. Nearly one-third of all households had additional members. By comparing the average number of persons in the original family group with the average number of other persons in the households given in Table 7, this tendency is observed: "other" persons are found in households in which the original family group is smaller than the average. Further proof of this tendency is set forth in Table 9.

Table 9.—Average Number of Persons per Family Group and the Percent of Households Having Other Persons, by Type of Family.

Type of Family	Average Number of Persons per Original Family Group	Percent of Households Containing Other Persons
Non-Family	1.0	42.3
Broken Family	3.1	31.5
Normal Family	4.0	30.5

Who are the "other" persons residing in relief households? What bearing do they have on the relief problem? In answer to the first question, a minute study of the data at hand showed that unrelated persons were more often present than related persons in households of the sample under study. Non-family types and the father-children-other type were responsible for this characteristic. It is plausible to expect families to "double-

⁶ Ibid.

⁷ Ibid.

up" with a man and his children in order that the children may have a semblance of maternal care in the absence of the mother. Likewise, many single or widowed persons for reasons of economic necessity or companionship live in households with friends.

On the basis of a more detailed study of the data than is shown in Table 8, it was observed that married and widowed children were most often found as additions to the original family group. They were found most frequently in the homes of widowed mothers.⁸ Grandchildren appeared in the households in practically the same proportion as the own parent or parents.

Characteristic of patriarchal influence perhaps was the presence in the household of more parents and fraternal relatives of the husband-father. The widowed mother had the highest proportion of blood relatives in her household. Another observation from the data was the fairly equal distribution of other persons between households with and without children. Also, there were fewer children in the families having additional persons. There can be little doubt that the presence of additional persons in households tends to accentuate the economic strain upon the natural family and to interfere with its growth and social life. Usually, their status is one of either partial or complete dependency. In another study of an Oklahoma farm population made in 1933 it was found that additional members of households accounted for only 6 percent of the total man-days expended in the growing of crops, although they constituted 11 percent of all workers and 7 percent of the total population residing in the households visited.⁹ All of this is to say simply that, in general, additional persons in households do not perform their statistically expected share of the work to be done toward the maintenance of the household. Their contribution to the support of household whether in cash or kind is of almost negligible consequence in an ordinary farm population group. The inference is, therefore, that in a relief population, whether farm, village, or city, the occurrence of additional persons in households is to be regarded *per se* as an indication of their incapacity to support themselves elsewhere.

Age Composition of Households. Closely related to type of household are the ages of the members. An analysis of age composition again brings into focus the problems of dependent groups. Children under 16 and persons 65 years of age and over are defined as dependent. From the data in Table 10, it is apparent that 72 percent of the households contained dependent persons. Almost one-fifth of the households had persons 65 years of age and over. Also, three-fifths of all households contained children under 16 years of age. Of the relief households of Ottawa county, 7 percent reported both dependents under 16 and over 64. In the national unemployment relief census of 1933, Payne and Cleveland counties, in central Oklahoma, had only 3 percent of the households under this classification.¹⁰

As between rural and urban areas, a larger percent of the households in the rural areas had children under 16. A similar situation held true but to a less marked extent with respect to the concentration of aged persons. Urban communities had proportionally more families without persons in

⁸ It was often difficult to determine from the case histories whether a woman was living in the home of her children or vice versa. The designated head of the relief household (or original family group) usually was the economic head.

⁹ O. D. Duncan, unpublished data taken from a social and economic survey in the North Central Winter Wheat Area of Oklahoma.

¹⁰ Federal Emergency Relief Administration, *op. cit.*, p. 75.

dependent age groups than rural areas. Furthermore, it may be observed that the proportions of households without members in dependent groups increased directly with the degree of urbanity of the community in which they were located.

Table 10.—Percentage Distribution of Relief Households With Different Classes of Dependents, by Residence.

Residence	Total Households	PERCENT OF HOUSEHOLDS HAVING DEPENDENTS			Households Without Dependents	Unclassified
		Under 16 and Over 64	Under 16 Only	65 Years and Over		
Total	1511	7.1	54.7	10.2	26.1	1.9
Rural	926	8.4	57.4	9.9	22.5	1.8
Urban	585	5.0	50.4	10.9	31.6	2.1
Open country	561	8.9	59.7	7.8	21.8	1.8
Village	365	7.7	53.7	12.9	23.8	1.9
Town	102	2.9	41.2	14.7	30.4	10.8
City	483	5.4	52.4	10.1	32.1	---

Households Containing Persons 16-64 Years of Age. It is necessary to know more of the employable status of eligible workers than their mere numbers. Households may contain only one worker, male or female, between the ages of 16 and 64 years. This person may be a widow or widower with small children, which complicates the problem greatly, because of need in the home. Another class of households, consisting largely of aged persons, will have no eligible workers 16 to 64 years of age.

Table 11.—Percentage of Relief Households With or Without Persons 16 to 64 Years of Age, by Residence.

Residence	Total Households	HOUSEHOLDS REPORTING				
		PERSONS 16 TO 64 YEARS OF AGE			Without Persons 16-64	Unclassified as to Age
		Male and Female	Male	Female		
Total	1511	74.0	8.3	11.7	4.0	2.0
Rural	926	78.7	8.1	8.0	3.3	1.9
Urban	585	65.5	10.1	17.6	4.7	2.1
Open country	561	85.0	6.8	3.6	2.8	1.8
Village	365	69.0	10.0	14.8	4.1	2.0
Town	102	58.8	4.9	18.6	6.9	10.8
City	483	66.9	11.2	17.4	4.3	.2

Almost three-fourths, 74 percent of the relief households had both males and females 16 to 64 years of age; 8 percent possessed only a male worker; 12 percent had only a female worker; and 4 percent reported neither a male nor a female member within these age limits (Table 11). The rural areas had a considerably higher representation of both males and females

16 to 64 years of age in households than urban centers. On the other hand, urban households were less favorably situated than those in rural territory in that there were more than twice as many proportionally with only females 16 to 64 years of age.

Marital Status. At this point it appears appropriate to discuss the marital conditions in relief households in conjunction with the age status. The occurrence in the relief population of a fairly high proportion of families broken by divorce or separation is partially indicative of the character of the people. Likewise, there may be an association between divorced and separated persons and their presence on the relief rolls. In fact, any form of family disintegration may be contributive toward economic instability of family life.

Table 12.—Marital Status of Heads of Relief Households by Residence.

Marital Status	PERCENT		
	Total	Rural	Urban
All heads	100.0	100.0	100.0
Single			
Male	4.7	4.7	4.8
Female	.7	.4	1.2
Married			
Male head	66.3	72.5	56.6
Widowed			
Male	1.5	1.4	1.7
Female	8.5	6.2	12.2
Separated or Divorced			
Male	3.2	2.4	4.5
Female	4.8	2.9	7.6
Unknown			
Male	8.1	8.3	7.7
Female	2.2	1.2	3.7

Three outstanding characteristics are noted in Table 12. First, there was a disproportionately large percent of widowed and divorced or separated relief heads in urban as compared with rural communities. Second, the proportion of widowed female heads was almost six times as large as that of male heads. Third, relatively few of the household heads receiving relief were single.

In explaining the foregoing statements, it is pointed out by sociologists that divorce rates are generally higher in towns and cities than in rural areas. Also, the data showed that widowed and separated or divorced persons tended to concentrate in the urban centers. Another source of the wide variations in the percentages of rural and urban relief household heads who were either divorced or separated may be ascribed to the conservative mores of agricultural people in regard to conventional family life as contrasted with a general laxity and indifference which usually characterizes the attitudes of inhabitants of mining communities in regard to moral questions.

Female relief heads who are widowed, divorced, or separated are usually burdened with children which often handicaps them in attaining self-sufficiency. Unattached single men exceeded single women as heads of

households both in number and percent, principally because a male child over 16 years of age was designated as the head in the absence of the father. Therefore, it is probable that households having female heads had no employable male members.

Year of Formation of Marriage. A majority of families receiving relief in Ottawa county are in the early stages of the family growth cycle. Two-fifths of the marriages in which the date of formation was reported occurred in the ten-year interval from 1925 to 1934, and over one-seventh of the unions took place between 1915 and 1924 (Table 13).

Rural and urban differences are characterized chiefly by the fact that a larger percent of urban than of rural marriages occurred since 1920, while a larger proportion of the rural than of the urban marriages took place during the years prior to that date. It is natural that the larger proportion of the marriages formed during the earlier years would fall to the rural population because the non-agricultural development of Ottawa county did not get under full sway for many years after the farm communities had been settled. Between 1930 and 1934 it would seem that a disproportionately large number of the marriage unions formed were entered into by young people from economically dependent families in the urban centers. The specter of unemployment and of being cared for the expense of society probably held less terror for them than for the more stable and conservative farm youth. Furthermore, it is believed on the basis of official reports on rural-urban migration that the more improvident farm youth who married during the depression were attracted to the cities in large numbers by the various public relief programs. This would cause the curve in Figure 4 to favor the rural at the expense of the urban families.

Table 13.—Percentage Distribution of 653 Rural and 316 Urban Marriages at Date of Formation by Five-Year Periods.

Five-Year Period	Total	Rural	Urban
All periods	100.0	100.0	100.0
1930 to 1934	21.5	19.9	24.7
1925 to 1929	19.3	19.0	19.9
1920 to 1924	14.9	14.5	15.5
1915 to 1919	12.1	12.9	10.4
1910 to 1914	9.0	9.7	7.6
1905 to 1909	7.6	7.6	7.6
1900 to 1904	6.5	7.2	5.1
1895 to 1899	4.3	4.0	5.1
1890 to 1894	2.7	2.9	2.2
1885 to 1889	1.1	1.5	.3
Beofre 1885	1.0	.8	1.6

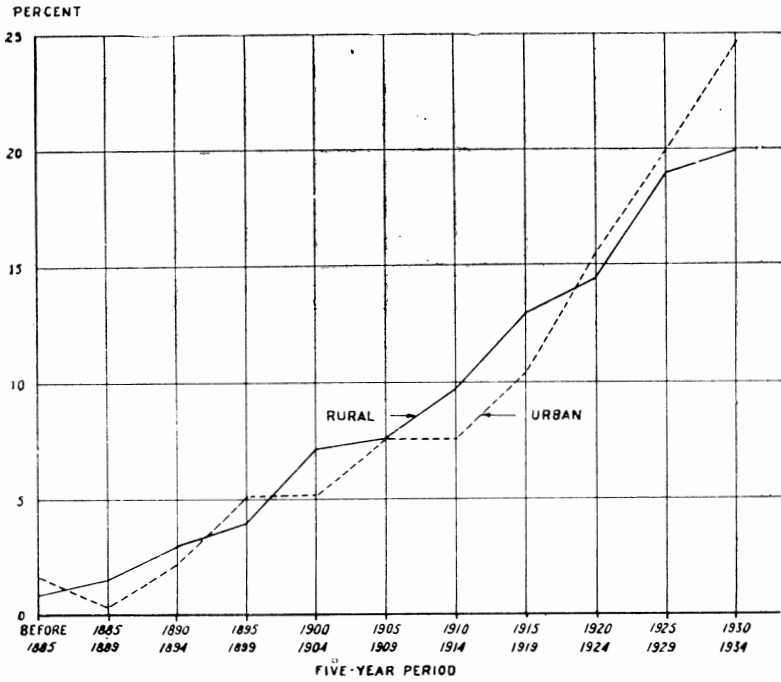


Fig. 4.—Percentage Distribtuion of 653 Rural and 316 Urban Marriages at Date of Formation, by Five-Year Periods.

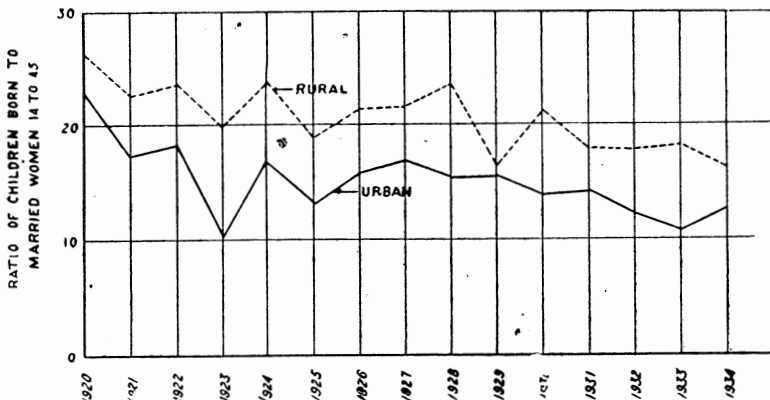


Fig. 5.—Number of Surviving Children Born to 100 Rural and Urban Married Women Between the Ages of 14 and 45 from 1920 to 1934.

Fertility of Married Women in Relief Households. Generally it is the popular opinion that the birth rates among relief families have increased. Judged from the ratio of fertility, which was computed by dividing the total number of married women in relief families from 15 to 45 years of age in a given year by the total number of children born in the same year and multiplying the figure by 100, a declining trend has been experienced over the past 15 years in both rural and urban areas.¹¹ (See Figure 5 and Table 14.) This trend is all the more significant considering that relatively larger numbers of younger married women were included in the calculations for recent years. Although the rate of fertility among the rural married women was higher, the depression apparently had not accelerated the decreasing ratio among urban women.

Table 14.—The Number of Surviving Children Born to Each 100 Rural and Urban Married Women Between the Ages of 15 and 45 from 1920 to 1934.

Year	Number of Married Women of Fertile Age	NUMBER OF CHILDREN SURVIVING IN 1934 WHO WERE BORN TO 100 MARRIED WOMEN 14 TO 45 YEARS OF AGE DURING SPECIFIED YEARS		
		Total	Rural	Urban
1934	657	13.85	14.19	12.62
1933	615	15.93	18.14	10.81
1932	598	16.05	17.79	12.09
1931	574	16.72	17.93	14.04
1930	557	18.85	21.04	13.95
1929	537	15.80	16.03	15.38
1928	524	20.99	23.55	15.34
1927	514	20.39	21.47	16.88
1926	503	19.48	21.22	15.72
1925	459	16.99	18.73	13.19
1924	448	21.65	23.87	16.67
1923	419	16.71	19.62	10.16
1922	404	22.03	23.61	18.81
1921	396	20.96	22.55	17.36
1920	378	25.15	26.14	22.81

Occupation and Residence of Relief Heads. Possibly the foremost objective in this study is an appraisal of occupations represented in the relief population. Nearly one-half of the households on relief were there because of unemployment. Up to this point, the factual evidence presented has dealt with the age, sex, and marital composition of persons in relief households, types of families, the incidence of dependents, and birth rates. Attention will be directed now to the heads of relief households, the breadwinners for this great mass of unfortunate people.

¹¹ The fertility ratio was calculated for rural and urban communities for all years on the basis of the residence of married women in December, 1934, and does not take into account any inter-movements during the period studied.

Table 15.—Number and Percent of Heads of Relief Households Classified by Usual Occupation and Residence.

Usual Occupation	NUMBER			PERCENT		
	Total	Rural	Urban	Total	Rural	Urban
All occupations	1511	926	585	100.0	100.0	100.0
Farm Owner	166	166	0	10.9	17.9	0.0
Farm tenant	314	314	0	20.8	33.9	0.0
Farm laborer	90	85	5	5.9	9.2	.9
Miner	188	84	104	12.5	9.1	17.8
Unskilled laborer	406	161	245	26.9	17.4	41.9
All other occupations	183	53	130	12.1	5.7	22.2
No usual occupation	164	63	101	10.9	6.8	17.2

The occupational distribution in Table 15 reveals the preponderance of relief heads engaged in agriculture and as unskilled laborers, in contrast with the small representation of miners and other occupations. Of the 1511 relief heads, 27 percent were unskilled laborers; next in importance were tenants comprising 21 percent; miners accounted for only 13 percent of the total; the group including chiefly clerical workers, sales persons, nurses, professional persons and other white-collar workers, made up 12 percent; farm owners made up 11 percent of the total; 6 percent were farm laborers; the remaining 11 percent reported no usual occupation.¹² Of the total relief heads, 38 percent were engaged in agricultural pursuits and lived in rural areas. Unskilled laborers and miners, together, constituted 39 percent of the total. Approximately 60 percent of the labor groups, excluding farm laborers, resided in urban centers. It is to be expected that proportionally more of the white-collar workers would live in urban centers than in the smaller towns and the open country, but a surprisingly large percent of urban workers were within this classification.

Table 16.—Percentage Distribution of Gainfully Employed Population in 1930 and of Relief Population in 1934, by Occupational Groups.

Occupational Group	PERCENT OF GAINFULLY EMPLOYED POPULATION IN OCCUPATIONAL GROUP		
	Ottawa County 1930	Relief Population 1934	Expectancy Ratio of Relief to General Population
All occupations	100.0	100.0	-----
Agriculture	21.2	37.6 32.8*	177.4 154.7*
Mining	32.0	12.5 38.0*	39.1 115.0*
No usual occupations	46.8	49.9 44.5*	106.6 95.1*

* Corrected for occupational shifting between mining and agriculture.

¹² Usual occupation is defined as the last occupation at which a person has worked a month or more, or the one at which the person has worked the longest.

Data on the occupational classification of the non-relief population of Ottawa county in 1934 were not available. However, it is possible to make a general comparison of the occupational distribution of the general population in 1930 with that of the relief sample as it appeared in 1934. The data for this comparison are given in Table 16.

From these data in which the proportion of the population gainfully employed in each occupational group in 1930 was used as a base an expectancy ratio for the relief population of 1934 has been computed. The principal objective in making these calculations was to find out whether the major occupational groupings of the 1930 population contributed to the relief population of 1934 in their respective proportions. The chief interest was focused upon the agricultural and mining groups, and in the light of the results this seems justifiable because of the close consistency between the proportions of "all others" found in the general population of 1930 and the relief population of 1934.

In the mining industry as may be seen by referring again to Table 2, the heavy decline in production did not begin until around 1926-27. This gave the miners of the county a respite of some five or six years in comparison with the farmers. For these reasons, it seems, the agricultural population of 1930 produced a much higher proportion of the 1934 relief population than came from the non-agricultural groups.

At first sight it appeared that the agricultural group had contributed 177 percent of its expected proportion of the relief population, that the mining group had supplied only 39 percent of its expectancy and that "all others" had produced 107 percent of its expected quota. This result seemed absurd both on its face and on the basis of the production data shown in Table 2. It was necessary, therefore, to check the data carefully in order to find out how much interoccupational shifting had occurred between agriculture, mining, and other occupations. This being done, it was found that the proportion of agriculturalists on relief had been too high, that of miners too low, and that of "all others" too high as computed on the basis of the relief data without correction. However, with the corrections made, it was found that the expectancy ratio for agriculture was 155, that for miners 115, and that of "all others" was 95. What these refinements of the data mean is that large numbers of persons from all non-agricultural occupations, and mining in particular, had migrated to farms when they lost their jobs at the mines and elsewhere. Still, however, it is obvious that without this immigration the agriculture of the area probably suffered more severely from the depression than other industries as far as the ability of the working population to be self-sustaining was concerned. This was due in part, no doubt, to the fact that the depression for agriculture began with the post-war slump in 1920-21 and that its effects were simply accumulated upon those of the great depression of 1929-34.

Sex and Age of Heads of Relief Households. As in 65 other counties surveyed by the Federal Emergency Relief Administration, approximately 14 percent of all heads of households in Ottawa county were females.¹³ Approximately 60 percent of the 245 female heads were in urban centers, as contrasted with only 35 percent of the male heads (See Figure 6). The primary reason for this is the concentration of widows and divorced or separated women in the towns and cities. In the distribution among various age groups, it is observed from Figure 6 that 57 percent of the male heads were under 45 years of age, while 73 percent of the female heads were over 45. The 25 to 34 year age group had 24 percent of all relief heads, the highest proportion of male heads being in this group. Relatively more female than male heads, on the other hand, were between 45 and 54 years

¹³ P. G. Beck and M. C. Forster, *Six Rural Problem Areas: Relief Resources-Rehabilitation* (Washington, Federal Emergency Relief Administration, 1935, p. 59.)

of age, the percentages being 25 and 18, respectively. Rural male heads appear to be slightly younger on an average than those in urban households, but on the whole, there is little difference in the age distribution between rural and urban female heads.

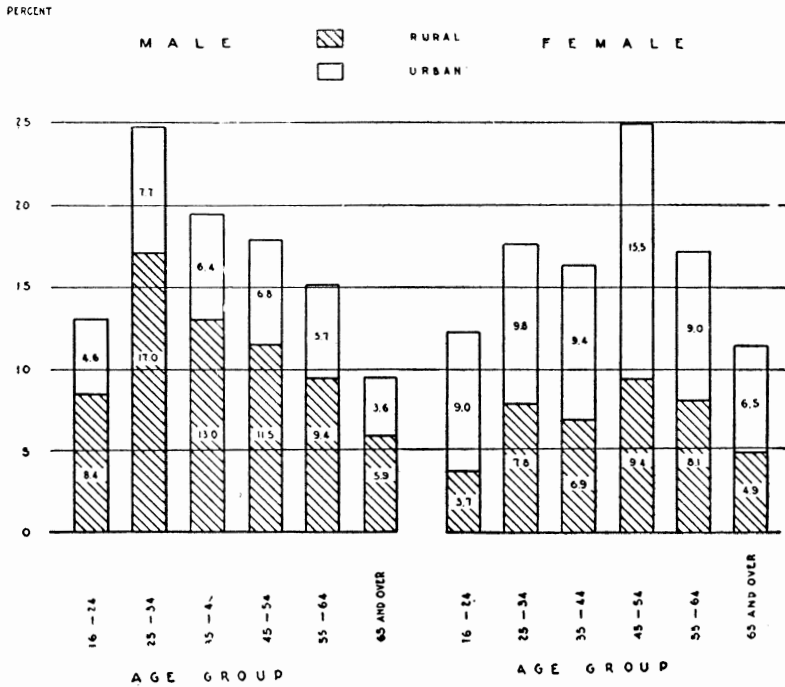


Fig. 6.—Percentage Distribution of Male and Female Heads of Relief Households, by Age Groups.

Table 17.—Percentage Distribution of Heads of Relief Households Classified by Age and Usual Occupation.

Usual Occupation	Total Heads	PERCENT OF RELIEF HEADS IN AGE GROUP					
		16-24	25-34	35-44	45-54	55-64	65 and over
All occupations	1511	13.0	23.6	18.9	19.3	15.4	9.8
Farm owner	166	3.0	16.9	22.9	26.5	20.5	10.2
Farm tenant	314	14.7	29.9	19.4	19.1	10.2	6.7
Farm laborer	90	21.1	17.8	12.2	12.2	21.1	15.6
Miner	188	9.1	23.9	26.6	22.3	11.2	6.9
Unskilled laborer	406	18.0	25.6	16.3	15.0	15.5	9.6
All others	183	9.3	24.1	19.7	19.1	18.0	9.8
No usual occupations	164	11.6	15.2	14.6	23.8	18.9	15.9

It is noteworthy that scarcely 10 percent of the male as compared with slightly over 11 percent female heads were 65 years of age or over. There were 41 percent of household heads in this age group living in urban centers.

Age and Usual Occupation of Relief Heads. The relationship between age and occupation is desirable to determine how the younger relief heads differ from older heads in occupational status.

In Table 17, the data show an overly large percentage of farm tenants, farm laborers, and unskilled laborers in the age group from 16 to 24 years. There is also a large percentage of inexperienced younger household heads listed under "No Usual Occupations."

To tenants and unskilled laborers may be added high proportions of miners and "All Other" occupations represented in the age group between 25 and 34 years. Other occupations are relatively less important. Between the ages of 35 and 44 years an increased percent of farm owners and miners is shown, with smaller proportions in "All Other" occupations when compared with the preceding age group.

The largest percent of farm owners were between the ages of 45 and 54 years. Miners and white-collar workers were reported in smaller proportions than in the previous age group. The high percent of heads reporting "No Usual Occupation" includes a large proportion of female heads.

Table 18.—Percent Distribution of Relief Heads According to Age Within Various Occupations.

Age Group	Total Heads	Farm Owner	Farm Tenant	Farm Laborer	Miner	Un-skilled Laborer	All Other Occupation	No Usual Occupation
All ages -----	1511	10.9	20.8	5.9	12.5	26.9	12.1	10.9
16 to 24 -----	196	2.5	23.5	9.7	8.7	37.2	8.7	9.7
25 to 34 -----	356	7.9	26.2	4.5	12.7	29.2	12.4	7.0
35 to 44 -----	286	13.2	21.2	3.8	17.4	23.1	12.6	8.7
45 to 54 -----	292	15.1	20.5	3.8	14.4	20.9	12.0	13.3
55 to 64 -----	233	14.6	13.7	8.2	9.0	27.0	14.2	13.3
65 and over---	148	11.5	14.2	9.4	8.8	26.3	12.2	17.6

Table 18 shows the proportions of relief heads in each age group as they were distributed into various occupational classifications. Farm tenure status was found to be associated with the age of family heads, but not always in a rectilinear relationship. As would be expected, the proportions of the extremely young household heads who were farm owners were very small. Age is a factor which is associated positively with the proportion of ownership in an ordinary farm population up to around age 60 or 65. The proportion of tenants declined as age increased, except for those below 34 years of age, and for those above 65 years old. The proportions of farm laborers were highest in the extreme and lowest in the middle age groups. A similar relationship prevailed for miners. The most definite direct relationship between age and occupational condition was found in the group which specified no usual occupation. Perhaps this may be because those who have no regular occupation find self-maintenance increasingly difficult as age advances beyond middle life. In other words, dependency is most selective of those population levels in which there is a definite lack of occupational specialization.¹⁴

¹⁴ For further discussion of this point in reference to the farm population of Oklahoma, see O. D. Duncan's unpublished data cited previously.

Education of Relief Heads. The lack of an adequate formal education on the part of household heads is perhaps one of the most important single factors associated with the social and economic disorganization of relief families. It is often associated with physical handicaps and low mentality. Poor education will stand as one of the most challenging problems in the rehabilitation of relief families. Money, land, equipment, and supervision may be provided, but, without response in the form of intelligently directed efforts on the part of the relief family, any program of restoration will fail ultimately.

In Ottawa county 5 percent of all heads of relief households failed to secure any formal education (Table 19). Only 1 percent of those classed as "All Others," most of whom were white-collar workers, as compared with 10 percent of the farm laborers received no schooling. These were the groups which gave the maximum differences in proportions. Less than one-fourth of the heads, 22 percent, completed from 1 to 4 years school work. Another 28.1 percent reached the fifth, six, or seventh grades. Those heads finishing the eighth grade accounted for 30.4 percent. Thus, 85 percent of all heads of relief households possessed an eighth grade education or less. Those whose education was ended in high school grades 9 to 12, comprised 13.4 percent of the entire sample, and less than 1 percent reached higher educational institutions.

Table 19.—Percentage Distribution of Heads of Relief Households in Various Occupational Groups According to Last Grade Completed in School.

Highest Grade Completed	All Occupations	Farm Owner	Farm Tenant	Farm Laborer	Miner	Unskilled Laborer	All Other Occup.	No Usual Occup.
All Heads	1511	166	314	90	188	406	183	164
	Percent							
None	4.5	3.0	4.3	10.0	5.8	5.7	1.1	3.1
1- 4	22.0	28.3	20.1	16.7	30.3	22.2	13.7	20.1
5- 7	28.1	25.9	32.2	25.5	34.1	25.1	16.4	37.8
8	30.4	30.7	32.3	37.8	23.4	32.7	33.3	22.0
9-10	8.3	6.1	6.7	6.7	2.7	8.6	15.3	12.2
11-12	5.1	4.8	3.8	3.3	3.2	4.2	14.2	3.0
Over 12	.7	.6	.3	---	---	---	4.4	.6
Unknown	.9	.6	.3	---	.5	1.5	1.6	1.2

Within various occupational classifications, farm laborers and miners were the lowest in educational achievement, 37 percent of the former and 36 percent of the latter ended their schooling at the fourth grade or below. An additional 58 percent of the miners had a fifth to eighth grade training, and only 6 percent of the heads had gone farther than the eighth grade in school. There were 6 percent of the miners who reported no schooling. One of the principal reasons for this poor showing among miners may be the fact that many of them migrated from the Ozark Mountain country, where educational facilities have been inadequate and where the influences of isolation are heavily pronounced.

In both the farm laborer and unskilled laborer groups 86 percent of the household heads had an eighth grade education or less. About 84 percent of both the farm owners and tenants received from one to eight years of schooling. However, 57 percent of the owners and nearly 65 percent of the farm tenants had completed from five to eight grades in school.

The group classed as "All Others" which include many women and white-collar workers were better educated than either farmers or manual laborers, over one-third of the heads possessing more than eighth grade training. Nearly 10 percent had completed high school. Of the heads with no usual occupation, 80 percent had been in school from one to eight years, while about 16 percent had completed grades above the eighth. Differences between rural and urban areas were unimportant. Urban heads received slightly more formal education than rural heads.

Employment Status of Children Away from Home. From a sociological viewpoint an indication as to the economic status of children away from home, based upon the occupation of the family head, is important. The data taken from the schedules were tabulated to show the percent of children away from home who were employed. In the case of a married daughter, the employment status of the husband was substituted. In Table 20 these data show only 56 percent of children of unskilled laborers to be employed as against 71 percent of the farm owners' children. Children of farm laborers and miners were employed in about equal proportions, which exceeded the percent of children whose parents were technical, sales, or clerical workers who were classed as "All Other" occupations. It is significant that the children of household heads who had no usual occupation showed employment in only 57 percent of the cases. This suggests that there may be a definite tendency for the work habits along with other socio-economic characteristics of parents to be reflected in the lives of the younger generation.

Table 20.—Employment Status of Children Away from Home According to the Usual Occupation of the Parent-Head.

Usual Occupation of Parent-Head	Number of Children Away from Home	Percent Employed	Percent Unemployed
All occupations	773	62	38
Farm owner	100	71	29
Farm tenant	100	70	30
Farm laborer	40	68	32
Miner	63	67	33
Unskilled laborer	232	56	44
All other occupations	87	63	37
No usual occupation	151	57	43

Mobility of Relief Heads. The increase in population in Ottawa county over a period of 50 years is the result of two important economic expansions. The first and perhaps the most orderly and lasting growth has been the fairly rapid development of agriculture in the county. This period has extended from 1880 to the present time. The second, and by far the most spectacular economic force has been the discovery and rapid exploitation of the lead and zinc resources. Since 1910 mineral production has assumed an almost equal status with agriculture in the county economy. The population has increased more than three-fold under the impetus of these developments.

In Table 21, 243 relief heads who were born outside of Oklahoma were classified according to the state from which they came and the number of years by periods the migrants had resided in Ottawa county.¹⁵ Over one-

¹⁵ The figures presented here do not represent all the relief heads migrating into the county from other states. At least 150 heads reported previous residence outside of Oklahoma, although the year they came to the county was not given.

Table 21.—Duration of Residence in Ottawa County of 243 Relief Household Heads Born Outside of Oklahoma According to State of Prior Residence.

State of Prior Residence	Total Household Heads	YEARS OF RESIDENCE OF HOUSEHOLD HEADS IN OTTAWA COUNTY				
		0-10	11-20	21-30	31-40	41 and Over
All states	243	53	100	53	27	10
Missouri	124	22	53	30	16	3
Kansas	29	6	7	9	3	4
Arkansas	27	8	14	4	1	
Illinois	15	4	6	4	1	
Michigan	8	2	4	1	1	
Ohio	7	3	2	1	1	
All others	33	8	14	4	4	3

half of the relief heads reporting migrated from Missouri, and approximately another one-fourth were from the bordering states of Arkansas and Kansas. The immigration of relief household heads from the more distant states was relatively unimportant.

The largest movement of relief household heads into the county occurred during the interim between 1914 and 1923. This was also the period of the most extensive and rapid mining development. From 1904 to 1913 it is probable that the majority of people moving into the county were settlers primarily interested in farming and trade.

In recent years economic distress has caused a great increase in community mobility. The loss of employment, failure to pay house rentals, a tendency to double up families in effecting household economies, and the accessibility of Federal relief have induced families at lower economic levels to move frequently.

Because it is desirable to know the comparative mobility within occupational groups and by residence, Tables 22 and 23 were prepared to bring out the important characteristics for the rural and the urban household heads separately. These data show that urban households greatly exceed rural households in mobility. Over one-half of the urban households had

Table 22.—Percentage Distribution Rural Relief Household Heads According to Duration of Domicile at Present Address.

Duration of Domicile (Years)	All Occupations	FARMERS			Miner	Unskilled Laborer	All Other Occupations	No Usual Occupation
		Owner	Tenant	Laborer				
All periods	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 or less	34.6	15.1	42.7	49.4	35.7	32.3	37.8	27.0
2 to 4	23.0	16.3	30.2	18.8	20.2	21.1	22.7	19.1
5 to 9	16.0	23.5	11.1	14.1	15.5	16.2	15.1	23.8
10 to 14	8.6	15.1	4.8	8.2	11.9	8.1	7.5	9.5
15 to 19	5.3	7.2	1.9	2.4	4.8	9.3	7.5	9.5
20 and over	5.9	16.8	2.9	2.4	3.6	3.7	1.9	9.5
Unknown	6.6	6.0	6.4	4.7	8.3	9.3	7.5	1.6

moved to their present address within the last year, as compared with slightly over one-third of the rural families. During depression years from 1930 to the end of 1934, 73 percent of the urban and 58 percent of the rural households had changed their residence. Only 16 percent of the rural and 11 percent of the urban families had retained their present residence from 5 to 9 years. Those who had lived at the same place 10 years or longer comprised 20 percent of the rural as compared with 13 percent of the urban families.

Tenant farmers led all other occupational groups in residence turnover since 1930, but miners and laborers also moved often. Farm owners were the most stable group, although 31 percent reported moving since 1930.

Table 23.—Percentage Distribution of All Urban Household Heads According to Duration of Domicile at Present Address.

Duration of Domicile	All Occupations	Farm Laborer	Miner	Unskilled Laborer	All Other	No Usual
All periods	100.0	100.0	100.0	100.0	100.0	100.0
1 year or less	54.2	60.0	54.8	54.7	54.6	51.5
2 to 4 years	18.9	---	20.2	20.0	18.5	16.8
5 to 9 years	11.1	20.0	13.5	11.0	11.5	7.9
10 to 14 years	6.5	---	1.9	5.7	6.9	12.9
15 to 19 years	4.3	---	1.9	3.7	6.2	5.9
20 years and over	2.1	20.0	1.9	3.3	---	1.0
Unknown	2.9	---	5.8	1.6	2.3	4.0

PART III

YOUTH ON RELIEF

Incidence of Children and Young People on Relief. Briefly presented here are data relating to the social characteristics of the youth on relief in Ottawa county, with particular reference to the adolescent portion of the population, that is those whose ages range from 16 to 24 years. Persons within these age limits constituted 17 percent of both the male and the female population who were below 25 years of age. The picture is not at all encouraging.

Numerically there were 3332 persons in relief households under 25 years of age (Table 24.) Two-thirds of this number lived in the rural areas. In the sample of cases receiving relief in December, 1934, roughly 1,100 persons were in the age group from 16 to 24 years, inclusive. Proportionally, 53 percent of the total relief population was represented in the children and adolescent groups.

Table 24.—Number of Males and Females Under 25 Years of Age in Relief Households and Proportion of the Total Relief Population Represented in These Groups.

Age Group	NUMBER			PERCENT OF TOTAL RELIEF POPULATION		
	Total	Rural	Urban	Total	Rural	Urban
Total	3332	2225	1107	52.6	54.0	50.0
0 to 15 Years						
Male	1176	788	388	35.6	36.2	34.4
Female	1073	741	332	35.3	38.0	30.5
16 to 24 Years						
Male	566	376	190	17.1	17.3	16.9
Female	517	320	197	17.1	16.4	18.1

Educational Status of Youth 16 to 24. Since the depression-born youth problem involving vocations and the enforced use of leisure time is a matter of chief concern, an analysis of the educational status of persons 16 to 24 years of age in relief households should show the limitations of this important factor in effecting satisfactory solutions. In Table 25 is presented, for all persons on whom data were available, the proportion completing various grades in school. Over one-fourth of the males and one-fifth of both males and females were still in school at the time of the survey.

Less than one-third of both males and females had received as much as an elementary school training. The proportions of those 16 to 24 years of age who reported high school work were 30 percent for males and 40 percent for females. Of those entering high school, two out of every three boys and one of every two girls failed to finish. Only slightly more than 2 percent of all relief persons 16 to 24 years of age had attended college, although there was one such institution located within the county in which they lived.

Table 25.—Last Grade Completed in School by Persons 16 to 24 Years of Age in Relief Groups by Sex and Residence, Shown in Percentages.

Highest Grade Completed	TOTAL		RURAL		URBAN	
	Male	Female	Male	Female	Male	Female
All grades -----	495	427	341	283	154	144
None -----	.2	.5	.0	.7	.6	----
1 to 4 -----	6.9	3.7	5.9	3.9	9.1	3.5
5 to 7 -----	21.0	14.5	19.9	14.5	23.4	14.6
8 -----	30.9	32.1	31.7	32.5	29.2	31.2
9 to 10 -----	17.8	18.7	17.9	17.6	17.5	20.8
11 to 12 -----	10.3	19.5	12.0	21.2	6.5	16.0
Over 12 -----	2.4	2.3	1.8	1.2	3.9	4.9
Unknown -----	10.5	8.7	10.8	8.5	9.8	9.0

Surprising as it may seem to the uninformed, the youth in rural communities had taken fuller advantage of school opportunities, and rural boys on an average had gone farther in school than urban boys. It may be observed that 32 percent of the rural as compared with 28 percent of the urban boys had received at least some high school instruction. On the other hand, 26 percent of the rural as compared with 33 percent of the urban boys had not gone beyond the seventh grade. Less striking differences were noted between the girls of the two areas. Possible reasons for the poorer schooling of urban boys and girls are the lack of emphasis on education in mining communities and the larger cash outlays necessary for clothing and incidental expenses in the cities than in the country. Furthermore, it is likely that the rural relief sample represents more nearly

Table 26.—Comparison Between the Educational Status of Married Persons 16 to 24 Years of Age and the Total Relief Population of Similar Age by Residence.

(Percentages)

Residence and Sex Group	Total	No Education	Grammar School or Less	High School	College	Unknown
Rural and Urban						
Total males -----	100.0	.2	58.5	28.1	2.4	10.5
Married males -----	100.0	----	74.5	24.5	----	1.0
Total females ----	100.0	.5	50.4	38.2	2.3	8.6
Married females -	100.0	.5	66.5	32.0	----	1.0
Rural						
Total males -----	100.0	----	57.4	29.9	1.8	10.9
Married males -----	100.0	----	69.0	29.0	----	2.0
Total females ---	100.0	.7	50.9	38.9	1.0	8.5
Married females -	100.0	.7	67.4	31.9	----	----
Urban						
Total males -----	100.0	.6	61.7	24.0	3.9	9.7
Married males -----	100.0	----	85.0	15.0	----	----
Total females ---	100.0	----	49.3	36.8	4.9	9.0
Married females --	100.0	----	65.0	32.0	----	3.0

a true cross-section of the rural population than the urban sample depicts for the general urban population. In the latter case the relief population includes almost exclusively persons who were living at the very lowest economic levels.

Education of Married Young People. Another significant analysis reveals the differences in the formal education of young married people to the total youth in relief households. Two limitations of the data shown in Table 25 are the relatively large proportion of persons whose education was unknown and the partly counter-balancing fact that a small percent had not finished school. However, several clear-cut observations are noted from these data. In general, married persons between 16 and 24 years of age appear to have an inferior educational status when compared with the total youth of the same age. For example, 85 percent of the married males in urban centers had an eighth-grade training or less, in contrast with 62 percent of all male persons within the ages under study (Table 26). Similarly, 65 percent of the married females and 49 percent of the total females in the cities reported work in grammar schools only.

The educational attainment of rural married persons appeared to vary somewhat less from that of the total rural youth than the corresponding comparison in urban centers. No college youths on relief were married.

The foregoing data seem to indicate that the youth 16 to 24 years of age who had married at the time of the survey have received less formal schooling on the whole than those who were unmarried. As a measure of self-protection, the poorly-educated young people had married probably to escape unsatisfactory conditions in the homes of their parents. Without any forethought as to the small probabilities of attaining a secure economic status, they merely seek to fulfill their desires for sex gratification and companionship through marriage. Also in an ordinary population, a prevailing tendency is that early marriage is associated with a curtailment of the period of formal attendance at school. On the contrary, the better-educated youths find an emotional outlet in wholesome recreation or wider participation in social groups. The consequences of early marriages with insufficient pecuniary resources are recognized more clearly.

While it is true that on an average, and within limits, the age of a population at marriage is inversely correlated with the number of years spent in school, it is easy to exaggerate the significance of this relationship in groups in which economic factors are highly selective. For example, if for other reasons than marriage a child stops school at or below the eighth grade, there is no necessary reason why the amount of schooling received should be directly correlated with age at marriage. Probably, he will have been out of school for several years before he is even conscious or aware of an impulse to marry. The degree of adequacy of education may have other socio-economic correlatives which may influence either the marital age pattern of a population group or the specific age at marriage of an individual to a far greater extent than education itself. Again, both the amount of education received and the age at marriage may be conditioned by different sets of factors and the resultant of the interaction of those factors may act to hasten or delay marriage, depending on their influence upon the individual himself. In other words, it is logical that the same factors which are responsible for a low standard of living in the parental home may condition the children of such homes for a continuation under them. Education, social participation and other forms of acculturation being crowded into the background by economic influences, the natural urges find few agencies of sublimation and few forms of vicarious fulfillment. Children of socially impoverished environments are likely, therefore, to yield early in life to the natural predispositions toward marriage and a family of their own.

Married Youth Between 16 and 24. About one-third of the youth from the ages of 16 to 24 years, inclusive, was married, the differences between rural and urban groups being negligible (Table 27). The proportion of married females exceeded that of married males by two and one-half times. Females usually marry at an earlier age than males, but in relief families the economic stress is an important reason for daughters leaving the home. The marriage venture appealed to proportionately more urban than rural males and to more rural than urban females.

Table 27.—Number and Percent of Married Males and Females 16 to 24 Years of Age in Rural and Urban Relief Households.

Sex Group	RELIEF PERSONS 16 TO 24 YEARS OF AGE		
	Total	Rural	Urban
Total Persons	922	624	298
Males	495	341	154
Females	427	283	144
Total Married	307	209	98
Males	98	65	33
Females	209	144	65
Percent Married	33.3	33.4	32.9
Males	19.6	19.1	21.4
Females	48.9	50.9	45.1

Occupations of Young People. In reviewing the data presented in Table 18, differences in occupational status between the household heads from 16 to 24 years of age and other heads were not conspicuous, considering age as a factor. One-fourth of the heads in this age group were farm tenants and about one-half were in the laborer classifications. One in ten reported "no usual occupation," indicating a lack of experience in any line of work.

The data presented up to this point indicate that the general literacy base of the relief population as a whole has risen noticeably in going from the older to the younger generation. Less than 1 percent of the young people 16 to 25 years of age had never completed the first grade in school as compared with almost 5 percent of the relief household heads. About 28 percent of the males and 18 percent of the females in the younger group as compared with 50 percent of the older household heads had stopped school before reaching the eighth grade; approximately 30 percent of those in both groups had quit school at the end of the eighth grade. In the younger age group 30 percent of the males and 38 percent of the females as compared with 13 percent of the older family heads had gone to high school. The proportions of both groups who attended college were negligible.

No doubt, the parents were anxious to have their children reach a higher grade attainment than they themselves received. However, it is not improbable that improvements made in the school system by the State, the passage of compulsory school laws, and other factors in the cultural media in which the younger persons were reared may have been as much responsible for their superior educational achievements as their home influences or even more. It is a known fact that in the short period of a single generation Oklahoma was transformed from an almost uninhabited region into a highly integrated and complex cultural area.

In spite of the positive changes in cultural accommodation which are seen in the youth as compared with the older relief population, there are certain untoward indications. First, those on the lower socio-economic

levels seem to be in the act of recapitulating the family life patterns of their parents. Second, from all indications visible on the surface, it appears that conditions which beget poverty and dependency are self-generating and self-perpetuating, unless this vicious circle can be broken by some external force. That is, population born and nurtured in such an atmosphere seems unable to extricate itself from those conditions except by almost imperceptible degrees. Third, with the rapidly changing technologies which have come into being it grows increasingly difficult for those whose main support is the labor of their bare hands to rise above the levels of their origin. Even though the education of the population in terms of hours spent in school has increased much during the past 30 years or so it remains an open question whether, considering the revolutionary changes in technology which have occurred simultaneously with the spread of education, the educational equipment for the youth in this study is as adequate for their needs in life as was that of their parents who lived under a simpler socio-economic order.

PART IV

ECONOMIC STATUS OF RELIEF HOUSEHOLDS

Essentially the relief problem is resolved into two aspects, (1) the inability of a family to earn currently an income sufficiently large to gratify its elemental wants, and (2) the depletion of assets to such a point that deficits in current earnings cannot be made up by drawing upon past accumulations. In many cases depletion is the result of low earnings in recent years, the families having disposed of their possessions to provide for their living. However, the overwhelming majority of relief cases have always maintained a hand-to-mouth existence, never accumulating any more than a minimum of farming equipment or household furnishings. Credit, not cash, has formed the basis of family and farming operations, with the consequent sacrifice of any chances for saving. The very nature of such a family economy suggests dependency.

Farm or Home Ownership. Figures on farm and home ownership verify previous statements regarding capital savings and credit. Only 366, or 24 percent, of the families in the sample reported ownership of home or farm (Table 28). The average purchase price was \$358, the amounts ranging from \$215 for the farms to \$511 for homes of city residents. In the population studied here 30 percent of the village, 24 percent of urban, and 13 percent of the open country families were owners.

It may be noted further that assessed values are in disagreement with purchase prices. Possibly this is due to the reporting of only the first or accumulated payments in the case of farm owners, since it is uncommon for farms to be purchased outright. Also, assessed values of property were scaled down during the depression period. This leads to the explanation that assessed values are more typical of the true values of property than are purchase prices. However, assessed valuations of property are usually arrived at on a basis of from 40 to 60 percent of its actual value. By correcting the figures given here on assessed values to allow for under-assessment a truer idea of the relationship shown can be formed than is possible by using only the crude data.

Table 28.—Number of Families Reporting Farm or Home Ownership With the Average Assessed Value, Purchase Price, and Mortgages Reported, by Residence.

Residence	Total Number Reporting Ownership	Average Assessed Value	Average Purchase Price of Unit	Number Reporting Mortgages	Average Size of Mortgage Against Mortgaged Property
All residences	366	\$314	\$358	130	\$591
Open country	119	576	215	72	813
Village	107	154	318	26	285
Town	25	294	436	6	103
City	115	233	511	26	397

Size of Farm Unit. A common reason given by the farm population for the need of relief is that small sized farms are not capable of producing a living for the family. Admittedly other limiting factors are present, but when 47 percent of the farm operators are located on farms having less

than 50 acres, and an additional 28 percent have farms ranging from 50 to 99 acres, the truth of the claim can be fully visualized.¹ Referring to Table 29, it is observed that 63 percent of the owner as compared with only 40 percent of the tenant household heads lived on farms of less than 50 acres in size. As would be expected, it is easier to rent larger acreages than to own them. Also, it is logical to expect that owner farmers on relief would be those occupying under-sized and uneconomical farm units.

Table 29.—Distribution of Farm Operators Receiving Relief According to Acreage in Farms.

Acreage in Farm	ALL OPERATORS		OWNERS		TENANTS	
	Number	Percent	Number	Percent	Number	Percent
All farms	480	100.0	166	100.0	314	100.0
3 to 9 acres	10	2.1	2	1.2	8	2.6
10 to 19	30	6.2	17	10.2	13	4.2
20 to 49	188	39.1	85	51.2	103	32.8
50 to 99	132	27.7	38	22.9	94	29.9
100 to 17480	16.6	17	10.3	63	20.0
175 and over	18	3.7	2	1.2	16	5.1
Acreage Unknown	22	4.6	5	3.0	17	5.4

Livestock. Added to the problem of the small farms in this study were the gross deficiencies in livestock. Nearly one-third and one-fourth of the farm owners and of tenants, respectively, owned neither horses nor mules (Table 30). Only 63 percent of all farm operators included in the study kept milk cows. Cattle, other than milk cows, were only found on approximately one-fourth of the farms. Hogs were listed by three-fourths of the owners and a somewhat smaller proportion of tenants.

About one-eighth of the rural non-farm households had workstock. Milk cows and hogs were reported respectively in one-fourth and one-fifth of these households, which no doubt proved a valuable resource in producing the family living. Urban households were short on livestock, although over one-tenth of the households possessed at least one milk cow.

For the households which kept poultry the flocks were not large enough to provide more than enough eggs and meat for home use. One-eighth of the farm families had no chickens and three-fifths had flocks of 60 head or less. Fewer than one-tenth of the households listed 100 head or more. Approximately one-fifth of rural non-farm and urban households owned poultry.

¹ The 1935 Farm Census gives an average per acre value of land and buildings of less than \$24.

Table 30.—Number of Farm and Non-Farm Households Reporting Livestock.

Kind of Livestock and Tenure	Total House- holds Reporting	NUMBER OF LIVESTOCK, ALL KINDS EXCEPT POULTRY									
		None	1	2	3	4	5	6-7	8-9	10-11	12 and Over
Farm Owner	166										
Horses and Mules		53	20	54	22	11	2	4			
Milk Cows		26	38	29	17	13	9	20	7	7	
Other Cattle		127	8	7	10	2	6	4	0	1	1
Hogs		37	16	28	17	19	12	21	6	6	4
Farm Tenant	314										
Horses and Mules		80	23	117	46	25	11	7	3	2	
Milk Cows		68	71	55	42	24	15	22	8	5	4
Other Cattle		236	27	18	13	7	4	7	1	1	
Hogs		98	34	41	25	22	23	25	16	14	16
Rural Non-Farm Households	446										
Horses and Mules		388	11	35	8	2	2				
Milk Cows		340	86	8	4	5	3				
Other Cattle		439			2	4		1			
Hogs		359	25	22	8	12	2	11	3	1	3
Urban Households	585										
Horses and Mules		568	7	6	4						
Milk Cows		524	53	6	1	1					
Other Cattle		574	9	1	1						
Hogs		575	4	3	1		1				1
		NUMBER OF POULTRY									
		None	1-20	21-40	41-60	61-80	81-100	101-120	121-140	141-160	Over 160
Farm Owner	166	1	34	43	30	12	32	4	3	3	4
Farm Tenant	314	59	44	89	57	23	17	4	2	15	4
Rural Non-Farm Households	446	314	21	39	34	15	11	4	3	4	1
Urban Households	585	510	11	36	13	11	1	1	1		1

Farm Implements. From a close inspection of the individual schedules, it was concluded that scarcely one-fourth of the farm operators possessed a minimum of farm implements, such as a combination of plow, harrow, cultivator, and wagon. It is also a known fact that much of the machinery owned by relief clients is in such a state of disrepair as to be of little practical use.

In Table 31, with a single exception, a large majority of farm operators were without the implements listed. Over one-half of the owners and two-fifths of the tenants had plows, but the number having other implements was small. Only one-seventh of all households reported ownership of automobiles.

Table 31.—Number of Farm and Non-Farm Households Reporting Farm Implements, Automobiles, and Trucks.

NUMBER OF FARM AND NON-FARM HOUSEHOLDS REPORTING						
Kind of Implements and Tenure	Total Number Reporting	NUMBER OF IMPLEMENTS				
		None	1	2	3	4
Farm Owner	166					
Plow		73	75	14	4	
Harrow		106	58	2		
Cultivator		95	71			
Rake		161	5			
Tractor		164	2			
Wagon		96	70			
Truck		158	8			
Automobile		106	60			
Farm Tenant	314					
Plow		175	108	26	4	1
Harrow		231	80	2	1	
Cultivator		176	119	16	1	2
Rake		300	13	1		
Tractor		312	2			
Wagon		217	93	3	1	
Truck		308	6			
Automobile		237	77			
Rural Non-Farm Households	446					
Plow		427	12	7		
Harrow		436	9	1		
Cultivator		432	12	2		
Rake						
Tractor						
Wagon		431	14	1		
Truck		426	20			
Automobile		412	34			
Urban Households	585					
Wagon		583	2			
Truck		558	27			
Automobile		536	49			

Debt Analysis. Debts of relief households were relatively small because of restricted credit. Lack of regular employment, small capital, and questionable integrity are reasons attributed to this situation. Thus it is not surprising to find the average debt for rural households reporting debts was \$188 and for urban households only \$94.

Table 32.—Percent of Households Which Reported Debts of Specified Type and Average Amount of Debt Owed by Indebted Households for Each Type of Indebtedness.

Type of Indebtedness	PERCENT OF HOUSEHOLDS REPORTING DEBT*			AVERAGE AMOUNT DEBT REPORTED BY DEBTOR HOUSEHOLDS		
	Total	Rural	Urban	Total	Rural	Urban
All types of debt	64.1	72.8	51.8	\$159	\$188	\$ 94
Mortgage, real estate	11.8	16.3	4.8	372	393	257
Loans and chattels	13.6	19.9	3.7	148	151	130
Groceries	30.9	30.5	31.6	29	30	27
Rent	15.6	12.5	20.5	25	31	20
Clothing	.7	.9	.5	11	11	14
Furniture	3.5	3.2	3.9	29	26	34
Fuel, water and lights	3.3	1.8	6.8	10	7	11
Health	17.3	19.7	13.5	58	53	71
Taxes	5.8	6.6	4.6	37	35	42
Miscellaneous	17.7	22.1	10.7	60	64	47
None	35.9	27.2	48.2	---	---	---

* Percentages overlap because a given household may have had indebtedness of several types.

Ranking next to real estate mortgages in average amount for indebted households were debts secured by chattels, or the advancement of credit. It is apparent from the data that the proportion of households having this incumbrance varied little from those with the real-estate lien.

Obligations for food were the most frequent among the family bills. Slightly over 30 percent of both rural and urban households owed an average of \$27 and \$30, respectively, for this item. Of the urban households 21 percent were in arrears \$20 on the average for rentals. However, medicine, hospital, and burial debts bulked large, with 20 percent of the rural households indebted an average of \$53 and 14 percent of the urban households averaging \$71.

Clothing, furniture, light, heat, and fuel expenses either had been curtailed or furnished by relief agencies, for the proportion of households reporting such debts were smaller than expected. Unlike food—clothing, furniture and other items of these types may be said to have a large degree of psychic utility. That is to say old and faded clothing, for example, may afford equally as much physical comfort as a new garment although it may not have as intense appeal to the esthetic senses as new clothing. However, in cases of abject poverty, it is easier to postpone the satisfaction of a desire for new clothing for a much longer time than is possible in the case of food. Hence, the amount of debt incurred for the purchase of food gives a more satisfactory indication of the pressure of want than that for clothing, furniture and other items for which substitutes are more easily found than for food. Similarly, the property-tax burden did not weigh heavily upon the great majority of relief cases probably for the reason that few of them possessed property greatly in excess of the legal exemption value allowable

for taxation. Accounts payable for feed, gasoline, and other miscellaneous items averaged \$64 for 22 percent of the rural households and \$47 for 11 percent of the urban households. Approximately 36 percent of all relief households listed no debts, the urban centers having 48 percent of debt-free households as compared with 27 percent of the rural households.

Relief Housing. Limited data prevented a detailed description of the condition of the relief homes. However, case workers graphically described the deplorable conditions in narrative histories of individual cases. Roofless or sieve-like shelters were found frequently. Windows and screens were often missing while over-crowding of rooms was prevalent. Vermin and filth abounded, and chickens, pigs, dogs, and cats were frequently as much "at home" inside houses as outside. In extreme instances, families lived in dugouts, hog-houses, and barns. Outdoor toilets, if used at all, were often wholly unsanitary. In contrast with this sorry picture of the worst homes, a small minority of dwellings were depicted as being "spotlessly clean," boasting "lye-scrubbed floors," "dainty curtains made from sugar sacks," excellent home-built tables and chairs, and beautiful flowers.

An attempt was made to classify rather arbitrarily from the general descriptions contained in case histories the quality of the house, its furnishings, and cleanliness. The rural and urban comparisons are presented in Table 33. Of all houses, 31 percent were classed as "poor"; 48 percent were equally divided between "good" and "fair"; and but two percent were termed as "excellent." Admittedly, these descriptions may have been dependent upon the individual tastes of field workers to a large extent. However, qualitative and subjective judgments, when they are the outgrowth of ages of human experience, cannot be discarded wholly as having no value whatever in an analysis of a purely human situation. The evaluations are given for whatever they may be worth.

Table 33.—Physical Aspects of Relief Households Based on Classifications by Social Case Workers.

Classification of Households	NUMBER OF HOUSEHOLDS			PERCENT OF HOUSEHOLDS		
	Total	Rural	Urban	Total	Rural	Urban
All households	1511	926	585	100.0	100.0	100.0
Excellent	49	22	27	3.2	2.4	4.6
Good	366	222	144	24.2	24.0	24.6
Fair	365	244	121	24.2	26.3	20.7
Poor	468	295	173	31.0	31.9	29.6
Unknown	263	143	120	17.4	15.4	20.5

Table 34.—Physical Aspects of Relief Households Classified According to Occupational Groups.

Usual Occupation	Total Households	PERCENT OF HOUSEHOLDS				
		Excellent	Good	Fair	Poor	Unknown
All occupations	1511	3.2	24.2	24.2	31.0	26.3
Farm owner	166	4.2	31.7	29.5	24.1	11.5
Farm tenant	314	2.9	27.1	29.6	28.0	12.4
Farm laborer	90	1.1	21.1	23.3	32.3	22.2
Miner	138	1.6	21.8	19.7	39.3	17.6
Unskilled laborer	406	2.0	19.9	22.4	34.5	21.2
All other occupations	183	8.7	28.4	21.3	25.2	16.4
No usual occupation	164	3.0	22.6	21.3	31.1	22.0

To associate the physical aspects of houses with various occupational groups, Table 34 was prepared. In this table is shown that white-collar workers, or "all other occupations," had the largest proportion of "excellent" homes found in any occupational class. On the other hand, a larger proportion of miners lived in "poor" homes. Closely similar proportions of farm laborers and unskilled laborers had houses rated as "good," "fair," and "poor." Farm owner and tenant operators had better homes on the average than other manual labor groups.

Reasons Assigned for Need of Relief. Various reasons given for the need of relief are superficial in character, and underlying causes of more profound significance justify assistance. For example, the drouth of 1934 resulted in great increases of relief rolls. But the effects touched non-relief farm families as well. Why were certain families affected more seriously than others? Obviously, the lines of demarcation which made some families more resistant to the drouth are traceable to deep-seated social and economic factors. Therefore, in analyzing reasons for extending relief, the fundamental factors were sought to bolster the incidental drouth conditions.

Unemployment was given twice as frequently a justification for seeking relief as drouth, which ranked second in frequency (Table 35). In the urban centers 67 percent of the heads of households were on relief because they were without jobs, while only 32 percent of the rural heads came under this classification. Although it was known that many farm operators receiving relief depended to a considerable extent upon income from labor off the farm, this fact was ignored in classifying the cases.

It was presumed that the drouth cases, which nominally accounted for 33 percent of the total rural relief load, were mostly borderline farm families who would probably be dismissed from the relief rolls when the 1935 crops were harvested.

Table 35.—Reasons Assigned for Need of Relief Reported by Heads Classified According to Residence.

Reason for Need of Relief	NUMBER			PERCENT		
	Total	Rural	Urban	Total	Rural	Urban
Total reasons reported	1511	926	585	100.0	100.0	100.0
Unemployment	689	297	392	45.6	32.1	67.0
Drouth	309	309	---	20.4	33.3	---
Widows	155	62	93	10.2	6.7	15.8
Old age	136	75	61	9.0	8.1	10.4
Small farm	77	77	---	5.1	8.3	---
Disability and sickness	63	35	28	4.2	3.8	4.8
Inadequate farming equipment	36	36	---	2.4	3.9	---
Insufficient farm income	33	22	11	2.2	2.4	2.0
Poor land	13	13	---	.9	1.4	---

Although unemployment and drouth were the assigned causes of distress in two-thirds of the cases, other noteworthy reasons for need among rural and city families were widowhood and old age. In the urban sample 16 percent, as against 7 percent of the rural families, received relief because the head was a widow, while 10 percent of the urban and 8 percent of the rural heads were dependency cases due to senility. Small farms, inadequate farming equipment, insufficient farm incomes and poor land combined were credited with being responsible for 16 percent of the rural cases.

Relief History and Amount of Advances. The ERA began the disbursement of relief in Ottawa county during March, 1934, and at the time of survey, the organization had been operating ten months. According to Table 36, 20 percent of the total cases had received relief for four months, though not necessarily consecutively. This reflected in part the addition of drought cases in August, as do the months immediately preceding and following. The bulge in the percent of households receiving assistance for eight months

Table 36.—Distribution of Households Receiving Relief in December 1934 According to Number of Months Assistance Had Been Given by the ERA.

Number of Months Relief was Received	Number of Households	Percent of Households
Total	1511	100.0
1 (March)	73	4.8
2 (April)	115	7.6
3 (May)	175	11.6
4 (June)	303	20.0
5 (July)	219	14.5
6 (August)	105	6.9
7 (September)	140	9.3
8 (October)	204	13.5
9 (November)	143	9.5
10 (December)	34	2.3

Vertical Scale: Number of Months per Person Cash Relief was Received.

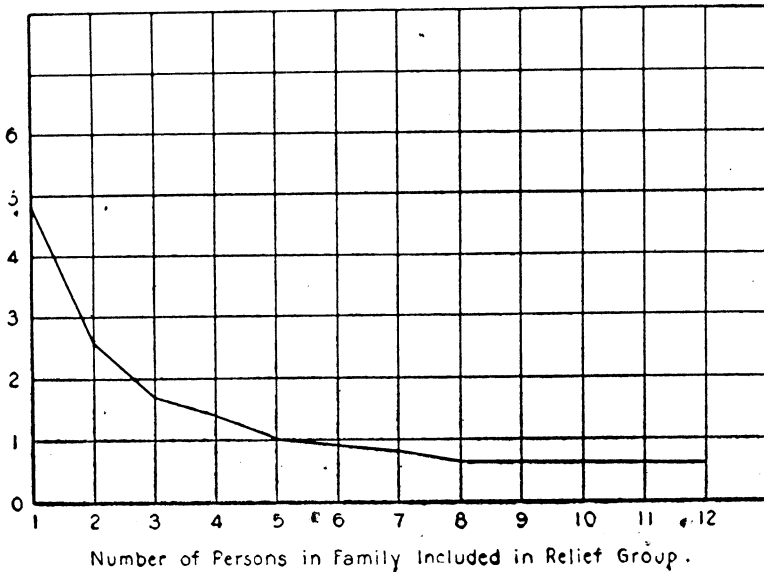


Fig. 7.—Number of Months Persons Received Relief from ERA, by Size of Relief Group.

probably was due to the wholesale acceptance of cases experienced in May, 1934, when families began to realize the opportunity offered by the assisting agencies. This situation apparently was curbed in June and July, but the drouth accentuated the need for relief in the Fall months.

Vertical Scale = Dollars of Cash Relief.

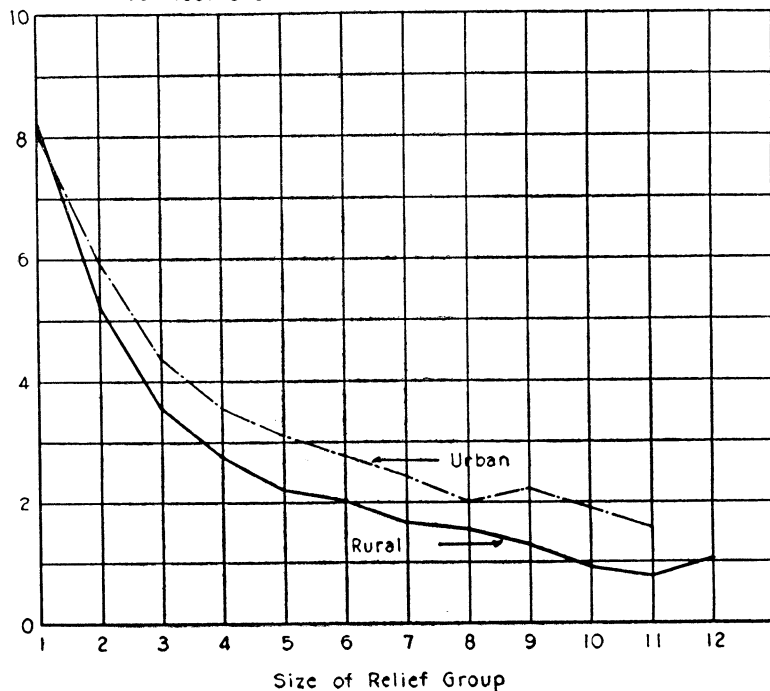


Fig. 8.—Amount of Cash Relief Given per Person During December 1934, According to the Number of Persons in Relief Groups.

One of the chief criticisms of the ERA heard frequently was that in the granting of relief assistance small-size families were favored at the expense of large families. The data available appear to support the contention as may be seen from an examination of Figure 8, and Tables 37 and 38. On the average in one-person relief groups \$814 were received per 100 persons and each person had been on the relief rolls 4.8 months. At the other end of the scale, a twelve-person relief group had been advanced \$79 per 100 persons in December, 1934, while the length of the relief period was .6 months per person. It was observed that, as a rule, the urban relief groups received more assistance than the rural relief households.

Table 37.—Number of Months Persons Received Relief From ERA Classified According to Size of Relief Group.

Size of Relief Group	Number of Persons in Each Group	Total Number of Months Relief Given	Average Number of Months Relief per Person
Total	5467	8004	1.5
One person	182	875	4.8
Two	706	1856	2.6
Three	921	1570	1.7
Four	932	1297	1.4
Five	885	917	1.0
Six	720	686	.9
Seven	427	360	.8
Eight	328	213	.6
Nine	171	107	.6
Ten	70	45	.6
Eleven	77	49	.6
Twelve	48	29	.6

Table 38.—Amount of Cash Relief Given During December, 1934, According to the Number of Persons in Relief Groups.

Number of Persons in Relief Group	AMOUNT OF CASH RELIEF GIVEN			AVERAGE AMOUNT GIVEN PER 100 PERSONS		
	Total	Rural	Urban	Total	Rural	Urban
All groups	\$17,354	\$9,936	\$7,418	\$318	\$273	\$405
One	1,481	704	777	814	819	809
Two	3,907	1,942	1,965	553	519	592
Three	3,533	2,069	1,464	384	354	436
Four	2,862	1,554	1,308	307	276	355
Five	2,215	1,302	913	250	221	309
Six	1,634	1,003	631	227	204	277
Seven	763	593	170	179	166	243
Eight	541	428	113	165	157	202
Nine	247	187	60	144	130	222
Ten	65	65	---	93	93	---
Eleven	68	51	17	88	77	155
Twelve	38	38	---	79	106	---

PART V

REHABILITATION PLANS

Relief Problems. The long accumulating mal-adjustments of the social and economic system were accentuated and brought to a crisis by the depression. Nation-wide attention was directed to their magnitude by the sponsors of the New Deal and the subsequent action program which embraced unemployment relief, resettlement of families, assistance to underprivileged youth, and numerous other measures greatly broadened the scope of organized relief, heretofore limited largely to private agencies whose activities included old age assistance and other forms of direct relief to indigent cases.

Relief on such a huge scale has augmented rather than lessened dependency among the population at the lower income levels probably because the human and economic resources have not been maintained in equipoise. The point has been reached now where the sudden withdrawal of public subsidy from the needy would be exceedingly difficult. Added to this disturbing circumstances is the fact, more or less well known, that private industry can not be expected to employ men who, by age or lack of training or for any other reason, may not be fitted for jobs above the most common grades of unskilled labor.

Rehabilitation Problems and Prospects. This study will have failed in its purpose if it does not point out possible adjustments in the socio-economic organization of Ottawa county. The foregoing analyses have sought to delineate the factors that render impossible a recovery through the operation of so-called natural or unguided economic forces. The discussion here will be devoted to applicable means of achieving a more secure economy for the relief population, taking into consideration these salient factors:

1. The mining industry cannot be counted upon to reemploy miners over 45 years of age or those who are physically incapacitated. One-third of the 1366 male heads of families in the sample were between the ages of 45 and 64.
2. Agriculture cannot continue to absorb the surplus population through the process of increasing the number of units at the expense of reduced size without lowering the already meager plane of living.
3. The present size of farms and inadequacy of farming equipment possessed by operators on relief precludes the possibility of self-support without either an increase in the size of farm units or a substantial income from non-farm pursuits, or perhaps both.
4. Limited formal education of relief heads, along with other social weaknesses, suggests the futility of expecting families again to become self-supporting under more favorable economic conditions without some form of guidance.
5. A special problem arises in connection with the families with female heads, (245 female heads were reported in the sample) only 11 percent being eligible for old age assistance under the Social Security Act. There were 179 female heads in the sample who had children living in the household, and hence should be eligible for some form of aid to widows and dependent children.
6. The undeveloped natural resources are not sufficient to warrant the investment of profit-seeking capital.

It may be observed that, while the problems involved are chiefly economic, the underlying causes emanate from social forces. Therefore, county planning calls for social reforms in conjunction with economic readjustments. Any program of reconstruction must proceed slowly, the developing processes requiring about the same length of time as was consumed in creating the ills. Furthermore, the structural changes introduced should not be allowed to destroy the useful functions of the existing economy.

A Program for the Unemployed. The author has envisaged a program for the unemployed which seeks to restore them ultimately to a position of at least partial self-sufficiency. Whether it would assume permanency would depend upon the continuing need. The assumptions that underlie the necessity for the proposed plan are:

1. A majority of the unemployed on relief are unfit for private employment by reason of advanced age, lack of natural ability, or deficient technical or vocational training and consequently have become wards of society.
2. It is conceivable that if the Federal Government continues a public works program such as is now in progress, the time might come when the demand for schools, roads, and other civic improvements would reach a point of saturation, thus creating unemployment for thousands in this country who have always regarded "public works" as their chief occupation.
3. No national, state, or local unit of government can continue the present rate of relief expenditures without jeopardizing both private and public credit. Therefore, of necessity, the government must attempt to shift the relief population from an exclusively consumptive to a partially productive role.

The goal in rehabilitation is to assist people in securing gainful employment and subsequent better living. Under the various unemployment relief programs, this objective has been attained partially by artificial means. Efforts should be made now not simply to stabilize wages and employment but to assure as a minimum a scale of income at least equivalent to present WPA earnings.¹ Admittedly, this standard falls far short of adequacy, but if the value of a worker's services can be raised to this minimum the factitious methods can be economically justified. The validity of subsidizing individuals, corporations, or even nations in order to achieve specific ends is highly controversial, but the continued use by every administration is a strong defensive argument in its favor.

The problem of rehabilitation is the utilizing of inefficient human and material resources in production within a fiercely competitive social order. How well this has been demonstrated to the discouragement of those who have attempted social planning. But, aside from super-imposing or grafting these low producers onto the existing economy, the only other alternative seems to be to rebuild the system according to some scheme which would eliminate competition and the profit seeking motive, and this is not in accord with present thinking. Furthermore, the latter suggestion does not appear practicable as long as the existing pattern of psycho-social values such as are typified under a theoretically individualistic system of industry prevails and as long as human nature remains what it is now and what it has always been. Therefore, a makeshift mechanism in the form of relief subsidies for the benefit of the weaker members of society, supported at least in part by a paternal government, appears to be an expedient which will have to be employed until some wiser plan can be evolved.

¹ Under the WPA wage scale prevailing in Ottawa county since July 1936, unskilled laborers receive \$26.40 per month; intermediate, \$39.60; and professional and technical \$58.30.

At this point the data in Table 39 are presented to show the possible rehabilitation plans the social workers in Ottawa county believe their clients are best qualified to execute. The heads were classified by occupation and whether they were under or over 65 years of age. The case aides were instructed to report male or female heads capable of working in subsistence gardens or higher classifications if health and ability permitted. No doubt there are gross inaccuracies in the results obtained by the method employed. However, there are no other data available on the point in question and they are used only as a rough beginning.

Table 39.—Percentage Distribution of Relief Heads Under and Over 65 Years of Age According to Possible Rehabilitation Plans, by Usual Occupation.

Rehabilitation Plan Suggested	PERCENT OF HOUSEHOLD HEADS RECOMMENDED FOR SUGGESTED PLAN		
	All Heads	Heads Under 65 Years of Age	Heads 65 Years of Age and Over
All types	100.0	100.0	100.0
Cash crop farm	15.0	15.3	10.9
Subsistence farm	13.4	14.1	7.5
Subsistence garden	59.4	61.1	44.2
None	12.2	9.5	37.4

It may be significant that commercial farming is not conceived as practicable by case aides who were intimately acquainted with the situation at hand. Only 15 percent of all relief heads under 64 years of age were recommended as suitable for operating cash crops or commercial farms. A more detailed study of the data than is given in Table 39 shows that within the age group specified, 34 percent of the farm owners, 45 percent of the farm tenants and 13 percent of the farm laborers were thought to be adaptable to commercial farming. Miners were rated as poor prospects for either cash crop or subsistence farming classifications, and were recommended almost entirely for subsistence gardening. This concurs with experience in other mining areas. Judging from lack of both experience and capital equipment for farming possessed by miners, agriculture did not appear to offer for them more than a means of supplementing wages with foods which could be produced with a minimum of land and equipment.

The proportions of relief heads qualified for subsistence and for cash crop farms were thought to be about equal. Less than one-fourth of the farm laborers came under this heading and unskilled laborers, miners, and non-agricultural groups were represented in small proportions. The general opinion held by the case aides was not that relief heads had no experience, but that they were deficient in equipment and managerial ability adaptable to agriculture.

Of the relief heads under 65 years of age, 61 percent were classified as being capable of working on subsistence gardens. This group included most of the urban and rural non-farm relief heads. Roughly, 80 percent of the miners, unskilled laborers, white-collar workers, and those reporting no usual occupation fell within the group. Indicative of the misfits now on farms was the reporting of 21 percent of the farm owners and 24 percent of the tenants, respectively, as being adaptable only to subsistence gardening.

"No plan" was reported for relief heads handicapped by physical and mental infirmities. This group included 10 percent of all heads 64 years of age and under. Heads having no usual occupation, the white-collar workers, and miners were largely represented in this classification. A method for taking care of persons who are ineligible under the Social Security Act or the public works programs remains to be worked out.

Certain tentative conclusions can be made from this tabulation. First, agriculture, as a possible measure for alleviating the unemployment problem in Ottawa county, offers little hope, unless the government assumes the role of entrepreneur. Second, it would seem extremely unwise to attempt the rehabilitation of miners and unskilled and white-collar workers on farms in their present state of inexperience and lack of managerial aptitude.

On the relief rolls in Ottawa county are farmers, miners, mechanics, plumbers, carpenters, foremen, concrete workers, barbers, shoe repairers, salesmen, seamstresses, cooks, waitresses, and nurses, continuing through a long list of occupations represented. The problem is essentially one of finding a way by which such skills as these people may possess can be combined into a coordinated working entity capable of self-support.

In general, a single cooperative unit would seem practicable to centralize and coordinate activities and maintain low operating costs. The framework would embody the more essential trade and service institutions now patronized by relief clients in procuring the necessities of life. Suggested integral units could be:

1. Farms

- a. Commercial farms, both individually and collectively operated types.
- b. Subsistence farms, up to 60 acres in size and operated principally as an individual part-time enterprise.
- c. Subsistence gardens, ranging from town-lot to 3 acres in size, either individually or collectively operated for the benefit of the urban and rural non-farm relief population.

2. Processing factories

- a. Canneries, to process and conserve farm products such as meat, vegetables, and fruits and dairy products.
- b. Woodwork and handicraft units, to provide for fuel, furniture making and repairing, garment-, mattress-, rug-, and broom-making. Tanning and leather processing might be developed to supplement shoe repair departments.
- c. Construction industries, to operate stone-block and brick works, using mine crushed rock, clay and building stone abounding in the county. Carpenters and plumbers would work under this division.

3. Buying and selling agencies, organized primarily as trading mediums for cooperators. Food, clothing, drugs, hardware, furniture, lumber, farm machinery would be available. All farm produce could be sold here.

4. Warehouses, for storing surpluses acquired by the buying agency would carry the reserves from year to year as a buffer against drought, storm, or other crop-destroying factors.

5. Employment agency, to perform the service of bringing together employer and laborer. It should be apparent by now that the cooperative would absorb surplus labor and should be the logical source for supplying labor demand.

6. Hospitalization, designed for promoting health of cooperating members at a reasonable cost.

7. Credit association, to make available not only credit but also all forms of insurance.

Membership Under the Proposed Plan. Membership would be drawn from the relief rolls or any WPA, state, county, or private agency on a volunteer basis. Each family accepted would have one working member between the ages of 16 and 64. The best case work methods would be used in determining eligibility for relief. Once accepted to membership, a co-operator would be subject to the regulations of the unit until he withdrew or was dismissed by group action. Appropriately, the inclusion of widows with dependents would be encouraged.

Supervision. Since financing will fall upon the government, the authority for directing activities should be vested therein. Careful supervision and strict discipline will be incumbent to assure even mediocre success. In other words, the dignity of labor must be restored. Efficiency in operation would be an absolute necessity. A system of rewards or recognition of merit could well be a definite incentive for progressive effort. The administrative personnel should consist of trained workers, preferably with civil service ratings. Cooperating members deserve to be given broader responsibilities as their efficiency improves. It is evident that the same degree of supervision is not necessary over all workers. A few will require temporary supervision; others probably must have complete supervision in their activities. Ideally, vocational education would be an adjunct to the actual operation. Obviously, a program of this kind will encounter many obstacles and will be slow of realization.

Financing. Subsistence farming is the core of this plan. Supplemental cash income would be provided through work off the farm. In general this has been the method in vogue for many years, and culminated only when opportunities for outside employment dried up. Unfortunately the outlook for an expansion of activity in the lead and zinc mines or in other industries now operating in Ottawa county which will be able to utilize all the existing human resources appear extremely discouraging. Thus the national leadership will be obliged to seek other channels for employment. Of first import is the housing problem.

If the government can build houses for as low as \$1000 to \$1500, a demand of huge proportions may be uncovered. Available credit would gauge the demand somewhat, but one thousand new houses are needed in the county to replace mining shanties and homes in the poorer sections of the cities and smaller centers.

The individually-operated commercial farms, it is thought, will be conducted by the better operators now living on farms and whose chief needs are temporary financial assistance and supervision. The chief difference between the present government practice of making rehabilitation loans to such farmers would be in the extending of supervision over farming activities. More clearly, it would be advantageous to the government to protect its loans by giving the borrower full benefit of technical and managerial skill. Aside from loans, the government might well assist the farmer-cooperator by engaging him in a land use program, including erosion control, reverting poorer lands to grass, and similar practices on his own farm. Extra income could accrue to the operator in this way. Presumably the Soil Conservation Service and Resettlement Administration are shaping their projects in this direction.

Subsistence farms, privately operated and ranging up to 60 acres in size, are intended to furnish nearly all of the food, wood, and shelter for the

operator. Beyond that, families must rely upon the government or private industry for cash income. The same applies to subsistence gardens, except that increasing amounts of food would necessarily come from the communal source.

The complications surrounding collectively-conducted farms are justified by the low labor cost. Assuming a forty-two hour week, one-half the time might be spent in producing family food by working in the collective farms or canneries. From a practical standpoint, however, the shifting from one type of work to another is sometimes demoralizing, and those adapted to farm work should spend all their time on the farm under strict supervision. Others working on non-farm projects could be employed the full forty-two hours period on that work.

In addition, two adjunct services would be operated for the benefit of and without cost to the members. First, hospitalization, medical attention and periodic compulsory physical examinations should be available. Second, to counteract the argument advanced by critics and members alike that possibility of work outside the cooperative is impossible under this set-up, an employment agency is proposed to assist members in securing employment. Private and public employers would be urged to utilize this agency. Presumably they could not request labor for wages below the prevailing scale for similar work in the community. As a means of reducing the membership, or at least forcing members to accept outside employment when offered, lists would be rotated in order to give all workers equal opportunity. Refusal to accept such work would entail the deduction of an amount equivalent to outside earnings from the salary received through the cooperative.

Operation. The features of the proposed cooperative are. (1) The stress on subsistence farms and gardens; (2) the attempted self-supporting industries; and (3) the broadening of supervisory powers over all project activities in order to bring about more effective results from labor.

The county already has its WPA packing plant and commodity warehouses. These can be converted into the assembling and processing centers for all vegetables, fruits, meats, and surplus grains. Theoretically, the quantities should be sufficient to create reserves for year-round use. It is in this phase of the operation that the government should be able to effect substantial savings.

The problem of disposing of products from industrial projects presents formidable difficulties. However, the development of low cost housing projects throughout the state could easily consume the entire output of stone-blocks made from mine chat.

The social problems in the county give rise to the hope that public consciousness will demand a wider use of educational facilities. Although illiteracy in the county, according to the Federal Census of 1930, amounts to 2.4 percent of the persons 15 years of age and over, efforts to increase school attendance should be intensified. A government project is needed to provide for a truancy officer in every school district whose duties would be to report the reasons for absence to the County Superintendent and to promote better attendance. Vocational training courses should be expanded in the school curriculum.

Unfortunately, moral laxity in mining communities did not diminish with the advent of the depression. Whether this problem will tend to retard social progress noticeably is subject to speculation; but a stricter observance of the conventional social code appears as a distinct need. Better housing, an effective health program, a planned community recreation program, and possibly a widening church influence, are offered as means for counteracting unwholesome social forces prevailing.

Several long-time adjustments may be expected to improve the economic distress in the county. In the first place the county is over-populated and a 10 to 20 percent reduction, principally among the industrial groups, would be desirable. Such an emigration would relieve agriculture of a pressure that is thwarting the more favorable economic processes. The present tendency to reduce the size of farms and increase their number will offer only a temporary respite from the depression, by providing food, shelter, fuel and water, but in the long run the economic welfare of these additional farmers will be impaired and that of the longer resident farmers as well.

Agricultural recovery, both in prices and crop yields, should stimulate business and eventually revive employment opportunities. However, it is re-stated for emphasis that a large portion of the farm population now succored by government subventions never can attain a self-maintaining basis through their own efforts because of social weaknesses.

RELIEF CASE RECORD

Name _____ Case No. _____ Schedule No. _____
 Address _____ C T V C County _____ Race _____

1. Members of Household

No.	Sex	Birth Date	Education Last Grade	Chronic Disability	Regular Trade	Present Occupation
Man						
Wife						
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

2. Others in Household

No.	Sex	Relation to Family	Occupation
1			
2			
3			
4			

3. Children Away from Home

No.	Sex	Relation to Family	No. Deps.	Occupation
1				
2				
3				
4				

4. Last Three Steady Jobs Head of Family

Kind of Job	Date Began	Date Ended	Weekly Wages
1			
2			
3			

5. Mobility

Moved to Present Address _____

6. General Questions

Date Married _____
 Social History _____

Physical Aspects of HH _____

11. Tenure

Status	Acreage	House
Owner		
Renter		
Other		

7. Est. Minimum Weekly Needs

Food \$ _____
 Shelter _____
 Clothing _____
 Fuel _____
 Light _____
 Medical _____
 HH Necessities _____
 Other (Itemize) _____

 Total \$ _____

9. Other Financial Data

Assessed Value of Home \$ _____
 Pur. Price of Home _____
 Mort. on Home _____
 Unpd. Bal. on Home _____
 Equity in Home _____
 Savings _____
 Other Property _____
 Insurance _____

 Total \$ _____

12. Livestock

Horses and Mules _____
 Milk Cows _____
 Other Cattle _____
 Hogs _____
 Poultry _____
 Other _____

8. Est. Weekly Income

Wages of Man \$ _____
 Wages of Woman _____
 Children's Wages _____
 Boarders, Lodgers _____
 Pensions, Compan. _____
 Produce Sold _____
 Other (Itemize) _____

 Total \$ _____

10. Debts

Mortgage on Home \$ _____
 Chattel Mortgages _____
 Rent _____
 Groceries _____
 Furniture _____
 Other _____

 Total \$ _____

13. Farm Implements

Tractor _____ Rakes _____
 Plow _____ Other _____
 Harrow _____
 Cultivator _____
 Wagon _____

14. No. of Rooms in House

Type Financial Aid Needed
 Temporary Relief _____
 Permanent Relief Rehabil. _____

Total \$ _____
 Budget Deficiency _____
 Relief Rec'd in December _____

15. Reason for Relief:
 16. Household is qualified for
 17. Type Supervision Needed
 None Temporary Permanent
 Soc Agr Soc Agr

