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FORT HAYS KANSAS STATE COLLEGE STUDIES

GENERAL SERIES

NUMBER EIGHT

ECONOMICS SERIES No. 2

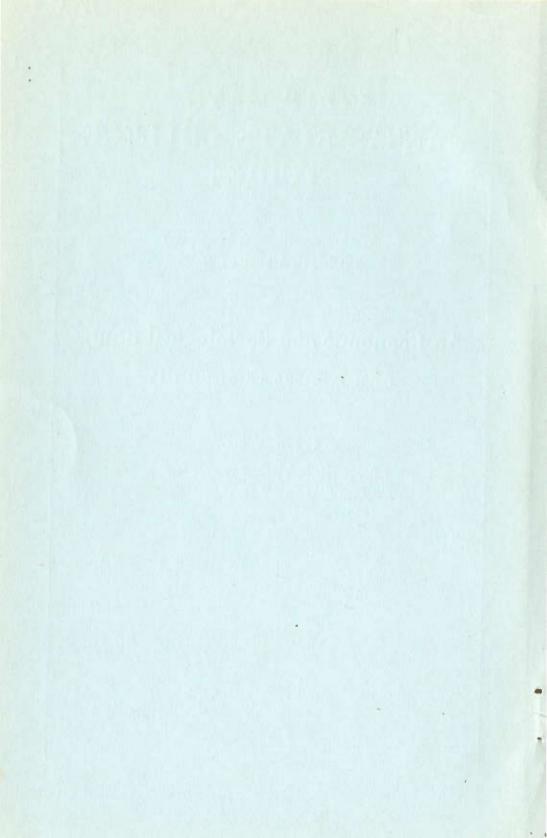
An Economic and Sociological Study of a Kansas Community

By VERNON T. CLOVER

Associate Professor of Economics, Department of Economics and Business Administration FORT HAYS KANSAS STATE COLLEGE



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FORT HAYS KANSAS STATE COLLEGE STUDIES

GENERAL SERIES

NUMBER EIGHT

ECONOMICS SERIES No. 2 F. B. STREETER, Editor

AN ECONOMIC AND SOCIOLOGICAL STUDY OF A KANSAS COMMUNITY

A PATTERN FOR THE STUDY OF ANY COUNTY OR SIMILAR AREA IN THE UNITED STATES

By Vernon T. Clover

Associate Professor of Economics, Department
of Economics and Business Administration

FORT HAYS KANSAS STATE COLLEGE



PRINTED BY KANSAS STATE PRINTING PLANT LEONARD MCCALLA. STATE PRINTER TOPEKA, 1945 20-4674 • •

PREFACE

This is a survey of Ellis county, Kansas. The purpose was to discover what information of importance is available in regard to the economic and human characteristics of this county and of similar areas throughout the United States for the prewar year of 1940. It is assumed that after the war we shall return to conditions and problems that will be the same in many respects as those existing immediately before Pearl Harbor. To be sure, in numerous industrial centers or in areas near military establishments abnormal growth or other maladjustments will have wraught great changes. It is quite likely, however, that the fundamental characteristics of the areas as they existed in 1940 will remain as important influences in economic and social conditions in the postwar years.

The general conditions dealt with in this survey include (1) population: Number, age, education, and occupational status; (2) housing facilities, including need for repairs; (3) agriculture: Number and size of farms, kinds of implements and vehicles, major sources of income, ownership status of operaters, tax load; and, (4) retail, wholesale and service establishments: Number, kinds, sales and pay rolls. In many surveys manufacturing would be a fifth subject for study. It is not discussed separately in the Ellis county analysis because it is of minor importance in that area.

All too often in area analysis and planning the necessity of studying the total set of conditions, material and human, that exists in the region, is overlooked. This particular survey, it is believed, could serve as a guide to some of the information that can be obtained for practically every county or equivalent area in the United States. The 1940 Census of the United States is the major source of information used. The Ellis county clerk was helpful with tax information and population estimates. The city clerk of the largest city in the county provided data about building activities.

In more detailed surveys carried on by local groups much additional information could be obtained from Chambers of Commerce, Agricultural Adjustment Administration committees, school authorities, city, county or state government officials and planning commissions, offices of the United States Employment Service, news-

paper editors, state tax authorities, labor union officials, and publications of the federal government's departments of Commerce, Labor, and Agriculture. At the end of this study there is a bibliography of sources of information and of handbooks upon methods of conducting area surveys. (See Appendix A.)

Each study before put in final form should be submitted to several responsible and well-informed persons who live in the area being surveyed. These persons often might be able to point out inaccuracies or to suggest items that should receive more study. The survey itself should be the work of interested groups, directed, of course, by one person who has had experience in such studies or is at least especially interested in the project.

The reader's attention is called to the "Table of Contents" in this study. Here his reading can be directed to the special subject matter in which he may be interested. A brief summary will be found in Chapter VI.

Vernon T. Clover.

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CHAPTER I

INTRODUCTION

Ellis county, Kansas, is located in the western central part of the state. Hays, its county seat, is approximately 147 miles east of the Kansas-Colorado state line, and 78 miles south of the Kansas-Nebraska boundary line. The map on the next page shows the location.

The population of the county was 17,508 in 1940, an increase of 10.1 percent from the 15,907 of 1930. In 1920 the total was 14,138. Hays had a population of 6,385 in 1940, or 36.5 percent of the total for the county. In 1930, Hays had 4,618 which was 29 percent of the county's population. The 1920 figures were 3,165 and 22.4 percent. These data show that the population of Hays is growing more rapidly than that of the county. Ellis City is the next largest town in the county. It had a population of 2.042 in 1940, as compared to 1,957 in 1930, and 1,876 in 1920. Victoria had a population of 884 in 1940, 637 in 1930, and 600 in 1920. Schoenchen, the only other incorporated place in the county, had a 1940 population of 259. Table I shows the population of the county by townships and cities for the census years 1940, 1930, and 1920. Estimates for 1943 are included.

Table I shows that there were population gains between 1930 and 1940 in Hays, Ellis and Victoria, and small increases in six townships. These were more than enough to offset losses in the ten other townships, with the result that the county total went up from 15,907 in 1930 to 17,508 in 1940, as has been shown. The loss of population in the rural areas has occurred throughout Kansas. In 1940, when the state had a loss of 79,971 from the 1930 population figure, the urban places of 2,500 and over showed a gain of 24,107. But the state total went down in spite of this urban gain, because the rural territory experienced a decline of 104,078 persons.

Ellis county is still more rural than the average for the state, although the county and the state are becoming more urban. In 1940, 41.9 percent of the population in Kansas was found in urban places; 38.8 percent was the proportion in 1930. In Ellis county, Hays was the only place large enough to be classed as urban. It contained 36.5 percent of the Ellis county population in 1940, and 29 percent in 1930.

^{1.} A place is classified as urban if it contains 2,500 or more persons.

^{2.} Sixteenth Census of the United States, 1940: Population, Vol. 1, Number of Inhabitants, Kansas, p. 395, Table 3.

MAP OF KANSAS (OUNTIES, PRINCIPAL CITIES AND RIVERS

			4		,			• •	110				
Chyenno	e Raw	RIVER	Decatur	t	Phillips	Smith	Jawall	Republic	Washington Mare	hall nema	ha Brown	Doniphan	3
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Wallace	Loga		Gove	Trego	Ellis Ony	Russell	Lincoln	SACINA	Gear	Wabausee	Shawnee	<u>~</u> ,~	Johnson
	SM	OKY HI	LL RIVER		EUIS &			Saline	Dickinson			2.2	
Grealeg	W:_L:t=	Scott	Lane	1000	Rush	Barton	Elloworth		Morris		Osage	Franklin	Thiami
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E) }	C1	Haskell	Gray	Tora	Kiowa	Pratt	Kingman	Sedgui	c k		V/:1-		
Stanton	GIANI	HADNEH		1	1,110		J		\	Elk	Wilson	Ugoelo	Crawford
m 1	Stauere	Saviacia	maada	Clark	Comanche	Barber	Harper	Sunna	cowley		- be-	1.1.11	
Morton :	JIEVENS	Dewara	Meada	Ciark	Contanche	اعادا اعادا	Transpor	Panna	Lessing	Chautauqua	Wontgomery	Labette	Cherokee
										L	<u> </u>		\

The presence of the Walker Army Air Base some fourteen miles east of Hays has caused an influx of civilian workers and of army personnel with their families. The result has been a rapid rise in the population of Hays since 1940. The city clerk of that city estimated the population at between 7,000 and 8,000 at the beginning of 1944.³ Undoubtedly, the majority of this increase must be counted as temporary. A loss of several hundred from the county has occurred at the same time due to the induction of young men into the military forces.

The wartime changes are important, to be sure, but they are for the most part temporary. Some of the changes will affect Hays and the rest of the county permanently, of course. It would be worthwhile to be able to measure these results of the war. However, that would be difficult. It is probably justifiable to assume

TABLE I
Population of Ellis County, Kansas, by Cities and Townships, 1920, 1930, 1940 and 1943*

MINOR CIVIL DIVISION.	1940.	1930.	1920.	1943.
Ellis County	17,508	15,907	14,138	17,197*
Big Creek township	695	640	492	748
Buckeye township	544	612	596	558
Catherine township	775	723	742	742
East Hamilton township	177	233		142
Ellis city	2.042	1.957	1.876	1,935
Ellis township	639	718	764	642
Freedom township	497	490	521	445
Hays city	6,385	4.618	3.165	6,340
Herzog township	472	587	649	440
Lookout township	579	828	847	518
Pleasant Hill township	396	522	477	408
Riverview township	333	274	273	313
Saline township	408	325	365	442
Schoenchen city	259			248
Smoky Hill township	341	395	317	321
Victoria city	884	637	600	1,084
Victoria township	471	552	520	440
Walker township	647	7.57	684	579
West Hamilton township	224	302		200
Wheatland township	740	737	703	652

^{*}Source: 16th Census of the United States, 1940: Population, Vol. 1, Number of Inhabitants, Kansas, p. 399, Table 4, for 1920, 1930, and 1940. 1943 figures are estimates obtained from the county clerk of Ellis county, and are based on tax assessors' figures. The tax assessors' figures for the county in 1940 were 17,057 or 97.4 percent of the Census number of 17,508; for Hays the figures were 5,970 or 93.5 percent of the 6,385 shown in the Census. The assessors evidently are unable to find all persons in their counting. Therefore, population estimates as shown in the assessors' records might be increased by 2.6 percent for the county and 6.5 percent for the city of Hays for the year 1943.

^{3.} See footnote to Table 1.

that to a large extent Ellis county after the war will be the type of area it was before the war, and that the people will be the same type of persons as those who lived there in 1940. The majority of the facts about Ellis county that are presented in this survey are those that have been compiled in the 1940 census of the United States. These data should help us to understand some of the important conditions and characteristics of the human and economic aspects of Ellis county.

Before going into a more detailed discussion, a few additional general conditions in the county should be mentioned. The climate is relatively invigorating and healthful. There is abundant sunshine. Data for the state of Kansas show that the average annual number of clear days is 186, partly cloudy 100, and cloudy 79. The average number of days with 0.01 inch or more of precipitation is 68. The yearly precipitation in Ellis county averages 22.74 inches, with monthly amounts of 2 or 3 inches coming in each of the spring and summer months of April through August. With the exception of October, no other month experiences as much as 1.00 inch of precipitation. The normal growing season is 168 days in the county. The average date for the latest killing frost is April 29, and for the earliest killing frost October 14. The January temperature (on a 24-hour average basis) is 29.6°; the July average is 79.1°. The summer season usually brings several days with temperatures above 100°, but the nights are ordinarily cool enough for comfortable sleep. This is partly due to the altitude, which is approximately 2,000 feet at Hays.4

The topography of the county is that of a rolling prairie. The natural vegetation is short grass, and the cultivated crops consist mostly of winter wheat and row crops of the sorghum variety. The Saline river flows from west to east through the northern part of the county. Big Creek passes through Ellis and Hays, and the Smoky Hill river crosses the southern portion of the county.

The main line of the Union Pacific Railroad between Kansas City and Denver runs east and west through the county with stations at Walker, Victoria, Hays and Ellis. By rail to the east it is 290 miles to Kansas City, 222 to Topeka and 103 to Salina. Denver is 350 miles to the west. Federal highway 183 goes through Hays in crossing the county from north to south and federal highway

^{4.} For climatic facts see pp. 873-883, 1941 Yearbook of Agriculture, "Climate and Man," published by U. S. Department of Agriculture. See Appendix C of this study also.

40 crosses the county from east to west parallel to the Union Pacific Railroad.⁵ The railroad has repair shops in Ellis. Fort Hays Kansas State College and St. Joseph's College and Military Academy are located at Hays. Just south of that city are the Kansas Frontier Historical Park and the Fort Hays Agricultural Experiment Station.

^{5.} Any accurate road map of the state will show the main highways, railroads and streams of a county. Excellent detail is shown in the Aeronautical Charts prepared by the U. S. Coast and Geodetic Survey. Other maps useful in local studies include those prepared by state governments, the AAA aerial photographs, county assessors' maps, maps prepared by abstract and title companies and city engineers or planning commissions.

CHAPTER II

THE PEOPLE OF ELLIS COUNTY

The people of any area are both the product of their environment and the molders of that environment. It is important in any survey of a community to learn something about the characteristics of its inhabitants. In this section of the study facts will be presented about the population in regard to age, number, sex, country of birth, race, occupation, and amount of education.

AGE, RACE, COUNTRY OF BIRTH

The numbers of each sex are almost equal. There is a moderate "surplus" of young women in each of the age brackets during which marriage is most likely, namely, 15-19, 20-24, and 25-29. Maiden ladies had a favorable situation facing them in the years of 30-34 in 1940, however, when the men outnumbered the women 677 to 619. (See Table II.)

The average age in Ellis county is lower than that for the state. Forty-seven percent of the persons in the county are under 21 years of age, while for the whole state only 35 percent are under 21.

The percentage of the population found in the working age range between 20 and 59 is less for Ellis county than for the state of Kansas. 48.1 percent of the county population was between 20 and 59 in 1940 as compared to 53.2 percent for the state. Even when the lower age limit is dropped to 15 years the county percentage of 59.5 percent remains below the figure of 62.6 percent for the state.

Ellis county was the land of promise for many foreign immigrants and much of the development of the area has been the work of those who were born in other countries and then came to the United States. In 1940 there were 875 persons of foreign birth in the county. This represented 5 percent of the total population. The corresponding figure for the whole state was 2.9 percent.² 545 or 62.3 percent of those of foreign birth came from Russia. The next largest number, 101 or 11.5 percent, gave their birth place as Rumania. Austria with 87 or 9.9 percent was third, and Germany

For state figures see 16th Census of the United States, 1940: Population, Vol. II, Part 3, Characteristics of Population, Kansas, p. 17, Table 7.

^{2.} For state figures see Ibid., p. 14, Table 4.

TABLE II

Age. Race and Sex of Ellis County Population, 1940 and 1930

		19	40 populatio	on.		
COUNTY AND AGES.		All classes.	Native white.			
	Total.	Male.	Female.	Male.	Femule.	
Ellis County	17,508	8,753	8,755	8,288	8,295	
Under 5.	1,874 1,980 2,087 2,001 1,646 1,438 1,296 1,087 885 825 752 497 420 299 188 233	928 982 1,066 985 793 701 677 538 432 420 385 266 229 138 98	946 998 1,021 1,016 853 737 619 453 405 367 231 191 161 90	926 981 1,065 984 789 699 669 519 402 382 325 234 171 69 44 29	944 996 1,017 1,014 853 734 606 527 420 374 315 203 132 73 41	
Under 1 year	373 9,232	176 4,635	197 4,597	175 4,175	196 4,147	

1930 population.

Ellis County	15,907		 7,409	7,126
Under 5	2,206		 1.126	1.075
5 to 9	2,230	1	 1,135	1.089
0 to 14	1,993	1	 1.013	973
5 to 19			 889	897
0 to 24	1,397	1	 735	632
5 to 29	1.110	1	 502	559
0 to 34	944	1	 424	456
5 to 44	1.761	1	 803	758
5 to 54	1.120		 489	410
5 to 64	698		 165	156
5 to 74	437	1	 82	72
5 and over	214	1	 45	40
Jnder 1 year			 205	220
and over	7.389		 3.082	2 968

Source: 16th Census of the United States, 1940: Population, Second Series, Vol. I, Number of Inhabitants, Kansas, p. 50, Table 22.

Norm.—Figures for Ellis county are given by townships, towns and cities in the same publication, Table 28, p. 107.

TABLE II-CONCLUDED

COUNTY AND AGES.			•	pulation.					
COUNTY AND MILES.		n-born ite.	Ne	gro.	Other races.				
	Male.	Female.	Male.	Female.	Male.	Female.			
llis County	440	435	24	24	1	1			
nder 5			2	2					
5 to 9			1	1		1			
) to 14			1	4					
to 19		2 $ $	1						
) to 24	2		2						
to 29	1	2	1	1					
) to 34	7	13	1						
to 39	16	19	2	3	ı				
to 44	28	31	2	2					
to 49	34	31	4 3						
) to 54	57	46	3	6					
5 to 59	29	26	3	2					
) to 64	57	58 87	1						
to 69	69			1 !					
to 74	54 86	48 72		1					
and over	86	12							
nder lyear	440	433	19	17					

1930 population.

Ellis County	668	640	30	33	 	 1		. <i>.</i>	 		
Under 5			1	4	 	 . ,	_		 		
5 to 9	 .	2	2	2	 	 	!	١	 		
10 to 14	2		3	2	 	 	. 1	١	 		
15 to 19	4	3	2	1	 	 	!	١	 		
20 to 24	10	16	3	1	 	 	!	١	 		
25 to 29	18	25	2	3		1	- 1	١	 		
30 to 34	28	33	2	1	 	 	!	١	 		
35 to 44	95	85	8	12	 	 	!	١	 		
45 to 54	119	94	4	4	 	 	!	١	 		
55 to 64	184	190	2	1	 	 	!	١.,	 		
65 to 74	143	137	1	2	 	 	!	١	 		
75 and over	65	55			 	 	!	١	 		
Under 1 year				<i>.</i>	 	 	!	١.,	 		
21 and over	661	632	21	24		1	- 1				

was fourth with 58 or 6.6 percent. Twenty-three countries in all are represented. (See Table III.)

The population of the county was preponderantly white, there being only 48 negroes, and but two persons of other nonwhite races.

OCCUPATIONS OF THE PEOPLE

There were 12,000 persons 14 years old and over in Ellis county in 1940. 5,675 or 47.3 percent of these were in the "labor force." 80.7 percent (4,577) of this labor force was employed on regular nonrelief work, and 19.3 percent (1,098) was either working on relief projects or seeking jobs.³ Wage and salary earners com-

^{3. 10.6} percent (599) was employed on WPA, NYA, etc.; and 8.79 percent (499) was seeking work.

posed 58.6 percent of the regularly employed persons; employers and own-account workers 33.3 percent; and unpaid family workers 7.5 percent. (See Table IV.)

TABLE III

Country of Birth of the Foreign Born Population of Ellis County, as of 1940

COUNTRY OF BIRTH.	Number.	Percentage
Russia (U. S. S. R.)	545	62.29
Rumania	101	11.54
Austria	87	9.94
Germany	58	6.60
anada	17	1.94
England	13	1.48
rish Free State (Eire)	9	1.03
Denmark	ž	.80
Switzerland	7	.80
weden	6	.68
Central and South America	5	. 57
Poland	4	.46
Northern Ireland	ź	.23
ithuania	$\bar{2}$.23
talv	$\bar{2}$.23
Australia	$\bar{2}$	23
All other and not reported	2	23
eotland	ī	12
Vorway	î	12
rance	î	1 12
Zechoslovakia.	î	12
Iungary	î	1 112
Greece	1	1 12
AIOCCO, ,		
Totals	875	100.00

Source: 16th Census of the United States: 1940, Population, Vol. II, Part 3, Characteristics of the Population, Kansas, p. 79, Table 24.

Agriculture was the dominant occupation of the people of Ellis county. 1.551 persons were so employed in 1940. This was 27.3 percent of the 5,675 in the total labor force. 1,086 or 70 percent of the persons engaged in farming were independent farmers or managers. 465 or 30 percent were hired farm hands or unpaid family workers (about 5 percent).

Next to agriculture, the most important occupation, or rather group of occuations, was professional and related services. This classification includes doctors, lawyers, teachers, nurses, clergymen, welfare workers, pharmacists and so forth.⁵ They numbered 553,

^{4.} This 27.3 percent figure may sound too small because we ordinarily think that agriculture is by far the most important occupation in a "rural" county such as Ellis county. It is true that it is the most important single occupation and, also, since it gives work to farmers' families in addition it is even more important than the 27.3 percent would indicate. But even taking this into consideration we still find that farming is actually less important numerically as an occupation than we are accustomed to think. Of course, it should not be forgotten that agriculture is a basic industry and that urban occupations are dependent on farms for raw materials and markets for the goods and services for sale in the towns and cities. On the other hand, farmers are dependent upon the urban businesses for markets, and for goods and services which farmers need to buy from others. In a word, we are economically interdependent.

^{5. 16}th Census of the United States: 1940: Population, Vol. II, Part 3, Character of the Population, Kansas, p. 9.

which was 9.7 percent of the labor force. The third largest amount of employment was found in crude petroleum and natural gas production which gave work to 345, or 6.1 percent of the total number of persons in the county's labor force.

Retail stores and retail trade of all kinds, along with wholesale trade, if placed in the same classification, would rank next to agriculture in regard to number of persons economically occupied. They provided jobs for 727 persons, or 12.8 percent of the county labor force. But when this general group is broken down into wholesale trade and the different lines of retailing, the figures for each are less than those for professional and related services, and those for crude petroleum and gas production. General retail stores engaged 237; motor vehicles, assessories and filling stations 130; food and dairy products stores and milk retailing 127; eating and drinking places 106; and wholesale trade 127.

Other important occupations were: Construction, 167; domestic service, 166; government, 139; railroads, including repair shops and railway express, 124.

No other industry provided occupations for as many as 100 persons in Ellis county in 1940. Some ten manufacturing industries are represented, but altogether they provided work for only 109 persons, or 1.9 percent of the county labor force. Food and kindred products (flour milling mostly) with 72, and machinery, the second in size, with 12, accounted for 77 percent of the persons in manufacturing industries.

Other occupations that employed 25 or more persons were: Miscellaneous personal services (barber shops, beauty parlors, etc.), 84; finance, insurance and real estate, 83; hotels and lodging places, 76; automobile storage, rental and repair services, 69; trucking service and other nonrailroad transportation, 67; utilities, 53; laundering, cleaning and dyeing services, 35; printing, publishing and allied services, 30; business and repair services, except automobile, 27; and amusement, recreation and related services, 27.

UNEMPLOYMENT

1940 was a fairly prosperous year, yet we found that 1,098 persons, 19.3 percent of the labor force of 5,675, were without employment in private industry or regular government activities. 599 of these persons were on work relief, the N. Y. A. or other public emergency work, and 499 were seeking work. These figures may indicate that if Ellis county's economic activity after the war returns to the

level of 1940, jobs for approximately 1,000 persons will be needed. (See Table IV.)

Before leaving the subject of occupations a few more facts are worth mentioning. 77.3 percent of the males 14 years of age and over, and 17.4 percent of the females were in the labor force. These ratios are about the same as the corresponding statewide figures of 76.7 percent and 19.2 percent, respectively.6 Of the 4,577 persons engaged in nonrelief work, 2,680, 58.5 percent, were wage and salary earners working as employees of others; 1,522, 33.3 percent, were employers and own-account workers, that is, proprietors in business and farming, and managers of businesses. 345 workers were classed as unpaid family workers, and 30 were not classified. We see from these figures that Ellis county contains mostly small businesses with each employer hiring a few employees to help him in his business or on his farm. This statement is also true for Kansas as a whole, because we find that 59.4 percent of the persons gainfully occupied in nonrelief work in the state were wage and salary workers, and 36.2 percent were employers or own-account workers.7

It is interesting to note that in the urban areas of the state 82.1 percent of the gainfully occupied are wage and salary workers, and 16.3 per cent are employers. In rural-nonfarm sections (towns under 2,500) the amounts are 72.7 percent and 24.6 percent. It is on the farms that we still find that the largest majority of those who are gainfully occupied are working as their own bosses in their own businesses. 68.0 percent of those employed in agriculture are employers and own-account workers, and 22.9 percent are wage and salary earners. We find that an additional 8.5 percent of those employed on farms of the state are unpaid family workers. This percentage for unpaid family workers is more than double the 3.9 percent figure for the whole state, and almost 8 times the 1.1 percent for the urban areas.

^{6.} For state figures see Ibid., Table 17, p. 34.

^{7.} Ibid., Table 17, p. 34. The percentages given in this and the next paragraph may not add up to 100 in all cases because figures may not be included for unpaid family workers or workers not reported by class. In most instances they compose less than 10 percent of the labor force.

^{8.} For state figures see Ibid., Table 17, p. 34.

TABLE IV

Persons 14 Years Old and Over, by Employment Status, Class of Worker, Major Occupation Group, Industry and Sex, Ellis County, Kansas, 1940

Employment Status, Class of Worker, Major Occupation Group, and Industry Group.	Total.	Percent of labor force.	Male.	Female.
Total population (all ages)	17,508		8,753	8,755
Persons 14 years old and over	12,000 5,675		5,988 4,630	6,012 1,045
Percent of population 14 and over Employed (except on public emergency work)	4,577	80.65	$\frac{77.3}{3,701}$	17.4 876
Wage and salary workers	2,680	58.55*	1,911	769
Employers and own-account workers	1,522 345	33.25* 7.54*	$\frac{1,453}{322}$	69 23
Class of workers not reported. On Public Emergency Work (WPA, NYA, etc.)	30	0.66*	15	15
On Public Emergency Work (WPA, NYA, etc.)	599 499	10.56 8.79	533 396	66 103
Seeking Work	435	0.19	352	83
New workers	64		44	20
Not in Labor Force	6,325 3,796		1,358 28	4,967 3,768
In school	1,114		620	494
Other and not reported Unable to work	938 467		418 283	520 184
In institutions	10		9	101
EMPLOYED WORKERS BY MAJOR OCCUPATIONS	4,577		2 701	876
Employed (except on public emergency work)	1,086	23.73*	$\frac{3,701}{1,072}$	14
Clerical, sale, and kindred workers	548	11.97*	336	212
Operatives and kindred workers Professional workers	545 456	11.91* 9.96*	510 224	35 232
Craftsmen, foremen and kindred workers	420	9.18*	417	3
Proprietors, managers, and officials, except farmers, Farm laborers, unpaid family workers	408 319	8.91* 6.97*	376 311	32 8
Service workers, except domestic	283	6.18*	130	153
Domestic service workers Laborers, except farm	162 144	3.54* 3.15*	2 144	160
Farm laborers (wage workers) and farm foremen.	123	2.69*	123	
Occupation not reported	57	1.25* 0.57*	38	19
Semiprofessional workers EmpLoyed Workers by Industry Group	26	0.57*	18	8
Employed (except on public emergency work)	4,577		3,701	876
AgricultureProfessional and related services	1,551 553		1.527 229	24 324
Crude petroleum and natural gas production	345		343	2
Other retail trade n. c. e.†	237 167		171 164	66
Domestic service.	166		2	164
Government	139		110	29
Motor vehicles and access., retail, and filling stations, Wholesale trade	130 127		128 123	2 4
Food and dairy products stores, and milk retailing,	127		114	13
Railroads (inc. rr. repair shops) and ry. express	124 106		124 44	62
Eating and drinking places	100		72	28
Miscellaneous personal services n. c. e.† Finance, insurance, and real estate	84 83		45 65	39 18
Hotels and lodging places	76		39	37
Hotels and lodging places	72 69		66 66	6 3
Automobile storage, rental, and repair services Utilities	53		47	6
Trucking service	38		37	1 21
CommunicationLaundering, cleaning, and dyeing services	38 35		17 24	11
Printing, publishing and allied industries	30		27	3
Other transportation n. c. e.†	29 27		28 22	1 5
Business and repair services, except auto	27		26	1
Machinery (manufacturing)	12		11 7	1
Chemicals and allied products (mfg.)			1	1

TABLE IV-CONCLUDED

Employment Status, Class of Worker, Major Occupation Group, and Industry Group.	Total.	Percent of labor force.	Male.	Female.
EMPLOYED WORKERS BY INDUSTRY GROUP—Concluded				
Iron and steel and their products (mfg.)	5		4	1
Petroleum and coal products (mfg.)	4		4	l
Furniture, store fixture, misc. wooden goods (mfg.)	4		. 4	
Forestry (except logging) and fishing	3		3	
Other mines and quarries n. c. e.†	3		3	<i></i>
Other and not specified manufacturing industries, n. c. e.†	2		2	
Automobiles and automobile equip. (mfg.)	1		- 1	
Nonferrous metals and their products (mfg.) Apparel and other fabricated textile products (mfg.)	1 1		1	
Sawmills and planing mills			1	

Source: 16th Census of the United States: 1940, Population, Vol. II, Part 3, Characteristics of the Population, Kansas, p. 69, Table 23. For statewide figures see pp. 32-35, Tables 16, 17 and 18.

EDUCATION: SCHOOL ATTENDANCE AND YEARS COMPLETED 9

The amount of education, as measured by the number of years of school completed, is an important factor in the determination of the nature of the population of a given area. In a democracy it is considered essential that the people be educated. They need to be able to vote intelligently and to judge the results of the operations of their government. Also, an education should help them to conduct their own economic affairs in such a satisfactory manner that government intervention can be kept at a minimum. The economic success of either a proprietor or an employee, seems to depend to a great extent upon the amount of education acquired. Of course, there are cultural and other advantages of an education that are as important, or more so, than the economic gains that may result.

61.3 percent of the 7,714 persons from 5 to 24 years old in Ellis county were in school in 1940. The state figure was slightly higher, 62.8 percent. 98.1 percent of the county's children from 7 to 13 years old were in school. The state had 97.6 percent. For the usual high-school age groups the percentages in school in the county were lower than the state proportions. In the year group 14 and 15, the county percentage in school was 84.7 percent; the state percentage, 91.8 percent. For the 16 and 17 year olds, 62.7 percent in the county were in school, as compared to 76.1 percent for the state. The 18 to 20 classification shows 26.8 percent for the county and 31.9 percent for the state. The group including persons 21 to 24 years old, which would be college years mostly, gives the county

^{*} Percentage of "Employed (except on public emergency work)."

[†] Not classified elsewhere.

^{9.} Statistics in regard to the educational status of the population of all the states were collected and compiled in the 1940 Census. It might be worthwhile to use these data for comparative studies of counties within a state or of the various states in the United States.

a slight edge, 7.5 percent to 7.1 percent. The presence of two colleges at Hays probably accounts for the higher proportion for the county. In the youngest group, 5- and 6-year olds, Ellis county had 39.2 percent in school and the state 48.2 percent. (See Table V.)

TABLE V

Number of Persons Attending School in Ellis County and in the Whole State of Kansas, 1940

Age.	County.	State.
Persons 5 and 6 years old	778	55.979
Number attending school	305	26.980
Percent attending school	39.2	48.2
Persons 7 to 13 years old	2.856	212.239
Number attending school.	2,801	207.304
Percent attending school	98.1	97.6
Persons 14 and 15 years old	832	66,305
Number attending school	705	60.888
Percent attending school	84.7	91.8
Persons 16 and 17 years old		67,946
Number attending school	523	51.728
Percent attending school.	62.7	76.
Persons 18 to 20 years old	1,102	98.381
Number attending school.	295	31.419
Percent attending school	26.8	31.9
Persons 21 to 24 years old		114,050
Number attending school	99	8,108
Percent attending school	7.5	7.1
Total persons 5 to 24 years old		614.900
Number attending school	4.728	386, 427
Percent attending school.	61.3	62.8

Source: 16th Census of the United States: 1940: Population, Vol. II, Part 3, Characteristics of the Population, Kansas, p. 39, Table 21, and p. 23, Table 11.

The median number of school years completed by persons 25 years of age and over was 8.4 for the county and 8.7 for the state. These figures mean that a grade school education, with less than a year of high school in addition, is the most common educational status attained by the adults of Ellis county and the state of Kansas. Of course, many persons have not finished eight grades, while some have gone through high school, and a few through college. 37.18 percent of the persons 25 years old and over in the county have finished 7 to 8 years of school. The state percentage is 42.31 percent. 12.26 percent in the county have gone 1 to 3 years in high school, and 14.84 percent in the state have done so. 12.56 percent of the persons in the county 25 years or more of age and 16.58 percent in the state have completed high school. For the county and state 8.22 percent and 7.11 percent, respectively, have completed 1 to 3 years of college, and 6.38 percent in the county and 4.58 percent in the state have had four or more years of college. No school years were completed by 1.67 percent of the persons 25 years of age and over in the county, and 1.14 in the state. (See Table VI.)

TABLE VI

Number of Years of School Completed by Persons 25 Years of Age and Over, in Ellis County and the Whole State of Kansas, 1940

YEARS COMPLETED.	County.				State.	
I EARS COMPLETED,	Total.	Male.	Female.	Total.	Male.	Female.
Persons 25 years and over No school years completed Percent of persons 25 yrs, and over Grade school: 1-4 yrs Percent of persons 25 yrs, and over 5 and 6 years Percent of persons 25 yrs, and over 7 and 8 yrs Percent of persons 25 yrs, and over High school: 1-3 yrs Percent of persons 25 yrs, and over 4 yrs Percent of persons 25 yrs, and over College: 1-3 yrs Percent of persons 25 yrs, and over 4 or more yrs Percent of persons 25 yrs, and over Not reported.	7,920 132 1,67 635 8,02 999 12,61 2,945 37,18 971 12,26 995 12,56 651 8,22 505 6,38	3,999 54 301 485 1,508 541 485 296 277	3,921 78 334 514 1,437 430 510 355 228	1,047,818 11,975 1,14 52,221 4,99 79,350 7,58 42,31 155,423 14,84 173,580 16,58 74,460 7,11 47,927 4,58 10,044	525, 669 6, 808 31, 685 44, 753 235, 225 72, 175 70, 827 32, 507 25, 954 5, 735	34,597 207,613 83,248 102,753 41,953 21,973
	6.38	52			5,73	35

Source: 16th Census of the United States: 1940, Population, Vol. II, Part 3, Characteristics of the Population, Kansas, p. 29, Table 13; p. 39, Table 21.

One measure of the need for a postwar project in adult education might be the number of school years completed by the persons 25 years old and over in the community. In Ellis county there were 4.711 persons in the age groups of 25 and over who had gone no further than the 7th or 8th grades.¹⁰ In the whole state there were 586,384 such persons.

HAYS CITY AND ELLIS CITY

Hays, with a population of 6,385 in 1940 and at least 6,800¹¹ in 1943, and Ellis with 2,042 and 2,000,¹² respectively, are the largest towns in the county. They therefore warrant some additional space in this study. Table VII gives information about the population of Hays in regard to race, age, sex, occupations and employment status, and years of school completed, for the year 1940. Table VIII shows the 1940 population of Ellis City and the race, age, and sex of the people. Estimates of changes in the amount of population since 1940 are given in footnotes to these tables. No further discussion of these two towns is attempted here, but the information in these tables could furnish the basis for a more extended study of Hays and Ellis.

^{10.} This was 59.48 percent and 56.02 percent of the persons 25 years of age and over in the county and state, respectively.

^{11.} See footnote to Table VII.

^{12.} See footnote to Table VIII.

TABLE VII

The Population of Hays, Kansas: Race, Agc, Sex, Occupation and Employment Status, and Years of School Completed, 1940

Subject.	Total.	Male.	Female.
Total Population Native white Foreign-born white.	6,385* 6,176 209	3,036 2,938 98	3,349 3,238 111
Age			
Under 5 years	661	327	334
5 to 9 years	626 629	303	323 313
10 to 14 years. 15 to 19 years.	640	316 289	351
20 to 24 years	665	278	387
25 to 29 years	627	295	332
30 to 34 years	601	301	300
35 to 39 years	462	226	236
40 to 44 years	357	176	181
45 to 49 years	292	135	157
50 to 54 years	265	129	136
55 to 59 years	173	86	87
60 to 64 years	140	73	67
65 to 69 years	108 60	45 29	63 31
75 years and over	79	28	51
21 years and over	3,701	1.755	1,946
Years of School Completed	0,.01	1,100	1,010
Persons 25 years old and over	3,164		
No school years completed	26		
Grade school:			
1 to 4 years	165		
5 or 6 years	239		
7 or 8 years	902		
High school:	460		
1 to 3 years	564		
College:	504		
1 to 3 years	397		l
4 years or more	382		
Not reported	29		
Median years completed Employment Status	10.5		
14 years old and over	4,607	2,156	2,451
In labor force	2,349	1,709	640
Employed (except on public emergency work)	1,994	1,422	572
On public emergency work (WPA, NYA, etc.) Seeking work	184 171	151 136	33 35
Not in labor force	2,258	447	1,811
Employed Workers by Major Occupations	2,200	111	1,011
Employed (except on public emergency work)	1.944	1.422	572
Clerical, sales, and kindred workers	429	254	26
Operatives and kindred workers	380	353	27
Professional workers Proprietors, managers, and officials, except farm	300	161	139
Proprietors, managers, and officials, except farm	252	226	26
Craftsmen, foremen, and kindred workers	210	208	2
Service workers, except domestic	201	93	108
Laborers, except farm	82 71	71	82
Farm laborers (wage workers) and farm foremen	22	22	
Semiprofessional workers	17	10	7
Farmers and farm managers	14	14	
Occupation not reported	14	19	5
Farm laborers, unpaid family workers	2	Ϊl	ï

^{*} Estimated population of Hays in 1943 was put at between 7,000 and 8,000 by Mr. V. A. Basgall, city clerk. On the basis of assessors' figures and adding 6.5 percent for possible undercounting, the writer would guess at least 6,800. See footnote to Table I. Source: 16th Census of the United States: 1940, Population, Vol. II, Part 3, Characteristics of the Population, Kansas, p. 140, Table 30.

TABLE VIII

Composition of the Population of Ellis City, Kansas, 1940

	Total.	Male.	' Female.
Total population of all clusses	2,042* 1,994 1,832	1,007 983 898	1.035 1.011 934
Foreign born	162 48	85 24	77 24
Ages Under 5	298	87 221 163 141	101 200 196 157
35 to 44 45 to 54 55 to 64 56 and over.	268 232 138 138 1,194	131 121 74 69	137 111 64 69

^{*}On the basis of the assessors' count, the 1943 population was 1,935. The 1940 census figure was 2,042 or 3.3 percent more than the assessors' 1,974 for that year. By adding 3.3 percent to the 1,935 population given by the assessor, we get an estimated population of 1,999 for the year 1943.

Source: 16th Census of the United States: 1940, Population, Vol. II, Part 3, Characteristics of the Population, Kansas, p. 137, Table 29.

CHAPTER III

AGRICULTURE IN ELLIS COUNTY

Agriculture is the most important single economic activity in the county. It was pointed out in the first part of this survey that farming was the occupation of 27.3 percent of the county's labor force in 1940. Of the county's population of 17,508, over one-third, 6,743 or 38.5 percent lived on farms.1

FARMS: NUMBER, SIZE, ACRES HARVESTED, AND VALUE

Ellis county had 1,235 farms in 1940, 6.4 percent (79) less than in 1930. The state had 5.9 percent fewer farms in 1940 than in 1930. During the same decade the average size of farms in the

TABLE IX Farms: Number, Size, Acres Harvested, Value, 1929 or 1930 to 1939 or 1940, State of Kansas, and Ellis County

ITEMS.	County.	State.
Farms, Acreage, and Land Area		
Number of farms	1,235 1,343 1,314	156,327 174,589 166,042
Approximate land area, acres	576,000 96.7	52,552,320
All land in farms, acres	556,777 563,500 549,764	48,173,635 48,009,770 46,975,647
Average size of farm, acres	450.8 419.6 418.4	308.2 275.0
Farm land according to use:		282.9
Cropland harvested, acres	79,068 190,647 296,911	17,816,498 16,663,186 24,308,361
Crop failure, acres	155,619 71,260	5,370,096 7,435,680
Lands used for crops (harvd, and failure) farms reptd., 1939 Acres	1,924 1,202 234,687	967,761 147,576 23,186,594
1934 1929	261,907 298,835	24,098,866 25,276,122
Values Values of farms (land and buildings) dollars	13,203,402 13,541,135 22,221,204	1,421,387,464 1,478,659,428 2,281,101,631
Average values: Land and buildings per farm, dollars	10,691	9,092
1935 1930 Farms of 30 acres and over, dollars	10,083 16,911 10,791	8,469 13,738 9,821
Land and buildings per acre. 1940 Value of implements and machinery, dollars 1940 1930	23.71 994,686 1,838,846	29.51 115,262,686 167,785,230

Source: 16th Census of the United States, 1940: Agriculture, First and Second Series, Vol. I, Part 2, Kansas, pp. 718-720, Table 1.

^{1.} Sixteenth Census of the United States, 1940: Population, Vol. II, Part 3, Kansas, p. 92, Table 27.

county increased from 418 acres to 451 acres (7.9%). The increase in the state was from 283 acres to 308 acres (8.8%). The amount of all land in farms also increased in both the county and the state. The county increase was from 549,764 acres to 556,777 acres, or 7,013 acres. The state increase was from 46,975,647 acres to 48,173,635 acres, or 1,197,988 acres. 96.7 percent of the land area of the county in 1940 was in farms. The proportion for the state was 91.7 percent. (See Table IX.)

The increase in the number of acres in farm land during the 1930's may seem peculiar in view of the crop acreage restrictions practiced under the Agricultural Adjustment Administration programs and the increase of fallowing. The effects of the AAA do show up, however, in the reduction in land used for crops. Here we see that between 1929 and 1939 there was a 21 percent decrease in the county, or 64,148 acres (298,835 to 234,687). The state experienced an 8 percent decline or 2,089,528 acres (25,276,122 to 23,186,594).

There was a 37 percent drop in the value of Ellis county farms during the decade ending in 1940. The drop in the state was 34 percent. The value of the average farm in the county fell from \$16,911 to \$10,691. The state average farm value fell from \$13,738 to \$9,092. In 1940 the value of the land and buildings when figured on a per acre basis had an average value in Ellis county of \$23.71 per acre, and in the state \$29.51 per acre. (See Table IX.)

The great fluctuations in farm yields between good and bad years is illustrated strikingly by comparisons of the good year 1929 and the bad year 1939. In Ellis county only 34 percent of the cropland used in 1940 was harvested. For the state the figure was 77 percent. In contrast, 99.33 percent of the cropland acreage farmed in the county in 1929 was harvested. In the state 96.2 percent was harvested.

OWNERSHIP STATUS OF FARMERS

The ownership of farms by their operators increased moderately in the county between 1930-1940. In the latter year 449, or 36.4 percent of all farms, were owned by their operators. In 1930 the number was 421 and 32.0 percent. Farms operated by part owners decreased during the decade from 374 to 335. Such farms represented 27.1 percent of all farms in 1940 and 28.5 percent in 1930.

The number of farms operated by tenants decreased from 510, or 38.8 percent of all farms, to 446 and 36.1 percent. (See Table X.)

Although the number of Ellis county farms operated by full owners increased in the 1930's, the number of acres in such farms showed a drop of 32,816 in 1940 as compared to 1935. At the same time there was an increase of 23,240 acres in the farms operated by part owners. This increase was caused by the purchase of 11,724 acres and the almost equal increase in the number of acres, 11,516, rented from others. Renting from others seems to be a growing practice, perhaps because it allows an operator to get full use of his machinery with the resulting lower production costs. He, also, would avoid the problems involved in buying land. The 94,102 acres rented from others by part owner farmers in the county were 16.9 percent of the total area in all farms in 1940. The percentage was 14.7 percent in 1935. For the state the 9,086,301 acres rented by part owner operators in 1940 were 18.9 percent of the total area in all farms. The figure in 1935 was 16.9 percent.

TABLE X
Farms: Ownership Status of Operator, 1940, 1935, 1930, State of Kansas, and Ellis County

		Count	State.		
ITEMS.		Number.	Percent.	Number.	Percent
Number of Farms	1940 1935	1,235 1,343		156,327 174,589	
Full owners	1935	1,314 449 497	36.4 37.0	166,042 52,441 60,358	33.5 34.5
Part owners	1935	421 335 358	32.0 27.1 26.7	57,151 33,034 36,538	34.4 21.1 21.0
Managers	1935	374 5 8	28.5	37,611 630 922	22.6 0.5 0.5
All tenants	1935	9 446 480	36.1 35.7	954 70,222 76,771	0.6 44.9 44.0
All land in farms:	1930	` 510	38.8	70,326	42.4
Full owners, acres	1025	159,343 192,159		11,035,433 12,076,062	
Part owners, acres	1940 1935	212,739 189,499		17,186,926 16,349,636	
Portion owned, acres	1940 1935	118,637 106,913		8,100,625 8,232,994	
Portion rented from others, acres,		94,102 82,586		9,086,301 8,116,642	
Managers		16,864 10,604		761,319 743,536	

Source: 16th Census of the United States, 1940: Agriculture, Vol. I, Part 2, First and Second Series, Kansas, Table 2, pp. 728-780.

The number of farms in the county operated by managers declined from 9 in 1930 to 5 in 1940. Such farms were 0.7 percent of the total in 1930 and 0.4 percent in 1940. Between 1935 and 1940 the number of managers fell from 8 to 5, but the acreage in manager operated farms rose from 10,604 to 16,864, or 59 percent. In 1940, 3.03 percent of the acreage in farms was in those operated by managers.

Corresponding data for the state of Kansas show that the proportion of total farms operated by owners decreased from 34.4 percent in 1930 to 33.5 percent in 1940. The proportion operated by part owners went down slightly from 22.6 percent to 21.1 percent. Tenants operated a greater proportion in 1940 than in 1930, or 44.9 percent as compared to 42.4 percent. Contrary to Ellis county's large increase from 1935 to 1940 in acreage under farm managers (59 percent), the state increase was but 2.4 percent. Manager operated farms represented the small figure of 0.6 percent of all farms in the state in 1930 and 0.5 percent in 1940. In relation to total farm acreage, manager operated farms represented 1.58 percent.

Major Sources of Farm Income

The major sources of farm income in Ellis county are field crops (wheat mostly), and livestock. Dairy and poultry products run third, but far behind. Vegetables and fruits were responsible for less than 1 percent of the farm income in 1939. For the state of Kansas in 1939 field crops brought in 37 percent of the farm income, livestock products, exclusive of dairy and poultry, 35 percent, and dairy and poultry products 16 percent. Farm products used by the farm households accounted for 9 percent of the county's farm income in 1929, and 23 percent in 1939. Comparable figures for the state were 9 percent and 10 percent. (See Table XI.)

The crop year 1939 was exceedingly poor in Ellis county, and the amount of products sold, traded or used by farm households had a dollar value of but 21 percent of the 1929 output. Much of this drop was due to the lower prices in 1939, of course. Farm income for the whole state was less affected by crop failure in 1939, as is shown by the fact that state farm income in that year was 50 percent of the 1929 total as contrasted to the county's 21 percent.

There has been a great deal of discussion about the need for greater diversification in agriculture in such areas as central and

^{2.} The probable reason for the great relative importance of farm products consumed on the farm in 1939 as compared to 1929 was the crop failure in 1939. This failure left but a small amount of crops for the farmer to sell.

TABLE XI

Amount and Percentage of Farm Income from Major Sources, 1939 and 1929, State of Kansas, and Ellis County

ITEMS.	County.		
ITEM8,	1929.	1939.	
All farms—number, 1940. All farm prod. sold, traded or used by farm houselds., farms reptg. Total value, dollars. Average per farm, dollars. Livestock and livestock products sold or traded, dollars. Crops sold or traded, dollars. Forest products sold, dollars. Farm products used by farm households, dollars.	1,288 4,610,770 3,579.79 1,121,261 3,095,769 820 392,920	1,235 1,140 947,646 831.27 659,830 67,805 108 219,903	
Percentage of Income from Major Sources: All farm products Livestock and livestock products sold or traded Livestock sold or traded. Livestock products sold or traded Darry products Poultry and poultry products. Other livestock products		100.0 69.6 43.7 25.9 17.9 7.7 0.3	
Crops sold or traded. Field crops. Vegetables. Fruits and nuts. Horticultural specialties. Forest products sold. Farm products used by farm households.	67.1	7.2 6.1 0.2 (1) (1)	

⁽¹⁾ Less than one-tenth of 1 percent.

Source: 16th Census of the United States, 1940: Agriculture, Vol. II, Part 1, Third Series, Kansas, 1940, Table 17, pp. 836-838.

TABLE XI-CONCLUDED

Items.	State.			
ATEMS.	1929.	1939.		
All farms—number, 1940. All farm prod. sold, traded or used by farm houselds., farms reptg. Total value, dollars. Average per farm, dollars. Livestock and livestock products sold or traded, dollars. Crops sold or traded, dollars. Forest products sold, dollars. Farm products used by farm households, dollars.	160,901 458,530,522 2,843.55 245,224,951 171,902,701 560,234 40,842,636	156,327 151,167 226,984,994 1,501.55 116,465,620 86,898,100 153,705 23,467,569		
Percentage of Income from Major Sources: All farm products. Livestock and livestock products sold or traded. Livestock sold or traded. Livestock products sold or traded. Dairy products. Poultry and poultry products. Other livestock products. Field crops.	38.8 14.7 37.5	0.4 38.3 37.0		
Vegetables. Fruits and nuts. Horticultural specialties. Forest products sold. Farm products used by farm households.		0.3 0.4 0.6		

western Kansas. These sections have been said to rely too much upon specialization in one crop, usually wheat. If diversification were increasing in Ellis county it should be apparent in a rise in the acreage planted to other crops than wheat, and in a growth in the amount of livestock and poultry on farms. Neither of these general categories showed any definite important increases between 1929, or 1934, and 1939. (See Tables XII, XIII, and XIV.) Sorghums are a classification of crops considered to be especially adapted to the drier portions of the state. Acreage planted to such crops in Ellis county was but 3.11 percent greater in 1939 than in 1929. In both years sorghums accounted for only 7.98 percent and 10.59 percent, respectively, of the acres in crops.³ Throughout the state, on the other hand, there was an appreciable increase in acres planted in

TABLE XII

Acreage and Quantity of Wheat, Corn, Sorghums and Hay. 1939, 1934, 1929,
State of Kansas, and Ellis County

ITEMS.		County.	State.
Wheat:			
Any wheat threshed (farms reporting)	1934	590 1,100	100,240 88,790
Acres	1929	1,189 48,702	88,320 9,214,150
	1934	165,240	8 323,641
	1929	241.439	12,081.021
	1939 1929	91 1.660	63,344 118,949
Acres	1939	1,515	1,168,154
	1934 1929	$\frac{3,940}{4.791}$	1,782,885
Corn:			
	1939 1934	49 110	83,243 86,506
Acres	1929	634 1.280	131,617 2,738,927
	1934	2,629	3,021,406
Harvested for grain (farms reporting)	1929	21,099 28	6,642,501 66,586
	1934	29	7,661
Cut for silage (farms reporting)	1939 1939	13 232	8,241 $211,310$
Tons		543	609,408
Sorghums:			
Sorghums for all purposes, except sirup (farms reporting),	1939 1929	$\frac{902}{1.069}$	94,151 79,316
Acres	1939	21,857	2,406,881
	1934 1929	$\frac{17,340}{23,836}$	1,868,457
Miscellaneous Crops:			
Irish potatoes (farms reporting)	1939 1934	22 9	52,195 52,860
Acres	1939 1934	7 7	23,674 32,942
Bushels	1939	268	1,887,782
	1934	86	1,101,754

Source: 16th Census of the United States, 1940: Agriculture, Vol. I, Part 2, First and Second Series, Kansas, 1940, Table 6-7, pp. 762-764, 771-773.

^{3.} See Table IX for land used for crops.

sorghums. The gain amounted to 55.9 percent; the rise was from 1,544,249 acres in 1929 to 2,406,881 in 1939. In 1939 acreage planted in sorghums was 10.38 percent of all land used for crops in Kansas; the 1929 figure was 6.11 percent.

The number of livestock on farms in the county decreased between 1929, or 1930, and 1940. Cows milked fell 10.73 percent, from 6,954 in 1929 to 6,208 in 1939. Crop failure in 1939 may have accounted for some of this fall because cows milked num-

TABLE XIII

Livestock and Livestock Products, State of Kansas, and Ellis County,
1940, 1930

ITEMS.		County.	State.
Horses and colts:			
Number over 3 months	1940	3.364	370.777
Number over 3 months		9,301	706,654
Mules and mule colts:	1		
Number over 3 months	1940	189	58,056
Number over 3 months		609	149,426
Cattle and Calves:			
Number over 3 months	1940	22,556	2,507,571
Number over 3 months		27,773	2,741,929
Cows milked, number	1939	6,208	652,108
•	1934	9,136	880,540
	1929	6,954	723,864
Milk produced, gallons	1939	2,384,588	287,114,023
•	1934	2,872,527	302,388,794
Hogs and pigs:			
Number over 4 months		2,142	784,466
Number over 3 months	1930	5,993	1,526,133
Sheep and lambs:	1		
Number over 6 months		526	546,529
Number over 6 months	1930	410	363,764

Source: 16th Census of the United States, 1940: Agriculture, Vol. I, Part 2, First and Second Series, Kansas, 1940, Table 4, pp. 747-749.

TABLE XIV

Chickens, Chicken Eggs and Turkeys, 1939 and 1934, State of Kansas, and Ellis County

Ітемв.	County.	State.
Chicken eggs produced, farms reporting	1,057	129,110
Dozens	$\frac{1,182}{515,343}$	151,053 84,689,649
1934 Chickens sold (alive or dressed) farms reporting 1939	647,066 534	91,384,584
Number	30,119	86,518 7,427,934
Any poultry raised, farms reporting	1,053 1,049	126,809 125,609
1934	1,147	144,115
Number	180,806 236,729	23,903,335 29,034,488
Turkeys raised, farms reporting. 1939 Number. 1939	139 4,691	23,293

Source: 16th Census of the United States, 1940: Agriculture, Vol. I, Part 2, First and Second Series, Kansas, 1940, Table 5, pp. 757-759.

bered 9,136 in 1934. In addition, perhaps low, depression prices for other farm products were responsible for the milking of more cows in 1934 than in either 1929 or 1939. The high number in 1934, however, does indicate that many more cows could be added to the farms of the county. (See Table XIII.)

Milk produced on the farms dropped 16.99 percent, from 2,872,527 to 2,384,588 gallons, between 1934 and 1939. Cattle and calves went down 18.78 percent, from 27,773 to 22,556 between 1930 and 1940; hogs and pigs declined approximately 64.26 percent or from 5,993 to 2,142. Sheep and lambs increased 22.05 percent during these years, but they were not of much numerical importance in either 1930 or 1940, since they numbered only 410 in the first year and 526 in the latter. The 63.83 percent drop in horses and colts, and the 68.96 percent drop in mules and mule colts might be explained to a great extent by the increasing mechanization of agriculture.

Chickens and eggs joined in the trends downward shown for live-stock in the county. 23.62 percent fewer chickens were raised on farms in 1939 than in 1934. The figures were 180,806 in 1939 and 236,729 in 1934. Chicken eggs produced fell 20.36 percent, from 647,066 dozen in 1934 to 515,343 in 1939. With the exception of turkeys, which totaled 4,691 birds in 1939, no other kind of poultry reached 2,000 in number.⁴ (See Table XIV.)

There were declines during these years in state totals in Kansas livestock and poultry, but on a percentage basis they were in most instances much less than the decrease in Ellis county. The percentage increase in sheep and lambs was much larger for the state than for the county. (See Tables XIII and XIV.)

FARM TAXES

Farm taxes levied in 1939 upon farms operated by full owners averaged 32 cents an acre in Ellis county. The statewide average was 49 cents. Real estate taxes on owner operated farms were equal to \$1.19 per \$100 of value in the county, and \$1.39 in the state. Personal property taxes on these farms averaged \$18 per farm reporting for both the county and state. Real estate taxes per \$100 of value on farms operated by part owners were slightly higher than those on owner operated farms or \$1.23 to \$1.19 for the county. The state figures were \$1.41 and \$1.39. Average personal property

^{4.} See "Source" shown for Table XIV for complete poultry census figures.

taxes on part owner farms were considerably higher than on full owner farms, or \$23 per farm as compared to \$18 for the county, and \$28 and \$18 for the state.⁵ (See Table XV.)

TABLE XV

Farm Taxes Levied in 1939, per Acre and per \$100 of Value, State of Kansas, and Ellis County (in dollars).

OWNERSHIP STATUS.	County.	State
Farms operated by full owners Real estate taxes:* Average per acre. Taxes per \$100 of value.	0.32 1.19	0.49 1.39
Personal property taxes:† Average per farm reporting	18.00	18.00
Farms operated by part owners Real estate taxes:* Average per acre	0.30 1.23	0.43 1.41
Personal property tax:† Average per farm reporting	23.00	28.00

^{*} Includes taxes on land, buildings and other improvements, but excludes taxes levied by drainage or irrigation districts.

MACHINERY AND TRUCKS ON FARMS

Machinery and trucks on farms represent important and necessary farming facilities today. In 1940 approximately 35 percent of the farms in the county reported trucks. Their average model year was 1933. This means that they were seven years old in 1940, and because few trucks have been made available to farmers since 1941, most of the trucks owned by farmers in 1944 must be considered as nearly worn out. About the same picture is presented in the case of tractors. Seventy-three percent of the county's farms reported tractors. These tractors had an average age of 9 years in 1940. Undoubtedly by 1945 the farmers of Ellis county, as well as those throughout the rest of the state, had built up a sizeable potential demand for new motor trucks and tractors. (See Table XVI.)

The actual number of new vehicles that will be purchased when new ones can be built and sold without restrictions to civilians will depend to a large degree upon farm prices and incomes. If half the 1940 number of 979 tractors reported in the county were to

[†] Includes taxes on livestock, machinery, etc., but excludes automobile taxes, fees or licenses. See Table XXII, Chapter IV for general property tax levies for all purposes in Ellis county for 1930, 1935, 1940, and 1943.

Source: 16th Census of the United States, 1940: Agriculture, Vol. I, Part 2, First and Second Series, Kansas, 1940, Table 8, pp. 780-782.

^{5.} See Table XXII in Chapter IV for the general property tax levies for all purposes in Ellis county.

be replaced by new ones in the three years following the declaration of peace, that would result in the sale of 163 tractors in each of these years. If one-half the county's reported 455 trucks were to be replaced at the same rate their annual sales for this purpose should be about 78 for the first three postwar years.

AUTOMOBILES ON FARMS

Automobiles were found on 87 percent of the farms of the county in 1940, and on 96 percent of all the farms of the state. The average model year was 1933, making the average age 7 years. Along with urban folk, farmers most certainly are going to need cars when the war is over. (See Table XVI.)

TABLE XVI
Specified Farm Machinery, Use of Electricity and Telephones, and Kind of Roads, April 1, 1940, State of Kansas, and Ellis County

	Cour	nty.	State.		
ltems.	Number.	Percent.	Number.	Percent.	
Number of farms	1,235		156,327		
Automobiles on farms (farms reporting)	1,073	86.9	130,231	96.2	
Number	1,215		150,403		
Year of model, ave. year	1933		1933		
Motor trucks on farms (farms reporting)	427	34.6	39,623	25.3	
Number	455		42,617	1	
Year of model, ave. year	1932		1932	1	
Tractors on farms (farms reporting)	903	73.1	83,775	53.6	
Number	979		95,139		
Year of model, ave. year	1931		1932		
Electric distribution line within ¼ mile of farm dwell-	101	8.2	45 067	28.8	
ing (farms reporting) Dwellings lighted by electricity (farms reporting)	169	13.7	45,067 41.549	26.5	
Current from a power line (farms reporting)	42	3.4	27.960	17.8	
Current from a home plant (farms reporting)	127	10.3	13.589	8.7	
With power line within ¼ mi. (farms reptg.)	7	0.6	1.572	1.0	
Telephone on farms (farms reporting)	455	36.8	79.666	50.9	
Kind of road:	400	00.0	15,000	00.3	
Hard surfaced (farms reporting)	44	3.6	14.302	9.1	
Gravel, shell, shale, etc. (farms reporting)	292	23.6	53,653	34.3	
Improved dirt (farms reporting)	556	45.0	52,297	33.5	
Unimproved dirt (farms reporting)	284	23.0	28,144	18.0	

Source: 16th Census of the United States, 1940: Agriculture, Vol. I, Part 2, First and Second Series, Kansas, 1940, Table 10, pp. 794-796.

See Table XXI in Chapter IV for information on lighting, heating, cooking and refrigeration equipment and radios in farm homes.

ELECTRICITY AND TELEPHONES ON FARMS

It is pointed out in Chapter IV on housing conditions,⁶ that farm houses are meagerly supplied with electricity. In Ellis county only 14 percent of the farm dwellings reported current in the home. Ten percent of this was generated by home plants. For the state the figures are 27 percent and 18 percent. The extension of the use of

^{6.} See Table XXI in Chapter IV.

electricity in farm houses and farm work should be considered a needed postwar development. More telephones would seem to be desirable, too, in view of the fact that none was reported in almost two-thirds of the farm homes in the county. Half of the farm homes in the state reported no telephones. (See Table XVI.)

Possible Number of Part-time Industrial Workers Among Farmers

When managers of industries begin looking around for locations for new plants, they sometimes consider places where they find that they can use farm labor in the slack agricultural seasons. Statistics were gathered in the 1940 census in regard to the work off farms for pay performed by farmers. 217 Ellis county farmers reported that in 1939 they worked off their farms on nonfarm jobs an average of 103 days. An industry that could gear its busy season to the slack season on farms in the county might find, therefore, a labor force of around 200 men willing to work in processing or manufacturing plants some three months in the year. A state-wide and nationwide employment exchange system is apparently needed to facilitate the determination of the exact supply of and demand for labor, and to transport it quickly to and from areas where more or fewer workers are needed. (See Table XVII.)

NUMBER OF YEARS OF FARM OCCUPANCY

In concluding this section on Agriculture it is interesting to note that the farmers in Ellis county had occupied their farms an average of 17 years in 1940. This was 3 years longer than the state average of 14 years. The length of occupany on farms would probably show a much greater location stability than that for employers and workers in urban businesses. At the same time, greater stability in home and family conditions and in neighborhood or community relations should be the result of this longer occupancy of a given farm. (See Table XVII.)

TABLE XVII

Work Off Farm, 1939 and 1934; Age, Year of Occupancy and Residence of Farm Operator, April 1, 1940, State of Kansas, and Ellis County

Items.	County.	State.
Work off farm for pay or income:		
Operators reporting work off their farms, number 1939 1934	26 7 37 3	48,173 62,018
Proportion of all farm operators, percent	21.6 27.8	30.8 35.5
Days worked off farm in total days	24,866 93	4,572,260
Number Days worked	217 22.382	33,383
Average	103 46.1	116
Rear of occupancy reported, Apr. 1, 1940: Ave. age years	1923	1926
On the farm operated, operators reporting	1,005 170	134,492 14,126

Source: 16th Census of the United States, 1940: Agriculture, Vol. I, Part 2, First and Second Series, Kansas, 1940, Table 9, p. 790.

CHAPTER IV

HOUSING CONDITIONS IN ELLIS COUNTY

EXTENT OF HOME OWNERSHIP

Of the 4,229 dwelling units in Ellis county in 1940, 48 percent were occupied by their owners, 45 percent were occupied by tenants, and 7 percent were vacant. In Hays 42.5 percent of the residential units were occupied by owners as compared to 51.8 percent in the city of Ellis. For the rest of the county the proportion of owners was 51.5 percent. (See Table XVIII.)

EXTENT OF OVERCROWDING

The adequacy of the housing facilities available can be measured partially, at least, by the average number of persons per room in occupied units. If there are more than 1.50 persons per room over-crowding is indicated. The county-wide figures show that for the dwelling units reporting upon this factor 20 percent had 1.51 or more persons per room. The overcrowding seems to be most prevalent in rural areas and towns outside of Hays and Ellis city. 14.9 percent of the reporting units in Hays and 13 percent in Ellis city had 1.51 or more persons per room, while for the rest of the county 26.9 percent was the figure. (See Table XVIII.)

NEED FOR REPAIRS

The state of repair of the dwelling units in the county was asked for in the 1940 census. 3,972 reports were received, and 1,818 units, 45.8 percent, were declared to be in need of repairs. In Hays 27.6 percent needed repairs, in Ellis city 35.4 percent, and for the rest of the county 64 percent. It is interesting to note that there was no private bath in 33.3 percent of the dwelling units in Hays and 42.6 percent in Ellis city. (See Table XVIII.)

The definite evidences of overcrowding and the need for repairs on a large percentage of the houses in the county leads to the conclusion that residential building or repair activity should increase after the war.⁸ Whether or not this happens depends upon satisfactory farm, business and employment conditions. The need is undoubtedly present. Its fulfillment depends upon effective demand.

^{7.} See footnote 2 to Table XX for the meaning of "in need of repairs."

^{8.} This need for residential construction will be increased because of the wartime restrictions on building.

TABLE XVIII

General Characteristics of Housing in Ellis County, Kansas, 1940

	Urban, Rural, Nonfarm and Rural Farm.											
	Total dwelling	Owner	Tenant	Vacant, for not for sale or rent.	Vacant,	Persons p	er room¹ ed units.	Ne	ed for repai	rs. ²		
	units.	occupied.	occupied.			Number reporting.	1.51 or more.	Number reporting.	Need repairs.	No private bath.		
County		2,033 48.0	1,902 45.0	188 4.5	106 2.5	3,833	768 20.0	3,972	1,818 45.8	2,420 60.9		
Hays city ³	1,641	698 42.5	921 56,2	20 1.2	0.1	1,558	232 14.9	1,539	$\substack{425 \\ 27.6}$	512 33.3		
Ellis city	597	309 51.8	242 40.5	46 7.7		546	$\begin{array}{c} 71 \\ 13.0 \end{array}$	573	$\begin{array}{c} 203 \\ 35.4 \end{array}$	244 42.6		
Rest of county*		1.026 51.5	739 37.1	122 6.2	104 5.2	1,729	465 26.9	1,860	1,190 64.0	1,664 89.4		

TABLE XVIII-CONCLUDED

		Ur	BAN AND RU	RAL NONFA	RM.	
		units by	occupied mortgage tus.	All dwell by con- estimat		
	Total dwelling units.	Number reporting.	Mortgaged and percent mortgaged of number reporting.	Number reporting.	Average ⁵ monthly rent (\$).	Rural farm dwelling units.
County		1,158	348 30.1	2,721	20.46	1,409
Hays city ³		645	259 40.1		26.086	
Ellis city	587	304	67 22.0	583	16.92	10
Rest of county*		209	22 10.5	552	8.07	1,399

Source: 16th Census of the United States, 1940: Housing, Vol. 1, Part 1, Data for Small Areas, Kansas, p. 515, Table 5.

- 1. This is an index of crowding. More than 1.5 could be considered overcrowded. The percentages are based on the number reporting.
- 2. See footnote 1 to Table XX for meaning. The percentages are based on the number reporting.
- 3. Building permits for new residential structures in Hays show that approximately 90 new houses were built between the 1940 census in April and January 1, 1944. The figures for residences and business structures, respectively, were: 1940: 48 and 5; 1941: 23 and 4; 1942: 4 and 1; 1943: 28 and 2. These total 103 residences, but the writer assumed that only 75 percent of the 48 residences built in 1940 were built after the census was taken. Mr. Basgall, city clerk, estimated the city population at between 7,000 and 8,000 in January of 1944. Population in 1940 was 6,385. If we assume the population increase to have been 1,200 and the gain in houses 90 between 1940 and 1944, overcrowding is definitely indicated. There were but two vacant houses in April, 1940. If no houses were vacant in January, 1944, 13.3 persons per new house would be the relation between population and new house increases between 1940 and 1944. Of course, hotels, tourist camps, and the conversion of some houses into two or more apartments helped Hays to house this great increase in population.
 - 4. In the source table these data are given by townships.
- 5. Actual rent paid or estimates based on rents for similar dwelling units in the neighborhood,
- 6. Average monthly rent in Hays and Ellis county was high in 1940. Of the 64 urban places in Kansas, only Manhattan had a monthly rent average above the \$26.08 for Hays. Among the counties, rents of urban and rural nonfarm dwelling units exceeded the Ellis county monthly average of \$20.46 in but seven of the 105 counties in the state. The state-wide averages of \$17 for urban and rural nonfarm and \$20 for urban dwelling units compare with Ellis county averages of \$20.46 and \$26.08 (Hays), respectively. See the source for averages of state-wide and urban places.

MORTGAGE STATUS OF OWNER-OCCUPIED HOUSES

Data collected about owner-occupied units in 1940 show that of those reporting in the county 30.1 percent were mortgaged. Hays with 40.1 percent had a much higher percentage than the other areas of the county. Ellis city had 22 percent, and the rest of the county 10.5 percent. This higher percentage for Hays could be accounted for partly by the fact that between 1935 and 1940 over half the new houses in the county were built in Hays. (See Table XVIII.)

AVERAGE MONTHLY RENT

The actual or estimated average monthly rent in Ellis county in 1940 was \$20.46 for urban and rural-nonfarm dwelling units. The corresponding rent for the state of Kansas was \$17. Average rent per unit in Hays was \$26.08 per month, and for all urban dwelling units in the state of Kansas. \$20. (See Table XVIII.)

Number of Persons Living in Each Dwelling Unit

The number of persons living in each dwelling is declining. For the county the average was 4.45 per occupied residential unit in 1940 as compared to 5.10 in 1930. These statistics also may be taken to mean that the size of the family is decreasing. (See Table XIX.)

Type of Structure Based Upon Number of Family Dwelling Units

Most of the dwelling units in the county were one family detached houses. In the towns and rural-nonfarm areas outside of Hays 87 percent of the structures were of this type. On the farms 98 percent were separate, one family houses. In Hays 58 percent of the residences were one family units; 28 percent were for two or three families. (See Table XX.)

Age of the Houses in Ellis County

The age of the houses in Ellis county, and the periods of greatest building activity are shown by the data collected in the 1940 census in regard to the year that the dwelling units were built. Fifty-nine percent of the houses in the county were built in the years from 1900 to 1924, with 47 percent being built in the twenty-year period 1900-1919. This means that approximately half of the houses in the county are 25 or more years old. When it is seen that 86 percent of them were built of wood, it appears that they should be considered as having passed at least two-thirds of their useful lives. In Hays 44 percent of the houses were built at least 25 years ago. (See Table XX.)

Hays has been the site of the majority of the new houses built in the county between 1930 and 1940; that city had 56 percent of the county total during these years. The proportion of the population of the county that lived in Hays in 1940 was 37 percent. There was a building spurt in the period 1935-1940 in both the county outside of Hays and in that city. More houses were built

TABLE XIX

Dwelling Units: Ownership, Tenancy and Number of Persons in Household, Ellis County, Kansas, 1940 and 1930

Subject.	The county.	Hays.	Rural nonfarm.	Rural farm.
All Dwelling Units	4,229	1,641	1,179	1,409
1940: Occupancy, tenure: All occupied units	3,935	1,619	1,050	1,266
Owner-occupied units Percent of total occupied	$\frac{2,033}{51.7}$	698 43.1	591 56.3	744 58.8
Tenant-occupied units	1,902 48.3	921 56.9	459 43.7	522 41.2
1930: All private families. Owner families.	3,121 1,743	1,042 537	809 494	1,270 712
Percent owners	57.3	52.7	61.7	58.2
Population:*			4 800	0.740
Total population, 1940	17.508 4.45	6,385 3.94	4.380	6,743 5,33
Total population, 1930	15,907 5,10	4,618	3,308 4,09	7,981 6,28

^{*}Since the number of "occupied dwelling units" in 1940 is roughly comparable with the number of "private families" or "homes" in 1930, the population per occupied unit in 1940 may be compared with the population per private family in 1930 to indicate changes in family size, and both may be used as an approximation of average size of family.

Source: 16th Census of the United States, 1940: Housing, Vol. 2, Part 3, General Characteristics, Kansas. p. 27, Table 135.

between 1935 and 1940 than in any other five-year period after the First World War with the exception of the years 1920-1924.

Use of Electricity for Lighting

Electricity was used for lighting purposes in 66 percent of the dwellings in the county in 1940. In Hays 97 percent used electricity, in the rural-nonfarm homes 79 percent, and on the farms 19 percent. It would seem that electrification of more farms could be a possible postwar development in Ellis county. (See Table XXI.)

Homes with Radios

Radios were found in 81 percent of the homes in the county. 91 percent was the figure for Hays, 77 percent for the rural-nonfarm area, and 70 percent for the farms. (See Table XXI.)

Type and Extent of Residential Refrigeration

Mechanical refrigerators were used in 43 percent of the homes in the county. 68 percent of the dwellings in Hays had such refrigerators, 10 percent used ice, and the large number of 347 residences, or 22 percent, had no refrigeration. Well over half the rural non-

^{9.} The number of farms with electricity is shown in Table XVI in Chapter III.

TABLE XX

Dwelling Units: Type of Structure, Year Built, Exterior Material and State of Repair, Ellis County, Kansas, 1940

Subject.	The county.	c/ ₆	Hays.*	%	Rural non- farm.	%	Rural farm.	%
All dwelling units	4,229		1,641		1,179		1,409	
1-family detached	3.366	79.6	956	58.3	1.030	87.4	1.380	97.9
1-family attached	42	1.0	8	0.5	22		12	
2-family side by side	160	3.8	122	7.4	30		8	
2-family other	270	6.4	230	14.0	36		4	
3-family	120	2.8	108	6.6	12			
4-family	64	1.5	56	3.4	8			
1- to 4-family with business	43	1.0	12	0.7	27		4	
5- to 9-family	72	1.7	62	3.8	10			
10- to 19-family	22	0.5	22	1.3				
20-family or more other	70	1.7	65	3.9	4		1	
dwelling places	10	1.7	0.0	0.8	*		1	
Year Built				į į				
1935-1940	465	11.0	267	16.3	73	6.2	125	8.9
1930-1934	224	5.3	91	5.5	59	5.0	74	5.3
1925-1929	371	8.8	209	12.7	82	7.0	80	5.7
1920-1924	513	12.1	277	16.9	113	9.6	123	8.7
1910-1919	1.028	24.3	338	20.6	306	26.0	384	27.3
1900-1909	957	22.6	233	14.2	341	28.9	383	27.2
1890-1899	341	8.1	81	4.9	133	11.3	127	9.0
1880-1889	123	2.9	41	2.5	45	3.8	37	2.6
1860-1879	33	0.8	18	1.1	2	0.2	13	0.9
1859 or earlier	13	6.3	2	0.2	5	0.4	6	0.4
Not reporting year built	161	3.8	84	5.1	20	1.7	57	4.0
Exterior Material						1		
All residential structures	3,806							
Wood	3.279	86.2						
Brick	94	2.5				1		
Stucco	132	3.5						
Other	188	4.9	1					
Not reptg. external material,	113	3.0						
State of Repair†								
Not needing major repairs	2.154		1,114		539		501	
Needing major repairs	1,818		425		577		816	
Not reporting repairs	257		102		63		92	
	1	I	t	1	1	1	I	1

Source: 16th Census of the United States, 1940: Housing, Vol. 2, Part 3, General Characteristics, Kansas, 1940, p. 185, Table 22.

farm and rural farm dwellings had neither ice nor mechanical refrigeration. (See Table XXI.)

Type of Cooking Fuel

Gas was the most common cooking fuel used throughout the county, with kerosene or gasoline next. The proportion of households using gas was 43 percent; 35 percent used kerosene or gasoline. The majority of the gas users were in Hays. Electricity was used for cooking purposes in only 27 dwellings in the county. (See Table XXL)

^{*} See footnote 3 to Table XVIII for estimates of houses built in Hays since 1940. † Instructions to enumerators specified that a structure was to be reported as "needing major repairs" when parts of the structure such as floors, roof, plaster, walls, or foundations required repairs or replacements, the continued neglect of which would impair the soundness of the structure and create a hazard to its safety as a place of residence.

of 21.93 mills. In 1935 the comparable figures were 48.39 mills in Hays, 45.67 mills in Ellis city, and ranged from 10.43 to 23.15 in the townships. The corresponding 1940 mill levies were 43.65, 52.79, and 9.08 to 18.25. In 1943 the levies fell to a low of 36.01 in Hays, 45.27 in Ellis city, and a range of 4.94 to 14.94 in the townships. If we assume that there has been no change in the relationship between assessed and actual valuations, it can be said that general property taxes were lower in Ellis county in 1943 than they were in 1935, and they were slightly lower in 1943 than in 1930.¹¹ (See Table XXII.)

^{11.} For taxes on farm property see Table XV in Chapter III.

CHAPTER V

RETAIL AND WHOLESALE TRADE, AND SERVICE ESTABLISHMENTS

The 1940 Census of Business shows that in 1939 retail and whole-sale trade, and service establishments in Ellis county occupied 960 persons. This number was equal to 17 percent of the county's labor force in 1940. Of these 960 persons, 295 or 31 percent were proprietors and 655, or 69 percent, were employees. Retailing was the occupation of 702 persons, while wholesaling claimed 130, and service establishments 128. When these three groups of conomic activity are lumped together, they form the county's largest occupational classification with the exception of agriculture.

RETAIL TRADE

There were 216 retail stores in the county in 1939. Half the stores were located in Hays. Total sales in the county were \$4,448,-000. Almost three-fourths (\$3,308,000) were made by Hays retail outlets. 186 (26 percent) of the persons engaged in retailing were proprietors and 516 (74 percent) were employees. The employee pay roll in the county was \$383,000 for the year. When the pay roll is divided by the number of employees the figure of \$742 is This compares with \$753 for the state-wide average. The pay per employee figure for Hays was \$770, and it was \$790 for all cities in Kansas with populations from five to ten thousand. These annual pay figures should not be used to show actual average full-time earnings of employees because some part-time employees are counted. More is said about this a little later. The reason for citing these data here is merely to enable comparisons to be made between general compensation levels for employees in different areas. (See Table XXIII.)

One important indicator of whether a store is profitable is the volume of sales. The 1939 average sales per store in Ellis county were \$20,593, or 20 percent higher per store than the comparable average of \$17,192 per store for the state. The average sales per store in Hays (\$30,349) were also higher by 20 percent than the average (\$25,285) for the stores in all the cities in the population

^{1.} These are averages for the year. During the year more than this number were employed at one time or another.

group from five to ten thousand.2 In fact, among all cities in Kansas with over 5,000 population only one, Hutchinson, exceeded the Hays average sales per store.3

In the county there were 81 persons per retail store in 1939; for the state, 66. Hays had one retail store per 59 persons, and the cities in the Hays population class (5-10,000) had 48 persons for each

TABLE XXIII Retail Trade: Stores, Sales, Personnel, and Pay Roll, State of Kansas, and

Ellis County, 1939

	E	llis count	у.	All cities	
Items.	County.	Hays.	Re- mainder of county.	from 5-10 thousand in the state.	State.
Population* Number of stores Population ÷ number of stores Sales (dollars, add 000) Average sales per store (dollars). Sales ÷ population (dollars). Active proprietors of unincorpor'd businesses, Number of employees† (average for year) Total pay roll‡ (dollars, add 000). Payroll ÷ number of employees (dollars)	216 81 4,448	6.385 109 59 3.308 30.349 518 94 387 298 770	11,123 107 104 1,140 10,654 103 92 129 85 659	88,415* 1,825 48 46,145 25,285 527 1,652 5,741 4,536 790	1,801,028 27,545 66 473,551 17,192 263 25,780 56,490 42,510 753

Source: 16th Census of the United States, 1940. Census of Business, Vol. 1, Retail Trade: 1939, Part 3, Table 16, p. 519; for cities from 5-10,000, pp. 519-20.

store. These figures might be interpreted to mean that Ellis county and Hays could support a few more retail stores because they had more persons per store than the other similar areas in the state. Of course, the opening of more stores might have reduced the relatively high average sales per store for the county and for Hays.

When the total retail sales in the county are divided by the population the result shows that the county sales per capita (\$254) were about the same as those for the state (\$263). The Hays sales per capita (\$518) were also about equal to the average for all cities between five and ten thousand population (\$527). It would seem that the retail merchants in Ellis county were making their proportionate share of retail sales in the state. (See Table XXIII.)

^{*}See Appendix B, Table II for population of all cities over 5,000. Table I in Appendix B shows separately the cities in the 5-10,000 classification.
† Employees and pay roll include paid executives of corporations but not the number and compensation of proprietors of unincorporated businesses.
‡ This figure is not the same as the average annual pay for full-time employees because 22 percent of the employees were part-time for the state. It merely serves as a basis of compensation for employees in the different areas. See Table XXIV for average annual carnings of full-time employees, and part-time employees in retail stores.

^{2.} The population of Hays was 6,385 in 1940.

Hutchinson had average sales of \$32,263 per store in 1939. The average for all stores in cities with populations of 5,000 and over was \$25,365. See Appendix B, Table I.

Information was gathered in regard to the average annual earnings of employees, and the numbers of full-time and part-time employees in retail establishments throughout the entire state for 1939. Full-time employees totalled 56,490 in that year. That was 78 percent of all retail store employees in Kansas. Part-time workers comprised the remaining 22 percent. In 1929 full-time employees were 84 percent of the total. Full-time workers in 1939 received 92 percent (\$39,071,000) of the combined employee pay roll of \$42,510,000. The average annual earnings of full-time employees were \$889 in 1939. The 1929 earnings were \$1,165. The average annual earnings of part-time employees were \$275 in 1939, and \$278 in 1929. If it can be assumed that part-time compensation was at the same hourly or weekly rate as full-time, the part-time employees apparently worked about 31 percent of full-time in 1939, and 24 percent in 1929. (See Table XXIV.)

Food and automobiles, along with gasoline and other products sold by filling stations, were the most important items in the field of retailing in Ellis county and throughout the state in 1939. Retail outlets specializing in these things accounted for 61 percent of all retail sales in the county. For the whole state the figure was 57 percent. Food stores and eating and drinking places alone were responsible for 29 percent in the county and 29 percent through-

TABLE XXIV

Retail Stores: Number of Full-time and Part-time Employees, Payroll, and Average Annual Earnings, Kansas, 1939, 1935, and 1929

ITEMS.	1939.	1935.*	1929.*
Number of employees (average for year): Total. Full-time Percentage. Part-time.	56,490 43,972 77.8 12,518	51,312 (†) (†)	63,062 52,817 83.8 10,245
Pay roll (dollars, add 000): Total Full-time Percentage. Part-time.	42,510 39,071 91.9 3,439	36,960 36,088 92.6 2,872	64,371 61,518 95.6 2,853
Average annual earnings of a. (dollars): Full-time employee Part-time employee	889 275	(†)	1,165 278

Source: 16th Census of the United States, 1940. Census of Business, Vol. 1, Retail Trade: 1939, Part 3, Table 2, pp. 117.

^{*}Previously published totals for the State, for 1935 and 1929, are revised to exclude service garages and other automotive service businesses whose receipts from service sales exceed their sales of merchandise.

† Not available.

out the state. Some 2 percent to 3 percent additional sales of foods were made by other retailers, but even so, automobile dealers and filling stations had sales about equal to the food stores and eating places. (See Table XXV.)

It should be remembered, however, that Kansas is still 58.1 percent rural according to the 1940 census. In Ellis county the percentage was 63.5 percent. People living on farms or in small towns are quite likely to raise a part of their food requirements instead of buying all their food in food stores. 38.5 percent of the county's population actually lived on farms. The proportion for the whole state was 33.5 percent.

The need for transportation in a county with two-thirds of its population living in small towns or on farms might explain the fact that automobile sales in 1939 amounted to 23 percent of all retail sales in Ellis county as compared to but 17 percent in the state-wide totals. Local prosperity due to oil activity could have been the reason, of course.

Next to food, automobiles and their operation, the most important reason for consumers' retail expenditures were the items sold by lumber-building-hardware stores (11%) and general merchandise stores (13% for the county and 10% for the state). These four general types of sales accounted for at least 85 percent of the retail sales in Ellis county and 78 percent in the state.

Not all classes of stores nor all individual stores shared equally in the retail sales in the county and in the state. The different proportions of sales by the various types of merchandise have been shown in the preceding paragraphs. A study of the total number of retail outlets and the amount of sales by these show that only 25.0 percent of the sales in the county were made by 52.3 percent of the stores. The types of stores having this 25 percent are eating and drinking places (5%), filling stations, (9%), and lumber-building-hardware stores (11%). The statewide figures show that 27.1 percent of total sales were made by 46.2 percent of the stores. One of the main reasons for the concentration of sales in a minority of store units is the relatively large number of retail stores in relation to sales in the fields of filling stations, eating and drinking places, and lumber-building-hardware stores. (See Table XXV.)

More detailed data about retail stores and sales for each of the thirty-two Kansas cities with over 5,000 population are given in Appendix B of this study.

TABLE XXV

Retail Trade: Stores and Sales by Business Groups, State of Kansas, and Ellis County, 1939

			County	٠.				i i
ITEM8.	County.	%	Hays.	%	Remainder of county.	%	State.	97
otal—1940 population	17,508 216 4,448	100	6,385 109 3,308	100	11,123 107 1,140	100	1,801,028 27,545 473,551	100
Stores	$\begin{smallmatrix} 39\\1,063\end{smallmatrix}$	24	18 719	22	21 344	30	6,207 115,297	2
Stores. Sales (dollars, add 000). General merchandise group:	6 156	4			6 156	14	359 7,401	
Stores. Sales (dollars, add 000). Apparel group:	5 571	13	(x)		1 (x)		764 47,903	j
Stores	9 106	2	6 76	2	3 30	3	1,210 24,489	
Stores. Sales (dollars, add 000). Automotive group:	9 85	1	79	2	3 6	.05	955 17,623	
Stores Sales (dollars, add 000) Filling stations:	1,015	23	834	25	7 181	16	1,620 79,889	i
Stores Sales (dollars, add 000) Lumber—building—hardware	47 397	9	17 254	8	30 143	13	5,726 49,592	
Stores. Sales (dollars, add 000). Eating and drinking places:	35 474	11	19 307	9	16 167	15	2,620 51,233	
Stores Sales (dollars, add 000)	31 241	5	15 160	5	16 81	7	4,386 27,426	
Stores	6 159	4	5 (x)		1 (x)		1,076 20,998	

TABLE XXV-Concluded

Items.	County.	%	Hays.	%	Remainder of county.	%	State.	%
11. Other stores: Stores. Sales (dollars, add 000). Separate kinds of business (included in group totals) Grocery, combination stores (part of Group 1):	15 181	4	12 164	5	3 17	1	2,622 31,700	7
Stores Sales (dollars, add 000) Hardware stores (part of Group 8);	$\frac{28}{1,006}$		$\begin{array}{c} 12 \\ 677 \end{array}$		16 329		$\frac{5,097}{106,564}$	
Stores. Sales (dollars, add 000). Restaurants, other eating places (part of Group 9):	8 53		5 35		3 18		$\begin{smallmatrix} 771 \\ 9,580 \end{smallmatrix}$	
Stores	$\frac{20}{181}$		10 135		10 46		2,878 19,462	
Feed, farm, garden supplies (part of Group 1): Stores Sales	1 (x)				1 (x)		512 11.991	

Source: 16th Census of the United States, 1940. Census of Business, Vol. 1, Retail Trade: 1939, Part 3, Table 15, pp. 298-9. (x) Withheld to avoid disclosure.

WHOLESALE TRADE

There were 60 wholesale stores in Ellis county in 1939; 26 were in Hays and 34 were located in other towns. The Hays stores made sales amounting to \$1,756,000. This was 66.4 percent of all wholesale business (\$2,646,000) done by Ellis county establishments in 1939. The average number of persons occupied in the wholesale businesses of the county was 130. Of these, 32 were proprietors of unincorporated businesses, and 98 were employees. XXVI.)

The average annual sales per store for Ellis county were \$44,100, which was about half of the \$83,363 per store average for the state.

TABLE XXVI

Wholesale Trade: Stores, Sales, Personnel, and Pay Roll, State of Kansas, and Ellis County, 1939

		=:			
	E				
ITEMS.	County.	Hays.	Re- mainder of county.	from 5-10 thousand in the state.	State.
Population* Number of stores. Population ÷ number of stores. Sales (dollars, add 000). Average sales per store (dollars). Sales ÷ population (dollars) Percent wholesale sales were of retail sales†. Active proprietors of unincorpor'd businesses, Number of employees‡ (average for year). Total pay roil¶ (dollars, add 000). Pay roll ÷ number of employees (dollars).	17,508 60 292 2,646 44,100 151 59.5 32 98 115 1,172	6,385 26 246 1,756 67,538 275 53,1 13 71 85 1,197	11,123 34 327 890 26,176 80 71.0 19 27 30 1,111	88,415* 299 295 21,090 70,535 239 45.7 215 905 1.014 1,120	1,801,028 5,130 332 427,651 83,363 238 90.3 3,521 14,997 18,163 1,211

As is well known, the large cities are the centers for wholesale trade. These cities are found in the eastern part of the state.4 But it does appear that Hays had somewhat more wholesale business in relation to her population than the average city in her population class of from five to ten thousand. This is shown by the fact that wholesale trade amounted to \$275 per capita in Hays, while \$239 per capita was the average for the twelve cities in her population

^{*} See Appendix B, Table II for population of all cities over 5,000. Table I in Appendix B shows separately cities in the 5-10,000 classification.

† See Table XXIII for the amount of retail sales.

‡ Employees and pay rolls include paid executives of corporations but not the number and compensation of proprietors of unincorporated businesses.

¶ This figure is not the same as the average annual pay for full-time employees because some of the employees were part-time. It merely serves as a basis of comparison of levels of compensation for employees in the different areas. of compensation for employees in the different areas.

Source: 16th Census of the United States, 1940, Census of Business, Vol. II, Wholesale Trade, 1939, Table 13, pp. 970-71.

^{4.} See Appendix B, Table II for wholesale trade in the thirty-two largest cities of Kansas.

class. Another proof of the fact that Hays was somewhat more active as a wholesale center than the average small city in the state, is shown by the relationship between totals of wholesale and of retail sales in Hays and in the twelve cities of her class. Sales at wholesale by Hays stores were equal to 53.1 percent of retail sales in that city. For the twelve cities in her population group, sales of wholesale stores were only 45.7 percent of retail sales.

Further detailed data in regard to wholesale trade in Kansas is given in Appendix B of this survey. The information is broken down for the thirty-two cities in the state with populations over 5,000.

SERVICE ESTABLISHMENTS 5

Ellis county had 77 service establishments in 1939. Havs was the location of 43 of them, and the rest of the county had 34. The effect

TABLE XXVII

Service Establishments:* Number, Receipts, Personnel, and Pay Roll, State of Kansas, and Ellis County, 1939

	E	llis count	у.	All cities	
Items.	County.	Hays.	Re- mainder of county.	from 5-10 thousand in the state.	State.
Population	17,508 77 227 212 2,753 12 77 51 32 627	6,385 43 148 157 3,651 25 44 45 28 622	11,123 34 327 55 1,618 5 33 6 4 667	88.415† 702 126 2,587 3,685 29 745 866 578 667	1,801,028 10,047 179 30,397 3,025 17 10,333 10,191 6,990 686

* These include barber and beauty shops, laundries, dry cleaning establishments, shoe repairing, photographic studios, advertising agencies, warehouses, automotive repairs and services, electrical appliance repairing, and other establishments.

† See Table II in Appendix B for population of all cities over 5,000. Table I in Appendix B shows separately the cities in the 5-10,000 classification and those over 10,000.

‡ Employees and pay roll include paid executives of corporations but not the number and compensation of unincorporated businesses.

¶ This figure is not the same as the average annual pay for full-time employees because some of the employees were part-time. It merely serves as a basis of comparison of levels of compensation for employees in different areas. of compensation for employees in different areas.

Source: 16th Census of the United States, 1940, Census of Business, Vol. III, Service Establishments, 1939, and Places of Amusement, Hotels, Tourist Camps and Tourist Courts, 1939. Table 2, pp. 211-212. The data for places of amusement, hotels, etc., are not discussed in this survey because they are not broken down by counties in the published census volume. For Kansas totals see pp. 509, 571 and 626 of the source.

5. These include barber and beauty shops, laundries and dry cleaners, shoe repairing, automotive repairs and services, warehouses, various types of repair shops, and many other types of establishments. Places of amusement, hotels and tourist camps are excluded from this study because the published census material was not broken down into county or small city totals. The receipts of these establishments in 1939 in the entire state were 49 percent as great as those for the service establishments included in this study; the number of persons occupied was 33 percent as great; and the employee pay roll 41 percent as large. For reference citations see the footnote on "source" at bottom of Table XXVII.

of "city life" in causing more and more of the family's traditional household duties to be performed outside of the home, is strikingly illustrated by the fact that Hays with but 37 percent of the county's population was the site of 56 percent of the service establishments in the county. To be sure, many persons living outside Hays come into that town for trade at service establishments as well as for retail purchasing. The fact remains, however, that the laundries, dry cleaning establishments, and beauty parlors are primarily used by the city folk. (See Table XXVII.)

Service establishments are perhaps the smallest scale important type of business remaining in the economic system. They were the occupation of 128 persons in Ellis county in 1939. Proprietors outnumbered employees 77 to 51. Service establishments gave work to about the same number of persons as wholesaling, but their average annual receipts per establishment were only 6 percent of the average for wholesalers. In Hays average yearly receipts (sales of goods and services) were \$3,651 per establishment. This was practically the same as the \$3,685 average for such businesses in all cities in the five to ten thousand population class.

The people of Ellis county and of Hays evidently still do more of the traditional family household duties in the home than do most of the people elsewhere in Kansas. Support for this contention is found in the somewhat smaller receipts per capita for service establishments in Ellis county and Hays than for such businesses throughout the state. The population of Ellis county in 1939 spent an average of \$12 per capita in service establishments, while the state-wide figure was \$17 per capita. In Hays the amount was equal to \$25 per capita, and the average for the twelve cities in that population class was \$29 per capita.

Appendix B of this study contains more detailed data concerning the service establishments in the thirty-two cities in Kansas with populations exceeding 5,000.

^{6.} Table XXVII shows that the per capita receipts of service establishments were \$25 in Hays and but \$5 in the remainder of the county.

^{7.} Part of this difference is due to the difference in the nature of the products sold. For example, the service establishments sell human service which is created right in the place of business. This service was not purchased from a manufacturer as are most of the products of wholesalers. The net income after paying all costs is therefore greater in relation to sales or receipts in the service establishment than in the wholesale store. Nevertheless, these differences are not enough to lead to any other conclusion than the one that the service establishment is ordinarily a small scale business.

CHAPTER VI

SUMMARY

The purpose of this survey of Ellis county, Kansas, was to discover what information of importance is available in regard to the economic and human characteristics of this county and of similar areas throughout the United States for the prewar year of 1940. It is assumed that although the war will bring great changes in certain respects, the fundamental characteristics of most areas will be essentially the same after the war as they were in 1940. A knowledge of the characteristics of an area in its last full peacetime year undoubtedly will be quite helpful in planning for the years following the war.

The general conditions dealt with in this survey included (1) population: Number, age, country of birth, race, education and occupational status; (2) agriculture: Number, size and value of farms, acres harvested, automobiles and machinery on farms, ownership status, major sources of farm income, taxes, use of electricity and telephones; (3) housing: Extent of ownership, need for repairs, age of dwellings, average rents, extent of overcrowding, type of dwelling, use of electricity, type of heating equipment, refrigeration, radios, taxes on owners of property; (4) retail and wholesale trade and service establishments: Number of stores or establishments, amount and type of goods or services sold, number of persons engaged in trade, and payrolls.

The population of the county increased 10 percent between 1930 and 1940. Most of the growth occurred in the city of Hays which had a total of 6,385 persons in 1940, or 37 percent of the county total of 17,508. There were 875 persons of foreign birth in 1940, and they represented 5 percent of the total population. The figure for the whole state was 2.9 percent. Sixty-two percent of the foreign born in Ellis county came from Russia, and 12 percent from Rumania.

On the basis of the median number of school years completed by persons 25 years or older the figure of 8.4 for the county is about the same as the median of 8.7 for the state. The percentage of the persons of high-school age in school, however, was somewhat lower for the county than for the state. Table V in Chapter II gives this information in detail.

Agriculture was the dominant occupation of the people, claiming

1,551 persons, or 27 percent of the county's labor force. This percentage may seem small in such a definitely rural area, but the data shown in Table IV, in Chapter II help to show the great variety of occupations existing even in a predominantly agricultural region. Next to agriculture in number of persons occupied was the group classed as professional and related services with 553. Then came oil and gas production with 345. If all the persons engaged in retail and wholesale trade had been lumped together they would have ranked second to agriculture with 960 persons. Hays is a leading trade center for the surrounding counties, and consequently trade would be expected to be the second most important economic activity in Ellis county.

The average size of farms in the county increased from 418 acres to 451 acres, or 7.9 percent between 1930 and 1940. The state-wide average increased from 283 acres to 308 acres, a rise of 8.8 percent. The number of farms in the county was 1,235 in 1940, a decline of 79 or 6.4 percent from 1930. The drop in the state was 5.9 percent. There was a 37 percent fall in the value of Ellis county farms between 1930 and 1940. The state as a whole suffered a 34 percent loss in farm values. In 1940 the value of the land and buildings when calculated on a per acre basis had an average value in the county of \$23.71 per acre compared to \$29.51 per acre for the state.

The proportion of farms in the county owned by their operators increased from 32 percent in 1930 to 36 percent in 1940. Renting some land from others seems to be a growing practice, however, perhaps because it allows an operator to get more nearly full use of his machinery with the resulting lower production costs. He also would avoid the problems involved in buving land.

The major sources of farm income are field crops (wheat mostly), and livestock. These two sources account for over 75 percent of the total. Dairy products are a poor third. (See Table XI in Chapter III.) Between 1929 and 1939 diversification did not make much headway in the county. Acres planted to sorghums increased only 3.11 percent. Number of cows milked fell 11 percent in that decade; cattle and calves went down 19 percent, and hogs and pigs 64 percent. Twenty-four percent fewer chickens were raised in 1939 than in 1934, and 20 percent fewer eggs were produced.

Taxes in 1939 on Ellis county farms averaged 32 cents an acre. The state average was 49 cents. Real estate taxes were equal to \$1.19 per \$100 of assessed valuation in the county and \$1.39 per \$100 in the state.

Electricity was reported in only 14 percent of the farm dwellings. Twenty-seven percent was the state figure. But one-third of the farm homes in the county had telephones. One-half of the farm homes throughout the state had telephones.

The housing conditions reported in this survey show that there were 4,229 dwelling units in the county in 1940. About half (48 percent) of the units were owned by their occupants. Twenty percent of the units were overcrowded, most of these being in the rural areas. 1,818 residences or 46 percent were declared to be in need of repairs. It is interesting (alarming?) to note that there was no private bath in 33 percent of the dwelling units in Hays and 43 percent in Ellis city. Approximately half of the houses in the county were built at least 25 years ago. The average monthly rents per dwelling in the county and in Hays were appreciably higher than the state averages for rural and urban areas.

General property taxes in the county were lower in 1943 than they were in 1935, although in the former year they were about the same as in 1930. In Hays and Ellis city taxes have dropped considerably in the last few years. The decrease in Hays between 1935 and 1943 was from 48.39 mills to 36.01 mills. The big decline in Ellis city occurred between 1940 and 1943 when the drop was from 52.79 mills to 45.27 mills.

It can be seen from this survey that much building and repairing of dwellings is needed, both in towns and on farms. Automobiles, household equipment, farm machinery, extension of electrical and telephone service to rural areas are all great needs in Ellis county. This will be true for the state and nation at large. Such inventories of desired or needed goods as can be made by community surveys such as this study undertakes, will prove helpful in planning production and job possibilities. It should be remembered, however, that needs or desires are not the same as effective demand unless backed by actual purchasing power among the farmers, businessmen, professional persons and workers. The biggest task facing our communities and the nation is not the creation of desires for goods, but rather the creation of enough employment and effective purchasing power to provide a market for the goods that we can produce and most certainly need.

This study, as has been stated, was made to serve as a pattern for the study of any county or similar area. The real value of such a survey will be realized, however, only if it is used in an actual attempt to plan a sound future development of a community.

APPENDIX A

BIBLIOGRAPHY

Publications on Methods and Sources of Information for Community Surveys

Methods and Techniques

- United States Department of Commerce, Bureau of Foreign and Domestic Commerce. Suggestions for Use in Making a City Survey, (Industrial and Commercial). Washington, Government Printing Office, 1938 (Excellent)
- 2. United States Department of Labor, Bureau of Labor Statistics, Employment and Occupational Outlook Branch Postwar Division, Impact of the War on Labette County, Kansas, Industrial Area Study No. 2. March, 1943. Washington, United States Bureau of Labor Statistics, 1943. A working notebook for use by local groups studying recent economic developments and formulating plans for the postwar period. See also in this series of studies by the same agency, Impact of the War on the Waco-McGregor Area, McLennan County, Texas, Study No. 14; and a similar Study No. 13 on the Muscle Shoals Area. Various other studies have been made by the Employment and Occupational Branch of the Bureau of Labor Statistics.
- National Resources Planning Board, Area Analysis—A Method of Public Works Planning, Technical Paper No. 6, Revised edition, April, 1943. Washington, Government Printing Office, 1942.
- 4. United States Department of Commerce, Bureau of Census, 16th Census of the United States, 1940, Key to the Published and Tabulated Data for Small Areas. Washington, Government Printing Office, 1940.
- United States Department of Commerce, Bureau of Census, 16th Census of the United States: 1940, Uses of Agricultural Census Statistics. Washington, Government Printing Office, 1943.
- Federal Security Agency, United States Office of Education, Washington,
 D. C., Steps in a Community Occupational Survey. Washington,
 United States Office of Education, Vocational Division, 1941.
- National Resources Planning Board, Federal Aids to Local Planning. Washington, Government Printing Office, 1941.
- 8. United States Department of Agriculture, 1941 Yearbook, "Climate and Man." Washington, Government Printing Office, 1941. Gives climatic and weather data for each county in the United States. Equally useful is the 1938 Yearbook, "Soils and Men." Particularly good is the map "Soil Associations of the United States" prepared by the Soil Survey Division.
- 9. United States Department of Commerce, Bureau of Foreign and Domestic Commerce, Commercial Survey of the Southeast, Domestic Commerce Series, No. 19. Washington, Government Printing Office, 1927.
- 10. State Geological Survey, University of Kansas, Lawrence; has prepared many fine maps showing the mineral resources of Kansas. See especially the map "Mineral Resources of Kansas," published in 1942.
- Kansas State Industrial Development Commission, Topeka, Kansas, Various publications on economic possibilities of Kansas.

- United States Department of Commerce, Bureau of Foreign and Domestic Commerce, Community Action for Post-War Jobs and Profits, Industrial Series No. 6, Washington, Government Printing Office, 1943. (Excellent.)
- 13. Kansas State Labor Department, Kansas Labor and Industrial Bulletin, Vol. XIII, November, 1943, No. 3, and all others.
- Garnsey, Morris E. Employment Trends in Relation to the Post-War Economy of the Denver Area, Publication No. 2 of the Denver Regional Association. Denver, Colorado, University of Denver, October, 1943.

1940 Census Data Broken Down by Counties

- 15. United States Department of Commerce Bureau of Census, 16th Census of the United States: 1940, Agriculture, Vol. I, Part 2, First and Second series, Uses of Land, Principal Crops and Classes of Livestock, Kansas. Washington, Government Printing Office, 1941.
- 16. United States Department of Commerce, Bureau of Census, 16th Census of the United States: 1940, Agriculture, Vol. I, part 2, First and Second series, Farm Mortgages, Taxes, Labor, Facilities Expenditure, and Miscellaneous Farm Information, Fruits, Vegetables and Minor Crops, Kansas. Washington, Government Printing Office, 1941.
- 17. United States Department of Commerce, Bureau of Census, 16th Census of the United States: 1940, Agriculture, Vol. II, Third series, Value of Farm Products, Farms Classified by Major Source of Income and by Total Value of Products, Kansas. Washington, Government Printing Office, 1941.
- United States Department of Commerce, Bureau of Census, 16th Census of the United States: 1940, Housing, Vol. I, Part 1, Data for Small Areas, Kansas. Washington, Government Printing Office, 1941.
- 19. United States Department of Commerce, Bureau of Census, 16th Census of the United States: 1940, Housing, Vol. II, Part 3, General Characteristics, Kansas. Washington, Government Printing Office, 1942.
- United States Department of Commerce, Bureau of Census, 16th Census of the United States: 1940, Manufacturers 1939, Vol. III. Washington, Government Printing Office, 1942.
- United States Department of Commerce, Bureau of Census, 16th Census of the United States: 1940, Population, Vol. I, Number of Inhabitants, Kansas. Washington, Government Printing Office, 1941.
- United States Department of Commerce, Bureau of Census, 16th Census of the United States: 1940, Population, Vol. II, Part 3, Characteristics of the Population, Kansas. Washington, Government Printing Office, 1941.
- United States Department of Commerce, Bureau of Census, 16th Census of the United States: 1940, Census of Business: 1939, Retail Trade, Vol. I, Kansas. Washington, Government Printing Office, 1941.
- United States Department of Commerce, Bureau of Census, 16th Census of the United States: 1940, Census of Business, Vol. II, Retail Trade: 1939, Part 3. Washington, Government Printing Office, 1941.
- United States Department of Commerce, Bureau of Census, 16th Census of the United States: 1940, Census of Business: Vol. II, Wholesale Trade, 1939, Kansas. Washington, Government Printing Office, 1941.

Other 1940 Census Data (Not by Counties)

- United States Department of Commerce, Bureau of Census, 16th Census of the United States: 1940, Agriculture, Ranking Agricultural Counties. Washington, Government Printing Office, 1943.
- United States Department of Commerce, Bureau of Census, 16th Census of the United States: 1940, Drainage of Agricultural Lands, United States Summary. (A reprint from 1940 Census Report in Drainage of Agricultural Lands.) Washington, Government Printing Office, 1943.
- 28. United States Department of Commerce, Bureau of Census, 16th Census of the United States: 1940, Drainage of Agricultural Lands, Kansas. Washington, Government Printing Office, 1942.
- United States Department of Commerce, Bureau of Census, 16th Census of the United States: 1940, Housing, Vol. III, Part 2, Characteristics by Monthly Rent or Value, Kansas. Washington, Government Printing Office, 1942.
- 30. United State Department of Commerce, Bureau of Census, 16th Census of the United States: 1940, Housing, Vol. IV, Part 2, Mortgages on Owner-Occupied Nonfarm Homes, Kansas. Washington, Government Printing Office. 1943.
- 31. United States Department of Commerce, Bureau of Census, 16th Census of the United States, 1940, Population, Vol. III, Part 3, The Labor Force, Kansas. Washington, Government Printing Office, 1942.
- 32. United States Department of Commerce, Bureau of Census, 16th Census of the United States: 1940, Population, Vol. III, Part 2, The Labor Force. Washington, Government Printing Office, 1943.
- United States Department of Commerce, Bureau of Census, 16th Census of the United States: 1940, Population, Vol. IV; Part 2, Characteristics by Age, Marital Status, Relationship, Education, and Citizenship, Kansas. Washington, Government Printing Office, 1943.
- 34. United States Department of Commerce, Bureau of Census, 16th Census of the United States: 1940, Population, Vol. II, Part 2, Nativity and Parentage of the White Population, General Characteristics. Washington, Government Printing Office, 1943.
- 35. United States Department of Commerce, Bureau of Census, 16th Census of the United States: 1940, Population and Housing, Families, Characteristics of Rural-Farm Families. Washington, Government Printing Office, 1943.
- 36. United States Department of Commerce, Bureau of Census, 16th Census of the United States: 1940, Irrigation of Agricultural Lands, Kansas. Washington, Government Printing Office, 1942.

General References

- 37. National Resources Planning Board, After the War—Full Employment, Post-War Planning, Washington, Government Printing Office, 1942.
- 38. National Resources Planning Board, Demobilization and Readjustment. Washington, Government Printing Office, 1943.
- National Planning Board, Federal Emergency Administration of Public Works, Final Report 1933-34. Washington, Government Printing Office, 1934.
- National Resources Committee, Energy Resources and National Policy, 76th Congress, 1st Session, House Document 160. Washington, Government Printing Office, 1939.

- 41. National Resources Planning Board, Human Conservation, The Story of Our Wasted Resources. Washington, Government Printing Office, 1943.
- National Resources Planning Board, Land Classification in the United States. Washington, Government Printing Office, 1941.
- 43. National Resources Planning Board, Our National Resources, Facts and Problems. Washington, Government Printing Office, 1940.
- 44. National Resources Board, State Planning, Review of Activities and Progress. Washington, Government Printing Office, 1935.
- National Resources Committee, The Structure of the American Economy, Part I. Basic Characteristics. Washington, Government Printing Office, 1939.
- National Resources Planning Board, The Structure of the American Economy, Part II. Toward Full Use of Resources. Washington, Government Printing Office, 1940.
- 47. United States Department of Agriculture, State Legislation for Better Land Use, A Special Report. Washington, Government Printing Office, 1941.

APPENDIX B

TABLE I

Retail Stores: Sales, Personnel, and Pay Roll, Cities of Kansas in Two Population Classes: 5-10,000 and Over 10,000, 1939

CITIES.	Number of stores.	Sales (add 000) (dollars).	Average sales per store (dollars).	Active proprietors of unincorporated businesses.
Population class 5-10,000— Abilene Concordia Dodge City. Garden City. Great Bend HAYS Junction City. McPherson Pratt Wellington Winfield	138 132 189 135 153 109 175 157 165 144 117	2,917 3,276 5,409 4,155 4,960 3,308 3,163 3,631 4,124 3,518 2,944 4,740	21,138 24,811 28,619 30,778 32,418 30,349 18,074 23,127 24,994 24,431 25,162 22,414	136 116 170 106 135 94 162 151 140 133 113
TotalsAverage per store		46,145	25,285	1,652
Population class over 10,000— Arkansas City Atchison Chanute Coffeyville El Dorado Emporia Fort Scott Hutchinson Independence Kansas City Lawrence Leavenworth Manhattan Newton Ottawa Parsons Pittsburg Salina Topeka	236 212 320 187 263 245 501 228 1,687 287 354 282 245 194 247 366 395 1,089 1,839	5,372 4,822 4,225 6,659 4,927 6,776 4,539 16,164 5,364 35,111 7,335 6,769 6,333 4,927 4,277 4,277 4,277 10,801 31,633 53,243	22,290 20,432 19,929 20,809 26,348 25,764 18,527 32,263 20,813 25,557 19,121 28,527 26,632 22,046 21,619 21,631 27,344 29,048 28,952	216 243 199 292 181 240 221 444 4225 1,589 340 198 172 183 227 322 346 979 1,663
TotalsAverage per store	9,298	235,842	25,365	8,548

TABLE I-CONCLUDED

Cities.	Number of employees (average for year).	Average number employees per store.	Total pay rolls (add 000) (dollars).	Average pay roll per store (dollars)
Population class 5-10,000-				,
Abilene	392	2.8	277	2.007
oncordia	388	2.9	318	2,409
Oodge City	743	3.9	579	3,064
Garden City	479	3.6	403	2,985
Great Bend	591	3.9	528	3.451
IAYS.	387	3.6	298	2.733
ola	356	2.0	260	1.486
Ula,	431	2.7	333	2,121
unction City	527	3.2		
McPherson		3.2	420	2,909
Pratt	455		362	2,514
Wellington	383	3.3	299	2,556
Vinfield	609	2.8	459	2,175
Totals	5,741		4,536	
Average per store		3.1		2,485
Population class over 10,000—				
Arkansas City	717	3.0	534	2,216
Atchison	587	2.1	462	1,958
Chanute	492	2.3	329	1,557
Coffeyville	874	2.7	622	1,944
El Dorado	570	3.0	469	2,508
Emporia	906	3.4	665	2,529
ort Scott	577	2.4	400	1,633
Hutchinson	2,255	4.5	1.902	3,796
ndependence	681	3.0	475	2.083
Kansas City	3,767	2.2	3,333	1,976
Awrence	966	3.4	677	2,359
eavenworth	938	2.6	733	2,071
Manhattan	843	3.8	643	2.896
Newton	732	4.0	516	2.789
Ottawa	548	2.8	349	1.799
arsons	694	2.9	510	2,065
Pittsburg	1.093	3.0	840	2,295
Salina	1.492	3.8	1.249	3.162
Opeka	4.274	3.9	3.743	3,437
Vichita	7,519	4.1	6,287	3,419
Totalo	20 595		01 720	
Totals	30,525	3.3	24.738	1

Source: 16th Census of the United States, 1940, Census of Business, Vol. 1, Retail Trade: 1939, Part 3, Table 17, pp. 645-8; and Table 16, pp. 519-20.

TABLE II

Wholesale Trade: 1939, Establishments, Sales, Personnel, and Pay Roll, State of Kansas, Ellis County, Hays and all Cities with More than 5,000 Population

STATE, COUNTY AND CITY.	1940 popula- tion.	Number of estab- lishments.	Sales (add 000) (dollars).	Average sales per establish ment (dollars)
Kansas Ellis county Hays Remainder of county	1,801,028 17,508 6,385 11,123	5,130 60 26 34	427,651 2,646 1,756 890	83,363 44,100 46,538 26,176
Abilene Arkansas City Arkansas City Arkansas City Atchison Chanute Coffeyville Concordia Dodge City El Dorado Emporia Fort Scott Garden City Great Bend Hutchinson Independence Iola Iunction City Kansas City Aasvence Leavenworth Manhattan McPherson Newton Uttawa Parson Pittsburg Pratt Solina Copeka Wellington	5,671 12,752 12,648 10,142 17,355 6,255 8,487 10,045 13,188 10,557 6,285 9,044 30,013 11,565 7,244 8,507 121,458 14,390 19,220 11,659 7,194 11,048 10,193 14,294 11,073 6,591 21,073 67,833 7,246 11,073 67,833 7,246 11,966	18 21 30 26 32 28 32 22 28 32 21 25 93 37 21 22 130 37 35 23 23 24 130 25 21 25 37 37 35 23 24 37 37 37 35 23 40 40 40 40 40 40 40 40 40 40 40 40 40	953 4,425 4,722 1,113 3,117 1,963 2,643 1,305 3,233 1,521 1,178 1,540 23,109 2,802 2,236 1,528 39,719 2,679 2,186 1,177 2,679 2,186 1,177 2,341 4,982 1,159	52,944 210,714 157,400 42,808 103,900 75,500 82,612 46,607 101,031 47,531 56,095 61,600 62,48,184 75,730 106,476 69,455 305,531 72,424 62,457 135,348 83,607 134,649 135,938 83,607 134,649 135,938 83,607 134,649 135,938 135

TABLE II—CONCLUDED

STATE, COUNTY AND CITY.	Active proprietors per unin- corporated business.	Number of employees.	Average number employees per estab- lishments.	Total pay rolls (add 000) (dollars)	Average pay roll per store (dollars).
Kansas. Ellis county. Hays. Remainder of county.	3,521 32 13 19	14,997 98 71 27	2.9 1.6 2.7 .8	18,163 115 85 30	3,541 1,917 3,269 882
Abilene Arkansas City Atchison Cofneyville Coffeyville Concordia Dodge City El Dorado Emporia Fort Scott Garden City Great Bend Hutchinson Independence Iola Junction City Kansas City Lawrence Leavenworth Manhattan McPherson Newton Ottawa Parsons	12 19 26 19 24 13 21 21 26 28 14 15 7 30 35 15 79 32 25 20 19	47 211 267 67 175 97 132 201 87 52 83 607 154 80 75 1,411 195 114 152 89 53 115	2.6 10.0 8.9 2.6 5.8 3.7 4.1 2.6 6.3 2.7 2.5 3.3 6.5 2.3 3.4 4.2 3.8 4.2 3.8 4.2 4.2 4.2 4.2 4.2 4.2 4.3 6.6 6.3 7.3 7.3 7.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8	37 270 357 88 186 125 156 86 166 69 50 104 767 158 79 86 2,303 185 149 136 79 43 113	2,056 12,857 11,900 3,385 6,200 4,808 4,875 3,071 5,187 2,156 2,381 4,160 8,247 4,270 3,762 3,762 3,762 3,762 3,762 1,715 5,913 2,194 1,593 4,036 2,946
Pittsburg. Pratt Salina. Topeka. Wellington Wichita. Winfield.	46 16 47 90 11 174 28	266 53 796 1,163 40 2,991 87	5.0 2.3 8.9 8.3 2.5 9.4 2.6	319 67 1,036 1,578 62 4,489 84	6,255 2,913 11,640 11,191 3,875 14,072 2,545
Average of all cities, exclud. Hays,	34	324	6.6	437	8,918

Source: 16th Census of the United States, 1940, Census of Business, Vol. II, Wholesale Trade: 1939, Table 13, p. 970.

TABLE III

Service Establishments:* 1939, Number, Receipts, Personnel, and Pay Roll, State of Kansas, Hays, and All Cities with Over 5,000 Population

Ellis county 77 212 2,753 77 Hays 43 157 3,651 44 Remainder of county 34 55 1,618 33 Abilene 60 158 2,633 62 Arkansas City 107 320 2,991 108 Atchison 102 314 3,078 115 Chanute 72 240 3,333 80 Coffeyville 117 307 3,137 117 Concordia 50 122 2,440 60 Dodge City 67 332 4,955 75 Ell Dorado 85 310 3,647 955 Emporia 119 494 4,151 133 Fort Scott 95 218 4,360 48 Great Bend 81 376 4,644 90 Hutchinson 246 1129 4,589 253 Independence 89 291 3,270 95 Iola 376 4,644 90 Hutchinson 246 1129 4,589 253 Independence 89 291 3,270 95 Iola 55 7244 4,281 58 Kansas City 602 2,760 4,585 623 Lawrence 103 467 4,534 112 Leavenworth 110 470 4,273 112 Manhattan 101 452 4,75 102 Manhattan 84 264 3,143 86 Parsons 85 302 1,259 88 Pritsburg 146 578 3,959 154 Pratt 62 243 3,919 62 Salina 200 857 4,285 214	STATE, COUNTY AND CITY.	Number of estab- lishments.	Receipts (add 000) (dollars).	Average receipts per estab- lishments (dollars).	Active proprie- tors.
Arkansas City 107 320 2,991 108 Atchison 102 314 3,078 115 Chanute 72 240 3,333 80 Coffeyville 117 307 3,137 117 Concordia 50 122 2,440 60 Dodge City 67 332 4,955 75 El Dorado 85 310 3,647 95 Emporia 119 494 4,151 133 Fort Scott 95 323 3,400 96 Garden City 50 218 4,360 48 Great Bend 81 376 4,644 90 Hutchinson 246 1,129 4,589 253 Independence 89 291 3,270 95 Iola 57 214 4,281 58 Kansas City 602 2,760 4,585 623 Lawrence 103 467	Kansas Ellis county Hays Remainder of county	77 43	212 157	2,753 3,651	77 44
Wellington 29 107 3,690 31 Wichita 886 4,704 5,309 900	Arkansas City Arkansas City Atchison. Chanute. Coffeyville Concordia. Dodge City El Dorado. Emporia. Fort Scott. Garden City Great Bend Hutchinson Independence. Iola Junction City Kansas City Lawrence Leavenworth Manhattan McPherson Newton. Ottawa Parsons. Pittsburg. Pratt Salina	107 102 727 117 50 67 85 119 95 50 81 246 89 55 57 602 103 110 101 66 80 84 84 85 146 86 2200	320 314 240 367 122 332 310 494 494 291 161 244 2,760 467 470 217 277 264 362 578 243 857	2,991 3,078 3,333 3,137 2,440 4,955 3,647 4,151 3,400 4,380 4,589 3,270 2,927 4,281 4,534 4,273 3,288 3,442 3,143 4,273 3,143 4,273 3,143 4,273 3,143 4,273 3,143 4,285 3,919 4,285	108 117 80 117 60 75 95 133 96 48 90 253 95 58 623 112 102 71 94 86 88 88 154
	Wellington	29 886	107 4,704	3,690 5,309	900

TABLE III-CONCLUDED

STATE, COUNTY AND CITY.	Number of employees.	Average number employees per estab- lishment.	Total pay roll (add 000) (dollars).	Average pay roll per store (dollars).
Kansas Ellis county. Hays. Remainder of county.	10,191 51 45 6	$ \begin{array}{c} 1.0 \\ 0.7 \\ 1.0 \\ 0.2 \end{array} $	6,990 32 28 4	696 416 651 118
Abilene Arkansas City Atchison Chanute Coffeyville Concordia Dodge City El Dorado Emporia Fort Scott Garden City Great Bend Hutchinson Independence Iola Junction City Kansas City Lawrence Leaven worth Manhattan McPherson Newton Ottawa Parsons Pittsburg Pratt Salina	50 101 102 72 135 48 118 110 194 130 73 106 503 112 40 80 828 225 208 171 82 108 91 125 193 91 125 193 925	0.8 0.9 1.0 1.2 0.96 1.7 1.3 1.6 1.4 2.0 1.3 0.7 1.3 1.4 2.1 1.4 2.1 1.5 1.4 2.1 1.7 1.3 1.6 1.7 1.3 1.6 1.7 1.3 1.6 1.7 1.3 1.6 1.7 1.3 1.6 1.7 1.3 1.6 1.7 1.3 1.6 1.7 1.3 1.6 1.7 1.3 1.6 1.7 1.3 1.6 1.7 1.3 1.6 1.7 1.3 1.6 1.7 1.3 1.6 1.7 1.3 1.6 1.7 1.3 1.6 1.7 1.7 1.7 1.8 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9	33 70 67 43 98 29 73 68 118 74 54 85 316 76 25 58 750 141 142 114 51 60 51 81 139 51 51	550 654 651 597 795 580 900 992 779 1,090 1,049 1,285 854 455 1,018 1,246 1,367 1,291 1,129 1,12
Topeka Wellington Wichita Winfield Average of all these cities, excluding Hays	919 42 2.214 95 244	1.4 2.5 1.1	705 25 1,612 66 177	852 1,819 804 1,204

^{*}These include: Barber and beauty shops, laundries and dry cleaning establishments, shoe repairing, photographic studios, warehouses, automotive repairs and services, electrical appliance repairing, advertising agencies, and other establishments.

Source: 16th Census of the United States, 1940, Census of Business, Vol. III, Service Establishments, 1939, Table II, pp. 211-212, and Places of Amusement, Hotels, Tourist Courts and Tourist Camps, 1939.

TABLE IV

Farms: Value of Land, Buildings, and Implements by Ownership Status of Operator, 1940, 1935, State of Kansas, and Ellis County

ITEMS.		County.	State.
Value of farms (land and buildings): Full owners, dollars—			,
run owners, donars—	1940 1935	4,213,018 4,937,415	383,542,350 428,095,986
Part owners, dollars—	1940	4,980,212	461,748,643
Portion owned	1935	4,484,595 2,897,099	455,050,102 243,646,890
Portion rented from others	1940 1940 1935	2,083,113 451,220 426,930	218,101,753 18,033,933 20,130,135
All tenants	1940 1935	3,558,952 3,692,195	558,062,538 575,383,205
Value of implements and machinery, 1940: Full owners:			grand.
Farms reporting		410 325,130	. 43,683 28,207,073
Part owners: Farms reporting Dollars		329 378,031	32,096 40,487,532
Managers: Farms reporting		5	547
Dollars		32,312	821,845
All tenants: Farms reporting Dollars.		382 259,213	61,870 45,746,236

Source: 16th Census of the United States, 1940: Agriculture, First and Second Series, Vol. 1, Part 2, Kansas, 1940, Table 2, pp. 728-30.

APPENDIX C

SUPPLEMENTARY CLIMATIC NOTES FOR KANSAS

Kansas is located approximately in the geographic center of the United States. The elevation decreases gradually from about 4,000 feet above sea level in Sherman and Wallace counties, near the Colorado line, eastward and southward to about 750 feet in the extreme southeastern counties. The terrain over the north-central and western parts of the state is gently rolling. In the central and southern counties the land is quite level. Eastern Kansas is more hilly, but only along the streams are there any sharp elevavations.

Drainage is provided by two main river systems, the Kansas and its tributaries in the northern half, and the Arkansas and a large tributary, the Neosho, in the southern half. There are fringes of timber along the streams in eastern Kansas but in the short-grass country of the west few trees are seen.

The variety in the weather is invigorating and also makes possible a great range of crop production. Summer afternoons are often uncomfortably warm, but the long evenings provide relaxation. During Indian summer, a period of the weather frequently occurring in the latter part of September and in October, rainfall is usually light, sunshine abundant, mornings rather frosty, and afternoons warm. The winter season is frequently mild, with stock ranging in the open much of the time, though extremely low temperatures occur sometimes.

The average annual temperature is 55° F., ranging from 58° in the southeast to 52° in the northwest. The extreme annual range is normally about 125°.

The normal growing season varies from nearly 200 days in the southeastern counties to 160 days in the northwest. Killing frosts have been recorded in the southeast as late as May 9 and in the northwest as late as May 27. In Ellis county the average growing season is 168 days with the average date for the latest killing frost April 29 and the earliest October 14. Temperatures of 32° F. or lower have occurred in the fall as early as the middle of September in western Kansas and in the latter part of that month in the southeast. Farming operations generally begin in south-central counties first, then gradually get started in the eastern and north-central counties, and finally begin in the extreme northwest about three weeks later.

The counties in the southeast normally receive a little over 40 inches of precipitation annually and there is a gradual decrease in amount across the state to the middle counties of the western third, where the average is only 15 inches a year. The average precipitation for the eastern third is 34.76, the middle, 26.05, and the western third, 18.81 inches. Precipitation in Ellis county averages 22.74 inches.

After January, the month of least precipitation, there is a gradual increase until June, the wettest month. In the eastern half of the state there is usually a noticeable decline in precipitation in the latter part of July, with an increase

again in early August. The wettest month in Ellis county is June with 2.80 inches. April, May, June, July and August all average between 2 and 3 inches.

In winter most of the precipitation is rather light, but in summer 24-hour falls of 5 to 10 inches have been recorded in all sections of Kansas. Although there are many more light than heavy rains, the greatest amount of rain comes in amounts of half an inch or more. About 70 percent of the total precipitation falls in the warm season and thus supplies the demands of growing crops. Two inches or more of rainfall in 24 hours have been recorded much more frequently in eastern Kansas than in the western part.

The average annual number of days with 0.01 inch or more of precipitation is 68. The average number of clear days is 186, partly cloudy 100, and cloudy 79.

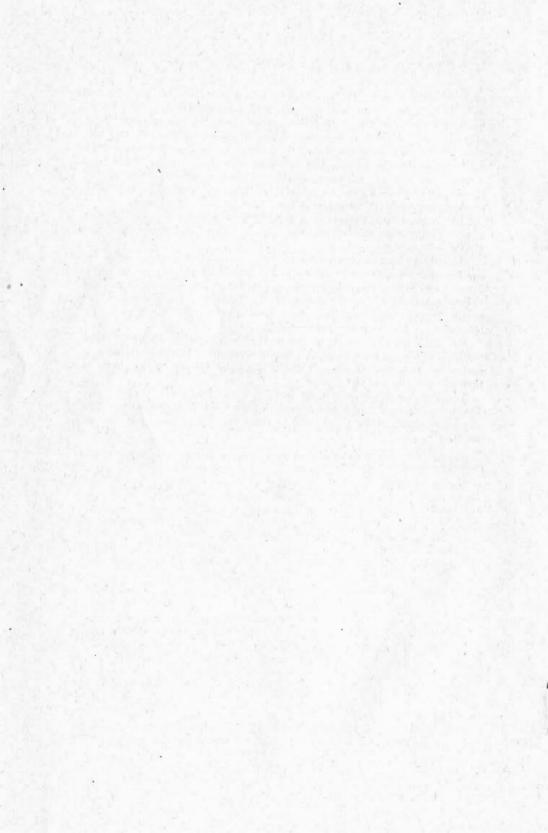
The average annual snowfall ranges from approximately 12 inches in the southeastern counties to 25 inches in the northwestern part of the state. January and February are the months of heaviest snow in eastern Kansas and February and March in the western half. While a snow cover does not usually remain very long, there have been winters when the ground was blanketed for several weeks consecutively.

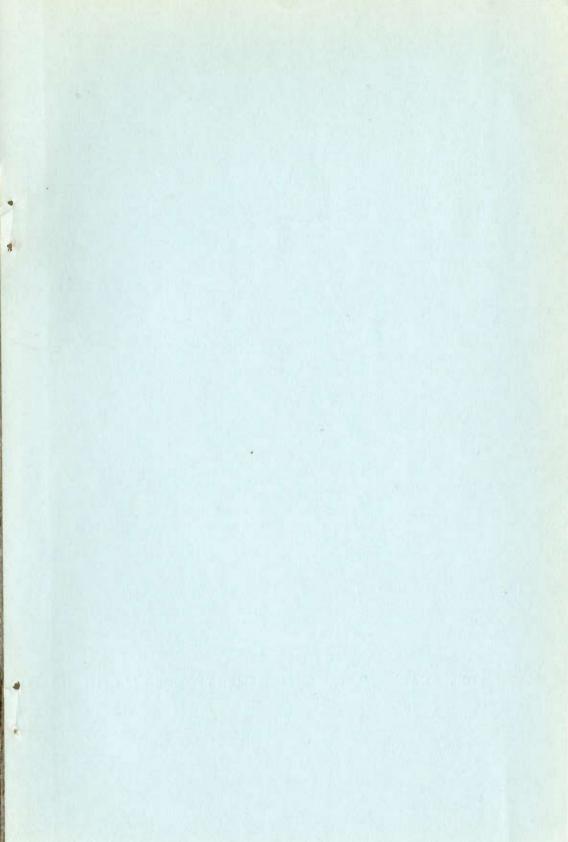
The prevailing wind movement is from the south except in the winter, when northerly winds are more frequent. Wind movement is higher in the western part of the state than in the east and is of greater velocity in the afternoon than at other times of the day.

Tornadoes have occurred in all months of the year except January and December. Normally May and June each have a much greater number than any other month, while about twice as many occur in eastern as in western counties.

Sources: From 1941 Yearbook of Agriculture, Climate and Man, pp. 882-3. United States Department of Agriculture,







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