

THE UNIVERSITY OF KANSAS
Kansas Center for Community Economic Development
Institute for Public Policy and Business Research
TECHNICAL REPORT SERIES

Economic Trends Update: Douglas County

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January 1998

Report No. 39

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Foreword

The following report was prepared for a presentation by Dr. Charles Krider to the Lawrence Chamber of Commerce's 1998 Economic Outlook Luncheon. Dr. Krider is Director of the Institute for Public Policy and Business Research (IPPBR) and Co-Director of the Kansas Center for Community Economic Development (KCCED) at the University of Kansas.

The KCCED is funded by a grant from the Economic Development Administration of the U.S. Department of Commerce. It is a joint university center between the University of Kansas and Kansas State University. The statements, findings, and conclusions of this report are those of the authors and do not necessarily reflect the views of the U.S. Government, the University of Kansas, Kansas State University, or any other individual or organization.

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Economic Trends Update: Douglas County

INTRODUCTION

The Lawrence-Douglas County area is a community with a growing population, high quality work force, and modern economic base, enhanced by the presence of a major regional university. Its development in recent years has been shaped by two significant forces. First, with three colleges, it is a major center for higher education. Much of its development has been influenced by its large student population. Second, Douglas County is located between two metropolitan areas, and has captured some of the spill over benefits from this location.

In 1992, the Institute for Public Policy and Business Research (IPPBR) at the University of Kansas conducted a review of economic and demographic trends for Douglas County and the City of Lawrence. This review was part of the strategic planning process for the county called Horizon 2020. The 181-page report contained data on: global, regional and national trends, population, housing, education, employment, earnings and income, geographic location and infrastructure, business environment, financial capital, innovation and technology, and quality of life.¹

The following report includes an update of selected variables from the 1992 study as well as some additional variables. This report looks at variables categorized under the following areas:

- population,
- employment,
- earnings and income,
- retail,
- agriculture, and
- education.

Throughout the report, Douglas County's performance is compared with the performance of the State of Kansas, Comparative Counties² and Surrounding Counties³. It is by no means a comprehensive analysis of economic trends facing Douglas County but rather an overview of some key economic and demographic variables.

¹ *Horizon 2020 Data Analysis*, Kansas Center for Community Economic Development, Institute for Public Policy and Business Research, the University of Kansas, Technical Report Number 12, August 1992.

² "Comparative Counties" are Boone County, Missouri (University of Missouri, Columbia); Johnson County, Iowa (University of Iowa, Iowa City); Larimer County, Colorado (Colorado State University, Fort Collins); and Champaign County, Illinois (University of Illinois, Urbana-Champaign).

³ "Surrounding Counties" used for comparison in this report are Johnson, Shawnee, and Wyandotte counties. "Selected Counties" include both the Comparative and the Surrounding Counties.

POPULATION

Population size and economic activity are closely related. Changes in population size are directly linked to employment opportunities, wage differentials between regions, and a community's overall economic conditions and quality of life. Communities with growing populations are generally regarded as being more able to adapt to a changing economic environment due to the opportunities presented by new residents as additional consumers, taxpayers, and suppliers of labor. Without population growth, communities face problems of a tightening labor market, lack of new customers for businesses, a shrinking tax base, and an overall decline in economic activity. Generally, areas of population growth are also areas of economic growth, whereas areas of population loss suffered previous economic decline and restructuring.

Population characteristics are regarded as indicators of a region's economic conditions and economic potential. The level of Douglas County's population relative to the state's population reflects the county's overall level of competitiveness with respect to other regions within the state. A minimum population is necessary to sustain a basic level of public and private services and facilities. Past and projected population change is indicative of community economic trends and can be compared to other counties and the statewide and national averages.

Migration is linked to job opportunities and demand as well as wage differentials between regions. Counties with low rates of job creation and low wages will face higher worker mobility due to a "push" factor (lack of opportunity) or a "pull" phenomenon by urban areas with higher wages, better job opportunities, and a perceived better quality of life. Other determinants of regional migration are age and education. Generally, there is a life-cycle pattern to migration with the population aged 18 to 45 being the most mobile age group. The effect of education on migration is reflected by the movement of well-educated workers toward better job matches for themselves and their spouses and their attempts to raise their income levels by migrating to areas with employment opportunities.

The following section consists of the population tables, figures, and maps which together illustrate population totals, population growth rates, percent net migration, and population rankings.

Population: Key Findings

- During the 1980's, Douglas County's population grew almost 21 percent, which was four times as fast as the growth rate of Kansas and twice the rate of the U.S. The county's population has grown every decade since 1890 and has grown by 10,000 or more per decade since 1940. Population has almost doubled between the end of the 1950's and the end of the 1980's (Table 1).

- The county's rates of growth for 1991 and 1992 were both greater than the state's rates for those years, and in 1993 the county's rate of growth was more than three times greater than the state's rate. In 1995, the county's rate of growth was less than half that of the state. In 1996, however, the county's growth rate was significantly higher than the state's (Table 1).
- From 1980 to 1990, all the "college town" counties except for Champaign, Illinois, grew faster than the national average of 9.7 percent. From 1990 to 1996, Douglas County had a growth rate of 9.9 percent. This growth rate, for the college towns, was surpassed only by Boone County, Missouri (11.8 percent), and Larimer County, Colorado (19.1 percent). Larimer County's rate was nearly double the rate of Douglas County and more than three times the national average (Table 2).
- Johnson County, Kansas, had the highest growth rate for the neighboring metropolitan counties in Kansas with a 27.1 percent increase from 1980 to 1990 and a 15.0 percent increase from 1990 to 1996. These rates were higher than Douglas County's rates during the same time periods. Johnson County's rate for 1990 to 1996 was nearly fifty percent higher than Douglas County's rate for this time period (Table 2).
- For the past four and one-half decades, Douglas County's population has grown at a faster rate than Kansas or the U.S. (Table 2 and Figure 1).
- Douglas County's percent population change from 1971 to 1980 (23.4 percent) was less than half of what it had been the previous decade, but it was about four times greater than the state's percent population change. For this same time period, the net migration for Douglas County had dropped by more than half to 15.4 percent, highlighting the fact that Douglas County's population increase for that time was due primarily to migration (Table 3).
- From 1991 through 1994, Douglas County's net migration was positive for each year, as was the state's from 1992 to 1995. Counter to the state trend in 1995, however, Douglas County's net migration was negative (-0.5 percent). Its population change was a positive 0.2 percent that year. Douglas County showed a positive net migration of 1.5 percent in 1996 (Table 3).
- Douglas County had moved from being the sixteenth most populated county in Kansas in 1940 to being the fifth most populated county in 1990. Douglas County is projected to maintain through the year 2020 (Table 4).
- Douglas County was one of the fastest growing counties in Kansas from 1980 to 1990 (Map 1). The percent net migration from 1980 to 1990 for Douglas County was the third highest for Kansas (Map 2).

Table 1

Population Totals, Growth Rates, Rank & Share
 Actual 1890 – 1990, Estimates 1991 – 1996, Projections 2000 - 2020

Year	Douglas County		Kansas		Rank	Share (%)
	Population Total	Growth Rate	Population Total	Growth Rate		
1890	23,961		1,427,096		15	1.7
1900	25,096	4.7 %	1,470,495	3.0 %	13	1.7
1910	24,724	-1.5	1,690,949	15.0	15	1.5
1920	23,998	-2.9	1,769,257	4.6	17	1.4
1930	25,143	4.8	1,880,999	6.3	17	1.3
1940	25,171	0.1	1,801,028	-4.3	16	1.4
1950	34,086	35.4	1,905,299	5.8	10	1.8
1960	43,720	28.3	2,178,611	14.3	9	2.0
1970	57,932	32.5	2,249,071	3.2	6	2.6
1980	67,640	16.8	2,364,236	5.1	5	2.9
1990	81,798	20.9	2,477,588	4.8	5	3.3
1991*	83,182	1.7	2,491,407	0.6	5	3.3
1992*	84,338	1.4	2,514,839	0.9	5	3.4
1993*	86,411	2.5	2,532,458	0.7	5	3.4
1994*	88,031	1.9	2,550,897	0.7	5	3.5
1995*	88,206	0.2	2,565,328	0.6	5	3.4
1996*	89,899	1.9	2,572,150	0.3	5	3.5
2000**	95,849	8.7	2,562,890	-0.10	n/a	3.7
2005**	100,419	4.8	2,604,664	1.63	n/a	3.9
2010**	102,015	1.6	2,645,887	1.58	n/a	3.9
2015**	102,503	0.5	2,688,165	1.60	n/a	3.8
2020**	103,243	0.7	2,723,689	1.32	n/a	3.8

* Estimation.

** Projection.

Source: Population Totals: U.S. Bureau of the Census, Fifteenth Census of the United States, 1930, Vol. 1; "Census of Population, 1960: Number of Inhabitants; 1980 Census of Population," Vol. 1, Chapter A, Part 18; "1990 Decennial Census," mimeographed sheet; Population Estimates, and Population Distribution Branches, U.S. Bureau of the Census; 1996 Population Estimates for Counties, Population Estimates Branch, U.S. Bureau of the Census 1997. Calculations: IPPBR.

Table 2

Population Growth Rates (percent): 1950 - 1996*
 Douglas County, Selected Counties, Kansas, and United States

	<u>1950 - 60</u>	<u>1960 - 70</u>	<u>1970 - 80</u>	<u>1980 - 90</u>	<u>1990 - 96**</u>
Douglas	28.3 %	32.5 %	16.8 %	20.9 %	9.9 %
Johnson	129.0	53.0	26.9	27.1	15.0
Shawnee	34.0	9.9	-0.3	3.9	2.5
Wyandotte	12.2	0.7	-7.8	-6.0	-5.3
Boone, MO	14.0	46.6	24.0	21.9	11.8
Johnson, IA	17.3	34.4	13.3	17.6	5.7
Larimer, CO	22.5	68.5	65.9	24.8	19.1
Champaign, IL	24.8	23.3	3.1	2.8	-3.3
Kansas	14.3	3.2	5.1	4.8	3.8
United States	18.5	13.4	11.5	9.7	6.7

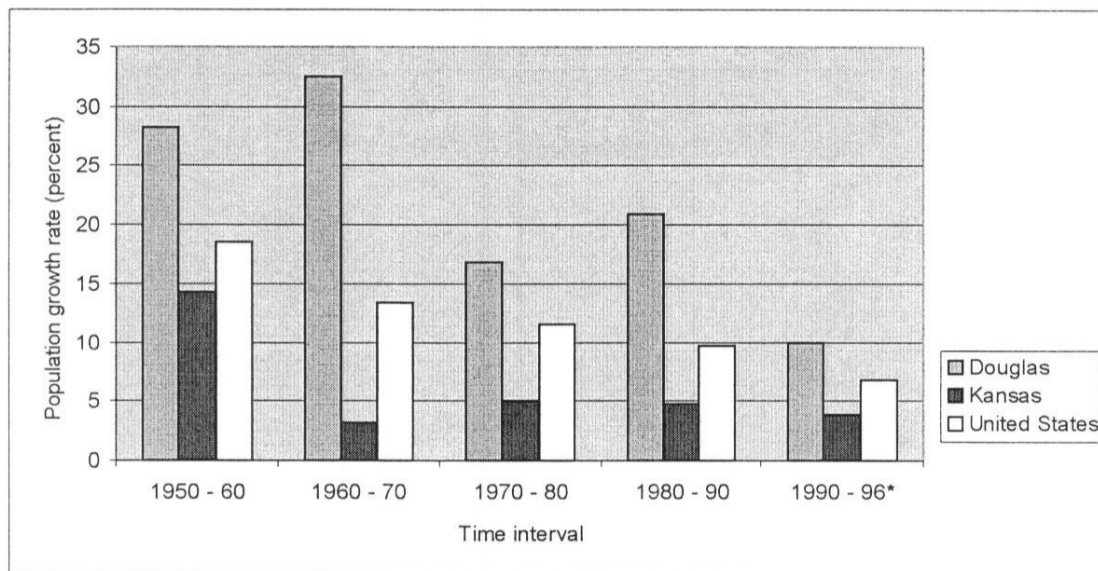
* 1996 Population Estimate.

** This is a six-year period compared to ten years for the previous periods.

Source: U.S. Bureau of the Census, "Census of Population, 1960: Number of Inhabitants," Final Report: "1980 Census of Population," PC90-1-A-18; "1990 Decennial Census." U.S. Department of Commerce, Bureau of Economic Analysis, Kansas Center for Community Economic Development, "Profile for Douglas County, 1996." 1990-1996 estimates: U.S. Bureau of the Census Abstract 1997. U.S. Calculations by IPPBR, based on Population estimates: U.S. Bureau of the Census Abstract 1997. Calculations: IPPBR.

Figure 1

Population Growth Rates
Douglas County, Kansas, and U.S., 1950-1996



* This is a six-year period compared to ten years for the others.

Source: U.S. Bureau of the Census, "Census of Population, 1960: Number of Inhabitants," Final Report: "1980 Census of Population," PC90-1-A-18; "1990 Decennial Census." U.S. Department of Commerce, Bureau of Economic Analysis, Kansas Center for Community Economic Development, "Profile for Douglas County, 1996." 1990-1996 estimates: U.S. Bureau of the Census Abstract 1997. U.S. Calculations by IPPBR, based on Population estimates: U.S. Bureau of the Census Abstract 1997. Calculations: IPPBR.

Table 3
 Births, Deaths, Population Change, and Net Migration: 1970 - 1996
 Douglas County and Kansas

<u>Douglas</u>											
<u>Births</u>	<u>Deaths</u>	<u>Births - Deaths</u>	<u>Population</u>	<u>Population Change</u>	<u>Population Change (%)</u>	<u>Net Migration</u>	<u>Net Migration (%)</u>				
8,802	3,668	5,134	57,932	21,631	49.5	16,497	37.7				
8,228	3,611	4,617	67,640	13,560	23.4	8,943	15.4				
10,123	3,925	6,198	81,798	14,154	20.9	7,956	11.8				
1,081	437	644	83,182	1,384	1.7	740	0.9				
1,050	428	622	84,338	1,156	1.4	534	0.6				
1,078	480	598	86,411	2,073	2.5	1,475	1.7				
1,111	450	661	88,031	1,620	1.9	959	1.1				
1,077	494	583	88,206	175	0.2	-408	-0.5				
1,060	518	542	89,899	1,868	2.1	1,326	1.5				

(Continued on the following page)

Table 3 (continued)

Kansas

<u>Births</u>	<u>Deaths</u>	<u>Births - Deaths</u>	<u>Population</u>	<u>Population Change</u>	<u>Population Change (%)</u>	<u>Net Migration</u>	<u>Net Migration (%)</u>
409,189	219,067	190,122	2,249,071	102,917	4.7	-87,205	-4.0
355,861	218,713	137,148	2,364,236	119,308	5.3	-17,840	-0.8
395,546	220,359	175,187	2,477,588	88,386	3.7	-86,801	-3.7
37,630	22,363	15,267	2,491,407	13,819	0.6	-1,448	-0.1
37,848	22,052	15,796	2,514,839	23,432	0.9	7,636	0.3
37,283	23,508	13,775	2,532,458	17,619	0.7	3,844	0.2
37,269	23,219	14,050	2,550,897	18,439	0.7	4,389	0.2
37,087	23,807	13,280	2,565,328	14,431	0.6	1,151	0.0
36,524	23,788	12,736	2,572,150	6,822	0.3	-5,914	-0.2

* Decade ending, calculated as follows: 1970 decade birth and death figures are years 1961 through 1970; population change is from years 1961 to 1970.
 Net migration = population change - (births - deaths)
 Percent net migration = 100 x (net migration / population total of year beginning the time interval)

Source: Population totals: U.S. Bureau of the Census, "Census of Population, 1960: Number of Inhabitants; 1980 Census of Population," Vol. 1, Chapter A, Part 18, "1990 Decennial Census," mimeographed sheet; Population Estimates U.S. Bureau of the Census; Kansas Center for Community Economic Development Summary for Douglas County 1997. Birth and Death totals for 1961-1990: Kansas State Board [Department] of Health, Division of Vital Statistics, "Annual Summary of Vital Statistics," 1960-1991, using the revised figures provided. Birth and Death totals for 1996: Kansas State Department of Health, Division of Vital Statistics, "Annual Summary of Vital Statistics," 1997.

Table 4

Population of Top Ranking Kansas Counties
(in Thousands)

	<u>1940</u>		<u>1990</u>		<u>2020*</u>			
1	Wyandotte	145	1	Sedgwick	404	1	Johnson	624
2	Sedgwick	143	2	Johnson	355	2	Sedgwick	478
3	Shawnee	91	3	Wyandotte	162	3	Shawnee	171
4	Reno	52	4	Shawnee	161	4	Wyandotte	158
5	Montgomery	49	5	Douglas	82	5	Douglas	103
6	Crawford	45	6	Riley	67	6	Leavenworth	85
7	Leavenworth	41	7	Leavenworth	64	7	Finney	80
8	Cowley	38	8	Reno	62	8	Riley	77
9	Johnson	33	9	Butler	51	9	Butler	64
10	Butler	32	10	Saline	49	10	Reno	54
11	Labette	30	11	Montgomery	39	11	Saline	44
12	Cherokee	30	12	Cowley	37	12	Ford	41
13	Saline	30	13	Crawford	36	13	Geary	38
14	Lyon	26	14	Lyon	35	14	Cowley	38
15	Sumner	26	15	Finney	33	15	Lyon	37
16	Douglas	25	16	Harvey	31	16	Crawford	34
17	Barton	25	17	Geary	30	17	Montgomery	32
18	McPherson	24	18	Barton	29	18	Harvey	32
19	Dickinson	23	19	Ford	27	19	Miami	30
20	Atchison	22	20	McPherson	27	20	Sumner	29

* Population projections.

Source: The University of Kansas, Institute for Public Policy and Business Research, "Kansas Statistical Abstract," 1992-1993, "Population of Kansas Counties, 1890-1980"; U.S. Bureau of the Census, "Fifteenth Census of the United States, 1930, Vol. 1"; "Census of Population, 1960: Number of Inhabitants"; "1980 Census of Population, Vol. 1, Chapter A, Part 18"; "1990 Decennial Census." Population Projections: Floerchinger, Teresa D., "Kansas Population Projections, 1990-2030," Kansas Division of the Budget, September, 1992. Calculations: IPPBR.

EMPLOYMENT

Employment levels are an important measure of a community's economic vitality. The size of the labor force shows the number of people who are either working or willing to work. The size of the labor force is influenced not only by population but also by the perceptions of individuals that suitable job opportunities exist. Diverse, healthy economies tend to offer the widest variety of job opportunities and thereby attract a large number of job-seekers, which increases the size of the labor force. The level of unemployment reflects the amount of economic activity within an area and how well the local market is able to match the supply and demand for labor. Job creation rates (net change in average annual employment) reflect the growth in employment levels and the range of employment opportunities. As some jobs are lost in a community due to changing economic circumstances, they may be replaced by new jobs. Net job creation reflects the net gain or net loss in jobs over a given period of time.

The following tables, figures and maps are included in the employment section: employment growth rates, number of firms by number of employees, percentage distribution of firms by number of employees, employment levels by industry, labor force participation, unemployment rates, and job growth.

Employment: Key Findings

- The average annual employment (by place of work) for Douglas County has shown strong growth in the last 10 years with a 24.3 percent growth from 1985 to 1990 and 17.1 percent growth from 1990 to 1995 (Table 5). The average annual employment growth for Douglas County has outperformed both the state and national growth rates (Table 4 and Figure 2a).
- Of the selected counties, Johnson County, Kansas, Boone County, Missouri, and Larimer County, Colorado, had higher average annual employment growth rates for 1985 to 1990. For 1990 to 1995, only Johnson County, Kansas, and Larimer County, Colorado had higher rates (Table 5 and Figure 2b).
- The number of firms located in Douglas County has increased 42.8 percent from 1985 to 1995, compared to an 8.2 percent increase for Kansas (Table 6).
- For both the county and the state, around 87 percent of the firms employ fewer than 19 workers (Table 7). The importance of small firms to the economy indicates a need for strategies that nurture new business development and assist existing small businesses.
- Total employment for Douglas County grew from 36,438 in 1985 to 53,043 in 1995, for a growth rate of 46 percent, compared to 17 percent for Kansas during the same time period. Farm employment for the same time period declined by 12 percent in Douglas County and declined by 17 percent for Kansas (Tables 8a and 8b).

- Traditionally, Douglas County's economy has been dependent upon government employment due to the presence of the University of Kansas. Government and Government Services remains nearly the top employer (12,875) in 1995 but is surpassed by Services (13,603). These sectors are followed closely in 1995 by the Retail Trade sector with 10,819 employed (Table 8a).
- Douglas County's employment levels by industry follow state trends. The Services sector in Douglas County offered the largest growth in jobs in Douglas County from 1985 to 1995. In 1995 Douglas County's Services sector was 25.7 percent of total employment, while Government and Government Services and Retail Trade were 24.3 and 20.4 percent of total employment respectively (Table 8a).
- The largest number increase in employment from 1985 to 1995 for Douglas County occurred in the Services sector with an increase of 5,408 persons employed. The next two strongest sectors were Retail Trade and Government and Government Services, with increases of 4,027 and 3,263, respectively. These sectors were also the sectors of largest employment gains for the State of Kansas during the same time period. The largest number increase occurred in the Services sector followed by the Government and Government Services and then Retail Trade (Tables 8a and 8b and Figure 3).
- Recent wage and salary employment estimates show that during the first 10 months of 1997, employment for all industries for the Lawrence SMSA decreased by 1.2 percent from the 1996 estimates. From 1995 to 1996 employment for all industries increased by 2.1 percent. Estimates for the State of Kansas show a 2.5 percent employment increase during the first 10 months of 1996. From 1995 to 1996 employment for the state increased by 2.2 percent (Table 8c).
- The labor force participation rate is the percentage of population 16 and over that is in the labor force. The labor force participation rate in 1990 for Douglas County was 65.3 percent (Map 3). This participation rate was similar to Kansas' rate of 65.4 percent for Kansas and slightly above the U.S. rate of 64.4 percent (1990 U.S. Census). In comparison, nearby Johnson County had a 75.3 percent participation rate in 1990 (Map 3).
- The 1996 unemployment rate for Douglas County was 4.9 percent, which was among the lower rates in the region, suggesting that the county is doing a good job supplying jobs for its residents (Map 4).
- Change in employment from 1990 to 1996 for Douglas County was 12.72 percent. This employment data is based on an individual's place of residence unlike other data, which have been based on place of work. Douglas County's employment data indicate that job opportunities have increased for residents of Douglas County both in and out of the county (Map 5).

Table 5

Employment Growth Rates: 1985 - 1995
 Douglas County, Selected Counties, Kansas, and United States

	<u>Average Annual Employment</u>			<u>% Employment Growth</u>	
	<u>1985</u>	<u>1990</u>	<u>1995*</u>	<u>1985 to 1990</u>	<u>1990 to 1995*</u>
Douglas	36,438	45,280	53,043	24.3 %	17.1 %
Johnson	186,803	243,750	294,152	30.5	20.7
Shawnee	99,492	110,290	119,052	10.9	7.9
Wyandotte	93,712	92,639	93,426	-1.1	0.8
Boone, MO	65,212	77,496	89,513	18.8	15.5
Johnson, IA	56,387	66,002	76,596	17.1	16.1
Larimer, CO	89,838	107,338	134,211	19.5	25.0
Champaign, IL	101,322	113,799	111,078	12.3	-2.4
Kansas	1,381,256	1,489,960	1,619,784	7.9	8.7
United States	125,050,100	139,891,300	149,290,100	11.9	6.7

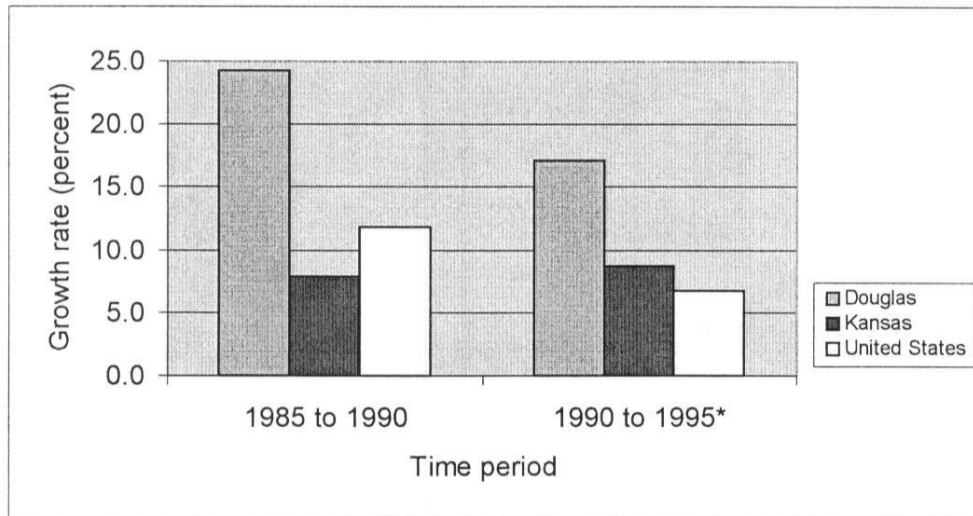
* Data for 1995 are not directly comparable with data from earlier years.

Note: Employment by place of work.

Source: U.S. Department of Commerce, Bureau of Economic Analysis; Kansas Center for Community Economic Development, County Summaries, the University of Kansas.

Figure 2 a

Employment Growth Rates: 1985 - 1990 and 1990 - 1995*
Douglas County, Kansas, and United States

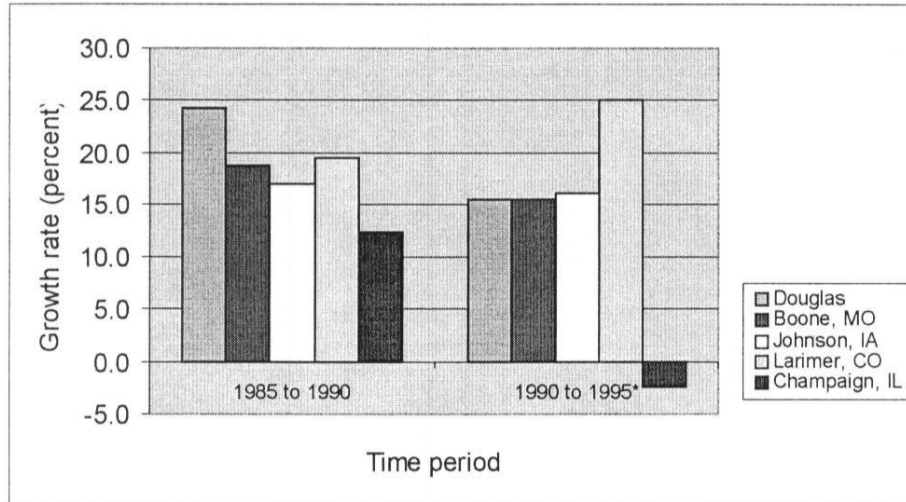


* Data for 1995 are not directly comparable with data from earlier years.

Source: U.S. Department of Commerce, Bureau of Economic Analysis; Kansas Center for Community Economic Development, County Summaries, the University of Kansas.

Figure 2 b

Employment Growth Rates: 1985 - 1990 and 1990 - 1995*
Douglas County and Comparative Counties



* Data for 1995 are not directly comparable with data from earlier years.

Source: U.S. Department of Commerce, Bureau of Economic Analysis; Kansas Center for Community Economic Development, County Summaries, the University of Kansas.

Table 6

Number of Firms, by Number of Employees: 1985 and 1995
Douglas County and Kansas

Employees	Douglas			Kansas		
	1985	1995	% Change	1985	1995	% Change
1 -- 19	1,463	2,040	39.4 %	58,347	61,719	5.8 %
20 -- 99	142	252	77.5	6,234	7,767	24.6
100 -- 499	29	38	31.0	840	1,281	52.5
500+	1	4	300.0	89	127	42.7
Total	1,635	2,334	42.8%	65,510	70,894	8.2

Source: U.S. Bureau of the Census, "County Business Patterns, 1995" and Kansas Center for Community Economic Development Summary for Douglas County 1997.

Table 7

Percentage Distribution of Firms, by Number of Employees: 1985 and 1995
Douglas County and Kansas

Employees	Douglas		Kansas	
	1985	1995	1985	1995
1 -- 19	89.5 %	87.4 %	89.1 %	87.1 %
20 -- 99	8.7	10.8	9.5	11.0
100 -- 499	1.8	1.6	1.3	1.8
500+	0.1	0.2	0.1	0.2

Source: U.S. Bureau of the Census, "County Business Patterns, 1995" and Kansas Center for Community Economic Development Summary for Douglas County 1997.

Table 8 a

Employment Levels by Industry: 1985 and 1995
Douglas County

Industry	Douglas			As a Percent of Total Employment	
	1985	1995	Change in Employment	1985	1995
			% Change in Employment		
Ag. Services	121	421	300	0.3 %	0.8 %
Mining	177	144	-33	0.5	0.3
Construction	1,616	2,624	1,008	4.4	4.9
Manufacturing	4,558	5,317	759	12.5	10.0
Transportation	1,221	1,340	119	3.4	2.5
Wholesale Trade	800	1,672	872	2.2	3.2
Retail Trade	6,792	10,819	4,027	18.6	20.4
Finance, Insur., Real Est.	2,302	3,312	1,010	6.3	6.2
Services	8,195	13,603	5,408	22.5	25.6
Gov't. and Gov't. Services	9,612	12,875	3,263	26.4	24.3
Subtotal -- Non-Farm	35,394	52,127	16,733		
Farm Employment	1,044	916	-128	2.9	1.7
Total Employment	36,438	53,043	16,605	100 %	100 %

Note: Employment by place of work.

Source: The University of Kansas, Kansas Center for Community Economic Development, "Kansas County Profile for Douglas County 1997," Bureau of Economic Analysis, Regional Economic Information System, Table CA25.

Table 8 b

Employment Levels by Industry: 1985 and 1995
Kansas

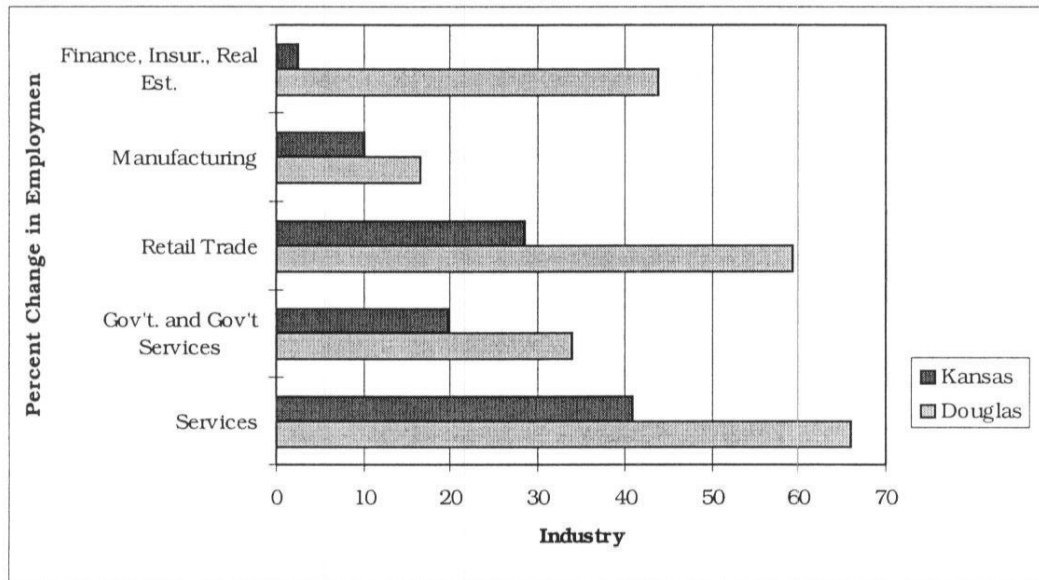
Industry	Kansas			As a Percent of Total Employment		
	1985	1995	Change in Employment	% Change in Employment	1985	1995
Ag. Services	10,270	18,986	8,716	85 %	0.7 %	1.2 %
Mining	52,573	26,881	-25,692	-49	3.8	1.7
Construction	66,139	77,895	11,756	18	4.8	4.8
Manufacturing	179,124	197,144	18,020	10	13.0	12.2
Transportation	73,679	78,309	4,630	6	5.3	4.8
Wholesale Trade	70,353	78,905	8,552	12	5.1	4.9
Retail Trade	212,159	272,498	60,339	28	15.4	16.8
Finance, Insur., Real Est.	97,826	100,265	2,439	2	7.1	6.2
Services	295,321	415,717	120,396	41	21.4	25.7
Gov't. and Gov't. Services	229,824	275,019	45,195	20	16.6	17.0
Subtotal -- Non-Farm	1,287,268	1,541,619	254,351	20		
Farm Employment	93,988	78,165	-15,823	-17	6.8	4.8
Total Employment	1,381,256	1,619,784	238,528	17	100 %	100 %

Note: Employment by place of work.

Source: The University of Kansas, Kansas Center for Community Economic Development, "Kansas County Profile for Douglas County 1997," Bureau of Economic Analysis, Regional Economic Information System, Table CA25.

Figure 3

Change in Employment Level by Selected Industry: 1985 - 1995
Douglas County and Kansas



Source: The University of Kansas, Kansas Center for Community Economic Development, "Kansas County Profile for Douglas County 1997" Bureau of Economic Analysis, Regional Economic Information System, Table CA25.

Table 8 c

Labor Market Summary: 1995 - 1997
Lawrence SMSA (Douglas County) and Kansas

	Lawrence SMSA (Douglas County)					Kansas	
	1995r	1996	1997*	Percent	Percent	Percent	Percent
	<u>Average</u>	<u>Average</u>	<u>Average</u>	<u>Change</u>	<u>Change</u>	<u>Change</u>	<u>Change</u>
			1995r-1996	1996-97*	1995r-96	1996-97*	
Place of Residence Data							
Civilian labor force	50,517	50,726	50,781	0.4	0.1	0.7	3.5
Employment	48,092	48,223	48,509	0.3	0.6	0.7	4.1
Unemployment	2,425	2,503	2,272	3.2	-9.2	2.1	-9.6
Unemployment rate	4.8	4.9	4.5	2.1	-9.0	2.3	-12.4
Place of Work Data							
Wage and Salary Employment							
All industries	43,200	44,100	43,580	2.1	-1.2	2.2	2.5
Goods producing industries	6,900	7,200	7,090	4.3	-1.5	3.5	3.9
Construction and mining	1,800	2,000	1,950	11.1	-2.5	7.7	4.9
Manufacturing	5,100	5,200	5,140	2.0	-1.2	2.1	3.5
Service producing industries	36,300	36,900	36,490	1.7	-1.1	1.9	2.2
Transportation & public utilities	1,100	1,200	1,160	9.1	-3.3	2.6	3.1
Trade	11,000	11,600	11,610	5.5	0.1	2.4	2.0
Wholesale	1,600	1,600	1,660	0.0	3.7	2.0	2.0
Retail	9,400	10,000	9,950	6.4	-0.5	2.6	2.0
Finance, insurance, and real estate	1,800	2,000	1,900	11.1	-5.0	1.9	2.7
Services	9,600	10,100	10,090	5.2	-0.1	3.5	3.4
Government	12,800	12,200	11,730	-4.7	-3.9	-1.0	0.5
Farm employment	600	600	570	0.0	-5.0	-7.9	-0.2

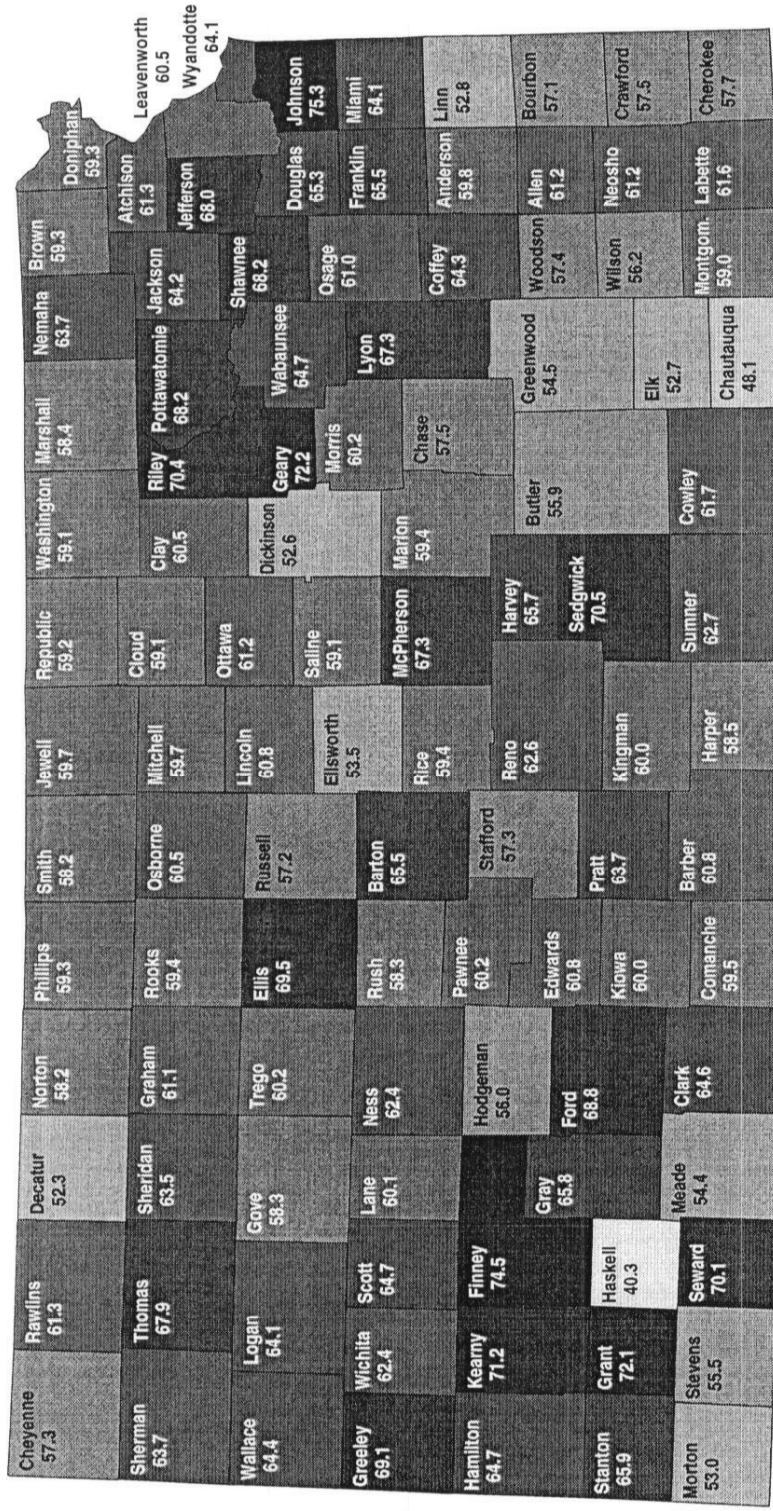
r = revised

* 1997 Average calculated using the first 10 months of 1997.

Source: Kansas Department of Human Resources, Labor Market Information Services. Developed in cooperation with the U.S. Bureau of Labor Statistics. Non-farm wage and salary estimates are based on data drawn from unemployment insurance employer records.

Map 3

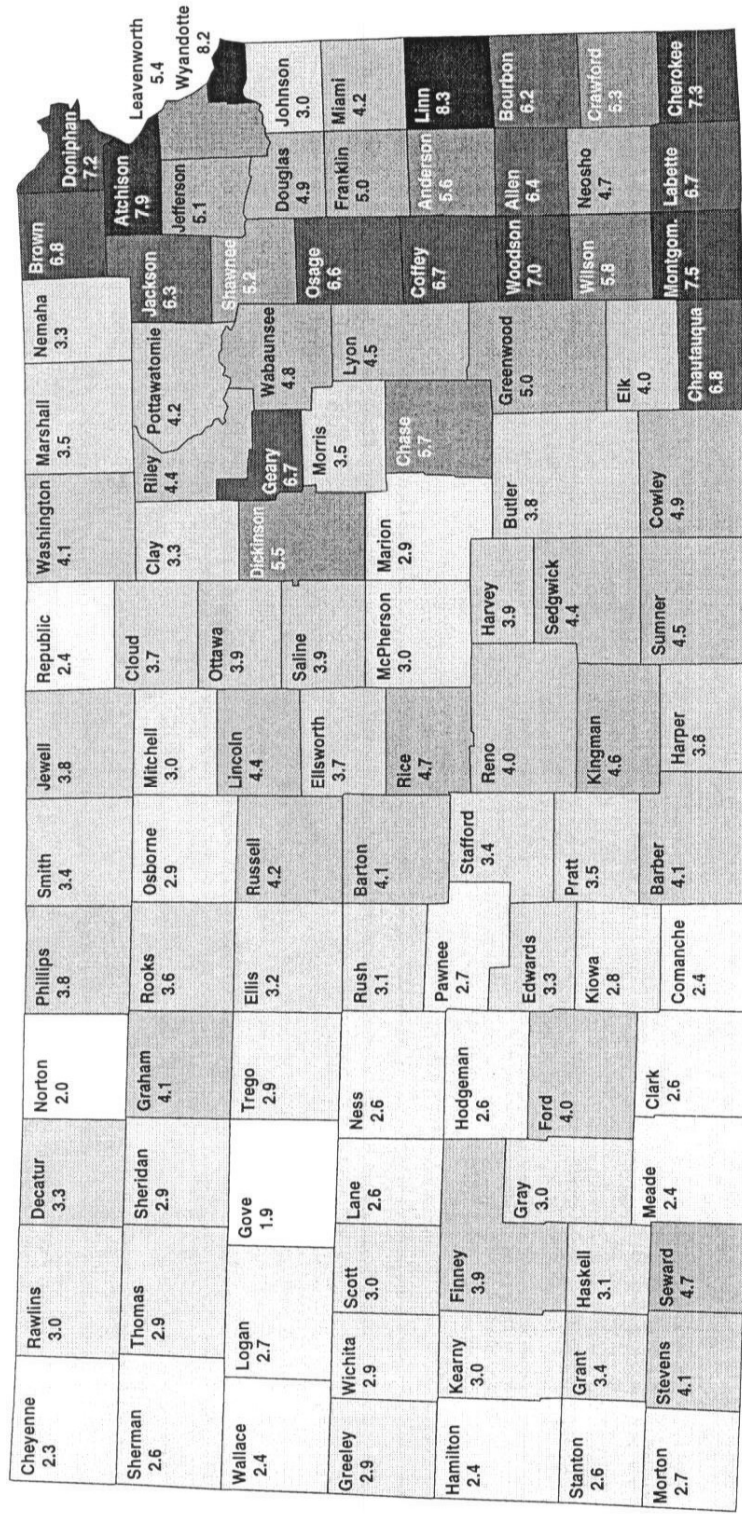
Labor Force Participation: 1990



Source: 1990 U.S. Census.

Map 4

Unemployment Rates: 1996

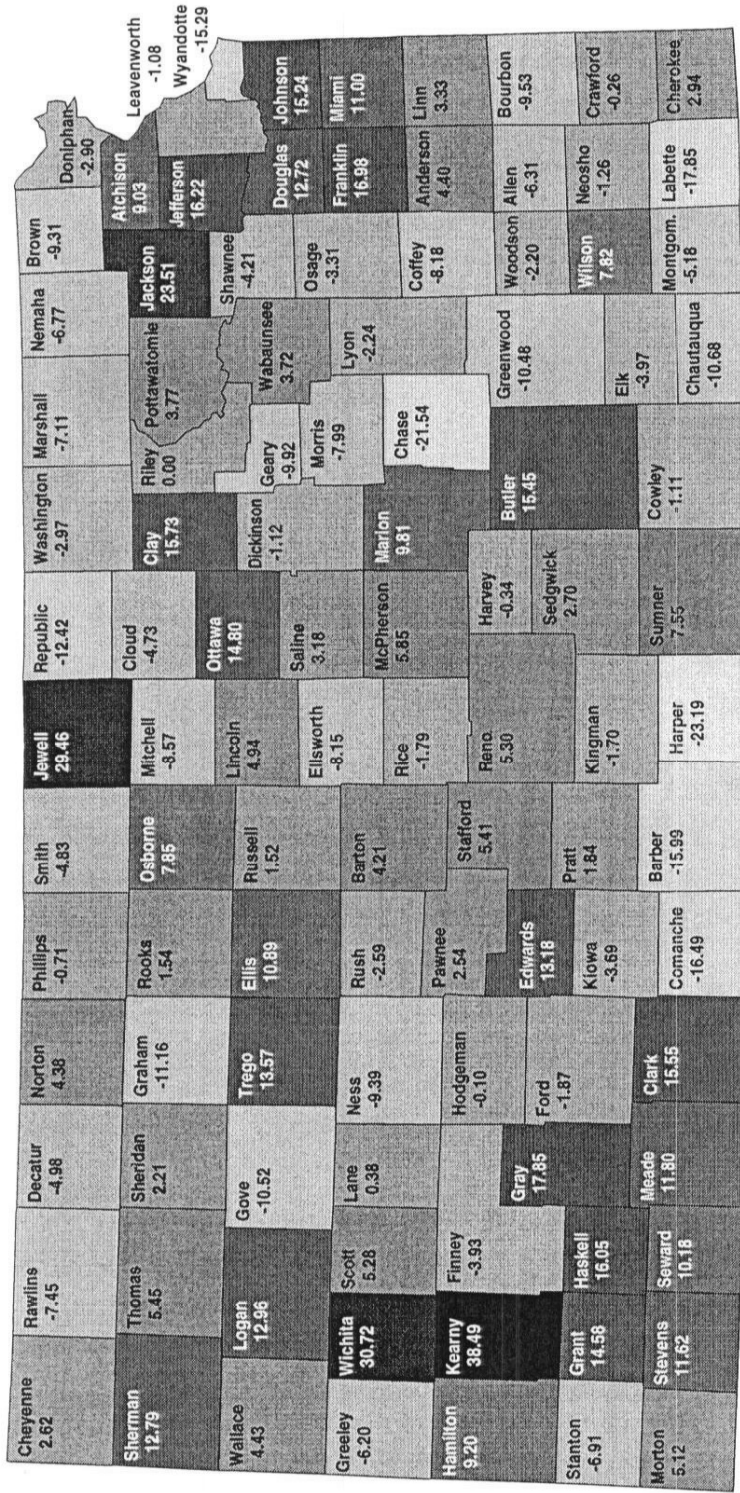


Note: Employment data are based on an individual's place of residence.

Source: Institute for Public Policy and Business Research, The University of Kansas, "Kansas Statistical Abstract, 1996," using data from Kansas Labor Force Estimates Annual Average 1996, Kansas Department of Human Resources, Labor Market Information Services, developed in cooperation with U.S. Bureau of Labor Statistics.

Map 5

Change in Employment (percent): 1990 - 1996



Note: Employment data are based on an individual's place of residence.

Source: Kansas Statistical Abstract, IPPBR, University of Kansas, Kansas Labor Force Estimates Annual Average 1996, Kansas Department of Human Resources.

Earnings and Income

Earnings and income are the sources of revenue for the community residents. Higher average wages may indicate a greater number of jobs in high growth, high performance businesses. Low wage growth may indicate a higher concentration of stable, declining industries. Per capita personal income indicates the relative wealth of the area compared to the state. As the productivity of business and industry increases, personal per capita income also rises. Decreasing or stable rates may be the result of mature or declining industry. The following section contains data on the average wage per job and per capita personal income.

Earnings and Income: Key Findings

- The average wage per job for Douglas County at \$19,124 in 1995 was \$4,095 lower than the state average and \$8,295 lower than the national average (Table 9).
- Douglas County also had a lower average wage than its comparative counties. All three of the neighboring metropolitan counties (Johnson, Shawnee and Wyandotte) had higher average wages than Douglas County (Table 9).
- Per capita personal income for Douglas County lags behind the state's figures. Douglas County's per capita personal income in 1995 was \$18,191, while Kansas' per capita personal income was \$21,781. However, Douglas County's per capita personal income increase by 8.4 percent in 1995 compared to a 4.9 percent increase for the state (Table 10 and Figure 4).
- Douglas County's Per Capita Personal Income was 80.4 percent of the Per Capita Personal Income for the state in 1985; it was 83.5 percent of the state Per Capita Personal Income in 1995 (Table 10).
- Douglas County has one of the lower per capita personal incomes in the region and in the state (Map 6).

Table 9

Average Wage per Job: 1985 - 1995
 Douglas County, Comparative Counties, and Kansas

	Average Wage per Job (Dollars)			Percent Growth	
	<u>1985</u>	<u>1990</u>	<u>1995</u>	<u>1985-1990</u>	<u>1990-1995</u>
Douglas	14,338	16,710	19,124	16.5	14.4
Johnson	18,955	22,949	27,511	21.1	19.9
Shawnee	18,310	21,301	24,767	16.3	16.3
Wyandotte	20,247	24,085	28,341	19.0	17.7
Boone, MO	14,497	17,240	21,443	18.9	24.4
Johnson, IA	14,703	18,559	22,899	26.2	23.4
Larimer, CO	16,184	19,438	24,484	20.1	26.0
Champaign, IL	17,048	17,933	22,686	5.2	26.5
Kansas	16,893	19,868	23,219	17.6	16.9
United States	18,851	23,430	27,419	24.3	17.0

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Table CA34, 1997.

Table 10

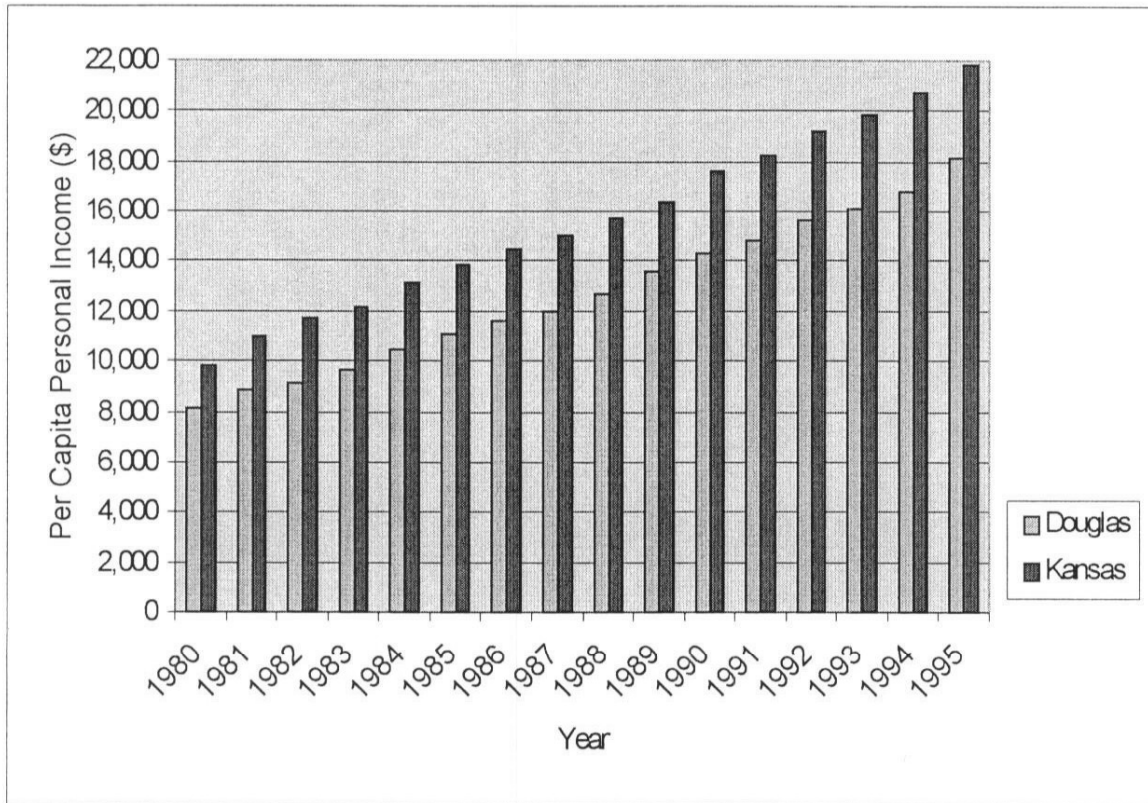
Per Capita Personal Income: 1980 - 1995
Douglas County and Kansas

	<u>Income (\$)</u>			<u>Growth Rates</u>	
	<u>Douglas</u>	<u>Kansas</u>	<u>Douglas/Kansas</u>	<u>Douglas</u>	<u>Kansas</u>
1980	8,146	9,829	82.9 %		
1981	8,893	11,034	80.6	9.2 %	12.3 %
1982	9,096	11,760	77.3	2.3	6.6
1983	9,669	12,192	79.3	6.3	3.7
1984	10,448	13,114	79.7	8.1	7.6
1985	11,133	13,847	80.4	6.6	5.6
1986	11,586	14,472	80.1	4.1	4.5
1987	12,021	15,017	80.0	3.8	3.8
1988	12,705	15,748	80.7	5.7	4.9
1989	13,599	16,399	82.9	7.0	4.1
1990	14,300	17,642	81.1	5.2	7.6
1991	14,875	18,251	81.5	4.0	3.5
1992	15,658	19,261	81.3	5.3	5.5
1993	16,112	19,892	81.0	2.9	3.3
1994	16,785	20,760	80.9	4.2	4.4
1995	18,191	21,781	83.5	8.4	4.9

Source: The University of Kansas, Kansas Center for Community Economic Development, "Kansas County Profile for Douglas" Bureau of Economic Analysis, Regional Economic Information System, Table CA5; Local Area Personal Income 1969-95, U.S. Department of Commerce, BEA.

Figure 4

Per Capita Personal Income: 1980 - 1995
Douglas County and Kansas



Source: The University of Kansas, Kansas Center for Community Economic Development, "Kansas County Profile for Douglas" Bureau of Economic Analysis, Regional Economic Information System, Table CA5; Local Area Personal Income 1969-95, U.S. Department of Commerce, BEA.

RETAIL

Retail trade is part of a community's business environment, which is affected by several things. Past decisions by investors, business managers, taxpayers and policy makers each contribute to share a climate which either promotes or inhibits the productivity of local businesses and therefore affects decisions about growth and expansion. Other contribution factors include the level of competition, the availability of suppliers and supporting industries, the cost of labor, and taxation and regulation within the community. Some types of establishments will thrive in an environment in which other firms cannot operate profitably.

The level of taxable retail sales is an indicator of retail sector performance and the overall strength of the local consumer market. The County Trade Pull Factor (CTPF) accounts for the relative retail trade performance of each county in terms of the average retail trade activities of Kansas.⁴ CTPF is calculated by dividing the county's per capita sales by Kansas' per capita sales. A CTPF value of less than 1.00 indicates that the county is losing customers due to "out-shopping" by residents. A CTPF of more than 1.00 would indicate that the county is attracting retail customers.

The following section contains a table and a figure, outlining the retail sales growth rates, and a map illustrating County Trade Pull Factors.

Retail: Key Findings

- Since 1985, retail sales in Douglas County have grown at a rate faster than the state's rate, except for the periods from 1987 to 1988 and 1991 to 1992. From 1991 to 1992, Douglas County's growth rate in Retail Sales was negative 1.1 percent (Table 11 and Figure 5).
- The trade pull factor for Douglas County for 1997 was 1.01, which indicates that the trade it loses to surrounding counties is slightly less than the trade it gains. Johnson County and Shawnee County with CTPFs of 1.48 and 1.19, respectively, out-performed Douglas County in attracting customers (Map 7).

⁴ Chatura Ariyaratne and David Darling, "County Retail Trade Activity and Changes from 1990 through 1994," *Kansas Business Review*, Vol. 18, No. 3, Spring 1995.

Table 11

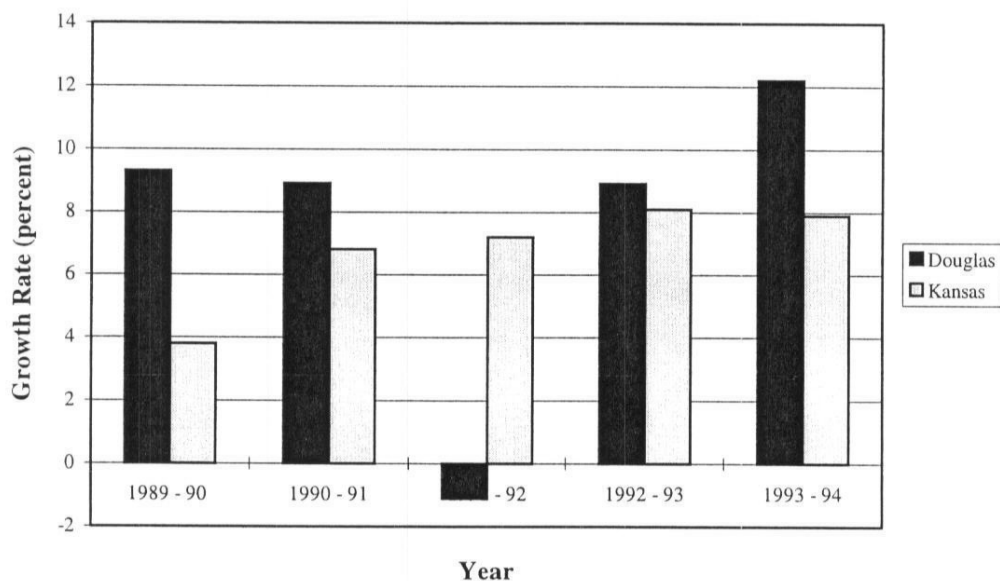
Retail Sales and Growth Rates: 1984 - 1994
 Douglas County and Kansas
 (\$ Millions)

<u>Year</u>	<u>Douglas</u>		<u>Kansas</u>	
	<u>Nominal Sales</u>	<u>Growth Rate</u>	<u>Nominal Sales</u>	<u>Growth Rate</u>
1984	351.3		15,806.8	
1985	383.8	9.3 %	16,299.1	3.1 %
1986	400.8	4.4	16,165.9	-0.8
1987	426.5	6.4	16,746.0	3.6
1988	446.0	4.6	17,548.0	4.8
1989	477.8	7.1	18,034.4	2.8
1990	522.1	9.3	18,723.3	3.8
1991	568.7	8.9	19,988.0	6.8
1992	562.5	-1.1	21,421.3	7.2
1993	612.5	8.9	23,154.4	8.1
1994	687.0	12.2	24,979.0	7.9

Source: CEDBR Data Base, Center for Economic Development and Business Research, W. Frank Barton School of Business, Wichita State University, Kansas County Profile, KCCED/IPPBR, The University of Kansas.
 Calculations: IPPBR.

Figure 5

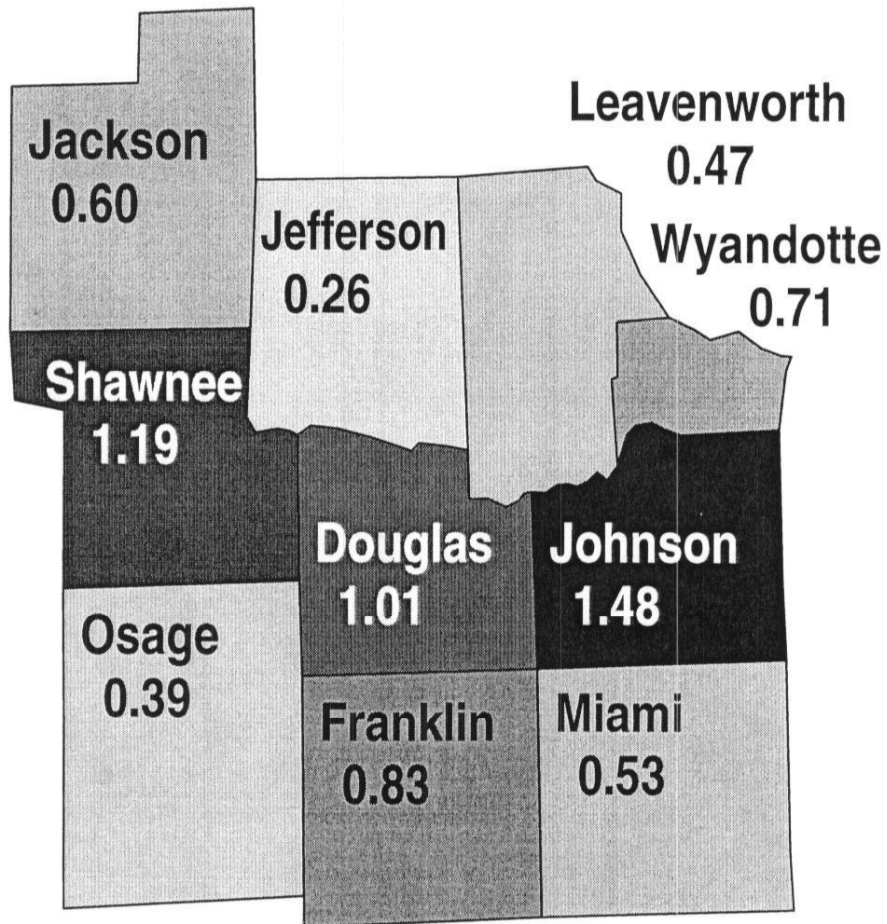
Retail Sales Growth Rates: 1989 - 1994
Douglas County and Kansas



Source: CEDBR Data Base, Center for Economic Development and Business Research, W. Frank Barton School of Business, Wichita State University, Kansas County Profile, KCCED/IPPBR, The University of Kansas.
Calculations: IPPBR.

Map 7

County Trade Pull Factors: 1997
Douglas County and Surrounding Counties



Note: County Trade Pull Factor (CTPF) = County per Capita Sales divided by Kansas per Capita Sales. Population used to compute per capita sales includes institutionalized population.

Source: David Darling and Chatura Ariyaratne, Cooperative Extension Service, Kansas State University, Department of Agricultural Economics, 1997.

AGRICULTURE

The data on agriculture will help determine whether or not the overall importance of this sector in the county has been increasing or decreasing and how this compares with other counties and the state as a whole. The economic well-being of Douglas County in the past was not dependent on the strength of this industry sector, but it is interesting to look at the level of activity in agriculture and how the character of this industry is changing in the county. The agriculture section contains tables and figures on the total value of field crops and the total value of livestock and poultry.

Agriculture: Key Findings

- The total value of field crops for Douglas County have fluctuated during the 1990 to 1995 time period, with 1994 being the highest year. The state totals, on the other hand, have fairly consistently increased over the time interval. Douglas County's business economy is not highly dependent upon field crop production, and it has not been more than 0.73 percent of the state's total value between 1990 and 1995. In 1995, its field crop value ranked 73rd out of the 105 counties in Kansas, having increased rank from 86th position in 1994 (Table 12).
- The value of livestock and poultry varies from year to year, having declined from 0.52 percent of Kansas' total value in 1990 to 0.42 percent of Kansas' total value in 1995. Douglas county's rank in value of livestock and poultry has steadily declined from 79th out of 105 counties in 1990 to 89th in 1995 (Table 13).

Table 12

Total Value of Field Crops: 1990 - 1995
Douglas County and Kansas

	Total Value of Field Crops* (\$1,000's)					
	1990	1991	1992	1993	1994	1995
Douglas	16,354	15,123	21,955	14,993	19,949	20,124
Kansas	2,728,644	2,578,640	2,988,468	3,014,079	3,555,000	3,525,926
Crop Price Index+	103	99	108	104	113	130
County Rank	81	80	71	87	86	73
<i>As a Percent of Kansas:</i>	0.60	0.59	0.73	0.50	0.56	0.57
Percent Change:		1990-91	1991-92	1992-93	1993-94	1994-95
Douglas		-7.53	45.18	-31.71	33.06	0.88
Kansas		-5.50	15.89	0.86	17.95	-0.82

+ Since 1975, index numbers are on 1990-1992 = 100 base.

* Does not include any government program payments, value of sugar beets, or cotton acreage value until 1991; then, only government payments are not included.

Source: Kansas Agricultural Statistics, Kansas Department of Statistics; Kansas Farm Facts; Kansas County Profile Report, KCCED, The University of Kansas, 1997; KCCED calculations.

Table 13

Total Value of Livestock and Poultry: 1990 - 1995
Douglas County and Kansas

	<u>Total Value of Livestock and Poultry (\$1,000's)</u>					
	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>
Douglas	15,260	13,902	12,639	13,493	12,260	11,309
Kansas	2,928,822	2,856,751	2,758,569	2,873,600	2,966,198	2,678,091
Livestock & Products Price Index+	103	99	98	101	91	86
County Rank	79	79	86	85	92	89
<i>As a Percent of Kansas:</i>	0.52	0.49	0.46	0.47	0.41	0.42
Percent Change:		<u>1990-91</u>	<u>1991-92</u>	<u>1992-93</u>	<u>1993-94</u>	<u>1994-95</u>
Douglas		-8.90	-9.09	6.76	-9.14	-7.76
Kansas		-2.46	-3.44	4.17	3.22	-9.71

+ Since 1975, index numbers are on 1990-1992 + 100 base.

Source: Kansas Agricultural Statistics, Kansas Department of Statistics; Kansas Farm Facts; Kansas County Profile Report, KCCED, The University of Kansas, 1997; KCCED calculations.

EDUCATION

Education is another key to a strong community. Residents who have a strong educational background will be more employable and command higher salaries. Employers will benefit as well because they will most likely experience lower turnover and training costs. Individuals with lower education levels have a harder time finding jobs that can supply a living wage and may be more likely to use social services, such as food stamps.

Education: Key Findings

- Douglas County is the home of the University of Kansas, Baker University, and Haskell Indian Nations University. Therefore, it is not surprising to find that the education level of the county's population was greater than the state's average in 1990 (Table 14).
- Lawrence and Douglas County have a much higher percentage of their over-25 population with Bachelors than the state, with 24.6 percent for Lawrence and 21.7 percent for Douglas County with Bachelors compared to 14.1 percent for Kansas (Table 14).
- The number of persons with graduate degrees also is high. Lawrence and Douglas County have 19.4 percent and 16.7 percent of their over-25 population with graduate degrees compared to 7.0 percent for Kansas (Table 14).
- The percentage of Lawrence and Douglas County population with associate degrees is slightly below the percentage for Kansas, which would tend to indicate that the county may be lacking in technically trained workers (Table 14).

Table 14

Educational Attainment of Persons over 25: 1990
As a Percentage of the Population of Persons over 25
Lawrence, Douglas County, and Kansas

	<u>Completed Less Than 9th Grade</u>	<u>9-12th Grade No Diploma</u>	<u>High School Graduate</u>	<u>Some College</u>	<u>Associate Degree</u>	<u>Bachelor's Degree</u>	<u>Graduate Degree</u>	<u>Population Over 25</u>
Lawrence	995	1,939	6,927	6,942	1,317	7,965	6,271	32,356
Douglas County	1,627	3,095	10,669	8,958	1,695	9,192	7,072	42,308
Kansas	120,951	172,321	514,177	342,964	85,146	221,016	109,361	1,565,936
<i>As a Percent of Population of Persons over 25:</i>								
Lawrence	3.1	6.0	21.4	21.5	4.1	24.6	19.4	
Douglas	3.8	7.3	25.2	21.2	4.0	21.7	16.7	
Kansas	7.7	11.0	32.8	21.9	5.4	14.1	7.0	

Source: U.S. Bureau of the Census, 1990. Percent calculations by KCCED/IPPBR, The University of Kansas.

CONCLUSION

The use of data in economic development is important because it assists a community in “taking stock” and understanding its current situation across several different areas of economic and demographic performance. However, data alone do not lead to a well-founded understanding of the community. Data must be analyzed and interpreted, taking into account the intuition of those within the community as to what the trends really mean. In other words, data serve as the foundation for analysis which concludes: 1) what is happening in the community relative to other regions over time, and 2) what potential impacts or consequences can be inferred from the data. The data in this report suggest the following interpretation.

Douglas County has a highly educated adult population, low unemployment rates, strong employment increases in most sectors, particularly services, retail trade, and government and government services. The data also show that small firms, those with fewer than 19 employees, are very important to the county’s economy. Despite the high growth rates in job creation, the average wage for Douglas County has declined in relative terms, indicating more of the growth was in lower paying jobs. Given the high education level of the population and the lower average wage per job, work is still needed to reduce the gap between Douglas County and similar areas in level of earnings. The 1992 study noted many opportunities could be capitalized upon to assist in bridging the gap between education and pay, such as new state technology policies, university linkages, and the proximity to metropolitan center to generate higher value-added employment opportunities in developing industries.

The Lawrence-Douglas County area, as indicated by population and employment data, is a desirable place to live. Its proximity to Johnson County, Kansas, one of the fastest growing counties in the nation, and the presence of three institutions of higher education are part of its desirability. The higher education institutions provide a great deal of stability while the location of the county provides opportunities for growth. How these two assets are utilized will have a lot to do with the type of community Douglas County will be in the future.