

POPULATION CHARACTERISTICS AND CHANGES

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missouri population characteristics and changes

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• The average American moves his place of residence about once in each five years. This move may be to the house next door or across the country. It would be a very unusual family today that would live in the same house for several generations as was common in the past.

These changes in spatial location are just one of many ways in which our population is changing. To determine changes in population, the Bureau of the Census gathers a large amount of data which includes counts of the people, their residence, and characteristics. This census is conducted every ten years at the beginning of each decade.

Data from successive censuses provide comparisons of changes of number and in characteristics of the people. This comparison is like examining two still pictures taken at different times. It does not take into account changes that do not show up at the exact time the census is taken.

This bulletin was prepared for people who do not have United States Census material available but desire to know some of the general changes that have occurred in Missouri's population. More detailed data are available in the United States Department of Commerce, Bureau of Census reports for Missouri.

In this bulletin, the 1940 and 1960 population counts for Missouri are considered in detail. Items compared include the number of residents, their spatial distribution, the age and sex composition, patterns of migration, educational achievement for those over 25 years of age, birth and death rates, and the sex ratio. This publication also deals with changes occurring between 1940 and 1960 in the numbers and characteristics of the people.

Missouri's Population, 1940-1960

Missouri's population was 4,319,813 in 1960. This was an increase of 535,149 people or 14.3 percent from 1940. The largest percentage of this increase occurred between 1950 and 1960. Of the 535,149 or 14.3 percent increase in population, 365,160 or 9.2 percent of it occurred between 1950 and 1960. This latter increase was about twice as great as for the decade of 1940-1950.

Missouri has not maintained the same relative position to the other states in total number of persons during the past 60 years. In 1900, Missouri was the fifth largest state in population. It had dropped to the tenth most populous state in 1940, and then dropped to thirteenth in 1960. Thus, while the state has increased in population, it has not kept pace with population growth of the nation.

^{*}This is part of a study of the population of Missouri carried out under the direction of Robert L. McNamara, professor of Rural Sociology. It is a contribution from the Missouri Agricultural Experiment Station as a collaborator under North Central Region cooperative research project N. C. 18, entitled, "Population Dynamics in the North Central Region and Related Rural Social and Economic Problems" and a report on Department of Rural Sociology research project 325, "Rural Population."

THE RANK OF MISSOURI

Year	Rank
1960	13
50	11
40	10
- 30	10
20	9
1900	5

Missouri increased in population by 9.2 percent between 1950 and 1960. This was contrasted to the 18.5 percent increase in the nation as a whole. Thus, Missouri's growth was only one-half that for the nation.

The rates of change in population within the state were quite uneven. Urban places (all incorporated places having 2,500 or more residents) increased at a rate near the national average: The urban rate was 18.2 percent, compared to 18.5 percent for the nation.

The rural population of the state declined during the last decade (Table 1). During the 20-year period from 1940-1960, Missouri became more urban; that is, a larger proportion of its people lived in towns of 2,500 or more in 1960 than in 1940. From 51.8 percent urban in 1940, Missouri increased to 66.7 percent urban in 1960. The number of urban places increased between 1940 and 1960 (Table 2). Eleven counties without a place as large as 2,500 in 1940 had such a town in 1960. Around onethird of the counties were completely rural in 1960 as contrasted to 48.2 percent rural in 1940. Though more of the counties had a town of 2,500 or over in 1960 than in 1940, 44 counties still did not have urban population. Thus, nearly 40 percent of the counties in the state did not have a place as large as 2,500 within their boundaries.

Density of the Population

Most of the increase in Missouri's population was around the 4 large cities (Figs. 1 and 2). This was indicated by the increases in density (number of inhabitants per square mile) of the counties around those cities. Another area of increasing density was a band of counties from Kansas City to St. Louis, which includes the cities of Jefferson City and Columbia. Decreasing density existed in most other areas of the state. The north-central agricultural counties were generally decreasing in density as were those in the south-central or Ozarks area of the state. An exception to this decline was Pulaski county, the site of an Armed Forces Base, in the southcentral part of the state. The personnel of the base were first counted in the census of 1960. Thus, the density in 1960 was much greater because of the concentration of military and civilian personnel.1

The density patterns which are shown by county do not take into consideration changes within each county. Many of the counties that were losing population were at the same time becoming more urban (Figs. 3 and 4). This indicates that the losses were predominately among rural residents.

A comparison of metropolitan areas² for 1940 and 1960 shows a concentration of the state's population in these areas at both time periods (Table 3). The density was greatest in the Kansas City and St. Louis metropolitan areas (Table 4). While the proportion of the total

	The State			Urban Territory		Rural Territory		Percent of Total	
Census Year	Population	Percent Increase	No. of Urban Places	Population	Percent Increase	Population	Percent Increase	Urban	Rural
1960 1950 1940	4,319,813 3,954,653 3,784,664	9.2 4.5 4.3	¹ 145 1 ₁₀₈ 2 ₈₇	2,876,557 2,432,715 1,960,696	[#] 18.2 *24.0 5.5	1,443,256 1,521,938 1,823,968	- 5.2 -16.6 + 3.0	66.6 61.5 51.8	33.4 38.5 48.2

TABLE 1 - URBAN AND RURAL POPULATION CHANGE IN MISSOURI, 1960-1940

¹New Urban Definition ²Old Urban Definition

*Changes would be 329,453 in number and a percentage change of 16.8 if old urban definition is used for 1950 #Changes would be 356,854 in number and a percentage change of 15.6 if old urban definition is used for 1960

¹U. S. Census Report, P. C. (1), 27 B, Missouri, 1950. p.v.

²The metropolitan areas were delineated as the Standard Metropolitan Statistical Areas (SMSA) in the 1960 Census of Population. An SMSA is a county or group of contiguous counties which contained at least one city of 50,000 or more in 1960. Contiguous counties are included if they are metropolitan in nature and depend socially and economically on the central city.

population living in the areas was large in 1940, it was much larger in 1960. These two metropolitan areas represented more than one-half of the population of Missouri in 1960.

The city of St. Louis showed a decrease in density during the past 20 years. The decline occurred for the most part during the last decade. But the loss within St. Louis City was more than offset by population increases in the suburbs of St. Louis County and other surrounding counties. Some places not listed in the census reports of 1940 appeared and mushroomed to more than 10,000 residents by 1960. St. Louis County increased 49.3 percent between 1950 and 1960, and St. Charles County increased 52.3 percent for the same period. Increases in both counties may be attributed in large part to in-migration and a lesser extent to an increase of births over deaths.

Changes in Population Numbers

Population growth or decline, whether in rural or urban areas, is largely the result of three major factors: births, deaths, and migration. Explanations of these factors follow.

Number of Births

To compare the births in one area or at one time to those in another, it is necessary to make the birth rates

TABLE 2 - NUMBER AND SIZE OF MISSOU	51
INCORPORATED PLACES WITH	
POPULATION OVER 1,000	

	Number	of Places
Population Group	1960	1940
25,000 and over	12	6
10,000 24,999	25	16
5,000 9,999	44	24
2,500 4,999	64	41
1,000 2,499	130	113
Total	275	200

comparable. The birth rate, which consisted of the proportion of births as compared to the total population, provides this standardization.³

The state birth rate declined generally from 1920 to a low point in 1935 (Table 5). From the low of 14.7 births

	Area	Population		Der	nsity
	(sq. mi.)	1960	1940	1960	1940
State	69,270	4,319,813	3,784,644	62.3	54.6
Metropolitan					s b
Total	3,890	2,499,968	1,840,716	642.7	473.2
Kansas City Area	1,016	710,206	508,245	1,244.5	866.0
Jackson	603	622,732	477,828	1,032.7	792.4
Clay	413	87,474	30,417	211.8	73.6
St. Joseph Area					
(Buchanan)	411	90,581	94,067	224.2	228.9
St. Louis Area	1,786	1,572,905	1,147,863	880.6	642.7
Jefferson	667	66,377	32,023	99.5	48.0
St. Charles	561	52,970	25,562	94.4	45.6
St. Louis County	497	703,532	274,230	1,415.5	551.8
St. Louis City	61	750,026	816,048	12,295.5	13,377.8
Springfield Area					
(Greene)	677	126,276	90,541	186.5	133.7

TABLE 3 - AREA,	POPULATION,	AND DENSIT	Y OF	COUNTIES	IN SELECTE	D
	METROPOLIT	AN CONCEN	TRAT	IONS		

³The "crude" birth rate was arithmetically derived by dividing the population for a given area into the number of births for the same area. The result was multipled by 1,000 to eliminate decimals. The number of births is not available from the census. However, vital statistics including the numbers of births in each county have been published by the State Department of Health since the late 1940s.









	Рори	ulation	Percent
Area	1960	1940	Change
Metropolitan Total	2,499,968	1,840,716	+ 35.8
Kansas City Area	710,206	508,245	+ 39.7
Clay County	87,474	30,417	+ 187.6
Jackson County	622,732	477,828	+ 30.3
St. Joseph Area			
(Buchanan County)	90,581	94,067	- 3.7
St. Louis Area	1,572,905	1,147,863	+ 37.0
Jefferson County	66,377	32,023	+ 107.3
St. Charles County	52,970	25,562	+ 107.2
St. Louis County	703,532	274,230	+ 156.5
St. Louis City	750,026	816,048	- 8.0
Springfield Area			
(Greene County)	126,276	90,541	+ 39.5

per 1,000 population in 1936, the rate moved up moderately to 16.5 by 1940.⁴

The birth rate reached a post-war high of 23.4 in 1947 and remained at about the same level in the 50s and early 60s. In 1960, the birth rate was 22.6.

The composition of the population has an influence on the birth rate. An area which had predominately older people or a large proportion of single people was obviously not going to have as high a birth rate as one the

⁴Vital Statistics, 1960; Missouri Division of Health. Jefferson City, Missouri, p. 1.

TABLE 5 – BIRTH AND DEATH RATES FOR THE UNITED STATES AND MISSOURI

	Birth Ra	te
Year	United States	Missouri
1960	23.7	22.6
1950	24.1	21.6
1940	19.4	16.5
1930	21.3	17.0
1920	27.7	19.2
	Death Ra	te
	United States	Missouri
1960	9.5	11.2
1950	9.6	11.0
1940	10.8	11.6
1930	11.3	11.8
1920	13.0	12.5

same size which was made up largely of young married couples. Within the state, there was considerable variation in the population composition which may have influenced the birth rates. These variations will be considered in a later section.

Number of Deaths

The number of deaths also was an important element of population change. As with births, the number of deaths needs to be made comparable in a rate."

Death rates in Missouri have been more stable than the birth rates (Fig. 5). A comparison of the state rates for 1940 and 1960 showed the rates to be about the same, 11.2. A change of 1.6 was noted when the 1960 rate was compared to the 12.8 rate for 1935. In addition, a change in rates in the rural and urban populations was noted. The death rate of 11.2 per 1,000 persons for Missouri contrasted to 9.5 per 1,000 for the United States.

The death rate in any area is contingent on the characteristics of the area. An area with a high average age, that is, with a large proportion of people in the older ages and relatively few young people, will generally have higher death rates.

Natural Increase

If an area has no in- or out-migration, its population may still change because of an excess of births or deaths. If the births are in excess, the increase is termed

⁵A "crude" death rate was computed by dividing the number of deaths for a specific time period and area by the area's total population for the same time period. Again the result was multiplied by 1,000 to eliminate decimals.

FIGURE 5—POPULATION DISTRIBUTION BY AGE AND SEX (POPULATION PYRAMID).



"natural increase" and if deaths are in excess, the change is called "natural decrease."⁶ A high birth rate and a low death rate in an area produce a large natural increase. The birth rate for the state has been relatively high since 1949 and the death rate has been at a level of about one-half the birth rate. Thus, Missouri would have had a sizeable natural increase in population between the years of 1940 and 1960 if there had been no migration. From 1940 to 1950, this natural increase was 363,643 and was 483,576 for the 1950 to 1960 period, for a total of 847,219 during the two decades.

Migration

6

People in the United States and Missouri have been constantly moving their place of residence. In most areas the in and out movement does not balance. Thus, areas may lose or gain population because of migration. In this discussion, the net movement is considered so migration refers to changes in a population other than those caused by births and deaths. A population that is larger than can be accounted for by natural increase is assumed to



have received in-migrants. On the other hand, a 1960 population which has less than the 1940 base population plus the natural increase, has had an out-migration of population.

McNamara⁷ found that Missouri lost 193,654 people through out-migration between 1940 and 1950. This did not mean a loss in total population, but rather a loss in what the state's population would have been if it had retained all of the natural increase. This loss by out-migration from Missouri represents a loss of 5.1 percent of the 1940 population. Campbell⁸ computed the loss through out-migration between 1950 and 1960 to have been about 118,416 persons. Thus, there was somewhat less out-migration during the decade of the 1950s, but this still represented a loss of 3.0 percent of the 1950 population. If Missouri had retained these people, the population would have been 312,170 more or 4,631,983 in the 1960 census instead of 4,319,813.

⁶¹¹Natural increase" was computed as the difference between the number of births and the number of deaths for a given area and for a specified time.

⁷Robert L. McNamara, et. al., *Rural-Urban Population Change and Migration in Missouri, 1940-1950,* University of Missouri, College of Agriculture Bulletin 620, April, 1954, p. 10.

⁸Rex R. Campbell, "Conditions of Population Change in Missouri," *Business and Government Review*, University of Missouri, Vol. IV, January-February, 1963, p. 16.

FIGURE 6-UNITED STATES POPULATION DISTRIBUTION BY AGE AND SEX.





Characteristics Of Missouri's Population, 1940-1960

Changes in the characteristics were found by comparing the age and sex structure for the two periods. The median age of Missouri's population was 31.6 years in 1960, compared to 31.1 years in 1940.

The age structure is shown graphically by population pyramids (Figs. 5 and 6). The males and females in the United States and Missouri are shown in 5-year age groups. Note the change in age structure that has occurred between 1940 and 1960. Much of the variation between the 1940 and 1960 pyramids can be explained on the basis of previous discussion. The wider base in 1960 was a result of the higher birth rate in 1960 than in 1940.

The pyramids show an increase since 1940 in persons 65 years old and older. This increase was, in part, a result of the greater percentage of females in the older age brackets. The relatively small percentage in the 15-30 age categories of the pyramids was primarily the result of lower birth rates at an earlier time and current high rates of out-migration. The children born during the low birth rate period of the 1930s were about 25 years old in 1960. A second factor was out-migration of young people. Migrants were most likely to be young adults. Migration is at its highest point at the end of the formal education period. The decreasing death rate has produced a higher percentage of older people and is revealed in a broader top in the 1960 pyramid.

Sex Ratio

Another important characteristic of the population is the ratio of males to females. As with the birth and death rates, there was a need to provide a comparable ratio.⁹ If there were exactly the same number of each sex, the ratio would be 1,000 males per 1,000 females. However, at birth, there were more males than females. Higher death rates at almost all ages for males offset this birth advantage. With few exceptions (principally under 10 years of age) there were more females than males in the population.

The sex ratio was 982 for the United States in 1960. This meant 982 males per 1000 females. The Missouri

⁹The sex ratio is computed by dividing the number of females into the number of males and multiplying the result by 1,000.

ratio was 952. In contrast, the sex ratio in the United States was 1,007 (or 1,007 males to 1000 females) in 1940; the Missouri ratio then was 988. Rural Missouri areas had a greater number of males than females. Generally, the more rural an area, the higher the sex ratio. In some rural counties, the ratio exceeded 1,000; meaning there were more men than women. It will be recalled that 47 counties were completely rural and in these there were wide deviations from the state average of 952 men per 1,000 women.

Life Expectancy

The normal life expectancy at birth in Missouri in 1960 was above that for the United States average. White females had an expectancy of 74.8 years and white males had an expectancy of 68.0. These figures compare with United States average of 73.9 years for white females and 67.3 years for white males in 1959. Non-whites, on the average, did not enjoy as long a life expectancy as whites. In 1960, the non-white females in Missouri had a life expectancy of 66.2 years at birth and the corresponding expectancy was 60.5 for males. These rates for the United States non-white population in 1959 were females 66.2 and males 60.9 years. The 1940 rates for whites were substantially lower. They were 67.8 years for females and 63.6 years for males in Missouri, and 65.9 for white females and 61.6 for white males. The same data for nonwhites was not available for 1940.

Educational Achievement

Educational achievement of Missouri adults increased during the period 1940 to 1960. The average in 1940 was 8.6 years of schooling completed; in 1960 it was 9.6 completed. Educational achievement was measured by the years of formal education completed by persons 25 years old or older. It was assumed that for most individuals, education was completed by this age. Those younger than 20 years of age have not, for the most part, completed their education, and those who attend college normally conclude this program between the ages 20 and 25.

Average educational attainment in some Missouri counties was below the eighth grade. The range was from a low of 7.5 years in Pemiscot County to 12.1 years in Boone County (Fig. 7). Again the levels of attainment favored the metropolitan areas and reflected redistribution of population. For example, in Boone County the relatively high average grade attainment is partly due to the concentration of college personnel.

Educational Expenditures

Educational expenditures refer to the total money, including state and federal funds, spent by the public school systems of the state. Since these figures are for 1960 expenses, they do not include the payments on bonded indebtedness. Individual county figures were not available for 1940 so comparison with the 1960 figures was not possible. To obtain a standardized figure, the average daily attendance for each county was related to the total current expenditures. This gave an average attendance unit cost by county for 1960 so comparison can be made among counties.

There was a strong association between the average daily expenditure of funds per pupil enrolled in school and the urbanization of the county. Not all rural counties were at the bottom of the list, though most were in the lower quartile. Conversely, the counties in the metropolitan areas were all near the top in this expenditure. The highest expenditure of \$514 per pupil was reported for St. Louis County, while less than half that amount (\$241) was reported for Dent County.

An Examination Of Selected Counties Of Missouri

The first section of this bulletin presented the general social or *demographic* changes that occurred in Missouri between 1940 and 1960. The data presented were for the state and were contrasted with national figures. In this section, the same data are examined for eight "core" counties to indicate changes that have occurred across the state (Fig. 8). The data, including birth rates, death rates, age distribution (population pyramids), sex ratios, and educational achievement, are examined for 1940 and 1960.

This information is contrasted with state data. The Appendix contains the same data for all 114 counties. Thus, more detailed analysis may be made by comparing each county with the state or with the nearest "core" county.

It should be noted that some counties have large changes because of unusual circumstances. For example, Pulaski County has a recent record of unusually low birth and death rates. The county has had a phenomenal rate of growth due to the development of an armed forces base which was first enumerated by the Census of 1960. This development affected both the birth and death rates.¹⁰

The eight counties were selected from the "core" or relatively homogeneous social areas because they approximated the average social and economic conditions of their respective social areas. They were not selected to represent the extremes of any characteristics used for analysis.

These eight counties were mostly rural (Table 6). Six of the eight had no urban population, and of the two

¹⁰The death rate of 3.6 deaths per 1,000 population is a result of the addition of all of the young people in Ft. Leonard Wood to the County's population. Death rates are relatively low for young people and this has reduced the rate for the whole county. Likewise, the birth rate has dropped from 23 births per 1,000 population in 1940 to 10.7 per 1,000 in 1960. This has resulted from the presence of a large number of males, many of whom are not married or whose wives are not presently in the county.

FIGURE 7-MEDIAN SCHOOL YEARS COMPLETED.





Range 1940 High 9.6 Jackson Low 6.4 Mississippi

Range 1960 High 12.1 Boone and Clay Low 7.7 Mississippi FIGURE 8-COUNTIES SELECTED AS "CORE" COUNTIES.



TABLE 6 -	PER	CENTAG	ES URBAN	AND C	HANGE FROM
1960	TO	1940 FOR	SELECTED	CORE	COUNTIES

	Percen	t Urban	Percentage
County	1960	1940	Change
State	66.6	51.2	+ 30.6
Atchison	-	_	-
Caldwell	-	-	-
Henry	50.1	27.1	+ 84.9
Knox	-	-	-
Mississippi	45.2	22.4	+ 101.8
Ripley	-	_	-
Warren	-	-	_
Webster	-	-	

remaining, Henry County had 50.1 percent urban population and Mississippi had 45.2 percent urban population in 1960. Each of these counties had increased its proportion of urban population since 1940. Since each was onefourth urban in 1940, they have about doubled their urban population during the two decades.

Birth Rates

Earliest birth rates available for comparison by county were for 1949. The birth rate for the state was nearly the same in 1949 as in 1960 (Table 7). The eight counties probably typify the rural conditions in the state which existed at the two time periods. Five of the eight counties had a lower birth rate in 1960 than in 1949. Four of the counties were either above, or near, the state birth rate in 1949. In 1960, only one of the "core" counties was above and two others were slightly below the state rate. The range of the birth rates for all the counties in 1949 was from a high of 34.2 per 1000 population in Mississippi County to a low of 12.2 in St. Clair County. In 1960, the range was from a high of 33.2 in St. Charles County to a low of 10.7 in Pulaski County.

TABLE 7 – BIRTH RATES AND PERCENT CHANGE FOR SELECTED CORE COUNTIES, MISSOURI

	Births per 100	00 Population	Percent
County	1960	1949	Change
State	22.6	21.7	+ 4.1
Atchison	13.9	20.7	- 32.8
Caldwell	15.4	17.4	- 11.5
Henry	17.6	16.7	+ 5.4
Knox	20.6	14.0	+ 47.1
Mississippi	26.4	34.2	- 22.8
Ripley	18.5	21.6	- 14.4
Warren	17.3	16.3	+ 6.1
Webster	21.3	21.4	5

During these 11 years, the birth rates of rural and urban areas converged or became quite similar. In reaching relative similarity the rural rates decreased and the urban rates increased. In the past, rural areas have been characterized by higher birth rates than the urban areas, but present data show little difference by residential groupings. Suburban counties had higher birth rates in 1960 than many rural counties in Missouri. An analysis of 1960 age structure of suburban counties revealed that they contained relatively young populations as contrasted to the rural counties and this may contribute to their higher rates.

In addition to the differences in birth rate by counties, there was a tendency for differences by race. The birth rate for non-whites was higher than for whites. Mississippi County, which had a large percentage of nonwhites at both time periods, had the highest county rate in 1949. This would appear to account, in part, for the high birth rates in Mississippi County. The relative decline in Mississippi County births from 1949 to 1960 was substantial, but even so, it still had one of the highest birth rates in the state.

The state rate increased .9 births per 1,000 population between the two time periods, but 70 counties declined in birth rates. In addition, 5 counties had the same rate for 1949 and 1960. Forty counties increased in rates. These 40 counties had to more than absorb the decrease of 70 counties to give the slight over-all increase. Significantly, these 40 counties have become more urban in composition during the two decades.

Death Rates

The death rate for Missouri has been decreasing for most of this century. The only exception between 1920 and 1960 was in the 1960 rate. Missouri rates have remained above the national rate since 1930. This may be in part a reflection of the fact that Missouri is second only to Iowa in the percentage of aged over 65 (1960 census figures). Missouri deaths increased slightly from 11.0 per 1,000 people in 1950 to 11.2 per 1,000 in 1960.

A wide range of rates was apparent when individual counties were considered (Table 8). Rural counties had higher death rates than the more urban counties. The rural counties had a higher percentage of older people in their population which would indicate that age-adjusted death rates would be a more meaningful basis of comparison.

In 1940, death rates for counties ranged from a low of 7.3 per 1,000 people in Ozark and Shannon Counties to 16.6 per 1,000 in Clinton County. The 1960 high of 17.7 per 1,000 residents in Shelby County is contrasted to the low of 3.6 in Pulaski County. As mentioned before, Fort Leonard Wood is located in Pulaski County

TABLE 8 - DEAT	TH RATE AN	D PERCENT CI	HANGE FROM
1949 TO 19	60 FOR SELI	ECTED CORE	COUNTIES

County	1960	1949	Percent Change
State	11.2	11.2	-
Atchison Caldwell Henry Knox Mississippi Ripley Warren	12.9 17.4 16.5 13.4 11.3 15.2 10.9	10.0 16.3 13.3 11.9 11.5 9.5 11.8 11.7	+ 29.0 + 6.7 + 24.1 + 12.6 - 1.7 + 60.0 - 7.6 + 1.7

and the large number of young males in the county tended to reduce the death rate in 1960.

When age-specific death rates were examined, it was found that most of the reduction of the death rates had occurred in the earlier years of life. Sizeable reductions have been made in infant mortality during this century and this accounts for part of the general reduction in death rates. The slight increase in the 1960 death rate may indicate a leveling off or gradual increase because of the increase in the number of the aged. Thus, Missouri will probably continue above the national rate as long as Missouri's proportion of aging population remains higher than average. To illustrate this, one of every eight Missourians was 65 or older in 1960. By contrast, fewer than one of ten were in this category for the United States.

Age Distribution

The population pyramids for the eight core counties were quite similar in shape in 1960 (Fig. 9). There was a greater difference between pyramids of individual counties in 1940 than in 1960. Some of the counties had experienced low birth rates in the period before 1940 and thus had a relatively small proportion of young people.

Mississippi County's pyramid presented a contrast when compared to the age structures of Knox and Ripley Counties. As mentioned earlier, Mississippi County had the highest birth rate in the state in 1949 and probably in the decade preceding it. This is shown in the pyramid for Mississippi County which is much wider at the base, reflecting the large proportion of young people; it is relatively tapered at the top.

Many other rural counties had a larger proportion of older people and other counties had higher birth rates in 1960 than Mississippi. Contrasting the 1960 population pyramids with those for 1940, a number of changes are apparent. As a result of out-migration of young people from the rural counties, the proportion of young people between the ages of 16 and 30 decreased. This is indicated by the "narrow waists" in the graphic presentations. An example of this was in Mississippi County. Out-migration was the greatest in the age group of 20 to 30 years. This out-migration was quite apparent in the age distribution in 1960, but it had had relatively little influence on the age distributions of 1940.

Another factor mentioned as influencing the age distribution and thus the resulting population pyramid was the birth rate of the area. An additional important aspect of the age structure is the percentage of older people in a population. For Missouri and most of its counties, the population was "older" in 1960 than in 1940. Contributing to this was out-migration of young people, decline in the birth rate, and a longer life span. These developments increased the proportion of older people and are reflected in the population pyramid for 1960.

Most of the core counties' pyramids were wider at the top in 1960 than they were in 1940. In numbers, Missouri increased its population by over half a million people during the two decades, but about one-third of the gain was accounted for by those 65 years of age and older. The population of Missouri increased by 12.4 percent during these two decades, but for the same period, those 65 and over increased 54.5 percent.

Sex Ratios

The sex ratios for the eight core counties were above the state average for both 1940 and 1960. The core counties tended to have higher sex ratios (greater proportions of men) than the state (Table 9). The higher rates were

TABLE 9 –	SEX RATIOS	AND	PERCENT	CHANGE	FOR
	SELECTED	CORE	COUNTI	ES	

County	1960	1940	Percent Change
State	952	988	- 3.6
Atchison Caldwell Henry Knox Mississippi Ripley Warren Webster	971 962 944 997 969 1001 1019 1009	1061 1012 1016 950 1094 1109 1095 1034	- 8.4 - 4.9 - 7.1 + 4.9 - 11.4 - 9.7 - 6.9 - 2.4

Range of All Counties in the State 1960 - 1940

1960 Range:	Low -St. Louis Ci	ty 870
	High-Pulaski Cour	nty 2467

1940 Range: Low –St. Louis City 923 High–Cole County 1185

FIGURE 9-MALE AND FEMALE PERCENTAGE COMPOSITION OF COUNTIES.

6

6









Percent

ATCHISON COUNTY, 1960



Percent

6





Percent







WARREN COUNTY, 1960









RIPLEY COUNTY, 1940







20

RIPLEY COUNTY, 1960



COUNTIES CONTAINED IN S.M.S.A.'S, MISSOURI, 1960



KNOX COUNTY, 1940



1

KNOX COUNTY, 1960



Percent

WEBSTER COUNTY, 1940



due in part to the aging process and out-migration from the state. On the average, aged white females lived five years longer than males in Missouri, while non-white females lived six years longer than non-white males.

In 1940, sex ratios for the counties of the state ranged from a high of 1,185 males per 1,000 females in Cole County to a low of 923 in St. Louis City. The 1960 pattern was similar. The state as a whole had fewer males than females both years. The range in ratios was from 2,467 males per 1,000 females in Pulaski County (Fort Leonard Wood) to 870 in St. Louis City in 1960.

In both decades, the rural counties contained a greater number of males than females. In 1940, the rural counties generally had sex ratios above 1,000 but there was a general decline in these ratios between 1940 and 1960. Many counties that had a predominance of males in 1940 had a predominance of females in 1960. The relative position of rural counties with respect to sex ratios remained about the same for both decades, but there was less difference for sex ratios between rural and urban counties. The trend of converging rural and urban rates was again apparent. WEBSTER COUNTY, 1960



The low ratios in metropolitan centers was in part the result of migration of young females from rural to urban places. There was probably less opportunity for young females to obtain work in rural areas and relatively more opportunity in cities. In St. Louis City in 1960, the sex ratio was well below the average for Missouri (870 and 952 respectively).

Education

The educational level of the Missouri population has increased. Every county, rural or urban, had a higher average educational attainment in 1960 than in 1940. Table 10 shows the difference in the average attainment of all persons 25 years of age or older.

There was a smaller range of differences in educational attainment between counties in 1940 than in 1960. The highest level of attainment for 1940 was found in Jackson County where there was an average of 9.6 years of education for each resident 25 years of age or older, and the lowest attainment was 6.4 years in Mississippi County. Comparative data for 1960 were at somewhat higher levels, but the same general areas of the state furnished the highest and lowest counties. Both Clay and Boone Counties have an average of 12.1 years of completed education, and Pemiscot County has a low of 7.5 years of education. Clay and Jackson Counties are in the Kansas City area where the highest educational attainment was found for both decades. The lowest attainment

TABLE 10 - EDUCATIONAL ATTAINMENT AND PERCENT CHANGE FOR CORE COUNTIES

County	1960	1940	Percent Change
Atchison	11.0	8.8	+ 25.0
Caldwell	10.2	8.6	+ 18.6
Henry	8.9	8.3	+ 7.2
Knox	10.6	8.4	+ 26.2
Mississippi	8.6	6.4	+ 14.9
Ripley	8.2	7.4	+ 10.8
Warren	8.7	7.9	+ 10.1
Webster	8.7	7.8	+ 11.5

Range of All Counties in the State 1960-1940

1960 Range:	Low - 7.5 Pemiscot
	High-12.1 Clay
	12.1 Boone

1940 Range: Low – 6.4 Mississippi High– 9.6 Jackson was found in the southeast lowlands area.

Though Pemiscot County had the lowest average attainment, 42 counties experienced smaller gains between 1940 and 1960 than did Pemiscot County. Boone and Clay, which were high counties in 1960, did not have the highest percentage gain for these 20 years. Due to the Fort Leonard Wood factor, Pulaski had a greater percentage increase.

The average number of students attending classes and the cost per average daily attendance unit is shown by Table 11. The average number of students was related to the current operating expenses for 1961.

The correlation of amount of money spent per student and average attainment is high. Counties with highest expenditures tend to have the highest attainment. Atchison County spent \$410 per attendance unit in 1960-61 and this was exceeded in grade attainment by only 9 other counties in Missouri. St. Louis County spent the highest amount and was exceeded in educational attainment by only 3 counties. On the other hand, Dent County, the lowest in rank of spending (\$241), was above 12 other counties in educational achievement.

As a general conclusion one can venture that the rural areas are lower in both school spending and attainment than urban counties. Counties more urban in character are more likely to rank high on the achievement scale for completed education and also on expenditures per average daily attendance unit.

		Average	Total 1961
County	Per Student	Attendance	Operating Expenses
Atchison	\$410	1869	\$ 767,167
Caldwell	379	1907	723,090
Henry	317	3518	1,115,244
Knox	384	1130	434,060
Mississippi	278	5326	1,418,789
Ripley	263	2118	556,181
Warren	354	1364	482,644
Webster	286	3391	969,135

TABLE 11 – AVERAGE DAILY ATTENDANCE, COST PER YEAR PER STUDENT AND TOTAL EXPENDITURE BY COUNTY FOR SELECTED CORE COUNTIES, MISSOURI, 1961

Range of All Counties in the State 1961

1961 Range: High-St. Louis County \$514 Low -Dent County \$241

APPENDIX

PERCENT URBAN, PERCENT CHANGE, AND SIZE OF LARGEST PLACE IN MISSOURI COUNTIES 1940-1960

	Deveent Linkers			Size of Largest Place	
County	1960	1940	Percent Change	1960	1940
THE STATE COUNTIES	66.6	51.8	+ 28.6		
Adair	65.3	49.8	+ 31.1	13,123	10,080
Andrew	0	0	0	2,455	2,108
Atchison	0	0	0	2,160	2,114
Audrain	61.1	51.7	+ 18.2	12,889	9.053
Barry	21.7	16.2	+ 34.0	4,115	3,819
Barton	32.5	21.1	+ 54.0	3,608	2,992
Bates	23.8	15.1	+ 57.6	3,791	2,958
Benton	0	0	0	1,054	957
Bollinger	0	0	0	658	581
Boone	72.2	52.6	+ 37.3	35,223	18,399
Buchanan	88.3	80.5	+ 9.7	79,673	75,711
Butler	46.0	32.6	+ 41.1	15,926	11,163
Caldwell	0	0	0	1,701	1,655
Callaway	46.7	35.9	+ 30.1	11,131	8,297
Camden	0	0	0	1,405	893
Cape Girardeau	71.0	59.7	+ 18.9	24,947	19,426
Carroll	32.9	22.8	+ 44.3	3,806	3,332
Carter	0	0	0	575	458
Cass	37.4	0	+ 37.4	3,437	2,322
Cedar	31.2	0	+ 31.2	2,864	2,342
Chariton	0	0	0	1,787	1.750
Christian	0 ·	0	0	1.536	961
Clark	0	Õ	0	2,160	1.781
Clay	86.4	36.7	+ 135.4	*4.821	**35,168
Clinton	30.0	26.5	+ 13.2	3,512	3,480
Cole	40.3	69.5	- 0.3	28,228	24,268
Cooper	45.3	33.7	+ 34 4	7,090	6.089
Crawford	5.2	1.4	+ 271.4	1,672	1.033
Dade	0	0	0	1,172	1,353
Dallas	0	õ	0	1,477	920
Daviess	0	õ	0	1.658	1.642
DeKalb	27	1 1	+ 145 4	942	1.026
Dent	37.1	26.8	+ 38.4	3.870	3,151
Doualas	0	0	0	1,581	1,393
Dunklin	36.0	20 0	+ 80 0	9 098	6.335
Franklin	46.8	26.8	+ 74.6	7,961	6,756
Gasconade	20.8	0	+ 20.8	2.536	2,308
Gentry	0	Ő	0	1,662	2,010
Greene	77.0	67.6	+ 13.9	95,865	61,238
Grundy	51.2	44.8	+ 14.3	6,262	7.046
Harrison	23.9	16.2	+ 47.5	2,771	2,682
Henry	50 1	27 1	+ 84.9	6,836	6.032
Hickory	0	0	0	349	439
Holt	0	0	0	1,249	1,605
Howard	30.3	20.0	+ 51.5	3,294	2,608
Howell	26.5	18.1	+ 46.4	5,836	4.026
Iron	0	0	0	1,310	1.083
lackson	94 4	86.9	+ 8.6	440.371	399,178
lasper	70 1	68.4	+ 2.4	38,958	37,144
lefferson	24.9	41 4	- 39 9	+7 021	***5,121
Johnson	33 4	27 1	+ 23 2	9 689	5,868
Knox	0	0	0	1 457	1 637
Laclede	43 0	26.8	+ 61 6	8 220	5 025
Lafavette	35.0	20.0	+ 07	4 845	5 341
Lawrence	25.5	18.8	+ 25 4	4 483	4 056
Lawie	23.5	0.0	+ 22.2	2 562	2 125
Lincoln	20.0	0	0	+++1 779	++1 548
Lincom	v	0		11117777	117010

	Percent Urban			Size of Large	Size of Largest Place	
	1960	1940	Percent Change	1960	1940	
linn	50.9	43.8	+ 16.2	5,694	6,915	
Livingston	58.6	44.5	+ 31.7	9.012	7,722	
MaDonald	0	0	0	992	938	
Macon	27.6	19.7	+ 40 1	4.547	4,206	
Macon	37.2	35 4	+ 51	3,484	3,414	
Maaison	0	0.4	0	1 016	621	
Maries	77 5	. 44 1	+ 17.2	19 943	20 865	
Marion	77.5	00.1	0	1 443	1 584	
Mercer	22.0	17.5	+ 30 9	3 097	2 590	
Miller	15 0	22.4	+ 101 8	5 911	5 182	
Mississippi	40.2	22.4	+ 101.0	2 788	2 525	
Monifeau	20.0	21.4	+ 24.3	2,700	1 840	
Monroe	0	0	0	1 019	1,040	
Montgomery	0	0	0	2,047	1,071	
Morgan	0	0		2,047	2 /05	
New Madrid	17.4	0	+ 17.4	2,007	5 210	
Newton	30.2	21.5	+ 40.5	7,452	3,310	
Nodaway	35.1	22.3	+ 57.4	7,807	7,904	
Oregon	0	0	0	6//	5/6	
Osage	0	0	0	1,050	6/6	
Ozark	0	0	0	266	255	
Pemiscot	32.5	19.7	+ 65.0	8,643	6,612	
Perry	34.9	25.4	+ 37.4	5,117	3,907	
Pettis	68.0	61.3	+ 10.9	23,874	20,428	
Phelps	43.8	29.5	+	11,124	5,141	
Pike	41.5	25.5	+ 62.7	4,286	4,669	
Platte	13.4	0	+ 13.4	1,315	1,121	
Polk	25.5	15.1	+ 68.9	3,512	2,636	
Pulaski	0	0	0	2,377	468	
Putnam	0	0	0	1,896	2,055	
Ralls	1.1	0	+ 1.1	875	1,005	
Randolph	59.8	52.8	+ 13.3	13,170	12,920	
Rav	29.0	22.8	+ 27.2	4,604	4,240	
Revnolds	0	0	0	812	849	
Ripley	0		0	1,421	1,604	
St. Charles	52.3	42.3	+ 23.6	21,189	10,803	
St. Clair	0	0	0	1,075	1,188	
St. Francois	36.6	35.8	+ 2.2	5,618	5,401	
St. Louis County	92.4	45.4	+ 103.4	51,249	33,023	
St. Louis City	100.0	100.0	0	705,026	816,048	
Ste. Genevieve	36.7	25.6	+ 43.4	4, 443	2,787	
Saline	49.1	39.4	+ 24.6	9,572	8,533	
Schuyler	0	0	0	740	886	
Scotland	0	0	0	2,106	1,935	
Scott	50 5	36.2	+ 39.5	13,679	7,944	
Shannon	0	0	0	562	480	
Shalby	õ	. 0	0	2.067	2,107	
Stoddard	18 7	94	+ 98.9	5.519	3,108	
Stone	0.7	0	0	954	1.013	
Sullivan	0	0	ů	1 670	2,016	
Julivan	0	0	9	1 887	1 015	
Taney	0	0	õ	1,660	1 069	
lexas		22 0	ן <u>א</u> כ' ⊥	8 414	8 181	
vernon	41.0	52.0	T 20.1	1 840	1 254	
warren	0	0		0.007	2 017	
Washington	19.6	U	+ 17.0	2,000	2,01/	
Wayne	0	U	0		1,1//	
Webster	0	0	0	2,221	1,704	
Worth	0	U	0	1,061	1,209	
Wright	22.4	0	+ 22.4	3,1/6	2,431	

*Largest town in 1940 was Excelsior Springs **Part of Dansas City in 1960 census

***1940 DeSoto

††Elsberry 1940 †††Troy 1960

†1960 Festus

RESIDENT LIVE BIRTH RATES AND PERCENT CHANGE BY COUNTY 1961-1949

	Birth	Rates		
	1960	1949	Percent Change	
United States*	23.7	24.1	- 1.7	
State	22.6	21.7	+ 4-1	
Counties				
Adair	21.8	21.2	+ 2.8	
Andrew	17.5	16.4	+ 6.7	
Atchison	13.9	20.7	- 32.8	
Audrain	22.0	22.9	- 3.9	
Barry	18.6	19.6	- 51	
Barton	14.1	18.9	- 25 4	
Bates	16.3	17.7	- 79	
Benton	13.5	16.5	- 18.2	
Bollinger	14.6	17.9	- 18.4	
Boone	25.6	21.8	- 10.4	
Buchanan	21.8	18 7	+ 17.4	
Butler	19 /	25.3	+ 10.0	
Caldwall	15.4	17 4	- 23.3	
Callaway	14 5	10.4	- 11.5	
Candon	12.4	20.1	~ 11.3	
Cana Cianda au	13.0	20.1	- 32.3	
	20.1	22.4	- 10.3	
Carroll	18.1	18.6	- 2.7	
Carter	19.6	20.6	- 4.9	
Cass	22.2	17.8	+ 25.8	
Cedar	17.7	17.6	+ .5	
Chariton	17.8	17.4	+ 2.3	
Christian	19.0	19.0	0	
Clark	19.0	17.5	+ 8.6	
Clay	25.2	23.3	+ 8.2	
Clinton	17.3	21.0	- 17.6	
Cole	20.8	19.0	+ 9.5	
Cooper	20.0	19.1	+ 4.7	
Crawford	19.6	23.2	- 15.5	
Dade	15.0	14.7	+ 2.0	
Dallas	13.1	16.2	- 19.1	
Daviess	11.6	15.9	- 27.0	
DeKalb	16.6	18.3	- 9.1	
Dent	17.1	16.8	+ 1.8	
Douglas	18.0	20.1	- 10.4	
Dunklin	22.5	26.0	- 13.5	
Franklin	24.7	23.8	+ 3.8	
Gasconade	17.4	20.3	- 14.3	
Gentry	15.7	16.2	- 3,1	
Greene	21.3	21.3	0	
Grundy	16.8	19.7	- 14.7	
Harrison	16.6	15.8	+ 5.1	
Henry	17.6	16.7	+ 5.4	
Hickory	15.3	18.2	- 15.9	
Holt	16.4	18.0	- 8.9	
Howard	19.0	19.7	- 3.6	
Howell	20.0	22.7	- 11.9	
Iron	19.8	23.1	- 14.3	
Jackson	25.7	23.2	+ 10.8	
Jasper	20.2	21.6	- 6.5	
Jefferson	25.6	22.2	+ 15 3	
Johnson	17.3	15 5	+ 11 A	
Knox	20 4	14.0	± 17.0	
laclede	20.0	14.0	± 74	
Lafavette	10.1	17.0 20.0	T 2.0	
	14 4	20.0	- 7.5	
Lawie	20.2	10.4	- 10.7	
Lincoln	20.3	18.0	+ 9.1	
LINCOIN	18.9	19.6	- 3.6	

	Birth	Rates	
	1960	1949	Percent Change
Linn	16.8	18.3	- 8.2
Livingston	17.2	20.4	- 15.7
McDonald	18.2	17.1	+ 6.4
Macon	16.8	14.7	+ 14.3
Madison	18.3	22.6	- 19.0
Maries	20.5	22.9	- 10.5
Marion	20.4	21.4	- 4.7
Marcar	11.8	14.2	- 16.9
Millor	21 7	. 21.4	+ 1.4
Minie	26.4	34.2	- 22.8
Mississippi	20.4	10.2	- 11
Monifedu	18.1	14.5	+ 38 6
Monroe	20.1	14.5	+ 32.0
Montgomery	20.5	10.8	+ 22.0
Morgan	15.2	18.1	- 18.0
New Madrid	28.5	31.3	- 8.9
Newton	20.0	19.9	+ .5
Nodaway	18:1	21.4	- 15.4
Oregon	15.8	18.1	- 12.7
Osage	23.6	17.4	+ 35.6
Ozark	17.2	21.8	- 21.1
Pemiscot	27.4	27.4	0
Perry	22.2	24.3	- 8.6
Pettis	21.5	17.6	+ 22.2
Phelps	23.6	24.0	- 1.7
Pike	23.0	21.2	+ 8.5
Platte	23.0	19.0	+ 21.1
Polk	14.8	20.2	- 26.7
Pulaski**	10.7	23.0	- 53.5
Putnam	16.4	18.0	- 8.9
Ralls	12.1	16.9	- 28.4
Randolph	18.5	17.5	+ 5.7
Ray	17.1	15.8	+ 8.2
Reynolds	16.5	20.7	- 20.3
Ripley	18.5	21.6	- 14.4
St. Charles	33.2	23.3	+ 42.5
St. Clair	13.9	12.2	+ 13.9
St. Francois	19 4	23.2	- 16.4
St. Louis	23 3	22.1	+ 5.4
Sta Canaviava	25.8	26.9	- 41
Salias	17 0	18.3	- 27
Salumlan	15.4	10.5	- 15.8
Sectional	10.2	15.7	+ 15.9
	10.2		7 7
SCOTT	20.0	17.0	- /./ + 12 /
Shannon	20.3	17.9	+ 13.4
Shelby	17.1	20.9	- 18.2
Stoddard	21.4	26.3	- 18.0
Stone	18.5	19.6	- 5.0
Sullivan	14.9	16.7	- 10.8
Taney	17.7	17.0	+ 4.1
Texas	19.8	21.0	- 5./
Vernon	13.6	13.9	- 2.2
Warren	17.3	16.3	+ 6.1
Washington	24.5	25.8	- 5.0
Wayne	16.2	18.4	- 12.0
Webster	21.3	21.4	5
Worth	14.2	18.7	- 24.1
Wright	20.0	20.9	- 4.3
St. Louis City	25.8	23.2	+ 11.2

*United State figures are for 1950 and 1960 **Change in Census Definition, 1950

RESIDENT MORTALITY RATES AND PERCENT CHANGE BY COUNTY, 1961-1949

		Mortality Rates	
	1961	1949	Percent Change
United States*	9.5		1.0
State	11.2	11 2	- 1.0
Counties	11.2	11.2	0
Adair	12 7	12.0	0
Andrew	12.7	12.8	8
Atchison	12.0	10.4	+ 9.6
Audrain	10.7	10.0	+ 29.0
Barry	10.7	11.4	- 6.1
Barton	14.4	9.5	+ 51.6
Bates	16.7	12.0	+ 40.8
Bonton	10.0	11.5	+ 41.7
Bellinger	12.0	13.5	- 5.2
Boono	12.2	10.1	+ 20.8
Buchanan	0.3	8.2	+ 1.2
Buchanan	12.0	12.0	+ 5.0
	11.9	9.8	+ 21.4
Caldwell	17.4	16.3	+ 6.7
Callaway	11.6	11.7	8
Camden	9.2	10.8	- 14.8
Cape Girardeau	9.6	9.8	- 2.0
Carroll	13.6	12.4	+ 9.7
Carter	10.6	11.0	- 3.6
Cass	9.2	12.8	- 28.1
Cedar	15.5	13.2	+ 17.4
Chariton	16.0	12.6	+ 27.0
Christian	12.9	11.4	+ 13.2
Clark	14.2	11.9	+ 19.3
Clay	6.4	9.7	- 34.0
Clinton	15.5	16.6	- 6.6
Cole	9.1	7.8	+ 16.7
Cooper	12.9	12.7	+ 1.6
Crawford	12.8	11.6	+ 10.3
Dade	12.8	13.2	- 3.0
Dallas	12.2	11.2	+ 8.9
Daviess	15.6	14.6	+ 6.8
DeKalb	11.8	11.1	+ 6.3
Dent	12.3	11.4	+ 79
Douglas	9.2	7.7	+ 19.5
Dunklin	11.3	9.0	+ 25.6
Franklin	10.9	10.9	- 25:0
Gasconade	10.7	11.8	_ 03
Gentry	15.5	14.5	- 7.5
Greene	10.8	10.4	+ 3.8
Grundy	17.5	17 1	+ 2.3
Harrison	15.8	11.8	+ 2.0
Henry	16.5	12.2	+ 33.7
Hickory	13.7	13.5	+ 24.1
Holt	17.2	12.2	+ 10.1 + 20.0
Howard	15.3	12.0	+ 39.0
Howell	11.3	10.4	+ 17.7
Iron	17.9	10.8	+ 0.0
lackson	17.0	11.0	+ 01.8
Jasper	14.4	11.6	~ 4.3
lefferson	14.4	12.6	+ 14.3
Johnson	/./	9.5	- 18.9
Louison Knov	7.3	10.4	- 10.6
	13.4	11.9	+ 12.6
	11.2	10.2	+ 9.8
Larayette	13.5	12.5	+ 16.0
	12.9	10.6	+ 21.7
	13.1	14.9	- 12.1
Lincoln	13.3	11.9	+ 11.8

1	Mortality Rates		
	1961	1949	Percent Change
Linn	16.4	13.8	+ 18.8
Livingston	12.9	12.3	+ 4.9
McDonald	14.9	10.7	+ 39.3
Macon	14.4	14.3	+ .7
Madison	12.9	9.3	+ 38.7
Maries	11.9	8.4	+ 41.7
Marion	15.2	14.3	+ 6.3
Miller	12.7	8.8	+ 44.3
Mercer	14.8	10.8	+ 37.0
Mississinni	11.3	11.5	- 1.7
Monitequ	14.4	13.8	+ 4.3
Monroe	14.3	13.4	+ 6.7
Montgomery	16.0	13.9	+ 15.1
Morngomery	12.6	12.5	+ .8
Morgan	9.8	8.8	+ 11.4
New Madria	9.0	10.8	- 16.7
Newton	13.0	10.8	+ 20.4
Orean	12.3	9.4	+ 30.9
Oregon	0.0	8.8	+ 12.5
Osage	7.7	7 3	+ 93 2
Ozark	14.1	2.5	+ 23.2
Pemiscot	11.7	2.5	+ 28.9
Perry	10.7	0.0	- 15
Pettis	12.6	13.2	- 4.5
Phelps	9.3	10.0	- 7.0
Pike	13.7	15.0	- 0./
Platte	8.0	10.1	- 20.8
Polk	13.6	12.4	+ 9./
Pulaski	3.6	11.0	- 07.3
Putnam	16.3	14.1	+ 15.6
Ralls	14.5	12.7	+ 14.2
Randolph	15.8	12.9	+ 22.5
Ray	12.9	12.7	+ 1.6
Reynolds	9.7	8.5	+ 14.1
Ripley	15.2	.9.5	+ 60.0
St. Charles	6.6	10.1	- 34.7
St. Clair	14.3	8.0	+ 78.8
St. Francois	11.4	11.0	+ 3.6
St. Louis	7.1	7.8	- 9.0
Ste. Genevieve	8.7	8.8	- 1.3
Saline	13.3	12.6	+ 5.6
Schuyler	14.3	13.1	+ 9.2
Scotland	14.5	17.7	- 14.7
Scott	10.7	8.9	+ 20.2
Shannon	9.9	7.3	+ 35.6
Shelby	17.7	15.0	+ 18.0
Stoddard	9.9	10,1	- 2.0
Stone	8.8	8.5	+ 3.5
Sullivan	14.8	14.9	7
Taney	8.5	9.8	- 13.3
Tower	12 7	12.0	+ 5.8
Vernon	13.5	10.9	+ 23.9
Warren	10.9	11 8	- 76
Washington	10.7	10.7	+ 75
wasnington	10.4	0 2	⊥ // Q
wayne	12.4	0.0	⊤ 44 .7 ⊥ 1 7
Webster	11.9	11./	T 1./
Worth	15.2	13.3	+ 14.3
Wright	12.9	10.8	+ 19.4
St. Louis City	13.9	12.4	+ 12.1

*United States figures are for 1950 and 1960

SEX RATIO AND PERCENT CHANGE BY COUNTY 1960-1940

	S	ex Ratio	
	1960	1940	Percent Change
United States	982	1007	- 25
State	952	988	- 2.5
Counties	,,,,	,66	- 3.6
Adair	975	1004	2.0
Andrew	992	1004	- 2.9
Atchison	071	1044	- 4.8
Archison	971	1001	- 8.5
Audrain	943	1014	- 7.0
Barry	958	1037	- 7.6
Barton	98/	1034	- 4.5
Bates	987	1041	- 5.2
Benton	1005	1068	- 5.9
Bollinger	1007	1064	- 5.4
Boone	1007	973	+ 2.5
Buchanan	911	961	- 5.2
Butler	967	1066	- 93
Caldwell	962	1012	- 49
Callaway	1045	1095	- 4.5
Camden	1031	1053	
Cape Girardeau	947	007	- 2.1
Carroll	044	1022	- 5.0
Carton	1029	1033	- 6./
Carle	1036	1155	- 10.1
Cass	1064	1043	+ 2.0
Ceddr	984	1049	- 6.2
Chariton	989	1065	- 7.1
Christian	988	1075	- 8.1
Clark	1000	1049	- 4.7
Clay	979	1008	- 2.9
Clinton	943	1003	- 6.0
Cole	1129	1185	- 4.7
Cooper	1059	1083	- 2.2
Crawford	996	1100	- 95
Dade	994	1036	- 4.1
Dallas	1018	1063	- 4.2
Daviess	992	1075	- 77
DeKalb	986	10/9	- 7.7
Dent	073	1071	- 8.0
Doualas	1044	10/1	- 9.2
Dunklin	044	1003	- 1.8
Eraphin	904	1053	- 8.5
	988	1036	- 4.6
Gasconade	992	1071	- 7.4
Gentry	968	1025	- 5.6
Greene	928	956	- 2.9
Grundy	953	1015	- 6.1
Harrison	983	1029	- 4.5
Henry	944	1016	- 7.1
Hickory	1045	1106	- 5.5
Holt	1006	1050	- 4.2
Howard	968	1038	- 67
Howell	967	1034	- 6.5
Iron	979	1021	- 41
Jackson	912	024	- 4.1
lasper	905	920	- 1.5
lefferson	705	740	- 4.2
Jenerson	1040	1059	- 1.2
Johnson	10/3	1007	+ 6.6
Nnox	996	1052	- 5.3
Laclede	978	1040	- 4.4
Latayette	1001	1038	- 3.6
Lawrence	963	994	- 3.1
Lewis	990	1039	- 4.7
Lincoln	979	1069	- 8.4
30			

	Sex Ratio			
	1960	1940	Percent Change	
Linn	930	999	- 69	
Livingston	915	968	- 5 5	
McDonald	984	1073	- 83	
Macon	940	1078	- 8.2	
Madison	044	1027	- 5.2	
Madison	1054	1120	- 3.7	
Maries	012	970	- 0.7	
	713	1042	- 5.4	
/vercer	788	1042	- J.4	
Miller	1004	1042	- 3.0	
Mississippi	909	1094	- 11.4	
Monifeau	944	1005	- 0.1	
Monroe	992	1047	- 5.3	
Montgomery	971	1049	- 7.4	
Morgan	1020	1068	- 4.5	
New Madrid	998	1149	- 13.1	
Newton	959	1025	- 6.4	
Nodaway	1001	1017	- 1.6	
Oregon	960	1015	- 5.4	
Osage	1039	1101	- 5.6	
Ozark	1049	1089	- 3./	
Pemiscot	970	1066	- 9.0	
Perry	1009	1089	- 7.3	
Pettis	935	979	- 4.5	
Phelps	1177	1059	+ 11.1	
Pike	963	1034	- 6.9	
Platte	1027	1066	- 3.7	
Polk	986	1015	- 2.9	
Pulaski	2467	1076	+129.3	
Putnam	984	1033	- 4.7	
Ralls	1034	1080	- 4.3	
Randolph	919	967	- 5.0	
Ray	1003	1077	- 6.9	
Reynolds	1009	1085	- 7.0	
Ripley	1001	1109	- 9.7	
St. Charles	959	1025	- 6.4	
St. Clair	994	1055	- 5.8	
St. Francois	947	993	- 4.6	
St. Louis	950	950	0.0	
Ste. Genevieve	1012	1106	- 8.5	
Saline	974	1026	- 5.1	
Schuyler	949	1014	- 6.4	
Scotland	968	1021	- 5.2	
Scott	953	1041	- 8.5	
Shannon	1023	1090	- 6.1	
Shelby	957	1017	- 5.9	
Stoddard	981	1072	- 8.5	
Stone	1024	1057	- 3.1	
Sullivan	1012	1046	- 3.3	
Taney	1027	1071	- 4.1	
Texas	1011	1054	- 4.1	
Vernon	912	1012	- 9.9	
Warren	1019	1095	- 7.0	
Washington	1023	1091	- 6.2	
Wayne	1032	1097	- 6.0	
Webster	1009	1034	- 2.4	
Worth	947	1035	- 6.6	
Wright	968	1039	- 6.8	
St. Louis City	870	923	- 5.7	

	1960	1940	Percent Change
United States	10.6	8.4	26.2
State	9.6	8.6	11.6
Counties			
Adair	9.8	8.4	16.7
Andrew	9.6	8.4	14.3
Atchison	11.0	8.8	25.0
Audrain	9.9	8.6	15.0
Barry	8.8	8.1	8.6
Barton	8.9	8.3	7.2
Dates	8.9	8.3	7.2
Bollinger	0.0	7.8	10.3
Bonna	0.4	7.4	13.5
Buchanan	0.0	0.0	37.4
Butler	9.4	8.5	16.4
Caldwell	10.2	2.3	15.1
Callaway	8 9	8.0	10.0
Camden	8.9	7.8	141
Cape Girardeau	9.0	8.2	0.0
Carroll	9.0	8 4	7.8
Carter	8.3	7.7	7.1
Cass	11.2	8 5	7.0
Cedar	8.8	8.0	10.0
Chariton	9.0	8.2	9.8
Christian	8.9	7.9	12 7
Clark	8.9	8.2	8.5
Clay	12.1	8.9	36.0
Clinton	10.8	8.7	24.1
Cole	9.9	8.4	19.3
Cooper	9.0	8.6	4.7
Crawford	8.5	7.7	10.4
Dade	8.9	8.2	8.5
Dallas	8.7	8.0	8.7
Daviess	9.3	8.5	9.4
DeKalb	9.9	8.4	17.9
Dent	8.5	7.9	7.6
Douglas	8.6	7.6	13.2
Encolin	8.3	7.2	15.3
Gasconado	8./	7.8	11.5
Gentry	0.5	7.8	9.0
Greene	7.0	8.5	12.9
Grundy	0.0	0.7	24.1
Harrison	0.3	0.4	10.7
Henry	8.9	0.4 8 3	7.2
Hickory	8.7	8.0	8.7
Holt	10.2	8.6	18.6
Howard	9.2	8.4	9.5
Howell	8.7	8.0	8.7
Iron	8.3	7.4	12.2
Jackson	11.6	9.6	20.8
Jasper	10.0	8.6	16.3
Jefferson	8.9	7.9	12.7
Johnson	11.5	8.6	33.7
Knox	10.6	8.4	26.2
Laclede	8.7	7.8	11.5
Lafayette	8.9	8.2	8.5
Lawrence	8.9	8.2	8.5
Lewis	10.0	8.6	16.3
Lincoln	8.7	8.2	6.1

COMPLETED EDUCATION AND PERCENT CHANGE FOR THOSE 25 YEARS AND OLDER BY COUNTY 1960-1940

	1960	1940	Percent Change	
Linn	9.7	8.4	15 4	
Livingston	10.2	8.6	18.6	
McDonald	8.8	8.0	10.0	
Macon	8.9	8.2	8.5	
Madison	8.6	7 9	8.0	
Maries	8.5	7.5	13.3	
Marion	9.6	8.5	12.9	
Mercer	8.9	8.2	8.5	
Miller	8.7	8.0	8 7	
Mississippi	7.7	6.4	20_3	
Moniteau	8.8	8 1	8.6	
Monroe	9.3	8.5	9.0	
Montgomery	8.8	8.2	7 3	
Morgan	8.7	7 9	10_1	
New Madrid	7.8	6.7	16.1	
Newton	9.6	8 2	17 1	
Nodaway	11.4	8 7	31.0	
Oregon	8.4	7.6	10 5	
Osage	8.5	7.4	14.0	
Ozark	8.5	7.6	14.7	
Pemiscot	7.5	6.7	11.0	
Perry	8 5	7 7	10.4	
Pettis	0.0	8 /	10.4	
Phelos	9.0	8.0	10.7	
Pike	8.9	8.0	9.5	
Platte	11 7	8.5	27.4	
Polk	8.8	8 1	57.0	
Pulaski	11 1	7.9	40.5	
Putnam	8.9	8 1	40.5	
Ralls	8.0	83	7.7 0 /	
Randolph	9.5	8.5	0.4	
Ray	8.9	8.1	0.0	
Reynolds	8 4	7 4	7.7	
Ripley	8.2	7 4	10.9	
St. Charles	9.0	7.8	10.8	
St. Clair	8 7	8.2	4	
St. Francois	8.8	8.0	10.0	
St. Louis City	8.8	8 1	8.6	
St. Louis County	11.7	8 7	34.4	
Ste. Genevieve	8.5	7.5	13 3	
Saline	8.9	8.3	7.2	
Schuyler	8.9	8 4	6.0	
Scotland	8.9	8 4	6.0	
Scott	8.6	7 7	11 7	
Shannon	8.3	7.6	9.2	
Shelby	9.4	8 4	11.9	
Stoddard	8.3	7 4	12.2	
Stone	8.6	7 7	11.7	
Sullivan	8.9	8.1	9.9	
Taney	9.2	7.9	16.4	
Texas	8.7	7.9	10.1	
Vernon	8.9	8 4	6.0	
Warren	8 7	7.9	10 1	
Washington	8 1	6.9	17 /	
Wayne	8.3	7.5	10.7	
Webster	8.7	7 8	11.5	
Worth	9.9	8 4	17.0	
Wright	8.6	7.8	10.3	
-		·••	10.5	

	A.D.A. Cost Per Pupil	Average Daily Attendance	Total 1961 Operating Expense		
United States	341				
State	314				
County					
Adair	322	3,336	1,073,017		
Andrew	390	2,086	813,197		
Atchison	410	1,869	767,167		
Audrain	364	5,068	1,844,049		
Barry	295	4,103	1,209,491		
Barton	295	2,340	690,542		
Bates	346	2,941	1,017,891		
Benton	297	1,755	520,947		
Bollinger	308	2,049	631,948		
Boone	345	8,764	3,021,642		
Buchanan	361	13,773	4,969,230		
Butler	299	8,521	2,549,520		
Caldwell	379	1,907	723,090		
Callaway	297	4,278	1,270,473		
Camden	368	1,932	710,035		
Cape Girardeau	365	6,827	2,488,911		
Carroll	412	2,490	962,385		
Carter	295	1,039	307,518		
Cass	354	6,293	2,226,912		
Cleadr	330	1,998	607,995		
Chariton	437	1,820	795,496		
Christian	334	2,439	814,673		
Clark	304	2,072	629,616		
Clay	337	18,530	6,654,38/		
Clinton	375	2,554	958,659		
Corre	300	4,863	1,773,532		
Crowford	304	2,522	893,479		
Dade	320	2,420	776,102		
Dallas	205	1,421	507,996		
Daviess	407	1,770	. 524,344		
DeKalh	374	1,820	514 442		
Dent	241	2 264	545 627		
Douglas	279	1 769	194 157		
Dunklin	314	8 756	2 750 840		
Franklin	323	7 771	2,750,040		
Gasconade	309	2.546	787 046		
Gentry	355	1,759	624 087		
Greene	336	23.407	7,855,438		
Grundy	328	2,129	698,760		
Harrison	435	2,154	936,210		
Henry	317	3,518	1,115,244		
Hickory	366	1.023	374.022		
Holt	399	1,655	659,961		
Howard	344	1,874	644,040		
Howell	263	5,485	1,440,267		
Iron	271	1,722	467,009		
Jackson	426	97,856	41,719,076		
Jasper	327	16,438	5,371,954		
Jefferson	326	13,993	4,558,370		
Johnson	417	3,772	1,537,444		
Knox	384	1,130	434,060		
Laclede	263	4,207	1,104,857		
Lafayette	400	4, 441	1,776,015		
Lawrence	320	4,182	1,340,201		
Lewis	382	2,129	812,347		
Lincoln	387	2,407	930,419		

AVERAGE DAILY ATTENDANCE AND AVERAGE EXPENDITURE PER PUPIL BY COUNTY 1961

	A.D.A. Cost Per Pupil	Average Daily Attendance		Total 1961 Operating Expense
	22.4	2.2/0		1 100 001
Linn	334	3,362		1,122,821
MaDagald	316	2,004		757 382
Macon	336	3 101		1 040 787
Madison	295	2 117		624 566
Maries	267	1 582		422 907
Marion	330	5,215		1.731.534
Mercer	413	941		388,885
Miller	331	3,063		1,014,380
Mississippi	278	5,326		1,481,789
Monitegu	323	2,071		669,671
Monroe	338	2,234		745,878
Montgomery	393	1,747		686,750
Morgan	368	1,434		527,140
New Madrid	303	8,545		2,590,203
Newton	289	6,538		1,888,310
Nodaway	396	3,522		1,396,234
Oregon	321	2,184		701,455
Osage	423	1,392		589,123
Ozark	285	1,723		491,259
Pemiscot	307	9,788		3,009,629
Perry	288	1,998		575,533
Pettis	313	6,087		1,904,766
Phelps	308	4,655		1,435,143
Pike	331	3,144		1,042,017
Platte	365	4, 797		1,751,878
Polk	333	2,791		930,273
Pulaski	480	4,346		2,088,003
Putnam	248	1,619		400,728
Kalls Deve de la h	360	973		350,611
Randolph	342	3,843		1,314,536
Kay Device a lala	330	3,351		1,106,080
Piplou	310	1,441		447,043
St. Charles	203	2,118		556,181
St. Clair	325	1,527		3,035,806
St. François	356	7,05		470,727
St. Louis	514	104 879		52 004 115
Ste. Genevieve	388	1 181		/58 170
Saline	342	4 370		1 496 294
Schuyler	269	1,372		369,203
Scotland	330	1,260		415,216
Scott	336	6,667		2,239,372
Shannon	313	1,303		407,843
Shelby	323	1,848		596,175
Stoddard	309	6,900		2,128,788
Stone	325	1,888		614,460
Sullivan	392	1,456		571,041
Taney	318	2,206		701,919
Texas	288	4, 427		1,274,277
Vernon	357	3,226		1,152,063
Warren	354	1,364		482,644
Washington	313	3,016		943,316
Wayne	291	1,928		560,776
Webster	286	3,391		969,135
Worth	372	783		291,414
verignt St. Louis City	305	3,465		1,056,282
ST. LOUIS CITY	4/1	84,232		39,686,060

			(Percent)			
1960	1950	1940	1930	1920	1910	1900
66.6	61.5	51.8	51.2	46.6	42.3	36.3
61.3	57.9	51.8	51.2	46.6	42.3	36.3
17.4	21.7	21.6	22.6	22.7	20.9	18.5
11.0	11.5	10.5	11.0	9.5		
					7.5	8.6
6.7	3.7	3.6	3.8	2.3	2.4	0.0
4.6	4.4	1.9	1.6	2.0	2.0	0.8
9.3	7.2	6.5	4.5	3.2	2 1	1.7
7.1	4.8	4.1	4.2	3.2	3 5	3.0
5.2	4.7	3 7	3.4	3.6	3.0	2.0
1.1	1.1	017	0.4	0.0	0.7	2.7
4 3	2.5			••••	••••	
	2.5				• • • •	••••
33.4	38.5	48.2	48.8	53.4	57.7	63.7
3.9	4.3	4.7	4.9	5.4	5 1	4 9
4.3	4.7	5.4	5.6	6.0	5.8	5.0
25.1	29.5	38.1	38.3	41.9	46.8	53.7
	1960 	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$(Percent)$ $\begin{array}{c c c c c c c c c c c c c c c c c c c $	$(Percent)$ $\begin{array}{c c c c c c c c c c c c c c c c c c c $	$(Percent)$ 1960 1950 1940 1930 1920 1910 66.6 61.5 51.8 51.2 46.6 42.3 61.3 57.9 51.8 51.2 46.6 42.3 61.3 57.9 51.8 51.2 46.6 42.3 17.4 21.7 21.6 22.6 22.7 20.9 11.0 11.5 10.5 11.0 9.5 \dots 11.0 11.5 10.5 11.0 9.5 2.0 2.0 9.3 7.2 6.5 4.5 3.2 2.1 7.1 4.8 4.1 4.2 <

PERCENTAGES OF MISSOURI POPULATION LOCATED IN PLACES OF VARIOUS SIZES 1900-1960