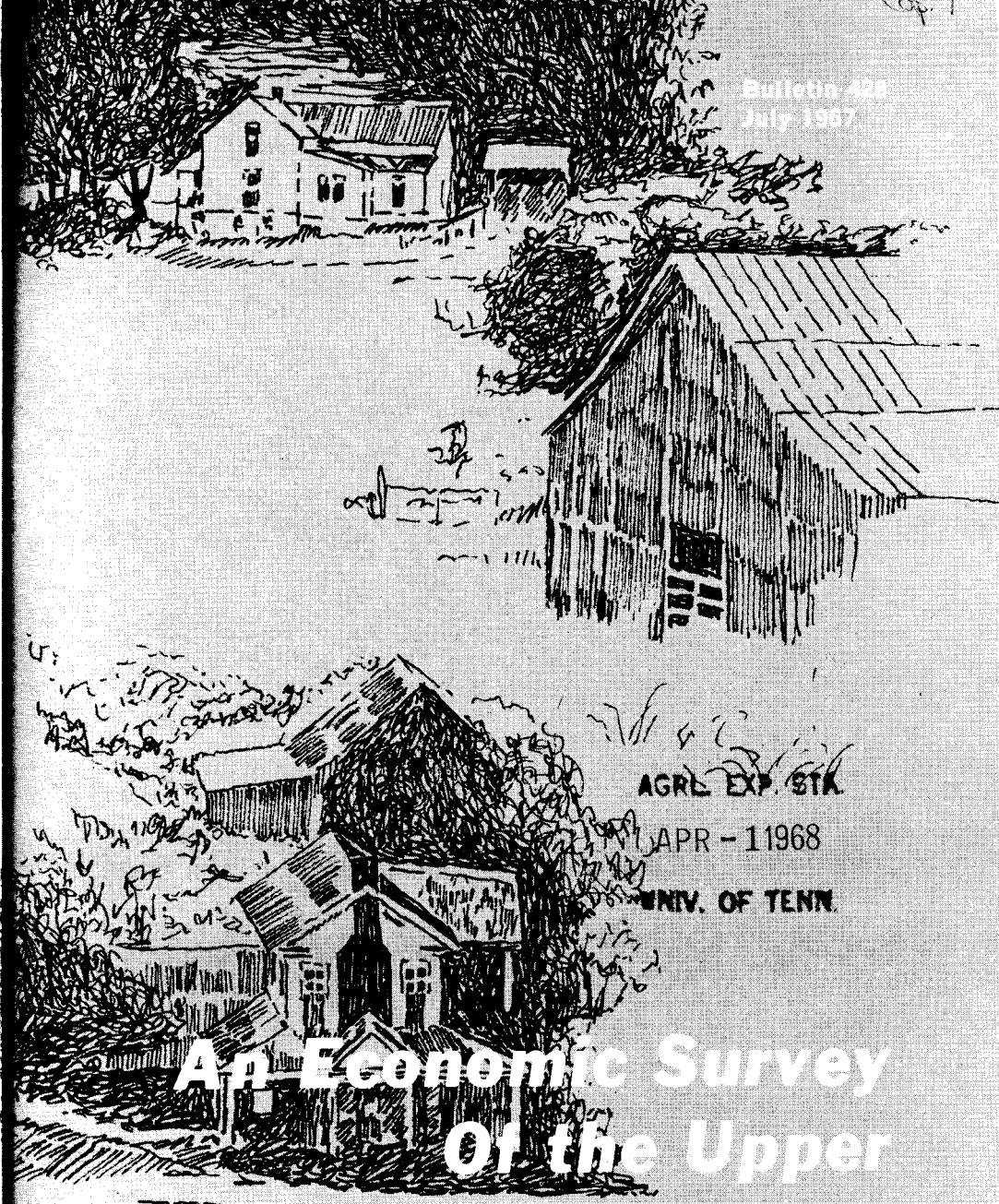
7-1967

An Economic Survey of the Upper Cumberland Area with Special Reference to Agriculture

University of Tennessee Agricultural Experiment Station

M. B. Badenhop



Bulletin 428
July 1967

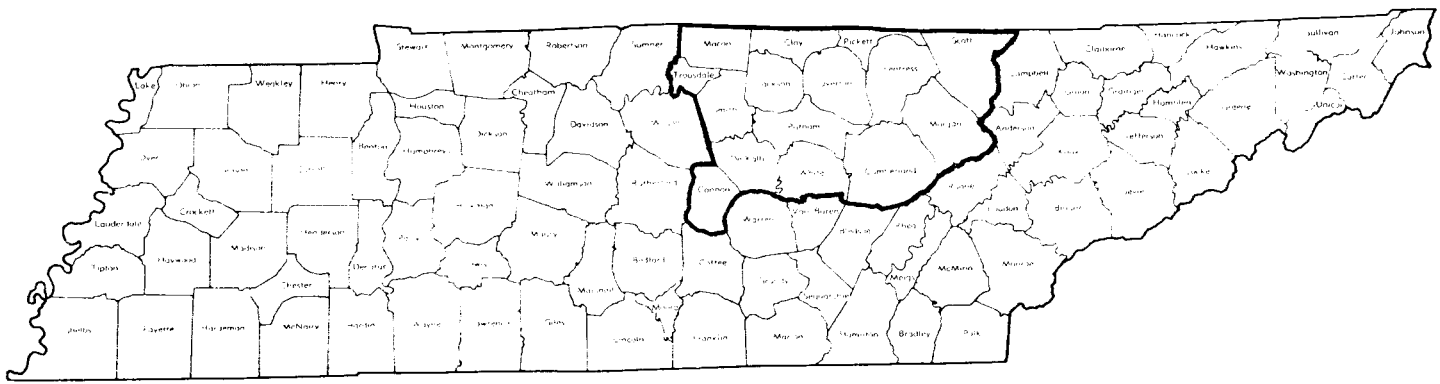
An Economic Survey Of the Upper Cumberland Area

With Special Reference to Agriculture

by M. B. Badenhop

The University of Tennessee
Agricultural Experiment Station
John A. Ewing, Director

CONTENTS



UPPER CUMBERLAND AREA

SUMMARY

In 1960, the Upper Cumberland Area's population was 90% rural but only 36% farm. The only urban centers in 1960 were Cookeville, Crossville, Livingston, and Sparta. These centers comprised just over 10% of the total population.

Agricultural development has not occurred on a wide scale in the Upper Cumberland Area. Only 32% of the non-Federal and nonurban land in the Upper Cumberland Area is suitable for normal cultivation of crops, and an additional 9% is suitable for only occasional cultivation. Corresponding United States figures are 44% and 12%. The lack of adequate agricultural land severely limits the production of crops requiring intensive cultivation. Much of the cultivable land is in small isolated tracts or on rough terrain which cannot be farmed efficiently with modern machinery.

Because of limited productive land in the Area, a significant number of farmers have not been able to compete successfully in the production of most agricultural products. During 1950-65, a larger proportion of Upper Cumberland Area farmers, farms, and farmland were withdrawn from agriculture than in the rest of the United States. All of this decline was in farms with sales less than $2,500. In the 1950 decade, Area agricultural employment declined about 14,000.

Many Upper Cumberland Area farm operators control too few resources to produce an income comparable to that of farm operators in the rest of the United States. Furthermore, from 1950 to 1965, the income gap has widened. In 1950, average sales per farm were $3,225 less in the Upper Cumberland Area than in the United States. By 1964, the difference was $8,284.

MANY FARM OPERATORS, unable to earn enough income from farming for an adequate level of living for their families, have turned to nonfarm employment. About the same proportion of farmers in the Upper Cumberland Area work off their farms 100 days or more per year, and have incomes from nonfarm sources exceeding the value of farm products sold, as farmers in the rest of the United States. In 1964, the average nonfarm income reported was $3,286 per farm household for the Upper Cumberland Area and $3,923 per farm household for the United States.

Educational attainment is below that for the rest of the United States. In 1964, only 17.8% of the Upper Cumberland Area's popu-

lation in farm-operator households 25 years old and over had finished high school, and only 3.3% of this age group had completed 4 years of college. Corresponding figures for the United States are 28.4% and 4.8%.

In 1964, there were 773 commercial farms in the Upper Cumberland Area having yearly gross sales of $10,000 or more. This group comprised 8% of all commercial farms in the Area compared to 40% in the United States. In 1950, this group comprised only 1% of all Upper Cumberland Area commercial farms.

In 1964, there were 4,275 Upper Cumberland Area farms in the $2,500-$9,999 income category. Of these, 1,352 (930 more than in 1950) had yearly gross sales of $5,000 to $9,999, and 2,923 (1,211 more than in 1950) had yearly gross sales of $2,500 to $4,999.

AGRICULTURE IN THE AREA is based more on livestock than on cash crop production. In 1964, the value of livestock and livestock products totaled over $27 million, representing 59% of the total value of all farm products sold, and was over $11 million greater than the value of livestock and livestock products sold in 1950.

The possibility of expanding production of livestock in the Upper Cumberland Area varies with the livestock enterprise. While most major livestock enterprises may expand in local areas, beef production seems to have the best possibilities of Areawide expansion. Substantial increases in numbers of beef cows from 1950 to 1964 and corresponding decreases in numbers of other forage-consuming livestock indicate a definite trend toward expanded beef production.

Crop production in the Upper Cumberland Area is adapted to livestock production. Forage crops are important in all parts of the Area. There was a significant shift from grain to forage production from 1950 to 1965.

The technological and economic pressures that have forced workers out of agriculture in the past are expected to continue. Productivity per farm worker is expected to increase as farm machinery is made more efficient and other technological innovations are adopted. United States agricultural employment will decline an estimated 1.9% per year between 1960 and 1975. Due to continued competition from other agricultural areas, the pres-

sures for shifts of workers out of agriculture in the Upper Cumberland Area will probably be at least as great as the United States average.

EMPLOYMENT OPPORTUNITIES were lacking in some nonagricultural industries in the Upper Cumberland Area during the 1950 decade. In addition to the nearly 14,000 workers who left agriculture, there was a decline in the relative importance of the mining industry as a source of employment. Net employment declines also occurred in furniture, lumber, and wood products, and textile mill products manufacturing groups. In the service industries, employment in the public utilities group declined. Net employment gains in all manufacturing, trades and services, and construction amounted to about 13,000, but was not enough to prevent a net decrease of nearly 1,300 in total area employment.

No large urban center exists in the Upper Cumberland Area. This undoubtedly is an important reason why more substantial manufacturing industries have not located in the Area. Recent data indicate, however, that regional manufacturing activity increased relatively more in the smaller urban and rural areas than in the large urban centers. Yet, the increase was slight.

Past nonfarm employment trends in the Upper Cumberland Area and projected nonfarm employment levels for the United States provide some indication of the major industry groups which are most likely to provide the greatest employment opportunities for qualified workers.

EMPLOYMENT GAINS occurred in manufacturing, trades and services, and construction in the 1950 decade. Employment gains probably will continue in these industries. The major increase in total employment is expected to be in the service-producing industries. Between 1960 and 1975, service employment for the United States is expected to increase 44%. Future gains are expected in output of the mining industries but not in employment because of increased mechanization.

The effect of lack of job opportunities on population growth rates, outmigration, unemployment, and income is quite pronounced in the Upper Cumberland Area. In the 1950 decade, the population decreased 9.3% compared with the national increase of 18.5%.

Each county in the Area had a greater net outmigration of population from 1950 to 1960 than its actual loss of population. From the Area, a net total of nearly 46,000 persons migrated dur-

ing this decade, while the total population decreased nearly 20,000. The natural increase in population was not enough to counteract this loss and add to the 1950 population. This migration resulted in a decline in the number of people in the 18 to 64 age group.

Lack of job opportunities in the Upper Cumberland Area resulted in increases in unemployment in the 1950 decade despite the heavy outmigration. In 1960, the rate of unemployment—5.9% of the civilian labor force—was 0.8% higher than the national average. Three counties, Fentress, Morgan, and Scott, had unemployment rates exceeding 8% in 1960.

Income levels in the Upper Cumberland Area not only are below national averages, but are also below those of Tennessee. In 1960, median family income for the Upper Cumberland Area was $2,259 compared with $3,949 for Tennessee and $5,560 for the United States.

An Economic Survey Of the Upper Cumberland Area With Special Reference To Agriculture

by
M. B. Badenhop*

INTRODUCTION

The purpose of this study is to examine data about important trends in the Upper Cumberland Area economy. Special attention is given to agricultural problems and opportunities, and emphasis is placed on employment trends in all sectors of the area economy.

In recent years, technological innovations have influenced strong structural changes in agriculture in the United States, as reflected in the change from subsistence to commercial-type farming. The lack of suitable land resources for agricultural production in much of the Upper Cumberland Area has prevented many farmers from adopting the innovations necessary to make this transition. This inability to change from subsistence to commercial production has adversely affected the competitive position of much of the Upper Cumberland Area's agriculture.

Opportunities are limited in the Area's agricultural sector, but agriculture is an important part of the Area's economy. Therefore, it is important to examine the types of current agricultural adjustments and to indicate the problems and opportunities in this sector.

Since agriculture will remain a decreasing employment industry for the next decade or more, an examination of the trends in employment in other sectors of the Upper Cumberland Area's economy was made. If the labor released from agriculture and other basic industries is to be employed in the Area and surrounding metropolitan centers, the greatest opportunity for employment is expected in industries where trends indicate growth in employment.

*Professor of Agricultural Economics.

In examining the direction and magnitude of changes that occurred in the Upper Cumberland Area's agriculture and other major industries between 1950, 1960, and 1965, comparisons are made between the Upper Cumberland Area, Tennessee, Appalachia, and the United States.[1] The comparisons are made to present the Upper Cumberland Area's relative economic position. Since the Upper Cumberland Area is a region of considerable contrast, county data comparisons are also made.

Comparisons between areas, as well as over time, required that the county data be comparable. Data in various U. S. Department of Commerce, Bureau of Census publications met this requirement best. Therefore, with only an occasional exception, the data in this report were obtained from Bureau of Census publications.[2]

THE STUDY AREA

The Upper Cumberland Area, as defined for this report, is the same area as District IV of the University of Tennessee Agricultural Extension Service. It consists of 15 counties: Cannon, Clay, Cumberland, De Kalb, Fentress, Jackson, Macon, Morgan, Overton, Pickett, Putnam, Scott, Smith, Trousdale, and White. All but two of these counties—Cannon and Trousdale—are designated as part of the Appalachian Region. And these two counties have characteristics similar to the other counties of the Upper Cumberland Area.

[1]1965 Census data for selected variables used in the 1950 and 1960 comparisons for Appalachia and the United States were not available at the time this report was prepared. The Appalachian Region, as defined in this report, was delineated by the President's Appalachian Regional Commission in July, 1963. The Region includes 323 counties in Alabama, Georgia, Maryland, North Carolina, Pennsylvania, Tennessee, Virginia, and West Virginia. Summarized data for the Appalachian Region used in this report were taken from **Agricultural Economics Report No. 69** published by the Economic Research Service, U. S. Department of Agriculture.

[2]Whenever appropriate, use was made of statistics reported by the Tennessee Crop Reporting Service and by the Bureau of Business Research, University of Tennessee. See: 1) **Tennessee, Department of Agriculture,** Tennessee Agricultural Statistics, Tennessee Crop Reporting Service, Annual Summary, 1965, and 2) Corry, Ormond C. and Price, Patricia Ann, **Comparative Economic Growth Measures—Population and Personal Income Estimates for Tennessee Counties, 1950 Through 1962,** Bureau of Business and Economic Research, University of Tennessee, Knoxville, May, 1964.

UPPER CUMBERLAND AREA AGRICULTURAL PROBLEMS AND POTENTIALS[3]

Farm Population Changes

In recent decades, a large segment of Tennessee's population has shifted from rural to urban residence(5).[4] Between 1950 and 1960, for example, the percentage of rural residents in Tennessee dropped from 56% to 48%, while the percentage of urban residents increased from 44% to 52%. In the Appalachian Region, a similar but slower trend developed. In the Upper Cumberland Area, the only urban centers in 1960 were Crossville, Livingston, Cookeville, and Sparta. These centers comprised just over 10% of the total population. The percentage of rural residents declined from 95% to 90% from 1950 to 1960 (Table 1; all tables are in the appendix).

Although numerically the Upper Cumberland Area's total rural population decreased only slightly in 1950-59, its rural farm population declined sharply. This reduction characterized change in the composition of the population in the Upper Cumberland Area, as well as in Tennessee, Appalachia, and the United States. The percentage decrease in the farm population was larger in Appalachia (57%) than the decrease in the Upper Cumberland Area (46%); however, it was larger in the Upper Cumberland Area than it was in Tennessee (42%) and the United States (43%) (Table 2).

The farm population decrease is largely the result of two factors. The first, and most important, is the technological advances in agricultural production which have increased the productivity per worker. Fewer people are needed to produce the Nation's food and fiber requirements than in previous years. The technological revolution has caused a larger proportion of Appalachian and Upper Cumberland Area farmers to leave agriculture than in other regions. This trend is attributed to the lack of suitable land resources for agriculture in much of these two areas. Many farmers of these two regions have not been able to compete in producing and marketing farm products with farmers in other farming areas of the United States and later moved from the

[3]See **The Appalachian Region's Agriculture: Its Problems and Potentials for Development**, prepared by the President's Appalachian Regional Commission, 1964. Also, see Campbell, John C., **The Southern Highlander and His Homestead**, Russell Sage Foundation, New York, 1921. Campbell conducted the first comprehensive survey of Appalachian problems and opportunities. His survey included 210 counties in Maryland, West Virginia, Kentucky, Virginia, Tennessee, North Carolina, South Carolina, Georgia, and Alabama.

[4]Boldface numbers in parenthesis refer to items in Literature Cited, p. 36.

farm or took off-farm employment. The second factor causing a reduction in the farm population is a change in the Census definition of a farm. This change eliminated from the Census count many of the smaller farms of Appalachia and the Upper Cumberland Area.

While the farm population decreased, the rural nonfarm population increased appreciably. In the Upper Cumberland Area, nonfarm growth (41%) was larger than that for Tennessee (36%), Appalachia (28%), and the United States (30%). Many of the new rural nonfarm residents in the Upper Cumberland Area did not actually change residence. For the most part, the classification change was the result of either farmers changing occupations or definitional change. Generally, rural nonfarm families depend upon non agricultural income for their livelihood. However, many of these families produce significant quantities of food for their own use and enjoy other low cost-of-living advantages enjoyed by farm families.

Upper Cumberland Area Agricultural Problems

Lack of Suitable Land Resources

The major obstacle to the development of agriculture in the Upper Cumberland Area is the critical lack of land adapted to mechanized farming. The roughness of most of the uplands restricts their use for row crop production. Some areas are suitable for pasture production. Pasture crops usually do not require regular cultivation, and the climatic conditions favor their growth. Some of the mountain plateau and rolling lands contain some upland suitable for regular row crop production.

The lack of land suitable for mechanized cultivation is shown in data on land capability. Data on land capability and limitation in land use for agricultural purposes applicable to the Upper Cumberland Area were derived from the **Conservation Needs Inventory (12)** and **Tennessee Soil and Water Conservation Needs Inventory (10).** These data were developed from information on sample area plots for soil, slope, erosion, and other land conditions as of 1958 and were expanded to entire counties.

The land capability scheme used by the Conservation Needs Inventory committee places all the land included in the inventory acreage into 8 capability classes.[5] The limitation in suitable land

[5]Inventory acreage includes all land except: 1) Land owned by the Federal Government other than cropland operated under lease or permit, 2) urban and built-up areas, and 3) water areas of less than 40 acres in size and streams less than one-eighth of a mile wide. Large water areas and streams are not included in the total land area.

uses for agricultural purposes becomes progressively greater from Class I to Class VIII.[6] Land in the first 3 classes is suitable for regular cultivation and has few limitations that restrict its use. Land in Class IV is suitable for only occasional cultivation. Land in Classes V through VIII is generally unsuitable for cultivation. Therefore, most of the land suitable for cultivation falls in Classes I through III. Class IV land is only marginal cropland.

The distribution of inventory acreage by land capability classes is shown in Table 3. The percentage of land in Classes I through III (that best suited for cultivation) is lower in the Upper Cumberland Area than in Tennessee or the United States and about the same as for Appalachia. In the Upper Cumberland Area, only 32% of the inventory acreage is in Class I through III, compared with 45% in Tennessee and 44% in the United States. An additional 9% of the acreage in the Upper Cumberland Area is Class IV (marginal cropland), compared with 16% in Tennessee, 14% in Appalachia, and 12% in the United States.

Intra-area comparison of the distribution of inventory acreage by capability classes shows that the ratio of Classes I-III land to total acreage is highest in Macon, Putnam, Fentress, and Cannon counties, and lowest in Pickett, Jackson, Scott, and Clay counties.

The lack of Classes I-III land and the marginal cropland of Class IV severely limits production of crops requiring intensive cultivation in the Upper Cumberland Area. Of the total inventory acreage, 41% is in these land capability classes. Although some wide valleys and large moderate slopes are found in this Area, much of the cultivable land is in small, isolated tracts which cannot be farmed efficiently with modern machinery. The steepness and roughness of the terrain surrounding many of these smooth tracts prohibit their combination into larger tracts. Thus, much land which might be physically suitable for cultivation is not and cannot be economically cultivated.

The topography has impeded development of large farms, which are characteristic of the relatively more prosperous farming areas of the United States. In 1959, the average size Upper Cumberland Area farm contained only 97 acres, compared with 102 acres

[6]The inventory acreage is not comparable to land in farms. The grouping of soils into capability classes was done on the basis of their capability to produce common cultivated crops and pasture plants, without deterioration over a long period, and not on how the land was actually used. Farmland, as well as nonfarm land, was included in this classification.

for Tennessee, 106 acres for Appalachia, and 302 acres for the United States. In 1964, the average size farm in the Upper Cumberland Area was 113 acres; for Tennessee, 114 acres; and for the United States, 352 acres (15). Although large acreages are not essential for success in some types of farming (specialty crop and poultry farms are examples), gross farm income tends to increase with size of farm. Efficiency in managerial operations and application of mechanized power and other new technology also tend to rise as gross income increases. Operators of small farms often cannot efficiently use new technological advances.

Total farm acreage in the Upper Cumberland Area decreased 8% during the 1950 decade. In the same period, total farm acreage in Appalachia decreased much more—22%. Total farm acreage decreased 9% in Tennessee and 3% nationally (Table 4). From 1959 to 1964, total farm acreage continued its downward trend in the Upper Cumberland Area, declining 2% during this period. Many Appalachian farmers, including those of the Upper Cumberland Area, have retired their land from agricultural production because they have been unable to compete successfully in agricultural production. Farm numbers declined by 4,294 farms, or 15%, in the Upper Cumberland Area from 1950 to 1954. From 1954 to 1959, farm numbers declined by 4,345 farms, or 18%; however, 35% of this decrease, or 1,540 farms, was due to the 1959 change in the Census definition of a farm. Farm numbers declined 14% more from 1959 to 1964 (Table 5).

Topography limits harvested cropland acreage in the Upper Cumberland Area more than total farm acreage. The general roughness of the land surface has resulted in a relatively small acreage of harvested crops (15% of the total farm land in 1964), which are produced largely without the advantage of advanced mechanical equipment and power (Table 6).

There is considerable variation in the harvested cropland as a proportion of the total farmland among counties of the Upper Cumberland Area. The relationship between harvested cropland and total farmland chiefly follows the same pattern as the relationship between land capability Classes I-III acreage and total inventory acreage. For example, in Pickett, Jackson, Scott, and Clay counties, the proportion of total inventory acreage in land capability Classes I-III is relatively low, ranging from 24% in Clay County to 20% in Pickett County (Table 3). Similarly, the proportion of farmland from which crops were harvested in 1964

ranged from 8% in Scott County to 13% and 15%, respectively, in Pickett and Clay counties (Table 6).

The shortage of suitable agricultural land resources in the Upper Cumberland Area counties and the problems of mechanization and expansion in farm size associated with this shortage is reflected in the change in farm numbers and agricultural employment.[7] The trend established in the United States over the last decade has been a sharp reduction in farm numbers and employment. Similar trends have developed in the Upper Cumberland and Appalachia; however, changes in agricultural employment have been proportionally greater (Tables 5 and 7).

Control of Insufficient Resources

Most farm operators in the Upper Cumberland Area control insufficient resources to produce an income comparable to that of farm operators in other sections of Tennessee and the United States. For example, Upper Cumberland Area farm operators have less capital invested in land and buildings than farm operators in Tennessee or the United States. In 1964, the average value of land and buildings for all Upper Cumberland Area farms was $14,245, compared with $21,088 for Tennessee and $51,394 for the United States. In 1959, the latest census period for which data are available, the value of investment in land and buildings for commercial farms in the Upper Cumberland Area ($11,323) was 25% greater than for all farms in the Area but much lower than the values reported for Tennessee and the United States (Table 8).[8]

[7]According to one comparison, there are more farms in some counties of the Upper Cumberberland Area than people employed in agriculture in the Area. The number of farms was taken from the U. S. Census of Agriculture and the number of people employed in agriculture from the U. S. Census of Population. In the Census of Population, the occupation of a worker was determined by the number of hours worked per week at a particular job. If the worker worked at two or more jobs, the job at which he worked the greatest number of hours during the week of the interview determined the occupational category in which he was placed. Since a third of the Upper Cumberland Area farmers work off their farms 100 days or more per year, many would be listed as nonagricultural workers. Due to the small proportion of the civilian labor force employed in forestry and fisheries, workers in these industries were included with agricultural workers.

[8]In the 1950 and 1959 agricultural censuses, farms were classified on the basis of gross farm sales as commercial and other farms. In both censuses, commercial farms were divided into 6 economic classes. In 1959, class intervals were different from those used in 1950. In 1950, all farms with a value of sales of $1,200 or more were classified as commercial. Farms with sales of $250 to $1,199 were also classified as commercial, provided the farm operator worked off the farm less than 100 days per year, and provided other income the farm family received was less than the value of farm products sold. In 1959, all farms with gross sales of $2,500 or more were commercial. In addition, farms with sales of $50 to $2,499 were classified as commercial if the operator was under 65 years of age, did not work off the farm 100 days or more per year, and other income was less than the farm sales. In both censuses, the above restrictions apply only to Class VI farms. In 1964, the same classification was used as for 1959.

Operators of farms in Classes I through V would work off-farm more than 100 days, and other income the family received could exceed the value of farm products sold.

Between 1950 and 1959, the average value of investment in land and buildings per farm decreased in the Upper Cumberland Area relative to Tennessee and the United States. In 1950, the average value of land and buildings for all farms in the Area was 73% and 32% of the average value invested in Tennessee and the United States, respectively. In 1959, the average value had decreased to 67% and 24%, respectively. Between 1959 and 1964, there was little change in their relative positions; the average value of land and buildings for all farms in the Area was 68% of the average value invested in Tennessee and 28% in the United States. A similar relationship existed between the average value of land and buildings per commercial farm in the Upper Cumberland Area, Tennessee, and the United States.

Farm income received from farm products sold in the Upper Cumberland Area is low. Furthermore, the Upper Cumberland Area farm income gap is widening. In 1964, the average value of all farm products sold in the Area was only $2,869 per farm. Although the total value of farm products sold in the Upper Cumberland Area increased 57.9% from 1950 to 1959 and 11.5% from 1959 to 1964, a greater disparity existed in sales per farm between the Upper Cumberland Area and Tennessee and the United States in 1959 than in 1950, and again in 1964 compared with 1959. In 1950, average sales per farm were $3,225 less in the Upper Cumberland Area than in the United States, and $509 less in the Upper Cumberland Area than in Tennessee. By 1964, the difference between average sales per farm in the Upper Cumberland Area and the United States, and the Upper Cumberland Area and Tennessee was $8,284 and $1,072, respectively (Table 9).

During the 1950-1964 period, some counties of the Upper Cumberland Area experienced considerably greater increases in total farm sales than others. This is particularly true for Scott, Fentress, and Cumberland counties. From 1950 to 1964, Scott County experienced gains in total farm sales from $289,000 to $2,209,000; Fentress County from $721,000 to $4,470,000; and Cumberland County from $1,118,000 to $2,843,000. These large increases, occurring at the same time farm numbers were decreasing, increased the average value of farm sales per farm in Scott County from only $217 in 1950 to $5,351 in 1964. Likewise, in

Cumberland County farm sales per farm ranged from $589 in 1950 to $2,895 in 1964 (Table 9).[9]

As a result of low farm income, a substantial number of Upper Cumberland Area farm operators are unable to provide their families with a level of living comparable to that enjoyed by other farm families in the United States. Level of living indexes prepared by Cowhig (4) reveal that the average farm operator level of living index for the Upper Cumberland Area in 1950 and 1959 was 25 and 65, respectively. Only two counties—Trousdale and Smith—had indexes for 1959 higher than the average for Tennessee, and none of the counties approached the national average (Table 10).

Another measure of living levels of Upper Cumberland farm families is the condition of housing. For every 100 Upper Cumberland Area rural farm housing units, 33 are deteriorating, that is, they are in need of major repair; and 11 are in such dilapidated condition they endanger the safety and health of the occupants. Corresponding figures for Tennessee are 29% deteriorating and 9% dilapidated; and for the United States, 23% and 7% (1 and 7).

Data on plumbing facilities provide further evidence of the condition of the Upper Cumberland Area farm housing. Over two-thirds of the Upper Cumberland Area's farmhouses lack complete plumbing facilities, compared with just over a third for the United States (1).

Many farm operators, unable to earn an income from farming that will provide an adequate level of living for their families, have turned to nonfarm employment as a means to supplement their income. The percentage of farmers in the Upper Cumberland Area working off-farm 100 days or more per year increased from 24% in 1950 to 30% in 1959 and 33% in 1964 (Table 11). These percentages were almost the same as those for the United States.

[9]For the 1950 Census of Agriculture, places of 3 or more acres were counted as farms if the annual value of agricultural products, whether for home use or for sale but exclusive of home-garden products, amounted to $150 or more. Places of less than 3 acres were counted as farms only if the annual sales of agricultural products amounted to $150 or more. A few places with very low agricultural production because of unusual circumstances, such as crop failure, were also counted as farms if they normally could have been expected to meet the minimum value or sales criteria.

For the 1959 and 1964 Census of Agriculture, census farms comprise places on which agricultural operations were conducted at any time under the control or supervision of one person, a partnership or a manager. Places of less than 10 acres were counted as farms if the estimated sales of agricultural products for the year amounted, or normally would amount to at least $250. Places of 10 or more acres were counted as farms if the estimated sales of agricultural products for the year amounted to at least $50.

From 1954 to 1959, farm numbers in the Upper Cumberland Area declined by 4,345 farms, or 18%. Thirty-five percent of this decrease, or 1,540 farms, was due to the 1959 change in the Census definition of a farm.

The proportion of all farm families having income greater than the value of farm products sold was greater than the proportion of farmers working off-farm 100 days or more per year. This was true for the Upper Cumberland Area, as well as for Tennessee and the United States.

Commercial farm operators and their families do not engage in nonfarm work to the same extent as noncommercial farm families. However, many commercial farm operators in the Upper Cumberland Area work off their farms. The percentage of Upper Cumberland Area commercial farm operators working off their farms 100 days or more increased from 6% to 11% from 1950 to 1959. Furthermore, the percentage having incomes from other sources greater than farm sales increased from approximately 8% to 13%.[16] Comparable data in the 1964 Agricultural Census were not reported.

For the first time since the Census of Agriculture began, there was an attempt in the 1964 Census to determine how much farm family income came from nonfarm sources. Eighty-six percent of the Upper Cumberland Area farmers received nonfarm income compared with 83% of all Tennessee farmers and 81% of United States farmers. The average nonfarm income reported was $3,286 per farm household for the Upper Cumberland Area, $3,421 for Tennessee, and $3,923 per farm household for the United States. Thus, income from all nonfarm sources was 20% greater for United States farmers than for the Upper Cumberland Area farmers (Table 12). A breakdown of this income by source for the Upper Cumberland Area farmers showed the following: 58% of the farm households reported $2,876 average income from wages and salaries; 10% of the farm households reported $3,431 average income from nonfarm business or professional practice; 30% of the farm households received $984 average payments from social security, pensions, and welfare; and 19% of the farm households reported $583 average income from rents, interests, and dividends.

Deficiencies in Education

Deficiencies in educational programs in the Upper Cumberland Area have limited the opportunities of the farm population. In

[16]The group of commercial farm operators having extremely low incomes is not included in Table 11. This group operated Class VI farms. According to the census definition of Class VI farms, the operator could not work off-farm as much as 100 days per year, and other income he and his family received could not exceed the value of farm sales. Therefore, for 1950, all commercial farms with gross sales of less than $1,200 were excluded from the data in Table 11, and for 1959, those farms with gross sales of less than $2,500 were excluded.

1964, for every 100 persons over 25 years of age in the United States in farm-operator households, 6 have failed to finish 5 years of school. In the Upper Cumberland Area, that figure rises to 15—146% higher than that of the United States. None of the counties approaches the national average.

Only 18 out of every 100 Upper Cumberland Area persons over 25 years old in farm-operated households finished high school, contrasted to almost 25 persons of similar age in Tennessee and over 28 persons in the United States. In this respect, only two counties in the Area reach Tennessee's average; and no counties reach the national average (Table 13).

The Area also fails to turn out its share of college graduates among persons in the farm-operated households. Only 3.3% of the persons 25 years old and over in this group had completed 4 years of college as of 1964. This compares with 3.6% for Tennessee and 4.8% for the United States.

Upper Cumberland Area Agricultural Potentials

The potential for commercial agriculture in the Upper Cumberland Area is limited primarily because of its topography. During recent decades, the Upper Cumberland Area's competitive position in the production and marketing of most agricultural products has declined relative to other regions. For farm operators in the Upper Cumberland Area to compete successfully with those in other farming areas, they must obtain greater efficiencies in production and increase their output and sales. They must gain control of adequate land and capital resources and accelerate the adoption of known technological innovations, especially improved managerial techniques.

Since Upper Cumberland Area farms are relatively small, many must be combined into economic units. A major obstacle to this needed change, however, is the lack of agricultural land in units large enough to be feasibly combined. Only 32% of the total agricultural land in the Area is suitable for normal cultivation of crops—Class I-III; another 9% is suitable for only occasional cultivation—Class IV (Table 3). The lack of cultivable land is most evident in Clay, Jackson, Pickett, and Scott counties where less than one-fourth of the agricultural land is suitable for normal cultivation.

There are, however, other obstacles to farm consolidation, even if suitable land were available. Consolidation involves the move-

ment of people, which is a slow process. The average age of all farm operators in the Upper Cumberland Area in 1964 is approximately 53 years (15). People at this age level are reluctant to sell their land and homes to move to other areas. In addition, when land is placed on the market, it is often priced so high that a farmer cannot justify its purchase for agricultural use. Where land prices are lower, land capability is also lower. This is not to imply that no farm consolidation will occur in the Upper Cumberland Area. Some consolidation will occur even in areas where suitable land is scarce.

Since it is unlikely that farm consolidation will occur on an appreciable scale in most sections of the Upper Cumberland Area, the farm operators who will most likely be able to compete successfully in commercial agricultural production are those who presently control adequate land resources. Adjustments on these farms in the form of greater capital investments, use of improved productive practices, and better management will help increase farm income.

Most of those farm operators who have been able to adjust to the changes in agriculture in the late 1950's and early 1960's probably will be able to do so in future years. Basically, farmers who as a group were able to adjust, have been operators of commercial farms with gross sales of $2,500 or more per year, and especially those with farm sales greater than $10,000 per year.

In 1964, there were 773 commercial farms in the Upper Cumberland Area having yearly gross sales of $10,000 or more. Operators of these farms control sufficient land and capital resources to produce relatively large outputs of agricultural products. Although this group of farms comprised only 8% of all commercial farms in the Area, compared with 40% in the United States, there was a large proportional increase in their numbers from 1950 to 1964 (see footnote 9). In 1950, this group comprised only 1% of all Upper Cumberland Area commercial farms (Table 14).

Farm operators with yearly gross farm sales of $2,500 to $9,999 usually control fewer land and capital resources than operators in the $10,000 a year group. However, many farmers in this income group should be able to continue to compete successfully in the production of agricultural products with the resources they now control and are able to acquire. Further, the increase in farms in this income category indicates that some farmers have

been able to expand their operations and increase their incomes. In 1964, there were 4,275 Upper Cumberland Area farms in this category. Of these, 1,352 (930 more than in 1950) had yearly gross sales of $5,000 to $9,999 and 2,923 (1,211 more than in 1950) had yearly gross sales of $2,500 to $4,999 (Table 14).

In general, the farms having gross sales of $2,500 or more per year, especially those with farm sales greater than $10,000 per year, constitute the major part of the agricultural potential in the Upper Cumberland Area. Most of these farmers must increase their output and sale of farm products to continue to compete successfully, however. For some, this will require increased farm acreage. For others, external expansion is neither possible nor feasible. Farmers in this latter group will have to expand production greatly on the present farm unit if they are to compete. This will require increased use of fertilizer, lime, improved varieties of crops, improved livestock, and higher levels of management.

The commercial farmers having yearly gross farm sales of less than $2,500 have limited resources for producing agricultural products. The large decrease in numbers in this group—from 11,387 in 1950 to 4,462 in 1964—indicates that most of these farmers have been unable to compete successfully in agriculture.[11] Therefore, as a group, they present very little potential for future agricultural production. In the Area, the average value per farm of all farm products sold by this group of farmers was $920 in 1964. This group represented 47% of the total number of commercial farms in the Upper Cumberland Area but sold only 5% of the agricultural products sold by commercial farmers.

The low-income commercial farmers have two alternatives to increase their incomes. The first is to become more competitive through farm enlargement and increased agricultural production.

[11]Between 1950 and 1959, a large number of Upper Cumberland Area commercial farm operators having farm sales of less than $2,500 per year apparently left farming. According to census data, this group decreased by 6,977. For these operators to have remained in agriculture in the Upper Cumberland Area, as defined by the census, their status must have changed so that they would have been reclassified and placed in one of two farm groups that experienced gains in farm numbers from 1950 to 1959. These two groups were commercial farms with yearly farm sales of $2,500 or more and part-time farms. Farm numbers in these groups increased 4,612 (Table 14). Assuming that all this increase was comprised of farmers classified as having farm sales of less than $2,500 in 1950, which is unlikely, this leaves 2,365 farm operators in this low income group unaccounted for in 1959. The decrease in the number of commercial farmers with yearly farm sales of less than $2,500 was more rapid in the 1950 to 1959 period than during the 1959 to 1964 period, largely because of the accounting problem mentioned above.

When one considers the relatively low rate of return realized by even the best farmers, it seems doubtful that many of these low-income farmers can accumulate enough capital to acquire the farm resources necessary to move to higher income levels. Considering the large decrease in the number of farms in this group from 1950 to 1964, and more particularly from 1950 to 1959, it appears that only a limited number were able to make the transition. Assuming that all the increase in the number of Upper Cumberland Area farms having yearly gross sales of $2,500 or more came from this group (see footnote 11), 1 of 3 moved into higher income groups. A limited number of these farmers may be able to increase their incomes and levels of living on the units they now own by producing with greater efficiency or by engaging in a specialty enterprise which yields a high return and requires a low capital investment.

The second alternative available to commercial farmers whose yearly farm sales are less than $2,500 is to supplement their low farm income from part-time off-farm employment. This would allow them to improve their level of living and retain their present farms without increasing their investment in agricultural resources. Many have only limited skills for off-farm work. In addition, the lack of jobs in the Area further limits this alternative.

Noncommercial farms in the Upper Cumberland Area consist of part-time farms[12] and a group classified as other.[13] Although the percentage of all farms represented by part-time farms is large—26% in 1964 (Table 14)—the value of farm products sold by this group comprised only a small proportion of the value of all farm products sold in 1964. For example, in Cumberland County, the part-time farmers comprised 41% of all farm operators, but produced only 6% of the value of all farm products sold. The average value sold per farm was less than $500. Residential, part-retirement, and abnormal farms comprised 18% of the farms in the Area. Additional income from nonfarm sources and agricultural products produced for home consumption are essential to maintain an adequate level of living for these noncommercial farmers.

Position of Livestock in the Area

The value of livestock and livestock products sold by Upper

[12]Part-time farmers, as defined by the 1964 Census of Agriculture, were those who sold less than $2,500 worth of farm products per year, were less than 65-years-old, and either worked off-farm 100 days or more per year, or the income earned from nonfarm sources by the farmer and members of his household was greater than the value of farm products sold.

Cumberland Area farmers indicates the importance of livestock as a farm enterprise. In 1964, this value totaled over $27 million, representing 59% of the total value of all farm products sold, and was over $11 million greater than the value of livestock and livestock products sold in 1950. In that year 61% of the total value was derived from livestock (Table 15).

Data on farms, by type, show that the relative importance of livestock and crop production have remained about the same over the past several years.[14] In 1964, the main enterprise, based on source of income, on 41% of the Upper Cumberland Area's commercial farms was some type of livestock, compared with 40% in 1950 (Table 16). County differences in the relative importance of livestock, including dairy and poultry, are quite large. In 1964, the main enterprise, in terms of income, on more than 55% of the commercial farms in Cannon, Cumberland, Fentress, and Scott counties, was in the livestock category.

Beef. The possibility of expanding production of livestock in the Upper Cumberland Area varies with the livestock enterprise. Beef production—especially that of feeder cattle—appears to have the best possibilities for Areawide expansion, however. There were substantial increases in beef cow numbers from 1950 to 1964, while decreases occurred in other forage-consuming livestock numbers, indicating a definite trend toward expanded beef production throughout the Area.

While beef cow numbers increased in the Upper Cumberland Area, Tennessee, and the United States from 1950 to 1964, the Upper Cumberland Area had a greater relative increase than either Tennessee or the United States. From 1950 to 1959, beef cow numbers increased 234% in the Upper Cumberland Area, compared with 166% in Tennessee and 54% in the United States. The trend continued from 1959 to 1964 during which time beef cow numbers increased 100% in the Upper Cumberland Area compared with 74% in Tennessee and 32% in the United States (Table 17). This increase in beef cow numbers in the Area more than offset the decrease in dairy cow numbers (Table 17). This shift toward beef production reflects an effort to utilize pasture and hay released by other kinds of livestock.

[13]Other farms include residential, part-retirement, and abnormal farms.

[14]In the 1950, 1959, and 1964 Censuses of Agriculture, commercial farms were classified on the basis of the relationship of the value of sales of one or more enterprises to the total value of sales of all farm products sold. A farm was classified as a particular type when 50% or more of the total value of farm sales was derived from a single enterprise or from a group of similar enterprises.

The cow-calf enterprise is the principal form of beef production in the Upper Cumberland Area. Its continuing growth, however, depends on several factors: the amount of capital farmers are willing to invest in the enterprise, increases in productivity in livestock, hay and forage crops, and the national demand for beef. The possibility for increasing production of livestock other than beef appears to be more limited.

Dairy. Dairying is a declining source of farm income in the Upper Cumberland Area. Dairy cow numbers declined 21% in the Area from 1950 to 1959 and another 16% from 1959 to 1964 (Table 17). Macon County is the only county in the Area that had an increase in dairy cow numbers in 1964 compared with 1950. Milk production per cow in the Area is considerably below the national average. For Tennessee, production per milk cow in 1966 was 5,800 pounds compared with 8,500 pounds for the United States (9). Average production per milk cow in the Grade A dairy herds in Tennessee in 1966 was about 8,000 pounds (9). In general, there is a low density of dairy farms in the Area with production becoming concentrated on fewer and larger farms. Partly responsible for this trend is the fact that the Upper Cumberland Area has long been a deficit grain-producing area and producers are faced with relatively high production and marketing costs. Also, there was a net outmigration of the total population of nearly 22%, or about a 10% population loss in the Area from 1950 to 1960 (5).

Poultry. Fentress and Scott counties are important in commercial broiler production in the Upper Cumberland Area. Expansion of the enterprise in the Area has occurred since 1954, particularly in Fentress, Scott, Cumberland, and Morgan counties (Table 18). If present trends continue, the prospects for increased broiler production appears favorable. Limiting factors are the market for broilers, capital investment required to get started in the enterprise, and limited processing and feed manufacturing facilities in the Area. The efficiency of production in the Area, relative to other broiler-producing areas, should permit producers to make adjustments necessary to remain competitive.

Commercial egg production for the Upper Cumberland Area is not an important enterprise. Egg production for the Area accounted for only 5% of the total Tennessee egg production in 1964 and its relative position declined since 1954.

Other Livestock. If present trends continue, it is likely that production from other livestock enterprises in the Upper Cumberland Area will be limited. For example, hog production decreased in every county during 1959-1964 (Table 19). The percentage decline in the number of hogs in the Area was considerably greater than the decline in the national average over the same time period. High transportation costs increase the cost of grain and other feedstuffs that must be shipped into the Area, thereby increasing the cost of production relative to other major production regions.

Sheep production is only a minor livestock enterprise in the Area with less than 17,000 ewes reported on farms in 1964. The number of ewes on farms decreased more than 60% from 1959 to 1964 (Table 19).

Position of Crops in the Area

Because of topographic and climatic conditions in the Upper Cumberland Area, forage crops necessarily occupy an important place in the cropping system in all parts of the Area. During 1950-64, there was a significant shift from grain to forage production (Table 20). This trend will probably continue as forage-consuming livestock increase in importance in the Upper Cumberland Area.

Corn acreage was reduced from 156,000 acres to 80,000 between 1959 and 1964. Acreage in sorghums and small grains, not very important in terms of total acres of cropland, continued its downward trend (Table 20). Soybean acreage, although small, increased slightly during the period. Burley tobacco, a crop yielding high returns per acre, was grown on 62% of the farms in the Area in 1964 and comprised the main cash income on many farms (15). Small acreages of tobacco will continue to be produced, with total acreage depending upon acreage allotment and price support programs.

Tree fruit enterprises are of little importance as a source of farm income in the Upper Cumberland Area. Vegetables for sale (snap beans) comprised an important source of farm income in Fentress and Cumberland counties. Acreage in snap beans increased 89%, 3,906 to 7,391 acres, from 1959 to 1964 in these two counties. Most of these producers are able to compete successfully with producers in other regions. Nursery and greenhouse products are of little importance as a source of farm income in the Area except in De Kalb County.

EMPLOYMENT TRENDS IN MAJOR NONAGRICULTURAL ECONOMIC ACTIVITIES

Expanding nonfarm job opportunities and declining employment opportunities in the Upper Cumberland Area's agriculture have forced many workers to turn to nonagricultural activities in search of fuller employment and higher incomes. Between 1950 and 1960, a total of 13,764 workers dropped out of the agricultural labor force (Tables 7 and 21). The technological and economic pressures that have forced workers out of agriculture in the past are expected to continue. Productivity of farm labor is expected to increase as farm machinery is made more efficient and other technological innovations are adapted. Therefore, between 1960 and 1975, United States agricultural employment (farmers, farm managers, farm laborers, and foremen) is expected to decline an estimated 28%, or an average of 1.9% per year (21, p. 244). Due to the strong competitive conditions confronting the Upper Cumberland Area farmers, the pressures for shifts of workers out of agriculture in the Upper Cumberland Area will probably be at least as great as the United States average.[15]

Employment trends of the Upper Cumberland Area's major nonfarm economic activities are examined in this report. It is assumed that the greatest opportunity for nonfarm employment in the Upper Cumberland Area will be in industries where trends indicate increases in employment.

Mining

Employment in mining in the Upper Cumberland Area is indicated in Table 22. Less than 3% of the civilian labor force was employed in this activity in 1960. The relative importance of the industry as a source of employment declined during the 1950 decade.

[15]This occurrence raises a major question. Will these displaced agricultural workers be able to find jobs in other sectors of the Upper Cumberland Area and surrounding economy, or will they be forced to migrate to labor markets outside of the Upper Cumberland Area and surrounding counties, or will they be forced to join the unemployed? The answer will depend upon the characteristics of the displaced workers as well as the condition of the economy inside and outside the Upper Cumberland Area. For example, nonfarm employment opportunities for farm people will depend upon 1) the age, education, and training of displaced persons; 2) his ability to acquire additional training and new skills to perform nonagricultural work; 3) his willingness to acquire additional training and to move to areas of employment; 4) the general condition of the economy outside the Upper Cumberland Area; 5) the demand situation for products produced by industries in the Upper Cumberland Area; and 6) the employment situation in industries in the Upper Cumberland Area.

Within the Area there is limited production of bituminous coal in Scott, Morgan, Putnam, and Cumberland counties. With the decline in the national demand for bituminous coal, these areas are finding it increasingly difficult to compete successfully with other coal producing regions. Limestone and building sand and stone are the other important minerals mined. The limestone is primarily in Cumberland and Putnam counties.

Construction

Construction, which includes erection, repair, and maintenance of nonmobile structures, is an important economic activity in the Upper Cumberland Area, Tennessee, and the United States. Between 1950 and 1960, employment in construction remained fairly constant in the Area, when measured as a percentage of the civilian labor force. The same was true of Tennessee and the United States. Direct employment in construction comprised between 6% and 7% of the civilian labor force in the Area in 1960 and provided jobs for over 4,200 workers (Table 23).

In addition to the direct employment provided by the construction industry, its activities influence production and employment in industries manufacturing materials used in construction as well as employment in such fields as finance, real estate, insurance, design, and engineering.

Manufacturing

A common conception of the Upper Cumberland Area is that it is predominantly an agricultural area. However, more workers are employed in manufacturing than in agriculture and mining combined.

Between 1950 and 1960, area employment in all manufacturing industries increased nearly 7,900 or 89.2%. Area manufacturing employment growth far surpassed the national rate of 19% and Tennessee's rate of 33%. This growth was substantial in the face of declining employment in agriculture and mining. In 1960, manufacturing employment comprised about the same proportion of the civilian labor force in the Upper Cumberland Area (26.2%) as in the United States (25.7%) and as in Tennessee (24.7%) (Table 24).

There was a considerable range in the manufacturing employment growth rates for county portions of the Upper Cumberland Area. The growth rate did not increase in Scott County dur-

ing the 1950 decade. The growth rates for Morgan, Cumberland, and Putnam counties were lower than the rates for the other county areas. Manufacturing employment decreased slightly in Scott County (−1.8%), increased less in Morgan County (18.5%), and more in Smith (528.4%), than in any other county of the Area.

Some counties are more industrialized than others. Jackson County in 1960 was the least industrialized, with 17% of the labor force employed in manufacturing. The next lowest were Smith and Trousdale, where 19% of the labor force was so employed. The highest proportion was in Fentress and Pickett, where over 36% of the labor force was employed in manufacturing.

Manufacturing Employment by Industry Group

The distribution of area employment by manufacturing industry groups in 1950 and 1960 is presented in Table 25. The data in Tables 26 and 27 show employment by each manufacturing group for the Appalachian portion of Tennessee and for the Appalachian Region.

The area employment growth rates from 1950 to 1960 for the various industry groups ranged from nearly 42% for the machinery—except electrical—group, to 1,600% for the electrical machinery group. These percentage growth figures, however, mean very little since only 248 persons were employed in these two industry groups in the Area in 1960. Two industry groups 1) furniture, lumber, and wood products, and 2) textile mill products, had absolute declines in employment during the 1950 decade.

In 1960, the apparel and other fabricated textile products group[16] provided 52% of the total employment in the Area, or more than all other industry groups combined. This industry group also had the largest absolute increase in employment (6,985 persons) of any manufacturing group between 1950 and 1960. The growth rate was also substantial, at slightly over 400%. This industry group provided over 65% of the total employment in the manufacturing industries in 6 of the 15 counties in the Area: Cannon, De Kalb, Fentress, Overton, Pickett, and Smith. The wage rate paid by apparel manufacturers is one of the manufacturing industry's lowest, averaging only $3,122 per employee in 1960 (16, pp. 772-773).

[16]Included in this group are men's and boys' suits and coats; men's and boys' furnishings; women's and misses' outerwear; women's undergarments; millinery; hats and caps; children's outerwear; fur goods; miscellaneous apparel; and fabricated textiles not elsewhere classified.

The second largest employer—the furniture, lumber, and wood products group—had a decline in employment of nearly 1,300 during the 1950 decade. The annual wage for this group is relatively low, averaging only $3,851 in 1960 (**16**, pp. 772-773). This group includes logging, sawing, the production of millwork and prefabricated wood products, and the production of furniture and fixtures for household and commercial uses. This industry group provided the major source of employment for the civilian labor force employed in manufacturing in Scott County (60%). More than 25% of the labor force employed in manufacturing in Morgan, Clay, Cumberland, and White counties were engaged in the furniture, lumber, and wood products industries.

The remaining major groups—machinery, motor vehicles and other transportation equipment, food, textile mill products, printing and publishing, and chemicals—employed more workers in 1960 than in 1950. The large growth rates that occurred in some of these industries in the Area was the result of only small or moderate additions to a very small employment base. Nevertheless, increases in the number of jobs in these industry groups, however small, mean substantial gains in income, since their annual wage rates are relatively high. In 1960, the annual wage paid motor vehicle and other transportation equipment employees averaged $6,500, while the average for all machinery manufacture and chemicals and allied products employees was $5,683 and $6,105, respectively (**16**, pp. 772-773). These major industry groups combined employed only 25% of the labor force engaged in manufacturing in the Area.

In general, manufacturing activity is clustered in and around the larger urban centers, often referred to as industrial-complexes. No large urban center exists in the Upper Cumberland Area. This undoubtedly is an important reason why more substantial manufacturing industries have not located in the Area. Recent data indicate, however, that regional manufacturing activity increased relatively more in the smaller urban and rural areas than in the larger urban centers. Yet, the increase was slight (**3**, pp. 24-25).[17]

Trades and Services

Industries discussed in the preceding sections—agriculture, mining, construction, and manufacturing—are involved in the

[17]Employee data in the Census of Manufacturers, which reports on the basis of location of the manufacturing plant, show that the largest relative and absolute increase in employment between 1954 and 1958 occurred in counties where population of the largest city was less than 25,000. In the Upper Cumberland Area, there was no city as large as 25,000.

production of physical products. In this section employment data are presented which pertain to industries in which employees are concerned with providing services rather than producing physical goods.

Rising productivity in the goods-producing industries, combined with an increasing demand for more services, has caused a structural change in the demand for labor; that is, a shift from the physical goods-producing industries to the trade and service sectors. For the United States economy, the proportion of the civilian labor force in trade and service industries increased from 51% in 1950 to 56% in 1960 (Table 28). Employment in all trades and services in the Upper Cumberland Area increased absolutely, as well as a proportion of the labor force; the proportional increase was about the same as the national average—26%.

Employment in the trade and service industries comprised a smaller proportion of the civilian labor force in the Upper Cumberland Area in 1950 (28%) and in 1960 (36%) than in the United States. Nevertheless, the combined trade and service industries in the Upper Cumberland Area provide more employment than agriculture or the manufacturing industries.

Trade and Service Employment by Industry Group

The trade and service industries include a large number of activities, of which the main categories are:

1) Public utilities (including rail, truck and air transportation, communication systems, and utilities and sanitary systems)
2) Wholesale trade
3) Retail trade
4) Finance, insurance, and real estate
5) Professional and related services (including services provided by hospitals, educational institutions, and nonprofit organizations)
6) Public administration (including postal service, and Federal, State, and local public administration)
7) Other services (including business and repair services and entertainment and recreation services)
8) Industry not reported (nonclassifiable establishments)

The distribution of area employment by these major industry groups in 1950 and 1960 is presented in Table 29. Employment data by the same industry groups for the Appalachian portion of Tennessee and for the Appalachian Region are presented in Tables 30 and 31.

During the 1950 decade, employment increased in the Upper Cumberland Area in all the major groups except the public utilities group in which total employment declined about 7%. Employment in trades and services is concentrated in the small towns and trading centers in the Area.

Prospects for Nonfarm Employment Gains

Employment data show that employment declined in some nonagricultural industries in the Upper Cumberland Area as well as in the agricultural sector during the 1950 decade. The data show that nearly 14,000 workers were forced out of agriculture and another 500 out of mining. Net employment declines also occurred in some of the major manufacturing groups—notably, furniture, lumber, wood products, and textile mill products—while in services, employment in the public utilities declined. On the positive side, net employment gains in construction, all manufacturing, and in trades and services amounted to about 13,000. This increase was not sufficient to prevent a net decrease of nearly 1,600 in total area employment. By contrast, there was a 15% increase in employment nationally.

To estimate future nonfarm employment opportunities in the Upper Cumberland Area, past nonfarm employment trends in the Upper Cumberland Area and projected nonfarm employment levels for the United States by major industry groups provide some indication of the major industry groups most likely to provide the greatest opportunity for nonfarm employment.

In the bituminous coal industry, future gains are expected in output but not in employment. The demand for coal is expected to increase appreciably in future years and may reach 940 million tons by 1980 (20, p. 14). The industry, however, presents little opportunity for employment above the present level, even in the face of increasing demand for coal. Little if any gain is likely to occur in the United States and the Upper Cumberland Area in total mining employment by 1975 or 1980 (20, p. 18, and 20).

Manufacturing, trades and services, and construction were the industry sectors in which employment gains occurred in the 1950

decade. On the national level, employment gains will continue to occur in these industries but at varying rates. United States manufacturing employment is expected to increase about 1.4% per year between 1960 and 1975 (21). This projected increase is about one-half of 1% less than the actual United States manufacturing employment growth rate between 1950 and 1960. Based on this estimate, manufacturing employment as a percentage of total employment will tend to decline.

By 1975, total United States employment in the construction field is expected to increase 52% above the 1960 level (21 and 22). Since 1950, construction employment has remained at nearly a constant proportion of total employment. This has been true of the Upper Cumberland Area as well as in the Nation. Furthermore, based on the 1975 employment level, employment in construction will in that year comprise nearly the same proportion of total employment as in 1950.

The major increase in employment is expected to be in the service-producing industries. Between 1960 and 1975, service employment is expected to rise 44% (21). On an annual basis, this gain is only slightly greater than the 1950 to 1960 average; however, as a proportion of total employment, service-producing employment is expected to increase.

The above projections apply only to the total United States economy and no attempt is made to extrapolate these projections to the Upper Cumberland Area. Based on past developments, however, employment gains in the Upper Cumberland Area occurred in the same major industry groups in which future gains are expected on the national level. Whether the magnitude of future employment changes in the Upper Cumberland Area will be comparable to national changes will depend on the extent the Upper Cumberland Area is able to share in additions to the national product.

EFFECTS OF ECONOMIC PROBLEMS

Population Changes

The effect of insufficient job opportunities on population growth rates is quite pronounced in the Upper Cumberland Area. In 1960, the Area had a total of 191,000 inhabitants. During the preceding 10-year period, the total population of the Area decreased 9.3%. This large decrease is especially apparent when

compared with changes in other areas. In Appalachia there was a small increase in population, 1.5%, during the 1950-60 period. In Tennessee, total population increased 8.4% during the decade, which was considerably less than the national increase of 18.5% (Table 32).

Population growth rates for the various counties of the Upper Cumberland Area were by no means uniform. Only one county, Cumberland, experienced a net gain in population (1.4%). On the other hand, net population losses exceeded 10% in 9 of the 15 counties in the Area. Jackson County had a net population loss of 25.2%; Overton County, 16.5%; and Clay County, 16.2%.

Outmigration

Most of the losses in population in the Area are due to outmigration. Each county in the Area had a greater net outmigration of population from 1950 to 1960 than its actual loss of population. From the Area, a net total of nearly 46,000 persons migrated during this decade, while the total population decreased about 20,000. The natural increase in population was not enough to counteract this loss and add to the 1950 population (Table 32).

Age Composition of the Population

During 1950-59, changes occurred in the age composition of the population in the Upper Cumberland Area. The age group of most productive workers, 18 to 64 years, declined in absolute terms as did the younger group, less than 18 years. The older group, over 64 years, increased (Table 33).[18] The declines in the less than 18 years and 18 to 64 years not only reduced the size of the existing labor force but also reduced the size of the potential labor force.

Comparison of the proportion of the population in these age groups gives an indication of the relative position of the Upper Cumberland Area. Between 1950 and 1960, the proportion of the population between 18 and 64 years remained the same in the Area but decreased in Tennessee, Appalachia, and the United States. The percentage for the Upper Cumberland Area was slightly less than in Tennessee, Appalachia, or the United States. To illustrate, 52.3% of the population of the Area, 54.5% of the population of Tennessee, 54.3% of that of Appalachia, and 55% of that of the United States were in the 18 to 64 age group (Table 34).

[18]That part of the population in the 18 to 64 age group is usually considered productive, whereas that part under 18 and over 64 is considered dependent.

The Labor Force

Deficits in job opportunities had depressing effects on labor force growth rates in the Upper Cumberland Area.[19] In contrast to the small increase of only 0.6% during the 1950's in the Upper Cumberland Area and only 1.4% in Appalachia, the civilian labor force in Tennessee increased slightly over 9% and in the United States over 15% (Table 35). The slight increase in civilian labor force in the Upper Cumberland Area is significant, however, when one considers the decrease in population of over 9% in the Area during the 1950 decade. The employment of women in the manufacturing of wearing apparel and other fabricated textile products in relatively small textile plants established in the Area during the 1950's is primarily responsible for the slight increase in the civilian labor force.

Wide variation in the net change of the civilian labor force from 1950 to 1960 in the counties of the Area is noted. Although all the counties except Cumberland lost population during the 1950's, 8 of the 15 had net gains in the civilian labor force. The rate of gain was the highest in Pickett County, 14.9%, and Putnam County, 11.9%. Net losses in the civilian labor force were highest in Jackson County, 17.2%, and Morgan County, 13.2%.

Ratio of Civilian Labor Force to Civilian Population

The ratio of the civilian labor force to the civilian population is one of the general measures of the economy. The higher the ratio, the lower the proportion of the population that depends upon the labor force for support. Per capita income is therefore affected by the ratio.

Ratios of the civilian labor force to civilian population for the Upper Cumberland Area, Tennessee, Appalachia, and the United States for 1950 to 1960 are presented in Table 36. In 1950 and 1960, the ratios for the Area were smaller than for the other areas for which comparisons were made. This situation is similar to that which exists for age distribution (Table 33). The increasing proportion of people in the oldest age category adversely affects the proportion of the population in the civilian labor force.

Data in Table 36 show that the ratio of civilian labor force to total population increased in the Area from 30% to 33% dur-

[19]The civilian labor force, as identified by the Bureau of the Census, includes all persons 14-years-old and over, except members of the Armed Forces, who are presently employed or actively seeking employment. Persons included in the civilian labor force who are not employed but are actively seeking employment are listed as unemployed.

ing the 1950 decade. The ratio increased in 13 and decreased slightly in 2 of the counties in the Area. The 1960 ratio of the civilian labor force to total population ranged from 25% in Scott County to 40% in Cannon County.

In 1960, one-fourth of the civilian labor force in the Upper Cumberland Area were women compared to 30% for Appalachia, 32% for Tennessee, and 36% for the United States. During the 1950 decade, however, the number of women entering the labor force in the Upper Cumberland Area increased 80% compared to 41% for Tennessee, and 36% for the United States (17). Despite the large increase in the number of women entering the Upper Cumberland Area's civilian labor force, the ratio of women to total civilian labor force in 1960 remained below the ratio for the other areas.

Unemployment

The deficiency of job opportunities in the Upper Cumberland Area resulted in increases in unemployment in the 1950 decade despite heavy outmigration. In 1960, the Upper Cumberland Area's rate of unemployment, 5.9% of the civilian labor force, was 0.8% higher than the national average. Three counties in the Area, Fentress, Morgan, and Scott, had unemployment rates exceeding 8% in 1960 (Table 37). Severe declines in employment in agriculture and lack of sufficient job opportunities in other industries was largely responsible for these high rates.

These unemployment statistics show only the unemployed who actively look for employment. Omitted from this category are many who possess little in the way of training and skills, who grew tired of looking for jobs that were not available, and finally withdrew from the labor force. No precise estimate of the magnitude of this group is available. Another group not considered in the unemployment category consists of those who are considered underemployed. Many operators of small farms in the Upper Cumberland Area are in this category.

Income

Low income indicates the seriousness of the Upper Cumberland Area's economic and social problems. Income levels in the Upper Cumberland Area counties are below those for Tennessee and the Nation. In 1960, median family income for the Upper Cumberland Area was $2,259 compared with $3,949 for Tennessee

and $5,660 for the United States (17). Total and per capita personal income figures are presented in Tables 38 and 39.

County differences in median family income were not very large. Income levels were lowest in Jackson, Clay, and Fentress counties where median family income was less than $2,000 and highest in Putnam, Cannon, and Trousdale counties where family incomes averaged about $2,700.

DISCUSSION

Employment growth in the Upper Cumberland Area has lagged behind that of the rest of Tennessee and the United States. Income levels remain below those at the state and national level while unemployment rates exceed the state and national rate. Heavy outmigration reflects the lack of employment opportunities in the local economy. Many residents in the Area fail to share fully in the benefits derived from a growing and prosperous national economy.

The basic objective of economic growth is to raise the living levels of all the people. Realization of this objective relies upon higher levels of employment, which in part depend upon continuous improvements in education and training of the labor force and increases in capital investment. The attainment of higher levels of education and training is becoming increasingly important as technological advances frequently demand higher educational and training requirements. Training and skills of the labor force are not only major determinants in the rate of economic growth which can be achieved by an economy; for individuals, they determine job opportuntities and earning abilities.

Analysis of employment trends in the Upper Cumberland Area indicate employment gains occurred in industry groups (mostly manufacturing and service groups) where employers frequently demand of their employees a higher level of competence. Unless the prospective employee has attained, or is capable of attaining, the necessary attributes, his chances of employment in the Upper Cumberland Area or elsewhere will continue to diminish. There is an apparent need to upgrade and expand educational and training activities in the Area.[20] This is of paramount importance

[20]Assistance for adult training is presently being provided through such national programs as Manpower Development and Training and Area Redevelopment (22, p. 78). The need for the continuation and expansion of these types of programs is evident. Assistance to formal secondary education is not readily available. Yet, the secondary schools provide the educational base for all subsequent training. Except for Federal assistance to vocational education, little external aid is available to Upper Cumberland Area secondary schools.

in the rural areas where youth not only have an educational disadvantage, compared with urban youth; they are increasingly dependent on nonfarm jobs, and it is necessary to prepare them for those jobs (6). With manufacturing activity increasing in the smaller urban and rural areas, preparing to do competent work is of immense importance to rural youth.

For the most part, the availability of new jobs in the Upper Cumberland Area depends largely upon new investment in the private sector of the economy. The competition among various regions of the United States for new plants and businesses is great, however. Investors are unlikely to make investments in areas where transportation, medical, water and sanitary, and other public facilities are inadequate. These conditions often outweigh such favorable items as availability of labor, raw materials, favorable tax rates, and nearness to markets.

The need to improve the economic and social climate in the Upper Cumberland Area is apparent. Various agencies cognizant of this need have developed plans to spend significant quantities of resources in an attempt to improve the Upper Cumberland Area's resources and promote economic and social growth. Often, these agencies must develop and implement programs with only minimum knowledge of the details of the structure of the economy of the Area and the interdependencies among the development of resources and economic growth among local economies in the Area and between the Area, Tennessee, and the United States. Such groups need more adequate information on 1) the types of educational programs and facilities needed to educate and train the population adequately; 2) the types of economic activity, and their location, that have the best potential for increasing employment and income; and 3) the interrelationships among the development of resources, including labor among the local economies and between the Area, Tennessee, and the United States.

LITERATURE CITED

(1) Badenhop, M. B.
1966. Quality of Housing in the Upper Cumberland Area of Tennessee, Tennessee Farm and Home Science, Progress Report 57. University of Tennessee Agricultural Experiment Station, Knoxville, Tennessee.

(2) Campbell, John C.
1921. The Southern Highlander and His Homestead, Russel Sage Foundation, New York.

(3) Coltraine, R. I. and Baum, E. L.
1965. An Economic Survey of the Appalachian Region, with Special Reference to Agriculture. U. S. Department of Agriculture, Agricultural Economics Report 69. Washington, D. C.

(4) Cowhig, James D.
1962. Farm Operator Level-of-Living Indexes, 1950 and 1959. U. S. Department of Agriculture Statis. Bul. 321. Washington, D. C.

(5) Leuthold, Frank O.
1966. Population Changes in Tennessee Since 1930. Agricultural Experiment Station Bulletin 403. University of Tennessee, Knoxville, Tennessee.

(6) Moore, E. J., Baum, E. L., and Glasgow, R. B.
1964. Economic Factors Influencing Educational Attainments and Aspirations of Farm Youth. U. S. Department of Agriculture, Agricultural Economics Report 51. Washington, D. C.

(7) Pavlick, Anthony L., and Coltrane, Robert I.
1964. Quality of Rural and Urban Housing in the Appalachian Region. U. S. Department of Agriculture, Agricultural Economics Report 52. Washington, D. C.

(8) President's Appalachian Regional Commission
1964. Appalachia. A Report by the President's Appalachian Regional Commission, Washington, D. C.

(9) State of Tennessee, Department of Agriculture
1966. Tennessee Crop Reporting Service, Annual Summary, 1966, and Selected Releases, Nashville, Tennessee.

(10) The Tennessee Conservation Needs Committee
Undated. Tennessee Soil and Water Conservation Needs Inventory, Tennessee State Soil Conservation Service, Nashville, Tennessee.

(11) U. S. Department of Agriculture
1966. Agricultural Statistics 1965, Washington, D. C.

(12) ———
1962. Basic Statistics of the National Inventory of Soil and Water Conservation Needs. Statis. Bul. 317. Washington, D. C.

(13) ———
1935. Economic and Social Problems of the Southern Appalachians. U. S. Forest Service, Bureau of Agricultural Economics, Bureau of Home Economics, Misc. Pub. No. 205. Washington, D. C.

(14) U. S. Department of Commerce, Bureau of the Census
1962. Current Population Reports. Series P-23, No. 7, Components of Population Change, 1950 and 1960, for counties, Standard Metropolitan Statistical Areas, State Economic Areas, and Economic Subregions. Washington, D. C.

(15) ———
1952-56-61-66. U. S. Census of Agriculture: 1950, 1954, and 1959. Vol. 1, Counties, and 1964 (Preliminary Report), Counties. Washington, D. C.

(16) ———
1964. Statistical Abstract of the United States, 1964. Washington, D. C.

(17) ———————————
1952-61. U. S. Census of Population: 1950 and 1960. Washington, D. C.

(18) U. S. Department of the Interior, Bureau of Mines
1960. Minerals Yearbook. Vol. III. Washington, D. C.

(19) ———————————
1963. Minerals Yearbook. Vol. III. Washington, D. C.

(20) U. S. Department of Labor
1963. Bituminous Coal Mining. Industry Manpower Surveys, No. 106. Washington, D. C.

(21) ———————————
1964. Manpower Report of the President and a Report on Manpower Requirements, Resources, Utilization, and Training. Washington, D. C.

(22) ———————————
1966. Manpower Report of the President and a Report on Manpower Requirements, Resources, Utilization, and Training. Washington, D. C.

APPENDIX

Table 1. Percentage distribution of the population in the Upper Cumberland Area classified as urban, rural nonfarm, and rural farm, by counties, Tennessee, Appalachia, and United States, 1950 to 1960

County area	Urban		Rural nonfarm		Rural farm	
	1950	1960	1950	1960	1950	1960
			Percent			
Cannon	—	—	27.0	51.1	73.0	48.9
Clay	—	—	29.3	43.3	70.7	56.7
Cumberland	—	24.4	46.4	50.7	53.6	24.9
De Kalb	—	—	34.9	54.5	65.1	45.5
Fentress	—	—	38.9	74.9	61.1	25.1
Jackson	—	—	18.2	37.3	81.8	62.7
Macon	—	—	27.3	39.1	72.7	60.9
Morgan	—	—	49.2	86.4	50.8	13.6
Overton	—	19.2	30.5	44.2	69.5	36.6
Pickett	—	—	18.9	37.4	81.1	62.6
Putnam	23.2	26.7	34.8	50.6	42.0	22.7
Scott	—	—	54.6	90.2	45.4	9.8
Smith	—	—	30.2	43.2	69.8	56.8
Trousdale	—	—	35.2	44.1	64.8	55.9
White	26.5	28.9	21.4	34.4	52.1	36.6
Upper Cumberland Area	5.3	10.4	34.8	54.0	59.9	35.6
Tennessee	44.1	52.3	25.0	31.3	30.9	16.4
Total Appalachia	45.6	49.1	33.2	41.9	21.2	9.0
United States	64.0	69.9	20.7	22.6	15.3	7.5

Source: (17).

Table 2. Percentage change in the urban, rural nonfarm, and rural farm population in the Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1950 and 1960

County area	Urban	Rural nonfarm	Rural farm
	Percent		
Cannon	0	+ 6.1	−37.6
Clay	0	+ 9.5	−32.8
Cumberland	+100	+18.0	−53.0
De Kalb	0	+41.4	−35.6
Fentress	0	+11.9	−63.3
Jackson	0	+10.5	−42.7
Macon	0	+28.3	−24.8
Morgan	0	+11.2	−75.6
Overton	+100	+ 7.0	−56.0
Pickett	0	+72.6	−32.9
Putnam	+ 12.7	+42.3	−47.2
Scott	0	+46.7	−80.9
Smith	0	+22.4	−30.4
Trousdale	0	+11.4	−23.1
White	+ 4.9	+54.4	−32.3
Upper Cumberland Area	+ 76.4	+40.9	−46.1
Tennessee	+ 28.7	+35.8	−42.2
Total Appalachia	+ 9.2	+28.1	−56.7
United States	+ 29.9	+30.2	−42.7

Source: (17).

Table 3. Inventory acreage by land-capability class, Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1958

County area	Inventory acreage[1]	Class I-III		Class IV		Class V-VIII	
		Area	Share	Area	Share	Area	Share
	1,000 acres	1,000 acres	Percent	1,000 acres	Percent	1,000 acres	Percent
Cannon	167.3	66.1	39.5	13.4	8.0	87.8	52.5
Clay	138.2	33.1	23.9	24.0	17.4	81.1	58.7
Cumberland	420.4	126.0	30.0	29.0	6.9	265.4	63.1
De Kalb	160.0	52.5	32.8	22.7	14.2	84.8	53.0
Fentress	307.4	133.1	43.3	6.7	2.2	167.6	54.5
Jackson	204.2	44.3	21.7	16.4	8.0	143.5	70.3
Macon	181.8	90.8	49.9	13.6	7.5	77.4	42.6
Morgan	343.3	90.3	26.3	8.2	2.4	244.8	71.3
Overton	270.6	69.8	25.8	46.9	17.3	153.9	56.9
Pickett	96.0	19.1	19.9	10.1	10.5	66.8	69.6
Putnam	234.3	103.3	44.1	38.9	16.6	92.1	39.3
Scott	338.6	74.4	22.0	2.8	.8	261.4	77.2
Smith	198.7	59.2	29.8	23.2	11.7	116.3	58.5
Trousdale	69.3	26.5	38.2	7.5	10.8	35.3	51.0
White	236.8	86.3	36.4	37.1	15.7	113.4	47.9
Upper Cumberland Area	3,366.9	1,074.8	31.9	300.5	8.9	1,991.6	59.2
Tennessee	24,197.6	10,837.7	44.8	3,961.5	16.4	9,398.4	38.8
Total Appalachia	87,888.0	27,035.0	30.8	11,880.0	13.5	48,973.0	55.7
United States	1,452,873.0	638,009.0	43.9	169,181.0	11.6	645,683.0	44.4

[1]Inventory acreage does not correspond to land in farms.

Source: (10 and 12).

Table 4. Land in farms, proportion of total land area in farms, the average size of farm, Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1950, 1959, and 1964

County area	Land in farms		Percentage of total land area		Percentage change land in farms		Average size of farm		
	1959	1964	1959	1964	1950-1959	1959-1964	1950	1959	1964
	1,000 acres		Percent				Acres		
Cannon	143.4	135.3	82.7	78.0	−14.4	− 5.6	99.1	116.5	131.7
Clay	107.6	107.4	71.6	72.3	− 8.8	− 2.5	89.9	111.2	115.6
Cumberland	118.5	119.1	27.3	27.4	− 9.1	− 4.5	83.3	93.8	121.3
De Kalb	142.5	134.6	80.7	75.7	−10.6	− 5.5	81.0	94.5	109.0
Fentress	105.8	123.6	33.2	38.7	+ .6	+ 1.7	67.1	103.9	133.5
Jackson	162.9	157.2	77.8	76.0	−12.2	− 3.5	80.4	105.1	104.5
Macon	170.4	164.2	87.6	84.4	− 6.6	− 3.6	69.7	88.1	88.1
Morgan	78.3	69.2	22.7	20.1	− 7.7	−11.5	76.0	102.2	123.9
Overton	162.9	145.0	58.0	51.4	−12.6	−11.0	74.8	97.2	120.1
Pickett	57.0	50.8	56.7	50.2	− 4.0	−11.0	69.0	80.1	90.7
Putnam	170.5	163.4	65.6	63.0	−13.1	− 4.2	69.4	85.4	87.4
Scott	59.8	70.1	17.0	20.1	− 5.3	+17.2	58.8	84.4	163.9
Smith	199.5	190.1	95.9	92.0	− 1.2	− 4.7	75.1	95.4	109.1
Trousdale	64.5	65.0	89.1	89.0	− 7.2	+ 7.0	71.9	99.5	94.1
White	158.3	173.0	64.6	70.8	− 3.1	+ 9.2	82.0	97.5	116.9
Upper Cumberland Area[1]	1,901.9	1,860.0	56.5	52.9	− 8.0	− 2.2	76.5	97.0	112.5
Tennessee	16,081.3	15,266.2	60.2	57.7	− 9.1	− 5.1	80.0	102.0	114.4
Total Appalachia[2]	42,958.0	—	43.6	—	−21.8	—	82.5	105.6	—
United States	1,123,508.0	1,110,096.5	49.5	48.7	− 3.3	− 1.1	215.3	302.4	351.5

[1]Because of rounding, some totals may not equal the sum of the items listed.

[2]Data for 1964 not available at time of report.

Source: (15).

Table 5. Change in number of farms in the Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1950 to 1964

County area	Number of farms			Percentage change	
	1950	1959	1964	1950-1959	1959-1964
				Percent	
Cannon	1,700	1,230	1,028	−27.6	−16.4
Clay	1,345	968	929	−28.0	− 4.1
Cumberland	1,898	1,264	982	−33.4	−22.3
De Kalb	1,992	1,507	1,235	−24.3	−18.0
Fentress	1,549	1,018	926	−34.3	− 9.0
Jackson	2,343	1,549	1,505	−33.9	− 2.8
Macon	2,629	1,934	1,759	−26.4	− 9.0
Morgan	1,380	766	559	−44.5	−27.0
Overton	2,650	1,676	1,207	−36.8	−28.0
Pickett	884	712	560	−19.5	−21.3
Putnam	2,944	1,997	1,870	−32.2	− 6.4
Scott	1,336	709	428	−46.9	−39.6
Smith	2,690	2,092	1,742	−22.2	−16.7
Trousdale	969	648	690	−33.1	+ 6.5
White	2,024	1,624	1,479	−19.8	− 8.9
Upper Cumberland Area[1]	28,333	19,694	16,899	−30.5	−14.2
Tennessee	231,631	157,688	133,445	−31.9	−15.4
Total Appalachia[2]	—	406,900	—	−38.8	—
United States	5,382,162	3,703,600	3,157,864	−31.2	−14.7

[1]Because of rounding, some totals may not equal the sum of the items listed.
[2]Data for 1964 not available at time of report.
Source: (15).

Table 6. Harvested cropland as a percentage of total farmland in the Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1950, 1959, and 1964

County area	1950		1959		1964	
	Area	Share of total farm land	Area	Share of total farm land	Area	Share of total farm land
	1,000 acres	Percent	1,000 acres	Percent	1,000 acres	Percent
Cannon	34.3	20.4	22.4	15.6	18.0	13.3
Clay	31.8	26.3	19.7	18.3	13.9	13.0
Cumberland	28.2	17.8	22.2	18.7	21.0	17.6
De Kalb	40.1	24.9	28.6	20.1	22.3	16.6
Fentress	23.4	22.5	17.8	16.8	19.0	15.4
Jackson	41.2	21.9	29.0	17.8	17.0	10.8
Macon	51.0	27.8	37.6	22.1	29.8	18.1
Morgan	18.2	17.3	12.1	15.5	9.1	13.1
Overton	48.9	24.7	29.0	17.8	19.2	13.3
Pickett	15.4	25.2	10.5	18.4	7.4	14.6
Putnam	49.4	24.2	32.1	18.8	23.3	14.2
Scott	13.7	17.5	7.7	12.9	5.6	8.0
Smith	54.3	26.9	37.8	18.9	27.0	14.2
Trousdale	23.0	33.0	14.6	22.6	11.5	17.8
White	51.2	30.9	37.0	23.4	31.3	18.1
Upper Cumberland Area[1]	524.1	24.2	358.1	18.8	275.4	14.8
Tennessee	5,575.1	30.1	4,116.4	25.6	3,618.0	23.7
Total Appalachia[2]	13,691.0	24.9	9,640.0	22.4	—	—
United States	344,546.0	29.7	311,476.1	27.7	286,885.3	25.8

[1]Because of rounding, some totals may not equal the sum of the items listed.
[2]Data for 1964 not available at time of report.
Source: (15).

Table 7. Employment in agriculture in the Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1950 and 1960

County area	1950		1960		Change in employment, 1950 to 1960	
	Number employed	Share of civilian labor force	Number employed	Share of civilian labor force	Amount	Rate
		Percent		Percent		Percent
Cannon	1,696	51.8	882	25.7	− 814	−48.0
Clay	1,514	60.5	1,010	41.8	− 504	−33.3
Cumberland	1,621	30.1	732	13.4	− 889	−54.8
De Kalb	2,276	57.0	1,143	27.0	− 1,133	−49.8
Fentress	1,497	41.0	543	15.0	− 954	−63.7
Jackson	2,502	66.2	1,385	44.3	− 1,117	−44.6
Macon	2,641	60.5	1,842	38.5	− 799	−30.3
Morgan	1,014	24.4	295	8.2	− 719	−70.9
Overton	2,871	53.1	1,108	22.0	− 1,763	−61.4
Pickett	847	62.2	411	26.3	− 436	− 51.5
Putnam	2,631	28.2	1,246	11.9	− 1,385	−52.6
Scott	839	19.3	201	5.3	− 638	−76.0
Smith	2,813	61.5	1,612	36.1	− 1,201	−42.7
Trousdale	1,046	55.8	685	35.3	− 361	−34.5
White	2,112	41.4	1,061	19.3	− 1,051	−49.8
Upper Cumberland Area	27,920	44.3	14,156	22.3	−13,764	−50.4
	(1,000)		(1,000)		(1,000)	
Tennessee	247.4	20.9	131.4	10.2	− 116.0	−46.9
Total Appalachia	644.2	12.3	309.3	5.8	− 334.9	−52.0
United States	7,005.4	11.9	4,349.9	6.4	− 2,655.5	−37.9

Source: (17).

Table 8. Value of investment in land and buildings, per farm, all farms and commercial farms, by counties, Tennessee, Appalachia, and United States, 1950, 1959, and 1964[1]

County area	All farms			Commercial farms[2]	
	1950	1959	1964	1950	1959
			Dollars		
Cannon	5,212	7,892	12,100	6,386	11,482
Clay	4,273	7,323	13,430	5,833	9,498
Cumberland	3,613	6,888	16,250	6,671	10,666
De Kalb	4,874	8,632	16,106	5,916	8,773
Fentress	3,083	6,452	10,987	4,868	13,397
Jackson	4,928	8,741	15,677	6,595	10,709
Macon	3,917	7,432	11,865	4,246	8,505
Morgan	3,310	7,135	12,806	5,053	11,134
Overton	3,082	6,988	11,804	4,238	9,220
Pickett	3,462	7,104	12,342	4,172	8,428
Putnam	4,693	10,349	14,334	5,713	14,353
Scott	2,755	7,519	16,198	6,662	9,061
Smith	7,028	11,614	17,144	7,847	13,856
Trousdale	7,001	11,517	16,084	7,524	13,510
White	5,992	11,557	16,555	7,601	17,259
Upper Cumberland Area	4,482	8,476	14,245	5,955	11,323
Tennessee	6,154	12,488	21,088	7,544	16,475
Total Appalachia[3]	5,978	12,032	—	7,736	16,416
United States	13,911	33,173	51,394	17,696	44,439

[1]Value has not been adjusted for price changes.
[2]1964 Data not available for commercial farms.
[3]Data for 1964 not available at time of report.
Source: (15).

Table 9. Value of farm products sold, Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1950, 1959, and 1964

County area	Total value[1]			Change		Average value per farm		
	1950	1959	1964	1950-1959	1959-1964	1950	1959	1964
		1,000 dollars		Percent			Dollars	
Cannon	1,961.7	2,404.5	2,061.4	+ 22.6	−14.3	1,154	1,986	2,005
Clay	1,304.3	1,912.1	2,225.7	+ 46.6	+16.4	970	1,981	2,396
Cumberland	1,118.1	2,356.6	2,843.0	+110.8	+20.6	589	1,861	2,895
De Kalb	2,027.2	3,123.6	3,438.8	+ 54.1	+10.1	1,018	2,080	2,784
Fentress	720.9	3,581.1	4,769.8	+396.8	+33.2	465	3,427	5,151
Jackson	2,385.1	3,006.4	2,879.2	+ 26.0	− 4.2	1,018	2,004	1,913
Macon	2,835.7	4,071.0	4,848.7	+ 43.6	+19.1	1,079	2,102	2,757
Morgan	534.0	957.3	1,233.8	+ 79.3	+28.9	387	1,310	2,207
Overton	1,367.7	2,656.6	2,170.6	+ 94.2	−18.3	516	1,590	1,798
Pickett	627.7	1,166.6	1,172.6	+ 85.9	+ .47	710	1,594	2,093
Putnam	2,236.6	3,126.3	3,209.9	+ 39.8	+ 2.7	760	1,537	1,717
Scott	289.4	1,813.5	2,290.3	+526.6	+26.3	217	2,602	5,351
Smith	4,703.3	5,180.0	6,292.9	+ 10.1	+21.5	1,748	2,527	3,612
Trousdale	1,720.5	2,224.9	2,722.0	+ 29.3	+22.3	1,776	3,346	3,945
White	2,139.1	3,435.2	4,175.3	+ 60.6	+21.5	1,057	2,223	2,823
Upper Cumberland Area[2]	25,971.3	41,015.7	46,333 6	+ 57.9	+11.5	898	2,145	2,896
Tennessee	340,542	474,557	529,448	+ 39.4	+11.6	1,407	3,009	3,968
Total Appalachia[3]	902,627	1,355,142	—	+ 50.1	—	1,357	3,330	—
United States	22,217,256	30,492,721	35,305,964	+ 38.3	+13.6	4,123	8,218	11,180

[1]Value has not been adjusted for price changes.
[2]Because of rounding, some totals may not equal the sum of the items listed.
[3]Data for 1964 not available at time of report.
Source: (15).

Table 10. Farm operator level-of-living indexes, Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1950 and 1959[1]
(U.S. county average in 1950 = 59; 1959 = 100)

County area	1950	1959
Cannon	31	60
Clay	18	50
Cumberland	19	53
De Kalb	25	59
Fentress	14	51
Jackson	25	54
Macon	31	63
Morgan	18	59
Overton	16	48
Pickett	12	46
Putnam	22	55
Scott	21	62
Smith	43	71
Trousdale	47	87
White	27	65
Upper Cumberland Area	25	59
Tennessee	29	71
Total Appalachia	34	72
United States	59	100

[1]Indexes for areas are averages of county indexes, unweighted for differences in the number of farms within counties.
Source: (4).

Table 11. Off-farm employment and farm families with other income greater than the value of farm products sold, all farms, commercial farms, Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1950, 1959, and 1964

County area	All farms					Commercial farms[1]			
	Percentage working off-farm 100 days or more			Percentage with income greater than the value of farm products sold[1]		Percentage working off-farm 100 days or more		Percentage with income greater than the value of farm products sold	
	1950	1959	1964	1950	1959	1950	1959	1950	1959
					Percent				
Cannon	22.2	35.4	38.8	37.8	60.3	7.0	13.8	8.8	19.0
Clay	17.2	23.4	24.6	30.8	42.0	4.1	13.7	5.2	10.8
Cumberland	42.0	47.4	47.7	61.8	70.2	9.4	21.9	12.6	23.6
De Kalb	15.2	27.6	31.2	31.9	51.1	4.3	5.9	5.6	13.2
Fentress	35.4	39.3	38.3	63.2	67.8	10.1	30.5	11.3	32.9
Jackson	18.6	21.7	25.6	34.1	38.6	6.9	6.2	8.5	6.9
Macon	14.8	19.4	22.1	23.1	31.6	2.9	5.3	5.8	7.0
Morgan	44.8	45.7	44.2	71.4	69.4	7.6	15.6	10.3	16.1
Overton	24.9	30.2	33.6	45.3	52.3	5.9	11.2	8.0	15.1
Pickett	24.2	31.8	29.8	34.4	53.3	7.7	11.3	6.0	14.5
Putnam	27.0	31.1	29.2	45.7	53.4	5.8	8.2	10.1	12.9
Scott	44.1	47.3	54.9	80.5	72.0	14.6	33.2	15.7	33.2
Smith	12.1	19.5	22.9	19.6	26.5	4.5	7.0	7.1	7.0
Trousdale	14.4	17.1	24.2	14.4	20.5	7.1	11.5	6.1	12.5
White	20.4	34.0	38.7	32.9	58.6	6.5	13.1	7.3	15.1
Upper Cumberland Area	24.1	29.9	32.8	40.6	49.3	5.7	10.9	7.6	13.0
Tennessee	22.5	32.0	35.2	15.4	43.2	6.4	12.2	9.3	12.6
Total Appalachia[2]	32.1	37.5	—	44.1	51.2	9.0	14.9	12.2	15.3
United States	23.9	29.9	32.1	29.1	35.8	9.3	14.5	9.1	12.5

[1]Data for 1964 not available in preliminary census reports.
[2]Data for 1964 not available at time of report.
Source: (15).

Table 12. Income of all members of farm operator families from sources other than farm operated, Upper Cumberland Area, by counties, Tennessee, and United States, 1964

County area	Total farm operators	All sources of income		Wages and salaries		Nonfarm business or professional practice		Social security, pensions, veterans, and welfare payments		Rent from farm and nonfarm property interest, dividends, etc.	
		Percent of total farm operators	Dollars per household	Percent of total farm operators	Dollars per household	Percent of total farm operators	Dollars per household	Percent of total farm operators	Dollars per household	Percent of total farm operators	Dollars per household
Cannon	1,028	80.6	7,782	57.5	4,077	10.6	2,218	29.7	858	19.4	577
Clay	929	85.0	1,974	59.0	1,970	8.8	2,022	32.3	719	27.4	386
Cumberland	982	88.4	3,254	66.8	2,998	10.4	4,303	29.7	1,055	17.3	651
De Kalb	1,235	88.0	2,786	61.1	2,678	10.6	2,117	38.1	889	32.7	772
Fentress	926	88.6	3,002	61.1	3,096	10.5	2,590	36.3	1,180	17.5	382
Jackson	1,505	87.6	2,405	53.2	2,523	10.9	2,252	36.8	1,039	20.7	481
Macon	1,759	83.2	2,073	53.4	2,172	8.6	1,935	27.9	719	29.6	665
Morgan	559	92.3	3,789	71.2	3,671	8.4	5,007	29.3	1,287	22.0	328
Overton	1,207	86.9	2,805	61.3	2,852	9.4	2,892	37.6	756	19.6	677
Pickett	560	82.7	2,370	56.1	2,501	6.6	1,919	32.0	890	28.8	509
Putnam	1,870	89.3	2,866	54.4	3,158	11.5	3,071	35.6	928	26.1	609
Scott	428	93.5	3,742	63.1	3,174	21.7	3,851	38.6	1,374	20.3	631
Smith	1,742	82.4	2,258	52.5	2,375	9.1	2,503	30.9	787	26.6	538
Trousdale	690	83.6	3,485	55.2	2,474	6.8	4,675	26.4	1,188	35.1	2,612
White	1,479	86.1	3,250	59.7	3,428	10.0	3,431	30.0	984	19.1	583
Upper Cumberland Area	16,899	86.2	3,286	57.8	2,876	10.0	2,986	32.8	977	24.8	693
Tennessee	133,445	83.3	3,421	57.5	3,530	9.8	3,530	30.0	920	24.5	949
United States	3,157,864	81.2	3,923	54.1	3,778	9.5	3,721	24.8	1,072	33.0	1,541

Source: (15).

Table 13. Educational levels of persons in farm-operated households 25 years old and over for the Upper Cumberland Area, by counties, Tennessee, and United States, 1964

County area	Persons 25 years old and over	Percent completed		
		Less than 5 years schooling	4 years of high school or more	4 years of college or more
Cannon	2,034	13.2	23.1	2.2
Clay	1,887	14.8	18.6	5.5
Cumberland	2,035	13.3	17.2	4.7
De Kalb	2,510	15.1	15.2	2.5
Fentress	1,913	21.7	17.1	3.6
Jackson	3,056	15.1	15.7	3.6
Macon	3,583	21.6	10.5	1.3
Morgan	1,189	12.7	25.9	5.3
Overton	2,521	16.1	15.7	2.3
Pickett	1,158	11.1	14.4	2.4
Putnam	3,690	10.4	17.5	4.3
Scott	885	21.4	21.5	4.3
Smith	3,411	12.1	17.6	2.0
Trousdale	1,284	17.9	28.3	2.9
White	3,010	12.0	22.7	5.2
Upper Cumberland Area	34,166	15.0	17.8	3.3
Tennessee	272,984	12.9	24.7	3.6
United States	6,389,443	6.1	28.4	4.8

Source: (15).

Table 14. Number and percentage of commercial farms, and of commercial and noncommercial farms according to value of sales, Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1950, 1959, and 1964

County area	Total commercial farms					
	1950		1959		1964	
	Number of farms	Percentage of all farms	Number of farms	Percentage of all farms	Number of farms	Percentage of all farms
		Percent		Percent		Percent
Cannon	978	57.5	506	41.8	491	47.8
Clay	736	54.7	520	53.9	609	65.6
Cumberland	414	21.8	351	27.7	413	42.1
De Kalb	1,188	59.6	682	45.4	731	59.2
Fentress	327	21.1	331	31.7	482	52.1
Jackson	1,299	55.4	885	59.0	889	59.1
Macon	1,860	70.7	1,221	63.0	1,209	68.7
Morgan	184	13.3	205	28.0	229	41.0
Overton	897	33.8	689	41.2	625	51.8
Pickett	415	46.9	311	42.5	324	57.9
Putnam	1,272	43.2	759	37.3	873	46.7
Scott	89	6.7	235	33.7	202	47.2
Smith	2,093	77.8	1,280	62.4	1,179	67.7
Trousdale	805	83.1	480	72.2	448	65.0
White	1,089	53.8	635	41.1	766	51.8
Upper Cumberland Area	13,646	48.2	9,090	46.5	9,470	56.0
	(1,000)		(1,000)		(1,000)	
Tennessee	138.2	59.7	82.6	52.4	76.4	57.2
Total Appalachia[1]	303.8	45.7	184.8	45.4	—	—
United States	3,706.4	68.9	2,416.0	65.2	2,165.7	68.6

See footnotes at end of table.

—Continued

Table 14. (Continued)

County area	Commercial farms with value of sales											
	Greater than $10,000[2]						From $5,000-$9,999[3]					
	1950		1959		1964		1950		1959		1964	
	Farms	Percentage[4]	Farms	Percentage[4]	Farms	Percentage[4]	Farms	Percentage[4]	Farms	Percentage[4]	Farms	Percentage[4]
Cannon	5	0.5	16	3.2	29	5.9	27	2.8	70	13.8	50	10.2
Clay	5	0.7	22	4.2	28	4.6	33	4.5	41	7.9	66	10.8
Cumberland	4	1.0	52	14.8	69	16.7	21	5.1	26	7.4	45	10.9
De Kalb	1	0.1	11	1.6	48	6.6	40	3.4	71	10.4	111	15.2
Fentress	1	0.3	101	30.5	130	27.0	15	4.6	72	21.8	50	10.4
Jackson	11	0.8	38	4.3	22	2.5	13	1.0	72	8.1	91	10.2
Macon	5	0.3	20	1.6	37	3.1	6	0.3	121	9.9	199	16.5
Morgan	—	0	21	10.2	35	15.3	22	12.0	27	13.2	23	10.0
Overton	9	1.0	39	5.7	35	5.6	10	1.1	46	6.7	47	7.5
Pickett	5	1.2	16	5.1	18	5.6	—	0	25	8.0	25	7.7
Putnam	16	1.3	17	2.2	39	4.5	25	2.0	86	11.3	78	8.9
Scott	2	2.2	94	40.0	76	37.6	—	0	35	14.9	30	14.9
Smith	40	1.9	25	2.0	88	7.5	102	4.9	210	16.4	284	24.1
Trousdale	1	0.1	20	4.2	46	9.4	28	3.5	110	22.9	120	24.6
White	25	2.3	45	7.1	73	9.5	75	6.9	100	15.7	133	17.4
Upper Cumberland Area	130	1.0	537	5.9	773	8.1	417	3.1	1,112	12.2	1,352	14.2
	(1,000)		(1,000)		(1,000)		(1,000)		(1,000)		(1,000)	
Tennessee	3.6	2.6	8.1	9.8	10.7	14.0	8.1	5.9	14.8	17.9	13.8	18.1
Total Appalachia[1]	12.2	4.0	31.5	17.1	—	—	27.2	9.0	35.8	19.3	—	—
United States	484.4	13.1	795.5	32.9	868,905	40.1	721.2	19.5	653.9	27.1	504,625	23.3

See footnotes at end of table.

—Continued

Table 14. (Continued)

County area	Commercial farms with value of sales											
	From $2,500 to $4,999[5]						Less than $2,500[6]					
	1950		1959		1964		1950		1959		1964	
	Farms	Percentage[4]	Farms	Percentage[4]	Farms	Percentage[4]	Farms	Percentage[4]	Farms	Percentage[4]	Farms	Percentage[4]
Cannon	177	18.1	195	38.5	157	32.0	769	78.6	225	44.5	255	52.0
Clay	32	4.3	197	37.9	189	31.0	666	90.5	260	50.0	326	53.5
Cumberland	31	7.5	103	29.3	88	21.3	358	86.5	170	48.4	211	51.1
De Kalb	155	13.0	240	35.2	249	34.1	992	83.5	360	52.8	323	44.2
Fentress	25	7.6	58	17.5	70	14.5	286	87.5	100	30.2	232	48.1
Jackson	162	12.5	270	30.5	255	28.7	1,113	85.7	505	57.1	521	58.6
Macon	142	7.6	450	36.9	528	43.7	1,707	91.8	630	51.6	445	37.8
Morgan	9	4.9	47	22.9	33	14.4	153	83.2	110	53.7	138	60.3
Overton	58	6.5	164	23.8	122	19.5	820	91.4	440	63.9	421	67.4
Pickett	30	7.2	75	24.1	67	20.7	380	91.6	195	62.7	214	66.0
Putnam	76	6.0	236	31.1	237	27.1	1,155	90.8	420	55.3	519	59.5
Scott	10	11.2	1	0.4	23	11.4	77	86.5	105	44.7	73	36.1
Smith	450	21.5	585	45.7	471	39.9	1,501	71.7	460	35.9	336	28.5
Trousdale	223	27.7	210	43.8	212	43.4	553	68.7	140	29.2	110	22.5
White	132	12.1	200	31.5	222	29.0	857	78.7	290	45.7	338	44.1
Upper Cumberland Area	1,712	12.5	3,031	33.3	2,923	30.7	11,387	83.4	4,410	48.5	4,462	46.9
	(1,000)		(1,000)		(1,000)		(1,000)		(1,000)		(1,000)	
Tennessee	23.0	16.7	30.1	36.4	23.4	30.6	103.5	74.9	29.6	35.8	28.5	37.3
Total Appalachia[1]	50.5	16.7	53.3	28.8			212.8	70.3	64.3	34.8		
United States	882.3	23.8	617.7	25.6	443,928	20.5	1,618.5	43.7	349.0	14.4	348,269	16.0

See footnotes at end of table.

—Continued

Table 14. (Continued)

County area	Noncommercial farms											
	Part-time farms						Other farms[7]					
	1950		1959		1964		1950		1959		1964	
	Farms	Percentage[4]	Farms	Percentage[4]	Farms	Percentage[4]	Farms	Percentage[4]	Farms	Percentage[4]	Farms	Percentage[4]
Cannon	289	17.0	495	40.9	327	31.8	433	25.5	210	17.3	210	20.4
Clay	252	18.7	310	32.1	169	18.2	357	26.5	135	14.0	151	16.3
Cumberland	412	21.7	685	54.1	400	40.7	1,072	56.5	230	18.2	169	17.2
De Kalb	363	18.2	520	34.6	305	24.7	441	22.1	300	20.0	199	16.1
Fentress	348	22.5	553	52.9	282	30.5	874	56.4	161	15.4	162	17.5
Jackson	402	17.2	330	22.0	323	21.5	642	27.4	285	19.0	293	19.5
Macon	347	13.2	416	21.5	285	16.2	422	16.1	300	15.5	265	15.1
Morgan	247	17.9	395	54.0	210	37.6	949	68.8	131	17.9	120	21.5
Overton	468	17.7	687	41.1	341	28.3	1,285	48.5	295	17.7	241	20.0
Pickett	206	23.3	245	33.5	138	24.6	263	29.8	176	24.0	98	17.5
Putnam	569	19.3	905	44.5	624	33.4	1,103	37.5	370	18.2	373	20.0
Scott	167	12.5	357	51.2	159	37.1	1,080	80.8	105	15.1	67	15.7
Smith	321	11.9	410	20.0	270	15.5	276	10.3	360	17.6	293	16.8
Trousdale	107	11.0	110	16.5	93	13.5	57	5.9	75	11.3	109	15.8
White	367	18.1	640	41.4	443	30.0	568	28.1	270	17.5	270	18.3
Upper Cumberland Area	4,865	17.2	7,058	36.1	4,369	25.8	9,822	34.7	3,403	17.4	3,020	17.9
	(1,000)		(1,000)		(1,000)		(1,000)		(1,000)		(1,000)	
Tennessee	35.3	15.3	50.6	32.1	35.7	26.7	58.1	25.1	24.4	15.5	21.4	16.1
Total Appalachia[1]	110.3	16.6	154.6	38.0	—	—	251.1	37.7	67.1	16.5	—	—
United States	639.2	11.9	884.8	23.9	639,404	20.2	1,033.6	19.2	407.2	11.0	352,733	11.0

[1]Data for 1964 not available at time of report.
[2]Economic Class I and II farms in 1950, Class I, II and III farms in 1959.
[3]Economic Class III farms in 1950, Class IV farms in 1959.
[4]Percentage of all commercial farms.
[5]Economic Class IV farms in 1950, Class V farms in 1959.
[6]Economic Class V and VI farms in 1950, Class VI farms in 1959.
[7]Other farms include residential, part-retirement, and abnormal farms.
Source: (15).

Table 15. Value of livestock and livestock products sold, Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1950, 1959, and 1964

County area	Total value of livestock and livestock products[1]			Percentage change		Value share of all farm products derived from livestock		
	1950	1959	1964	1950-59	1959-64	1950	1959	1964
	1,000 dollars					Percent		
Cannon	1,580.4	1,965.0	1,567.8	+ 24.3	−20.2	80.6	81.7	76.1
Clay	781.9	970.3	1,108.4	+ 24.1	+14.2	59.9	50.7	49.8
Cumberland	654.7	1,499.8	1,731.3	+129.1	+15.4	58.6	63.6	60.9
De Kalb	1,211.8	1,741.9	1,802.6	+ 43.7	+34.8	59.8	55.8	52.4
Fentress	459.0	2,785.6	3,708.9	+506.8	+33.1	63.7	77.8	77.8
Jackson	1,487.7	1,765.4	1,390.2	+ 18.7	−21.3	62.4	58.7	48.3
Macon	1,233.5	1,798.5	1,955.7	+ 45.8	+ 8.7	43.5	44.2	40.3
Morgan	366.0	745.6	932.1	+121.9	+25.0	62.9	77.9	75.6
Overton	1,010.1	1,979.8	1,411.5	+ 96.0	−28.7	73.9	74.5	65.0
Pickett	328.5	660.6	623.4	+101.1	− 5.6	52.3	56.6	53.2
Putnam	1,403.1	1,872.5	1,732.7	+ 33.5	− 7.5	62.7	59.9	54.0
Scott	202.6	1,709.0	2,169.8	+743.7	+27.0	70.0	94.2	94.7
Smith	2,839.0	3,069.8	3,459.0	+ 8.1	+12.7	60.4	59.3	55.0
Trousdale	908.9	1,255.0	1,137.9	+ 38.1	− 9.3	52.8	56.4	41.8
White	1,312.8	2,372.1	2,518.2	+ 80.7	+ 6.2	61.4	69.1	60.3
Upper Cumberland Area[2]	15,750.7	26,190.9	27,249.5	+ 66.3	+ 4.0	60.6	63.9	58.8
Tennessee	157,608.4	229,923.3	245,982.0	+ 49.5	+ 7.0	56.3	48.5	46.5
Total Appalachia[3]	559,606.0	934,706.0	—	+ 67.0	—	62.0	69.0	—
United States	12,197,274.0	17,059,131.0	18,849,714.8	+ 39.9	+10.5	54.9	55.9	53.4

[1]Value has not been adjusted for price changes.

[2]Because of rounding, some totals may not equal the sum of the items listed.

[3]Data for 1964 not available at time of report.

Source: (15).

Table 16. Type of commercial farms, Upper Cumberland Area, by counties, Tennessee, and Appalachia, 1950, 1959, and 1964

County area	All commercial farms	Field crops other than vegetable and fruit and nut		Poultry		Dairy		Livestock other than poultry and dairy		General		Other[1]	
1950		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Cannon	978	77	7.9	5	0.5	264	27.0	330	33.7	289	29.6	13	1.3
Clay	736	328	44.6	5	0.7	11	1.5	244	33.1	148	20.1	—	0
Cumberland	414	81	19.6	13	3.1	45	10.9	202	48.8	59	14.2	14	3.4
De Kalb	1,188	347	29.2	—	0	144	12.1	370	31.1	292	24.6	35	3.0
Fentress	327	40	12.2	14	4.3	41	12.5	140	42.8	47	14.4	45	13.8
Jackson	1,299	458	35.3	16	1.2	48	3.7	467	35.9	305	23.5	5	0.4
Macon	1,860	1,155	62.1	20	1.1	83	4.4	173	9.3	398	21.4	31	1.7
Morgan	184	32	17.4	14	7.6	38	20.7	53	28.8	33	17.9	14	7.6
Overton	897	106	11.8	89	9.9	18	2.0	418	46.6	235	26.2	31	3.5
Pickett	415	153	36.9	15	3.6	—	0	108	26.0	114	27.5	25	6.0
Putnam	1,272	427	33.6	43	3.4	82	6.4	439	34.5	267	21.0	14	1.1
Scott	89	10	11.2	14	15.7	5	5.6	38	42.7	10	11.3	12	13.5
Smith	2,093	749	35.8	13	0.6	280	13.4	518	24.7	533	25.5	—	0
Trousdale	805	399	49.6	5	0.6	46	5.7	229	28.5	121	15.0	5	0.6
White	1,089	288	26.4	37	3.4	122	11.2	274	25.2	354	32.5	14	1.3
Upper Cumberland Area	13,646	4,650	34.1	303	2.2	1,227	9.0	4,003	29.3	3,205	23.5	258	1.9
Tennessee	138,218	74,414	53.8	1,634	1.2	14,673	10.6	22,937	16.6	21,927	15.9	2,633	1.9
Total Appalachia	303,758	132,889	43.7	23,498	7.7	55,118	18.1	41,502	13.7	37,990	12.5	11,494	3.8

—Continued

Table 16. (Continued)

County area	All commercial farms	Field crops other than vegetable and fruit and nut		Poultry		Dairy		Livestock other than poultry and dairy		General		Other[1]	
1959		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Cannon	506	60	11.9	—	0	130	25.7	236	46.6	75	14.8	5	1.0
Clay	520	200	38.5	5	1.0	25	4.8	165	31.7	100	19.2	25	4.8
Cumberland	351	56	16.0	40	11.4	45	12.8	164	46.7	30	8.5	16	4.6
De Kalb	682	185	27.1	—	0	100	14.7	267	39.1	115	16.9	15	2.2
Fentress	331	35	10.6	102	30.8	26	7.8	81	24.5	31	9.4	56	16.9
Jackson	885	397	44.8	20	2.3	30	3.4	297	33.6	141	15.9	—	0
Macon	1,221	755	61.8	20	1.7	60	4.9	141	11.6	230	18.8	15	1.2
Morgan	205	40	19.5	36	17.6	20	9.7	67	32.7	26	12.7	16	7.8
Overton	689	140	20.3	45	6.5	20	2.9	342	49.6	112	16.3	30	4.4
Pickett	311	130	41.8	—	0	10	3.2	100	32.2	61	19.6	10	3.2
Putnam	759	280	36.9	15	2.0	65	8.5	327	43.1	65	8.6	7	0.9
Scott	235	15	6.4	126	53.6	2	0.9	67	28.5	—	0	25	10.6
Smith	1,280	520	40.6	20	1.5	115	9.0	340	26.6	285	22.3	—	0
Trousdale	480	255	53.1	5	1.0	50	10.4	80	16.7	90	18.8	—	0
White	635	165	26.0	10	1.6	92	14.5	258	40.6	105	16.5	5	0.8
Upper Cumberland Area	9,090	3,233	35.6	444	4.9	790	8.7	2,932	32.2	1,466	16.1	225	2.5
Tennessee	82,639	42,169	51.0	1,912	2.3	9,647	11.7	17,800	21.5	9,669	11.7	1,442	1.8
Total Appalachia	184,837	67,599	36.6	22,231	12.0	40,627	22.0	33,657	18.2	13,149	7.1	7,555	4.1

—Continued

Table 16. (Continued)

County area	All commercial farms	Field crops other than vegetable and fruit and nut		Poultry		Dairy		Livestock other than poultry and dairy		General		Other[1]	
1964		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Cannon	491	76	15.5	2	.4	161	32.8	175	35.6	58	11.8	19	3.9
Clay	609	280	46.0	1	.2	55	9.0	133	21.8	112	18.4	28	4.6
Cumberland	413	64	15.5	37	9.0	43	10.4	176	42.6	39	9.4	54	13.1
De Kalb	731	233	31.9	1	.1	156	21.3	162	22.2	126	17.2	53	7.3
Fentress	482	64	13.3	121	25.1	32	6.6	130	27.0	52	10.8	83	17.2
Jackson	889	477	53.7	10	1.1	66	7.4	210	23.6	100	11.2	26	3.0
Macon	1,209	701	58.0	3	.2	177	14.6	110	9.1	200	16.5	18	1.5
Morgan	229	39	17.0	34	14.8	32	14.0	51	22.3	27	11.8	46	20.1
Overton	625	152	24.3	13	2.1	44	7.0	265	42.4	97	15.5	54	8.7
Pickett	324	168	51.9	7	2.2	5	11.5	95	29.3	34	10.5	15	4.6
Putnam	873	368	42.2	7	.8	69	7.9	278	31.8	107	12.3	44	5.0
Scott	202	13	6.4	93	46.0	13	6.4	35	17.3	21	.5	27	13.4
Smith	1,179	569	48.3	16	1.4	187	15.9	242	20.5	158	13.4	7	.6
Trousdale	488	341	69.9	2	.4	55	11.3	42	8.6	45	9.2	3	.6
White	766	210	27.4	2	.3	135	17.6	238	31.1	147	19.2	34	4.4
Upper Cumberland Area	9,510	3,755	39.5	349	3.7	1,230	12.9	2,342	24.6	1,323	13.9	511	5.4
Tennessee	76,352	37,683	49.4	1,707	2.2	10,133	13.3	14,982	19.6	8,611	11.3	3,236	4.2
Total Appalachia[2]	—	—	—	—	—	—	—	—	—	—	—	—	—

[1]Miscellaneous, vegetable, fruit, and nut farms.
[2]Data for 1964 not available at time of report.
Source: (15).

Table 17. Number of beef cows and dairy cows on farms, Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1950, 1959, and 1964

County area	Beef cows			Percentage change		Dairy cows			Percentage change	
	1950	1959	1964	1950-1959	1959-1964	1950	1959	1964	1950-1959	1959-1964
Cannon	834	3,089	5,958	+270.4	+ 92.9	7,060	5,187	3,566	−26.5	−31.3
Clay	401	1,970	4,449	+391.3	+125.8	2,508	2,117	2,160	−15.6	+ 2.0
Cumberland	1,657	3,217	5,638	+ 94.1	+ 75.3	3,101	2,167	2,082	−30.1	−39.2
De Kalb	667	3,503	6,521	+417.4	+135.8	6,665	5,336	4,802	−19.9	−10.0
Fentress	610	2,355	4,982	+286.1	+111.5	2,978	2,270	2,328	−23.8	+ 2.6
Jackson	910	3,727	7,215	+309.6	+ 93.6	5,528	3,862	2,904	−30.1	−24.8
Macon	1,297	2,063	5,445	+ 59.1	+163.9	5,520	5,977	6,078	+ 8.3	+ 1.7
Morgan	516	961	1,463	+ 86.2	+ 52.2	2,063	1,464	1,282	−29.0	−12.4
Overton	940	3,941	7,849	+319.3	+ 99.1	4,822	3,835	2,428	−20.5	−36.7
Pickett	174	1,163	3,411	+568.4	+193.3	1,706	1,478	800	−13.4	−45.9
Putnam	578	3,901	8,873	+574.9	+127.5	6,287	4,434	3,323	−29.5	−25.1
Scott	334	766	1,438	+129.3	+ 87.7	1,661	1,038	986	−37.5	− 5.0
Smith	1,986	6,893	11,870	+247.1	+ 72.2	10,819	7,523	6,248	−30.5	−16.9
Trousdale	905	2,090	3,943	+130.9	+ 88.7	2,744	2,692	2,544	− 1.9	− 5.5
White	1,454	4,715	9,692	+224.5	+205.6	5,821	5,127	4,281	−11.9	−16.5
Upper Cumberland Area	13,273	44,354	88,747	+234.5	+100.1	69,283	54,507	45,812	−21.3	−16.0
	(1,000)	(1,000)	(1,000)			(1,000)	(1,000)	(1,000)		
Tennessee	163.6	434.5	756.2	+165.5	+ 74.0	638.1	456.5	370.0	−28.5	−18.9
Total Appalachia[1]	348.0	816.5	—	+134.6	—	1,793.8	1,446.0	—	−19.4	—
United States	16,069.2	24,751.5	32,725.0	+ 54.1	+ 32.2	21,232.6	16,522.0	14,622.2	−22.2	−11.5

[1]Data for 1964 not available at time of report.

Source: (15).

Table 18. Broilers and eggs sold, Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1954, 1959, and 1964

County area	Broilers					Chicken Eggs		
				Percentage change				Percentage change
	1954	1959	1964	1954-59	1959-64	1954	1959	1954-59
	1,000			Percent		1,000 dozens		Percent
Cannon	—	70.0	—	—	—	173.1	80.2	− 53.7
Clay	28.0	96.0	—	+ 242.9	—	77.9	50.4	− 35.3
Cumberland	16.5	429.8	1,015.8	+2,500.5	+136.3	168.5	311.5	+ 84.9
De Kalb	—	22.0	—	—	—	191.8	117.5	− 38.7
Fentress	37.5	3,349.3	5,631.9	+8,831.5	+ 68.2	81.6	248.1	+204.2
Jackson	27.6	42.7	44.8	+ 54.7	+ 4.9	146.7	77.5	− 47.2
Macon	26.5	40.0	4.0	+ 50.9	− 90.0	176.8	194.2	+ 9.8
Morgan	—	340.7	768.2	—	+125.5	140.0	302.7	+116.3
Overton	125.1	127.5	—	+ 1.9	—	200.7	432.5	+115.5
Pickett	—	—	215.8	—	—	46.3	53.7	+ 16.0
Putnam	48.9	79.8	—	+ 63.2	—	218.9	147.9	− 32.4
Scott	372.0	2,630.3	3,358.7	+ 607.0	+ 27.7	56.7	225.6	+298.0
Smith	—	—	—	—	—	240.8	240.6	− 0.1
Trousdale	109.0	—	—	—	—	100.5	166.9	+ 66.0
White	7.4	36.0	—	+ 386.5	—	209.3	176.5	− 15.7
Upper Cumberland Area	798.6	7,264.1	11,036.2	+ 809.6	+ 51.9	2,229.5	2,825.9	+ 26.7
Tennessee	7,524.6	27,858.0	36,220.1	+ 270.2	+ 30.0	23,907.4	38,230.6	+ 59.9
Total Appalachia[1]	185,845.2	404,363.6	—	+ 117.6	—			
United States	792,373.7	1,414,259.4	1,915,059.5	+ 78.5	+ 35.4	2,663,454.5	3,330,265.4	

[1]Data for 1964 not available at time of report.

Source: (15).

Table 19. Number of hogs and pigs and ewes on farms, Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1950, 1959, and 1964

County area	Hogs and pigs					Ewes				
				Percentage change					Percentage change	
	1950	1959	1964	1950-59	1959-64	1950	1959	1964	1950-59	1959-64
				— Percent —					— Percent —	
Cannon	15,917	16,056	9,593	+ 0.9	−40.3	7,919	6,316	1,808	− 20.2	−71.4
Clay	11,905	13,412	10,060	+12.7	−25.0	168	541	100	+222.0	−81.5
Cumberland	9,052	10,800	7,901	+19.3	−26.8	942	1,564	556	+ 66.0	−64.5
De Kalb	14,669	19,613	10,008	+33.7	−49.0	3,872	3,181	1,344	− 17.8	−58.1
Fentress	6,267	7,883	6,360	+25.8	−19.3	438	419	236	− 4.3	−43.7
Jackson	22,090	88,704	10,998	+ 2.8	−51.6	1,796	2,126	744	+ 18.4	−65.0
Macon	13,583	16,919	9,185	+24.6	−45.7	3,673	4,858	2,359	+ 32.3	−51.4
Morgan	3,290	4,233	2,989	+28.7	−29.4	191	397	165	+107.9	−58.4
Overton	12,612	19,714	7,860	+56.3	−60.1	675	559	82	− 17.2	−85.3
Pickett	4,794	6,057	4,277	+26.3	−29.4	48	141	41	−193.8	−71.0
Putnam	15,838	20,063	12,704	+26.7	−36.7	1,881	1,250	385	− 33.5	−69.2
Scott	3,291	4,826	2,426	+46.6	−49.7	501	811	276	+ 61.9	−66.0
Smith	30,401	32,787	17,896	+ 7.8	−45.4	12,165	12,953	5,130	+ 6.5	−60.4
Trousdale	9,093	10,359	3,408	+13.9	−67.1	6,066	7,571	3,515	+ 24.8	−53.6
White	13,841	21,289	17,885	+53.8	−16.0	1,064	1,163	212	+ 9.3	−81.8
Upper Cumberland Area	186,643	226,715	133,550	+21.5	−41.0	41,399	43,850	16,953	+ 5.9	−61.3
	(1,000)	(1,000)	(1,000)			(1,000)	(1,000)	(1,000)		
Tennessee	1,365.8	1,609.6	957.9	+17.9	−40.5	185.4	190.5	72.0	+ 2.7	−62.2
Total Appalachia[1]	2,026.0	2,249.8	—	+11.0	—	595.7	587.5	—	− 1.4	—
United States	55,788.6	67,949.3	54,135.2	+21.8	−20.3	19,841.8	20,991.6	16,142.5	+ 5.8	−23.1

[1]Data for 1964 not available at time of report.

See footnote at end of table.

Table 20. Harvested cropland by major crops and woodland, Upper Cumberland Area, by counties, Tennessee, and Appalachia, 1950, 1959, and 1964

County area	Cropland harvested			Woodland		
	1950	1959	1964	1950	1959	1964
				Acres		
Cannon	34,330	22,413	18,043	61,110	51,908	48,999
Clay	31,848	19,702	13,933	56,447	55,796	55,623
Cumberland	28,210	22,156	20,985	91,152	58,526	62,553
De Kalb	40,061	28,637	22,319	48,660	41,894	40,236
Fentress	23,400	17,792	19,035	56,141	59,879	74,543
Jackson	41,248	29,004	16,921	73,210	67,748	67,784
Macon	50,950	37,558	29,781	56,707	58,469	57,331
Morgan	18,217	12,068	9,102	65,257	47,740	45,049
Overton	48,096	28,968	19,245	81,609	72,175	68,979
Pickett	15,408	10,485	7,400	27,055	27,935	22,428
Putnam	49,404	32,063	23,271	70,040	63,665	59,826
Scott	13,689	7,725	5,621	49,028	38,748	52,521
Smith	54,261	37,770	26,901	46,521	52,725	51,693
Trousdale	23,015	14,602	11,523	18,416	16,569	18,521
White	51,234	37,036	31,337	56,480	55,883	69,120
Upper Cumberland Area	524,181	357,979	275,417	857,833	769,660	795,206
	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
Tennessee	5,575.1	4,116.4	3,618.0	5,868.6	5,201.3	4,859.2
Total Appalachia[1]	13,691.0	9,640.0	—	—	—	—

See footnote at end of table.

—Continued

Table 20. (Continued)

County area	All hay			Corn		
	1950	1959	1964	1950	1959	1964
				Acres		
Cannon	12,271	9,801	9,206	16,521	9,620	5,574
Clay	9,638	5,499	5,221	17,288	10,268	5,251
Cumberland	14,399	12,186	12,415	10,292	6,577	3,801
De Kalb	13,518	10,937	12,139	19,782	12,945	7,085
Fentress	11,566	8,976	10,301	8,719	4,865	3,239
Jackson	9,537	7,674	6,482	27,844	18,034	7,967
Macon	17,745	14,261	14,976	25,873	17,465	10,300
Morgan	8,917	6,634	5,584	5,104	3,282	1,989
Overton	20,576	11,860	11,177	22,215	12,181	5,177
Pickett	7,240	5,231	4,891	5,974	3,953	1,668
Putnam	18,826	12,516	13,586	23,868	15,010	6,515
Scott	6,315	4,086	4,127	5,437	3,159	1,301
Smith	19,053	16,298	15,610	28,099	17,196	7,217
Trousdale	7,671	6,332	6,731	10,926	5,335	2,221
White	20,365	16,065	16,925	22,000	15,766	10,267
Upper Cumberland Area	197,637	148,356	149,371	249,942	155,656	79,572
	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
Tennessee	1,618.3	1,194.6	1,183.7	2,076.3	1,416.7	910.3
Total Appalachia[1]	4,590.0	4,145.0	—	4,274.0	2,834.0	—

See footnote at end of table.

—Continued

Table 20. (Continued)

County area	Sorghums			Wheat		
	1950	1959	1964	1950	1959	1964
				Acres		
Cannon	527	550	204	988	376	246
Clay	185	347	251	1,195	462	153
Cumberland	43	55	90	301	127	49
De Kalb	88	483	126	1,838	788	310
Fentress	124	355	192	740	179	44
Jackson	398	376	156	190	164	19
Macon	589	846	359	1,645	1,337	362
Morgan	47	62	30	340	205	114
Overton	398	1,107	336	2,161	619	40
Pickett	42	114	39	1,067	366	70
Putnam	216	561	246	1,204	721	259
Scott	13	56	17	—	—	—
Smith	531	613	373	1,103	483	116
Trousdale	176	295	162	456	382	145
White	174	704	179	1,785	1,058	640
Upper Cumberland Area	3,551	6,524	2,760	15,013	7,267	2,567
	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
Tennessee	23.3	69.8	27.3	238.5	156.8	153.5
Total Appalachia[1]	—	—	—	942.0	512.0	—

See footnote at end of table.

—Continued

Table 20. (Continued)

County area	Oats			Barley		
	1950	1959	1964	1950	1959	1964
				Acres		
Cannon	886	527	467	312	84	41
Clay	586	177	54	120	227	106
Cumberland	677	502	630	30	26	8
De Kalb	484	436	604	498	179	20
Fentress	647	1,032	610	27	201	—
Jackson	350	146	39	138	189	20
Macon	814	575	244	213	273	146
Morgan	332	288	194	37	46	79
Overton	1,428	648	129	79	72	34
Pickett	679	108	38	8	70	6
Putnam	2,349	721	211	117	356	48
Scott	—	—	10	—	—	3
Smith	1,878	473	231	679	589	150
Trousdale	556	362	63	1,098	399	69
White	1,515	1,053	506	683	743	115
Upper Cumberland Area	13,181	7,038	4,030	4,039	3,454	845
	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
Tennessee	170.8	126.2	51.1	61.2	44.0	21.6
Total Appalachia[1]	872.0	749.0	—	127.0	118.0	—

See footnote at end of table.

—Continued

Table 20. (Continued)

County area	Soybeans 1950 Grown alone	1950 Grown with other crops	1959 Grown alone	1959 Grown with other crops	1964 Harvested for beans	1964 Cut for hay
			Acres			
Cannon	70	—	1,323	105	825	1,505
Clay	367	129	1,570	151	394	1,302
Cumberland	—	—	180	12	10	219
De Kalb	67	9	376	—	330	221
Fentress	1	—	90	11	23	31
Jackson	232	60	1,719	138	136	716
Macon	83	—	522	26	63	586
Morgan	60	—	576	60	164	477
Overton	496	6	1,147	63	101	865
Pickett	—	—	26	6	1	34
Putnam	422	2	1,427	71	281	860
Scott	—	—	54	1	4	21
Smith	4	—	245	75	29	353
Trousdale	—	—	13	—	17	137
White	1,485	—	1,331	173	1,126	1,057
Upper Cumberland Area	3,287	206	10,599	892	3,504	8,386
	(1,000)	(1,000)	(1,000)	(1,000)		
Tennessee	137.9	5.7	411.0	25.7	560,263	58,226
Total Appalachia[1]	—	—	—	—	—	—

See footnote at end of table.

—Continued

Table 20. (Continued)

County area	Tobacco 1950	1959	1964	Vegetables for sale 1950	1959	1964
			Acres			
Cannon	310	310	239	6	12	14
Clay	778	627	650	15	36	12
Cumberland	152	170	148	234	2,215	3,229
De Kalb	1,061	928	910	15	19	11
Fentress	87	120	114	845	2,090	4,236
Jackson	1,421	1,121	1,099	2	3	3
Macon	3,072	2,185	2,048	54	4	7
Morgan	52	46	42	233	125	175
Overton	209	332	282	37	86	19
Pickett	359	374	321	3	139	1
Putnam	1,091	999	934	28	69	26
Scott	14	10	13	45	4	2
Smith	3,121	2,205	2,166	18	8	2
Trousdale	1,634	1,137	1,208	7	9	4
White	829	789	839	50	32	35
Upper Cumberland Area	14,190	11,344	11,013	1,592	4,851	7,776
	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
Tennessee	103.9	74.2	68.6	26.5	44.0	42.3
Total Appalachia[1]	174.0	132.0	—	—	—	—

[1]Data for 1964 not available at time of report.

Source: (15).

Table 21. Employment in agriculture, forestry, and fisheries in the Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1950 and 1960

County area	1950		1960		Change 1950 to 1960	
	Number employed	Share of civilian labor force	Number employed	Share of civilian labor force	Amount	Rate
		Percent		Percent		Percent
Cannon	1,697	51.8	886	25.8	− 811	−47.8
Clay	1,519	60.7	1,022	42.3	− 497	−32.7
Cumberland	1,643	30.5	778	14.2	− 865	−52.6
De Kalb	2,288	57.3	1,143	27.0	− 1,145	−50.0
Fentress	1,524	41.7	563	15.5	− 961	−63.1
Jackson	2,502	66.2	1,393	44.5	− 1,109	−44.3
Macon	2,641	60.5	1,842	38.5	− 799	−30.3
Morgan	1,035	24.9	332	9.2	− 703	−67.9
Overton	2,888	53.4	1,128	22.4	− 1,760	−60.9
Pickett	852	62.6	411	26.3	− 441	−51.8
Putnam	2,644	28.3	1,258	12.0	− 1,386	−52.4
Scott	864	19.9	208	5.5	− 656	−75.9
Smith	2,819	61.7	1,612	36.1	− 1,207	−42.8
Trousdale	1,047	55.8	685	35.3	− 362	−34.6
White	2,114	41.5	1,073	19.6	− 1,041	−49.2
Upper Cumberland Area	28,077	44.5	14,334	22.6	−13,743	−48.9
	(1,000)		(1,000)		(1,000)	
Tennessee	248.8	21.0	132.8	10.3	− 116.0	−46.6
Total Appalachia	644.2	12.3	309.3	5.8	− 334.6	−52.0
United States	7,005.4	11.9	4,349.9	6.4	− 2,655.5	−37.9

Source: (17).

Table 22. Employment in mining in the Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1950 and 1960

County area	1950		1960		Change 1950 to 1960	
	Number employed	Share of civilian labor force	Number employed	Share of civilian labor force	Amount	Rate
		Percent		Percent		Percent
Cannon	0	0	3	0.1	+ 3	—
Clay	4	0.2	22	0.9	+ 18	+450.0
Cumberland	599	11.1	443	8.1	− 156	− 26.0
De Kalb	7	0.2	4	0.1	− 3	− 42.9
Fentress	392	10.7	123	3.4	− 269	− 68.6
Jackson	1	0	0	0	− 1	− 100.0
Macon	6	0.1	0	0	− 6	− 100.0
Morgan	531	12.8	306	8.5	− 225	− 42.4
Overton	366	6.8	142	2.8	− 224	− 61.2
Pickett	28	2.1	16	1.0	− 12	− 42.9
Putnam	170	1.8	136	1.3	− 34	− 20.0
Scott	656	15.1	519	13.6	− 137	− 20.9
Smith	4	0.1	17	0.4	+ 13	+325.0
Trousdale	1	0	8	0.4	+ 7	+700.0
White	126	2.5	22	0.4	− 104	− 82.5
Upper Cumberland Area	2,891	4.6	1,761	2.8	−1,130	− 39.1
	(1,000)		(1,000)		(1,000)	
Tennessee	14.4	1.2	8.8	0.7	− 5.7	− 39.1
Total Appalachia	451.5	8.6	186.1	3.5	− 265.4	− 58.8
United States	929.5	1.6	654.0	1.0	− 275.5	− 29.6

Source: (17).

Table 23. Employment in construction in the Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1950 and 1960

County area	1950		1960		Change 1950 to 1960	
	Number employed	Share of civilian labor force	Number employed	Share of civilian labor force	Amount	Rate
		Percent		Percent		Percent
Cannon	182	5.6	255	7.4	+ 73	+ 40.1
Clay	130	5.2	148	6.1	+ 18	+ 13.8
Cumberland	322	6.0	373	6.8	+ 51	+ 15.8
De Kalb	321	8.0	348	8.2	+ 27	+ 8.4
Fentress	187	5.1	151	4.2	− 36	− 19.2
Jackson	190	5.0	170	5.4	− 20	− 10.5
Macon	184	4.2	236	4.9	+ 52	+ 28.3
Morgan	253	6.1	239	6.6	− 14	− 5.5
Overton	173	3.2	394	7.8	+221	+127.7
Pickett	56	4.1	111	7.1	+ 55	+ 98.2
Putnam	709	7.6	710	6.8	+ 1	+ 0.1
Scott	148	3.4	171	4.5	+ 23	+ 15.5
Smith	308	6.7	385	8.6	+ 77	+ 25.0
Trousdale	106	5.7	128	6.6	+ 22	+ 20.8
White	285	5.6	399	7.3	+114	+ 40.0
Upper Cumberland Area	3,554	5.6	4,218	6.6	+664	+ 18.7
	(1,000)		(1,000)		(1,000)	
Tennessee	80.0	6.8	82.4	6.4	+ 2.5	+ 3.1
Total Appalachia	269.3	5.2	283.3	5.3	+ 14.0	+ 5.2
United States	3,458.0	5.9	3,815.9	5.6	+357.9	+ 10.3

Source: (17).

Table 24. Employment in all manufacturing industries in the Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1950 and 1960

County area	1950		1960		Change 1950 to 1960	
	Number employed	Share of civilian labor force	Number employed	Share of civilian labor force	Amount	Rate
		Percent		Percent		Percent
Cannon	557	17.0	1,139	33.1	+ 582	+104.5
Clay	222	8.9	524	21.7	+ 302	+136.0
Cumberland	790	14.7	1,126	20.5	+ 336	+ 42.5
De Kalb	412	10.3	1,246	29.4	+ 834	+202.4
Fentress	624	17.1	1,325	36.5	+ 701	+112.3
Jackson	286	7.6	529	16.9	+ 243	+ 85.0
Macon	499	11.4	1,041	21.8	+ 542	+108.6
Morgan	789	19.0	935	25.9	+ 146	+ 18.5
Overton	647	12.0	1,497	29.7	+ 850	+131.4
Pickett	142	10.4	568	36.3	+ 426	+300.0
Putnam	1,580	16.9	2,666	25.5	+1,086	+ 68.7
Scott	992	22.9	974	25.6	− 18	− 1.8
Smith	134	2.9	842	18.9	+ 708	+528.4
Trousdale	123	6.6	378	19.5	+ 225	+207.3
White	1,006	19.7	1,866	34.0	+ 860	+ 85.5
Upper Cumberland Area	8,803	14.0	16,656	26.2	+7,853	+ 89.2
	(1,000)		(1,000)		(1,000)	
Tennessee	239.4	20.3	317.9	24.7	+ 78.4	+ 32.8
Total Appalachia	1,380.6	26.4	1,593.2	30.1	+ 212.7	+ 15.4
United States	14,685.5	24.9	17,513.1	25.7	+2,827.6	+ 19.3

Source: (17).

Table 25. Employment in manufacturing, by industry group, Upper Cumberland Area, 1950 and 1960

Industry group	1950		1960		Change 1950 to 1960	
	Number employed	Share of civilian labor force	Number employed	Share of civilian labor force	Amount	Rate
		Percent		Percent		Percent
Furniture, lumber and wood products	4,956	7.9	3,661	5.8	− 1,295	− 26.1
Metal industries	55	0.1	389	0.6	+ 334	+ 607.3
Machinery, except electrical	55	0.1	78	0.1	+ 23	+ 41.8
Electrical machinery	10	0	170	0.3	+ 160	+1,600.0
Motor vehicles & motor vehicle equipment	89	0.1	341	0.5	+ 252	+ 283.1
Transportation equipment	8	0	104	0.2	+ 96	+1,200.0
Other durable goods	313	0.5	466	0.7	+ 153	+ 48.9
Food and kindred products	423	0.7	733	1.2	+ 310	+ 73.3
Textile mill products	532	0.8	525	0.8	− 7	− 1.3
Apparel and other fabricated textile products	1,742	2.8	8,727	13.7	+6,985	+ 401.0
Printing and publishing and other allied products	138	0.2	235	0.4	+ 97	+ 70.3
Chemical and allied products	106	0.2	319	0.5	+ 213	+ 200.9
Other nondurable goods	376	0.6	908	1.4	+ 532	+ 141.5
Total	8,803	14.0	16,656	26.2	+7,853	+ 89.2

Source: (17).

Table 26. Employment in manufacturing by industry group, Appalachian portion of Tennessee, 1950 and 1960

Industry group	1950		1960		Change 1950 to 1960	
	Number employed	Share of civilian labor force	Number employed	Share of civilian labor force	Amount	Rate
	1,000	Percent	1,000	Percent	1,000	Percent
Furniture, lumber and wood products	21.4	4.1	20.5	3.6	− .9	− 4.4
Metal industries	17.9	3.5	20.9	3.7	+ 3.0	+ 16.7
Machinery, except electrical	2.6	.5	3.7	.7	+ 1.1	+ 43.4
Electrical machinery	1.0	.2	4.4	.8	+ 3.4	+337.3
Motor vehicles and motor vehicle equipment	.6	.1	.8	.1	+ .2	+ 29.5
Transportation equipment	.4	.1	.7	.1	+ .3	+ 80.2
Other durable goods	8.7	1.7	10.9	1.9	+ 2.2	+ 25.4
Food and kindred products	8.3	1.6	12.4	2.2	+ 4.1	+ 49.5
Textile mill products	26.8	5.2	24.1	4.3	− 2.6	− 9.8
Apparel and other fabricated textile products	7.2	1.4	20.1	3.5	+12.9	+180.3
Printing and publishing and other allied products	4.6	.9	6.5	1.1	+ 1.9	+ 41.0
Chemical and allied products	21.3	4.1	31.7	5.6	+10.3	+ 48.5
Other nondurable goods	7.0	1.4	8.3	1.5	+ 1.3	+ 18.6
Total[1]	127.7	24.7	164.9	29.0	+37.2	+ 29.1

[1]Because of rounding, some totals may not equal the sum of the items listed.
Source: (17).

Table 27. Employment in manufacturing, by industry group, Appalachian Region, 1950 and 1960

Industry group	1950		1960		Change 1950 to 1960	
	Number employed	Share of civilian labor force	Number employed	Share of civilian labor force	Amount	Rate
	1,000	Percent	1,000	Percent	1,000	Percent
Furniture, lumber and wood products	134.3	2.6	118.2	2.2	− 16.1	− 12.0
Metal industries	366.4	7.0	402.5	7.6	+ 36.1	+ 9.9
Machinery, except electrical	60.8	1.2	74.4	1.4	+ 13.5	+ 22.2
Electrical machinery	70.4	1.4	94.4	1.8	+ 24.1	+ 34.2
Motor vehicles and motor vehicle equipment	8.3	.2	14.3	.3	+ 6.0	+ 72.9
Transportation equipment	19.0	.4	50.1	1.0	+ 31.1	+164.1
Other durable goods	122.1	2.3	129.2	2.4	+ 7.1	+ 5.8
Food and kindred products	82.0	1.6	113.8	2.2	+ 31.9	+ 38.9
Textile mill products	195.7	3.8	176.9	3.3	− 18.8	− 9.6
Apparel and other fabricated textile products	104.4	2.0	148.7	2.8	+ 44.3	+ 42.4
Printing and publishing and other allied products	41.5	.8	57.2	1.1	+ 15.7	+ 37.8
Chemical and allied products	80.7	1.5	104.6	2.0	+ 23.9	+ 29.6
Other nondurable goods	95.0	1.8	108.9	2.1	+ 13.8	+ 14.5
Total[1]	1,380.6	26.4	1,593.2	30.1	+212.7	+ 15.4

[1]Because of rounding, some totals may not equal the sum of the items listed.
Source: (17).

Table 28. Employment in all trade and service industries in the Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1950 and 1960

County area	1950		1960		1950 to 1960 Change	
	Number employed	Share of civilian labor force	Number employed	Share of civilian labor force	Amount	Rate
		Percent		Percent		Percent
Cannon	776	23.7	1,040	30.3	+ 264	+34.0
Clay	584	23.4	640	26.5	+ 56	+ 9.6
Cumberland	1,784	33.1	2,390	43.6	+ 606	+34.0
De Kalb	912	22.8	1,271	30.0	+ 359	+39.4
Fentress	842	23.0	1,162	32.0	+ 320	+38.0
Jackson	747	19.8	921	29.4	+ 174	+23.3
Macon	959	22.0	1,390	29.1	+ 431	+44.9
Morgan	1,326	31.9	1,439	39.9	+ 113	+ 8.5
Overton	1,190	22.0	1,491	29.5	+ 301	+25.3
Pickett	277	20.4	356	22.8	+ 79	+28.5
Putnam	3,859	41.3	5,047	48.3	+1,188	+30.8
Scott	1,434	33.0	1,620	42.5	+ 186	+13.0
Smith	1,283	28.1	1,456	32.6	+ 173	+13.5
Trousdale	557	29.7	707	36.4	+ 150	+26.9
White	1,394	27.4	1,811	33.0	+ 417	+29.9
Upper Cumberland Area	17,924	28.4	22,741	35.8	+4,817	+26.9
	(1,000)		(1,000)		(1,000)	
Tennessee	553.0	46.8	680.3	52.8	+ 127.3	+23.0
Total Appalachia	2,213.6	42.4	2,555.0	48.2	+ 341.4	+15.4
United States	30,327.3	51.3	38,306.3	56.2	+7,979.0	+26.3

Source: (17).

Table 29. Employment in trades and services, by industry group, Upper Cumberland Area, 1950 and 1960

Industry group	1950		1960		Change 1950 to 1960	
	Number employed	Share of civilian labor force	Number employed	Share of civilian labor force	Amount	Rate
		Percent		Percent		Percent
Public utilities	2,388	3.8	2,224	3.5	− 164	− 6.9
Wholesale trade	599	0.9	921	1.5	+ 322	+53.8
Retail trade	5,293	8.4	6,962	11.0	+1,669	+31.5
Finance, insurance and real estate	402	0.6	726	1.1	+ 324	+80.6
Professional and related services	3,616	5.7	4,850	7.6	+1,234	+34.1
Public administration	1,384	2.2	1,707	2.7	+ 323	+23.3
Other services	3,080	4.9	3,963	6.2	+ 883	+28.7
Industry not reported	1,162	1.8	1,388	2.2	+ 226	+19.4
Total	17,924	28.4	22,741	35.8	+4,817	+26.9

Source: (17).

Table 30. Employment in trades and services, by industry group, Appalachian portion of Tennessee, 1950 and 1960

Industry group	1950		1960		Change 1950 to 1960	
	Number employed	Share of civilian labor force	Number employed	Share of civilian labor force	Amount	Rate
	1,000	Percent	1,000	Percent	1,000	Percent
Public utilities	29.7	5.7	30.0	5.3	+ .3	+ 1.1
Wholesale trade	11.6	2.2	13.8	2.4	+ 2.2	+18.9
Retail trade	65.3	12.6	74.7	13.2	+ 9.5	+14.5
Finance, insurance and real estate	8.7	1.7	13.9	2.4	+ 5.2	+60.0
Professional and related services	35.8	6.9	55.1	9.7	+19.3	+54.1
Public administration	14.7	2.8	16.2	2.9	+ 1.5	+10.5
Other services	41.6	8.0	48.0	8.4	+ 6.4	+15.4
Industry not reported	9.6	1.9	19.1	3.4	+ 9.5	+98.2
Total[1]	216.8	41.8	270.8	47.7	+53.9	+24.9

[1]Because of rounding, some totals may not equal the sum of the items listed.
Source: (17).

Table 31. Employment in trades and services, by industry group, Appalachian Region, 1950 and 1960

Industry group	1950		1960		Change 1950 to 1960	
	Number employed	Share of civilian labor force	Number employed	Share of civilian labor force	Amount	Rate
	1,000	Percent	1,000	Percent	1,000	Percent
Public utilities	382.3	7.3	343.2	6.5	− 39.0	− 10.2
Wholesale trade	114.0	2.2	126.3	2.4	+ 12.2	+ 10.7
Retail trade	653.2	12.5	699.2	13.2	+ 46.0	+ 7.0
Finance, insurance and real estate	96.9	1.8	133.1	2.5	+ 36.3	+ 37.4
Professional and related services	359.5	6.9	528.9	10.0	+169.8	+ 47.1
Public administration	153.9	3.0	184.8	3.5	+ 31.0	+ 20.1
Other services	382.7	7.3	392.9	7.4	+ 10.2	+ 2.7
Industry not reported	71.1	1.4	146.5	2.8	+ 75.4	+106.1
Total[1]	2,213.6	42.4	2,555.0	48.2	+341.4	+ 15.4

[1]Because of rounding, some totals may not equal the sum of the items listed.

Source: (17).

Table 32. Population change in the Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1950 to 1960

County area	1960	Change 1950 to 1960		Net civilian migration 1950 to 1960	
	Population	Amount	Rate	Amount	Percent
Cannon	8,537	− 637	− 6.9	− 1,372	−15.0
Clay	7,289	− 1,412	−16.2	− 2,335	−26.8
Cumberland	19,135	+ 258	+ 1.4	− 3,167	−16.8
De Kalb	10,774	− 906	− 7.8	− 1,996	−17.1
Fentress	13,288	− 1,629	−10.9	− 4,313	−28.9
Jackson	9,233	− 3,115	−25.2	− 4,282	−34.7
Macon	12,197	− 1,402	−10.3	− 2,769	−20.4
Morgan	14,304	− 1,423	− 9.0	− 3,520	−22.4
Overton	14,661	− 2,905	−16.5	− 4,815	−27.4
Pickett	4,431	− 662	−13.0	− 1,325	−26.0
Putnam	29,236	− 633	− 2.1	− 4,276	−14.3
Scott	15,413	− 1,949	−11.2	− 4,893	−28.2
Smith	12,059	− 2,039	−14.5	− 3,124	−22.2
Trousdale	4,914	− 606	−11.0	− 1,113	−20.2
White	15,577	− 627	− 3.9	− 2,449	−15.1
Upper Cumberland Area	191,048	−19,687	− 9.3	−45,749	−21.7
	(1,000)	(1,000)		(1,000)	
Tennessee	3,567.1	+ 275.4	+ 8.4	− 256.7	− 7.8
Total Appalachia	15,033	+ 223.8	+ 1.5	− 1,841.5	−12.4
United States	179,326	+28,628.3	+18.5		

Source: (17).

Table 33. Population by age group for the Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1950 and 1960

County area	Less than 18 years		18 to 64 years		Over 64 years	
	1950	1960	1950	1960	1950	1960
Cannon	3,396	2,895	4,940	4,744	838	898
Clay	3,766	2,821	4,343	3,762	592	706
Cumberland	8,423	7,969	9,222	9,411	1,232	1,755
De Kalb	4,132	3,681	6,492	5,799	1,056	1,294
Fentress	7,178	5,882	6,904	6,330	835	1,076
Jackson	5,019	3,248	6,379	4,884	950	1,101
Macon	4,982	4,209	7,421	6,612	1,196	1,376
Morgan	6,685	5,821	8,099	7,301	943	1,182
Overton	7,201	5,523	8,979	7,548	1,386	1,590
Pickett	2,265	1,765	2,493	2,253	335	413
Putnam	10,765	9,817	16,924	16,419	2,180	3,000
Scott	8,102	6,873	8,218	7,341	1,042	1,199
Smith	4,754	3,896	8,016	6,614	1,328	1,549
Trousdale	1,904	1,668	3,113	2,638	503	608
White	6,225	5,644	8,582	8,177	1,397	1,756
Upper Cumberland Area	84,797	71,712	110,125	99,833	15,813	19,503
	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
Tennessee	1,150	1,314	1,907	1,944	235	309
Total Appalachia	5,153	5,477	8,569	8,170	1,087	1,385
United States	46,716	64,199	91,624	98,629	12,357	16,498

Source: (17).

Table 34. Distribution of the population by age group for the Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1950 and 1960

County area	Less than 18 years		18 to 64 years		Over 64 years	
	1950	1960	1950	1960	1950	1960
	Percent					
Cannon	37.0	33.9	53.9	55.6	9.1	10.5
Clay	43.3	38.7	49.9	51.6	6.8	9.7
Cumberland	44.6	41.6	48.9	49.2	6.5	9.2
De Kalb	35.4	34.2	55.6	53.8	9.0	12.0
Fentress	48.1	44.3	46.3	47.6	5.6	8.1
Jackson	40.6	35.2	51.7	52.9	7.7	11.9
Macon	36.6	34.5	54.6	54.2	8.8	11.3
Morgan	42.5	40.7	51.5	51.0	6.0	8.3
Overton	41.0	37.7	51.1	51.5	7.9	10.8
Pickett	44.5	39.8	48.9	50.9	6.6	9.3
Putnam	36.0	33.6	56.7	56.2	7.3	10.2
Scott	46.7	44.6	47.3	47.6	6.0	7.8
Smith	33.7	32.3	56.9	54.9	9.4	12.8
Trousdale	34.5	33.9	56.4	53.7	9.1	12.4
White	38.4	36.2	53.0	52.5	8.6	11.3
Upper Cumberland Area	40.2	37.5	52.3	52.3	7.5	10.2
Tennessee	35.0	36.8	57.9	54.5	7.1	8.7
Total Appalachia	34.8	36.4	57.9	54.3	7.3	9.2
United States	31.0	35.8	60.8	55.0	8.2	9.2

Source: (17).

Table 35. Civilian labor force change in the Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1950 to 1960

County area	1960 civilian labor force	Change 1950 to 1960	
		Amount	Rate
	Number	Number	Percent
Cannon	3,438	+ 163	+ 5.0
Clay	2,416	− 85	− 3.4
Cumberland	5,480	+ 98	+ 1.8
De Kalb	4,232	+ 238	+ 6.0
Fentress	3,629	− 25	− 0.7
Jackson	3,129	− 649	−17.2
Macon	4,784	+ 417	+ 9.5
Morgan	3,605	− 546	−13.2
Overton	5,046	− 359	− 6.6
Pickett	1,564	+ 203	+14.9
Putnam	10,451	+1,111	+11.9
Scott	3,812	− 529	−12.2
Smith	4,463	− 109	− 2.4
Trousdale	1,943	+ 68	+ 3.6
White	5,485	+ 389	+ 7.6
Upper Cumberland Area	63,477	+ 385	+ 0.6
	(1,000)	(1,000)	
Tennessee	1,289.4	+ 107.3	+ 9.1
Total Appalachia	5,294.9	+ 71.8	+ 1.4
United States	68,144.1	+9,072.4	+15.4

Source: (17).

Table 36. Civilian labor force as a percentage of the total population for the Upper Cumberland Area, Tennessee, Appalachia, and United States, 1950 and 1960

County area	1950	1960
	Percent	
Cannon	35.7	40.3
Clay	28.7	33.1
Cumberland	28.5	28.6
De Kalb	34.2	39.3
Fentress	24.5	27.3
Jackson	30.6	33.9
Macon	32.1	39.2
Morgan	26.4	25.2
Overton	30.8	34.4
Pickett	26.7	35.3
Putnam	31.3	35.7
Scott	25.0	24.7
Smith	32.4	37.0
Trousdale	34.0	39.5
White	31.4	35.2
Upper Cumberland Area	29.9	33.2
Tennessee	35.9	36.1
Total Appalachia	35.3	35.2
United States	39.2	38.0

Source: (17).

Table 37. Unemployment in the Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1950 and 1960

County area	Number Unemployed		Share of civilian labor force	
	1950	1960	1950	1960
			— — Percent — —	
Cannon	63	115	1.9	3.3
Clay	42	60	1.7	2.5
Cumberland	244	370	4.5	6.8
De Kalb	54	220	1.4	5.2
Fentress	85	305	2.3	8.4
Jackson	52	116	1.4	3.7
Macon	78	275	1.8	5.7
Morgan	217	354	5.2	9.8
Overton	141	394	2.6	7.8
Pickett	6	102	0.4	6.5
Putnam	378	634	4.0	6.1
Scott	247	320	5.7	8.4
Smith	24	151	0.5	3.4
Trousdale	41	37	2.2	1.9
White	171	314	3.4	5.7
Upper Cumberland Area	1,843	3,767	2.9	5.9
	(1,000)	(1,000)		
Tennessee	46.4	67.1	3.9	5.2
Total Appalachia	263.9	368.0	5.1	7.0
United States	2,832.2	3,504.8	4.8	5.1

Source: (17).

Table 38. Total and per capita income for the Upper Cumberland Area, by counties, Tennessee, Appalachia, and United States, 1962

County area	Total personal income	Per capita personal income
	1,000 dollars	dollars
Cannon	11,905	1,280
Clay	6,544	869
Cumberland	20,006	1,025
De Kalb	12,985	1,301
Fentress	12,154	863
Jackson	8,921	976
Macon	12,974	1,083
Morgan	11,457	765
Overton	14,555	950
Pickett	4,480	1,054
Putnam	36,316	1,170
Scott	14,937	907
Smith	14,243	1,171
Trousdale	6,391	1,191
White	18,072	1,129
Upper Cumberland Area	205,130	1,049
Tennessee	6,185,000	1,694
Total Appalachia[1]	38,140,000	1,617
United States[1]	331,697,000	1,850

[1]Data for Appalachia and the United States are for 1960.

Source: Corry, Ormond C. and Price, Patricia Ann. **Comparative Economic Growth Measures—Population and Personal Income Estimates for Tennessee Counties, 1950 Through 1962.** May, 1964, Bureau of Business and Economic Research, College of Business Administration, University of Tennessee, Knoxville, Tennessee, and 17.

Table 39. Projected 1970 and 1975 population, personal income, and per capita personal income for the Upper Cumberland Area, by counties, and Tennessee

County area	Population		Total personal income		Per capita personal income	
	1970	1975	1970	1975	1970	1975
			1962 dollars 1,000		1962 dollars	
Cannon	8,484	8,628	14,000	18,000	1,650	2,086
Clay	6,745	6,707	8,000	9,000	1,186	1,342
Cumberland	19,794	20,355	29,000	36,000	1,465	1,769
De Kalb	9,960	10,046	18,000	23,000	1,807	2,289
Fentress	13,225	13,490	18,000	23,000	1,361	1,705
Jackson	7,785	7,518	9,000	11,000	1,156	1,463
Macon	11,295	11,286	16,000	19,000	1,417	1,684
Morgan	13,714	13,782	13,000	15,000	948	1,088
Overton	14,119	14,244	19,000	24,000	1,346	1,685
Pickett	3,869	3,821	6,000	8,000	1,551	2,094
Putnam	29,959	30,827	56,000	72,000	1,869	2,336
Scott	14,984	15,077	18,000	21,000	1,201	1,393
Smith	11,163	11,143	15,000	17,000	1,344	1,526
Trousdale	4,727	4,720	8,000	9,000	1,692	1,907
White	15,430	15,637	22,000	26,000	1,426	1,663
Upper Cumberland Area	185,253	187,281	269,000	331,000	1,428	1,735
Tennessee	4,050,000	4,310,000	8,742,000	10,950,000	2,159	2,541

Source: Corry, Ormond C. and Price, Patricia Ann, **Comparative Economic Growth Measures—Population and Personal Income Estimates for Tennessee Counties, 1950 Through 1962, May, 1964**, Bureau of Business and Economic Research, College of Business Administration, University of Tennessee, Knoxville, Tennessee.

THE UNIVERSITY OF TENNESSEE
AGRICULTURAL EXPERIMENT STATION
KNOXVILLE, TENNESSEE

Agricultural Committee

Board of Trustees

Andrew D. Holt, President
Clyde M. York, Chairman
Ben Douglass, Harry W. Laughlin, Wassell Randolph
W. F. Moss, Commissioner of Agriculture

STATION OFFICERS

Administration

Andrew D. Holt, President
Webster Pendergrass, Dean of Agriculture
E. J. Chapman, Assistant Dean
J. A. Ewing, Director
Eric Winters, Associate Director
J. L. Anderson, Budget Officer

Department Heads

S. E. Bennett, Agricultural Biology
T. J. Whatley, Agricultural Economics and Rural Sociology
J. J. McDow, Agricultural Engineering
Harold J. Smith, Agriculture, University of Tennessee at Martin
L. F. Seatz, Agronomy
C. S. Hobbs, Animal Husbandry-Veterinary Science
Ruth L. Highberger, Child Development and Family Relationships
J. T. Miles, Dairying
Grayce E. Goertz, Foods and Institution Management
M. R. Johnston, Food Technology
J. W. Barrett, Forestry
Myra L. Bishop, Home Management, Equipment, and Family Economics
B. S. Pickett, Horticulture
R. L. Hamilton, Information
Mary R. Gram, Nutrition
K. L. Hertel, Physics
O. E. Goff, Poultry
Anna J. Treece, Textiles and Clothing

University of Tennessee Agricultural Research Units

Main Station, Knoxville, J. N. Odom, Superintendent of Farms
University of Tennessee-Atomic Energy Commission Agricultural Research Laboratory, Oak Ridge, N. S. Hall, Laboratory Director
The University of Tennessee at Martin, Martin, Harold J. Smith, Head, Department of Agriculture

Branch Stations

Dairy Experiment Station, Lewisburg, J. R. Owen, Superintendent
Highland Rim Experiment Station, Springfield, L. M. Safley, Superintendent
Middle Tennessee Experiment Station, Spring Hill, J. W. High, Jr., Superintendent
Plateau Experiment Station, Crossville, J. A. Odom, Superintendent
Tobacco Experiment Station, Greeneville, J. H. Felts, Superintendent
West Tennessee Experiment Station, Jackson, B. P. Hazlewood, Superintendent

Field Stations

Ames Plantation, Grand Junction, James M. Bryan, Manager
Cumberland Plateau Forestry Field Station, Wartburg, J. S. Kring, Manager
Friendship Forestry Field Station, Chattanooga
Highland Rim Forestry Field Station, Tullahoma, P. J. Huffman, Jr., Manager
Milan Field Station, Milan, T. C. McCutchen, Manager
Oak Ridge Forest and Arboretum, Oak Ridge, R. D. MacDonald, Manager

(3M/1-68)