2.0 Economic Base

This section examines economic structure and performance issues in Kansas and compares its performance to the U.S. and to a group of competitor states. The competitor states are defined as Arkansas, Colorado, Iowa, Missouri, Nebraska and Oklahoma. Because of its proximate location, Colorado has traditionally been considered a regional competitor state for Kansas. As shown in this report, Colorado's economy has performed remarkably well of late and often dominates the findings for the competitor states. It seems appropriate that for future consideration, Colorado should be promoted to a benchmark state for comparison purposes.[1]

2.1 Economic Trends Affecting Kansas

There are a number of current economic trends that have real implications for the Kansas economy.[2] Section 2.1 outlines the U.S. trend, the implications to Kansas, and the challenges facing the state.

Economic Growth and Short-Term Uncertainty

U.S. Trend: The U.S. experienced an unprecedented period of economic expansion in the 1990s, highlighted by strong Gross Domestic Product (GDP) growth and low unemployment rates. The past year has witnessed a substantial slowing of the economy with an element of uncertainty in the short-term, but generally there is confidence in moderate long-term growth.

KS Implication: Kansas has benefited from this growth with even lower unemployment rates (three percent in 1999) and strong employment growth (almost 20 percent in the 1990s).

Challenge: A lack of industrial structure diversity has the potential to hurt Kansas, especially in national recessions. How can Kansas continue to diversify in the 21st century and maintain its employment growth levels? Additional threats to the Kansas economy include volatile oil prices and the gradual depletion of the aquifer in Kansas.

[1]This report includes North Carolina and Washington as benchmark comparison states—those states that, regardless of their location, are performing at the highest level.

[2]These economic trends were identified in previous research by Cambridge Systematics for the Federal Highway Administration and Georgia's Long-Range Transportation Plan.

Growing and Aging Population

U.S. Trend: The U.S. population continues to grow (almost 10 percent in the 1990s) and advances to health and nutrition are extending life expectancies.

KS Implication: Kansas is also experiencing a growing and aging population. But the growth is less than at the national level, largely due to emigration of younger populations, and thus aging is more pronounced.[3] Immigration to Kansas are largely foreign immigrants capturing available meat-packing jobs, providing opportunities and challenges around linguistic and cultural issues.

Challenge: What solutions exist to improve the ability of Kansas to retain and attract a youthful workforce, especially in rural areas? The aging of the population is especially acute in rural areas and leads to increased demand for government services and a declining revenue base. How will increased funding needs for the Department of Aging balance with the overall state budget?

Shift in Location of Economic Activity to the South and West

U.S. Trend: The concentration of economic activity within the U.S. is shifting from the northeast and midwest to the south and west.

KS Implication: Kansas is located relatively close to beneficiaries of this economic shift (Texas, Colorado, etc.).

Challenge: How can Kansas most effectively leverage its location with respect to trade corridors along north-south and east-west axes?

Shift Towards Service and High-Tech Jobs

U.S. Trend: The U.S. economy is shifting from a manufacturing-based economy to a service and information-based economy.

KS Implication: Kansas experience bears out this trend, as service jobs are growing more quickly than manufacturing jobs.

[3] It should be noted that Kansas' population is expected to grow by 16.5 percent over the next 25 years, less than the U.S. projected growth (22.7 percent), but more than projected growth in most midwestern states according to the U.S. Census. In addition, population in metro areas such as Lawrence and Wichita are expected to grow rapidly.

Challenge: Is Kansas poised to fully partake in the Knowledge Economy?[4] Does it have the necessary labor force, capital availability, research facilities, and entrepreneurship, etc.? Will rural Kansas be left behind in the Knowledge Economy if it continues to emphasize farming, manufacturing, and local government jobs?

Increasing Importance of Trade

U.S. Trend: Imports and exports as a share of U.S. GDP are rising. Technology advances allow for increased mobility of capital and quicker global responses to information. The expansion of international trade agreements is also a positive influence on trade.

KS Implication: Kansas has also experienced increases in international trade activity, notwithstanding its central location far removed from the nation's borders. Kansas has experienced stronger than average manufacturing growth in the 1990s, which has traditionally been an indicator of exporting capacity.

Challenge: Is Kansas positioned to grow its service and information-based exports, while maintaining its agriculture and manufacturing export base?

Shifting Government Policies

U.S. Trends: Policy trends at the national level suggest a potentially reduced role for the federal government as state/local autonomy increases, increasing the importance of education, continuing deregulation, and gradual defense spending reductions, for example, military base closures.

KS Implication: These national trends do impact Kansas. Kansas has traditionally perceived itself as a state that is independent and encourages autonomy. Kansas depends more heavily upon military employment than the U.S. average and the existence of Fort Riley and McConnell Air Base's B-1 Squadron have been threatened before.

Challenge: Other public sector policy issues include: What are the best ways to improve the linkage between education and the workforce? How can the state best deal with limited program funding levels after recent tax cuts? And lastly, how can growing disparities between rural and urban areas best be addressed?

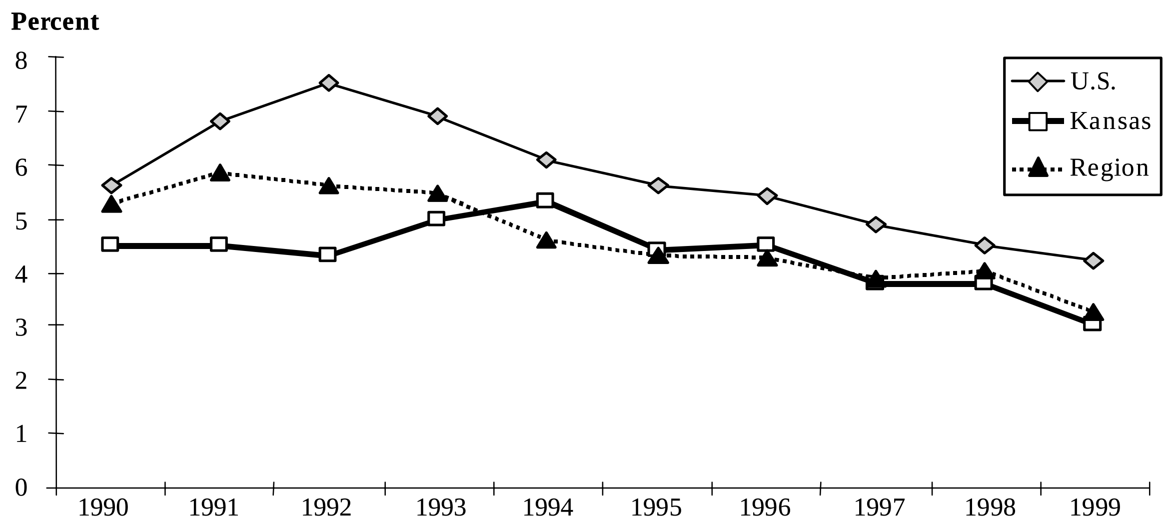
[4] The new economy is a nebulous concept, but meant here to emphasize a knowledge-based economy where labor force skill, technology, product quality, efficiency, and capital resources are the primary determinants of economic success.

■ 2.2 Aggregate Assessment of Recent Kansas Economic Performance

Section 2.2 examines a number of economic indicators to assess the recent performance of the Kansas economy. Economic indicators in this section include unemployment rates, employment growth, per capita personal income and exports.[5] Most of the data are from federal government sources, though material from the Corporation for Enterprise Development (CFED) 2000 Report Card has also been used. According to that report, Kansas has earned average marks in the three major categories: performance, business vitality, and development capacity. For comparison purposes, Colorado received all high marks (A's), and Missouri received above average marks (B's) for economic performance and average grades for business vitality and development capacity. Finally, Iowa and Nebraska did very well on performance, but very poorly on business vitality and roughly average on development capacity.

Unemployment

Figure 2.1 Unemployment Rates 1990-1999



Source: U.S. Bureau of Labor Statistics.

- Kansas' unemployment rate has consistently been under that of the U.S. over the past decade. It was only 3 percent in 1999, though has shown signs of an up-tick in 2000.

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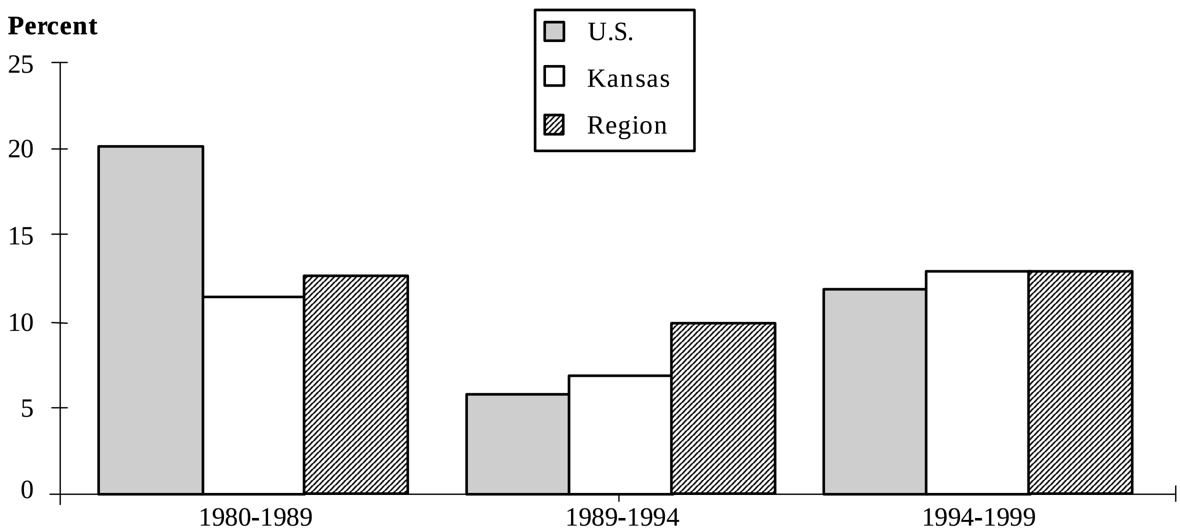
[5] It is recognized that this assessment does not capture all indicators of economic activity. Other useful measures might include housing starts and value-added production.

- Kansas' unemployment rate has typically been lower than the competitor region weighted average rate. The low unemployment rate is an indicator of potential labor shortages, especially since Kansas has a relatively low rate of involuntary part-time employment, according to the CFED report.[6]

- While the height of the U.S. unemployment rate was in 1992, Kansas' top rate was in 1994. The downward trend since 1994 mirrors that of the U.S.

Employment Growth

Figure 2.2 Employment Growth
1980-1989, 1989-1994, 1994-1999



Source: U.S. Bureau of Economic Analysis.

- While employment growth was significantly less in Kansas than in the U.S. in the 1980s, it outpaced the U.S. in the 1990s.

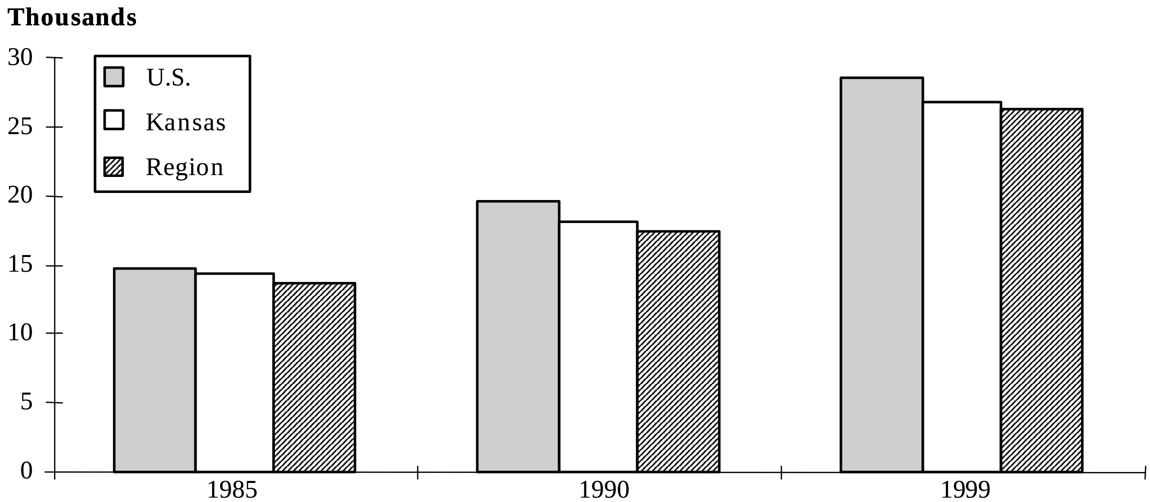
- Regional competitor states enjoyed more employment growth than Kansas in both the 1980s and the 1990s. Much of this is due to Colorado, which accounted for over 30 percent of the competitor region employment growth in both the 1980s and 1990s.

- Since 1994, employment growth has been equally strong in the U.S., Kansas, and the region of competitor states at over 12 percent.

[6] It should be noted that interviews conducted with business and government leaders in central and western Kansas indicated that involuntary part-time employment and underemployment were real issues in their regions.

Per Capita Personal Income

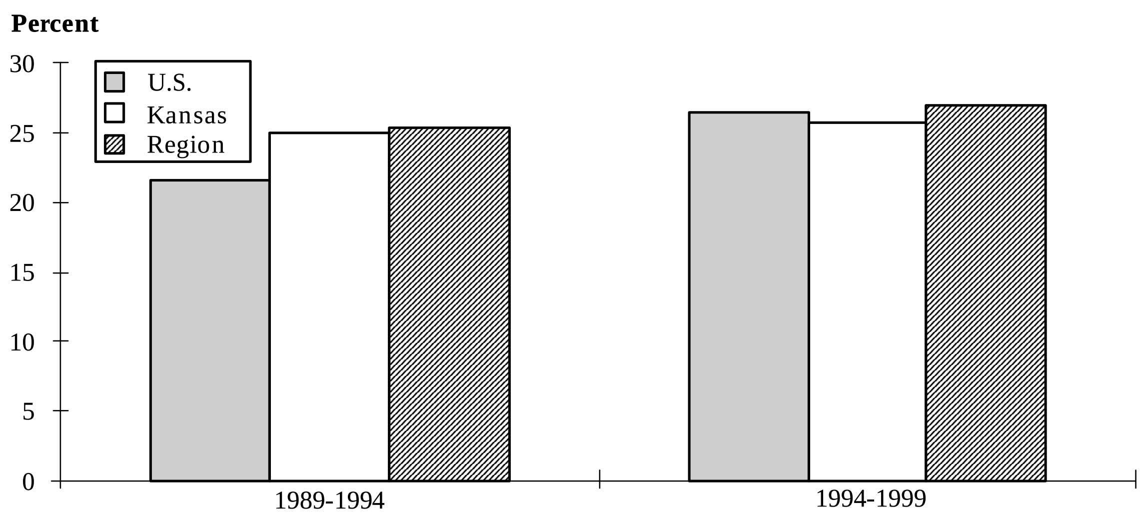
Figure 2.3 Per Capita Personal Income



Source: U.S. Bureau of Economic Analysis.

- Since at least 1985, per capita personal income consistently has been slightly lower in Kansas than at the U.S. level.
- Meanwhile, Kansas' per capita income has remained slightly higher than that of the competitor states.[7]

Figure 2.4 Per Capita Personal Income Growth



Source: U.S. Bureau of Economic Analysis.

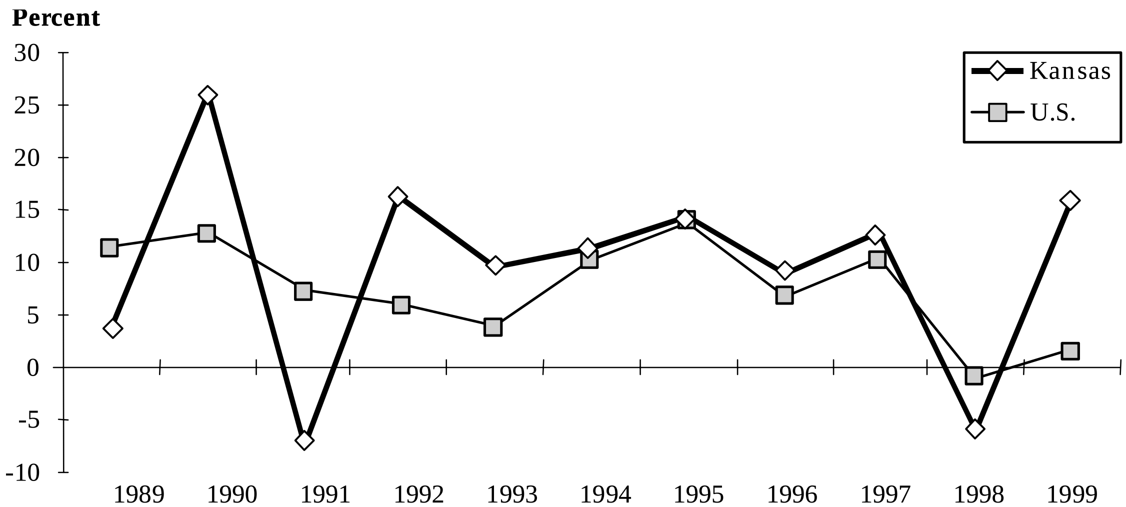
[7] Per capita personal income for the competitor states was calculated as a true regional indicator, dividing total regional personal income by total regional population.

- Kansas' per capita income growth was above that of the U.S. from 1989 to 1994, at 25 percent, though just slightly lower than that of the competitor states.

- From 1994 to 1999, all three areas enjoyed per capita income growth of over 25 percent, though the U.S. and competitor states grew slightly faster than Kansas.

International Trade

Figure 2.5 Annual Export Growth

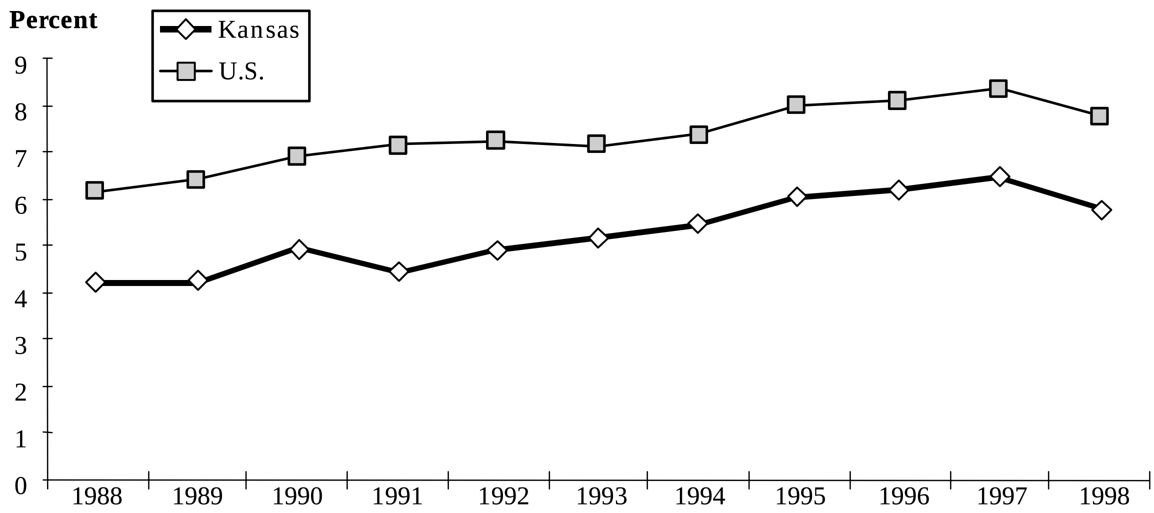


Source: U.S. Census Bureau, Foreign Trade Division, MISER.

- Annual export growth in Kansas has roughly followed the pattern of U.S. export growth since 1989 with three exceptions: (1) a jump up in 1990; (2) a drop down in 1991; and (3) a large jump up in 1999. These exceptions can largely be explained by spurts of activity in the transportation equipment industry.

- Except for 1991 and 1998, export growth was positive in every period of analysis—a sign of the continued importance of international trade in today's economy.

Figure 2.6 Exports as a Share of GSP



Source: U.S. Bureau of Economic Analysis, U.S. Census Bureau, and MISER.

- In general, exports as a share of Gross State Product (GSP) have been increasing for both the U.S. and Kansas, with a small downturn in 1998 related to the Asian financial crisis.
- Exports have been a larger share of GSP for the U.S. than Kansas over the past decade. This gap has not narrowed. This reflects export data counted at the point of exit rather than from where it was produced. Undercounted export data is a common issue for inland states such as Kansas.

Table 2.1 The 10 Largest Exporting Industries in Kansas, 1999 (millions of $)

	Exports	
Industry	**Origin of Movement**	**Exporter Location**
Transportation equipment	2,236	1,328
Food and kindred products	1,123	1,189
Industrial machinery, computer equipment	414	417
Instruments and related products	282	297
Agricultural production crops	196	986
Chemicals and allied products	182	293
Electronic, electric equip, except computers	148	149
Rubber and misc. plastics products	113	55
Fabricated metal products	73	72
Total (Top 10 Industries)	**4,839**	**4,815**
Grand Total (All Industries)	**5,162**	**5,239**

Source: U.S. Census Bureau, Foreign Trade Division, and MISER..

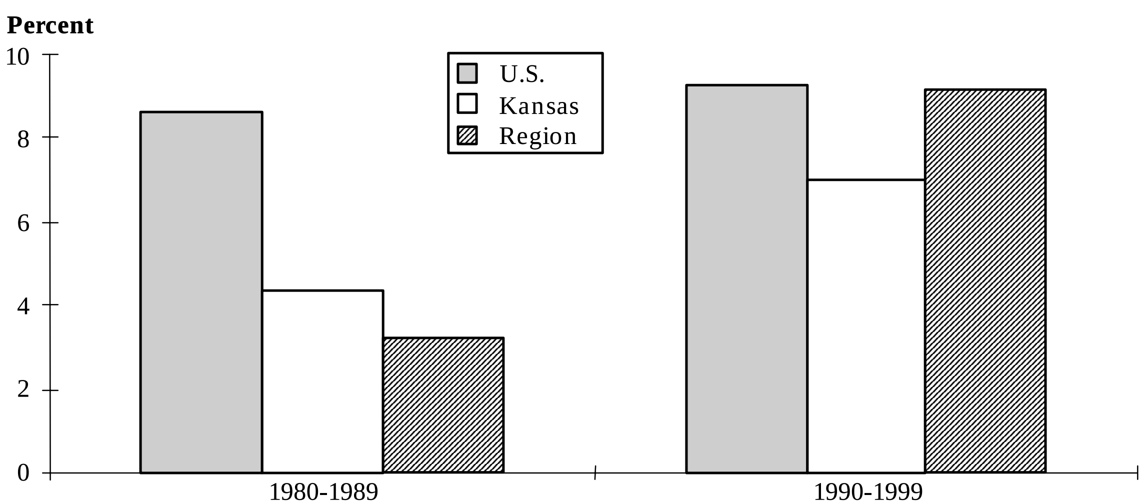
- International exports for Kansas by industry are presented for two data series: the Origin of Movement (OM) series and the Exporter Location (EL) series. The Policy Research Institute at the University of Kansas uses the OM series in its Kansas Statistical Abstract publication, while the KDOC&H Trade Development Division uses the EL series as the foundation of its "State of Kansas Export Statistics" publication. A thorough discussion of these different export accounting methods is provided in Supplement A.

- While the total count of exports is similar for the two series, there is much variation for certain industries. For example, transportation equipment exports (largely aviation) are over $900 million higher in the OM series, but agricultural production is $790 million lower than the EL series.

- In both series, the two largest exporting industries are transportation equipment and food and kindred products. Other important exporting industries include industrial machinery, agricultural crops, instruments, and chemicals.[8]

Population

Figure 2.7 Population Growth



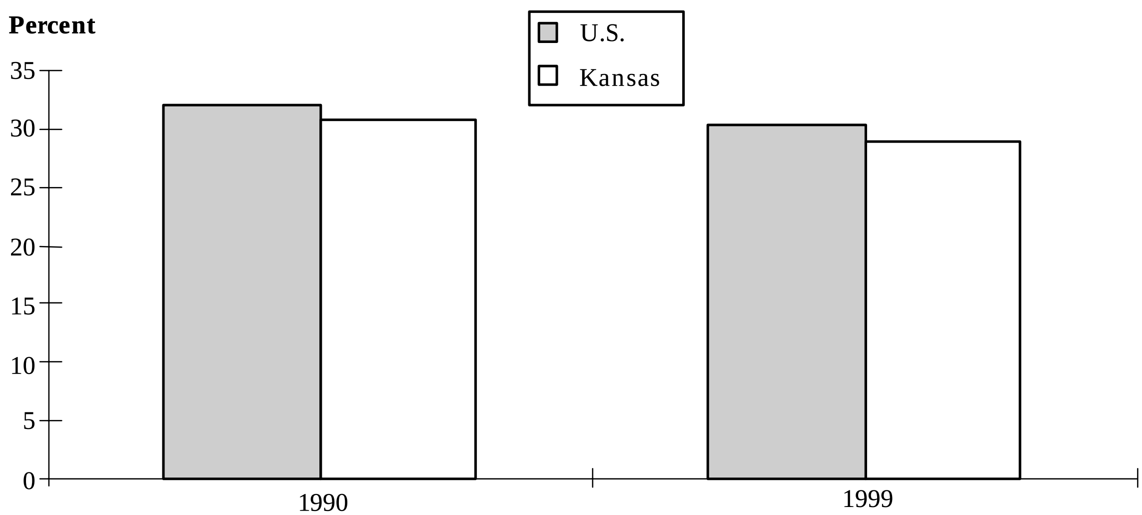
Source: U.S. Bureau of Economic Analysis.

[8] It is important to note that exports from Kansas to other parts of the U.S. are not counted in this data set.

- Population growth has lagged in Kansas compared to the U.S. over the last two decades. The deficit was even larger in the 1980s compared to the 1990s.

- Kansas population growth outpaced competitor states in the 1980s, but lagged roughly two percent lower in the 1990s. The relatively slower growth in the 1990s is mostly due to Colorado, which experienced a population increase of over 22 percent. Kansas' population growth outpaced Nebraska, Iowa, Missouri, and Oklahoma in the 1990s.

Figure 2.8 Share of Total Population Age 25-44



Source: U.S. Bureau of the Census.

- Kansas has a slightly smaller share of its population in the prime working labor force age category (25-44) compared to the U.S. This trend held in both 1990 and 1999.

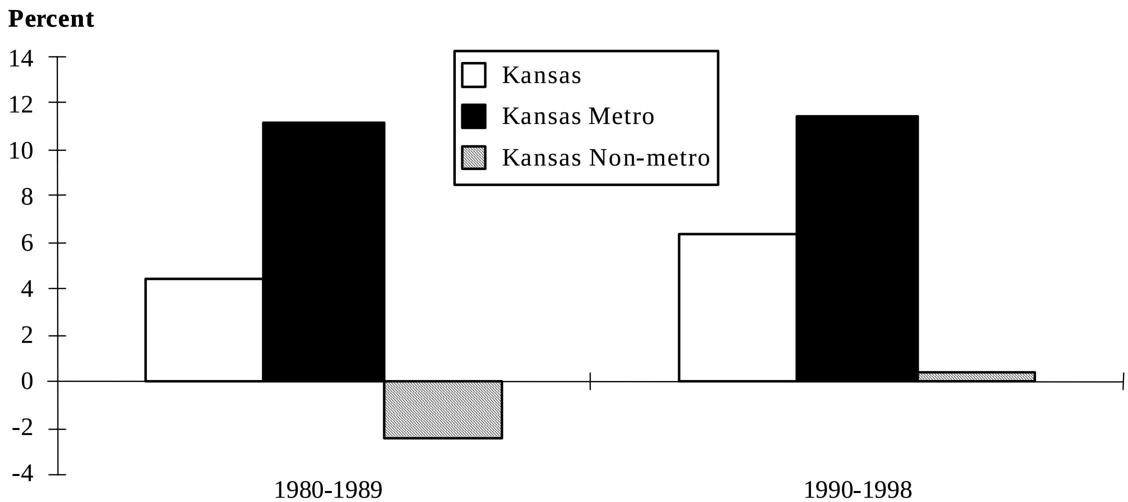
- This graphic is also an indication of the gradually shrinking share of the population aged 25-44 found in the U.S. and Kansas.

Metro and Non-Metro Area Disparities

A commonly-cited issue in Kansas is the disparity between metropolitan and non-metropolitan areas within Kansas.[9] This subsection highlights some of the key differences between metro and non-metro areas and provides analysis of population trends at the county level.

[9] Nine counties make up metropolitan areas in Kansas as defined by the U.S. Census: Butler, Harvey, Sedgwick, Douglas, Johnson, Miami, Leavenworth, Shawnee, and Wyandotte.

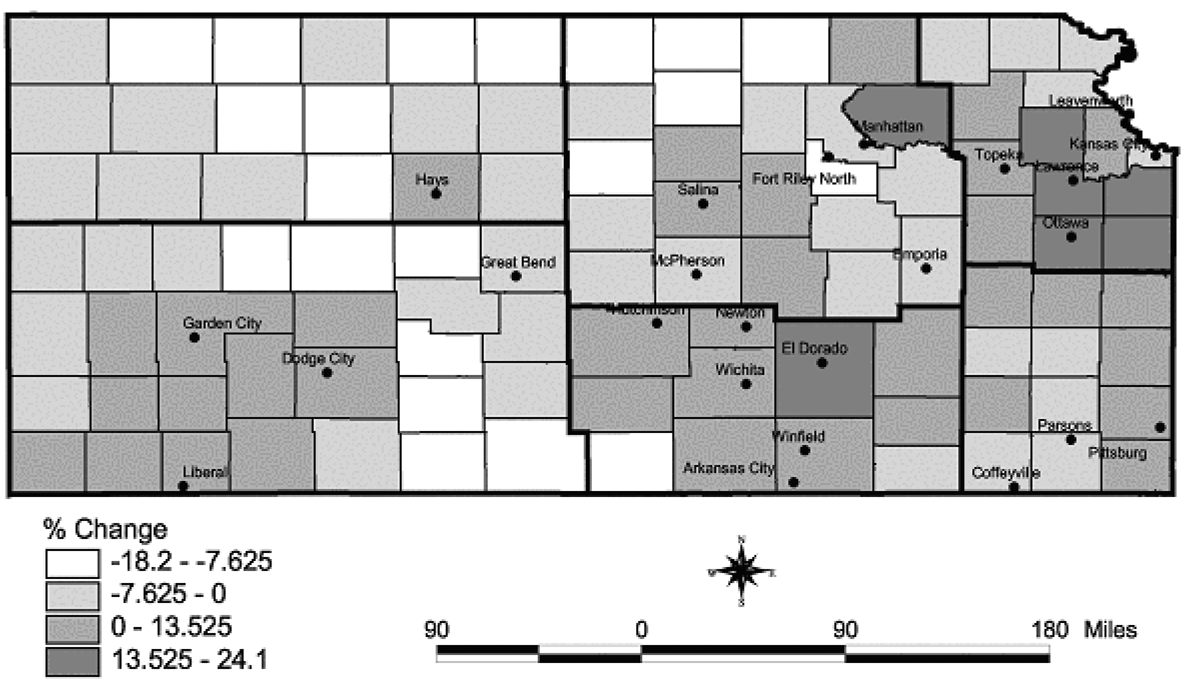
Figure 2.9 Population Growth in Kansas



Source: U.S. Bureau of Economic Analysis.

- Population growth in Kansas has been disproportionately located in metropolitan areas over the past 20 years.
- Declining to stagnant population growth in non-metro areas underscores the challenges facing rural Kansas.

Figure 2.10 Percent Change in Kansas County Population
1990-1999

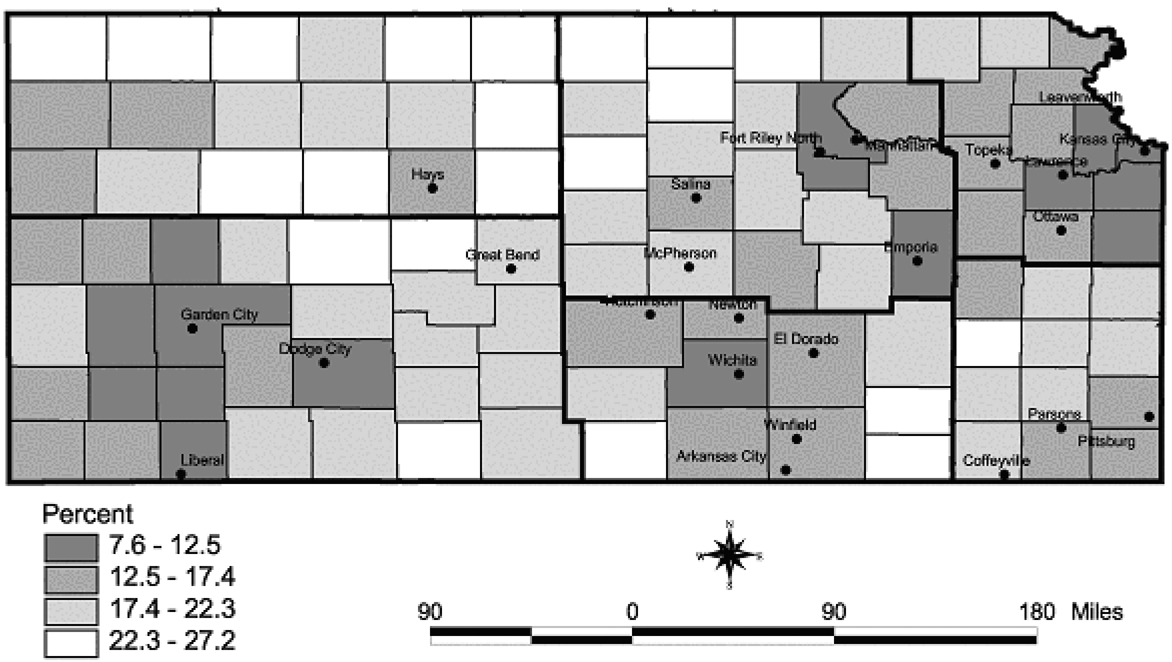


Source: U.S. Census Bureau.

- County population growth over the past decade shows some interesting trends. For example, every county in the Northwest except for Ellis (with Hays) had a decline in population.

- The counties with the largest rates of population growth were those located close to population and economic centers such as Johnson county, Wichita, and Manhattan.[10] Population growth also occurred in the Garden City, Dodge City, and Liberal area, largely due to employment gains in the meat-packing industry.

Figure 2.11 Percent of Kansas County Population 65 and Over
1999



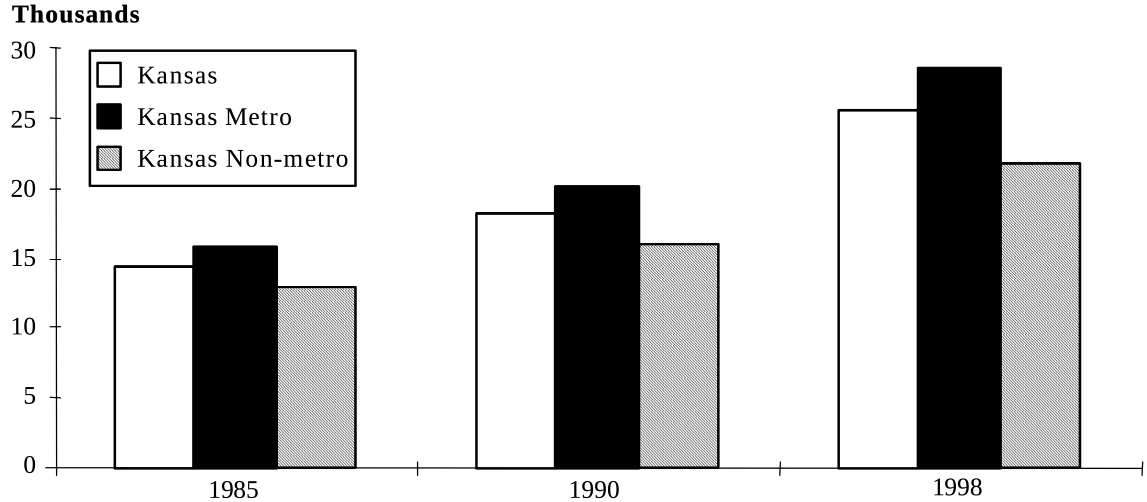
Source: U.S. Census Bureau.

- Another demographic trend is the aging of the population. The percent of Kansans age 65 or over was 13.3 percent in 1999, a higher share compared to the U.S. at 12.7 percent.

- The county map of Kansas indicates that most counties in the central and southeastern parts of the state have more elderly people per capita than the U.S. Counties with greatest populations, especially in the northeast—Johnson county, Lawrence, and Topeka, have fewer elderly than the U.S. average.

[10] Population growth in Pottawatomie County is largely due to a large Kansas Power and Light power station.

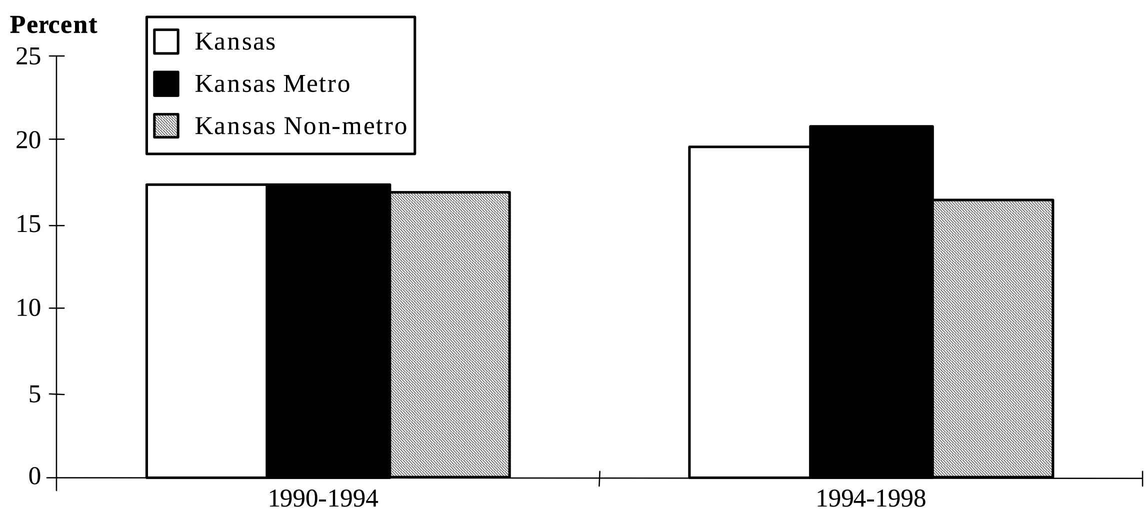
Figure 2.12 Kansas Per Capita Income



Source: U.S. Bureau of Economic Analysis.

- Over the past 15 years, per capita personal income has consistently been higher in metropolitan areas than non-metro areas. This is also the case at the U.S. level.
- Non-metro per capita income in Kansas, as a percent of metro income, was 76 percent in 1998 and 79 percent in 1990. U.S. non-metro per capita income was 71 percent of metro per capita income in both 1990 and 1999. This indicates that Kansas' non-metro areas fare better by comparison to the U.S. as a whole, but that advantage is gradually being lost.

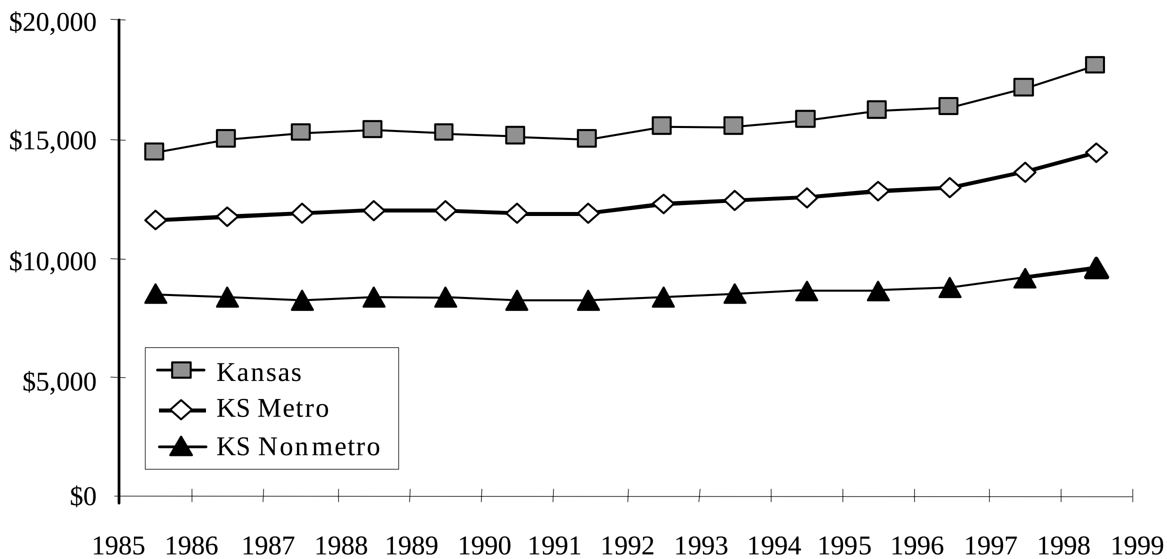
Figure 2.13 Per Capita Income Growth in Kansas



Source: U.S. Bureau of Economic Analysis.

- Per capita income growth in non-metro areas was almost identical to growth in metro areas from 1990 to 1994. However, from 1994 to 1998, non-metro income growth trailed the rest of the state, indicating that rural Kansas has not benefited equally during the recent economic expansion. Lagging farm and oil and gas industry earnings have hurt parts of rural Kansas.

Figure 2.14 Real Per Capita Private Earnings in Kansas



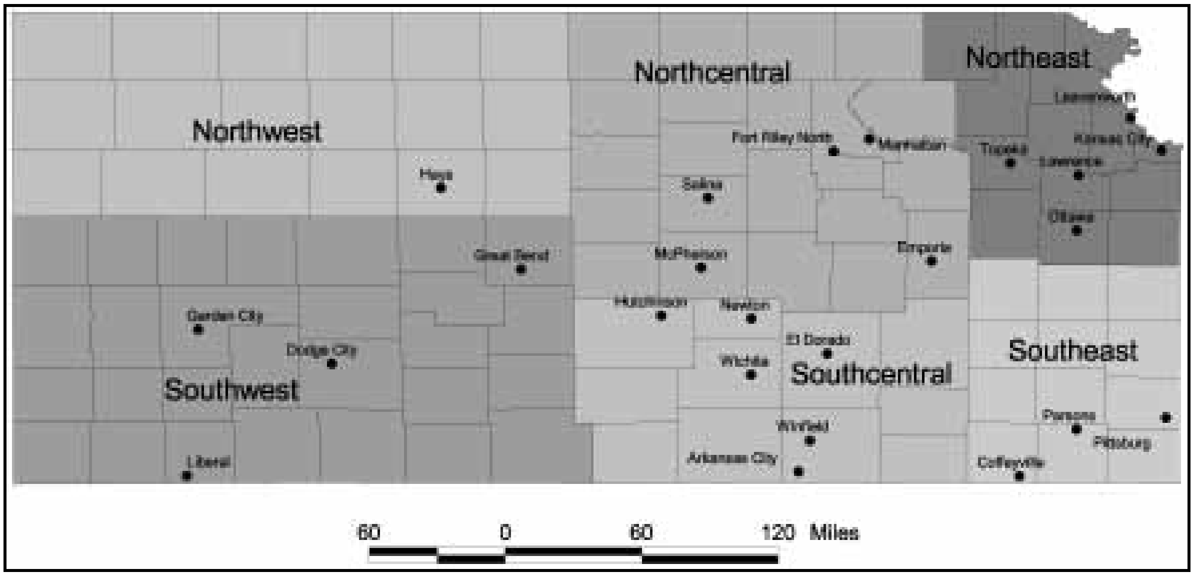
Source: U.S. Bureau of Economic Analysis

- Real per capita private earnings were essentially flat from 1985 to 1991, but grew gradually from 1991 to 1996, and grew more quickly from 1996 to 1998.
- Kansas metro area per capita private earnings have consistently been higher than non-metro areas. In 1985, non-metro area per capita private earnings were 60 percent of metro area earnings. This measure fell to 53 percent in 1998, indicating that the gap between metro and non-metro areas is increasing.
- In 1998, non-metro per capita personal income (which includes public sector earnings and retirement income) was 76 percent of metro areas compared to only 53 percent for per capita private earnings. This is an indication of the importance of local government earnings and retirement income in non-metro areas.

Regional Economic Indicators

- In the annual *County Economic Vitality and Distress Report* (1999 Update) by Kansas, Inc., rural counties removed from urban centers tend to have the highest level of distress, and metropolitan counties have the lowest level of distress. Distress is measured by eight factors grouped by wealth, growth, and dependent population. (See Figure 2.15 for the regional definitions.)

Figure 2.15 Six Kansas Inc. Regions



- In general, the northeast (with Kansas City, Lawrence, and Topeka) is the most prosperous economic region of the state, while the southeast, north central, northwest, and southwest are facing challenging economic vitality conditions.

- In terms of population change, rural counties lost population (47 of the 61 counties with under 10,000 people lost population in the 1990s), mid-size counties had zero to modest growth, and metro counties grew over one percent per year. Northeast and south central counties had population growth, while north central, northwest, and southeast counties lost population.

- Rural counties also have different demographic profiles. They have a much larger share of their population age 65 or over than metro counties. The northwest and southeast are regions with the largest shares of elderly population. Counties with large elderly populations typically have a relatively small prime working age population.

- Short-term employment growth (1997-1999) has been strong in metro areas and weakest in rural areas. However, on a percentage basis, numerous rural counties in near proximity to highways or larger urban areas showed substantial recent growth. Long-term employment growth has been strongest in the northeast and south central (the Wichita area) and weakest in the southeast, southwest, and north central. In fact, over the decade of the 1990s, almost 50 percent of the job growth occurred in only two Kansas counties – Sedgwick and Johnson.

- Per capita personal income is highest in the northeast and south central and lowest in the southeast, north central, and west.

2.3 Industry Assessment of Kansas Economy

Location Quotients

Table 2.2 Kansas Location Quotients, 1999

	KS to U.S.	KS to Region
Farm employment	2.37	1.17
Agricultural services, forestry, fishing	0.94	1.02
Mining	2.19	1.43
Construction	0.93	0.89
Manufacturing	1.04	1.07
Lumber and wood products	0.56	0.56
Fabricated metal products	0.67	0.65
Other transportation equipment	5.40	6.24
Food and kindred products	1.70	0.94
Transportation and public utilities	1.05	0.95
Wholesale trade	1.05	1.10
Retail trade	1.02	1.00
Finance, insurance, and real estate	0.82	0.85
Services	0.86	0.93
Government and government enterprises	1.14	1.14
Military	1.30	1.24
Local	1.21	1.26

Source: U.S. Bureau of Economic Analysis and Cambridge Systematics.

- Location quotients, measuring the concentration of employment by industry in Kansas, were calculated based on 1999 BEA employment data, comparing Kansas to the U.S. and its competitor states. A location quotient above 1.0 means that the industry has a larger share of employment than the U.S. or regional average and is frequently interpreted to suggest an industry that is more likely to export goods or services to other regions. Conversely, values less than 1.0 indicate a relatively lower share of total employment and suggest that the industry is less likely to satisfy indigenous demand and consequently the region will turn to imports for unmet local demands.

- Farming employment is highly concentrated in Kansas compared to the U.S. and slightly more concentrated than the rest of the region. The agricultural services, forest, and fishing industry is not above the U.S. average, as Kansas has little forests and no commercial fishing.

- The mining industry is a relatively important employer in Kansas, with three times as many mining employees in Kansas compared to the U.S. average. This is primarily because of the oil and gas industry. Still, mining represented just over one percent of total employment in 1999, down from two percent in 1990 and almost four percent in 1985.

- Manufacturing is slightly more concentrated in Kansas than the U.S. and the rest of the region. Manufacturing industries with relatively low employment are lumber and wood products, fabricated metal products, electrical equipment, and instruments.

- Other transportation equipment is very highly concentrated in Kansas, largely due to the strong aviation industry in Wichita. Food and kindred products is a strong industry in Kansas compared to the U.S., but actually under-represented when compared to the rest of the region.

- Transportation and public utilities, wholesale trade, and retail trade all have location quotients of roughly 1.0.

- The finance, insurance and real estate (FIRE), and services sectors are relatively under-represented in Kansas compared to the U.S. and region.

- Kansas has a larger concentration of government jobs than the U.S. and the region. This is especially the case for military employment (Fort Leavenworth and Fort Riley) and local government (high prevalence of county government compared to population).

- Kansas employment concentrations tend to be in typically lower-wage industries, such as farming, food and kindred products, and retail trade. Meanwhile, the state is under-represented in higher-paying industries such as FIRE, business services, and legal services.

Shift-Share Analysis

A shift-share analysis was performed for Kansas, comparing the state to the U.S. and the competitor states region from 1990 to 1999. Shift-share analysis is a method of examining the performance of a state's economy using two factors: industry mix and local competitive factors. The first compares the industrial mix of the state to the nation in terms of the composition of fast and slow growing industries. The second measure analyzes the performance of Kansas industries to the U.S. average industry performance. Overall, when comparing Kansas to the U.S. in the 1990s, Kansas benefited from competitive local factors but had a relatively weak industry mix that dampened employment growth in the state. This suggests that Kansas' industry base is concentrated in traditionally strong sectors, but a lack of industry diversity could have major economic growth consequences in the future. Appendix B provides a detailed industry analysis.

Industry Cluster Discussion

- KDOC&H has identified six industry areas to emphasize for economic growth: administrative service centers, value-added agriculture, aircraft parts and equipment, call centers, plastics products and wholesale packaging and distribution.

- The KDOC&H clusters cover most of the major current and future industries in Kansas. These industries, while representing metropolitan areas and high-skill jobs, also tend to represent traditional industry groupings and emerging markets that can also be pursued in rural areas and with low- to mid-skill level workers.

- Meanwhile, KTEC has identified four industry cluster targets that focus on high-technology, high-skill processes: information technology, aviation, human biosciences, and agricultural biotechnology.

- The KTEC industry clusters are targeted for funding to speed development. Based upon existing research strengths, each cluster has its own proposed sponsor research site: the University of Kansas, Wichita State University, KU Medical Center and Kansas State University, respectively. In addition, there is a plastics and polymers center of excellence at Pittsburg State.

- A key challenge for Kansas will be to effectively combine the industry targets. For example, combining value-added agriculture with agricultural biotechnology or aircraft parts and equipment with aviation research and development.