# FARM OPERATOR TURNOVER AND RESOURCE ADJUSTMENTS IN SELECTED STATE ECONOMIC AREAS IN KANSAS

by

M. Charles Kellogg

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Major Professor

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# INTRODUCTION

Human resource adjustments in agriculture are not new phenomena. Since 1935, nearly one out of every two Kansas farms has disappeared due to farm consolidation. However, in more recent years the impact of these changes has become greater, because an increasing proportion of farm operators are in the older age groups.

The amount of capital required for farming has increased while the amount of labor required has decreased, yet farm output has been steadily increasing. Scientific and technological advancement have enabled the farmer to produce more with less labor, consequently, the number of farms has been decreasing and the average size farm continuously increasing. As a result, fewer and fewer people are needed to produce the basic food requirements for the country. This is not a situation unique to Kansas but to the entire nation.

This phenomenom has released farm labor not only for employment in industries and services within agribusiness, but also in other sectors of the economy. However, many of these people that are not needed in farming have had little or no training which is required in most types of nonfarm employment.

In Kansas, which is considered to be primarily an agricultural state with 95.7 percent[1] of land area in farms, these changes have had far-reaching

[1]U.S. Bureau of the Census, "Statistics for the State and Counties," Census of Agriculture, 1964, (Washington, D.C.: U.S. Government Printing Office, 1967), p. 210.

effects. Not many rural areas have matched the need for nonfarm employment with local industries and services. In the past the shift from farm to nonfarm employment in these areas has come largely by farm people moving to distant urban centers where employment could be found. These are the types of adjustments that have been occurring in most of the agricultural areas in Kansas. Projections of the expected adjustments between 1964 and 1984 were made in this study. These projections should be valuable to state, county, and community leaders in considering the education and training of rural youth, in anticipating the financial needs of refinancing new farm businesses, and in area development planning.

## DESCRIPTION OF THE STUDY

### Problem

Many Kansas farmers are currently in the older age groups. In 1964, the average age for all Kansas farmers was 51.3 years, with 17.8 percent of all farmers in the state 65 years of age or older.[1] Consequently, a large portion of present Kansas farmers will be leaving farming through retirement and death in the next few years. In addition to the rapid turnover of farmers, continued farm consolidation will contribute to the problems of resource adjustment. Many of the farm operations which the farmer leaves will not create a new farming opportunity but will be absorbed into existing farming units. Thus, the number of youth that can enter the farm labor force will be severly limited by the increase in technology and the decreasing number of farms.

Most of the youth in rural areas have been trained in a rural environment for a farming occupation. Consequently, many rural youth that enter the industrial labor force are at a disadvantage because they have not been properly trained for skilled urban industrial occupations. The Fifth Annual Economic Report of the Governor states that:

> One of the most frustrating paradoxes of the current economic scene is that of simultaneous unemployment and labor shortage. The reason stems from the weak demand for unskilled labor and a strong demand for skilled labor. Projections of future labor requirements indicate that the demand for unskilled workers will remain constant at best while the demand for skilled workers will rise sharply.[2]

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[1] Ibid., p. 254.

[2] Robert B. Docking, Fifth Annual Economic Report of the Governor, State of Kansas (Topeka, Kansas: State Printing Office, January, 1968), p. 45.

> The burden of rearing and training young people to make their contributions elsewhere is often a serious one. With a declining population base, the problem of providing educational and other facilities becomes increasingly difficult. Adequate programs can assist some of the young people in finding satisfactory adjustments elsewhere, and enable those who remain to take advantage of the opportunities which modern technical developments make possible.[1]

Some of the problems encountered by rural youth who do not enter farming have been mentioned. Now a look at problems facing rural youth who do enter farming would be appropriate.

The increasing average size farm has resulted in additional difficulties in the financing of new farm businesses. For example, a growing demand for fixed capital requirements was reflected in the increase of the total value of farms in Kansas from $5.0 billion in 1959 to $6.1 billion in 1964. The total investment in Kansas farming in 1964, "averaged more than $49,000 per farm worker, twice the national average investment per farm worker and nearly three times the national average invested per worker in the nation's manufacturing industry."[2] Previous studies[3] of beginning farmers in various states in the North Central area have shown uniformly that many beginners have small incomes, averaging below corresponding figures for established farmers. This indicates that family assistance and available credit are not sufficient.

The loss of income and unusual expense caused by low prices, errors in the managerial process, drought, family illness and accidents are other major problems that limit farming opportunities. These circumstances can exhaust

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[1]Conrad Taeuber, "Economic and Social Implications of Internal Migration," Journal of Farm Economics, Vol. XLI, (December, 1959), p. 1149.

[2]Jasper E. Pallesen and John L. Wilson, Agriculture in the Kansas Economy, (Topeka, Kansas: Kansas State Board of Agriculture, 1964), p. 3.

[3]Don Kanel, Opportunities of Beginning Farmers, Why are They Limited? North Central Regional Publication 102 (Lincoln, Nebraska: Nebraska Agricultural Experiment Station, University of Nebraska, May 1960), p. 22.

the limited capital of new farmers and force them to quit or to repeat the effort of accumulating the savings needed to create a farming enterprise.

> More credit to those who can find a farm, better leasing arrangements, crop insurance, improvements in practices, and more economic combinations of enterprises might help beginning farmers to start on larger farms and to survive some of the risks of farming.[1]

The exodus from rural areas creates a burden on local institutions. With fewer people available, it is difficult to have adequate schools, churches, and efficient governmental bodies. To help hold people in rural areas, rural industries play a major role. As one defination states, an industry is a rural industry if it has "a major locational advantage when located proximate to agricultural raw materials, forestry raw materials, or local agricultural markets."[2] However modern means of transportation have made it possible for industries to locate distances from the source of raw material and local markets.[3] Consequently, it is difficult to analyze which businesses contribute most to the rural sector of the economy.

## Geographical Area of Study

The geographical area used in this study included state economic areas 1, 2, 3, 4, 5, 6, 7, and 8.[4] These areas contained all counties in Kansas except Johnson, Sedgwick, Shawnee, and Wyandotte, which comprised the metropolitan state economic areas A, B, and C. Figure 1, page 6, shows the location of the state economic areas. The 1960 Census of Population defined

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[1]Ibid., p. 22-23.

[2]Stefan Robock, "Rural Industries and Agricultural Development," Journal of Farm Economics, Vol. XXXIV (August, 1952), p. 346.

[3]John M. Kuhlman, "Rural Industries and Agricultural Development," Journal of Farm Economics, Vol. XXXV, (August, 1953), p. 436.

[4]U.S. Bureau of the Census, Part A, "Number of Inhabitants," U.S. Census of Population, 1960, Vol. I, Characteristics of the Population, (Washington, D.C.: U.S. Government Printing Office, 1961), p. S 8.

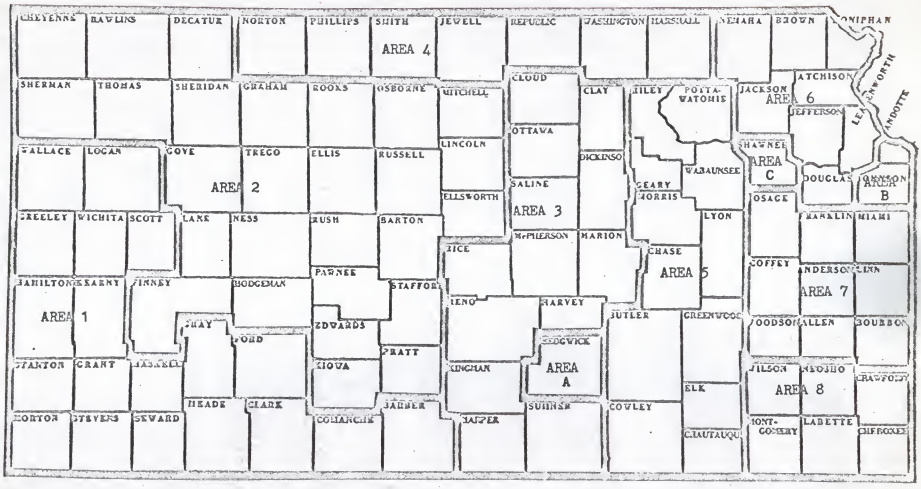


Fig. 1. State Economic Areas in Kansas.

state economic areas as:[1]

> . . . relatively homogeneous subdivisions of states. They consist of single counties or groups of counties which have similar economic and social characteristics.... In the establishment of state economic areas, factors in addition to industrial and commercial activities were taken into account. Demographic, climatic, physiographic, and cultural factors, as well as factors pertaining more directly to the production and exchange of agricultural and non-agricultural goods, were considered.

Metropolitan state economic areas were eliminated from this study because of the high urbanization of these counties. Each of these areas had greater than 100,000 inhabitants and the population per square mile ranged from 133.6 to 259.2[2] in the counties excluded from the study. Furthermore, the percent of the population that was rural farm was less than three percent[3] in all these areas. In these four counties alone, the total number of acres in farms dropped 69,020[4] from 1959 to 1964 whereas the acres of farm land remained relatively constant throughout the rest of the state.

## Procedures of Study

In this study data were assembled to project trends of farming opportunities. Because of the nature of the data it was necessary to collect it on a county by county basis for use in the analysis of each economic area.

The primary data used in the study were obtained from the Census of Agriculture, 1964. Also, the U.S. Census of Agriculture data for the years

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[1] Ibid. pp. XXVII - XXVIII.

[2] Wayne C. Rohrer and Charles C. Langford, Statistics for Kansas Counties, (Manhattan, Kansas: Extension Service, Kansas State University, October, 1963), Figure 1.

[3] Ibid., Figure 10.

[4] U.S. Bureau of Census, "Statistics for the State and Counties, Kansas," Census of Agriculture, 1964, (Washington, D.C.: U.S. Government Printing Office, 1967), p. 210.

1950, 1954, and 1959 were used whenever it seemed appropriate in order to determine past trends of farm consolidation, farm operator turnover, and the number of youth entering the farm labor force.

The magnitude of the surplus of youth over farming opportunities was projected under six different situations:

(1) based on the 1950 to 1964 rate of farm consolidation and assuming one operator per farm in 1974 and 1984.

(2) based on a rate of farm consolidation 25 percent greater than the 1950 to 1964 rate and assuming one operator per farm in 1974 and 1984.

(3) based on a rate of farm consolidation 50 percent greater than the 1950 to 1964 rate and assuming one operator per farm in 1974 and 1984.

(4) based on the 1950 to 1964 rate of farm consolidation and assuming 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984.

(5) based on a rate of farm consolidation 25 percent greater than the 1950 to 1964 rate and assuming 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984.

(6) based on a rate of farm consolidation 50 percent greater than the 1950 to 1964 rate and assuming 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984.

The total number of farmers in the year 1974 and 1984 was obtained by multiplying the projected number of farms in 1974 or 1984 by the assumed number of operators per farm.

Cohorts were used to calculate the rate of farm operator turnover by 1974 or 1984.

> The cohort as defined is a distinct group; a farmer cannot belong to more than one of the cohorts. It is an age group in the sense that

its members were all born in the same period, and in that the range of age among group members is limited to ten years. Of course the age of the group is not fixed but increases over a period of time.[1]

Fox example, a cohort would be all farmers in Kansas, who ranged in age from 45 to 54 in 1964. In 1974, the same cohort would include farmers of age 55 to 64. By calculating the loss of farmers in each cohort for the projection period, one can determine the rate of farm operator turnover. To determine the number of farmers in 1964 remaining in 1974 or 1984, cohorts for the year 1954 to 1964 and the rate of farm operator turnover were used to project the trend to 1974 or 1984, respectively.

New farming opportunities for the projected time period were calculated by subtracting the number of 1964 farmers remaining in 1974 or 1984 from the total number of farming opportunities at the end of the projected period. The total number of youth available to enter the labor force was calculated by subtracting from the total number of farm male youth, the loss of youth due to migration as occurred in the 1954 to 1964 period, and those dying before entering the labor force.[2] To obtain the surplus of youth over available farming opportunities, the number of new farming opportunities was subtracted from the number of farm youth available to enter the labor force.

The average and total farm valuations of 1964 were projected to 1974 and 1984 assuming a continuation of the increase in value that occurred in the 1959 to 1964 period. This increase in value accounted for the inflationary effect as well as the growth in farms.

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[1]Don Kanel, "Age Components of Decrease in Number of Farmers, North Central States 1890-1954," Journal of Farm Economics, Vol. XLIII (May, 1961), p. 250.

[2]U.S. National Center for Health Statistics, Monthly Vital Statistics Report, Vol. 15, No. 13, (July 26, 1967), p. 15.

Using the estimates calculated from these data, the identification and magnitude of problems arising as a result of the rapid rate of turnover of farm operators, and farm consolidation were examined.

## Major Assumptions

A projection method requires the use of many assumptions about the various trends used in the projection period. Thus, a formulation of certain conditions assumed to exist in the future was necessary. When possible, the assumptions were based upon the most recent rates of change. It must be understood that these assumptions were not predictions of the future, but that they were based upon present conditions.

Acres of land in farms.

The total acres of land in farms was found to remain relatively constant. A comparison of the data for the years 1950, 1954, 1959, and 1964, indicated no significant change. It appeared that retirement of land through government programs, expansion of cities, the use of land for highway development, recreational purposes, and flood control would not significantly affect the number of acres of land in farms.

Rate of farm consolidation.

Three different rates of farm consolidation were used for each area in this study. The assumed rates of farm consolidation were as follows: (1) a continuation of the rate found to exist between 1950 and 1964 in each area; (2) a rate of farm consolidation 25 percent greater than the rate found to exist between 1950 and 1964 in each area; and (3) a rate of farm consolidation 50 percent greater than the rate found to exist between 1950 and 1964 in each area.

Total number of farm operators.

Two different levels of labor and management supply per farm were used in this study. The first assumption considered that each farm would have only one operator throughout the projection period. The second assumption considered that farms would average 1.2 operators each in 1974 and 1.4 operators for each farm in 1984. Flexibility in the number of operators per farm allows for farms that get so large that one man could not manage the entire operation, for father-son partnerships and other similar arrangements, and for shifts to more labor intensive farming, such as a livestock feeding operation.

Rate of farm operator turnover.

The rate of farmers leaving farming was assumed to be a continuation of the 1954 to 1964 rate of turnover. This was estimated with the use of cohorts as described in a previous section on pages 8 and 9.

Youth available to enter the labor force.

The number of youth available to enter the labor force was assumed to be all farm male youth less those migrating before entering the labor force using the rate of migration that occurred in the 1954 to 1964 period, and those dying before entering the labor force.

Death rates.

The death rate of Kansas rural youth was assumed not to be significantly different from death rates of U.S. rural youth.[1]

Economic Conditions.

Economic conditions were assumed to continue at near full employment levels throughout the projection period without any catastrophic events occurring.

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[1]U.S. National Center for Health Statistics, Monthly Vital Statistics Report, Vol. 15, No. 13, (July 26, 1967), p. 15.

## ANALYSIS OF ECONOMIC AREAS AND THE STATE

Census data have given a good description of Kansas agriculture in 1964. But to describe Kansas agriculture in the future, the information and projections presented in this section would be helpful. The first part of the section was an analysis of the individual state economic areas under each of the six different situations. After an analysis of the individual state economic areas, the total state[1] was examined. For the state, each of the same six alternative assumptions were used.

Tables 23a, 23b, 24a, 24b, 25a, 25b, 26a, 26b, 27a, 27b, 28a, and 28b in the appendix show the results of the six alternative projections. Tables 23a and 23b show the results, when assuming one operator per farm and a continuation of the 1950 to 1964 rate of farm consolidation in each area. Tables 24a and 24b show the results of a rate of farm consolidation 25 percent greater than the 1950 to 1964 rate in each area and assuming one operator per farm. The results of a rate of farm consolidation 50 percent greater than the 1950 to 1964 rate in each area and one operator per farm were given in tables 25a and 25b. In tables 26a and 26b, the assumption of one operator per farm was changed to 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984. With this new assumption, the rate of farm consolidation was the original 1950 to 1964 rate in each area. The results of assuming a rate of farm consolidation 25 percent

[1] The total area studied actually did not include Johnson, Sedgwick, Shawnee, and Wyandotte counties, the metropolitan state economic areas. However, the level of farming activity in these areas is very low and would not significantly affect the analysis. Therefore, for purposes of simplification, the total area studied will be referred to as the state or the total state area.

greater than the 1950 to 1964 rate, and 1.2 and 1.4 operators per farm in 1974 and 1984, respectively, were shown for each area in tables 27a and 27b. Results given in tables 28a and 28b were based on the assumption of a rate of farm consolidation 50 percent greater than the 1950 to 1964 rate in each area, and 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984.

State Economic Area 1

State economic area 1 includes nineteen counties in the southwestern part of the state (See Fig. 1 on page 6). The population density is very low in this area, reaching as low as 2.3[1] inhabitants per square mile in Wallace county. Also, in this area there were only two cities in 1960 with a population greater than four thousand[2] people--Liberal, in Seward county and Dodge City, in Ford county.

Table 22 on page 48 shows that area 1 had larger farms than any other area--averaging 1,348 acres in 1964. However, this varied from a 722 acre average in Ford county to an average of 1,993 acres in Stanton county. The past rate of farm consolidation was 18.4 percent every ten years in area 1. This was the smallest rate of farm consolidation of any area in the study. On the other hand, because of the large size of farms in this area, the absolute increase in size of farms was much larger than in other area studied.

Looking at the following table, one sees the number of new farming opportunities in area 1 under each of the six situations. The number of new farming opportunities is doubled if 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984 is assumed rather than one operator per farm.

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[1]Wayne C. Rohrer and Charles E. Langford, Statistics for Kansas Counties, (Manhattan, Kansas: Kansas State University, October, 1963), Figure 1.

[2]U.S. Bureau of the Census, U.S. Census of Population, 1960, Vol. I, Characteristics of the Population, Part A, "Number of Inhabitants," (Washington, D.C.: U.S. Government Printing Office, 1961).

Table 1.[1] Projected number of new farming opportunities in area 1 by 1974 and 1984.

| Number of operators | One operator per farm in 1974 and 1984 | | | 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984 | | |
|---|---|---|---|---|---|---|
| Rate of farm consolidation | 1950-64 rate | 25% greater rate | 50% greater rate | 1950-64 rate | 25% greater rate | 50% greater rate |
| New farming opportunities by 1974 | 1,268 | 1,028 | 804 | 2,489 | 2,201 | 1,932 |
| New farming opportunities by 1984 | 2,343 | 1,944 | 1,587 | 4,407 | 3,848 | 3,348 |

From these data, it appears as if there is a large number of available farming opportunities. However, there will be 3,012 farm youth available to compete for the opportunities in area 1 by 1974, and 5,375 to vie for them by 1984. This imbalance between youth and farming opportunities under the various assumptions is shown in the following table.

[1] This table was compiled from data in tables 23a to 28b on pages 49 to 60 in the appendix.

Table 2[1] Projected number of surplus youth over farming opportunities and percent surplus of youth by 1974 and 1984 for area 1.

| Number of operators | One operator per farm in 1974 and 1984 | | | 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984 | | |
|---|---|---|---|---|---|---|
| Rate of farm consolidation | 1950-64 rate | 25% greater rate | 50% greater rate | 1950-64 rate | 25% greater rate | 50% greater rate |
| 1974 surplus of farm youth | 1,744 | 1,984 | 2,208 | 523 | 811 | 1,080 |
| Percent surplus-1974 | 137.3% | 193.0% | 274.6% | 21.0% | 36.8% | 55.9% |
| 1984 surplus of farm youth | 3,032 | 3,431 | 3,788 | 968 | 1,527 | 2,027 |
| Percent surplus-1984 | 129.4% | 176.5% | 238.7% | 22.0% | 39.7% | 60.5% |

As shown here, if one operator per farm is assumed, there will be more farm youth who could not find a farming opportunity than those who could. However, if more than one operator per farm is assumed, the number of excess youth is small.

Farmers in area 1 were younger than farmers in any other area in 1964. Farmers in this area ranged in average age from 46.8 years in Scott county to an average age of 52.5 years in Clark county.

The average farm valuation in area 1 was the greatest for all farms included in the study in 1964. It was $138,946 in 1964, nearly $40,000 greater than the average for any other area. The projected increase in average farm value in a ten year period was approximately 89 percent for area 1. This 89 percent is slightly above the average for all of the areas studied. The

[1]This table was compiled from data in tables 23a to 28b on pages 49 to 60 in the appendix.

projected average value of farms in area 1 for 1974 and 1984 is $263,106 and $498,221, respectively. It is important to realize that this increase in value includes the increase due to inflation. However, a beginning farmer saving to purchase a farm would look at this as an increased cost. This average value of farms of nearly a half-million dollars in 1984 is also reflected in the projected number of acres in an average size farm. In 1984, the average size farm in area 1, assuming a continuation of the 1950 to 1964 rate of farm consolidation, was projected as 1,888 acres. Looking at each county in the area, as shown in table 21 on page 44, one sees that the average size farm would range from 1,082 acres in Ford county to a 2,793 acre average in Stanton county in 1984, assuming a continuation of the area 1 rate of farm consolidation during the 1950 to 1964 period. Total farm valuation was $1,004,164,507 in 1964. The projected total farm valuation for 1974 was $1,606,262,233 and $2,570,324,246 for 1984. This is an increase in total farm valuation of $602 million by 1974 and $1,566 million by 1984.

State Economic Area 2

State economic area 2 includes 27 counties in the western part of Kansas. In 1960, there were nine cities in this area with a population of over 4,000 inhabitants each, as compared to only two cities in area 1 with a population greater than 4,000. Area 2 tends to have relatively young farmers as was the case in area 1. Farmers in this area ranged in average age from 52.5 years in Lincoln county to 47.6 years of age in Gove county.

The farms in area 2 were the second largest in the state averaging 817 acres each in 1964. They ranged in size from an average of 558 acres in Mitchell county to 1,285 acres in Lane county in 1964. The past rate of farm consolidation in area 2 was 20.8 percent every ten years. This, as in area 1 is relatively low, but once again the large size of farms in area 2 makes the

absolute increase in size of farms the next to the largest, led only by area 1.

The number of new farming opportunities in area 2 by 1974 and 1984 is shown in the following table.

Table 3.[1] Projected number of new farming opportunities in area 2 by 1974 and 1984.

| Number of operators | One operator per farm in 1974 and 1984 | | | 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984 | | |
|---|---|---|---|---|---|---|
| Rate of farm consolidation | 1950-64 rate | 25% greater rate | 50% greater rate | 1950-64 rate | 25% greater rate | 50% greater rate |
| New farming opportunities by 1974 | 2,940 | 2,300 | 1,678 | 5,960 | 5,192 | 4,446 |
| New farming opportunities by 1984 | 5,437 | 4,403 | 3,434 | 10,439 | 8,991 | 7,635 |

For these farming opportunities, there will by 7,117 farm youth available by 1974. By 1984, there will be 12,840 youth available to enter the farm labor force in area 2. The magnitude of this supply of youth and farming opportunities is shown in the following table.

[1]This table was compiled from data in tables 23a to 28b on pages 49 to 60 in the appendix.

Table 4.[1] Projected number of surplus youth over farming opportunities and percent surplus of youth by 1974 and 1984 for area 2.

| Number of operators | One operator per farm in 1974 and 1984 | | | 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984 | | |
|---|---|---|---|---|---|---|
| Rate of farm consolidation | 1950-64 rate | 25% greater rate | 50% greater rate | 1950-64 rate | 25% greater rate | 50% greater rate |
| 1974 surplus of farm youth | 4,177 | 4,817 | 5,439 | 1,157 | 1,925 | 2,671 |
| Percent surplus-1974 | 142.2% | 209.4% | 324.1% | 19.4% | 37.1% | 60.1% |
| 1984 surplus of farm youth | 7,403 | 8,437 | 9,401 | 2,406 | 3,849 | 5,205 |
| Percent surplus-1984 | 136.2% | 191.6% | 273.9% | 23.0% | 42.8% | 68.2% |

As shown here, the percentage of surplus youth is about the same as in area 1.

The average farm value was $89,204 for area 2 in 1964. This was the second largest average value of all the areas studied. The projected increase in average value per farm was 82 percent in a ten year period. This is slightly below the average increase in average farm value for the state. The projected average farm values are $162,542 for 1974 and $296,201 for 1984. This is an increase in average farm values of approximately $73,000 per farm between 1964 and 1974, and an increase in average value of a farm of approximately $207,000 between 1964 and 1984. The total value of all farms in area 2 was $1,626,901,550 in 1964. The projected total value of farms was $2,454,769,713 in 1974 and $3,703,998,705 in 1984. This is an increase in total value of farms of just over $825 million by 1974 and $2,087 million between 1964 and 1984.

[1]This table was compiled from data in tables 23a to 28b on pages 49 to 60 in the appendix.

State Economic Area 3

State economic area 3 includes 13 counties in the central part of the state. This area includes several of the states major cities, but it also has a high percentage of its land area in rural areas. The farms in area 3 in 1964 were much smaller than in the two previous areas analyzed. Farms in area 3 averaged 423 acres each in 1964. In 1964, farms ranged from an average of 547 acres in Rice county to a low of 320 acres in Harvey county. These medium sized farms had a rate of farm consolidation of 27.7 percent every ten years during the years 1950 to 1964, which is very near the average of the state during that same time period. The average age of farm operators in this area was very near the state average age. Harper county had the oldest farmers in area 3, averaging 52.4 years of age, while McPherson and Kingman counties had the youngsters of the area, averaging 50.0 years of age.

The average farm valuation for state economic area 3 was $68,765 which was near the average of the state in 1964. On the other hand, the increase of average farm values was 68 percent for a ten year period -- the lowest of all areas. The projected average farm values are $115,373 for 1974, and $193,572 for 1984. This is an increase of approximately $47,000 per farm between 1964 and 1974 and an increase of approximately $125,000 per farm between 1964 and 1984.

The total farm valuation of area 3 was $1,134,422,970 in 1964. However, because of the relatively small increase in the average value of farms and a rate of farm consolidation above the average rate for the state the increase in the total farm valuation is not great. The projected values of the total farm valuation in area 3 are $1,490,991,399 for 1974 and $1,959,334,071 for 1984.

The number of new farming opportunities in area 3 by 1974 and 1984 is shown in the following table.

Table 5.[1] Projected number of new farming opportunities in area 3 by 1974 and 1984.

| Number of operators | One operator per farm in 1974 and 1984 | | | 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984 | | |
|---|---|---|---|---|---|---|
| Rate of farm consolidation | 1950-64 rate | 25% greater rate | 50% greater rate | 1950-64 rate | 25% greater rate | 50% greater rate |
| New farming opportunities by 1974 | 1,872 | 1,168 | 505 | 4,457 | 3,612 | 2,816 |
| New farming opportunities by 1984 | 3,667 | 2,595 | 1,637 | 7,716 | 6,215 | 4,874 |

Area 3 has a higher rate of farm consolidation than the two previous areas analyzed. Thus, one sees that supply farming opportunities are relatively less than in the other two areas. To compete for the farming opportunities in area 3, there will be 6,384 farm youth by 1974 and 8,682 by 1984. The imbalance between farm opportunities and rural youth available to enter farming is shown in the following table.

[1] This table was compiled from data in tables 23a to 28b on pages 49 to 60 in the appendix.

Table 6.[1] Projected number of surplus youth over farming opportunities and percent surplus of youth by 1974 and 1984 for area 3.

| Number of operators | One operator per farm in 1974 and 1984 | | | 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984 | | |
|---|---|---|---|---|---|---|
| Rate of farm consolidation | 1950-64 rate | 25% greater rate | 50% greater rate | 1950-64 rate | 25% greater rate | 50% greater rate |
| 1974 surplus of farm youth | 4,512 | 5,216 | 5,879 | 1,927 | 2,772 | 3,568 |
| Percent surplus-1974 | 241.1% | 446.6% | 1,164.2% | 43.2% | 76.7% | 126.7% |
| 1984 surplus of farm youth | 7,610 | 8,682 | 9,640 | 3,561 | 5,062 | 6,403 |
| Percent surplus-1984 | 207.5% | 334.6% | 588.9% | 46.2% | 81.4% | 131.4% |

As is shown here, area 3 has a very high percentage of surplus youth. Consequently, many youth will not be able to find a farming opportunity in this area.

State Economic Area 4

State economic area 4 contains seven counties in the northern most tier of counties in Kansas. This area is mainly rural with only one city having a population in 1960 of over 4,000 inhabitants -- Marysville, in Marshall county. The 8,052 farms in area 4 averaged 464 acres in 1964. They ranged in size from a 727 acre average in Norton county to a 355 acre average in Republic county. The average age of farm operators in this area was near the state average age ranging from a high of 51.8 years of age in Jewell county to a low in Marshall county of 50.2 years of age in 1964. The past rate of farm consolidation in

[1]This table was compiled from data in tables 23a to 28b on pages 49 to 60 in the appendix.

area 4 has been 31.6 percent for an entire ten year period. This was greater than the state average rate of farm consolidation for the same period of time. The fast rate of farm consolidation was probably due to the small average size of farms in area 4.

The average farm valuation in area 4 in 1964 was $47,058. The increase in the average farm valuation of farms was approximately 89 percent over a ten year period. The projected average farm values for 1974 and 1984 are $89,095 and $168,692, respectively. The total valuation of farms in area 4 was $378,910,236 in 1964. Projecting the total valuation to 1974 and 1984, the values are $545,350,469 for 1974 and $785,092,213 for 1984. This is an increase of the total farm value of a little more than $400 million by 1984. On a 1984 per farm basis, this would be an increase of approximately $120,000.

The number of farming opportunities becoming available by 1974 and 1984 in area 4 is shown in the following table.

Table 7.[1] Projected number of new farming opportunities in area 4 by 1974 and 1984.

| Number of operators | One operator per farm in 1974 and 1984 | | | 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984 | | |
|---|---|---|---|---|---|---|
| Rate of farm consolidation | 1950-64 rate | 25% greater rate | 50% greater rate | 1950-64 rate | 25% greater rate | 50% greater rate |
| New farming opportunities by 1974 | 980 | 614 | 270 | 2,204 | 1,765 | 1,352 |
| New farming opportunities by 1984 | 1,757 | 1,216 | 739 | 3,610 | 2,861 | 2,193 |

[1]This table was compiled from data in tables 23a to 28b on pages 49 to 60 in the appendix.

There will be 2,834 youth in area 4 to compete for these opportunities by 1974 and 5,106 youth available by 1984. The difference between the supply of youth and the available opportunities is shown in the following table.

Table 8.[1] Projected number of surplus youth over farming opportunities and percent surplus of youth by 1974 and 1984 for area 4.

| Number of operators | One operator per farm in 1974 and 1984 | | | 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984 | | |
|---|---|---|---|---|---|---|
| Rate of farm consolidation | 1950-64 rate | 25% greater rate | 50% greater rate | 1950-64 rate | 25% greater rate | 50% greater rate |
| 1974 surplus of farm youth | 1,854 | 2,220 | 2,564 | 630 | 1,069 | 1,482 |
| Percent surplus-1974 | 189.2% | 361.6% | 949.6% | 28.6% | 60.6% | 109.6% |
| 1984 surplus of farm youth | 3,349 | 3,890 | 4,367 | 1,487 | 2,245 | 2,913 |
| Percent surplus 1984 | 190.6% | 319.9% | 590.9% | 41.1% | 78.5% | 132.8% |

State Economic Area 5

Twelve counties in the Flint Hills region of Kansas are included in state economic area 5. In 1964, there were 10,670 farms in area 5, averaging 558 acres each. This is the same average size as for the average of all areas studied. The size of farms varied greatly in area 5, ranging from an average of 1,126 acres in Chase county to a 419 acre average in Lyon county. Even though farms averaged near the state average in size, the rate of farm consolidation was 31.6 percent over a ten year period. This high rate of farm consolidation is probably due to the older age of farmers in this area. Because farmers in this area were older, the rate of turnover was faster, thus leaving more farming

[1]This table was compiled from data in tables 23a to 28b on pages 49 to 60 in the appendix.

units available for farm consolidation. In 1964, farm operators in area 5 ranged in age from an average of 54.2 years in Elk county to a low average of 51.7 years in Riley, Pottawatomie, Geary, Butler, and Cowley counties. All of these averages are greater than the state average age.

The number of new farming opportunities in area 5 by 1974 and 1984 is shown in the following table.

Table 9.[1] Projected number of new farming opportunities in area 5 by 1974 and 1984.

| Number of operators | One operator per farm in 1974 and 1984 | | | 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984 | | |
|---|---|---|---|---|---|---|
| Rate of farm consolidation | 1950-64 rate | 25% greater rate | 50% greater rate | 1950-64 rate | 25% greater rate | 50% greater rate |
| New farming opportunities by 1974 | 1,246 | 758 | 305 | 2,868 | 2,283 | 1,739 |
| New farming opportunities by 1984 | 2,282 | 1,563 | 932 | 4,749 | 3,743 | 2,859 |

To fulfill these farming opportunities, there will be 3,619 farm youth available by 1974 and 6,224 available by 1984. The magnitude of the difference between farming opportunities and the supply of youth is shown in the following table.

[1]This table was compiled from data in tables 23a to 28b on pages 49 to 60 in the appendix.

Table 10.[1] Projected number of surplus youth over farming opportunities and percent surplus of youth by 1974 and 1984 for area 5.

| Number of operators | One operator per farm in 1974 and 1984 | | | 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984 | | |
|---|---|---|---|---|---|---|
| Rate of farm consolidation | 1950-64 rate | 25% greater rate | 50% greater rate | 1950-64 rate | 25% greater rate | 50% greater rate |
| 1974 surplus of farm youth | 2,373 | 2,861 | 3,314 | 751 | 1,336 | 1,880 |
| Percent surplus-1974 | 190.4% | 377.4% | 1,086.6% | 26.2% | 58.5% | 108.1% |
| 1984 surplus of farm youth | 3,942 | 4,661 | 5,292 | 1,475 | 2,481 | 3,365 |
| Percent surplus-1984 | 172.7% | 298.2% | 567.8% | 31.1% | 66.3% | 117.7% |

In 1964, the average value per farm was $63,317 in area 5. Projecting the 1964 average value at the 10 year increase of 87 percent. the average value in 1974 would be $118,350. In 1984, the projected average value would be $221,243, an increase of approximately $158,000 per farm between 1964 and 1984. The total farm valuation was $675,588,703 in 1964. Projecting this, in 1974 the total value is $959,932,965, and in 1984, $1,364,626,604. This is an increase in total value of approximately $285 million by 1974 and approximately $689 million between 1964 and 1984.

## State Economic Area 6

Area 6 consists of eight counties in the northeast corner of the state. This area includes several urban centers therefore, it has a greater population per square mile than any other area included in the study. Farms in area 6 averaged 267 acres in 1964, the smallest average of any area. The farms ranged

[1]This table was compiled from data in tables 23a to 28b on pages 49 to 60 in the appendix.

from an average acreage of 311 in Nemaha county to a 194 acre average in Leavenworth county in 1964. These relatively small farms had a rate of farm consolidation during the period 1950 to 1964 of 27.7 percent every ten years. This was just slightly above the average in the state area. Farm operators in area 6 were older on the average than all farmers in Kansas. The youngest farmers were in Nemaha county, who averaged 48.5 years of age, and the oldest, who averaged 53.1 years were from Douglas county.

Available farming opportunities are shown for area 6 in the following table.

Table 11.[1] Projected number of new farming opportunities in area 6 by 1974 and 1984.

| Number of operators | One operator per farm in 1974 and 1984 | | | 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984 | | |
|---|---|---|---|---|---|---|
| Rate of farm consolidation | 1950-64 rate | 25% greater rate | 50% greater rate | 1950-64 rate | 25% greater rate | 50% greater rate |
| New farming opportunities by 1974 | 1,397 | 994 | 343 | 2,881 | 2,397 | 1,616 |
| New farming opportunities by 1984 | 2,479 | 1,865 | 943 | 4,804 | 3,945 | 2,654 |

To compete for these new farming opportunities, there will be 3,378 farm youth by 1974 and 6,268 farm youth by 1984. Table 12 will show the projected imbalance between farm youth and farming opportunities.

[1]This table was compiled from data in tables 23a to 28b on pages 49 to 60 in the appendix.

Table 12.[1] Projected number of surplus youth over farming opportunities and percent surplus of youth by 1974 and 1984 for area 6.

| Number of operators | One operator per farm in 1974 and 1984 | | | 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984 | | |
|---|---|---|---|---|---|---|
| Rate of farm consolidation | 1950-64 rate | 25% greater rate | 50% greater rate | 1950-64 rate | 25% greater rate | 50% greater rate |
| 1974 surplus of farm youth | 1,981 | 2,384 | 3,035 | 497 | 891 | 1,762 |
| Percent surplus-1974 | 141.8% | 239.8% | 884.8% | 17.3% | 40.9% | 109.0% |
| 1984 surplus of farm youth | 3,789 | 4,403 | 5,325 | 1,464 | 2,323 | 3,614 |
| Percent surplus-1984 | 152.8% | 236.1% | 564.7% | 30.5% | 58.9% | 136.2% |

Average farm valuation in area 6 was $41,440 in 1964. However, the increase in average valuation for a ten year period was approximately 99 percent, which was much above the average increase for the state area. The projected average farm values are $82,330 for 1974, and $163,565 for 1984. This is an increase of approximately $122,000 per farm for the twenty-year projection period. In 1964, the value of all farms was $392,520,191. Projecting the increase in value of farms, one finds that the total farm valuation in 1974 is estimated at $610,890,412, and in 1984 as $950,805,330. Thus, an increase in total value of $218 million would occur from 1964 to 1974 and a $559 million increase from 1964 to 1984.

State Economic Area 7

State economic area 7 encompasses nine counties in east-central Kansas. This area is predominately rural but in close proximity to urban centers. The

[1] This table was compiled from data in tables 23a to 28b on pages 49 to 60 in the appendix.

average size farm in 1964 was 313 acres ranging from a low average of 222 acres in Miami county to an average of 483 acres in Woodson county. These relatively small farms had a rate of farm consolidation somewhat greater than the average for the state. The past rate of farm consolidation was 29.5 percent every ten years. Farm operators in area 7 ranged in age from 54.0 years in Allen county to 51.3 years of age in Anderson county. Thus, farmers in area 7 were, on the average, relatively older than other farmers in the state. Consequently the rate of farm operator turnover was greater than in any other area of the state.

The average value of a farm in area 7 was $36,273 in 1964. This relatively low average value and a low increase in average value of 74 percent for a 10 year period, made the projected average value of farms in area 7 the lowest of all areas studied. The projected average farm value for 1974 was $63,128 and for 1984, $109,857 (an increase of only $73,000 per farm for the entire twenty-year projection period). Total farm value of area 7 was $369,915,428 in 1964. The projected total farm value was $497,450,736 for 1974 and $668,371,517 for 1984. This is an increase of total farm value of approximately $128 million between 1964 and 1974 and an increase of total farm value of approximately $299 million from 1964 to 1984.

The number of new farming opportunities in area 7 by 1974 and by 1984 is shown in the following table.

Table 13.[1] Projected number of new farming opportunities in area 7 by 1974 and 1984.

| Number of operators | One operator per farm in 1974 and 1984 | | | 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984 | | |
|---|---|---|---|---|---|---|
| Rate of farm consolidation | 1950-64 rate | 25% greater rate | 50% greater rate | 1950-64 rate | 25% greater rate | 50% greater rate |
| New farming opportunities by 1974 | 974 | 502 | 96 | 2,550 | 2,005 | 1,496 |
| New farming opportunities by 1984 | 1,923 | 1,246 | 646 | 4,357 | 3,409 | 2,569 |

There will be 3,078 farm youth available to contend for these farming opportunities by 1974 and 5,780 by 1984. The following table will show surplus of farm youth over available farming opportunities.

Table 14.[1] Projected number of surplus youth over farming opportunities and percent surplus of youth by 1974 and 1984 for area 7.

| Number of operators | One operator per farm in 1974 and 1984 | | | 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984 | | |
|---|---|---|---|---|---|---|
| Rate of farm consolidation | 1950-64 rate | 25% greater rate | 50% greater rate | 1950-64 rate | 25% greater rate | 50% greater rate |
| 1974 surplus of farm youth | 2,104 | 2,558 | 2,982 | 528 | 1,073 | 1,528 |
| Percent surplus-1974 | 216.0% | 419.8% | 3,106.3% | 20.7% | 53.5% | 105.7% |
| 1984 surplus of farm youth | 3,857 | 4,534 | 5,134 | 1,423 | 2,371 | 3,211 |
| Percent surplus-1984 | 200.6% | 363.9% | 794.7% | 32.7% | 69.6% | 125.0% |

[1]These tables were compiled from data in tables 23a to 28b on pages 49 to 60 in the appendix.

State Economic Area 8

State economic area 8 includes six counties in the southeastern corner of the state. In 1964, the 7,732 farms in this area averaged 276 acres each, just slightly larger than those in state economic area 6. Wilson county had the largest farms in this area averaging 362 acres and Crawford county the smallest, averaging only 249 acres per farm. The rate of farm consolidation for a ten year period was 36.7 percent, greater than the rate in any other area. Farm operators in this area were relatively older than farmers in general over the entire state. Cherokee county had the youngest farmers in this area averaging 51.4 years of age, while Crawford and Montgomery counties had the oldest, averaging 52.6 years of age in 1964.

The number of farming opportunities becoming available by 1974 and by 1984 in area 8 is shown in the following table.

Table 15.[1] Projected number of new farming opportunities in area 7 by 1974 and 1984.

| Number of operators | One operator per farm in 1974 and 1984 | | | 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984 | | |
|---|---|---|---|---|---|---|
| Rate of farm consolidation | 1950-64 rate | 25% greater rate | 50% greater rate | 1950-64 rate | 25% greater rate | 50% greater rate |
| New farming opportunities by 1974 | 711 | 327 | -24 | 1,843 | 1,382 | 961 |
| New farming opportunities by 1984 | 1,340 | 794 | 335 | 2,997 | 2,232 | 1,590 |

For these farming opportunities, there will be 2,563 farm youth available by 1974. By 1984, there will be 4,716 youth available to enter the farm labor

[1]This table was compiled from data in tables 23a to 28b on pages 49 to 60 in the appendix.

force in area 8. The abundance of these youth is shown in the following table.

Table 16.[1] Projected number of surplus youth over farming opportunities and percent surplus of youth by 1974 and 1984 for area 8.

| Number of operators | One operator per farm in 1974 and 1984 | | | 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984 | | |
|---|---|---|---|---|---|---|
| Rate of farm consolidation | 1950-64 rate | 25% greater rate | 50% greater rate | 1950-64 rate | 25% greater rate | 50% greater rate |
| 1974 surplus of farm youth | 1,852 | 2,236 | 2,587 | 720 | 1,181 | 1,602 |
| Percent surplus-1974 | 260.5% | 683.8% | *[2] | 39.1% | 85.5% | 166.7% |
| 1984 surplus of farm youth | 3,376 | 3,922 | 4,381 | 1,719 | 2,484 | 3,126 |
| Percent surplus-1984 | 251.9% | 494.0% | 1,307.8% | 57.4% | 111.3% | 196.6% |

The average value per farm in 1964 was $33,962. This was the lowest average of all the areas studied. However, the increase in value was 109 percent for a ten year period, or more than 20 percent greater than the state average. The projected average value of farms in 1974 was $71,003 and $148,455 for 1984. This was a projected increase of almost $120,000 per farm for the twenty-year projection period. The total farm valuation was $262,597,865 in 1964. However, because of the rapid rate of increase of farm values in this small area, the projected total valuation of farms in 1974 was

[1] This table was compiled from data in tables 23a to 28b on pages 49 to 60 in the appendix.

[2] The percentage surplus could not be calculated for this value because under this assumption there is a negative value for new farming opportunities, which is the base figure.

$401,877,651 and in 1984, $614,857,514. This was a projected increase in total value of nearly $140 million from 1964 to 1974 and an increase in total value of farms of slightly over $350 million by 1984.

## State Area[1]

The total area studied includes 101 counties in Kansas. Farms in this area averaged 558 acres, ranging from 194 acres in Leavenworth county to a 1,993 acre average in Stanton county. The rate of farm consolidation in the state area was 27.1 percent every ten years. The farmer's ages in the state varied from a high average age of 54.2 years in Elk county to a low average age of 46.8 years in Scott county.

The total number of farming opportunities becoming available in the state by 1974 and by 1984 is shown in the following table.

Table 17.[2] Projected number of new farming opportunities in the state area by 1974 and 1984.

| Number of operators | One operator per farm in 1974 and 1984 | | | 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984 | | |
|---|---|---|---|---|---|---|
| Rate of farm consolidation | 1950-64 rate | 25% greater rate | 50% greater rate | 1950-64 rate | 25% greater rate | 50% greater rate |
| New farming opportunities by 1974 | 11,388 | 7,709 | 3,977 | 25,252 | 20,837 | 16,358 |
| New farming opportunities by 1984 | 21,228 | 15,626 | 10,253 | 43,088 | 35,244 | 27,722 |

[1]Does not include the state metropolitan economic areas.

[2]This table was compiled from data in tables 23a to 26b on pages 49 to 60 in the appendix.

To compete for the farming opportunities in the state, there will be 31,985 farm youth by 1974 and 57,586 youth by 1984. The magnitude of this imbalance is shown in the following table.

Table 18.[1] Projected number of surplus youth over farming opportunities and percent surplus of youth by 1974 and 1984 for the state.[2]

| Number of operators | One operator per farm in 1974 and 1984 | | | 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984 | | |
|---|---|---|---|---|---|---|
| Rate of farm consolidation | 1950-64 rate | 25% greater rate | 50% greater rate | 1950-64 rate | 25% greater rate | 50% greater rate |
| 1974 surplus of farm youth | 20,597 | 24,276 | 28,008 | 6,733 | 11,148 | 15,627 |
| Percent surplus-1974 | 180.9% | 314.9% | 704.2% | 26.7% | 53.5% | 95.5% |
| 1984 surplus of farm youth | 36,358 | 41,960 | 47,333 | 14,498 | 22,342 | 29,864 |
| Percent surplus-1984 | 171.3% | 268.5% | 461.7% | 33.6% | 63.4% | 107.7% |

The average value of farms in the state was $66,356 in 1964, which has increased 86 percent every ten years in the past. Projected average value of farms was $123,590 in 1974 and $230,889 in 1984. This was an increase of approximately $57,000 per farm between 1964 and 1974 and $164,000 per farm between 1964 and 1984. The value of all farms in the state area was $5,845,021,450 in 1964. Projecting this value to 1974 and 1984, the values were $8,567,525,578 and $12,617,410,200, respectively. This was a projected increase of approximately $2,722 million by 1974 and $6,772 between 1964 and 1984.

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[1] This table was compiled from data in tables 23a to 28b on pages 49 to 60 in the appendix.

[2] Does not include the state metropolitan economic areas.

## SUMMARY AND IMPLICATIONS

### Summary

The agricultural sector of the Kansas economy has had an excess supply of youth for many years. Consequently, many workers in rural areas have been underemployed. The economic areas studied in this project showed that there were more farm youth than available farming opportunities.

The main objective of this study was to estimate the number of available farming opportunities for the periods 1964 to 1974 and from 1964 to 1984, and at the same time estimate the number of youth in each area. Six alternative sets of assumptions, presented in tables 23a through 28b in the appendix, were employed to show the variation in the magnitude of surplus farm youth that would occur during the projection period. The second objective of this study was to estimate some of the future financial requirements of those who continue in farming and of those who enter farming in the twenty-year projection period.

Factors assumed to affect the number of new farming opportunities and the supply of youth were discussed on pages 10 and 11. The factors affecting the number of new farming opportunities were these: (1) the acres of land in farms, (2) the rate of farm consolidation, (3) the total number of farm operators, and (4) the rate of farm operator turnover. Factors affecting the supply of youth were these: (1) the number of all farm male youth, (2) the death rate of farm youth, and (3) the migration rate of farm youth.

The geographical areas used in this study were the eight state economic areas in Kansas. These areas were predominately rural areas with a relatively

low population density. The three metropolitan state economic areas in Kansas, which encompassed the metropolitan areas of Wichita, Topeka, and Kansas City, were not included in the study because of their urban characteristics.

Column 26 is the most important one in table 23b through 28b. It shows the surplus of farm youth over farming opportunities in percentage figures for the entire twenty-year projection period in each of the areas studied. A summary of these figures appear in the following table.

Table 19.[1] Percentage surplus of farm youth over farming opportunities by 1984.

| Number of operators | One operator per farm in 1984 | | | 1.4 operators per farm in 1984 | | |
|---|---|---|---|---|---|---|
| Rate of farm consolidation | 1950-64 rate | 25% greater rate | 50% greater rate | 1950-64 rate | 25% greater rate | 50% greater rate |
| Area 1 | 129.4% | 176.5% | 238.7% | 22.0% | 39.7% | 60.5% |
| Area 2 | 136.2% | 191.6% | 273.9% | 23.0% | 42.8% | 68.2% |
| Area 3 | 207.5% | 334.6% | 588.9% | 46.2% | 81.4% | 131.4% |
| Area 4 | 190.6% | 319.9% | 590.9% | 41.1% | 78.5% | 132.8% |
| Area 5 | 172.7% | 298.2% | 567.8% | 31.1% | 66.3% | 117.7% |
| Area 6 | 152.8% | 236.1% | 564.7% | 30.5% | 58.9% | 136.2% |
| Area 7 | 200.6% | 363.9% | 794.7% | 32.7% | 69.6% | 125.0% |
| Area 8 | 251.9% | 494.0% | 1,307.8% | 57.4% | 111.3% | 196.6% |
| State | 171.3% | 268.5% | 461.7% | 33.6% | 63.4% | 107.7% |

[1]This table was compiled from data in tables 23a to 28b on pages 49 to 60 in the appendix.

## Implications

The implications, which were drawn from this study, should be an aid to rural community leaders in considering the education and training of rural youth, in meeting the financial needs of refinancing new farm businesses, and in the promotion of rural area development planning.

Rural farm youth will find it necessary to migrate from their home areas unless industry is brought to them. Whether or not industry is brought to the rural areas, the youth in these areas must be trained for occupations in the nonfarm sector of our economy. For example, a young man may have outstanding abilities as a dairyman, but if there is no opportunity which allows him to become a dairyman, his abilities are of little value to him if he is forced to migrate to the city and work in a factory. Consequently, as long as the farm sector continues to "produce" an excess supply of youth, the rural educational system must prepare the "surplus" for nonfarm employment.

Rural leaders also face a large task in rural area development planning. If leaders in these areas want to maintain present population or increase population, they they must provide economic opportunities for farm youth as they enter the industrial labor force. To provide industry in rural areas requires development in many fields. Leaders in rural areas must examine such promotional activities as tax incentives to lure industry into rural communities, adequate credit resources for industries in rural areas, expansion of rural housing, and the development of rural water districts, to name just a few. Also, leaders must develop successful social institutions. Rural people will demand adequate recreational facilities, schools, churches, and governments if they are to remain in rural areas.

Some of the problems that face youth that leave the farm have been identified. Now to look at one problem of the beginning farmers--providing

credit to all farm youth to enter farming only increases the degree of competition for available farming opportunities. However, adequate credit to those who can find a farming opportunity, crop insurance, improved technology, and better management might help beginning farmers to survive some of the problems and risks of farming.

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# APPENDIX

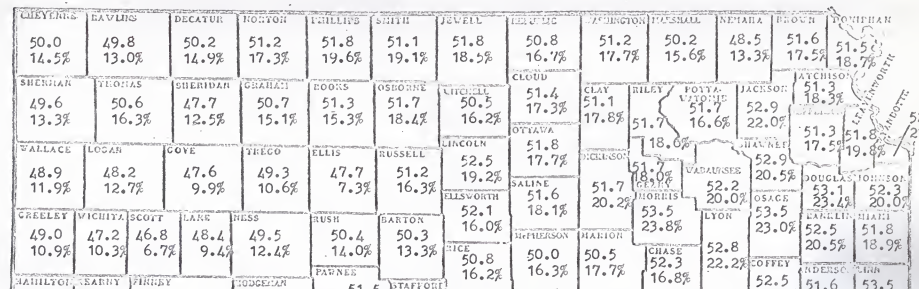


Fig. 2. Average age and percent of farm operators 65 or more years of age by counties in Kansas in 1964.[1]

Average age (top figure)
Percent over 65 years of age (bottom figure)

State average age -- 51.3
State average percent over 65 -- 17.8%

[1]U.S. Bureau of the Census, Census of Agriculture, 1964, "Statistics for the State and Counties, Kansas," (Washington, D.C.: U.S. Government Printing Office, 1967), p. 254.

Table 20. Number of farms in 1964, projected number of farms in 1974 and 1984 assuming a continuation of the 1950-64 rate of farm consolidation, projected number of farms in 1974 and 1984 assuming a rate of farm consolidation 25 percent greater than the 1950-64 rate, and projected number of farms in 1974 and 1984 assuming a rate of farm consolidation 50 percent greater than the 1950-1964 rate for state economic areas 1, 2, 3, 4, 5, 6, 7, and 8.[1]

| | | 1950-64 rate | | 25% greater rate | | 50% greater rate | |
|---|---|---|---|---|---|---|---|
| | Farms 1964[2] | Farms 1974 | Farms 1984 | Farms 1974 | Farms 1984 | Farms 1974 | Farms 1984 |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Area 1 | 7,227 | 6,105 | 5,159 | 5,865 | 4,760 | 5,641 | 4,403 |
| Area 2 | 18,238 | 15,102 | 12,505 | 14,462 | 11,471 | 13,840 | 10,502 |
| Area 3 | 16,497 | 12,923 | 10,122 | 12,219 | 9,050 | 11,556 | 8,092 |
| Area 4 | 8,052 | 6,121 | 4,654 | 5,755 | 4,113 | 5,411 | 3,636 |
| Area 5 | 10,670 | 8,111 | 6,168 | 7,623 | 5,449 | 7,170 | 4,818 |
| Area 6 | 9,472 | 7,420 | 5,813 | 7,017 | 5,199 | 6,366 | 4,277 |
| Area 7 | 10,198 | 7,880 | 6,084 | 7,426 | 5,407 | 7,002 | 4,807 |
| Area 8 | 7,732 | 5,660 | 4,142 | 5,276 | 3,596 | 4,925 | 3,137 |
| Totals | 88,086 | 69,322 | 54,647 | 65,643 | 49,045 | 61,911 | 43,672 |

[1] Does not include the state metropolitan economic areas.

[2] U.S. Bureau of the Census, Census of Agriculture, 1964, "Statistics for the State and Counties, Kansas," (Washington, D.C.: U.S. Government Printing Office, 1967), Table 1, p. 210.

Table 21. Average size farms in acres by counties in Kansas for 1964, projected average size farms in acres by counties in Kansas for 1974 and 1984, assuming a continuation of the 1950 to 1964 rate of farm consolidation, projected average size farms in acres by counties in Kansas for 1974 and 1984, assuming a rate of farm consolidation 25 percent greater than the 1950 to 1964 rate, and projected average size farms in acres by counties in Kansas for 1974 and 1984, assuming a rate of farm consolidation 50 percent greater than the 1950 to 1964 rate.

| | | 1950-64 rate | | 25% greater rate | | 50% greater rate | |
|---|---|---|---|---|---|---|---|
| | Average Size-1964 | Average Size-1974 | Average Size-1984 | Average Size-1974 | Average Size-1984 | Average Size-1974 | Average Size-1984 |
| Area 1 | | | | | | | |
| Barber | 1,150 | 1,361 | 1,611 | 1,416 | 1,745 | 1,473 | 1,887 |
| Clark | 1,762 | 2,085 | 2,468 | 2,170 | 2,674 | 2,257 | 2,892 |
| Commanche | 1,621 | 1,918 | 2,271 | 1,996 | 2,459 | 2,076 | 2,660 |
| Ford | 772 | 914 | 1,082 | 951 | 1,172 | 989 | 1,268 |
| Grant | 1,346 | 1,593 | 1,888 | 1,659 | 2,043 | 1,725 | 2,210 |
| Gray | 989 | 1,171 | 1,386 | 1,218 | 1,501 | 1,267 | 1,624 |
| Greeley | 1,630 | 1,929 | 2,283 | 2,008 | 2,474 | 2,088 | 2,676 |
| Hamilton | 1,754 | 2,076 | 2,457 | 2,160 | 2,661 | 2,247 | 2,879 |
| Haskell | 1,252 | 1,483 | 1,755 | 1,543 | 1,901 | 1,605 | 2,056 |
| Kearny | 1,868 | 2,211 | 2,617 | 2,301 | 2,835 | 2,393 | 3,067 |
| Logan | 1,616 | 1,913 | 2,264 | 1,991 | 2,453 | 2,071 | 2,653 |
| Meade | 1,225 | 1,450 | 1,716 | 1,509 | 1,859 | 1,570 | 2,011 |
| Morton | 1,709 | 2,023 | 2,394 | 2,105 | 2,594 | 2,190 | 2,806 |
| Scott | 1,326 | 1,569 | 1,858 | 1,633 | 2,012 | 1,699 | 2,177 |
| Seward | 1,461 | 1,729 | 2,047 | 1,800 | 2,217 | 1,872 | 2,398 |
| Stanton | 1,993 | 2,360 | 2,793 | 2,456 | 3,026 | 2,554 | 3,273 |
| Stevens | 1,221 | 1,445 | 1,711 | 1,504 | 1,853 | 1,564 | 2,004 |
| Wallace | 1,605 | 1,900 | 2,349 | 1,977 | 2,436 | 2,057 | 2,635 |
| Wichita | 1,315 | 1,557 | 1,843 | 1,620 | 1,996 | 1,685 | 2,159 |
| Area 2 | | | | | | | |
| Barton | 498 | 601 | 726 | 628 | 791 | 656 | 864 |
| Cheyenne | 1,084 | 1,309 | 1,581 | 1,367 | 1,724 | 1,428 | 1,882 |
| Decatur | 819 | 989 | 1,194 | 1,032 | 1,301 | 1,079 | 1,421 |
| Edwards | 803 | 970 | 1,172 | 1,013 | 1,277 | 1,058 | 1,395 |
| Ellis | 651 | 786 | 949 | 820 | 1,034 | 957 | 1,130 |
| Ellsworth | 657 | 793 | 957 | 828 | 1,044 | 865 | 1,140 |

Table 21. cont.

| | Average Size-1964 | 1950-64 rate Average Size-1974 | 1950-64 rate Average Size-1984 | 25% greater rate Average Size-1974 | 25% greater rate Average Size-1984 | 50% greater rate Average Size-1974 | 50% greater rate Average Size-1984 |
|---|---|---|---|---|---|---|---|
| Area 2 cont. | | | | | | | |
| Finney | 1,245 | 1,504 | 1,816 | 1,570 | 1,980 | 1,641 | 2,162 |
| Gove | 1,144 | 1,379 | 1,666 | 1,442 | 1,818 | 1,507 | 1,986 |
| Graham | 894 | 1,079 | 1,303 | 1,127 | 1,421 | 1,176 | 1,552 |
| Hodgeman | 1,000 | 1,208 | 1,459 | 1,261 | 1,591 | 1,318 | 1,737 |
| Kiowa | 1,066 | 1,287 | 1,555 | 1,344 | 1,695 | 1,405 | 1,851 |
| Lane | 1,285 | 1,552 | 1,875 | 1,621 | 2,044 | 1,694 | 2,232 |
| Lincoln | 589 | 712 | 859 | 743 | 937 | 777 | 1,023 |
| Mitchell | 558 | 674 | 814 | 704 | 888 | 736 | 969 |
| Ness | 938 | 1,133 | 1,368 | 1,183 | 1,491 | 1,236 | 1,628 |
| Osborne | 667 | 805 | 972 | 840 | 1,060 | 878 | 1,157 |
| Pawnee | 698 | 843 | 1,018 | 881 | 1,110 | 920 | 1,213 |
| Pratt | 673 | 813 | 982 | 849 | 1,071 | 887 | 1,170 |
| Rawlings | 1,010 | 1,220 | 1,473 | 1,274 | 1,606 | 1,331 | 1,754 |
| Rooks | 789 | 952 | 1,150 | 995 | 1,254 | 1,039 | 1,370 |
| Rush | 593 | 716 | 865 | 748 | 943 | 781 | 1,030 |
| Russell | 693 | 837 | 1,010 | 874 | 1,102 | 913 | 1,203 |
| Sheridan | 892 | 1,077 | 1,300 | 1,125 | 1,419 | 1,176 | 1,549 |
| Sherman | 1,238 | 1,495 | 1,806 | 1,561 | 1,969 | 1,632 | 2,150 |
| Stafford | 674 | 814 | 983 | 850 | 1,072 | 889 | 1,171 |
| Thomas | 1,152 | 1,391 | 1,680 | 1,453 | 1,832 | 1,518 | 2,001 |
| Trego | 871 | 1,052 | 1,271 | 1,099 | 1,386 | 1,148 | 1,513 |
| Area 3 | | | | | | | |
| Clay | 408 | 520 | 664 | 550 | 743 | 582 | 831 |
| Cloud | 432 | 551 | 703 | 583 | 787 | 616 | 880 |
| Dickinson | 376 | 480 | 612 | 507 | 685 | 537 | 766 |
| Harper | 542 | 692 | 884 | 732 | 988 | 774 | 1,105 |
| Harvey | 320 | 408 | 521 | 432 | 583 | 457 | 652 |
| Kingman | 519 | 662 | 845 | 700 | 945 | 740 | 1,057 |
| McPherson | 337 | 431 | 550 | 456 | 615 | 482 | 688 |
| Marion | 404 | 516 | 659 | 545 | 736 | 577 | 824 |

Table 21. cont.

| | Average Size-1964 | 1950-64 rate Average Size-1974 | 1950-64 rate Average Size-1984 | 25% greater rate Average Size-1974 | 25% greater rate Average Size-1984 | 50% greater rate Average Size-1974 | 50% greater rate Average Size-1984 |
|---|---|---|---|---|---|---|---|
| Area 3 cont. | | | | | | | |
| Ottawa | 545 | 696 | 889 | 736 | 994 | 778 | 1,111 |
| Reno | 380 | 485 | 619 | 513 | 692 | 542 | 774 |
| Rice | 547 | 699 | 892 | 739 | 998 | 782 | 1,116 |
| Saline | 509 | 650 | 830 | 687 | 928 | 727 | 1,037 |
| Sumner | 414 | 528 | 674 | 559 | 754 | 591 | 844 |
| Area 4 | | | | | | | |
| Jewell | 485 | 638 | 839 | 678 | 949 | 721 | 1,073 |
| Marshall | 361 | 475 | 625 | 505 | 707 | 537 | 800 |
| Norton | 727 | 956 | 1,258 | 1,017 | 1,423 | 1,082 | 1,600 |
| Phillips | 626 | 823 | 1,082 | 875 | 1,225 | 931 | 1,385 |
| Republic | 355 | 467 | 614 | 497 | 695 | 528 | 786 |
| Smith | 558 | 734 | 965 | 781 | 1,093 | 830 | 1,236 |
| Washington | 363 | 477 | 628 | 508 | 711 | 540 | 804 |
| Area 5 | | | | | | | |
| Butler | 514 | 676 | 889 | 719 | 1,006 | 765 | 1,138 |
| Chase | 1,126 | 1,481 | 1,948 | 1,575 | 2,204 | 1,675 | 2,483 |
| Chautauqua | 719 | 946 | 1,245 | 1,006 | 1,408 | 1,070 | 1,593 |
| Cowley | 479 | 630 | 828 | 670 | 937 | 712 | 1,060 |
| Elk | 592 | 779 | 1,025 | 829 | 1,160 | 882 | 1,312 |
| Geary | 521 | 685 | 902 | 729 | 1,020 | 775 | 1,154 |
| Greenwood | 829 | 1,091 | 1,435 | 1,160 | 1,624 | 1,234 | 1,837 |
| Lyon | 419 | 551 | 724 | 586 | 820 | 623 | 927 |
| Morris | 514 | 677 | 890 | 720 | 1,007 | 765 | 1,139 |
| Pottawatomie | 451 | 593 | 780 | 631 | 882 | 671 | 998 |
| Riley | 449 | 591 | 777 | 629 | 880 | 669 | 995 |
| Wabaunsee | 598 | 787 | 1,036 | 837 | 1,172 | 891 | 1,326 |
| Area 6 | | | | | | | |
| Atchison | 270 | 345 | 440 | 365 | 492 | 402 | 598 |
| Brown | 300 | 382 | 488 | 404 | 546 | 446 | 663 |

Table 21. cont.

| | Average Size-1964 | 1950-64 rate Average Size-1974 | 1950-64 rate Average Size-1984 | 25% greater rate Average Size-1974 | 25% greater rate Average Size-1984 | 50% greater rate Average Size-1974 | 50% greater rate Average Size-1984 |
|---|---|---|---|---|---|---|---|
| Area 6 cont. | | | | | | | |
| Doniphan | 263 | 336 | 429 | 355 | 480 | 392 | 583 |
| Douglas | 241 | 307 | 392 | 325 | 439 | 358 | 533 |
| Jackson | 289 | 368 | 470 | 390 | 526 | 429 | 639 |
| Jefferson | 259 | 331 | 422 | 350 | 472 | 385 | 573 |
| Leavenworth | 194 | 248 | 317 | 262 | 354 | 289 | 430 |
| Nemaha | 313 | 400 | 511 | 423 | 571 | 466 | 694 |
| Area 7 | | | | | | | |
| Allen | 276 | 358 | 463 | 379 | 521 | 402 | 586 |
| Anderson | 348 | 450 | 583 | 477 | 655 | 506 | 737 |
| Bourbon | 304 | 394 | 510 | 418 | 574 | 443 | 645 |
| Coffey | 368 | 476 | 617 | 505 | 694 | 536 | 780 |
| Franklin | 265 | 343 | 444 | 364 | 500 | 386 | 562 |
| Linn | 304 | 393 | 509 | 417 | 573 | 442 | 644 |
| Miami | 222 | 287 | 371 | 304 | 418 | 323 | 470 |
| Osage | 368 | 477 | 618 | 506 | 695 | 537 | 781 |
| Woodson | 483 | 625 | 809 | 663 | 910 | 703 | 1,024 |
| Area 8 | | | | | | | |
| Cherokee | 255 | 348 | 476 | 374 | 548 | 400 | 628 |
| Crawford | 249 | 341 | 465 | 365 | 536 | 391 | 614 |
| Labette | 271 | 370 | 505 | 397 | 582 | 425 | 667 |
| Montgomery | 255 | 348 | 476 | 374 | 548 | 400 | 628 |
| Neosho | 293 | 400 | 547 | 430 | 630 | 460 | 722 |
| Wilson | 362 | 495 | 676 | 531 | 778 | 568 | 892 |

Table 22. Average acres per farm for 1964, projected average acres per farm for 1974 and 1984 assuming a continuation of the 1950-64 rate of farm consolidation, projected average acres per farm for 1974 and 1984 assuming a rate of farm consolidation 25 percent greater than the 1950-64 rate, and projected average acres per farm for 1974 and 1984 assuming a rate of farm consolidation 50 percent greater than the 1950-64 rate for state economic areas 1, 2, 3, 4, 5, 6, 7, and 8.[1]

| | | 1950-64 rate | | 25% greater rate | | 50% greater rate | |
|---|---|---|---|---|---|---|---|
| | Average Size-1964 | Average Size-1974 | Average Size-1984 | Average Size-1974 | Average Size-1984 | Average Size-1974 | Average Size-1984 |
| | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| Area 1 | 1,348 | 1,596 | 1,888 | 1,661 | 2,046 | 1,727 | 2,212 |
| Area 2 | 817 | 987 | 1,191 | 1,030 | 1,299 | 1,077 | 1,419 |
| Area 3 | 423 | 541 | 690 | 572 | 772 | 605 | 863 |
| Area 4 | 464 | 611 | 803 | 650 | 909 | 691 | 1,028 |
| Area 5 | 558 | 734 | 965 | 781 | 1,092 | 830 | 1,235 |
| Area 6 | 267 | 341 | 435 | 360 | 486 | 397 | 591 |
| Area 7 | 313 | 405 | 524 | 429 | 590 | 455 | 663 |
| Area 8 | 276 | 377 | 516 | 405 | 594 | 434 | 681 |
| Totals | 558 | 709 | 900 | 749 | 1,003 | 794 | 1,126 |

[1] Does not include the state metropolitan economic areas.

Table 23a. Number of 1964 farmers, projected number of farmers in 1974, number of farmers in 1964 remaining in 1974, number of new farming opportunities by 1974, number of youth available to enter labor force by 1974, number of surplus farming youth over opportunities by 1974, and percent surplus of youth by 1974, for state economic areas 1, 2, 3, 4, 5, 6, 7, and 8,[1] assuming one operator per farm and a continuation of the 1950-64 rate of farm consolidation.

| | Farmers 1964[2] | Farmers 1974[3] | Remaining Farmers[4] | Farming Opportunities | Available Youth[5] | Number of Surplus Youth | Percent Surplus |
|---|---|---|---|---|---|---|---|
| | (1) | (15) | (16) | (17) | (18) | (19) | (20) |
| Area 1 | 7,227 | 6,105 | 4,837 | 1,268 | 3,012 | 1,744 | 137.5 |
| Area 2 | 18,238 | 15,102 | 12,162 | 2,940 | 7,117 | 4,177 | 142.1 |
| Area 3 | 16,497 | 12,923 | 11,051 | 1,872 | 6,384 | 4,512 | 241.1 |
| Area 4 | 8,052 | 6,121 | 5,141 | 980 | 2,834 | 1,854 | 189.2 |
| Area 5 | 10,670 | 8,111 | 6,865 | 1,246 | 3,619 | 2,373 | 190.4 |
| Area 6 | 9,472 | 7,420 | 6,023 | 1,397 | 3,378 | 1,981 | 141.8 |
| Area 7 | 10,198 | 7,880 | 6,906 | 974 | 3,078 | 2,104 | 216.0 |
| Area 8 | 7,732 | 5,660 | 4,949 | 711 | 2,563 | 1,852 | 260.5 |
| Totals | 88,086 | 69,322 | 57,934 | 11,388 | 31,985 | 20,597 | 180.9 |

[1]Does not include the state metropolitan economic areas.

[2]U.S. Bureau of the Census, Census of Agriculture, 1964, "Statistics for the State and Counties, Kansas," (Washington, D.C.: U.S. Government Printing Office, 1967), p. 254.

[3]Based on the assumptions of one operator per farm and a continuation of the 1950-64 rate of farm consolidation in each area.

[4]Calculated with the use of cohorts as explained on page 9.

[5]Total number of farm youth less those migrating from the farm and those dying before entering the labor force.

Table 23b. Number of 1964 farmers, projected number of farmers in 1984, number of farmers in 1964 remaining in 1984, number of new farming opportunities by 1984, number of youth available to enter labor force by 1984, number of surplus youth over farming opportunities in 1984, and percent surplus of youth by 1984, for state economic areas 1, 2, 3, 4, 5, 6, 7, and 8,[1] assuming one operator per farm and a continuation of the 1950-64 rate of farm consolidation.

| | Farmers 1964[2] | Farmers 1984[3] | Remaining Farmers[4] | Farming Opportunities | Available Youth[5] | Number of Surplus Youth | Percent Surplus |
|---|---|---|---|---|---|---|---|
| | (1) | (21) | (22) | (23) | (24) | (25) | (26) |
| Area 1 | 7,227 | 5,159 | 2,816 | 2,343 | 5,375 | 3,032 | 129.4 |
| Area 2 | 18,238 | 12,505 | 7,068 | 5,437 | 12,840 | 7,403 | 136.2 |
| Area 3 | 16,497 | 10,122 | 6,455 | 3,667 | 11,277 | 7,610 | 207.5 |
| Area 4 | 8,052 | 4,654 | 2,897 | 1,757 | 5,106 | 3,349 | 190.6 |
| Area 5 | 10,670 | 6,168 | 3,886 | 2,282 | 6,224 | 3,942 | 172.7 |
| Area 6 | 9,472 | 5,813 | 3,334 | 2,479 | 6,268 | 3,789 | 152.8 |
| Area 7 | 10,198 | 6,084 | 4,161 | 1,923 | 5,780 | 3,857 | 200.6 |
| Area 8 | 7,732 | 4,142 | 2,802 | 1,340 | 4,716 | 3,376 | 251.9 |
| Totals | 88,086 | 54,647 | 33,419 | 21,228 | 57,586 | 36,358 | 171.3 |

[1] Does not include the state metropolitan economic areas.

[2] U.S. Bureau of the Census, Census of Agriculture, 1964, "Statistics for the State and Counties, Kansas," (Washington, D.C.: U.S. Government Printing Office, 1967), p. 254.

[3] Based on the assumptions of one operator per farm and a continuation of the 1950-64 rate of farm consolidation in each area.

[4] Calculated with the use of cohorts as explained on page 9.

[5] Total number of farm youth less those migrating from the farm and those dying before entering the labor force.

Number 24a. Number of 1964 farmers, projected number of farmers in 1974, number of farmer in 1964 remaining in 1974, number of new farming opportunities by 1974, number of youth available to enter labor force by 1974, number of surplus youth over farming opportunities by 1974, and percent surplus of youth by 1974, for state economic areas 1, 2, 3, 4, 5, 7, and 8,[1] assuming one operator per farm and a rate of farm consolidation 25 percent greater than the 1950-64 rate.

| | Farmers 1964[2] | Farmers 1974[3] | Remaining Farmers[4] | Farming Opportunities | Available Youth[5] | Number of Surplus Youth | Percent Surplus |
|---|---|---|---|---|---|---|---|
| | (1) | (15) | (16) | (17) | (18) | (19) | (20) |
| Area 1 | 7,227 | 5,865 | 4,837 | 1,028 | 3,012 | 1,984 | 193.0 |
| Area 2 | 18,238 | 14,462 | 12,162 | 2,300 | 7,117 | 4,817 | 209.4 |
| Area 3 | 16,497 | 12,219 | 11,051 | 1,168 | 6,384 | 5,216 | 446.6 |
| Area 4 | 8,052 | 5,755 | 5,141 | 614 | 2,834 | 2,220 | 361.6 |
| Area 5 | 10,670 | 7,623 | 6,865 | 758 | 3,619 | 2,861 | 377.4 |
| Area 6 | 9,472 | 7,017 | 6,023 | 994 | 3,378 | 2,384 | 239.8 |
| Area 7 | 10,198 | 7,426 | 6,906 | 502 | 3,078 | 2,558 | 491.8 |
| Area 8 | 7,732 | 5,276 | 4,949 | 327 | 2,563 | 2,236 | 683.8 |
| Totals | 88,086 | 65,643 | 57,934 | 7,709 | 31,985 | 24,276 | 314.9 |

[1]Does not include the state metropolitan economic areas.

[2]U.S. Bureau of the Census, Census of Agriculture, 1964, "Statistics for the State and Counties, Kansas," (Washington, D.C.: U.S. Government Printing Office, 1967), p. 254.

[3]Based on the assumptions of one operator per farm and a rate of farm consolidation 25 percent greater than the 1950-64 rate in each area.

[4]Calculated with the use of cohorts as explained on page 9.

[5]Total number of farm youth less those migrating from the farm and those dying before entering the labor force.

Table 24b. Number of 1964 farmers, projected number of farmers in 1984, number of farmers in 1964 remaining in 1984, number of new farming opportunities by 1984, number of youth available to enter labor force by 1984, number of surplus youth over farming opportunities by 1984, and percent surplus of youth by 1984, for state economic areas 1, 2, 3, 4, 5, 6, 7, and 8,[1] assuming one operator per farm and a rate of farm consolidation 25 percent greater than the 1950-64 rate.

| | Farmers 1964[2] | Farmers 1984[3] | Remaining Farmers[4] | Farming Opportunities | Available Youth[5] | Number of Surplus Youth | Percent Surplus |
|---|---|---|---|---|---|---|---|
| | (1) | (21) | (22) | (23) | (24) | (25) | (26) |
| Area 1 | 7,227 | 4,760 | 2,816 | 1,944 | 5,375 | 3,431 | 176.5 |
| Area 2 | 18,238 | 11,471 | 7,068 | 4,403 | 12,840 | 8,437 | 191.6 |
| Area 3 | 16,497 | 9,050 | 6,455 | 2,595 | 11,277 | 8,682 | 334.6 |
| Area 4 | 8,052 | 4,113 | 2,897 | 1,216 | 5,106 | 3,890 | 319.9 |
| Area 5 | 10,670 | 5,449 | 3,886 | 1,563 | 6,224 | 4,661 | 298.2 |
| Area 6 | 9,472 | 5,199 | 3,334 | 1,865 | 6,268 | 4,403 | 236.1 |
| Area 7 | 10,198 | 5,407 | 4,161 | 1,246 | 5,780 | 4,534 | 363.9 |
| Area 8 | 7,732 | 3,596 | 2,802 | 794 | 4,716 | 3,922 | 494.0 |
| Totals | 88,086 | 49,045 | 33,419 | 15,626 | 57,586 | 41,960 | 268.5 |

[1]Does not include the state metropolitan economic areas.

[2]U.S. Bureau of theCensus, Census of Agriculture, 1964, "Statistics for the State and Counties, Kansas," (Washington, D.C.: U.S. Government Printing Office, 1967), p. 254.

[3]Based on the assumptions of one operator per farm and a rate of farm consolidation 25 percent greater that the 1950-64 rate in each area.

[4]Calculated with the use of cohorts as explained on page 9.

[5]Total number of farm youth less those migrating from the farm and those dying before entering the labor force.

Table 25a. Number of 1964 farmers, projected number of farmers in 1974, number of farmers in 1964 remaining in 1974, number of new farming opportunities by 1974, number of youth available to enter labor force by 1974, number of surplus youth over farming opportunities by 1974, and percent surplus of youth by 1974, for state economic areas 1, 2, 3, 4, 5, 6, 7, and 8,[1] assuming one operator per farm and a rate of farm consolidation 50 percent greater than the 1950-64 rate.

| | Farmers 1964[2] | Farmers 1974[3] | Remaining Farmers[4] | Farming Opportunities | Available Youth[5] | Number of Surplus Youth | Percent Surplus |
|---|---|---|---|---|---|---|---|
| | (1) | (15) | (16) | (17) | (18) | (19) | (20) |
| Area 1 | 7,227 | 5,641 | 4,837 | 804 | 3,012 | 2,208 | 274.6 |
| Area 2 | 18,238 | 13,162 | 12,162 | 1,678 | 7,117 | 5,439 | 324.1 |
| Area 3 | 16,497 | 11,556 | 11,051 | 505 | 6,384 | 5,879 | 1,164.2 |
| Area 4 | 8,052 | 5,411 | 5,141 | 270 | 2,834 | 2,564 | 949.6 |
| Area 5 | 10,670 | 7,170 | 6,865 | 305 | 3,619 | 3,314 | 1,086.6 |
| Area 6 | 9,472 | 6,366 | 6,023 | 343 | 3,378 | 3,035 | 884.8 |
| Area 7 | 10,198 | 7,002 | 6,906 | 96 | 3,078 | 2,982 | 3,106.3 |
| Area 8 | 7,732 | 4,925 | 4,949 | -24 | 2,563 | 2,587 | ---[6] |
| Totals | 88,086 | 61,911 | 57,934 | 3,977 | 31,985 | 28,008 | 704.2 |

[1]Does not include the state metropolitan economic areas.

[2]U.S. Bureau of the Census, Census of Agriculture, 1964, "Statistics for the State and Counties, Kansas," (Washington, D. C.: U.S. Government Printing Office, 1967), p. 254.

[3]Based on the assumptions of one operator per farm and a rate of farm consolidation 50 percent greater than the 1950-64 rate in each area.

[4]Calculated with the use of cohorts as explained on page 9.

[5]Total number of farm youth less those migrating from the farm and those dying before entering the labor force.

[6]This value cannot be calculated because of the negative value for available farming opportunities.

Table 25b. Number of 1964 farmers, projected number of farmers in 1984, number of farmers in 1964 remaining in 1984, number of new farming opportunities by 1984, number of youth available to enter labor force by 1984, number of surplus youth over farming opportunities by 1984, and percent surplus of youth by 1984, for state economic areas 1, 2, 3, 4, 5, 6, 7, and 8,[1] assuming one operator per farm and a rate of farm consolidation 50 percent greater than the 1950-64 rate.

| | Farmers 1964[2] | Farmers 1984[3] | Remaining Farmers[4] | Farming Opportunities | Available Youth[5] | Number of Surplus Youth | Percent Surplus |
|---|---|---|---|---|---|---|---|
| | (1) | (21) | (22) | (23) | (24) | (25) | (26) |
| Area 1 | 7,227 | 4,403 | 2,816 | 1,587 | 5,375 | 3,788 | 238.7 |
| Area 2 | 18,238 | 10,502 | 7,068 | 3,434 | 12,840 | 9,406 | 273.9 |
| Area 3 | 16,497 | 8,092 | 6,455 | 1,637 | 11,277 | 9,640 | 588.9 |
| Area 4 | 8,052 | 3,636 | 2,897 | 739 | 5,106 | 4,367 | 590.9 |
| Area 5 | 10,670 | 4,818 | 3,886 | 932 | 6,224 | 5,292 | 567.8 |
| Area 6 | 9,472 | 4,277 | 3,334 | 943 | 6,268 | 5,325 | 564.7 |
| Area 7 | 10,198 | 4,807 | 4,161 | 646 | 5,780 | 5,134 | 794.7 |
| Area 8 | 7,732 | 3,137 | 2,802 | 335 | 4,716 | 4,381 | 1,307.8 |
| Totals | 88,086 | 43,672 | 33,419 | 10,253 | 57,586 | 47,333 | 461.7 |

[1]Does not include the state metropolitan economic areas.

[2]U.S. Bureau of the Census, Census of Agriculture, 1964, "Statistics for the State and Counties, Kansas," (Washington, D.C.: U.S. Government Printing Office, 1967), p. 254.

[3]Based on the assumptions of one operator per farm and a rate of farm consolidation 50 percent greater than the 1950-64 rate in each area.

[4]Calculated with the use of cohorts as explained on page 9.

[5]Total number of farm youth less those migrating from the farm and those dying before entering the labor force.

Table 26a. Number of 1964 farmers, projected number of farmers in 1974, number of farmers in 1964 remaining in 1974, number of new farming opportunities by 1974, number of youth available to enter labor force by 1974, number of surplus youth over farming opportunities by 1974, and percent surplus of youth by 1974, for state economic areas 1, 2, 3, 4, 5, 6, 7, and 8,[1] assuming 1.2 operators per farm in 1974, and a continuation of the 1950-64 rate of farm consolidation.

| | Farmers 1964[2] | Farmers 1974[3] | Remaining Farmers[4] | Farming Opportunities | Available Youth[5] | Number of Surplus Youth | Percent Surplus |
|---|---|---|---|---|---|---|---|
| | (1) | (15) | (16) | (17) | (18) | (19) | (20) |
| Area 1 | 7,227 | 7,326 | 4,837 | 2,489 | 3,012 | 523 | 21.0 |
| Area 2 | 18,238 | 18,122 | 12,162 | 5,960 | 7,117 | 1,157 | 19.4 |
| Area 3 | 16,497 | 15,508 | 11,051 | 4,457 | 6,384 | 1,927 | 43.2 |
| Area 4 | 8,052 | 7,345 | 5,141 | 2,204 | 2,834 | 630 | 28.6 |
| Area 5 | 10,670 | 9,733 | 6,865 | 2,868 | 3,619 | 751 | 26.2 |
| Area 6 | 9,472 | 8,904 | 6,023 | 2,881 | 3,378 | 497 | 17.3 |
| Area 7 | 10,198 | 9,456 | 6,906 | 2,550 | 3,078 | 528 | 20.7 |
| Area 8 | 7,732 | 6,792 | 4,949 | 1,843 | 2,563 | 720 | 39.1 |
| Totals | 88,086 | 83,186 | 57,934 | 25,252 | 31,985 | 6,733 | 26.7 |

[1]Does not include the state metropolitan economic areas.

[2]U.S. Bureau of the Census, Census of Agriculture, 1964, "Statistics for the State and Counties, Kansas," (Washington, D.C.: U.S. Government Printing Office, 1967), p. 254.

[3]Based on the assumptions of 1.2 operators per farm and a continuation of the 1950-64 rate of farm consolidation in each area.

[4]Calculated with the use of cohorts as explained on page 9.

[5]Total number of farm youth less those migrating from the farm and those dying before entering the labor force.

Table 26b. Number of 1964 farmers, projected number of farmers in 1984, number of farmers in 1964 remaining in 1984, number of new farming opportunities by 1984, number of youth available to enter labor force by 1984, number of surplus youth over farming opportunities by 1984, and percent surplus of youth by 1984, for state economic areas 1, 2, 3, 4, 5, 6, 7, and 8,[1] assuming 1.4 operators per farm in 1984, and a continuation of the 1950-64 rate of farm consolidation.

| | Farmers 1964[2] | Farmers 1984[3] | Remaining Farmers[4] | Farming Opportunities | Available Youth[5] | Number of Surplus Youth | Percent Surplus |
|---|---|---|---|---|---|---|---|
| | (1) | (21) | (22) | (23) | (24) | (25) | (26) |
| Area 1 | 7,227 | 7,223 | 2,816 | 4,407 | 5,375 | 968 | 22.0 |
| Area 2 | 18,238 | 17,507 | 7,068 | 10,439 | 12,840 | 2,401 | 23.0 |
| Area 3 | 16,497 | 14,171 | 6,455 | 7,716 | 11,277 | 3,561 | 46.2 |
| Area 4 | 8,052 | 6,516 | 2,897 | 3,619 | 5,106 | 1,487 | 41.1 |
| Area 5 | 10,670 | 8,635 | 3,886 | 4,749 | 6,224 | 1,475 | 31.1 |
| Area 6 | 9,472 | 8,138 | 3,334 | 4,804 | 6,268 | 1,464 | 30.5 |
| Area 7 | 10,198 | 8,518 | 4,161 | 4,357 | 5,780 | 1,423 | 32.7 |
| Area 8 | 7,732 | 5,799 | 2,802 | 2,997 | 4,716 | 1,719 | 57.4 |
| Totals | 88,086 | 76,507 | 33,419 | 43,088 | 57,586 | 14,498 | 33.6 |

[1] Does not include the state metropolitan economic areas.

[2] U.S. Bureau of the Census, Census of Agriculture, 1964, "Statistics for the State and Counties, Kansas," (Washington, D.C.: U.S. Government Printing Office, 1967), p. 254.

[3] Based on the assumptions of 1.4 operators per farm and a continuation of the 1950-64 rate of farm consolidation in each area.

[4] Calculated with the use of cohorts as explained on page 9.

[5] Total number of farm youth less those migrating from the farm and those dying before entering the labor force.

Table 27a. Number of 1964 farmers, projected number of farmers in 1974, number of farmers in 1964 remaining in 1974, number of new farming opportunities by 1974, number of youth available to enter labor force by 1974, number of surplus youth over farming opportunities by 1974, and percent surplus of youth by 1974 for state economic areas 1, 2, 3, 4, 5, 6, 7, and 8,[1] assuming 1.2 operators per farm in 1974 and a rate of farm consolidation 25 percent greater than the 1950-64 rate.

| | Farmers 1964[2] | Farmers 1974[3] | Remaining Farmers[4] | Farming Opportunities | Available Youth[5] | Number of Surplus Youth | Percent Surplus |
|---|---|---|---|---|---|---|---|
| | (1) | (15) | (16) | (17) | (18) | (19) | (20) |
| Area 1 | 7,227 | 7,038 | 4,837 | 2,201 | 3,012 | 811 | 36.8 |
| Area 2 | 18,238 | 17,354 | 12,162 | 5,192 | 7,117 | 1,925 | 37.1 |
| Area 3 | 16,497 | 14,663 | 11,051 | 3,612 | 6,384 | 2,772 | 76.7 |
| Area 4 | 8,052 | 6,906 | 5,141 | 1,765 | 2,834 | 1,069 | 60.6 |
| Area 5 | 10,670 | 9,148 | 6,865 | 2,283 | 3,619 | 1,336 | 58.5 |
| Area 6 | 9,472 | 8,420 | 6,023 | 2,397 | 3,378 | 891 | 40.9 |
| Area 7 | 10,198 | 8,911 | 6,906 | 2,005 | 3,078 | 1,073 | 53.5 |
| Area 8 | 7,732 | 6,331 | 4,949 | 1,382 | 2,563 | 1,181 | 85.5 |
| Totals | 88,086 | 78,771 | 57,934 | 20,837 | 31,985 | 11,148 | 53.5 |

[1]Does not include the state metropolitan economic areas.

[2]U.S. Bureau of the Census, Census of Agriculture, 1964, "Statistics for the State and Counties, Kansas," (Washington, D.C.: U.S. Government Printing Office, 1967), p. 254.

[3]Based on the assumptions of 1.2 operators per farm and a rate of farm consolidation 25 percent greater than the 1950-64 rate in each area.

[4]Calculated with the use of cohorts as explained on page 9.

[5]Total number of farm youth less those migrating from the farm and those dying before entering the labor force.

Table 27b. Number of 1964 farmers, projected number of farmers in 1984, number of farmers in 1964 remaining in 1984, number of new farming opportunities by 1984, number of youth available to enter labor force by 1984, number of surplus youth over farming opportunities by 1984, and percent surplus of youth by 1984, for state economic areas 1, 2, 3, 4, 5, 6, 7, and 8,[1] assuming 1.4 operators per farm in 1984 and rate of farm consolidation 25 percent greater than the 1950-64 rate.

| | Farmers 1964[2] | Farmers 1984[3] | Remaining Farmers[4] | Farming Opportunities | Available Youth[5] | Number of Surplus Youth | Percent Surplus |
|---|---|---|---|---|---|---|---|
| | (1) | (21) | (22) | (23) | (24) | (25) | (26) |
| Area 1 | 7,227 | 6,664 | 2,816 | 3,848 | 5,375 | 1,527 | 39.7 |
| Area 2 | 18,238 | 16,059 | 7,068 | 8,991 | 12,840 | 3,849 | 42.8 |
| Area 3 | 16,497 | 12,670 | 6,455 | 6,215 | 11,277 | 5,062 | 81.4 |
| Area 4 | 8,052 | 5,758 | 2,897 | 2,861 | 5,106 | 2,245 | 78.5 |
| Area 5 | 10,670 | 7,629 | 3,886 | 3,743 | 6,224 | 2,481 | 66.3 |
| Area 6 | 9,472 | 7,279 | 3,334 | 3,945 | 6,268 | 2,323 | 58.9 |
| Area 7 | 10,198 | 7,570 | 4,161 | 3,409 | 5,780 | 2,371 | 69.6 |
| Area 8 | 7,732 | 5,034 | 2,802 | 2,232 | 4,716 | 2,484 | 111.3 |
| Totals | 88,086 | 68,663 | 33,419 | 35,244 | 57,586 | 22,342 | 63.4 |

[1]Does not include the state metropolitan economic areas.

[2]U.S. Bureau of the Census, Census of Agriculture, 1964, "Statistics for the State and Counties, Kansas," (Washington, D.C.: U.S. Government Printing Office, 1967), p. 254.

[3]Based on the assumptions of 1.4 operators per farm and a rate of farm consolidation 25 percent greater than the 1950-64 rate in each area.

[4]Calculated with the use of cohorts as explained on page 9.

[5]Total number of farm youth less those migrating from the farm and those dying before entering the labor force.

Table 28a. Number of 1964 farmers, projected number of farmers in 1974, number of farmers in 1964 remaining in 1974, number of new farming opportunities by 1974, number of youth available to enter labor force by 1974, number of surplus youth over farming opportunities by 1974, and percent surplus of youth by 1974, for state economic areas 1, 2, 3, 4, 5, 6, 7, and 8,[1] assuming 1.2 operators per farm in 1974, and a rate of farm consolidation 50 percent greater than the 1950-64 rate.

| | Farmers 1964[2] | Farmers 1974[3] | Remaining Farmers[4] | Farming Opportunities | Available Youth[5] | Number of Surplus Youth | Percent Surplus |
|---|---|---|---|---|---|---|---|
| | (1) | (15) | (16) | (17) | (18) | (19) | (20) |
| Area 1 | 7,227 | 6,769 | 4,837 | 1,932 | 3,012 | 1,080 | 55.9 |
| Area 2 | 18,238 | 16,608 | 12,162 | 4,446 | 7,117 | 2,671 | 60.1 |
| Area 3 | 16,497 | 13,867 | 11,051 | 2,816 | 6,384 | 3,568 | 126.7 |
| Area 4 | 8,052 | 6,493 | 5,141 | 1,352 | 2,834 | 1,482 | 109.6 |
| Area 5 | 10,670 | 8,604 | 6,865 | 1,739 | 3,619 | 1,880 | 108.1 |
| Area 6 | 9,472 | 7,639 | 6,023 | 1,616 | 3,378 | 1,762 | 109.0 |
| Area 7 | 10,198 | 8,402 | 6,906 | 1,496 | 3,078 | 1,582 | 105.7 |
| Area 8 | 7,732 | 5,910 | 4,949 | 961 | 2,563 | 1,602 | 166.7 |
| Totals | 88,086 | 74,292 | 57,934 | 16,358 | 31,985 | 15,627 | 95.5 |

[1]Does not include the state metropolitan economic areas.

[2]U.S. Bureau of the Census, Census of Agriculture, 1964, "Statistics for the State and Counties, Kansas," (Washington, D.C.: U.S. Government Printing Office, 1967), p. 254.

[3]Based on the assumptions of 1.2 operators per farm and a rate of farm consolidation 50 percent greater than the 1950-64 rate in each area.

[4]Calculated with the use of cohorts as explained on page 9.

[5]Total number of farm youth less those migrating from the farm and those dying before entering the labor force.

Table 28b. Number of 1964 farmers, projected number of farmers in 1984, number of farmers in 1964 remaining in 1984, number of new farming opportunities by 1984, number of youth available to enter labor force by 1984, number of surplus youth over farming opportunities by 1984, and percent surplus of youth by 1984, for state economic areas 1, 2, 3, 4, 5, 6, 7, and 8,[1] assuming 1.4 operators per farm in 1984, and a rate of farm consolidation 50 percent greater than the 1950-64 rate.

| | Farmers 1964[2] | Farmers 1984[3] | Remaining Farmers[4] | Farming Opportunities | Available Youth[5] | Number of Surplus Youth | Percent Surplus |
|---|---|---|---|---|---|---|---|
| | (1) | (21) | (22) | (23) | (24) | (25) | (26) |
| Area 1 | 7,227 | 6,164 | 2,816 | 3,348 | 5,375 | 2,027 | 60.5 |
| Area 2 | 18,238 | 14,703 | 7,068 | 7,635 | 12,840 | 5,205 | 68.2 |
| Area 3 | 16,497 | 11,329 | 6,455 | 4,874 | 11,277 | 6,403 | 131.4 |
| Area 4 | 8,052 | 5,090 | 2,897 | 2,193 | 5,106 | 2,913 | 132.8 |
| Area 5 | 10,670 | 6,745 | 3,886 | 2,859 | 6,224 | 3,365 | 117.7 |
| Area 6 | 9,472 | 5,988 | 3,334 | 2,654 | 6,268 | 3,614 | 136.2 |
| Area 7 | 10,198 | 6,730 | 4,161 | 2,569 | 5,780 | 3,211 | 125.0 |
| Area 8 | 7,732 | 4,392 | 2,802 | 1,590 | 4,716 | 3,126 | 196.6 |
| Totals | 88,086 | 61,141 | 33,419 | 27,722 | 57,586 | 29,864 | 107.7 |

[1] Does not include the state metropolitan economic areas.

[2] U.S. Bureau of the Census, Census of Agriculture, 1964, "Statistics for the State and Counties, Kansas," (Washington, D.C.: U.S. Government Printing Office, 1967), p. 254.

[3] Based on the assumptions of 1.4 operators per farm and a rate of farm consolidation 50 percent greater than the 1950-64 rate in each area.

[4] Calculated with the use of cohorts as explained on page 9.

[5] Total number of farm youth less those migrating from the farm and those dying before entering the labor force.

Table 29. Average farm valuation for 1964 and projected average farm valuation for state economic areas 1, 2, 3, 4, 5, 6, 7, and 8.

| | Average value 1964[1] | Average value 1974[2] | Average value 1984[2] |
|---|---|---|---|
| | (27) | (28) | (29) |
| Area 1 | $138,946 | $263,106 | $498,221 |
| Area 2 | 89,204 | 162,546 | 296,201 |
| Area 3 | 68,765 | 115,373 | 193,572 |
| Area 4 | 47,058 | 89,095 | 168,692 |
| Area 5 | 63,317 | 118,350 | 221,243 |
| Area 6 | 41,440 | 82,330 | 163,565 |
| Area 7 | 36,273 | 63,128 | 109,857 |
| Area 8 | 33,962 | 71,003 | 148,455 |
| All Areas | $ 66,356 | $123,590 | $230,889 |

[1]U.S. Bureau of the Census, Census of Agriculture, 1964, "Statistics for the State and Counties, Kansas," (Washington, D.C.: U.S. Government Printing Office, 1967), p. 210.

[2]These values were projected assuming a continuation of the 1959 to 1964 percentage increase in value in each area.

Table 30. Total farm valuation for 1964 and projected total farm valuation for state economic areas 1, 2, 3, 4, 5, 6, 7, and 8.

| | Total Value 1964[1] | Total Value 1974[2] | Total Value 1984[2] |
|---|---|---|---|
| | (30) | (31) | (32) |
| Area 1 | $1,004,164,507 | $1,606,262,233 | $2,570,324,246 |
| Area 2 | 1,626,901,550 | 2,454,769,713 | 3,703,998,705 |
| Area 3 | 1,134,422,970 | 1,490,991,399 | 1,959,334,071 |
| Area 4 | 378,910,236 | 545,350,469 | 785,092,213 |
| Area 5 | 675,588,703 | 959,932,965 | 1,364,626,604 |
| Area 6 | 392,520,191 | 610,890,412 | 950,805,330 |
| Area 7 | 369,915,428 | 497,450,736 | 668,371,517 |
| Area 8 | 262,597,865 | 401,877,651 | 614,857,514 |
| Totals | $5,845,021,450 | $8,567,525,578 | $12,617,410,200 |

[1]U.S. Bureau of the Census, Census of Agriculture, 1964, "Statistics for the State and Counties, Kansas," (Washington, D.C.: U.S. Government Printing Office, 1967), p. 210.

[2]These values were projected assuming a continuation of the 1959 to 1964 percentage increase in value in each area.

# FARM OPERATOR TURNOVER AND RESOURCE ADJUSTMENTS IN SELECTED STATE ECONOMIC AREAS IN KANSAS

by

M. Charles Kellogg

B.S., Kansas State University, 1967

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AN ABSTRACT OF A THESIS

submitted in partial fulfillment of the

requirements for the degree

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Department of Agricultural Economics

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1969

The major objective of this study was to estimate the number of available farming opportunities for the periods 1964 to 1974 and from 1964 to 1984, and at the same time estimate the number of youth in each area. Six alternative sets of assumptions were employed to show the variation in the magnitude of surplus youth that might occur during the projection period. The assumptions were as follows:

(1) one operator per farm in 1974 and 1984 and a continuation of the 1950 to 1964 rate of farm consolidation.

(2) one operator per farm in 1974 and 1984 and a rate of farm consolidation 25 percent greater than the 1950 to 1964 rate.

(3) one operator per farm in 1974 and 1984 and a rate of farm consolidation 50 percent greater than the 1950 to 1964 rate.

(4) 1.2 operatorsper farm in 1974 and 1.4 operators per farm in 1984 and a continuation of the 1950 to 1964 rate of farm consolidation.

(5) 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984 and a rate of farm consolidation 25 percent greater than the 1950 to 1964 rate.

(6) 1.2 operators per farm in 1974 and 1.4 operators per farm in 1984 and a rate of farm consolidation 50 percent greater than the 1950 to 1964 rate.

The second objective of this study was to estimate some of the future financial requirements of those who continue in farming, and of those who enter farming in the twenty-year projection period.

Several factors were assumed to affect the number of new farming opportunities and the supply of farm youth. The factors affecting the number of new

farming opportunities were these: (1) the acres of land in farms, (2) the rate of farm consolidation, (3) the total number of farm operators, and (4) the rate of farm operator turnover. Factors affecting the supply of youth were these: (1) the number of all farm male youth, (2) the death rate of farm youth, and (3) the migration rate of farm youth.

The geographical areas used in this study were eight state economic areas in Kansas. These areas were predominately rural areas with a relatively low population density. The three metropolitan state economic areas in Kansas, which encompassed the metropolitan areas of Wichita, Topeka, and Kansas City were not included in the study because of their urban characteristics.

By balancing the estimated supply of youth and available farming opportunities, it was possible to estimate the surplus of youth entering the farm labor force. The six alternatives indicate a surplus of farm labor of 177.3 percent, 268.5 percent, 461.7 percent, 33.6 percent, 63.4 percent, and 107.7 percent, respectively for the twenty-year projection period in the state. The percentage of surplus youth was found to be greater in the eastern part of the state. This was a result of different changes that are being assumed for different areas in the future.

The implications drawn from this study were to aid rural community leaders in considering the education and training of rural youth, in meeting the financial needs of refinancing new farm businesses, and in the promotion of rural area development planning. Rural farm youth will find it necessary to migrate from these areas unless industry is brought to them. Whether or not industry is brought to the rural areas, the youth in these areas must be trained for occupations in the nonfarm sector of the economy. Rural leaders also face a large task in rural area development planning. If leaders in these

areas want to maintain present population or increase population, then they must provide economic opportunities for farm youth as they enter the industrial labor force.