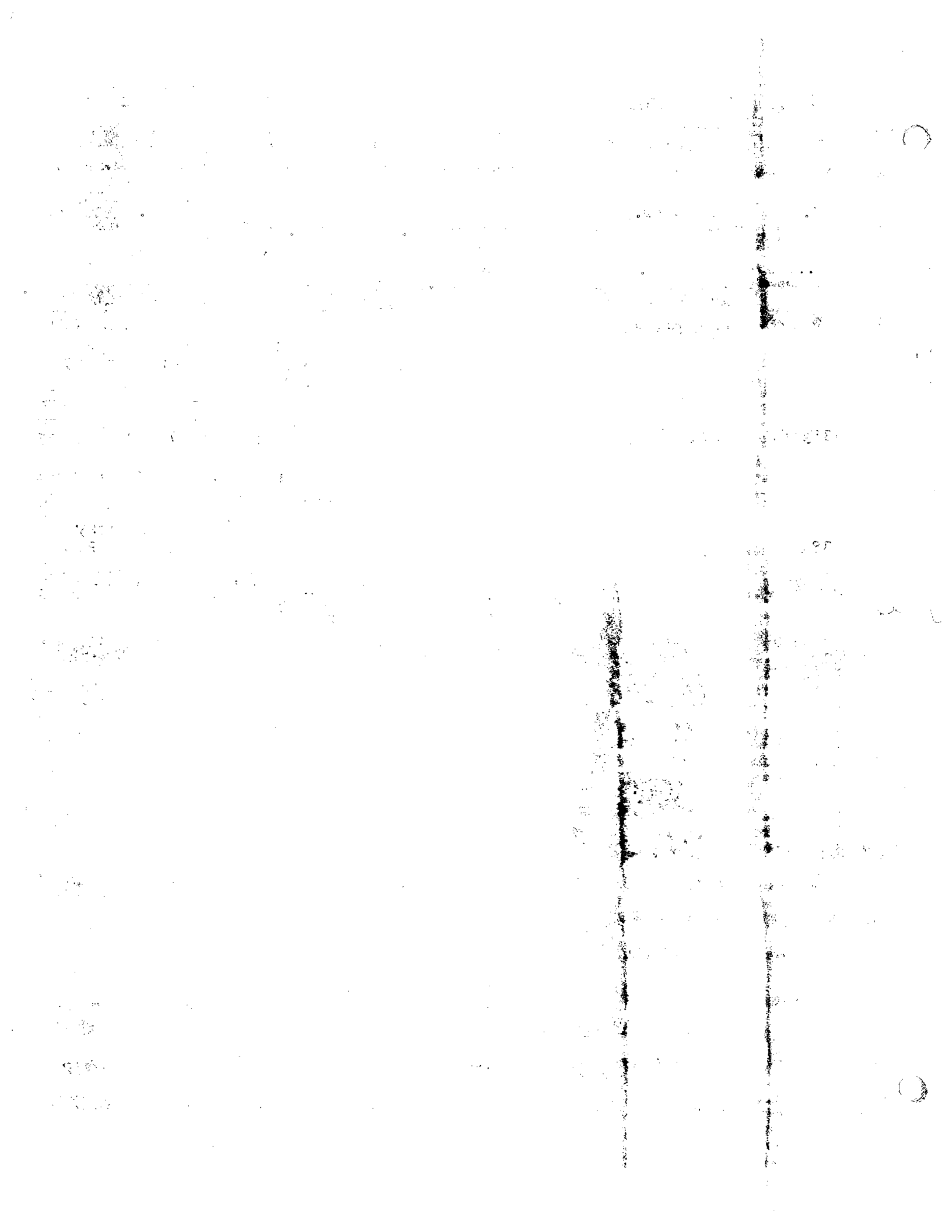


431. Vic Hellard, Jr., Director - Report of the Special Committee on Teacher Retirement. January, 1986. (Janie L. Jones)
432. Vic Hellard, Jr., Director - Government Competition with Private Enterprise July, 1986. (Randy Bacon/Sharon Schneider)
433. Vic Hellard, Jr., Director - Local Planning Commission Survey. November, 1986. (Gordon F. Mullins)
- 434.. Vic Hellard, Jr., Director - Establishment of a Building Inspectors' Foundation Program Fund and Feasibility Study. October, 1987. (Allan Alsip/ Mike Greenwell)
435. Vic Hellard, Jr., Director - Report of the Special Subcommittee on Kentucky Essential Skills Testing. April 7, 1988. (Bonnie Brinly)
436. Vic Hellard, Jr., Director - High School Graduation Requirements and Testing for Graduation. April 7, 1988. (Bonnie Brinly)
437. Vic Hellard, Jr., Director - Patterns of Growth and Decline in the Kentucky Economy, 1969-1988. November, 1989. (Virginia Wilson)



438. Vic Hellard, Jr., Director - Economic Trends in Kentucky Counties, 1969-1987 - ADAIR COUNTY. Feb., 1990. (Virginia Wilson/ Donna A. Cantrell)
438. Vic Hellard, Jr., Director - Economic Trends in Kentucky Counties, 1969-1987 - ALLEN COUNTY. Feb., 1990. (Virginia Wilson/ Donna A. Cantrell)
438. Vic Hellard, Jr., Director - Economic Trends in Kentucky Counties, 1969-1987 - ANDERSON COUNTY. Feb., 1990. (Virginia Wilson/ Donna A. Cantrell)
438. Vic Hellard, Jr., Director - Economic Trends in Kentucky Counties, 1969-1987 - BALLARD COUNTY. Feb., 1990. (Virginia Wilson/ Donna A. Cantrell)
438. Vic Hellard, Jr., Director - Economic Trends in Kentucky Counties, 1969-1987 - BARREN COUNTY. Feb., 1990. (Virginia Wilson/ Donna A. Cantrell)
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438. Vic Hellard, Jr., Director - Economic Trends in Kentucky Counties, 1969-1987 - BELL COUNTY. Feb., 1990. (Virginia Wilson/ Donna A. Cantrell)
438. Vic Hellard, Jr., Director - Economic Trends in Kentucky Counties, 1969-1987 - BOONE COUNTY. Feb., 1990. (Virginia Wilson/ Donna A. Cantrell)
438. Vic Hellard, Jr., Director - Economic Trends in Kentucky Counties, 1969-1987 - BOURBON COUNTY. Feb., 1990. (Virginia Wilson/ Donna A. Cantrell)

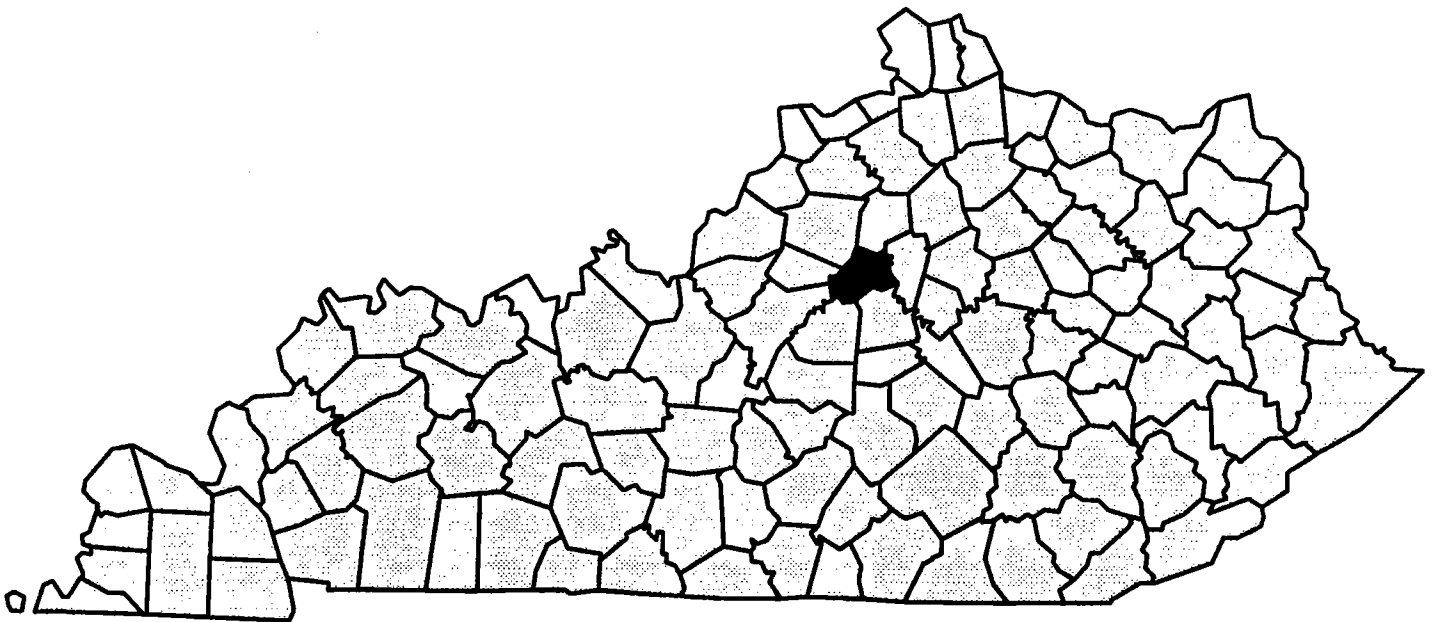


438. Vic Hellard, Jr., Director - Economic Trends in Kentucky Counties, 1969-1987 - BOYD COUNTY. Feb., 1990. (Virginia Wilson/ Donna A. Cantrell)
438. Vic Hellard, Jr., Director - Economic Trends in Kentucky Counties, 1969-1987 - BOYLE COUNTY. Feb., 1990. (Virginia Wilson/ Donna A. Cantrell)
438. Vic Hellard, Jr., Director - Economic Trends in Kentucky Counties, 1969-1987 - BRACKEN COUNTY. Feb., 1990. (Virginia Wilson/ Donna A. Cantrell)



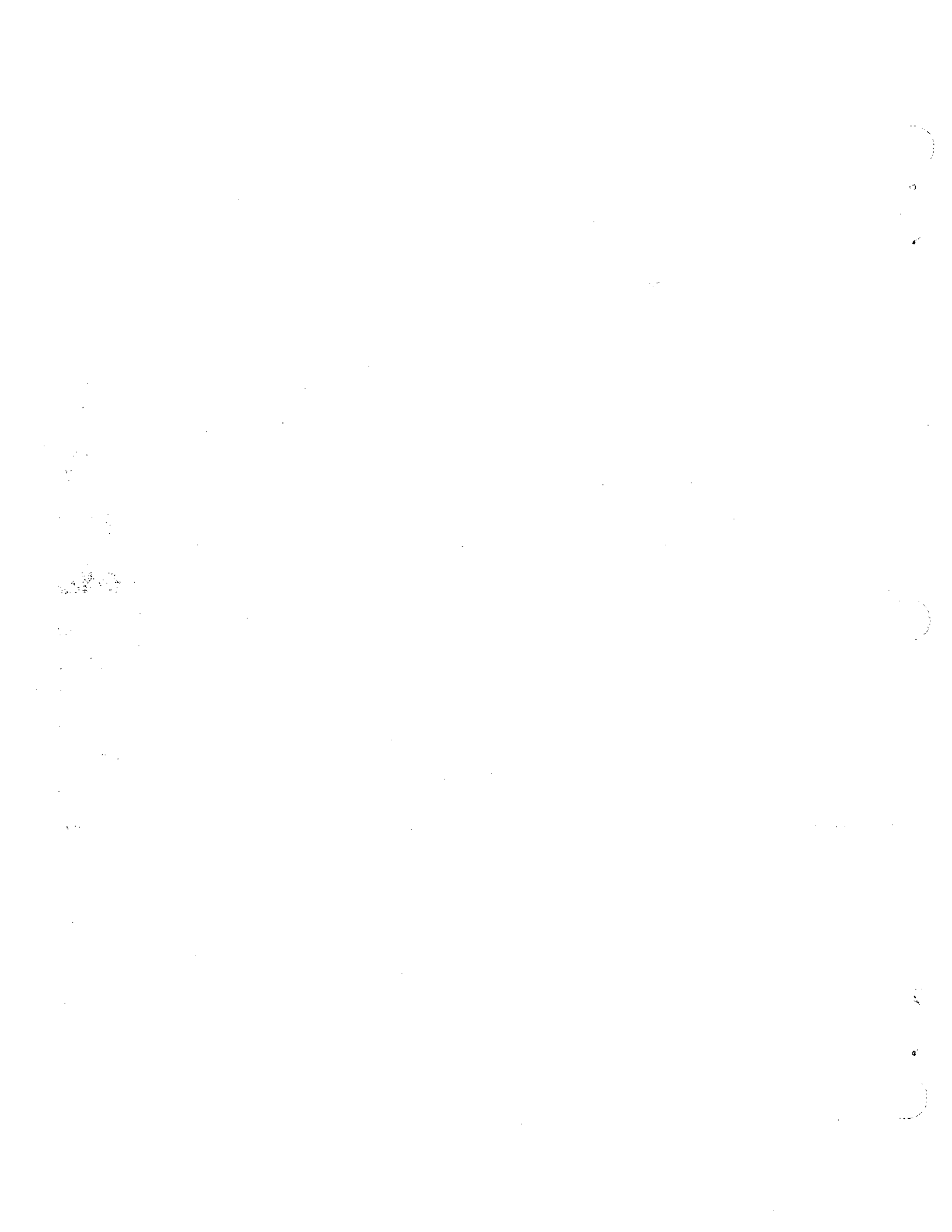
ECONOMIC TRENDS IN  
KENTUCKY COUNTIES  
1969 – 1987

**ANDERSON COUNTY**



Prepared by  
Virginia Wilson  
Donna A. Cantrell

RESEARCH MEMORANDUM 438  
Legislative Research Commission  
Frankfort, Kentucky  
February, 1990





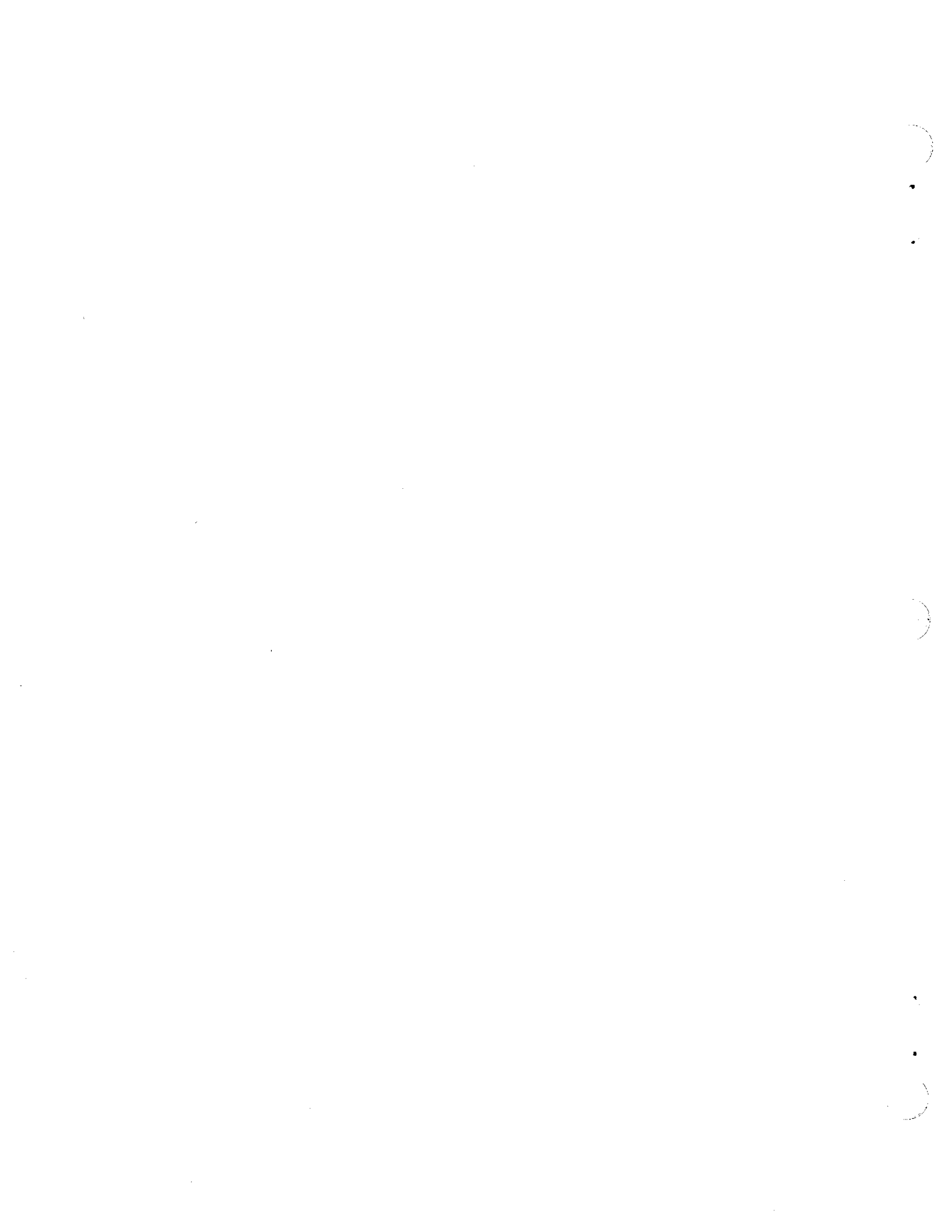
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1990

ECONOMIC TRENDS IN  
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1969 – 1987

ANDERSON COUNTY

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## FOREWORD

This publication is one of a set of 120, highlighting economic trends in each county in Kentucky from 1969-1987. This effort is part of the ongoing activities sponsored by the Legislative Research Commission to provide a long-term perspective on issues for decision makers. The economies of individual counties do not always parallel overall state trends. This set of publications is an attempt to look at the economic trends in each county over time and to point out where the economies of individual counties may be performing differently from the economy of the state as a whole.

This publication was prepared by Virginia Wilson and Donna Cantrell. Susan Dance assisted in production of the manuscript and Charles Bush edited the report. The assistance of Carol Straus from the Center for Business and Economic Research at the University of Kentucky in deciphering data is gratefully acknowledged.

Vic Hellard, Jr.  
Director

The Capitol  
Frankfort  
February, 1990



## SUMMARY

The Anderson County economy almost doubled from 1969 to 1987. The county has also increased its share of Kentucky personal income, indicating the county economy is growing at a faster rate than that of the state.

Anderson County economic growth was generated by an economic structure different from that of the state. Anderson County received a much larger percentage of personal income from earnings and a smaller share from transfer payments. The key sectors of economic activity are also different from those of the state. The county manufacturing sector has experienced strong growth in both earnings and employment. Conversely, this sector declined at the state level.

The service sector increased its share of employment, but decreased its share of earnings. While employment at the state level in the service sector has similarly increased, earnings have increased as well. The trade sector is also unlike that for the state in that both county employment and earnings have increased. At the state level, earnings were stable throughout the period, while employment increased significantly.

The high concentration and growth in the manufacturing economy has been beneficial for the local economy, in that manufacturing is a relatively high wage industry. However, manufacturing industries are very sensitive to changes in consumer demand and are generally more susceptible to cyclical economic changes. Consequently, while a high concentration in manufacturing enabled the county to enjoy economic expansion during a period of national economic growth, it may also make the county more susceptible to recessionary contractions.



## INTRODUCTION

This is one of a series of reports called Economic Trends in Kentucky Counties. The purpose of this series is to describe the economic structure of Kentucky counties and to assess their economic performance relative to their own history and relative to the Kentucky economy. Information on the structure and patterns of change in county economies and an understanding of their relationship to the Kentucky economy can help in making policy decisions that are intended to shape Kentucky's economic future.

When assessing any economy there are several pertinent questions which may be addressed. The first concerns changes in the absolute size of the economy over time. Here the relevant comparison is between the county economy and its own history. Since most economic variables are given in dollars and because inflation causes the value of a dollar to vary over time, all dollar values in this report are presented in constant 1988 dollars. This allows analysis of real changes over time by controlling for the effects of inflation.

A second question concerns the structure and nature of the county economy. The structure of an economy refers to the relative share contributed by the various segments of the economy, while the nature deals with how this share has changed over time.

A third question concerns the performance of the county economy when compared to the Kentucky economy. For example, if a county has a higher proportion of earnings or employment in a sector it would indicate a specialization in that sector. Differences in economic structure may explain variations in relative economic well-being between a county and the state as a whole.

Economic data for counties are usually published after a lag of two years. Therefore, most data in this report cover the period 1969 to 1987. All data for this report was obtained from the Kentucky Economic Information System, an on-line database maintained by the University of Kentucky Center for Business and Economic Development.

There are certain caveats which should be remembered when analyzing data. First, it is a common and useful approach to evaluate the percentage an economic sector contributes to the total economy. However, one must remember that a sector's percentage contribution may decline even when its absolute value is increasing if another sector's contribution is growing at a faster rate. Secondly, when reviewing data in graphical analyses, the scales used to present data should be noted. In this report most graphs are presented with the narrowest scale which will cover all data points. This can accentuate visual patterns over time even when absolute changes are relatively small.

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\*For an analysis of economic trends in Kentucky, see Virginia Wilson, Patterns of Growth and Decline in the Kentucky Economy 1969-1988, Research Memorandum 437, Legislative Research Commission, November 1989.





## ECONOMIC TRENDS IN ANDERSON COUNTY

The following analysis includes a brief description of the Anderson County economy and is accompanied by graphical illustrations. Data tables are included at the end of this report. Three principal components of the Anderson County economy are analyzed. They are:

1. Personal Income
2. Earnings
3. Employment

### Personal Income

Personal income is often used as a measure of the economic activity in an area. Personal income is the sum of all the dollar income received by individuals in an area from any legal source. Personal income data is published by the Bureau of Economic Analysis (BEA) for most major geographic regions, including states, counties, and major cities.

In general, income can be obtained in three ways. First, it can be earned by the work of an individual. This type of income includes wage and salary income and proprietors' earnings. Second, income can be earned by property. This component includes earnings from rents, dividends, and interest. Finally, income can be received as a gift or an entitlement. This type of income constitutes the component of personal income called transfer payments. Included in this component is income from sources such as retirement benefits, unemployment benefits, food stamps, and medical programs such as Medicare and Medicaid.

As can be seen in Chart 1A, the Anderson County economy, as measured by personal income, increased from \$88 million in 1969 to \$179 million in 1987, after adjusting for inflation. Chart 1B shows Anderson County total personal income as a percent of Kentucky total personal income. Anderson County has increased its share of Kentucky personal income.

A similar pattern emerges from an examination of per capita personal income. Per capita personal income is simply the total personal income of an area divided by its population. Per capita personal income is often used as a measure of the economic well-being of the residents of an area. Charts 1C and 1D indicate that Anderson County per capita income increased over the time period to a level of \$12,856 per person. In 1987, Anderson County per capita personal income was 102.9 percent of Kentucky per capita personal income.

A better understanding of the nature of economic activity can be gleaned from an examination of the relative contribution of the components of personal income and how their share has changed over time. This information is illustrated in Charts 2A-2D. While total earnings increased from \$73 million in 1969 to \$130 million in 1987 (in constant 1988 dollars), their share of personal income has declined over time. This is also a trend occurring at the

state level. Earnings accounted for 82.9 percent of Anderson County's total personal income in 1987, which was significantly more than Kentucky's 67.5 percent share.

Transfer payments contributed \$7 million to total personal income in 1969 and \$24 million in 1987. During the same period, transfer payments contributed a smaller percentage of personal income in Anderson County than in Kentucky.

Income from property in Anderson County grew at a stable rate through the time period. Income from property totalled \$8 million in 1969 and increased to \$26 million in 1987.

### **Earnings**

Earnings are the component of personal income reflecting payments to individuals in return for labor. Earnings include both wage and salary and proprietor's income. In 1969, Anderson County received 25.3 percent of total earnings from manufacturing. This percentage increased to 33.5 percent in 1987. The county trend toward increasing concentration in manufacturing is different from that for the state, where the percentage of earnings from manufacturing has shown a steady decline over the period.

Chart 3A also indicates that farming's contribution to total county earnings decreased substantially from 21.2 percent in 1969 to 9.5 percent in 1987. Earnings from mining were minimal throughout the period.

Earnings from non-goods-producing industries are illustrated in Chart 3B. The percentage of earnings from the services sector decreased from 13.5 percent in 1969 to 10.9 percent in 1987, whereas the state increased its share of service sector employment. Earnings in both the trade and state and local government sectors have increased. At the state level, the percent of employment from these sectors decreased.

Average earnings per job (adjusted for inflation) for Anderson County and Kentucky are shown in Chart 3D. In Kentucky, average earnings per job reached a high of \$20,121 per person in 1978. Since then, average earnings per job declined and in 1987 they were \$18,636 per person. In Anderson County, average earnings have been cyclical over the period. They were \$15,649 in 1987, which was well below the Kentucky average.

### **Employment**

Employment is considered any activity for which one receives financial remuneration in the form of wages or profits. Total employment in Anderson County increased substantially during the data period. In 1969, total employment stood at 3,477 people. By 1987, that figure had increased to 5,025.

The unemployment rate, often used as an indicator of economic well-being, is the ratio of unemployed to the total civilian labor force. Unemployment is described as a condition of being out of work while actively seeking employment within the last thirty days. The civilian labor force is described as the proportion of population age 16 or older employed or actively seeking employment. Annual unemployment rates for Kentucky and Anderson County are presented in Chart 4B. While unemployment rates in Anderson County have paralleled those of the state, they have generally been lower than state rates. In 1987, the Anderson County unemployment rate was 7.1 percent compared to 8.8 percent for the state.

Another employment concept includes the discouraged worker. Discouraged workers are persons who want jobs but made no attempt to find work in the last thirty days because they believe they could not find it. These individuals are not included when calculating official unemployment rates. The Cabinet for Human Resources does not estimate discouraged workers by county. However, preliminary research by the Cabinet indicates that the inclusion of discouraged workers in the civilian labor force estimate would increase the unemployment rate by approximately four percent for the state. This figure would vary by county depending on the labor market in the county and within commuting distance.

Employment in the goods-producing industries is illustrated in Chart 4C. While the percent of Anderson County total employment in agriculture declined, this sector has been the county's largest source of employment since 1975. In 1987, 20.8 percent of jobs were in the farm sector. Manufacturing employment increased slightly in the early seventies, but later declined to 19.1 percent in 1987. The state trend has also shown a decline in both manufacturing and agricultural employment. It is interesting to note that while the percent of total employment in agriculture is almost equal to that from manufacturing in 1987, the percent of earnings from manufacturing exceeded those from agriculture, reflecting the higher earnings in manufacturing industries.

Employment in the non-goods-producing industries is presented in Chart 4D. The growing employment sectors of the Anderson County economy have been services and trade. In 1969, 14.5 percent of jobs were in services and 14.3 percent in trade. In 1987, these shares increased to 17.0 percent and 17.7 percent for the respective sectors. Employment in state and local government has been stable. These employment trends reflect Kentucky employment trends.

## **Population**

The U.S. census conducted each decade obtains an actual count of the population in an area. Population is then statistically estimated for non-census years. The demographic composition of this population growth has important implications for the future demand for goods and services, and ultimately, the economic structure of Anderson County.

The Anderson County population grew from 9,300 in 1969 to 14,000 in 1987 (Chart 5A). The composition of Anderson County's population changed in the early eighties. Prior to this period, the percent of the population under age 6 was similar to that of the state. However, by the mid-eighties this percentage declined relative to the state. By 1986, 7.9 percent of Anderson County's population was under six years of age, compared to 8.6 percent for the state. Another population shift has been evidenced in the population age 60 and over. Prior to the eighties, Anderson County had a higher proportion of senior residents than the state. However, by 1987, 16.1 percent of the Anderson County population fell in this age group, compared to 16.5 percent for Kentucky.

CHART 1A

ANDERSON COUNTY  
REAL PERSONAL INCOME  
Millions of 1988 dollars

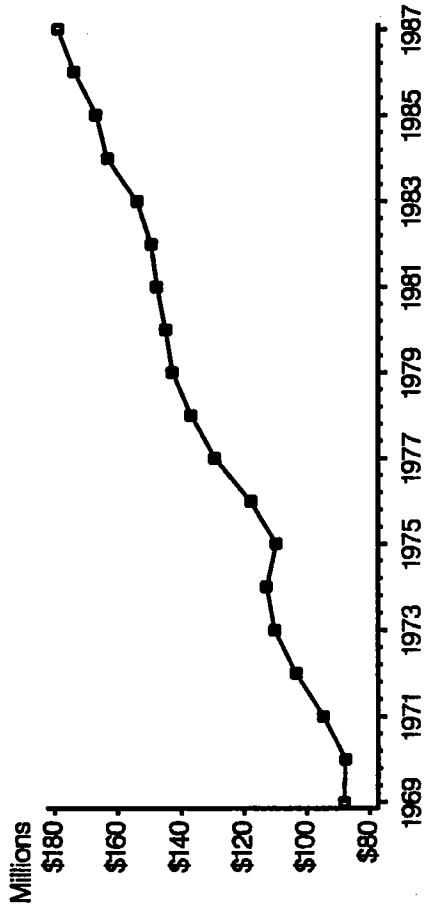


CHART 1B  
ANDERSON COUNTY  
PERSONAL INCOME  
as a Percent of Kentucky Personal Income

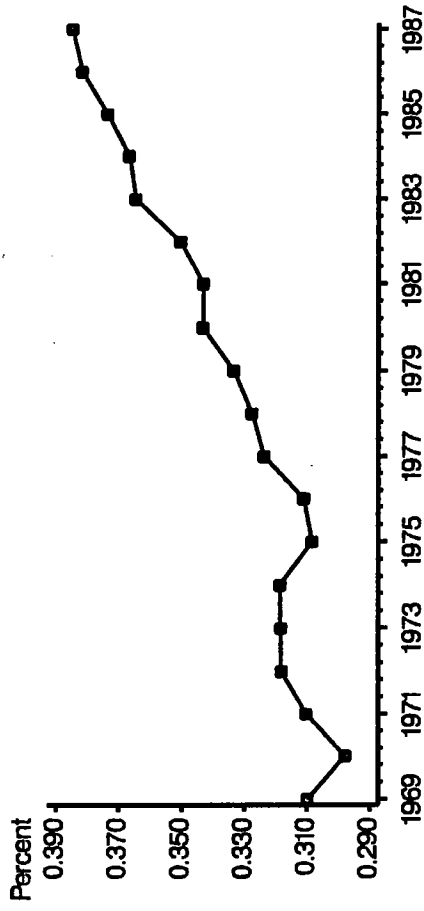


CHART 1C

ANDERSON COUNTY  
PER CAPITA PERSONAL INCOME  
in Constant 1988 Dollars

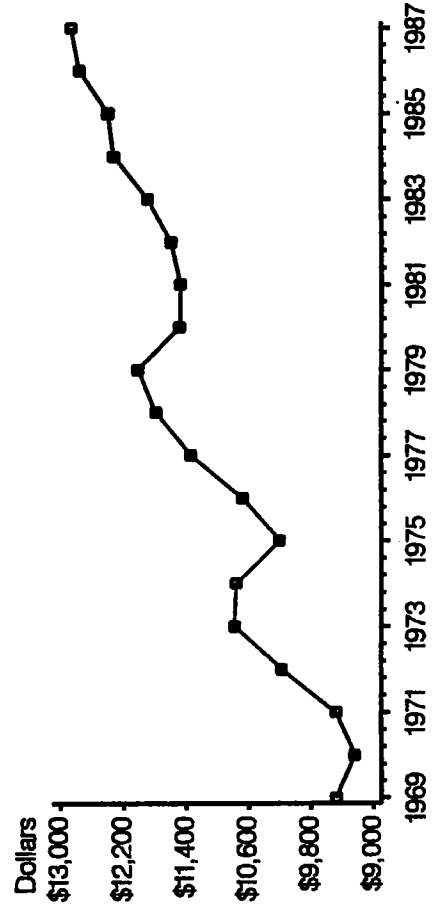


CHART 1D

ANDERSON COUNTY  
PER CAPITA PERSONAL INCOME  
as a Percent of Kentucky Per Capita Personal Income

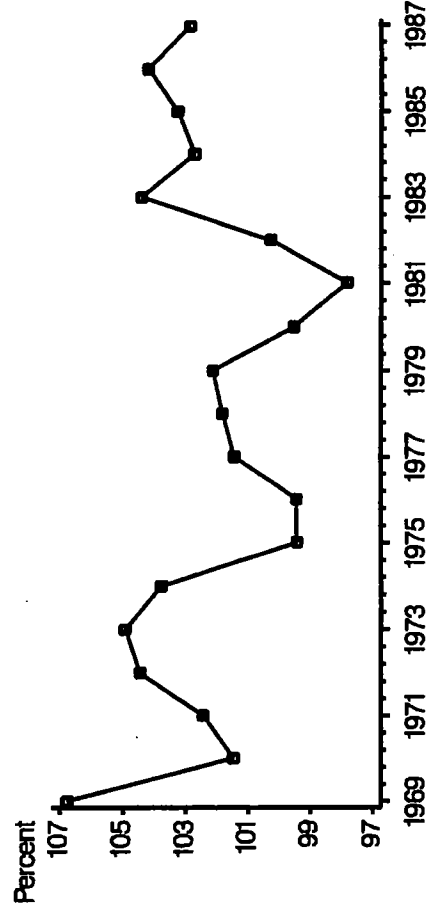


CHART 2A  
ANDERSON COUNTY  
REAL TOTAL EARNINGS  
Millions of 1988 dollars

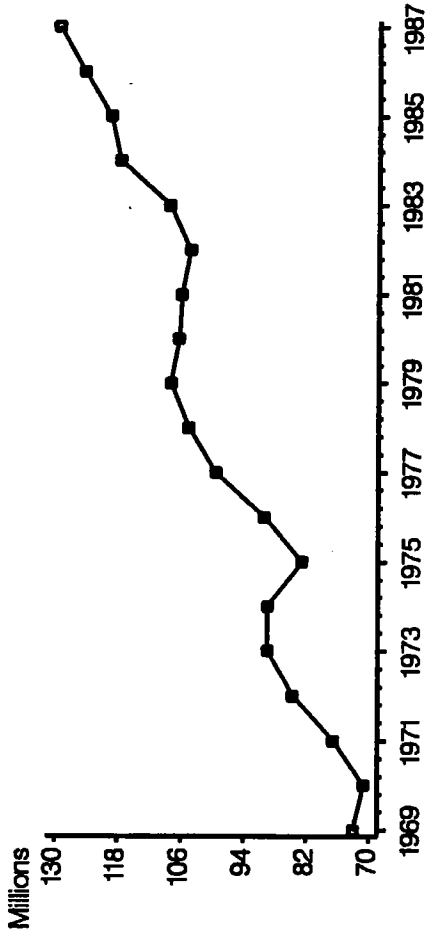


CHART 2B  
ANDERSON COUNTY  
TRANSFER PAYMENTS and INCOME FROM PROPERTY  
Millions of 1988 Dollars

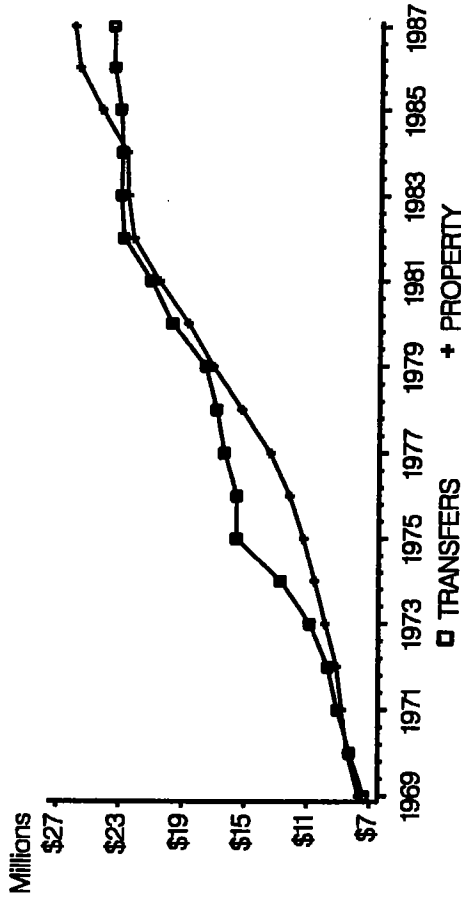


CHART 2C  
ANDERSON COUNTY  
TOTAL EARNINGS  
as a Percent of Personal Income

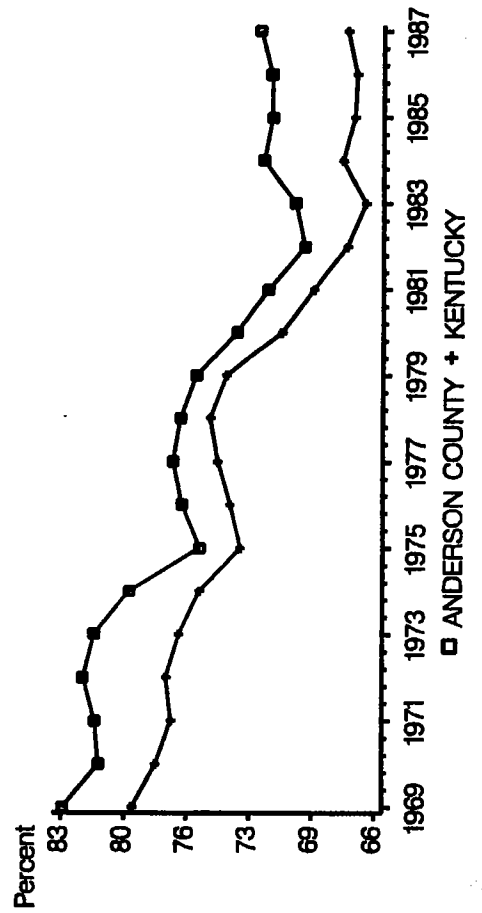


CHART 2D  
ANDERSON COUNTY  
TRANSFER PAYMENTS  
as a Percent of Personal Income

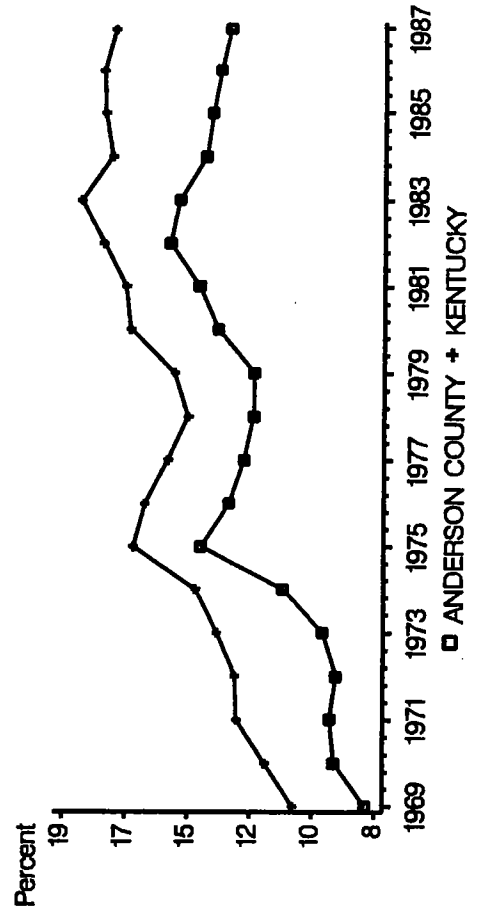


CHART 3A  
 ANDERSON COUNTY  
 EARNINGS IN GOODS PRODUCING INDUSTRIES  
 as a Percent of Total Earnings

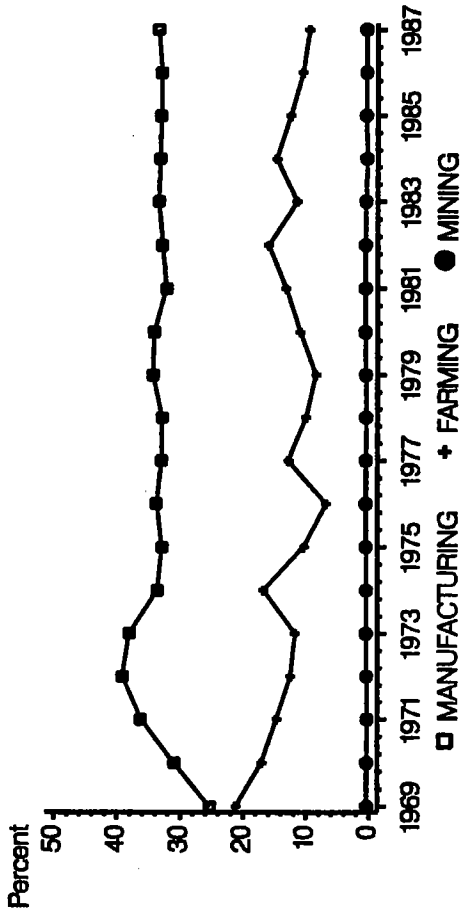


CHART 3B  
 ANDERSON COUNTY  
 EARNINGS IN NON-GOODS PRODUCING INDUSTRIES  
 as a Percent of Total Earnings

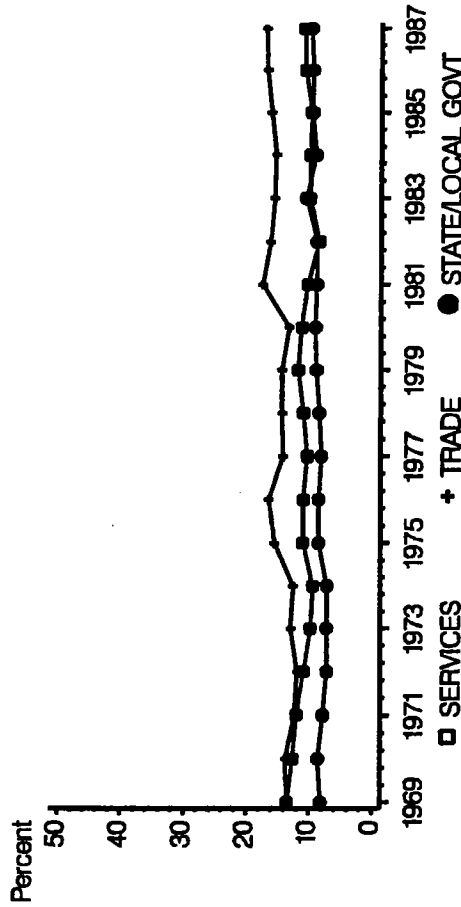


CHART 3C  
 ANDERSON COUNTY  
 EARNINGS IN GOODS PRODUCING INDUSTRIES  
 as a Percent of Kentucky Industries

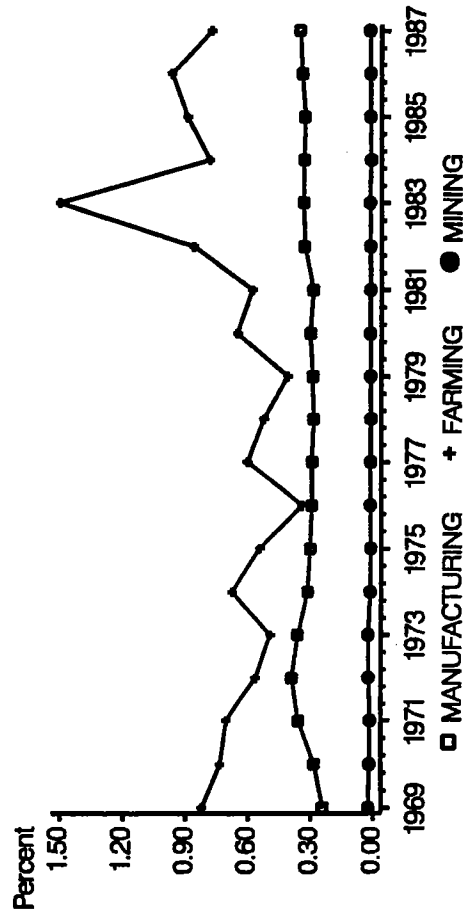


CHART 3D  
 ANDERSON COUNTY  
 AVERAGE EARNINGS PER JOB  
 in Constant 1988 Dollars

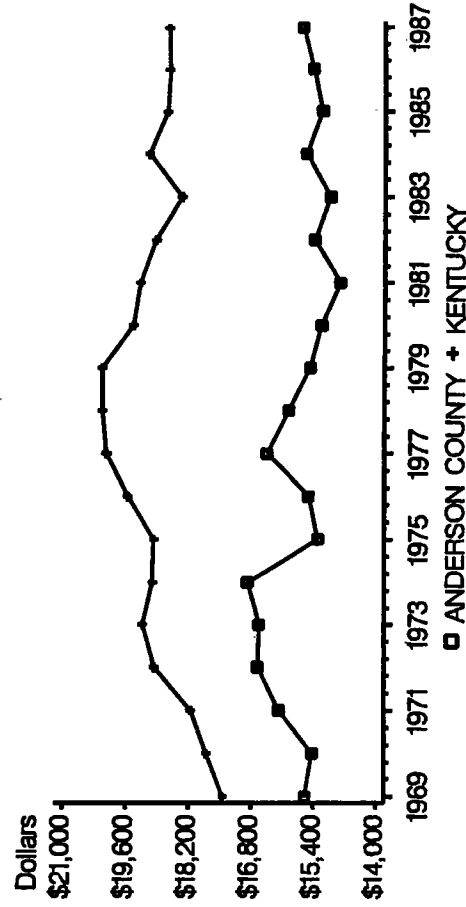


CHART 4A  
ANDERSON COUNTY  
TOTAL EMPLOYMENT  
Thousands of People

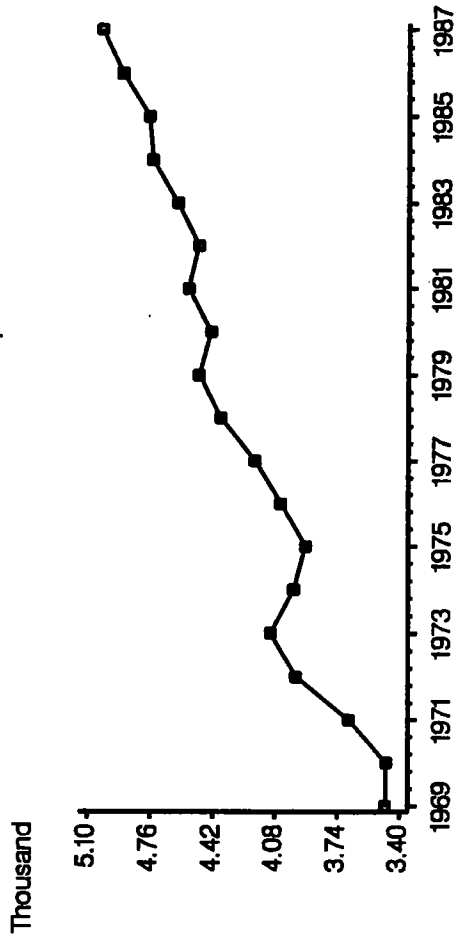


CHART 4B  
ANDERSON COUNTY  
ANNUAL UNEMPLOYMENT RATE

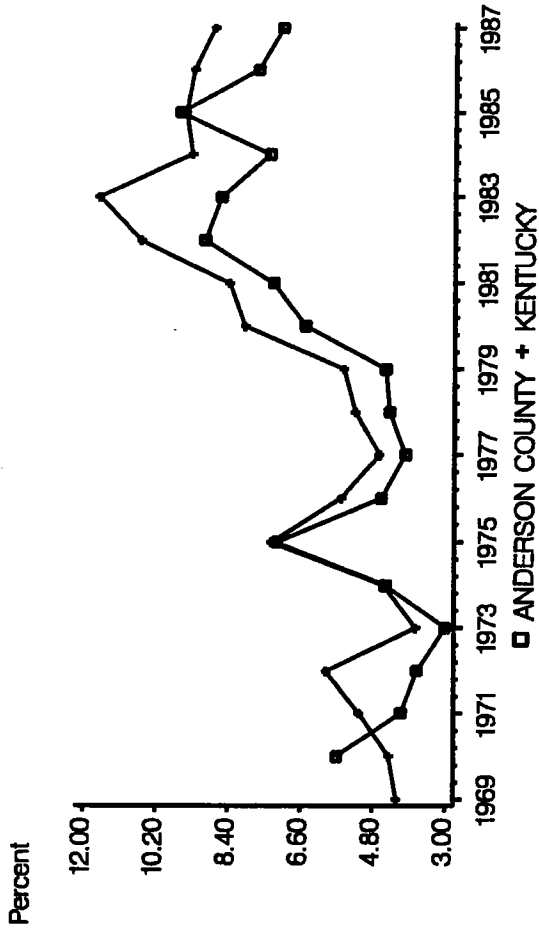


CHART 4C  
ANDERSON COUNTY  
EMPLOYMENT IN GOODS PRODUCING INDUSTRIES  
as a Percent of Total Employment

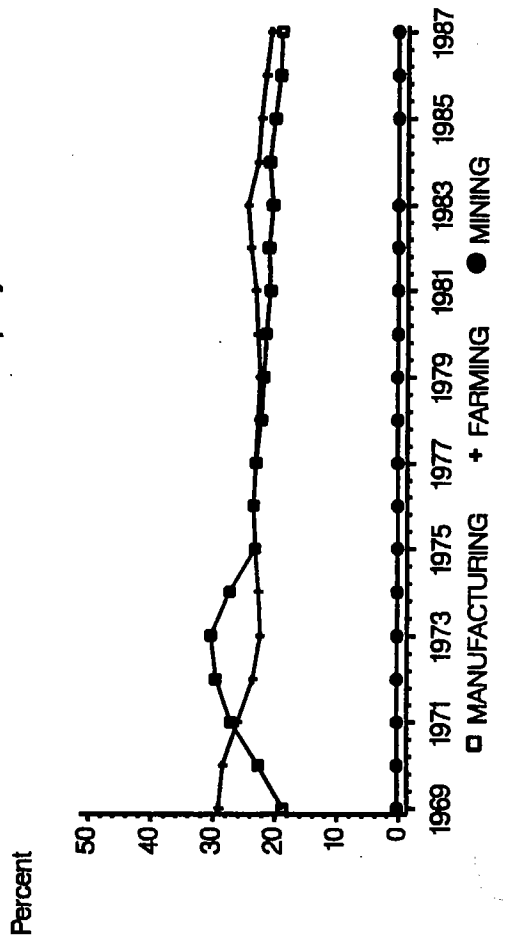


CHART 4D  
ANDERSON COUNTY  
EMPLOYMENT IN NON-GOODS PRODUCING INDUSTRIES  
as a Percent of Total Employment

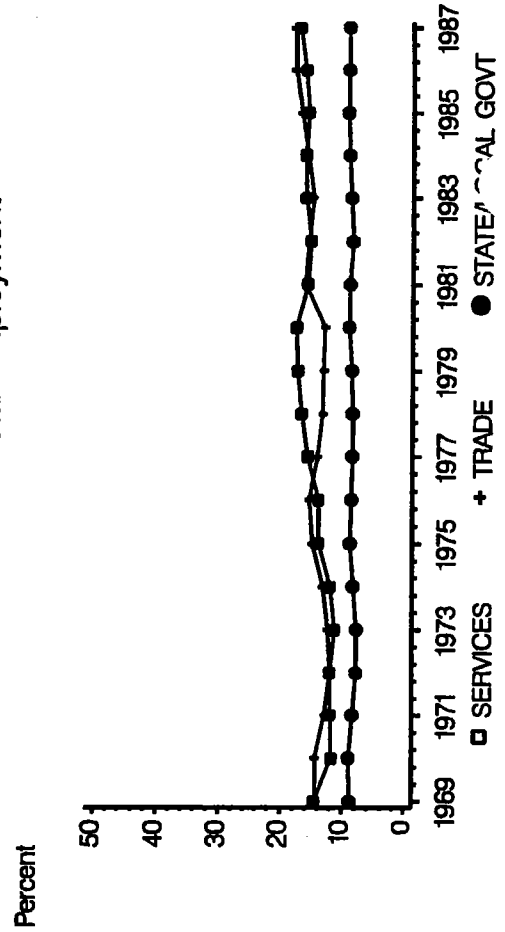




CHART 5A  
ANDERSON COUNTY  
POPULATION  
Thousands of People

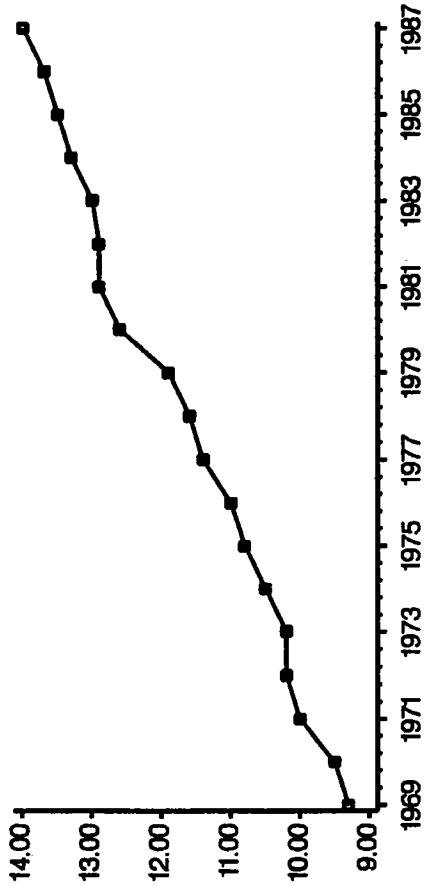


CHART 5B  
ANDERSON COUNTY  
POPULATION  
as a Percent of Kentucky Population

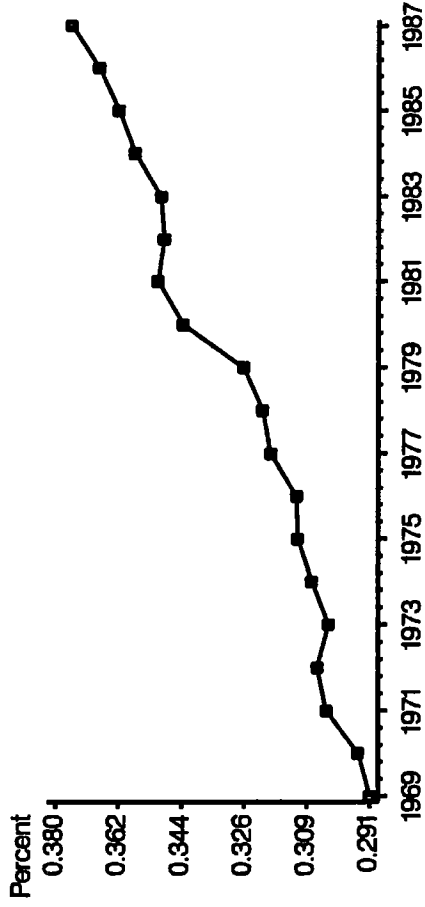


CHART 5C  
ANDERSON COUNTY  
POPULATION 5 AND UNDER  
as a Percent of Total Population

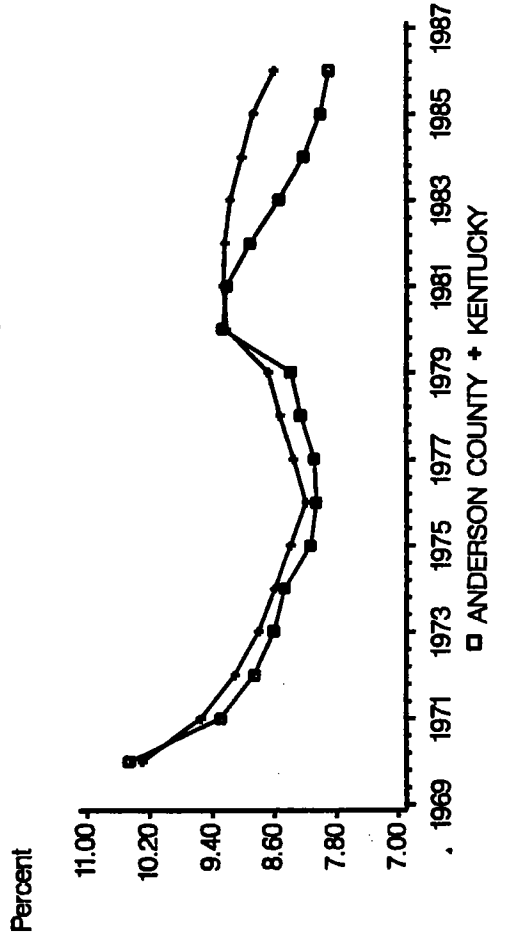
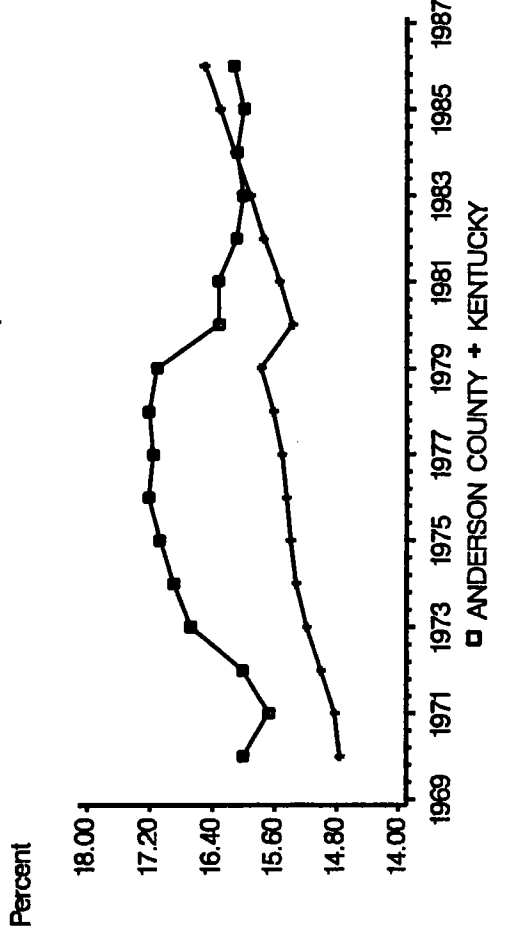


CHART 5D  
ANDERSON COUNTY  
POPULATION 60 AND OVER  
as a Percent of Total Population



ANDERSON COUNTY

PERSONAL INCOME  
In Constant 1988 Dollars

Year	County Personal Income (M\$)	Percent of Kentucky (%)	Per Capita Personal Income (\$)	Percent of Kentucky (%)
1969	88	0.31	9,486	106.8
1970	88	0.30	9,249	101.5
1971	95	0.31	9,483	102.5
1972	103	0.32	10,179	104.5
1973	110	0.32	10,776	104.9
1974	113	0.32	10,753	103.8
1975	110	0.31	10,206	99.4
1976	118	0.31	10,678	99.5
1977	129	0.32	11,338	101.4
1978	137	0.33	11,777	101.8
1979	143	0.33	12,011	102.1
1980	145	0.34	11,480	99.5
1981	148	0.34	11,470	97.9
1982	150	0.35	11,588	100.3
1983	154	0.36	11,884	104.4
1984	164	0.37	12,319	102.7
1985	167	0.37	12,389	103.3
1986	174	0.38	12,750	104.2
1987	179	0.39	12,856	102.9

COMPONENTS OF PERSONAL INCOME  
In Constant 1988 Dollars

Year	EARNINGS			TRANSFER PAYMENTS			INCOME from PROPERTY		
	M\$	Percent of Personal Income		M\$	Percent of Personal Income		M\$	Percent of Personal Income	
		County	Kentucky		County	Kentucky		County	Kentucky
1969	73	82.9	79.2	7	8.4	10.9	8	8.7	9.9
1970	71	80.9	77.9	8	9.4	11.9	8	9.6	10.2
1971	77	81.2	77.0	9	9.6	12.9	9	9.3	10.1
1972	85	81.8	77.3	10	9.4	12.9	9	8.8	9.7
1973	90	81.2	76.6	11	9.8	13.6	10	8.9	9.7
1974	90	79.3	75.5	13	11.3	14.4	11	9.4	10.1
1975	83	75.5	73.3	16	14.2	16.5	11	10.3	10.1
1976	90	76.5	73.9	16	13.2	16.1	12	10.3	10.0
1977	100	77.0	74.6	16	12.7	15.3	13	10.4	10.1
1978	105	76.5	75.0	17	12.3	14.6	15	11.1	10.4
1979	108	75.7	74.1	18	12.3	15.1	17	12.0	10.8
1980	107	73.5	71.1	20	13.6	16.7	19	12.9	12.2
1981	106	71.8	69.3	21	14.3	16.8	21	13.9	13.8
1982	104	69.8	67.5	23	15.3	17.6	22	14.9	14.9
1983	108	70.4	66.6	23	15.0	18.4	23	14.7	15.1
1984	118	72.1	67.8	23	14.1	17.3	23	13.9	14.9
1985	120	71.6	67.2	23	13.8	17.6	24	14.5	15.3
1986	125	71.7	67.1	24	13.5	17.6	26	14.8	15.3
1987	130	72.3	67.5	24	13.2	17.2	26	14.6	15.3

ANDERSON COUNTY

SECTOR EARNINGS as a PERCENT of TOTAL COUNTY EARNINGS and  
as a PERCENT of KENTUCKY SECTOR EARNINGS

YEAR	MANUFACTURING		FARMING		MINING	
	TOTAL	KENTUCKY	TOTAL	KENTUCKY	TOTAL	KENTUCKY
1969	25.3	0.24	21.2	0.82	0.3	0.02
1970	30.9	0.28	17.1	0.73	0.3	0.02
1971	36.3	0.36	14.7	0.70	0.3	0.02
1972	39.2	0.39	12.5	0.57	0.4	0.02
1973	38.0	0.36	11.8	0.50	0.5	0.03
1974	33.7	0.31	16.8	0.68	0.4	0.02
1975	32.9	0.30	10.4	0.55	0.5	0.01
1976	33.8	0.29	6.9	0.34	0.5	0.01
1977	33.0	0.29	12.9	0.60	0.5	0.01
1978	32.9	0.28	10.0	0.53	0.4	0.01
1979	34.4	0.29	8.5	0.41	0.5	0.01
1980	34.2	0.30	11.0	0.65	0.6	0.02
1981	32.2	0.29	13.3	0.58	0.6	0.02
1982	32.9	0.33	16.0	0.86	0.6	0.02
1983	33.4	0.34	11.5	1.50	0.5	0.02
1984	33.2	0.33	14.7	0.79	0.3	0.01
1985	33.1	0.33	12.5	0.89	0.4	0.02
1986	33.0	0.34	10.6	0.97	0.4	0.02
1987	33.5	0.35	9.5	0.78	0.4	0.02

YEAR	SERVICES		TRADE		STATE and LOCAL GOVERNMENT	
	TOTAL	KENTUCKY	TOTAL	KENTUCKY	TOTAL	KENTUCKY
1969	13.5	0.24	13.5	0.20	8.2	0.21
1970	12.6	0.22	13.7	0.19	8.6	0.20
1971	12.0	0.22	12.3	0.19	7.8	0.19
1972	10.8	0.21	11.9	0.19	7.1	0.19
1973	9.8	0.19	12.9	0.20	7.2	0.19
1974	9.4	0.18	12.5	0.19	7.2	0.19
1975	11.0	0.18	15.5	0.21	8.5	0.19
1976	10.9	0.18	16.4	0.22	8.5	0.19
1977	10.3	0.17	14.2	0.20	8.1	0.19
1978	11.0	0.18	14.3	0.20	8.4	0.19
1979	11.8	0.19	14.4	0.19	8.9	0.19
1980	11.3	0.17	13.3	0.18	9.1	0.19
1981	10.3	0.15	17.5	0.25	8.9	0.19
1982	8.5	0.13	16.2	0.24	8.8	0.19
1983	9.9	0.14	15.6	0.23	10.6	0.23
1984	9.9	0.14	15.4	0.24	9.0	0.20
1985	9.7	0.13	16.1	0.24	9.6	0.21
1986	10.7	0.14	16.8	0.26	9.5	0.21
1987	10.9	0.14	17.0	0.26	9.8	0.21

ANDERSON COUNTY  
COUNTY EMPLOYMENT by SECTOR  
-----

YEAR	MANUFACTURING		FARMING		MINING	
	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL
1969	653	18.8	1,014	29.2	12	0.3
1970	787	22.7	987	28.4	11	0.3
1971	1,000	27.2	959	26.1	11	0.3
1972	1,175	29.6	935	23.6	16	0.4
1973	1,248	30.4	918	22.4	14	0.3
1974	1,091	27.4	902	22.7	13	0.3
1975	909	23.2	912	23.3	12	0.3
1976	950	23.5	952	23.5	11	0.3
1977	967	23.1	970	23.2	12	0.3
1978	974	22.2	996	22.7	14	0.3
1979	984	21.9	1,012	22.5	18	0.4
1980	955	21.5	1,015	22.9	15	0.3
1981	951	20.9	1,057	23.2	15	0.3
1982	950	21.1	1,082	24.0	14	0.3
1983	946	20.5	1,130	24.5	13	0.3
1984	998	21.0	1,086	22.9	.	.
1985	961	20.2	1,066	22.4	11	0.2
1986	951	19.4	1,062	21.6	14	0.3
1987	961	19.1	1,045	20.8	15	0.3

YEAR	SERVICES		TRADE		STATE and LOCAL GOVERNMENT	
	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL
1969	505	14.5	496	14.3	304	8.7
1970	405	11.7	499	14.4	309	8.9
1971	435	11.8	471	12.8	307	8.3
1972	473	11.9	474	12.0	308	7.8
1973	461	11.2	508	12.4	318	7.7
1974	476	12.0	525	13.2	331	8.3
1975	544	13.9	584	14.9	344	8.8
1976	564	13.9	626	15.5	347	8.6
1977	659	15.7	592	14.1	354	8.4
1978	731	16.7	579	13.2	370	8.4
1979	782	17.4	590	13.1	386	8.6
1980	778	17.6	572	12.9	399	9.0
1981	717	15.7	737	16.2	404	8.9
1982	686	15.2	703	15.6	380	8.4
1983	741	16.1	685	14.8	402	8.7
1984	767	16.1	749	15.8	428	9.0
1985	746	15.6	800	16.8	440	9.2
1986	793	16.1	870	17.7	448	9.1
1987	855	17.0	891	17.7	454	9.0

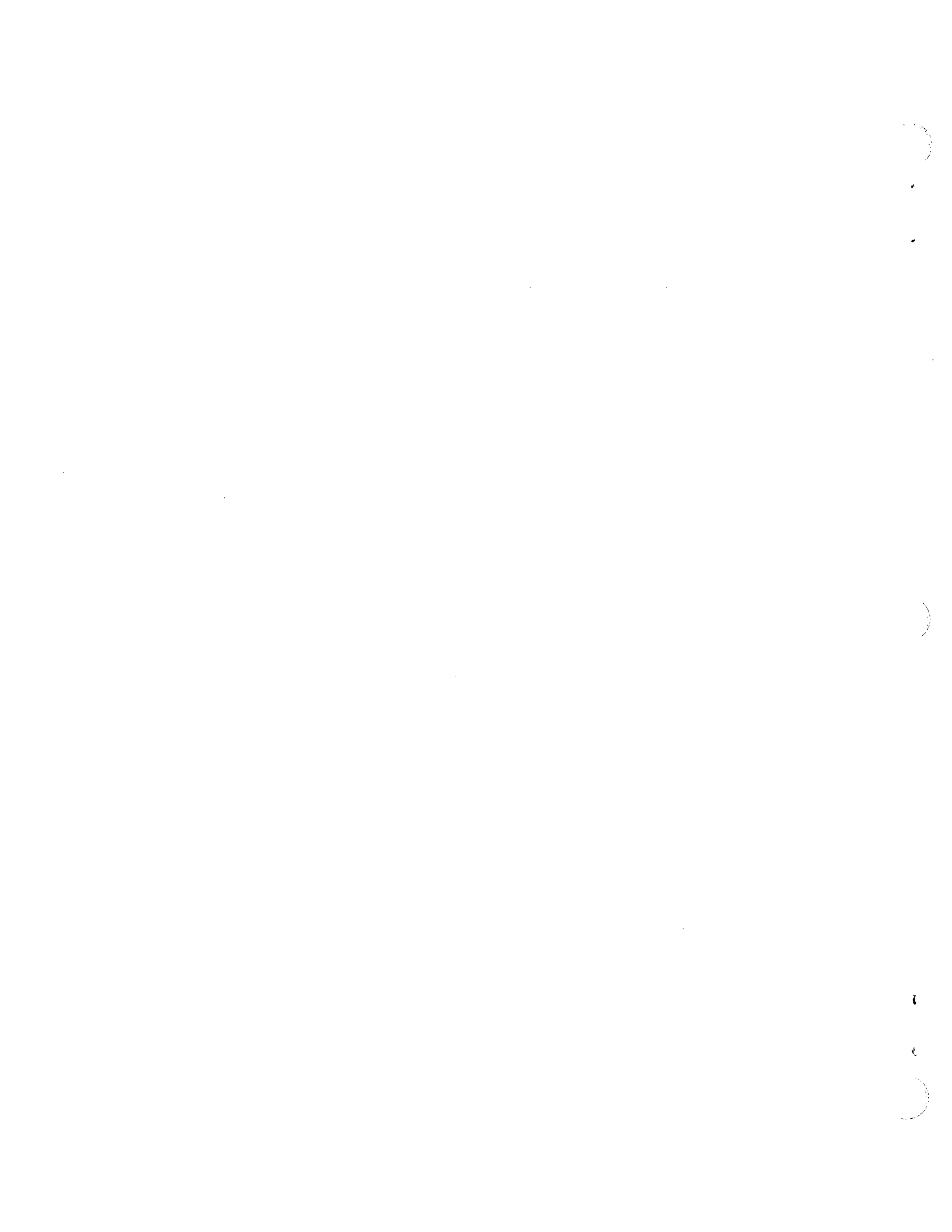
ANDERSON COUNTY

EMPLOYMENT STATISTICS

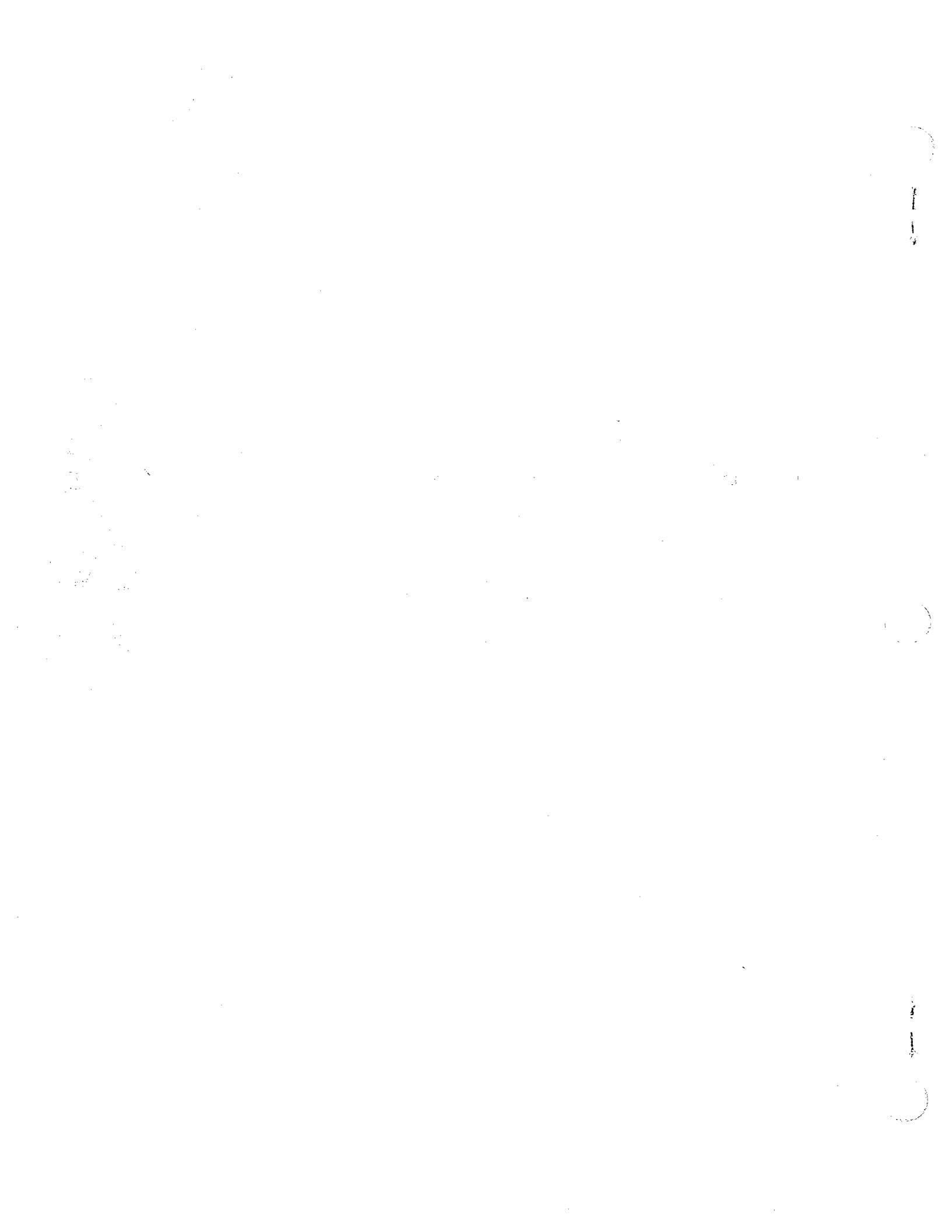
YEAR	TOTAL EMPLOYMENT	AVERAGE EARNINGS		UNEMPLOYMENT RATE	
		COUNTY	KENTUCKY	COUNTY	KENTUCKY
1969	3,477	\$15,596	\$17,440	.	4.2
1970	3,472	\$15,428	\$17,811	5.7	4.4
1971	3,679	\$16,188	\$18,166	4.1	5.1
1972	3,965	\$16,652	\$18,970	3.7	6.0
1973	4,104	\$16,627	\$19,232	3.0	3.7
1974	3,979	\$16,880	\$19,008	4.5	4.5
1975	3,914	\$15,308	\$18,976	7.2	7.3
1976	4,050	\$15,517	\$19,563	4.6	5.6
1977	4,190	\$16,450	\$20,031	4.0	4.7
1978	4,379	\$15,971	\$20,121	4.4	5.3
1979	4,497	\$15,478	\$20,110	4.5	5.5
1980	4,432	\$15,239	\$19,439	6.5	8.0
1981	4,554	\$14,824	\$19,286	7.3	8.4
1982	4,499	\$15,387	\$18,931	9.0	10.6
1983	4,615	\$15,048	\$18,358	8.6	11.6
1984	4,750	\$15,577	\$19,080	7.4	9.3
1985	4,769	\$15,222	\$18,676	9.6	9.5
1986	4,914	\$15,416	\$18,627	7.7	9.3
1987	5,025	\$15,649	\$18,636	7.1	8.8

POPULATION STATISTICS

YEAR	POPULATION	% OF KY	PERCENT UNDER AGE 6		PERCENT AGE 60+	
			COUNTY	KENTUCKY	COUNTY	KENTUCKY
1969	9,300	0.29	.	.	.	.
1970	9,500	0.29	10.5	10.3	16.0	14.8
1971	10,000	0.30	9.3	9.6	15.7	14.8
1972	10,200	0.31	8.9	9.1	16.0	15.0
1973	10,200	0.30	8.6	8.8	16.7	15.2
1974	10,500	0.31	8.5	8.6	16.9	15.3
1975	10,800	0.31	8.1	8.4	17.1	15.4
1976	11,000	0.31	8.1	8.2	17.2	15.5
1977	11,400	0.32	8.1	8.4	17.2	15.5
1978	11,600	0.32	8.3	8.5	17.2	15.6
1979	11,900	0.33	8.4	8.7	17.1	15.8
1980	12,600	0.34	9.3	9.2	16.3	15.4
1981	12,900	0.35	9.2	9.3	16.3	15.5
1982	12,900	0.35	8.9	9.2	16.1	15.7
1983	13,000	0.35	8.5	9.2	16.0	15.9
1984	13,300	0.36	8.2	9.0	16.1	16.1
1985	13,500	0.36	8.0	8.9	16.0	16.3
1986	13,700	0.37	7.9	8.6	16.1	16.5
1987	14,000	0.38	.	.	.	.



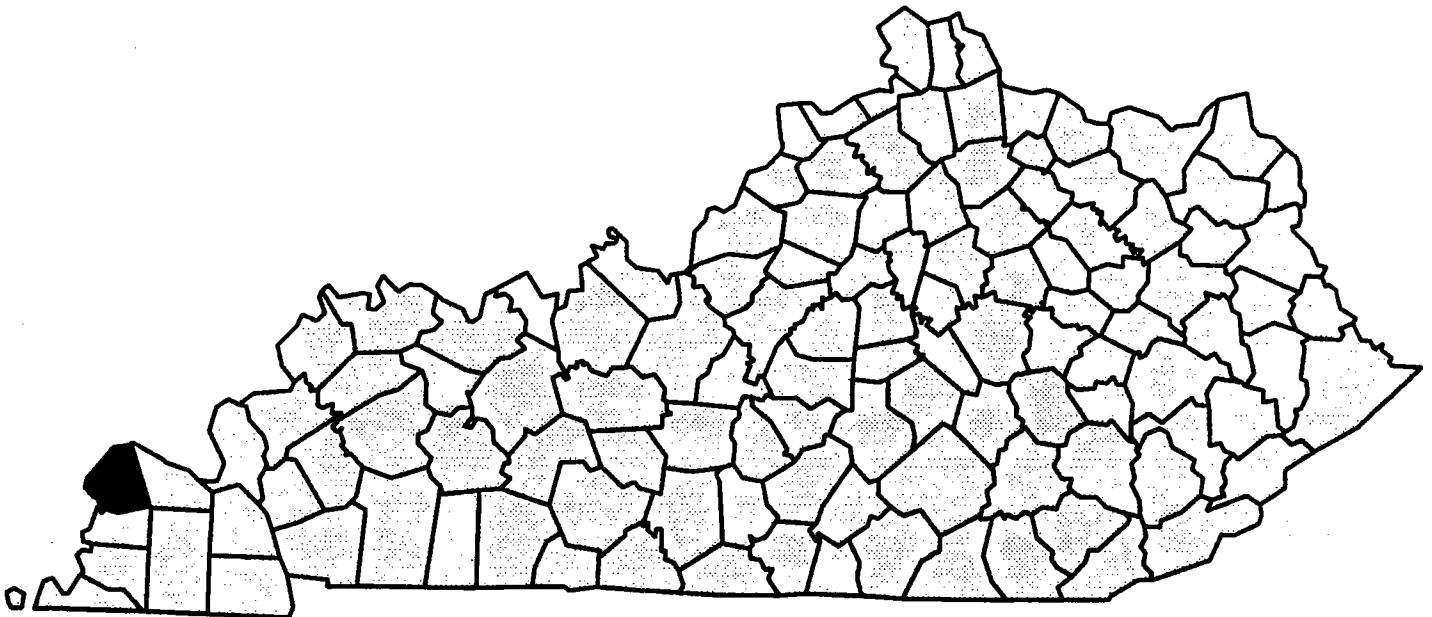






ECONOMIC TRENDS IN  
KENTUCKY COUNTIES  
1969 – 1987

**BALLARD COUNTY**



Prepared by  
Virginia Wilson  
Donna A. Cantrell

RESEARCH MEMORANDUM 438  
Legislative Research Commission  
Frankfort, Kentucky  
February, 1990



ECONOMIC TRENDS IN  
KENTUCKY COUNTIES  
1969 — 1987

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BALLARD COUNTY

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Frankfort, Kentucky  
February, 1990



## FOREWORD

This publication is one of a set of 120, highlighting economic trends in each county in Kentucky from 1969-1987. This effort is part of the ongoing activities sponsored by the Legislative Research Commission to provide a long-term perspective on issues for decision makers. The economies of individual counties do not always parallel overall state trends. This set of publications is an attempt to look at the economic trends in each county over time and to point out where the economies of individual counties may be performing differently from the economy of the state as a whole.

This publication was prepared by Virginia Wilson and Donna Cantrell. Susan Dance assisted in production of the manuscript and Charles Bush edited the report. The assistance of Carol Straus from the Center for Business and Economic Research at the University of Kentucky in deciphering data is gratefully acknowledged.

Vic Hellard, Jr.  
Director

The Capitol  
Frankfort  
February, 1990

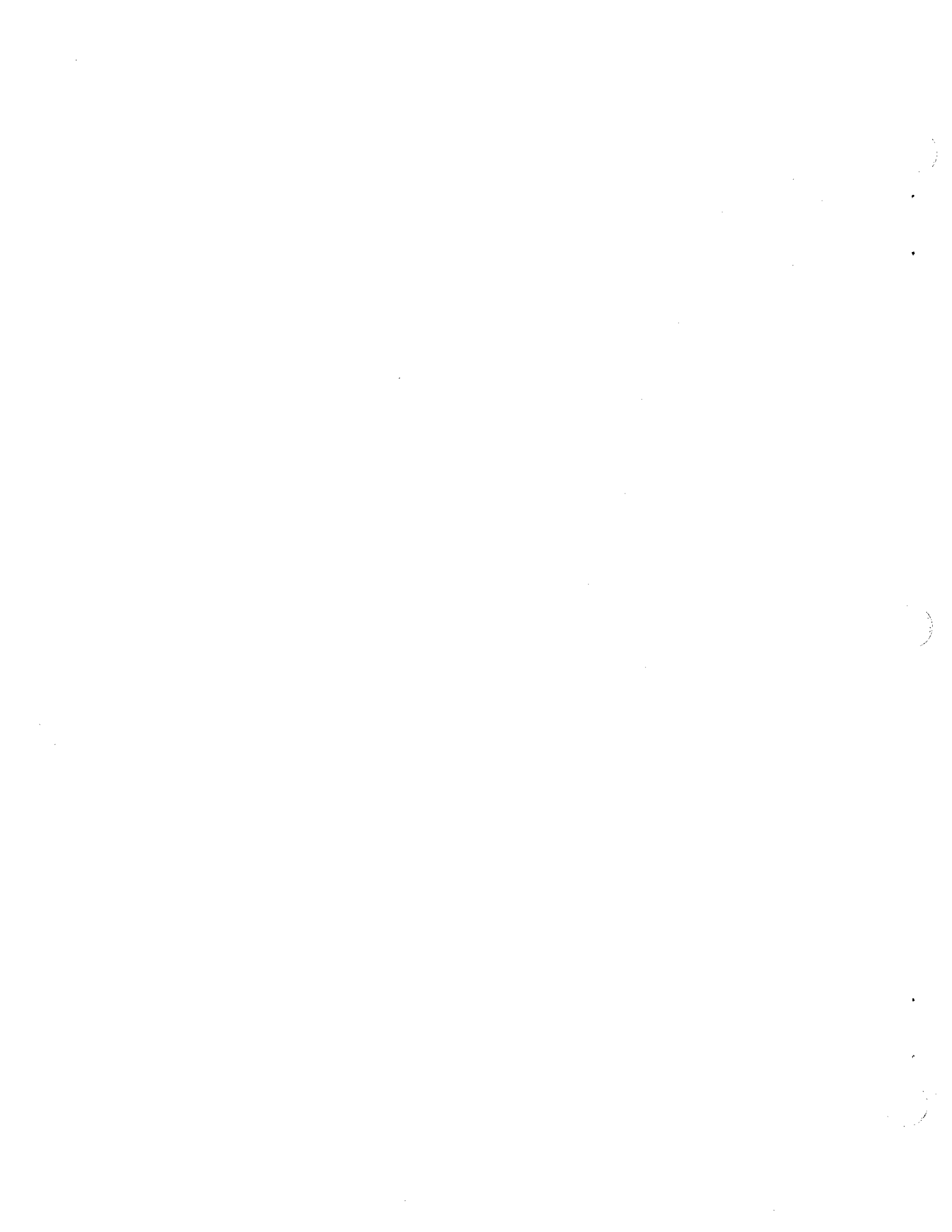


## SUMMARY

The Ballard County economy experienced significant growth from 1969 to 1979. After 1979, the economy, as measured by personal income, actually declined. This pattern of economic growth primarily reflects activity in the goods-producing industries.

The county experienced significant economic restructuring during the period. The manufacturing sector increased significantly, becoming the primary employer and accounting for half of total earnings by 1987. Conversely, the farm sector declined significantly.

While the manufacturing sector has declined statewide, it has grown in Ballard County. The high concentration and growth in the manufacturing sector may have been beneficial for the local economy, since manufacturing is a relatively high wage industry. However, manufacturing industries are very sensitive to changes in consumer demand and are generally more susceptible to economic volatility. Consequently, while a high concentration in manufacturing enabled the county to enjoy economic expansion during a period of national economic growth, it may also make the county more susceptible to recessionary contractions.





## INTRODUCTION

This is one of a series of reports called Economic Trends in Kentucky Counties. The purpose of this series is to describe the economic structure of Kentucky counties and to assess their economic performance relative to their own history and relative to the Kentucky economy. Information on the structure and patterns of change in county economies and an understanding of their relationship to the Kentucky economy can help in making policy decisions that are intended to shape Kentucky's economic future.\*

When assessing any economy there are several pertinent questions which may be addressed. The first concerns changes in the absolute size of the economy over time. Here the relevant comparison is between the county economy and its own history. Since most economic variables are given in dollars and since inflation causes the value of a dollar to vary over time, all dollar values in this report are presented in constant 1988 dollars. This allows analysis of real changes over time by controlling for the effects of inflation.

A second question concerns the structure and nature of the county economy. The structure of an economy refers to the relative share contributed by the various segments of the economy, while the nature deals with how this share has changed over time.

A third question concerns the performance of the county economy when compared to the Kentucky economy. For example, if a county has a higher proportion of earnings or employment in a particular sector it would indicate a specialization in that sector. Differences in economic structure may explain variations in relative economic well-being between a county and the state as a whole.

Economic data for counties are usually published after a lag of two years. Therefore, most data in this report cover the period 1969 to 1987. All data for this report was obtained from the Kentucky Economic Information System, an on-line database maintained by the University of Kentucky Center for Business and Economic Development.

There are certain caveats which should be remembered when analyzing data. First, it is a common and useful approach to evaluate the percentage an economic sector contributes to the total economy. However, one must remember that a sector's percentage contribution may decline even when its absolute value is increasing if another sector's contribution is growing at a faster rate. Secondly, when reviewing data in graphical analyses, the scales used to present data should be noted. In this report most graphs are presented with the narrowest scale which will cover all data points. This can accentuate visual patterns over time even when absolute changes are relatively small.

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\*For an analysis of economic trends in Kentucky, see Virginia Wilson, Patterns of Growth and Decline in the Kentucky Economy 1969-1988, Research Memorandum 437, Legislative Research Commission, November 1989.

## ECONOMIC TRENDS IN BALLARD COUNTY

The following analysis includes a brief description of the county economy and is accompanied by graphical illustrations. Data tables are also included at the end of this report. Three principal components of the Ballard County economy are analyzed. They are:

1. Personal Income
2. Earnings
3. Employment

### Personal Income

Personal income is often used as a measure of the economic activity in an area. Personal income is the sum of all the dollar income received by individuals in an area from any legal source. Personal income data is published by the Bureau of Economic Analysis (BEA) for most major geographic regions, including states, counties, and major cities.

In general, income can be obtained in three ways. First, it can be earned by the work of an individual. This type of income includes wage and salary income and proprietors' earnings. Second, income can be earned by property. This component includes earnings from rents, dividends, and interest. Finally, income can be received as a gift or an entitlement. This type of income constitutes the component of personal income called transfer payments. Included in this component is income from sources such as retirement benefits, unemployment benefits, food stamps, and medical programs such as Medicare and Medicaid.

As can be seen in Chart 1A, the Ballard County economy, as measured by personal income, increased from \$73 million in 1969 to \$115 million in 1979, after adjusting for inflation. However, after 1979, personal income declined to \$98 million by 1987. Chart 1B shows Ballard County total personal income as a percent of Kentucky total personal income. Ballard County has decreased its share of Kentucky personal income.

A similar pattern emerges from an examination of per capita personal income. Per capita personal income is simply the total personal income of an area divided by its population. Per capita personal income is often used as a measure of the economic well-being of the residents of an area. Charts 1C and 1D indicate that Ballard County per capita income increased to \$13,262 in 1979 and then declined to a level of \$11,885 per person in 1987, when it was 95.1 percent of Kentucky per capita personal income.

A better understanding of the nature of economic activity can be gleaned from an examination of the relative contribution of the components of personal income and how their shares have changed over time. This information is illustrated in Charts 2A-2D. Total earnings increased from \$56 million in 1969 to \$84 million in 1979. However, similar to personal income, earnings

then declined to \$60 million in 1987. The percent of personal income from earnings declined over time. This trend occurred at the state level as well. In 1987, earnings accounted for 61.0 percent of Ballard County's total personal income, which was significantly lower than Kentucky's 67.5 percent share.

Transfer payments contributed \$11 million to total personal income in 1969 and \$22 million in 1987. During the same period, transfer payments contributed a larger percentage of personal income in Ballard County than in Kentucky.

Income from property in Ballard County grew rapidly in the late 1970's, and leveled off in the 1980's. Income from property totalled \$6 million in 1969 and increased to \$17 million in 1987.

### **Earnings**

Earnings are the component of personal income reflecting payments to individuals in return for labor. Earnings include both wages and salaries and proprietor's income. Ballard County experienced significant restructuring in the goods-producing industries. In 1969, Ballard County received 8.1 percent of total earnings from manufacturing. This percentage increased substantially, to 52.8 percent, in 1987 (Chart 3A). At the state level, manufacturing's share of earnings declined. These two occurrences have resulted in Ballard County increasing its share of state manufacturing earnings. (Chart 3C).

Conversely, the percent of earnings originating from the farm sector has declined substantially. In 1969, 22.0 percent of earnings was derived from farming. By 1987, this share declined to 2.1 percent.

Earnings from non-goods-producing industries as a percent of total earnings are illustrated in Chart 3B. The percent of earnings from the non-goods-producing sectors declined through the 1970's. By the early 1980's, these sectors began to recover their share of total earnings. At the state level, the percent of earnings from services increased significantly, while the percent of earnings from trade and state and local government was stable.

Average earnings per job (adjusted for inflation) for Ballard County and Kentucky are shown in Chart 3D. In Kentucky, average earnings per job reached a high of \$20,121 per person in 1978. Since then, average earnings per job declined and in 1987 they were \$18,636 per person. Average earnings in Ballard County reached a high of \$22,230 in 1979 and then declined to \$17,437 by 1987.

### **Employment**

Employment is considered any activity for which one receives financial remuneration in the form of wages or profits. Total employment in Ballard

then declined to \$60 million in 1987. Earnings' share of personal income declined over time. This trend is occurring at the state level as well. In 1987, earnings accounted for 61.0 percent of Ballard County's total personal income, which was significantly lower than Kentucky's 67.5 percent share.

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Earnings from non-goods-producing industries as a percent of total earnings are illustrated in Chart 3B. The percent of earnings from the non-goods-producing sectors declined through the 1970's. By the early 1980's, these sectors began to recover their share of total earnings. At the state level, the percent of earnings from services increased significantly, while the percent of earnings from trade and state and local government was stable.

Average earnings per job (adjusted for inflation) for Ballard County and Kentucky are shown in Chart 3D. In Kentucky, average earnings per job reached a high of \$20,121 per person in 1978. Since then, average earnings per job declined and in 1987 they were \$18,636 per person. Average earnings in Ballard County reached a high of \$22,230 in 1979 and then declined to \$17,437 by 1987.

### **Employment**

Employment is considered any activity for which one receives financial remuneration in the form of wages or profits. Total employment in Ballard

County increased during the data period. In 1969, total employment stood at 2,803 people. By 1987, that figure had increased to 3,683.

The unemployment rate, often used as an indicator of economic well-being, is the ratio of unemployed to the total civilian labor force. Unemployment is described as a condition of being out of work while actively seeking employment within the last thirty days. The civilian labor force is described as the proportion of population age 16 or older employed or actively seeking employment. Annual unemployment rates for Kentucky and Ballard County are presented in Chart 4B. Unemployment rates in Ballard County have been above those of the state since 1983. In 1987, the county unemployment rate was 11.0 percent, compared to 8.8 percent for Kentucky.

Another employment concept includes the discouraged worker. Discouraged workers are persons who want jobs but made no attempt to find work in the last thirty days because they believe they could not find it. These individuals are not included when calculating official unemployment rates. The Cabinet for Human Resources does not estimate discouraged workers by county. However, preliminary research by the Cabinet indicates that the inclusion of discouraged workers in the civilian labor force estimate would increase the unemployment rate by approximately four percent for the state. This figure would vary by county depending on the labor market in a county or within commuting distance.

Employment in the goods-producing industries is illustrated in Chart 4C. Manufacturing surpassed farming as the primary source of employment in 1979. The percent of total employment in manufacturing increased from 4.1 percent in 1969 to 26.4 percent in 1987. This trend is unlike that of the state, where manufacturing employment declined.

Similar to county trends in farm earnings, farm employment decreased through the period. The farm sector accounted for 37.0 percent of employment in 1969. This share decreased to 18.8 percent in 1987.

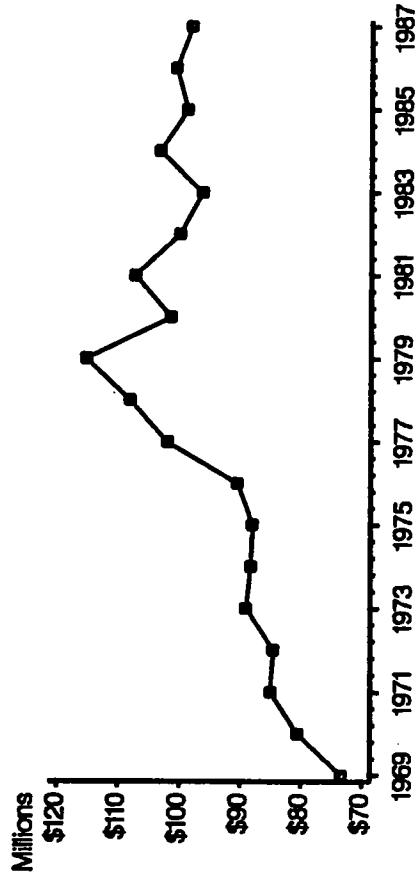
Employment in the non-goods-producing industries is presented in Chart 4D. Employment in the service sector declined in the mid-1970's. However, the service sector increased its share of employment to 16.0 percent of the workforce by 1987. Employment in the trade and state and local government sectors remained constant. At the state level, employment in both the service and trade sectors increased, while government share remained constant.

## **Population**

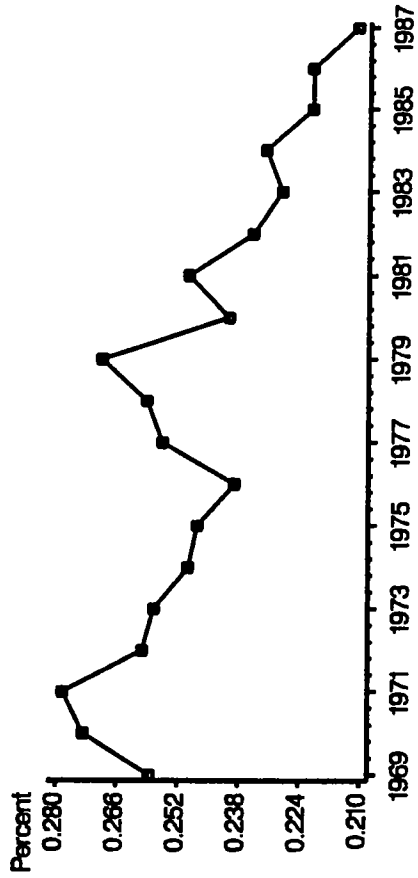
The census conducted each decade counts the actual population in an area. Population is then statistically estimated during intervening years. The demographic composition of this population growth has important implications for the future demand for goods and services, and ultimately, the economic structure of Ballard County.

The Ballard County population remained essentially unchanged from 1969 to 1987. In 1987, the county population was 8,300 (Chart 5A). Ballard County has a smaller proportion of younger residents and a much larger proportion of older residents than the state. It was estimated that in 1986, 6.6 percent of Ballard County's population was under six years of age, compared to 8.6 percent for the state. Conversely, for the same year 22.3 percent of the Ballard County population was sixty years of age and over, while 16.5 percent of all Kentucky residents fell in this age group.

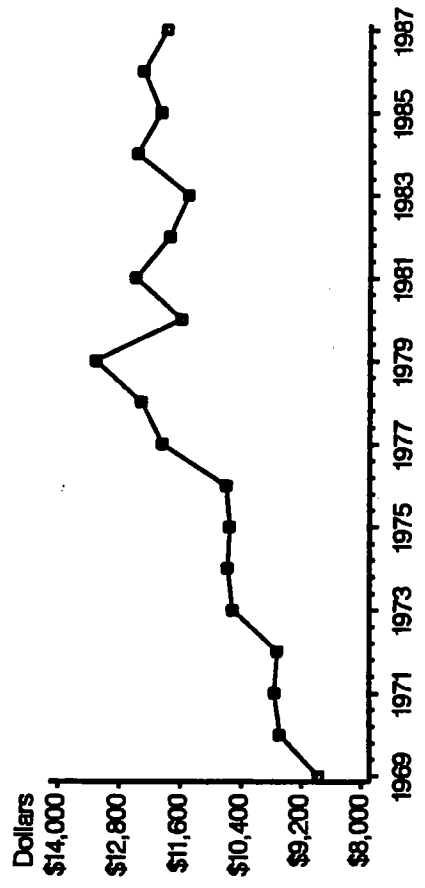
**CHART 1A**  
**BALLARD COUNTY**  
**REAL PERSONAL INCOME**  
 Millions of 1988 dollars



**CHART 1B**  
**BALLARD COUNTY**  
**PERSONAL INCOME**  
 as a Percent of Kentucky Personal Income



**CHART 1C**  
**BALLARD COUNTY**  
**PER CAPITA PERSONAL INCOME**  
 in Constant 1988 Dollars



**CHART 1D**  
**BALLARD COUNTY**  
**PER CAPITA PERSONAL INCOME**  
 as a Percent of Kentucky Per Capita Personal Income

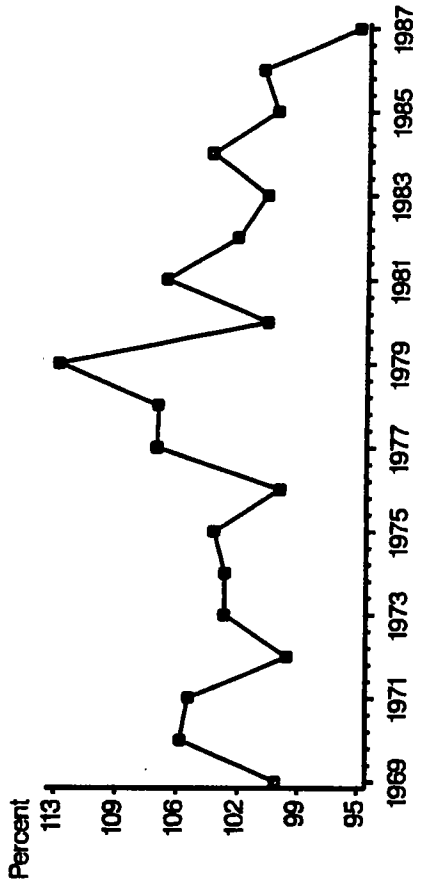


CHART 2A  
BALLARD COUNTY  
REAL TOTAL EARNINGS  
Millions of 1988 dollars

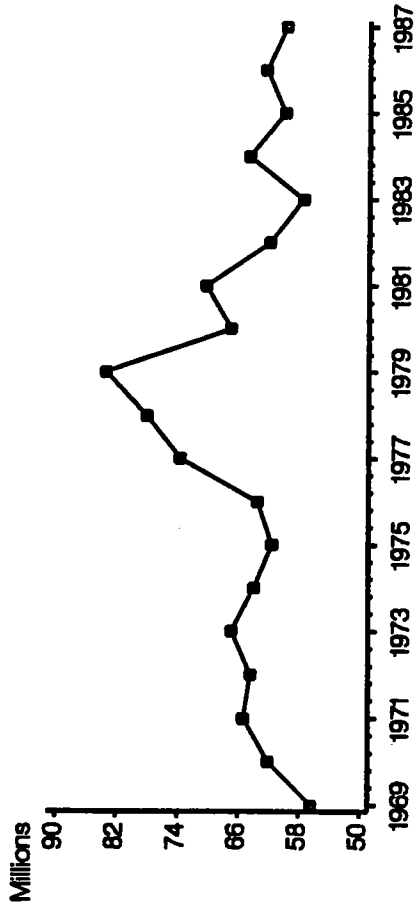


CHART 2B  
BALLARD COUNTY  
TRANSFER PAYMENTS and INCOME FROM PROPERTY  
Millions of 1988 Dollars

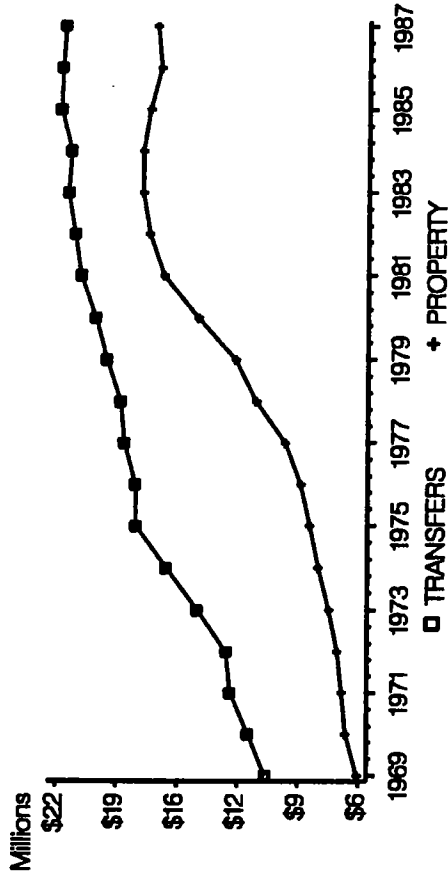


CHART 2C  
BALLARD COUNTY  
TOTAL EARNINGS  
as a Percent of Personal Income

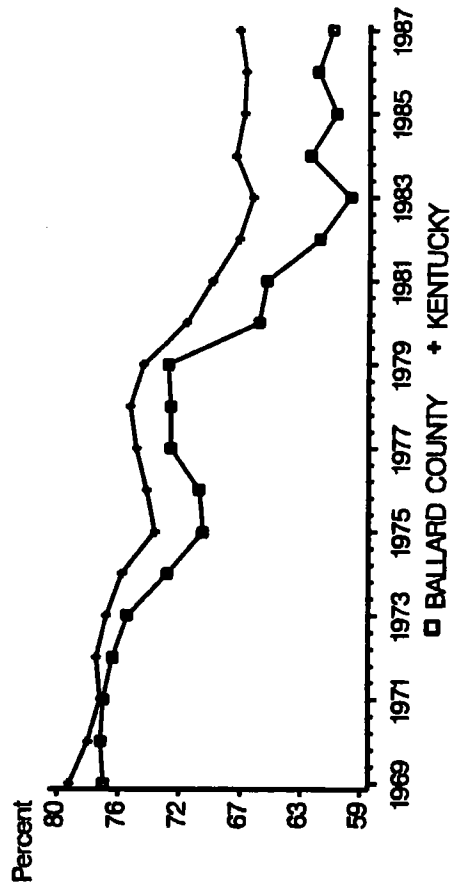
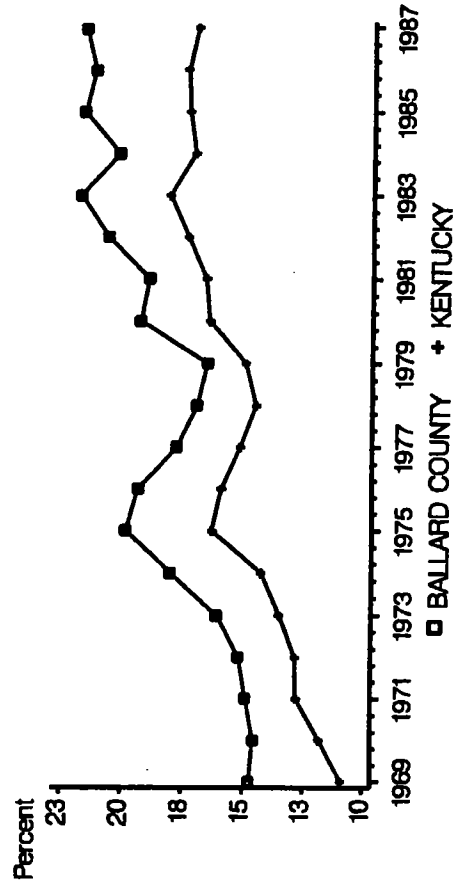
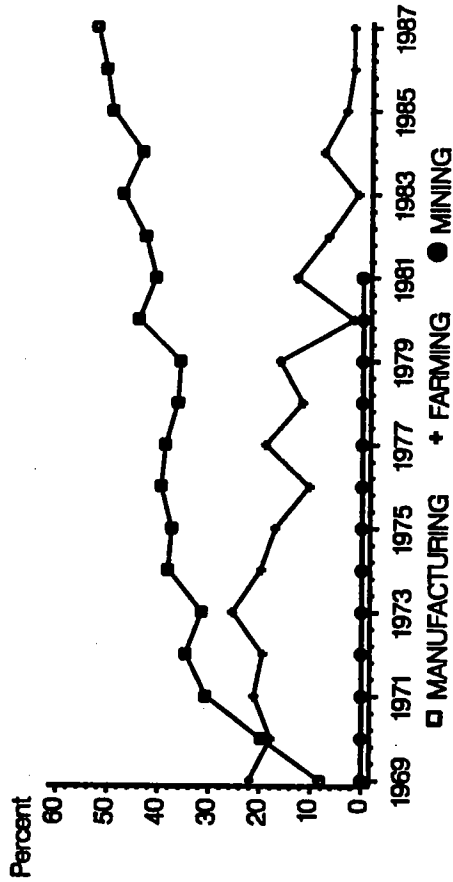


CHART 2D  
BALLARD COUNTY  
TRANSFER PAYMENTS  
as a Percent of Personal Income

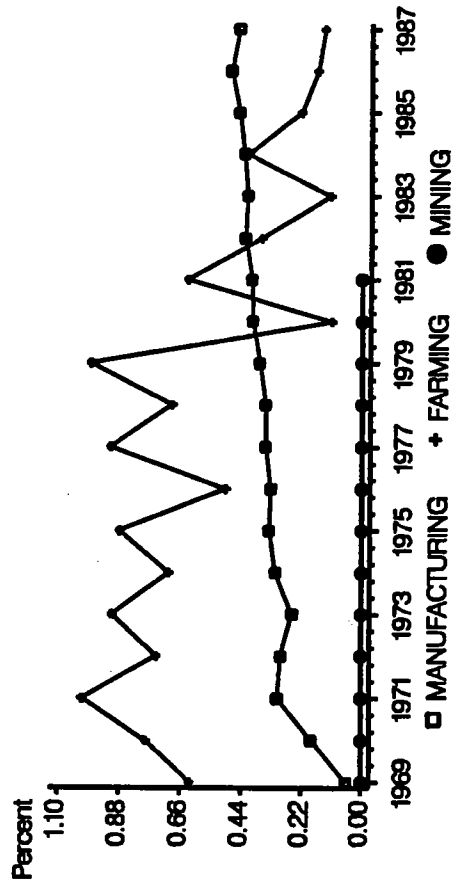




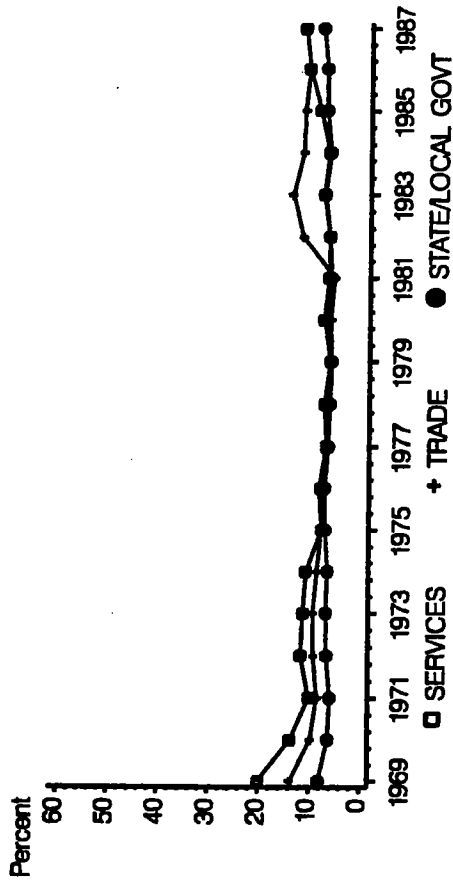
**CHART 3A**  
**BALLARD COUNTY**  
**EARNINGS IN GOODS PRODUCING INDUSTRIES**  
**as a Percent of Total Earnings**



**CHART 3C**  
**BALLARD COUNTY**  
**EARNINGS IN GOODS PRODUCING INDUSTRIES**  
**as a Percent of Kentucky Industries**



**CHART 3B**  
**BALLARD COUNTY**  
**EARNINGS IN NON - GOODS PRODUCING INDUSTRIES**  
**as a Percent of Total Earnings**



**CHART 3D**  
**BALLARD COUNTY**  
**AVERAGE EARNINGS PER JOB**  
**in Constant 1988 Dollars**

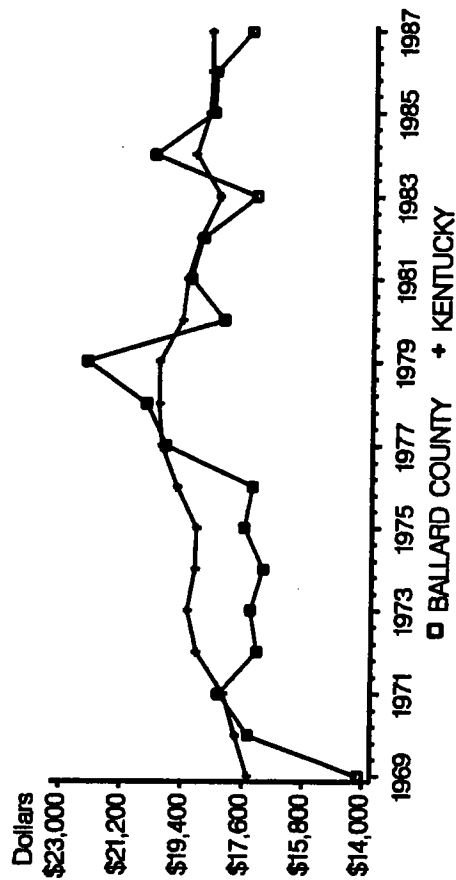


CHART 4A  
BALLARD COUNTY  
TOTAL EMPLOYMENT  
Thousands of People

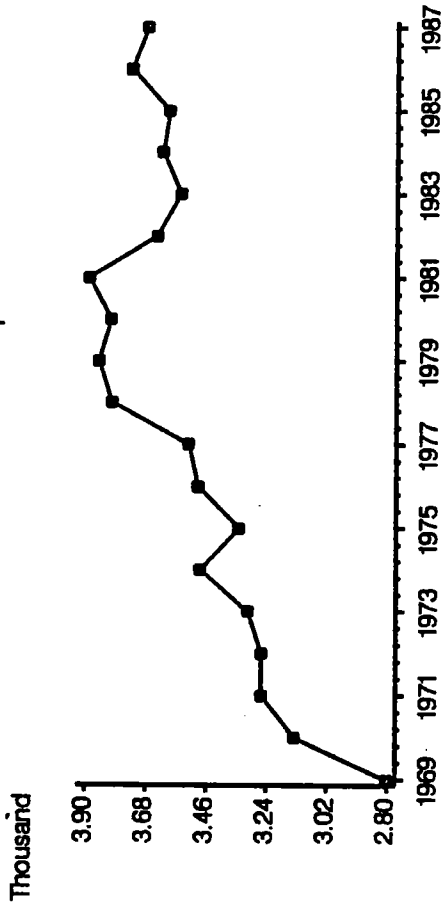


CHART 4B  
BALLARD COUNTY  
ANNUAL UNEMPLOYMENT RATE

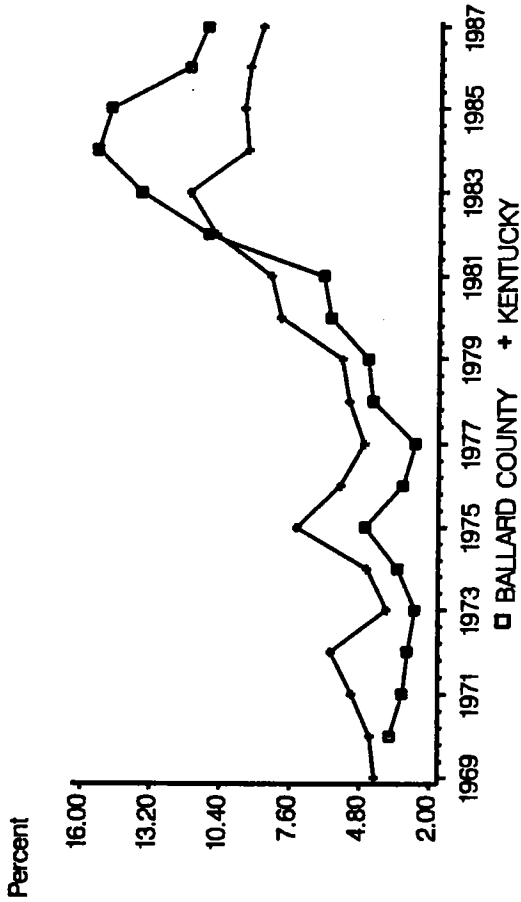


CHART 4C  
BALLARD COUNTY  
EMPLOYMENT IN GOODS PRODUCING INDUSTRIES  
as a Percent of Total Employment

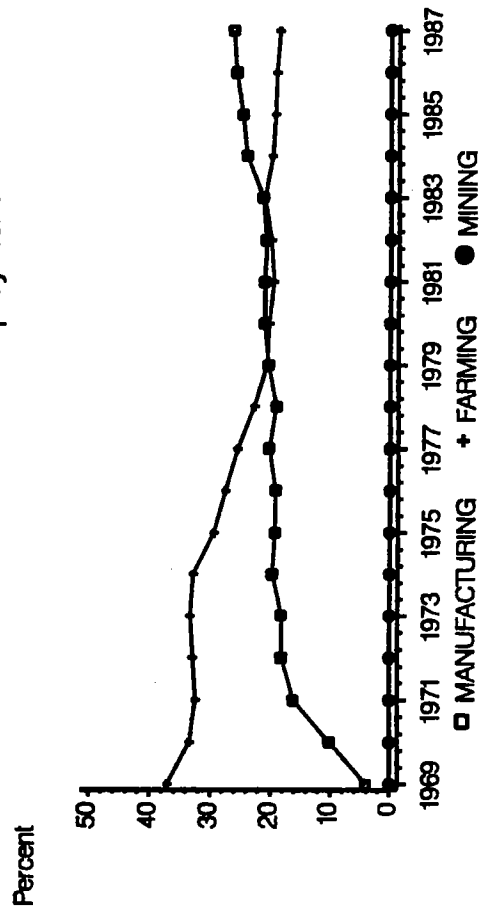
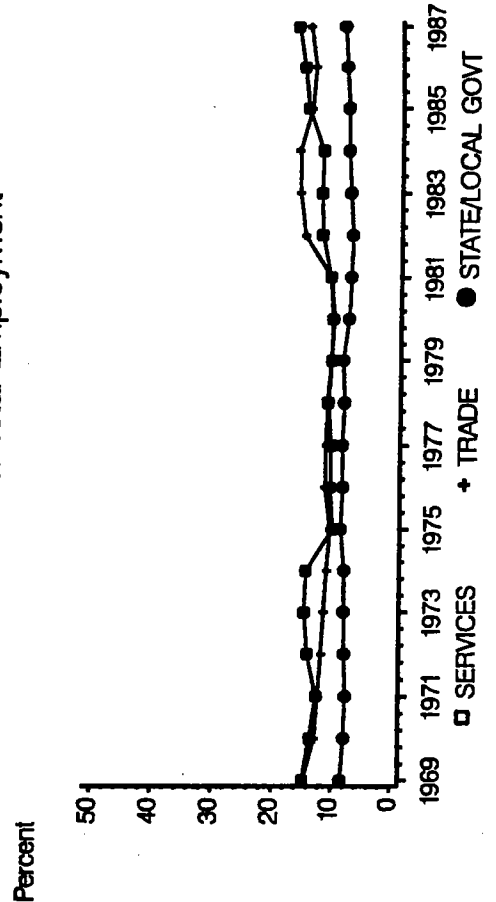
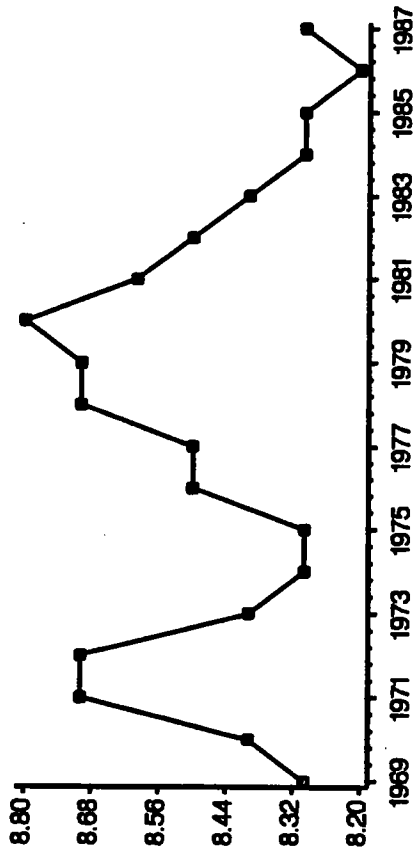


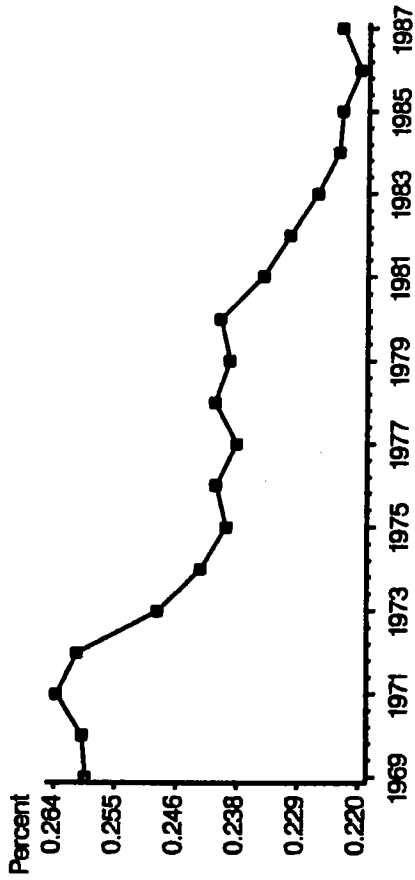
CHART 4D  
BALLARD COUNTY  
EMPLOYMENT IN NON-GOODS PRODUCING INDUSTRIES  
as a Percent of Total Employment



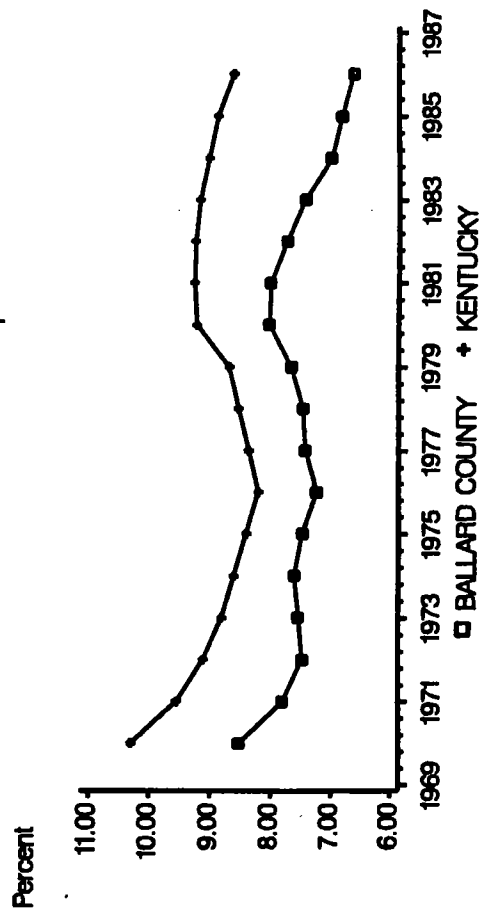
**CHART 5A**  
**BALLARD COUNTY**  
**POPULATION**  
 Thousands of People



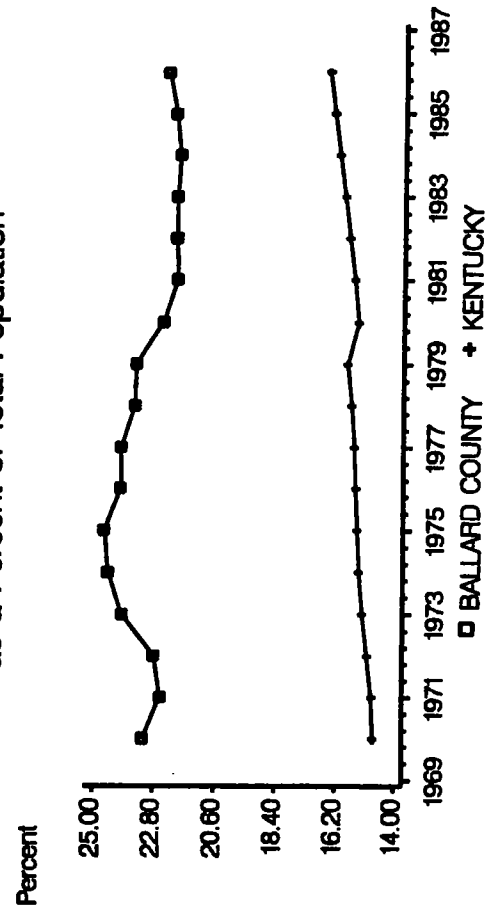
**CHART 5B**  
**BALLARD COUNTY**  
**POPULATION**  
 as a Percent of Kentucky Population



**CHART 5C**  
**BALLARD COUNTY**  
**POPULATION 5 AND UNDER**  
 as a Percent of Total Population



**CHART 5D**  
**BALLARD COUNTY**  
**POPULATION 60 AND OVER**  
 as a Percent of Total Population



BALLARD COUNTY

PERSONAL INCOME  
In Constant 1988 Dollars

Year	County Personal Income (M\$)	Percent of Kentucky (%)	Per Capita Personal Income (\$)	Percent of Kentucky (%)
1969	73	0.26	8,876	99.9
1970	81	0.27	9,623	105.6
1971	85	0.28	9,727	105.1
1972	85	0.26	9,669	99.2
1973	89	0.26	10,577	103.0
1974	88	0.25	10,671	103.0
1975	88	0.25	10,635	103.6
1976	91	0.24	10,702	99.7
1977	102	0.26	11,963	107.0
1978	108	0.26	12,372	107.0
1979	115	0.27	13,262	112.8
1980	102	0.24	11,586	100.5
1981	107	0.25	12,480	106.5
1982	100	0.23	11,820	102.3
1983	96	0.23	11,444	100.5
1984	103	0.23	12,449	103.8
1985	99	0.22	11,993	100.0
1986	101	0.22	12,337	100.8
1987	98	0.21	11,885	95.1

COMPONENTS OF PERSONAL INCOME  
In Constant 1988 Dollars

Year	EARNINGS			TRANSFER PAYMENTS			INCOME from PROPERTY		
	M\$	Percent of Personal Income		M\$	Percent of Personal Income		M\$	Percent of Personal Income	
		County	Kentucky		County	Kentucky		County	Kentucky
1969	56	76.8	79.2	11	14.9	10.9	6	8.3	9.9
1970	62	77.0	77.9	12	14.7	11.9	7	8.3	10.2
1971	65	76.8	77.0	13	15.1	12.9	7	8.1	10.1
1972	64	76.2	77.3	13	15.4	12.9	7	8.4	9.7
1973	67	75.2	76.6	15	16.3	13.6	8	8.5	9.7
1974	64	72.4	75.5	16	18.3	14.4	8	9.2	10.1
1975	62	70.0	73.3	18	20.2	16.5	9	9.8	10.1
1976	64	70.2	73.9	18	19.7	16.1	9	10.1	10.0
1977	74	72.2	74.6	18	18.1	15.3	10	9.7	10.1
1978	78	72.2	75.0	19	17.2	14.6	11	10.6	10.4
1979	84	72.4	74.1	19	16.8	15.1	13	10.9	10.8
1980	67	66.1	71.1	20	19.6	16.7	15	14.3	12.2
1981	70	65.5	69.3	21	19.3	16.8	16	15.2	13.8
1982	62	61.9	67.5	21	21.0	17.6	17	17.1	14.9
1983	58	59.7	66.6	21	22.2	18.4	17	18.1	15.1
1984	65	62.6	67.8	21	20.5	17.3	17	16.9	14.9
1985	60	60.7	67.2	22	22.0	17.6	17	17.3	15.3
1986	63	62.0	67.1	22	21.6	17.6	17	16.4	15.3
1987	60	61.0	67.5	22	22.0	17.2	17	17.0	15.3

BALLARD COUNTY

SECTOR EARNINGS as a PERCENT of TOTAL COUNTY EARNINGS and  
as a PERCENT of KENTUCKY SECTOR EARNINGS

YEAR	MANUFACTURING		FARMING		MINING	
	TOTAL	KENTUCKY	TOTAL	KENTUCKY	TOTAL	KENTUCKY
1969	8.1	0.06	22.0	0.62	0.0	0.00
1970	19.7	0.18	17.9	0.78	0.0	0.00
1971	30.7	0.31	21.2	1.01	0.0	0.00
1972	34.7	0.29	19.6	0.75	0.0	0.00
1973	31.5	0.25	25.5	0.91	0.0	0.00
1974	38.2	0.31	19.9	0.70	0.0	0.00
1975	37.6	0.34	17.1	0.88	0.0	0.00
1976	39.7	0.33	10.4	0.50	0.0	0.00
1977	38.9	0.35	19.1	0.91	0.0	0.00
1978	36.5	0.35	11.8	0.69	0.0	0.00
1979	36.0	0.37	16.3	0.98	0.0	0.00
1980	44.2	0.40	1.9	0.11	0.0	0.00
1981	40.9	0.41	13.1	0.64	0.1	0.00
1982	43.0	0.43	6.9	0.37	.	.
1983	47.5	0.42	1.0	0.12	.	.
1984	43.7	0.43	7.9	0.42	.	.
1985	49.7	0.45	3.4	0.23	.	.
1986	50.9	0.48	2.0	0.17	.	.
1987	52.8	0.45	2.1	0.14	.	.

YEAR	SERVICES		TRADE		STATE and LOCAL GOVERNMENT	
	TOTAL	KENTUCKY	TOTAL	KENTUCKY	TOTAL	KENTUCKY
1969	20.0	0.26	13.7	0.15	8.1	0.15
1970	13.7	0.24	9.7	0.14	6.2	0.15
1971	10.0	0.18	8.4	0.13	5.9	0.15
1972	11.7	0.19	9.2	0.13	6.6	0.15
1973	11.3	0.18	9.4	0.12	6.7	0.15
1974	10.7	0.18	8.6	0.12	6.5	0.15
1975	7.7	0.12	7.7	0.10	6.9	0.15
1976	7.9	0.12	8.2	0.11	7.1	0.15
1977	6.9	0.12	6.9	0.10	6.4	0.16
1978	7.2	0.13	6.6	0.10	6.2	0.16
1979	6.1	0.12	5.9	0.10	5.9	0.16
1980	7.4	0.11	6.1	0.09	6.9	0.15
1981	6.5	0.11	5.3	0.09	6.0	0.14
1982	6.3	0.09	11.6	0.17	6.4	0.14
1983	7.5	0.09	13.7	0.18	7.4	0.14
1984	6.6	0.09	11.6	0.18	6.3	0.14
1985	8.4	0.10	11.4	0.16	7.1	0.14
1986	10.6	0.12	10.6	0.15	7.1	0.14
1987	11.5	0.12	11.5	0.15	7.9	0.14

BALLARD COUNTY

COUNTY EMPLOYMENT by SECTOR

YEAR	MANUFACTURING		FARMING		MINING	
	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL
1969	114	4.1	1,037	37.0	0	0.0
1970	317	10.1	1,049	33.4	0	0.0
1971	528	16.2	1,058	32.5	0	0.0
1972	594	18.2	1,073	32.9	0	0.0
1973	604	18.2	1,104	33.3	0	0.0
1974	689	19.8	1,146	32.9	0	0.0
1975	647	19.3	985	29.5	0	0.0
1976	671	19.2	960	27.5	0	0.0
1977	716	20.3	899	25.5	0	0.0
1978	728	19.1	867	22.8	0	0.0
1979	789	20.5	798	20.7	0	0.0
1980	805	21.1	776	20.4	0	0.0
1981	823	21.1	764	19.6	0	0.0
1982	764	21.0	731	20.1	0	0.0
1983	763	21.4	754	21.2	0	0.0
1984	874	24.1	721	19.9	0	0.0
1985	894	24.8	700	19.4	0	0.0
1986	967	25.8	720	19.2	0	0.0
1987	971	26.4	692	18.8	0	0.0

YEAR	SERVICES		TRADE		STATE and LOCAL GOVERNMENT	
	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL
1969	412	14.7	405	14.4	236	8.4
1970	422	13.4	397	12.6	246	7.8
1971	404	12.4	394	12.1	249	7.6
1972	455	14.0	380	11.7	256	7.9
1973	480	14.5	375	11.3	266	8.0
1974	496	14.2	378	10.8	277	7.9
1975	331	9.9	347	10.4	288	8.6
1976	363	10.4	392	11.2	290	8.3
1977	361	10.2	390	11.1	296	8.4
1978	412	10.8	414	10.9	309	8.1
1979	394	10.2	401	10.4	323	8.4
1980	387	10.2	374	9.8	284	7.5
1981	411	10.6	406	10.4	280	7.2
1982	436	12.0	538	14.8	255	7.0
1983	431	12.1	558	15.7	261	7.3
1984	431	11.9	571	15.7	278	7.7
1985	516	14.3	496	13.8	280	7.8
1986	561	15.0	493	13.2	301	8.0
1987	588	16.0	515	14.0	308	8.4

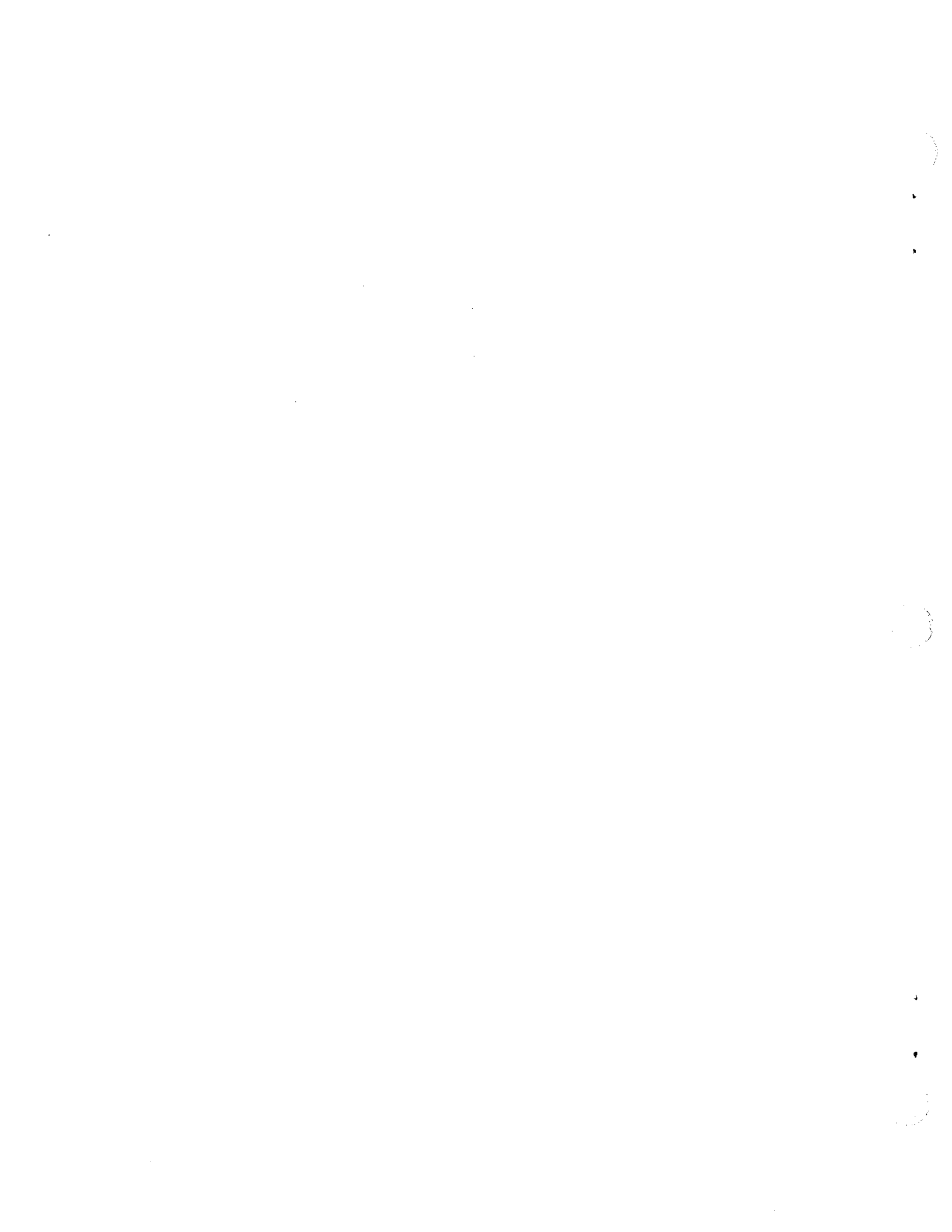
BALLARD COUNTY

EMPLOYMENT STATISTICS

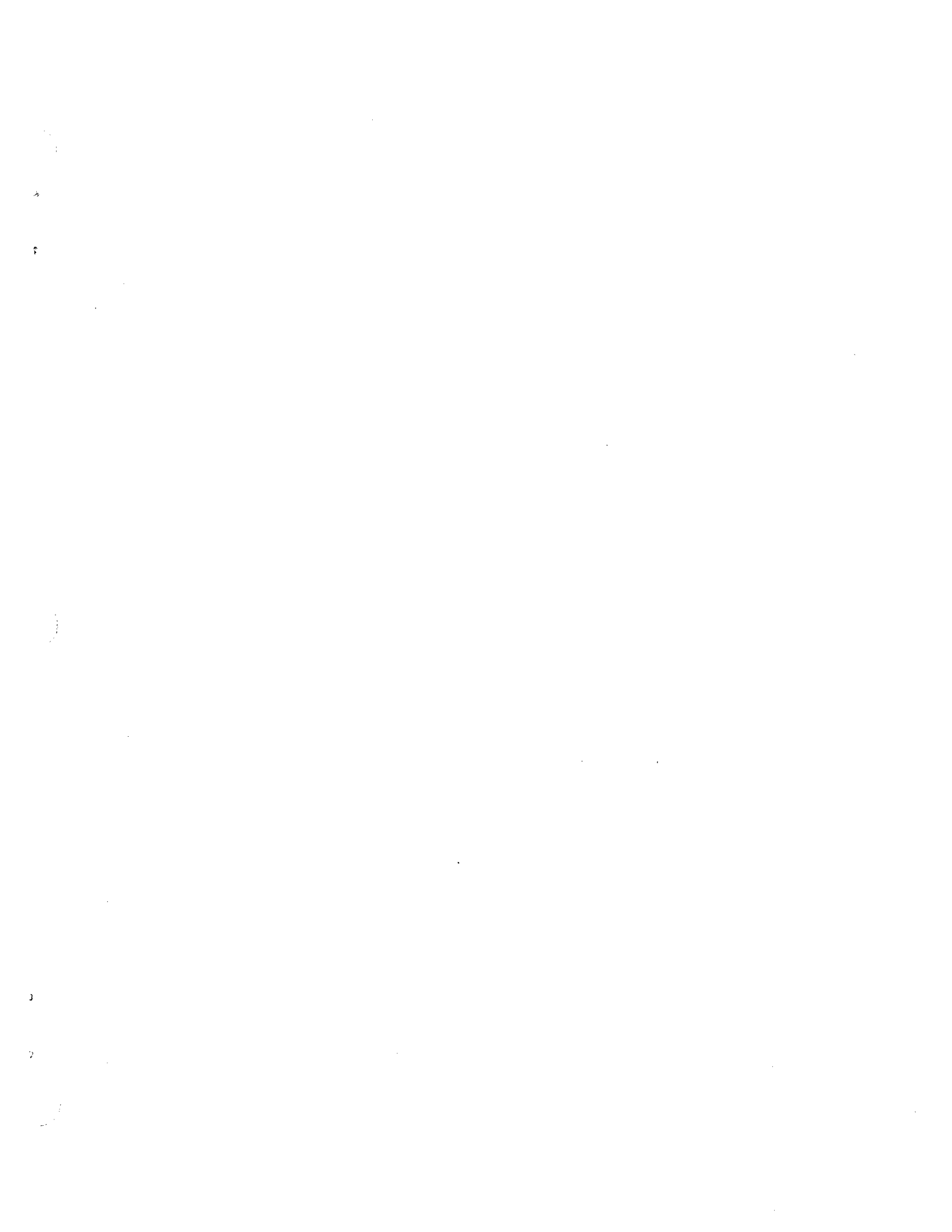
YEAR	TOTAL EMPLOYMENT	AVERAGE EARNINGS		UNEMPLOYMENT RATE	
		COUNTY	KENTUCKY	COUNTY	KENTUCKY
1969	2,803	\$14,129	\$17,440	.	4.2
1970	3,139	\$17,424	\$17,811	3.6	4.4
1971	3,260	\$18,301	\$18,166	3.1	5.1
1972	3,260	\$17,166	\$18,970	2.9	6.0
1973	3,311	\$17,365	\$19,232	2.6	3.7
1974	3,485	\$16,980	\$19,008	3.3	4.5
1975	3,344	\$17,567	\$18,976	4.6	7.3
1976	3,493	\$17,317	\$19,563	3.1	5.6
1977	3,528	\$19,913	\$20,031	2.6	4.7
1978	3,809	\$20,487	\$20,121	4.3	5.3
1979	3,856	\$22,230	\$20,110	4.5	5.5
1980	3,812	\$18,208	\$19,439	6.0	8.0
1981	3,893	\$19,197	\$19,286	6.3	8.4
1982	3,645	\$18,848	\$18,931	10.9	10.6
1983	3,558	\$17,276	\$18,358	13.6	11.6
1984	3,626	\$20,290	\$19,080	15.3	9.3
1985	3,603	\$18,561	\$18,676	14.8	9.5
1986	3,741	\$18,506	\$18,627	11.7	9.3
1987	3,683	\$17,437	\$18,636	11.0	8.8

POPULATION STATISTICS

YEAR	POPULATION	% OF KY	PERCENT UNDER AGE 6		PERCENT AGE 60+	
			COUNTY	KENTUCKY	COUNTY	KENTUCKY
1969	8,300	0.26	.	.	.	.
1970	8,400	0.26	8.5	10.3	23.2	14.8
1971	8,700	0.26	7.8	9.6	22.6	14.8
1972	8,700	0.26	7.5	9.1	22.8	15.0
1973	8,400	0.25	7.5	8.8	24.0	15.2
1974	8,300	0.24	7.6	8.6	24.5	15.3
1975	8,300	0.24	7.5	8.4	24.6	15.4
1976	8,500	0.24	7.2	8.2	24.0	15.5
1977	8,500	0.24	7.4	8.4	24.0	15.5
1978	8,700	0.24	7.4	8.5	23.5	15.6
1979	8,700	0.24	7.6	8.7	23.5	15.8
1980	8,800	0.24	8.0	9.2	22.5	15.4
1981	8,600	0.23	8.0	9.3	22.0	15.5
1982	8,500	0.23	7.7	9.2	22.0	15.7
1983	8,400	0.23	7.4	9.2	22.0	15.9
1984	8,300	0.22	7.0	9.0	21.9	16.1
1985	8,300	0.22	6.8	8.9	22.1	16.3
1986	8,200	0.22	6.6	8.6	22.3	16.5
1987	8,300	0.22	.	.	.	.





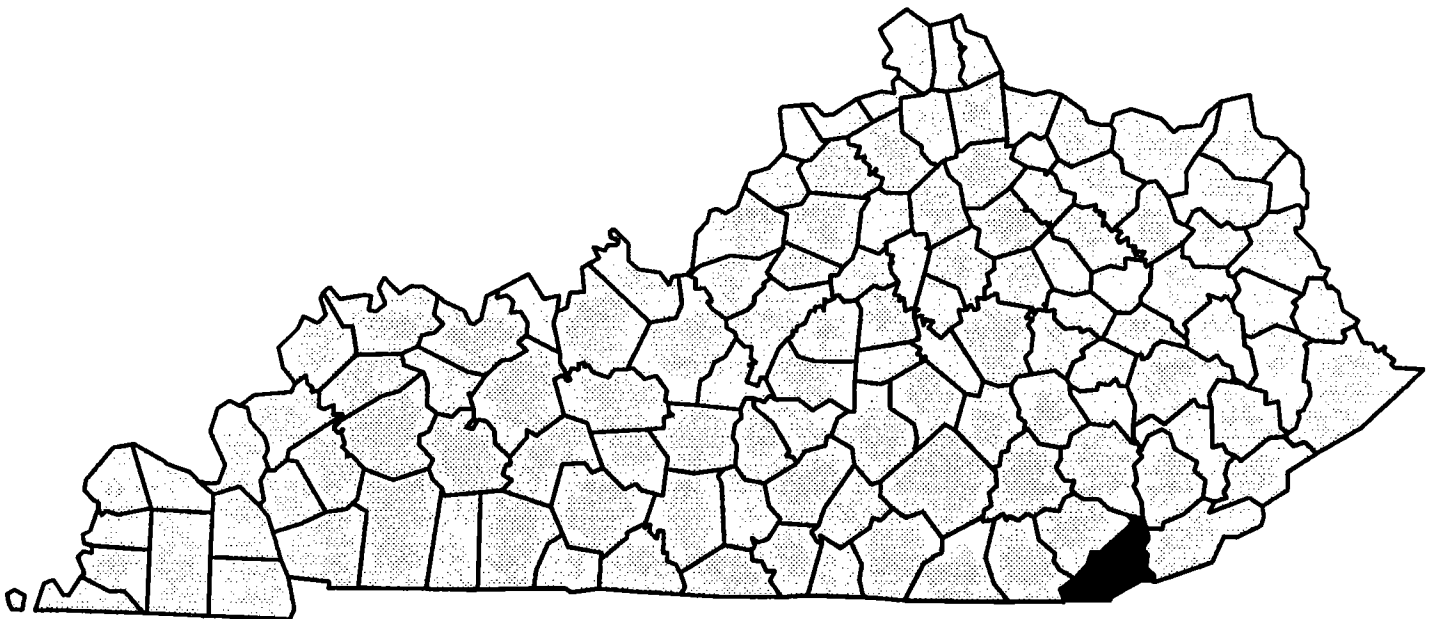


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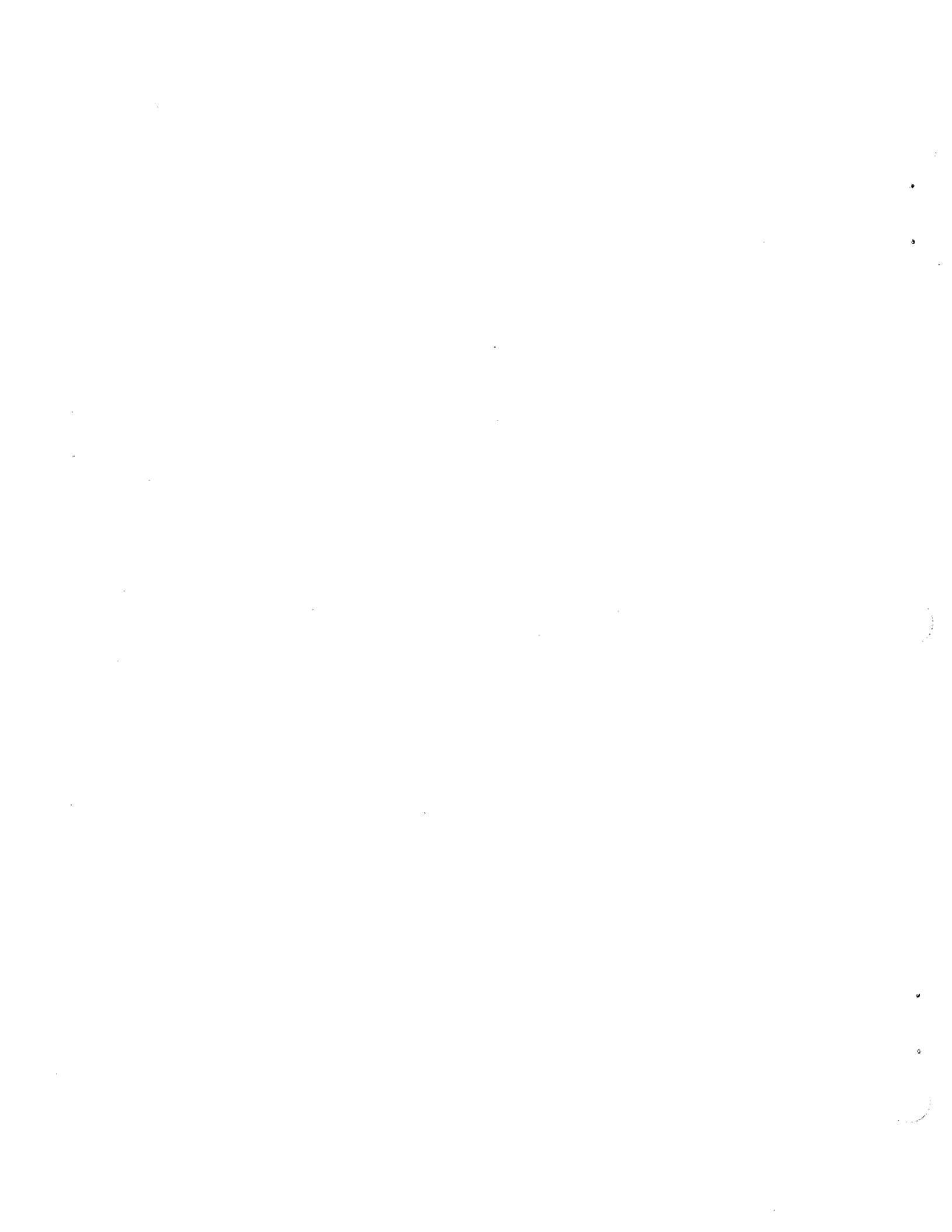
ECONOMIC TRENDS IN  
KENTUCKY COUNTIES  
1969 – 1987

**BELL COUNTY**



Prepared by  
Virginia Wilson  
Donna A. Cantrell

RESEARCH MEMORANDUM 438  
Legislative Research Commission  
Frankfort, Kentucky  
February, 1990



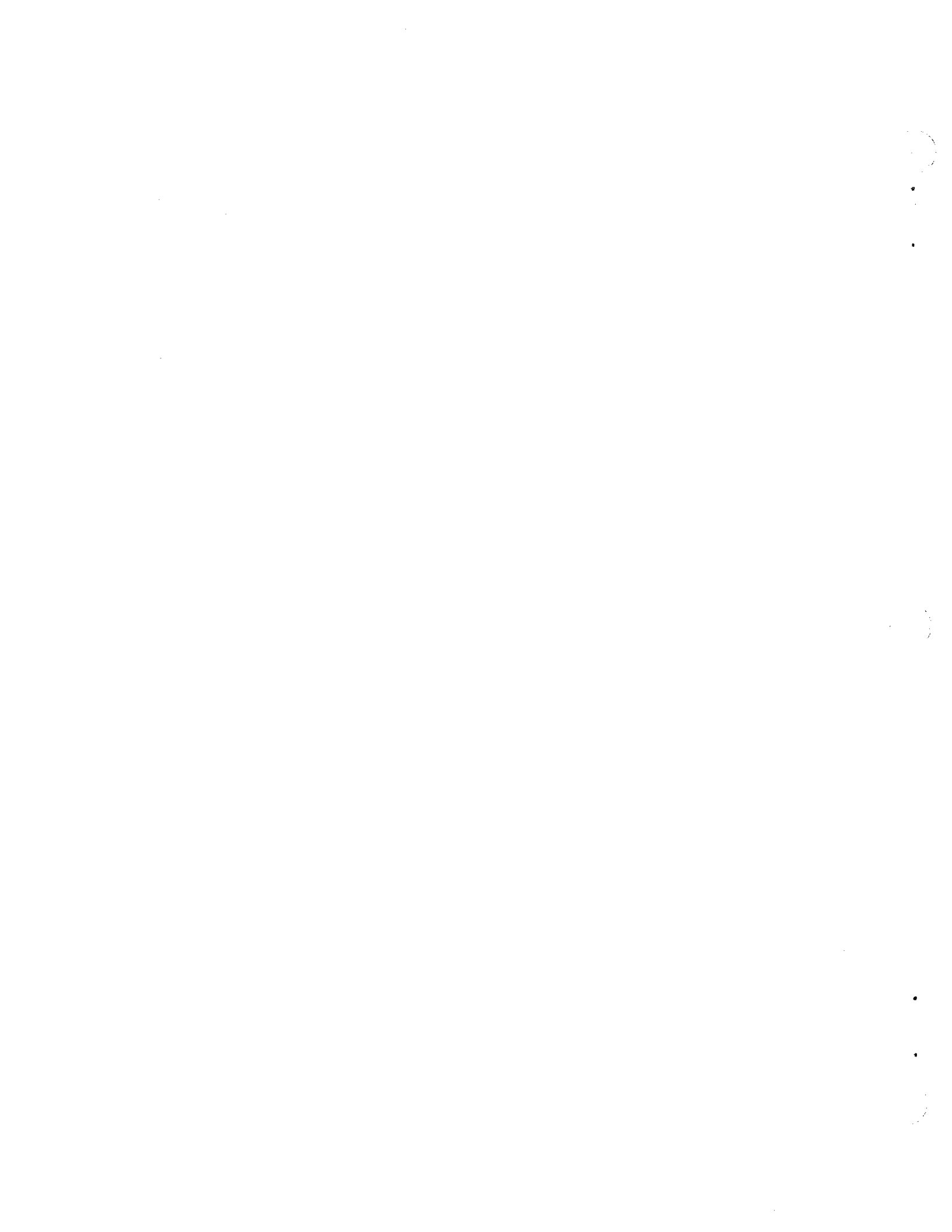
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ECONOMIC TRENDS IN  
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BELL COUNTY

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## FOREWORD

This publication is one of a set of 120, highlighting economic trends in each county in Kentucky from 1969-1987. This effort is part of the ongoing activities sponsored by the Legislative Research Commission to provide a long-term perspective on issues for decision makers. The economies of individual counties do not always parallel overall state trends. This set of publications is an attempt to look at the economic trends in each county over time and to point out where the economies of individual counties may be performing differently from the economy of the state as a whole.

This publication was prepared by Virginia Wilson and Donna Cantrell. Susan Dance assisted in production of the manuscript and Charles Bush edited the report. The assistance of Carol Straus from the Center for Business and Economic Research at the University of Kentucky in deciphering data is gratefully acknowledged.

Vic Hellard, Jr.  
Director

The Capitol  
Frankfort  
February, 1990

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## SUMMARY

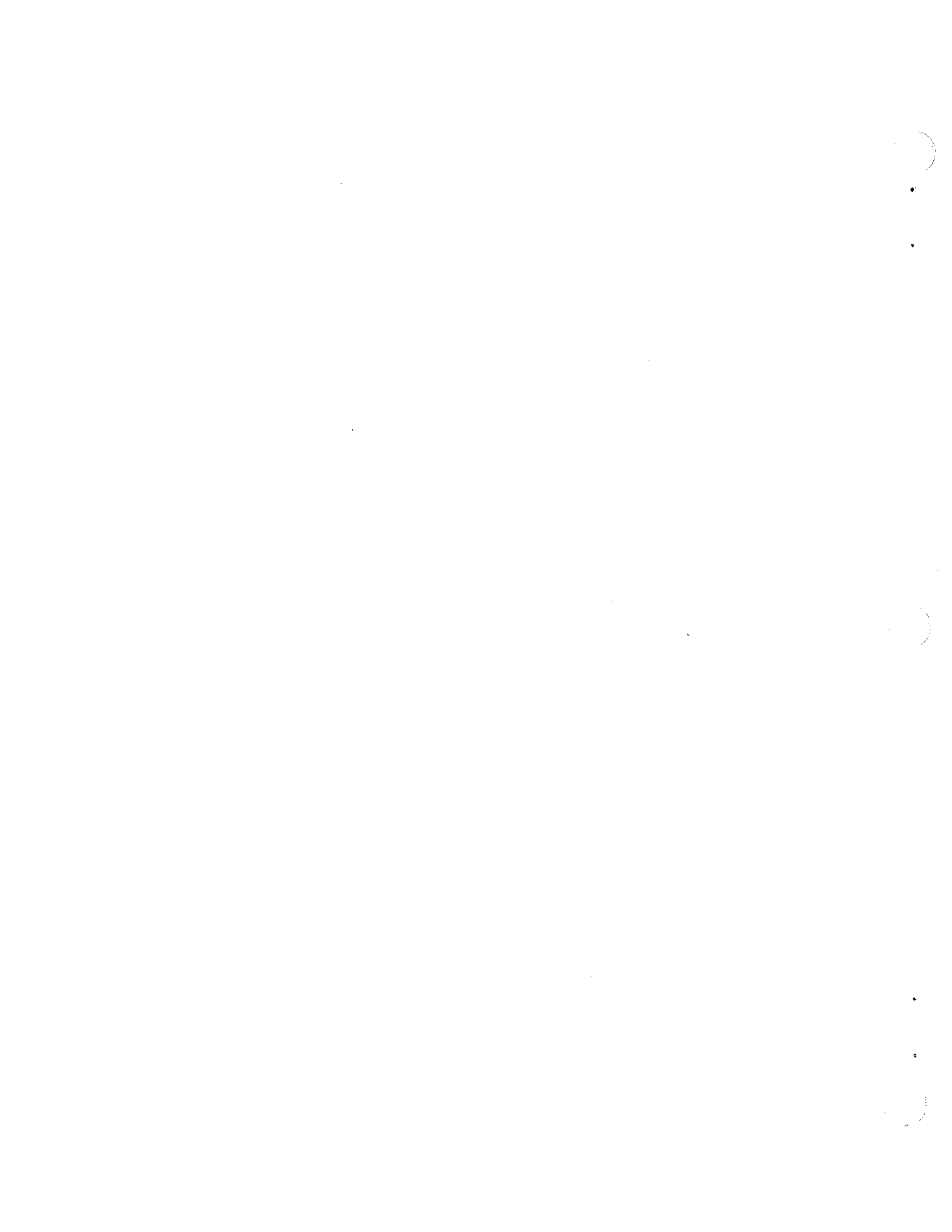
The Bell County economy, as measured by personal income, grew strongly in the 1970's and declined slightly in the 1980's. Bell County increased its share of Kentucky personal income in the 1970's and decreased its share in the 1980's. Per capita personal income was significantly below that of the state, while average earnings per job were above those of the state. Bell County generates a smaller percent of personal income from earnings and a larger percent from transfer payments than does the state as a whole.

The county economy was heavily impacted by the goods-producing industries of mining and manufacturing. Mine sector earnings and employment shares increased through 1981, then declined. The county's share of earnings and employment from manufacturing declined. These sectors also lost share at the state level.

The service and state and local government sectors in Bell County decreased their shares of employment. The trade sector increased its share. At the state level, the services and trade sectors increased their shares, while the state and local government share was constant.

Events in the international energy markets, specifically a sharp increase in the price of oil, resulted in an increased demand for coal. This provided the impetus for economic growth in Bell County in the mid-to-late 1970's. However, these favorable coal market conditions were not sustained. Earnings and employment from this sector subsequently declined.

The county's high concentration in the mining sector contributed to a volatile economic history and projects an uncertain economic future. Further, this sector is becoming less labor intensive, limiting its future employment potential. This sector is very sensitive to economic fluctuations. Consequently, while a high concentration in mining supported the economy during a period of high energy prices, these conditions will not ensure future economic growth. The non-goods-producing sectors are more resilient. Furthermore, a diversified economy helps to stabilize an area during recessionary periods. Future economic growth in Bell County would probably be enhanced by development of such sectors.



## INTRODUCTION

This is one of a series of reports called Economic Trends in Kentucky Counties. The purpose of this series is to describe the economic structure of Kentucky counties and to assess their economic performance relative to their own history and relative to the Kentucky economy. Information on the structure and patterns of change in county economies and an understanding of their relationship to the Kentucky economy can help in making policy decisions that are intended to shape Kentucky's economic future.

When assessing any economy there are several pertinent questions which may be addressed. The first concerns changes in the absolute size of the economy over time. Here the relevant comparison is between the Bell County economy and its own history. Since most economic variables are given in dollars and since inflation causes the value of a dollar to vary over time, all dollar values in this report are presented in constant 1988 dollars. This allows analysis of real changes over time by controlling for the effects of inflation.

A second question concerns the structure and nature of the Bell County economy. The structure of an economy refers to the relative share contributed by the various segments of the economy, while the nature deals with how this share has changed over time.

A third question concerns the performance of the Bell County economy when compared to the Kentucky economy. For example, if a county has a higher proportion of earnings or employment in a particular sector it would indicate a specialization in that sector. Differences in economic structure may explain variations in relative economic well being between a county and the state as a whole.

Economic data for counties are usually published after a lag of two years. Therefore, most data in this report cover the period 1969 to 1987. All data for this report was obtained from the Kentucky Economic Information System, an on-line database maintained by the University of Kentucky Center for Business and Economic Development.

There are certain caveats which should be remembered when analyzing data. First, it is a common and useful approach to evaluate the percentage an economic sector contributes to the total economy. However, one must remember that a sector's percentage contribution may decline even when its absolute value is increasing, if another sector's contribution is growing at a faster rate. Secondly, when reviewing data in graphical analyses, the scales used to present data should be noted. In this report most graphs are presented with the narrowest scale which will cover all data points. This can accentuate visual patterns over time even when absolute changes are relatively small.

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\*For an analysis of economic trends in Kentucky, see Virginia Wilson, Patterns of Growth and Decline in the Kentucky Economy 1969-1988, Research Memorandum 437, Legislative Research Commission, November 1989.



## ECONOMIC TRENDS IN BELL COUNTY

The following analysis includes a brief description of the county economy and is accompanied by graphical illustrations. Data tables are also included at the end of this report. Three principal components of the Bell County economy are analyzed. They are:

1. Personal Income
2. Earnings
3. Employment

Also, because coal production has been an important component in the Kentucky economy and in many local economies, the coal sector is analyzed in counties which have a history of coal production.

### Personal Income

Personal income is often used as a measure of the economic activity in an area. Personal income is the sum of all the dollar income received by individuals in an area from any legal source. Personal income data is published by the Bureau of Economic Analysis (BEA) for most major geographic regions, including states, counties, and major cities.

In general, income can be obtained in three ways. First, it can be earned by the work of an individual. This type of income includes wages and salaries income and proprietors' earnings. Second, income can be earned by property. Included are earnings from rents, dividends, and interest. Finally, income can be received as a gift or an entitlement. This type of income constitutes the component of personal income called transfer payments. Included in this component is income from sources such as retirement benefits, unemployment benefits, food stamps, and medical programs such as Medicare and Medicaid.

As can be seen in Chart 1A, the size of the Bell County economy, as measured by real personal income, increased, from \$185 million in 1969 to a high of \$313 million in 1981 (after adjusting for inflation). There was a subsequent decline to \$297 million in 1987. Chart 1B shows Bell County total personal income as a percent of Kentucky total personal income. Bell County's share of Kentucky personal income increased through the 1970's and declined in the 1980's.

A similar pattern emerges from an examination of per capita personal income (Charts 1C and 1D). Per capita personal income is simply the total personal income of an area divided by its population. Per capita personal income is often used as a measure of the economic well-being of the residents of an area. Bell County real per capita income generally increased over the time period to a level of \$8,814 per person in 1987. While Bell County's per capita personal income was 70.5 percent of the Kentucky per capita personal income in 1987, this percentage was down since 1980.

A better understanding of the nature of economic activity can be gleaned from an examination of the relative contribution of the components of personal income and how their shares have changed over time. This information is illustrated in Charts 2A-2D. Total earnings increased from \$130 million in 1969 to a high of \$197 million in 1978, then declined to \$164 million in 1987 (in constant 1988 dollars). Earnings as a percent of personal income declined over the period. This trend occurred at the state level as well. Earnings accounted for 55.3 percent of Bell County's total personal income in 1987, which was significantly less than Kentucky's 67.5 percent share.

Transfer payments contributed \$40 million to total personal income in 1969 and \$89 million in 1987. Transfer payments contributed a much higher percentage of personal income in Bell County than in Kentucky. In 1987, 30.0 percent of Bell County personal income was from transfer payments, compared to 17.2 percent for Kentucky.

Income from property in Bell County grew steadily through the time period. Income from property totalled \$15 million in 1969 and increased to \$44 million in 1987.

## Earnings

Earnings are the component of personal income reflecting payments to individuals in return for labor. Earnings include both wages and salaries and proprietor's income. Earnings in the goods-producing industries are illustrated in Chart 3A. In 1969, Bell County received 17.1 percent of its earnings from manufacturing. This percentage decreased to 8.7 percent in 1987. This trend of a decline in the percent of total earnings from manufacturing parallels the state trend.

The mine sector's share of earnings was 9.6 percent in 1969. This sector's share increased dramatically in the late 1970's and accounted for a high of 38.5 percent in 1981. Earnings from this sector declined subsequently to 25.7 percent in 1987. This parallels state trends in the mining sector.

Earnings from non-goods-producing industries are illustrated in Chart 3B. The percent of total earnings from services decreased from 24.2 percent in 1969 to 13.1 percent in 1981, then increased to 19.6 percent in 1987. The percent of earnings from the trade sector decreased in the late 1970's, then increased to 15.7 percent in 1987. The percentage of earnings in both the state and local government sectors decreased from 12.5 percent in 1969 to 7.5 percent in 1978, then increased to 11.6 percent in 1987. The declines in these sectors likely reflect activity in the mining sector rather than absolute declines. At the state level, the share of earnings from services increased, while trade and government were stable.

Average earnings per job (adjusted for inflation) for Bell County and Kentucky are shown in Chart 3D. In Kentucky, average earnings per job reached a high of \$20,121 per person in 1978. Average earnings per job have since declined and in 1987 they were \$18,636 per person. Similarly, in Bell County earnings per job increased during the 1970's, then decreased to a level of \$18,873 in 1987.

## Employment

Employment is considered to be any activity for which one receives financial remuneration in the form of wages or profits. In 1969, total employment stood at 9,352 people. By 1987, employment had increased to 11,805 people.

The unemployment rate, often used as an indicator of economic well-being, is the ratio of unemployed to the total civilian labor force. Unemployment is described as a condition of being out of work while actively seeking employment within the last thirty days. The civilian labor force is described as the proportion of population age 16 or older employed or actively seeking employment. Annual unemployment rates for Kentucky and Bell County are presented in Chart 4B. Bell County unemployment rates were above those of the state during the period. In 1987, the unemployment rate in Bell County was 13.5 percent, compared to 8.8 percent in Kentucky.

Another employment concept includes the discouraged worker. Discouraged workers are persons who want jobs but made no attempt to find work in the last thirty days because they believe they could not find it. These individuals are not included when calculating official unemployment rates. The Cabinet for Human Resources does not estimate discouraged workers by county. However, preliminary research by the Cabinet indicates that the inclusion of discouraged workers in the civilian labor force estimate would increase the unemployment rate by approximately 4 percent for the state. This figure would vary by county depending on the labor market in a county or within commuting distance.

Employment in the goods-producing industries is illustrated in Chart 4C. The percent of Bell County total employment in manufacturing decreased over the time period. Manufacturing represented 17.7 percent of total employment in 1969. This decreased to 9.5 percent in 1987. The mining sector represented 5.7 percent of total employment in 1969. The mine sector employment share increased to 20.3 percent in 1981. However, this share declined through the 1980's to 13.3 percent in 1987. These trends parallel the employment trends for the state.

Bell County employment in the non-goods-producing industries is illustrated in Chart 4D. Employment in the service sector as a percent of total employment decreased from 24.8 percent in 1969 to 20.4 percent in 1987. The percent of employment in trade increased from 18.5 percent in 1969 to 25.4 percent in 1987. The percent of employment in state and local government decreased from 15.7 percent in 1969 to 11.6 percent in 1987. At the state level, the percents of employment in the service and trade sectors increased, while the percent in state and local government was stable.

## Population

The census conducted each decade counts the actual population in an area. Population is then statistically estimated during intervening years. The demographic composition of this population growth has important

implications for the future demand for goods and services, and ultimately, the economic structure of Bell County.

The Bell County population grew from 31,500 in 1969 to 34,700 in 1983, then declined to 33,600 in 1987 (Chart 5A). It was estimated that in 1986, 8.9 percent of Bell County's population was under six years of age, compared to 8.6 percent for the state. In the same year, 17.3 percent of the Bell County population was sixty years of age or over, compared to 16.5 percent of all Kentucky residents.

## Coal

The coal sector provides significant income and employment to the Kentucky economy. This sector also contributes directly to the Commonwealth's General Fund revenues through severance tax collections. Coal production had a strong impact on the Bell County economy.

Bell County coal production patterns are presented in Chart 6A. Coal production is estimated by the Energy Information Administration of the U.S. Department of Energy. Estimates of production are calculated from a sample of coal shipments from each county. Coal production increased significantly during the period, to a high of 6,670 thousand tons in 1981. This production increase was likely stimulated by changes in international energy markets. Specifically, a sharp increase in the price of oil resulted in increased demand for coal by utilities and resulted in increases in the price of coal. In 1986, 5,661 thousand tons of coal was mined in Bell County.

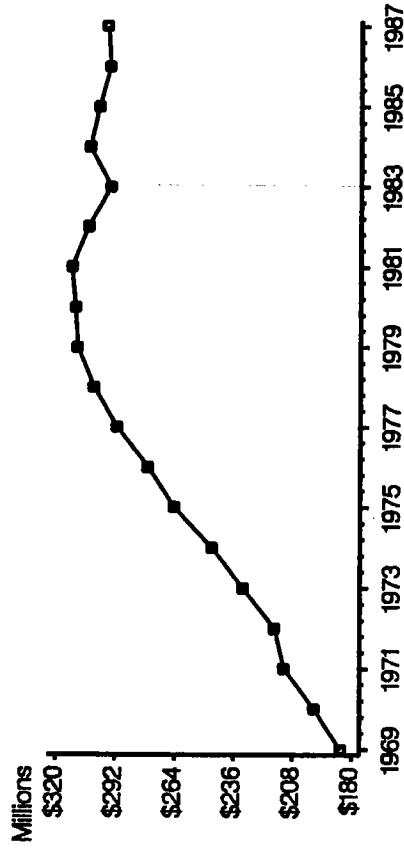
Employment in the mining sector, which includes coal and other forms of mining, is illustrated in Chart 6B. In 1969, this sector provided 536 jobs in Bell County. This increased to 2,369 in 1981. By 1987, mining employment declined to 1,567 people.

The average value per ton for coal is illustrated in Chart 6C. Similar to patterns for the national coal market, average value per ton increased in the 1970's, then declined during the 1980's.

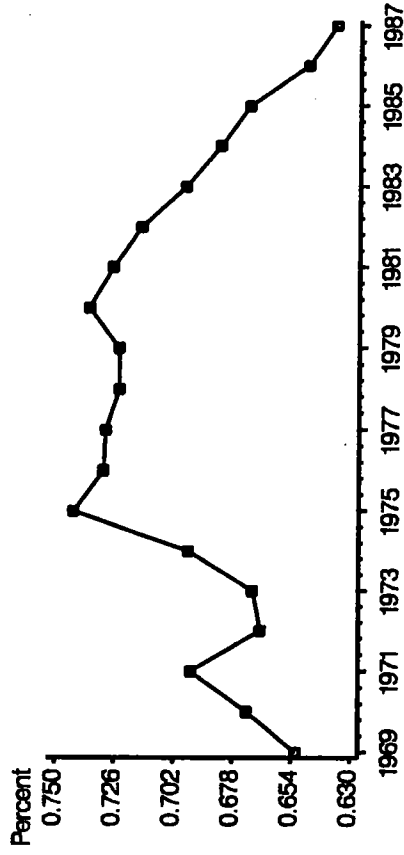
Coal severance tax receipts are presented in Chart 6D. The Kentucky Revenue Cabinet collects severance taxes on processed coal. Receipts are then allocated to counties, based on the value of the coal mined in the county and the value attributed to any processing done in the county. Therefore, trends in severance tax collections may not exactly parallel those of the coal production figures in Chart 6A. Bell County coal severance tax collections totalled \$8.3 million in 1986.



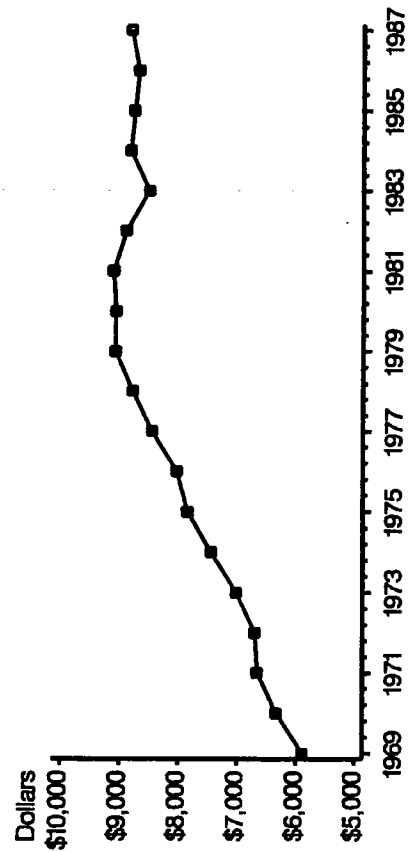
**CHART 1A**  
**BELL COUNTY**  
**REAL PERSONAL INCOME**  
 Millions of 1988 dollars



**CHART 1B**  
**BELL COUNTY**  
**PERSONAL INCOME**  
 as a Percent of Kentucky Personal Income



**CHART 1C**  
**BELL COUNTY**  
**PER CAPITA PERSONAL INCOME**  
 in Constant 1988 Dollars



**CHART 1D**  
**BELL COUNTY**  
**PER CAPITA PERSONAL INCOME**  
 as a Percent of Kentucky Per Capita Personal Income

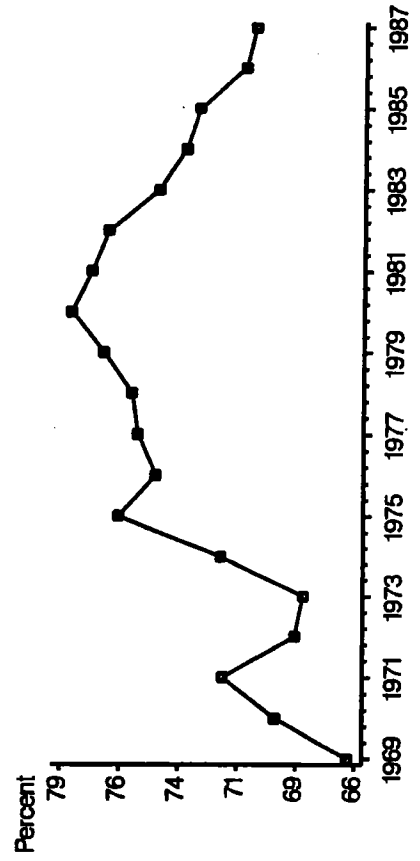


CHART 2A  
 BELL COUNTY  
 REAL TOTAL EARNINGS  
 Millions of 1988 dollars

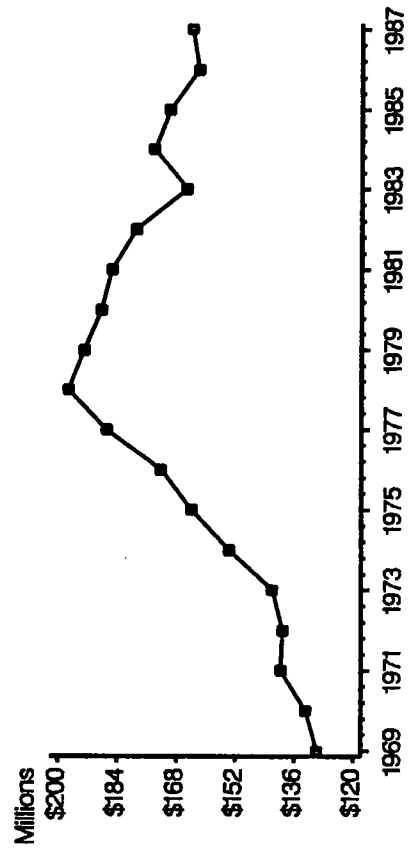


CHART 2B  
 BELL COUNTY  
 TRANSFER PAYMENTS and INCOME FROM PROPERTY  
 Millions of 1988 Dollars

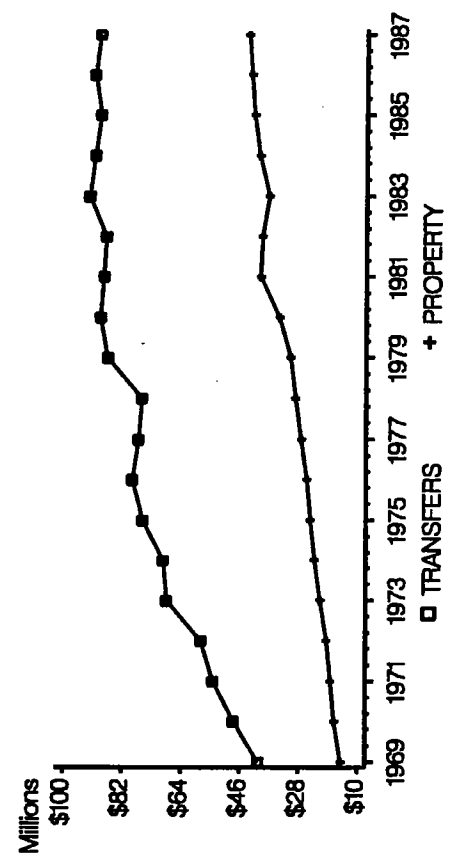


CHART 2C  
 BELL COUNTY  
 TOTAL EARNINGS  
 as a Percent of Personal Income

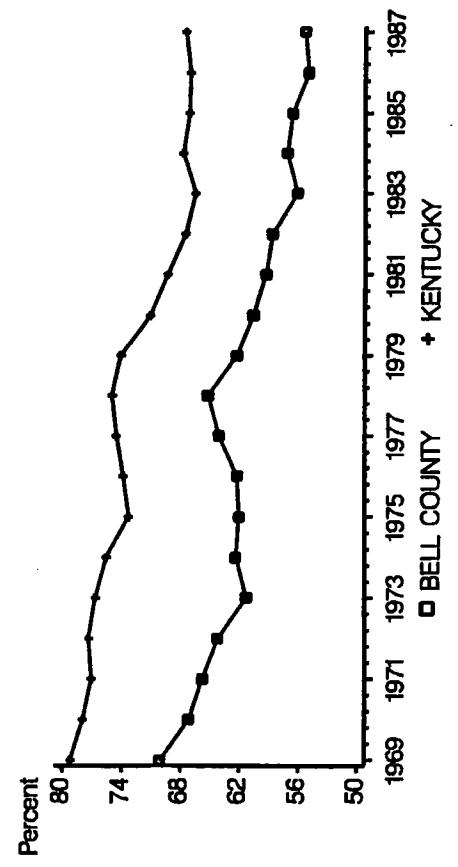
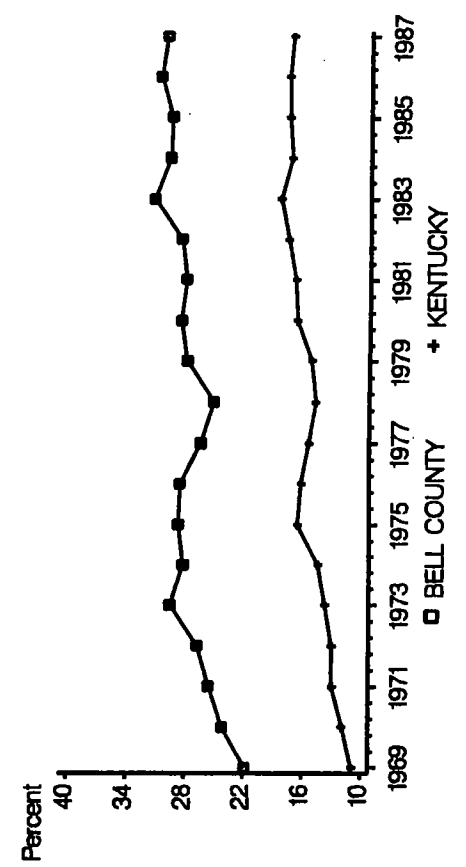
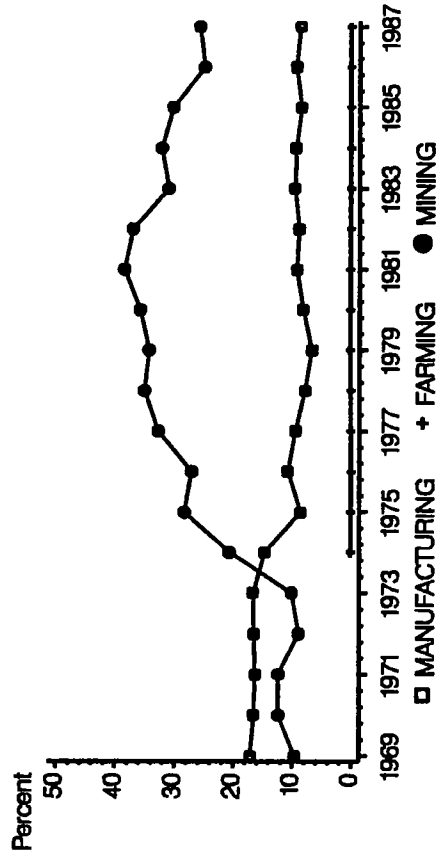


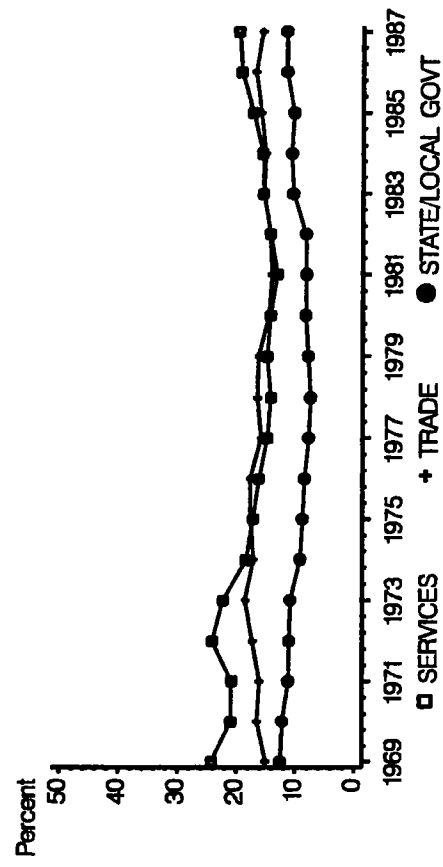
CHART 2D  
 BELL COUNTY  
 TRANSFER PAYMENTS  
 as a Percent of Personal Income



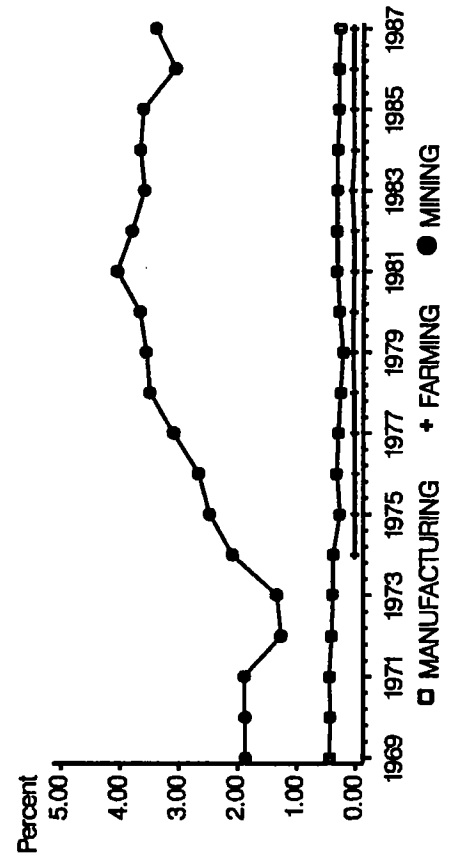
**CHART 3A**  
**BELL COUNTY**  
**EARNINGS IN GOODS PRODUCING INDUSTRIES**  
**as a Percent of Total Earnings**



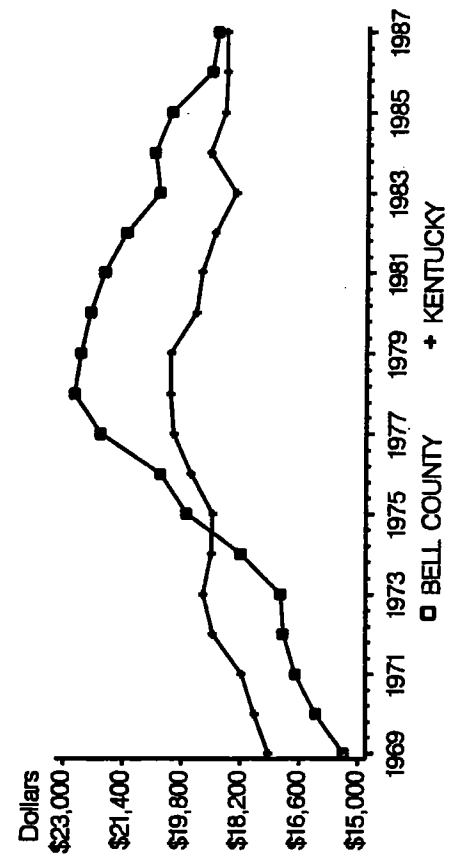
**CHART 3B**  
**BELL COUNTY**  
**EARNINGS IN NON - GOODS PRODUCING INDUSTRIES**  
**as a Percent of Total Earnings**



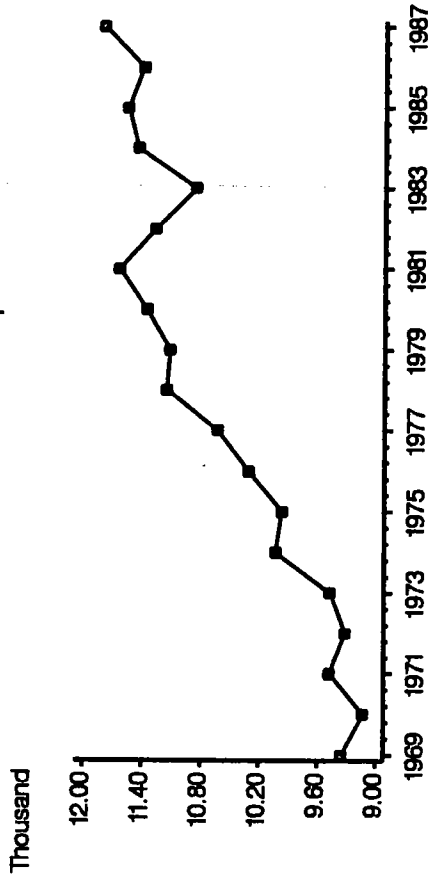
**CHART 3C**  
**BELL COUNTY**  
**EARNINGS IN GOODS PRODUCING INDUSTRIES**  
**as a Percent of Kentucky Industries**



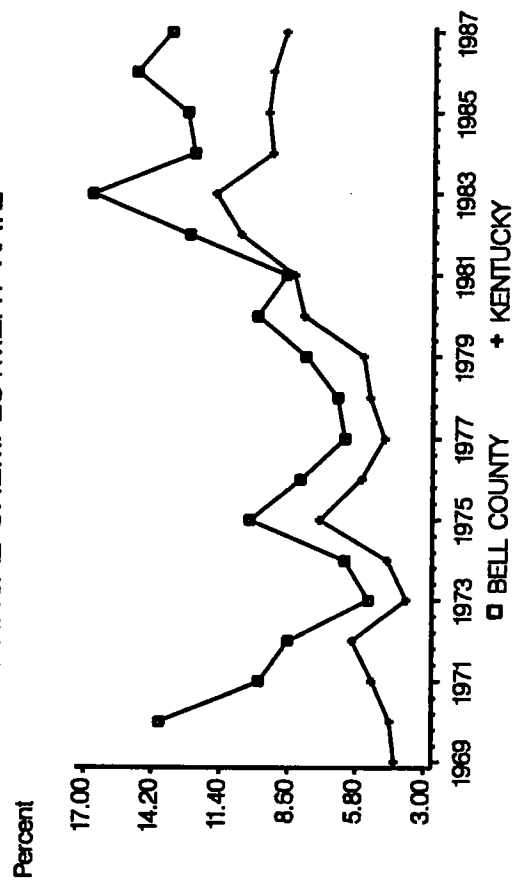
**CHART 3D**  
**BELL COUNTY**  
**AVERAGE EARNINGS PER JOB**  
**in Constant 1988 Dollars**



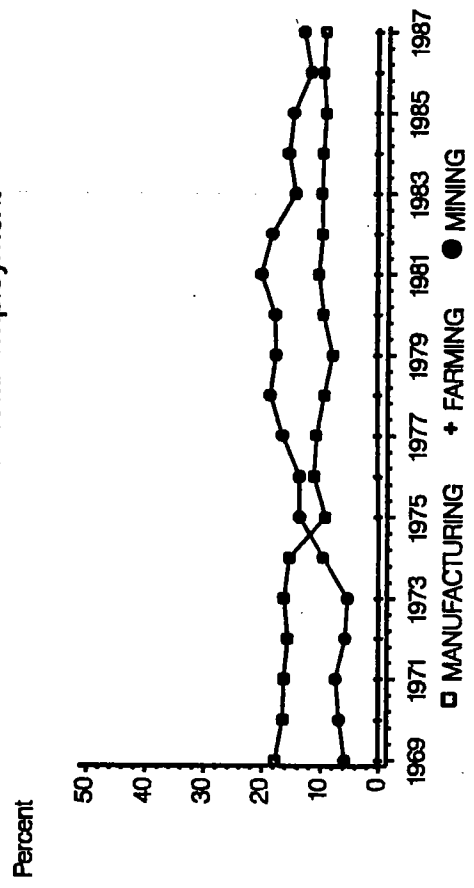
**CHART 4A**  
**BELL COUNTY**  
**TOTAL EMPLOYMENT**  
 Thousands of People



**CHART 4B**  
**BELL COUNTY**  
**ANNUAL UNEMPLOYMENT RATE**



**CHART 4C**  
**BELL COUNTY**  
**EMPLOYMENT IN GOODS PRODUCING INDUSTRIES**  
 as a Percent of Total Employment



**CHART 4D**  
**BELL COUNTY**  
**EMPLOYMENT IN NON-GOODS PRODUCING INDUSTRIES**  
 as a Percent of Total Employment

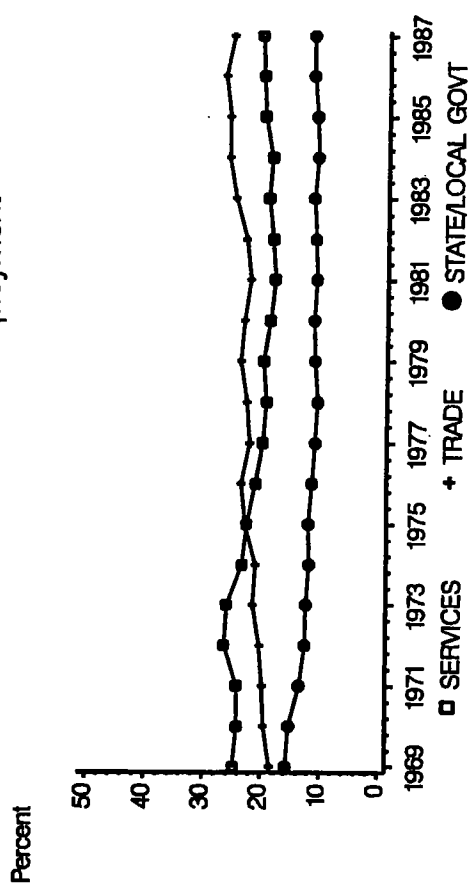


CHART 5A  
BELL COUNTY  
POPULATION  
Thousands of People

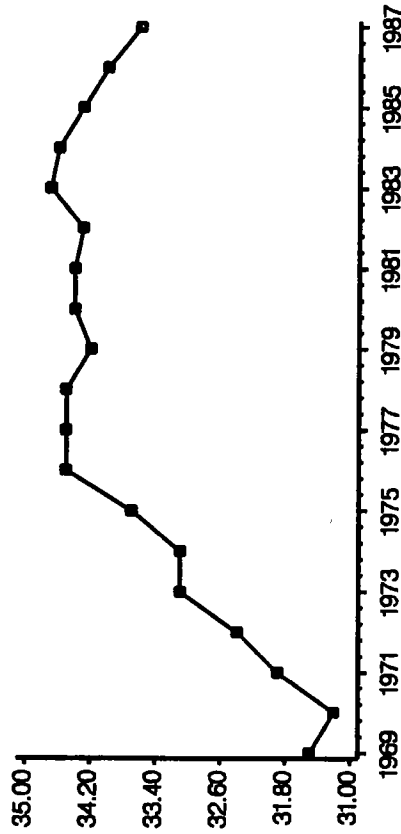


CHART 5B  
BELL COUNTY  
POPULATION  
as a Percent of Kentucky Population

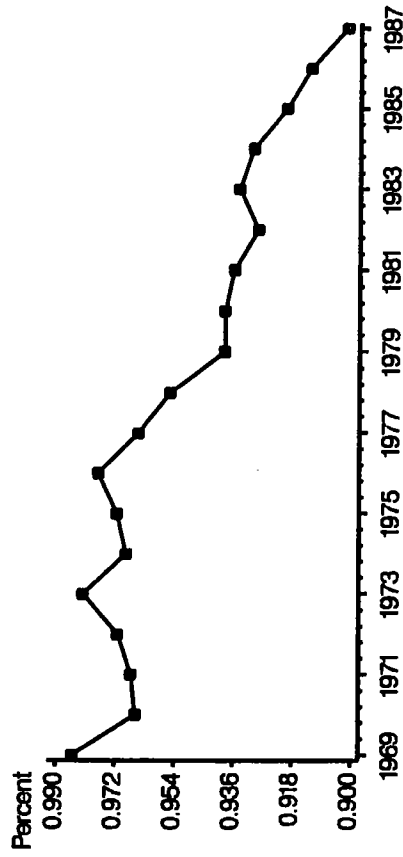


CHART 5C  
BELL COUNTY  
POPULATION 5 AND UNDER  
as a Percent of Total Population

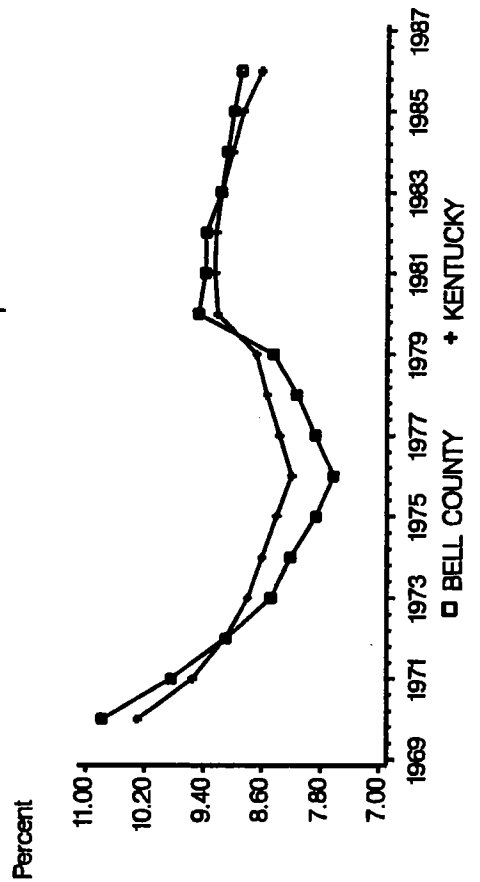
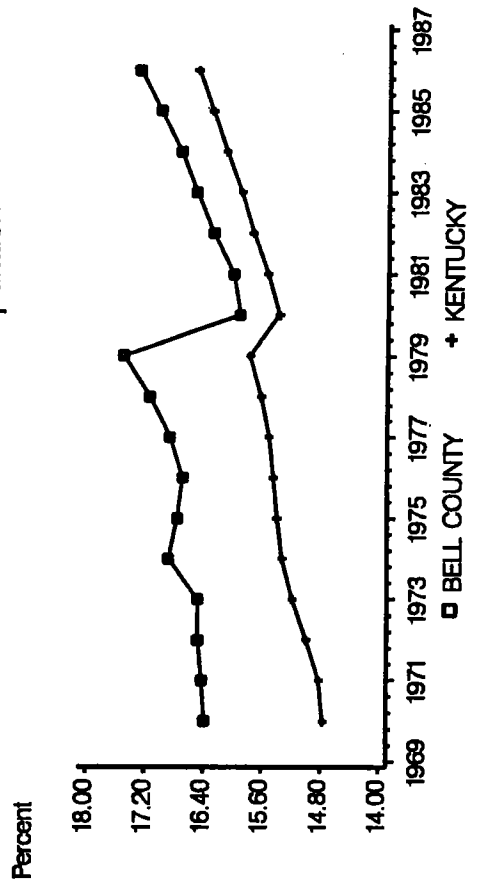
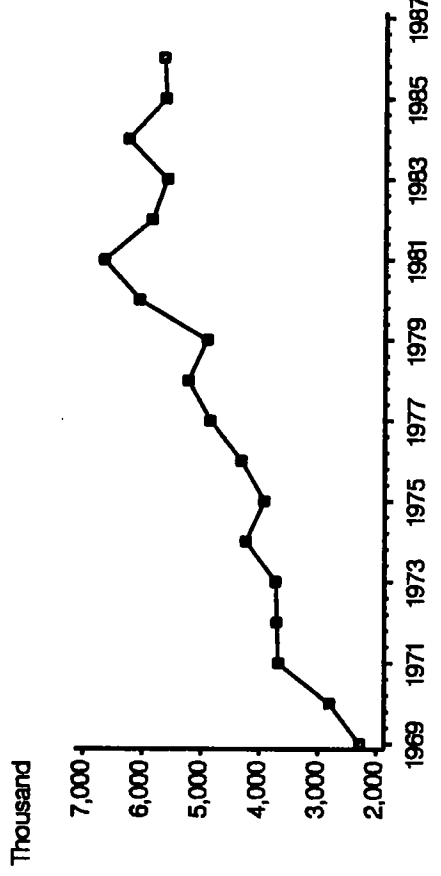


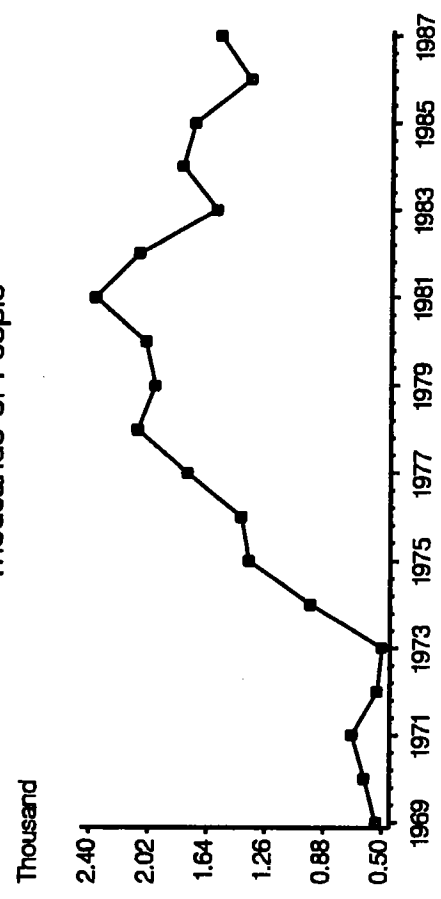
CHART 5D  
BELL COUNTY  
POPULATION 60 AND OVER  
as a Percent of Total Population



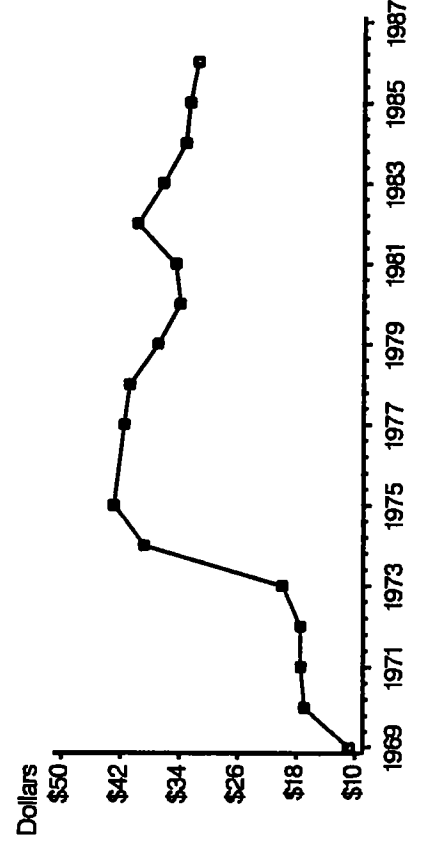
**CHART 6A**  
**BELL COUNTY**  
**TOTAL COAL PRODUCTION (SHIPMENTS)**  
 Thousands of Tons



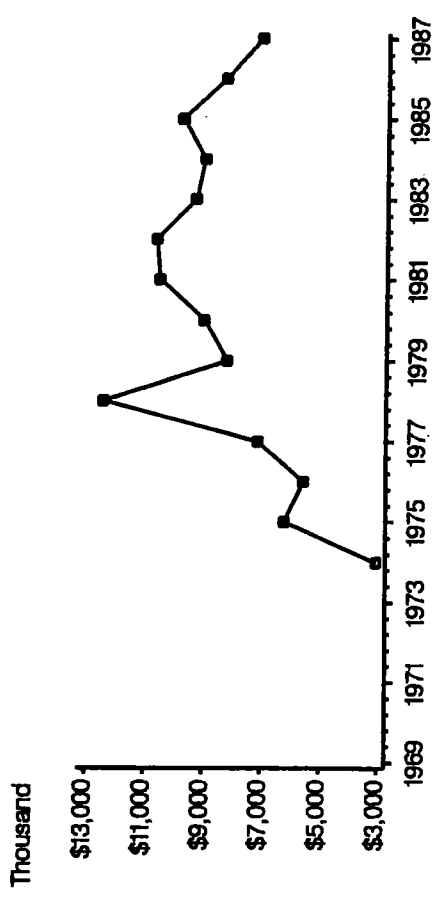
**CHART 6B**  
**BELL COUNTY**  
**MINING EMPLOYMENT**  
 Thousands of People



**CHART 6C**  
**BELL COUNTY**  
**AVERAGE VALUE PER TON FOR COAL**  
 Constant 1988 Dollars



**CHART 6D**  
**BELL COUNTY**  
**TAX RECEIPTS ON COAL SEVERED OR PROCESSED**  
 Thousands of 1988 Dollars



BELL COUNTY

PERSONAL INCOME  
In Millions of 1988 Dollars

Year	County Personal Income (M\$)	Percent of Kentucky (%)	Per Capita Personal Income (\$)	Percent of Kentucky (%)
1969	185	0.65	5,891	66.3
1970	198	0.67	6,338	69.5
1971	212	0.69	6,649	71.8
1972	217	0.67	6,692	68.7
1973	232	0.67	7,013	68.3
1974	246	0.70	7,456	72.0
1975	264	0.74	7,849	76.5
1976	277	0.73	8,033	74.8
1977	292	0.73	8,454	75.6
1978	303	0.72	8,779	75.9
1979	310	0.72	9,070	77.1
1980	311	0.74	9,059	78.5
1981	313	0.73	9,102	77.7
1982	305	0.72	8,889	76.9
1983	295	0.70	8,506	74.7
1984	305	0.68	8,820	73.6
1985	300	0.67	8,757	73.0
1986	295	0.65	8,681	70.9
1987	297	0.64	8,814	70.5

COMPONENTS OF PERSONAL INCOME  
In Constant 1988 Dollars

Year	EARNINGS			TRANSFER PAYMENTS			INCOME from PROPERTY		
	M\$	Percent of Personal Income		M\$	Percent of Personal Income		M\$	Percent of Personal Income	
		County	Kentucky		County	Kentucky		County	Kentucky
1969	130	70.1	79.2	40	21.8	10.9	15	8.1	9.9
1970	133	67.2	77.9	48	24.2	11.9	17	8.7	10.2
1971	140	65.8	77.0	54	25.6	12.9	18	8.6	10.1
1972	139	64.2	77.3	58	26.8	12.9	20	9.0	9.7
1973	142	61.2	76.6	68	29.5	13.6	22	9.3	9.7
1974	154	62.3	75.5	70	28.2	14.4	23	9.5	10.1
1975	164	62.0	73.3	76	28.7	16.5	25	9.3	10.1
1976	172	62.2	73.9	79	28.5	16.1	26	9.3	10.0
1977	187	64.1	74.6	77	26.4	15.3	27	9.4	10.1
1978	197	65.2	75.0	76	25.1	14.6	29	9.6	10.4
1979	193	62.2	74.1	86	27.9	15.1	31	9.9	10.8
1980	188	60.6	71.1	89	28.5	16.7	34	11.0	12.2
1981	186	59.3	69.3	88	28.0	16.8	40	12.7	13.8
1982	179	58.7	67.5	87	28.5	17.6	39	12.9	14.9
1983	165	56.1	66.6	92	31.2	18.4	37	12.7	15.1
1984	174	57.2	67.8	90	29.6	17.3	40	13.2	14.9
1985	170	56.6	67.2	89	29.5	17.6	42	13.9	15.3
1986	162	54.9	67.1	90	30.6	17.6	43	14.5	15.3
1987	164	55.3	67.5	89	30.0	17.2	44	14.7	15.3

BELL COUNTY

SECTOR EARNINGS as a PERCENT of TOTAL COUNTY EARNINGS and  
as a PERCENT of KENTUCKY SECTOR EARNINGS

YEAR	MANUFACTURING		FARMING		MINING	
	TOTAL	KENTUCKY	TOTAL	KENTUCKY	TOTAL	KENTUCKY
1969	17.1	0.43	.	.	9.6	1.86
1970	16.6	0.42	.	.	12.4	1.87
1971	16.3	0.43	.	.	12.4	1.88
1972	16.5	0.40	.	.	8.9	1.27
1973	16.7	0.38	.	.	10.1	1.34
1974	14.7	0.37	0.1	0.01	20.7	2.09
1975	8.6	0.26	0.1	0.02	28.3	2.49
1976	10.8	0.31	0.1	0.01	27.0	2.68
1977	9.5	0.29	0.1	0.02	32.7	3.09
1978	7.9	0.25	0.1	0.03	35.1	3.50
1979	6.7	0.20	0.2	0.04	34.3	3.56
1980	8.2	0.27	0.2	0.04	35.8	3.67
1981	9.3	0.31	0.2	0.03	38.5	4.05
1982	8.9	0.31	0.2	0.03	37.1	3.80
1983	9.6	0.31	0.1	0.06	31.0	3.59
1984	9.4	0.30	0.1	0.02	32.2	3.66
1985	8.5	0.27	0.1	0.03	30.3	3.61
1986	9.4	0.28	0.1	0.04	25.0	3.06
1987	8.7	0.26	0.1	0.03	25.7	3.39

YEAR	SERVICES		TRADE		STATE and LOCAL GOVERNMENT	
	TOTAL	KENTUCKY	TOTAL	KENTUCKY	TOTAL	KENTUCKY
1969	24.2	1.13	15.1	0.59	12.5	0.85
1970	20.9	0.99	16.5	0.64	12.2	0.80
1971	20.8	1.01	16.1	0.66	11.2	0.74
1972	24.1	1.12	17.3	0.67	11.0	0.70
1973	22.2	1.00	18.5	0.69	10.9	0.69
1974	18.4	0.95	17.2	0.73	9.2	0.67
1975	17.2	0.93	17.6	0.78	8.8	0.65
1976	16.2	0.87	17.7	0.79	8.5	0.64
1977	14.8	0.85	15.9	0.77	7.8	0.63
1978	14.2	0.84	16.5	0.81	7.5	0.62
1979	14.8	0.84	16.3	0.78	7.9	0.62
1980	14.2	0.80	14.6	0.76	8.3	0.66
1981	13.1	0.73	14.0	0.77	8.2	0.67
1982	14.3	0.73	14.3	0.74	8.3	0.63
1983	15.5	0.70	15.3	0.73	10.5	0.73
1984	15.6	0.70	15.2	0.74	10.7	0.77
1985	17.2	0.73	15.9	0.76	10.4	0.71
1986	19.2	0.70	16.8	0.74	11.5	0.71
1987	19.6	0.69	15.7	0.69	11.6	0.72



BELL COUNTY

COUNTY EMPLOYMENT by SECTOR

YEAR	MANUFACTURING		FARMING		MINING	
	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL
1969	1,659	17.7	13	0.1	536	5.7
1970	1,500	16.4	13	0.1	613	6.7
1971	1,539	16.2	12	0.1	695	7.3
1972	1,457	15.6	12	0.1	532	5.7
1973	1,543	16.3	12	0.1	500	5.3
1974	1,544	15.4	.	.	968	9.6
1975	924	9.3	25	0.3	1,369	13.7
1976	1,160	11.2	38	0.4	1,419	13.8
1977	1,161	10.9	48	0.5	1,770	16.6
1978	1,059	9.5	54	0.5	2,094	18.8
1979	895	8.0	56	0.5	1,981	17.8
1980	1,109	9.8	57	0.5	2,041	18.0
1981	1,234	10.6	62	0.5	2,369	20.3
1982	1,123	10.0	59	0.5	2,084	18.5
1983	1,096	10.1	63	0.6	1,585	14.6
1984	1,131	9.9	61	0.5	1,808	15.8
1985	1,082	9.4	60	0.5	1,730	15.0
1986	1,128	9.9	60	0.5	1,370	12.0
1987	1,122	9.5	58	0.5	1,567	13.3

YEAR	SERVICES		TRADE		STATE and LOCAL GOVERNMENT	
	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL
1969	2,322	24.8	1,726	18.5	1,472	15.7
1970	2,202	24.1	1,781	19.5	1,387	15.2
1971	2,295	24.2	1,869	19.7	1,279	13.5
1972	2,461	26.4	1,886	20.2	1,167	12.5
1973	2,464	26.0	2,033	21.5	1,175	12.4
1974	2,344	23.4	2,111	21.0	1,193	11.9
1975	2,254	22.6	2,283	22.9	1,204	12.1
1976	2,174	21.1	2,432	23.6	1,184	11.5
1977	2,117	19.9	2,361	22.2	1,163	10.9
1978	2,158	19.3	2,531	22.7	1,178	10.6
1979	2,207	19.8	2,644	23.8	1,231	11.1
1980	2,132	18.8	2,639	23.2	1,280	11.3
1981	2,099	18.0	2,581	22.2	1,268	10.9
1982	2,072	18.4	2,583	22.9	1,250	11.1
1983	2,080	19.1	2,702	24.9	1,243	11.4
1984	2,131	18.6	2,984	26.1	1,239	10.8
1985	2,299	19.9	3,006	26.0	1,275	11.0
1986	2,301	20.2	3,053	26.8	1,328	11.6
1987	2,408	20.4	2,994	25.4	1,365	11.6

BELL COUNTY

EMPLOYMENT STATISTICS

YEAR	TOTAL EMPLOYMENT	AVERAGE EARNINGS		UNEMPLOYMENT RATE	
		COUNTY	KENTUCKY	COUNTY	KENTUCKY
1969	9,352	\$15,389	\$17,440	.	4.2
1970	9,131	\$16,136	\$17,811	13.9	4.4
1971	9,476	\$16,709	\$18,166	9.8	5.1
1972	9,315	\$17,043	\$18,970	8.6	6.0
1973	9,472	\$17,109	\$19,232	5.3	3.7
1974	10,032	\$18,193	\$19,008	6.3	4.5
1975	9,972	\$19,678	\$18,976	10.2	7.3
1976	10,312	\$20,387	\$19,563	8.1	5.6
1977	10,635	\$21,992	\$20,031	6.3	4.7
1978	11,155	\$22,709	\$20,121	6.6	5.3
1979	11,120	\$22,541	\$20,110	7.9	5.5
1980	11,361	\$22,282	\$19,439	9.9	8.0
1981	11,644	\$21,909	\$19,286	8.7	8.4
1982	11,270	\$21,333	\$18,931	12.7	10.6
1983	10,862	\$20,433	\$18,358	16.7	11.6
1984	11,453	\$20,564	\$19,080	12.5	9.3
1985	11,561	\$20,109	\$18,676	12.8	9.5
1986	11,405	\$19,044	\$18,627	14.9	9.3
1987	11,805	\$18,873	\$18,636	13.5	8.8

POPULATION STATISTICS

YEAR	POPULATION	% OF KY	PERCENT UNDER 6		PERCENT 60+	
			COUNTY	KENTUCKY	COUNTY	KENTUCKY
1969	31,500	0.98	.	.	.	.
1970	31,200	0.97	10.8	10.3	16.4	14.8
1971	31,900	0.97	9.8	9.6	16.4	14.8
1972	32,400	0.97	9.1	9.1	16.5	15.0
1973	33,100	0.98	8.5	8.8	16.5	15.2
1974	33,100	0.97	8.2	8.6	16.9	15.3
1975	33,700	0.97	7.9	8.4	16.8	15.4
1976	34,500	0.98	7.6	8.2	16.7	15.5
1977	34,500	0.97	7.9	8.4	16.9	15.5
1978	34,500	0.96	8.1	8.5	17.1	15.6
1979	34,200	0.94	8.4	8.7	17.5	15.8
1980	34,400	0.94	9.5	9.2	15.9	15.4
1981	34,400	0.94	9.4	9.3	16.0	15.5
1982	34,300	0.93	9.4	9.2	16.3	15.7
1983	34,700	0.93	9.2	9.2	16.5	15.9
1984	34,600	0.93	9.1	9.0	16.7	16.1
1985	34,300	0.92	9.0	8.9	17.0	16.3
1986	34,000	0.91	8.9	8.6	17.3	16.5
1987	33,600	0.90	.	.	.	.

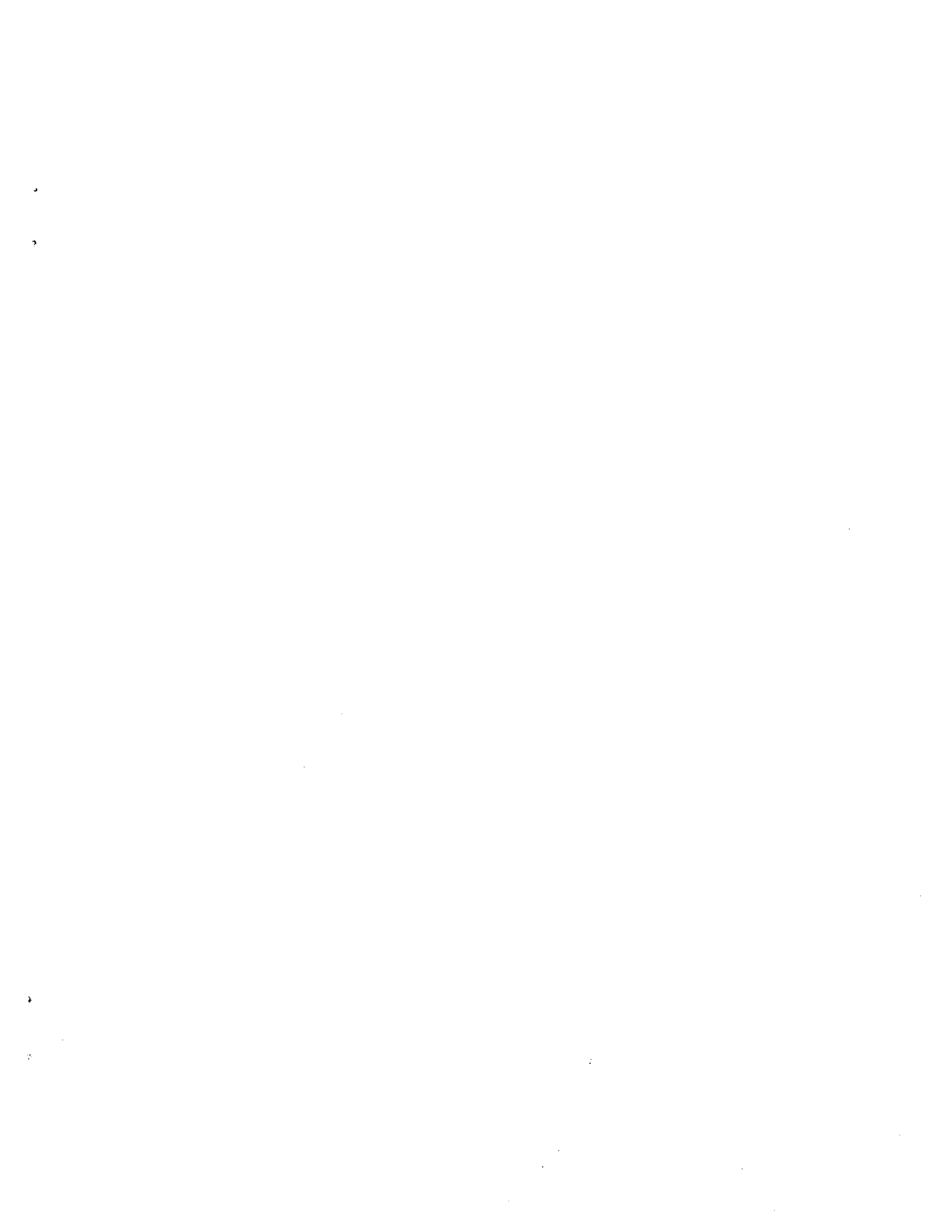
BELL COUNTY

COAL MINING STATISTICS

YEAR	PRODUCTION (Thousand Tons)	EMPLOYMENT	AVERAGE VALUE PER TON	COAL TAX RECEIPTS (000)
1969	2,284	536	\$10.84	.
1970	2,803	613	\$16.92	.
1971	3,678	695	\$17.41	.
1972	3,704	532	\$17.49	.
1973	3,728	500	\$20.01	.
1974	4,236	968	\$38.80	\$3,060
1975	3,924	1,369	\$42.92	\$6,221
1976	4,317	1,419	.	\$5,571
1977	4,855	1,770	\$41.57	\$7,132
1978	5,230	2,094	\$40.81	\$12,404
1979	4,911	1,981	\$36.92	\$8,222
1980	6,061	2,041	\$33.94	\$9,006
1981	6,670	2,369	\$34.57	\$10,522
1982	5,857	2,084	\$39.82	\$10,635
1983	5,602	1,585	\$36.26	\$9,301
1984	6,265	1,808	\$33.27	\$8,994
1985	5,628	1,730	\$32.70	\$9,747
1986	5,661	1,370	\$31.62	\$8,298
1987	.	1,567	.	.

Note: All dollar figures are presented in constant 1988 dollars.





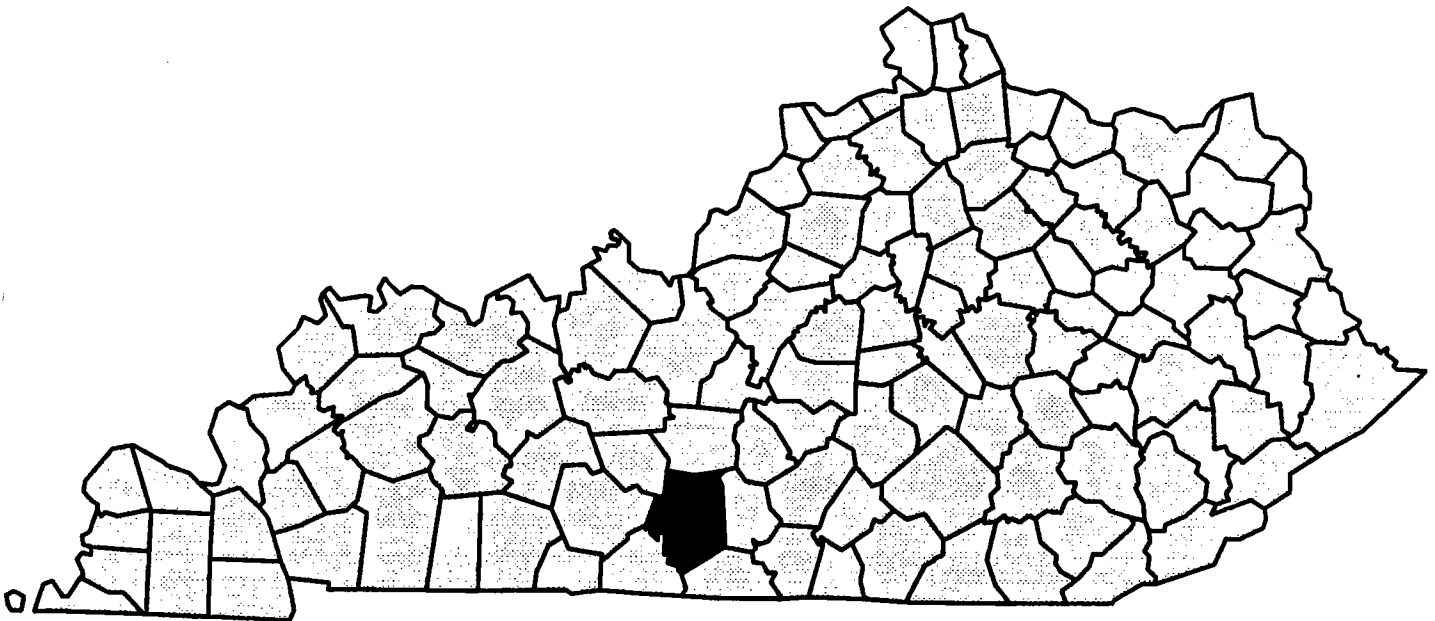
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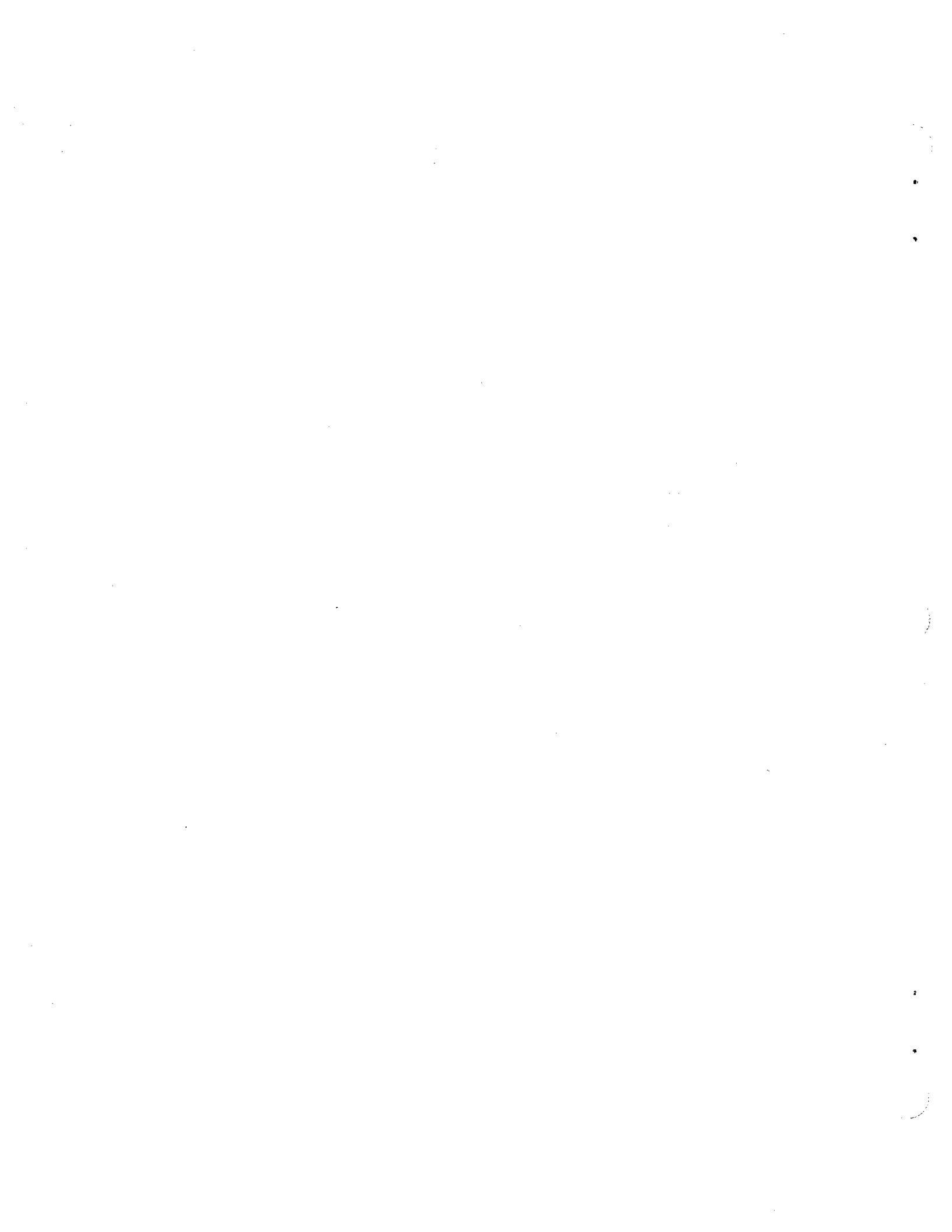
ECONOMIC TRENDS IN  
KENTUCKY COUNTIES  
1969 – 1987

**BARREN COUNTY**



Prepared by  
Virginia Wilson  
Donna A. Cantrell

RESEARCH MEMORANDUM 438  
Legislative Research Commission  
Frankfort, Kentucky  
February, 1990





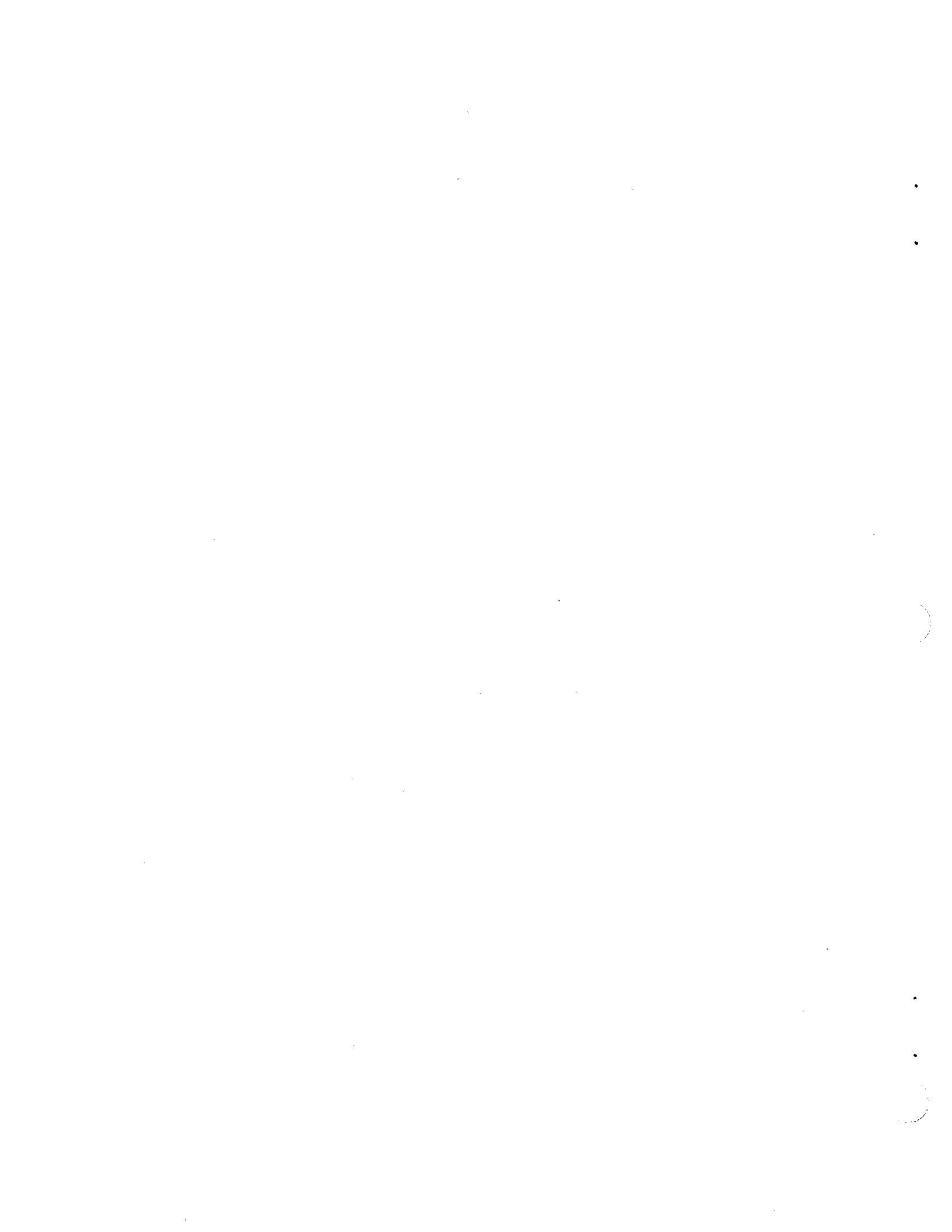
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1990

ECONOMIC TRENDS IN  
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1969 – 1987

BARREN COUNTY

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## FOREWORD

This publication is one of a set of 120, highlighting economic trends in each county in Kentucky from 1969-1987. This effort is part of the ongoing activities sponsored by the Legislative Research Commission to provide a long-term perspective on issues for decision makers. The economies of individual counties do not always parallel overall state trends. This set of publications is an attempt to look at the economic trends in each county over time and to point out where the economies of individual counties may be performing differently from the economy of the state as a whole.

This publication was prepared by Virginia Wilson and Donna Cantrell. Susan Dance assisted in production of the manuscript and Charles Bush edited the report. The assistance of Carol Straus from the Center for Business and Economic Research at the University of Kentucky in deciphering data is gratefully acknowledged.

Vic Hellard, Jr.  
Director

The Capitol  
Frankfort  
February, 1990



## SUMMARY

The Barren County economy experienced strong economic growth over the last two decades. In fact, the county increased its share of Kentucky personal income, indicating the economy is growing at a faster rate than the state.

The county economy has experienced significant economic restructuring, characterized by an increase in the manufacturing sector and a decline in the farming sector. At the state level, both the farm and the manufacturing sectors declined.

The service sector has also experienced growth in Barren County. This is similar to state and national trends, where the service sector is the fastest growing component of the economy.

The high concentration and growth in the manufacturing sector has been beneficial for the local economy. This is partly attributed to relatively high wages in this sector. However, manufacturing industries are very sensitive to national economic trends and are generally more susceptible to economic declines. Consequently, while a high concentration in manufacturing enabled the county to enjoy economic expansion during a period of economic growth, it may also make the county more susceptible to recessionary contractions.

On the positive side, the service sector is less cyclical. Therefore, the increase in this sector may help to support the county economy in recessionary periods.



## INTRODUCTION

This is one of a series of reports called Economic Trends in Kentucky Counties. The purpose of this series is to describe the economic structure of Kentucky counties and to assess their economic performance relative to their own history and relative to the Kentucky economy. Information on the structure and patterns of change in county economies and an understanding of their relationship to the Kentucky economy can help in making policy decisions that are intended to shape Kentucky's economic future.\*

When assessing any economy there are several pertinent questions which may be addressed. The first concerns changes in the absolute size of the economy over time. Here the relevant comparison is between the county economy and its own history. Since most economic variables are given in dollars and because inflation causes the value of a dollar to vary over time, all dollar values in this report are presented in constant 1988 dollars. This allows analysis of real changes over time by controlling for the effects of inflation.

A second question concerns the structure and nature of the county economy. The structure of an economy refers to the relative share contributed by the various segments of the economy, while the nature deals with how this share has changed over time.

A third question concerns the performance of the county economy when compared to the Kentucky economy. For example, if a county has a higher proportion of earnings or employment in a sector it would indicate a specialization in that sector. Differences in economic structure may explain variations in relative economic well-being between a county and the state as a whole.

Economic data for counties are usually published after a lag of two years. Therefore, most data in this report cover the period 1969 to 1987. All data for this report was obtained from the Kentucky Economic Information System, an on-line database maintained by the University of Kentucky Center for Business and Economic Development.

There are certain caveats which should be remembered when analyzing data. First, it is a common and useful approach to evaluate the percentage an economic sector contributes to the total economy. However, one must remember that a sector's percentage contribution may decline even when its absolute value is increasing if another sector's contribution is growing at a faster rate. Secondly, when reviewing data in graphical analyses, the scales used to present data should be noted. In this report most graphs are presented with the narrowest scale which will cover all data points. This can accentuate visual patterns over time even when absolute changes are relatively small.

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\*For an analysis of economic trends in Kentucky, see Virginia Wilson, Patterns of Growth and Decline in the Kentucky Economy 1969-1988, Research Memorandum 437, Legislative Research Commission, November 1989.





## ECONOMIC TRENDS IN BARREN COUNTY

The following analysis includes a brief description of the county economy and is accompanied by graphical illustrations. A series of data tables is also included at the end of this report. Three principal components of the Barren County economy are analyzed. They are:

1. Personal Income
2. Earnings
3. Employment

### Personal Income

Personal income is often used as a measure of the economic activity in an area. Personal income is the sum of all the dollar income received by individuals in an area from any legal source. Personal income data is published by the Bureau of Economic Analysis (BEA) for most major geographic regions, including states, counties, and major cities.

In general, income can be obtained in three ways. First, it can be earned by the work of an individual. This type of income includes wage and salary income and proprietors' earnings. Second, income can be earned by property. This component includes earnings from rents, dividends, and interest. Finally, income can be received as a gift or an entitlement. This type of income constitutes the component of personal income called transfer payments. Included in this component is income from sources such as retirement benefits, unemployment benefits, food stamps, and medical programs such as Medicare and Medicaid.

As can be seen in Chart 1A, the size of the Barren County economy, as measured by personal income, increased from \$214 million in 1969 to \$382 million in 1987, after adjusting for inflation. Chart 1B shows Barren County total personal income as a percent of Kentucky total personal income. Barren County has increased its share of Kentucky personal income, indicating economic growth that is exceeding that of the state.

A similar pattern emerges from an examination of per capita personal income. Per capita personal income is simply the total personal income of an area divided by its population. Per capita personal income is often used as a measure of the economic well-being of the residents of an area. Charts 1C and 1D indicate that while Barren County per capita income increased over the time period to a level of \$11,081 per person in 1987, Barren County per capita personal income was still only 88.7 percent of Kentucky per capita personal income.

A better understanding of the nature of economic activity can be gleaned from an examination of the relative contribution of the components of personal income and how their share has changed over time. This information is illustrated in Charts 2A-2D. While total earnings increased from \$168 million

in 1969 to \$252 million in 1987 (in constant 1988 dollars), earnings as a percent of personal income declined, paralleling the state trend. Earnings accounted for 66.0 percent of Barren County's total personal income in 1987, compared to Kentucky's 67.5 percent share.

Transfer payments contributed \$26 million to total personal income in 1969 and \$69 million in 1987. During the seventies, transfer payments contributed an almost equal percentage of personal income in Barren County and in Kentucky. However, transfer payments have contributed a slightly higher percent of personal income in the eighties.

Income from property in Barren County also grew through the time period. Income from property totalled \$20 million in 1969 and increased to \$61 million in 1987.

## Earnings

Earnings are the component of personal income reflecting payments to individuals in return for labor. Earnings include both wages and salaries and proprietor's income. Since 1969, Barren County has experienced significant economic restructuring, as indicated in Chart 3A. In 1969, Barren County received 24.1 percent of total earnings from manufacturing. This percentage increased to 36.9 percent in 1987. The county trend toward increasing concentration in manufacturing is different from that for the state, where the percentage of earnings from manufacturing has shown a steady decline over the period. Chart 3A also indicates that farming's contribution to total county earnings decreased from 20.4 percent in 1969 to 3.4 percent in 1987. Earnings from mining were minimal throughout the period.

Compared to earnings from goods-producing industries, earnings from non-goods-producing industries (Chart 3B) remained relatively stable. The percent of earnings from the service sector increased from 13.2 percent in 1969 to 18.1 percent in 1987, which parallels state trends. Earnings in trade declined from 17.2 percent in 1969 to 12.4 percent in 1987. The percent of earnings from state and local government has been stable. At the state level, earnings from both trade and government have been stable throughout the period.

Average earnings per job (adjusted for inflation) for Barren County and Kentucky are shown in Chart 3D. In Kentucky, average earnings per job reached a high of \$20,121 per person in 1978. Since then, average earnings per job declined and in 1987 were \$18,636 per person. In Barren County, average earnings increased slightly over the period to a level of \$15,451 in 1987, which was well below the Kentucky average.

## Employment

Employment is considered any activity for which one receives financial remuneration in the form of wages or profits. Total employment in Barren County increased substantially during the data period. In 1969, total employment stood at 13,886 people. By 1987, that figure had increased to 19,499.

The unemployment rate, often used as an indicator of economic well-being, is the ratio of unemployed to the total civilian labor force. Unemployment is described as a condition of being out of work while actively seeking employment within the last thirty days. The civilian labor force is described as the proportion of population age 16 or older employed or actively seeking employment. Annual unemployment rates for Kentucky and Barren County are presented in Chart 4B. Unemployment rates in Barren County have generally paralleled those of the state. In 1987, the unemployment rate for Barren County was 9.3 percent compared to 8.8 percent for the state.

Another employment concept includes the discouraged worker. Discouraged workers are persons who want jobs but made no attempt to find work in the last thirty days because they believe they could not find it. These individuals are not included when calculating unemployment rates. The Cabinet for Human Resources does not estimate discouraged workers by county. However, preliminary research by the Cabinet indicates that the inclusion of discouraged workers in the civilian labor force estimate would increase the unemployment rate by approximately four percent for the state. This figure would vary by county depending on the labor market in the county or within commuting distance.

Employment in the goods-producing industries is illustrated in Chart 4C. The percent of total employment in manufacturing increased slightly from 20.6 percent in 1969 to 23.4 percent in 1987. Farming employment as a percent of total has declined from 26.2 percent in 1969 to 15.8 percent in 1987. Mining employment has been minimal.

Employment in the non-goods-producing industries is presented in Chart 4D. Similar to the state trend, the percent of employment in the service sector increased over the period. The percent employed in the trade and state and local government sector remained stable. Kentucky employment in the trade sector has shown substantial increases, while the employment share of state and local government remained stable.

## Population

The census conducted each decade counts the actual population in an area. Population is then estimated through intervening years. The demographic composition of this population growth has important implications for the future demand for goods and services, and ultimately, the economic structure of Barren County.

The Barren County population grew from 28,600 in 1969 to 34,400 in 1987 (Chart 5A). Barren County's growth rates for the age group five and under have generally paralleled the state's. It was estimated that in 1986, 7.6 percent of Barren County's population was under six years of age, compared to 8.6 percent for the state. Conversely, for the same year 18.9 percent of the Barren County population was 60 years of age and over, while 16.5 percent of all Kentucky residents fell in this age group.

CHART 1A  
 BARREN COUNTY  
 REAL PERSONAL INCOME  
 Millions of 1988 dollars

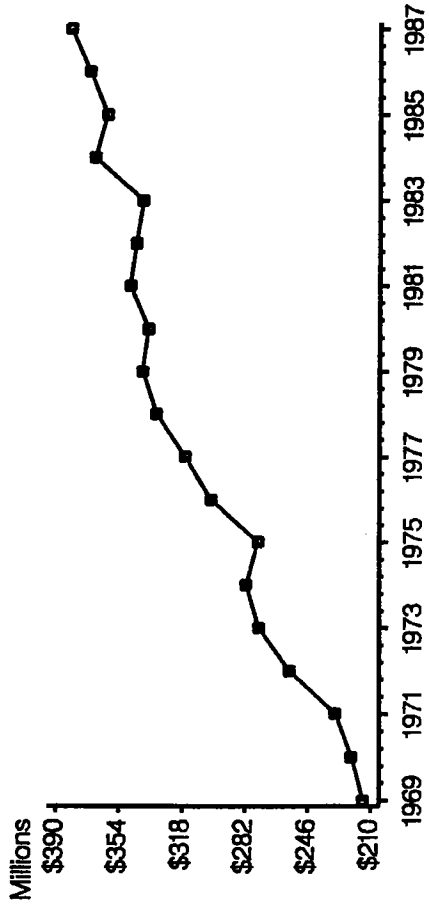


CHART 1B  
 BARREN COUNTY  
 PERSONAL INCOME  
 as a Percent of Kentucky Personal Income

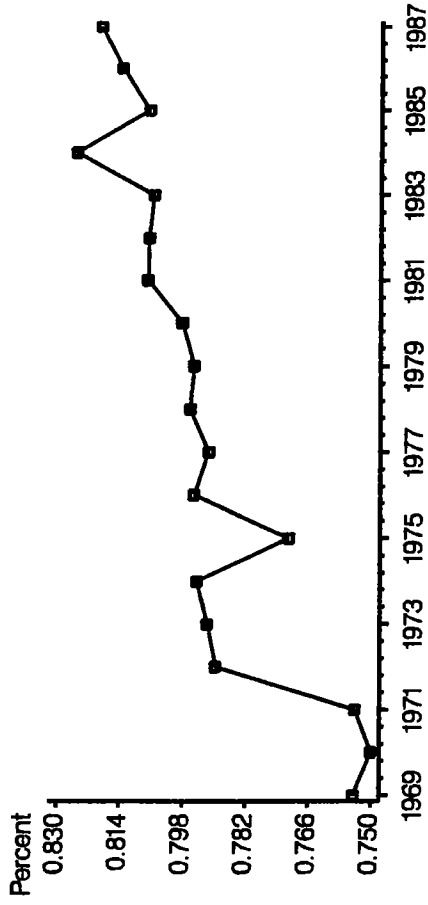


CHART 1C  
 BARREN COUNTY  
 PER CAPITA PERSONAL INCOME  
 in Constant 1988 Dollars

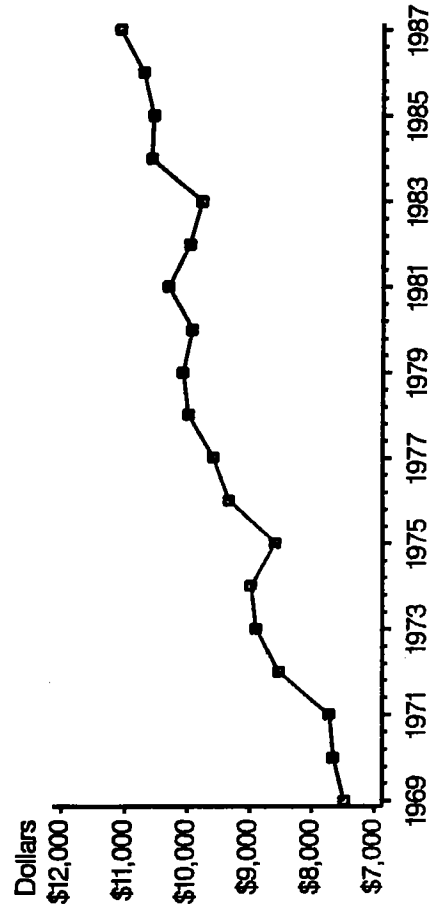


CHART 1D  
 BARREN COUNTY  
 PER CAPITA PERSONAL INCOME  
 as a Percent of Kentucky Per Capita Personal Income

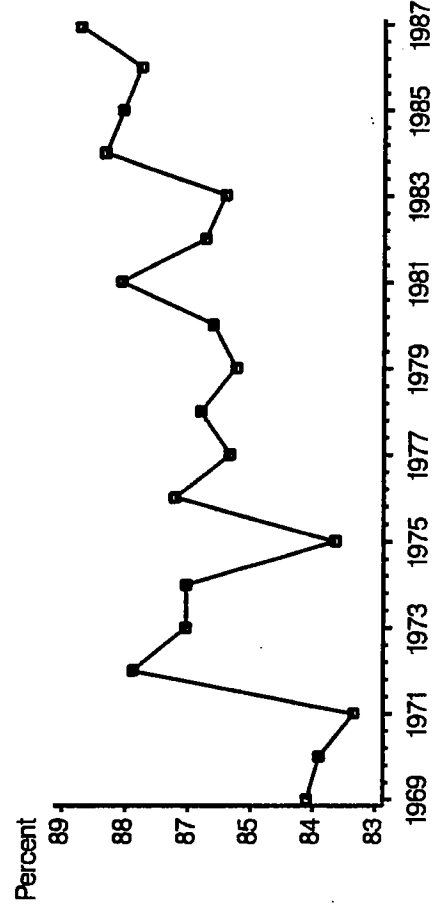


CHART 2A

BARREN COUNTY

REAL TOTAL EARNINGS

Millions of 1988 dollars

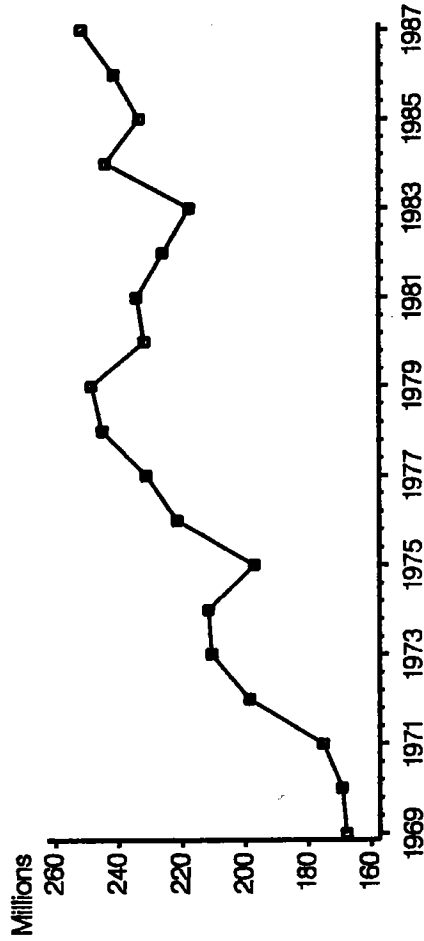


CHART 2B

BARREN COUNTY

TRANSFER PAYMENTS and INCOME FROM PROPERTY

Millions of 1988 Dollars

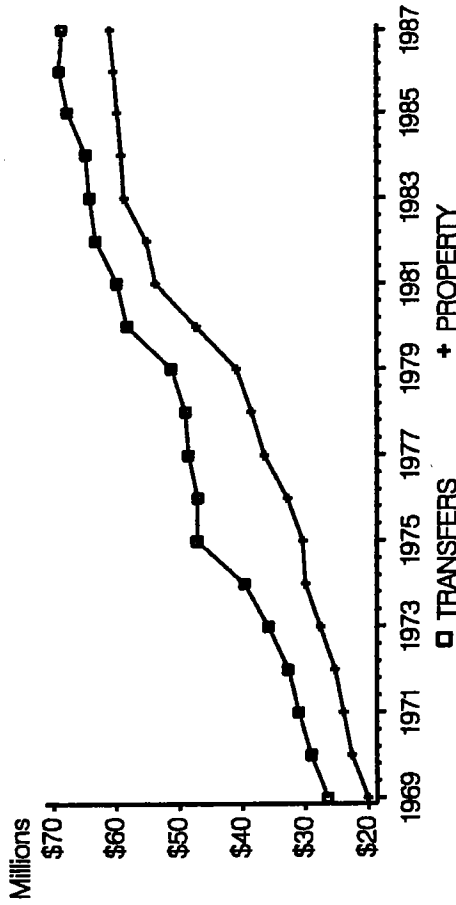


CHART 2C

BARREN COUNTY

TOTAL EARNINGS

as a Percent of Personal Income

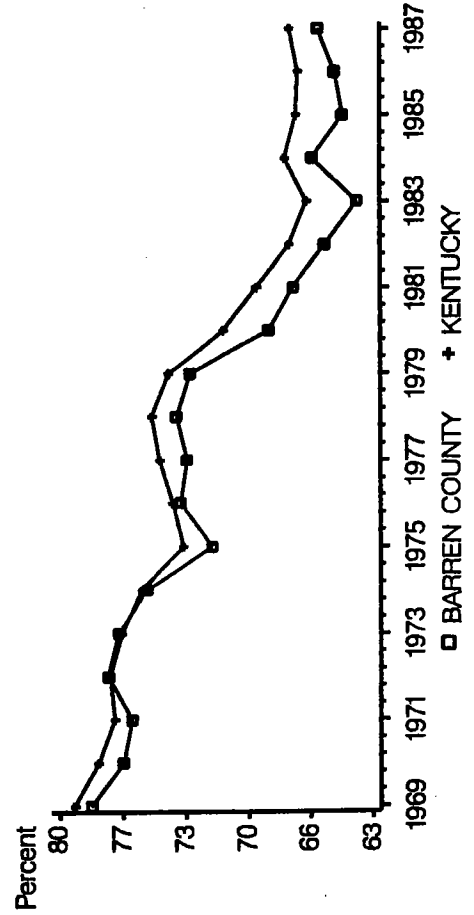


CHART 2D

BARREN COUNTY

TRANSFER PAYMENTS

as a Percent of Personal Income

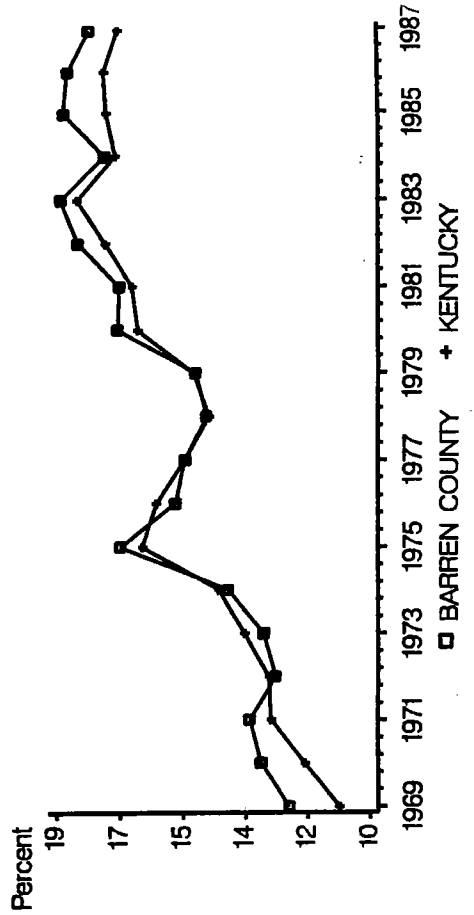


CHART 3A

BARREN COUNTY

EARNINGS IN GOODS PRODUCING INDUSTRIES  
as a Percent of Total Earnings

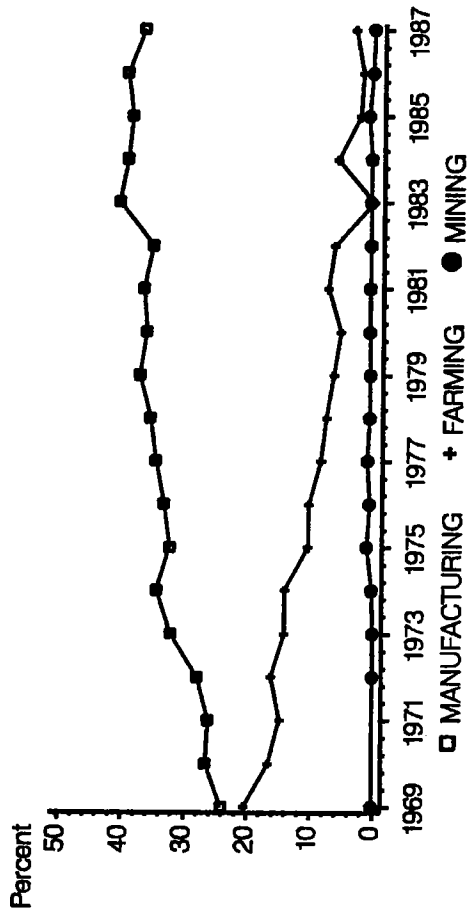


CHART 3B

BARREN COUNTY

EARNINGS IN NON - GOODS PRODUCING INDUSTRIES  
as a Percent of Total Earnings

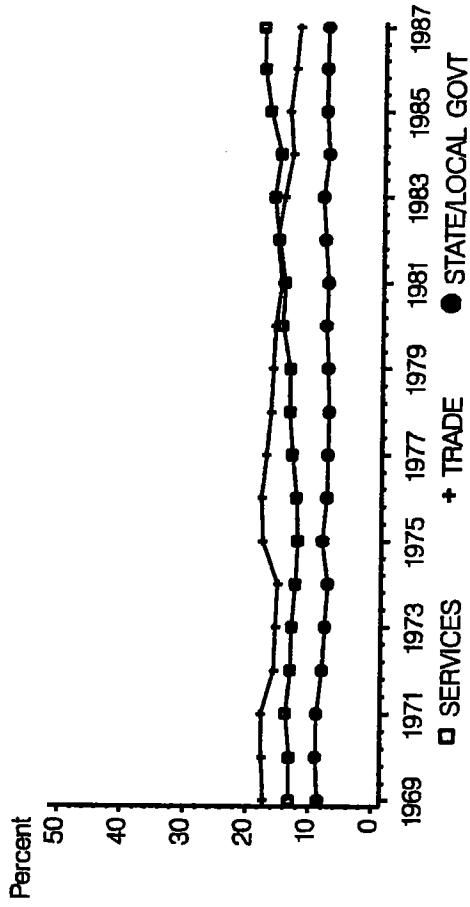


CHART 3C

BARREN COUNTY

EARNINGS IN GOODS PRODUCING INDUSTRIES  
as a Percent of Kentucky Industries

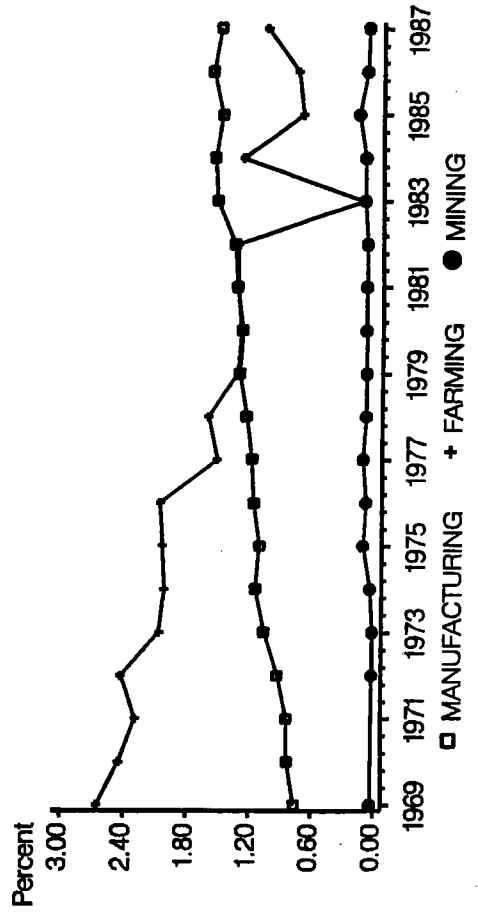


CHART 3D

BARREN COUNTY

AVERAGE EARNINGS PER JOB  
in Constant 1988 Dollars

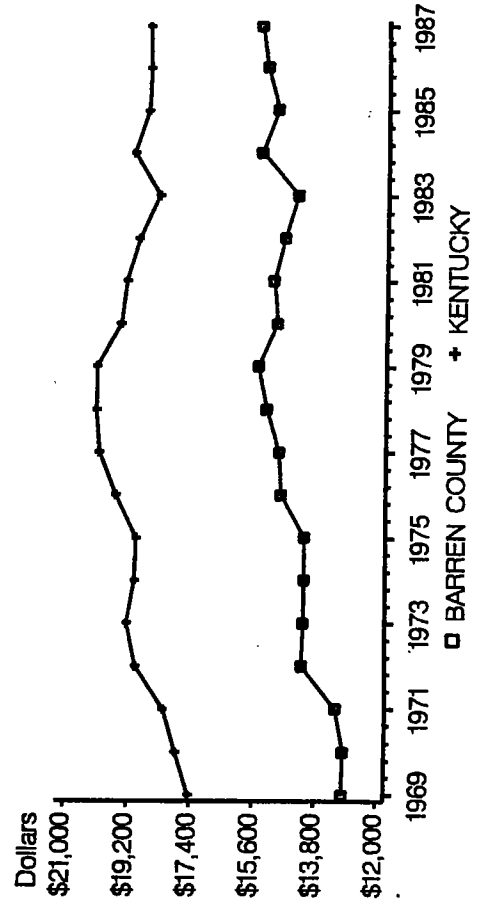


CHART 4A  
 BARREN COUNTY  
 TOTAL EMPLOYMENT  
 Thousands of People

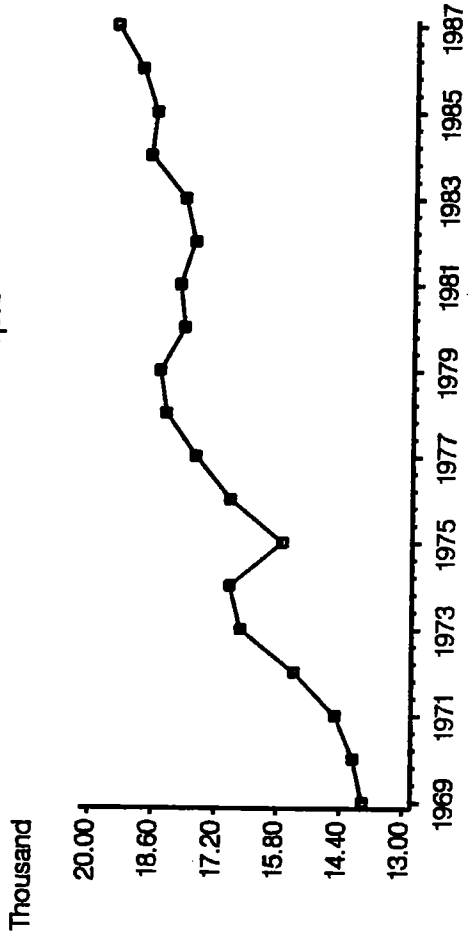


CHART 4B  
 BARREN COUNTY  
 ANNUAL UNEMPLOYMENT RATE

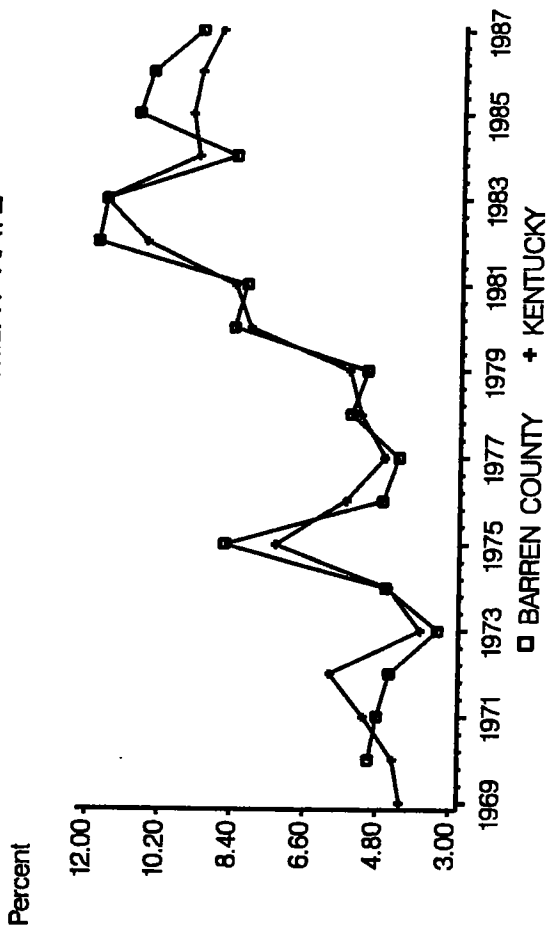


CHART 4C  
 BARREN COUNTY  
 EMPLOYMENT IN GOODS PRODUCING INDUSTRIES  
 as a Percent of Total Employment

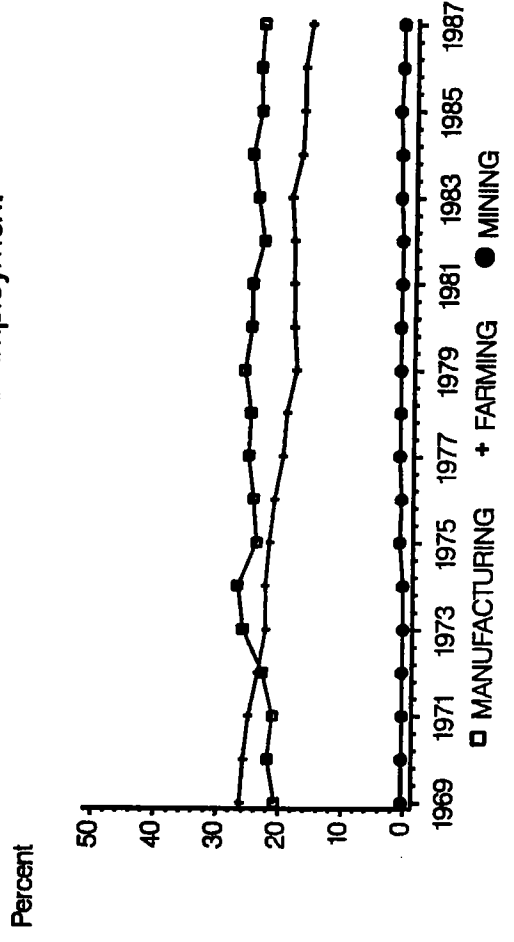


CHART 4D  
 BARREN COUNTY  
 EMPLOYMENT IN NON-GOODS PRODUCING INDUSTRIES  
 as a Percent of Total Employment

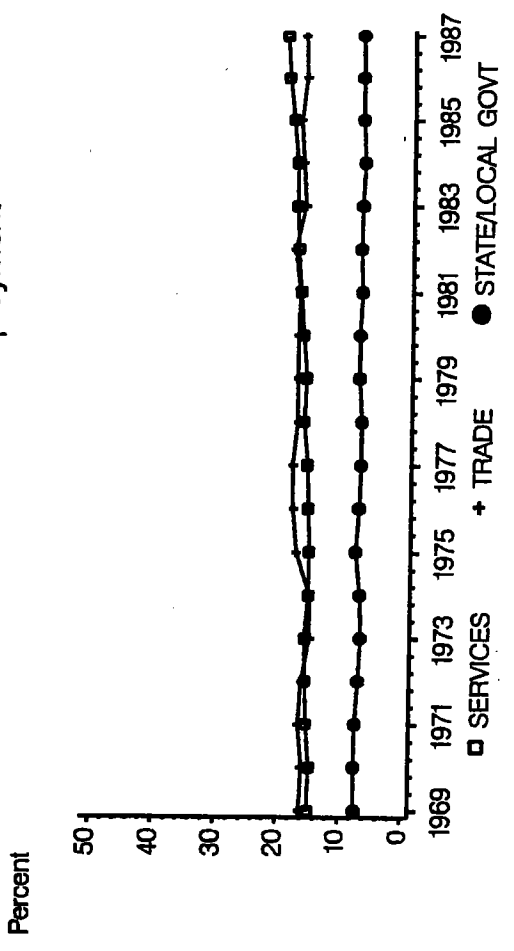


CHART 5A  
 BARREN COUNTY  
 POPULATION  
 Thousands of People

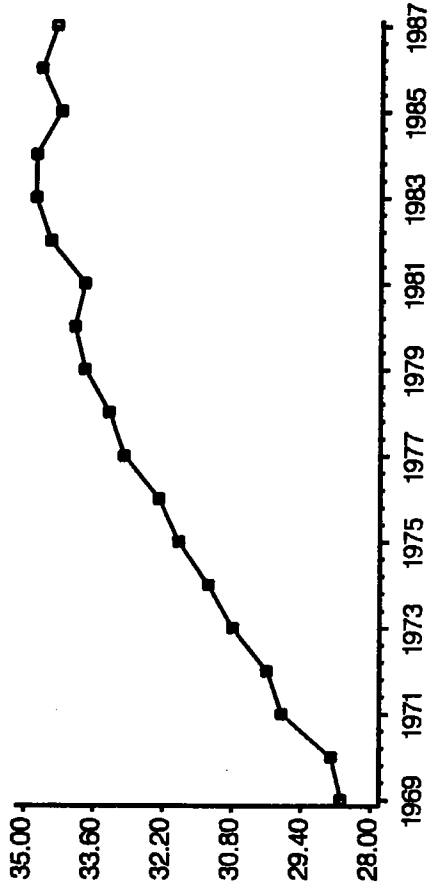


CHART 5B  
 BARREN COUNTY  
 POPULATION  
 as a Percent of Kentucky Population

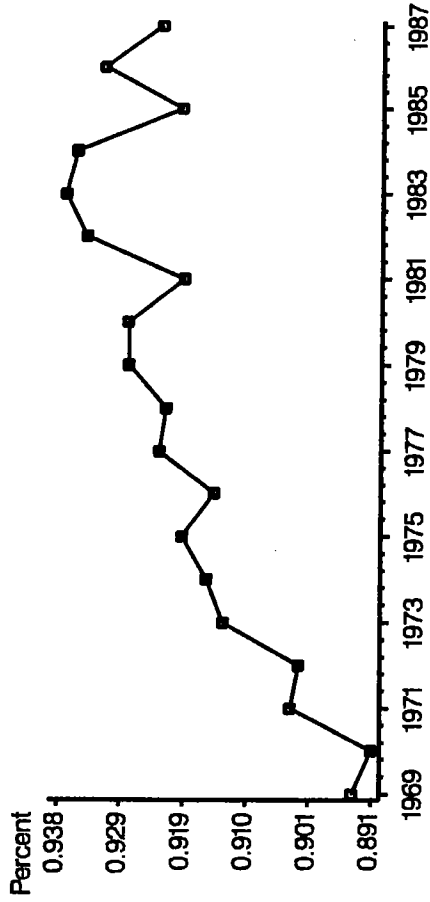


CHART 5C  
 BARREN COUNTY  
 POPULATION 5 AND UNDER  
 as a Percent of Total Population

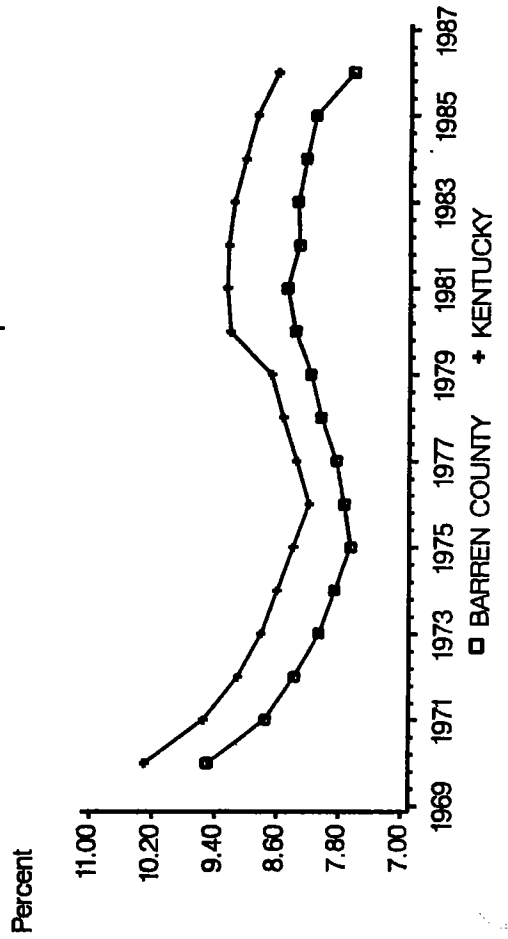
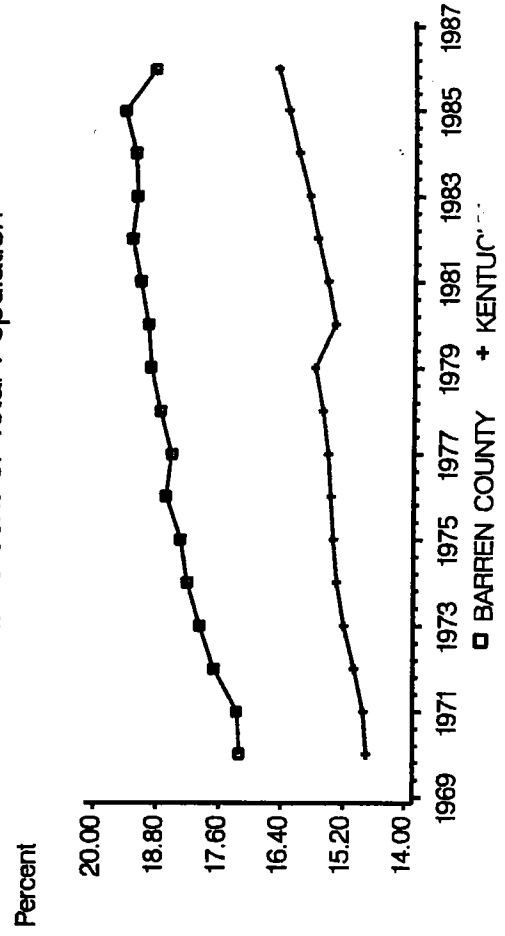


CHART 5D  
 BARREN COUNTY  
 POPULATION 60 AND OVER  
 as a Percent of Total Population





BARREN COUNTY

PERSONAL INCOME  
In Constant 1988 Dollars

Year	County Personal Income (M\$)	Percent of Kentucky (%)	Per Capita Personal Income (\$)	Percent of Kentucky (%)
1969	214	0.75	7,491	84.3
1970	221	0.75	7,664	84.1
1971	230	0.75	7,722	83.4
1972	257	0.79	8,542	87.7
1973	274	0.79	8,898	86.7
1974	281	0.79	8,979	86.6
1975	275	0.77	8,599	83.8
1976	301	0.80	9,326	86.9
1977	316	0.79	9,590	85.8
1978	333	0.80	9,991	86.4
1979	341	0.80	10,076	85.7
1980	337	0.80	9,934	86.1
1981	348	0.81	10,302	87.9
1982	344	0.81	9,970	86.3
1983	341	0.81	9,777	85.9
1984	368	0.83	10,575	88.2
1985	361	0.81	10,542	87.9
1986	371	0.81	10,709	87.5
1987	382	0.82	11,081	88.7

COMPONENTS OF PERSONAL INCOME  
In Constant 1988 Dollars

Year	EARNINGS			TRANSFER PAYMENTS			INCOME from PROPERTY		
	M\$	Percent of Personal Income		M\$	Percent of Personal Income		M\$	Percent of Personal Income	
		County	Kentucky		County	Kentucky		County	Kentucky
1969	168	78.3	79.2	26	12.3	10.9	20	9.4	9.9
1970	169	76.6	77.9	29	13.2	11.9	23	10.3	10.2
1971	175	76.1	77.0	31	13.5	12.9	24	10.4	10.1
1972	199	77.4	77.3	33	12.7	12.9	25	9.9	9.7
1973	211	76.8	76.6	36	13.1	13.6	28	10.1	9.7
1974	212	75.2	75.5	40	14.1	14.4	30	10.7	10.1
1975	197	71.7	73.3	47	17.2	16.5	30	11.1	10.1
1976	221	73.5	73.9	47	15.6	16.1	33	10.9	10.0
1977	231	73.1	74.6	49	15.3	15.3	37	11.5	10.1
1978	245	73.7	75.0	49	14.7	14.6	39	11.6	10.4
1979	249	72.9	74.1	51	15.0	15.1	41	12.0	10.8
1980	232	68.7	71.1	58	17.3	16.7	47	14.0	12.2
1981	234	67.3	69.3	60	17.2	16.8	54	15.5	13.8
1982	226	65.6	67.5	63	18.4	17.6	55	16.0	14.9
1983	218	63.9	66.6	64	18.9	18.4	59	17.3	15.1
1984	244	66.3	67.8	65	17.6	17.3	59	16.1	14.9
1985	233	64.7	67.2	68	18.8	17.6	60	16.6	15.3
1986	242	65.1	67.1	69	18.6	17.6	60	16.3	15.3
1987	252	66.0	67.5	69	18.0	17.2	61	16.0	15.3

BARREN COUNTY

SECTOR EARNINGS as a PERCENT of TOTAL COUNTY EARNINGS and  
as a PERCENT of KENTUCKY SECTOR EARNINGS

YEAR	MANUFACTURING		FARMING		MINING	
	TOTAL	KENTUCKY	TOTAL	KENTUCKY	TOTAL	KENTUCKY
1969	24.1	0.77	20.4	2.65	0.1	0.03
1970	26.6	0.83	16.7	2.45	.	.
1971	26.2	0.84	14.8	2.29	.	.
1972	28.0	0.93	16.2	2.43	0.1	0.02
1973	32.2	1.06	14.2	2.06	0.1	0.01
1974	34.5	1.14	14.1	2.01	0.3	0.04
1975	32.4	1.10	10.5	2.03	1.1	0.11
1976	33.4	1.16	10.4	2.05	0.7	0.08
1977	34.7	1.18	8.5	1.51	1.1	0.11
1978	35.6	1.23	7.6	1.60	0.8	0.08
1979	37.4	1.30	6.5	1.31	0.7	0.08
1980	36.3	1.27	5.5	1.28	0.8	0.09
1981	36.8	1.33	7.5	1.32	0.8	0.09
1982	35.3	1.35	6.5	1.32	0.7	0.08
1983	40.7	1.52	0.2	0.12	0.8	0.11
1984	39.5	1.54	6.1	1.27	0.7	0.10
1985	38.7	1.47	2.5	0.70	1.2	0.17
1986	39.6	1.57	2.1	0.75	0.6	0.09
1987	36.9	1.49	3.4	1.05	0.4	0.07

YEAR	SERVICES		TRADE		STATE and LOCAL GOVERNMENT	
	TOTAL	KENTUCKY	TOTAL	KENTUCKY	TOTAL	KENTUCKY
1969	13.2	0.78	17.2	0.85	8.5	0.73
1970	13.1	0.77	17.5	0.85	8.9	0.72
1971	13.7	0.81	17.7	0.87	8.8	0.71
1972	13.1	0.84	15.7	0.84	8.0	0.70
1973	12.9	0.85	15.4	0.84	7.5	0.69
1974	12.3	0.83	15.2	0.84	7.2	0.68
1975	12.0	0.73	17.5	0.87	8.0	0.67
1976	12.2	0.78	17.7	0.94	7.4	0.66
1977	12.9	0.84	17.0	0.93	7.3	0.66
1978	13.4	0.87	16.4	0.89	7.2	0.65
1979	13.4	0.87	16.1	0.88	7.3	0.66
1980	14.7	0.87	15.8	0.87	7.7	0.65
1981	14.4	0.86	14.9	0.87	7.4	0.65
1982	15.4	0.86	15.7	0.89	8.0	0.67
1983	16.2	0.84	14.6	0.80	8.4	0.67
1984	15.2	0.84	13.3	0.80	7.5	0.66
1985	16.9	0.86	13.9	0.79	8.0	0.66
1986	17.9	0.87	13.0	0.76	8.0	0.66
1987	18.1	0.86	12.4	0.74	7.9	0.65

BARREN COUNTY

COUNTY EMPLOYMENT by SECTOR

YEAR	MANUFACTURING		FARMING		MINING	
	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL
1969	2,866	20.6	3,645	26.2	43	0.3
1970	3,075	21.8	3,633	25.8	43	0.3
1971	3,048	21.0	3,620	25.0	35	0.2
1972	3,509	22.7	3,631	23.5	47	0.3
1973	4,323	26.0	3,701	22.2	31	0.2
1974	4,529	26.8	3,776	22.4	50	0.3
1975	3,750	23.9	3,409	21.7	131	0.8
1976	4,118	24.4	3,538	21.0	102	0.6
1977	4,458	25.2	3,462	19.6	162	0.9
1978	4,570	24.9	3,482	19.0	157	0.9
1979	4,804	26.0	3,258	17.6	171	0.9
1980	4,478	25.0	3,234	18.0	187	1.0
1981	4,494	24.9	3,272	18.1	167	0.9
1982	4,083	23.0	3,224	18.2	159	0.9
1983	4,327	24.1	3,346	18.6	207	1.2
1984	4,699	25.1	3,203	17.1	208	1.1
1985	4,405	23.7	3,127	16.8	259	1.4
1986	4,524	23.9	3,173	16.8	203	1.1
1987	4,561	23.4	3,078	15.8	186	1.0

YEAR	SERVICES		TRADE		STATE and LOCAL GOVERNMENT	
	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL
1969	2,084	15.0	2,257	16.3	1,016	7.3
1970	2,087	14.8	2,256	16.0	1,051	7.5
1971	2,229	15.4	2,411	16.6	1,066	7.3
1972	2,404	15.6	2,492	16.1	1,079	7.0
1973	2,611	15.7	2,480	14.9	1,111	6.7
1974	2,563	15.2	2,534	15.0	1,153	6.8
1975	2,378	15.1	2,703	17.2	1,191	7.6
1976	2,594	15.4	3,005	17.8	1,199	7.1
1977	2,751	15.6	3,156	17.9	1,207	6.8
1978	2,963	16.2	3,148	17.2	1,252	6.8
1979	2,932	15.9	3,191	17.3	1,338	7.2
1980	2,936	16.4	3,090	17.2	1,298	7.2
1981	3,040	16.8	3,072	17.0	1,252	6.9
1982	3,059	17.3	3,148	17.8	1,269	7.2
1983	3,150	17.5	2,917	16.2	1,258	7.0
1984	3,291	17.6	3,118	16.6	1,267	6.8
1985	3,388	18.2	3,187	17.1	1,315	7.1
1986	3,593	19.0	3,076	16.2	1,345	7.1
1987	3,747	19.2	3,183	16.3	1,370	7.0

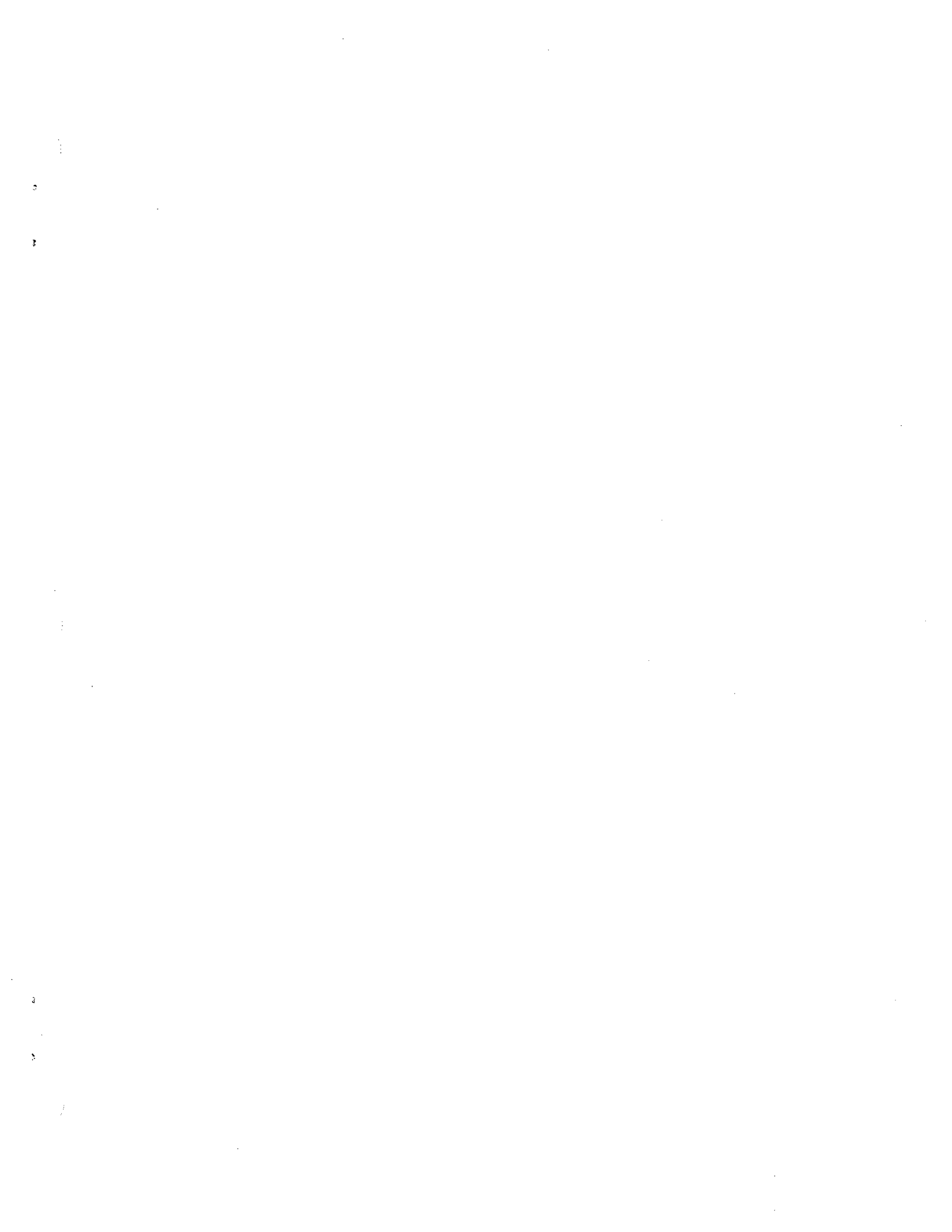
BARREN COUNTY

EMPLOYMENT STATISTICS

YEAR	TOTAL EMPLOYMENT	AVERAGE EARNINGS		UNEMPLOYMENT RATE	
		COUNTY	KENTUCKY	COUNTY	KENTUCKY
1969	13,886	\$13,018	\$17,440	.	4.2
1970	14,106	\$12,987	\$17,811	5.0	4.4
1971	14,508	\$13,218	\$18,166	4.8	5.1
1972	15,441	\$14,180	\$18,970	4.5	6.0
1973	16,639	\$14,134	\$19,232	3.3	3.7
1974	16,884	\$14,127	\$19,008	4.6	4.5
1975	15,714	\$14,116	\$18,976	8.6	7.3
1976	16,880	\$14,825	\$19,563	4.7	5.6
1977	17,660	\$14,882	\$20,031	4.3	4.7
1978	18,324	\$15,244	\$20,121	5.5	5.3
1979	18,474	\$15,497	\$20,110	5.1	5.5
1980	17,938	\$14,964	\$19,439	8.4	8.0
1981	18,044	\$15,078	\$19,286	8.1	8.4
1982	17,728	\$14,757	\$18,931	11.8	10.6
1983	17,953	\$14,379	\$18,358	11.6	11.6
1984	18,733	\$15,448	\$19,080	8.4	9.3
1985	18,609	\$14,990	\$18,676	10.8	9.5
1986	18,936	\$15,294	\$18,627	10.5	9.3
1987	19,499	\$15,451	\$18,636	9.3	8.8

POPULATION STATISTICS

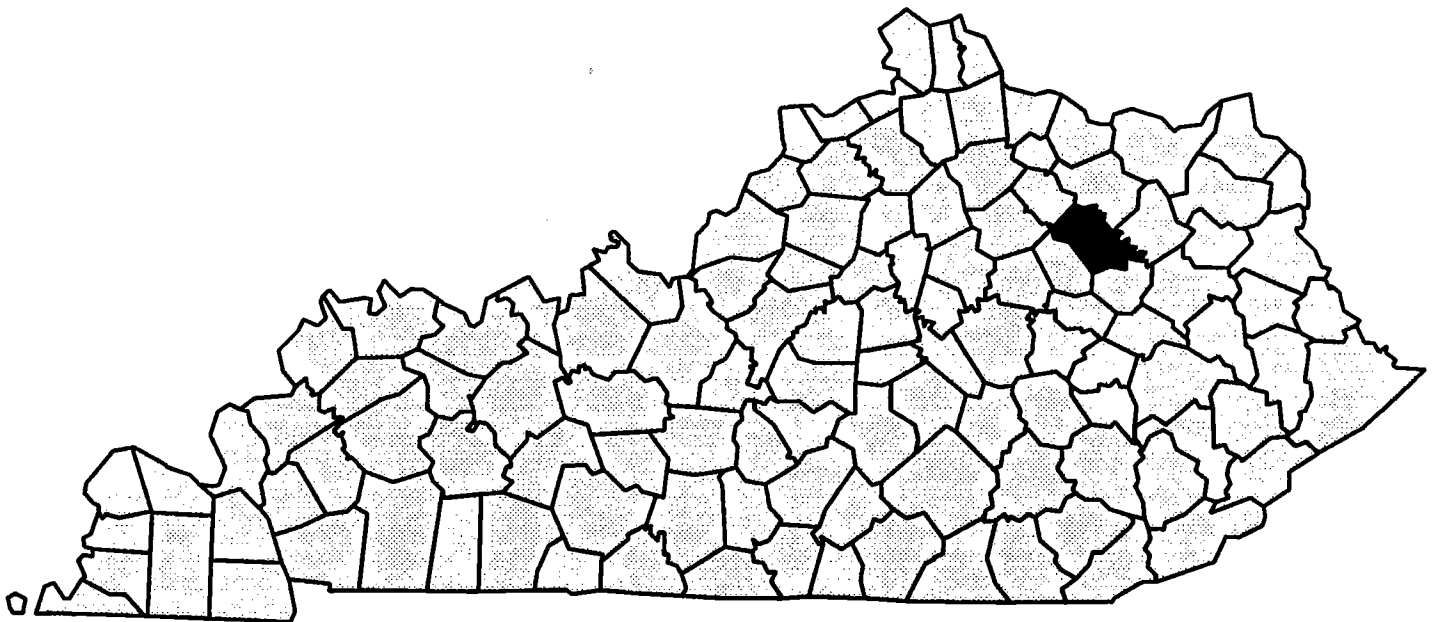
YEAR	POPULATION	% OF KY	PERCENT UNDER AGE 6		PERCENT AGE 60+	
			COUNTY	KENTUCKY	COUNTY	KENTUCKY
1969	28,600	0.89	.	.	.	.
1970	28,800	0.89	9.5	10.3	17.2	14.8
1971	29,800	0.90	8.7	9.6	17.3	14.8
1972	30,100	0.90	8.4	9.1	17.7	15.0
1973	30,800	0.91	8.1	8.8	18.0	15.2
1974	31,300	0.92	7.9	8.6	18.2	15.3
1975	31,900	0.92	7.7	8.4	18.4	15.4
1976	32,300	0.91	7.7	8.2	18.6	15.5
1977	33,000	0.92	7.8	8.4	18.5	15.5
1978	33,300	0.92	8.0	8.5	18.8	15.6
1979	33,800	0.93	8.2	8.7	18.9	15.8
1980	34,000	0.93	8.4	9.2	19.0	15.4
1981	33,800	0.92	8.5	9.3	19.1	15.5
1982	34,500	0.93	8.3	9.2	19.3	15.7
1983	34,800	0.94	8.4	9.2	19.2	15.9
1984	34,800	0.94	8.2	9.0	19.3	16.1
1985	34,300	0.92	8.1	8.9	19.4	16.3
1986	34,700	0.93	7.6	8.6	18.9	16.5
1987	34,400	0.92	.	.	.	.





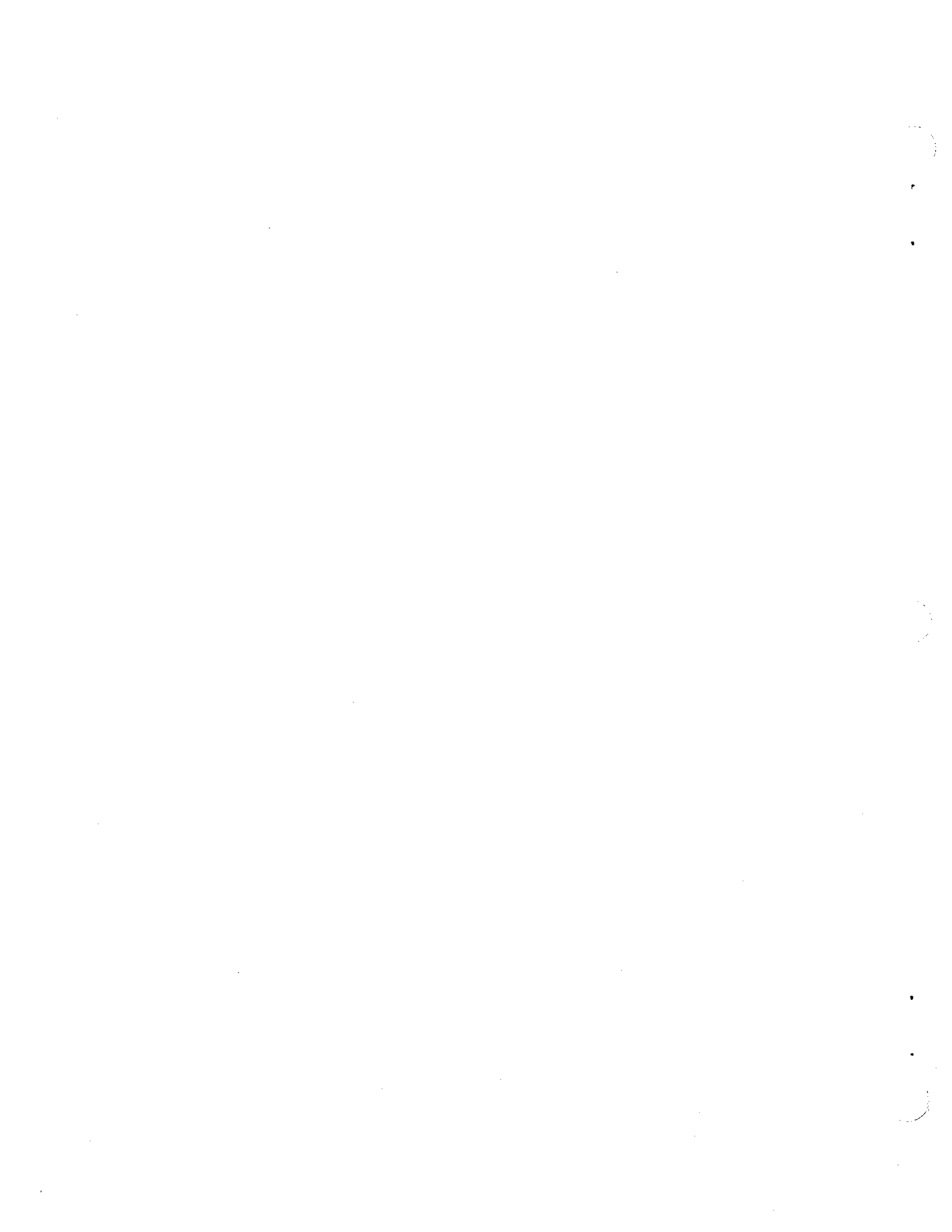
ECONOMIC TRENDS IN  
KENTUCKY COUNTIES  
1969 – 1987

**BATH COUNTY**



Prepared by  
Virginia Wilson  
Donna A. Cantrell

RESEARCH MEMORANDUM 438  
Legislative Research Commission  
Frankfort, Kentucky  
February, 1990





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1990

ECONOMIC TRENDS IN  
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## FOREWORD

This publication is one of a set of 120, highlighting economic trends in each county in Kentucky from 1969-1987. This effort is part of the ongoing activities sponsored by the Legislative Research Commission to provide a long-term perspective on issues for decision makers. The economies of individual counties do not always parallel overall state trends. This set of publications is an attempt to look at the economic trends in each county over time and to point out where the economies of individual counties may be performing differently from the economy of the state as a whole.

This publication was prepared by Virginia Wilson and Donna Cantrell. Susan Dance assisted in production of the manuscript and Charles Bush edited the report. The assistance of Carol Straus from the Center for Business and Economic Research at the University of Kentucky in deciphering data is gratefully acknowledged.

Vic Hellard, Jr.  
Director

The Capitol  
Frankfort  
February, 1990



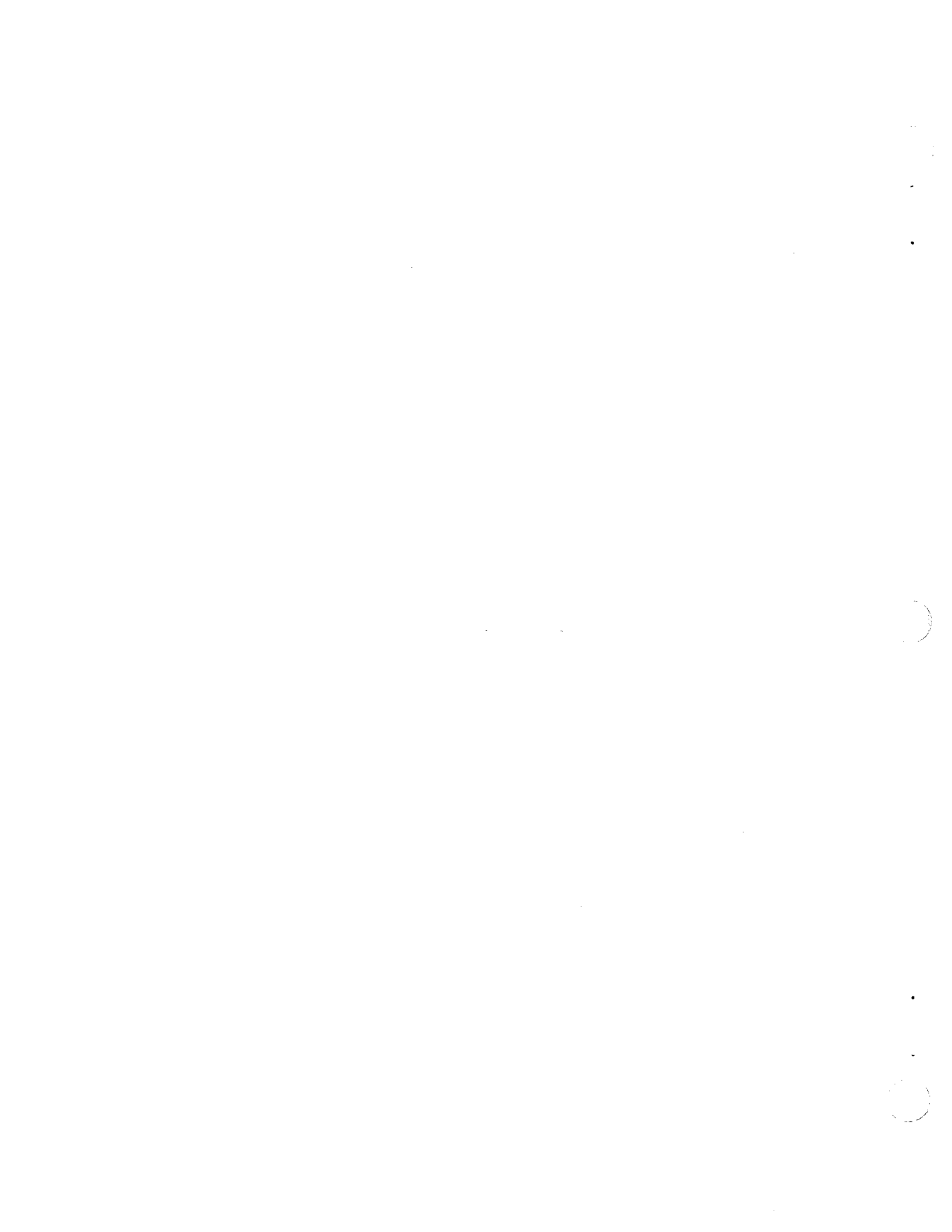
## SUMMARY

The Bath County economy, as measured by personal income, grew moderately from 1969 to 1987. However, Bath County decreased its share of the Kentucky economy. This indicates the county economy did not grow as fast as the state economy.

The most prominent economic trend in Bath County was the decline in earnings from the farm sector. Farm employment also declined, but to a much lesser degree, indicating a decline in average earnings in this sector.

While Bath County experienced some economic growth, it came primarily from increases in the non-goods-producing industries. Both the state and local government and service sectors significantly increased their share of both county earnings and employment. The growth sectors at the state level have been the service and trade sectors.

There is a national and state trend toward declining farm employment. Therefore, the outlook for this sector in Bath County is for continued decline. Future economic growth in the county will most likely be dependent on other sectors of the economy.



## INTRODUCTION

This is one of a series of reports called Economic Trends in Kentucky Counties. The purpose of this series is to describe the economic structure of Kentucky counties and to assess their economic performance relative to their own history and relative to the Kentucky economy. Information on the structure and patterns of change in county economies and an understanding of their relationship to the Kentucky economy can help in making policy decisions that are intended to shape Kentucky's economic future.

When assessing any economy there are several pertinent questions which may be addressed. The first concerns changes in the absolute size of the economy over time. Here the relevant comparison is between the county economy and its own history. Since most economic variables are given in dollars and since inflation causes the value of a dollar to vary over time, all dollar values in this report are presented in constant 1988 dollars. This allows analysis of real changes over time by controlling for the effects of inflation.

A second question concerns the structure and nature of the county economy. The structure of an economy refers to the relative share contributed by the various segments of the economy, while the nature deals with how this share has changed over time.

A third question concerns the performance of the county economy when compared to the Kentucky economy. For example, if a county has a higher proportion of earnings or employment in a particular sector it would indicate a specialization in that sector. Differences in economic structure may explain variations in relative economic well-being between a county and the state as a whole.

Economic data for counties are usually published after a lag of two years. Therefore, most data in this report cover the period 1969 to 1987. All data for this report was obtained from the Kentucky Economic Information System, an on-line database maintained by the University of Kentucky Center for Business and Economic Development.

There are certain caveats which should be remembered when analyzing data. First, it is a common and useful approach to evaluate the percentage an economic sector contributes to the total economy. However, one must remember that a sector's percentage contribution may decline even when its absolute value is increasing if another sector's contribution is growing at a faster rate. Secondly, when reviewing data in graphical analyses, the scales used to present data should be noted. In this report most graphs are presented with the narrowest scale which will cover all data points. This can accentuate visual patterns over time even when absolute changes are relatively small.

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\*For an analysis of economic trends in Kentucky, see Virginia Wilson, Patterns of Growth and Decline in the Kentucky Economy 1969-1988, Research Memorandum 437, Legislative Research Commission, November 1989.





## ECONOMIC TRENDS IN BATH COUNTY

The following analysis includes a brief description of the county economy and is accompanied by graphical illustrations. Data tables are also included at the end of this report. Three principal components of the Bath County economy are analyzed. They are:

1. Personal Income
2. Earnings
3. Employment

### Personal Income

Personal income is often used as a measure of the economic activity in an area. Personal income is the sum of all the dollar income received by individuals in an area from any legal source. Personal income data is published by the Bureau of Economic Analysis (BEA) for most major geographic regions, including states, counties, and major cities.

In general, income can be obtained in three ways. First, it can be earned by the work of an individual. This type of income includes wage and salary income and proprietors' earnings. Second, income can be earned by property. This component includes earnings from rents, dividends, and interest. Finally, income can be received as a gift or an entitlement. This type of income constitutes the component of personal income called transfer payments. Included in this component is income from sources such as retirement benefits, unemployment benefits, food stamps, and medical programs such as Medicare and Medicaid.

As can be seen in Chart 1A, the Bath County economy, as measured by personal income, responded strongly to national recessions in 1975 and 1983. It was \$63 million in 1969 and \$88 million in 1987, after adjusting for inflation. Chart 1B shows Bath County total personal income as a percent of Kentucky total personal income. Bath County generally decreased its share of Kentucky personal income.

A similar pattern emerges from an examination of per capita personal income. Per capita personal income is simply the total personal income of an area divided by its population. Per capita personal income is often used as a measure of the economic well-being of the residents of an area. Charts 1C and 1D indicate that Bath County per capita income increased over the time period and stood at \$8,633 per person in 1987. This was 69.1 percent of Kentucky per capita personal income.

A better understanding of the nature of economic activity can be gleaned from an examination of the relative contribution of the components of personal income and how their shares have changed over time. This information is illustrated in Charts 2A-2D. Total earnings increased from \$50 million in 1969 to \$55 million in 1987 (in constant 1988 dollars) and were very volatile,

due to recessionary cycles. Earnings as a percent of personal income declined over time. This trend occurred at the state level as well. In 1987, earnings accounted for 62.6 percent of Bath County's total personal income, which was significantly lower than Kentucky's 67.5 percent share.

Transfer payments contributed \$9 million to total personal income in 1969 and \$21 million in 1987. During the same period, transfer payments contributed a much larger percentage of personal income in Bath County than in Kentucky.

Income from property in Bath County grew at a stable rate through the time period. Income from property totalled \$4 million in 1969 and increased to \$12 million in 1987.

## **Earnings**

Earnings are the component of personal income reflecting payments to individuals in return for labor. Earnings include both wages and salaries and proprietor's income. In 1969, Bath County received only 0.4 percent of total earnings from manufacturing. This percentage increased to 5.8 percent in 1987 (Chart 3A).

The percent of earnings from the farm sector declined substantially through the time period. In 1969, 48.6 percent of earnings were generated in the farm sector. By 1987, this sector's share declined to 17.4 percent.

Earnings from non-goods-producing industries as a percent of total earnings are illustrated in Chart 3B. The percent of earnings from the service sector increased from 9.2 percent in 1969 to 14.8 percent in 1987. Earnings from the state and local government sector increased significantly, from 9.9 percent in 1969 to 19.1 percent in 1987. The trade sector's share of earnings remained stable and was 12.6 percent in 1987. At the state level, the percent of earnings from services increased, while the percent of earnings from trade and state and local government were stable.

Average earnings per job (adjusted for inflation) for Bath County and Kentucky are shown in Chart 3D. In Kentucky, average earnings per job reached a high of \$20,121 per person in 1978. Since then, average earnings per job declined and in 1987 they were \$18,636 per person. In Bath County, average earnings generally declined through the period and they were \$9,817 in 1987.

## **Employment**

Employment is considered any activity for which one receives financial remuneration in the form of wages or profits. Total employment in Bath County increased substantially during the data period. In 1969, total employment stood at 2,888 people. By 1987, that figure had increased to 3,262.

The unemployment rate, often used as an indicator of economic well-being, is the ratio of unemployed to the total civilian labor force.

Unemployment is described as a condition of being out of work while actively seeking employment within the last thirty days. The civilian labor force is described as the proportion of population age 16 or older employed or actively seeking employment. Annual unemployment rates for Kentucky and Bath County are presented in Chart 4B. Unemployment rates in Bath County were above those of the state throughout the period. In 1987, the county unemployment rate was 13.5 percent, compared to 8.8 percent for Kentucky.

Another employment concept includes the discouraged worker. Discouraged workers are persons who want jobs but made no attempt to find work in the last thirty days because they believe they could not find it. These individuals are not included when calculating official unemployment rates. The Cabinet for Human Resources does not estimate discouraged workers by county. However, preliminary research by the Cabinet indicates that the inclusion of discouraged workers in the civilian labor force estimate would increase the unemployment rate by approximately four percent for the state. This figure would vary by county depending on the labor market in a county or within commuting distance.

Employment in the goods-producing industries is illustrated in Chart 4C. The percent of total employment in manufacturing increased from 1.0 percent in 1969 to 4.2 percent in 1987. At the state level, manufacturing's share of employment declined. The farm sector was the primary source of county employment. However, employment in this sector declined from 50.0 percent of total employment in 1969 to 40.5 percent in 1987.

Employment in the non-goods-producing industries is presented in Chart 4D. Employment in the trade sector decreased and accounted for 11.3 percent of employment in 1987. The percent of employment in the service sector increased over the period and accounted for 14.4 percent in 1987. The employment share in state and local government increased from 9.1 percent in 1969 to 11.3 percent in 1987. At the state level, employment shares in both the service and trade sectors increased, while the government employment share remained constant.

## Population

The census conducted each decade counts the actual population in an area. Population is then statistically estimated during intervening years. The demographic composition of this population growth has important implications for the future demand for goods and services, and ultimately, the economic structure of Bath County.

The Bath County population grew from 9,200 in 1969 to 10,200 in 1987 (Chart 5A). Bath County had a smaller proportion of younger residents and a higher proportion of older residents than the state. It was estimated that in 1986, 8.0 percent of Bath County's population was under six years of age, compared to 8.6 percent for the state. Conversely, for the same year 18.0 percent of the Bath County population was sixty years of age and over, while 16.5 percent of all Kentucky residents fell in this age group.

CHART 1A

BATH COUNTY  
REAL PERSONAL INCOME  
Millions of 1988 dollars

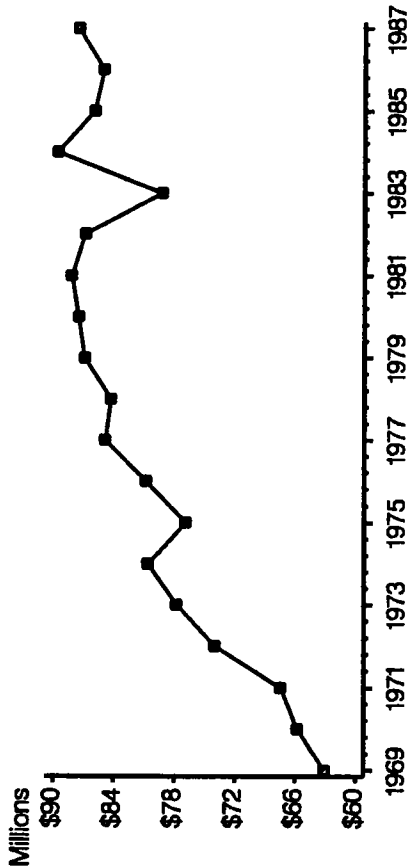


CHART 1B

BATH COUNTY  
PERSONAL INCOME  
as a Percent of Kentucky Personal Income

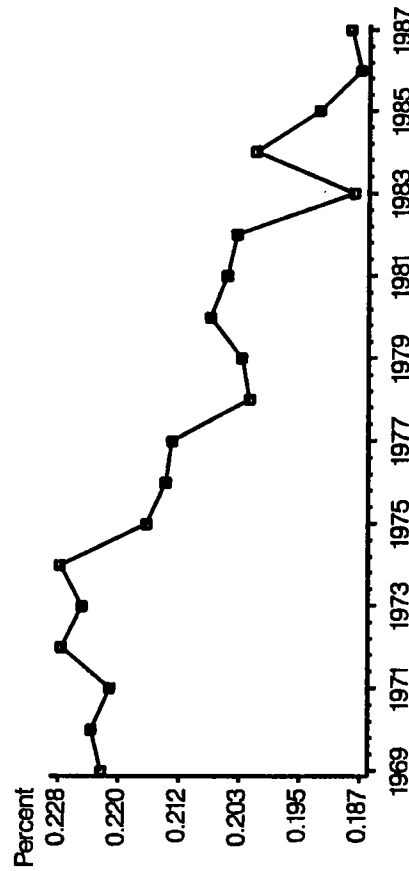


CHART 1C

BATH COUNTY  
PER CAPITA PERSONAL INCOME  
in Constant 1988 Dollars

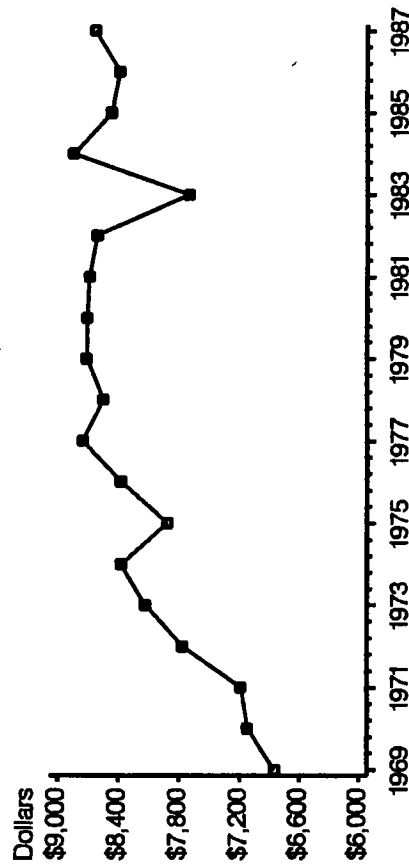


CHART 1D

BATH COUNTY  
PER CAPITA PERSONAL INCOME  
as a Percent of Kentucky Per Capita Personal Income

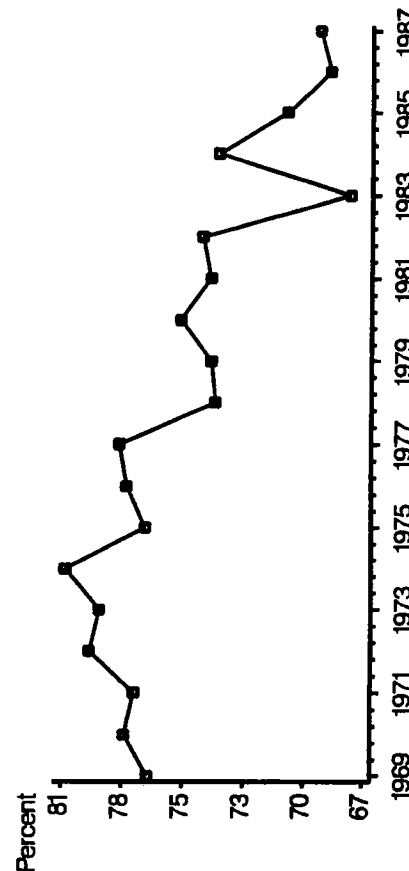


CHART 2A  
BATH COUNTY  
REAL TOTAL EARNINGS  
Millions of 1988 dollars

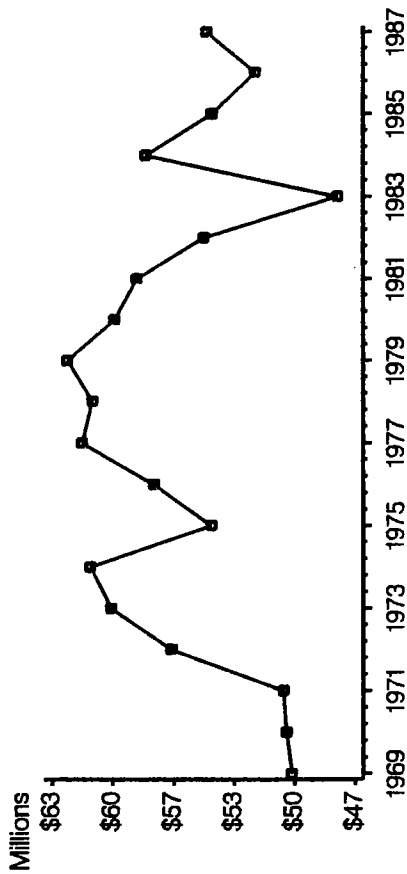


CHART 2B  
BATH COUNTY  
TRANSFER PAYMENTS and INCOME FROM PROPERTY  
Millions of 1988 Dollars

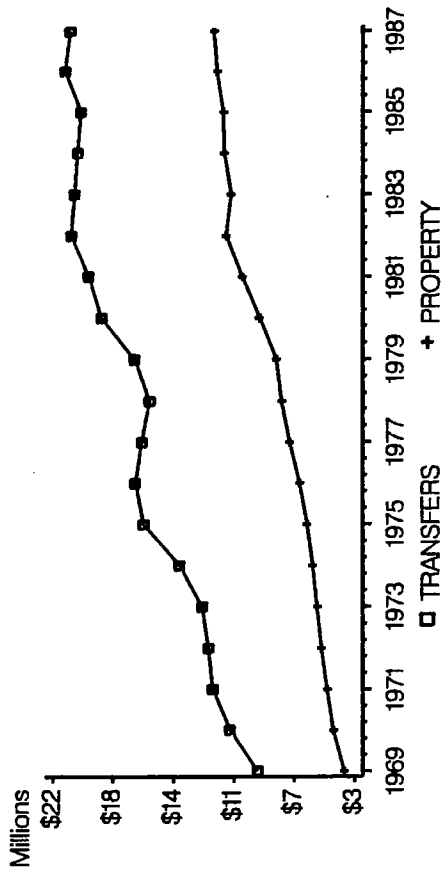


CHART 2C  
BATH COUNTY  
TOTAL EARNINGS  
as a Percent of Personal Income

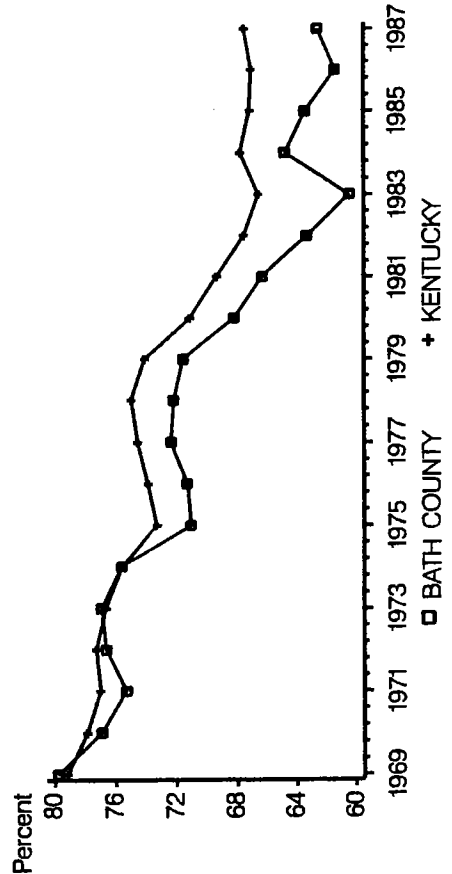


CHART 2D  
BATH COUNTY  
TRANSFER PAYMENTS  
as a Percent of Personal Income

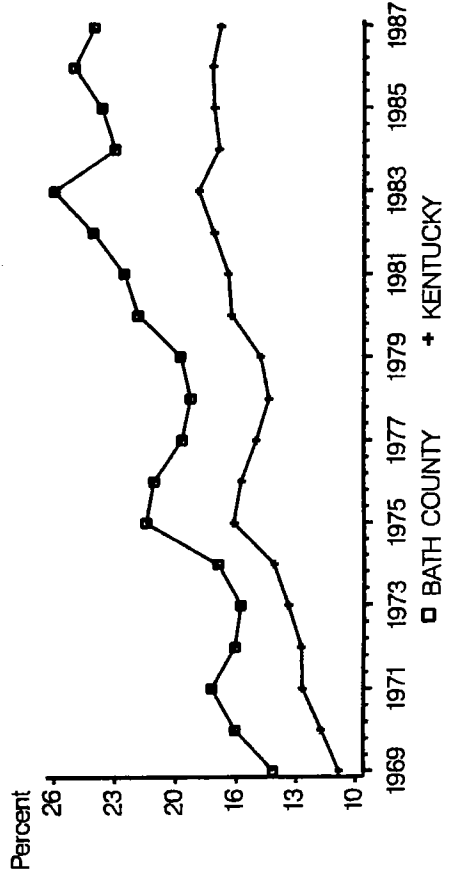


CHART 3A  
BATH COUNTY

EARNINGS IN GOODS PRODUCING INDUSTRIES  
as a Percent of Total Earnings

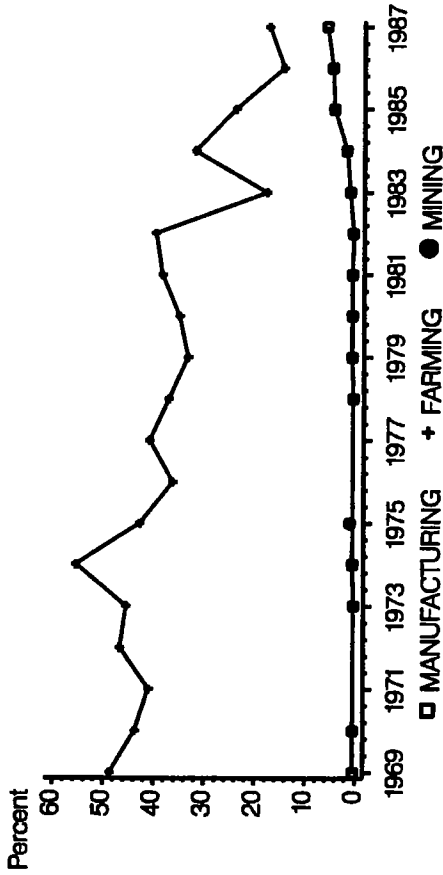


CHART 3B  
BATH COUNTY  
EARNINGS IN NON-GOODS PRODUCING INDUSTRIES  
as a Percent of Total Earnings

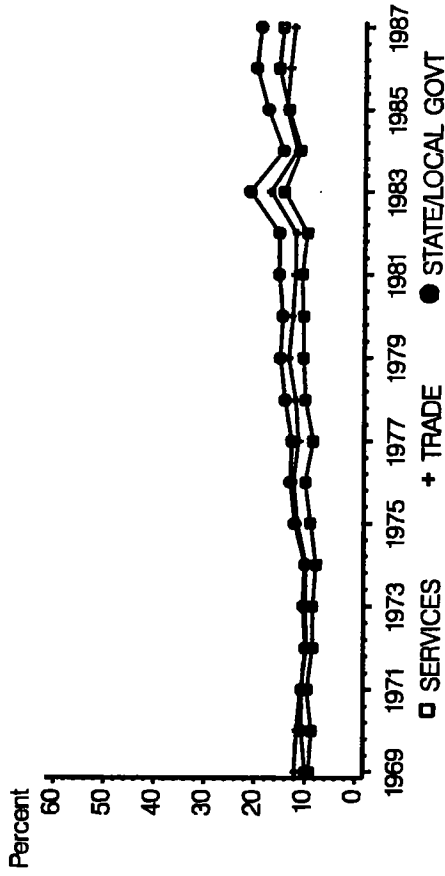


CHART 3C  
BATH COUNTY

EARNINGS IN GOODS PRODUCING INDUSTRIES  
as a Percent of Kentucky Industries

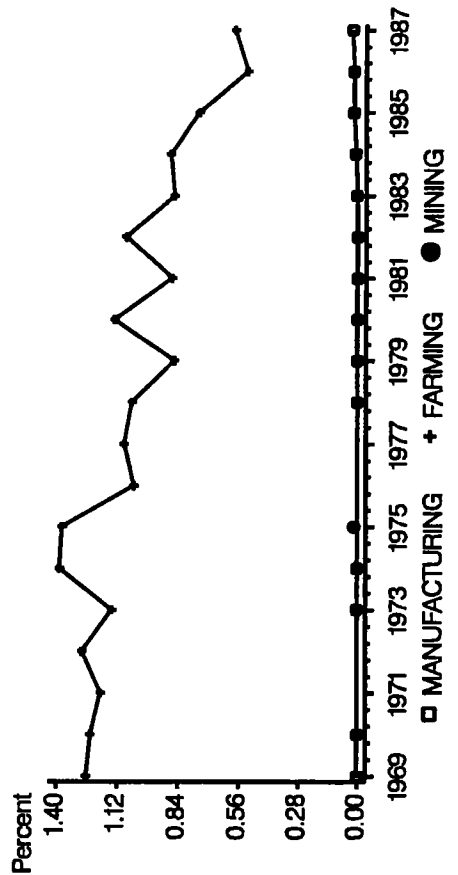
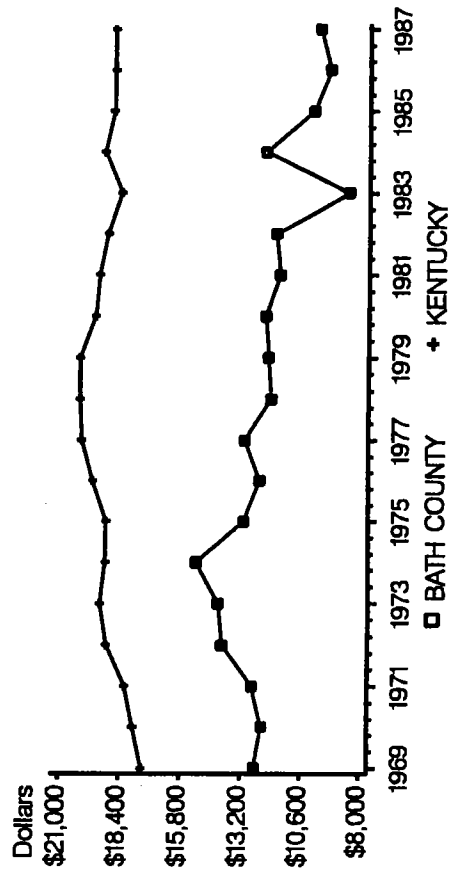
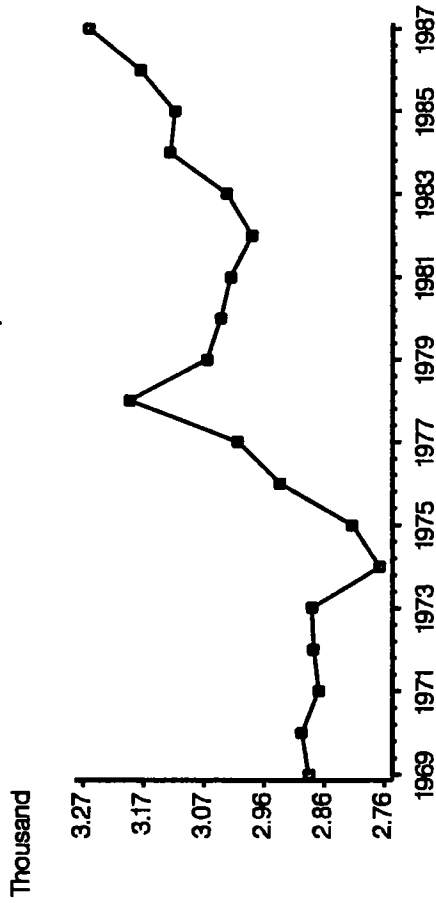


CHART 3D  
BATH COUNTY

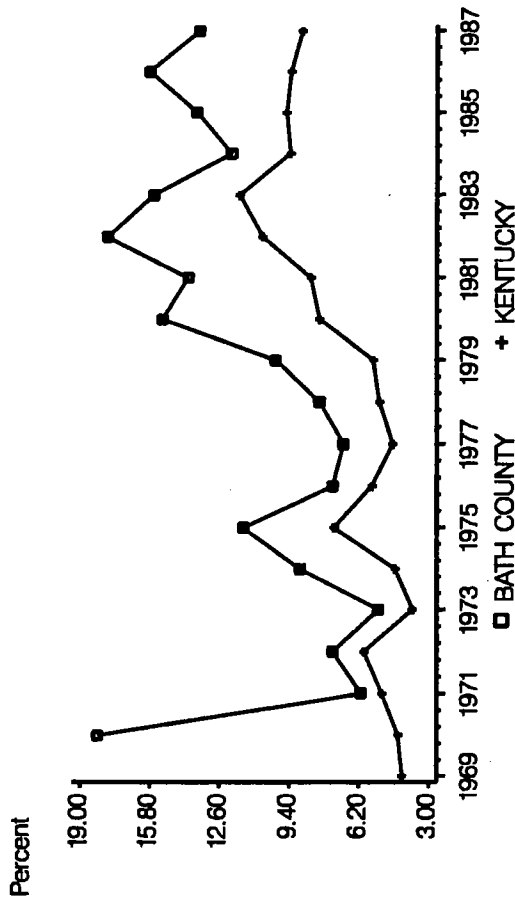
AVERAGE EARNINGS PER JOB  
in Constant 1988 Dollars



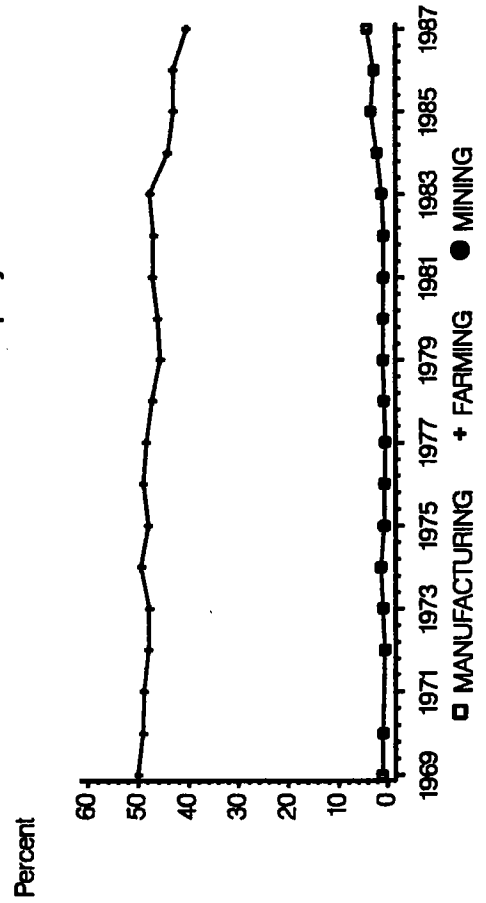
**CHART 4A**  
**BATH COUNTY**  
**TOTAL EMPLOYMENT**  
 Thousands of People



**CHART 4B**  
**BATH COUNTY**  
**ANNUAL UNEMPLOYMENT RATE**



**CHART 4C**  
**BATH COUNTY**  
**EMPLOYMENT IN GOODS PRODUCING INDUSTRIES**  
 as a Percent of Total Employment



**CHART 4D**  
**BATH COUNTY**  
**EMPLOYMENT IN NON-GOODS PRODUCING INDUSTRIES**  
 as a Percent of Total Employment

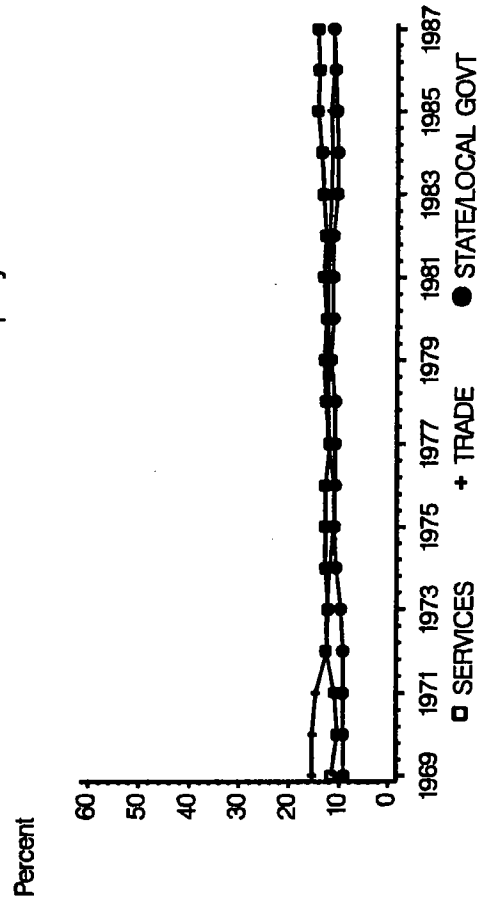


CHART 5A  
BATH COUNTY  
POPULATION

Thousands of People

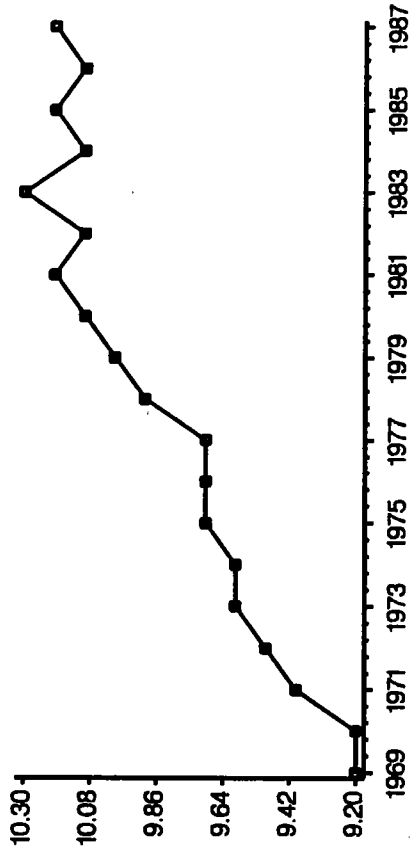


CHART 5B  
BATH COUNTY  
POPULATION  
as a Percent of Kentucky Population

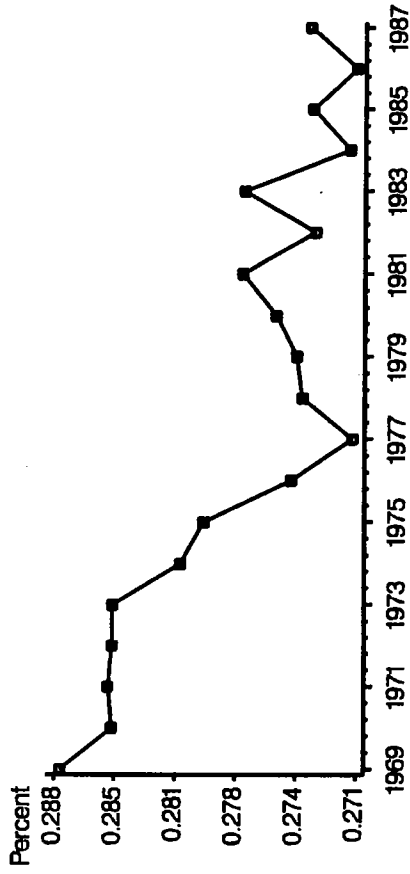


CHART 5C  
BATH COUNTY  
POPULATION 5 AND UNDER  
as a Percent of Total Population

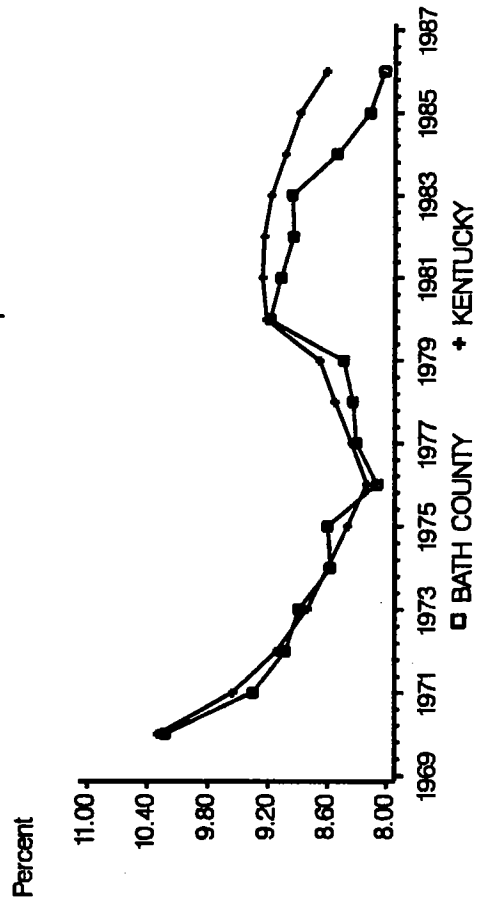
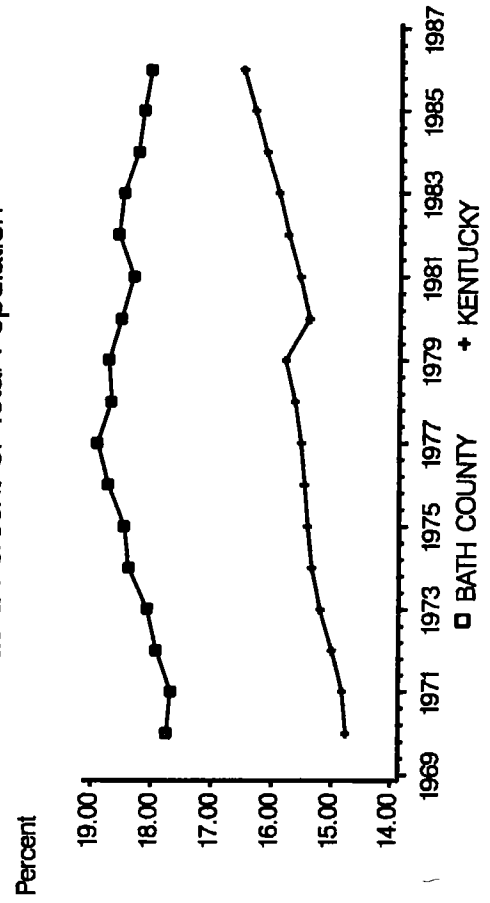


CHART 5D  
BATH COUNTY  
POPULATION 60 AND OVER  
as a Percent of Total Population





BATH COUNTY

PERSONAL INCOME  
In Constant 1988 Dollars

Year	County Personal Income (M\$)	Percent of Kentucky (%)	Per Capita Personal Income (\$)	Percent of Kentucky (%)
1969	63	0.22	6,844	77.0
1970	66	0.22	7,119	78.1
1971	67	0.22	7,187	77.7
1972	74	0.23	7,766	79.7
1973	78	0.22	8,138	79.2
1974	81	0.23	8,374	80.8
1975	77	0.22	7,918	77.2
1976	81	0.21	8,375	78.0
1977	85	0.21	8,756	78.3
1978	84	0.20	8,550	73.9
1979	87	0.20	8,715	74.1
1980	88	0.21	8,709	75.5
1981	88	0.20	8,689	74.1
1982	87	0.20	8,609	74.5
1983	79	0.19	7,698	67.6
1984	90	0.20	8,846	73.8
1985	86	0.19	8,468	70.6
1986	85	0.19	8,390	68.6
1987	88	0.19	8,633	69.1

COMPONENTS OF PERSONAL INCOME  
In Constant 1988 Dollars

Year	EARNINGS			TRANSFER PAYMENTS			INCOME from PROPERTY		
	M\$	Percent of Personal Income		M\$	Percent of Personal Income		M\$	Percent of Personal Income	
		County	Kentucky		County	Kentucky		County	Kentucky
1969	50	79.8	79.2	9	14.4	10.9	4	5.8	9.9
1970	51	76.9	77.9	11	16.5	11.9	4	6.6	10.2
1971	51	75.3	77.0	12	17.7	12.9	5	7.0	10.1
1972	57	76.7	77.3	12	16.5	12.9	5	6.9	9.7
1973	60	77.0	76.6	13	16.2	13.6	5	6.9	9.7
1974	61	75.6	75.5	14	17.4	14.4	6	7.0	10.1
1975	55	71.0	73.3	16	21.2	16.5	6	7.8	10.1
1976	58	71.3	73.9	17	20.8	16.1	6	8.0	10.0
1977	61	72.4	74.6	16	19.3	15.3	7	8.4	10.1
1978	61	72.2	75.0	16	18.8	14.6	8	9.0	10.4
1979	62	71.6	74.1	17	19.4	15.1	8	9.1	10.8
1980	60	68.2	71.1	19	21.6	16.7	9	10.2	12.2
1981	59	66.3	69.3	20	22.3	16.8	10	11.4	13.8
1982	55	63.3	67.5	21	24.0	17.6	11	12.7	14.9
1983	48	60.4	66.6	21	26.0	18.4	11	13.6	15.1
1984	58	64.8	67.8	20	22.8	17.3	11	12.5	14.9
1985	55	63.4	67.2	20	23.5	17.6	11	13.1	15.3
1986	52	61.4	67.1	21	24.9	17.6	12	13.7	15.3
1987	55	62.6	67.5	21	23.9	17.2	12	13.5	15.3

BATH COUNTY

SECTOR EARNINGS as a PERCENT of TOTAL COUNTY EARNINGS and  
as a PERCENT of KENTUCKY SECTOR EARNINGS

YEAR	MANUFACTURING		FARMING		MINING	
	TOTAL	KENTUCKY	TOTAL	KENTUCKY	TOTAL	KENTUCKY
1969	0.4	0.00	48.6	1.26	.	.
1970	0.4	0.00	43.7	1.24	.	.
1971	.	.	41.0	1.20	.	.
1972	.	.	46.7	1.28	.	.
1973	0.3	0.00	45.5	1.15	.	.
1974	0.6	0.00	55.5	1.39	.	.
1975	.	.	42.8	1.38	1.0	0.02
1976	.	.	36.3	1.04	.	.
1977	.	.	40.9	1.09	.	.
1978	0.4	0.00	37.1	1.05	.	.
1979	0.6	0.00	33.3	0.86	.	.
1980	0.6	0.00	35.1	1.13	.	.
1981	0.7	0.00	38.5	0.87	.	.
1982	0.5	0.00	39.8	1.08	.	.
1983	1.1	0.00	17.7	0.86	.	.
1984	1.8	0.01	32.0	0.88	.	.
1985	4.4	0.02	24.0	0.74	.	.
1986	4.7	0.02	14.4	0.52	.	.
1987	5.8	0.03	17.4	0.58	.	.

YEAR	SERVICES		TRADE		STATE and LOCAL GOVERNMENT	
	TOTAL	KENTUCKY	TOTAL	KENTUCKY	TOTAL	KENTUCKY
1969	9.2	0.11	12.0	0.12	9.9	0.17
1970	8.7	0.10	11.6	0.11	10.7	0.17
1971	9.6	0.11	10.8	0.10	10.7	0.16
1972	8.4	0.10	9.7	0.10	9.9	0.16
1973	8.5	0.10	10.0	0.09	10.4	0.17
1974	7.8	0.09	9.8	0.09	10.1	0.17
1975	9.0	0.09	11.6	0.10	12.2	0.17
1976	10.1	0.09	12.4	0.10	13.1	0.17
1977	8.5	0.08	11.4	0.09	12.8	0.17
1978	10.1	0.09	12.1	0.09	14.1	0.17
1979	10.5	0.09	13.4	0.09	15.1	0.17
1980	10.5	0.09	12.7	0.10	14.7	0.17
1981	10.8	0.08	12.2	0.09	15.4	0.17
1982	9.8	0.07	12.0	0.09	15.4	0.17
1983	14.4	0.08	17.1	0.09	21.2	0.17
1984	11.2	0.08	11.9	0.09	14.6	0.17
1985	13.6	0.08	14.1	0.09	17.7	0.17
1986	15.6	0.08	13.4	0.08	20.0	0.17
1987	14.8	0.07	12.6	0.08	19.1	0.17

BATH COUNTY

COUNTY EMPLOYMENT by SECTOR

YEAR	MANUFACTURING		FARMING		MINING	
	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL
1969	30	1.0	1,444	50.0	.	.
1970	25	0.9	1,421	49.0	.	.
1971	.	.	1,401	48.8	.	.
1972	15	0.5	1,382	48.0	.	.
1973	25	0.9	1,377	47.8	.	.
1974	35	1.3	1,367	49.4	.	.
1975	18	0.6	1,350	48.0	20	0.7
1976	16	0.5	1,438	49.0	.	.
1977	13	0.4	1,454	48.3	.	.
1978	22	0.7	1,504	47.1	.	.
1979	27	0.9	1,394	45.5	.	.
1980	25	0.8	1,401	46.1	.	.
1981	26	0.9	1,422	47.1	.	.
1982	24	0.8	1,400	46.9	.	.
1983	36	1.2	1,442	47.6	.	.
1984	66	2.1	1,378	44.1	.	.
1985	104	3.3	1,339	43.0	.	.
1986	86	2.7	1,369	43.1	.	.
1987	137	4.2	1,322	40.5	.	.

YEAR	SERVICES		TRADE		STATE and LOCAL GOVERNMENT	
	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL
1969	335	11.6	443	15.3	262	9.1
1970	300	10.3	442	15.2	267	9.2
1971	314	10.9	418	14.6	266	9.3
1972	363	12.6	357	12.4	266	9.2
1973	352	12.2	358	12.4	281	9.7
1974	353	12.8	330	11.9	297	10.7
1975	361	12.8	316	11.2	312	11.1
1976	377	12.8	326	11.1	320	10.9
1977	360	12.0	370	12.3	330	11.0
1978	407	12.8	394	12.3	348	10.9
1979	399	13.0	374	12.2	358	11.7
1980	385	12.7	377	12.4	343	11.3
1981	399	13.2	372	12.3	344	11.4
1982	383	12.8	360	12.1	339	11.4
1983	404	13.3	358	11.8	321	10.6
1984	426	13.6	363	11.6	325	10.4
1985	450	14.4	370	11.9	333	10.7
1986	450	14.2	356	11.2	348	11.0
1987	469	14.4	370	11.3	368	11.3

BATH COUNTY

EMPLOYMENT STATISTICS

YEAR	TOTAL EMPLOYMENT	AVERAGE EARNINGS		UNEMPLOYMENT RATE	
		COUNTY	KENTUCKY	COUNTY	KENTUCKY
1969	2,888	\$12,571	\$17,440	.	4.2
1970	2,900	\$12,253	\$17,811	18.2	4.4
1971	2,871	\$12,677	\$18,166	6.1	5.1
1972	2,880	\$13,991	\$18,970	7.4	6.0
1973	2,883	\$14,159	\$19,232	5.3	3.7
1974	2,768	\$15,104	\$19,008	8.9	4.5
1975	2,815	\$13,077	\$18,976	11.5	7.3
1976	2,937	\$12,361	\$19,563	7.4	5.6
1977	3,009	\$13,025	\$20,031	6.9	4.7
1978	3,192	\$11,869	\$20,121	8.0	5.3
1979	3,061	\$11,996	\$20,110	10.0	5.5
1980	3,038	\$12,114	\$19,439	15.2	8.0
1981	3,021	\$11,512	\$19,286	14.0	8.4
1982	2,985	\$11,687	\$18,931	17.7	10.6
1983	3,028	\$8,522	\$18,358	15.6	11.6
1984	3,124	\$12,132	\$19,080	12.0	9.3
1985	3,116	\$10,089	\$18,676	13.6	9.5
1986	3,175	\$9,352	\$18,627	15.8	9.3
1987	3,262	\$9,817	\$18,636	13.5	8.8

POPULATION STATISTICS

YEAR	POPULATION	% OF KY	PERCENT UNDER AGE 6		PERCENT AGE 60+	
			COUNTY	KENTUCKY	COUNTY	KENTUCKY
1969	9,200	0.29	.	.	.	.
1970	9,200	0.28	10.2	10.3	17.7	14.8
1971	9,400	0.28	9.4	9.6	17.7	14.8
1972	9,500	0.28	9.0	9.1	17.9	15.0
1973	9,600	0.28	8.9	8.8	18.1	15.2
1974	9,600	0.28	8.6	8.6	18.4	15.3
1975	9,700	0.28	8.6	8.4	18.5	15.4
1976	9,700	0.27	8.1	8.2	18.7	15.5
1977	9,700	0.27	8.3	8.4	18.9	15.5
1978	9,900	0.27	8.3	8.5	18.7	15.6
1979	10,000	0.27	8.4	8.7	18.7	15.8
1980	10,100	0.28	9.2	9.2	18.5	15.4
1981	10,200	0.28	9.1	9.3	18.3	15.5
1982	10,100	0.27	8.9	9.2	18.6	15.7
1983	10,300	0.28	9.0	9.2	18.5	15.9
1984	10,100	0.27	8.5	9.0	18.2	16.1
1985	10,200	0.27	8.2	8.9	18.1	16.3
1986	10,100	0.27	8.0	8.6	18.0	16.5
1987	10,200	0.27	.	.	.	.

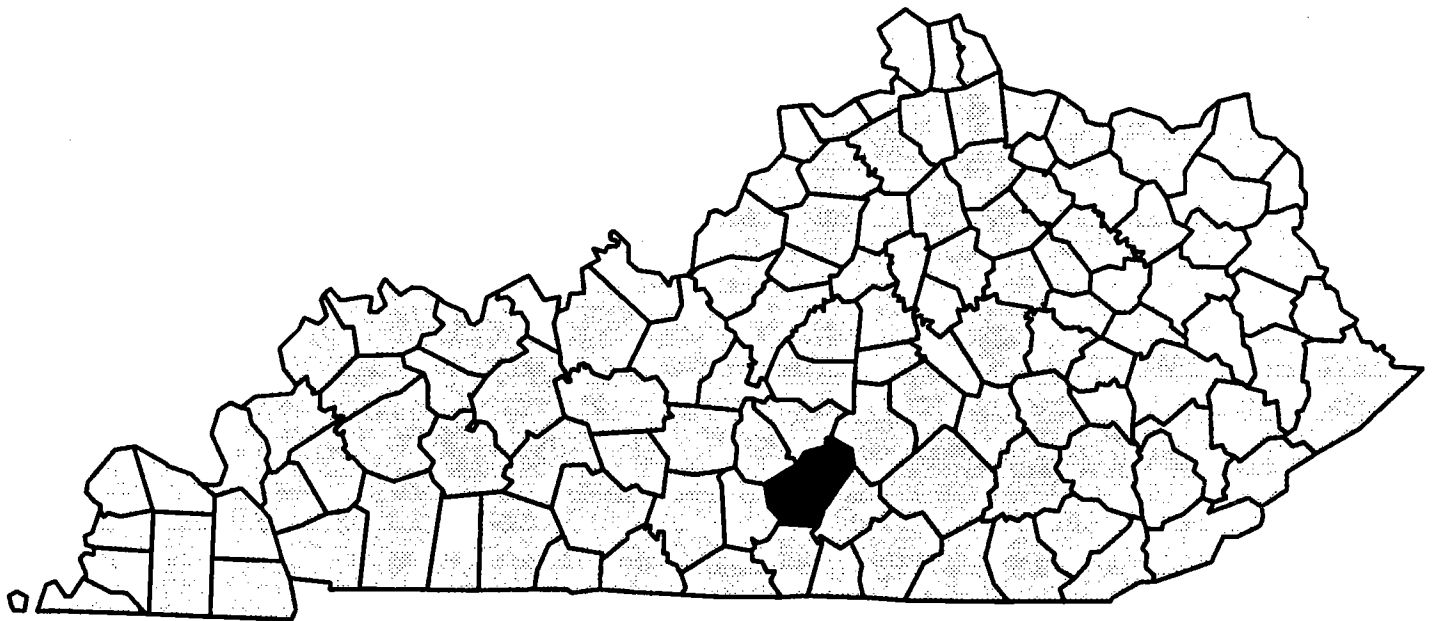


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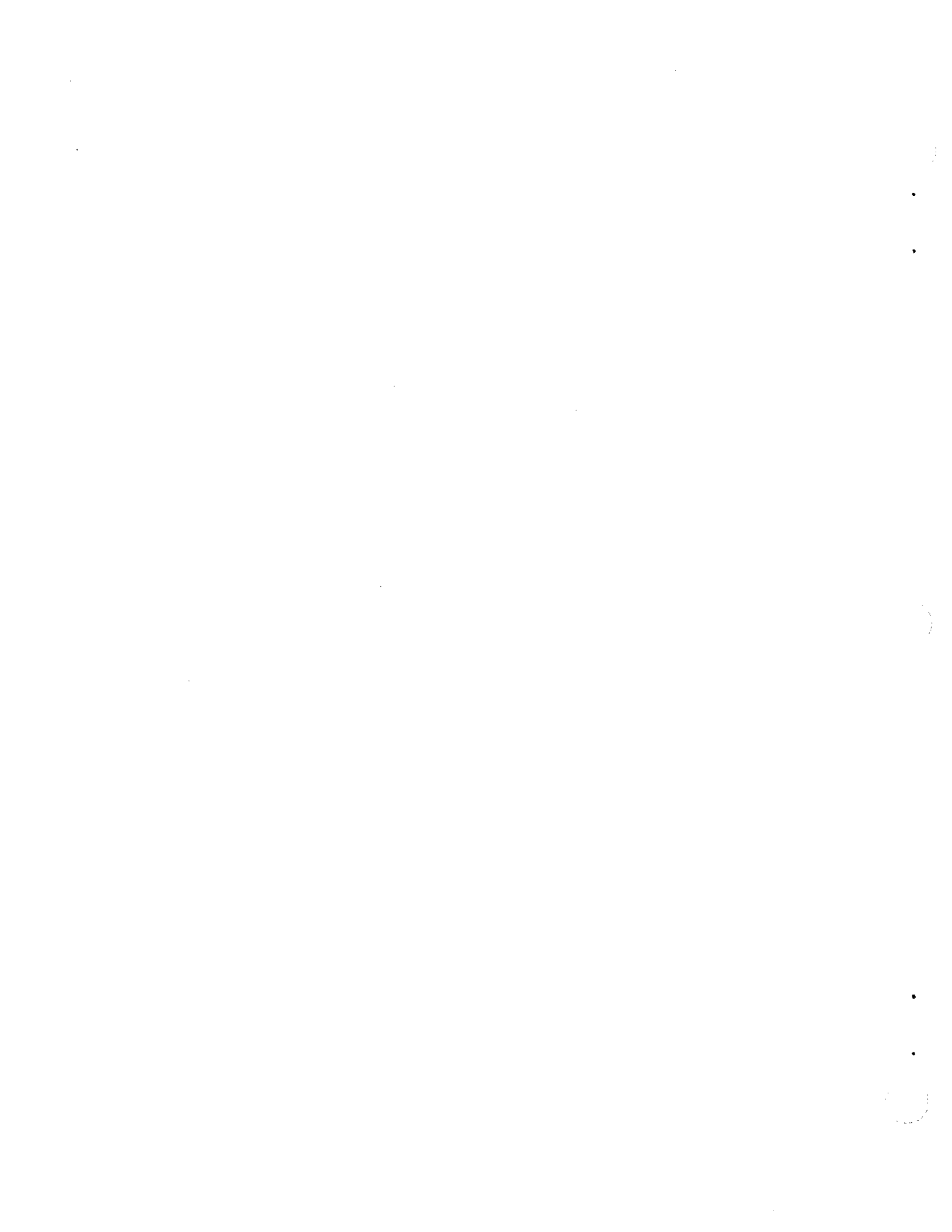
ECONOMIC TRENDS IN  
KENTUCKY COUNTIES  
1969 – 1987

**ADAIR COUNTY**



Prepared by  
Virginia Wilson  
Donna A. Cantrell

RESEARCH MEMORANDUM 438  
Legislative Research Commission  
Frankfort, Kentucky  
February, 1990





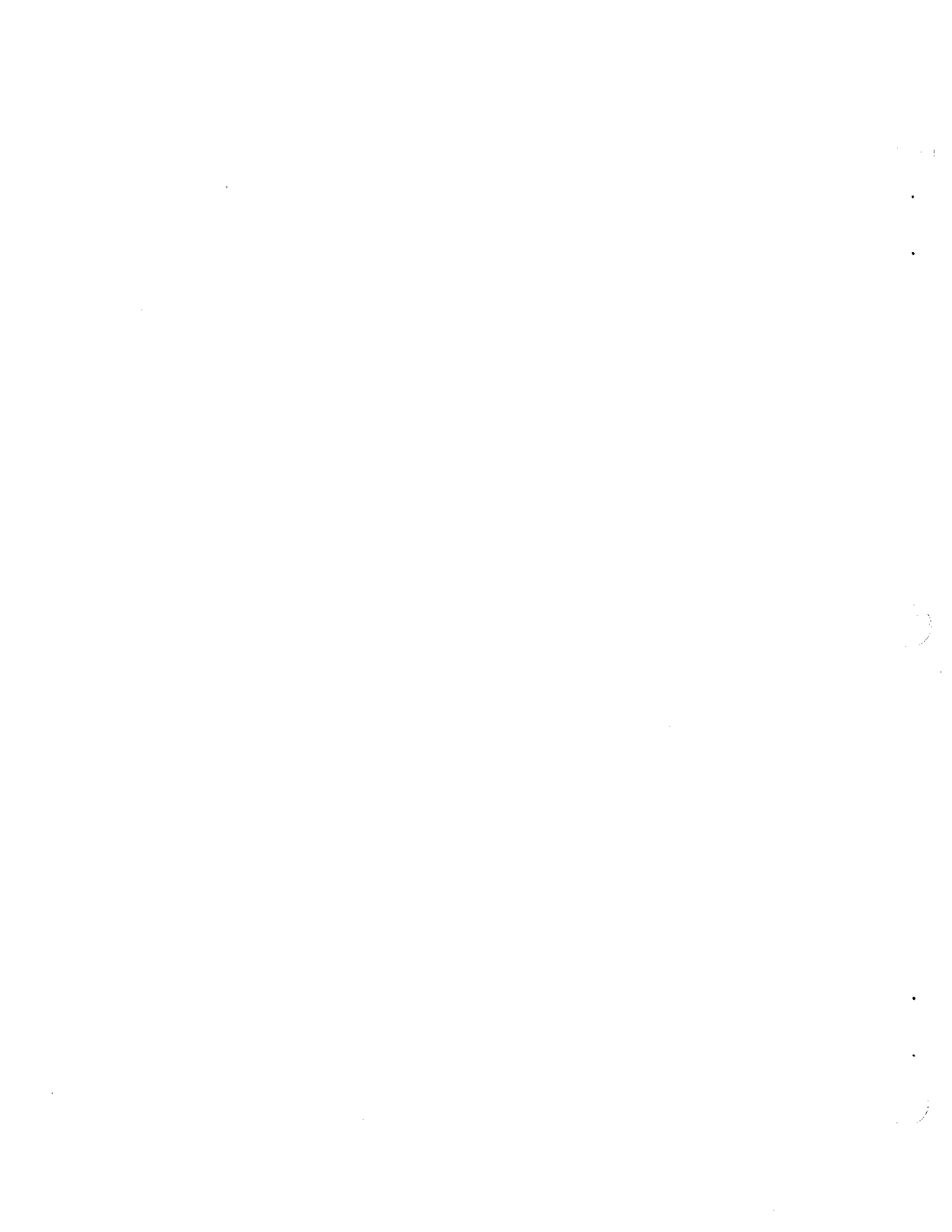
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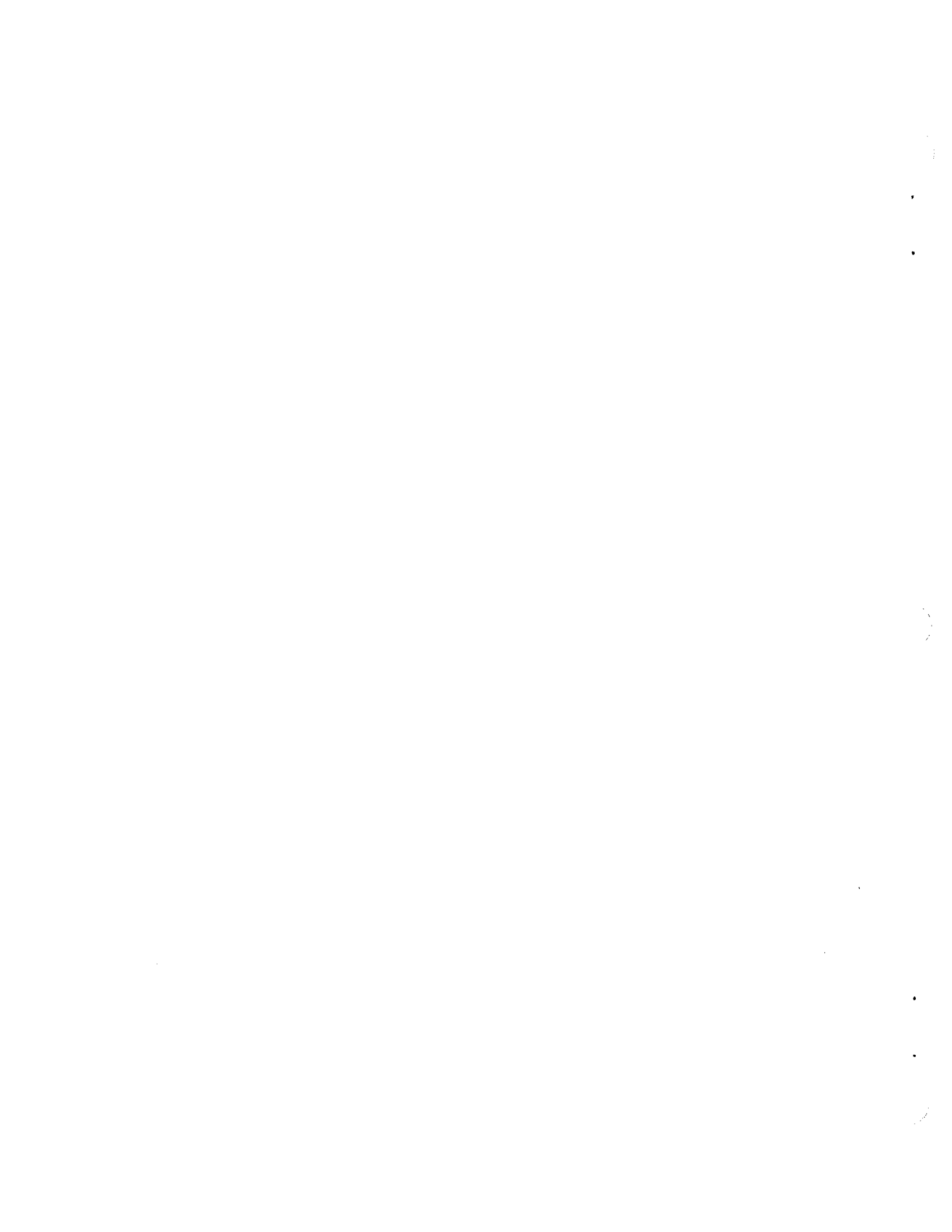
## FOREWORD

This publication is one of a set of 120, highlighting economic trends in each county in Kentucky from 1969-1987. This effort is part of the ongoing activities sponsored by the Legislative Research Commission to provide a long-term perspective on issues for decision makers. The economies of individual counties do not always parallel overall state trends. This set of publications is an attempt to look at the economic trends in each county over time and to point out where the economies of individual counties may be performing differently from the economy of the state as a whole.

This publication was prepared by Virginia Wilson and Donna Cantrell. Susan Dance assisted in production of the manuscript and Charles Bush edited the report. The assistance of Carol Straus from the Center for Business and Economic Research at the University of Kentucky in deciphering data is gratefully acknowledged.

Vic Hellard, Jr.  
Director

The Capitol  
Frankfort  
February, 1990



## SUMMARY

The Adair County economy experienced healthy growth from 1969 to 1987. The county also increased its share of the Kentucky economy, which indicates that county economic growth rates exceeded state economic growth rates.

Adair County went through a period of economic restructuring from 1969 to 1987. In 1969, agriculture was the predominant economic sector, but earnings in this sector declined significantly through the 1970's. However, this decline was offset by substantial increases in earnings from the manufacturing sector. While manufacturing was the primary source of earnings in 1987, agriculture remained the primary source of employment.

Another area of growth for the county economy was the service sector. The Kentucky economy also had a substantial increase in the service sector throughout this period.

The increase in the manufacturing sector is very different from state trends, where manufacturing's share of the economy has declined. The high concentration and growth in the manufacturing sector has been beneficial for the county economy, because manufacturing is a relatively high wage industry. However, manufacturing industries are very sensitive to changes in consumer demand and are generally more susceptible to economic fluctuations. Consequently, while a high concentration in manufacturing enabled the county to enjoy economic expansion during a period of national economic growth, it may also make the county more susceptible to recessionary contractions.



## INTRODUCTION

This is one of a series of reports called Economic Trends in Kentucky Counties. The purpose of this series is to describe the economic structure of Kentucky counties and to assess their economic performance relative to their own history and relative to the Kentucky economy. Information on the structure and patterns of change in county economies and an understanding of their relationship to the Kentucky economy can help in making policy decisions that are intended to shape Kentucky's economic future.

When assessing any economy there are several pertinent questions which may be addressed. The first concerns changes in the absolute size of the economy over time. Here the relevant comparison is between the county economy and its own history. Since most economic variables are given in dollars and since inflation causes the value of a dollar to vary over time, all dollar values in this report are presented in constant 1988 dollars. This allows analysis of real changes over time by controlling for the effects of inflation.

A second question concerns the structure and nature of the county economy. The structure of an economy refers to the relative share contributed by the various segments of the economy, while the nature deals with how this share has changed over time.

A third question concerns the performance of the county economy when compared to the Kentucky economy. For example, if a county has a higher proportion of earnings or employment in a particular sector it would indicate a specialization in that sector. Differences in economic structure may explain variations in relative economic well-being between a county and the state as a whole.

Economic data for counties are usually published after a lag of two years. Therefore, most data in this report cover the period 1969 to 1987. All data for this report was obtained from the Kentucky Economic Information System, an on-line database maintained by the University of Kentucky Center for Business and Economic Development.

There are certain caveats which should be remembered when analyzing data. First, it is a common and useful approach to evaluate the percentage an economic sector contributes to the total economy. However, one must remember that a sector's percentage contribution may decline even when its absolute value is increasing if another sector's contribution is growing at a faster rate. Secondly, when reviewing data in graphical analyses, the scales used to present data should be noted. In this report most graphs are presented with the narrowest scale which will cover all data points. This can accentuate visual patterns over time even when absolute changes are relatively small.

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\*For an analysis of economic trends in Kentucky, see Virginia Wilson, Patterns of Growth and Decline in the Kentucky Economy 1969-1988, Research Memorandum 437, Legislative Research Commission, November 1989.

## ECONOMIC TRENDS IN ADAIR COUNTY

The following analysis includes a brief description of the county economy and is accompanied by graphical illustrations. Data tables are also included at the end of this report. Three principal components of the Adair County economy are analyzed. They are:

1. Personal Income
2. Earnings
3. Employment

### Personal Income

Personal income is often used as a measure of the economic activity in an area. Personal income is the sum of all the dollar income received by individuals in an area from any legal source. Personal income data is published by the Bureau of Economic Analysis (BEA) for most major geographic regions, including states, counties, and major cities.

In general, income can be obtained in three ways. First, it can be earned by the work of an individual. This type of income includes wage and salary income and proprietors' earnings. Second, income can be earned by property. This component includes earnings from rents, dividends, and interest. Finally, income can be received as a gift or an entitlement. This type of income constitutes the component of personal income called transfer payments. Included in this component is income from sources such as retirement benefits, unemployment benefits, food stamps, and medical programs such as Medicare and Medicaid.

As can be seen in Chart 1A, the Adair County economy, as measured by personal income, increased from \$85 million in 1969 to \$155 million in 1987, after adjusting for inflation. Chart 1B shows Adair County total personal income as a percent of Kentucky total personal income. In general, Adair County has increased its share of Kentucky personal income.

A similar pattern emerges from an examination of per capita personal income. Per capita personal income is simply the total personal income of an area divided by its population. Per capita personal income is often used as a measure of the economic well-being of the residents of an area. Charts 1C and 1D indicate that while Adair County per capita income increased over the time period to a level of \$9,775 per person in 1987, Adair County per capita personal income was still only 78.2 percent of Kentucky per capita personal income.

A better understanding of the nature of economic activity can be gleaned from an examination of the relative contribution of the components of personal income and how their share has changed over time. This information is illustrated in Charts 2A-2D. While total earnings increased from \$65 million in 1969 to \$94 million in 1987 (in constant 1988 dollars), earnings were



volatile over the period. Earnings accounted for 60.7 percent of Adair County's total personal income in 1987, which was significantly less than Kentucky's 67.5 percent share.

Transfer payments contributed \$13 million to total personal income in 1969 and \$36 million in 1987. During the same period, transfer payments contributed a larger percentage of personal income in Adair County than in Kentucky. However, the rates of growth in transfer payments were similar.

Income from property in Adair County grew at a stable rate through the time period. Income from property totalled \$6 million in 1969 and increased to \$24 million in 1987.

### **Earnings**

Earnings are the component of personal income reflecting payments to individuals in return for labor. Earnings include both wages and salaries and proprietor's income. Since 1969, Adair County has experienced significant economic restructuring, as indicated in Chart 3A. In 1969, Adair County received 5.2 percent of total earnings from manufacturing. This percentage increased to 21.1 percent in 1987. The county trend toward an increasing concentration in manufacturing is different from that for the state, where the percentage of earnings from manufacturing has shown a steady decline over the period.

Chart 3A also indicates that farming's contribution to total county earnings decreased from 33.5 percent in 1969 to 12.5 percent in 1987. Earnings from mining were minimal throughout the period.

Compared to earnings from goods-producing industries, earnings from non-goods-producing industries (Chart 3B) remained relatively stable. The percent of earnings from services increased from 15.3 percent in 1969 to 20.2 percent in 1987. The trade sector's share of earnings declined from 16.6 percent in 1969 to 13.6 percent in 1987. The percent of earnings from state and local government sectors increased to 15.1 percent in 1987. At the state level, service's share of earnings also increased, while the share attributed to trade and government remained constant.

Average earnings per job (adjusted for inflation) for Adair County and Kentucky are shown in Chart 3D. In Kentucky, average earnings per job reached a high of \$20,121 per person in 1978. Since then, average earnings per job declined and in 1987 they were \$18,636 per person. In Adair County, average earnings decreased over most of the period to a level of \$10,960 in 1987 and they were well below the Kentucky average.

### **Employment**

Employment is considered to be any activity for which one receives financial remuneration in the form of wages or profits. Total employment in Adair County increased substantially during the data period. In 1970, total

employment stood at 4,628 people. By 1987, that figure had increased to 7,154.

The unemployment rate, often used as an indicator of economic well-being, is the ratio of unemployed to the total civilian labor force. Unemployment is described as a condition of being out of work while actively seeking employment within the last thirty days. The civilian labor force is described as the proportion of population age 16 or older employed or actively seeking employment. Annual unemployment rates for Kentucky and Adair County are presented in Chart 4B. Except for the period from 1979 to 1983, unemployment rates in Adair County have paralleled those of the state.

Another employment concept includes the discouraged worker. Discouraged workers are persons who want jobs but made no attempt to find work in the last thirty days because they believe they could not find it. These individuals are not included when calculating official unemployment rates. The Cabinet for Human Resources does not estimate discouraged workers by county. However, preliminary research by the Cabinet indicates that the inclusion of discouraged workers in the civilian labor force estimate would increase the unemployment rate by approximately four percent for the state. This figure would vary by county depending on the labor market in a county or within commuting distance.

Employment in the goods-producing industries is illustrated in Chart 4C. While the percent of Adair County total employment in agriculture declined, it remained the county's predominant source of employment. The percent of total employment in manufacturing increased significantly over the time period, accounting for the large increases in total employment. Again, both of these trends differ from those of the state, in that Kentucky manufacturing employment has declined and agricultural employment has been relatively low over the period. It is interesting to note that while the percent of total employment in agriculture exceeded that in manufacturing in 1987, the percent of earnings from manufacturing exceeded that from agriculture, reflecting the higher earnings in manufacturing industries.

Employment in the non-goods-producing industries is presented in Chart 4D. The percent of employment in the service sector increased from 14.0 percent in 1969 to 19.1 percent in 1987. The trade sector's share of employment declined over time to 13.4 percent in 1987. Government employment remained constant. Kentucky employment in both the services and trade component of non-goods-producing industries has shown substantial increases.

## **Population**

The census conducted each decade counts the actual population in an area. Population is then statistically estimated during intervening years. The demographic composition of this population growth has important implications for the future demand for goods and services, and ultimately, the economic structure of Breckinridge County.

The Adair County population grew from 13,200 in 1969 to 15,800 in 1987 (Chart 5A). It was estimated that in 1986, 7.3 percent of Adair County's population was under six years of age, compared to 8.6 percent for the state. Conversely, for the same year 20.9 percent of the Adair County population was sixty years of age and over, while 16.5 percent of all Kentucky residents fell in this age group. The higher proportion of older residents may account for the county's greater reliance on transfer payments as a source of personal income.

CHART 1A  
 ADAIR COUNTY  
 REAL PERSONAL INCOME  
 Millions of 1988 dollars

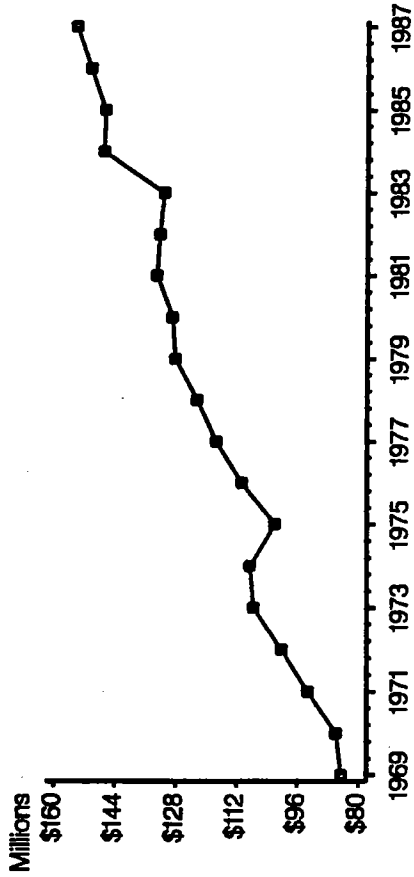


CHART 1B  
 ADAIR COUNTY  
 PERSONAL INCOME  
 as a Percent of Kentucky Personal Income

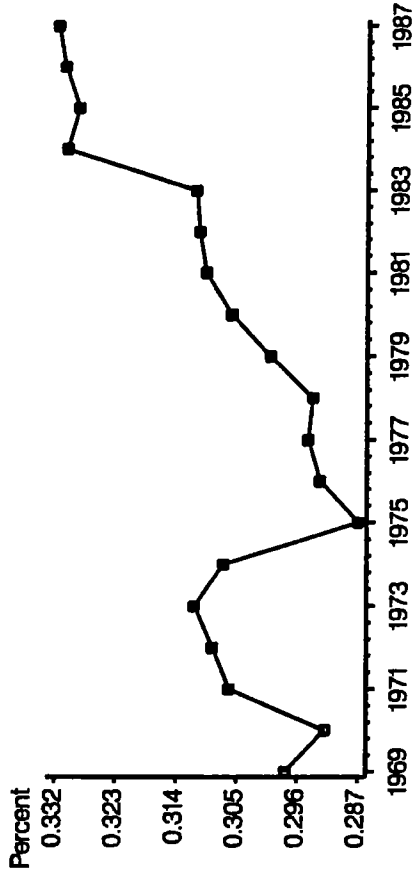


CHART 1C  
 ADAIR COUNTY  
 PER CAPITA PERSONAL INCOME  
 in Constant 1988 Dollars

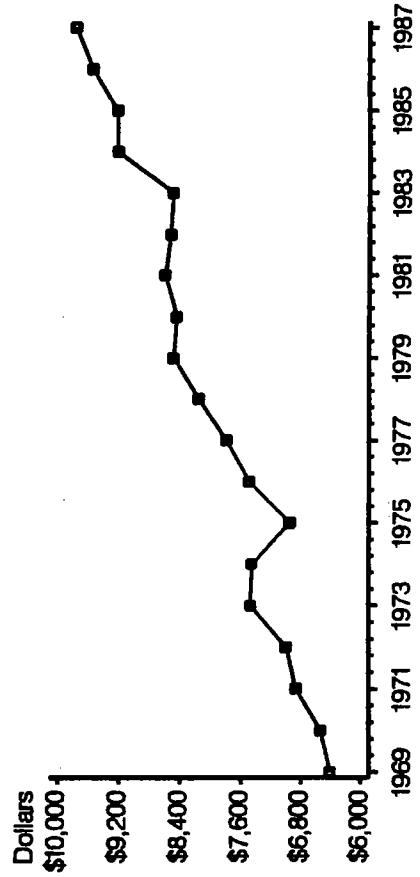


CHART 1D  
 ADAIR COUNTY  
 PER CAPITA PERSONAL INCOME  
 as a Percent of Kentucky Per Capita Personal Income

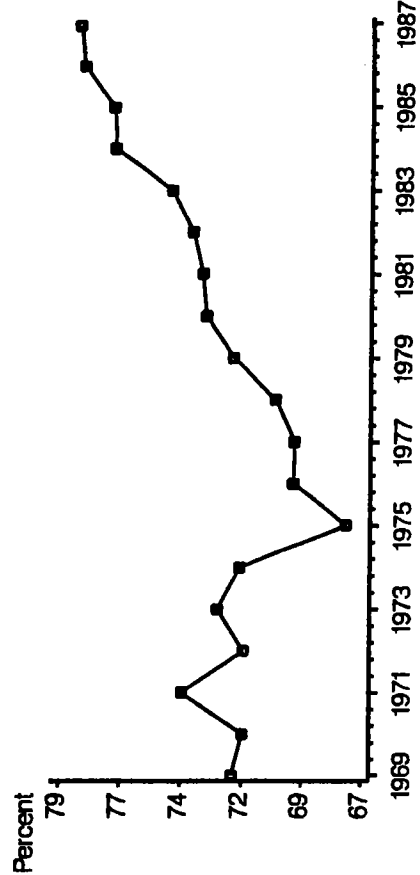


CHART 2A  
 ADAIR COUNTY  
 REAL TOTAL EARNINGS  
 Millions of 1988 dollars

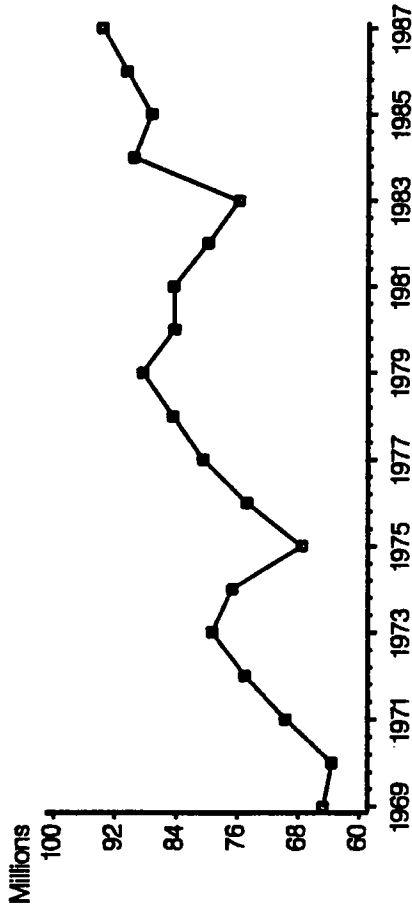


CHART 2B  
 ADAIR COUNTY  
 TRANSFER PAYMENTS and INCOME FROM PROPERTY  
 Millions of 1988 Dollars

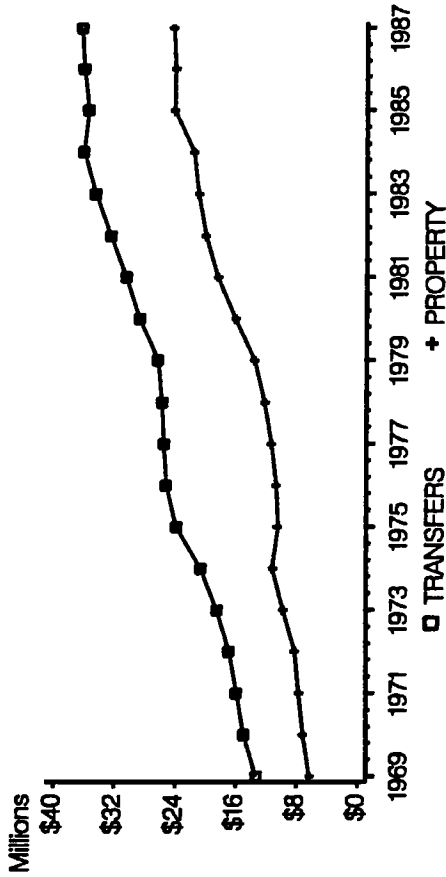


CHART 2C  
 ADAIR COUNTY  
 TOTAL EARNINGS  
 as a Percent of Personal Income

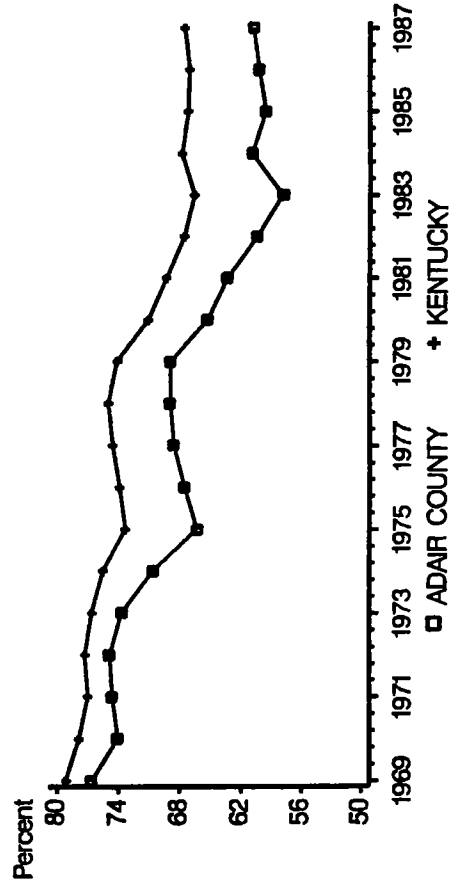


CHART 2D  
 ADAIR COUNTY  
 TRANSFER PAYMENTS  
 as a Percent of Personal Income

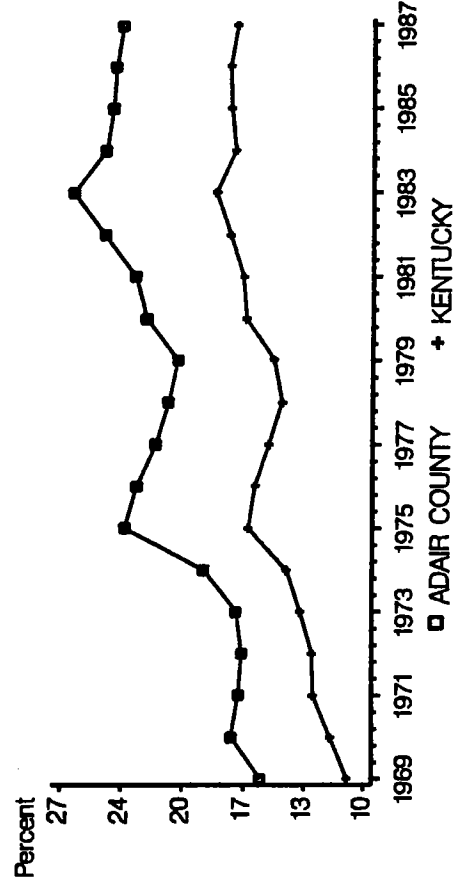


CHART 3A  
 ADAIR COUNTY  
 EARNINGS IN GOODS PRODUCING INDUSTRIES  
 as a Percent of Total Earnings

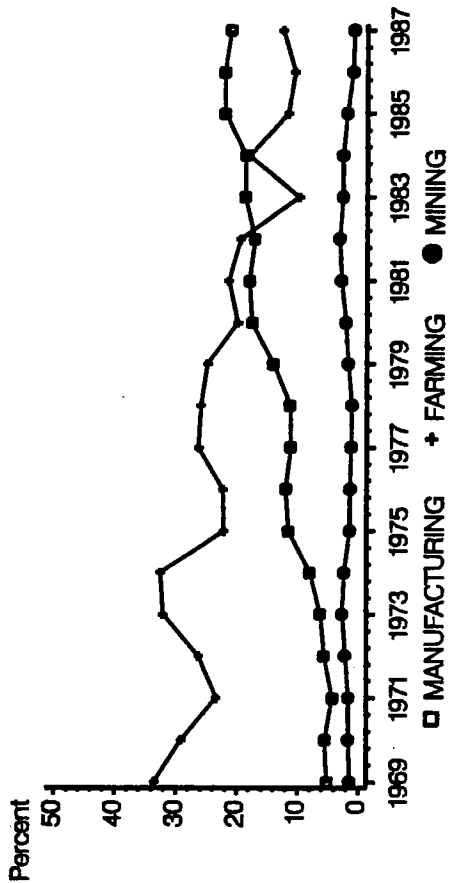


CHART 3B  
 ADAIR COUNTY  
 EARNINGS IN NON - GOODS PRODUCING INDUSTRIES  
 as a Percent of Total Earnings

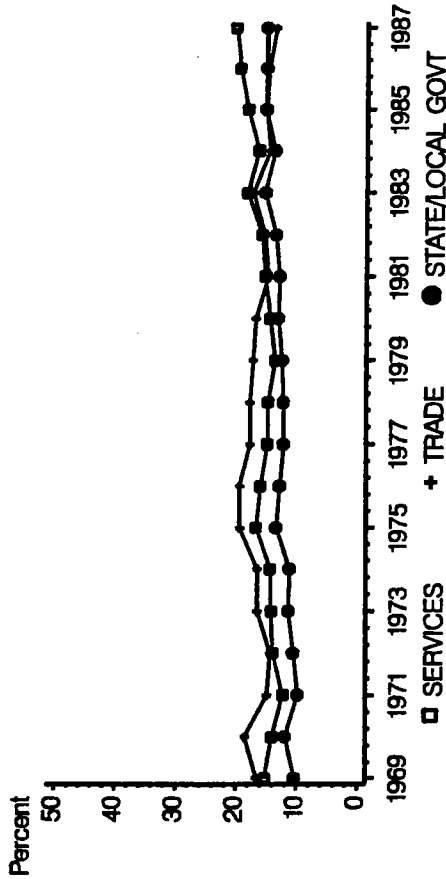


CHART 3C  
 ADAIR COUNTY  
 EARNINGS IN GOODS PRODUCING INDUSTRIES  
 as a Percent of Kentucky Industries

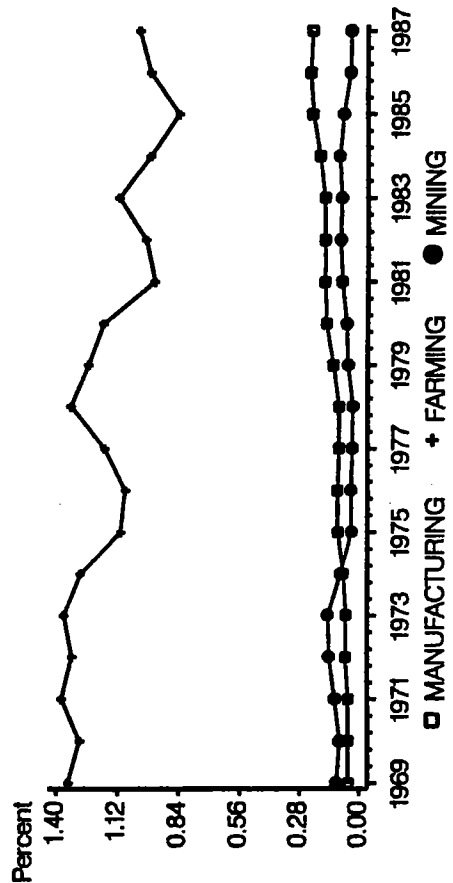


CHART 3D  
 ADAIR COUNTY  
 AVERAGE EARNINGS PER JOB  
 in Constant 1988 Dollars

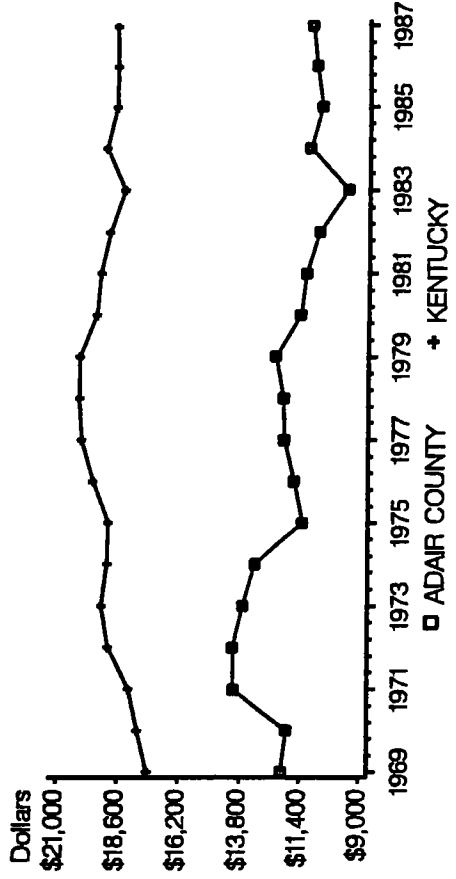


CHART 4A  
 ADAIR COUNTY  
 TOTAL EMPLOYMENT  
 Thousands of People

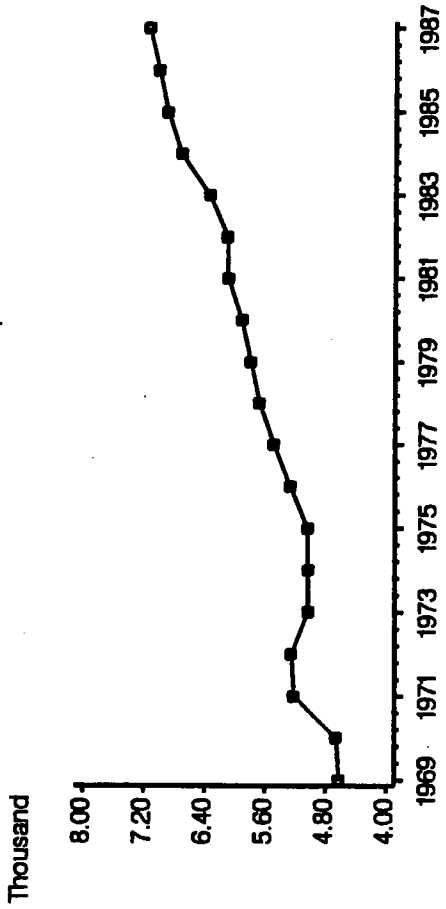


CHART 4B  
 ADAIR COUNTY  
 ANNUAL UNEMPLOYMENT RATE

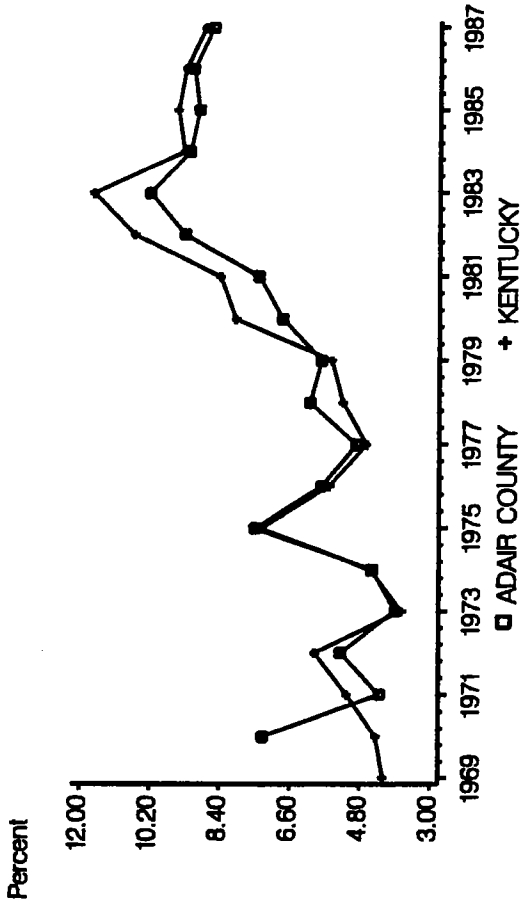


CHART 4C  
 ADAIR COUNTY  
 EMPLOYMENT IN GOODS PRODUCING INDUSTRIES  
 as a Percent of Total Employment

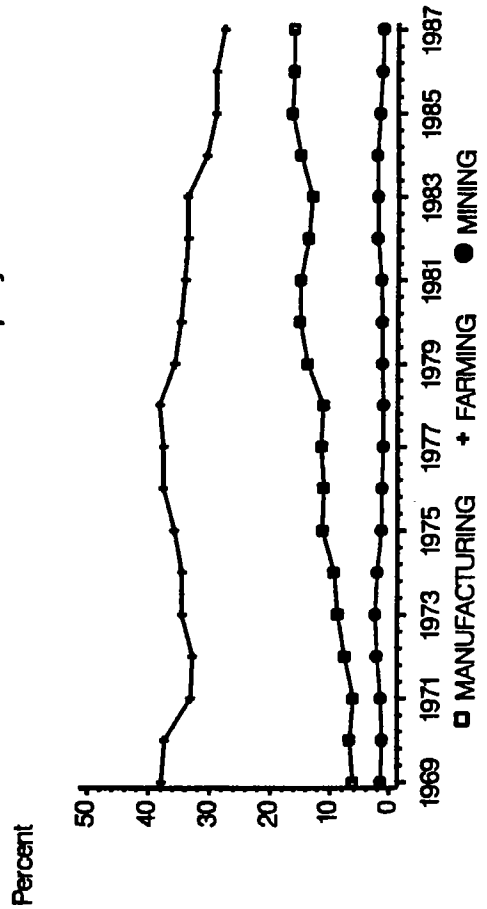


CHART 4D  
 ADAIR COUNTY  
 EMPLOYMENT IN NON-GOODS PRODUCING INDUSTRIES  
 as a Percent of Total Employment

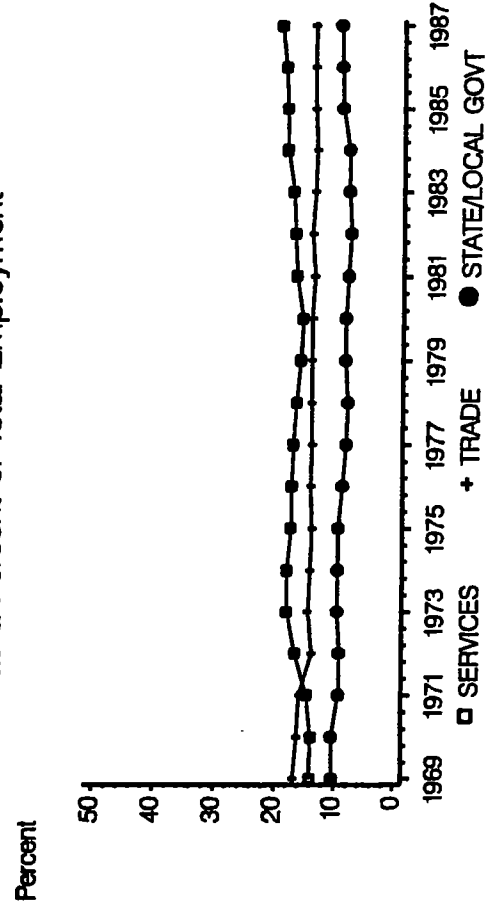


CHART 5A  
ADAIR COUNTY  
POPULATION  
Thousands of People

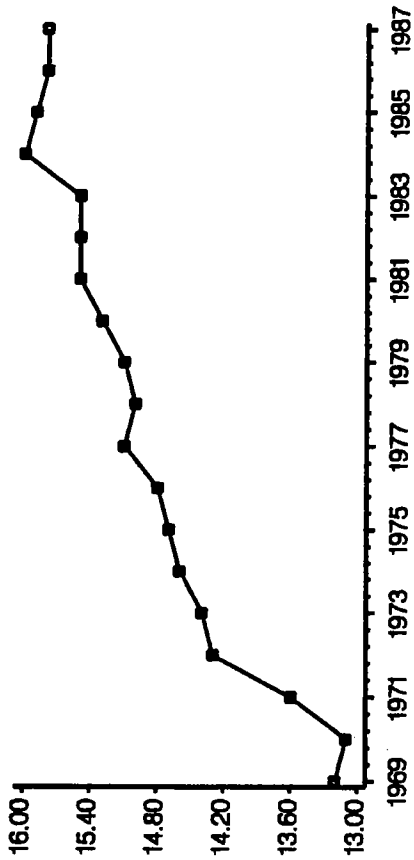


CHART 5B  
ADAIR COUNTY  
POPULATION  
as a Percent of Kentucky Population

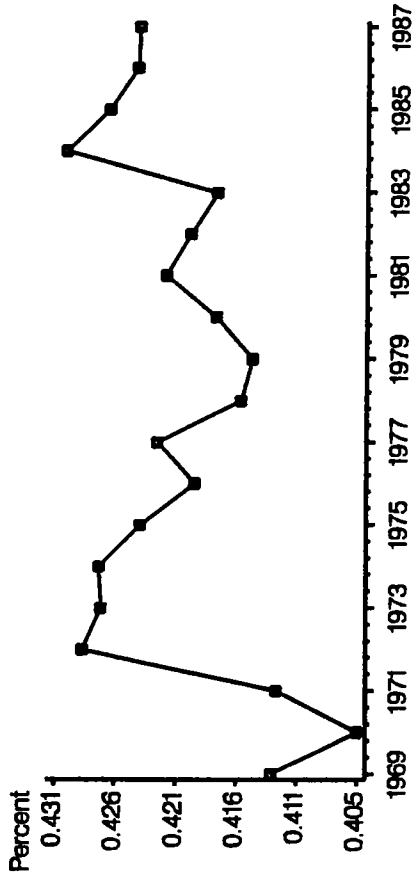


CHART 5C  
ADAIR COUNTY  
POPULATION 5 AND UNDER  
as a Percent of Total Population

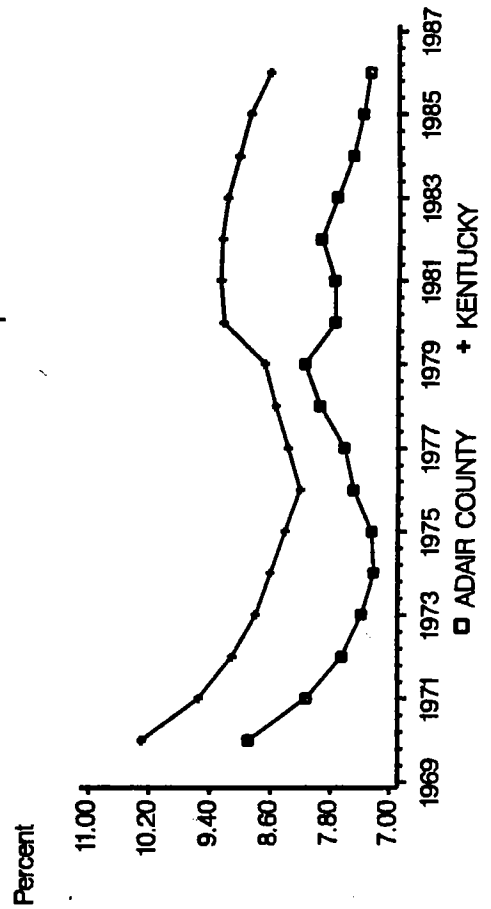
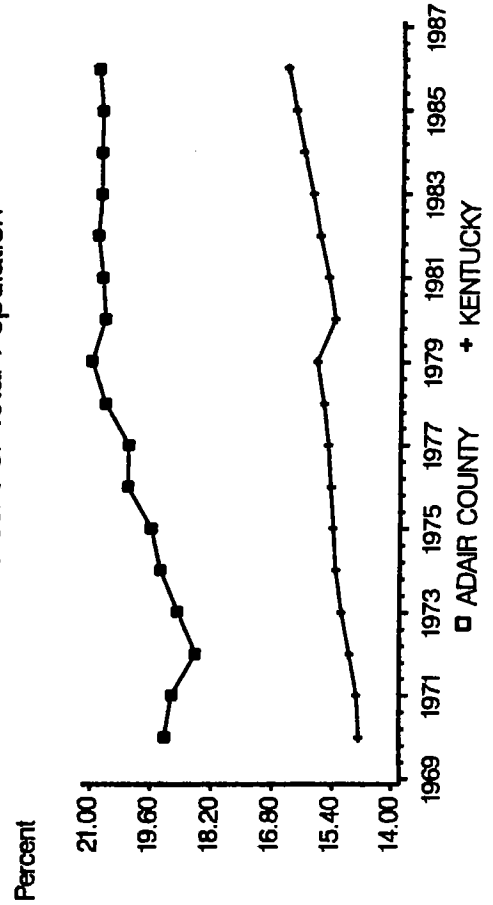


CHART 5D  
ADAIR COUNTY  
POPULATION 60 AND OVER  
as a Percent of Total Population





ADAIR COUNTY

PERSONAL INCOME  
In Constant 1988 Dollars

Year	County Personal Income (M\$)	Percent of Kentucky (%)	Per Capita Personal Income (\$)	Percent of Kentucky (%)
1969	85	0.30	6,413	72.2
1970	86	0.29	6,541	71.8
1971	93	0.31	6,863	74.1
1972	100	0.31	6,990	71.7
1973	108	0.31	7,473	72.8
1974	109	0.31	7,450	71.9
1975	102	0.29	6,940	67.6
1976	111	0.29	7,490	69.8
1977	118	0.29	7,793	69.7
1978	123	0.29	8,150	70.5
1979	128	0.30	8,486	72.2
1980	129	0.31	8,446	73.2
1981	133	0.31	8,602	73.4
1982	132	0.31	8,523	73.8
1983	131	0.31	8,494	74.6
1984	147	0.33	9,213	76.8
1985	147	0.33	9,224	76.9
1986	151	0.33	9,550	78.0
1987	155	0.33	9,775	78.2

COMPONENTS OF PERSONAL INCOME  
In Constant 1988 Dollars

Year	EARNINGS			TRANSFER PAYMENTS			INCOME from PROPERTY		
	M\$	Percent of Personal Income		M\$	Percent of Personal Income		M\$	Percent of Personal Income	
		County	Kentucky		County	Kentucky		County	Kentucky
1969	65	76.7	79.2	13	15.8	10.9	6	7.5	9.9
1970	64	74.1	77.9	15	17.5	11.9	7	8.4	10.2
1971	70	74.6	77.0	16	17.1	12.9	8	8.3	10.1
1972	75	74.9	77.3	17	16.9	12.9	8	8.3	9.7
1973	79	73.7	76.6	19	17.2	13.6	10	9.1	9.7
1974	77	70.6	75.5	21	19.0	14.4	11	10.3	10.1
1975	68	66.3	73.3	24	23.4	16.5	11	10.3	10.1
1976	75	67.5	73.9	25	22.8	16.1	11	9.7	10.0
1977	81	68.6	74.6	26	21.7	15.3	11	9.7	10.1
1978	85	69.0	75.0	26	21.0	14.6	12	10.0	10.4
1979	88	68.9	74.1	26	20.5	15.1	14	10.6	10.8
1980	84	65.3	71.1	29	22.2	16.7	16	12.5	12.2
1981	84	63.3	69.3	30	22.8	16.8	18	13.8	13.8
1982	80	60.3	67.5	32	24.5	17.6	20	15.1	14.9
1983	76	57.8	66.6	35	26.3	18.4	21	16.0	15.1
1984	90	60.9	67.8	36	24.5	17.3	22	14.7	14.9
1985	87	59.5	67.2	35	24.1	17.6	24	16.4	15.3
1986	91	60.1	67.1	36	23.9	17.6	24	15.9	15.3
1987	94	60.7	67.5	36	23.5	17.2	24	15.7	15.3

ADAIR COUNTY

SECTOR EARNINGS as a PERCENT of TOTAL COUNTY EARNINGS and  
as a PERCENT of KENTUCKY SECTOR EARNINGS

YEAR	MANUFACTURING		FARMING		MINING	
	TOTAL	KENTUCKY	TOTAL	KENTUCKY	TOTAL	KENTUCKY
1969	5.2	0.05	33.5	1.35	1.4	0.11
1970	5.5	0.05	29.1	1.29	1.6	0.09
1971	4.2	0.05	23.4	1.38	1.6	0.11
1972	5.6	0.06	26.3	1.33	2.1	0.14
1973	6.2	0.06	32.2	1.37	2.6	0.15
1974	8.0	0.07	32.6	1.29	2.3	0.09
1975	11.6	0.10	22.2	1.10	1.4	0.04
1976	12.0	0.10	22.3	1.08	1.4	0.04
1977	11.2	0.10	26.3	1.18	1.2	0.03
1978	11.3	0.10	26.0	1.33	1.1	0.03
1979	14.1	0.12	24.9	1.25	1.7	0.05
1980	17.6	0.16	20.0	1.18	2.1	0.06
1981	18.0	0.16	21.5	0.95	2.9	0.08
1982	17.2	0.16	19.5	0.99	3.2	0.09
1983	18.8	0.16	9.8	1.11	2.6	0.08
1984	18.6	0.19	18.1	0.97	2.6	0.09
1985	22.1	0.22	11.6	0.84	1.9	0.07
1986	22.1	0.23	10.6	0.97	0.9	0.04
1987	21.1	0.22	12.5	1.02	0.8	0.04

YEAR	SERVICES		TRADE		STATE and LOCAL GOVERNMENT	
	TOTAL	KENTUCKY	TOTAL	KENTUCKY	TOTAL	KENTUCKY
1969	15.3	0.28	16.6	0.25	10.4	0.27
1970	14.0	0.25	18.6	0.27	11.9	0.29
1971	12.3	0.28	14.9	0.28	9.9	0.30
1972	13.9	0.30	14.4	0.26	10.6	0.31
1973	14.2	0.27	16.5	0.26	11.4	0.30
1974	14.4	0.27	16.5	0.25	11.2	0.29
1975	16.7	0.26	19.5	0.25	13.5	0.29
1976	16.0	0.25	19.5	0.25	12.9	0.28
1977	14.9	0.24	17.8	0.24	12.2	0.28
1978	14.8	0.24	17.8	0.24	12.3	0.27
1979	13.6	0.22	17.3	0.24	12.5	0.28
1980	14.5	0.22	16.8	0.23	13.2	0.28
1981	15.2	0.23	14.7	0.21	12.9	0.28
1982	15.8	0.22	15.4	0.22	13.5	0.28
1983	18.3	0.22	17.3	0.22	15.3	0.29
1984	16.4	0.23	14.5	0.22	13.7	0.31
1985	18.2	0.24	15.2	0.23	15.2	0.33
1986	19.5	0.25	14.8	0.23	15.2	0.33
1987	20.2	0.25	13.6	0.21	15.1	0.33

ADAIR COUNTY

COUNTY EMPLOYMENT by SECTOR

YEAR	MANUFACTURING		FARMING		MINING	
	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL
1969	289	6.2	1,754	37.9	69	1.5
1970	316	6.8	1,743	37.4	59	1.3
1971	322	6.2	1,731	33.1	77	1.5
1972	398	7.6	1,726	32.8	111	2.1
1973	439	8.7	1,739	34.5	120	2.4
1974	471	9.3	1,740	34.5	104	2.1
1975	568	11.3	1,808	35.8	70	1.4
1976	581	11.0	1,985	37.6	66	1.3
1977	625	11.4	2,064	37.6	59	1.1
1978	628	11.0	2,170	38.2	58	1.0
1979	794	13.7	2,071	35.7	71	1.2
1980	891	15.0	2,057	34.7	77	1.3
1981	911	14.9	2,083	34.1	89	1.5
1982	832	13.6	2,063	33.7	131	2.1
1983	822	12.9	2,144	33.7	133	2.1
1984	1,004	14.9	2,055	30.6	147	2.2
1985	1,133	16.4	2,006	29.0	116	1.7
1986	1,131	16.1	2,033	28.9	91	1.3
1987	1,155	16.1	1,974	27.6	80	1.1

YEAR	SERVICES		TRADE		STATE and LOCAL GOVERNMENT	
	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL
1969	646	14.0	778	16.8	475	10.3
1970	640	13.7	755	16.2	482	10.3
1971	757	14.5	820	15.7	481	9.2
1972	869	16.5	721	13.7	482	9.2
1973	904	17.9	722	14.3	479	9.5
1974	905	18.0	706	14.0	477	9.5
1975	873	17.3	693	13.7	475	9.4
1976	907	17.2	736	13.9	463	8.8
1977	928	16.9	755	13.7	450	8.2
1978	935	16.4	792	13.9	452	7.9
1979	914	15.8	806	13.9	485	8.4
1980	914	15.4	819	13.8	496	8.4
1981	1,007	16.5	824	13.5	486	8.0
1982	1,025	16.8	847	13.8	463	7.6
1983	1,088	17.1	856	13.5	502	7.9
1984	1,221	18.2	890	13.2	534	7.9
1985	1,256	18.2	934	13.5	626	9.1
1986	1,294	18.4	952	13.5	644	9.2
1987	1,369	19.1	959	13.4	663	9.3

ADAIR COUNTY

EMPLOYMENT STATISTICS

YEAR	TOTAL EMPLOYMENT	AVERAGE EARNINGS		UNEMPLOYMENT RATE	
		COUNTY	KENTUCKY	COUNTY	KENTUCKY
1969	4,628	\$12,113	\$17,440	.	4.2
1970	4,660	\$11,896	\$17,811	7.3	4.4
1971	5,222	\$14,033	\$18,166	4.3	5.1
1972	5,257	\$14,060	\$18,970	5.3	6.0
1973	5,039	\$13,655	\$19,232	3.9	3.7
1974	5,038	\$13,168	\$19,008	4.5	4.5
1975	5,044	\$11,306	\$18,976	7.5	7.3
1976	5,278	\$11,621	\$19,563	5.8	5.6
1977	5,496	\$12,017	\$20,031	4.9	4.7
1978	5,688	\$12,055	\$20,121	6.1	5.3
1979	5,802	\$12,361	\$20,110	5.8	5.5
1980	5,921	\$11,401	\$19,439	6.8	8.0
1981	6,105	\$11,191	\$19,286	7.4	8.4
1982	6,117	\$10,672	\$18,931	9.3	10.6
1983	6,353	\$9,500	\$18,358	10.2	11.6
1984	6,723	\$11,056	\$19,080	9.2	9.3
1985	6,912	\$10,584	\$18,676	8.9	9.5
1986	7,028	\$10,795	\$18,627	9.1	9.3
1987	7,154	\$10,960	\$18,636	8.6	8.8

POPULATION STATISTICS

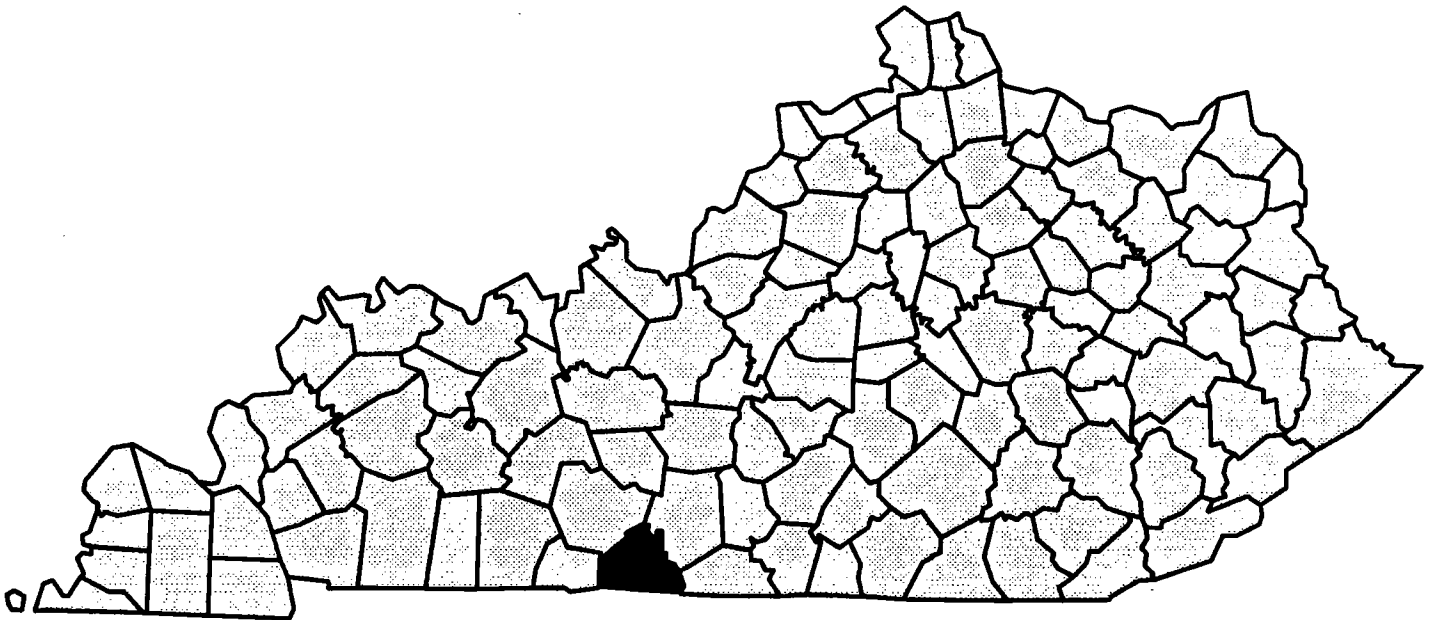
YEAR	POPULATION	% OF KY	PERCENT UNDER AGE 6		PERCENT AGE 60+	
			COUNTY	KENTUCKY	COUNTY	KENTUCKY
1969	13,200	0.41	.	.	.	.
1970	13,100	0.41	8.9	10.3	19.3	14.8
1971	13,600	0.41	8.1	9.6	19.1	14.8
1972	14,300	0.43	7.6	9.1	18.6	15.0
1973	14,400	0.43	7.4	8.8	19.0	15.2
1974	14,600	0.43	7.2	8.6	19.4	15.3
1975	14,700	0.42	7.2	8.4	19.6	15.4
1976	14,800	0.42	7.5	8.2	20.1	15.5
1977	15,100	0.42	7.6	8.4	20.1	15.5
1978	15,000	0.42	7.9	8.5	20.7	15.6
1979	15,100	0.41	8.1	8.7	21.0	15.8
1980	15,300	0.42	7.7	9.2	20.7	15.4
1981	15,500	0.42	7.7	9.3	20.8	15.5
1982	15,500	0.42	7.9	9.2	20.9	15.7
1983	15,500	0.42	7.7	9.2	20.8	15.9
1984	16,000	0.43	7.5	9.0	20.8	16.1
1985	15,900	0.43	7.4	8.9	20.8	16.3
1986	15,800	0.42	7.3	8.6	20.9	16.5
1987	15,800	0.42	.	.	.	.





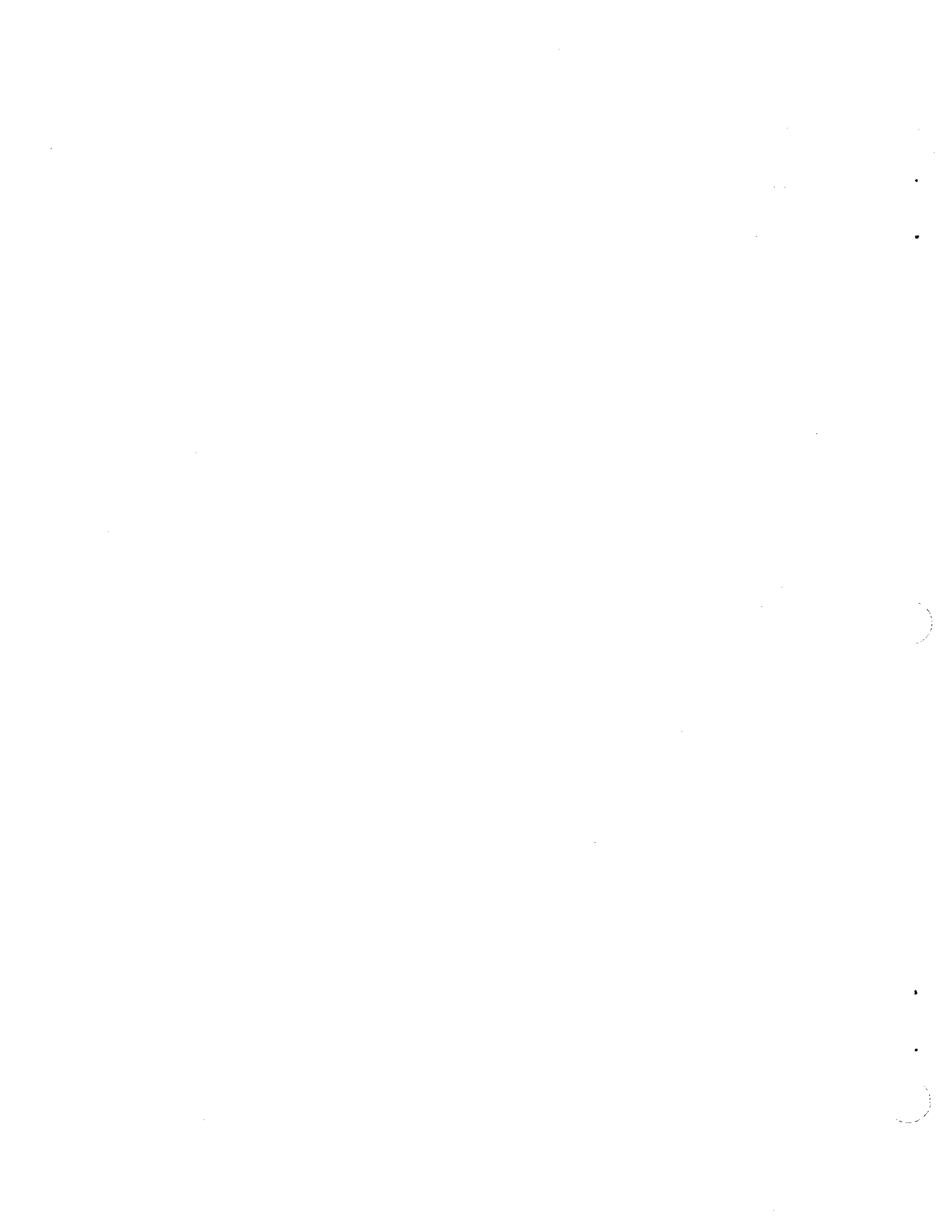
ECONOMIC TRENDS IN  
KENTUCKY COUNTIES  
1969 – 1987

**ALLEN COUNTY**



Prepared by  
Virginia Wilson  
Donna A. Cantrell

RESEARCH MEMORANDUM 438  
Legislative Research Commission  
Frankfort, Kentucky  
February, 1990





ECONOMIC TRENDS IN  
KENTUCKY COUNTIES  
1969 – 1987

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1990

ALLEN COUNTY

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RESEARCH MEMORANDUM 438  
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## FOREWORD

This publication is one of a set of 120, highlighting economic trends in each county in Kentucky from 1969-1987. This effort is part of the ongoing activities sponsored by the Legislative Research Commission to provide a long-term perspective on issues for decision makers. The economies of individual counties do not always parallel overall state trends. This set of publications is an attempt to look at the economic trends in each county over time and to point out where the economies of individual counties may be performing differently from the economy of the state as a whole.

This publication was prepared by Virginia Wilson and Donna Cantrell. Susan Dance assisted in production of the manuscript and Charles Bush edited the report. The assistance of Carol Straus from the Center for Business and Economic Research at the University of Kentucky in deciphering data is gratefully acknowledged.

Vic Hellard, Jr.  
Director

The Capitol  
Frankfort  
February, 1990



## SUMMARY

The Allen County economy, as measured by personal income, almost doubled from 1969 to 1987. Allen County has also increased its share of Kentucky personal income over this period, indicating that the county economy is growing at a faster rate than the state economy.

While the percentage of income derived from earnings is almost equal to the state, the economic structure underlying this income generation is quite different. The manufacturing sector has been very strong in Allen County and has increased its share of both earnings and employment. However, this sector has been declining at the state level. While the service sector has been the fastest growing sector of the state economy, this sector has not increased its share of either earnings or employment in the Allen County economy. Finally, the trade sector has just maintained its share of employment while experiencing declining earnings. At the state level, employment in the trade sector has increased substantially.

The high concentration and growth in the manufacturing sector has been beneficial for the local economy, in that manufacturing is a relatively high wage industry. However, manufacturing industries are very sensitive to changes in consumer demand and are generally more susceptible to economic volatility. Consequently, while a high concentration in manufacturing enabled the county to enjoy economic expansion during a period of national economic growth, it may also make the county more susceptible to recessionary contractions.



## INTRODUCTION

This is one of a series of reports called Economic Trends in Kentucky Counties. The purpose of this series is to describe the economic structure of Kentucky counties and to assess their economic performance relative to their own history and relative to the Kentucky economy. Information on the structure and patterns of change in county economies and an understanding of their relationship to the Kentucky economy can help in making policy decisions that are intended to shape Kentucky's economic future.\*

When assessing any economy there are several pertinent questions which may be addressed. The first concerns changes in the absolute size of the economy over time. Here the relevant comparison is between the county economy and its own history. Since most economic variables are given in dollars and since inflation causes the value of a dollar to vary over time, all dollar values in this report are presented in constant 1988 dollars. This allows analysis of real changes over time by controlling for the effects of inflation.

A second question concerns the structure and nature of the county economy. The structure of an economy refers to the relative share contributed by the various segments of the economy, while the nature deals with how this share has changed over time.

A third question concerns the performance of the county economy when compared to the Kentucky economy. For example, if a county has a higher proportion of earnings or employment in a particular sector it would indicate a specialization in that sector. Differences in economic structure may explain variations in relative economic well-being between a county and the state as a whole.

Economic data for counties are usually published after a lag of two years. Therefore, most data in this report cover the period 1969 to 1987. All data for this report was obtained from the Kentucky Economic Information System, an on-line database maintained by the University of Kentucky Center for Business and Economic Development.

There are certain caveats which should be remembered when analyzing data. First, it is a common and useful approach to evaluate the percentage an economic sector contributes to the total economy. However, one must remember that a sector's percentage contribution may decline even when its absolute value is increasing if another sector's contribution is growing at a faster rate. Secondly, when reviewing data in graphical analyses, the scales used to present data should be noted. In this report most graphs are presented with the narrowest scale which will cover all data points. This can accentuate visual patterns over time even when absolute changes are relatively small.

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\*For an analysis of economic trends in Kentucky, see Virginia Wilson, Patterns of Growth and Decline in the Kentucky Economy 1969-1988, Research Memorandum 437, Legislative Research Commission, November 1989.





## ECONOMIC TRENDS IN ALLEN COUNTY

The following analysis includes a brief description of the county economy and is accompanied by graphical illustrations. Data tables are also included at the end of this report. Three principal components of the Allen County economy are analyzed. They are:

1. Personal Income
2. Earnings
3. Employment

### Personal Income

Personal income is often used as a measure of the economic activity in an area. Personal income is the sum of all the dollar income received by individuals in an area from any legal source. Personal income data is published by the Bureau of Economic Analysis (BEA) for most major geographic regions, including states, counties, and major cities.

In general, income can be obtained in three ways. First, it can be earned by the work of an individual. This type of income includes wage and salary income and proprietors' earnings. Second, income can be earned by property. This component includes earnings from rents, dividends, and interest. Finally, income can be received as a gift or an entitlement. This type of income constitutes the component of personal income called transfer payments. Included in this component is income from sources such as retirement benefits, unemployment benefits, food stamps, and medical programs such as Medicare and Medicaid.

As can be seen in Chart 1A, the Allen County economy, as measured by personal income, increased from \$85 million in 1969 to \$160 million in 1987, after adjusting for inflation. Chart 1B shows Allen County total personal income as a percent of Kentucky total personal income. While the pattern has been cyclical, Allen County has generally increased its share of Kentucky personal income.

A similar pattern emerges from an examination of per capita personal income. Per capita personal income is simply the total personal income of an area divided by its population. Per capita personal income is often used as a measure of the economic well-being of the residents of an area. Charts 1C and 1D indicate that while Allen County per capita income increased over the time period to a level of \$10,938 per person in 1987, Allen County per capita personal income was still only 87.5 percent of Kentucky per capita personal income.

A better understanding of the nature of economic activity can be gleaned from an examination of the relative contribution of the components of personal income and how their share has changed over time. This information is illustrated in Charts 2A-2D. While total earnings increased from \$66 million in 1969 to \$109 million in 1987 (in constant 1988 dollars), earnings were volatile over the period. Earnings accounted for 68.3 percent of Allen

County's total personal income in 1987, compared to Kentucky's 67.5 percent share.

Transfer payments contributed \$13 million to total personal income in 1969 and \$30 million in 1987. During the period, transfer payments contributed a larger share to personal income in Allen County than in Kentucky. In 1987, 18.9 percent of personal income was derived from transfer payments, compared to 17.2 percent for the state.

Income from property in Allen County grew at a stable rate through the time period. Income from property totalled \$6 million in 1969 and increased to \$20 million in 1987.

### Earnings

Earnings are the component of personal income reflecting payments to individuals in return for labor. Earnings include both wage and salary and proprietor's income. Since 1969, Allen County has experienced strong growth in the percent of earnings from manufacturing (Chart 3A). In 1969, Allen County received 20.9 percent of total earnings from manufacturing, which increased to 31.8 percent in 1987. The county trend toward increasing concentration in manufacturing is different from that of the state, where the percentage of earnings from manufacturing has shown a steady decline over the period.

Chart 3A also indicates that farming's contribution to total county earnings decreased from 19.0 percent in 1969 to 14.7 percent in 1987. Earnings from mining were minimal throughout the period.

The percent of earnings from the service sector remained relatively unchanged (Chart 3B). Again, this trend differs from that of the state, where the percentage of earnings from the services sector increased significantly since the late 1970's. Earnings in both the trade and state and local government sectors declined slightly. These trends are unlike state trends, where the percent of earnings from these sectors was stable throughout this period.

Average earnings per job (adjusted for inflation) for Allen County and Kentucky are shown in Chart 3D. In Kentucky, average earnings per job reached a high of \$20,121 per person in 1978. Since then, average earnings per job declined and in 1987 they were \$18,636 per person. Average earnings per job have been volatile in Allen County. Similar to state patterns, average earnings peaked in 1979 at \$15,828 and declined to a level of \$14,870 in 1987, well below the Kentucky average.

### Employment

Employment is considered any activity for which one receives financial remuneration in the form of wages or profits. Total employment in Allen County increased substantially during the data period. In 1969, total employment stood at 4,563 people. By 1987, that figure had increased to 6,127.

The unemployment rate, often used as an indicator of economic well-being, is the ratio of unemployed to the total civilian labor force. Unemployment is described as a condition of being out of work while actively seeking employment within the last thirty days. The civilian labor force is described as the proportion of population age 16 or older employed or actively seeking employment. Annual unemployment rates for Kentucky and Allen County are presented in Chart 4B. While county unemployment patterns have paralleled state patterns, Allen County unemployment rates have generally been more extreme, exhibiting higher highs and lower lows. In 1987, the Allen County unemployment rate equaled the state rate of 8.8 percent.

Another employment concept includes the discouraged worker. Discouraged workers are persons who want jobs but made no attempt to find work in the last thirty days because they believe they could not find it. These individuals are not included when calculating official unemployment rates. The Cabinet for Human Resources does not estimate discouraged workers by county. However, preliminary research by the Cabinet indicates that the inclusion of discouraged workers in the civilian labor force estimate would increase the unemployment rate by approximately four or the state. This figure would vary by county depending on the labor market in a county or within commuting distance.

Employment in the goods-producing industries is illustrated in Chart 4C. The percent of employment in manufacturing increased from 19.7 percent in 1969 to 25.3 percent in 1987. The trend toward an increasing concentration in manufacturing differs from that of Kentucky where manufacturing employment has declined.

The percent of Allen County total employment in agriculture declined from 28.3 percent in 1969 to 24.5 percent in 1987. It is interesting to note that while the percent of total employment in agriculture equaled that in manufacturing in 1987, the percent of earnings from manufacturing exceeded that from agriculture, reflecting the higher earnings in manufacturing industries.

Employment in the non-goods-producing industries is presented in Chart 4D. The percent of employment in services has declined slightly over the period. Trade employment declined slightly from 1975 though the mid-eighties. Since that time, the sector gained employment share. Conversely, Kentucky employment in the services and trade component of non-goods-producing industries has shown substantial increases. State and local government employment has been stable in both the county and the state.

## Population

The census conducted each decade counts the actual population in an area. Population is then statistically estimated through intervening years. The demographic composition of this population growth has important implications for the future demand for goods and services, and ultimately, the economic structure of Allen County.

The Allen County population grew from 12,600 in 1969 to 14,600 in 1987 (Chart 5A). Allen County's growth rates for the age group five and under have

generally paralleled those of the state. It was estimated that in 1986, 8.3 percent of Allen County's population was under six years of age, compared to 8.6 percent for the state. Conversely, for the same year 21.4 percent of the Allen County population was 60 years of age and over, while 16.5 percent of all Kentucky residents fell in this age group. The higher proportion of older residents may account for the county's greater reliance on transfer payments as a source of personal income.

CHART 1A  
ALLEN COUNTY  
REAL PERSONAL INCOME  
Millions of 1988 dollars

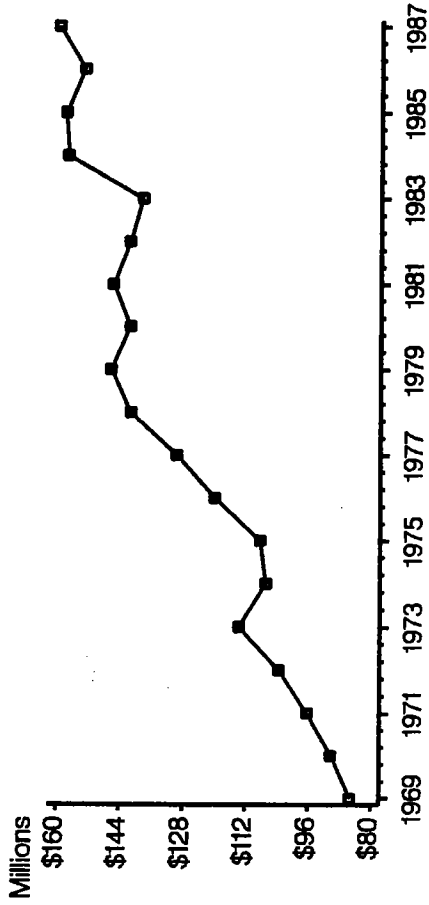


CHART 1B  
ALLEN COUNTY  
PERSONAL INCOME  
as a Percent of Kentucky Personal Income

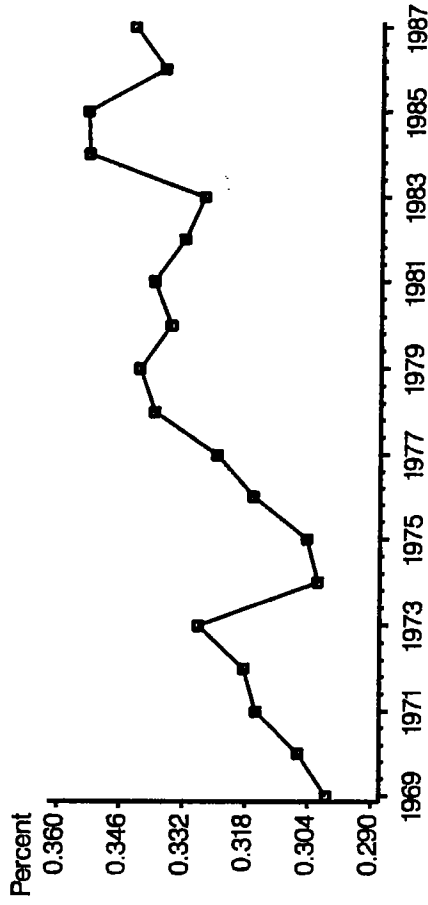


CHART 1C  
ALLEN COUNTY  
PER CAPITA PERSONAL INCOME  
in Constant 1988 Dollars

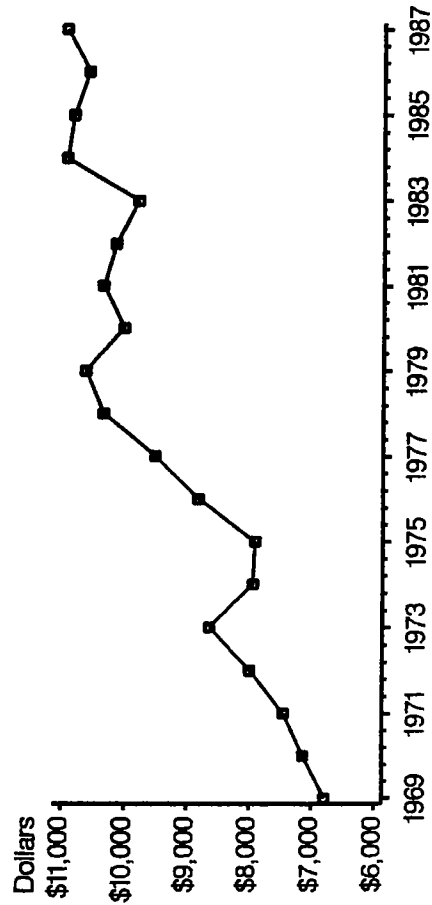


CHART 1D  
ALLEN COUNTY  
PER CAPITA PERSONAL INCOME  
as a Percent of Kentucky Per Capita Personal Income

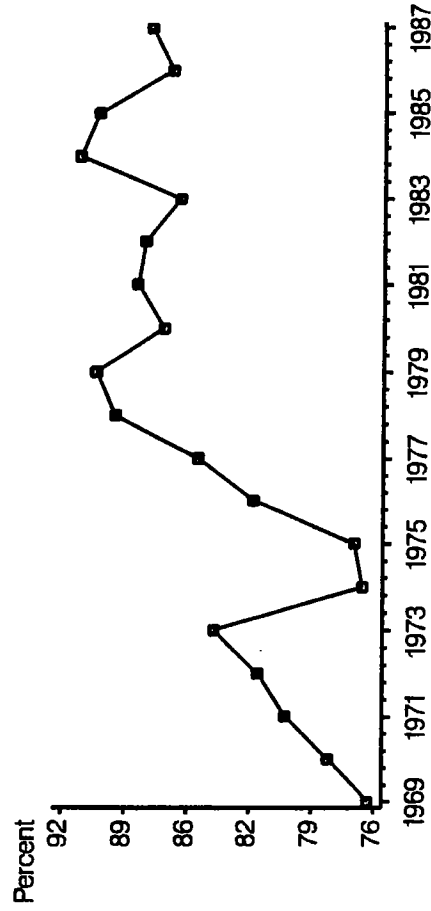


CHART 2A  
ALLEN COUNTY  
REAL TOTAL EARNINGS  
Millions of 1988 dollars

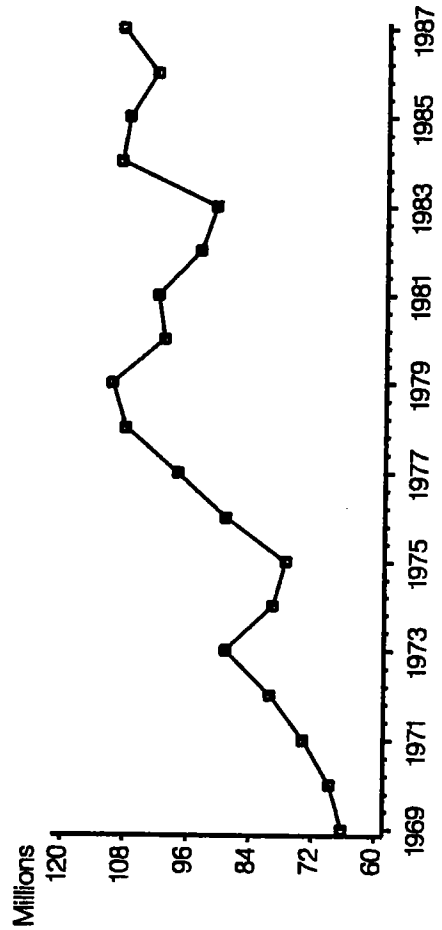


CHART 2B  
ALLEN COUNTY  
TRANSFER PAYMENTS and INCOME FROM PROPERTY  
Millions of 1988 Dollars

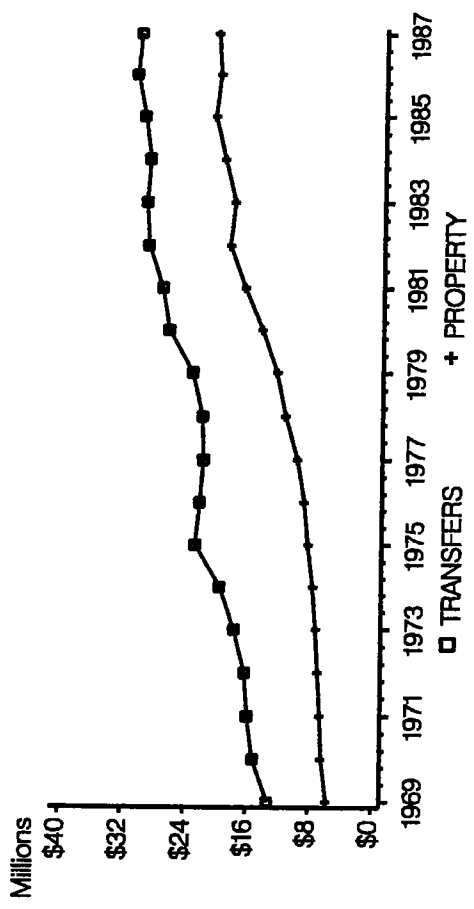


CHART 2C  
ALLEN COUNTY  
TOTAL EARNINGS  
as a Percent of Personal Income

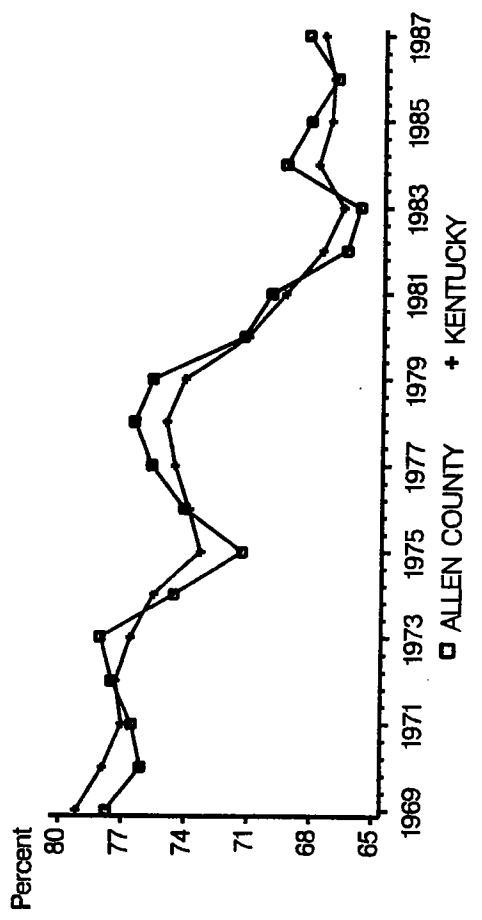


CHART 2D  
ALLEN COUNTY  
TRANSFER PAYMENTS  
as a Percent of Personal Income

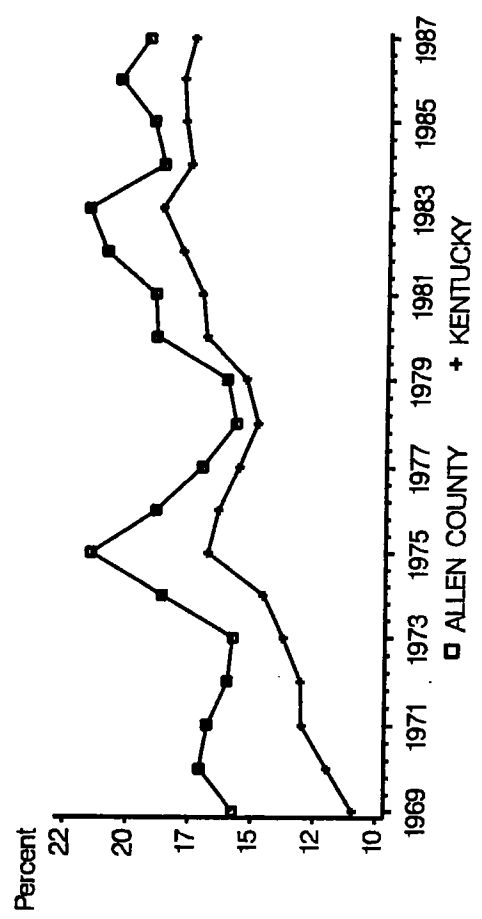


CHART 3A

ALLEN COUNTY

EARNINGS IN GOODS PRODUCING INDUSTRIES  
as a Percent of Total Earnings

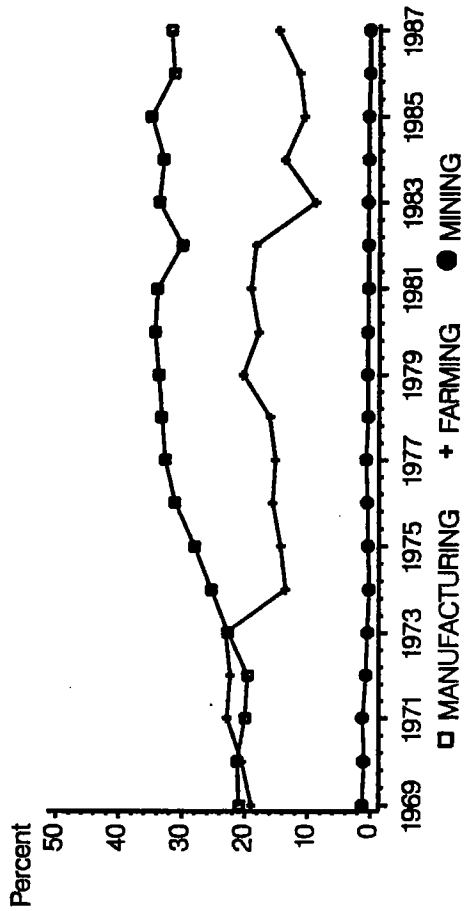


CHART 3B

ALLEN COUNTY

EARNINGS IN NON-GOODS PRODUCING INDUSTRIES  
as a Percent of Total Earnings

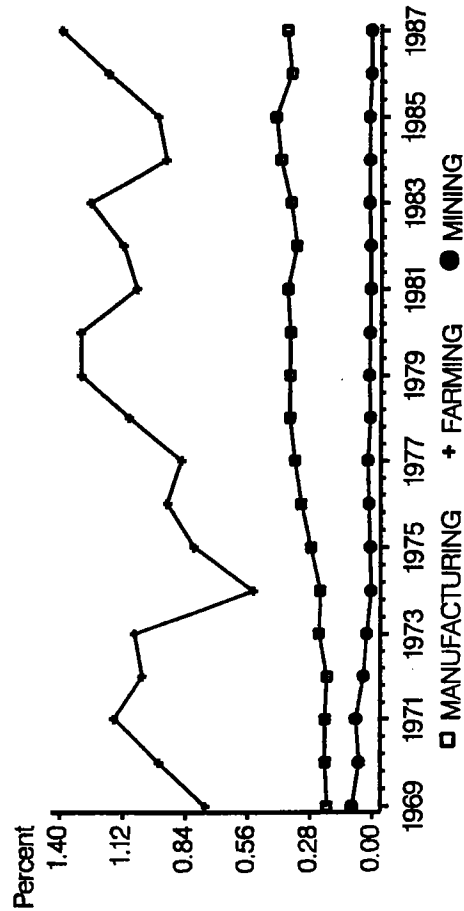


CHART 3C

ALLEN COUNTY

EARNINGS IN GOODS PRODUCING INDUSTRIES  
as a Percent of Kentucky Earnings

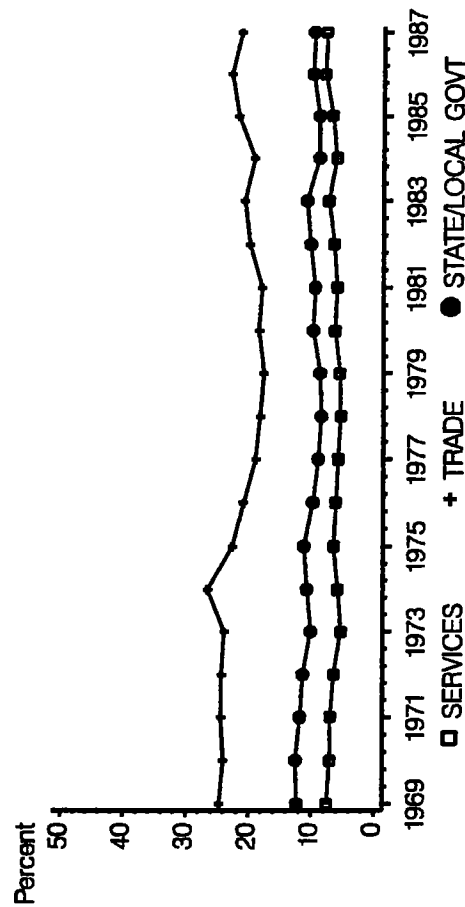


CHART 3D

ALLEN COUNTY

AVERAGE EARNINGS PER JOB  
in Constant 1988 Dollars

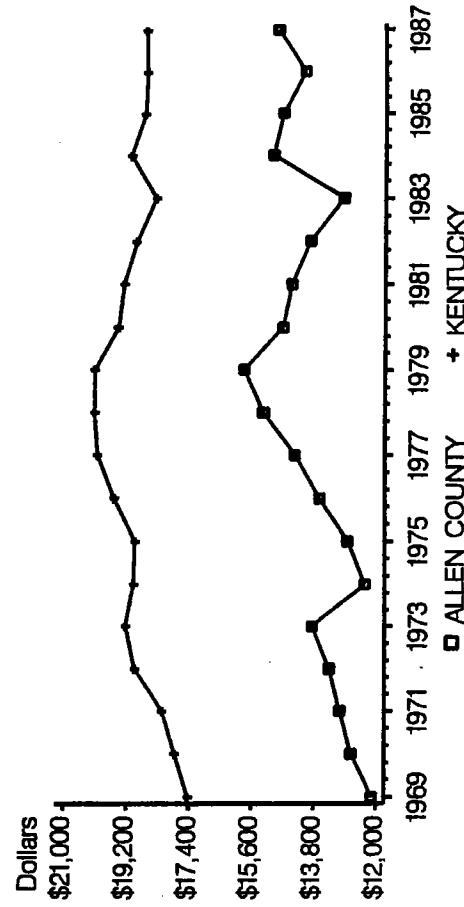


CHART 4A

ALLEN COUNTY

TOTAL EMPLOYMENT

Thousands of People

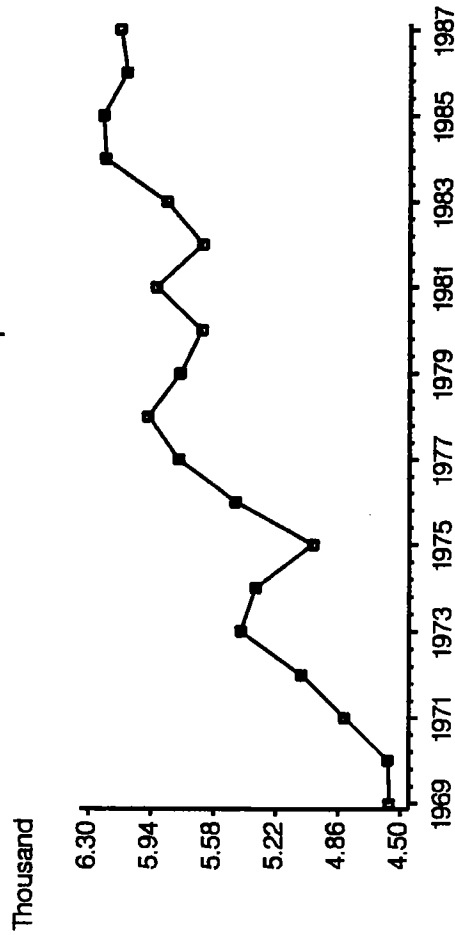


CHART 4B

ALLEN COUNTY

ANNUAL UNEMPLOYMENT RATE

Percent

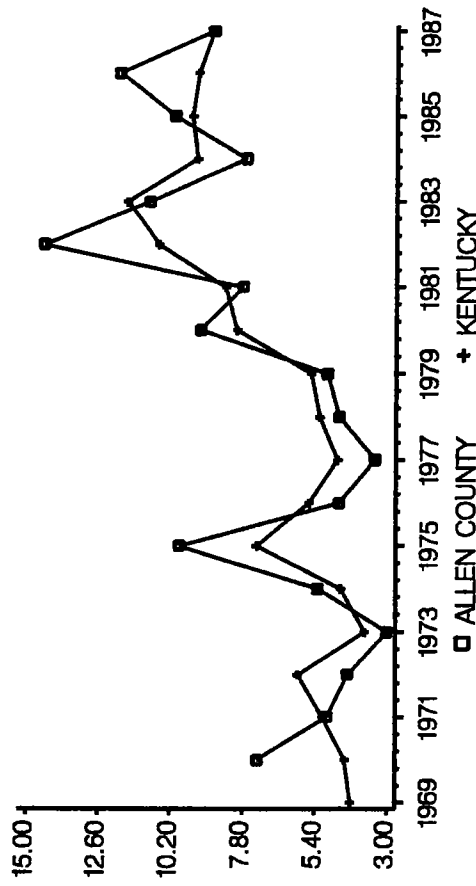


CHART 4C

ALLEN COUNTY

EMPLOYMENT IN GOODS PRODUCING INDUSTRIES

as a Percent of Total Employment

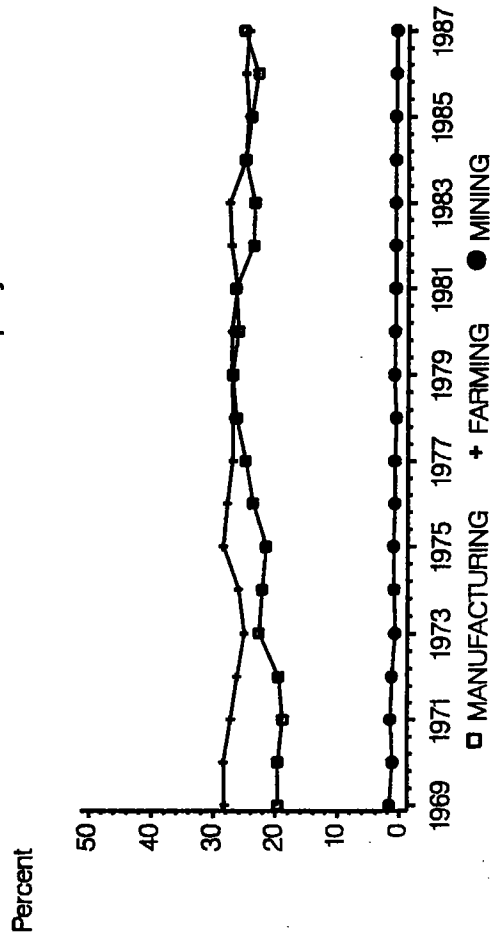


CHART 4D

ALLEN COUNTY

EMPLOYMENT IN NON-GOODS PRODUCING INDUSTRIES

as a Percent of Total Employment

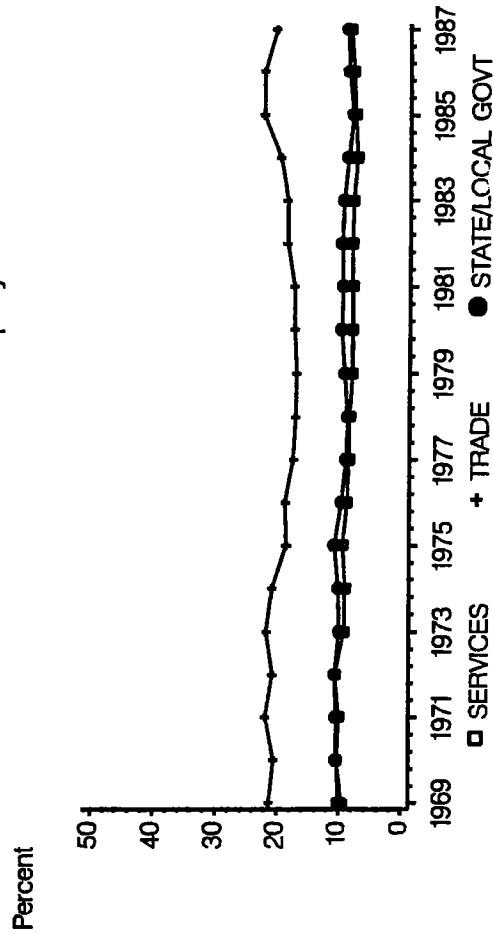




CHART 5A  
ALLEN COUNTY  
POPULATION  
Thousands of People

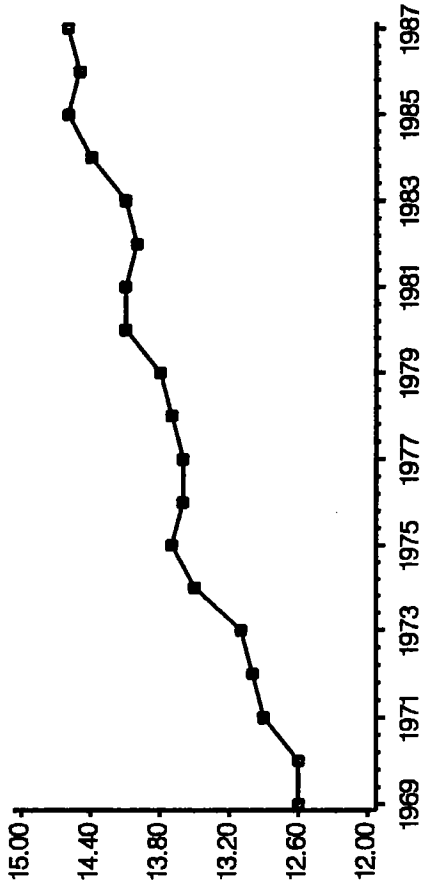


CHART 5B  
ALLEN COUNTY  
POPULATION  
as a Percent of Kentucky Population

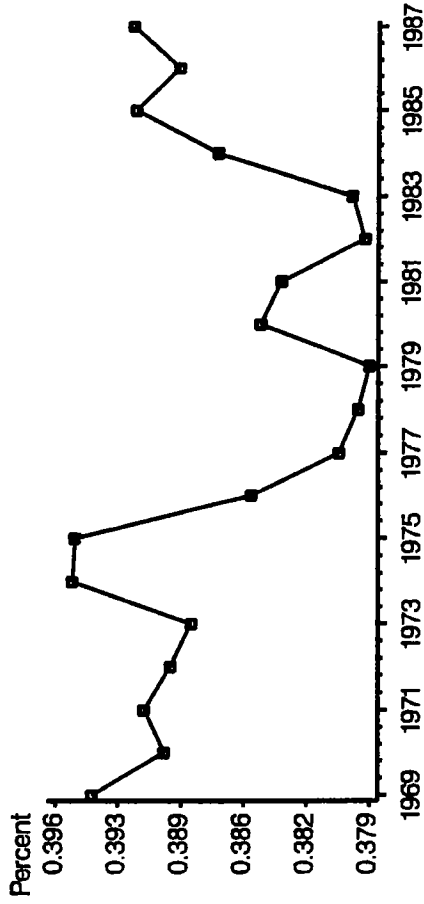


CHART 5C  
ALLEN COUNTY  
POPULATION 5 AND UNDER  
as a Percent of Total Population

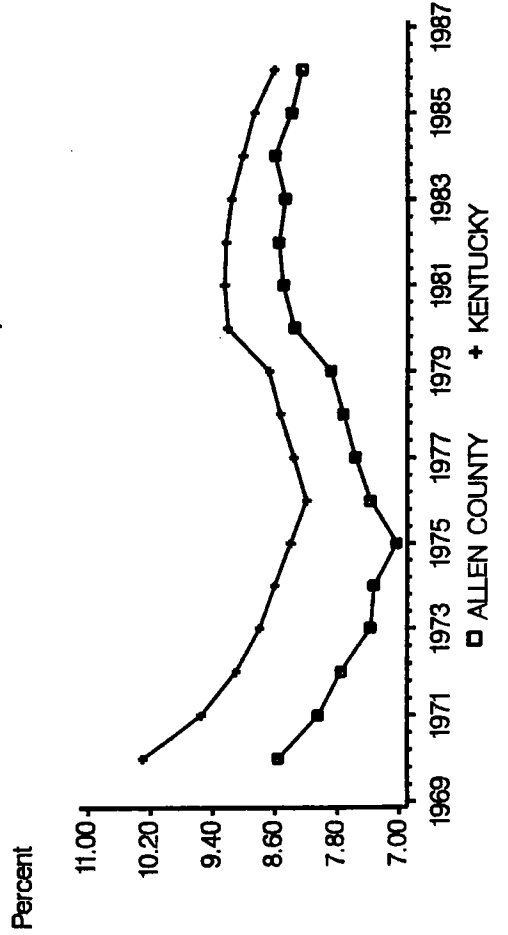
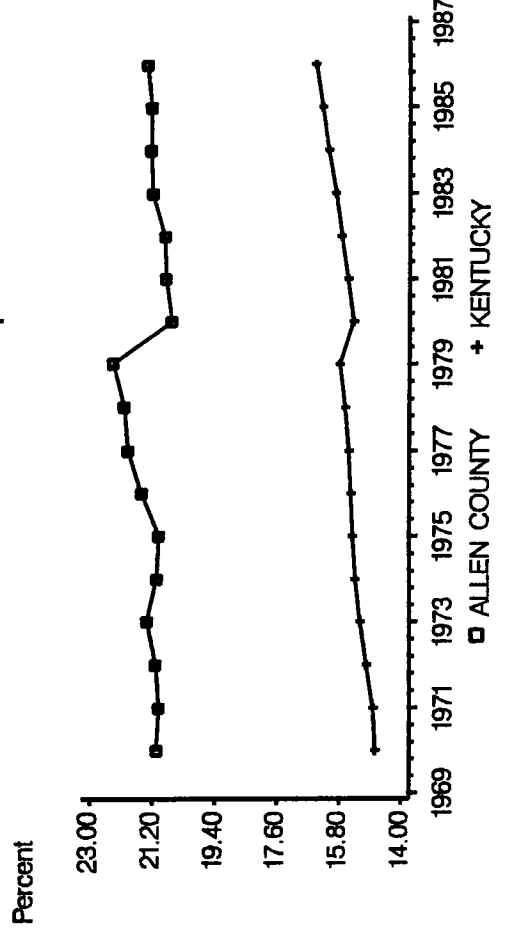


CHART 5D  
ALLEN COUNTY  
POPULATION 60 AND OVER  
as a Percent of Total Population



ALLEN COUNTY

PERSONAL INCOME  
In Constant 1988 Dollars

Year	County Personal Income (M\$)	Percent of Kentucky (%)	Per Capita Personal Income (\$)	Percent of Kentucky (%)
1969	85	0.30	6,784	76.3
1970	90	0.31	7,142	78.4
1971	96	0.32	7,459	80.6
1972	104	0.32	7,987	82.0
1973	114	0.33	8,652	84.3
1974	107	0.30	7,943	76.6
1975	108	0.30	7,912	77.1
1976	120	0.32	8,828	82.2
1977	130	0.32	9,510	85.1
1978	141	0.34	10,330	89.3
1979	146	0.34	10,616	90.3
1980	142	0.33	10,016	86.8
1981	146	0.34	10,340	88.2
1982	142	0.33	10,146	87.8
1983	138	0.33	9,794	86.0
1984	158	0.35	10,925	91.1
1985	158	0.35	10,819	90.2
1986	153	0.34	10,579	86.4
1987	160	0.34	10,938	87.5

COMPONENTS OF PERSONAL INCOME  
In Constant 1988 Dollars

Year	EARNINGS			TRANSFER PAYMENTS			INCOME from PROPERTY		
	M\$	Percent of Personal Income	County Kentucky	M\$	Percent of Personal Income	County Kentucky	M\$	Percent of Personal Income	County Kentucky
1969	66	77.7	79.2	13	15.5	10.9	6	6.7	9.9
1970	69	76.1	77.9	15	16.8	11.9	6	7.1	10.2
1971	74	76.6	77.0	16	16.5	12.9	7	6.9	10.1
1972	80	77.5	77.3	16	15.8	12.9	7	6.7	9.7
1973	89	78.0	76.6	18	15.6	13.6	7	6.4	9.7
1974	80	74.5	75.5	20	18.3	14.4	8	7.2	10.1
1975	77	71.3	73.3	23	21.0	16.5	8	7.7	10.1
1976	89	74.1	73.9	22	18.5	16.1	9	7.4	10.0
1977	98	75.7	74.6	22	16.8	15.3	10	7.5	10.1
1978	108	76.5	75.0	22	15.5	14.6	11	8.0	10.4
1979	111	75.7	74.1	23	15.9	15.1	12	8.5	10.8
1980	101	71.3	71.1	26	18.6	16.7	14	10.2	12.2
1981	102	70.0	69.3	27	18.6	16.8	17	11.4	13.8
1982	94	66.4	67.5	29	20.5	17.6	19	13.1	14.9
1983	91	65.8	66.6	29	21.2	18.4	18	13.1	15.1
1984	109	69.4	67.8	29	18.3	17.3	19	12.3	14.9
1985	108	68.2	67.2	30	18.8	17.6	21	13.1	15.3
1986	103	66.9	67.1	31	20.0	17.6	20	13.1	15.3
1987	109	68.3	67.5	30	18.9	17.2	20	12.8	15.3

ALLEN COUNTY

SECTOR EARNINGS as a PERCENT of TOTAL COUNTY EARNINGS and  
as a PERCENT of KENTUCKY SECTOR EARNINGS

YEAR	MANUFACTURING		FARMING		MINING	
	TOTAL	KENTUCKY	TOTAL	KENTUCKY	TOTAL	KENTUCKY
1969	20.9	0.20	19.0	0.75	1.2	0.09
1970	21.2	0.21	20.5	0.96	1.0	0.06
1971	20.0	0.21	22.9	1.16	1.2	0.07
1972	19.6	0.20	22.4	1.03	0.7	0.04
1973	22.7	0.24	23.1	1.07	0.4	0.03
1974	25.3	0.23	13.6	0.53	0.2	0.01
1975	28.0	0.28	14.3	0.80	0.4	0.01
1976	31.1	0.32	15.6	0.92	0.5	0.02
1977	32.7	0.35	15.2	0.86	0.7	0.02
1978	33.3	0.37	16.1	1.10	0.3	0.01
1979	33.7	0.37	20.3	1.31	0.5	0.02
1980	34.4	0.37	17.9	1.31	0.5	0.02
1981	34.0	0.39	19.1	1.06	0.3	0.01
1982	30.1	0.34	18.3	1.12	0.4	0.01
1983	33.7	0.37	8.9	1.26	0.5	0.02
1984	33.1	0.42	13.8	0.93	0.4	0.02
1985	35.0	0.44	10.7	0.97	0.4	0.02
1986	31.4	0.37	11.4	1.19	0.2	0.01
1987	31.8	0.39	14.7	1.39	0.2	0.01

YEAR	SERVICES		TRADE		STATE and LOCAL GOVERNMENT	
	TOTAL	KENTUCKY	TOTAL	KENTUCKY	TOTAL	KENTUCKY
1969	7.5	0.14	24.7	0.37	12.3	0.32
1970	7.0	0.13	24.0	0.37	12.5	0.32
1971	6.9	0.13	24.4	0.40	11.8	0.31
1972	6.4	0.13	24.3	0.40	11.3	0.31
1973	5.3	0.11	23.9	0.41	10.1	0.30
1974	5.9	0.11	26.5	0.41	10.8	0.28
1975	6.5	0.12	22.6	0.33	11.2	0.27
1976	6.1	0.12	20.9	0.33	9.9	0.26
1977	5.8	0.12	18.9	0.33	9.0	0.26
1978	5.4	0.11	18.2	0.32	8.5	0.25
1979	5.5	0.11	17.7	0.31	8.7	0.25
1980	6.3	0.12	18.4	0.31	9.8	0.26
1981	6.0	0.11	18.0	0.33	9.5	0.26
1982	6.5	0.11	19.9	0.34	10.2	0.26
1983	7.4	0.11	20.8	0.34	10.8	0.26
1984	6.1	0.11	19.2	0.37	8.9	0.25
1985	6.8	0.11	21.8	0.41	8.9	0.24
1986	8.0	0.12	22.9	0.40	9.9	0.24
1987	7.8	0.11	21.3	0.39	9.8	0.25

ALLEN COUNTY

COUNTY EMPLOYMENT by SECTOR

YEAR	MANUFACTURING		FARMING		MINING	
	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL
1969	897	19.7	1,292	28.3	76	1.7
1970	895	19.6	1,303	28.5	52	1.1
1971	908	18.8	1,318	27.3	73	1.5
1972	988	19.5	1,335	26.3	64	1.3
1973	1,230	22.7	1,365	25.2	42	0.8
1974	1,184	22.2	1,393	26.1	50	0.9
1975	1,079	21.5	1,432	28.6	52	1.0
1976	1,294	23.7	1,526	28.0	48	0.9
1977	1,446	25.0	1,568	27.1	52	0.9
1978	1,580	26.5	1,611	27.0	39	0.7
1979	1,565	27.1	1,571	27.2	55	1.0
1980	1,478	26.2	1,542	27.3	50	0.9
1981	1,576	26.6	1,558	26.3	47	0.8
1982	1,336	23.7	1,546	27.4	44	0.8
1983	1,376	23.5	1,620	27.7	48	0.8
1984	1,556	25.0	1,559	25.1	48	0.8
1985	1,498	24.1	1,528	24.5	49	0.8
1986	1,397	22.9	1,528	25.1	42	0.7
1987	1,548	25.3	1,500	24.5	38	0.6

YEAR	SERVICES		TRADE		STATE and LOCAL GOVERNMENT	
	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL
1969	461	10.1	970	21.3	432	9.5
1970	470	10.3	939	20.5	476	10.4
1971	478	9.9	1,056	21.9	507	10.5
1972	536	10.6	1,053	20.7	540	10.6
1973	497	9.2	1,177	21.7	540	10.0
1974	479	9.0	1,112	20.8	540	10.1
1975	472	9.4	933	18.6	541	10.8
1976	478	8.8	1,027	18.8	526	9.6
1977	492	8.5	1,018	17.6	518	9.0
1978	500	8.4	1,026	17.2	519	8.7
1979	464	8.0	988	17.1	531	9.2
1980	453	8.0	983	17.4	553	9.8
1981	470	7.9	1,036	17.5	565	9.6
1982	454	8.0	1,048	18.6	547	9.7
1983	463	7.9	1,087	18.6	551	9.4
1984	455	7.3	1,223	19.7	544	8.8
1985	477	7.7	1,392	22.4	494	7.9
1986	481	7.9	1,358	22.3	522	8.6
1987	510	8.3	1,246	20.3	537	8.8

ALLEN COUNTY

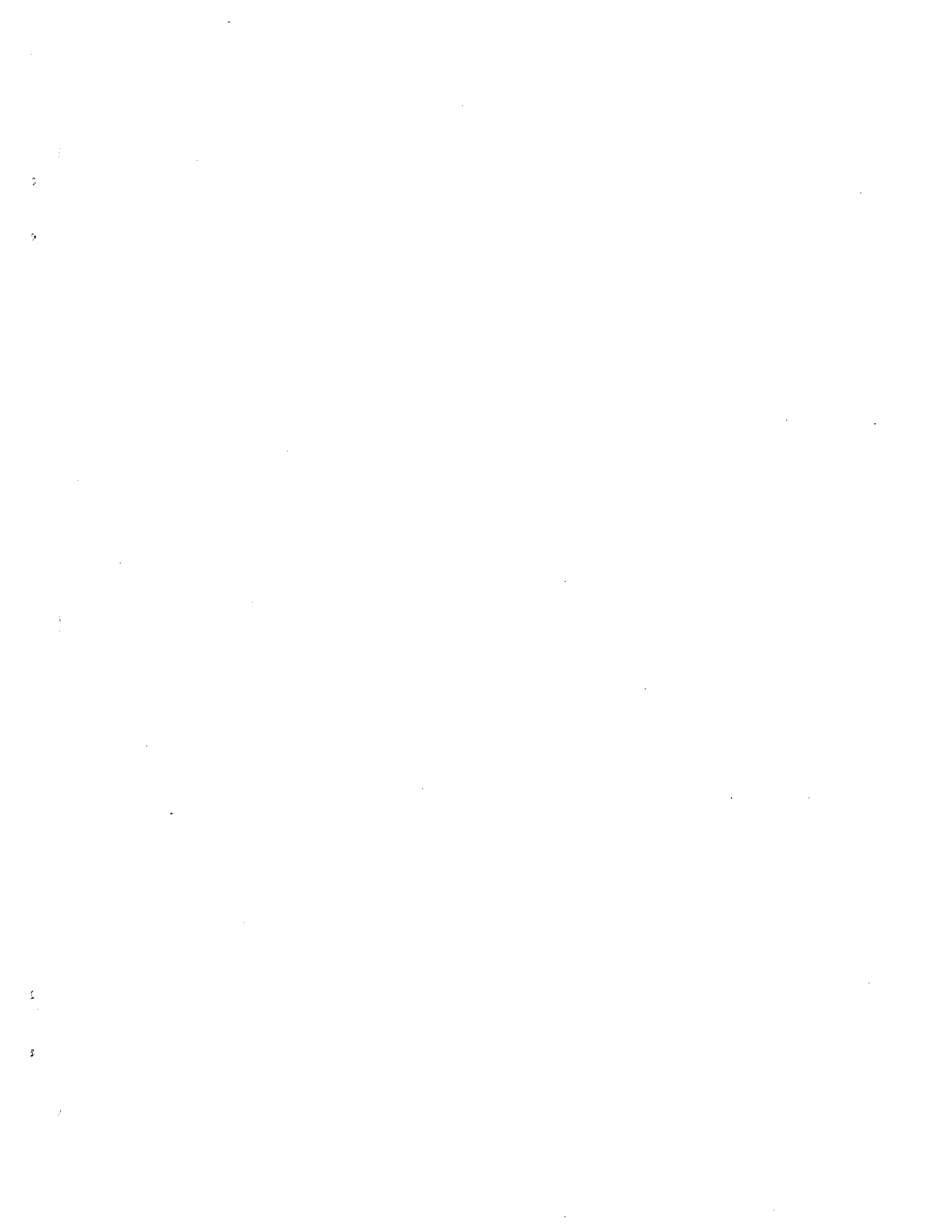
EMPLOYMENT STATISTICS

YEAR	TOTAL EMPLOYMENT	AVERAGE EARNINGS		UNEMPLOYMENT RATE	
		COUNTY	KENTUCKY	COUNTY	KENTUCKY
1969	4,563	\$12,134	\$17,440	.	4.2
1970	4,571	\$12,743	\$17,811	7.3	4.4
1971	4,824	\$13,052	\$18,166	5.0	5.1
1972	5,075	\$13,346	\$18,970	4.3	6.0
1973	5,425	\$13,851	\$19,232	3.0	3.7
1974	5,340	\$12,348	\$19,008	5.3	4.5
1975	5,007	\$12,841	\$18,976	9.9	7.3
1976	5,457	\$13,647	\$19,563	4.6	5.6
1977	5,786	\$14,374	\$20,031	3.4	4.7
1978	5,963	\$15,277	\$20,121	4.6	5.3
1979	5,776	\$15,828	\$20,110	5.0	5.5
1980	5,651	\$14,736	\$19,439	9.2	8.0
1981	5,914	\$14,475	\$19,286	7.8	8.4
1982	5,648	\$13,919	\$18,931	14.4	10.6
1983	5,856	\$12,969	\$18,358	10.9	11.6
1984	6,212	\$15,011	\$19,080	7.7	9.3
1985	6,226	\$14,738	\$18,676	10.1	9.5
1986	6,089	\$14,093	\$18,627	11.9	9.3
1987	6,127	\$14,870	\$18,636	8.8	8.8

POPULATION STATISTICS

YEAR	POPULATION	% OF KY	PERCENT UNDER AGE 6		PERCENT AGE 60+	
			COUNTY	KENTUCKY	COUNTY	KENTUCKY
1969	12,600	0.39	.	.	.	.
1970	12,600	0.39	8.6	10.3	21.1	14.8
1971	12,900	0.39	8.0	9.6	21.0	14.8
1972	13,000	0.39	7.7	9.1	21.1	15.0
1973	13,100	0.39	7.4	8.8	21.4	15.2
1974	13,500	0.40	7.3	8.6	21.1	15.3
1975	13,700	0.39	7.0	8.4	21.0	15.4
1976	13,600	0.39	7.4	8.2	21.5	15.5
1977	13,600	0.38	7.6	8.4	21.9	15.5
1978	13,700	0.38	7.7	8.5	22.0	15.6
1979	13,800	0.38	7.9	8.7	22.3	15.8
1980	14,100	0.38	8.4	9.2	20.7	15.4
1981	14,100	0.38	8.5	9.3	20.8	15.5
1982	14,000	0.38	8.5	9.2	20.9	15.7
1983	14,100	0.38	8.5	9.2	21.2	15.9
1984	14,400	0.39	8.6	9.0	21.3	16.1
1985	14,600	0.39	8.4	8.9	21.2	16.3
1986	14,500	0.39	8.3	8.6	21.4	16.5
1987	14,600	0.39	.	.	.	.





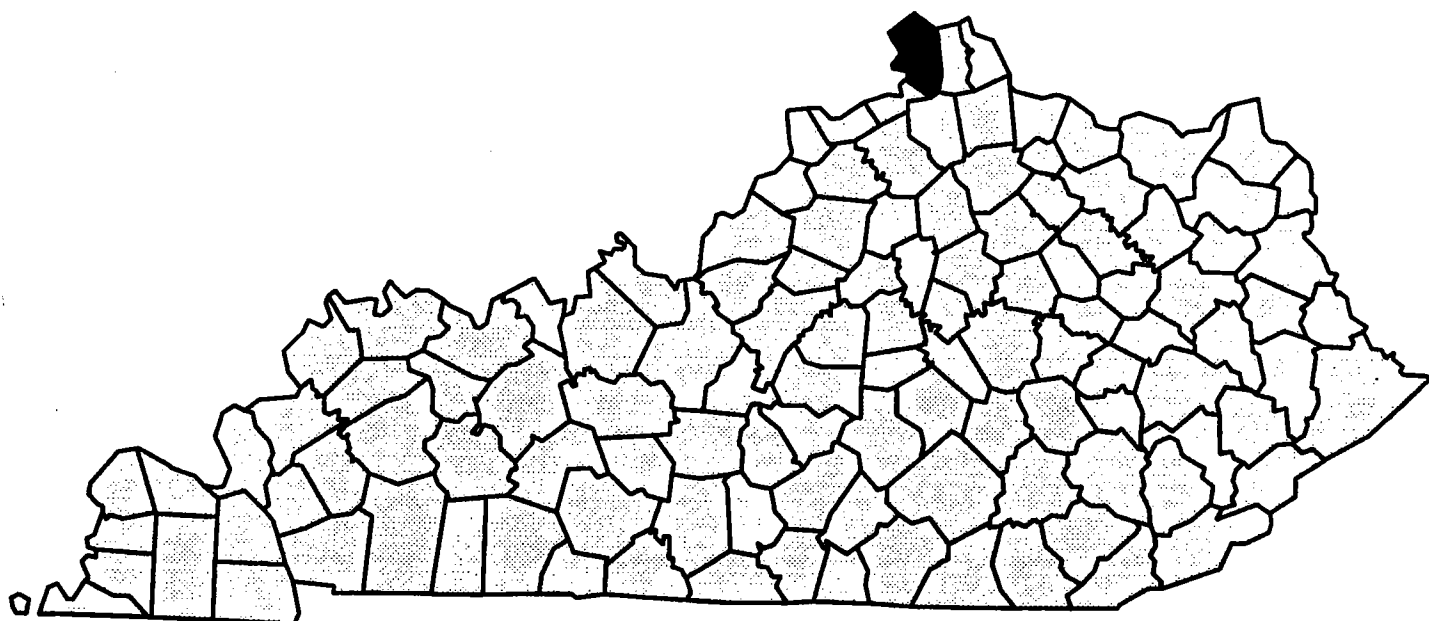
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11



ECONOMIC TRENDS IN  
KENTUCKY COUNTIES  
1969 – 1987

**BOONE COUNTY**



Prepared by  
Virginia Wilson  
Donna A. Cantrell

RESEARCH MEMORANDUM 438  
Legislative Research Commission  
Frankfort, Kentucky  
February, 1990



ECONOMIC TRENDS IN  
KENTUCKY COUNTIES  
1969 – 1987

KY  
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No. 438  
1990

**BOONE COUNTY**

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Donna A. Cantrell

RESEARCH MEMORANDUM 438  
Legislative Research Commission  
Frankfort, Kentucky  
February, 1990



## FOREWORD

This publication is one of a set of 120, highlighting economic trends in each county in Kentucky from 1969-1987. This effort is part of the ongoing activities sponsored by the Legislative Research Commission to provide a long-term perspective on issues for decision makers. The economies of individual counties do not always parallel overall state trends. This set of publications is an attempt to look at the economic trends in each county over time and to point out where the economies of individual counties may be performing differently from the economy of the state as a whole.

This publication was prepared by Virginia Wilson and Donna Cantrell. Susan Dance assisted in production of the manuscript and Charles Bush edited the report. The assistance of Carol Straus from the Center for Business and Economic Research at the University of Kentucky in deciphering data is gratefully acknowledged.

Vic Hellard, Jr.  
Director

The Capitol  
Frankfort  
February, 1990



## SUMMARY

Boone County experienced significant economic growth from 1969 to 1987. Personal income more than doubled over this period. Boone County also increased its share of Kentucky personal income, indicating that the county economy is growing at a faster rate than the state economy.

Earnings account for a much larger share of personal income in Boone County than in Kentucky. Transfer payments contribute a smaller share to personal income than for the state.

The economic growth was spurred to a large extent by an increase in both the service and trade sectors. While manufacturing was strong through the seventies, this sector's share declined in the 1980's. These trends parallel state economic trends.

Total employment in Boone County grew by 244 percent from 1969 to 1987. However, population grew by only 69 percent. This suggests that Boone County is importing a large portion of its labor, and exporting disposable income.

The manufacturing sector is very sensitive to national economic conditions and is very vulnerable to production cutbacks during low or no growth periods. The service and trade sectors are more resilient during periods of economic stagnation. The growth in the trade and service sectors has helped to create a more diversified economy. This diversification will help to stabilize the county economy during recessionary periods.





## INTRODUCTION

This is one of a series of reports called Economic Trends in Kentucky Counties. The purpose of this series is to describe the economic structure of Kentucky counties and to assess their economic performance relative to their own history and relative to the Kentucky economy. Information on the structure and patterns of change in county economies and an understanding of their relationship to the Kentucky economy can help in making policy decisions that are intended to shape Kentucky's economic future.

When assessing any economy there are several pertinent questions which may be addressed. The first concerns changes in the absolute size of the economy over time. Here the relevant comparison is between the county economy and its own history. Since most economic variables are given in dollars and because inflation causes the value of a dollar to vary over time, all dollar values in this report are presented in constant 1988 dollars. This allows analysis of real changes over time by controlling for the effects of inflation.

A second question concerns the structure and nature of the county economy. The structure of an economy refers to the relative share contributed by the various segments of the economy, while the nature deals with how this share has changed over time.

A third question concerns the performance of the county economy when compared to the Kentucky economy. For example, if a county has a higher proportion of earnings or employment in a sector it would indicate a specialization in that sector. Differences in economic structure may explain variations in relative economic well-being between a county and the state as a whole.

Economic data for counties are usually published after a lag of two years. Therefore, most data in this report cover the period 1969 to 1987. All data for this report was obtained from the Kentucky Economic Information System, an on-line database maintained by the University of Kentucky Center for Business and Economic Development.

There are certain caveats which should be remembered when analyzing data. First, it is a common and useful approach to evaluate the percentage an economic sector contributes to the total economy. However, one must remember that a sector's percentage contribution may decline even when its absolute value is increasing if another sector's contribution is growing at a faster rate. Secondly, when reviewing data in graphical analyses, the scales used to present data should be noted. In this report most graphs are presented with the narrowest scale which will cover all data points. This can accentuate visual patterns over time even when absolute changes are relatively small.

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\*For an analysis of economic trends in Kentucky, see Virginia Wilson, Patterns of Growth and Decline in the Kentucky Economy 1969-1988, Research Memorandum 437, Legislative Research Commission, November 1989.



## ECONOMIC TRENDS IN BOONE COUNTY

The following analysis includes a brief description of the county economy and is accompanied by graphical illustrations. Data tables are also included at the end of this report. Three principal components of the Boone County economy are analyzed. They are:

1. Personal Income
2. Earnings
3. Employment

### Personal Income

Personal income is often used as a measure of the economic activity in an area. Personal income is the sum of all the dollar income received by individuals in an area from any legal source. Personal income data is published by the Bureau of Economic Analysis (BEA) for most major geographic regions, including states, counties, and major cities.

In general, income can be obtained in three ways. First, it can be earned by the work of an individual. This type of income includes wage and salary income and proprietors' earnings. Second, income can be earned by property. This component includes earnings from rents, dividends, and interest. Finally, income can be received as a gift or an entitlement. This type of income constitutes the component of personal income called transfer payments. Included in this component is income from sources such as retirement benefits, unemployment benefits, food stamps, and medical programs such as Medicare and Medicaid.

As can be seen in Chart 1A, the size of the Boone County economy, as measured by personal income, increased from \$325 million in 1969 to \$781 million in 1987, after adjusting for inflation. Chart 1B shows Boone County total personal income as a percent of Kentucky total personal income. Boone County has increased its share of Kentucky personal income.

A similar pattern emerges from an examination of per capita personal income. Per capita personal income is simply the total personal income of an area divided by its population. Per capita personal income is often used as a measure of the economic well-being of the residents of an area. Charts 1C and 1D indicate that Boone County per capita income increased over the time period to a level of \$14,520 per person in 1987 and was 116.2 percent of Kentucky per capita personal income.

A better understanding of the nature of economic activity can be gleaned from an examination of the relative contribution of the components of personal income and how their share has changed over time. This information is illustrated in Charts 2A-2D. Total earnings increased from \$281 million in 1969 to \$623 million in 1987 (in constant 1988 dollars) and increased at a stable rate. While earnings have increased, their share of personal income has declined over time. This trend is occurring at the state level as well.

In 1987, earnings accounted for 79.7 percent of Boone County's total personal income, which was significantly higher than Kentucky's 67.5 percent share.

Transfer payments contributed \$20 million to total personal income in 1969 and \$82 million in 1987. During the same period, transfer payments contributed a smaller percentage of personal income in Boone County than in Kentucky.

Income from property in Boone County grew at a stable rate through the time period. Income from property totalled \$25 million in 1969 and increased to \$77 million in 1987.

## Earnings

Earnings are the component of personal income reflecting payments to individuals in return for labor. Earnings include both wage and salary and proprietor's income. Boone County had a very strong manufacturing sector in the 1970's. In 1969, Boone County received 30.2 percent of total earnings from manufacturing. By 1979, this percent increased to 38.4. However, by 1987, manufacturing earnings accounted for 27.8 percent of total earnings (Chart 3A). While the share of manufacturing earnings as a percent of total county earnings has declined, Boone County's share of state manufacturing earnings has increased (Chart 3C).

Chart 3A also indicates that farming's contribution to total county earnings is minimal and decreased from 6.7 percent in 1969 to 1.3 percent in 1987. Earnings from mining were also minimal throughout the period.

Earnings from non-goods-producing industries as a percent of total earnings are illustrated in Chart 3B. The percent of earnings from both the services and trade sectors have increased (Chart 3B). Earnings from the state and local government sector remained stable. At the state level, the percent of earnings from services increased, while the percent of earnings from trade and state and local government were stable.

Average earnings per job (adjusted for inflation) for Boone County and Kentucky are shown in Chart 3D. In Kentucky, average earnings per job reached a high of \$20,121 per person in 1978. Since then, average earnings per job declined and in 1987 they were \$18,636 per person. Trends in Boone County average earnings per job have been similar to state trends. Average earnings reached \$19,026 in 1987 and were above the Kentucky average for the first time since 1973.

## Employment

Employment is considered any activity for which one receives financial remuneration in the form of wages or profits. Total employment in Boone County increased substantially during the data period. In 1969, total employment stood at 10,341 people. By 1987, that figure had increased to 35,839.

The unemployment rate, often used as an indicator of economic well-being, is the ratio of unemployed to the total civilian labor force. Unemployment is described as a condition of being out of work while actively seeking employment within the last thirty days. The civilian labor force is described as the proportion of population age 16 or older employed or actively seeking employment. Annual unemployment rates for Kentucky and Boone County are presented in Chart 4B. Unemployment rates in Boone County have been below those of the state throughout the period. In 1987, the county unemployment rate was 6.0 percent compared to 8.8 percent for Kentucky.

Another employment concept includes the discouraged worker. Discouraged workers are persons who want jobs but made no attempt to find work in the last thirty days because they believe they could not find it. These individuals are not included when calculating unemployment rates. The Cabinet for Human Resources does not estimate discouraged workers by county. However, preliminary research by the Cabinet indicates that the inclusion of discouraged workers in the civilian labor force estimate would increase the unemployment rate by approximately four percent for the state. This figure would vary by county depending on the labor market in a county or within commuting distance.

Employment in the goods-producing industries is illustrated in Chart 4C. Employment trends in manufacturing parallel those in earnings. The percent of total employment in manufacturing decreased from 24.4 percent in 1969 to 19.4 percent in 1987. State employment in manufacturing has also declined. Similar to trends in farm earnings, farm employment in Boone County decreased through the period.

Employment in the non-goods-producing industries is presented in Chart 4D. Employment in the trade sector surpassed manufacturing, to become the primary source of employment in 1976. By 1987, 26.2 percent of employment was in the trade sector. The services sector became the second highest employer in 1986. In 1969, the service sector accounted for 9.8 percent of employment. This share increased to 20.6 percent in 1987. In spite of these changing employment patterns, earnings from manufacturing remained the largest component of personal income, reflecting the high wages in this sector. Employment in state and local government declined slightly. These employment trends in non-goods-producing sectors reflect state employment trends.

## Population

The census conducted each decade counts the actual population in an area. Population is then statistically estimated during intervening years. The demographic composition of this population growth has important implications for the future demand for goods and services, and ultimately, the economic structure of Boone County.

The Boone County population grew steadily from 31,700 in 1969 to 53,800 in 1987 (Chart 5A). Boone County has a higher proportion of younger residents and a smaller proportion of older residents than the state. It was estimated that in 1986, 9.9 percent of Boone County's population was under six years of age, compared to 8.6 percent for the state. Conversely, for the same year 12.0 percent of the Boone County population was 60 years of age and over while 16.5 percent of all Kentucky residents fell in this age group.

CHART 1A

BOONE COUNTY

REAL PERSONAL INCOME

Millions of 1988 dollars

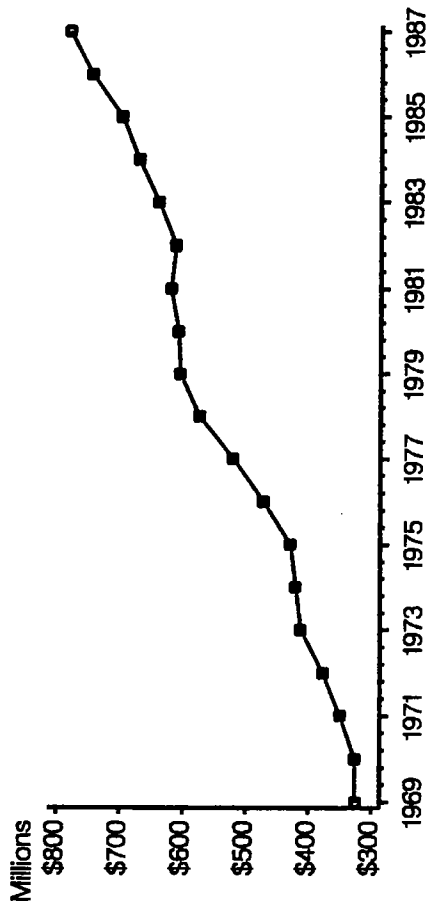


CHART 1B

BOONE COUNTY

PERSONAL INCOME

as a Percent of Kentucky Personal Income

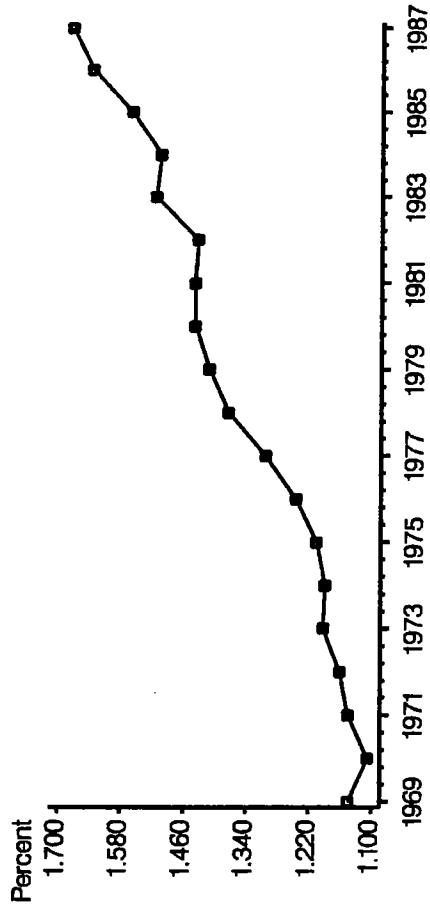


CHART 1C

BOONE COUNTY

PER CAPITA PERSONAL INCOME

in Constant 1988 Dollars

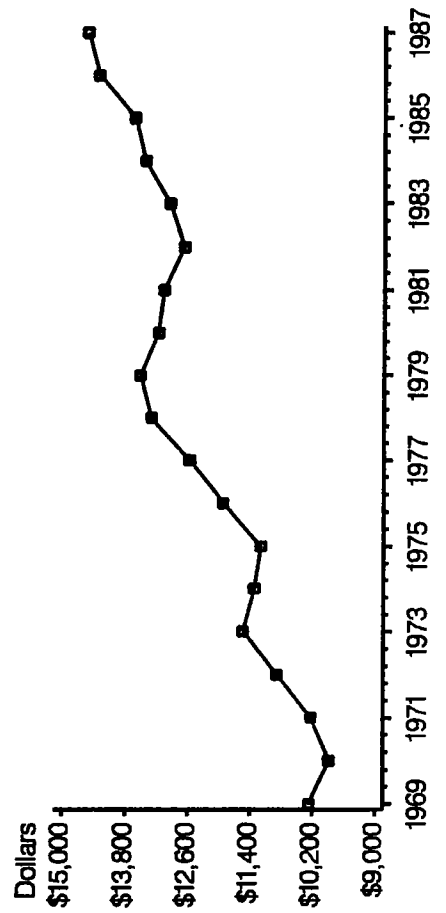


CHART 1D

BOONE COUNTY

PER CAPITA PERSONAL INCOME

as a Percent of Kentucky Per Capita Personal Income

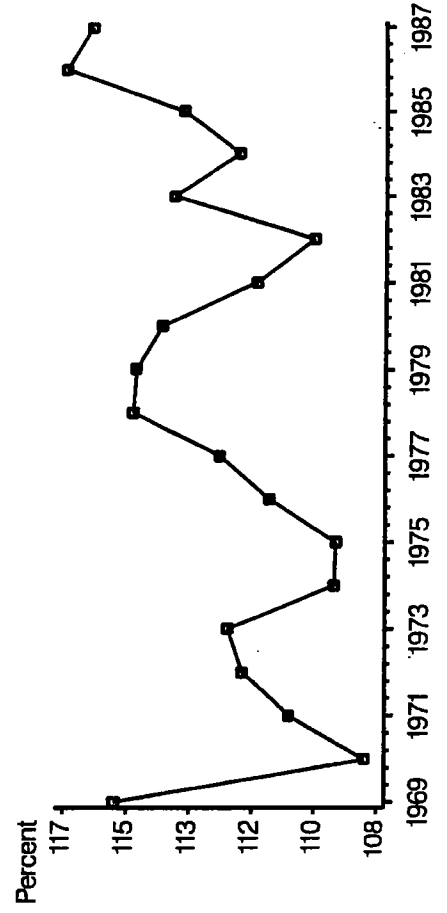


CHART 2A

BOONE COUNTY

REAL TOTAL EARNINGS

Millions of 1988 dollars

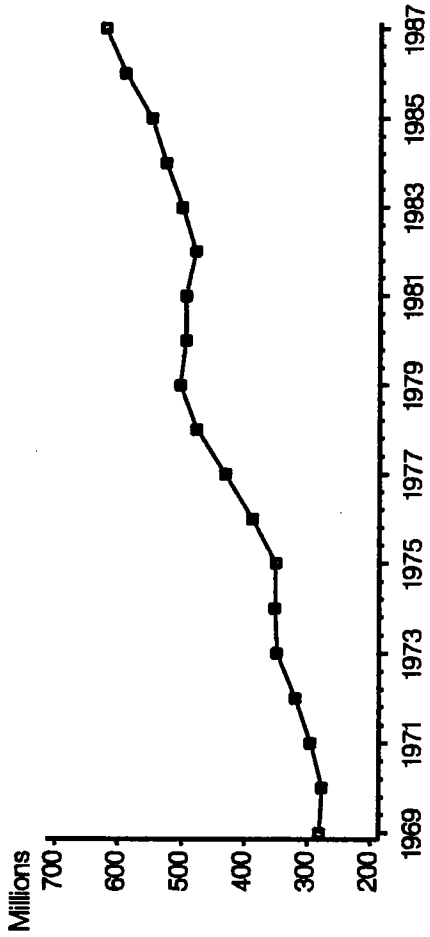


CHART 2B

BOONE COUNTY

TRANSFER PAYMENTS and INCOME FROM PROPERTY

Millions of 1988 Dollars

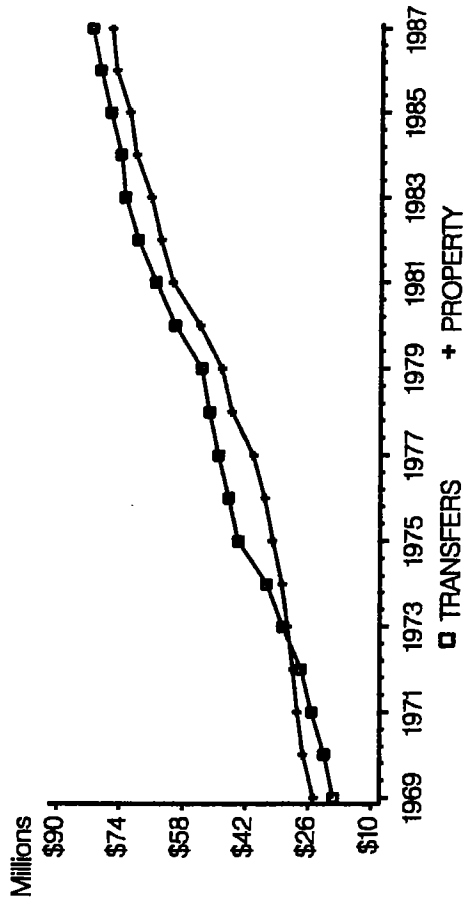


CHART 2C

BOONE COUNTY

TOTAL EARNINGS

as a Percent of Personal Income

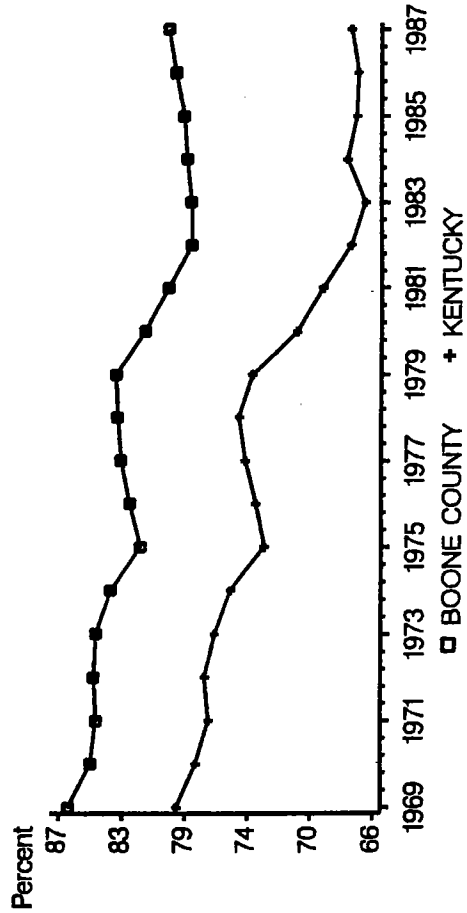


CHART 2D

BOONE COUNTY

TRANSFER PAYMENTS

as a Percent of Personal Income

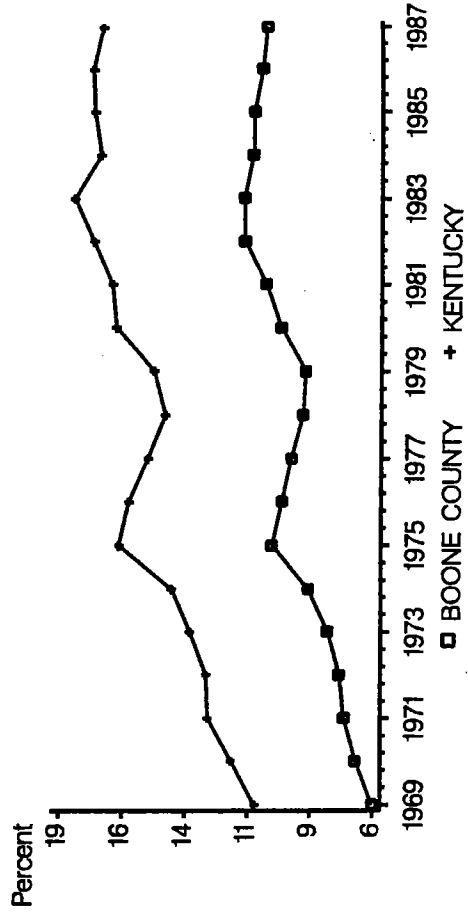


CHART 3A  
BOONE COUNTY  
EARNINGS IN GOODS PRODUCING INDUSTRIES  
as a Percent of Total Earnings

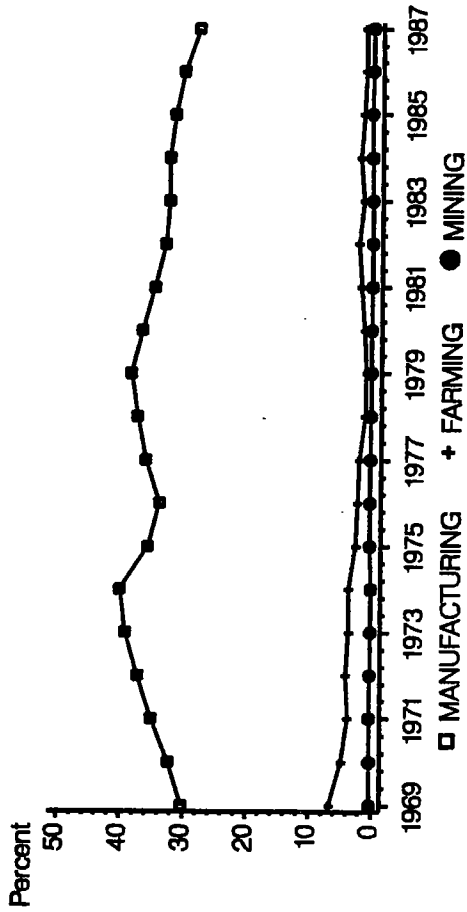


CHART 3B  
BOONE COUNTY  
EARNINGS in NON - GOODS PRODUCING INDUSTRIES  
as a Percent of Total Earnings

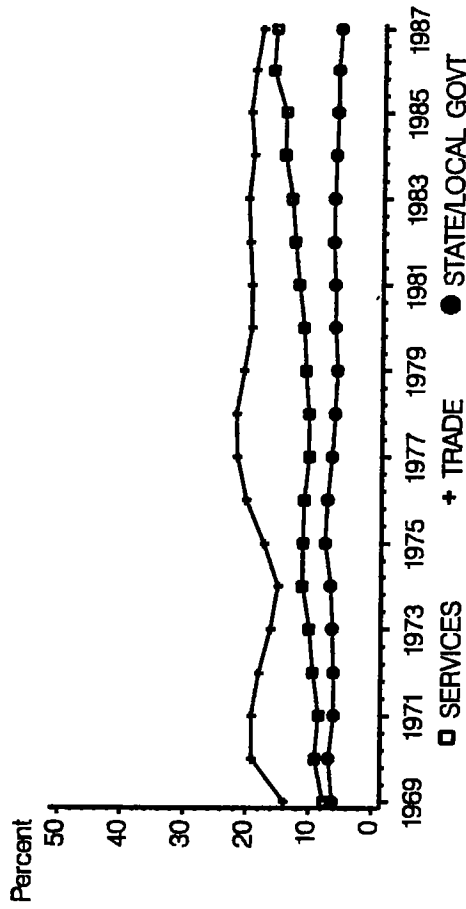


CHART 3C  
BOONE COUNTY  
EARNINGS in GOODS PRODUCING INDUSTRIES  
as a Percent of Kentucky Industries

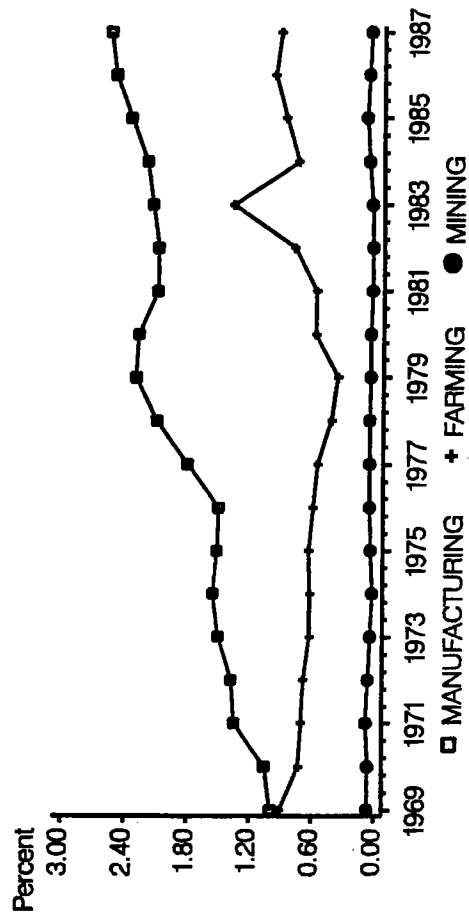


CHART 3D  
BOONE COUNTY  
AVERAGE EARNINGS PER JOB  
in Constant 1988 Dollars

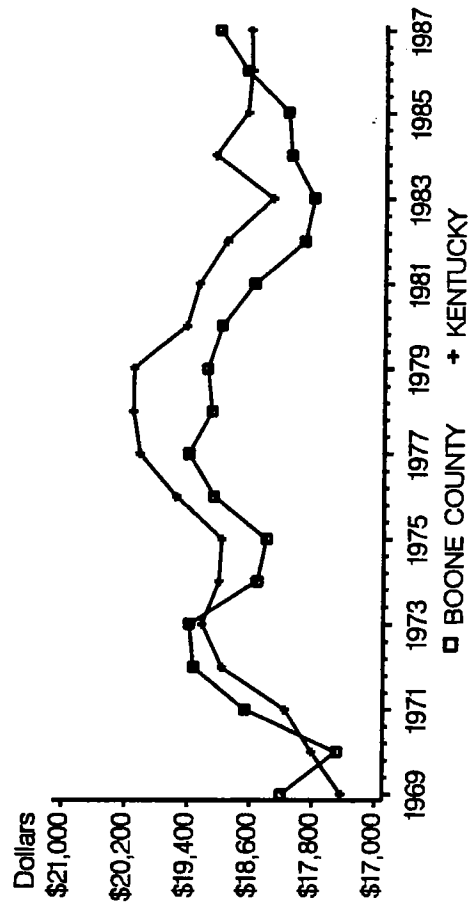




CHART 4A  
BOONE COUNTY  
TOTAL EMPLOYMENT  
Thousands of People

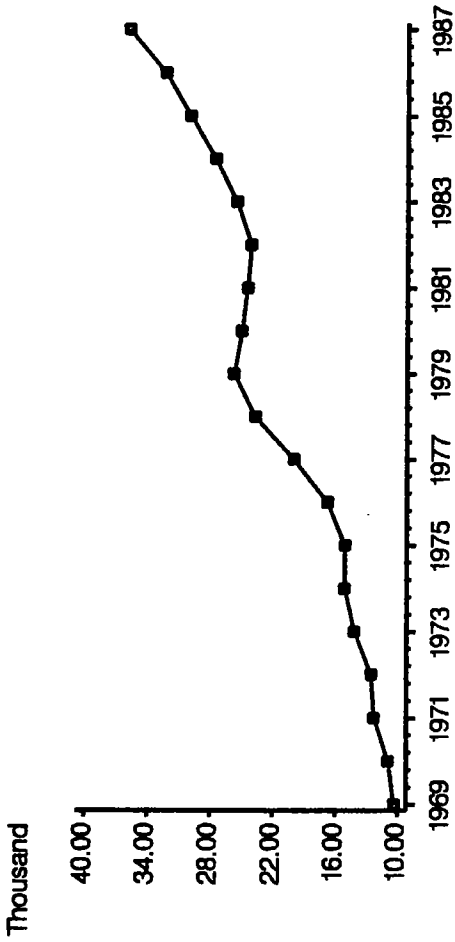


CHART 4B  
BOONE COUNTY  
ANNUAL UNEMPLOYMENT RATE

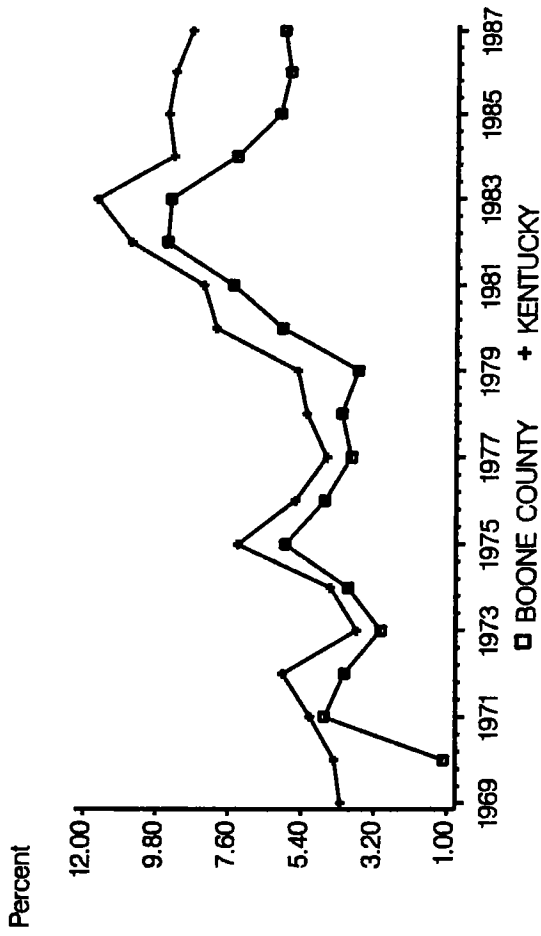


CHART 4C  
BOONE COUNTY  
EMPLOYMENT IN GOODS PRODUCING INDUSTRIES  
as a Percent of Total Employment

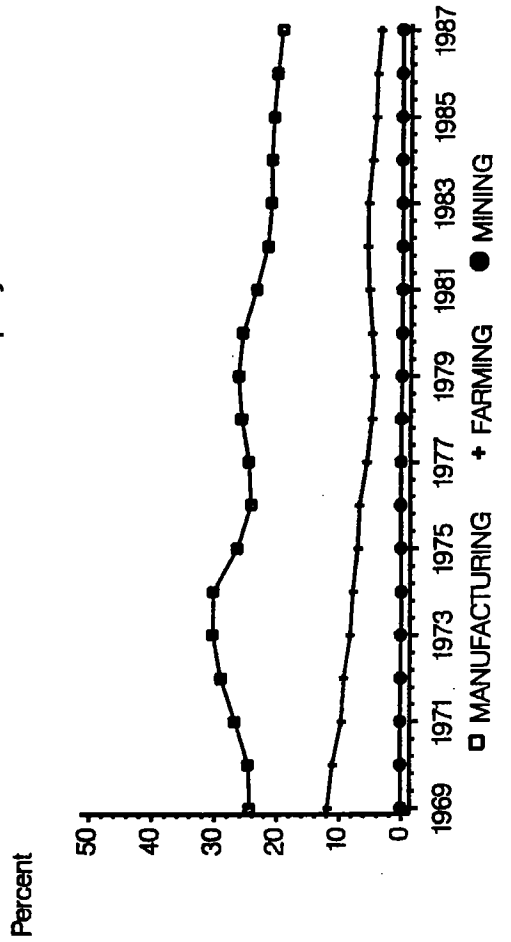


CHART 4D  
BOONE COUNTY  
EMPLOYMENT IN NON-GOODS PRODUCING INDUSTRIES  
as a Percent of Total Employment

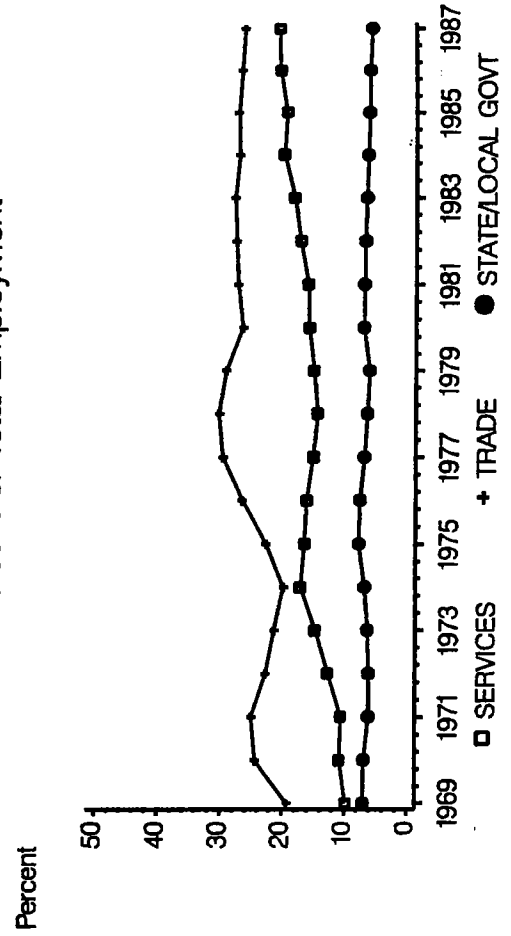


CHART 5A  
BOONE COUNTY  
POPULATION  
Thousands of People

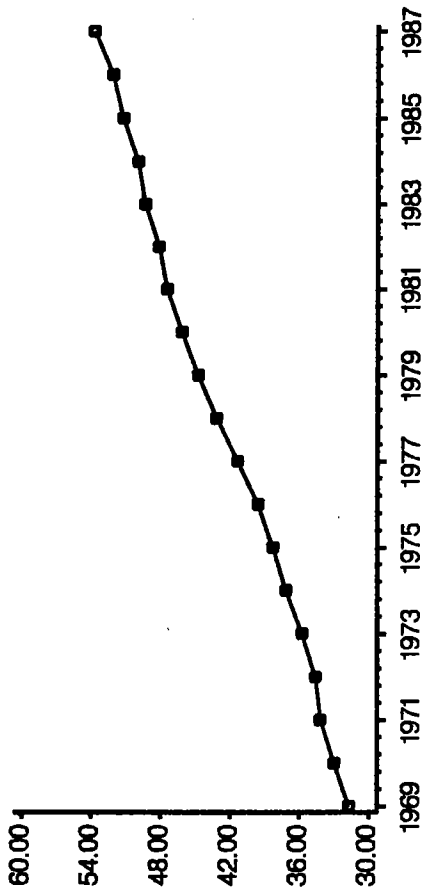


CHART 5B  
BOONE COUNTY  
POPULATION  
as a Percent of Kentucky Population

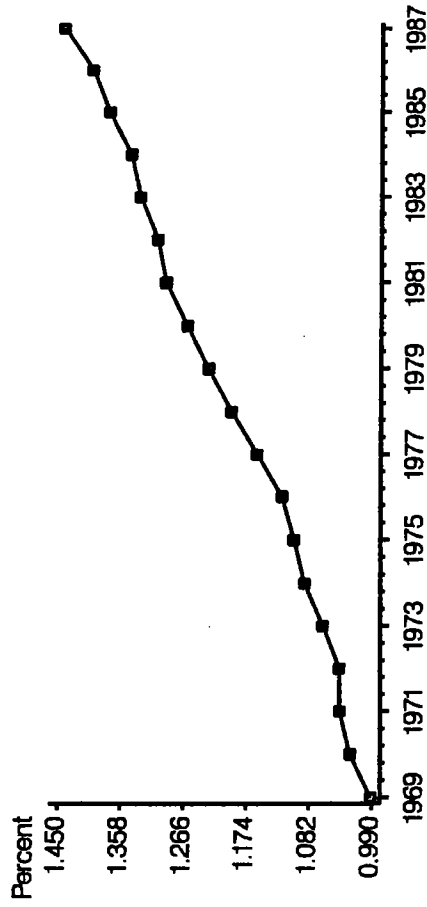


CHART 5C  
BOONE COUNTY  
POPULATION 5 AND UNDER  
as a Percent of Total Population

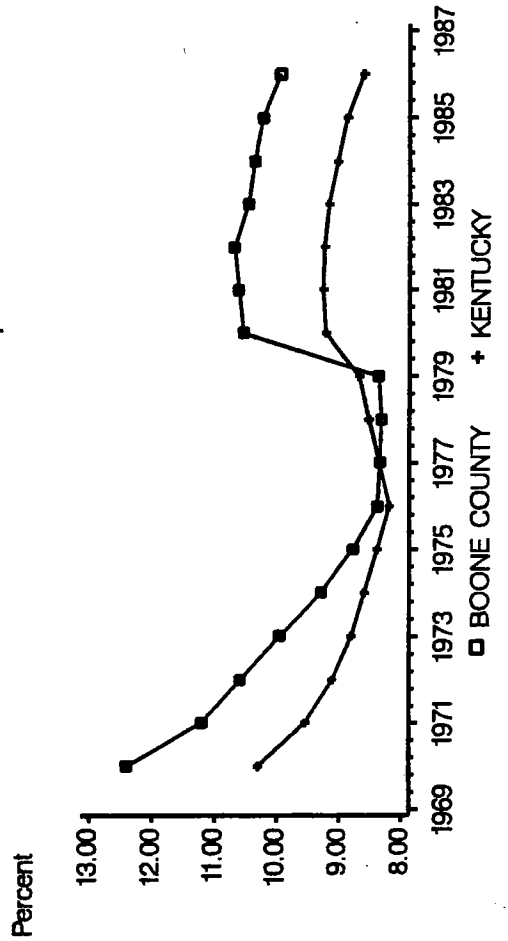
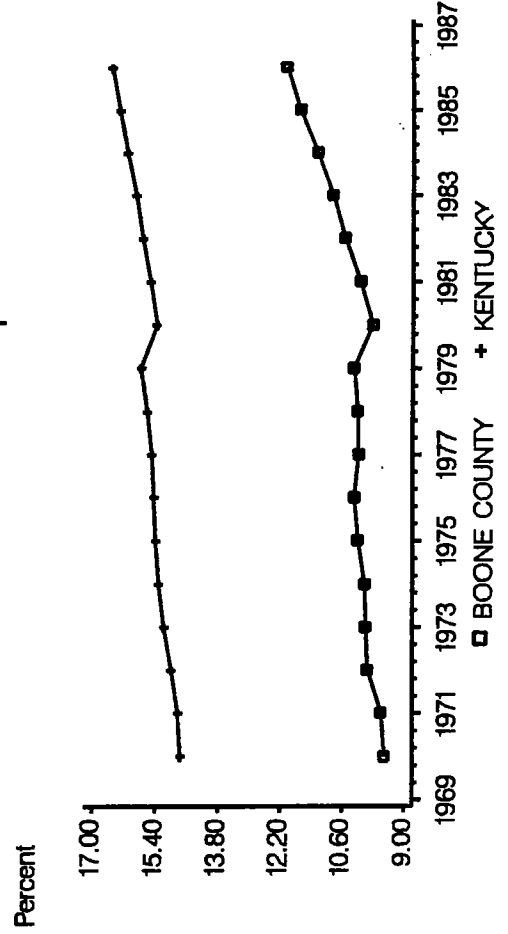


CHART 5D  
BOONE COUNTY  
POPULATION 60 AND OVER  
as a Percent of Total Population



BOONE COUNTY

PERSONAL INCOME  
In Constant 1988 Dollars

Year	County Personal Income (M\$)	Percent of Kentucky (%)	Per Capita Personal Income (\$)	Percent of Kentucky (%)
1969	325	1.14	10,267	115.6
1970	326	1.11	9,879	108.4
1971	350	1.14	10,232	110.5
1972	377	1.16	10,901	111.9
1973	413	1.19	11,531	112.3
1974	421	1.19	11,321	109.3
1975	429	1.21	11,207	109.2
1976	472	1.25	11,929	111.1
1977	521	1.30	12,579	112.5
1978	574	1.38	13,306	115.0
1979	605	1.41	13,517	114.9
1980	608	1.44	13,169	114.2
1981	620	1.44	13,069	111.5
1982	612	1.43	12,689	109.8
1983	640	1.51	12,959	113.9
1984	672	1.51	13,428	112.0
1985	699	1.56	13,630	113.6
1986	747	1.64	14,308	116.9
1987	781	1.68	14,520	116.2

COMPONENTS OF PERSONAL INCOME  
In Constant 1988 Dollars

Year	EARNINGS			TRANSFER PAYMENTS			INCOME from PROPERTY		
	M\$	Percent of Personal Income		M\$	Percent of Personal Income		M\$	Percent of Personal Income	
		County	Kentucky		County	Kentucky		County	Kentucky
1969	281	86.4	79.2	20	6.0	10.9	25	7.6	9.9
1970	277	84.9	77.9	22	6.7	11.9	27	8.4	10.2
1971	295	84.5	77.0	25	7.2	12.9	29	8.3	10.1
1972	319	84.7	77.3	28	7.4	12.9	30	7.9	9.7
1973	349	84.5	76.6	33	7.9	13.6	31	7.6	9.7
1974	352	83.5	75.5	37	8.7	14.4	33	7.8	10.1
1975	350	81.6	73.3	44	10.2	16.5	35	8.2	10.1
1976	389	82.3	73.9	46	9.8	16.1	37	7.9	10.0
1977	432	82.9	74.6	49	9.4	15.3	40	7.7	10.1
1978	477	83.1	75.0	51	8.9	14.6	46	8.0	10.4
1979	503	83.2	74.1	53	8.8	15.1	48	8.0	10.8
1980	494	81.3	71.1	60	9.9	16.7	54	8.8	12.2
1981	494	79.7	69.3	65	10.5	16.8	61	9.8	13.8
1982	479	78.2	67.5	70	11.4	17.6	64	10.4	14.9
1983	501	78.2	66.6	73	11.4	18.4	66	10.4	15.1
1984	527	78.5	67.8	74	11.0	17.3	70	10.5	14.9
1985	550	78.7	67.2	77	11.0	17.6	72	10.3	15.3
1986	592	79.2	67.1	80	10.7	17.6	75	10.1	15.3
1987	623	79.7	67.5	82	10.5	17.2	77	9.8	15.3

BOONE COUNTY

SECTOR EARNINGS as a PERCENT of TOTAL COUNTY EARNINGS and  
as a PERCENT of KENTUCKY SECTOR EARNINGS

YEAR	MANUFACTURING		FARMING		MINING	
	TOTAL	KENTUCKY	TOTAL	KENTUCKY	TOTAL	KENTUCKY
1969	30.2	1.00	6.7	0.91	0.3	0.07
1970	32.3	1.05	4.7	0.73	0.3	0.06
1971	35.1	1.34	3.8	0.70	0.4	0.08
1972	37.2	1.37	4.1	0.68	0.3	0.06
1973	39.2	1.51	3.7	0.62	0.2	0.04
1974	40.0	1.56	3.7	0.62	0.2	0.03
1975	35.7	1.52	2.6	0.64	0.4	0.05
1976	33.9	1.51	2.3	0.59	0.4	0.05
1977	36.0	1.80	2.1	0.55	0.4	0.06
1978	37.4	2.09	1.2	0.42	0.3	0.06
1979	38.4	2.30	1.0	0.36	0.2	0.05
1980	36.7	2.27	1.4	0.57	0.3	0.05
1981	34.8	2.09	1.9	0.57	0.2	0.04
1982	33.1	2.09	2.3	0.79	0.2	0.03
1983	32.5	2.14	1.6	1.36	0.2	0.04
1984	32.5	2.20	2.1	0.75	0.3	0.07
1985	31.7	2.35	1.6	0.87	0.3	0.10
1986	30.2	2.50	1.3	0.98	0.2	0.07
1987	27.8	2.55	1.3	0.92	0.1	0.06

YEAR	SERVICES		TRADE		STATE and LOCAL GOVERNMENT	
	TOTAL	KENTUCKY	TOTAL	KENTUCKY	TOTAL	KENTUCKY
1969	7.6	0.47	14.0	0.72	6.3	0.56
1970	9.1	0.56	19.1	0.96	6.9	0.58
1971	8.5	0.60	19.2	1.13	6.1	0.59
1972	9.4	0.67	18.0	1.07	6.1	0.60
1973	10.1	0.77	16.2	1.03	6.4	0.68
1974	11.2	0.89	15.0	0.98	6.7	0.74
1975	11.1	0.85	17.3	1.08	7.6	0.79
1976	11.0	0.90	20.2	1.37	7.2	0.83
1977	10.2	0.97	21.7	1.75	6.5	0.87
1978	10.3	1.09	21.8	1.93	6.1	0.91
1979	10.8	1.21	20.6	1.95	5.8	0.90
1980	11.2	1.17	19.5	1.90	6.2	0.92
1981	12.0	1.20	19.5	1.89	6.3	0.91
1982	12.7	1.18	19.9	1.86	6.5	0.90
1983	13.2	1.22	20.1	1.96	6.5	0.92
1984	14.4	1.38	19.3	2.01	6.2	0.95
1985	14.3	1.43	19.9	2.21	6.1	0.98
1986	16.4	1.66	19.2	2.35	6.0	1.03
1987	16.0	1.72	18.1	2.45	5.6	1.06

BOONE COUNTY

COUNTY EMPLOYMENT by SECTOR

YEAR	MANUFACTURING		FARMING		MINING	
	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL
1969	2,528	24.4	1,230	11.9	17	0.2
1970	2,692	24.7	1,208	11.1	22	0.2
1971	3,302	26.8	1,183	9.6	29	0.2
1972	3,655	29.1	1,164	9.3	23	0.2
1973	4,311	30.3	1,169	8.2	25	0.2
1974	4,578	30.2	1,175	7.8	20	0.1
1975	4,007	26.5	1,064	7.0	30	0.2
1976	4,081	24.3	1,137	6.8	42	0.2
1977	4,932	24.7	1,129	5.6	42	0.2
1978	6,140	25.9	1,154	4.9	43	0.2
1979	6,787	26.4	1,159	4.5	38	0.1
1980	6,424	25.7	1,231	4.9	32	0.1
1981	5,749	23.5	1,318	5.4	19	0.1
1982	5,211	21.6	1,358	5.6	16	0.1
1983	5,377	21.0	1,399	5.5	22	0.1
1984	5,784	21.0	1,335	4.8	44	0.2
1985	6,193	20.7	1,296	4.3	52	0.2
1986	6,504	20.1	1,335	4.1	49	0.2
1987	6,936	19.4	1,281	3.6	38	0.1

YEAR	SERVICES		TRADE		STATE and LOCAL GOVERNMENT	
	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL
1969	1,013	9.8	1,986	19.2	720	7.0
1970	1,179	10.8	2,667	24.4	748	6.9
1971	1,301	10.6	3,080	25.0	756	6.1
1972	1,606	12.8	2,855	22.7	769	6.1
1973	2,106	14.8	3,030	21.3	899	6.3
1974	2,608	17.2	3,002	19.8	1,032	6.8
1975	2,495	16.5	3,430	22.7	1,168	7.7
1976	2,724	16.2	4,471	26.6	1,269	7.6
1977	3,043	15.2	5,941	29.7	1,377	6.9
1978	3,448	14.5	7,186	30.3	1,523	6.4
1979	3,899	15.1	7,523	29.2	1,579	6.1
1980	3,982	15.9	6,654	26.6	1,766	7.1
1981	3,932	16.1	6,677	27.3	1,711	7.0
1982	4,164	17.2	6,682	27.7	1,641	6.8
1983	4,662	18.2	7,118	27.9	1,689	6.6
1984	5,485	19.9	7,479	27.1	1,774	6.4
1985	5,825	19.4	8,159	27.2	1,873	6.2
1986	6,614	20.4	8,640	26.7	1,986	6.1
1987	7,365	20.6	9,395	26.2	2,073	5.8

BOONE COUNTY

EMPLOYMENT STATISTICS

YEAR	TOTAL EMPLOYMENT	AVERAGE EARNINGS		UNEMPLOYMENT RATE	
		COUNTY	KENTUCKY	COUNTY	KENTUCKY
1969	10,341	\$18,204	\$17,440	.	4.2
1970	10,918	\$17,494	\$17,811	1.1	4.4
1971	12,300	\$18,667	\$18,166	4.7	5.1
1972	12,572	\$19,333	\$18,970	4.1	6.0
1973	14,216	\$19,390	\$19,232	3.0	3.7
1974	15,140	\$18,523	\$19,008	4.0	4.5
1975	15,101	\$18,404	\$18,976	5.9	7.3
1976	16,802	\$19,085	\$19,563	4.7	5.6
1977	20,007	\$19,407	\$20,031	3.9	4.7
1978	23,734	\$19,111	\$20,121	4.2	5.3
1979	25,746	\$19,173	\$20,110	3.7	5.5
1980	25,021	\$18,986	\$19,439	6.0	8.0
1981	24,475	\$18,574	\$19,286	7.5	8.4
1982	24,142	\$17,933	\$18,931	9.5	10.6
1983	25,550	\$17,817	\$18,358	9.4	11.6
1984	27,577	\$18,119	\$19,080	7.4	9.3
1985	29,968	\$18,163	\$18,676	6.1	9.5
1986	32,348	\$18,684	\$18,627	5.8	9.3
1987	35,839	\$19,026	\$18,636	6.0	8.8

POPULATION STATISTICS

YEAR	POPULATION	% OF KY	PERCENT UNDER AGE 6		PERCENT AGE 60+	
			COUNTY	KENTUCKY	COUNTY	KENTUCKY
1969	31,700	0.99	.	.	.	.
1970	33,000	1.02	12.4	10.3	9.5	14.8
1971	34,200	1.04	11.2	9.6	9.6	14.8
1972	34,600	1.04	10.6	9.1	10.0	15.0
1973	35,800	1.06	9.9	8.8	10.0	15.2
1974	37,200	1.09	9.3	8.6	10.0	15.3
1975	38,300	1.10	8.8	8.4	10.2	15.4
1976	39,600	1.12	8.4	8.2	10.3	15.5
1977	41,400	1.16	8.4	8.4	10.2	15.5
1978	43,200	1.20	8.3	8.5	10.2	15.6
1979	44,800	1.23	8.4	8.7	10.3	15.8
1980	46,200	1.26	10.5	9.2	9.8	15.4
1981	47,500	1.29	10.6	9.3	10.2	15.5
1982	48,200	1.30	10.7	9.2	10.5	15.7
1983	49,400	1.33	10.5	9.2	10.9	15.9
1984	50,000	1.34	10.4	9.0	11.3	16.1
1985	51,300	1.38	10.2	8.9	11.7	16.3
1986	52,200	1.40	9.9	8.6	12.0	16.5
1987	53,800	1.44	.	.	.	.



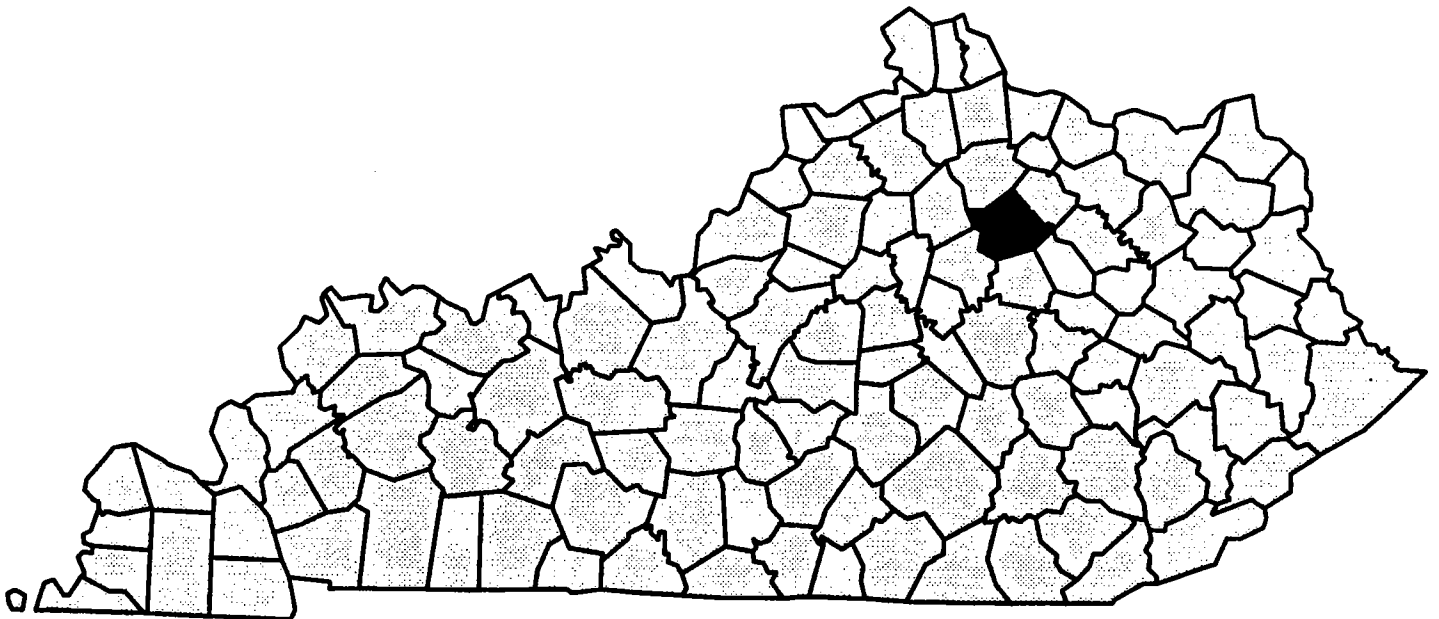
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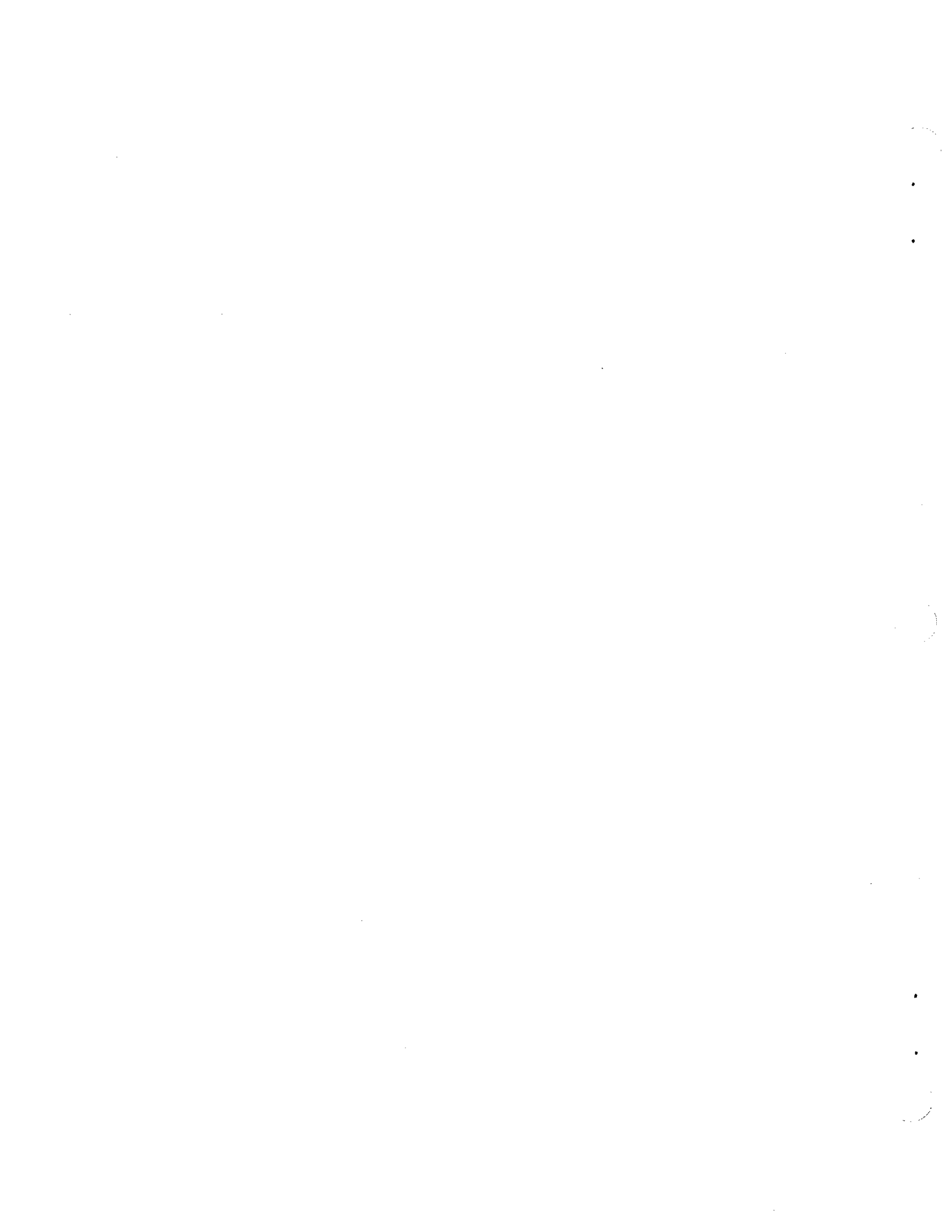
ECONOMIC TRENDS IN  
KENTUCKY COUNTIES  
1969 – 1987

**BOURBON COUNTY**



Prepared by  
Virginia Wilson  
Donna A. Cantrell

RESEARCH MEMORANDUM 438  
Legislative Research Commission  
Frankfort, Kentucky  
February, 1990



ECONOMIC TRENDS IN  
KENTUCKY COUNTIES  
1969 – 1987

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No. 438  
1990

BOURBON COUNTY

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## FOREWORD

This publication is one of a set of 120, highlighting economic trends in each county in Kentucky from 1969-1987. This effort is part of the ongoing activities sponsored by the Legislative Research Commission to provide a long-term perspective on issues for decision makers. The economies of individual counties do not always parallel overall state trends. This set of publications is an attempt to look at the economic trends in each county over time and to point out where the economies of individual counties may be performing differently from the economy of the state as a whole.

This publication was prepared by Virginia Wilson and Donna Cantrell. Susan Dance assisted in production of the manuscript and Charles Bush edited the report. The assistance of Carol Straus from the Center for Business and Economic Research at the University of Kentucky in deciphering data is gratefully acknowledged.

Vic Hellard, Jr.  
Director

The Capitol  
Frankfort  
February, 1990



## SUMMARY

Bourbon County experienced moderate economic growth from 1969 to 1987. However, this overall growth has been interspersed with periods of economic decline. Bourbon County's share of Kentucky personal income decreased over time, indicating its economy is growing at a slower rate than the state's.

Bourbon County enjoyed a period of rapid economic growth from 1978 to 1981. However, the events associated with the national recession in 1982 severely curtailed this growth. By 1984, the economy began to recover. Much of the growth and decline in the county economy was driven by activity in the farm sector.

The farm sector was the primary source of employment in Bourbon County. However, employment in both the service and trade sectors is growing. This is consistent with state trends in these sectors.

There is a national and state trend toward declining farm employment. Therefore, the outlook for this sector in Bourbon County is for continued decline. Future economic growth in Bourbon County will most likely be dependent upon further expansion of the service and trade sectors.





## INTRODUCTION

This is one of a series of reports called Economic Trends in Kentucky Counties. The purpose of this series is to describe the economic structure of Kentucky counties and to assess their economic performance relative to their own history and relative to the Kentucky economy. Information on the structure and patterns of change in County economies and an understanding of their relationship to the Kentucky economy can help in making policy decisions that are intended to shape Kentucky's economic future.

When assessing any economy there are several pertinent questions which may be addressed. The first concerns changes in the absolute size of the economy over time. Here the relevant comparison is between the county economy and its own history. Since most economic variables are given in dollars and because inflation causes the value of a dollar to vary over time, all dollar values in this report are presented in constant 1988 dollars. This allows analysis of real changes over time by controlling for the effects of inflation.

A second question concerns the structure and nature of the county economy. The structure of an economy refers to the relative share contributed by the various segments of the economy, while the nature deals with how this share has changed over time.

A third question concerns the performance of the county economy when compared to the Kentucky economy. For example, if a county has a higher proportion of earnings or employment in a sector it would indicate a specialization in that sector. Differences in economic structure may explain variations in relative economic well-being between a county and the state as a whole.

Economic data for counties are usually published after a lag of two years. Therefore, most data in this report cover the period 1969 to 1987. All data for this report was obtained from the Kentucky Economic Information System, an on-line database maintained by the University of Kentucky Center for Business and Economic Development.

There are certain caveats which should be remembered when analyzing data. First, it is a common and useful approach to evaluate the percentage an economic sector contributes to the total economy. However, one must remember that a sector's percentage contribution may decline even when its absolute value is increasing if another sector's contribution is growing at a faster rate. Secondly, when reviewing data in graphical analyses, the scales used to present data should be noted. In this report most graphs are presented with the narrowest scale which will cover all data points. This can accentuate visual patterns over time even when absolute changes are relatively small.

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\*For an analysis of economic trends in Kentucky, see Virginia Wilson, Patterns of Growth and Decline in the Kentucky Economy 1969-1988, Research Memorandum 437, Legislative Research Commission, November 1989.



## ECONOMIC TRENDS IN BOURBON COUNTY

The following analysis includes a brief description of the county economy and is accompanied by graphical illustrations. Data tables are also included at the end of this report. Three principal components of the Bourbon County economy are analyzed. They are:

1. Personal Income
2. Earnings
3. Employment

### Personal Income

Personal income is often used as a measure of the economic activity in an area. Personal income is the sum of all the dollar income received by individuals in an area from any legal source. Personal income data is published by the Bureau of Economic Analysis (BEA) for most major geographic regions, including states, counties, and major cities.

In general, income can be obtained in three ways. First, it can be earned by the work of an individual. This type of income includes wage and salary income and proprietors' earnings. Second, income can be earned by property. This component includes earnings from rents, dividends, and interest. Finally, income can be received as a gift or an entitlement. This type of income constitutes the component of personal income called transfer payments. Included in this component is income from sources such as retirement benefits, unemployment benefits, food stamps, and medical programs such as Medicare and Medicaid.

As can be seen in Chart 1A, the Bourbon County economy, as measured by personal income, increased from \$187 million in 1969 to \$256 million in 1987, after adjusting for inflation. In spite of this overall increase, periods of economic growth have been interspersed with periods of weakness. This is especially obvious for the years 1978 to 1983, when income increased dramatically and then declined, a typical boom/bust scenario. By 1987, the economy had somewhat recovered. Chart 1B shows Bourbon County total personal income as a percent of Kentucky total personal income. While also exhibiting erratic patterns, Bourbon County's share of Kentucky personal income has declined over the period.

A similar pattern emerges from an examination of per capita personal income. Per capita personal income is simply the total personal income of an area divided by its population. Per capita personal income is often used as a measure of the economic well-being of the residents of an area. Charts 1C and 1D indicate that while Bourbon County per capita income generally increased over the period to a level of \$13,266 per person in 1987, this was a decline from the peak of \$14,204 in 1979. In spite of these erratic trends, Bourbon County per capita personal income was 106.1 percent of Kentucky per capita personal income.

A better understanding of the nature of economic activity can be gleaned from an examination of the relative contribution of the components of personal income and how their share has changed over time. This information is illustrated in Charts 2A-2D. While total earnings increased from \$149 million in 1969 to \$179 million in 1987 (in constant 1988 dollars), earnings reached their highest level, \$205 million, in 1979. In 1987, earnings accounted for 69.9 percent of Bourbon County's total personal income, which was slightly more than Kentucky's 67.5 percent share.

Transfer payments contributed \$16 million to total personal income in 1969 and \$37 million in 1987. Transfer payments contributed a smaller percentage of personal income in Bourbon County than in Kentucky.

Income from property in Bourbon County exceeded income from transfer payments through most of the time period. This is unlike state trends, where income from transfer payments exceeds that from property. Income from property totalled \$23 million in 1969 and increased to \$40 million in 1987.

## Earnings

Earnings are the component of personal income reflecting payments to individuals in return for labor. Earnings include both wage and salary and proprietor's income. Chart 3A illustrates that farm earnings as a percent of total county earnings were declining in the early to mid-1970's, gained strength in the late 1970's and peaked at 43.9 percent in 1981. This share subsequently declined to 29.0 percent in 1987. This pattern indicates that the farm sector was the driving force behind the boom/bust pattern of economic growth in Bourbon County in the last decade.

Compared to farming, manufacturing was more stable in the Bourbon County economy. In 1969, Bourbon County received 16.7 percent of total earnings from manufacturing. This percentage decreased to 14.6 percent in 1987. The slight trend toward decreasing concentration in manufacturing is like that for the state. Earnings from mining were minimal throughout the period.

The percent of earnings derived from services was cyclical through the period (Chart 3B). It is interesting to note that when the farm sector share of earnings increased, the service sector share of earnings declined. However, by 1987, the service sector share increased to 10.3 percent. The percent of earnings from trade increased slightly from 11.6 percent in 1969 to 13.8 percent in 1987. The percent of earnings from state and local governments declined slightly. These trends differ from that of the state, where the percentage of earnings from the service sector increased significantly, while the percentage of earnings in both the trade and state and local government sectors was flat.

Average earnings per job (adjusted for inflation) for Bourbon County and Kentucky are shown in Chart 3D. In Kentucky, average earnings per job reached a high of \$20,121 per person in 1978. Since then, average earnings per job declined and in 1987 they were \$18,636 per person. In Bourbon County, average earnings followed a similar pattern, by increasing to a high of \$19,404 in

1979, then declining to \$16,567 in 1987, which was below Kentucky average earnings.

## **Employment**

Employment is considered any activity for which one receives financial remuneration in the form of wages or profits. Total employment in Bourbon County increased somewhat during the data period. In 1969, total employment stood at 8,725 people. By 1987, that figure had barely increased to 9,505.

The unemployment rate, often used as an indicator of economic well-being, is the ratio of unemployed to the total civilian labor force. Unemployment is described as a condition of being out of work while actively seeking employment within the last thirty days. The civilian labor force is described as the proportion of population age 16 or older employed or actively seeking employment. Annual unemployment rates for Kentucky and Bourbon County are presented in Chart 4B. Unemployment rates in Bourbon County were below those of the state throughout the period. In 1987, Bourbon County had an unemployment rate of 6.5 percent, compared to 8.8 percent for the state.

Another employment concept includes the discouraged worker. Discouraged workers are persons who want jobs but made no attempt to find work in the last thirty days because they believe they could not find it. These individuals are not included when calculating official unemployment rates. The Cabinet for Human Resources does not estimate discouraged workers by county. However, preliminary research by the Cabinet indicates that the inclusion of discouraged workers in the civilian labor force estimate would increase the unemployment rate by approximately four percent for the state. This figure would vary by county depending on the labor market in a county or within commuting distance.

Employment in the goods-producing industries is illustrated in Chart 4C. While the percent of Bourbon County total employment in agriculture declined, it remained the county's predominant source of employment. Even though farm earnings increased rapidly in the early 1980's, farm employment remained fairly stable. In 1987, 24.4 percent of employment was in farming. The percent of total employment in manufacturing increased slightly during the seventies and then declined to 11.5 percent in 1987. These trends parallel those of the state.

Employment in the non-goods-producing industries is presented in Chart 4D. Similar to the trends in earnings for these sectors, the percent of Bourbon County employment in both the service and trade sectors increased, and employment in state and local government declined. Kentucky has experienced strong employment growth in the services and trade sectors, with flat growth in state and local government.

## **Population**

The census conducted each decade counts the actual population in an area. Population is then statistically estimated through intervening years.

The demographic composition of this population growth has important implications for the future demand for goods and services, and ultimately, the economic structure of Bourbon County.

The Bourbon County population grew modestly from 18,400 in 1969 to 19,300 in 1987 (Chart 5A). Prior to 1980, Bourbon County's growth rates for the age group five and under generally paralleled those of the state. However, since 1980 this age group has comprised a consistently smaller proportion of the population. It was estimated that in 1986, 7.6 percent of Bourbon County's population was under six years of age, compared to 8.6 percent for the state. Conversely, for the same year 18.5 percent of the Bourbon County population was 60 years of age and over, while 16.5 percent of all Kentucky residents fell in this age group.

CHART 1A  
BOURBON COUNTY  
REAL PERSONAL INCOME  
Millions of 1988 dollars

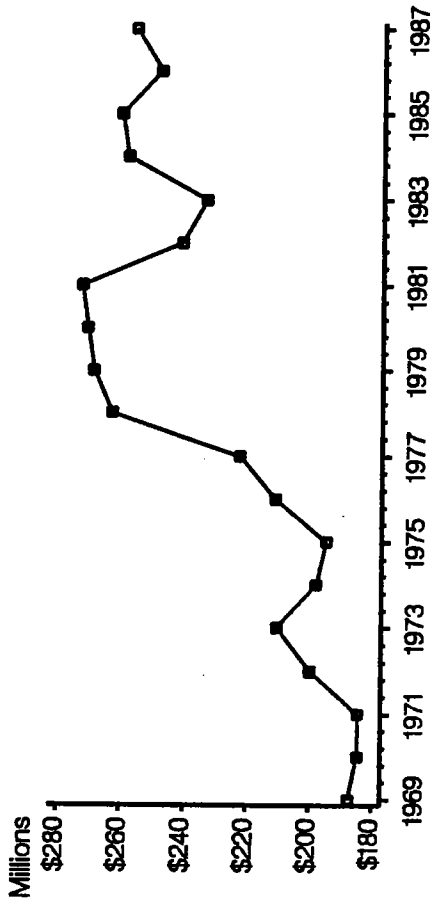


CHART 1B  
BOURBON COUNTY  
PERSONAL INCOME  
as a Percent of Kentucky Personal Income

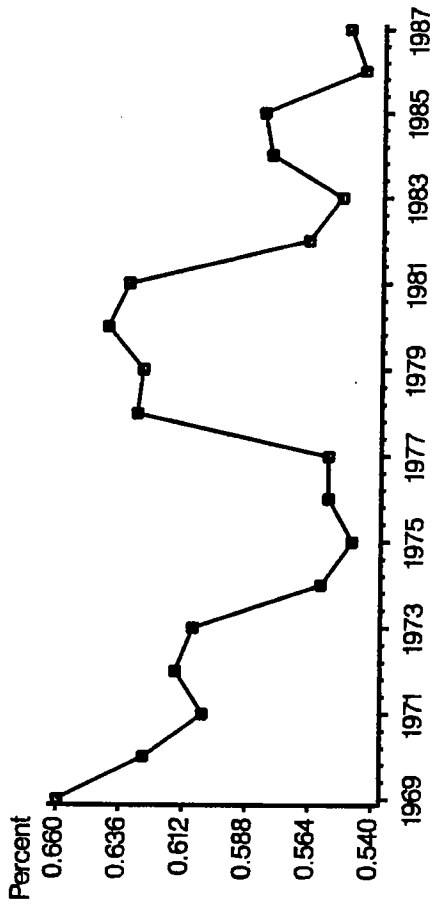


CHART 1C  
BOURBON COUNTY  
PER CAPITA PERSONAL INCOME  
in Constant 1988 Dollars

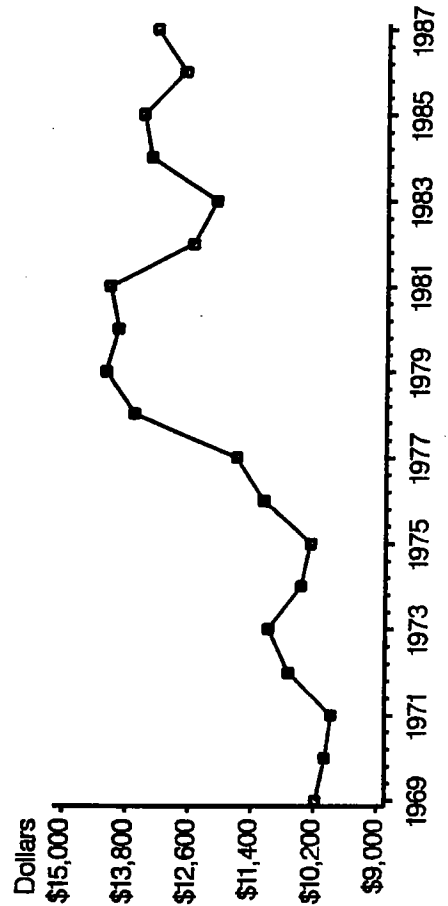


CHART 1D  
BOURBON COUNTY  
PER CAPITA PERSONAL INCOME  
as a Percent of Kentucky Per Capita Personal Income

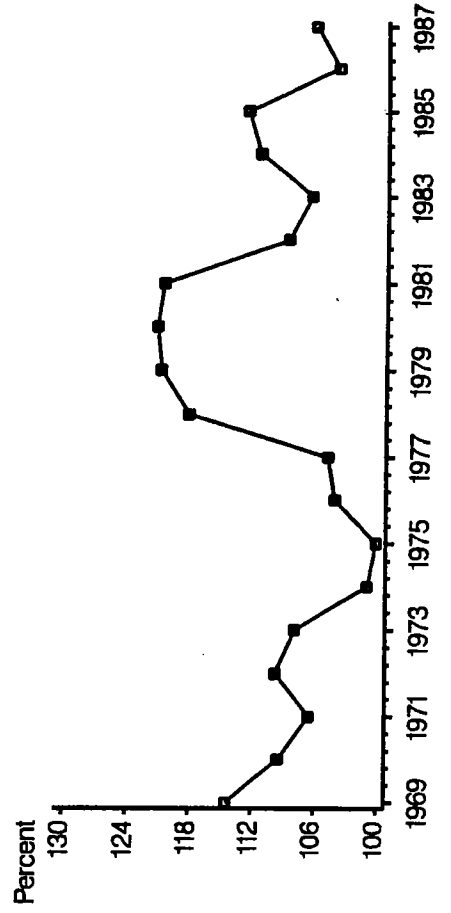


CHART 2A

BOURBON COUNTY  
REAL TOTAL EARNINGS  
Millions of 1988 dollars

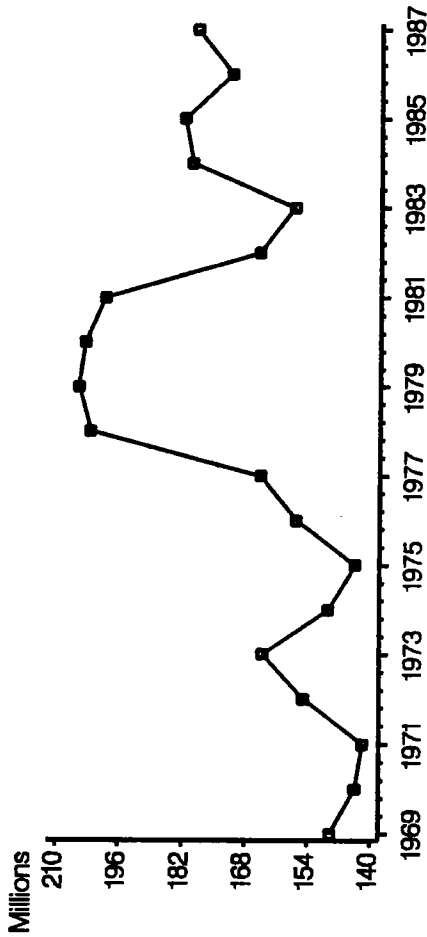


CHART 2B  
BOURBON COUNTY  
TRANSFER PAYMENTS and INCOME FROM PROPERTY  
Millions of 1988 Dollars

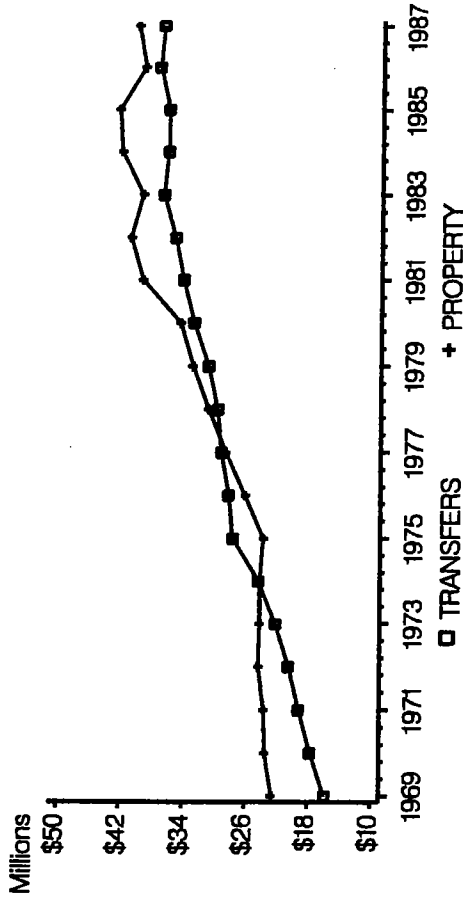


CHART 2C

BOURBON COUNTY  
TOTAL EARNINGS  
as a Percent of Personal Income

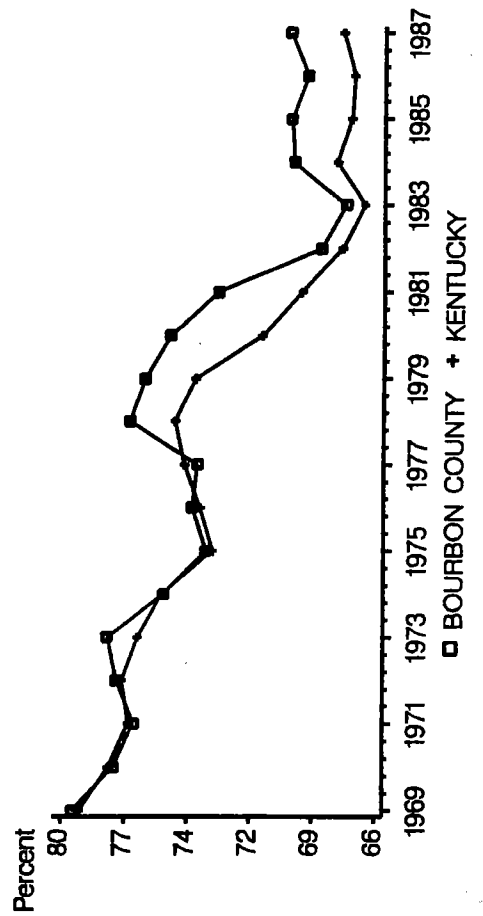


CHART 2D

BOURBON COUNTY  
TRANSFER PAYMENTS  
as a Percent of Personal Income

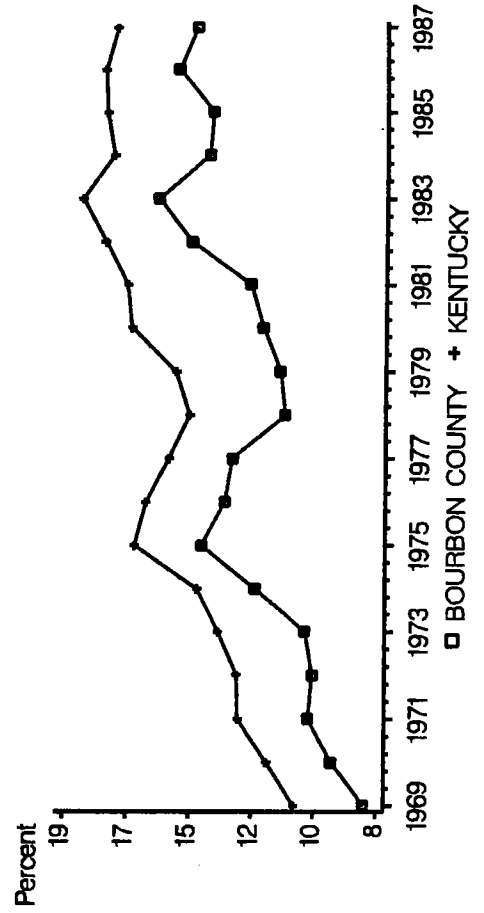




CHART 3A  
 BOURBON COUNTY  
 EARNINGS IN GOODS PRODUCING INDUSTRIES  
 as a Percent of Total Earnings

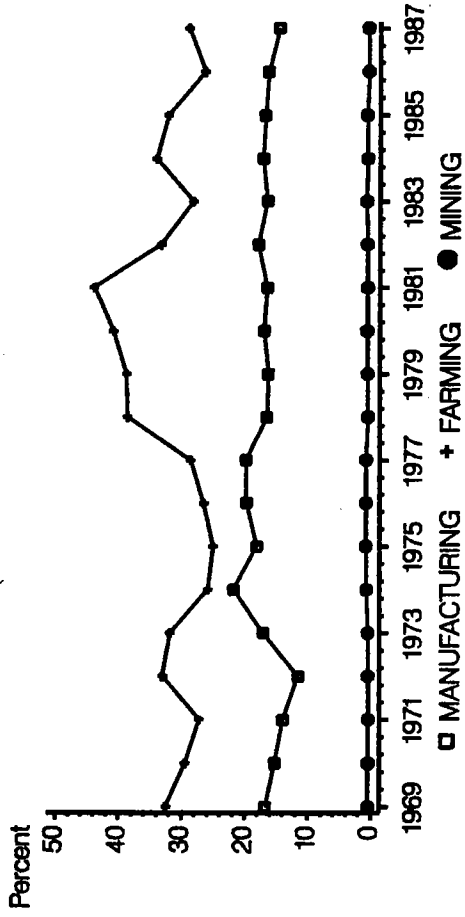


CHART 3B  
 BOURBON COUNTY  
 EARNINGS IN NON - GOODS PRODUCING INDUSTRIES  
 as a Percent of Total Earnings

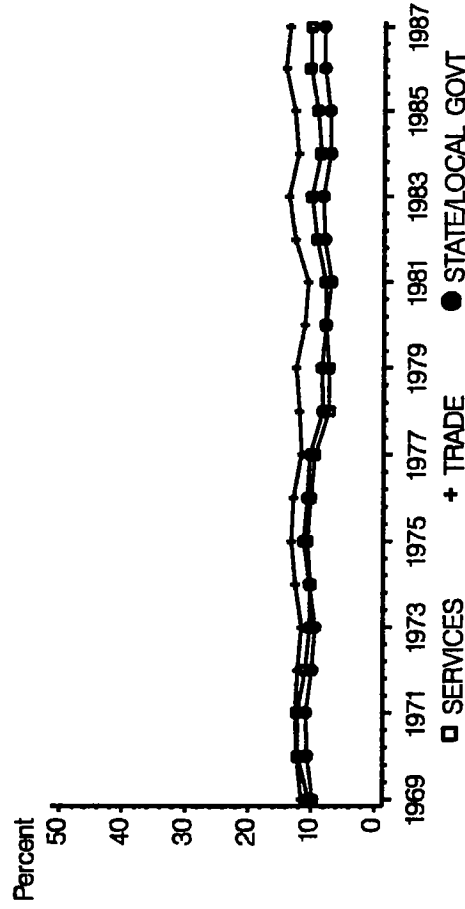


CHART 3C  
 BOURBON COUNTY  
 EARNINGS IN GOODS PRODUCING INDUSTRIES  
 as a Percent of Kentucky Industries

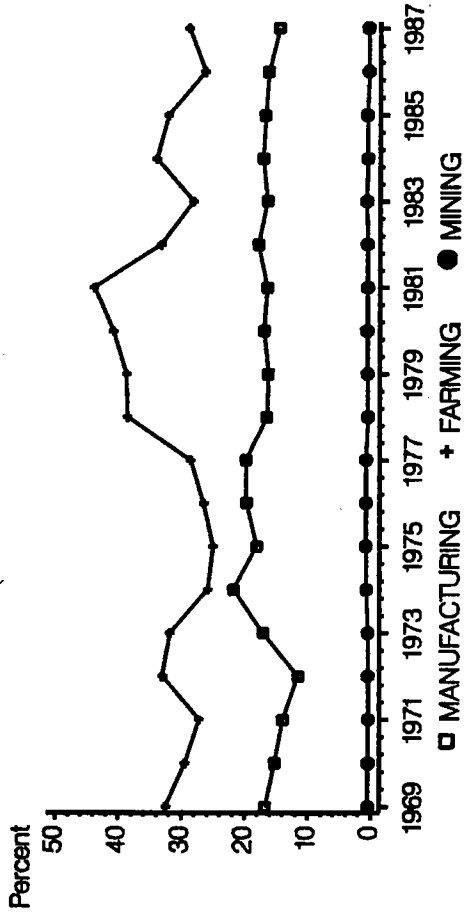


CHART 3D  
 BOURBON COUNTY  
 AVERAGE EARNINGS PER JOB  
 in Constant 1988 Dollars

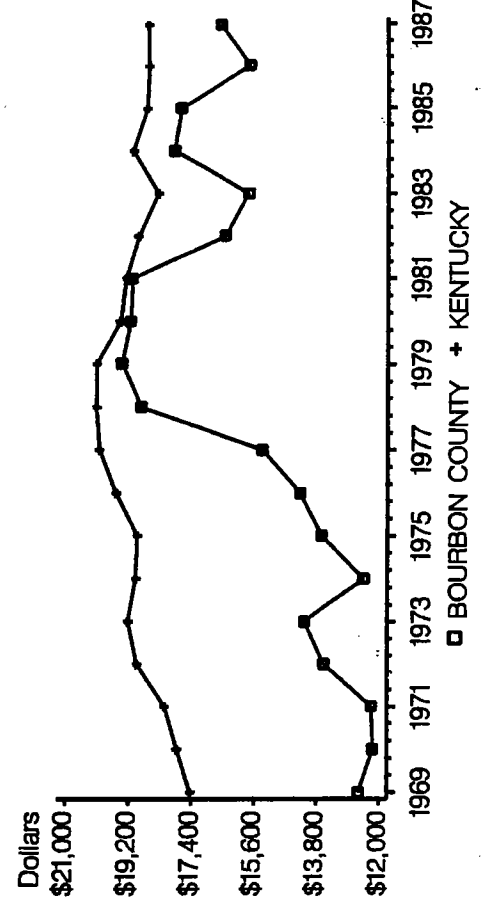


CHART 4A  
BOURBON COUNTY  
TOTAL EMPLOYMENT  
Thousands of People

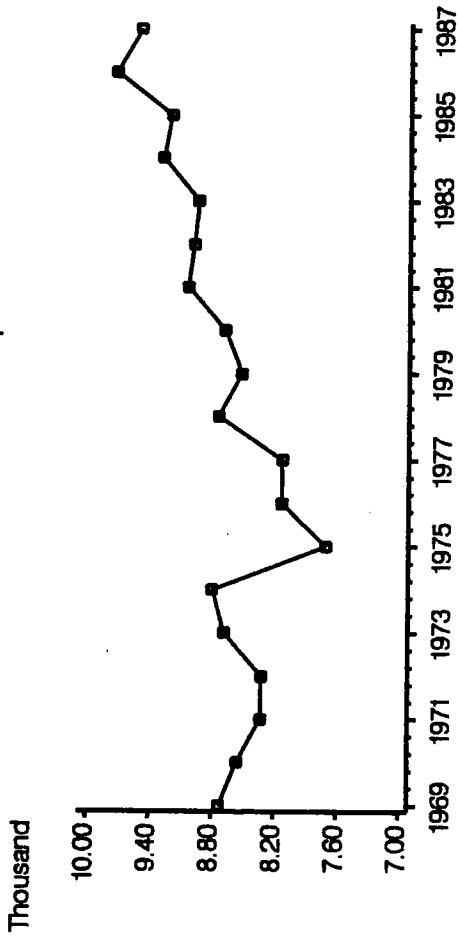


CHART 4B  
BOURBON COUNTY  
ANNUAL UNEMPLOYMENT RATE

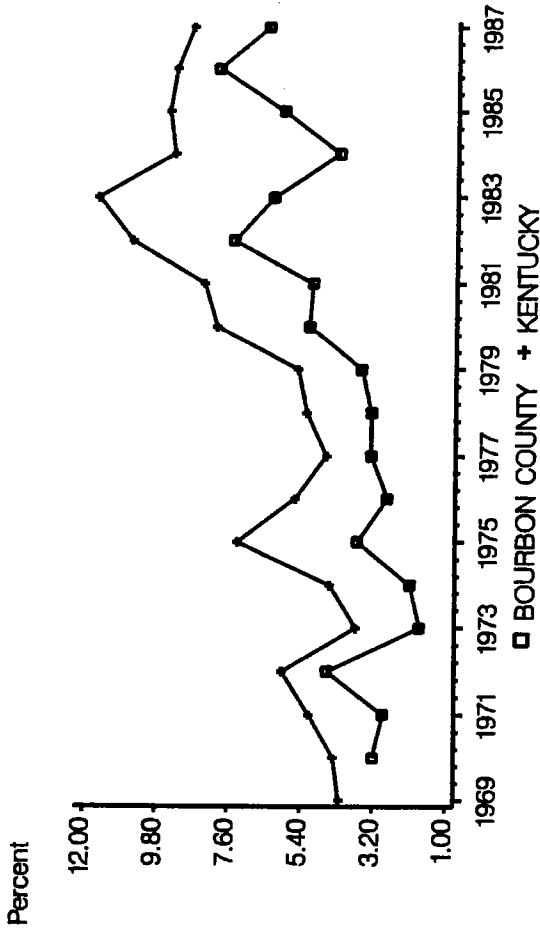


CHART 4C  
BOURBON COUNTY  
EMPLOYMENT IN GOODS PRODUCING INDUSTRIES  
as a Percent of Total Employment

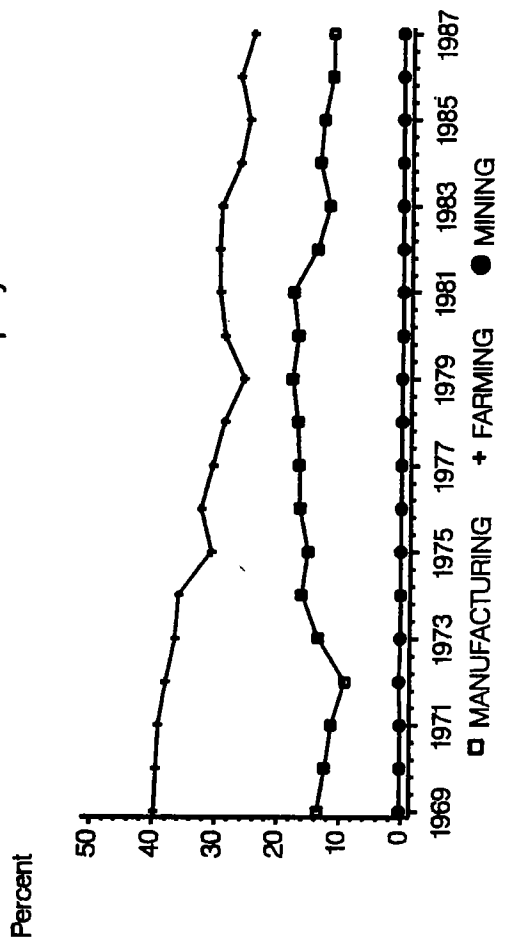


CHART 4D  
BOURBON COUNTY  
EMPLOYMENT IN NON-GOODS PRODUCING INDUSTRIES  
as a Percent of Total Employment

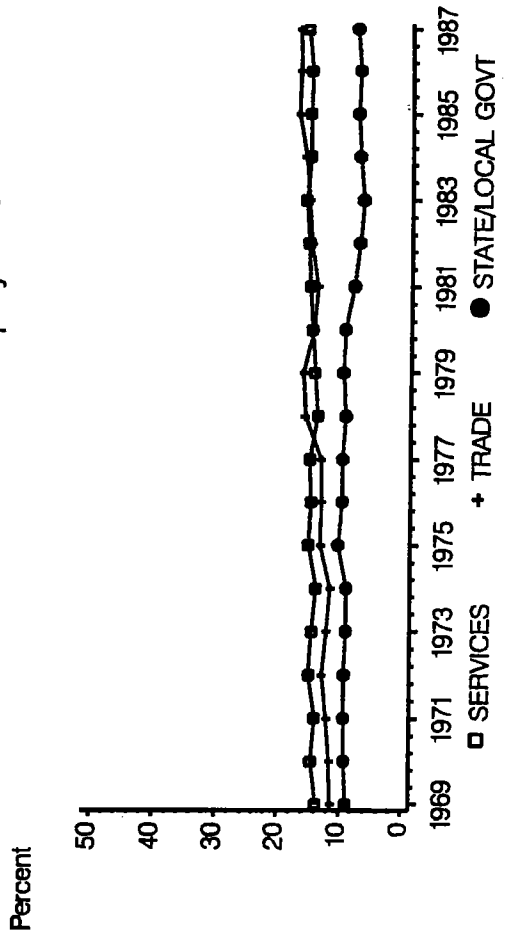


CHART 5A  
BOURBON COUNTY  
POPULATION  
Thousands of People

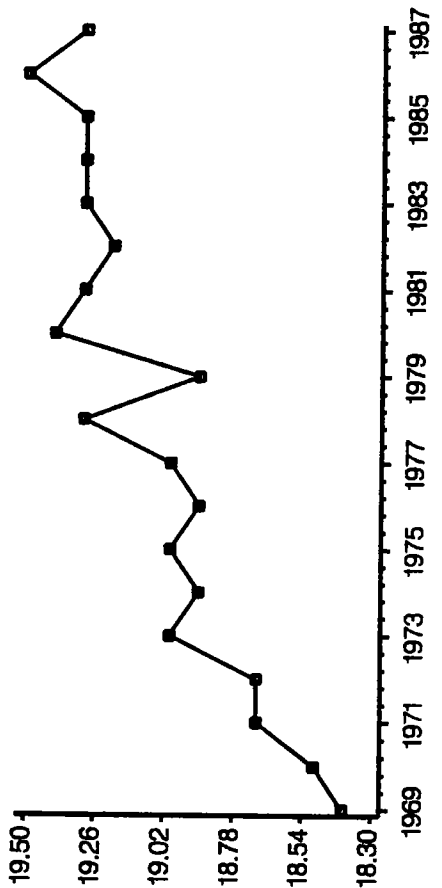


CHART 5B  
BOURBON COUNTY  
POPULATION  
as a Percent of Kentucky Population

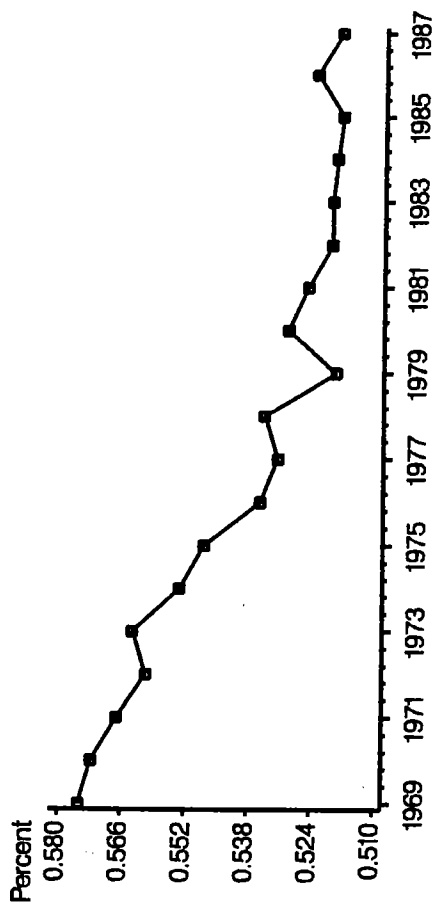


CHART 5C  
BOURBON COUNTY  
POPULATION 5 AND UNDER  
as a Percent of Total Population

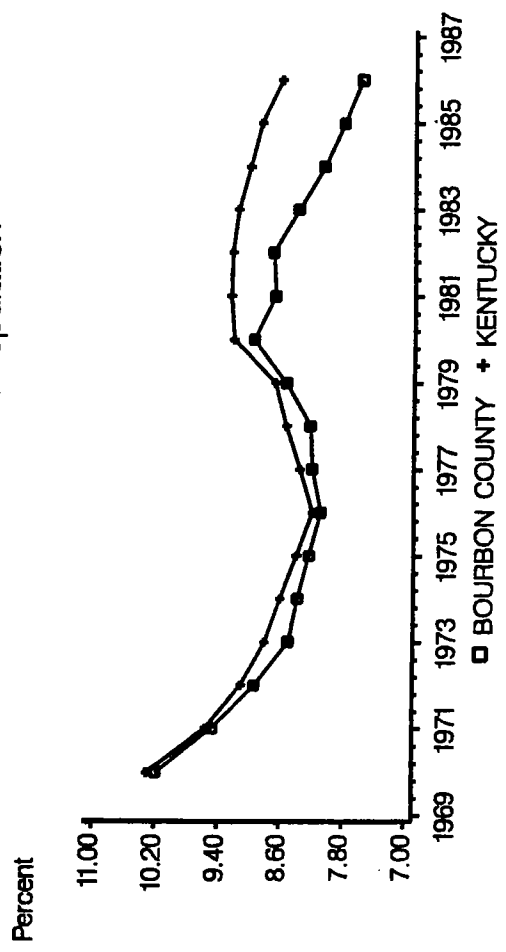
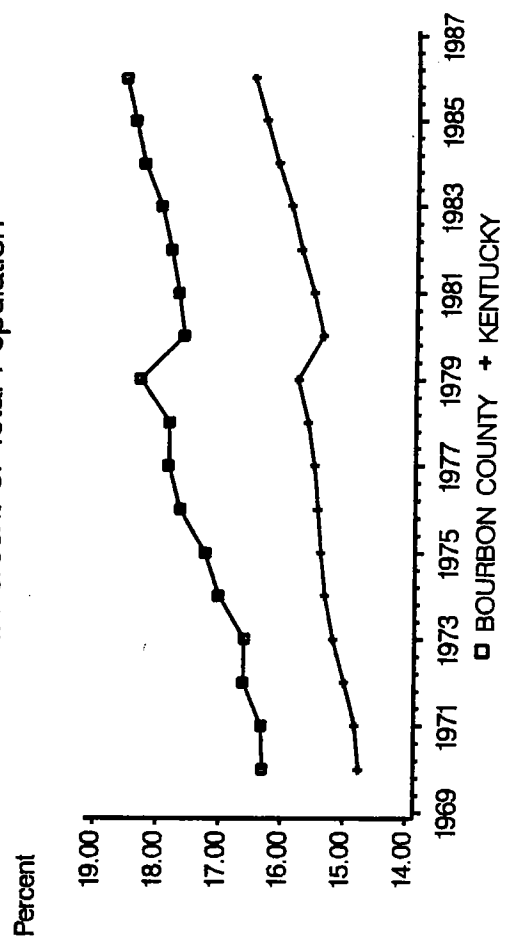


CHART 5D  
BOURBON COUNTY  
POPULATION 60 AND OVER  
as a Percent of Total Population



BOURBON COUNTY

PERSONAL INCOME  
In Constant 1988 Dollars

Year	County Personal Income (M\$)	Percent of Kentucky (%)	Per Capita Personal Income (\$)	Percent of Kentucky (%)
1969	187	0.66	10,163	114.4
1970	185	0.63	9,980	109.5
1971	185	0.60	9,857	106.5
1972	200	0.61	10,698	109.8
1973	211	0.61	11,082	107.9
1974	198	0.56	10,467	101.0
1975	195	0.55	10,282	100.2
1976	211	0.56	11,179	104.1
1977	223	0.56	11,713	104.8
1978	263	0.63	13,667	118.2
1979	269	0.63	14,204	120.8
1980	271	0.64	13,977	121.2
1981	273	0.63	14,133	120.6
1982	241	0.56	12,566	108.8
1983	233	0.55	12,124	106.5
1984	258	0.58	13,367	111.5
1985	260	0.58	13,517	112.7
1986	248	0.54	12,727	104.0
1987	256	0.55	13,266	106.1

COMPONENTS OF PERSONAL INCOME  
In Constant 1988 Dollars

Year	EARNINGS		TRANSFER PAYMENTS			INCOME from PROPERTY		
	M\$	Percent of Personal Income	M\$	Percent of Personal Income	M\$	Percent of Personal Income	Percent of Personal Income	
1969	149	79.5	16	8.5	23	12.0	9.9	
1970	143	77.7	18	9.6	23	12.7	10.2	
1971	142	76.8	19	10.4	24	12.8	10.1	
1972	155	77.6	20	10.3	24	12.2	9.7	
1973	164	78.0	22	10.5	24	11.5	9.7	
1974	149	75.5	24	12.3	24	12.2	10.1	
1975	143	73.6	28	14.2	24	12.2	10.1	
1976	157	74.2	28	13.4	26	12.4	10.0	
1977	165	74.0	29	13.1	29	12.9	10.1	
1978	203	77.0	30	11.3	31	11.7	10.4	
1979	205	76.3	31	11.5	33	12.2	10.8	
1980	204	75.2	33	12.1	34	12.7	12.2	
1981	199	73.1	34	12.5	39	14.4	13.8	
1982	165	68.5	35	14.6	41	16.9	14.9	
1983	157	67.4	37	15.7	39	16.9	15.1	
1984	180	69.7	36	14.0	42	16.3	14.9	
1985	182	69.8	36	13.9	42	16.3	15.3	
1986	171	69.1	37	15.1	39	15.8	15.3	
1987	179	69.9	37	14.4	40	15.7	15.3	

BOURBON COUNTY

SECTOR EARNINGS as a PERCENT of TOTAL COUNTY EARNINGS and  
as a PERCENT of KENTUCKY SECTOR EARNINGS

YEAR	MANUFACTURING		FARMING		MINING	
	TOTAL	KENTUCKY	TOTAL	KENTUCKY	TOTAL	KENTUCKY
1969	16.7	0.32	32.5	2.56	0.5	0.07
1970	15.2	0.27	29.5	2.47	0.4	0.05
1971	13.9	0.24	27.2	2.23	0.4	0.04
1972	11.6	0.20	33.0	2.55	0.4	0.04
1973	17.1	0.29	31.9	2.42	0.5	0.05
1974	21.8	0.33	25.9	1.70	0.7	0.04
1975	18.1	0.29	25.1	2.31	0.8	0.04
1976	19.8	0.32	26.6	2.45	0.8	0.04
1977	19.9	0.32	28.6	2.43	0.7	0.04
1978	16.5	0.34	38.6	4.77	0.5	0.03
1979	16.3	0.33	38.8	4.50	0.5	0.04
1980	17.0	0.37	40.9	5.97	0.6	0.04
1981	16.5	0.38	43.9	4.93	0.6	0.04
1982	17.9	0.39	33.3	3.83	0.6	0.04
1983	16.5	0.34	28.2	7.48	0.7	0.05
1984	17.2	0.39	34.1	4.10	0.6	0.05
1985	16.8	0.37	32.3	5.18	0.7	0.06
1986	16.3	0.34	26.4	4.90	0.4	0.04
1987	14.6	0.31	29.0	4.74	0.5	0.04

YEAR	SERVICES		TRADE		STATE and LOCAL GOVERNMENT	
	TOTAL	KENTUCKY	TOTAL	KENTUCKY	TOTAL	KENTUCKY
1969	10.5	0.38	11.6	0.35	9.9	0.51
1970	12.1	0.41	12.3	0.34	10.7	0.49
1971	12.2	0.38	12.5	0.33	10.9	0.47
1972	11.0	0.36	12.2	0.34	9.9	0.45
1973	10.2	0.35	11.6	0.33	9.4	0.45
1974	10.2	0.32	12.6	0.32	10.3	0.45
1975	10.7	0.31	13.2	0.31	11.2	0.44
1976	10.2	0.30	12.9	0.32	10.6	0.44
1977	9.5	0.29	11.7	0.30	10.3	0.44
1978	7.3	0.28	12.0	0.39	8.3	0.44
1979	7.3	0.27	12.5	0.40	8.4	0.44
1980	7.8	0.29	11.2	0.38	7.8	0.41
1981	7.9	0.30	10.6	0.39	6.9	0.39
1982	9.3	0.29	12.7	0.41	8.1	0.38
1983	10.1	0.29	13.7	0.42	8.3	0.37
1984	8.7	0.28	12.3	0.42	7.1	0.36
1985	9.2	0.28	12.9	0.43	7.3	0.35
1986	10.5	0.27	14.3	0.45	8.1	0.36
1987	10.3	0.26	13.8	0.43	8.3	0.36

BOURBON COUNTY  
 COUNTY EMPLOYMENT by SECTOR  
 -----

YEAR	MANUFACTURING		FARMING		MINING	
	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL
1969	1,182	13.5	3,468	39.7	26	0.3
1970	1,056	12.3	3,375	39.5	19	0.2
1971	944	11.3	3,260	39.1	17	0.2
1972	758	9.1	3,162	38.0	33	0.4
1973	1,176	13.5	3,171	36.5	22	0.3
1974	1,424	16.2	3,167	36.0	21	0.2
1975	1,171	15.2	2,367	30.7	22	0.3
1976	1,346	16.5	2,632	32.3	18	0.2
1977	1,358	16.7	2,479	30.5	18	0.2
1978	1,484	17.0	2,514	28.7	16	0.2
1979	1,520	17.8	2,190	25.7	20	0.2
1980	1,475	17.0	2,501	28.8	12	0.1
1981	1,606	17.8	2,675	29.6	13	0.1
1982	1,264	14.1	2,674	29.8	16	0.2
1983	1,078	12.0	2,629	29.4	20	0.2
1984	1,268	13.6	2,453	26.4	22	0.2
1985	1,200	13.0	2,306	25.0	23	0.2
1986	1,135	11.6	2,586	26.5	25	0.3
1987	1,097	11.5	2,321	24.4	32	0.3

YEAR	SERVICES		TRADE		STATE and LOCAL GOVERNMENT	
	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL
1969	1,205	13.8	990	11.3	770	8.8
1970	1,249	14.6	991	11.6	780	9.1
1971	1,168	14.0	1,007	12.1	770	9.2
1972	1,247	15.0	1,070	12.9	764	9.2
1973	1,264	14.6	1,055	12.1	774	8.9
1974	1,224	13.9	1,019	11.6	785	8.9
1975	1,169	15.2	1,020	13.2	794	10.3
1976	1,203	14.8	1,063	13.1	783	9.6
1977	1,217	15.0	1,073	13.2	780	9.6
1978	1,202	13.7	1,378	15.8	796	9.1
1979	1,222	14.3	1,375	16.1	817	9.6
1980	1,281	14.7	1,258	14.5	810	9.3
1981	1,375	15.2	1,261	13.9	720	8.0
1982	1,387	15.4	1,347	15.0	646	7.2
1983	1,422	15.9	1,377	15.4	589	6.6
1984	1,417	15.3	1,483	16.0	669	7.2
1985	1,404	15.2	1,572	17.1	687	7.5
1986	1,467	15.1	1,640	16.8	699	7.2
1987	1,478	15.5	1,598	16.8	716	7.5

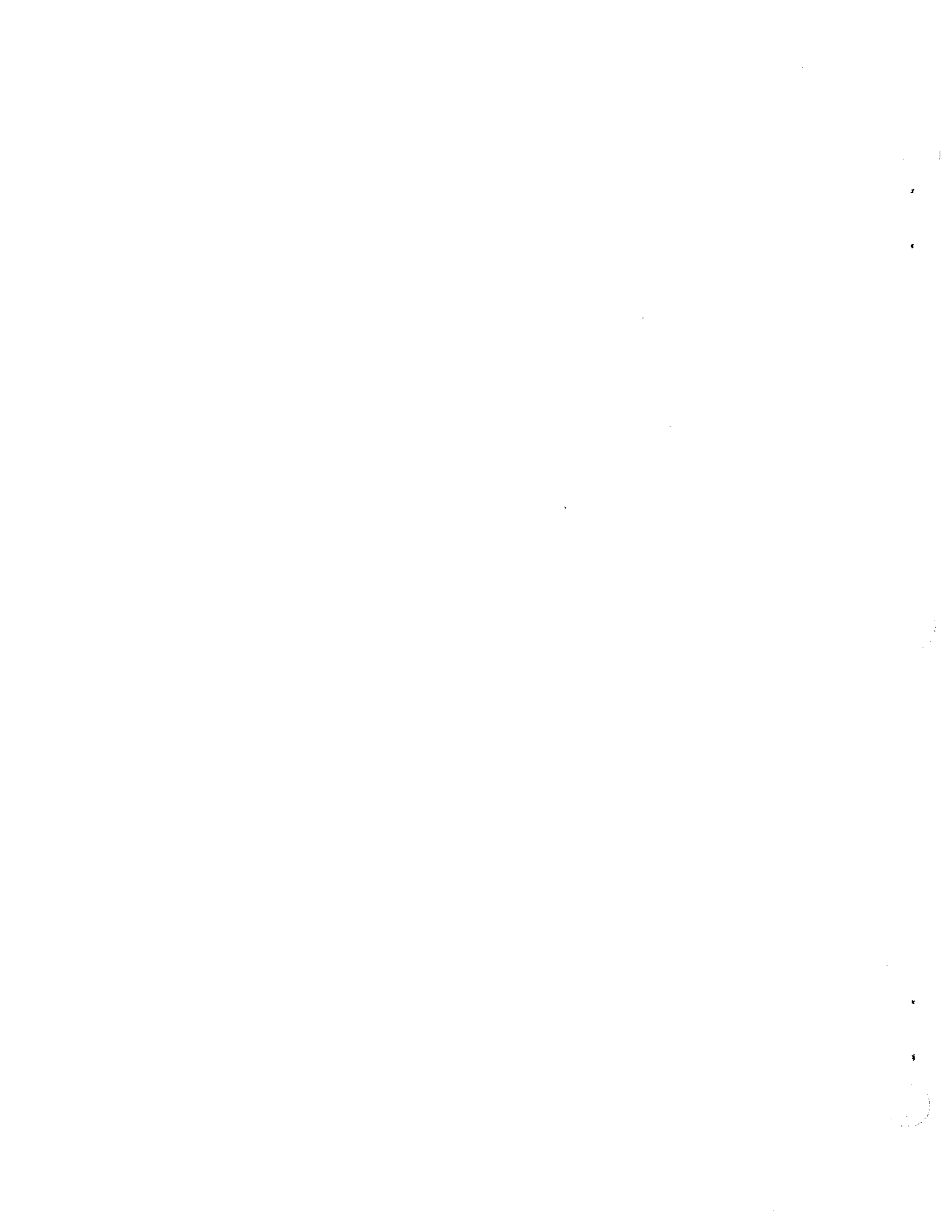
BOURBON COUNTY

EMPLOYMENT STATISTICS

YEAR	TOTAL EMPLOYMENT	AVERAGE EARNINGS		UNEMPLOYMENT RATE	
		COUNTY	KENTUCKY	COUNTY	KENTUCKY
1969	8,725	\$12,608	\$17,440	.	4.2
1970	8,554	\$12,198	\$17,811	3.2	4.4
1971	8,331	\$12,236	\$18,166	2.9	5.1
1972	8,323	\$13,586	\$18,970	4.6	6.0
1973	8,685	\$14,164	\$19,232	1.8	3.7
1974	8,798	\$12,466	\$19,008	2.1	4.5
1975	7,711	\$13,659	\$18,976	3.7	7.3
1976	8,138	\$14,292	\$19,563	2.8	5.6
1977	8,131	\$15,384	\$20,031	3.3	4.7
1978	8,746	\$18,852	\$20,121	3.3	5.3
1979	8,526	\$19,404	\$20,110	3.6	5.5
1980	8,688	\$19,171	\$19,439	5.2	8.0
1981	9,043	\$19,108	\$19,286	5.1	8.4
1982	8,988	\$16,444	\$18,931	7.5	10.6
1983	8,947	\$15,771	\$18,358	6.3	11.6
1984	9,290	\$17,900	\$19,080	4.3	9.3
1985	9,211	\$17,706	\$18,676	6.0	9.5
1986	9,746	\$15,736	\$18,627	8.0	9.3
1987	9,505	\$16,567	\$18,636	6.5	8.8

POPULATION STATISTICS

YEAR	POPULATION	% OF KY	PERCENT UNDER AGE 6		PERCENT AGE 60+	
			COUNTY	KENTUCKY	COUNTY	KENTUCKY
1969	18,400	0.58	.	.	.	.
1970	18,500	0.57	10.2	10.3	16.3	14.8
1971	18,700	0.57	9.5	9.6	16.3	14.8
1972	18,700	0.56	8.9	9.1	16.6	15.0
1973	19,000	0.56	8.5	8.8	16.6	15.2
1974	18,900	0.55	8.4	8.6	17.0	15.3
1975	19,000	0.55	8.2	8.4	17.2	15.4
1976	18,900	0.54	8.1	8.2	17.7	15.5
1977	19,000	0.53	8.2	8.4	17.8	15.5
1978	19,300	0.53	8.2	8.5	17.8	15.6
1979	18,900	0.52	8.5	8.7	18.3	15.8
1980	19,400	0.53	9.0	9.2	17.6	15.4
1981	19,300	0.53	8.7	9.3	17.7	15.5
1982	19,200	0.52	8.7	9.2	17.8	15.7
1983	19,300	0.52	8.4	9.2	18.0	15.9
1984	19,300	0.52	8.1	9.0	18.3	16.1
1985	19,300	0.52	7.8	8.9	18.4	16.3
1986	19,500	0.52	7.6	8.6	18.5	16.5
1987	19,300	0.52	.	.	.	.







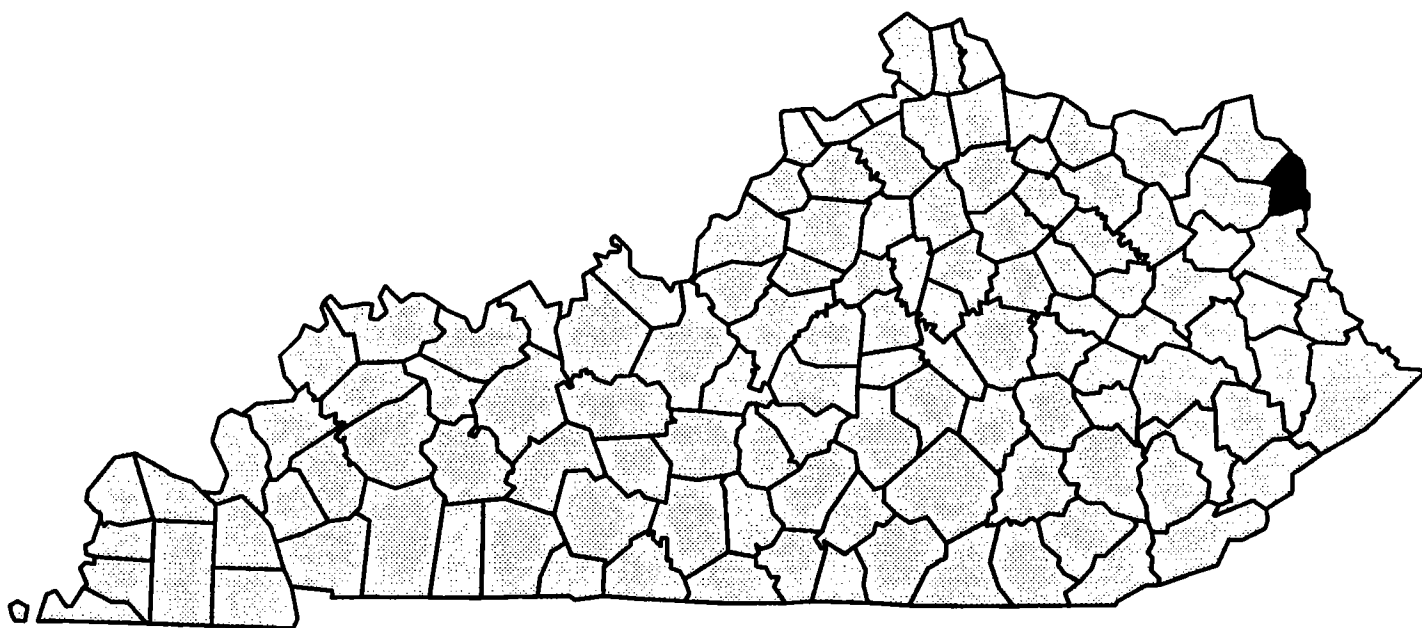
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ECONOMIC TRENDS IN  
KENTUCKY COUNTIES  
1969 – 1987

**BOYD COUNTY**



Prepared by  
Virginia Wilson  
Donna A. Cantrell

RESEARCH MEMORANDUM 438  
Legislative Research Commission  
Frankfort, Kentucky  
February, 1990



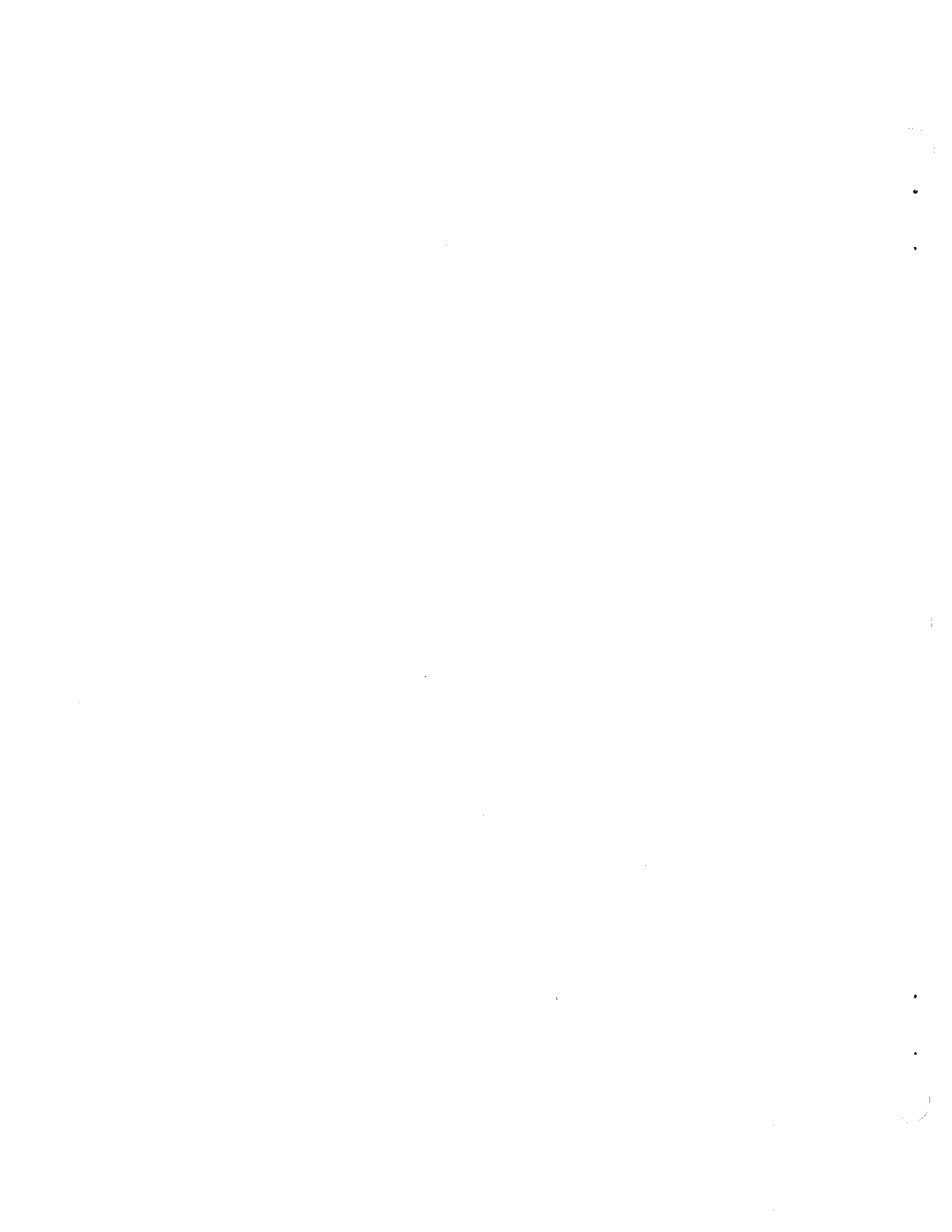
ECONOMIC TRENDS IN  
KENTUCKY COUNTIES  
1969 – 1987

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1990

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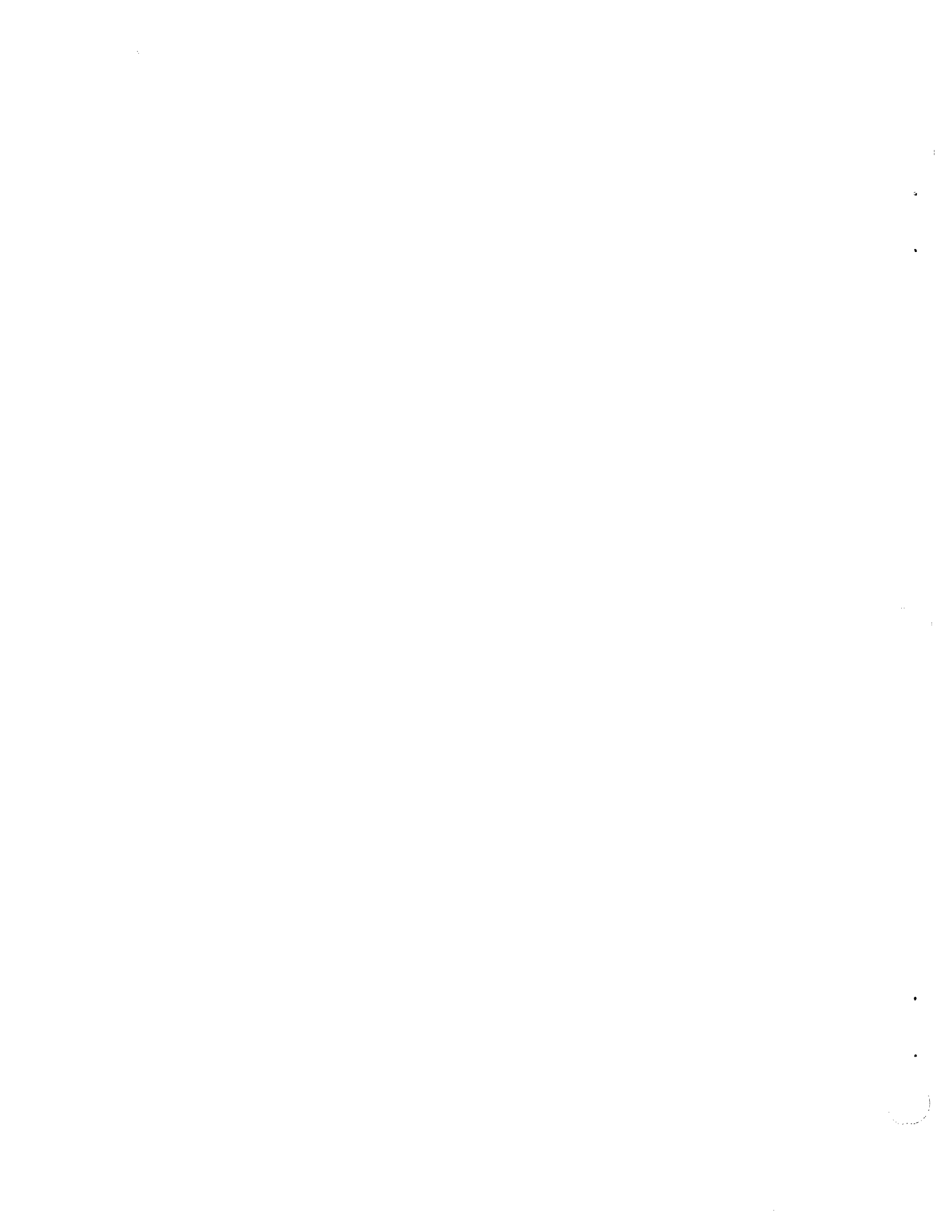
## FOREWORD

This publication is one of a set of 120, highlighting economic trends in each county in Kentucky from 1969-1987. This effort is part of the ongoing activities sponsored by the Legislative Research Commission to provide a long-term perspective on issues for decision makers. The economies of individual counties do not always parallel overall state trends. This set of publications is an attempt to look at the economic trends in each county over time and to point out where the economies of individual counties may be performing differently from the economy of the state as a whole.

This publication was prepared by Virginia Wilson and Donna Cantrell. Susan Dance assisted in production of the manuscript and Charles Bush edited the report. The assistance of Carol Straus from the Center for Business and Economic Research at the University of Kentucky in deciphering data is gratefully acknowledged.

Vic Hellard, Jr.  
Director

The Capitol  
Frankfort  
February, 1990





## SUMMARY

The Boyd County economy, as measured by personal income, grew strongly in the 1970's but declined slightly in the 1980's. Boyd County increased its share of Kentucky personal income in the mid-1970's and decreased its share in the 1980's. However, both per capita personal income and average earnings per job were significantly above those of the state. Boyd County generates a smaller percent of personal income from earnings and a larger percent from transfer payments than does the state as a whole.

The county economy was heavily impacted by the manufacturing sector. While the manufacturing sector was the primary source of earnings in Boyd County, earnings and employment from this sector declined substantially. The county's share of earnings and employment from mining and farming were minimal through most of the period. However, mining employment increased significantly in 1987.

The non-goods-producing sectors of services and state and local government experienced growth at the county level, while the trade sector declined. At the state level, the services and trade sector increased, while state and local government was constant.

Goods-producing industries, especially durable manufacturing, tend to be very sensitive to economic fluctuations and market competition. The non-goods-producing sectors tend to be more resilient during periods of economic decline. The long-term economic outlook at the state and national levels is for continued increase in these sectors, especially the service sector. Future economic growth in Boyd County would be enhanced by growth in these sectors.



## INTRODUCTION

This is one of a series of reports called Economic Trends in Kentucky Counties. The purpose of this series is to describe the economic structure of Kentucky counties and to assess their economic performance relative to their own history and relative to the Kentucky economy. Information on the structure and patterns of change in county economies and an understanding of their relationship to the Kentucky economy can help in making policy decisions that are intended to shape Kentucky's economic future.

When assessing any economy there are several pertinent questions which may be addressed. The first concerns changes in the absolute size of the economy over time. Here the relevant comparison is between the Boyd County economy and its own history. Since most economic variables are given in dollars and since inflation causes the value of a dollar to vary over time, all dollar values in this report are presented in constant 1988 dollars. This allows analysis of real changes over time by controlling for the effects of inflation.

A second question concerns the structure and nature of the Boyd County economy. The structure of an economy refers to the relative share contributed by the various segments of the economy, while the nature deals with how this share has changed over time.

A third question concerns the performance of the Boyd County economy when compared to the Kentucky economy. For example, if a county has a higher proportion of earnings or employment in a particular sector it would indicate a specialization in that sector. Differences in economic structure may explain variations in relative economic well being between a county and the state as a whole.

Economic data for counties are usually published after a lag of two years. Therefore, most data in this report cover the period 1969 to 1987. All data for this report was obtained from the Kentucky Economic Information System, an on-line database maintained by the University of Kentucky Center for Business and Economic Development.

There are certain caveats which should be remembered when analyzing data. First, it is a common and useful approach to evaluate the percentage an economic sector contributes to the total economy. However, one must remember that a sector's percentage contribution may decline even when its absolute value is increasing, if another sector's contribution is growing at a faster rate. Secondly, when reviewing data in graphical analyses, the scales used to present data should be noted. In this report most graphs are presented with the narrowest scale which will cover all data points. This can accentuate visual patterns over time even when absolute changes are relatively small.

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\*For an analysis of economic trends in Kentucky, see Virginia Wilson, Patterns of Growth and Decline in the Kentucky Economy 1969-1988, Research Memorandum 437, Legislative Research Commission, November 1989.



## ECONOMIC TRENDS IN BOYD COUNTY

The following analysis includes a brief description of the county economy and is accompanied by graphical illustrations. Data tables are also included at the end of this report. Three principal components of the Boyd County economy are analyzed. They are:

1. Personal Income
2. Earnings
3. Employment

Also, because coal production has been an important component in the Kentucky economy and in many local economies, the coal sector is analyzed in counties which have a history of coal production.

### Personal Income

Personal income is often used as a measure of the economic activity in an area. Personal income is the sum of all the dollar income received by individuals in an area from any legal source. Personal income data is published by the Bureau of Economic Analysis (BEA) for most major geographic regions, including states, counties, and major cities.

In general, income can be obtained in three ways. First, it can be earned by the work of an individual. This type of income includes wage and salary income and proprietors' earnings. Second, income can be earned by property. Included are earnings from rents, dividends, and interest. Finally, income can be received as a gift or an entitlement. This type of income constitutes the component of personal income called transfer payments. Included in this component is income from sources such as retirement benefits, unemployment benefits, food stamps, and medical programs such as Medicare and Medicaid.

The Boyd County economy has experienced both growth and decline during the data period. As can be seen in Chart 1A, the size of the Boyd County economy, as measured by real personal income, increased substantially, from \$521 million in 1969 to a high of \$794 million in 1979. There was a subsequent decline in the 1980's to \$698 million in 1987, after adjusting for inflation. Chart 1B shows Boyd County total personal income as a percent of Kentucky total personal income. Except for a cyclical fluctuation in the 1970's, Boyd County's share of Kentucky personal income decreased.

A similar pattern emerges from an examination of per capita personal income (Charts 1C and 1D). Per capita personal income is simply the total personal income of an area divided by its population. Per capita personal income is often used as a measure of the economic well-being of the residents of an area. Boyd County real per capita income increased in the 1970's, then declined in the 1980's to a level of \$13,217 in 1987. While Boyd County's per

capita personal income is high relative to the state's at 105.7 percent of Kentucky per capita personal income, this percentage was volatile throughout the period and declined substantially after 1979.

A better understanding of the nature of economic activity can be gleaned from an examination of the relative contribution of the components of personal income and how their shares have changed over time. This information is illustrated in Charts 2A-2D. Total earnings increased from \$409 million in 1969 to a high of \$598 million in 1979, then declined to \$445 million in 1987 (in constant 1988 dollars). Earnings as a percent of personal income declined over the period. Earnings accounted for 63.8 percent of Boyd County's total personal income in 1987, compared to Kentucky's 67.5 percent share.

Transfer payments contributed \$55 million to total personal income in 1969 and \$132 million in 1987. Until 1982, transfer payments contributed a smaller percentage of personal income in Boyd County than in Kentucky. However, this pattern reversed in 1983. In 1987, 18.9 percent of Boyd County personal income was derived from transfer payments, compared to 17.2 percent for the state.

Income from property in Boyd County grew at a stable rate through the time period. Income from property totalled \$58 million in 1969 and increased to \$121 million in 1987.

## Earnings

Earnings are the component of personal income reflecting payments to individuals in return for labor. Earnings include both wages and salaries and proprietor's income. Earnings from goods-producing sectors are presented in Chart 3A. In 1969, Boyd County received 44.0 percent of its earnings from manufacturing. This percentage decreased to 32.4 percent in 1987. This pattern of decline in the percent of total earnings from manufacturing parallels that of the state. Earnings from farming and mining were minimal through most of this period. However, the share of earnings from mining increased in 1987, possibly indicating the emergence of this sector in the county economy.

Earnings from non-goods-producing industries paralleled state trends (Chart 3B). The percent of total earnings from services increased from 9.5 percent in 1969 to 19.4 percent in 1987. The percentage of earnings from the trade sector declined in 1971, then remained relatively stable and accounted for 14.7 percent in 1987. The share from state and local government increased slightly and was 7.2 percent in 1987.

Average earnings per job (adjusted for inflation) for Boyd County and Kentucky are shown in Chart 3D. In Kentucky, average earnings per job reached a high of \$20,121 per person in 1978. Since that time average earnings per job have declined and in 1987 they were \$18,636 per person. Similarly, in Boyd County earnings per job peaked in 1979 at an average of \$26,131. County average earnings decreased to a level of \$23,005 in 1987, well above the Kentucky average.

## Employment

Employment is considered to be any activity for which one receives financial remuneration in the form of wages or profits. Total employment in Boyd County was volatile during the data period. In 1969, total employment stood at 25,181 people. Employment increased to 30,938 people in 1979 then declined to 26,890 by 1987.

The unemployment rate, often used as an indicator of economic well-being, is the ratio of unemployed to the total civilian labor force. Unemployment is described as a condition of being out of work while actively seeking employment within the last thirty days. The civilian labor force is described as the proportion of population age 16 or older employed or actively seeking employment. Annual unemployment rates for Kentucky and Boyd County are presented in Chart 4B. Boyd County unemployment rates were volatile and since 1980 exceeded corresponding rates for the state. In 1987, the Boyd County unemployment rate was 10.4 percent, compared to 8.8 for the state.

Another employment concept includes the discouraged worker. Discouraged workers are persons who want jobs but made no attempt to find work in the last thirty days because they believe they could not find it. These individuals are not included when calculating official unemployment rates. The Cabinet for Human Resources does not estimate discouraged workers by county. However, preliminary research by the Cabinet indicates that the inclusion of discouraged workers in the civilian labor force estimate would increase the unemployment rate by approximately 4 percent for the state. This figure would vary by county depending on the labor market in a county or within commuting distance.

Employment in the goods-producing industries is illustrated in Chart 4C. The percent of Boyd County total employment in manufacturing decreased over the time period. Again, this trend parallels that of the state. Manufacturing accounted for 31.6 percent of total employment in 1969. This share decreased to 18.9 percent in 1987. The farm and mine sectors historically employed less than one percent of the total workforce. However, in 1987, mining employment increased slightly, mirroring the slight increase in earnings from mining.

Boyd County employment in the non-goods-producing industries parallels state trends (Chart 4D). Employment in the service sector as a percent of total employment increased from 15.2 percent in 1969 to 23.5 percent in 1987. While the percent of employment from trade declined in the 1970's, employment in this sector increased in the 1980's to 24.2 percent in 1987. The percent of employment in state and local government remained relatively stable and accounted for 8.3 percent in 1987. These county employment patterns were similar to state patterns in the non-goods-producing sectors.

## Population

The census conducted each decade counts the actual population in an area. Population is then statistically estimated during intervening years.

The demographic composition of this population growth has important implications for the future demand for goods and services, and ultimately, the economic structure of Boyd County.

Population trends for Boyd County reflect the cycles of economic activity in the area. The Boyd County population grew from 52,300 in 1969 to 55,600 in 1979. Population then declined to 52,800 in 1987 (Chart 5A). In 1986, 7.5 percent of Boyd County's population was under six years of age, compared to 8.6 percent for the state. In the same year, 19.2 percent of the Boyd County population were 60 years of age and over, while 16.5 percent of all Kentucky residents fell in this age group.

## Coal

The coal sector provides significant income and employment to the Kentucky economy. This sector also contributes directly to the Commonwealth's General Fund revenues through severance tax collections. While mining employment and earnings are a very small percent of their respective totals for Boyd County, coal production has been a nontrivial sector of the county economy.

Boyd County coal production patterns are presented in Chart 6A. Coal production is estimated by the Energy Information Administration of the U.S. Department of Energy. Estimates of production are calculated from a sample of coal shipments from each county. Coal production increased significantly between 1976 and 1978. This production increase was likely stimulated by changes in international energy markets. Specifically, a sharp increase in the price of oil resulted in increased demand for coal by utilities and resulted in increases in the price of coal. However, when oil prices declined, coal production also declined. In 1986, 503 thousand tons of coal was mined in Boyd County.

Employment in the mining sector, which includes coal and other forms of mining, is illustrated in Chart 6B. In 1986 there were only 112 people employed in mining in Boyd County. In 1987, mining provided 559 jobs in the county. The large increase in employment from 1986 to 1987 illustrates the volatile nature of coal production and its impact on local economies.

The average value per ton for coal is illustrated in Chart 6C. Similar to patterns for the national coal market, average value per ton increased in the mid-1970's, then declined during the 1980's.

Coal severance tax receipts are presented in Chart 6D. The Kentucky Revenue Cabinet collects severance taxes on processed coal. Receipts are then allocated to counties, based on the value of the coal mined in the county and the value attributed to any processing done in the county. Therefore, trends in severance tax collections may not exactly parallel those of the coal production figures in Chart 6A. Severance tax collections were cyclical over the period. In 1986, coal severance tax collections allocated to Boyd County totalled \$1.8 million.



CHART 1A  
BOYD COUNTY  
REAL PERSONAL INCOME  
Millions of 1988 dollars

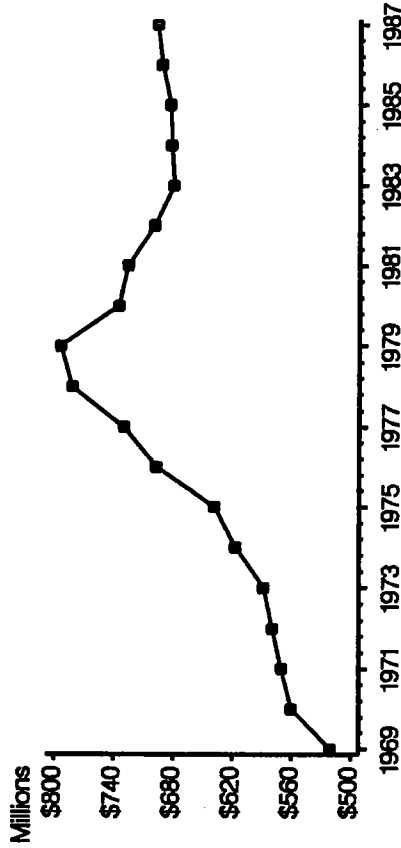


CHART 1B  
BOYD COUNTY  
PERSONAL INCOME  
as a Percent of Kentucky Personal Income

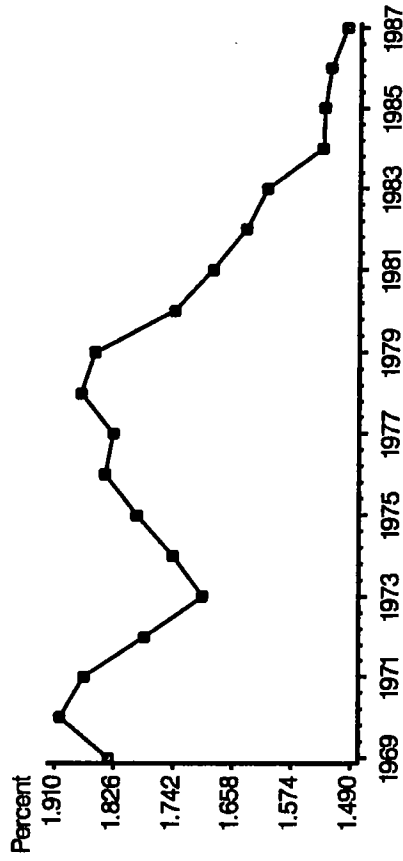


CHART 1C  
BOYD COUNTY  
PER CAPITA PERSONAL INCOME  
in Constant 1988 Dollars

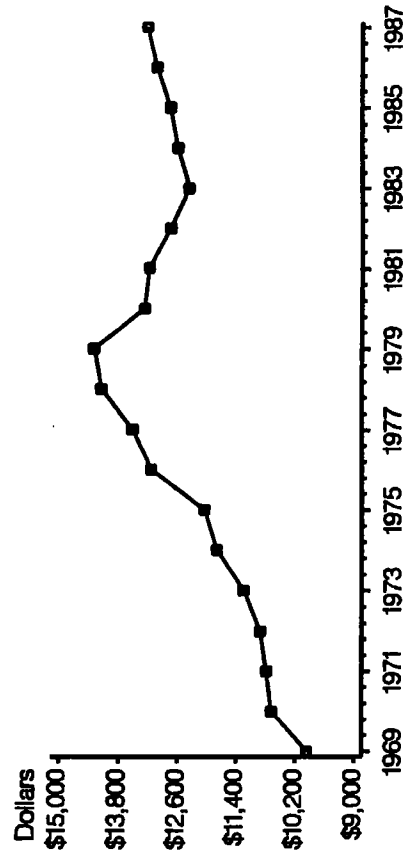


CHART 1D  
BOYD COUNTY  
PER CAPITA PERSONAL INCOME  
as a Percent of Kentucky Per Capita Personal Income

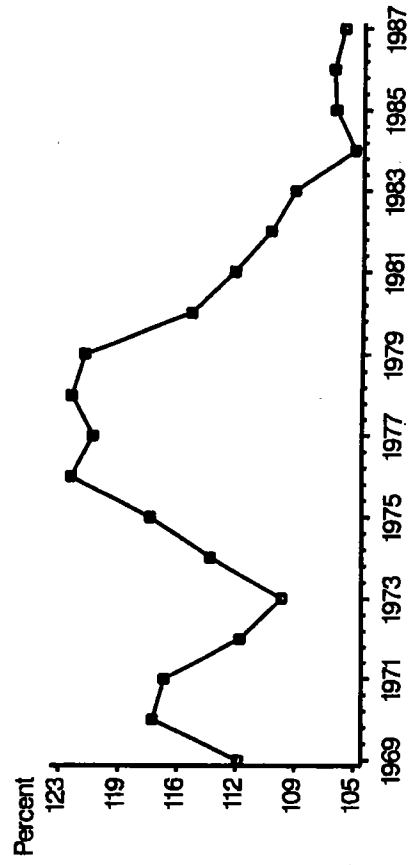


CHART 2A  
BOYD COUNTY  
REAL TOTAL EARNINGS  
Millions of 1988 dollars

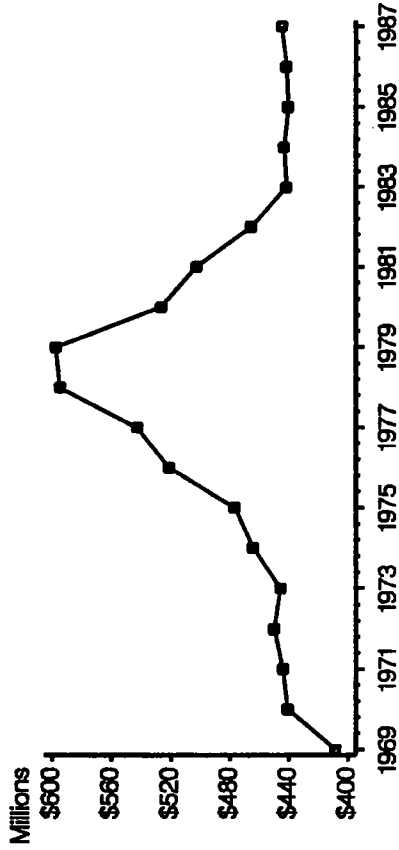


CHART 2B  
BOYD COUNTY  
TRANSFER PAYMENTS and INCOME FROM PROPERTY  
Millions of 1988 Dollars

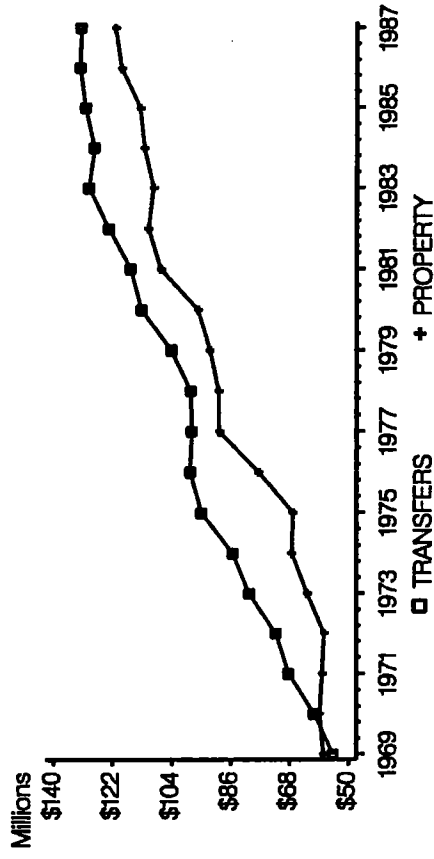


CHART 2C  
BOYD COUNTY  
TOTAL EARNINGS  
as a Percent of Personal Income

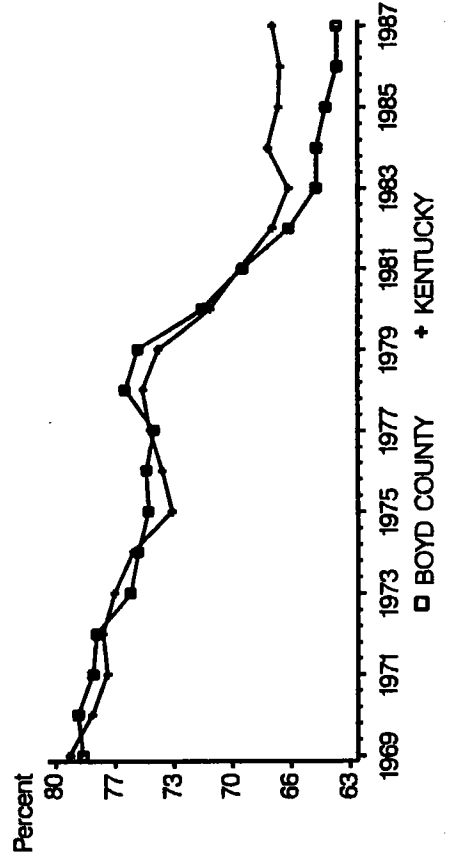


CHART 2D  
BOYD COUNTY  
TRANSFER PAYMENTS  
as a Percent of Personal Income

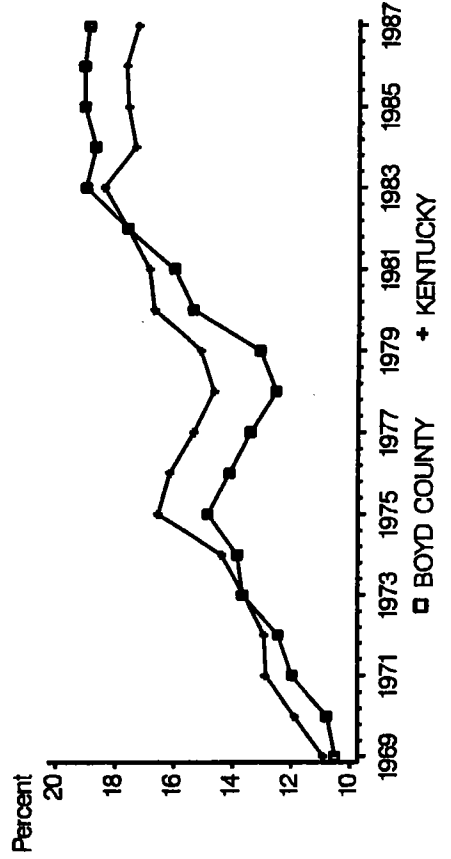


CHART 3A

BOYD COUNTY

EARNINGS IN GOODS PRODUCING INDUSTRIES  
as a Percent of Total Earnings

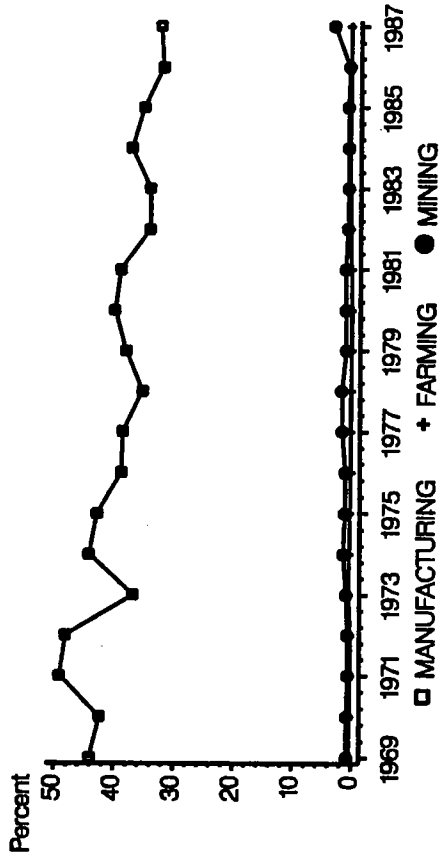


CHART 3B

BOYD COUNTY

EARNINGS IN NON - GOODS PRODUCING INDUSTRIES  
as a Percent of Total Earnings

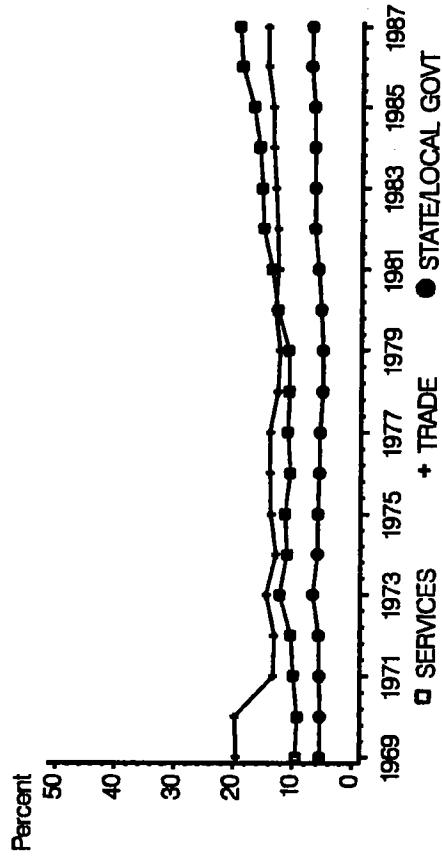


CHART 3C

BOYD COUNTY

EARNINGS IN GOODS PRODUCING INDUSTRIES  
as a Percent of Kentucky Industries

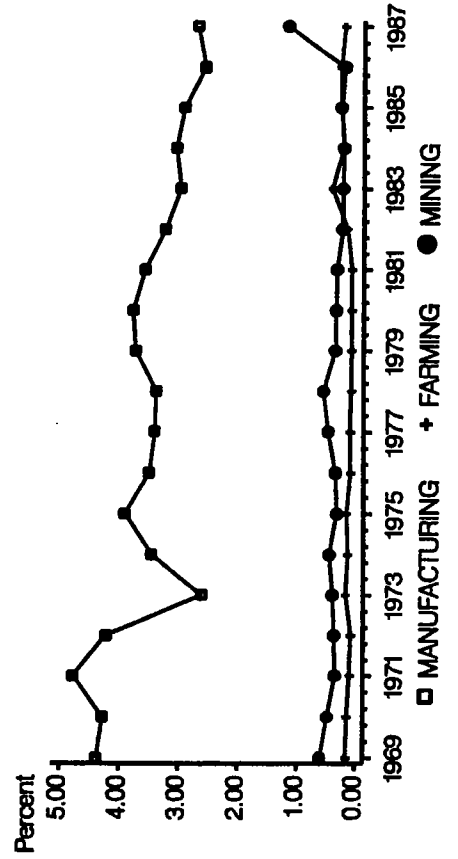


CHART 3D

BOYD COUNTY

AVERAGE EARNINGS PER JOB  
in Constant 1988 Dollars

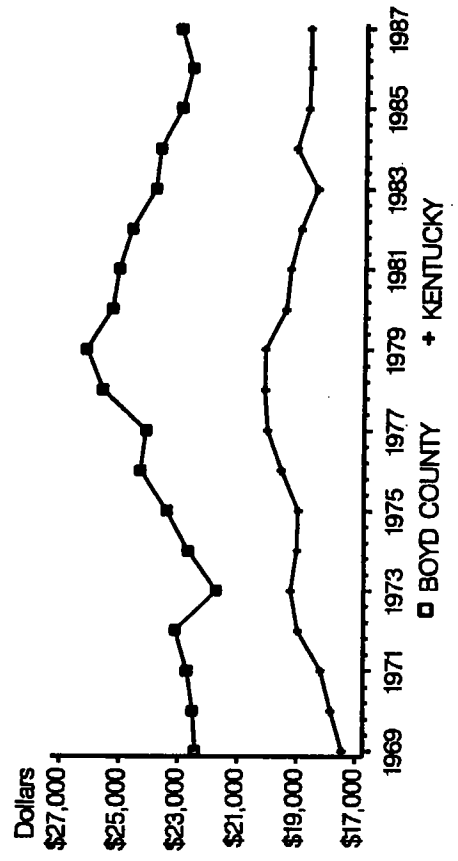


CHART 4A  
BOYD COUNTY  
TOTAL EMPLOYMENT  
Thousands of People

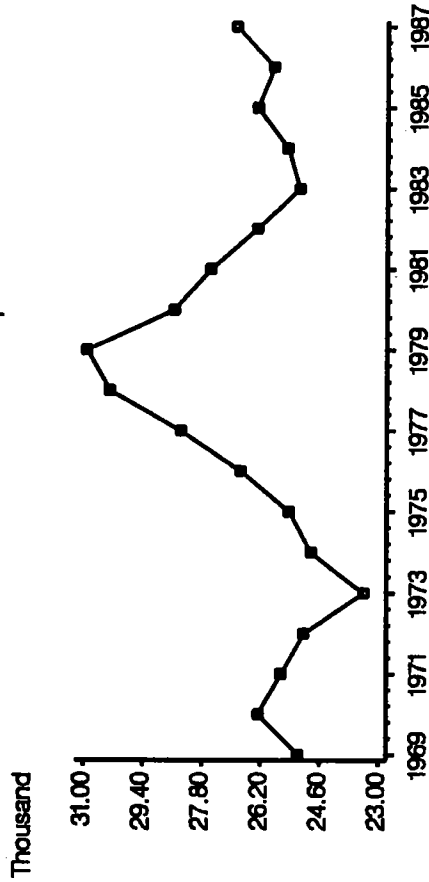


CHART 4B  
BOYD COUNTY  
ANNUAL UNEMPLOYMENT RATE

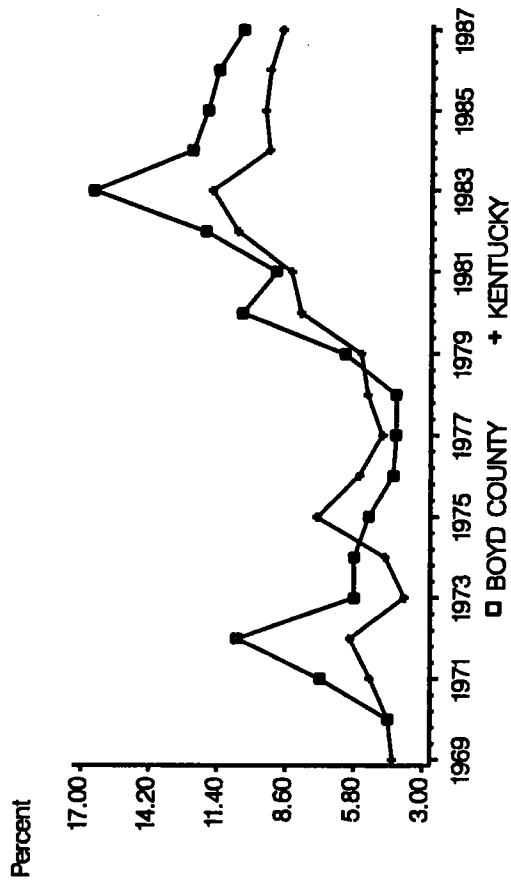


CHART 4C  
BOYD COUNTY  
EMPLOYMENT IN GOODS PRODUCING INDUSTRIES  
as a Percent of Total Employment

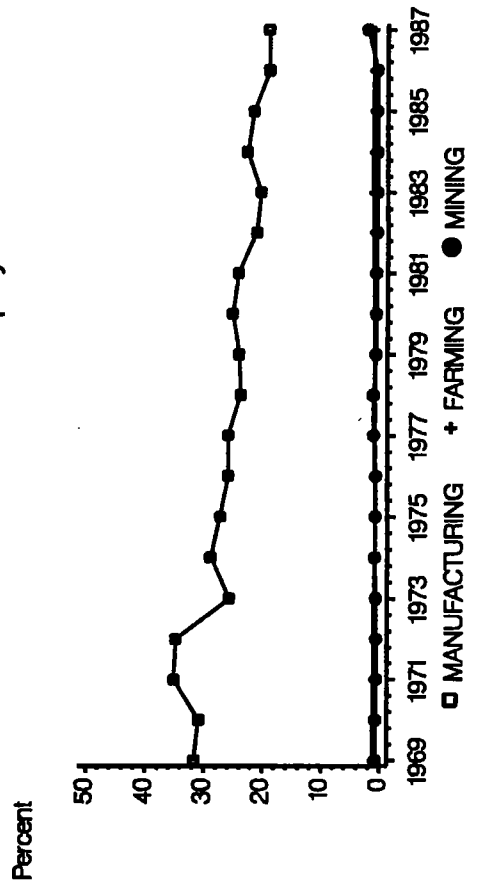


CHART 4D  
BOYD COUNTY  
EMPLOYMENT IN NON-GOODS PRODUCING INDUSTRIES  
as a Percent of Total Employment

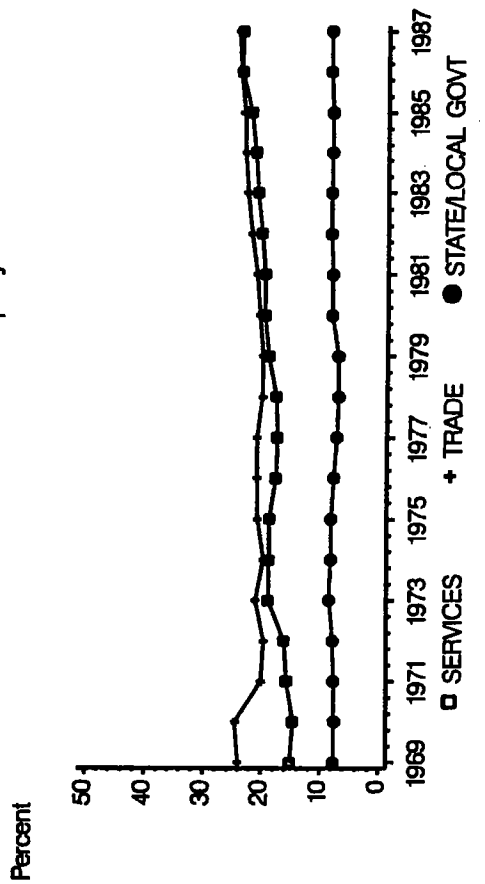


CHART 5A  
BOYD COUNTY  
POPULATION  
Thousands of People

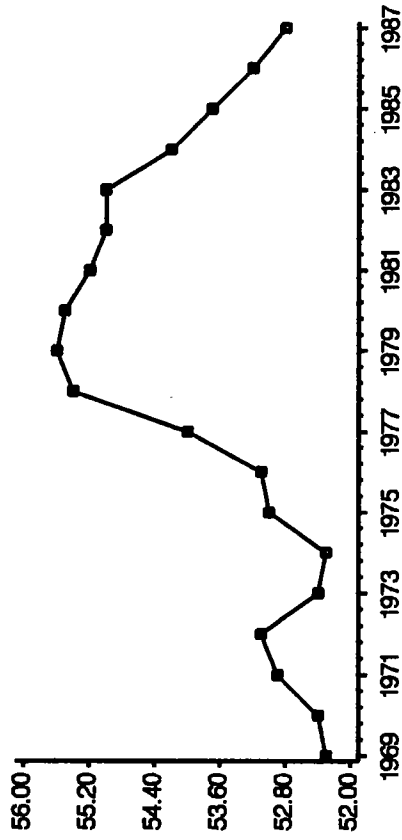


CHART 5B  
BOYD COUNTY  
POPULATION  
as a Percent of Kentucky Population

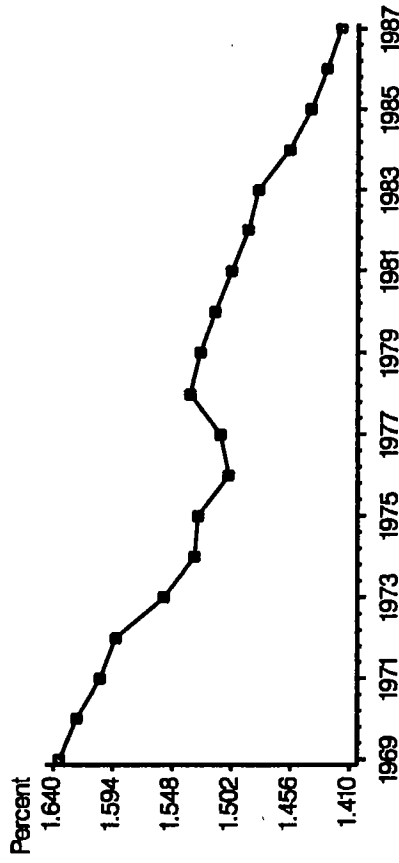


CHART 5C  
BOYD COUNTY  
POPULATION 5 AND UNDER  
as a Percent of Total Population

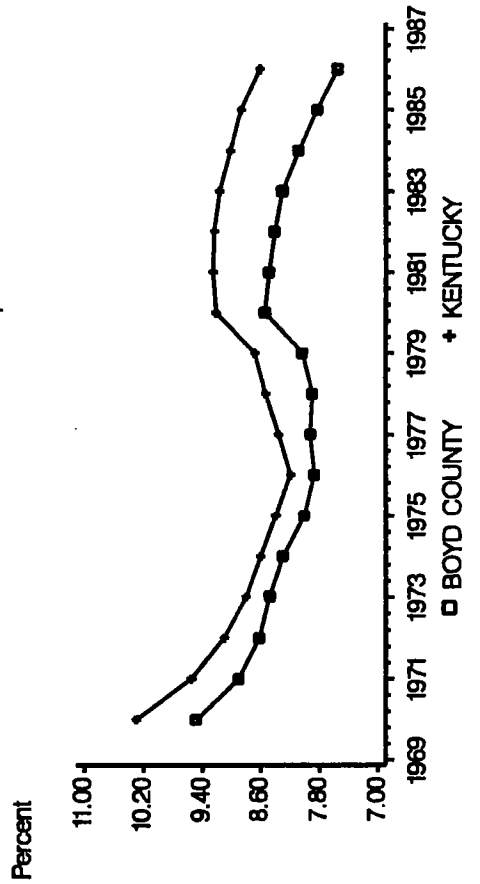
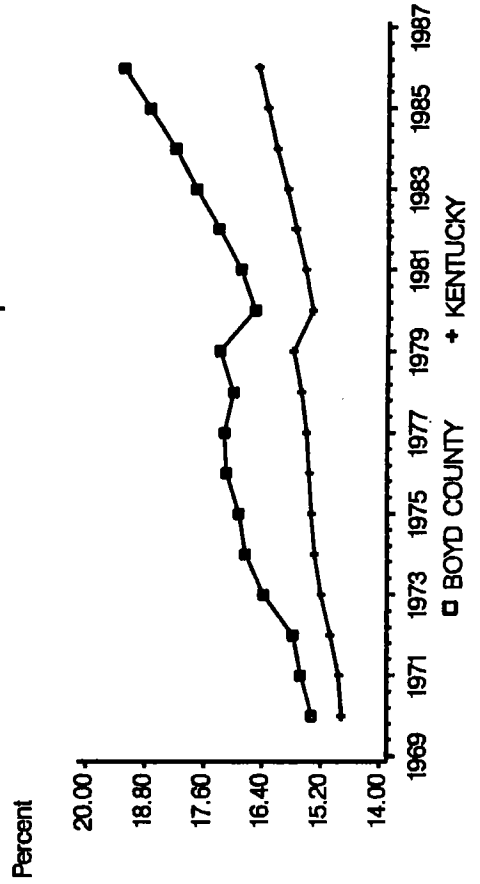
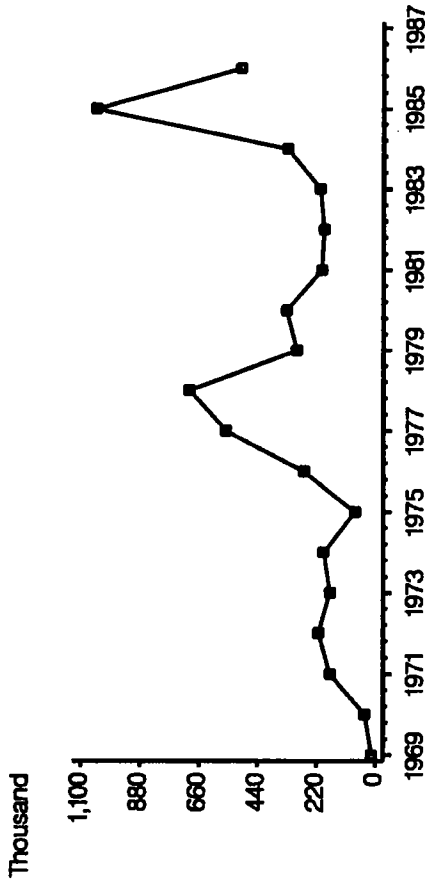


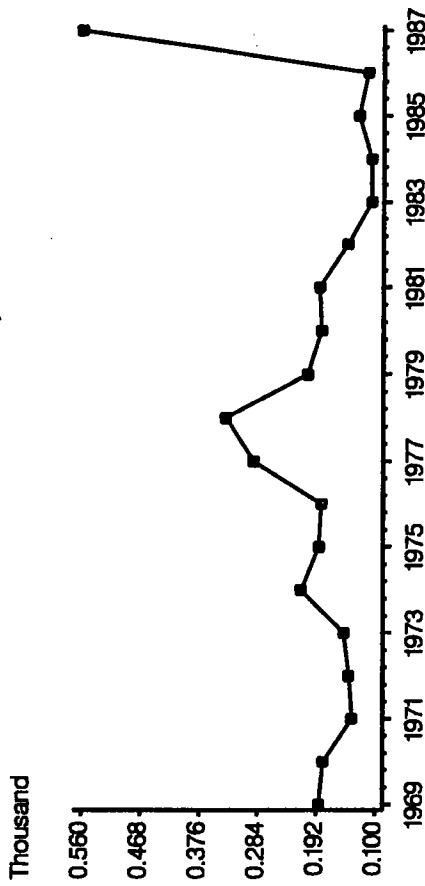
CHART 5D  
BOYD COUNTY  
POPULATION 60 AND OVER  
as a Percent of Total Population



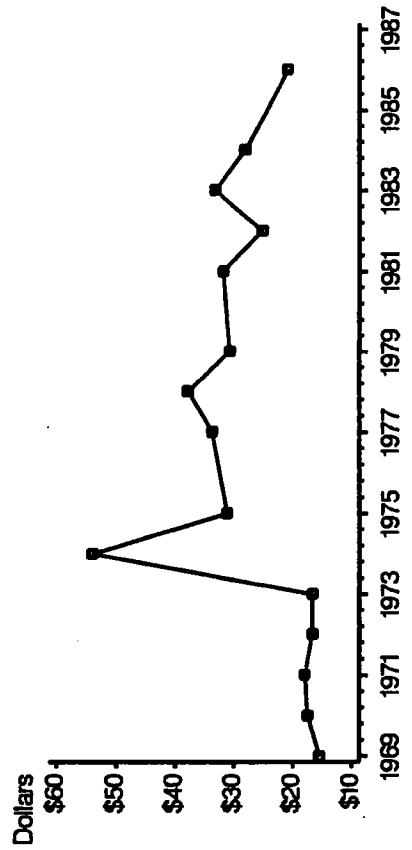
**CHART 6A**  
**BOYD COUNTY**  
**TOTAL COAL PRODUCTION (SHIPMENTS)**  
 Thousands of Tons



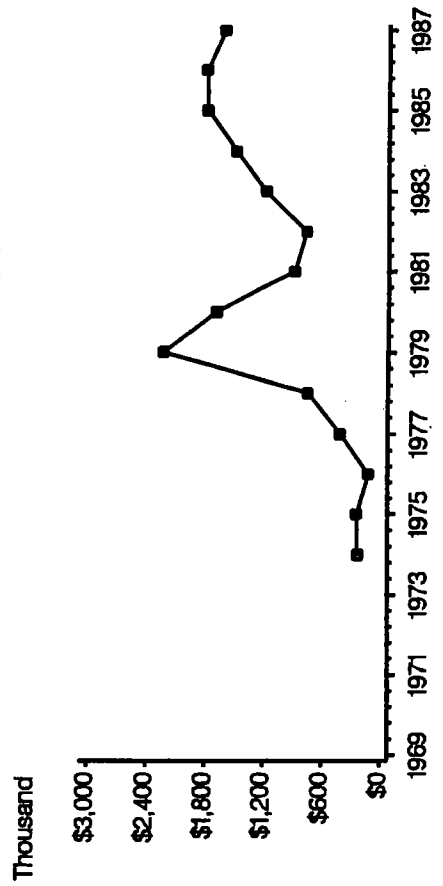
**CHART 6B**  
**BOYD COUNTY**  
**MINING EMPLOYMENT**  
 Thousands of People



**CHART 6C**  
**BOYD COUNTY**  
**AVERAGE VALUE PER TON FOR COAL**  
 Constant 1988 Dollars



**CHART 6D**  
**BOYD COUNTY**  
**TAX RECEIPTS ON COAL SEVERED OR PROCESSED**  
 Thousands of 1988 Dollars



BOYD COUNTY

PERSONAL INCOME  
In Millions of 1988 Dollars

Year	County Personal Income (M\$)	Percent of Kentucky (%)	Per Capita Personal Income (\$)	Percent of Kentucky (%)
1969	521	1.83	9,957	112.1
1970	560	1.90	10,688	117.3
1971	570	1.87	10,789	116.6
1972	580	1.78	10,909	112.0
1973	589	1.70	11,238	109.4
1974	617	1.74	11,793	113.8
1975	639	1.79	12,055	117.5
1976	697	1.84	13,122	122.2
1977	730	1.83	13,516	120.9
1978	783	1.87	14,137	122.2
1979	794	1.85	14,281	121.4
1980	736	1.74	13,265	115.0
1981	727	1.69	13,170	112.4
1982	700	1.64	12,734	110.2
1983	680	1.61	12,370	108.7
1984	683	1.53	12,597	105.1
1985	684	1.53	12,750	106.3
1986	693	1.52	13,017	106.4
1987	698	1.50	13,217	105.7

COMPONENTS OF PERSONAL INCOME  
In Constant 1988 Dollars

Year	EARNINGS			TRANSFER PAYMENTS			INCOME from PROPERTY		
	M\$	Percent of Personal Income		M\$	Percent of Personal Income		M\$	Percent of Personal Income	
		County	Kentucky		County	Kentucky		County	Kentucky
1969	409	78.4	79.2	55	10.5	10.9	58	11.1	9.9
1970	441	78.7	77.9	60	10.8	11.9	59	10.5	10.2
1971	444	77.9	77.0	68	12.0	12.9	58	10.2	10.1
1972	450	77.6	77.3	72	12.5	12.9	57	9.9	9.7
1973	446	75.7	76.6	80	13.7	13.6	63	10.6	9.7
1974	464	75.3	75.5	85	13.8	14.4	67	10.9	10.1
1975	477	74.7	73.3	95	14.9	16.5	67	10.5	10.1
1976	521	74.8	73.9	98	14.1	16.1	78	11.1	10.0
1977	543	74.3	74.6	98	13.4	15.3	89	12.3	10.1
1978	595	76.0	75.0	98	12.5	14.6	90	11.5	10.4
1979	598	75.3	74.1	104	13.1	15.1	92	11.6	10.8
1980	527	71.6	71.1	113	15.4	16.7	96	13.0	12.2
1981	503	69.2	69.3	116	16.0	16.8	107	14.8	13.8
1982	466	66.5	67.5	123	17.6	17.6	111	15.9	14.9
1983	442	64.9	66.6	129	19.0	18.4	109	16.1	15.1
1984	444	64.9	67.8	127	18.7	17.3	112	16.4	14.9
1985	441	64.4	67.2	130	19.0	17.6	113	16.6	15.3
1986	442	63.8	67.1	132	19.0	17.6	119	17.2	15.3
1987	445	63.8	67.5	132	18.9	17.2	121	17.4	15.3

BOYD COUNTY

SECTOR EARNINGS as a PERCENT of TOTAL COUNTY EARNINGS and  
as a PERCENT of KENTUCKY SECTOR EARNINGS

YEAR	MANUFACTURING		FARMING		MINING	
	TOTAL	KENTUCKY	TOTAL	KENTUCKY	TOTAL	KENTUCKY
1969	44.0	4.37	0.4	0.15	0.8	0.59
1970	42.3	4.27	0.3	0.14	0.8	0.46
1971	49.1	4.77	0.2	0.09	0.6	0.33
1972	48.1	4.21	0.2	0.07	0.7	0.35
1973	36.8	2.61	0.5	0.16	0.9	0.37
1974	44.2	3.46	0.4	0.13	1.4	0.43
1975	42.8	3.91	0.3	0.15	1.1	0.31
1976	38.8	3.50	0.2	0.08	1.1	0.33
1977	38.6	3.41	0.2	0.09	1.6	0.46
1978	35.3	3.38	0.1	0.07	1.7	0.53
1979	38.0	3.73	0.1	0.07	1.0	0.33
1980	40.0	3.77	0.1	0.07	1.1	0.32
1981	39.0	3.57	0.2	0.07	1.1	0.31
1982	34.1	3.22	0.3	0.14	0.8	0.22
1983	34.1	2.97	0.3	0.39	0.7	0.22
1984	37.3	3.04	0.5	0.21	0.7	0.20
1985	35.2	2.90	0.4	0.24	0.8	0.24
1986	32.0	2.57	0.4	0.25	0.5	0.18
1987	32.4	2.69	0.3	0.19	3.2	1.16

YEAR	SERVICES		TRADE		STATE and LOCAL GOVERNMENT	
	TOTAL	KENTUCKY	TOTAL	KENTUCKY	TOTAL	KENTUCKY
1969	9.5	1.74	19.5	3.00	5.4	1.44
1970	9.2	1.74	19.7	3.07	5.3	1.39
1971	9.9	1.77	13.4	2.01	5.5	1.34
1972	10.4	1.76	13.2	1.86	5.6	1.31
1973	12.3	1.74	14.5	1.70	6.6	1.31
1974	11.0	1.77	12.9	1.69	5.9	1.30
1975	11.4	1.86	13.8	1.85	5.8	1.30
1976	10.6	1.76	14.0	1.93	5.6	1.30
1977	11.0	1.85	14.0	2.00	5.5	1.30
1978	10.8	1.95	12.7	1.92	5.1	1.30
1979	10.9	1.99	12.4	1.93	5.1	1.29
1980	12.8	2.04	13.2	1.96	5.4	1.23
1981	13.8	2.08	12.7	1.87	5.9	1.31
1982	15.3	2.12	12.9	1.81	6.6	1.35
1983	15.5	1.88	13.2	1.70	6.5	1.23
1984	16.0	1.85	13.7	1.72	6.6	1.22
1985	17.0	1.88	13.8	1.70	6.8	1.21
1986	19.0	1.87	14.6	1.74	7.3	1.21
1987	19.4	1.90	14.7	1.80	7.2	1.23



BOYD COUNTY

COUNTY EMPLOYMENT by SECTOR

YEAR	MANUFACTURING		FARMING		MINING	
	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL
1969	7,961	31.6	328	1.3	188	0.7
1970	8,098	30.8	300	1.1	181	0.7
1971	8,989	35.1	270	1.1	136	0.5
1972	8,682	34.7	242	1.0	141	0.6
1973	6,018	25.7	220	0.9	149	0.6
1974	7,180	28.9	201	0.8	216	0.9
1975	6,941	27.3	193	0.8	188	0.7
1976	6,931	25.9	228	0.9	184	0.7
1977	7,370	26.0	240	0.8	290	1.0
1978	7,207	23.8	253	0.8	334	1.1
1979	7,441	24.1	250	0.8	206	0.7
1980	7,194	25.2	263	0.9	184	0.6
1981	6,661	24.1	278	1.0	187	0.7
1982	5,523	21.0	284	1.1	143	0.5
1983	5,086	20.2	295	1.2	106	0.4
1984	5,765	22.6	283	1.1	106	0.4
1985	5,640	21.4	274	1.0	126	0.5
1986	4,852	18.7	282	1.1	112	0.4
1987	5,080	18.9	271	1.0	559	2.1

YEAR	SERVICES		TRADE		STATE and LOCAL GOVERNMENT	
	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL
1969	3,816	15.2	6,053	24.0	1,914	7.6
1970	3,839	14.6	6,433	24.5	1,949	7.4
1971	4,036	15.7	5,133	20.0	1,953	7.6
1972	4,051	16.2	4,900	19.6	1,937	7.7
1973	4,414	18.9	4,908	21.0	1,972	8.4
1974	4,659	18.8	4,892	19.7	2,023	8.1
1975	4,762	18.7	5,281	20.8	2,069	8.1
1976	4,718	17.6	5,572	20.8	2,058	7.7
1977	4,943	17.4	5,919	20.9	2,043	7.2
1978	5,349	17.6	6,041	19.9	2,096	6.9
1979	5,859	18.9	6,157	19.9	2,159	7.0
1980	5,605	19.6	5,861	20.5	2,308	8.1
1981	5,418	19.6	5,788	21.0	2,221	8.1
1982	5,318	20.2	5,784	22.0	2,187	8.3
1983	5,255	20.9	5,700	22.6	2,087	8.3
1984	5,435	21.3	5,881	23.1	2,078	8.1
1985	5,802	22.1	6,100	23.2	2,129	8.1
1986	6,131	23.7	6,182	23.9	2,169	8.4
1987	6,322	23.5	6,501	24.2	2,233	8.3

BOYD COUNTY

EMPLOYMENT STATISTICS

YEAR	TOTAL EMPLOYMENT	AVERAGE EARNINGS		UNEMPLOYMENT RATE	
		COUNTY	KENTUCKY	COUNTY	KENTUCKY
1969	25,181	\$22,431	\$17,440	.	4.2
1970	26,263	\$22,517	\$17,811	4.4	4.4
1971	25,645	\$22,718	\$18,166	7.2	5.1
1972	25,030	\$23,100	\$18,970	10.6	6.0
1973	23,404	\$21,742	\$19,232	5.8	3.7
1974	24,844	\$22,687	\$19,008	5.8	4.5
1975	25,450	\$23,407	\$18,976	5.2	7.3
1976	26,758	\$24,321	\$19,563	4.2	5.6
1977	28,386	\$24,127	\$20,031	4.1	4.7
1978	30,309	\$25,583	\$20,121	4.1	5.3
1979	30,938	\$26,131	\$20,110	6.2	5.5
1980	28,570	\$25,282	\$19,439	10.4	8.0
1981	27,584	\$25,076	\$19,286	9.0	8.4
1982	26,320	\$24,645	\$18,931	11.9	10.6
1983	25,175	\$23,844	\$18,358	16.5	11.6
1984	25,499	\$23,676	\$19,080	12.5	9.3
1985	26,312	\$22,967	\$18,676	11.9	9.5
1986	25,878	\$22,630	\$18,627	11.4	9.3
1987	26,890	\$23,005	\$18,636	10.4	8.8

POPULATION STATISTICS

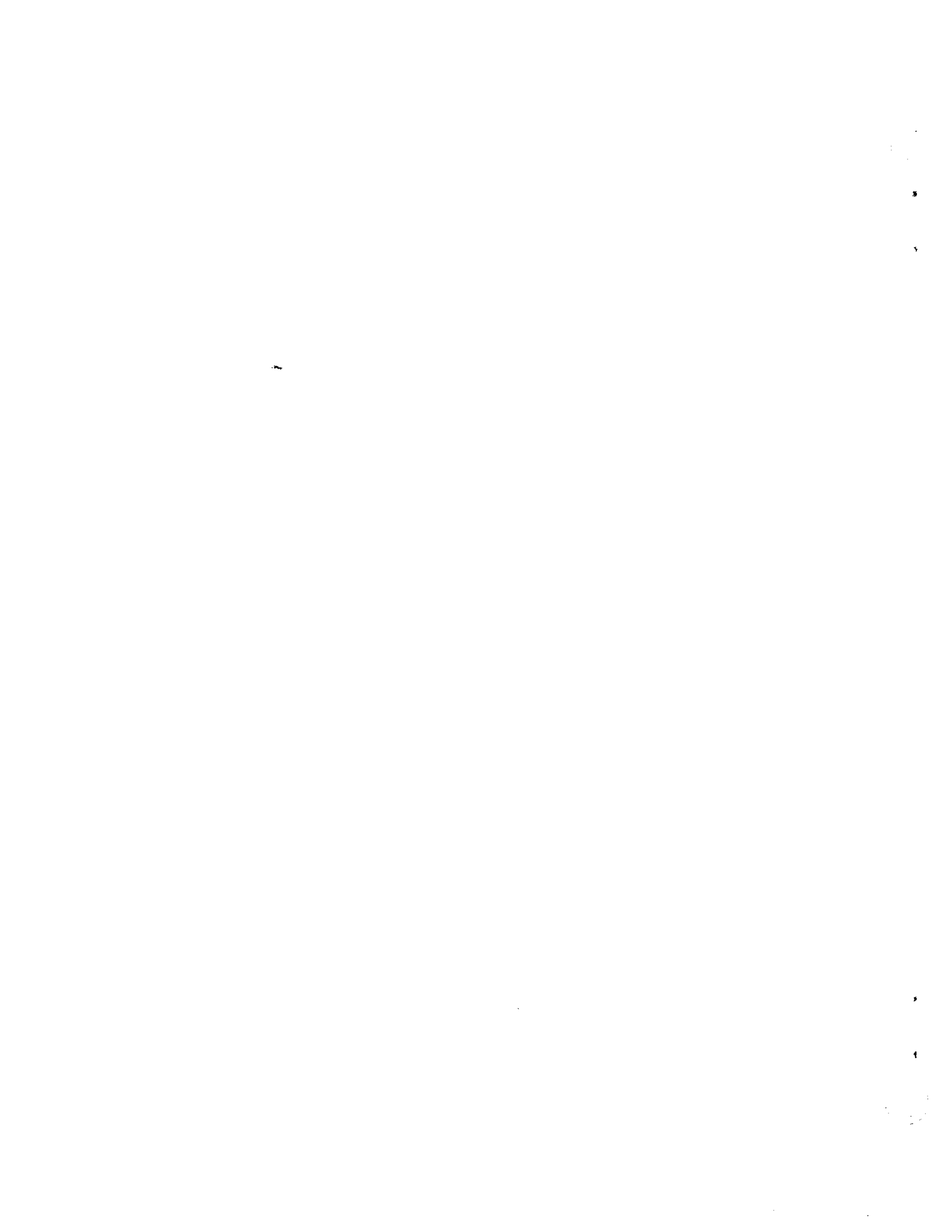
YEAR	POPULATION	% OF KY	PERCENT UNDER 6		PERCENT 60+	
			COUNTY	KENTUCKY	COUNTY	KENTUCKY
1969	52,300	1.64	.	.	.	.
1970	52,400	1.62	9.5	10.3	15.4	14.8
1971	52,900	1.60	8.9	9.6	15.6	14.8
1972	53,100	1.59	8.6	9.1	15.8	15.0
1973	52,400	1.55	8.5	8.8	16.4	15.2
1974	52,300	1.53	8.3	8.6	16.7	15.3
1975	53,000	1.53	8.0	8.4	16.9	15.4
1976	53,100	1.50	7.9	8.2	17.2	15.5
1977	54,000	1.51	7.9	8.4	17.2	15.5
1978	55,400	1.53	7.9	8.5	17.0	15.6
1979	55,600	1.53	8.0	8.7	17.3	15.8
1980	55,500	1.51	8.5	9.2	16.6	15.4
1981	55,200	1.50	8.5	9.3	16.9	15.5
1982	55,000	1.49	8.4	9.2	17.3	15.7
1983	55,000	1.48	8.3	9.2	17.8	15.9
1984	54,200	1.46	8.1	9.0	18.2	16.1
1985	53,700	1.44	7.8	8.9	18.7	16.3
1986	53,200	1.43	7.5	8.6	19.2	16.5
1987	52,800	1.42	.	.	.	.

BOYD COUNTY

COAL MINING STATISTICS

YEAR	PRODUCTION (Thousand Tons)	EMPLOYMENT	AVERAGE VALUE PER TON	COAL TAX RECEIPTS (000)
1969	13	188	\$15.40	.
1970	40	181	\$17.41	.
1971	169	136	\$17.86	.
1972	213	141	\$16.58	.
1973	169	149	\$16.57	.
1974	193	216	\$53.93	\$229
1975	76	188	\$31.10	\$238
1976	267	184	.	\$120
1977	559	290	\$33.75	\$407
1978	696	334	\$37.87	\$747
1979	295	206	\$30.65	\$2,225
1980	333	184	.	\$1,689
1981	201	187	\$31.76	\$891
1982	192	143	\$25.20	\$768
1983	207	106	\$33.16	\$1,179
1984	331	106	\$28.02	\$1,487
1985	1,044	126	.	\$1,783
1986	503	112	\$20.84	\$1,790
1987	.	559	.	.

Note: All dollar figures are presented in constant 1988 dollars.



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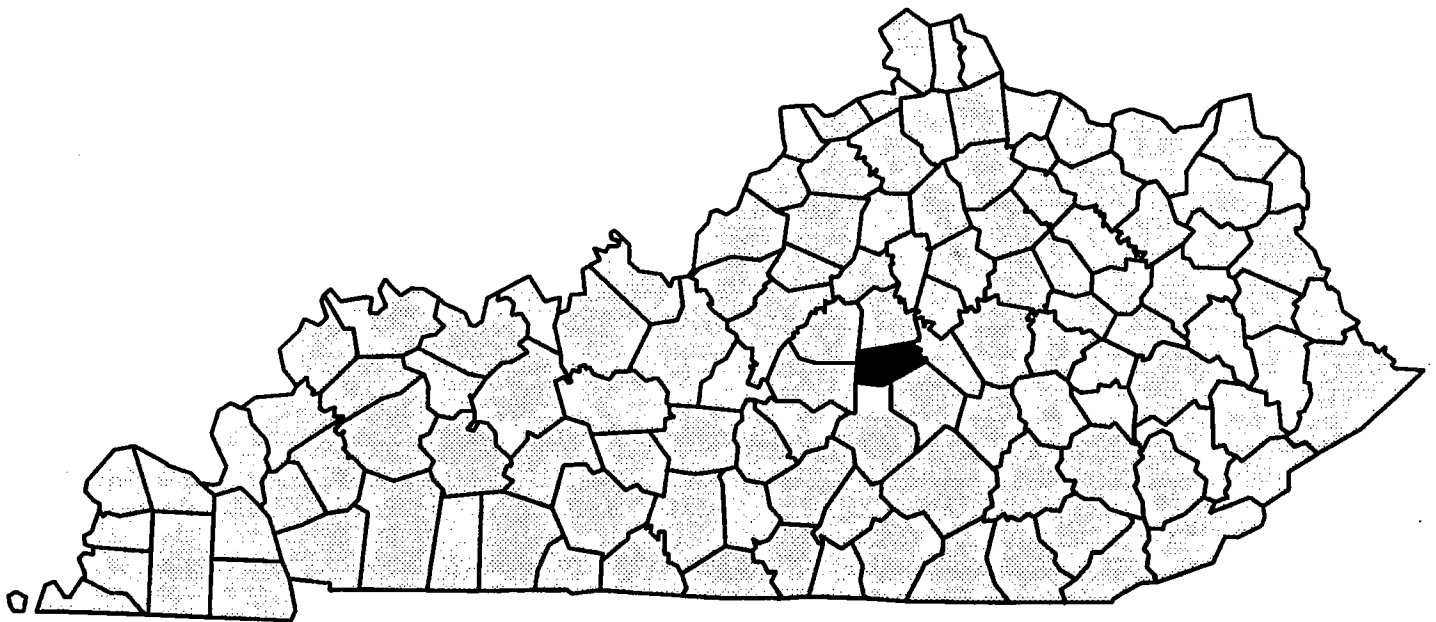
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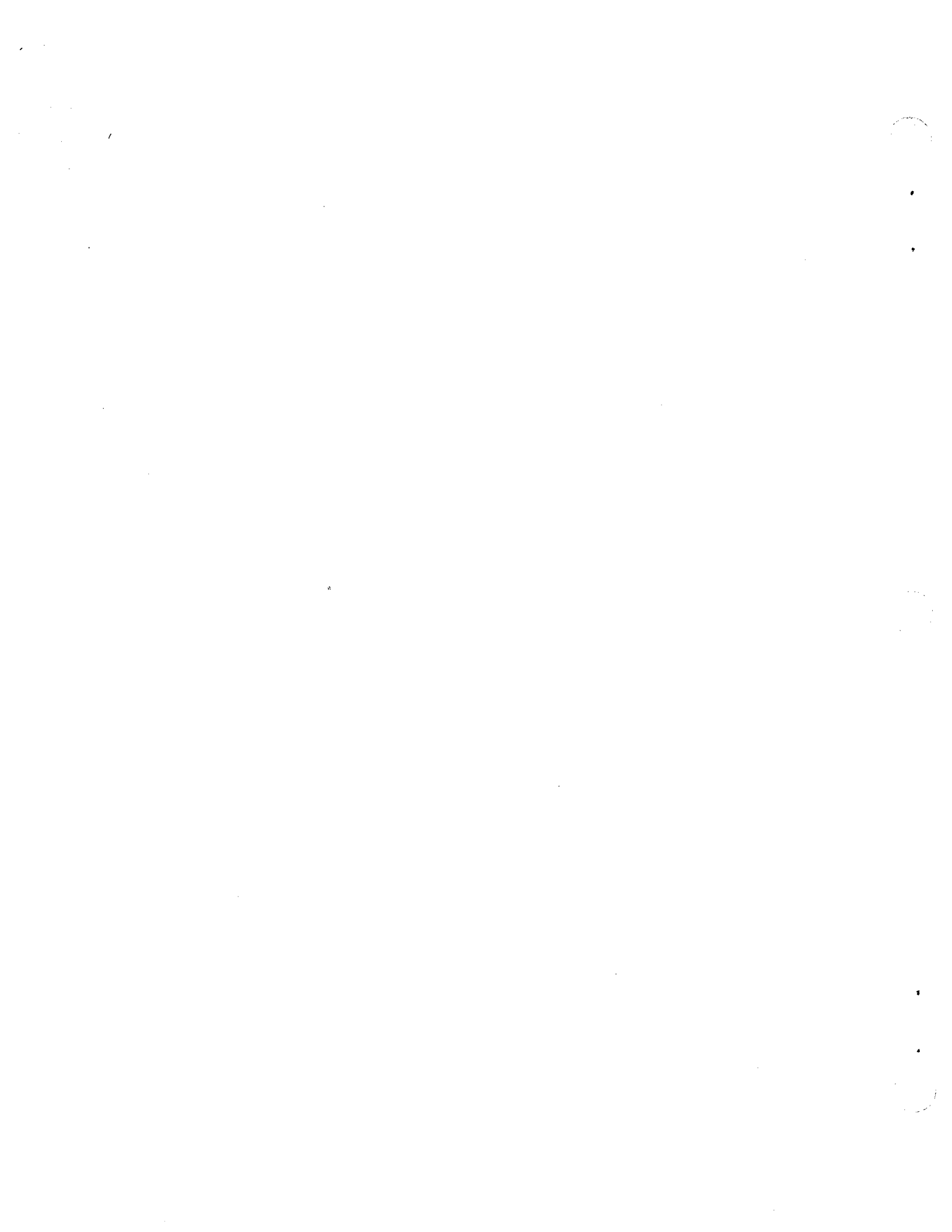
ECONOMIC TRENDS IN  
KENTUCKY COUNTIES  
1969 – 1987

**BOYLE COUNTY**



Prepared by  
Virginia Wilson  
Donna A. Cantrell

RESEARCH MEMORANDUM 438  
Legislative Research Commission  
Frankfort, Kentucky  
February, 1990





ECONOMIC TRENDS IN  
KENTUCKY COUNTIES  
1969 – 1987

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1990

BOYLE COUNTY

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RESEARCH MEMORANDUM 438  
Legislative Research Commission  
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## FOREWORD

This publication is one of a set of 120, highlighting economic trends in each county in Kentucky from 1969-1987. This effort is part of the ongoing activities sponsored by the Legislative Research Commission to provide a long-term perspective on issues for decision makers. The economies of individual counties do not always parallel overall state trends. This set of publications is an attempt to look at the economic trends in each county over time and to point out where the economies of individual counties may be performing differently from the economy of the state as a whole.

This publication was prepared by Virginia Wilson and Donna Cantrell. Susan Dance assisted in production of the manuscript and Charles Bush edited the report. The assistance of Carol Straus from the Center for Business and Economic Research at the University of Kentucky in deciphering data is gratefully acknowledged.

Vic Hellard, Jr.  
Director

The Capitol  
Frankfort  
February, 1990

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## SUMMARY

The Boyle County economy, as measured by personal income, grew moderately from 1969 to 1987. Boyle County generally maintained its share of Kentucky personal income, indicating that the county economy kept pace with the state economy. While per capita personal income was equal to that of the state, average earnings per job were significantly below those of the state.

The county was heavily vested in the goods-producing industries of manufacturing and farming. While the state share of earnings in manufacturing declined, this component of the Boyle County economy grew in importance. The farm sector decreased its share of earnings and employment in the county and the state.

The non-goods-producing sectors, particularly service and trade, experienced significant growth at the state level. In Boyle County, the trade sector increased its share of employment, while its share of earnings declined. Data on the service sector in Boyle County was not disclosed, to preserve confidentiality of data sources.

The county's economy was helped by its high concentration in the manufacturing sector. This is because manufacturing is a relatively high wage industry. However, manufacturing industries are very sensitive to economic fluctuations. Consequently, while a high concentration in manufacturing supported the economy during a period of national economic growth, it may also make the county more susceptible to recessionary contractions. The national economic outlook is for continued expansion of the service and trade sector. Future economic growth in Boyle County could be enhanced by expansion of these sectors.



## INTRODUCTION

This is one of a series of reports called Economic Trends in Kentucky Counties. The purpose of this series is to describe the economic structure of Kentucky counties and to assess their economic performance relative to their own history and relative to the Kentucky economy. Information on the structure and patterns of change in county economies and an understanding of their relationship to the Kentucky economy can help in making policy decisions that are intended to shape Kentucky's economic future.

When assessing any economy there are several pertinent questions which may be addressed. The first concerns changes in the absolute size of the economy over time. Here the relevant comparison is between the county economy and its own history. Since most economic variables are given in dollars and since inflation causes the value of a dollar to vary over time, all dollar values in this report are presented in constant 1988 dollars. This allows analysis of real changes over time by controlling for the effects of inflation.

A second question concerns the structure and nature of the county economy. The structure of an economy refers to the relative share contributed by the various segments of the economy, while the nature deals with how this share has changed over time.

A third question concerns the performance of the county economy when compared to the Kentucky economy. For example, if a county has a higher proportion of earnings or employment in a particular sector it would indicate a specialization in that sector. Differences in economic structure may explain variations in relative economic well-being between a county and the state as a whole.

Economic data for counties are usually published after a lag of two years. Therefore, most data in this report cover the period 1969 to 1987. All data for this report was obtained from the Kentucky Economic Information System, an on-line database maintained by the University of Kentucky Center for Business and Economic Development.

There are certain caveats which should be remembered when analyzing data. First, it is a common and useful approach to evaluate the percentage an economic sector contributes to the total economy. However, one must remember that a sector's percentage contribution may decline even when its absolute value is increasing if another sector's contribution is growing at a faster rate. Secondly, when reviewing data in graphical analyses, the scales used to present data should be noted. In this report most graphs are presented with the narrowest scale which will cover all data points. This can accentuate visual patterns over time even when absolute changes are relatively small.

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\*For an analysis of economic trends in Kentucky, see Virginia Wilson, Patterns of Growth and Decline in the Kentucky Economy 1969-1988, Research Memorandum 437, Legislative Research Commission, November 1989.





## ECONOMIC TRENDS IN BOYLE COUNTY

The following analysis includes a brief description of the county economy and is accompanied by graphical illustrations. Data tables are also included at the end of this report. Three principal components of the Boyle County economy are analyzed. They are:

1. Personal Income
2. Earnings
3. Employment

### Personal Income

Personal income is often used as a measure of the economic activity in an area. Personal income is the sum of all the dollar income received by individuals in an area from any legal source. Personal income data is published by the Bureau of Economic Analysis (BEA) for most major geographic regions, including states, counties, and major cities.

In general, income can be obtained in three ways. First, it can be earned by the work of an individual. This type of income includes wage and salary income and proprietors' earnings. Second, income can be earned by property. This component includes earnings from rents, dividends, and interest. Finally, income can be received as a gift or an entitlement. This type of income constitutes the component of personal income called transfer payments. Included in this component is income from sources such as retirement benefits, unemployment benefits, food stamps, and medical programs such as Medicare and Medicaid.

As can be seen in Chart 1A, the size of the Boyle County economy, as measured by personal income, increased from \$195 million in 1969 to \$323 million in 1987, after adjusting for inflation. Chart 1B shows Boyle County total personal income as a percent of Kentucky total personal income. Boyle County had only small changes in its share of Kentucky personal income.

A similar pattern emerges from an examination of per capita personal income. Per capita personal income is simply the total personal income of an area divided by its population. Per capita personal income is often used as a measure of the economic well-being of the residents of an area. Charts 1C and 1D indicate that Boyle County per capita income increased over the time period to a level of \$12,522 in 1987, which was 100.2 percent of Kentucky per capita personal income.

A better understanding of the nature of economic activity can be gleaned from an examination of the relative contribution of the components of personal income and how their shares have changed over time. This information is illustrated in Charts 2A-2D. Earnings showed strong growth through 1981. However, with the national recession of 1982, earnings dropped significantly. By 1984, earnings were once again increasing. Overall, total earnings

increased from \$150 million in 1969 to \$210 million in 1987 (in constant 1988 dollars). While earnings increased, their share of personal income declined over time. This trend occurred at the state level as well. In 1987, earnings accounted for 64.9 percent of Boyle County's total personal income, lower than Kentucky's 67.5 percent share.

Transfer payments contributed \$22 million to total personal income in 1969 and \$53 million in 1987. During the same period, transfer payments contributed a slightly lower percentage of personal income in Boyle County than in Kentucky.

Income from property in Boyle County grew strongly through the time period. Income from property totalled \$22 million in 1969 and increased to \$61 million in 1987.

## Earnings

Earnings are the component of personal income reflecting payments to individuals in return for labor. Earnings include both wages and salaries and proprietor's income. In 1969, Boyle County received 30.0 percent of total earnings from manufacturing. This percentage increased to 36.1 percent in 1987 (Chart 3A). The county trend toward increasing concentration in manufacturing is different from that for the state, where the percentage of earnings from manufacturing showed a steady decline over the period.

Farming's contribution to total county earnings decreased from 8.8 percent in 1969 to 1.3 percent in 1987. The trend toward declining farm earnings is consistent with state and national trends.

Earnings from non-goods-producing industries as a percent of total earnings are illustrated in Chart 3B. The share of earnings from the trade sector remained stable and accounted for 10.8 percent in 1987. The percent of earnings from the state and local government sector declined slightly, to 9.4 percent in 1987. At the state level, the percents of earnings from trade and state and local government were stable.

The service sector was the fastest growing sector of the Kentucky economy. However, data on the service sector in Boyle County was unavailable. Data on this sector was withheld by the Bureau of Economic Analysis, in order to preserve confidentiality of data sources. Nondisclosure rules prevent the release of data when either there are very few firms operating in a particular sector, or when one firm provides most of the activity in that sector. In Boyle County, nondisclosure of the service sector data likely results from the dominance of the county service sector by Centre College, a private educational institution. Private educational facilities are classified as service firms in the data.

Average earnings per job (adjusted for inflation) for Boyle County and Kentucky are shown in Chart 3D. In Kentucky, average earnings per job reached a high of \$20,121 per person in 1978. Since then, average earnings per job

declined and in 1987 they were \$18,636 per person. Trends in Boyle County average earnings per job paralleled state trends. Average earnings reached \$16,945 in 1987, well below the Kentucky average.

## Employment

Employment is considered any activity for which one receives financial remuneration in the form of wages or profits. Total employment in Boyle County increased substantially during the data period. In 1969, total employment stood at 11,980 people. By 1987, that figure had increased to 16,858.

The unemployment rate, often used as an indicator of economic well-being, is the ratio of unemployed to the total civilian labor force. Unemployment is described as a condition of being out of work while actively seeking employment within the last thirty days. The civilian labor force is described as the proportion of population age 16 or older employed or actively seeking employment. Annual unemployment rates for Kentucky and Boyle County are presented in Chart 4B. Unemployment rates in Boyle County followed those of the state during the period. In 1987, the county unemployment rate was 9.7 percent, compared to 8.8 percent for Kentucky.

Another employment concept includes the discouraged worker. Discouraged workers are persons who want jobs but made no attempt to find work in the last thirty days because they believe they could not find it. These individuals are not included when calculating official unemployment rates. The Cabinet for Human Resources does not estimate discouraged workers by county. However, preliminary research by the Cabinet indicates that the inclusion of discouraged workers in the civilian labor force estimate would increase the unemployment rate by approximately four percent for the state. This figure would vary by county depending on the labor market in a county or within commuting distance.

Employment in the goods-producing industries is illustrated in Chart 4C. The percent of total employment in manufacturing decreased from 26.3 percent in 1969 to 23.4 percent in 1987. The farm sector's share of employment declined from 12.2 percent in 1969 to 6.8 percent in 1987. Overall, Kentucky saw employment shares in both of these sectors decline during the period.

Employment in the non-goods-producing industries is presented in Chart 4D. Trade sector employment increased from 1969 to 1987. In 1969, the trade sector accounted for 13.4 percent of employment. This share increased to 16.4 percent in 1987. The percent of employment in the state and local government sector decreased from 10.9 percent in 1969 to 8.9 percent in 1987. At the state level, trade employment increased significantly, while government employment remained constant.

Similar to the situation regarding service sector earnings, service sector employment data was withheld in order to preserve the confidentiality of data sources. At the state level, service sector employment increased significantly.

## Population

The census conducted each decade counts the actual population in an area. Population is then statistically estimated during intervening years. The demographic composition of this population growth has important implications for the future demand for goods and services, and ultimately, the economic structure of Boyle County.

The Boyle County population grew from 21,100 in 1969 to 25,800 in 1987 (Chart 5A). It was estimated that in 1986, 7.4 percent of Boyle County's population was under six years of age, compared to 8.6 percent for the state. Boyle County has a higher proportion of residents age sixty or over than the state. In 1986, 18.1 percent of the Boyle County population was sixty years of age and over, while 16.5 percent of all Kentucky residents fell in this age group.

CHART 1A  
BOYLE COUNTY  
REAL PERSONAL INCOME  
Millions of 1988 dollars

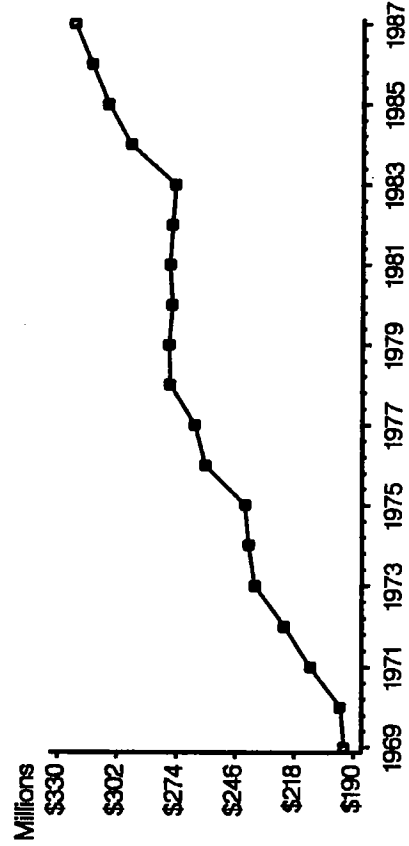


CHART 1B  
BOYLE COUNTY  
PERSONAL INCOME  
as a Percent of Kentucky Personal Income

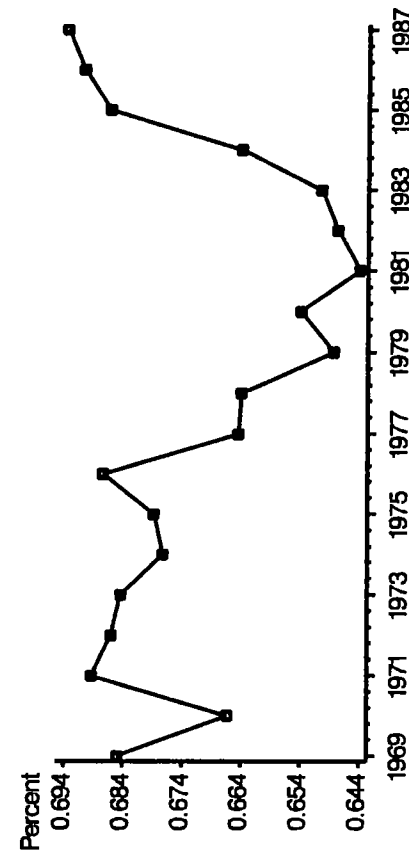


CHART 1C  
BOYLE COUNTY  
PER CAPITA PERSONAL INCOME  
in Constant 1988 Dollars

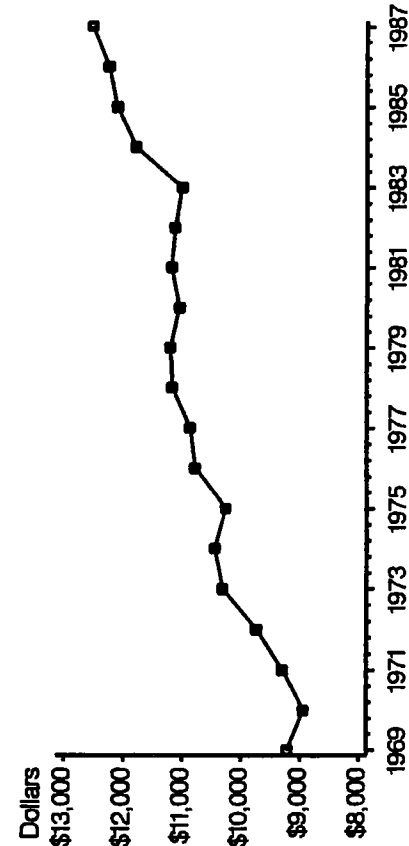


CHART 1D  
BOYLE COUNTY  
PER CAPITA PERSONAL INCOME  
as a Percent of Kentucky Per Capita Personal Income

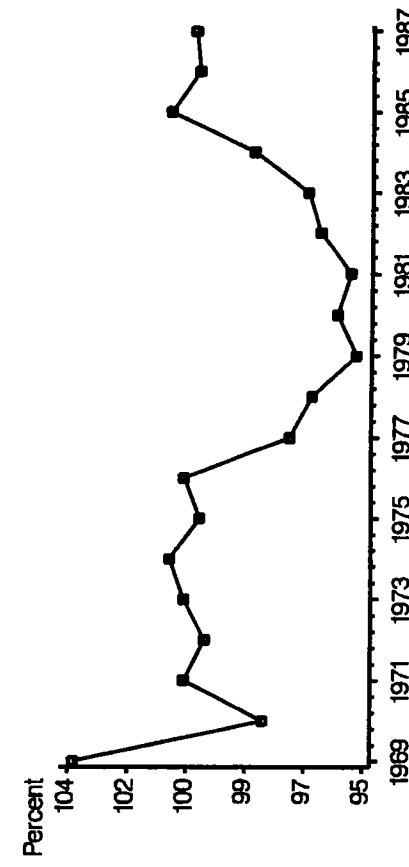


CHART 2A

BOYLE COUNTY

REAL TOTAL EARNINGS

Millions of 1988 dollars

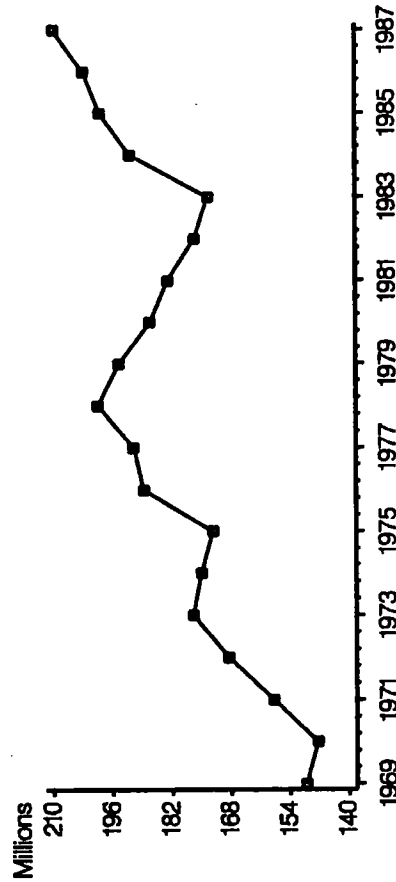


CHART 2B

BOYLE COUNTY

TRANSFER PAYMENTS and INCOME FROM PROPERTY

Millions of 1988 Dollars

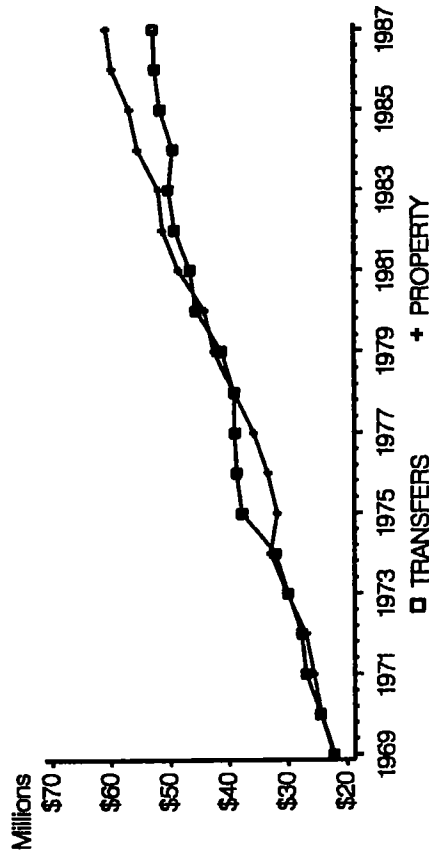


CHART 2C

BOYLE COUNTY

TOTAL EARNINGS

as a Percent of Personal Income

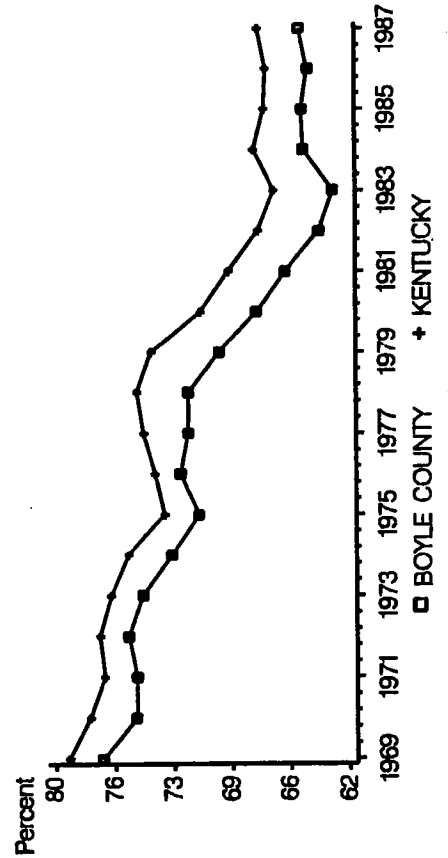


CHART 2D

BOYLE COUNTY

TRANSFER PAYMENTS

as a Percent of Personal Income

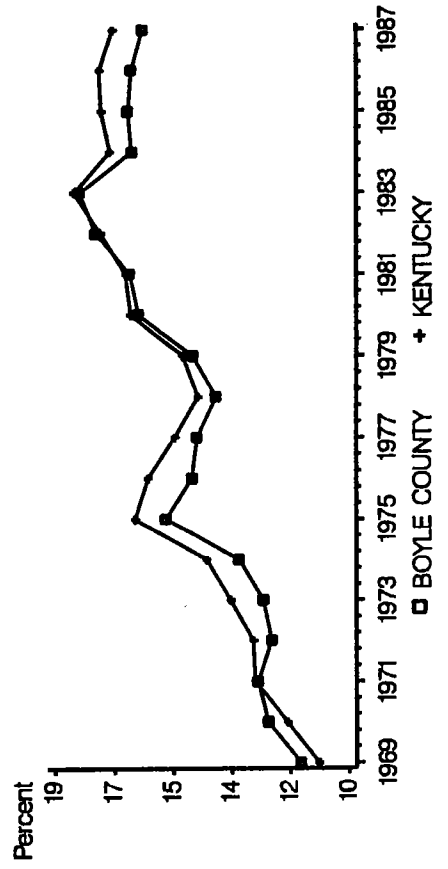


CHART 3A

BOYLE COUNTY

EARNINGS IN GOODS PRODUCING INDUSTRIES  
as a Percent of Total Earnings

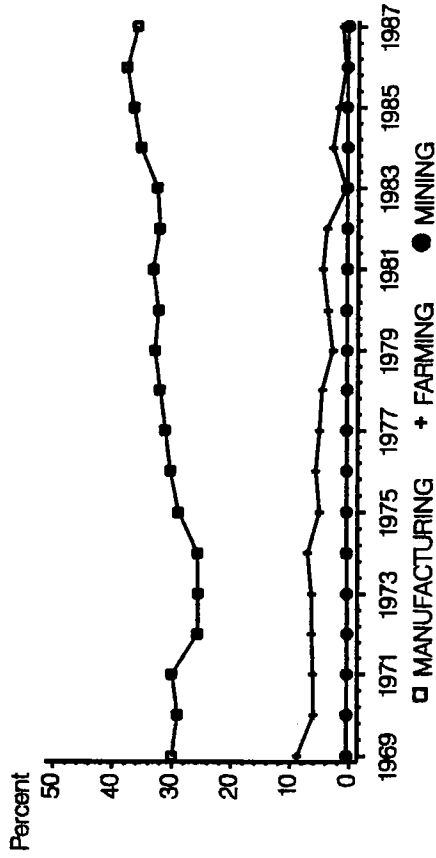


CHART 3B

BOYLE COUNTY

EARNINGS IN NON - GOODS PRODUCING INDUSTRIES  
as a Percent of Total Earnings

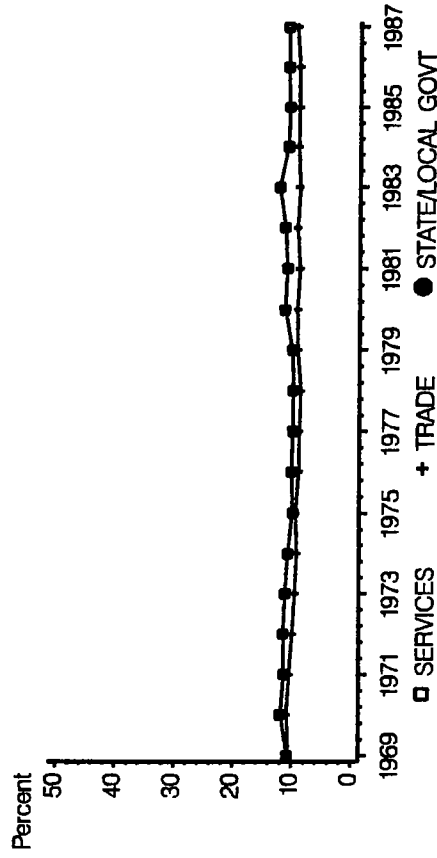


CHART 3C

BOYLE COUNTY

EARNINGS IN GOODS PRODUCING INDUSTRIES  
as a Percent of Kentucky Industries

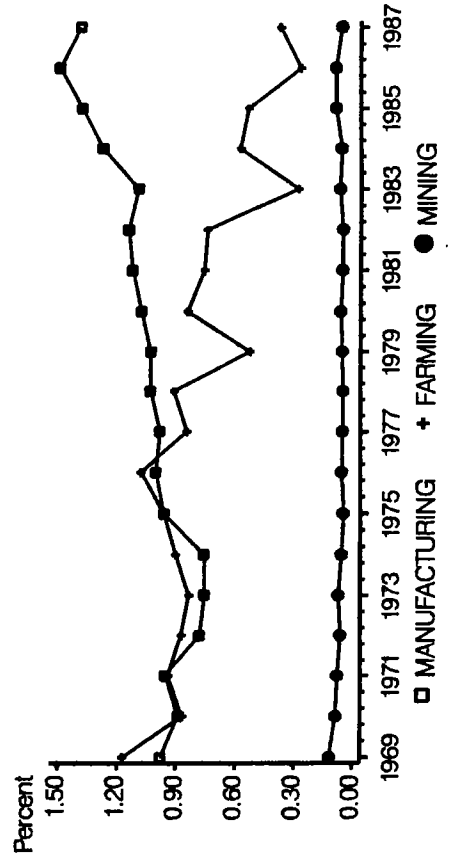


CHART 3D

BOYLE COUNTY

AVERAGE EARNINGS PER JOB  
in Constant 1988 Dollars

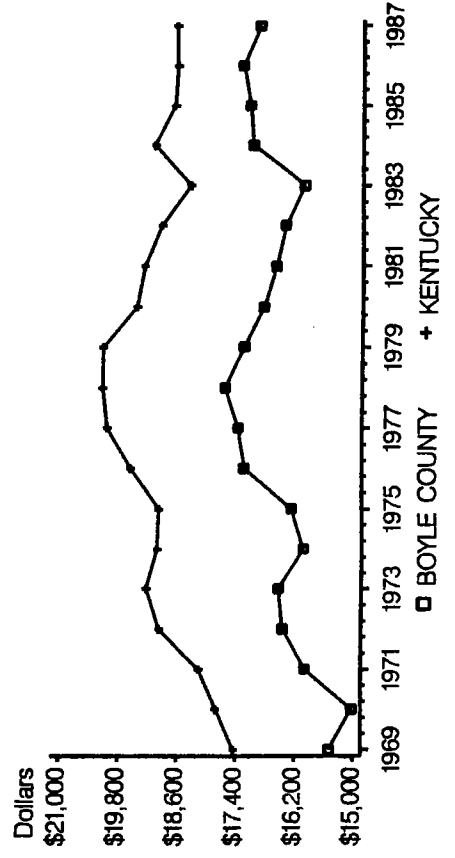


CHART 4A  
BOYLE COUNTY  
TOTAL EMPLOYMENT  
Thousands of People

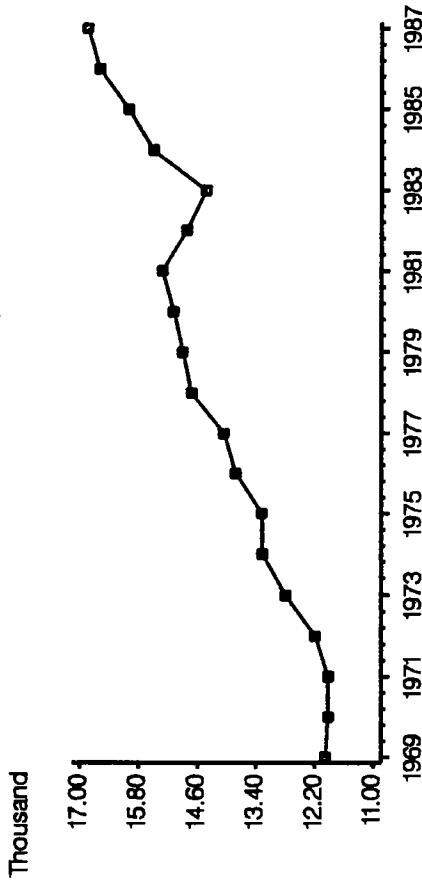


CHART 4B  
BOYLE COUNTY  
ANNUAL UNEMPLOYMENT RATE

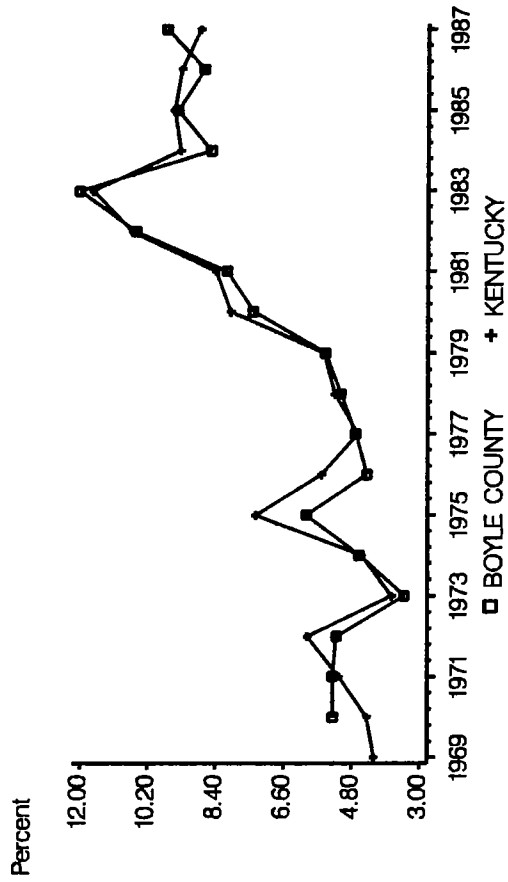


CHART 4C  
BOYLE COUNTY  
EMPLOYMENT IN GOODS PRODUCING INDUSTRIES  
as a Percent of Total Employment

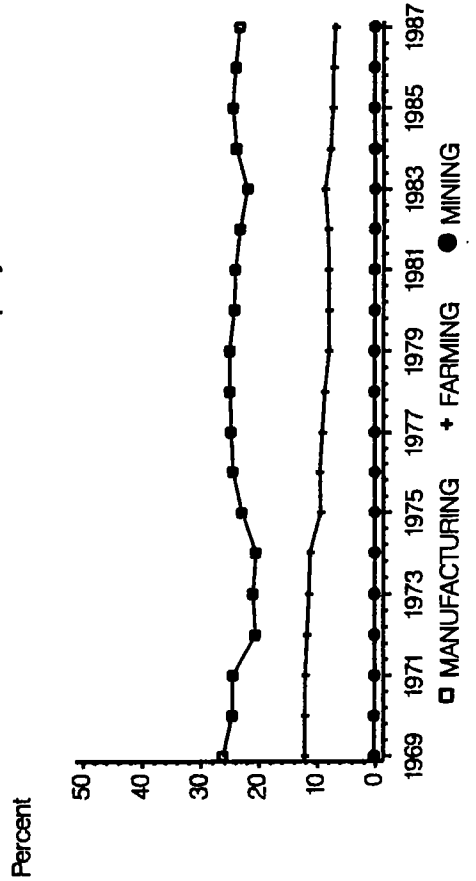


CHART 4D  
BOYLE COUNTY  
EMPLOYMENT IN NON-GOODS PRODUCING INDUSTRIES  
as a Percent of Total Employment

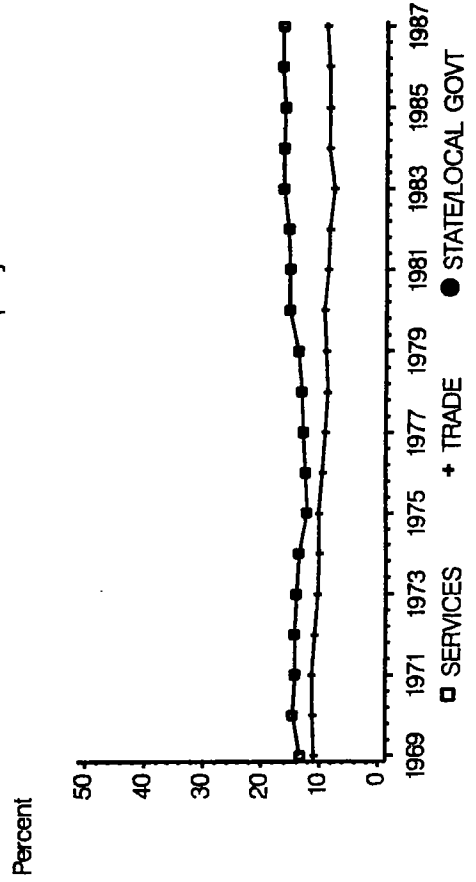




CHART 5A  
BOYLE COUNTY  
POPULATION  
Thousands of People

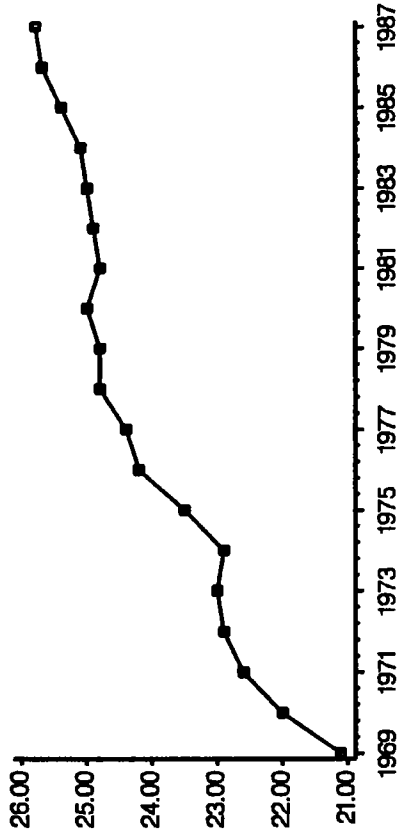


CHART 5B  
BOYLE COUNTY  
POPULATION  
as a Percent of Kentucky Population

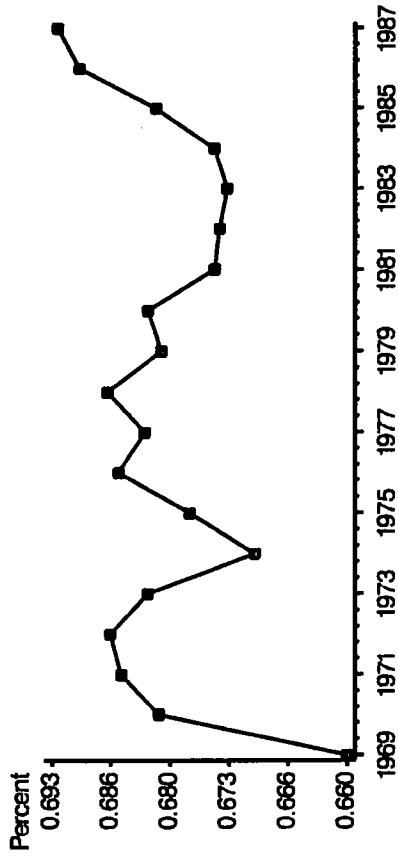


CHART 5C  
BOYLE COUNTY  
POPULATION 5 AND UNDER  
as a Percent of Total Population

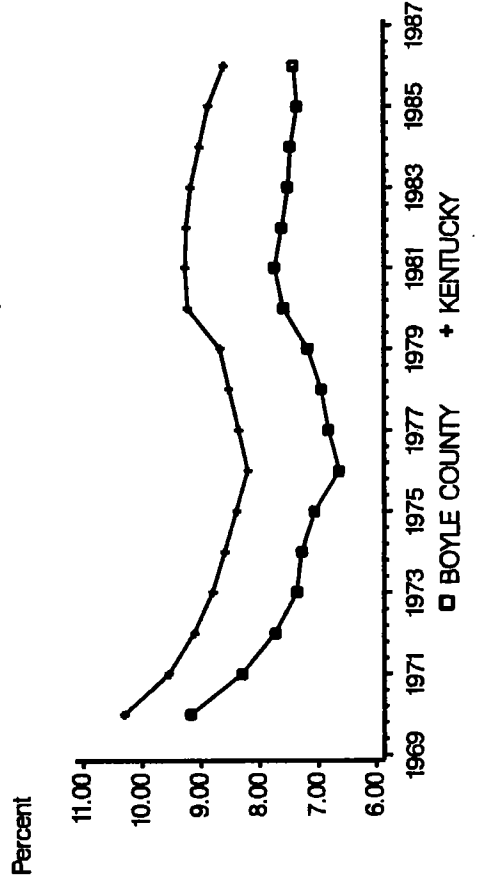
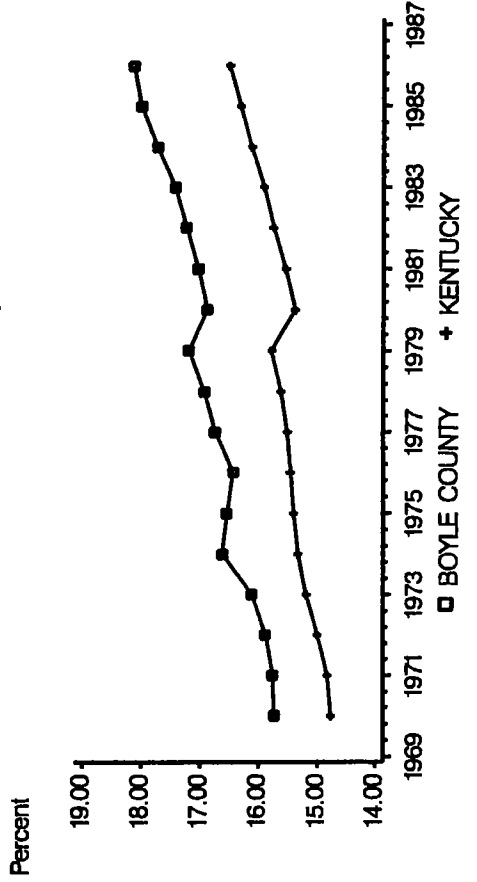


CHART 5D  
BOYLE COUNTY  
POPULATION 60 AND OVER  
as a Percent of Total Population



BOYLE COUNTY

PERSONAL INCOME  
In Constant 1988 Dollars

Year	County Personal Income (M\$)	Percent of Kentucky (%)	Per Capita Personal Income (\$)	Percent of Kentucky (%)
1969	195	0.69	9,225	103.8
1970	196	0.67	8,938	98.1
1971	210	0.69	9,300	100.5
1972	223	0.69	9,731	99.9
1973	237	0.68	10,319	100.5
1974	240	0.68	10,458	100.9
1975	242	0.68	10,265	100.0
1976	261	0.69	10,787	100.5
1977	266	0.66	10,873	97.3
1978	277	0.66	11,170	96.6
1979	278	0.65	11,199	95.2
1980	277	0.65	11,050	95.8
1981	278	0.64	11,184	95.4
1982	277	0.65	11,130	96.3
1983	275	0.65	11,010	96.7
1984	296	0.66	11,796	98.4
1985	307	0.69	12,108	100.9
1986	315	0.69	12,246	100.1
1987	323	0.69	12,522	100.2

COMPONENTS OF PERSONAL INCOME  
In Constant 1988 Dollars

Year	EARNINGS			TRANSFER PAYMENTS			INCOME from PROPERTY		
	M\$	Percent of Personal Income		M\$	Percent of Personal Income		M\$	Percent of Personal Income	
		County	Kentucky		County	Kentucky		County	Kentucky
1969	150	77.1	79.2	22	11.5	10.9	22	11.4	9.9
1970	147	75.1	77.9	25	12.5	11.9	24	12.4	10.2
1971	158	75.0	77.0	27	12.8	12.9	26	12.2	10.1
1972	169	75.5	77.3	28	12.4	12.9	27	12.1	9.7
1973	177	74.6	76.6	30	12.6	13.6	30	12.7	9.7
1974	175	72.9	75.5	32	13.4	14.4	33	13.7	10.1
1975	172	71.2	73.3	38	15.6	16.5	32	13.2	10.1
1976	189	72.4	73.9	39	14.8	16.1	33	12.8	10.0
1977	191	71.9	74.6	39	14.7	15.3	36	13.5	10.1
1978	199	71.8	75.0	39	14.1	14.6	39	14.1	10.4
1979	194	69.9	74.1	41	14.8	15.1	42	15.3	10.8
1980	187	67.6	71.1	45	16.4	16.7	44	15.9	12.2
1981	183	65.8	69.3	46	16.7	16.8	48	17.4	13.8
1982	176	63.8	67.5	49	17.7	17.6	51	18.5	14.9
1983	173	62.9	66.6	50	18.2	18.4	52	18.8	15.1
1984	192	64.7	67.8	49	16.6	17.3	55	18.7	14.9
1985	199	64.8	67.2	51	16.8	17.6	57	18.5	15.3
1986	203	64.4	67.1	52	16.6	17.6	60	19.0	15.3
1987	210	64.9	67.5	53	16.3	17.2	61	18.8	15.3

BOYLE COUNTY

SECTOR EARNINGS as a PERCENT of TOTAL COUNTY EARNINGS and  
as a PERCENT of KENTUCKY SECTOR EARNINGS

YEAR	MANUFACTURING		FARMING		MINING	
	TOTAL	KENTUCKY	TOTAL	KENTUCKY	TOTAL	KENTUCKY
1969	30.0	0.98	8.8	1.17	0.5	0.11
1970	29.1	0.89	6.1	0.87	0.5	0.08
1971	30.0	0.95	6.1	0.94	0.4	0.08
1972	25.7	0.78	6.4	0.87	0.3	0.06
1973	25.6	0.76	6.4	0.84	0.4	0.07
1974	25.7	0.76	7.1	0.90	0.5	0.05
1975	29.0	0.96	5.1	0.96	0.5	0.05
1976	30.3	1.00	5.7	1.08	0.5	0.05
1977	31.2	0.98	5.1	0.85	0.5	0.05
1978	32.1	1.03	4.7	0.91	0.5	0.05
1979	33.0	1.03	2.9	0.52	0.5	0.05
1980	32.4	1.08	3.8	0.84	0.6	0.06
1981	33.3	1.12	4.6	0.76	0.5	0.05
1982	32.3	1.14	3.9	0.74	0.5	0.05
1983	32.7	1.09	0.6	0.28	0.5	0.06
1984	35.5	1.27	3.0	0.57	0.5	0.06
1985	36.7	1.38	2.0	0.53	0.6	0.08
1986	37.9	1.49	0.8	0.27	0.5	0.08
1987	36.1	1.38	1.3	0.37	0.3	0.05

YEAR	SERVICES		TRADE		STATE and LOCAL GOVERNMENT	
	TOTAL	KENTUCKY	TOTAL	KENTUCKY	TOTAL	KENTUCKY
1969	.	.	10.8	0.55	10.6	0.92
1970	.	.	11.9	0.56	10.9	0.86
1971	.	.	11.3	0.56	10.5	0.84
1972	.	.	11.5	0.57	10.0	0.80
1973	.	.	11.2	0.55	9.6	0.79
1974	.	.	10.7	0.53	9.3	0.78
1975	.	.	9.9	0.48	9.5	0.77
1976	.	.	10.1	0.51	8.9	0.75
1977	.	.	9.9	0.50	8.8	0.74
1978	.	.	9.8	0.50	8.6	0.73
1979	.	.	10.0	0.49	9.1	0.73
1980	.	.	11.3	0.59	9.2	0.74
1981	.	.	10.9	0.59	8.8	0.72
1982	.	.	11.3	0.59	9.2	0.71
1983	.	.	12.3	0.61	8.8	0.64
1984	.	.	10.8	0.60	9.1	0.73
1985	.	.	10.6	0.60	9.0	0.73
1986	.	.	10.9	0.63	9.0	0.73
1987	.	.	10.8	0.61	9.4	0.74

BOYLE COUNTY

COUNTY EMPLOYMENT by SECTOR

YEAR	MANUFACTURING		FARMING		MINING	
	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL
1969	3,155	26.3	1,462	12.2	34	0.3
1970	2,949	24.7	1,453	12.2	38	0.3
1971	2,932	24.6	1,441	12.1	28	0.2
1972	2,515	20.6	1,440	11.8	28	0.2
1973	2,695	21.0	1,471	11.5	29	0.2
1974	2,727	20.5	1,493	11.2	27	0.2
1975	3,053	23.0	1,250	9.4	27	0.2
1976	3,393	24.5	1,325	9.6	26	0.2
1977	3,495	24.9	1,279	9.1	28	0.2
1978	3,691	25.1	1,276	8.7	33	0.2
1979	3,746	25.1	1,176	7.9	34	0.2
1980	3,665	24.3	1,198	7.9	33	0.2
1981	3,697	24.1	1,224	8.0	32	0.2
1982	3,453	23.3	1,212	8.2	32	0.2
1983	3,174	22.0	1,251	8.7	29	0.2
1984	3,725	24.0	1,194	7.7	28	0.2
1985	3,941	24.6	1,162	7.3	34	0.2
1986	4,000	24.1	1,188	7.2	39	0.2
1987	3,944	23.4	1,146	6.8	34	0.2

YEAR	SERVICES		TRADE		STATE and LOCAL GOVERNMENT	
	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL	EMPLOYMENT	PERCENT OF TOTAL
1969	.	.	1,609	13.4	1,310	10.9
1970	.	.	1,742	14.6	1,330	11.2
1971	.	.	1,695	14.2	1,348	11.3
1972	.	.	1,744	14.3	1,318	10.8
1973	.	.	1,797	14.0	1,314	10.3
1974	.	.	1,808	13.6	1,334	10.0
1975	.	.	1,625	12.2	1,343	10.1
1976	.	.	1,727	12.5	1,312	9.5
1977	.	.	1,820	12.9	1,265	9.0
1978	.	.	1,938	13.2	1,271	8.6
1979	.	.	2,052	13.8	1,327	8.9
1980	.	.	2,309	15.3	1,386	9.2
1981	.	.	2,346	15.3	1,322	8.6
1982	.	.	2,299	15.5	1,243	8.4
1983	.	.	2,364	16.4	1,096	7.6
1984	.	.	2,531	16.3	1,318	8.5
1985	.	.	2,586	16.1	1,352	8.4
1986	.	.	2,751	16.6	1,411	8.5
1987	.	.	2,771	16.4	1,500	8.9

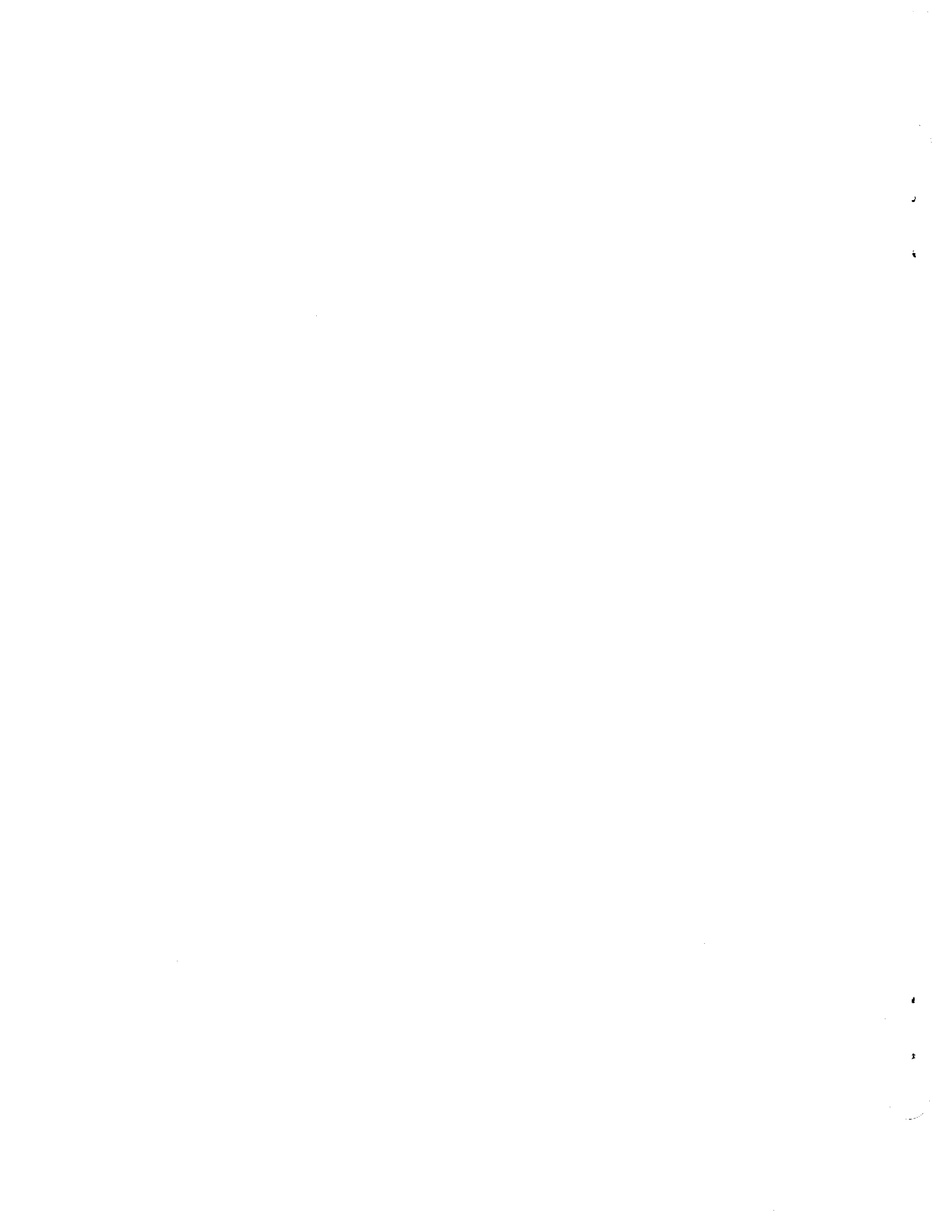
BOYLE COUNTY

EMPLOYMENT STATISTICS

YEAR	TOTAL EMPLOYMENT	AVERAGE EARNINGS		UNEMPLOYMENT RATE	
		COUNTY	KENTUCKY	COUNTY	KENTUCKY
1969	11,980	\$15,477	\$17,440	.	4.2
1970	11,922	\$15,024	\$17,811	5.3	4.4
1971	11,925	\$15,980	\$18,166	5.3	5.1
1972	12,192	\$16,452	\$18,970	5.2	6.0
1973	12,805	\$16,541	\$19,232	3.4	3.7
1974	13,276	\$16,024	\$19,008	4.6	4.5
1975	13,283	\$16,280	\$18,976	6.0	7.3
1976	13,825	\$17,239	\$19,563	4.4	5.6
1977	14,062	\$17,365	\$20,031	4.7	4.7
1978	14,727	\$17,640	\$20,121	5.1	5.3
1979	14,908	\$17,247	\$20,110	5.5	5.5
1980	15,095	\$16,854	\$19,439	7.4	8.0
1981	15,323	\$16,610	\$19,286	8.1	8.4
1982	14,820	\$16,424	\$18,931	10.5	10.6
1983	14,429	\$16,026	\$18,358	12.0	11.6
1984	15,512	\$17,086	\$19,080	8.5	9.3
1985	16,019	\$17,138	\$18,676	9.4	9.5
1986	16,614	\$17,289	\$18,627	8.7	9.3
1987	16,858	\$16,945	\$18,636	9.7	8.8

POPULATION STATISTICS

YEAR	POPULATION	% OF KY	PERCENT UNDER AGE 6		PERCENT AGE 60+	
			COUNTY	KENTUCKY	COUNTY	KENTUCKY
1969	21,100	0.66	.	.	.	.
1970	22,000	0.68	9.2	10.3	15.7	14.8
1971	22,600	0.69	8.3	9.6	15.8	14.8
1972	22,900	0.69	7.7	9.1	15.9	15.0
1973	23,000	0.68	7.4	8.8	16.1	15.2
1974	22,900	0.67	7.3	8.6	16.6	15.3
1975	23,500	0.68	7.1	8.4	16.5	15.4
1976	24,200	0.69	6.6	8.2	16.4	15.5
1977	24,400	0.68	6.8	8.4	16.7	15.5
1978	24,800	0.69	6.9	8.5	16.9	15.6
1979	24,800	0.68	7.2	8.7	17.2	15.8
1980	25,000	0.68	7.6	9.2	16.9	15.4
1981	24,800	0.67	7.7	9.3	17.0	15.5
1982	24,900	0.67	7.6	9.2	17.2	15.7
1983	25,000	0.67	7.5	9.2	17.4	15.9
1984	25,100	0.67	7.5	9.0	17.7	16.1
1985	25,400	0.68	7.4	8.9	18.0	16.3
1986	25,700	0.69	7.4	8.6	18.1	16.5
1987	25,800	0.69	.	.	.	.



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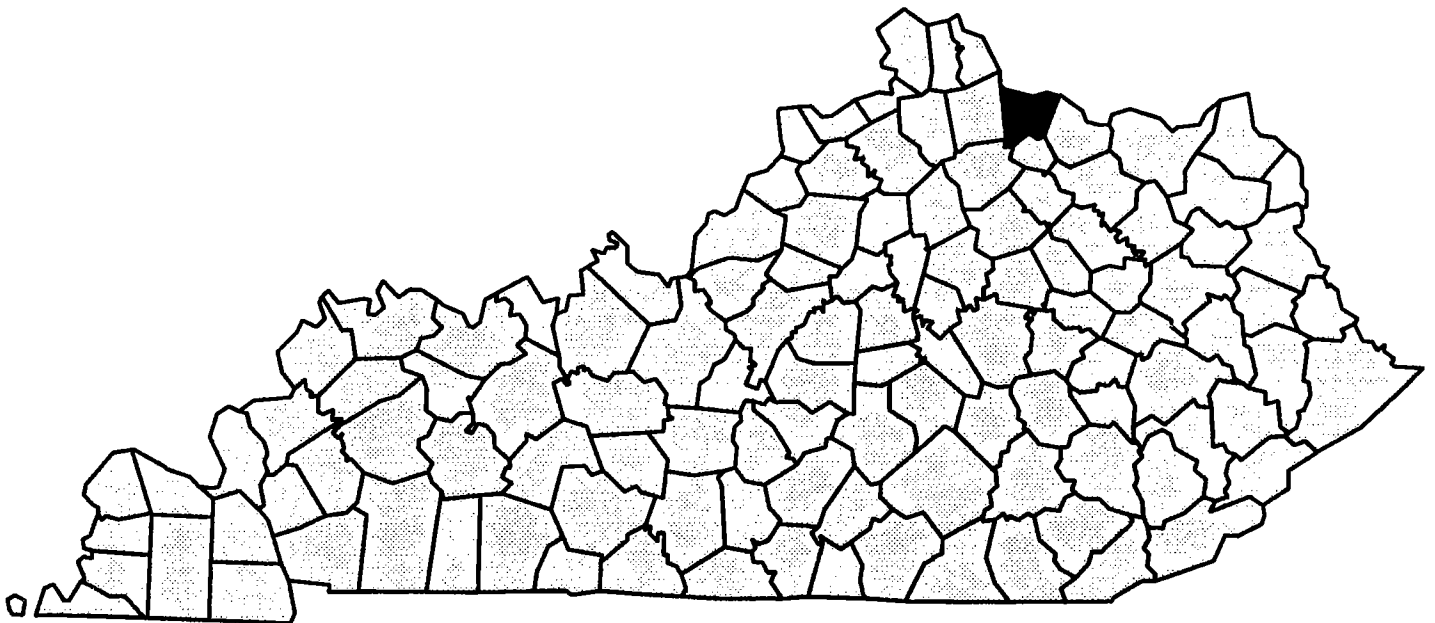
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ECONOMIC TRENDS IN  
KENTUCKY COUNTIES  
1969 – 1987

**BRACKEN COUNTY**



Prepared by  
Virginia Wilson  
Donna A. Cantrell

RESEARCH MEMORANDUM 438  
Legislative Research Commission  
Frankfort, Kentucky  
February, 1990



ECONOMIC TRENDS IN  
KENTUCKY COUNTIES  
1969 – 1987

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NO. 438  
1990

BRACKEN COUNTY

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RESEARCH MEMORANDUM 438  
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## FOREWORD

This publication is one of a set of 120, highlighting economic trends in each county in Kentucky from 1969-1987. This effort is part of the ongoing activities sponsored by the Legislative Research Commission to provide a long-term perspective on issues for decision makers. The economies of individual counties do not always parallel overall state trends. This set of publications is an attempt to look at the economic trends in each county over time and to point out where the economies of individual counties may be performing differently from the economy of the state as a whole.

This publication was prepared by Virginia Wilson and Donna Cantrell. Susan Dance assisted in production of the manuscript and Charles Bush edited the report. The assistance of Carol Straus from the Center for Business and Economic Research at the University of Kentucky in deciphering data is gratefully acknowledged.

Vic Hellard, Jr.  
Director

The Capitol  
Frankfort  
February, 1990



## SUMMARY

The Bracken County economy, as measured by personal income, grew rapidly from 1971 to 1974 but has shown little growth since that time. Bracken County significantly decreased its share of the Kentucky economy, indicating that the county economy has not grown as fast as the state economy.

The most prominent economic trend in Bracken County has been the decline in earnings from the farm sector. Farm employment has also declined, but to a much lesser degree. Earnings and employment in manufacturing have also declined.

There were, however, small increases in the non-goods-producing industries of service and trade. The state and local government sector significantly increased its share of both county earnings and employment. The growth sectors at the state level have been the service and trade sectors.

There is a national and state trend toward declining farm employment. Therefore, the outlook for this sector in Bracken County is for continued decline. Future economic growth in Bracken County will most likely be dependent on growth in other sectors of the economy.





## INTRODUCTION

This is one of a series of reports called Economic Trends in Kentucky Counties. The purpose of this series is to describe the economic structure of Kentucky counties and to assess their economic performance relative to their own history and relative to the Kentucky economy. Information on the structure and patterns of change in county economies and an understanding of their relationship to the Kentucky economy can help in making policy decisions that are intended to shape Kentucky's economic future.\*

When assessing any economy there are several pertinent questions which may be addressed. The first concerns changes in the absolute size of the economy over time. Here the relevant comparison is between the county economy and its own history. Since most economic variables are given in dollars and since inflation causes the value of a dollar to vary over time, all dollar values in this report are presented in constant 1988 dollars. This allows analysis of real changes over time by controlling for the effects of inflation.

A second question concerns the structure and nature of the county economy. The structure of an economy refers to the relative share contributed by the various segments of the economy, while the nature deals with how this share has changed over time.

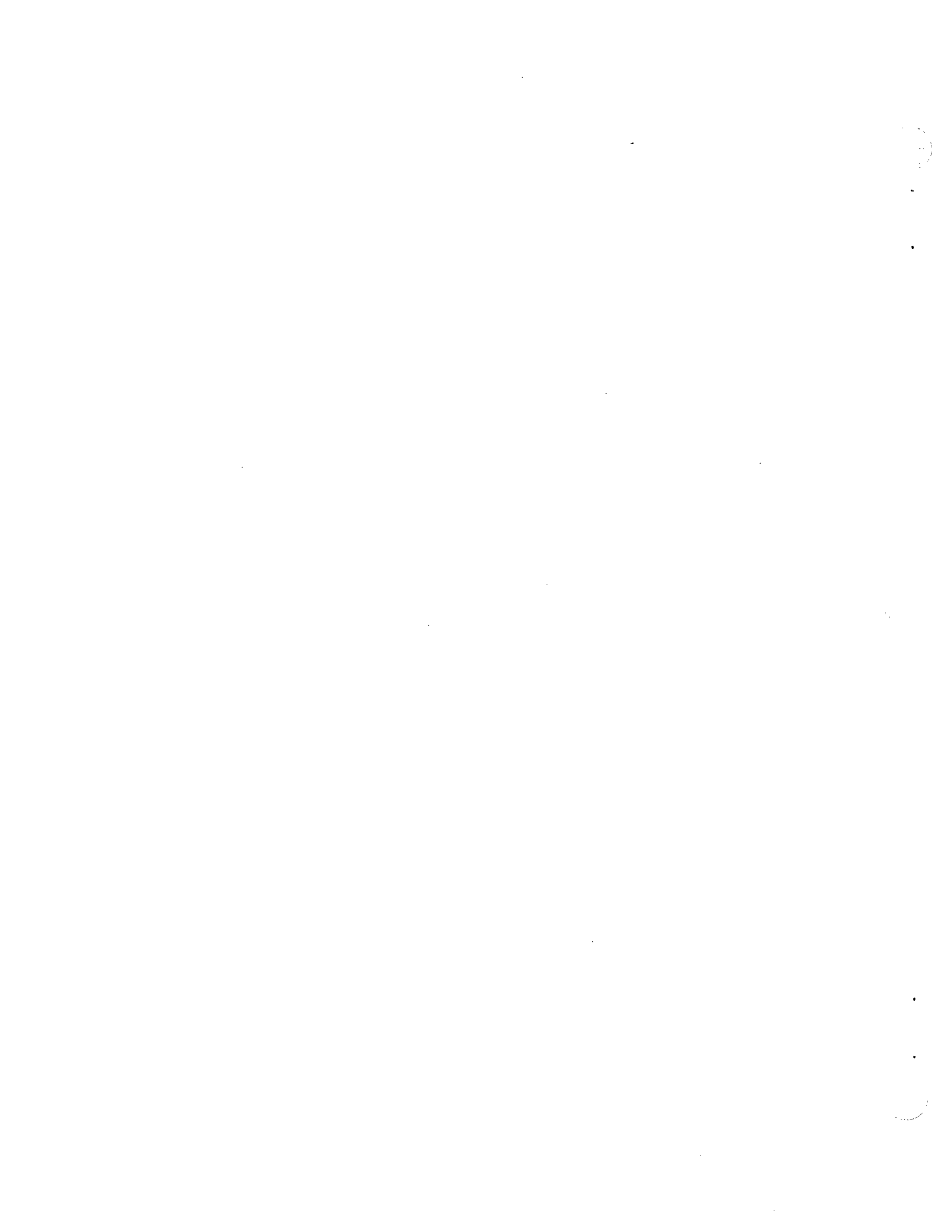
A third question concerns the performance of the county economy when compared to the Kentucky economy. For example, if a county has a higher proportion of earnings or employment in a particular sector it would indicate a specialization in that sector. Differences in economic structure may explain variations in relative economic well-being between a county and the state as a whole.

Economic data for counties are usually published after a lag of two years. Therefore, most data in this report cover the period 1969 to 1987. All data for this report was obtained from the Kentucky Economic Information System, an on-line database maintained by the University of Kentucky Center for Business and Economic Development.

There are certain caveats which should be remembered when analyzing data. First, it is a common and useful approach to evaluate the percentage an economic sector contributes to the total economy. However, one must remember that a sector's percentage contribution may decline even when its absolute value is increasing if another sector's contribution is growing at a faster rate. Secondly, when reviewing data in graphical analyses, the scales used to present data should be noted. In this report most graphs are presented with the narrowest scale which will cover all data points. This can accentuate visual patterns over time even when absolute changes are relatively small.

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\*For an analysis of economic trends in Kentucky, see Virginia Wilson, Patterns of Growth and Decline in the Kentucky Economy 1969-1988, Research Memorandum 437, Legislative Research Commission, November 1989.



## ECONOMIC TRENDS IN BRACKEN COUNTY

The following analysis includes a brief description of the county economy and is accompanied by graphical illustrations. Data tables are also included at the end of this report. Three principal components of the Bracken County economy are analyzed. They are:

1. Personal Income
2. Earnings
3. Employment

### Personal Income

Personal income is often used as a measure of the economic activity in an area. Personal income is the sum of all the dollar income received by individuals in an area from any legal source. Personal income data is published by the Bureau of Economic Analysis (BEA) for most major geographic regions, including states, counties, and major cities.

In general, income can be obtained in three ways. First, it can be earned by the work of an individual. This type of income includes wage and salary income and proprietors' earnings. Second, income can be earned by property. This component includes earnings from rents, dividends, and interest. Finally, income can be received as a gift or an entitlement. This type of income constitutes the component of personal income called transfer payments. Included in this component is income from sources such as retirement benefits, unemployment benefits, food stamps, and medical programs such as Medicare and Medicaid.

As can be seen in Chart 1A, the Bracken County economy, as measured by personal income, increased from \$51 million in 1969 to \$70 million in 1976, after adjusting for inflation. By 1987 personal income had only increased to \$72 million. Chart 1B shows Bracken County total personal income as a percent of Kentucky total personal income. Bracken County decreased its share of Kentucky personal income since 1974.

A similar pattern emerges from an examination of per capita personal income. Per capita personal income is simply the total personal income of an area divided by its population. Per capita personal income is often used as a measure of the economic well-being of the residents of an area. Charts 1C and 1D indicate that Bracken County per capita income increased sporadically over the time period to a level of \$9,413 per person in 1987. This was 75.3 percent of Kentucky per capita personal income for that year.

A better understanding of the nature of economic activity can be gleaned from an examination of the relative contribution of the components of personal income and how their shares have changed over time. This information is illustrated in Charts 2A-2D. Total earnings increased from \$38 million in 1969 to \$50 million in 1977, then declined to \$45 million in 1987 (in constant

1988 dollars) and were very volatile. Earnings as a percent of personal income declined over the period. This trend is occurring at the state level as well. In 1987, earnings accounted for 62.4 percent of Bracken County's total personal income, which was lower than Kentucky's 67.5 percent share.

Transfer payments contributed \$7 million to total personal income in 1969 and \$16 million in 1987. During the same period, transfer payments contributed a larger percentage of personal income in Bracken County than in Kentucky.

Income from property in Bracken County grew at a stable rate until 1983 and then began to decline. Income from property totalled \$5 million in 1969, increased to \$13 million in 1983 and had declined to \$11 million by 1987.

## Earnings

Earnings are the component of personal income reflecting payments to individuals in return for labor. Earnings include both wages and salaries and proprietor's income. In 1969, Bracken County received 20.3 percent of total earnings from manufacturing. This percentage changed erratically throughout the period and, in 1987, stood at 16.6 percent (Chart 3A). The percent of earnings from the farm sector declined dramatically, from 39.2 percent in 1969 to 6.0 percent in 1987.

Earnings from non-goods-producing industries as a percent of total earnings are illustrated in Chart 3B. The percent of earnings from both the services and state and local government sectors have increased substantially. Earnings from the state and local government sector increased from 8.6 percent in 1969 to 14.2 percent in 1987. The share of earnings from services increased to 11.2 percent in 1987. The share of earnings from trade increased then declined and, at 10.2 percent, was slightly lower in 1987 than 1969. At the state level, the percent of earnings from services increased, while the percent of earnings from trade and state and local government were stable.

Average earnings per job (adjusted for inflation) for Bracken County and Kentucky are shown in Chart 3D. In Kentucky, average earnings per job reached a high of \$20,121 per person in 1978. Since then, average earnings per job declined and in 1987 they were \$18,636 per person. In Bracken County, average earnings grew through the late 1970's, then fluctuated through the 1980's. In 1987 average county earnings per job were \$12,071.

## Employment

Employment is considered any activity for which one receives financial remuneration in the form of wages or profits. Total employment in Bracken County remained virtually unchanged over the data period. In 1969, total employment stood at 2,605 people. In 1987 that figure was 2,609.

The unemployment rate, often used as an indicator of economic well-being, is the ratio of unemployed to the total civilian labor force.

Unemployment is described as a condition of being out of work while actively seeking employment within the last thirty days. The civilian labor force is described as the proportion of population age 16 or older employed or actively seeking employment. Annual unemployment rates for Kentucky and Bracken County are presented in Chart 4B. Unemployment rates in Bracken County followed state trends except for a huge county jump in the early 1980's. In 1987, the county unemployment rate was 10.9 percent, compared to 8.8 percent for Kentucky.

Another employment concept includes the discouraged worker. Discouraged workers are persons who want jobs but made no attempt to find work in the last thirty days because they believe they could not find it. These individuals are not included when calculating official unemployment rates. The Cabinet for Human Resources does not estimate discouraged workers by county. However, preliminary research by the Cabinet indicates that the inclusion of discouraged workers in the civilian labor force estimate would increase the unemployment rate by approximately four percent for the state. This figure would vary by county depending on the labor market in a county or within commuting distance.

Employment in the goods-producing industries is illustrated in Chart 4C. The percent of total employment in manufacturing generally declined and accounted for 9.0 percent in 1987. At the state level, manufacturing's share of employment also declined. The farm sector was the primary source of county employment. However, employment in this sector declined from 49.2 percent of total employment in 1969 to 37.3 percent in 1987.

Employment in the non-goods-producing industries is presented in Chart 4D. Employment in the trade sector increased slightly and accounted for 13.5 percent of employment in 1987. The percent of employment in the service sector also increased and accounted for 9.5 percent in 1987. The employment share in state and local government increased from 8.4 percent in 1969 to 11.8 percent in 1987. At the state level, employment shares in both the service and trade sectors increased, while the government employment share remained constant.

## Population

The census conducted each decade counts the actual population in an area. Population is then statistically estimated during intervening years. The demographic composition of this population growth has important implications for the future demand for goods and services, and ultimately, the economic structure of Bracken County.

The Bracken County population grew from 7,200 in 1969 to 7,600 in 1987 (Chart 5A). Bracken County has a smaller proportion of younger residents and a higher proportion of older residents than does the state. It was estimated that in 1986, 7.4 percent of Bracken County's population was under six years of age, compared to 8.6 percent for the state. Conversely, for the same year 20.7 percent of the Bracken County population was sixty years of age and over, while 16.5 percent of all Kentucky residents fell in this age group.

CHART 1A  
BRACKEN COUNTY  
REAL PERSONAL INCOME  
Millions of 1988 dollars

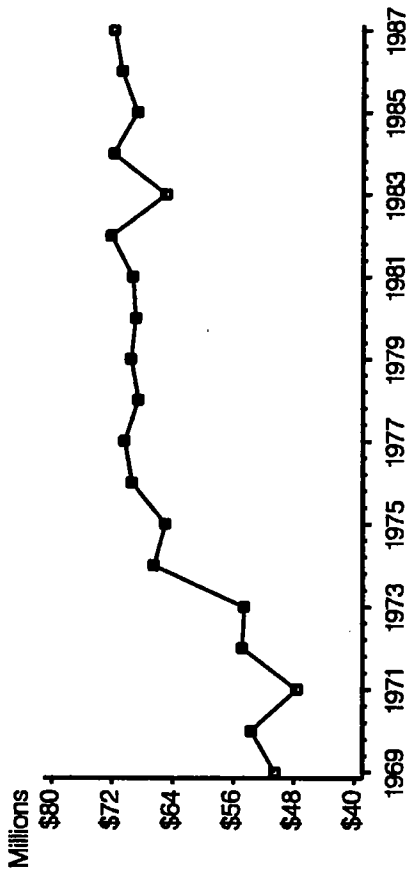


CHART 1B  
BRACKEN COUNTY  
PERSONAL INCOME  
as a Percent of Kentucky Personal Income

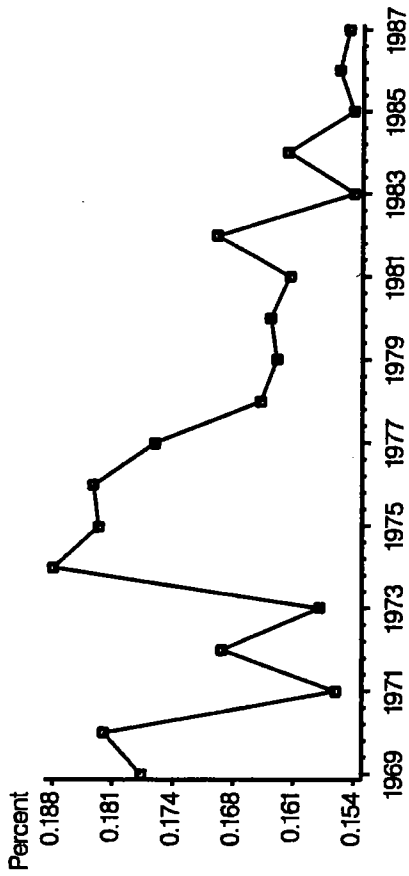


CHART 1C  
BRACKEN COUNTY  
PER CAPITA PERSONAL INCOME  
in Constant 1988 Dollars

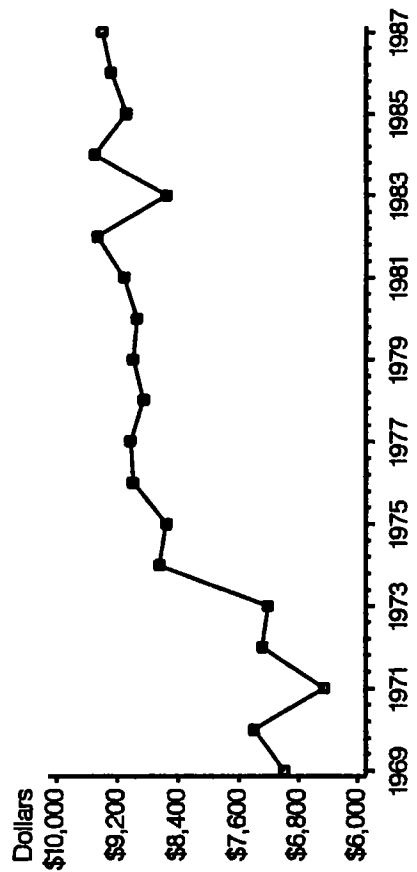


CHART 1D  
BRACKEN COUNTY  
PER CAPITA PERSONAL INCOME  
as a Percent of Kentucky Per Capita Personal Income

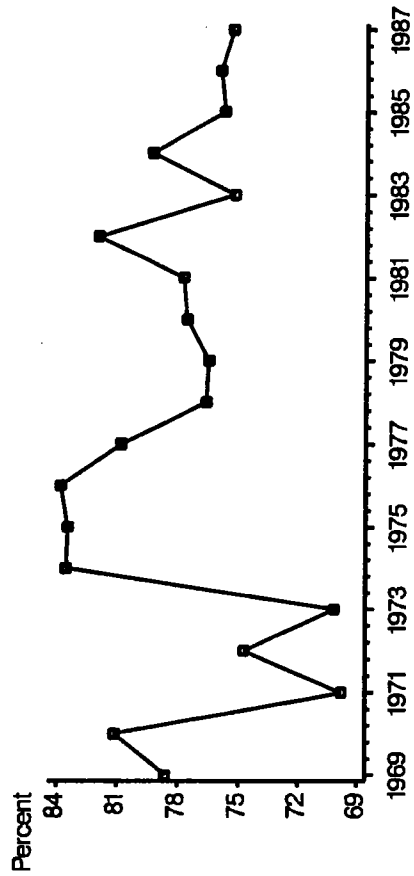


CHART 2A  
BRACKEN COUNTY  
REAL TOTAL EARNINGS  
Millions of 1988 dollars

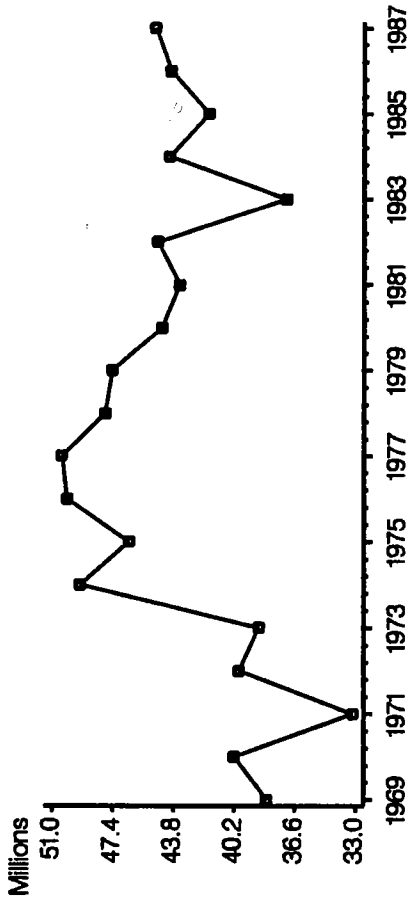


CHART 2B  
BRACKEN COUNTY  
TRANSFER PAYMENTS and INCOME FROM PROPERTY  
Millions of 1988 Dollars

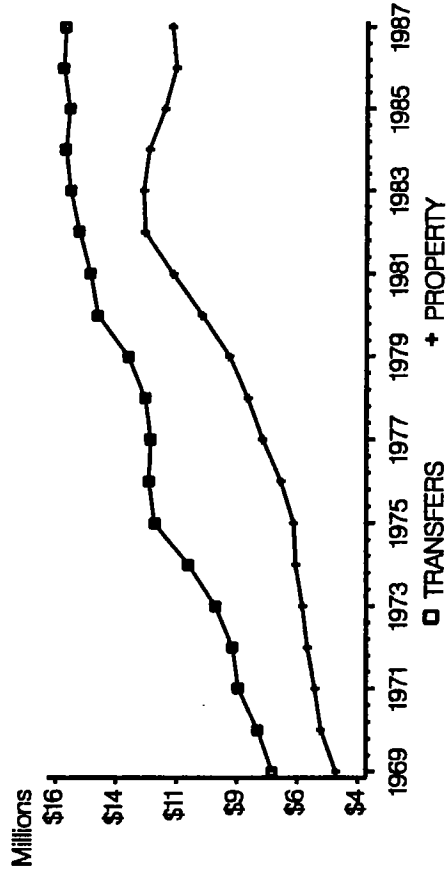


CHART 2C  
BRACKEN COUNTY  
TOTAL EARNINGS  
as a Percent of Personal Income

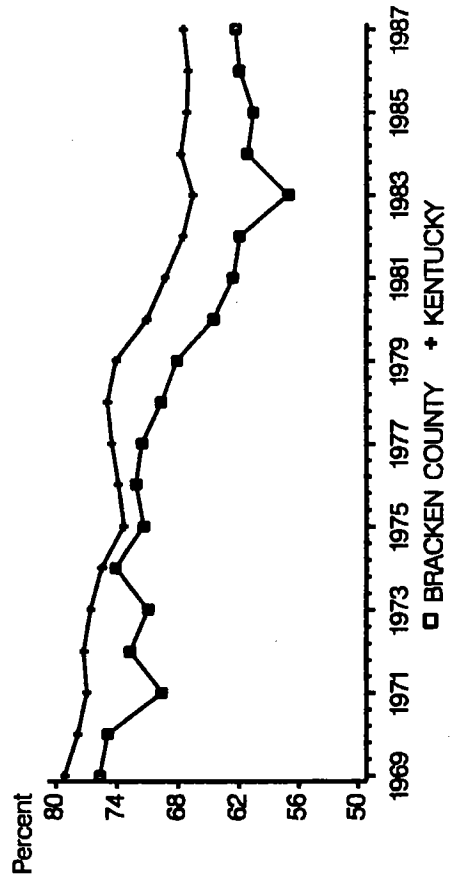


CHART 2D  
BRACKEN COUNTY  
TRANSFER PAYMENTS  
as a Percent of Personal Income

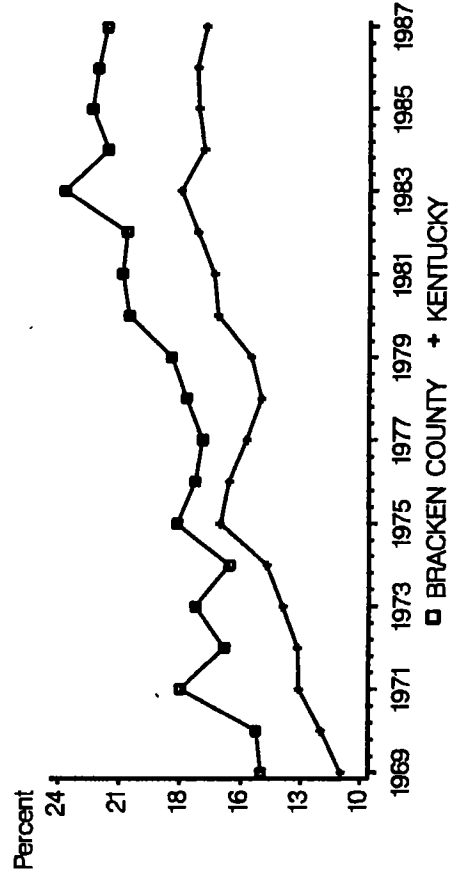


CHART 3A

BRACKEN COUNTY

EARNINGS IN GOODS PRODUCING INDUSTRIES

as a Percent of Total Earnings

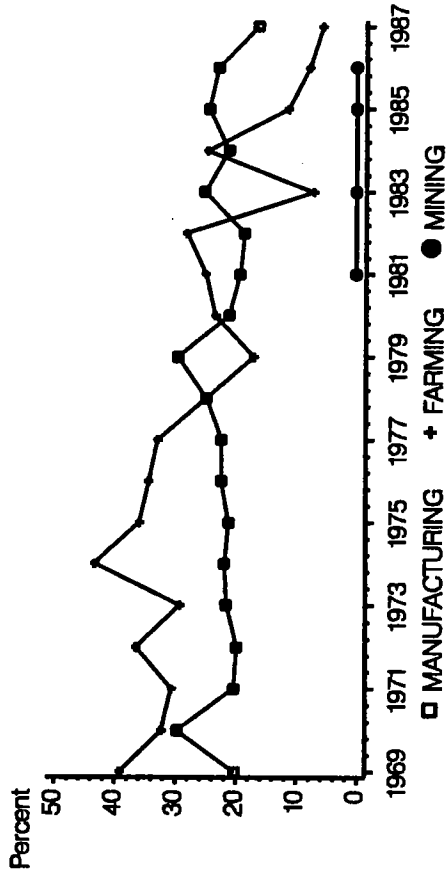


CHART 3B

BRACKEN COUNTY

EARNINGS in NON - GOODS PRODUCING INDUSTRIES

as a Percent of Total Earnings

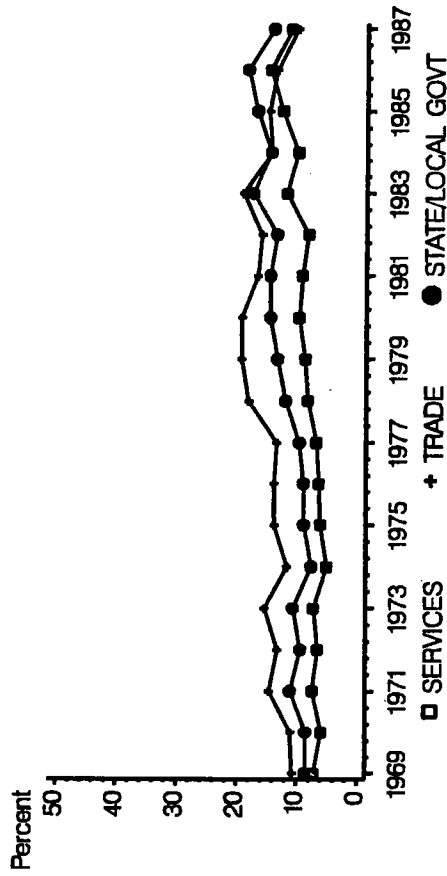


CHART 3C

BRACKEN COUNTY

EARNINGS in GOODS PRODUCING INDUSTRIES

as a Percent of Kentucky Industries

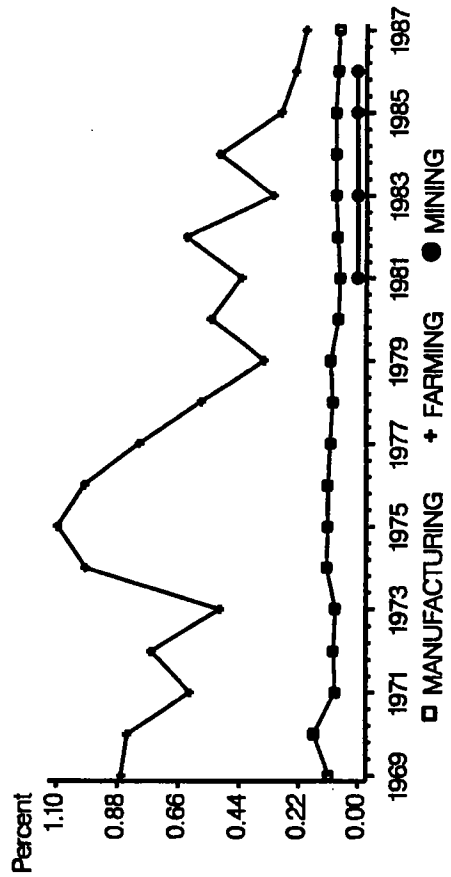


CHART 3D

BRACKEN COUNTY

AVERAGE EARNINGS PER JOB

in Constant 1988 Dollars

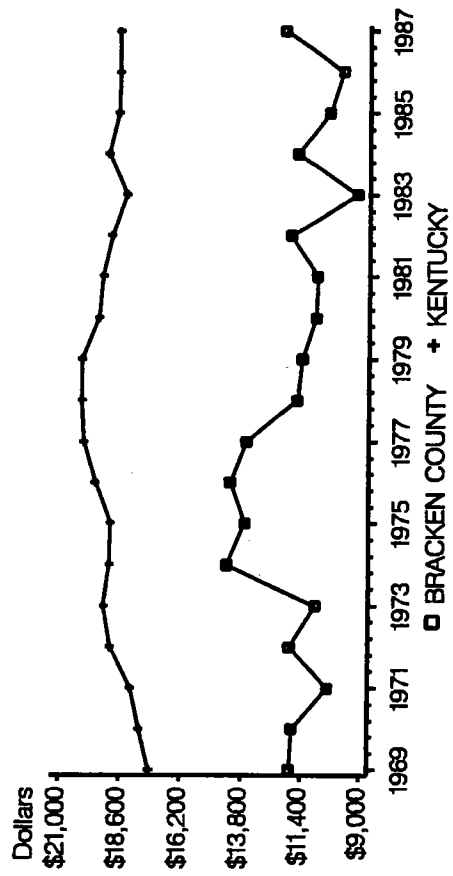




CHART 4A  
BRACKEN COUNTY  
TOTAL EMPLOYMENT  
Thousands of People

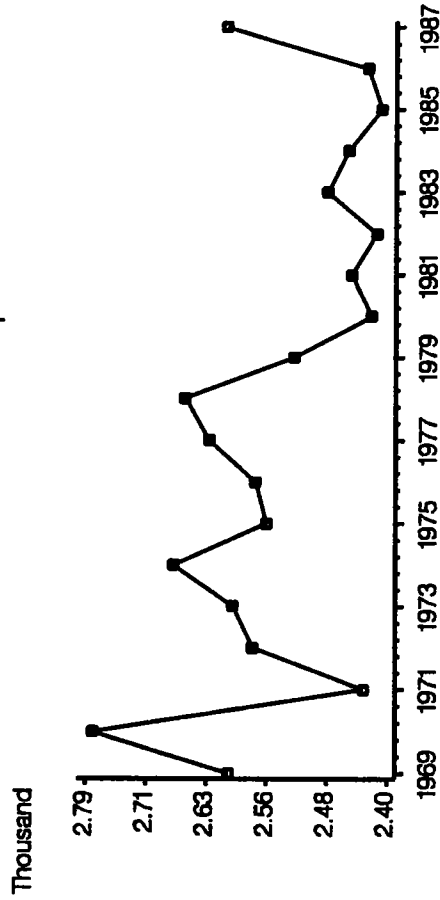


CHART 4B  
BRACKEN COUNTY  
ANNUAL UNEMPLOYMENT RATE

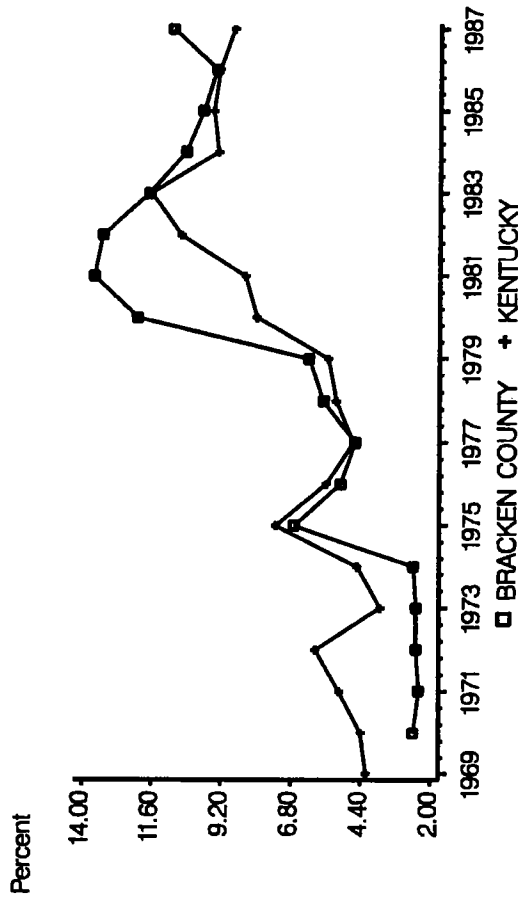


CHART 4C  
BRACKEN COUNTY  
EMPLOYMENT IN GOODS PRODUCING INDUSTRIES  
as a Percent of Total Employment

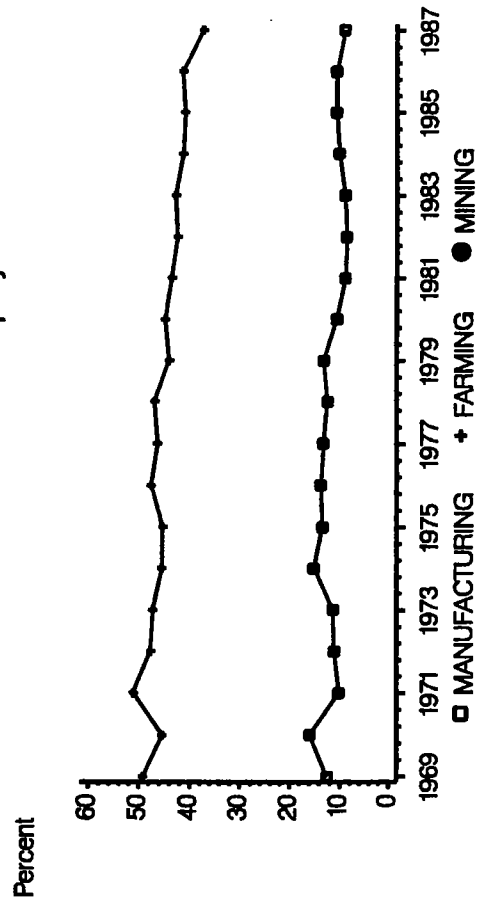


CHART 4D  
BRACKEN COUNTY  
EMPLOYMENT IN NON-GOODS PRODUCING INDUSTRIES  
as a Percent of Total Employment

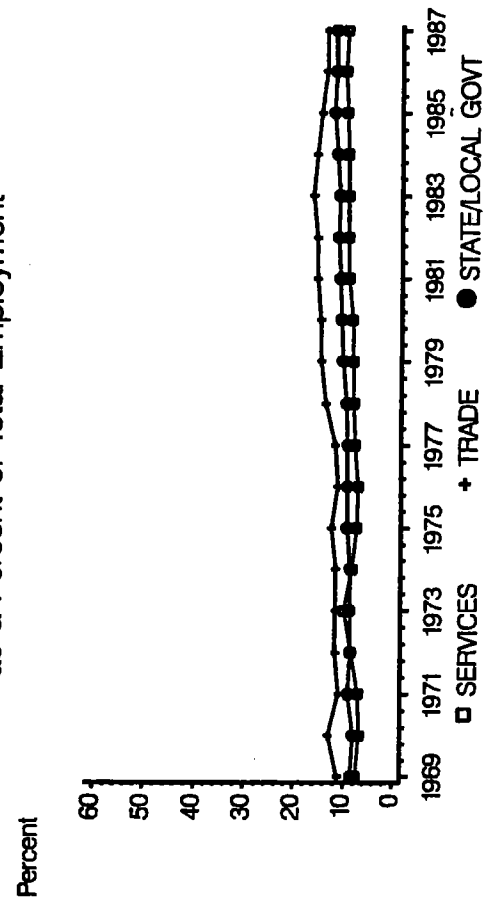


CHART 5A  
BRACKEN COUNTY  
POPULATION  
Thousands of People

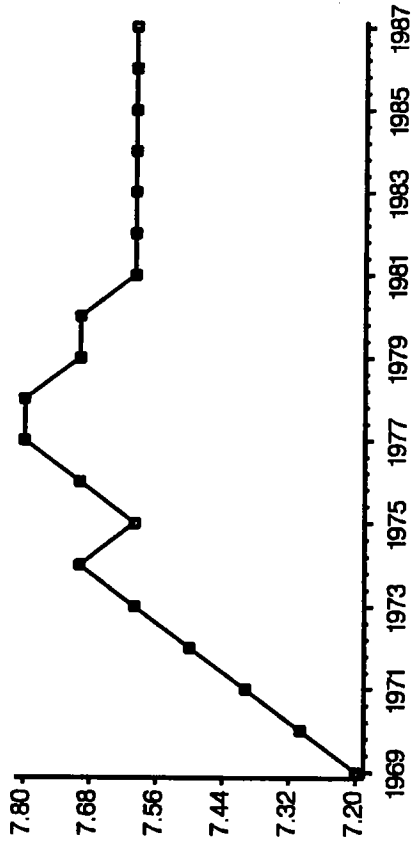


CHART 5B  
BRACKEN COUNTY  
POPULATION  
as a Percent of Kentucky Population

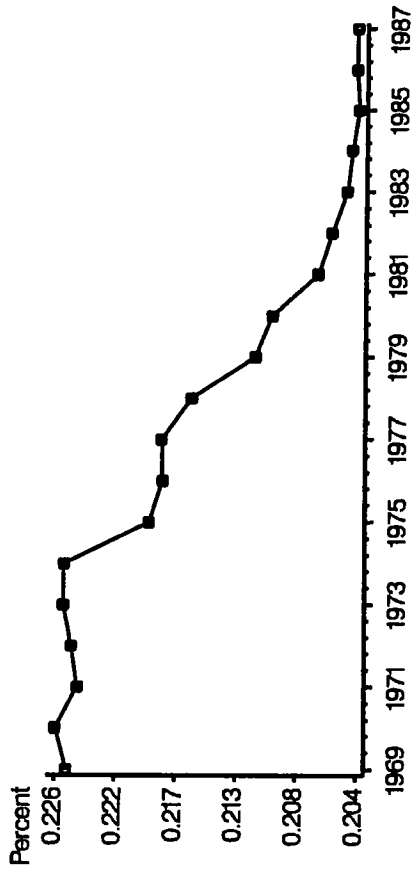


CHART 5C  
BRACKEN COUNTY  
POPULATION 5 AND UNDER  
as a Percent of Total Population

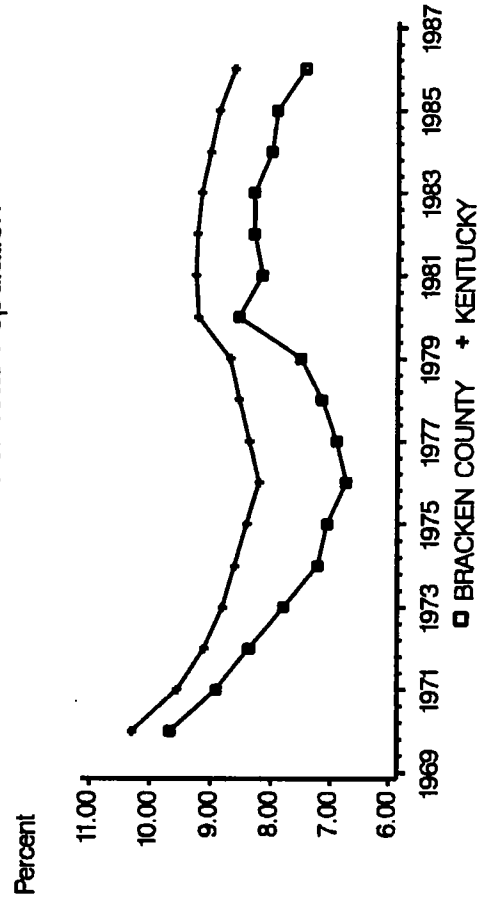
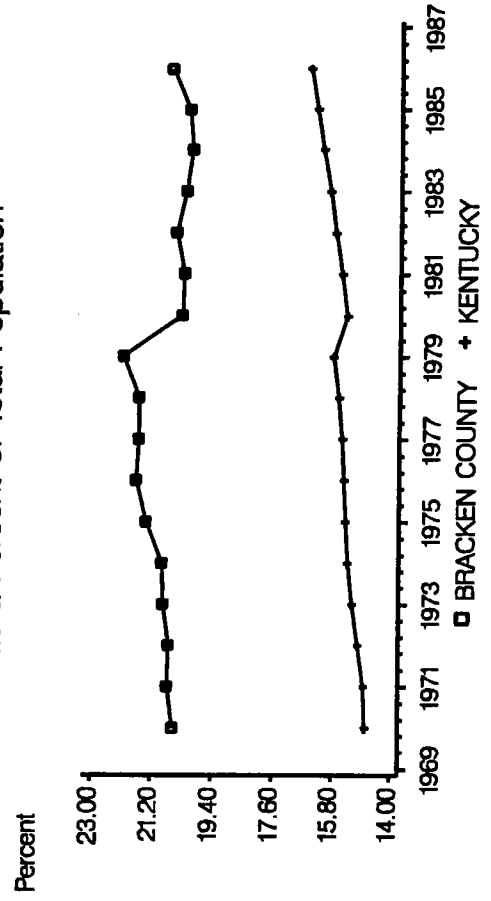


CHART 5D  
BRACKEN COUNTY  
POPULATION 60 AND OVER  
as a Percent of Total Population



BRACKEN COUNTY

PERSONAL INCOME  
In Constant 1988 Dollars

Year	County Personal Income (M\$)	Percent of Kentucky (%)	Per Capita Personal Income (\$)	Percent of Kentucky (%)
1969	51	0.18	6,987	78.6
1970	54	0.18	7,395	81.1
1971	48	0.16	6,461	69.8
1972	55	0.17	7,281	74.7
1973	55	0.16	7,204	70.2
1974	67	0.19	8,656	83.5
1975	65	0.18	8,566	83.5
1976	70	0.18	8,995	83.8
1977	70	0.18	9,030	80.8
1978	69	0.16	8,861	76.6
1979	70	0.16	8,995	76.5
1980	69	0.16	8,946	77.6
1981	69	0.16	9,114	77.8
1982	72	0.17	9,467	81.9
1983	65	0.15	8,562	75.2
1984	72	0.16	9,509	79.3
1985	69	0.15	9,086	75.7
1986	71	0.16	9,292	75.9
1987	72	0.15	9,413	75.3

COMPONENTS OF PERSONAL INCOME  
In Constant 1988 Dollars

Year	EARNINGS			TRANSFER PAYMENTS			INCOME from PROPERTY		
	M\$	Percent of Personal Income		M\$	Percent of Personal Income		M\$	Percent of Personal Income	
		County	Kentucky		County	Kentucky		County	Kentucky
1969	38	75.7	79.2	7	14.6	10.9	5	9.6	9.9
1970	40	74.9	77.9	8	14.9	11.9	5	10.2	10.2
1971	33	69.6	77.0	9	18.4	12.9	6	12.0	10.1
1972	40	72.7	77.3	9	16.4	12.9	6	10.9	9.7
1973	39	71.0	76.6	10	17.7	13.6	6	11.4	9.7
1974	49	74.2	75.5	11	16.1	14.4	6	9.7	10.1
1975	46	71.4	73.3	12	18.5	16.5	7	10.1	10.1
1976	50	72.1	73.9	12	17.7	16.1	7	10.2	10.0
1977	50	71.6	74.6	12	17.4	15.3	8	11.1	10.1
1978	48	69.7	75.0	12	18.1	14.6	8	12.2	10.4
1979	47	68.1	74.1	13	18.8	15.1	9	13.1	10.8
1980	45	64.5	71.1	14	20.8	16.7	10	14.8	12.2
1981	43	62.6	69.3	15	21.1	16.8	11	16.3	13.8
1982	45	61.9	67.5	15	20.9	17.6	12	17.2	14.9
1983	37	57.0	66.6	15	23.7	18.4	13	19.3	15.1
1984	44	61.2	67.8	16	21.7	17.3	12	17.1	14.9
1985	42	60.6	67.2	15	22.5	17.6	12	17.0	15.3
1986	44	62.0	67.1	16	22.2	17.6	11	15.8	15.3
1987	45	62.4	67.5	16	21.8	17.2	11	15.8	15.3

BRACKEN COUNTY  
EMPLOYMENT STATISTICS

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YEAR	TOTAL EMPLOYMENT	AVERAGE EARNINGS		UNEMPLOYMENT RATE	
		COUNTY	KENTUCKY	COUNTY	KENTUCKY
1969	2,605	\$11,824	\$17,440	.	4.2
1970	2,781	\$11,724	\$17,811	2.6	4.4
1971	2,431	\$10,334	\$18,166	2.4	5.1
1972	2,574	\$11,842	\$18,970	2.5	6.0
1973	2,600	\$10,828	\$19,232	2.5	3.7
1974	2,677	\$14,377	\$19,008	2.6	4.5
1975	2,557	\$13,663	\$18,976	6.7	7.3
1976	2,571	\$14,240	\$19,563	5.1	5.6
1977	2,631	\$13,592	\$20,031	4.6	4.7
1978	2,662	\$11,548	\$20,121	5.7	5.3
1979	2,521	\$11,372	\$20,110	6.2	5.5
1980	2,421	\$10,825	\$19,439	12.1	8.0
1981	2,447	\$10,784	\$19,286	13.6	8.4
1982	2,414	\$11,837	\$18,931	13.3	10.6
1983	2,478	\$9,163	\$18,358	11.7	11.6
1984	2,451	\$11,584	\$19,080	10.4	9.3
1985	2,408	\$10,296	\$18,676	9.9	9.5
1986	2,426	\$9,743	\$18,627	9.4	9.3
1987	2,609	\$12,071	\$18,636	10.9	8.8

POPULATION STATISTICS

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YEAR	POPULATION	% OF KY	PERCENT UNDER AGE 6		PERCENT AGE 60+	
			COUNTY	KENTUCKY	COUNTY	KENTUCKY
1969	7,200	0.23	.	.	.	.
1970	7,300	0.23	9.7	10.3	20.6	14.8
1971	7,400	0.22	8.9	9.6	20.7	14.8
1972	7,500	0.22	8.4	9.1	20.7	15.0
1973	7,600	0.23	7.8	8.8	20.9	15.2
1974	7,700	0.23	7.2	8.6	20.9	15.3
1975	7,600	0.22	7.1	8.4	21.4	15.4
1976	7,700	0.22	6.7	8.2	21.7	15.5
1977	7,800	0.22	6.9	8.4	21.6	15.5
1978	7,800	0.22	7.1	8.5	21.6	15.6
1979	7,700	0.21	7.5	8.7	22.1	15.8
1980	7,700	0.21	8.5	9.2	20.3	15.4
1981	7,600	0.21	8.2	9.3	20.3	15.5
1982	7,600	0.21	8.3	9.2	20.5	15.7
1983	7,600	0.20	8.3	9.2	20.2	15.9
1984	7,600	0.20	8.0	9.0	20.1	16.1
1985	7,600	0.20	7.9	8.9	20.1	16.3
1986	7,600	0.20	7.4	8.6	20.7	16.5
1987	7,600	0.20	.	.	.	.



