

Trends in the Kansas Economy 1985-2006

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Executive Summary

This report will serve as background information for the state's strategic economic development planning effort that is being undertaken by Kansas, Inc. in 2006-07. It analyzes the current state of the Kansas economy as well as discusses the major trends facing the state. An understanding of the Kansas economy's strengths and weaknesses is essential to strategic planning, but, just as important is an understanding of the major trends that are taking place in the state, national, and international economies. Significant trends are changing the way businesses operate, and these trends are the focus of this analysis. The purpose of this report is to allow these trends to be better understood and incorporated into the planning effort.

A major finding of the 1986 report on the Kansas economy (the Redwood-Krider report) was that the three main drivers of the Kansas economy – agriculture, oil and gas, and aircraft manufacturing – would continue to be important, but would not be the source of significant new jobs in the future. The implication was that Kansas needed to diversify its economy by encouraging new industries, particularly in services and technology, which would be important in coming years. A key finding in this report is that, while Kansas has made progress toward a more diversified economy and improved in areas such as exports, venture capital financing, and technology, more still needs to be done. For example, there has been much progress in growing exports from Kansas to other countries, but the state still ranks below average on this important economic indication.

Despite the progress that has been made in several areas, Kansas continues to rank low among the states in a number of areas that are important for future economic development. A question to be answered is whether Kansas would be satisfied being in the middle of the fifty states on economic issues or whether a higher goal should be set.

This report includes nine sections. The first eight look at major trends in the economy, and the ninth covers the state's business competitiveness. Important conclusions can be drawn from each section.

The New Integrated Global Economy

“Integrated global economy” is used to stress that more than importing and exporting is involved in the emerging global economy. Firms are increasingly integrating their operations across national boundaries. This has resulted in increased competition, outsourcing of work, the availability of new markets, and new potential sources for capital investment. Taking advantage of the opportunities that these changes have brought about should be a high priority. However, so far, Kansas has trailed the nation in adjusting to this new global economy. Kansas exports are growing compared to the state's gross product, but they still lag the U.S. average. There is enormous potential for expanding the state's trade with markets such as India and China. Also, foreign direct investment (FDI) in Kansas continues to account for a very small portion of total U.S. FDI, and the state has not attracted significant new FDI.

Strengths:

- Exports are growing in comparison to gross state product
- Increasing exportation to China, a huge emerging market

Weaknesses:

- Still lagging the U.S. in exports relative to gross product
- Top exports are all manufactured products, which could be outsourced
- Failure to attract much foreign direct investment

Innovation and Technology

Innovation and technology are crucial to Kansas' economic development. Technological change continues to occur very rapidly, particularly in computing, software, telecommunications, and life sciences and biosciences. This presents Kansas with two challenges: 1) existing firms require access to new technology in order to remain competitive, and 2) new technology-based industries and businesses present opportunities for the state. Since companies that do not keep pace with technological change will be at a competitive disadvantage, Kansas must invest in new technologies. Kansas is currently keeping pace with the nation in household internet access, although expense and lack of availability continue to be problems in gaining high-speed access. Kansas ranks very high in high-tech employment, but this is likely due to the state's aircraft industry. In biotechnology, an area in which the state has expressed a desire to expand and be a leader, Kansas is still in the bottom half of the states. Kansas has the beginnings of an ethanol industry, but it lags some nearby states such as Iowa and Nebraska. As the ethanol industry will likely continue to see steady growth in the U.S., this is an area that Kansas should consider pursuing more seriously. Also, the state receives consistently low ratings for patent output, including patents from universities. Obtaining patents apparently is not yet a priority for Kansas universities. Research and development spending in the state has improved since the late 1990s, but it is still seriously low in certain areas.

Strengths:

- Ranked highly in high-tech employment as a share of statewide employment
- Keeping pace with the nation in household internet access

Weaknesses:

- Mediocre to low performance in biotechnology, particularly in R&D spending
- Low patent output among the science and engineering community, especially among universities
- Second-to-last in Federal R&D obligations

Access to Financial Capital

Financing remains critical for Kansas' economic growth. In order to foster the growth of new firms, the state needs to support the financial needs of entrepreneurs. Existing firms also need access to financial capital in order to fund expansions. Unfortunately, Kansas has failed to attract ample amounts of venture capital in recent years. Although a moderate number of venture capital deals are taking place in Kansas, the state is near the bottom of the nation in terms of venture capital as a share of gross state product.

Strengths:

- Moderately high number of venture capital deals in recent years

Weaknesses:

- Near the bottom of the nation for venture capital as a share of GSP

Demographic and Labor Force Trends

The three most important demographic trends affecting Kansas are: 1) population growth in urban areas versus population decline in most rural areas, 2) over two-thirds of the state's population growth coming from Hispanics and Latinos, and 3) the aging of the state's population. These changes are significantly impacting employment in Kansas. Hispanics and Latinos are the fastest-growing segment of the Kansas labor force, which means ensuring that they have access to education and job training is important. The state's metropolitan (metro) areas have seen continual employment growth, whereas non-metropolitan (non-metro) areas have seen a drop in employment. This raises the question of whether the new economic strategy will focus on continuing to develop the state's metro areas or on bringing development more evenly to both metro and non-metro Kansas. Also, the aging of the state's population means that many Kansans will soon be entering the 65 and over age group and retiring.

Strengths:

- Higher-than-average population growth among 20-34 year olds
- Solid job growth in metro Kansas since 2000

Weaknesses:

- Net population loss in many of Kansas' non-metro counties
- Net loss of 0-19 year olds since 2000
- Negative employment growth in non-metro Kansas
- Lower overall employment growth in Kansas than the U.S.

Changing Role of Historically Dominant Industries

Manufacturing, agriculture, and the oil and gas industry have historically been the cornerstones of the Kansas economy. However, the roles of these industries are changing as we transition into the new integrated global economy. Jobs, particularly those in the manufacturing sector, are now vulnerable to relocation in other countries where wages are lower. So far, however, Kansas' manufacturing sector has not seen the massive job cuts that U.S. manufacturing as a whole has experienced. Farm jobs in Kansas have seen a steady decline in the past 25 years. Productivity gains are eliminating the need for additional farm laborers. Also, a decline in the amount of oil and natural gas available in Kansas has caused the oil and gas extraction industry in Kansas to shrink since 1985. The reality is that these historically dominant industries will not be significant sources of economic growth for the state, although they remain important to the Kansas economy.

Strengths:

- Manufacturing employment has remained relatively stable in Kansas
- Farm employment increased in the state since 2000

Weaknesses:

- Crude oil and natural gas production will continue to decrease due to exhaustion of the state's supplies
- No substantial job growth can be expected from manufacturing, farming, or oil and gas extraction

Focus on Services as a Source of New Employment Opportunities

The relative growth of sectors such as financial activities, health care and social assistance, and business services demonstrates that much of the state's growth in employment will come from service-providing industries. One benefit of service employment is that, unlike goods-producing work, some services must be delivered locally. However, service jobs such as preparing tax returns and interpreting medical tests can be done outside of Kansas and even outside of the U.S. One challenge for Kansas is that rural communities are lagging in the creation of service jobs. It will be difficult for them to have sustained employment without an emphasis on services.

Strengths:

- Strong employment growth in many service industries
- Relatively steady employment in goods-producing industries

Weaknesses:

- Significant job loss since 2000 in the Information sector
- Weak growth in service jobs in non-metro areas

Growing Importance of Well-Educated and Skilled Workforce

A major trend is for firms to move lower-skilled work to places such as China, Mexico, and India where wages are lower than in the U.S. More recently, this trend has expanded to include some higher-skilled jobs. An example is the creation of software, which is increasingly being done in places like China and India. In the long run, Kansas will not be able to compete for low-skilled jobs. As a result, the state must focus on developing a workforce that can compete for higher-skilled, higher-wage jobs. Kansas workers will only be attractive to employers if they have the education and skill training to justify their higher

wages. Currently, Kansas has a high amount of educational attainment at every level of education. This is a strength that needs to be maintained and built upon. Specifically, the state needs to increase educational attainment among its Hispanic and Latino population and work to keep its science and engineering graduate students within Kansas after finishing their degrees.

Strengths:

- Above-average educational attainment at all levels of schooling
- Near the top of the nation for S&E graduate students per 1,000 25-34 year olds

Weaknesses:

- Low educational attainment among Hispanics and Latinos, the state's fastest-growing subgroup
- Many S&E students take jobs outside of Kansas upon graduating

Continuing Lag in Personal Income

There are two main trends regarding Kansas' personal income. First, Kansas' per capita income and average annual pay lag the U.S. Second, per capita personal income in non-metropolitan areas of Kansas lags that of metropolitan areas by about 25 percent. This provides an incentive for continued migration to urban areas, especially among young people. An issue that needs to be addressed is how to increase the number of high-wage jobs throughout the state and not just in metropolitan areas.

Strengths:

- Non-metro per capita personal income in Kansas is slightly higher than in the U.S.

Weaknesses:

- Kansas per capita personal income and average annual pay lag the U.S.
- Significantly lower per capita personal income in the state's non-metro portion
- The fastest job growth is occurring in medium- to low-wage industries

Competitive Position and Economic Dynamism

This section looks at Kansas' competitive position and its ability to attract and retain businesses. First, it presents a number of nationally-known competitiveness measures in order to show how firms may perceive Kansas' business environment. In general, these measures paint a picture of Kansas as a good area in terms of infrastructure, education, and environmental policy, but a mediocre to bad area in terms of business incubation and the government/fiscal environment for business. Additional data in this section show that Kansas lags its surrounding states in number of Fortune 1000 headquarters and lags the nation in firm birth rate. Work needs to be done if firms are going to begin locating major new operations in Kansas.

Strengths:

- High scores for infrastructure, human resources, environmental policy, education expenditures, and business created via university R&D

Weaknesses:

- Perceived as a mediocre state in government/fiscal environment for business
- Ranks low for government assistance to small businesses
- Fewer Fortune 1000 companies than all surrounding states
- Lower firm birth rate and higher firm termination rate than the U.S. in 2004

With these observations and the supporting data in mind, it will be up to the state's policymakers to formulate the best economic development strategy for Kansas. They will need to decide whether Kansas' current standing in economic measures is good enough, or whether the state should strive to improve that standing significantly. Important decisions will need to be made in how best to allocate the state's economic development resources. This report will help with those decisions.

Trends in the Kansas Economy 1985-2006

Introduction

This report discusses the major trends that are affecting the Kansas economy and describes the current state of the economy in 2006. Our intent is to update a similar report prepared for Kansas, Inc. in 1999 in order to identify the economic environment that now exists in the state. An understanding of the current Kansas economy is essential to the strategic economic planning effort that is being undertaken by Kansas, Inc. Any update of the state's economic development strategy will need to take into account recent changes in the major economic trends that are affecting the nation as well as individual states like Kansas.

Kansas' economic development strategy over the past 20 years has had much success, but challenges remain. Economic changes and challenges always disturb the status quo, but they can bring opportunities to states that embrace them. Such changes cannot be stopped by anything done at the state level.

The major opportunity presented to Kansas is to develop an updated, unifying vision of what the state wants for its economy, along with a road map of how to get there. As the international and national economies change, Kansas' economic development strategy must also change. It must adapt to the forces that are shaping the state's future. And, while we refer to how economic trends are affecting the Kansas economy, our real concern is how the trends are impacting Kansas businesses.

The 1986 Kansas Economic Development Strategy

The framework adopted for state economic development policy in 1986 was that of a production model that looked at whether firms could access the inputs in Kansas that they needed in order to be profitable and competitive. These inputs included well-educated and qualified employees, access to financial capital, assistance with technology, good state infrastructure, a supportive business climate, and access to international markets. By improving these fundamental aspects of business, the state sought to have a long-term impact on economic growth that would improve employment opportunities and incomes for Kansans more substantially than, say, subsidies to some firms enacted through the tax system.

Our intent in this report is to continue that production model focus and to be always asking what the economic trends being discussed mean for the competitive position of Kansas businesses. Our premise is that businesses will locate or expand in the state only if it makes economic sense to do so.

A key feature of the 1986 strategy was its balanced approach that sought to support new startup businesses, expansion of existing businesses, and recruitment of companies from other locations. That is still a desirable approach.

1999 Update

In 1999, a report, titled *Changes in the Kansas Economy 1985-1999*, was produced by the University of Kansas to provide data for a revision of the 1986 economic strategy. This report identified strengths and weaknesses of the Kansas economy in a number of areas. Its major findings included:

Human Capital

Strengths:

- Above-average workforce education level
- Leading state for use of up-to-date computers in schools
- Above-average number of graduate students in science and engineering
- Above the national average in percentage of knowledge jobs

Weaknesses:

- Below-average in math and science degrees awarded
- Lagging other states in internet access in classrooms
- Failure to retain doctoral scientists and engineers upon graduation

Financial Capital

Weaknesses:

- Failure to attract venture capital
- Below the national average in expansion capital (initial public offerings)
- Below-average in foreign direct investment

Technology Development

Strengths:

- Among the top five states for digital government
- Leading the nation in government research and development (R&D) expenditure per capita

Weaknesses:

- Low rate of patents issued to Kansans
- Below-average in number of internet domain names (".com") per firm
- Lacking in R&D spending by universities and industry

Infrastructure / Telecommunications

Strengths:

- Above the national average for fiber optics usage in local telecommunications networks

Weaknesses:

- Trailing other states in share of adults with internet access

Business Environment

Strengths:

- Large number of successful high-growth gazelle firms

Weaknesses:

- Below-average in start-up formation and net business growth
- Failure to retain businesses

Globalization

Weaknesses:

- Low proportion of firms exporting
- Below the national average in exports per capita

In this report, we address these same areas and give an updated picture of the state's strengths and weaknesses using the most recent data available. The organization of the report has been changed in order to better reflect the economic trends currently affecting Kansas.

Economic Trends Impacting Kansas

The New Integrated Global Economy

International trade has become an integral part of the U.S. economy. Kansas must ensure that its businesses have the means to participate in the global market to the greatest extent possible.

Changes in the Kansas Economy 1985-1999

The new integrated global economy is being defined by major new competitors for Kansas businesses, outsourcing, opportunities for exporting to new markets, and opportunities for attracting foreign investment capital. The major implication is that Kansas businesses have challenges from new international competitors, but they also have new opportunities to enter and compete in an expanding number of countries and to access foreign capital.

The phrase “integrated global economy” is used to stress that more than importing and exporting is involved in the emerging global economy. Firms increasingly are integrating operations across national boundaries so that parts of a business are spread across several countries. An American company may have engineering work done in Japan, source its components in China, and do assembly work in Malaysia. Financing and marketing may also be done in alternative locations. Often these arrangements are formalized through alliances with companies from other countries.

The factors that have given rise to the integrated global economy include substantially lower communication costs, the increase in computing power, and the Internet. Work can be done over the Internet regardless of location, and employees who work together no longer need to be in the same physical location.

An implication of the ability to communicate and share work across great distances is that some work will leave the U.S. for other countries. However, it also implies that business can be located in rural areas of Kansas in ways that were previously not possible. Design work, for example, can be done by employees in Wamego working with others in Los Angeles. Taking advantage of the changes in the global economy should be a high priority. Changes in technology have created opportunities for Kansas as well as challenges.

The new competition for Kansas companies will often be focused on pieces of what a company does, meaning that even if a company remains in Kansas, work previously done here may be relocated to another country. The source of this new competition is the decision of major countries to adopt market economies and the continuing spread of free trade agreements. Within the last several decades, China, India, Mexico, and all of Eastern Europe have changed from inward-looking, government-controlled economies to outward-looking, market-based economies that emphasize the private sector and welcome foreign investment. Inefficient government-owned businesses have been privatized, resulting in more competitive firms that can compete globally. This trend is not yet completed but continues in all major economies, particularly in China and India as well as Russia. One result of this trend has been the admission of ten Eastern European countries into the European Union in 2004 after a decade of transition from government-planned economies to market economies.

Import Competition. The most dramatic changes have occurred in China and India. Both countries now welcome foreign direct investment, have been privatizing inefficient government-owned business, and have opened their economies to international trade. Kansas businesses are now in direct competition with products and services that originate in China and India and are imported into Kansas and the U.S. Kansas companies also compete with China and India for investment capital.

Free trade agreements continue to open U.S. markets to new competitors. Almost all major nations are now in the World Trade Organization (WTO), including China and India, and Russia will join in 2006 or 2007. Once in the WTO, a country agrees to reduce its tariffs and other trade restrictions and has more access to the markets of WTO members like the U.S. Nations that have free trade agreements with the United States may be good destinations for exports from Kansas firms.

The other continuing trend is for the U.S. to enter into free trade agreements that lower tariffs to zero on most products and services. The North American Free Trade Agreement with Canada and Mexico, implemented in 1994, continues to provide greater access to U.S. markets for products produced in Canada and Mexico. The U.S. in 2006 has or is negotiating trade agreements with 27 countries. An example of the growing import competition that will impact Kansas is the entry of Brazil's Embraer Empresa into the business aircraft industry. Also, in 2006, Japan's Honda announced plans to enter the very light jet aircraft industry.

Outsourcing. One important feature of the integrated global economy is increased opportunities for outsourcing. Outsourcing is defined as a U.S. company producing a product or service in other countries that was previously produced in the U.S. This is often done to take advantage of lower-cost labor, but it can also be done to take advantage of the skills of another workforce and is not limited only to low-wage jobs. Engineering work, for example, may be done in Germany or China as well as in the U.S. U.S. companies such as IBM, Motorola, and Texas Instruments are locating research and development (R&D) operations around the world to take advantage of skilled employees who accept lower wages than Americans with similar skills.

One important implication of the outsourcing trend is that Kansas companies have opportunities to locate all or parts of their operations in other countries for good business reasons. The state has no control over trade policy and cannot stop outsourcing. As a result, the state must decide which operations it wants to see remain in the state and which will be outsourced.

Exports. The expanding global economy also creates opportunities for Kansas companies to export their products and services. While China, for example, is exporting many products to the U.S. and Kansas, it also has a growing middle-class market that will continue to demand consumer goods. The opportunities for exporting to countries with more open markets are a positive aspect of the global economy. A key challenge for the state is to provide assistance to Kansas companies that wish to export to foreign markets.

Two of the most rapidly growing economies are those of China and India. It will be very important for Kansas companies to export to those countries and others that have recently entered the global economy. Kansas is showing promise, however, in exporting high value-added products – in 2005, computers and electronic products, machinery manufactures, and chemical manufactures were among Kansas' largest exports.

Foreign Direct Investment. Another opportunity for Kansas in the new global economy is to attract foreign direct investment. The United States continues to be an important destination for other countries' investments in business operations. Such investments can be an important source of new jobs and income for Kansans.

Data on Globalization. The following tables present information on trends in globalization. The overall conclusion is that Kansas lags the U.S. in both exports and foreign direct investment.

Exports

Table 1
Exports and Gross Product
1995, 2000, 2004, and 2005
(millions of dollars)

	Kansas			United States		
	Gross State Product	Exports of Goods and Services	Exports as a Percent of GSP	Gross Domestic Product	Exports of Goods and Services	Exports as a Percent of GDP
1995	\$63,699	\$3,433	5.4	\$7,397,700	\$583,865	7.9
2000	83,427	5,145	6.2	9,817,000	782,429	8.0
2004	98,946	4,931	5.0	11,734,300	819,026	7.0
2005	105,448	6,720	6.4	12,487,100	904,289	7.2

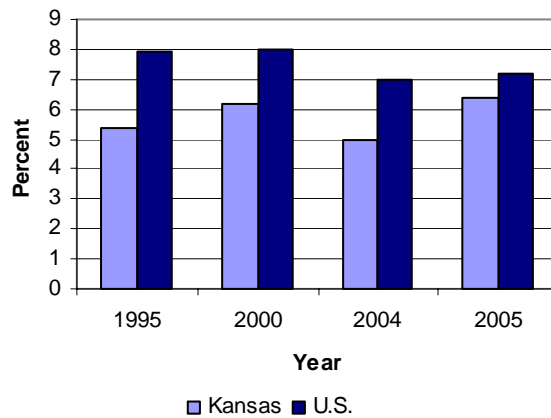
Source: Bureau of Economic Analysis, Regional Economic Accounts; National Economic Accounts, Gross Domestic Product; U.S. Census Bureau, Foreign Trade Division, FT900: U.S. International Trade in Goods and Services.

Amounts in current dollars.

- Exports from Kansas are increasing relative to the state's gross product. (Table 1)

Figure 1

Exports as a Percentage of Gross Product
Kansas and the U.S., 1995-2005



- Kansas exports as a percentage of gross product still trail the U.S., however. (Figure 1)

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

Table 2
Top Kansas Export Product Classifications
1990 and 2005

Rank	1990	2005
1	Transportation equipment -- \$848 million	Transportation equipment -- \$2,431 million
2	Food products -- \$670 million	Processed foods -- \$986 million
3	Computers and industrial machinery -- \$287 million	Computers & electronic products -- \$810 million
4	Scientific and measuring instruments -- \$134 million	Machinery manufactures -- \$694 million
5	Crops -- \$116 million	Chemical manufactures -- \$476 million
6	N/A	Crop production -- \$414 million
7	N/A	Plastic & rubber products -- \$154 million
8	N/A	Electronic eq., appliances & parts -- \$133 million
9	N/A	Fabricated metal products -- \$118 million
10	N/A	Leather & related products -- \$102 million

Source: U.S. Department of Commerce, International Trade Administration, TradeStats Express, State Export Data; Business America, July 13, 1992, "State export profiles - Colorado, Vermont, Oklahoma, Kansas and Iowa," retrieved from www.findarticles.com.

Amounts in current dollars.

N/A - Data not available.

- Manufactured products occupy the top ranks of Kansas' exports, which reflects the diversified nature of the Kansas economy. However, this could present a problem for the state given the current trend for manufacturing jobs to move to countries with lower wage rates. (Table 2)
- Processed foods have increased to nearly one billion dollars in 2005. This means that value is being added to farm products before they are exported from Kansas. (Table 2)
- Crop exports, while still important to the state, ranked only in 6th place in 2005. (Table 2)
- Kansas has had success in exporting a range of high value-added products such as computers and electronic products, machinery, and chemicals. (Table 2)

Table 3
Top Kansas Export Markets
1990 and 2005

Rank	1990	2005
1	Canada -- \$570 million	Canada -- \$1,792 million
2	Japan -- \$416 million	Mexico -- \$854 million
3	Mexico -- \$187 million	China -- \$313 million
4	South Korea -- \$126 million	United Kingdom -- \$306 million
5	France -- \$116 million	Germany -- \$280 million
6	United Kingdom -- \$115 million	Japan -- \$258 million
7	N/A	Australia -- \$192 million
8	N/A	Brazil -- \$188 million
9	N/A	South Korea -- \$173 million
10	N/A	Singapore -- \$167 million

Source: U.S. Department of Commerce, International Trade Administration, TradeStats Express, State Export Data; Business America, July 13, 1992, "State export profiles - Colorado, Vermont, Oklahoma, Kansas and Iowa," retrieved from www.findarticles.com.

Amounts in current dollars.

N/A - Data not available.

- Canada and Mexico, the United States' NAFTA trading partners, are currently Kansas' largest export markets. (Table 3)
- China, however, has rapidly risen from the state's fourteenth largest export market in 1999 (with \$61 million in exports) to its third largest in 2005 (with \$313 million in exports). (Table 3)
- India, the second-largest emerging economy, ranked only 17th in Kansas' export markets in 2005. (Table 3)

Foreign Direct Investment

Table 4
Gross Book Value of Property, Plant, and Equipment
of U.S. Affiliates* of Foreign Companies
1990, 2000, and 2003
(millions of dollars)

Year	Kansas	U.S. Total**	Kansas as a Percent of U.S. Total
1990	\$5,134	\$578,355	0.9
2000	9,036	1,175,628	0.8
2001	5,098	1,181,091	0.4
2002	5,362	1,192,710	0.4
2003	5,843	1,239,214	0.5

Source: U.S. Census Bureau, *Statistical Abstract of the United States: 2006*, Table 1280; Bureau of Economic Analysis, International Economic Accounts, Direct Investment.

* A U.S. affiliate is a U.S. business enterprise in which one foreign owner has a direct or indirect voting interest of 10 percent or more.

** U.S. Total represents the total for all 50 states, Puerto Rico, other territories and offshore areas, foreign assets of U.S. affiliates (fixed assets carried on the books of the U.S. affiliate but located abroad), and unspecified U.S. areas.

- Foreign direct investment in Kansas continues to account for less than one percent of total foreign direct investment in the U.S. (Table 4)
- Although the amount of investment in Kansas is still near its 1990 level, the amount of FDI coming into the U.S. has more than doubled since 1990. (Table 4)

- Canada, the United Kingdom, and Japan have been the largest foreign investors in Kansas in recent years. (Table 5)
- Although Kansas is an attractive destination for some foreign direct investment, the state still lags the United States in FDI. (Tables 4 and 5)

Table 5
Top Countries for Employment and Property, Plant, and Equipment
of Majority-Owned Affiliates* in Kansas
2003

Rank	Total Employment	Manufacturing Employment	Gross Book Value of Property, Plant, and Equipment (millions of dollars)
1	United Kingdom -- 6,200	Canada -- 3,900	United Kingdom -- \$1,170
2	Canada -- 4,500	Japan -- 2,900	Canada -- 1,067
3	Japan -- 4,400	United Kingdom -- 2,000	Germany -- 700
4	Germany -- 3,800	France -- 1,800	Japan -- 623
5	France -- 3,500	Germany -- 1,400	Netherlands -- 599
6	Netherlands -- 2,800	Netherlands -- 1,300	France -- 556
7	Switzerland -- 2,800	Sweden -- 600	Switzerland -- 251
8	Sweden -- 1,700	Italy -- 500	Sweden -- 86

Source: Bureau of Economic Analysis, International Economic Accounts, Foreign Direct Investment in the U.S.: Financial and Operating Data for U.S. Affiliates of Foreign Multinational Companies, <http://www.bea.gov/bea/di/di1fdiop.htm>.

* A majority-owned affiliate is an affiliate of a foreign company in which the combined ownership of all foreign parents exceeds 50 percent.

Table 6
Strategic Alliances, Top Ten OECD Countries
Cumulative Number of Deals, 1990-1999

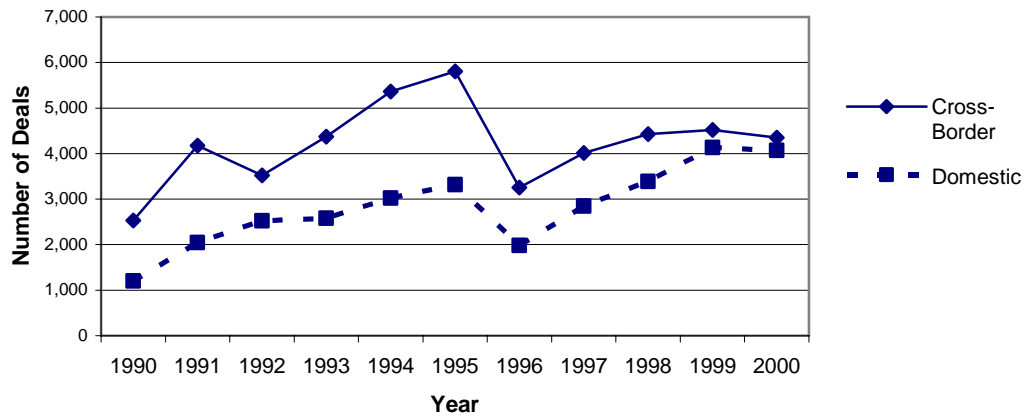
OECD Country	Cross-Border Alliances	Domestic Alliances
United States	22,293	19,141
Japan	9,430	1,306
United Kingdom	5,966	917
Canada	4,064	1,057
Germany	4,062	501
France	3,245	276
Australia	2,271	770
Netherlands	1,604	133
Korea	1,566	94
Italy	1,467	164

Source: Thomson Financial, November 2000.

- The U.S. leads the Organization for Economic Co-operation and Development (OECD) by a large margin in strategic cross-border and domestic alliances. (Table 6)

Figure 2

Cross-Border and Domestic Strategic Alliances Worldwide, 1990-2000



Source: Thomson Financial, November 2000.

Note: For 2000, data is from January to October.

- Despite a major decline from 1995 to 1996, the number of strategic alliances increased steadily during the 1990s. (Figure 2)
- Countries that have a free trade agreement with the United States are potentially good destinations for Kansas exports. (Table 7)

Table 7
U.S. Free Trade Agreements
as of July 2006

Trade Agreement	Countries Included	Date of Initiation
Central America-Dominican Republic FTA	Costa Rica	Pending
	Dominican Republic	Pending
	El Salvador	March 2006
	Guatemala	July 2006
	Honduras	April 2006
	Nicaragua	April 2006
North American Free Trade Agreement	Canada	January 1994
	Mexico	January 1994
Middle East Free Trade Area Initiative	Bahrain	August 2006
	Israel	August 1985
	Jordan	December 2001
	Morocco	January 2006
	Oman	Pending
	Thailand	Negotiations in progress
	United Arab Emirates	Negotiations in progress
Bilateral Free Trade Agreements	Australia	January 2005
	Chile	January 2004
	Colombia TPA*	April 2006
	Korea	Negotiations in progress
	Panama	Negotiations in progress
	Peru TPA*	April 2006
	Singapore	January 2004
	South African Customs Union**	Negotiations in progress

Source: Office of the United States Free Trade Agreement, <http://www.ustr.gov/index.html>.

* TPA = Trade Promotion Agreement.

** The South African Customs Union consists of Botswana, Lesotho, Namibia, South Africa and Swaziland.

The New Integrated Global Economy: Summary

Strengths:

- Exports are growing in comparison to gross state product
- Increasing exportation to China, a huge emerging market

Weaknesses:

- Still lagging the U.S. in exports relative to gross product
- Top exports are all manufactured products, which could be outsourced
- Failure to attract foreign direct investment

Innovation and Technology

Innovation and Technology drive the New Economy. Consequently, Kansas must provide an infrastructure that supports these endeavors by providing the appropriate research infrastructure technology for products and processes.

Changes in the Kansas Economy 1985-1999

The above statement still stands. Innovation and technology remain key to Kansas' economic development. Technological change continues to occur at a very rapid rate, particularly in computing, software, and telecommunications.

There are two challenges for the state. First, existing Kansas firms require access to new technology in order to remain competitive. Second, new technology-based industries and businesses present opportunities for Kansas. There is no alternative to investments in new technologies, since the process of creative destruction will ravage existing companies that do not keep pace with technological change. Kansas firms must adopt new technologies in order to remain competitive.

Since Kansas lacks major corporate headquarters and research centers, public investments will remain important, particularly through the state's research universities. They will play a critical role in attracting research-based companies that wish to locate near a university in order to have access to research and skilled employees. The Kansas Technology Enterprise Corporation (KTEC), which was created twenty years ago as a centerpiece of the Kansas economic development strategy, will continue to have a critical role along with regional technology centers in adapting technology to Kansas companies and creating new businesses.

The state has already identified biotechnology as an opportunity for Kansas to be a leader in an important technology area. The Kansas Biotechnology Authority has been created to lead the state effort. Kansas' biotechnology industry has seen growth and considerable attention in recent years. According to the Kansas Bioscience & Innovation Roadmap, prepared for the Kansas Technology Enterprise Corporation by New Economy Strategies, LLC in 2005, Kansas' bioscience industry includes approximately 70,000 individuals employed at 1,200 companies and universities throughout the state. About 55,000 of these employees and 650 of these companies are involved in bioscience-related services at hospitals and veterinary clinics, and about 5,000 of the employees work in bioscience-related departments at universities. The remaining 10,000 employees work at 550 non-services private sector companies. The largest biotechnology-related sub-sector in Kansas is the agricultural feedstock and chemicals sector, which accounts for 38 percent of biotechnology businesses and 43 percent of biotechnology employment (this excludes bioscience services and university activities). Medical equipment and devices account for 32 percent of businesses and 28 percent of employment, and drugs and pharmaceuticals make up 12 percent of businesses and 24 percent of employment. Companies involved primarily in research and testing account for 19 percent of businesses but only a slim six percent of biotechnology employment in the state. The average wage in the Kansas bioscience industry in 2002 was \$41,760, which is significantly below the national average of \$62,845.

Kansas is not yet a leading state in biotechnology. Success in this area will require investments in basic research to attract private sector investments and support for new ventures that may be spun off from the research. Other technologies that individual firms or entrepreneurs will identify as investment opportunities may merit state support through the Kansas Technology Enterprise Corporation and regional technology authorities.

Data on Innovation and Technology. The following tables present information on trends in innovation and technology. Kansas ranks high among the states in number of employees in high-tech establishments

but low in number of high-tech establishments. This suggests that high-tech employment is concentrated in a few firms, most likely in the aircraft industry. The state ranks low in federally-funded R&D, academic R&D, and patent output, including patents from Kansas universities. Also, while the Kansas' ethanol industry is growing, its production capacity is still far less that of states like Iowa and Nebraska. This is an industry that is likely to continue growing in the coming years.

Internet Activity

Table 8
Households with Internet Access
1998 and 2003
(Percent of all households)

	1998	2003
Kansas	25.7	54.3
U.S.	26.2	54.6
Arkansas	14.7	42.4
Colorado	34.5	63.0
Iowa	21.8	57.1
Missouri	24.3	53.0
Nebraska	22.9	55.4
Oklahoma	20.4	48.4

Source: U.S. Census Bureau, Statistical Abstract of the United States: 2006, Table 1150.

- Kansas is keeping up with the national average in percent of households with internet access.(Table 8)
- *Note:* Internet access in schools, which was covered in the 1999 report, is not included here because it is generally available in all schools today.

Table 9
Type of Internet Connection in Kansas Households
2003

	Percent of households
Universe: households with internet access	
Type of connection	
Regular dial-up telephone line	57.5
High-speed	
A Cable modem	23.5
A DSL Line (Digital Subscriber Line)	16.8
A fixed wireless connection such as MMDS (Multi-Media Distribution System)	1.1
Mobile phone, PDS, or pager connection	0.5
Satellite	0.2
Something else	0.4
Total with high-speed	42.5
Universe: households with high-speed access*	
Wireless or not	
With wireless	7.7
Without wireless	92.3

Source: Bureau of Labor Statistics, Current Population Survey, Internet and Computer Use, <http://www.bls.census.gov/cps/computer/computer.htm>, obtained via DataFerrett.

* Excludes fixed wireless connections.

- Of Kansas households that had internet access in 2003, 42.5 percent had high-speed access. (Table 9)
- As of 2003, wireless internet was uncommon among Kansas households. (Table 9)

Table 10
Reasons for Not Purchasing Internet / High-Speed Internet Access,
Kansas
2003

Topic or Reason	Percent of households
Universe: households without internet	
Reason for no internet access	
Don't need it, not interested	43.3
No computer or computer inadequate	23.1
Costs are too high	18.2
Lack of confidence or skills	3.7
Have access to Internet elsewhere	3.2
Lack of time to use the Internet	2.7
Concern that children will access inappropriate sites	1.2
Privacy and security concerns	0.4
Language barriers	0.0
Other reason	4.1
Universe: households with dial-up	
Reason for no high-speed access	
Too expensive	38.1
Don't need it, not interested	37.0
Not available in area	17.6
No computer or computer inadequate	1.6
Can use it somewhere else	1.1
Privacy and security	0.3
Other reasons	4.3

Source: Bureau of Labor Statistics, Current Population Survey, Internet and Computer Use, <http://www.bls.census.gov/cps/computer/computer.htm>, obtained via DataFerrett.

- Among households that do not have internet access, the most common reason in 2003 was “Don’t need it,” followed by “No computer or computer inadequate” and “Costs are too high.” (Table 10)
- About 38 percent of Kansas households with dial-up connections said they did not have high-speed access because it was too expensive. (Table 10)
- Almost 18 percent of households in Kansas reported that high-speed access was not available in their area. (Table 10)

Table 11
Percentage of U.S. Spending Online
by Selected Category of Business

Category	2003	2004	2005
Personal Computers	36.0	37.3	39.6
Software	36.1	37.8	39.2
Peripherals	24.9	26.0	26.8
Event Tickets	14.5	16.6	18.5
Books	13.1	14.4	15.4
Music	7.0	9.1	11.9
Videos	7.5	8.7	9.5
Office Products	5.2	7.3	9.1
Flowers	6.2	7.2	8.1

Source: U.S. Census Bureau, Statistical Abstract of the United States: 2006, Table 1035. Online Consumer Spending Forecast by Kind of Business: 2003 to 2005.

- U.S. spending is increasingly being done online, particularly with technology and entertainment products. In order for Kansas businesses to be competitive, they will have to have access to the Internet and to this emerging market. (Table 11)

Table 12
Employment in High-Technology Establishments
1998, 2000, and 2002

	Employment in high-tech establishments			High-tech employment as a percent of statewide employment					
	1998	2000	2002	1998		2000		2002	
				Percent	Rank	Percent	Rank	Percent	Rank*
Kansas	117,366	116,476	108,809	10.9	8	10.3	8	9.9	9
Arkansas	62,620	64,564	61,486	6.6	38	6.5	38	6.3	34
Colorado	166,494	190,282	179,894	9.5	14	10.0	9	9.4	11
Iowa	100,990	101,015	94,006	8.3	26	8.0	26	7.7	24
Missouri	201,038	178,522	175,851	8.7	22	7.4	33	7.5	26
Nebraska	57,718	59,228	53,739	8.0	32	7.9	28	7.2	29
Oklahoma	86,402	85,533	82,096	7.4	34	7.1	36	6.8	32

Source: National Science Foundation, Science and Engineering Indicators 2006, Chapter 8: State Indicators.

* No data was available for California or Texas this year. Thus, they were left out of the 2002 rankings. California was 7th in 1998 and 6th in 2000. Texas was 18th in 1998 and 20th in 2000.

- Kansas is among the top states for high-tech employment as a share of total employment. This high ranking is probably due largely to the state's aircraft industry. (Table 12)
- However, high-tech employment as a share of statewide employment decreased steadily from 1998 to 2002. (Table 12)

Table 13
Number of High-Technology Business Establishments
1998 and 2002

	1998		2002	
	Number	Rank	Number	Rank
Kansas	3,309	31	3,736	31
Arkansas	2,003	36	2,329	36
Colorado	10,472	13	12,400	13
Iowa	2,604	34	2,904	34
Missouri	6,355	22	6,903	21
Nebraska	1,834	38	2,045	38
Oklahoma	3,752	28	4,101	29

Source: National Science Foundation, Science and Engineering Indicators 2006, Chapter 8: State Indicators, <http://www.nsf.gov/statistics/seind06/c8/c8.cfm>.

- When number of high-tech establishments is looked at, Kansas' rank falls to 31st. This suggests that Kansas' high-tech employment is concentrated in a small number of firms. (Table 13)

- The number of high-technology establishments in Kansas is increasing, both in number and as a share of business establishments in the state. (Tables 13 and 14)

Table 14
High-Technology Establishments as a Share of All Business Establishments
1998 and 2002

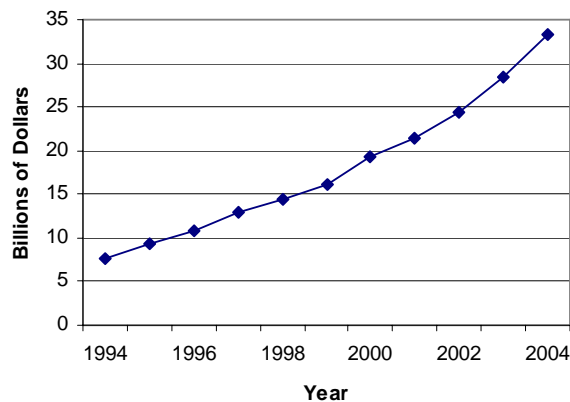
	1998		2002	
Kansas	4.47	30	4.98	29
U.S.	5.79	-	6.30	-
Arkansas	3.21	46	3.65	45
Colorado	8.03	3	8.72	1
Iowa	3.22	45	3.58	46
Missouri	4.42	31	4.66	35
Nebraska	3.77	44	4.07	44
Oklahoma	4.42	32	4.77	33

Source: National Science Foundation, Science and Engineering Indicators 2006, Chapter 8: State Indicators, <http://www.nsf.gov/statistics/seind06/c8/c8.cfm>.

Biotechnology

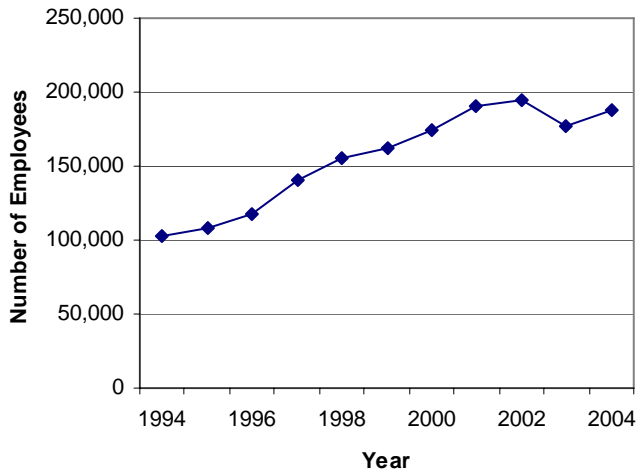
- Sales for the U.S. biotechnology industry increased 332 percent from 1994 to 2004. (Figure 3)

Figure 3
U.S. Biotech Industry Sales
1994-2004



Source: Biotechnology Industry Organization.

Figure 4
U.S. Biotech Industry Employment
1994-2004



Source: Biotechnology Industry Organization.

- Employment in the U.S. biotechnology industry has nearly doubled since 1994. (Figure 4)

Table 15
Total Number of Patents for Drugs,
Bio-Affecting and Body Treating Compositions*
2000-2004 by State of Origin

	Total number issued to state's residents 2000-2004	Rank among states
Kansas	66	32
Arkansas	32	37
Colorado	249	19
Iowa	92	28
Missouri	405	16
Nebraska	55	34
Oklahoma	52	35

Source: U.S. Patent and Trademark Office, Patenting In Technology Classes: Breakout By Geographic Origin.

* Patent class 424, includes class 514.

- Kansas is among the bottom half of states for biotechnology-related patents. (Table 15)

- Kansas has a medium-sized bioscience workforce (ranked 28th) and awards the 26th most bioscience higher education degrees in the U.S. (Table 16)
- However, the state's bioscience R&D expenditures at academic institutions seriously lag those of some surrounding states, particularly in the medical sciences. (Table 16)

Table 16
Biotechnology Industry Statistics, Kansas and Six State Region
Selected Years as Available

	Kansas	Arkansas	Colorado	Iowa	Missouri	Nebraska	Oklahoma
Employment in bioscience occupations, 2004							
Agricultural, food, and nutrition scientists and technicians	880	250	200	1,880	210	1,070	340
Biological scientists and technicians	910	670	3,250	1,070	2,750	790	2,400
Biomedical and biochemical scientists and engineers	100	40	330	100	120	240	100
Medical and clinical laboratory technicians	5,040	2,880	4,640	3,980	8,110	3,160	3,970
Total bioscience workforce	6,930	3,840	8,420	7,030	11,190	5,260	6,810
Rank among states	28	36	22	26	19	33	29
Higher education degrees in bioscience fields, 2004							
Rank among states	26	34	18	24	13	36	30
Bioscience R&D expenditures at academic institutions, 2003 (thousands of dollars)							
Medical sciences	\$40,254	\$54,833	\$189,262	\$162,141	\$306,947	\$52,420	\$43,131
Biological sciences	82,322	13,661	121,149	99,639	258,376	92,405	55,819
Agricultural sciences	48,479	55,741	19,875	44,779	66,413	48,085	38,304
Other life sciences	22,868	1,767	16,815	26,689	26,561	9,476	3,561
Total	193,923	126,002	347,101	333,248	658,297	202,386	140,815

Source: Biotechnology Industry Organization, *Growing The Nation's Biotech Sector: State Bioscience Initiatives 2006*, <http://www.bio.org/local/battelle2006/>.

Ethanol

Table 17
Fuel Ethanol Production Capacity as of July 2006
(million gallons per year)

	Current capacity	Under construction / expansions
Kansas	172.5	95.0
Arkansas	0.0	0.0
Colorado	83.5	1.5
Iowa	1,581.5	380.0
Missouri	110.0	45.0
Nebraska	550.5	501.0
Oklahoma	0.0	0.0
United States Total	4,817.9	2,122.5

Source: Nebraska Energy Office, "Ethanol Production Capacity by Plant," <http://www.neo.state.ne.us/statshhtml/122.htm>.

- Kansas' ethanol production capacity is currently only 3.6 percent of the national total. (Table 17)
- Once all current construction and expansion of ethanol plants in the U.S. is completed, Kansas will have 3.9 percent of the nation's production capacity. (Table 17)

Patents

Table 18
Number of Utility Patents* Granted by State of Origin
1991, 1996, 2001, and 2004

	1991	1996	2001	2004	Rank in 2004
Kansas	246	291	313	448	30
Arkansas	118	114	180	132	43
Colorado	761	1,178	1,929	2,099	13
Iowa	372	432	751	658	27
Missouri	720	656	843	768	24
Nebraska	145	167	215	191	40
Oklahoma	569	481	576	447	31

Source: U.S. Patent and Trademark Office, Patenting In Technology Classes Breakout By Geographic Origin, <http://www.uspto.gov/web/offices/ac/ido/oeip/taf/reports.htm>.

* Utility patents are patents granted to anyone who invents or discovers any new, useful, and non-obvious process, machine, article of manufacture, or composition of matter, or any new and useful improvement thereof.

- Although Kansas' utility patent output has steadily increased since 1991, the state still seriously lags some of its neighbors, such as Colorado, Iowa, and Missouri, in number of patents granted. (Table 18)

Table 19
Patents per 1,000 Individuals in Science and Engineering Occupations
2003

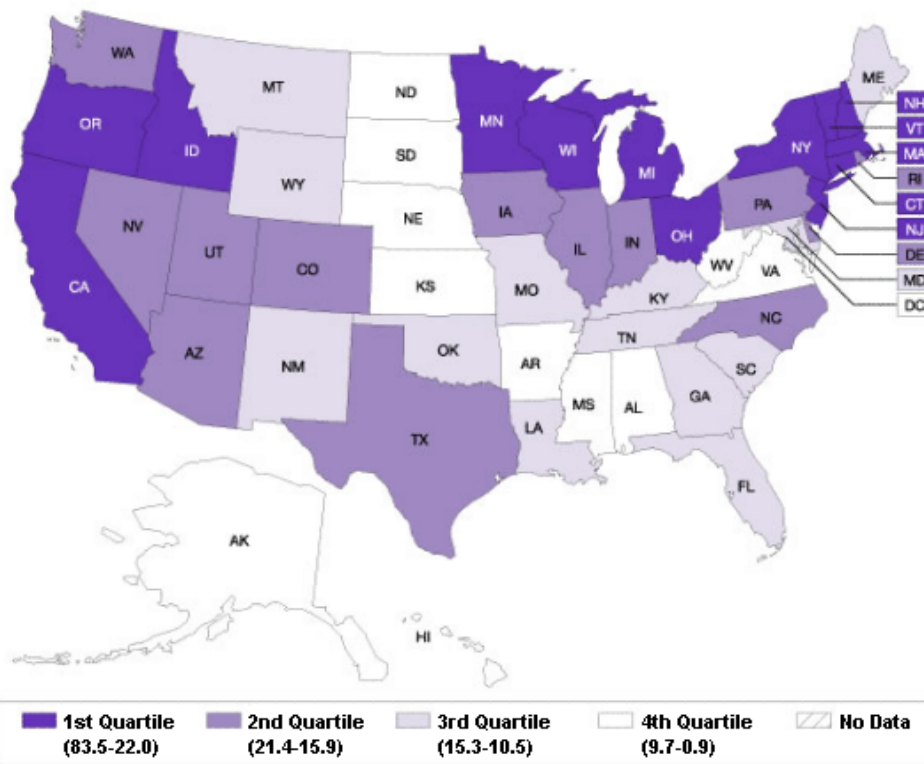
	Patents awarded	Individuals in S&E occupations	Patents per 1,000 individuals in S&E occupations	
			Number	Rank
Kansas	491	51,970	9.4	41
Arkansas	176	21,340	8.2	44
Colorado	2,304	124,140	18.6	21
Iowa	711	37,320	19.1	18
Missouri	946	84,150	11.2	33
Nebraska	240	30,710	7.8	46
Oklahoma	563	44,360	12.7	31

Source: National Science Foundation, Science and Engineering Indicators 2006, Chapter 8: State Indicators, <http://www.nsf.gov/statistics/seind06/c8/c8.cfm>.

- Although Kansas has a sizeable number of science and engineering workers (26th most in the U.S.), it is in the bottom quartile (41st place) in patents per 1,000 individuals in S&E occupations. If the state's biotechnology effort is going to succeed, steps will need to be taken to increase the workforce's innovation and patent output. (Table 19, Figure 5)

Figure 5

Patents awarded per 1,000 individuals in S&E occupations: 2003



Source: National Science Foundation, Science and Engineering Indicators 2006.

Table 20
Utility Patents* Issued to Universities
Kansas and the U.S., 2000-2003

	2000	2001	2002	2003
Kansas				
Total patents granted	391	313	421	428
Patents issued to universities	13	15	27	16
University patents as a percent of total patents	3.3	4.8	6.4	3.7
United States				
Total patents granted	87,941	90,485	89,184	89,747
Patents to issued universities	3,090	3,208	3,275	3,259
University patents as a percent of total patents	3.5	3.5	3.7	3.6

Source: U.S. Patent and Trademark Office, Patent Counts by Country/State and Year, Patenting by Geographic Origin (State and Country)- Breakout By Organization, http://www.uspto.gov/web/offices/ac/ido/oeip/taf/tecstc/424_stc.htm.

* Utility patents are patents granted to anyone who invents or discovers any new, useful, and non-obvious process, machine, article of manufacture, or composition of matter, or any new and useful improvement thereof.

- The state is now slightly over the national average for university patents as a percent of total patents. Increasing university patent output would be beneficial for the state, since this would lead to new products for Kansas businesses. (Table 20)
- Kansas universities received only 16 patents in 2003, which suggests that patents have not yet become a priority for the universities. (Table 20)

Table 21
Academic Patents per 1,000 Science and Engineering Doctorate Holders in Academia
1997 and 2003

- Kansas' academic patent output per 1,000 S&E doctorate holders in academia more than doubled between 1997 and 2003. (Table 21)

	1997		2003	
	Number	Rank	Number	Rank
Kansas	3.1	42	7.4	30
U.S.	10.5	-	13.0	-
Arkansas	5.5	33	14.9	10
Colorado	7.1	27	5.4	39
Iowa	16.7	3	19.2	3
Missouri	7.1	28	8.2	27
Nebraska	12.0	9	10.6	19
Oklahoma	6.5	30	6.0	37

Source: National Science Foundation, Science and Engineering Indicators 2006, Chapter 8: State Indicators.

Research and Development

Table 22
Research and Development Expenditures for Kansas, 2003

	Total (millions of dollars)	Rank	Per Capita (dollars)	Rank
Total R&D performed	\$2,024.4	28	\$743	23
Federal R&D obligations	190.0	42	70	49
Industry R&D	1,675.0	24	615	15
Academic R&D	310.1	32	114	34

Source: National Science Foundation, Science & Engineering States Profiles: 2003-04, Summary of U.S. States.

Rankings include the 50 states, the District of Columbia, and Puerto Rico.

- Total R&D expenditures in Kansas fall in the middle of states. Per capita industry R&D expenditures for 2003 were ranked 15th. (Table 22)
- Federal R&D per capita, however, ranked 49th. This indicates that Kansas is attracting less R&D funding from the federal government, probably due to a lack of major research facilities in the state. (Tables 22)
- In R&D expenditures as a share of gross state product, however, Kansas was among the top half of states in 2002. (Table 23)

Table 23
Research and Development Performed as a Share of Gross State Product
1998 and 2002

	R&D performed (\$ thousands)		GSP (\$ millions)		R&D performed / GSP (percent)			
	1998	2002	1998	2002	1998		2002	
					Amount	Rank	Amount	Rank
Kansas	\$463,570	\$1,865,261	\$58,380	\$89,508	0.79	38	2.08	22
U.S.	161,560,028	255,707,431	6,513,028	10,407,146	2.48	-	2.46	-
Arkansas	301,143	427,127	47,188	71,929	0.64	42	0.59	48
Colorado	2,864,058	4,217,633	93,588	179,410	3.06	9	2.35	16
Iowa	902,050	1,346,336	62,764	98,232	1.44	29	1.37	31
Missouri	1,788,896	2,478,355	119,680	187,543	1.49	28	1.32	34
Nebraska	294,531	663,135	38,665	60,962	0.76	39	1.09	38
Oklahoma	533,398	793,412	65,035	95,126	0.82	37	0.83	45

Source: National Science Foundation, Science and Engineering Indicators 2006, Chapter 8: State Indicators, <http://www.nsf.gov/statistics/seind06/c8/c8.cfm>.

Innovation and Technology: Summary

Strengths:

- Ranked highly in high-tech employment as a share of statewide employment
- Keeping pace with the nation in household internet access

Weaknesses:

- Mediocre to low performance in biotechnology, particularly in R&D spending
- Low patent output among the science and engineering community
- Second-to-last in Federal R&D obligations

Access to Financial Capital

Economic dynamism characterizes the business environment of the New Economy. To be competitive Kansas businesses must have access to various forms of capital. Venture capital, in particular, is of utmost importance, as start up companies account for a great majority of new jobs.

Changes in the Kansas Economy 1985-1999

This statement still stands. Financing – for new firms and for existing companies introducing new products or services – remains critical for Kansas’ economic growth. Some existing firms and products will always be in decline as they are replaced by new firms with new products that better meet consumers’ preferences. A key for any state is to foster the growth of new firms by supporting the financial needs of entrepreneurs as well as existing firms that are expanding. Although a growing number of venture capital deals are taking place in the state, Kansas is not a leading state for venture capital financing. There remains an important role for the state in this area.

Table 24
Venture Capital Disbursed per \$1,000 of Gross State Product
1995 and 2003

	Venture capital disbursed (\$ thousands)		Gross state product (\$ millions)		Venture capital / \$1,000 of gross state product			
	1995	2003	1995	2003	1995		2003	
					Amount	Rank	Amount	Rank
Kansas	\$6,600	\$2,935	\$63,699	\$93,263	\$0.10	36	\$0.03	41
Arkansas	5,012	1,150	53,303	74,540	0.09	37	0.02	42
Colorado	314,397	628,225	108,043	188,397	2.91	3	3.33	4
Iowa	14,188	4,200	71,905	102,400	0.20	33	0.04	40
Missouri	83,202	103,703	137,528	193,828	0.60	20	0.54	22
Nebraska	16,102	610	44,505	65,399	0.36	27	0.01	48
Oklahoma	6,100	31,136	69,580	101,168	0.09	39	0.31	29

Source: National Science Foundation, Science and Engineering Indicators 2006, Chapter 8: State Indicators, <http://www.nsf.gov/statistics/seind06/c8/c8.cfm>.

- Venture capital investments relative to gross state product are consistently low in Kansas. (Table 24)
- In 2003, venture capital investments were concentrated most heavily in the western states, the Northeast, and Texas. Kansas and several other Great Plains states were in the bottom quartile. (Figure 6)

Figure 6
Venture capital disbursed per \$1,000 of gross state product: 2003

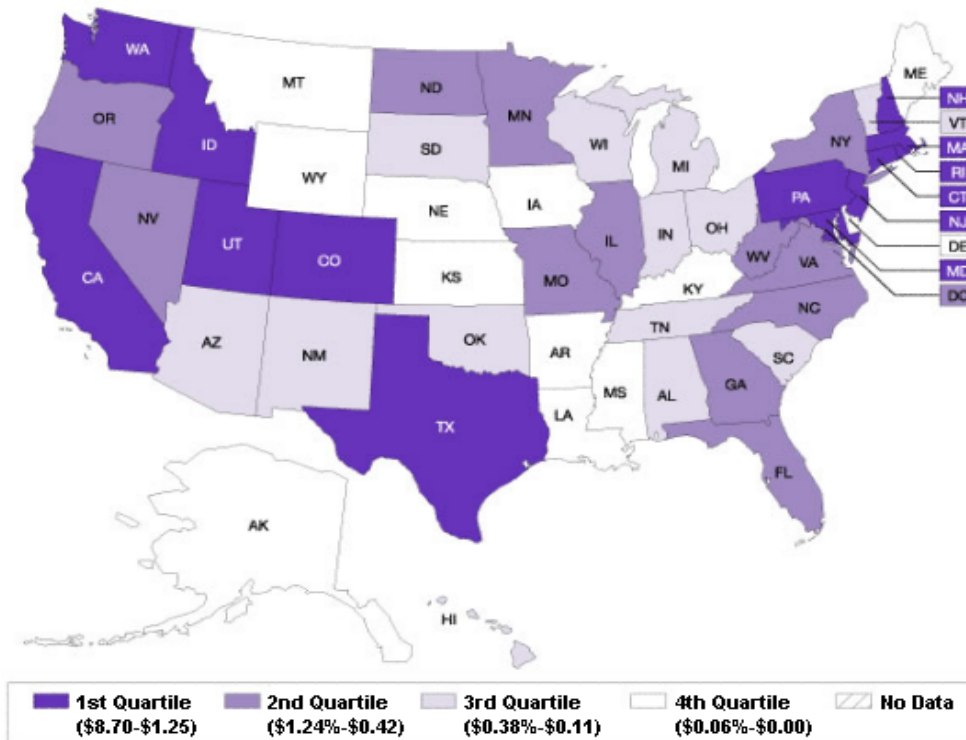


Table 25
Venture Capital Disbursed per Venture Capital Deal
1995, 2000, and 2004

	Venture capital disbursed (\$ thousands)		Venture capital deals		Venture capital / deal (\$ millions)			
	1995	2004	1995	2004	1995		2004	
					Amount	Rank	Amount	Rank
Kansas	\$6,600	\$37,670	3	8	\$2.20	31	\$4.71	31
U.S.	8,147,907	20,937,629	1,866	2,872	4.37	-	7.29	-
Arkansas	5,012	3,700	2	1	2.51	30	3.70	33
Colorado	314,397	443,599	57	70	5.52	8	6.34	18
Iowa	14,188	10,300	10	3	1.42	39	3.43	35
Missouri	83,202	62,469	14	13	5.94	7	4.81	27
Nebraska	16,102	0	2	0	8.05	4	0.00	49
Oklahoma	6,100	63,901	2	11	3.05	26	5.81	22

Source: National Science Foundation, Science and Engineering Indicators 2006, Chapter 8: State Indicators, <http://www.nsf.gov/statistics/seind06/c8/c8.cfm>.

- Although Kansas is among the bottom half of states for venture capital disbursed per venture capital deal, a moderate number of deals took place within the state in 2004. (Table 25)

Access to Financial Capital: Summary

Strengths:

- Moderately high number of venture capital deals in recent years

Weaknesses:

- Near the bottom of the nation for venture capital as a share of GSP

Demographic and Labor Force Trends

Demographic Trends. The three major demographic trends affecting Kansas are 1) the continued growth in urban areas relative to rural areas, 2) the growing importance of Hispanics and Latinos, and 3) the aging of the state's population. These changes are significantly changing the location and composition of employment in the state.

The first long-term trend in Kansas is the concentration of population in urban areas, particularly in Johnson and Sedgwick counties. Rural Kansas is seeing its share of the population slowly but steadily decline. Undoubtedly, the major cause of the urbanization of Kansas is that economic growth has been focused in the urban areas. A key issue is whether state economic development initiatives should seek to counter this trend by targeting rural areas for additional assistance. The alternative approach would be to

go with the population trend by continuing to focus on urban areas. The urbanization of Kansas' population shows no indication of stopping in the near future.

The second trend is the increasing importance of Hispanics and Latinos. In recent years, the trend in Kansas has been for Hispanics and Latinos to account for most of the state's net growth.

The third trend is the aging of the labor force. Like the U.S., the Kansas population is aging. There is some indication, however, that Kansas is having success in retaining young persons age 20-34.

Labor Force Trends. Changes in the Kansas population have a direct impact on the State's labor force. The major labor force trends are 1) Kansas has slower employment growth than the U.S. as a whole, 2) Hispanics are the fastest-growing segment of the Kansas Labor force; and 3) employment growth is focused entirely in the state's urban areas, which now account for two-thirds of all jobs.

Population Growth

Table 26
Population Growth
Census Years 1980-2000 and 2005

	Population		Rate of growth*		Kansas Pop. as a Percent of U.S. Pop.
	Kansas	U.S.	Kansas	U.S.	
1980	2,364,236	226,542,199	5.1	11.4	1.04
1990	2,477,574	248,718,302	4.8	9.8	1.00
2000	2,692,671	281,424,603	8.7	13.1	0.96
2005	2,744,687	296,410,404	1.9	5.3	0.93

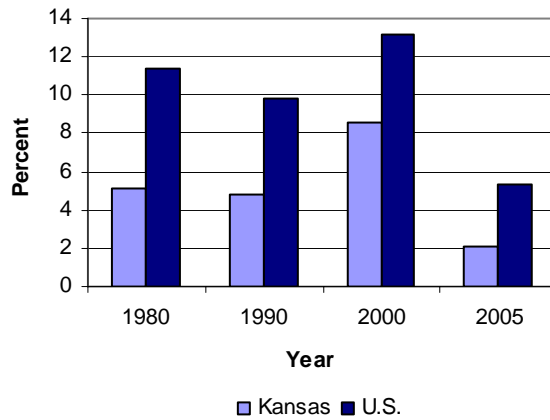
Source: U.S. Census Bureau, 2005 Population Estimates; Statistical Abstract of the United States, 2006, Table 1; U.S. Census Bureau, Estimated Population (Current Population Reports), retrieved from <http://www.ku.edu/pri/ksdata/ksah/ksah.htm>.

* Rate of growth since the previous decennial census.

(Note: For a detailed breakdown of Kansas' population growth by county, micropolitan area, and metropolitan area, see Appendix A.)

Figure 7

**Population Growth, Kansas and the U.S.
1980-2005**



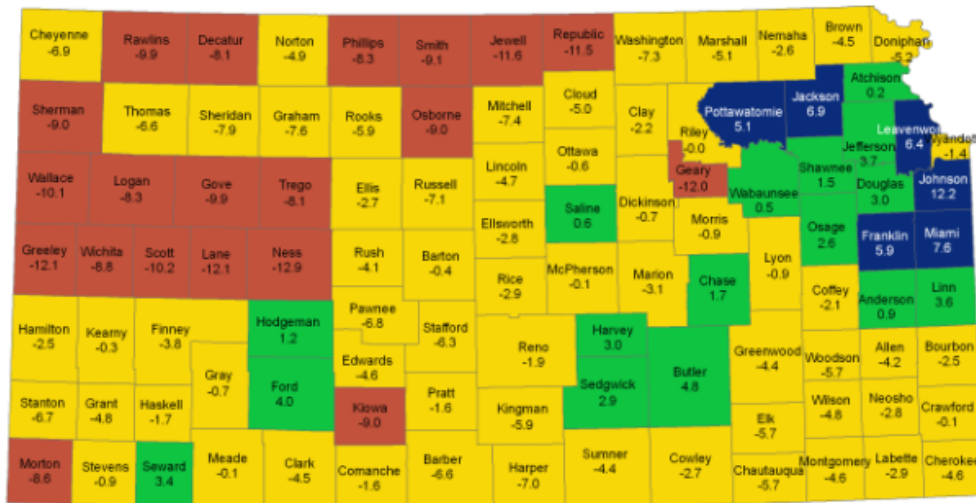
Source: U.S. Census Bureau.

- The state’s population is increasing, but not as quickly as the population of the entire U.S. (Table 26, Figure 7)

- Kansas’ population growth between April 2000 and July 2005 was concentrated almost exclusively in the state’s metropolitan and micropolitan counties, and most notably in the northeast corner of the state. (Figure 8)
- The rest of the state’s 83 counties experienced population declines ranging from -0.1 percent to -12.9 percent. (Figure 8)

Figure 8

Population Growth in Kansas, by County, April 2000 - July 2005



Source: U.S. Census Bureau, Census 2000 and Population Estimates Division.

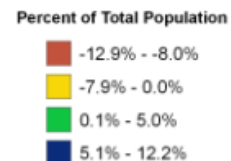


Table 27
Percentage of the Population in Designated Age Groups
Kansas and the U.S., Census Years 1980-2000 and 2004

Age Group	1980		1990		2000		2004	
	Kansas	U.S.	Kansas	U.S.	Kansas	U.S.	Kansas	U.S.
0 to 19 years	31.4	32.0	29.7	28.7	29.7	28.6	28.1	27.8
20 to 34 years	25.7	25.8	23.9	25.0	20.0	20.9	21.0	20.8
35 to 64 years	29.9	31.0	32.5	33.8	37.0	38.1	38.0	39.1
65 years and over	13.0	11.3	13.8	12.6	13.3	12.4	13.0	12.4

Source: U.S. Census Bureau, 2004 Population Estimates, *Annual Estimates of the Population by Sex and Age: April 1, 2000 to July 1, 2004*, <http://www.census.gov/popest/age.html>; 1990 Census, STF 1, Table P011; 1980 Census of Population and Housing, U.S. Summary: General Population Characteristics, Table 43, Kansas: General Population Characteristics, Table 19.

Table 28
Median Age of the Population
Census Years 1990-2000

	Kansas	U.S.
1980	30.1	30.0
1990	32.9	32.9
2000	35.2	35.3
2004	36.1	36.2

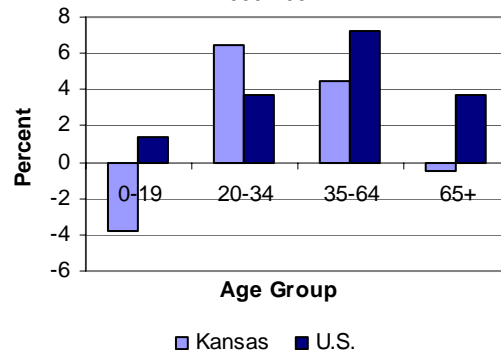
Source: U.S. Census Bureau, 2004 American Community Survey; Census 2000, SF 1, Table P13; 1990 Census, STF 1, Table DP-1; 1980 Census, U.S. Summary, Table 43, Kansas, Table 19.

- Like the U.S., the Kansas population is aging. (Tables 27 and 28)
- Since 1980, the 35 to 65 age group has increased steadily as a share of the Kansas population. As that group ages, Kansas can expect to see a steady increase in the over 65 population. (Table 27)
- The median age of the Kansas population has gone from 30.1 to 36.1 since 1980. (Table 28)

- While the state's population may be aging, it is not aging as fast as the United States as a whole. The 35 to 64 and 65+ age groups are growing significantly slower in Kansas than in the U.S., and Kansas' 20 to 34 population is growing at a faster rate than in the U.S. (Figure 9)
- Unfortunately, Kansas experienced a significant net loss in 0-19 year olds from 2000 to 2004. (Figure 9)

Figure 9

**Growth Rate of Various Age Groups,
Kansas and the U.S.
2000-2004**



Source: U.S. Census Bureau.

Table 29
Hispanic or Latino Population Statistics
Census Years 1980-2000 and 2004

		Entire Population	Hispanic or Latino Population	Percent Hispanic or Latino	Percent of Total Pop. Growth* due to Hispanics or Latinos
Kansas	1980	2,364,236	63,339	2.7	-
	1990	2,477,574	93,670	3.8	26.8
	2000	2,688,824	188,252	7.0	44.8
	2004	2,735,502	220,288	8.1	68.6
United States	1980	226,542,199	14,608,673	6.4	-
	1990	248,718,302	22,354,059	9.0	34.9
	2000	281,424,602	35,305,818	12.5	39.6
	2004	293,655,404	41,322,070	14.1	49.2

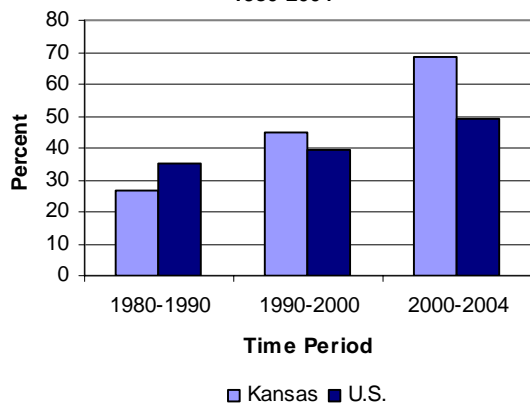
Source: U.S. Census Bureau, 2004 Population Estimates; Census 2000, SF 1, Table P4.; 1990 Census, STF 1, Table P008; 1980 Census of Population and Housing, U.S. Summary, Table 39.

* Growth of statewide population since the previous decennial census.

- Kansas' Hispanic or Latino population has tripled as a share of the state population since 1980. (Table 29)

Figure 10

Percent of Total Population Growth from Hispanic or Latino Population 1980-2004

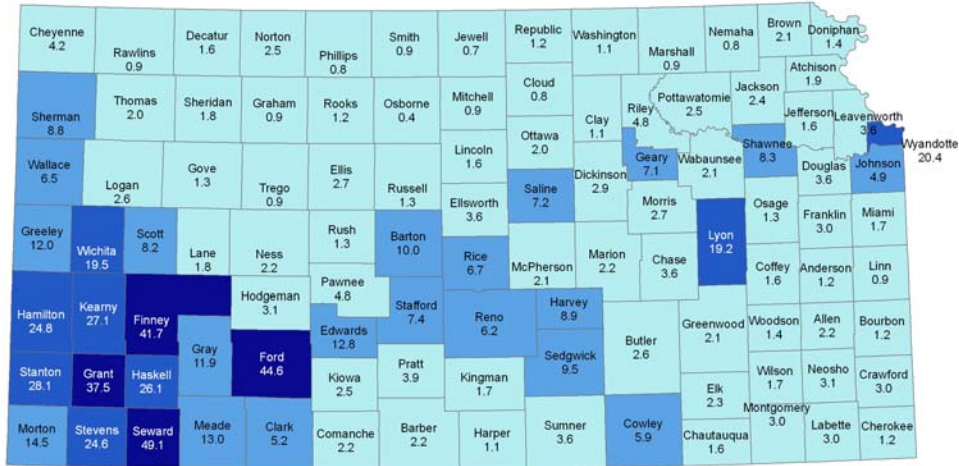


Source: U.S. Census Bureau.

- From 2000 to 2004, Hispanics and Latinos were responsible for over two-thirds of Kansas' population growth. (Figure 10)

- High concentrations of Hispanics and Latinos are occurring in counties that rely on manufacturing, particularly those with meat-packing facilities. (Figure 11)

Figure 11
Hispanics and Latinos as a Percent of the Kansas Population, by County, 2004



Source: U.S. Census Bureau, Population Estimates Division.

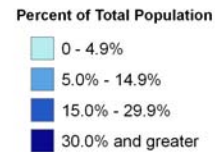
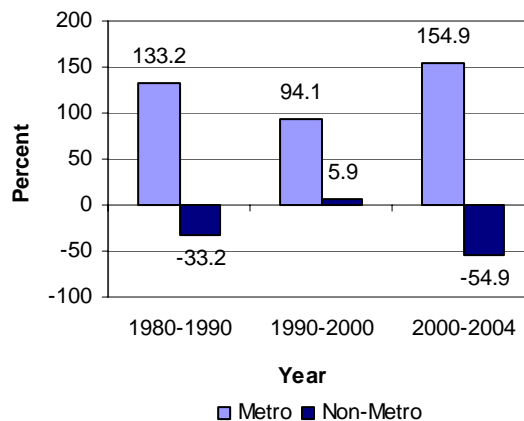


Figure 12
Percentage of Kansas Population Growth from Metro and Non-Metro Portions, 1980-2004

- The growth of Kansas' population since 1980 can be mostly attributed to the metropolitan portion of the state, which accounted for more than 100 percent of the state's growth between 1980 and 1990 and between 2000 and 2004. (Figure 12)



Source: U.S. Census Bureau.

- During the last 25 years, the overall trend for non-metropolitan Kansas has been population decline, although the non-metro areas did see a modest population increase during the 1990s. (Table 30)

Table 30
Population Growth in Kansas, by Metro and Non-Metro Portion
Census Years 1980-2000 and 2004

	1980	1990	2000	2004
Population				
Kansas	2,369,039	2,481,349	2,692,671	2,733,697
Metropolitan Portion	1,301,328	1,450,887	1,649,650	1,713,202
Non-Metropolitan Portion	1,067,711	1,030,462	1,043,021	1,020,495
Population Growth Rate*				
Kansas	5.4	4.7	8.5	1.5
Metropolitan Portion	7.4	11.5	13.7	3.9
Non-Metropolitan Portion	3.0	-3.5	1.2	-2.2
Percent of Statewide Population				
Metropolitan Portion	54.9	58.5	61.3	62.7
Non-Metropolitan Portion	45.1	41.5	38.7	37.3
Percent of Statewide Population Growth*				
Metropolitan Portion	74.3	133.2	94.1	154.9
Non-Metropolitan Portion	25.7	-33.2	5.9	-54.9

Source: Bureau of Economic Analysis, Regional Economic Information System, Table CA1-3, <http://www.bea.gov/bea/regional/reis/default.cfm?catable=CA1-3>.

Metro and Non-Metro areas defined according to December 2005 Office of Management and Budget standards for metropolitan and non-metropolitan.

* Growth since the previous decennial census.

Employment and Labor Force

Table 31
Total Nonfarm Employment, Kansas and the U.S.
Census Years 1980-2000 and 2005

	Kansas	U.S.
Employment		
1980	944,700	90,528,000
1990	1,088,400	109,487,000
2000	1,344,900	131,785,000
2005	1,334,700	133,463,000
Employment Growth Rate		
1990-2000	23.6	20.4
2000-2005	-0.8	1.3

Source: Bureau of Labor Statistics, Current Employment Statistics survey, <http://www.bls.gov/bls/employment.htm>.

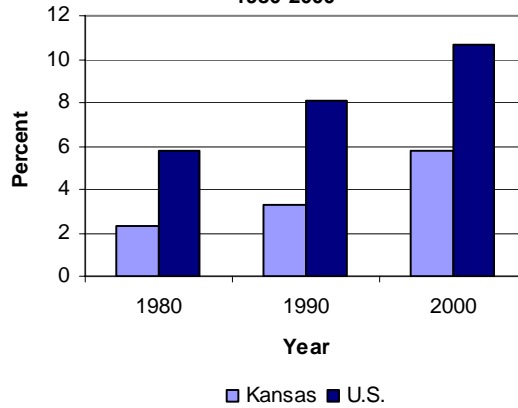
Employment figures are by place of work and do not account for self-employment.

Data not seasonally adjusted.

- Total nonfarm employment is not growing as fast in Kansas as in the entire U.S. (Table 31)

Figure 13

Percent of Civilian Labor Force that is Hispanic or Latino, Kansas and the U.S. 1980-2000



Source: U.S. Census Bureau.

- With Hispanics and Latinos steadily increasing as a percentage of the civilian labor force, education and training of the Hispanic or Latino population will be crucial for a well-educated, capable workforce in Kansas. (Figure 13, Table 32)

Table 32
Hispanics or Latinos in the Civilian Labor Force
Kansas and the U.S., Census Years 1980-2000

Year	Kansas			United States		
	Total Civilian Labor Force	Hispanics or Latinos		Total Civilian Labor Force	Hispanics or Latinos	
		Number in Civilian Labor Force	Percent of Civilian Labor Force		Number in Civilian Labor Force	Percent of Civilian Labor Force
1980	1,123,496	25,773	2.3	104,449,817	5,992,723	5.7
1990	1,229,986	40,262	3.3	123,473,450	10,021,723	8.1
2000	1,374,698	79,170	5.8	137,668,798	14,719,717	10.7

Source: U.S. Census Bureau, Census 2000, SF 3, Table P150H and Table P43; 1990 Census, STF 3, Tables P072 and P070; 1980 Census of Population and Housing, U.S. Summary: Detailed Population Characteristics, Table 272, Kansas: Detailed Population Characteristics, Table 213.

Table 33
Employment by Metro and Non-Metro Portions, Kansas and the U.S.
Census Years 1980-2000 and 2004

	1980	1990	2000	2004	Growth Rate 1980-2000	Growth Rate 2000-2004
Kansas						
Total Employment	1,312,137	1,483,043	1,771,218	1,791,395	35.0	1.1
Metropolitan Portion	722,108	883,038	1,103,728	1,124,924	52.8	1.9
<i>Percent of Total</i>	<i>55.0</i>	<i>59.5</i>	<i>62.3</i>	<i>62.8</i>		
Non-Metropolitan Portion	590,029	600,005	667,490	666,471	13.1	-0.2
<i>Percent of Total</i>	<i>45.0</i>	<i>40.5</i>	<i>37.7</i>	<i>37.2</i>		
United States						
Total Employment	114,231,200	139,380,900	166,758,800	170,091,500	46.0	2.0
Metropolitan Portion	94,795,919	117,707,027	141,263,311	144,341,571	49.0	2.2
<i>Percent of Total</i>	<i>83.0</i>	<i>84.4</i>	<i>84.7</i>	<i>84.9</i>		
Non-Metropolitan Portion	19,435,281	21,673,873	25,495,489	25,749,929	31.2	1.0
<i>Percent of Total</i>	<i>17.0</i>	<i>15.6</i>	<i>15.3</i>	<i>15.1</i>		

Source: Bureau of Economic Analysis, Regional Economic Information System, Table CA25, <http://www.bea.gov/beat/regional/reis/>.

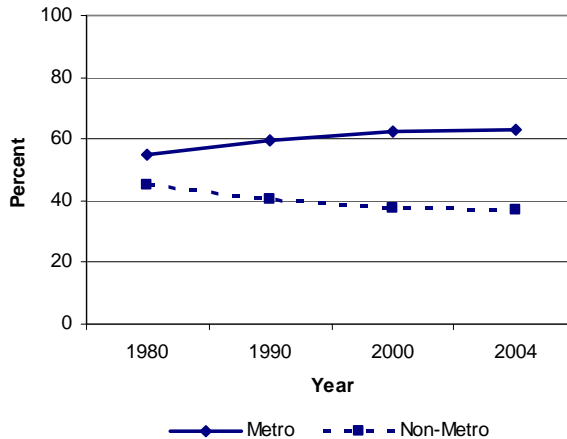
Employment is by place of work and includes full-time and part-time jobs and nonfarm self-employment.

Metro and Non-metro portions are defined according to December 2005 Office of Management and Budget standards for metropolitan and non-metropolitan.

- While employment in the metropolitan portion of Kansas continues to increase, employment in the non-metro portion saw a decrease from 2000 to 2004. (Table 33)

Figure 14

Kansas Metro and Non-Metro Employment as a Percentage of Total Employment 1980-2004



Source: Bureau of Economic Analysis.

- Non-metro employment has declined from slightly under half of statewide employment in 1980 to around one-third of the state's employment in 2004. (Figure 14)

Demographic and Labor Force Trends: Summary

Strengths:

- Higher-than-average population growth among 20-34 year olds
- Solid job growth in metro Kansas since 2000

Weaknesses:

- Net population loss in many of Kansas' non-metro counties
- Net loss of 0-19 year olds since 2000
- Negative employment growth in non-metro Kansas
- Lower overall employment growth in Kansas than the U.S.

The Changing Role of Historically Dominant Industries

Manufacturing, agriculture, and the oil and gas industry have historically been dominant sectors in the Kansas economy. However, in the new integrated global economy, technological advances are changing the face of many industries. Improvements in transportation and communications are allowing jobs in fields such as manufacturing to be relocated to cut costs, scientific innovations have led to higher productivity in many areas, and industries are becoming more or less important based on consumers' preferences. Kansas has had mixed success in dealing with these trends. Although manufacturing employment has declined significantly in Kansas since 2000, it saw a small net increase from 1990 to 2005. Even so, manufacturing firms are not likely to be major sources of new employment. The rapid productivity gains made in U.S. manufacturing have greatly reduced the need for existing and new manufacturing firms to hire large numbers of additional employees. Manufacturing, however, remains an important part of the Kansas economy.

Productivity gains and the rise of corporate farms have caused the state's farming industry to lose over 20,000 jobs since 1980. Since this trend of higher productivity will only increase as time passes, farm employment will likely continue to decline in Kansas.

Oil and natural gas production has declined during the past ten to twenty years due to a natural decrease in the amount of oil and gas available. Crude oil production has remained relatively steady since 1999 due to advances in oil extraction and increasing oil prices. Higher oil prices also likely account for a slight increase in oil and gas extraction employment from 2000 to 2004. In general, though, oil production and gas production seem destined to remain steady or decline in Kansas unless new supplies are discovered. Like manufacturing and farming, this industry should not be seen as a source for new growth.

Table 34
Manufacturing Employment,
Kansas and the U.S.
Selected Years 1985-2005
(thousands of workers)

	Kansas	United States
1990	177.5	17,695
1995	179.9	17,241
2000	200.6	17,263
2003	174.6	14,510
2004	176.8	14,315
2005	179.6	14,232

Source: Bureau of Labor Statistics, Current Employment Statistics survey.

N/A - Data not available.

- The U.S. manufacturing sector has seen a drastic decrease in employment since 1990 – nearly 2.5 million jobs have disappeared. (Table 34)
- In Kansas, on the other hand, manufacturing employment has actually increased by several thousand since 1990. (Table 34)

Table 35
Nonfarm and Farm Employment*
Census Years 1980-2000 and 2004

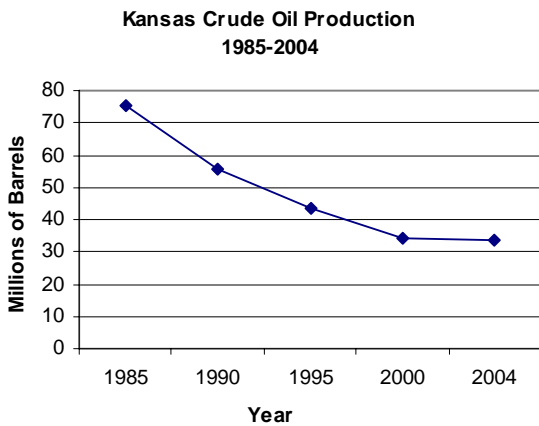
	1980	1990	2000	2004	Growth Rate 1980-2000	Growth Rate 2000-2004
Kansas						
Total Employment	1,312,137	1,483,043	1,771,218	1,791,395	35.0	1.1
Farm Employment	101,257	84,717	77,846	78,615	-23.1	1.0
<i>Percent of Total</i>	7.7	5.7	4.4	4.4		
Nonfarm Employment	1,210,880	1,398,326	1,693,372	1,712,780	39.8	1.1
<i>Percent of Total</i>	92.3	94.3	95.6	95.6		
United States						
Total Employment	114,231,200	139,380,900	166,758,800	170,091,500	46.0	2.0
Farm Employment	3,798,000	3,153,000	3,113,000	2,969,000	-18.0	-4.6
<i>Percent of Total</i>	3.3	2.3	1.9	1.7		
Nonfarm Employment	110,433,200	136,227,900	163,645,800	167,122,500	48.2	2.1
<i>Percent of Total</i>	96.7	97.7	98.1	98.3		

Source: Bureau of Economic Analysis, Regional Economic Information System, Table CA25, <http://www.bea.gov/bea/regional/reis/>.

Employment is by place of work and includes full-time and part-time jobs and nonfarm self-employment.

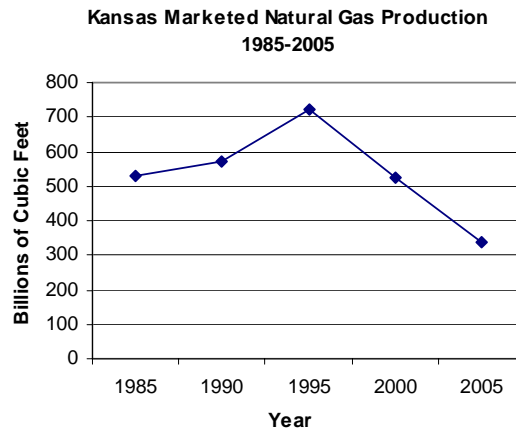
- Farm employment in Kansas has decreased steadily from over 100,000 to just fewer than 80,000 since 1980. Farming now accounts for only 4.4 percent of statewide employment. (Table 35)

Figure 15



Source: U.S. Energy Information Administration.

Figure 16



Source: U.S. Energy Information Administration.

- Crude oil production has decreased by over one half since 1985, marketed natural gas production by over one half since 1995. (Figures 15 and 16, Table 36)

Table 36
Oil and Gas Extraction Industry Employment
Selected Years 1985-2004

	Kansas	U.S.
1985	15,037	577,653
1990	8,697	395,029
1995	6,659	319,245
2000	5,720	306,776
2004*	5,936	306,862

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, www.bls.gov/cew.

* Note: In light of the switch from the Standard Industry Classification (SIC) system to the North American Industry Classification System (NAICS) after 2000, the 2004 figures were constructed by summing the figures for NAICS industries 211111, 211112, 213111, and 213112 in order to maintain comparability.

The Changing Role of Historically Dominant Industries: Summary

Strengths:

- Manufacturing employment has remained relatively stable in Kansas
- Farm employment actually increased in the state since 2000

Weaknesses:

- Crude oil and natural gas production will continue to decrease due to exhaustion of the state's supplies
- No substantial job growth can be expected from manufacturing, farming, or oil and gas extraction

Focus on Services as the Source of New Employment Opportunities

In contrast to the decline in employment from manufacturing, oil and gas, and farm production is the relative growth of all kinds of services, including financial, health, and business services. It is expected that much of the state's growth in employment will come from services. Some services, such as health care, must be delivered locally, meaning that the work cannot be done outside of Kansas. Other services, however, have recently started being delivered outside of Kansas and even the U.S.

One challenge for Kansas is that rural communities are lagging in the creation of service jobs. It will be difficult for rural Kansas communities to have sustained employment growth without a major emphasis on services.

Table 37
Employment by Industry in Kansas, Selected Years 1990-2005
(in thousands)

Industry	1990	1995	2000	2005	Growth Rate 1990-2000	Growth Rate 2000-2005
Total Nonfarm	1,088.4	1,198.0	1,344.9	1,334.7	23.6	-0.8
Goods-Producing	229.9	239.7	272.8	250.1	18.7	-8.3
Natural Resources and Mining	9.4	7.4	6.6	7.5	-29.8	13.6
Construction	43.0	52.3	65.6	63.0	52.6	-4.0
Manufacturing	177.5	179.9	200.6	179.6	13.0	-10.5
Service-Providing	858.5	958.3	1,072.1	1,084.6	24.9	1.2
Wholesale Trade	59.7	58.3	61.9	60.2	3.7	-2.7
Retail Trade	136.8	144.7	158.5	149.1	15.9	-5.9
Utilities	9.2	8.0	7.3	7.3	-20.7	0.0
Transportation and Warehousing	37.2	42.7	47.7	44.7	28.2	-6.3
Information	30.4	33.1	47.3	39.8	55.6	-15.9
Financial Activities	59.8	58.9	65.6	70.4	9.7	7.3
Professional and Business Services	76.9	104.8	129.8	132.2	68.8	1.8
Educational Services	8.6	10.6	13.6	15.6	58.1	14.7
Health Care and Social Assistance	96.4	115.5	134.4	149.3	39.4	11.1
Leisure and Hospitality	87.7	99.4	109.3	111.2	24.6	1.7
Other Services	41.0	45.1	51.9	52.9	26.6	1.9
Government	214.4	236.7	244.9	251.9	14.2	2.9

Source: Kansas Department of Labor, Labor Market Information, Nonfarm Payroll Employment, "Current Employment Statistics--actual."

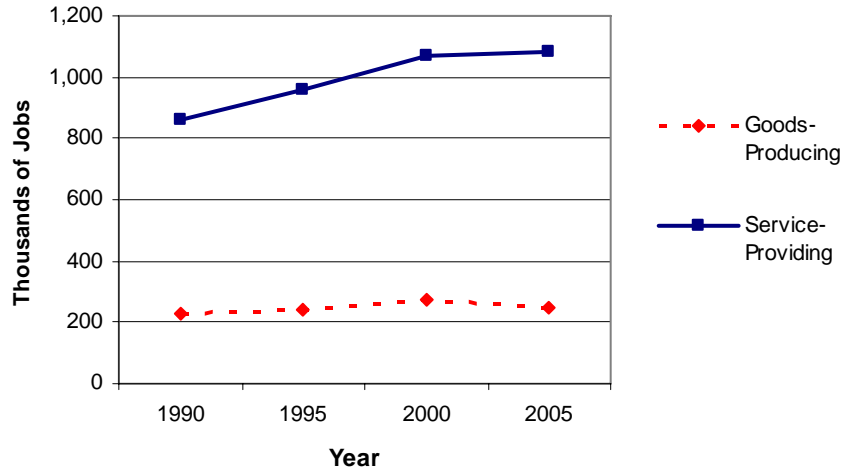
Employment figures are by place of work and do not account for self-employment.

Data not seasonally adjusted.

(Note: For a description of each industry, see Appendix B.)

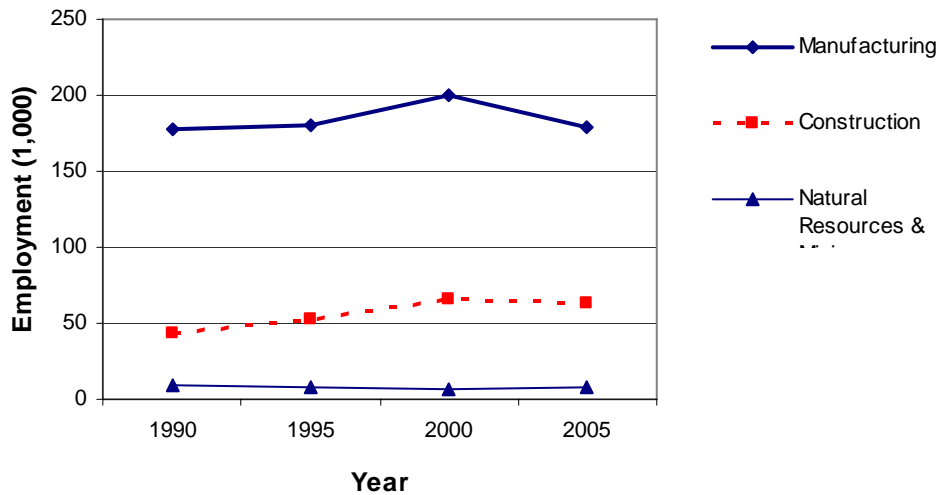
- Goods-producing employment as a whole has remained steady since 1990, with Manufacturing and Construction employment peaking in 2000 and declining since then. (Figures 17 and 18)
- Service-providing employment, on the other hand, has been on the increase since 1990. Government and Health Care and Social Assistance jobs in particular have been increasing consistently for the past 15 years. (Figures 17 and 19)

Figure 17
Kansas Goods-Producing and Service-Providing Employment



Source: Kansas Department of Labor, Labor Market Information.

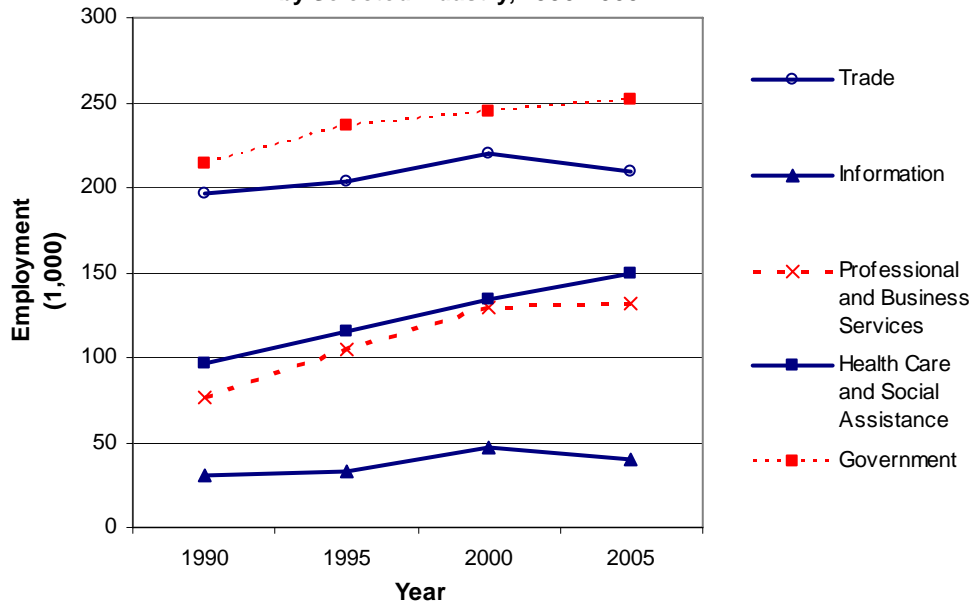
Figure 18
Kansas Goods-Producing Employment by Selected Industry, 1990-2005



Source: Kansas Department of Labor, Labor Market Information

Figure 19

Kansas Service-Providing Employment
by Selected Industry, 1990-2005



Source: Kansas Department of Labor, Labor Market Information.

Table 38

Distribution of Net Job Gains in Kansas by Industry
1990-2000 and 2000-2005
(jobs in thousands)

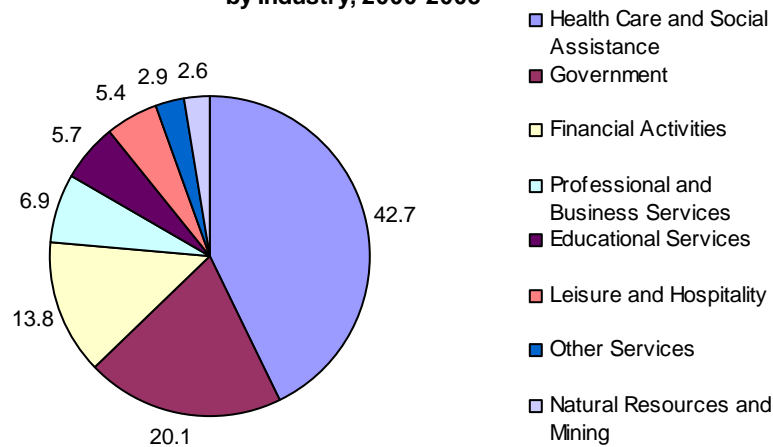
Industry	1990-2000		Industry	2000-2005	
	Number of Net New Jobs	Percent of Net New Jobs		Number of Net New Jobs	Percent of Net New Jobs
Professional and Business Services	52.9	20.2	Health Care and Social Assistance	14.9	42.7
Health Care and Social Assistance	38.0	14.5	Government	7.0	20.1
Government	30.5	11.7	Financial Activities	4.8	13.8
Manufacturing	23.1	8.8	Professional and Business Services	2.4	6.9
Construction	22.6	8.6	Educational Services	2.0	5.7
Retail Trade	21.7	8.3	Leisure and Hospitality	1.9	5.4
Leisure and Hospitality	21.6	8.3	Other Services	1.0	2.9
Information	16.9	6.5	Natural Resources and Mining	0.9	2.6
Other Services	10.9	4.2	Total	34.9	
Transportation and Warehousing	10.5	4.0			
Financial Activities	5.8	2.2			
Educational Services	5.0	1.9			
Wholesale Trade	2.2	0.8			
Total	261.7				

Source: Kansas Department of Labor, Labor Market Information, Nonfarm Payroll Employment, "Current Employment Statistics--actual."

- From 2000 to 2005, the biggest job-creating sector in Kansas was Health Care and Social Assistance, followed by the Government and Financial Activities sectors. (Table 38, Figure 20)
- Almost all of the state's new jobs were in service-providing sectors, which further illustrates that services are becoming the dominant source of new employment in Kansas. (Table 38, Figure 20)
- The biggest sources of job loss in Kansas from 2000 to 2005 were the Manufacturing, Retail Trade, and Information sectors. (Table 39)

Figure 20

Distribution of Net Job Gains in Kansas by Industry, 2000-2005



Source: Kansas Department of Labor.

Table 39

Distribution of Net Job Losses in Kansas by Industry 1990-2000 and 2000-2005 (jobs in thousands)

Industry	1990-2000		2000-2005		
	Number of Net Lost Jobs	Percent of Net Lost Jobs	Number of Net Lost Jobs	Percent of Net Lost Jobs	
Natural Resources and Mining	2.8	59.6	Manufacturing	21.0	46.5
Utilities	1.9	40.4	Retail Trade	9.4	20.8
Total	4.7		Information	7.5	16.6
			Transportation and Warehousing	3.0	6.6
			Construction	2.6	5.8
			Wholesale Trade	1.7	3.8
			Total	45.2	

Source: Kansas Department of Labor, Labor Market Information, Nonfarm Payroll Employment, "Current Employment Statistics--actual," http://laborstats.dol.ks.gov/industry/ces/ces_naics.htm.

Focus on Services: Summary

Strengths:

- Strong employment growth in many service industries
- Relatively steady employment in goods-producing industries

Weaknesses:

- Significant job loss since 2000 in the Information sector

Growing Importance of a Well-Educated and Skilled Workforce

The skills and education of the workforce have become critical components of a company's competitive edge in the business world. Kansas must insure that our state's education delivery system provides employees with the appropriate skill and lifelong learning characteristic of the New Economy.

Changes in the Kansas Economy 1985-1999

This statement still stands. Kansas firms that compete in markets beyond Kansas need well-educated and skilled employees. A major trend in the global economy is for firms to move work that can be done by low-skilled employees to places such as China, Mexico, and India where wages are much lower than in the United States. Work that is most vulnerable includes routine and repetitive types of work that can be performed by employees with low skills. In the long run, Kansas will not be able to compete for these types of jobs.

Kansans will have to compete for primarily higher-skilled jobs. Now, however, even some of these jobs are being outsourced to other countries. Examples include American tax returns being prepared in Ireland as well as in Salina or insurance claims being processed in Bangalore as well as in Overland Park. Kansas workers will be attractive to employers only if they have sufficiently high productivity to justify their higher wages. The source of such higher productivity will primarily be education and skill training. The goal for the state should be to have high school graduates continue their education until they receive either a four-year college degree or skill training through a technical college.

It is also clear that high school dropouts will not have access to as good of jobs as earlier generations of Kansans who did not complete high school. Kansas has steadily improved on this measure of education and, in 2004, only 10.6 percent of the adult population of Kansas did not have a high school degree. For the U.S., 16.1 percent did not have a high school degree. The high level of educational attainment in Kansas is a strength that needs to be built on.

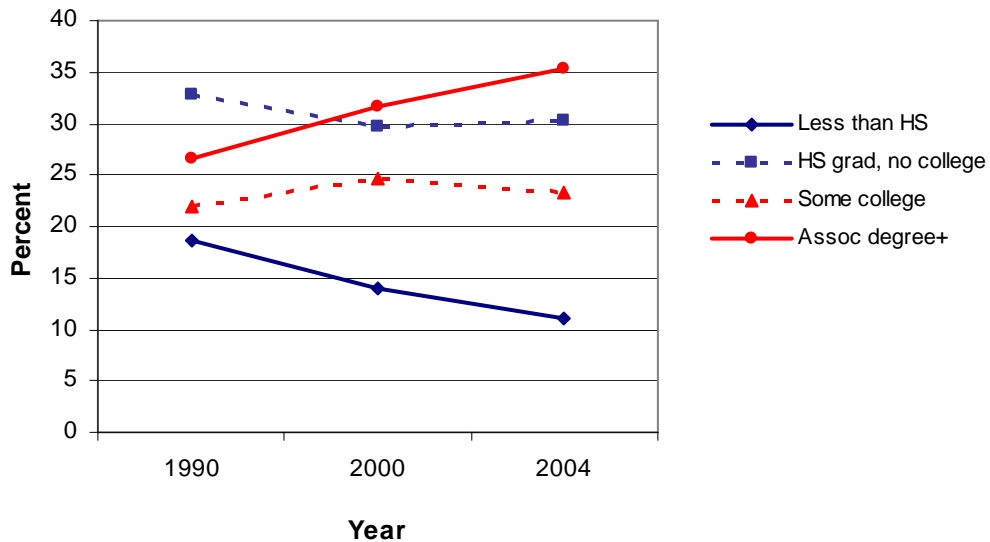
Table 40
Educational Attainment, Kansas and the U.S.
1990, 2000, and 2004
(Percent of the Population 25 Years and Over)

	Did not complete high school	High school graduate, no college	Some college, no degree	Associate degree or higher
Kansas				
1990	18.7	32.8	21.9	26.5
2000	14.0	29.8	24.6	31.7
2004	10.6	30.1	23.6	35.7
United States				
1990	24.8	30.0	18.7	26.5
2000	19.6	28.6	21.1	30.7
2004	16.1	29.5	20.3	34.1

Source: U.S. Census Bureau, 2004 American Community Survey, Kansas Data Profile; Census 2000, SF 3, Table QT-P20; 1990 Census, STF 3, Table P057.

- Education gains in Kansas have been keeping pace with those in the U.S. as a whole in recent years. Educational attainment is higher at all levels in Kansas than in the U.S., particularly in high school completion rates. (Table 40)
- The trend since 1990 has been increasing educational attainment in Kansas, particularly in the “Associate degree or higher” category. (Figure 21)

Figure 21
Educational Attainment, Kansas
Population 25 Years and Over



Source: U.S. Census Bureau, 2004 American Community Survey.

Table 41
Educational Attainment, Kansas
by Race and Ethnicity, 2004
(Percent of Population 25 Years and Over)

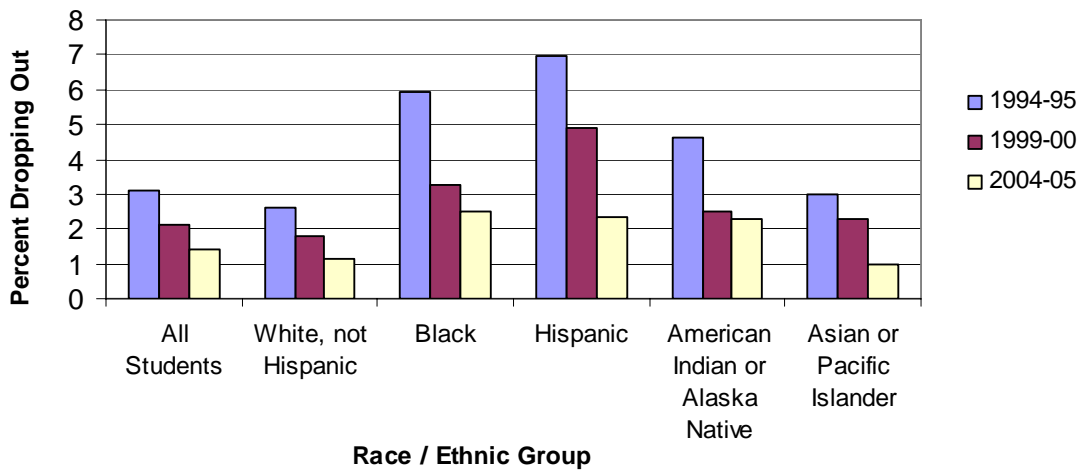
Level of Attainment	White, not Hispanic or Latino	Black or African American	American Indian and Alaska Native	Asian	Hispanic or Latino
Less than 9th grade	2.6	6.0	8.2	4.3	22.2
9th to 12th grade, no diploma	6.0	10.8	15.8	10.5	12.3
High school graduate, no college	30.4	36.8	23.9	17.3	23.9
Some college, no degree	23.9	22.1	25.1	14.0	24.8
Associate degree	7.5	10.1	10.1	6.7	3.3
Bachelor's degree	19.8	9.9	15.2	23.4	11.3
Graduate or professional degree	9.9	4.3	1.8	23.9	2.1

Source: U.S. Census Bureau, 2004 American Community Survey, Tables B15002A-I.

- As of 2004, Kansas' Hispanic or Latino population was the state's lowest-achieving race or ethnic group, with over 22 percent of Hispanics or Latinos 25 years and over having completed less than a 9th grade education. This is concerning since Hispanics and Latinos are the state's fastest-growing subgroup. (Table 41)
- The dropout rate for Hispanics and Latinos has dropped faster than for any other group since the 1994-95 school year. This is a trend that must be continued. (Figure 22)

Figure 22

High School Dropout Rate by Race and Ethnic Group in Kansas



Source: Kansas State Department of Education, K-12 School Reports.

Table 42
Enrollment in Kansas Technical Colleges
Selected Years 1996-2005

	Total Student Head Count	Full-Time Equivalent Enrollment		Total Student Head Count	Full-Time Equivalent Enrollment
Spring 1996	N/A	N/A	Fall 1996	3,262	1,959
Spring 2000	1,145	1,154	Fall 2000	3,878	1,471
Spring 2003	N/A	N/A	Fall 2003	3,588	2,784
Spring 2004	3,153	2,406	Fall 2004	2,757	2,347
Spring 2005	N/A	N/A	Fall 2005	2,627	2,267

Source: The University of Kansas, Policy Research Institute, *Kansas Statistical Abstract 1996, 2000, 2003, 2004*, Kansas Board of Regents, Institutional Research,
<http://www.kansasregents.org/research/KHEER/spring2004/tech/index.html>.

N/A -- Data not available.

- Full-time equivalent enrollment in Kansas technical colleges increased only slightly from fall 1996 to fall 2005, despite the opening of two new technical colleges – one in Atchison and one in Goodland. (Table 42)
- Relative to the state’s population, Kansas has the 3rd most S&E graduate students per 1,000 individuals 25-34 years old. This shows that the state has a solid base in training future researchers and scientists. (Table 43)

Table 43
Science and Engineering Graduate Students per 1,000
Individuals 25-34 Years Old
1998 and 2003

	1998		2003	
	Number	Rank	Number	Rank
Kansas	16.19	2	17.95	3
U.S.	10.38	-	11.76	-
Arkansas	6.15	47	6.14	47
Colorado	15.76	3	14.51	10
Iowa	11.88	12	14.21	11
Missouri	7.68	39	9.72	35
Nebraska	10.65	16	12.33	20
Oklahoma	9.04	33	9.87	32

Source: National Science Foundation, Science and Engineering Indicators 2006, Chapter 8: State Indicators.

- The state ranks 14th in S&E occupations as a share of the workforce and 31st in S&E doctorate holders as a share of the workforce. This means that a significant number of S&E degree holders work elsewhere upon finishing their degrees. (Table 44)
- Kansas ranks near the middle of states for engineers and computer specialists in the workforce and near the bottom third for S&E doctorate holders and life and physical scientists. (Table 45)

Table 44
Individuals in Science and Engineering Occupations as a Share of Workforce
2003

	Employed workforce	S&E occupations	Workforce in S&E occupations	
			Percent	Rank
Kansas	1,366,061	51,970	3.80	14
U.S.	137,406,413	4,961,550	3.61	-
Arkansas	1,204,539	21,340	1.77	50
Colorado	2,325,210	124,140	5.34	4
Iowa	1,548,215	37,320	2.41	41
Missouri	2,845,802	84,150	2.96	31
Nebraska	936,736	30,710	3.28	26
Oklahoma	1,614,418	44,360	2.75	34

Source: National Science Foundation, Science and Engineering Indicators 2006, Chapter 8: State Indicators, <http://www.nsf.gov/statistics/seind06/c8/c8.cfm>.

Table 45
Science and Engineering Doctorate Holders, Engineers, Scientists, and
Computer Specialists in the Kansas Workforce
2003

	Number in Kansas	Share of workforce (%)	Rank among states
S&E doctorate holders	4,050	0.30	31
Engineers	12,540	0.92	23
Life and physical scientists	3,910	0.29	33
Computer specialists	19,980	1.46	28
Employed workforce	1,366,061		

Source: National Science Foundation, Science and Engineering Indicators 2006, Chapter 8: State Indicators.

Well-Educated and Skilled Workforce: Summary

Strengths:

- Above-average educational attainment at all levels of schooling
- Near the top of the nation for S&E graduate students per 1,000 25-34 year olds

Weaknesses:

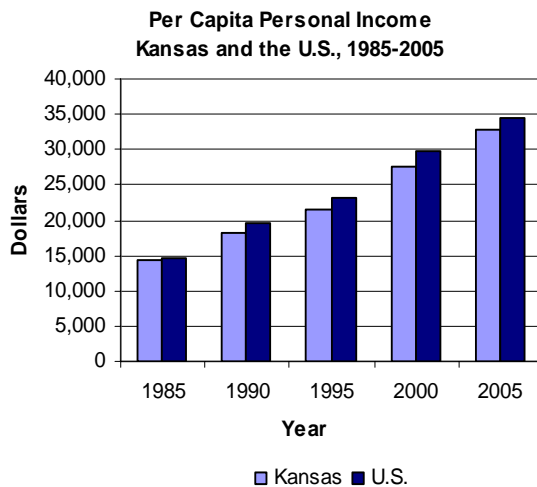
- Low educational attainment among Hispanics and Latinos, the state's fastest-growing subgroup
- Many S&E students take jobs outside of Kansas upon graduating

The Continuing Lag in Personal Income

There are two major conclusions regarding personal income in Kansas. First, per capita personal income (PCPI) and average annual pay lag the United States. Second, per capita personal income in non-metro areas of Kansas lags that of metro areas. The average non-metro Kansan receives about 75 percent of the personal income of a metro resident. This reflects the slower job growth in non-metro areas and the greater concentration of high-wage service jobs in metro areas.

One concern is that the lower income in non-metro areas provides an incentive for continued migration to urban areas, particularly for young people. An issue for the state is how to increase the number of high-wage jobs throughout the state and not just in metro areas.

Figure 23



Source: Bureau of Economic Analysis.

- Per capita personal income, which looks at income from all sources divided by population, has been consistently lower for Kansas since 1985, and the gap is growing larger. (Figure 23)

- Average annual pay is based on wage data for workers covered by state unemployment insurance laws. Average annual pay in Kansas seriously lags the United States. (Figure 24)

Figure 24

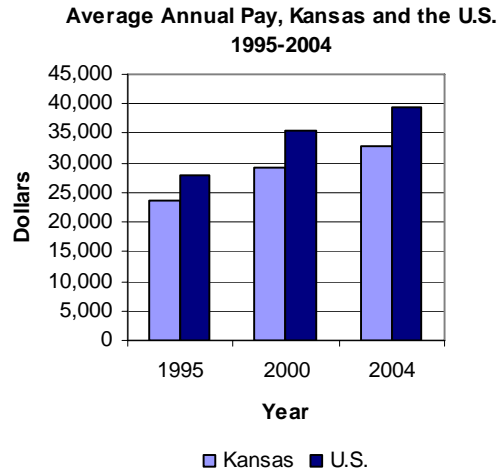
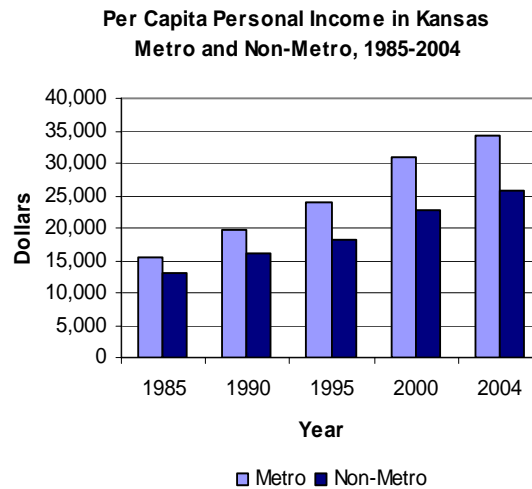


Figure 25



- Per capita personal income in Kansas' metro areas has exceeded that of its non-metro areas since 1985, and the gap has grown wider in recent years. (Figure 25)
- Non-metro per capita personal income is now only 75 percent of metro PCPI in Kansas. This creates a large incentive for Kansans, particularly young Kansans, to migrate from rural to urban areas. (Figure 25, Table 46)

Table 46
Per Capita Personal Income by Metro* and Non-Metro* Portion
Selected Years 1985-2005

	1985	1990	1995	2000	2004	2005
Kansas	14,451	18,085	21,558	27,694	31,078	32,836
Metro Portion	15,583	19,614	23,814	30,881	34,282	n/a
Non-Metro Portion	13,012	15,933	18,235	22,653	25,699	n/a
United States	14,758	19,477	23,076	29,845	33,050	34,586
Metro Portion	15,542	20,529	24,241	31,486	34,668	n/a
Non-Metro Portion	11,381	14,674	17,678	22,013	25,104	n/a
Ratio of Non-Metro to Metro						
Kansas	0.84	0.81	0.77	0.73	0.75	n/a
United States	0.73	0.71	0.73	0.70	0.72	n/a
Ratio of Kansas to U.S.	0.98	0.93	0.93	0.93	0.94	0.95

Source: Bureau of Economic Analysis, Regional Economic Accounts, Table SA1-3,
<http://www.bea.gov/bea/regional/reis/default.cfm?catable=CA1-3>.

n/a - Data not available.

* Defined according to December 2005 Office of Management and Budget standards for metropolitan and non-metropolitan.

- Kansas' larger proportion of rural area is reflected in its per capita personal income figure. This is the chief factor making Kansas' overall per capita personal income figure lower than the U.S.'s. (Table 46)
- The industries in bold in Table 47 are high-wage industries; that is, their average weekly wage is significantly over the state average of about \$660. Unfortunately, the industries with the highest wages are not the ones with the fastest-growing employment. (Table 47)

Table 47
Kansas Employment and Average Weekly Wage by Industry
1990 and 2004

Industry	Employment			Average Weekly Wage		
	1990	2004	Percent change 1990-2004	1990	2004	Percent change 1990-2004
<i>(Bold-face indicates high-wage industry)</i>						
Natural Resources & Mining	15,688	16,032	2.2	435	652	49.9
Construction	43,029	63,000	46.4	436	669	53.4
Manufacturing	177,703	176,504	-0.7	510	828	62.4
Food Manufacturing	24,122	31,981	32.6	424	657	55.0
Wholesale Trade	59,795	59,840	0.1	504	882	75.0
Retail Trade	137,021	151,056	10.2	267	401	50.2
Utilities	9,209	7,206	-21.8	669	1,194	78.5
Transportation & Warehousing	29,690	39,562	33.3	455	652	43.3
Information	30,461	41,663	36.8	506	1,077	112.8
Financial Activities	59,967	69,951	16.6	432	823	90.5
Professional and Business Services	77,075	128,259	66.4	402	684	70.1
Educational Services	6,527	10,029	53.7	317	515	62.5
Health Care and Social Assistance	95,990	146,633	52.8	380	607	59.7
Leisure and Hospitality	87,831	111,034	26.4	141	230	63.1

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, <http://www.bls.gov/cew/home.htm#data>.

The Continuing Lag in Personal Income: Summary

Strengths:

- Non-metro per capita personal income in Kansas is slightly higher than in the U.S.

Weaknesses:

- Kansas per capita personal income and average annual pay lag the U.S.
- Significantly lower per capita personal income in the state's non-metro portion
- The fastest job growth is occurring in medium- to low-wage industries

Competitive Position and Economic Dynamism

This section includes some national rankings of Kansas on factors that are expected to influence whether companies see the state as a desirable place to do business. By including certain measures, the authors are not certifying that they give an accurate picture of the Kansas economy. However, these measures are important because they are sometimes used by firms to decide which states merit consideration as locations for investments. Thus, it is important to know how the state is being ranked. This section also includes data on firm births and terminations and the presence of Fortune 1000 companies in the state, which help give an indication of the state's ability to attract and retain businesses.

The rankings in this section should be used with caution and only as guides to indicate areas of possible concerns. For example, the tax foundation ranks Kansas 34th in business tax environment. This may indicate that business taxes are relatively high in the state. However, in previous economic development efforts, the state set a goal of being in the middle on business taxes, but it has not aspired to have the lowest taxes. Taxes that are used to provide high-quality education and good infrastructure are not necessarily viewed negatively by businesses.

Table 48
State Competitiveness: Ability to Sustain High Per Capita Income and Long-term Growth

Slected States	Overall Rank	Gov't and Fiscal Policy	Security	Infra-structure	Human Resources	Tech-nology	Business Incubation	Openness	Environ-mental Policy
Colorado	5	39	30	12	20	4	2	28	6
Nebraska	10	29	4	2	9	30	27	42	13
Kansas	13	31	31	4	7	18	34	39	10
Iowa	17	20	18	17	10	28	30	40	18
Missouri	18	3	40	13	30	31	22	37	26
Oklahoma	41	25	38	33	41	39	16	47	17
Arkansas	48	19	48	45	47	50	26	45	19

Source: Beacon Hill Institute, Suffolk University, *State Competitiveness Report 2005*, <http://www.beaconhill.org/Compete05/Compete2005StateFinal.pdf>.

(Note: For an explanation of each index, see Appendix C.)

- Kansas received high rankings from the Beacon Hill Institute in Infrastructure, Human Resources, and Environmental Policy. Overall, it received a ranking of 13th for its ability to sustain high income and growth. (Table 48)
- On the other hand, Kansas received low rankings for government and fiscal policy, security, business incubation, and openness. (Table 48)

Table 49
U.S. Economic Freedom Index, 2004

	Rank	1999 Rank
Kansas	1	10
Colorado	2	14
Oklahoma	6	18
Missouri	10	13
Iowa	16	24
Nebraska	20	23
Arkansas	23	15

Source: Pacific Research Institute, *U.S. Economic Freedom Index: 2004*, Table 1, http://www.pacificresearch.org/pub/sab/entrep/2004/econ_freedom/index.html.

- The Pacific Research Institute's Economic Freedom Index, which rates each state's friendliness toward free enterprise and consumer choice, gave Kansas its top ranking in 2004. (Table 49)

Table 50
State Business Tax Climate Index,
2006

Selected States	Rank
Colorado	12
Oklahoma	17
Missouri	20
Kansas	34
Arkansas	41
Iowa	42
Nebraska	43

Source: The Tax Foundation, February 2006, "State Business Tax Climate Index," <http://www.taxfoundation.org/files/bp51.pdf>.

- Kansas was ranked behind about two-thirds of states in the Tax Foundation's Tax Climate Index, which looks at how conducive a state's tax system is to business competitiveness. (Table 50)

- The Small Business Survival Index ranks each state's policy environment for entrepreneurship by looking at 26 major government-imposed or government-related costs that impact small businesses and entrepreneurs. Kansas was ranked 31st in 2005. (Table 51)

Table 51
Small Business
Survival Index, 2005

Selected States	Rank*
Colorado	10
Arkansas	16
Missouri	18
Oklahoma	29
Kansas	31
Nebraska	32
Iowa	41

Source: Small Business & Entrepreneurship Council, Small Business Survival Index 2005, October 2005, http://www.sbsc.org/Media/pdf/SBSI_2005.pdf.

* Ranked from the friendliest to the least friendly policy environments for entrepreneurship.

Table 52
2006 Development Report Card for the States

		Rank among states						
		KS	AR	CO	IA	MO	NE	OK
Business Vitality	Business closings*, 2003-2004	8	9	1	10	32	11	7
	New companies, 2004	41	22	5	50	30	36	29
	Technology industry employment, 2003	4	39	2	38	28	26	35
Development capacity	K-12 education expenditures, 2002-2003	23	33	31	17	27	12	40
	Venture capital investments, 2004	32	42	8	41	19	46	31
	SBIC** financing, 2003-2004	43	30	6	23	20	44	37
	SBIR** grants, 2003	42	45	3	41	47	48	44
	Business created via university R&D, 2000-2002	22	11	39	30	46	29	14

Source: Corporation for Enterprise Development, 2006 Development Report Card for the States, <http://www.cfed.org/focus.m?parentid=1581&siteid=1581&id=1585>.

* A lower ranking indicates a lower rate of firm termination.

** SBIC = Small Business Investment Company, SBIR = Small Business Innovation Research.

- The CFED's 2006 Development Report Card shows a low rate of business closings and a high amount of technology employment in Kansas. (Table 52)
- The report gave Kansas low marks, however, in attracting new companies, attracting venture capital, and financially assisting small businesses. (Table 52)

Table 53
Number of Fortune 1000 Companies per State, 2006

State	Number of companies
Missouri	28
Colorado	17
Nebraska	8
Arkansas	7
Iowa	7
Oklahoma	7
Kansas	5

Source: CNN Money, <http://money.cnn.com/magazines/fortune/fortune500/states/K.html>.

- Kansas is not a leading state for corporate headquarters. (Table 53)

- Kansas lags all states in the 6-state-region in number of Fortune 1000 companies. The state is home to only one Fortune 500 company – YRC Worldwide, Inc. (Table 54)

Table 54
Kansas Fortune 1000 Companies, 2006

State Rank	Company	Fortune 1000 Rank	Revenues (\$ millions)
1	YRC Worldwide	263	8,741.6
2	Seaboard	652	2,688.9
3	Payless Shoesource	654	2,667.3
4	Ferrellgas Partners	853	1,843.5
5	Westar Energy	936	1,583.3

Source: CNN Money, <http://money.cnn.com/magazines/fortune/fortune500/states/K.html>.

Table 55
Employer Firm Birth and Termination Rates
1995 and 2000-2004

		Number of employer firms	Firm births			Firm terminations		
			Number	Birth rate ¹	Rank ²	Number	Termination rate ¹	Rank ²
Kansas	1995	63,374	7,600	12.3	32	8,387	13.5	27
	2000	67,461	6,483	9.7	46	6,981	10.5	45
	2003	68,095	7,625	11.3	30	8,392	12.4	34
	2004	69,241	6,742	9.9	n/a	7,250	10.6	n/a
United States	1995	5,369,068	594,369	13.7		497,246	14.4	
	2000	5,652,544	574,300	10.8		542,831	9.7	
	2003 ^e	5,696,600	572,900	10.1		554,800	9.8	
	2004 ^e	5,683,700	580,900	10.2		576,200	10.1	

Source: Small Business Administration, Small Business Profiles, <http://www.sba.gov/advo/research/profiles/>; SBA, Small Business Economic Indicators, <http://www.sba.gov/advo/research/sbei.html>.

¹ Firm birth and termination rates are calculated as the number of firm births or deaths during the current year as a percentage of the number of employer firms at the end of the previous year.

² Rankings are out of the 50 states plus the District of Columbia.

^e U.S. data for these years are estimates.

n/a - Data not available.

- In recent years, the Kansas economy's firm birth rate has been lower than the United States' and its firm termination rate has been higher than the United States'. (Table 55)
- This further confirms the pattern that has emerged in this section of Kansas receiving low scores in attracting new businesses and business incubation.

Competitive Position and Economic Dynamism: Summary

Strengths:

- High scores for infrastructure, human resources, environmental policy, education expenditures, and business created via university R&D

Weaknesses:

- Perceived as a mediocre state in government/fiscal environment for business
- Ranks low for government assistance to small businesses
- Fewer Fortune 1000 companies than all surrounding states
- Lower firm birth rate and higher firm termination rate than the U.S. in 2004

Conclusions

The picture of Kansas that has emerged in this report shows a state that has a foothold in certain up-and-coming areas but has not yet fully taken advantage of the opportunities that the new integrated global economy has to offer. Kansas is in the bottom half of states on many economic measures; however, the state has certain strengths that set it apart from surrounding states. Among these are high educational attainment, a large high-technology workforce, and an economy that is ranked as the friendliest in the nation toward free enterprise and consumer choice.

However, work needs to be done. This strategic economic planning effort has come at an opportune time. New technologies and economic trends are emerging, and it is crucial that the new development strategy be oriented toward putting the state in a position to fully capitalize on them. Hopefully this report has clearly identified the trends as well as giving some indication of the policy changes that they may require. Below is a brief summary of the most important implications, considerations and recommendations that emerged in the report.

Key Implications/Considerations/Recommendations

- In order to succeed and compete in the new integrated global economy, Kansas needs to increase its involvement in international trade. Kansas businesses need to consider exporting to emerging markets such as China and India, and the state should strive to attract more foreign direct investment.
- The education of the workforce, particularly Hispanics and Latinos, must be a priority. Hispanics and Latinos account for a large portion of the labor force's growth.
- A concerted effort may be needed to grow the population and business base of Kansas' non-metropolitan areas while sustaining and enhancing development in the state's metro areas.
- Manufacturing, farming, and oil and gas extraction will not be significant sources of job growth for Kansas. The state should look for most of its job growth from service-providing sectors.
- If Kansas is going to be a leader in the field of biotechnology and bioscience, a stronger effort will need to be undertaken. In particular, funding for bioscience-related R&D may need to be increased.
- The population of Kansas is getting older, and the state's 65 and over population may soon see a swift increase as the baby-boomer generation reaches retirement.
- If laws are passed that stem the flow of Hispanic or Latino immigrants into the United States, Kansas' population growth could decline significantly.

Appendix A

Additional Data on Kansas Population Growth

Table 56
Kansas Population Change by County, Metro vs. Non-Metro
2000-2005

Geographic Area	April 1, 2000 Census	Population Estimates						Numerical Change April 1, 2000 - July 1, 2005	Percent Change April 1, 2000 - July 1, 2005
		July 1, 2000 ¹	July 1, 2001	July 1, 2002	July 1, 2003	July 1, 2004	July 1, 2005		
Kansas	2,688,418	2,692,671	2,700,879	2,712,454	2,724,224	2,733,697	2,744,687	56,269	2.1
Metropolitan Portion	1,644,292	1,649,650	1,664,902	1,683,868	1,699,154	1,713,202	1,728,942	84,650	5.1
Non-Metropolitan Portion	1,044,126	1,043,021	1,035,977	1,028,586	1,025,070	1,020,495	1,015,745	-28,381	-2.7
All Micropolitan Statistical Areas	603,665	603,395	600,865	598,284	598,366	597,701	596,301	-7,364	-1.2
All Other Non-Metropolitan Counties	440,461	439,626	435,112	430,302	426,704	422,794	419,444	-21,017	-4.8
Metropolitan Portion									
(MSA = Metropolitan Statistical Area ²)									
Kansas City, KS MSA	740,364	744,370	755,912	769,009	780,660	791,005	802,082	61,718	8.3
Franklin County	24,784	24,873	25,212	25,587	25,940	26,130	26,247	1,463	5.9
Johnson County	451,086	454,582	463,901	475,939	486,852	496,892	506,562	55,476	12.3
Leavenworth County	68,691	68,966	69,947	71,175	71,948	72,443	73,113	4,422	6.4
Linn County	9,570	9,604	9,708	9,715	9,736	9,748	9,914	344	3.6
Miami County	28,351	28,501	28,705	28,934	29,231	29,811	30,496	2,145	7.6
Wyandotte County	157,882	157,844	158,439	157,659	156,953	155,981	155,750	-2,132	-1.4
Lawrence MSA									
Douglas County	99,962	100,118	100,679	101,493	102,011	102,738	102,914	2,952	3.0
St. Joseph MSA, ³ KS Portion									
Doniphan County	8,249	8,248	8,247	8,177	8,157	7,990	7,816	-433	-5.2
Topeka MSA	224,551	224,861	225,272	225,656	226,660	227,609	229,075	4,524	2.0
Jackson County	12,657	12,683	12,720	12,876	13,073	13,193	13,535	878	6.9
Jefferson County	18,426	18,467	18,590	18,699	18,812	18,951	19,106	680	3.7
Osage County	16,712	16,767	16,724	16,820	16,894	17,050	17,150	438	2.6
Shawnee County	169,871	170,068	170,419	170,490	171,051	171,553	172,365	2,494	1.5
Wabaunsee County	6,885	6,876	6,819	6,771	6,830	6,862	6,919	34	0.5
Wichita MSA	571,166	572,053	574,792	579,533	581,666	583,860	587,055	15,889	2.8
Butler County	59,482	59,692	59,960	60,478	61,035	61,694	62,354	2,872	4.8
Harvey County	32,869	32,882	32,995	33,381	33,557	33,697	33,843	974	3.0
Sedgwick County	452,869	453,491	456,090	460,154	461,835	463,383	466,061	13,192	2.9
Sumner County	25,946	25,988	25,747	25,520	25,239	25,086	24,797	-1,149	-4.4
Non-Metropolitan Portion									
Micropolitan Statistical Areas⁴									
Atchison									
Atchison County	16,774	16,760	16,810	16,753	16,783	16,860	16,804	30	0.2
Coffeyville									
Montgomery County	36,252	36,200	35,819	35,278	34,998	34,850	34,570	-1,682	-4.6
Dodge City									
Ford County	32,458	32,589	32,429	32,459	33,012	33,456	33,751	1,293	4.0
Emporia	38,965	38,996	38,962	38,765	38,699	38,922	38,690	-275	-0.7
Chase County	3,030	3,033	3,002	3,045	2,981	3,082	3,081	51	1.7
Lyon County	35,935	35,963	35,960	35,720	35,718	35,840	35,609	-326	-0.9
Garden City									
Finney County	40,523	40,619	40,195	39,369	39,086	39,170	38,988	-1,535	-3.8
Great Bend									
Barton County	28,205	28,124	28,066	28,083	28,110	28,004	28,105	-100	-0.4
Hays									
Ellis County	27,507	27,425	27,417	27,304	27,227	27,040	26,767	-740	-2.7
Hutchinson									
Reno County	64,790	64,687	64,472	63,996	63,784	63,556	63,558	-1,232	-1.9
Liberal									
Seward County	22,510	22,552	22,653	23,009	23,179	23,256	23,274	764	3.4
Manhattan	108,999	108,794	107,873	107,104	107,863	107,104	106,540	-2,459	-2.3
Geary County	27,947	27,733	27,145	26,468	26,083	25,145	24,585	-3,362	-12.0
Pottawatomie County	18,209	18,286	18,340	18,435	18,692	18,890	19,129	920	5.1
Riley County	62,843	62,775	62,388	62,201	63,088	63,069	62,826	-17	0.0

Source: U.S. Census Bureau, Annual Estimates of the Population for Counties: April 1, 2000 to July 1, 2005, <http://www.census.gov/popest/counties/CO-EST2005-01.html>.

¹ Population estimates are revised annually.

² A metropolitan statistical area (MSA) is a large population nucleus, together with adjacent communities having a high degree of social and economic integration with that core. The MSAs in this table were defined according to December 2005 Office of Management and Budget standards.

³ The St. Joseph, MO-KS metropolitan statistical area consists of Doniphan County in Kansas and Andrew, Buchanan, and DeKalb counties in Missouri.

⁴ A micropolitan statistical area is a nonmetropolitan county or group of contiguous nonmetropolitan counties that contains an urban cluster of 10,000 to 49,999 persons. These micropolitan statistical areas were defined according to December 2005 Office of Management and Budget standards.

Table 56 (continued)

Kansas Population Change by County, Metro vs. Non-Metro
2000-2005

Geographic Area	April 1, 2000 Census	Population Estimates						Numerical Change April 1, 2000 - July 1, 2005	Percent Change April 1, 2000 - July 1, 2005
		July 1, 2000*	July 1, 2001	July 1, 2002	July 1, 2003	July 1, 2004	July 1, 2005		
McPherson									
McPherson County	29,554	29,584	29,527	29,351	29,363	29,413	29,523	-31	-0.1
Parsons									
Labette County	22,835	22,749	22,485	22,337	22,293	22,154	22,169	-666	-2.9
Pittsburg									
Crawford County	38,242	38,225	38,258	37,982	38,284	38,167	38,222	-20	-0.1
Salina									
Ottawa County	59,760	59,811	59,953	60,128	59,923	60,052	60,042	282	0.5
Saline County	6,163	6,195	6,149	6,195	6,180	6,149	6,123	-40	-0.6
Saline County	53,597	53,616	53,804	53,933	53,743	53,903	53,919	322	0.6
Winfield									
Cowley County	36,291	36,280	35,946	36,366	35,762	35,697	35,298	-993	-2.7
All Other Non-Metropolitan Counties									
Allen County	14,385	14,377	14,196	14,103	13,947	13,918	13,787	-598	-4.2
Anderson County	8,110	8,099	8,204	8,159	8,224	8,170	8,182	72	0.9
Barber County	5,307	5,292	5,159	5,086	5,048	4,988	4,958	-349	-6.6
Bourbon County	15,379	15,386	15,369	15,199	15,163	15,082	14,997	-382	-2.5
Brown County	10,724	10,710	10,637	10,494	10,422	10,348	10,239	-485	-4.5
Chautauqua County	4,359	4,350	4,264	4,205	4,195	4,191	4,109	-250	-5.7
Cherokee County	22,605	22,555	22,272	22,008	21,868	21,797	21,555	-1,050	-4.6
Cheyenne County	3,165	3,158	3,103	3,050	2,989	2,968	2,946	-219	-6.9
Clark County	2,390	2,385	2,385	2,359	2,343	2,336	2,283	-107	-4.5
Clay County	8,822	8,828	8,738	8,667	8,558	8,572	8,629	-193	-2.2
Cloud County	10,268	10,221	10,077	9,958	9,873	9,746	9,759	-509	-5.0
Coffey County	8,865	8,879	8,832	8,825	8,843	8,740	8,683	-182	-2.1
Cornmanche County	1,967	1,956	1,984	1,957	1,917	1,912	1,935	-32	-1.6
Decatur County	3,472	3,461	3,438	3,385	3,310	3,261	3,191	-281	-8.1
Dickinson County	19,344	19,371	19,151	19,117	19,242	19,143	19,209	-135	-0.7
Edwards County	3,449	3,427	3,385	3,349	3,274	3,308	3,292	-157	-4.6
Elk County	3,261	3,227	3,193	3,203	3,139	3,109	3,075	-186	-5.7
Ellsworth County	6,525	6,531	6,455	6,387	6,389	6,355	6,343	-182	-2.8
Gove County	3,068	3,067	3,013	2,964	2,887	2,829	2,763	-305	-9.9
Graham County	2,946	2,922	2,885	2,873	2,811	2,751	2,721	-225	-7.6
Grant County	7,909	7,886	7,788	7,908	7,748	7,644	7,530	-379	-4.8
Gray County	5,904	5,912	5,926	5,993	6,015	5,970	5,861	-43	-0.7
Greeley County	1,534	1,540	1,532	1,452	1,407	1,412	1,349	-185	-12.1
Greenwood County	7,673	7,668	7,735	7,643	7,548	7,496	7,338	-335	-4.4
Hamilton County	2,670	2,660	2,688	2,676	2,686	2,643	2,604	-66	-2.5
Harper County	6,536	6,502	6,449	6,301	6,289	6,195	6,081	-455	-7.0
Haskell County	4,307	4,306	4,265	4,234	4,227	4,267	4,232	-75	-1.7
Hodgeman County	2,085	2,084	2,131	2,154	2,137	2,120	2,110	25	1.2
Jewell County	3,791	3,764	3,621	3,511	3,448	3,425	3,352	-439	-11.6
Kearny County	4,531	4,508	4,596	4,575	4,478	4,532	4,516	-15	-0.3
Kingman County	8,673	8,680	8,574	8,413	8,433	8,339	8,165	-508	-5.9
Kiowa County	3,278	3,254	3,138	3,100	3,126	3,079	2,984	-294	-9.0
Lane County	2,155	2,145	2,095	1,992	1,965	1,933	1,894	-261	-12.1
Lincoln County	3,578	3,575	3,558	3,508	3,511	3,407	3,411	-167	-4.7
Logan County	3,046	3,049	2,989	2,948	2,863	2,817	2,794	-252	-8.3
Marion County	13,361	13,377	13,406	13,295	13,258	13,014	12,952	-409	-3.1
Marshall County	10,965	10,938	10,818	10,649	10,528	10,416	10,405	-560	-5.1
Meade County	4,631	4,631	4,680	4,677	4,629	4,587	4,625	-6	-0.1
Mitchell County	6,932	6,915	6,769	6,698	6,680	6,519	6,420	-512	-7.4
Morris County	6,104	6,112	6,073	6,024	5,976	5,986	6,049	-55	-0.9
Morton County	3,496	3,479	3,381	3,358	3,330	3,229	3,196	-300	-8.6
Nemaha County	10,717	10,693	10,453	10,486	10,483	10,439	10,443	-274	-2.6
Neosho County	16,997	16,945	16,885	16,711	16,587	16,533	16,529	-468	-2.8
Ness County	3,454	3,444	3,357	3,279	3,155	3,067	3,009	-446	-12.9
Norton County	5,953	5,955	5,863	5,834	5,832	5,733	5,664	-289	-4.9
Osborne County	4,452	4,433	4,349	4,286	4,152	4,101	4,050	-402	-9.0
Pawnee County	7,233	7,221	7,038	6,907	6,805	6,750	6,739	-494	-6.8
Phillips County	6,001	6,001	5,878	5,770	5,665	5,610	5,504	-497	-8.3
Pratt County	9,647	9,630	9,543	9,591	9,469	9,376	9,496	-151	-1.6
Rawlins County	2,966	2,960	2,905	2,882	2,835	2,770	2,672	-294	-9.9
Republic County	5,835	5,806	5,664	5,448	5,328	5,223	5,164	-671	-11.5
Rice County	10,761	10,737	10,624	10,518	10,449	10,485	10,452	-309	-2.9
Rooks County	5,685	5,662	5,587	5,492	5,412	5,375	5,351	-334	-5.9
Rush County	3,551	3,542	3,517	3,468	3,443	3,451	3,406	-145	-4.1
Russell County	7,370	7,352	7,150	7,032	6,953	6,982	6,845	-525	-7.1
Scott County	5,120	5,100	5,097	4,927	4,837	4,629	4,600	-520	-10.2
Sheridan County	2,813	2,803	2,719	2,671	2,677	2,598	2,591	-222	-7.9
Sherman County	6,760	6,740	6,644	6,426	6,308	6,193	6,153	-607	-9.0
Smith County	4,536	4,522	4,427	4,300	4,237	4,157	4,121	-415	-9.1
Stafford County	4,789	4,765	4,729	4,667	4,574	4,536	4,488	-301	-6.3
Stanton County	2,406	2,401	2,410	2,424	2,384	2,366	2,245	-161	-6.7
Stevens County	5,463	5,459	5,364	5,325	5,340	5,492	5,412	-51	-0.9
Thomas County	8,180	8,177	8,145	8,073	7,935	7,793	7,639	-541	-6.6
Trego County	3,319	3,288	3,241	3,142	3,105	3,134	3,050	-269	-8.1
Wallace County	1,749	1,736	1,696	1,666	1,623	1,584	1,573	-176	-10.1
Washington County	6,483	6,471	6,308	6,218	6,178	6,079	6,009	-474	-7.3
Wichita County	2,531	2,522	2,529	2,482	2,452	2,342	2,309	-222	-8.8
Wilson County	10,332	10,308	10,254	10,155	10,121	9,893	9,834	-498	-4.8
Woodson County	3,788	3,766	3,784	3,655	3,631	3,549	3,572	-216	-5.7

Source: U.S. Census Bureau, Annual Estimates of the Population for Counties: April 1, 2000 to July 1, 2005, <http://www.census.gov/popest/counties/CO-EST2005-01.html>.

* Population estimates are revised annually.

Appendix B

Industry Descriptions for the North American Industry Classification System

Taken from the Bureau of Labor Statistics, Industry at a Glance, <http://www.bls.gov/iag/iaghome.htm>

Construction

The construction sector comprises establishments primarily engaged in the construction of buildings or engineering projects (e.g., highways and utility systems). Establishments primarily engaged in the preparation of sites for new construction and establishments primarily engaged in subdividing land for sale as building sites also are included in this sector. Construction work done may include new work, additions, alterations, or maintenance and repairs. Activities of these establishments generally are managed at a fixed place of business, but they usually perform construction activities at multiple project sites.

Educational Services

The educational services sector comprises establishments that provide instruction and training in a wide variety of subjects. This instruction and training is provided by specialized establishments, such as schools, colleges, universities, and training centers.

Financial Activities

The financial activities supersector is made up of two parts: the finance and insurance sector, and the real estate and rental and leasing sector.

The finance and insurance sector comprises establishments primarily engaged in financial transactions (transactions involving the creation, liquidation, or change in ownership of financial assets) and/or in facilitating financial transactions. Three principal types of activities are identified:

1. Raising funds by taking deposits and/or issuing securities and, in the process, incurring liabilities.
2. Pooling of risk by underwriting insurance and annuities.
3. Providing specialized services facilitating or supporting financial intermediation, insurance, and employee benefit programs.

The real estate and rental and leasing sector comprises establishments primarily engaged in renting, leasing, or otherwise allowing the use of tangible or intangible assets, and establishments providing related services. The major portion of this sector comprises establishments that rent, lease, or otherwise allow the use of their own assets by others. This sector also includes establishments primarily engaged in managing real estate for others, selling, renting and/or buying real estate for others, and appraising real estate. The main components of this sector are the real estate lessors industries; equipment lessors industries (including motor vehicles, computers, and consumer goods); and lessors of non-financial intangible assets (except copyrighted works).

Government

The government sector is made up of publicly-owned establishments. This sector includes establishments of federal, state, and local government agencies that administer, oversee, and manage public programs and have executive, legislative, or judicial authority over other institutions within a given area. These agencies also set policy, create laws, adjudicate civil and criminal legal cases, provide for public safety and for national defense. Establishments such as public schools and public hospitals also are included in government. The information presented here refers to civilian employment only.

Health Care and Social Assistance

The health care and social assistance sector comprises establishments providing health care and social assistance for individuals. The industries in this sector are arranged on a continuum starting with those establishments providing medical care exclusively, continuing with those providing health care and social assistance, and finally finishing with those providing only social assistance.

Information

The information sector comprises establishments engaged in the following processes: (a) producing and distributing information and cultural products, (b) providing the means to transmit or distribute these products as well as data or communications, and (c) processing data. The main components of this sector are the publishing industries, including software publishing, and both traditional publishing and publishing exclusively on the Internet; the motion picture and sound recording industries; the broadcasting industries, including traditional broadcasting and those broadcasting exclusively over the Internet; the telecommunications industries; the industries known as internet service providers and web search portals, data processing industries, and the information services industries.

Leisure and Hospitality

The leisure and hospitality supersector is made up of two parts: the arts, entertainment, and recreation sector, and the accommodation and food services sector.

The arts, entertainment, and recreation sector includes a wide range of establishments that operate facilities or provide services to meet varied cultural, entertainment, and recreational interests of their patrons. This sector comprises 1) establishments that are involved in producing, promoting, or participating in live performances, events, or exhibits intended for public viewing; 2) establishments that preserve and exhibit objects and sites of historical, cultural, or educational interest; and 3) establishments that operate facilities or provide services that enable patrons to participate in recreational activities or pursue amusement, hobby, and leisure-time interests.

The accommodation and food services sector comprises establishments providing customers with lodging and/or preparing meals, snacks, and beverages for immediate consumption. The sector includes both accommodation and food services establishments because the two activities are often combined at the same establishment.

Manufacturing

The manufacturing sector consists of establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products.

Natural Resources and Mining

The natural resources and mining supersector is made up of two parts: the agriculture, forestry, fishing and hunting sector, and the mining sector.

The agriculture, forestry, fishing and hunting sector comprises establishments primarily engaged in growing crops, raising animals, harvesting timber, and harvesting fish and other animals from a farm, ranch, or their natural habitats.

The mining sector comprises establishments that extract naturally occurring mineral solids, such as coal and ores; liquid minerals, such as crude petroleum; and gases, such as natural gas. The term mining is used in the broad sense to include quarrying, well operations, beneficiating (e.g., crushing, screening, washing, and flotation), and other preparation customarily performed at the mine site, or as a part of mining activity.

Other Services

The other services sector comprises establishments engaged in providing services not specifically provided for elsewhere in the North American Industry Classification System. Establishments in this sector are primarily engaged in activities, such as equipment and machinery repairing, promoting or administering religious activities, grant-making, advocacy, and providing dry cleaning and laundry services, personal care services, death care services, pet care services, photofinishing services, temporary parking services, and dating services.

Professional and Business Services

The professional and business services supersector is made up of three parts: the professional, scientific, and technical services sector, the management of companies and enterprises sector, and the administrative and support and waste management and remediation services sector.

The professional, scientific, and technical services sector comprises establishments that specialize in performing professional, scientific, and technical activities for others. Activities performed include: legal advice and representation; accounting, bookkeeping, and payroll services; architectural, engineering, and specialized design services; computer services; consulting services; research services; advertising services; photographic services; translation and interpretation services; veterinary services; and other professional, scientific, and technical services.

The management of companies and enterprises sector comprises (1) establishments that hold the securities of (or other equity interests in) companies and enterprises for the purpose of owning a controlling interest or influencing management decisions or (2) establishments (except government establishments) that administer, oversee, and manage establishments of the company or enterprise and that normally undertake the strategic or organizational planning and decision-making role of the company or enterprise.

The administrative and support and waste management and remediation services sector comprises establishments performing routine support activities for the day-to-day operations of other organizations. These essential activities are often undertaken in-house by establishments in many sectors of the economy. Activities performed include: office administration, hiring and placing of personnel, document preparation and similar clerical services, solicitation, collection, security and surveillance services, cleaning, and waste disposal services.

Transportation and Warehousing

The transportation and warehousing sector includes industries providing transportation of passengers and cargo, warehousing and storage for goods, scenic and sightseeing transportation, and support activities related to modes of transportation. Establishments in these industries use transportation equipment or transportation related facilities as a productive asset. The type of equipment depends on the mode of transportation. The modes of transportation are air, rail, water, road, and pipeline.

Utilities

The utilities sector comprises establishments engaged in the provision of the following utility services: electric power, natural gas, steam supply, water supply, and sewage removal. Within this sector, the specific activities associated with the utility services provided vary by utility: electric power includes generation, transmission, and distribution; natural gas includes distribution; steam supply includes provision and/or distribution; water supply includes treatment and distribution; and sewage removal includes collection, treatment, and disposal of waste through sewer systems and sewage treatment facilities.

Wholesale Trade

The wholesale trade sector comprises establishments engaged in wholesaling merchandise, generally without transformation, and rendering services incidental to the sale of merchandise. The wholesaling process is an intermediate step in the distribution of merchandise. Wholesalers are organized to sell or arrange the purchase or sale of a) goods for resale (i.e., goods sold to other wholesalers or retailers), b) capital or durable non-consumer goods, and c) raw and intermediate materials and supplies used in production. Wholesalers sell merchandise to other businesses and normally operate from a warehouse or office.

Retail Trade

The retail trade sector comprises establishments engaged in retailing merchandise, generally without transformation, and rendering services incidental to the sale of merchandise. The retailing process is the final step in the distribution of merchandise; retailers are, therefore, organized to sell merchandise in small quantities to the general public. This sector comprises two main types of retailers: store and non-store retailers.

Appendix C

Explanation of Beacon Hill Institute Indices

Taken from the Beacon Hill Institute, "State Competitiveness Report 2005,"
<http://www.beaconhill.org/Compete05/Compete2005StateFinal.pdf>

Government and Fiscal Policies

Looks at whether a state's tax rates are moderate and whether the state exhibits financial discipline (as evidenced in high state and municipal bond ratings and budget surpluses, for example).

Security

Measures whether public officials are trusted and crime is low; emphasis is placed on the importance of public safety.

Infrastructure

Gauges factors such as ease of commute, access to high-speed broadband, and the affordability of housing and energy.

Human Resources

Awards high rankings to states where labor force participation is high, skilled labor is readily available and not too expensive, and there is a strong commitment to education, training, and health care.

Technology

Takes into account R&D funding, patents issued relative to the size of the science and engineering workforce, and the importance of high-tech companies.

Business Incubation

Looks at businesses' ability to mobilize financing for investment as well as the state's business birth rate.

Openness

Measures how well a state's firms and people are connected with the rest of the world. This is based on level of exports as well as percent of the population born abroad.

Environmental Policy

States receive low rankings if they face environmental problems (e.g. air pollution, toxic releases) or have a heavy-handed policy of environmental regulation.

KANSAS, INC.

Created by the Legislature in 1986, Kansas, Inc. is an independent, objective, and non-partisan organization designed to conduct economic development research and analysis with the goal of crafting policies and recommendations to insure the state's ongoing competitiveness for economic growth. To attain our mission, Kansas, Inc. undertakes these primary activities: 1) Identifying, building, and promoting a Strategic Plan for economic development efforts in the State of Kansas; 2) To complement the Strategic Plan, Kansas, Inc. develops and implements a proactive and aggressive research agenda, which is used to identify and promote sound economic development strategies and policies; 3) Through collaboration and outreach with economic development entities and other potential partners, Kansas, Inc. conducts evaluation reviews and provides oversight of economic development programs to benchmark development efforts in the State of Kansas.

Co-Chaired by the Governor, Kansas, Inc. is governed by a 17-member Board of Directors. Board members, as mandated by legislation, include four members of Legislative leadership, a representative from the Board of Regents, the Secretary of Commerce, the Commanding General of the Kansas Cavalry, a representative from labor, and eight other members from the private sector representing key Kansas industrial sectors. Private sector members are appointed by the Governor and confirmed by the Kansas Senate.

Through analysis and open dialogue, Kansas, Inc. identifies policy options and builds the consensus essential for concerted action on vital economic issues. Kansas, Inc. is designed to be a public-private partnership with expectations that state investments are leveraged with other funds to maintain a strong research portfolio.

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