

**Volume II**

**Kansas Economic Development Study:  
Research Studies**

prepared by the  
**Institute for Public Policy and Business Research  
The University of Kansas**

**Study Director: Dr. Anthony Redwood  
Study Coordinator: Dr. Charles Krider**

**June 1986**



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Business Research  
Economic Research  
Community Development  
and Social Policy  
Policy Analysis

June 27, 1986

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Gentlemen:

I transmit to you our Final Report on the Kansas Economic Development Study, which we were commissioned to undertake in September 1985 on the basis of funding appropriated by the Kansas Legislature and matched by the private sector.

This final report comprises the following:

- Vol. I Executive Report and Recommendations
- Vol. II Kansas Economic Development Study, prepared by the Institute for Public Policy and Business Research.
- Vol. III Innovations in Economic Development: Lessons from Other States, prepared by ASLAN.
- Vol. IV Target Industry Analysis, prepared by Midwest Research Institute.

Sincerely,

Anthony L. Redwood  
Executive Director and  
Professor of Business

ALR/jeb

VOLUME II

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RESEARCH STUDIES

prepared by

Institute for Public Policy and Business Research  
University of Kansas

June 1986

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Report #108

## CONTENTS

I.	The Kansas Economy and Business Climate	1
	Long-Term Structural Changes in the Kansas Economy	4
	Recent Economic Performance of the Kansas Economy	16
	Kansas Demographic Trends	33
	Outlook for the Kansas Economy	42
	Policy Choices for Economic Growth	53
II.	Factors Considered in Site Location Decisions	64
	A Review of the Literature on Site Location	71
	Factors in Firms' Decisions to Locate or Expand in Kansas	80
	Factors Affecting Firms' Decisions not to Locate in Kansas or to Lease Operations in Kansas	86
	Factors Considered Important by Professional Site Consultants	94
III.	Kansans' Perception of Economic Development Issues	102
	Interviews with Kansas Business and Political Leaders	104
	Mail Survey of Kansas Business and Political Leaders	110
IV.	Recommendations	122
	Traditional Industries	122
	Taxation	125
	Education, Research, and Technology Transfer	131
	Finance, Capital Formation, and Innovation	142
	State Organization for Economic Development	159
	Community Development and Small Business	172
	Economic Development Strategy in State Policy Making: Human Resources, Infrastructure, and Regulation	184



## PREFACE

There has been serious concern throughout the state that Kansas could be losing its competitive edge in attracting economic development. As well, there has been a growing awareness of other states' efforts to foster new industry. Recognizing these significant developments, the 1985 Kansas Legislature appropriated funding for a research study of Kansas business conditions and climate and for the development of a state strategy for economic development. Matching funding has been provided by major Kansas organizations (listed at the end of this report), and the University of Kansas provided an equivalent contribution in resources.

The study was undertaken by the Institute for Public Policy and Business Research at the University of Kansas, in close consultation with Wichita State University, Midwest Research Institute (Kansas City), ASLAN (Washington, D.C.), and Counsel for Community Development (Boston). The main elements of the study are:

- 1) An identification of key factors affecting state economic development as perceived by Kansas business, state and community leaders, and by non-Kansans.
- 2) An identification of key factors affecting firm decisions to locate and not to locate in Kansas.
- 3) A delineation of Kansas economic trends, strengths and weaknesses.
- 4) An analysis of other states' incentives and strategies.
- 5) A target industry analysis of the types of industries best suited to Kansas and its regions.
- 6) Recommendations for consideration.

An Interim Report, prepared at mid-point of the study, was submitted in January 1986 to Governor Carlin and the Kansas Legislature. The objectives of the Interim Report were to facilitate discussion among Kansans concerning this important issue, to provide the basic framework for a state strategy, and to provide guidance for legislative action in 1986.

The Legislative Commission on Kansas Economic Development (Representative James Braden, House Majority Leader, Chair), adopted the basic strategy recommended in the Interim Report, and, assisted by Consultant Belden Hull Daniels and the authors, developed ten legislative initiatives based on the 34 recommendations of the report. These were passed by the Legislature in April 1986.

This Final Report includes the following products of extensive research undertaken by the study team:

- Vol. I     Executive Report and Recommendations
- Vol. II    Kansas Economic Development Study, prepared by the Institute for Public Policy and Business Research.
- Vol. III   Innovations in Economic Development: Lessons from Other States, prepared by ASLAN.
- Vol. IV    Target Industry Analysis, prepared by Midwest Research Institute.

A shorter version of the recommendations is included in the Executive Summary, while a more extensive version can be found in Chapter 4 of Volume II.

The authors gratefully acknowledge the splendid cooperation and analysis of the consultant organizations, in particular LaDene Morton of MRI, Bill Hamilton of ASLAN, Belden Daniels of Counsel for Community Development, and Gerry McDougall and Dennis Duell of Wichita State University. We thank the many Kansans who assisted the study with their time and views. As well, particular thanks go to Senator Wint Winter; Secretary Jamie Schwartz and his staff of the Kansas Department of Economic Development; Representative Jim Braden and members of the Legislative Commission on Kansas Economic Development; Chancellor Gene Budig; Vice Chancellor Frances Horowitz; and Dean John Tollefson of the University. Finally this study owes a great deal to the Institute's study team, Shirley Sicilian, Catherine Shenoy, Carolyn Coleman, Gary Albrecht, and Steven Maynard-Moody; also to the Institute's student research assistants, who worked on the project at one time or another, Steve Thomas, Bob Bretz, Bill Mayer, Laurian Casson, Elizabeth Elsey, Ron Riffle, and Adele Richtarik; and to the word processing staff of the Institute.

While the Institute has made extensive use of consultant advice in undertaking this study, the authors are responsible for the specific recommendations of this report.

## CHAPTER ONE

### THE KANSAS ECONOMY AND BUSINESS CLIMATE

#### SUMMARY

The Kansas economy has provided a good standard of living for the people of the state this century. As well, because of its traditional structure, the state economy did not suffer the degree of volatility resulting from national business cycle conditions that were experienced by the industrialized states. However significant changes have occurred in the national and international economic order that raise serious questions concerning the capacity of the Kansas economy to underpin adequately the welfare of Kansans in the future if present trends continue.

The purpose of this study is to identify and assess the policy choices now facing Kansas decision-makers as they seek to position the state for the next century. This will be based on an analysis of the evolution, current status, and outlook of the state's economic and demographic environment. The bottom line is that the state economy is not well positioned to go forward strongly in the next decade, so that restructuring the economic sector for a prosperous future constitutes the great challenge for Kansans in the years ahead.

Section I will analyze the significant long-term structural change from an agricultural economy to a mixed form somewhat like the national industrial structure. The key developments can be summarized as follows:

- (1) Farming, and oil and gas continue to be important sectors, but they are no longer predominant.
- (2) The state has a solid manufacturing sector, but its development has not been adequate to provide sufficient alternative employment opportunities for both natural labor force growth and labor displaced from the farms. This has led to chronic net outmigration and significant demographic changes in the Kansas population.
- (3) The industrial structure that has evolved is under-represented with industries that are expected to grow strongly in the next decade.

Section II shows that in the most recent recession (1980, 1981-82), the state economy fell further, started to recover later, and has grown more slowly than the national economy. Kansas can no longer be considered recession-proof, and the last

recession has illustrated how vulnerable the state economy is to the national business cycle. A number of factors have caused this relatively weak economic performance in recent years. Some have been beyond state influence, such as the strength of the dollar and supply-demand conditions in world markets for traditional Kansas products. Factors within our influence can be subsumed in the notion that the state has not fostered through the means available to it a new industrial mix with potential for expansion and growth.

Section III explores the demographic consequences of the changes in the Kansas economic structure. The population of Kansas, which has one of the slower growth rates in the nation, is projected to fall to 0.93 percent of the total U.S. population by the year 2000. Kansas has experienced net outmigration in every decade since 1890. Most of those leaving have been young adults and persons with higher education and skill levels. Consequently, Kansas ranks ninth among states in the proportion of population 65 and over. Within Kansas, a great many people have moved to regions of employment opportunity in the eastern part of the state.

Section IV will assess the outlook for the state economy, on the basis of likely patterns and trends. Key considerations affecting the future vitality of the existing industrial structure include the likelihood of continued depressed prices for farm products and for oil and gas, due to chronic oversupply in world markets, the likelihood of modest growth at best for the aviation industry, and the secondary impact on the service sector of this expected softness in the core sectors. In essence, the state depends on a set of industries that have served it well in the past but that cannot be counted upon to "carry" it in the future, although they will remain very important.

At the same time, under the imperative of powerful international forces, the U.S. economy is being transformed by innovation and technological change. Kansas does not have a comparative advantage that would naturally attract this type of industry en masse, so that the existing economic base is underrepresented with growth sectors. However, the state does have a significant set of major strengths upon which future economic development can be based and present trends diverted.

The fundamental question for Kansas therefore is how to foster the type and degree of economic activity that will provide a sound economic foundation for the future. The final section will analyze the policy choice facing the state:

- (1) Will the outcome of existing trends provide an acceptable level of economic and social welfare for Kansans, or must Kansans pursue economic development to

achieve standards that will be enjoyed by other Americans?

- (2) What form of economic development is realistically feasible? Given the existing structure, what form of development can be countenanced? Can a radical change be induced, with the development of whole new sectors in the economic base, or will it be possible only to foster innovation and competitiveness largely in what already exists?
- (3) What strategy will produce optimum economic development for Kansas? What is the legitimate role of the state? Should the primary focus be on retaining and expanding existing industry, and on nurturing new activity through home-spun entrepreneurship, or should it be on attracting new industry to the state? What are the main barriers to development?
- (4) What are the key elements of an optimum strategy for Kansas? What level of resource commitment and other changes will be necessary for that strategy to achieve a significant improvement over trend?

## I. LONG-TERM STRUCTURAL CHANGES IN THE KANSAS ECONOMY

Significant long-term changes have occurred in the state's economic structure over this century, and since World War II in particular--changes that have brought in their wake a profound, albeit gradual, transformation in the state's economic character and demographic composition. The Kansas economy has evolved from a predominantly agricultural one to a mixed form somewhat like the national industrial structure. The trend has been one of long transition from farming to other forms of activity, so that today farming produces about 8 percent of state product and manufacturing, 20 percent (Table 1.1). These figures would have been reversed fifty years ago.

The pattern of long-term structural change will be illustrated through trends in income and employment measures of economic activity since 1950, with particular emphasis on agriculture. The demographic consequences of this structural change for the Kansas population will then be identified in Section III.

### Personal Income

Personal income in Kansas has grown substantially in recent decades while farm income has increased relatively modestly; indeed nonfarm income has grown from \$2,500 million in 1950 to more than \$30,000 million in 1984 (Figure 1.1). The decline in the importance of the farm sector is reflected in the fact that whereas farm personal income accounted for more than 20 percent of total personal income in 1950, it represents 5 percent today (Figure 1.2, Table 1.2).

There have been dramatic changes in the contribution of the major economic sectors to the earnings of Kansans (Figure 1.3). Concurrent with the decline of the farm sector has been the emergence of manufacturing as the largest income generator, though this has leveled out somewhat, and of the service sector, which has continued to increase until recently. The latter is also likely to stabilize at around the United States average. At the same time, mining, the other key sector in the Kansas economic base, exhibited steady decline from 1950 to 1970, a resurgence to a 1982 peak, and then decline again, all within a 2 to 4 percent range of Kansas earnings.

The pattern is clear. Agriculture and mining, two key elements of the Kansas economic base combined, contribute less than 10 percent directly to state income, and the proportion is likely to decrease further. Manufacturing is the primary income contributing sector, closely followed by the service sector; significantly, manufacturing in Kansas has stabilized at a proportion lower than U.S. average.



**Table 1.1**  
**Kansas and U.S. Gross National Product**  
**by Industry (Percentage)**

	1960	1970	1980
<b>KANSAS</b>			
Farming	13.05	9.99	8.63
Manufacturing	19.08	19.48	20.20
Service	8.01	9.99	10.86
Government	13.07	14.74	11.33
Trade	15.33	17.38	17.11
Construction	4.95	4.38	5.06
Mining	NA	2.49	5.28
*Not available			
SOURCE: Kansas Department of Economic Development			
<b>UNITED STATES</b>			
Farming	4.01	2.64	2.91
Manufacturing	28.57	25.59	22.10
Government	9.35	11.73	11.80
Mining	2.49	1.77	3.65

SOURCE: Survey of Current Business, 1981.

**Table 1.2**  
**Percentage of Private Income by Industry**

	1960		1970		1980	
	US	KS	US	KS	US	KS
Farm	3.45	13.90	2.24	8.30	1.45	5.40
Manufacturing	22.63	18.90	19.68	13.70	16.37	15.30
Service	7.39	11.00	8.84	9.40	10.12	10.37
Government	11.67	12.20	13.70	14.20	11.68	10.87
Trade	11.49	20.00	11.18	12.20	10.51	11.99
Construction	3.97	NA	4.13	NA	3.50	4.48
Mining	1.40	2.70	1.04	1.48	1.79	2.65
Other	38.00	21.30	39.19	40.72	44.58	38.94
<b>Total</b>	100.00	100.00	100.00	100.00	100.00	100.00

SOURCE: U.S. Department of Commerce, State Personal Income: 1929-82.

The final income-related indicator of structural change in the Kansas economy is a comparison of total U.S. personal income and total Kansas personal income shown (Figure 1.4). Kansas personal income kept pace with U.S. personal income during the 1950s. However, beginning in 1963, Kansas personal income began growing at a slightly lower rate than the U.S. average. Although there are periods when the rate of growth in Kansas exceeds the U.S. growth rate, in general the gap between the United States and Kansas continues to expand.

## Employment

The most important employment-related measure indicating structural change is a shift in the distribution of jobs among different economic sectors. The significant shifts in Kansas sectors are shown in Table 1.3, as well as sector comparisons with national averages. Kansas farm sector employment has decreased from 15 percent of total Kansas employment in 1960 to 5 percent in 1984, but remained above the national average of 3 percent. On the other hand, Kansas manufacturing employment slowly increased over this period from 14 to 16 percent of the total, while the national proportion declined from 25 to 18.5 percent. Employment in other Kansas sectors has increased in the same manner as nationally, and the respective distributions tend to converge.

Two important points can be made in relation to these changes. First the economic base of Kansas, the basic sectors of agriculture, mining, and manufacturing, now employ around 22.34 percent of the Kansas work force; the corresponding national figure is 22.59 percent. In 1960, the Kansas economic bases employed 31 percent of its workforce, the U.S. 35 percent, so that convergence is occurring. Supporting sectors in Kansas, such as service, trade and government, therefore serve an economic base today that is more similar to the national base than ever before. Second, the decline in agricultural employment has been precipitous, and greater than the capacity of manufacturing to grow. While the supporting sectors have also grown, their size is limited by that of the economic base. The changing demographics of the Kansas population will show that employment growth in manufacturing and other expanding sectors has been chronically inadequate to offset the displacement of labor from Kansas farms in the past, leading to net outmigration. However, as the economic bases converge, the intensity of this problem may now be lessening.

The factors underlying the decline in agricultural employment will be analyzed later in this section. Two conclusions can be stated here. First, there is little if any reason to assume that the farm sector and related industries will expand employment in the future and there are compelling reasons



Figure 1.1  
Farm and Nonfarm Personal Income in Kansas, 1950-1984  
(Millions of Dollars)

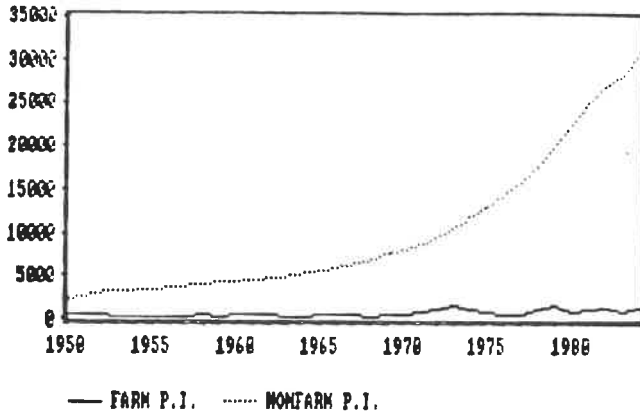


Figure 1.2  
Farm & Nonfarm Personal Income in Kansas  
Expressed as a Percent of Total Personal Income  
1950-1984

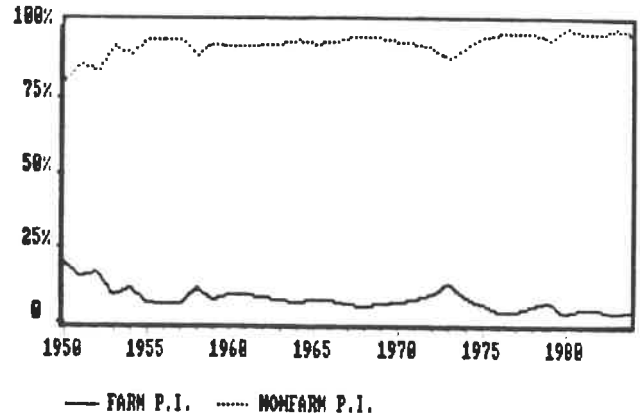


Figure 1.3  
Manufacturing, Services, Farm, & Mining Earnings in Kansas  
Expressed as a Percent of Total Earnings in Kansas  
By Place of Work, 1950-1984

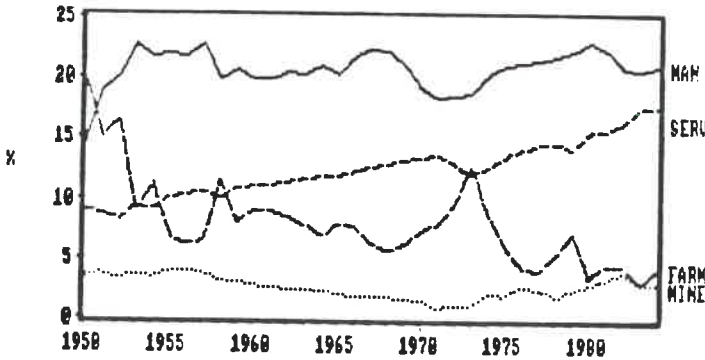
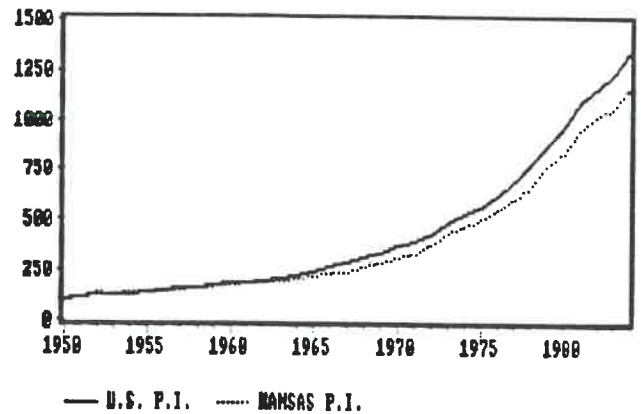


Figure 1.4  
Total Personal Income in the U.S. and Kansas, 1950-1984  
Indexed--1950=100



Source: Indexes calculated from Bureau of Economic Analysis data.

Table 1.3  
Percentage of Total Employment Contributed by Different Sectors

	1960		1970		1980		1984	
	US	KS	US	KS	US	KS	US	KS
Farm	8.30	14.80	4.40	9.39	3.39	5.65	3.16	5.16
Manufacturing	25.54	14.00	24.62	15.19	20.43	16.83	18.49	15.61
Service	11.22	8.45	14.68	11.64	19.13	14.73	19.77	16.24
Government	12.66	13.89	15.95	17.45	16.36	16.56	15.22	16.48
Trade	17.32	15.73	19.12	18.00	20.45	20.00	21.08	21.07
Construction	4.45	4.09	4.56	3.62	4.38	4.11	4.14	3.73
Mining	1.08	2.05	.79	1.24	1.03	1.43	.94	1.57
Other	19.44	26.98	15.87	23.46	15.94	20.69	17.22	20.13
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

SOURCE: Bureau of Labor Statistics.

to think they will shrink further. Second, there is the likelihood however that future declines will be relatively modest, as the scope for further substitution of land and capital for labor reaches its limit. This means that future employment growth need only cover the natural rate of expansion of the Kansas labor force to provide adequate job opportunities for Kansans, rather than additionally covering farm sector displacement.

Mining employment in Kansas exhibits several characteristics (Figure 1.5, Table 1.3). First, it has been relatively insignificant (range 1-2 percent) though greater than national average. Second, it has declined more rapidly than nationally. Third, Kansas mining, which is predominantly oil and gas, has exhibited considerable employment sensitivity to price changes, which are beyond the control of Kansas producers (Figure 1.6).

Given then that agricultural employment will still decline, albeit modestly, that mining's contribution to employment is also likely to decline, also modestly, (being limited as it is by the restricted nature of the state's resources and its acute sensitivity to price movements), and that the supporting sectors cannot grow without growth in the primary sectors, then manufacturing appears, by the process of elimination, to be the principal industry with the potential for growth and increased employment opportunities. (Manufacturing is conceived here in the broad sense of including types of product development like information systems and software that are usually defined as service.)

Figure 1.7 shows manufacturing as a percent of total industrial employment for Kansas and the United States since 1960. Nationally this percentage has seen a steady downward trend since 1960. In Kansas manufacturing has remained a more stable proportion of employment although there has also been a slight downward trend. The more significant factor is the relative fluctuation of Kansas manufacturing employment. This volatility reflects the movements of the aircraft component of the durable sector, beginning in the early sixties (Figure 1.8). Coincidental with the Vietnam War there was a major expansion in aircraft employment in Kansas which lasted until the late sixties, followed by a tremendous decline in the 1970s, a further surge around 1980, and a significant decline thereafter.

The manufacture of durable goods constituted 60 to 70 percent of Kansas manufacturing, and one subsector, aircraft, has comprised over 20 percent of total manufacturing employment. The nondurable component, dominated by food and meat products, has also exhibited greater volatility than the U.S. average, but with its trend decline also being much more modest than nationally (Figure 1.9).

Figure 1.5  
Mining Employment in the U.S. and Kansas  
Expressed as a Percent of Total Employment  
1960-1984

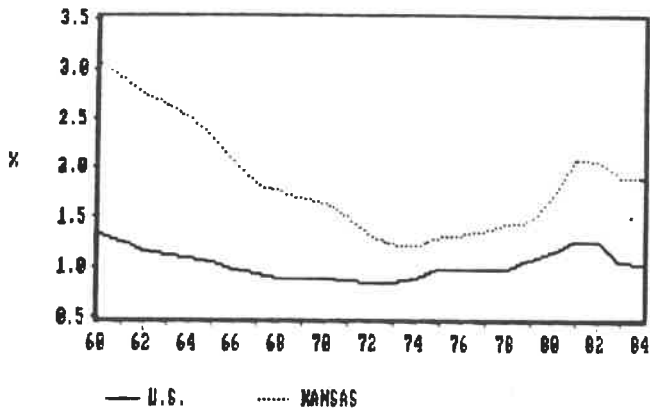


Figure 1.6  
Mining Employment in the U.S. and Kansas, 1960-1984  
Indexed—1960= 100

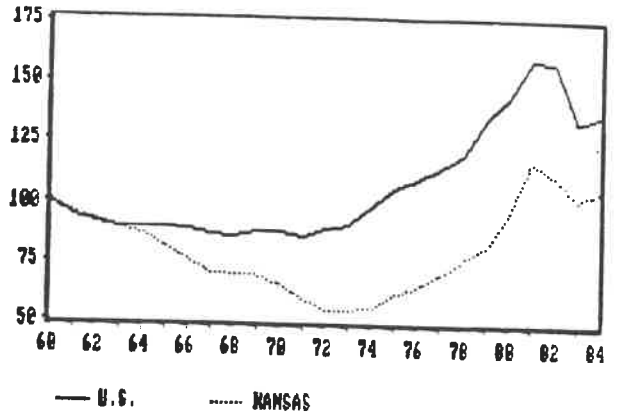


Figure 1.7  
Manufacturing Employment in the U.S. and Kansas  
Expressed as a Percent of Total Employment  
1960-1984

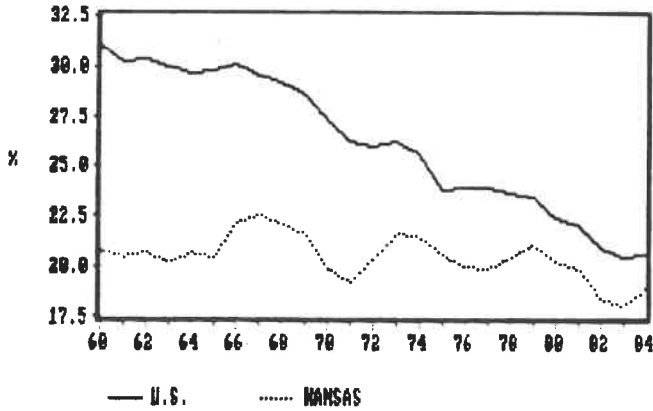


Figure 1.8  
Durable Goods Employment in the U.S. and Kansas  
Expressed as a Percent of Total Employment  
1960-1984

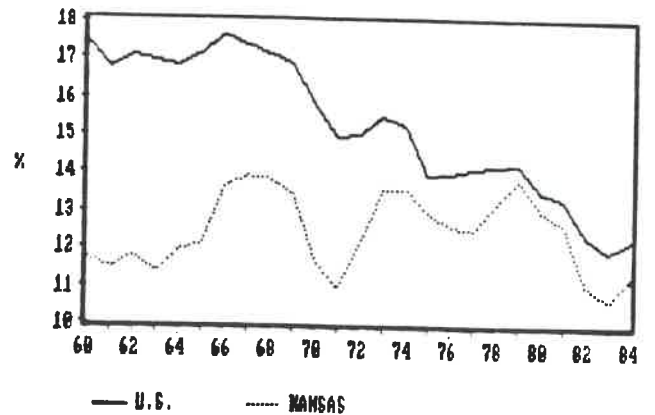


Figure 1.9  
Non-Durable Goods Employment in the U.S. and Kansas  
Expressed as a Percent of Total Employment  
1960-1984

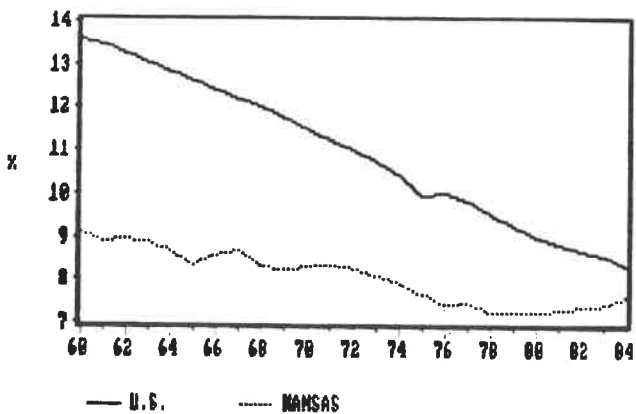
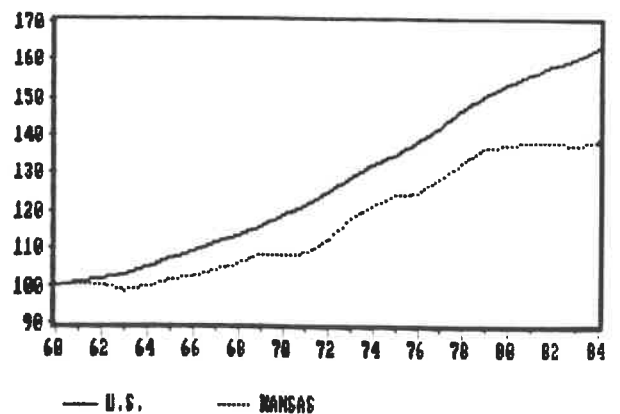


Figure 1.10  
Civilian Labor Force in the U.S. and Kansas, 1960-1984  
Indexed--1960=100



Source: Indexes calculated from Bureau of Labor Statistics data and Kansas Department of Human Resources, Kansas Civilian Labor Force.

In summary, Kansas manufacturing, in contrast to national average, is a lesser, though more steady, proportion of total employment. Because of its greater reliance on the durable component, it has shown greater volatility than national manufacturing. The sector has been dominated by aircraft (over 20 percent) and food and meat products (near 20 percent).

What has been the overall trend in the labor force in recent decades? Several measures of Kansas employment growth show the same pattern. The index of civilian labor force (Figure 1.10) and of total employment (Figure 1.11) indicate fewer job opportunities being generated through the 1960s, a widening of this gap in the early 1970s, followed by a narrowing in the late 1970s, and then a significant widening in the 1980s. In essence, while Kansas employment grew, it did so at a consistently slower rate than the U.S. average.

However, an examination of total establishment employment, which excludes farm employment, yields a more favorable scenario. Kansas total establishment employment growth has been much closer to the U.S. average and even exceeded the national average between 1975 and 1980 (Figure 1.12). Kansas farm employment on the other hand experienced a 50 percent decline from 1960 to 1980 (Figure 1.13) and it has been the inability of the state to offset this decline while catering for normal labor force population growth that underlies the slow employment growth rate of the state relative to national performance.

### The Changing Kansas Farm<sup>1</sup>

Because of its central significance to the evolution of the Kansas economy, some further indication of the changes occurring in the farm sector is appropriate. In overview, the number of farms continues to decline and the size of farms continues to grow. Farm production has become increasingly reliant on capital and other purchased inputs and less upon labor.

In a context of constant total acreage in Kansas agriculture, Figure 1.14 illustrates the evolution of farm size and numbers for Kansas. The number of farms in all except the two largest size classes have been declining steadily since World War II. Only farms in the 1,000-plus acres and the 599-999 acre categories have increased in number over this period. This concentration of farm production in fewer, larger farms is further illustrated in Figure 1.15, which shows that farms with

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<sup>1</sup>This section is based on Richard Sexton and John Cita, "The Changing Structure of the Kansas Farm," Kansas Business Review, Vol. 5, No. 6, 1982, pp. 1-12.

Figure 1.11

Total Employment in the U.S. and Kansas, 1960-1984  
Indexed--1960=100

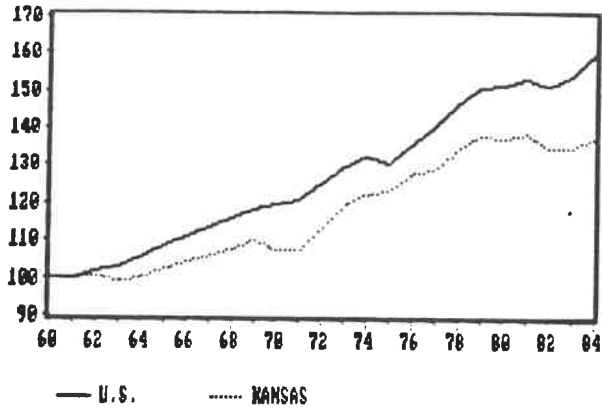


Figure 1.12

Total Establishment Employment in the U.S. and Kansas, 1960-1984  
Indexed--1960=100

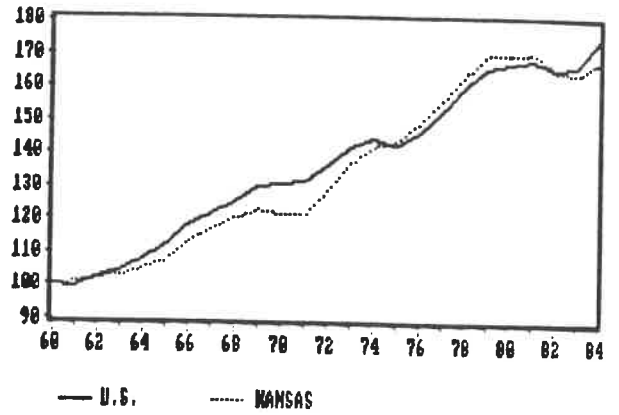
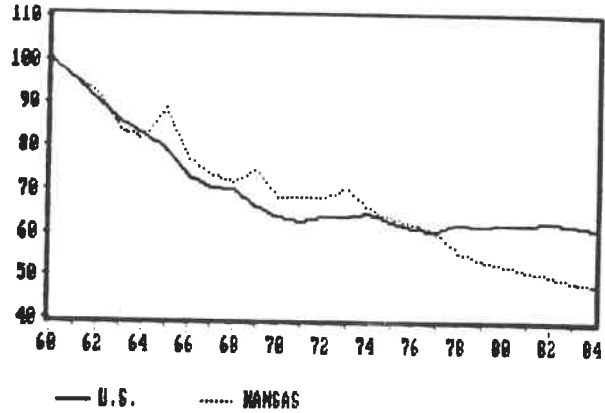


Figure 1.13

Kansas and U.S. Farm Employment, 1960 to 1984  
Indexed to 1960 = 100



Source: Indexes calculated from Bureau of Labor Statistics data and Kansas Department of Human Resources, Kansas Civilian Labor Force.

Figure 1.14  
**Number of Farms by Acres Harvested in Kansas  
 1945-1982**

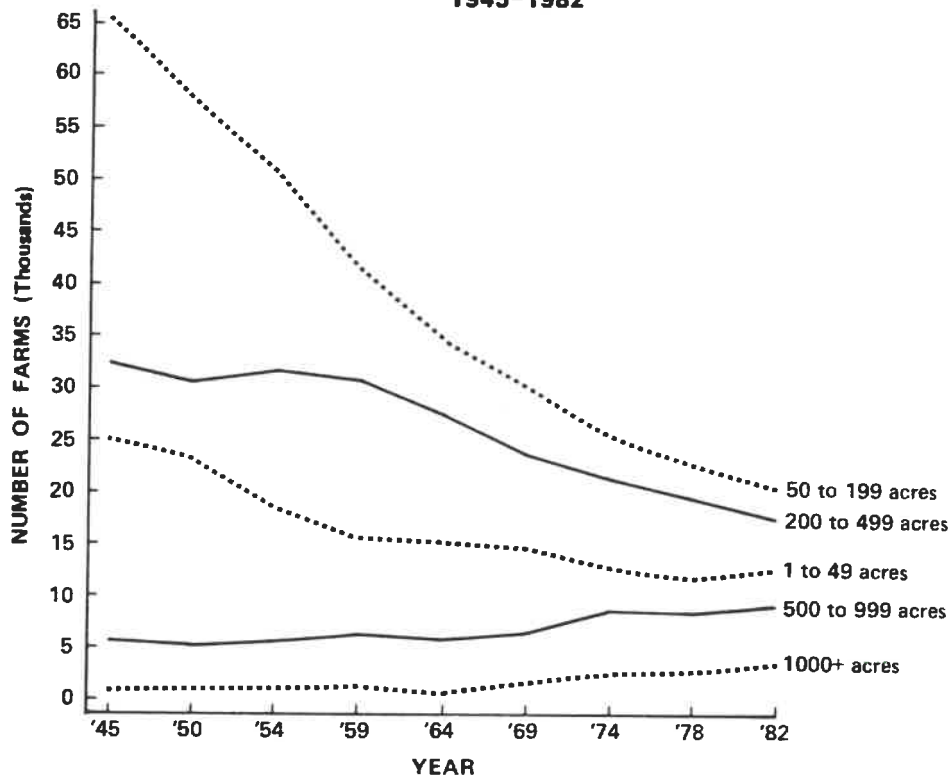
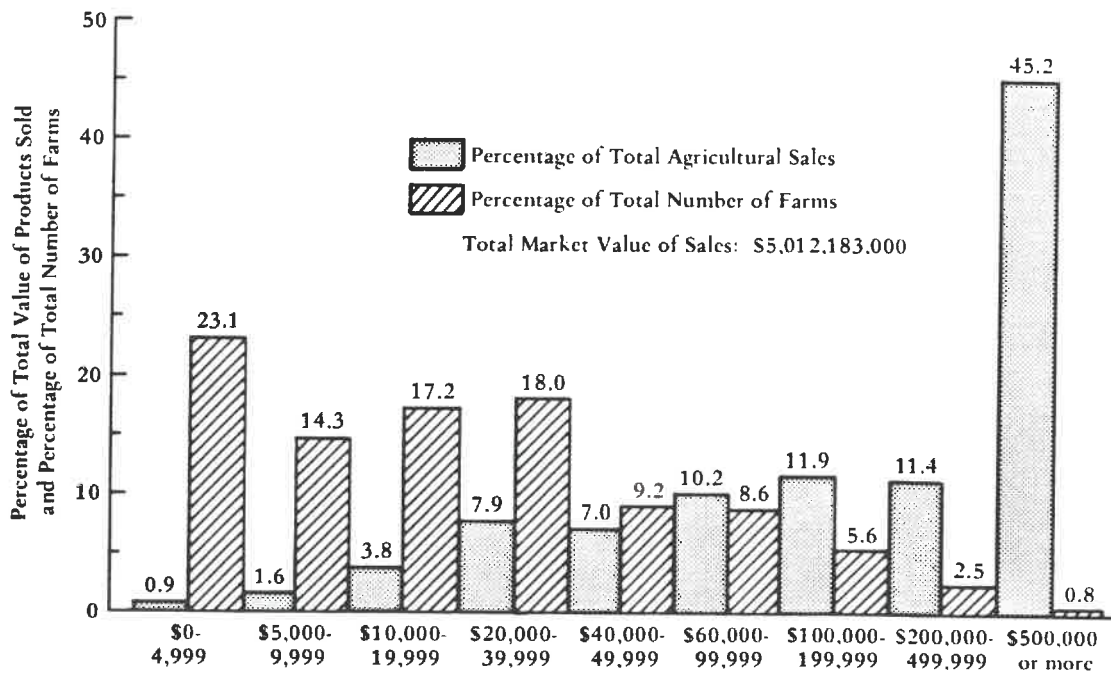


Figure 1.15  
**Percentage of Total Agricultural Sales in Kansas  
 by Farms Classified by Sales (1978)**





\$500,000 or more in sales (less than 1 percent of farms) account for over 45 percent of total farm production in Kansas.

In addition, the structure of production inputs in Kansas agriculture has altered markedly over time. Farming in Kansas has been transformed from self-sufficient enterprises of settlement days--which relied almost exclusively on land, family labor, and animal power as inputs--to market-oriented establishments which depend more and more heavily on outside, purchased inputs.

Technological change has been the principal catalyst in this structural revolution, and much of this change can be classified as labor saving and capital using. The result has been a substantial decline of labor input into agriculture and a commensurate increase in machinery use. In addition, whole new classes of inputs have been developed, e.g., chemical fertilizers, herbicides, and pesticides. These technological breakthroughs have also been labor saving, replacing, for example, time-consuming, manual methods of cultivation.

More recent developments in the revolution in farm input structure for Kansas are detailed in Table 1.4, below which measures change in the use of farm inputs since 1950 relative to the 1977 base year for the Northern Plains region (Kansas, Nebraska and the Dakota's). In 1950, agriculture was still heavily labor intensive, but this had declined dramatically by 1983. In contrast, chemical usage designed to enhance yield per acre had increased multiple times, and the relative importance of capital machinery also increased significantly.

Two major consequences follow. First, the larger capital intensive farms are more vulnerable to the vagaries of the national business cycle, especially with respect to interest rate variation. Second, capital and chemical intensive farms employ fewer and fewer people.



**Table 1.4**  
**Indexes of Total Farm Input and Major Input Subgroups,**  
**Northern Plains Region, 1950-83**  
**(1977=100)**

Year	Farm labor	Mechanical power and machine	Agricultural chemicals
1950	240	77	4
1951	239	82	4
1952	229	87	5
1953	223	88	7
1954	223	89	8
1955	211	90	9
1956	194	90	9
1957	191	88	9
1958	181	88	11
1959	166	83	15
1960	164	85	16
1961	153	79	21
1962	152	81	22
1963	147	77	26
1964	140	77	27
1965	132	78	31
1966	127	80	42
1967	127	84	51
1968	124	85	60
1969	118	87	58
1970	117	84	65
1971	118	86	68
1972	112	84	72
1973	113	90	80
1974	112	94	80
1975	106	100	78
1976	103	98	95
1977	100	100	100
1978	96	100	107
1979	94	104	118
1980	92	99	123
1981	92	99	122
1982	88	96	110
1983	78	91	96

SOURCE: U.S. Department of Agriculture.

## II. RECENT ECONOMIC PERFORMANCE OF THE KANSAS ECONOMY

During and following the 1980 and 1981-1982 recessionary periods the Kansas economy fell farther, started to recover later, and has grown more slowly than the national economy. This contrasts with the traditional view of Kansas enjoying a stable economy, an economy not subject to the national cyclical fluctuations.

In order to analyze the cyclical behavior of the Kansas economy, this section will first document recent business cycles. Employment, income, and business establishment data will show that, relative to the United States, Kansas performance has been weak. Also, application of an analytical technique, shift-share analysis, will show that particular Kansas industries are growing more slowly than their national counterparts.

The second objective of this section is to discover whether the stability of the Kansas economy prior to the 1980-1982 period was, as has been suggested, "a fortuitous combination of events rather than the effect of an inherently stable economy," or, whether the weak performance during the 1980-1985 period was due, at least partially, to some special factors including the effect of the strength of the dollar on the state's agricultural and manufacturing sectors and the effect of the falling price of oil on the state's mining sector. That is, we need to know if Kansas's failure to participate fully in the recovery from the latest downturn is an unusual development or an event that signals the future behavior of the Kansas economy.

The possible danger awaiting the state in the not-too-distant future is that when the national economy turns down again--as it inevitably must, given its cyclical character--the Kansas economy will again suffer an above-average impact and, then, will rebound more weakly than ever before. In this respect, it can also be said that the study's thesis is that the long term has caught up with the short term; Kansas is simply no longer well positioned to ride out with equanimity the fluctuations of the national business cycle.

### Performance of Employment Over Recent Recessionary Periods

Total employment during the 1980 and 1981-1982 recessions and the subsequent recoveries shows that the Kansas Economy has fallen farther, started to recover later, and has grown more slowly than the national economy. The brief respite between the 1980 recession and the 1981-1982 recession allowed the number of employed from 1980 to 1981 in Kansas to increase. Figure 2.1 shows that in 1981 there were slightly more people employed in Kansas than in 1979. Total employed in the U.S. continued to rise from 1980 to 1981. The effect of the 1981-1982 recession was a

decline in employment in both the U.S. and Kansas, but the decline is much steeper in Kansas than in the United States. Further, the steep decline in Kansas from 1981 to 1982 began at a level of employment similar to the 1979 level of employment. In the United States, on the other hand, employment fell in 1982 to a level of employment that was still above the 1979 level. The 1981-1982 recession officially ended in November of 1982 so that the entire year of 1983 was a recovery year. Employment in Kansas rose by very little from its low 1982 level, while the rate of increase for the United States was substantially higher. As the expansion continued in 1984, the level of employment increased in both the United States and Kansas. In 1984 the expansion was, as in 1983, more rapid for the U.S. than for Kansas: Kansas lost jobs between 1979 and 1984 while the U.S. was making great gains in the number of people employed.

The cyclical patterns of total employment, measured by household surveys, and of employment measured by firm surveys are quite similar (Figures 2.1 and 2.2). Since the difference between the two is largely that surveys of establishments will not pick up farm employment, we may conclude that farm employment is not counter-cyclical. Comparison of Tables 2.1 and 2.2 illustrates this point. When we consider the farm sector alone, we see that farm employment in Kansas, consistent with the long-term trends discussed in the first section, has dropped continuously since 1979. The Kansas decline contrasts with farm employment in the United States, which rose slightly in 1980 and 1981. Figure 2.3 shows the indexed level of farm employment for Kansas and the United States.

The declines in both the level of employment in Kansas and Kansas employment relative to the United States have reduced the size of the labor force, which consists of people who are employed and people who are actively seeking employment. Figure 2.4 shows that from 1979 to 1984 the U.S. labor force increased by approximately 8 percent whereas in Kansas the rate of growth was around 1 percent over this time period. Kansans leaving Kansas in order to become employed have probably kept the state labor force from growing apace with the nation's. The reason the unemployment rate in Kansas is normally lower than the U.S. rate is that often when a Kansan is unemployed he leaves the state to find work.

As explained in the first section of this paper, as the state economy becomes more reliant upon manufacturing employment for its economic health it becomes more like the U.S. economy and so we cannot expect it to withstand recessions better than the nation. The employment situation by various sectors for 1979-1984 is shown in Figures 2.5 through 2.13. The behavior of manufacturing employment has not been particularly salubrious for Kansas over the recent cycle. Manufacturing employment decreased continuously from 1979 through 1983 in both the United

Table 2.1

**Estimate of Employment "Lost" in Kansas  
(Nov. '79 - Nov. '84)**

	Kansas Actual Employment		Industry Projected Employment*	Difference Between Actual and Projected
	Nov. 79	Nov. 84	Nov. 84	
Manufacturing	203.2	177.6	193.8	-16.2
Stone, Clay, Glass	8.3	7.1	7.2	- .1
Primary Metals	4.4	3.3	3.1	.2
Fabricated Metals	14.3	11.5	12.4	-.9
Machinery	37.3	27.3	36.6	- 9.3
Transp. Equipment	57.0	45.0	54.6	- 9.6
Other Durables	12.4	11.3	12.1	-.8
Food and Kindred Products	23.4	26.8	22.2	4.6
Apparel	3.7	3.5	3.4	.1
Printing and Publications	16.6	18.0	18.2	-.2
Chemical	9.1	8.5	8.7	-.2
Petroleum and Coal	4.7	3.3	4.1	-.8
Other Nondurables	12.0	12.0	11.2	.8
Mining	14.2	18.0	14.6	3.4
Construction	52.1	43.8	50.5	- 6.7
Transp. and Public Utilities	65.6	64.8	66.0	- 1.2
Wholesale Trade	63.5	66.8	67.8	- 1.0
Retail Trade	165.6	179.6	180.7	- 1.1
Finance	46.7	52.1	53.0	-.9
Services	167.4	186.0	203.6	-17.6
Federal Government	25.9	26.4	26.0	.4
State and Local Government	162.5	165.8	163.3	2.5
Total	966.7	980.9	1,019.3	-38.4

\*This column gives the KS employment in the industry if the rate of growth from November 1979 to November 1984 had been the same as the US rate of growth in the industry.

**Table 2.2**  
**Growth in Major Industrial Groupings**  
**for Kansas and the United States, 1979, 1983**  
**Measured by Percent Change in Number of Establishments**

Industry	KS%	US%	Difference KS-US
Total	13.45	17.00	- 3.55
Ag. Services Forestry, and Fisheries	40.26	28.74	11.52
Mining	42.03	32.60	9.43
Contract Construction	- 4.49	- 0.14	- 4.35
Manufacturing	8.30	8.90	- .60
Trans. & Other Public Utilities	20.46	14.83	5.62
Wholesale Trade	10.75	12.85	-2.10
Retail Trade	11.57	14.47	-2.90
Finance, Insurance, and Real Estate	8.42	10.55	-2.13
Services	22.11	26.30	-4.19
Nonclassifiable Establishments	12.21	NA	NA

\*Not available

SOURCE: Calculated from County Business Patterns.

Figure 2.1  
Total Employment in the U.S. and Kansas, 1979-1984  
Indexed--1979=100

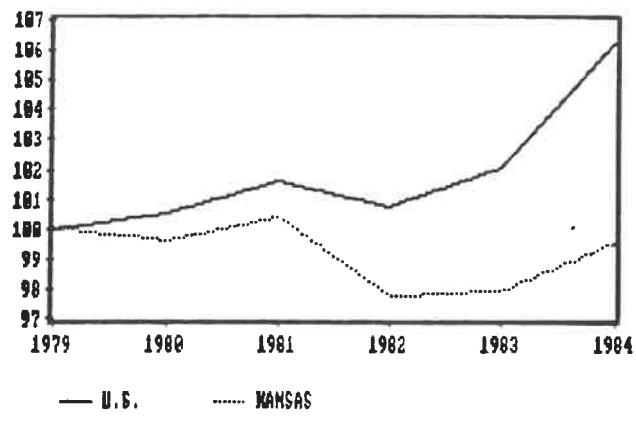


Figure 2.2  
Total Establishment Employment in the U.S. and Kansas, 1979-1984  
Indexed--1979=100

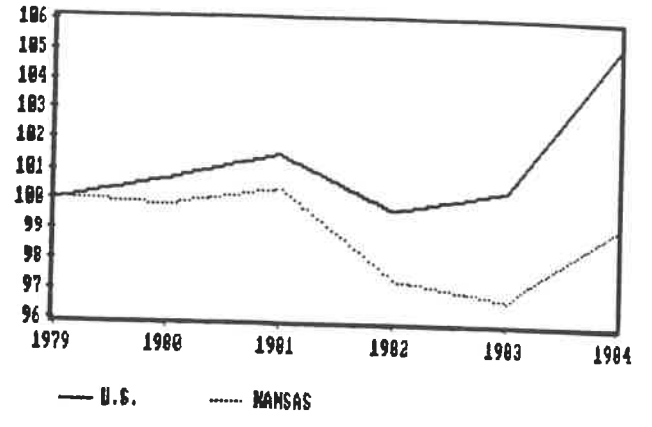


Figure 2.3  
Agricultural Employment in the U.S. and Kansas, 1979-1984  
Indexed--1979=100

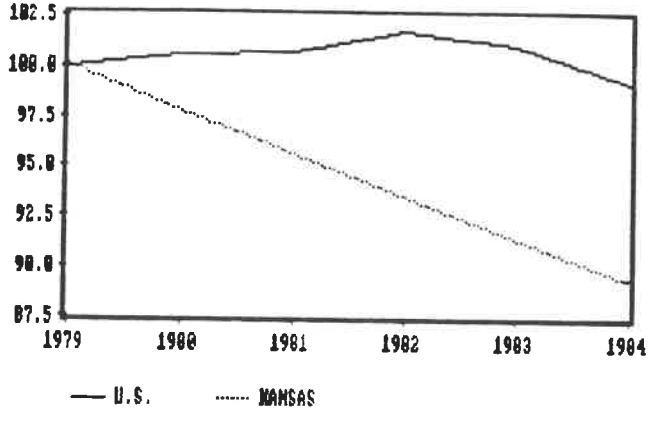


Figure 2.4  
Civilian Labor Force in the U.S. and Kansas, 1979-1984  
Indexed--1979=100

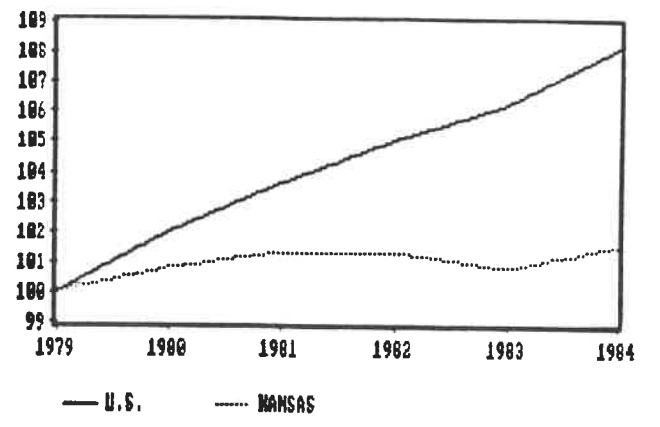


Figure 2.5  
Manufacturing Employment in the U.S. and Kansas, 1979-1984  
Indexed--1979=100

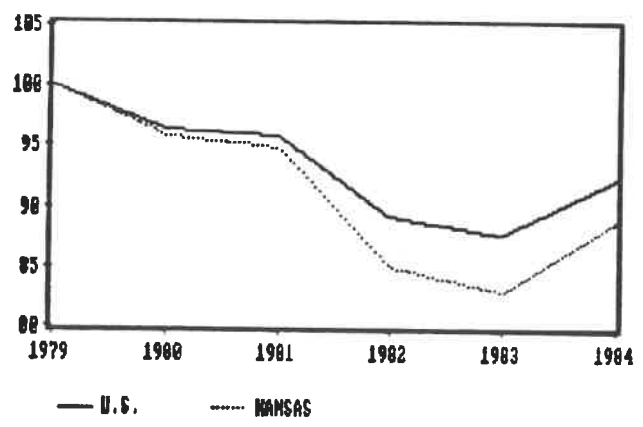
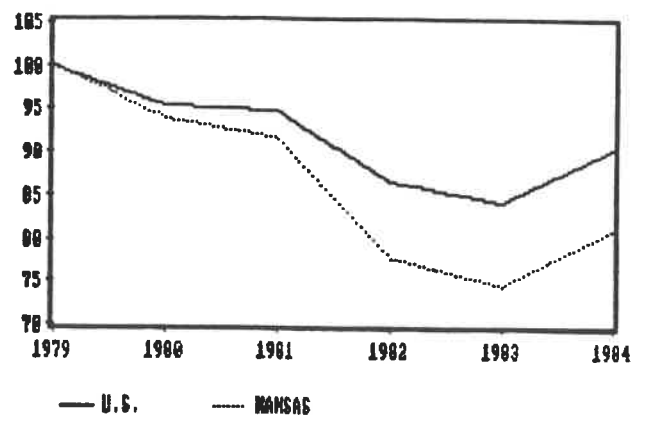


Figure 2.6  
Durable Goods Employment in the U.S. and Kansas, 1979-1984  
Indexed--1979=100



Source: Indexes calculated from Bureau of Labor Statistics data and Kansas Department of Human Resources, Kansas Civilian Labor Force.

Figure 2.7  
Non-Durable Goods Employment in the U.S. and Kansas, 1979-1984  
Indexed--1979=100

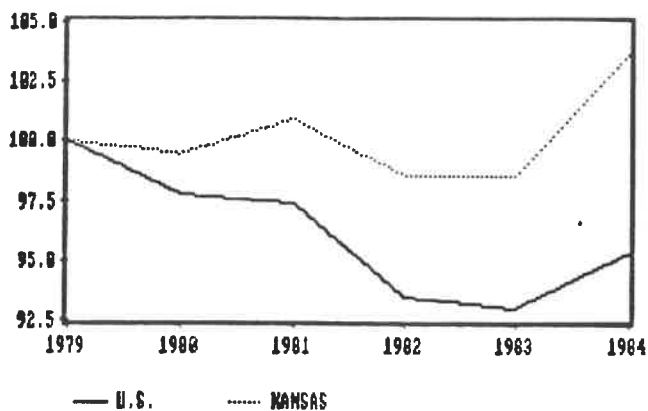


Figure 2.8  
Mining Employment in the U.S. and Kansas, 1979-1984  
Indexed--1979=100

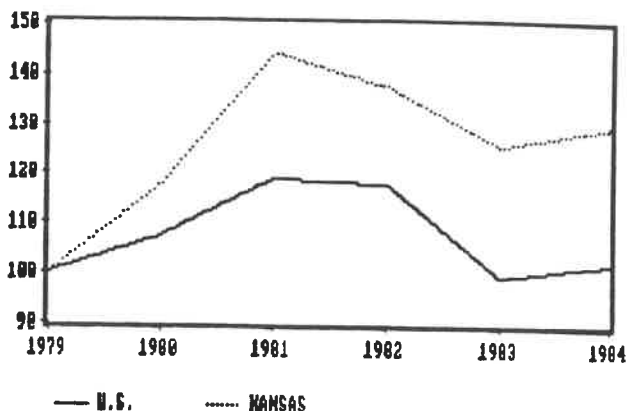


Figure 2.9  
Construction Employment in the U.S. and Kansas, 1979-1984  
Indexed--1979=100

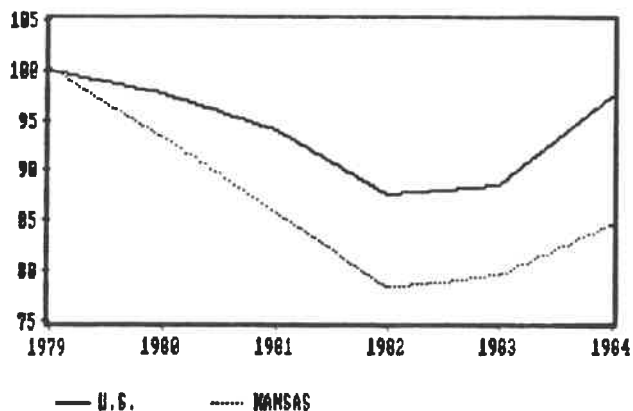


Figure 2.10  
Finance Employment in the U.S. and Kansas, 1979-1984  
Indexed--1979=100

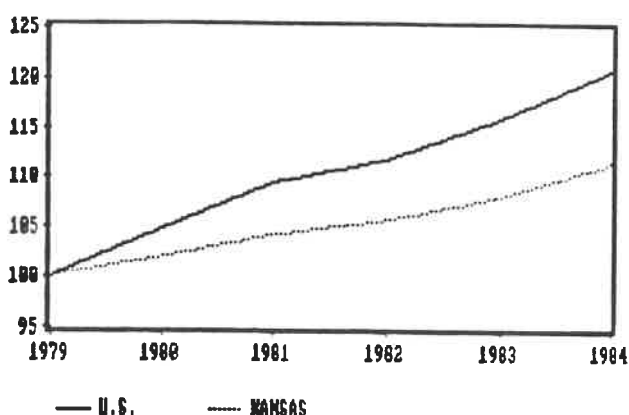


Figure 2.11  
Service Employment in the U.S. and Kansas, 1979-1984  
Indexed--1979=100

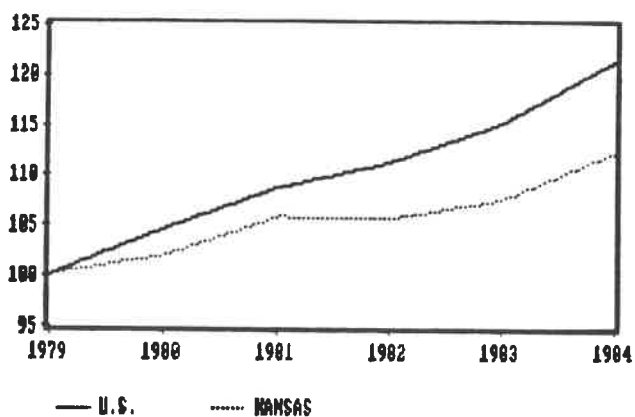
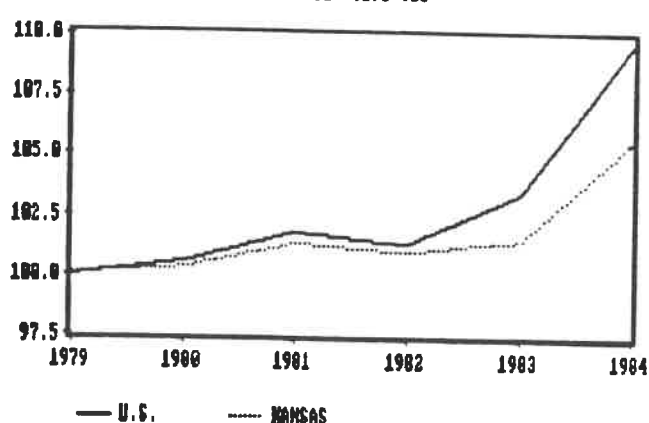


Figure 2.12  
Trade Employment in the U.S. and Kansas, 1979-1984  
Indexed--1979=100



Source: Indexes calculated from Bureau of Labor Statistics data and Kansas Department of Human Resources, Kansas Civilian Labor Force.



States and Kansas before picking up in 1984, as shown in Figure 2.5. The final level of manufacturing employment is, however, well below the 1979 level for both the United States and Kansas. The 1984 level of manufacturing employment for Kansas was approximately 90 percent of its 1979 level.

Manufacturing employment can be dichotomized into nondurable manufacturing employment and durable manufacturing employment. Employment in durable goods has been falling since 1979, both in Kansas and nationally, but the indexed level in Kansas fell about 10 percent more in 1981 and has never caught up. In Kansas the level of durable goods employment for 1984 was around 80 percent of the 1979 level, while the corresponding figure for the U.S. was around 90 percent.

In Kansas aircraft and automobile manufacturing are a more significant component of durable goods than in the nation as a whole. These industries were hit particularly hard during the 1980 and 1981-1982 recessions and this would account for much of the reason durable goods employment in Kansas was hit harder than durable goods employment in the United States.

Employment in nondurable manufacturing held up well in Kansas relative to the U.S. over the recessionary periods. As a result the employment level in Kansas in 1984 was approximately 3 percent higher than the 1979 level; United States employment in nondurable goods ended up at about 95 percent of its 1979 level.

Kansas's relatively strong showing in nondurable manufacturing employment is attributed to food products. In particular the meat packing industry in the Garden City area has grown continuously between 1979 and 1984.

In Kansas mining employment has significantly outperformed the U.S. Oil and gas extraction dominate the mining sector in Kansas. In 1979 the average wellhead price per barrel of oil was \$12.64, this rose to \$31.77 in 1981 and then began to taper off in 1982 and 1983 to \$28.52 and \$26.17. The mining employment level in Kansas followed the price level, as one would expect (Figure 2.8). Kansas employment in mining fluctuates more than the U.S. employment in mining because of the volatility of oil prices. Because of the low profit margin of Kansas wells, with \$14.00 per barrel oil, employment levels in Kansas mining will fall precipitously.

The above discussion of employment by industry covered the primary industries of agriculture, mining, and manufacturing. Although mining employment did perform better than the U.S. over the 1979-1984 period, this performance was not enough to offset the poor performance of manufacturing in Kansas. These industries serve as the export base for Kansas and as such determine the wealth of Kansas. With such a weakness in primary industries, one



would not expect employment in secondary industries in Kansas to perform as well as their U.S. counterparts. That this is the case is seen by Figures 2.9, 2.10, 2.11, 2.12 and 2.13, which show construction industry employment, finance industry employment, service industry employment, trade (wholesale and retail) industry employment, and the transportation and utilities industry employment. In not one of these industries did employment in Kansas perform as well as employment in the U.S.

An alternate way to describe what happened to employment between 1979-1984 in Kansas is to apply a method referred to as shift-share analysis. (The methodology is described in Redwood, Petree, and Albrecht, Kansas Business Review, Vol. 8, No. 2, 1985.) This analysis is based on the fact that the rate of employment growth in a state can differ from the rate of employment growth in the nation for two reasons: 1) the industrial mix of the state can be different from the nation, or 2) a particular industry's rate of growth may be different between the state and nation. A state may, for example, have a disproportionate share of slow growing industries, yet these industries may be growing at the same rate as their national counterpart. On the other hand, a state's proportion of slow and fast growing industries may be the same as the nation's, yet the particular industries may grow at a slower rate than their national counterparts. Slow growth, then, may occur for either of these two entirely differing reasons; shift-share analysis is a method to identify the cause. This analysis shows that particular industries in Kansas have, in general, been growing at a slower rate than their national counterparts and that the industrial mix is, practically speaking, merely neutral in terms of its effect on growth.

If employment in Kansas had grown at the same rate as U.S. employment from November 1979 to November 1984, there would have been 1,019.0 thousand people employed in Kansas in November 1984. There were however 980.9 thousand people employed in Kansas in November 1984, a shortfall of 38,400 persons employed. Shift-share analysis can show why this difference exists. Column three of Table 2.1 shows the number of people who would have been employed in each industry in Kansas if each industry in Kansas had grown at the same rate as its national counterpart. The summation of column three is 1019.3 thousand. The difference between 1,019.0 and 1,019.3 million is insignificant in this analysis. The different industrial mix in Kansas and the U.S., therefore, is not the reason for the slower Kansas growth; the reason is simply that the industries in Kansas grew more slowly than their national counterparts.

This analysis confirms the conclusions from the above figures: The manufacturing industries are not keeping up with the rates of growth of their national counterparts. As was previously stated, these industries are, in general, exporting industries,

and jobs lost in these sectors initiate a significant "multiplier" effect throughout the state economy. For example, one study has shown that employment changes in Wichita are multiplied about 2.5-3.0 times as they diffuse through the state--employment changes that in the last 15 years are directly traceable to the varying performance of the aircraft industry in that city.

Conclusions to be drawn from this analysis, given its relatively short-term, descriptive character, are necessarily tentative. However, it suggests that the manufacturing sector, which has become over time the principal source of the state's economic health, was not strong enough either to resist or to respond vigorously to the recessions of the early 1980s as a result, in great part, of the cumulative effects of the debilitating long-term trends described in this study.

#### **Performance of Personal Income Over Recent Recessionary Periods**

Real personal income in Kansas did not perform well relative to the U.S. between 1979 and 1984. The farm component of real personal income pulled down total personal income while nonfarm personal income grew about the same in Kansas as in the nation as a whole (Figures 2.14, 2.15, and 2.16). Kansas real farm personal income in 1980 was less than one-half of its 1979 value, and it has not fully recovered yet. The 1984 value was only 70 percent of the 1979 value. While farm personal income for the U.S. also declined in this time period, the fall was not nearly as precipitous. These figures reinforce the idea that Kansas did not begin the recovery as well as the U.S.

#### **Business Formation**

In general, the number of firms increased more rapidly in the U.S. than in Kansas. A notable exception was in mining where the number of firms increased by 42.03 percent in Kansas and by 32.60 percent in the U.S. Tables 2.2 and 2.3 relate to the change in the number of establishments in Kansas, surrounding states, and the U.S. Table 2.2, to a large extent, reflects the behavior that the employment figures showed.

In terms of the surrounding states Kansas is on par with Missouri and Nebraska. The states lag considerably behind Colorado and Oklahoma in terms of the percent change in establishment. Colorado and Oklahoma significantly outperform the other states except for agriculture services, forest and fisheries where Kansas excels. Kansas performs well relative to Missouri and Nebraska in mining, transportation and public utilities, and wholesale trade.

Figure 2.13

Transportation Employment in the U.S. and Kansas, 1979-1984  
Indexed--1979=100

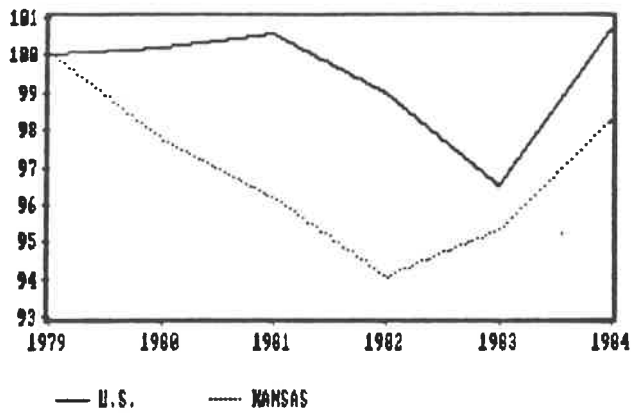


Figure 2.14

Total Personal Income in the U.S. and Kansas, 1979-1984  
Real Dollars Indexed--1979=100

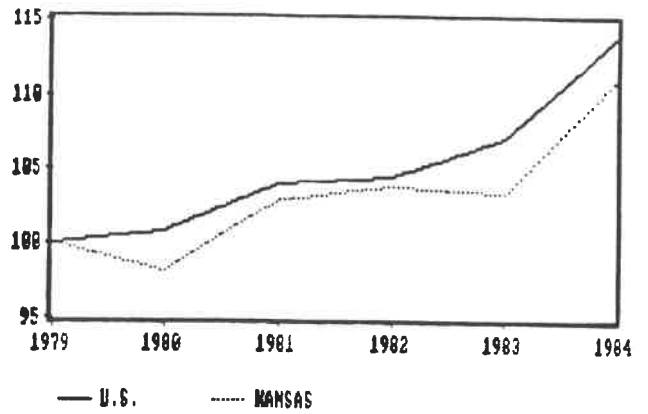


Figure 2.15

Farm Personal Income in the U.S. and Kansas, 1979-1984  
Real Dollars Indexed--1979=100

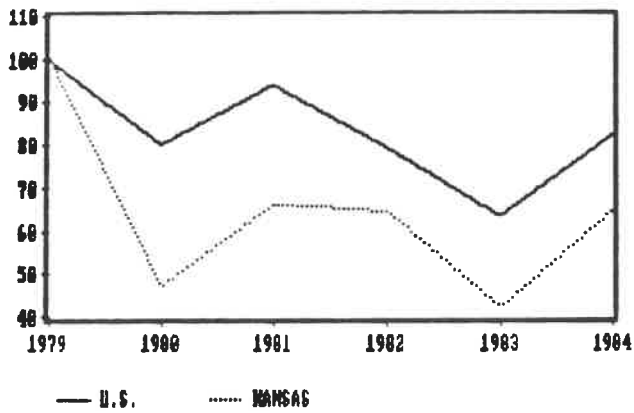
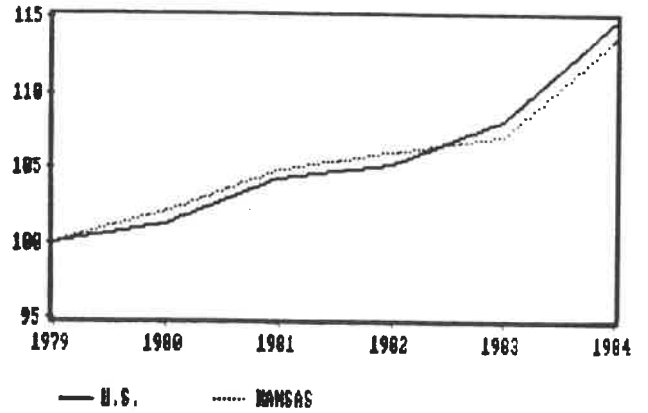


Figure 2.16

Nonfarm Personal Income in the U.S. and Kansas, 1979-1984  
Real Dollars Indexed--1979=100



Source: Indexes calculated from Bureau of Labor Statistics data and Kansas Department of Human Resources, Kansas Civilian Labor Force.

Table 2.3

**Growth in Major Industrial Groupings  
for the U.S., Kansas, and Surrounding States, 1979-1983  
Measured by a Percent Change in Establishments**

	<u>US %</u>	<u>KS %</u>	<u>CO %</u>	<u>MO %</u>	<u>NE %</u>	<u>OK %</u>
Total	17.0	13.4	26.7	12.1	10.4	23.2
Agricultural Services, Forestry and Fisheries	28.7	40.3	37.3	24.3	33.0	34.1
Mining	32.6	42.0	64.3	14.6	15.7	68.1
Construction	- 0.1	- 4.5	4.6	- 5.1	- 9.5	7.2
Manufacturing	8.9	8.3	21.9	6.2	8.0	17.0
Transportation and Other Public Utilities	14.8	20.5	28.3	12.1	14.8	13.5
Wholesale Trade	12.9	10.7	20.1	5.7	4.1	18.7
Retail Trade	14.5	11.6	21.1	10.7	9.7	15.8
Finance, Insurance, and Real Estate Services	10.5	8.4	21.1	7.0	5.7	18.6
Services	26.3	22.1	33.9	21.3	18.9	28.5
Nonclassifiable Establishments	NA	12.2	80.0	33.3	38.1	60.9

Source: Calculated from County Business Patterns, 1979 and 1983.

## Implications

The above analysis used employment, income, and the number of establishments statistics to show Kansas's economic position relative to the U.S. This comparative analysis has confirmed that Kansas performed more poorly during the 1980 and 1981-1982 recession than the U.S. The next question is whether this poor performance was abnormal or whether it is what we should expect in future cyclical downturns. To address this question we will analyze the previous recessionary periods and discover why Kansas weathered the recessions relatively well.

## Instability in the Kansas Economy

The Kansas Business Review article, "Instability in the Kansas Economy," by Sexton and Glass studies the phenomenon of Kansas's seeming immunity to the cyclical downturns prior to the 1980 and 1981-1982 recessions. Agriculture, aircraft and automotive sectors were shown to exert a large influence on the Kansas economy. During prior recessions it happened that the cyclical patterns of the industries did not coincide; the result was that Kansas did not suffer terribly during cyclical downturns. However Sexton and Glass conclude that the "historical tendency for Kansas to be recession proof may, in many cases, have been the result of a fortuitous combination of events rather than the effect of an inherently stable economy."<sup>2</sup> The following section relies heavily upon the Sexton-Glass article.

The period from the late 1950s to the early 1970s was one of stable growth in Kansas. Since then, however, the pattern of economic growth has become far less regular. These trends can be discerned from joint examination of Figures 2.17 and 2.18, which trace movements in real earned personal income during the last 25 years. The income measure used is the Bureau of Economic Analysis (BEA) personal income statistic deflated to remove the influence of price changes, and with transfer payments subtracted out.

In order to discern differences in cyclical behavior between agriculture and nonagriculture sectors of the economy, real wage and salary income is compared with receipts from wheat and beef. Figure 2.17 depicts real earned income in the U.S. and Kansas for the period 1958-1982. Real wage and salary income for Kansas, shown in Figure 2.17, captures nonfarm-related income in Kansas, since farm and farm-related income usually accrues to proprietors (farm owners, small dealers, and jobbers in rural communities)

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<sup>2</sup>Richard Sexton and Robert Glass, "Instability in the Kansas Economy," Kansas Business Review, Vol. 6, No. 4-5, March, April-May, June, 1983, p. 1.

Figure 2.17

REAL EARNED INCOME IN KANSAS AND THE USA, 1957-1983

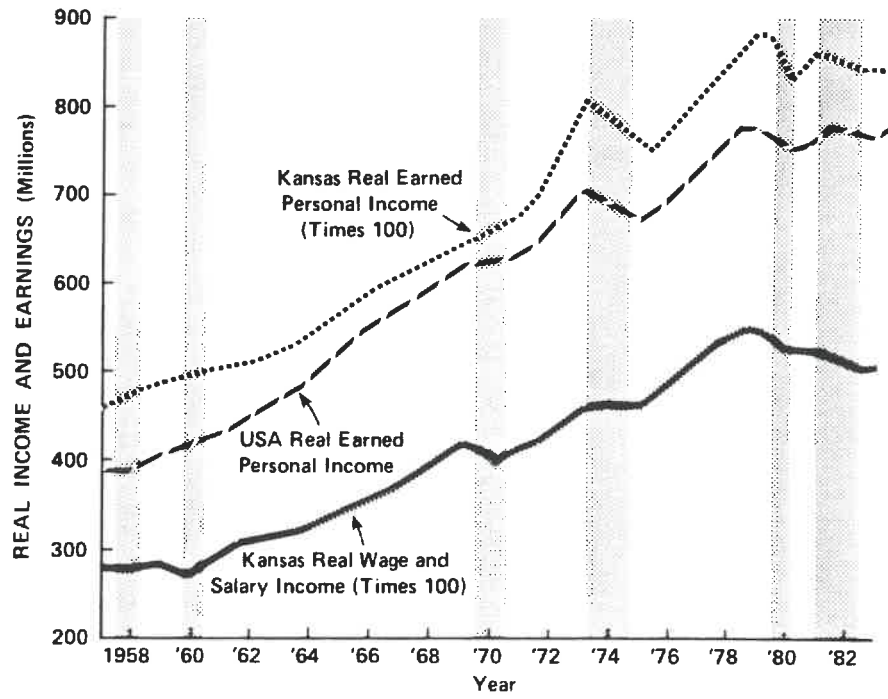
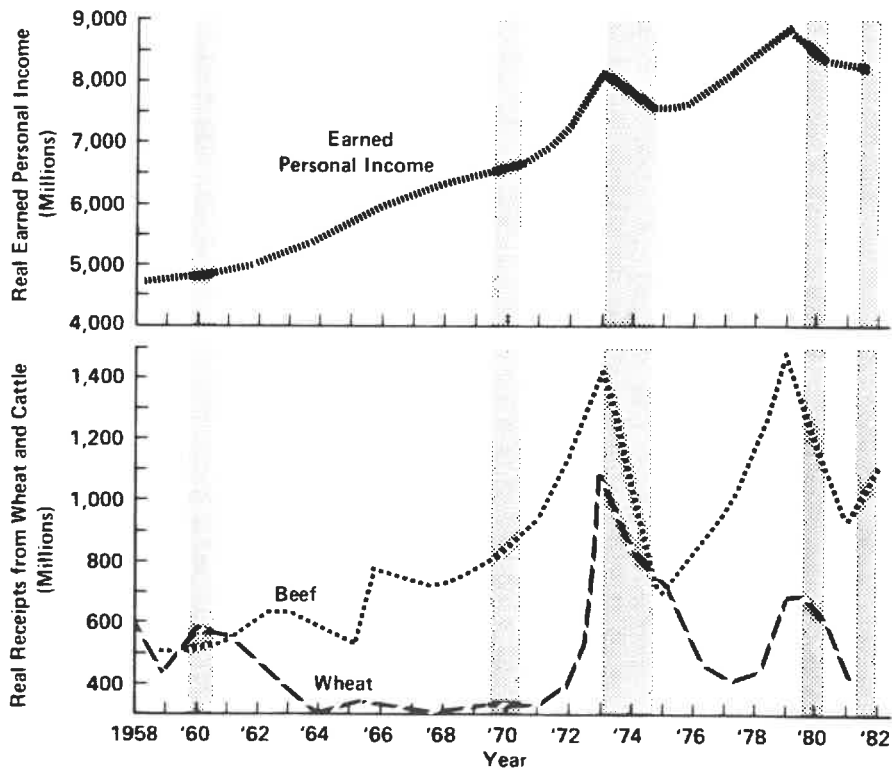


Figure 2.18

REAL EARNED INCOME AND REAL BEEF AND WHEAT RECEIPTS IN KANSAS 1958-1982





rather than to employees as wages and salaries. It should be noted that the Kansas figures are magnified 100 times to provide direct comparability with the national aggregate.

Historically, either farm income or wage and salary income had ameliorated the effects of recessions. Periods of officially designated recession (at the national level) are indicated by shading in both Figures 2.17 and 2.18. The period 1958-1972 was marked by three recessions at the national level, but none were particularly severe or long lasting. Kansas, however, grew at a relatively smooth, steady rate throughout this period. That is, Kansas was relatively recession proof. Real wage and salary income in Kansas was flat during the 1957-1958 recession but took sharp dips coincident with the national recessions in 1960 and 1970. What clearly happened--as Figure 2.18 indicates--is that the farm sector propped up the Kansas economy in the latter two instances. Figure 2.18 depicts real receipts from beef and wheat in Kansas. (Earned personal income is also included to provide reference.) Together, these two agricultural commodities account for the bulk of Kansas farm income--about 70-75 percent during most of the twentieth century (see Sexton and Cita, Kansas Business Review, Vol. 5, No. 6, 1982 for more details). The fluctuation, of wheat and beef receipts happened to partially offset the sharp downturns that hit the nonfarm sector during both the 1960 and 1970 recessions. Specifically, wheat earnings in 1960 reached a peak, one they would not again approach for 13 years. In 1970, although wheat receipts had fallen, beef income was in the midst of a strong long-term increase, and, consequently, it offset the decline in the nonfarm sector, causing total Kansas income to continue its upward trend through the recession.

Examining only the direct influence of the Kansas farm sector, however, belies its importance because farming, like manufacturing, is a primary industry and, as such, is the lifeblood for a number of secondary industries. As with any other primary income source, fluctuations in farm income will magnify themselves as they spread through the economy.

Earned personal income, propelled by rapid increases in farm income, grew at an unusually rapid rate from 1971 to 1973, but as the severe 1973-1975 recession set in, Kansas earned income turned sharply down. The downturn was due principally to sharp declines after 1973 in wheat and beef earnings; real wage and salary income in Kansas actually rose slightly during the recession.

The decline in Kansas earned income from 1973 to 1975, although steep, largely represented a return to what income would have been had it not risen sharply above trend during 1971-1973. Therefore, in contrast to the previous two recessions, the 1973-1975 contraction was characterized in Kansas by a declining farm

sector with a fairly strong nonfarm sector tending, this time, to soften the state's overall decline.

Strong wage and salary income supported the Kansas economy during the 1973-1975 recession. In contrast, wage and salary income fell while farm income supported the economy during the 1970 recession.

The fact that wage and salary income did not fall during the 1973-1975 recession may be attributable to aircraft employment strength over this time period. The aircraft industry has a substantial effect not only on employment in Wichita, but in all of Kansas. During the 1970 recession aircraft employment fell dramatically and this, of course, affected total employment in Kansas, thereby adding to the decline in wage and salary income during the recession. Figures 2.19 and 2.20 illustrate the contrasting behavior of aircraft employment over these recessions.

Following 1975, Kansas embarked on another period of above-trend-rate growth, sparked by a strong surge in the nonfarm sector, as indicated by growth in real wage and salary income, and by another sharp increase in income from beef. The peak was reached in 1979 with beef, wheat, and the nonfarm sector all attaining local maximums.

In the three most recent recessions prior to 1980, the state's unstable sectors tended to offset each other. As a result Kansas remained relatively stable compared with the nation and tended to enhance its recession-proof image. In 1980-1982, when both the farm and nonfarm sectors turned down, the recession's impact on a proportional basis was greater for Kansas than for the nation.

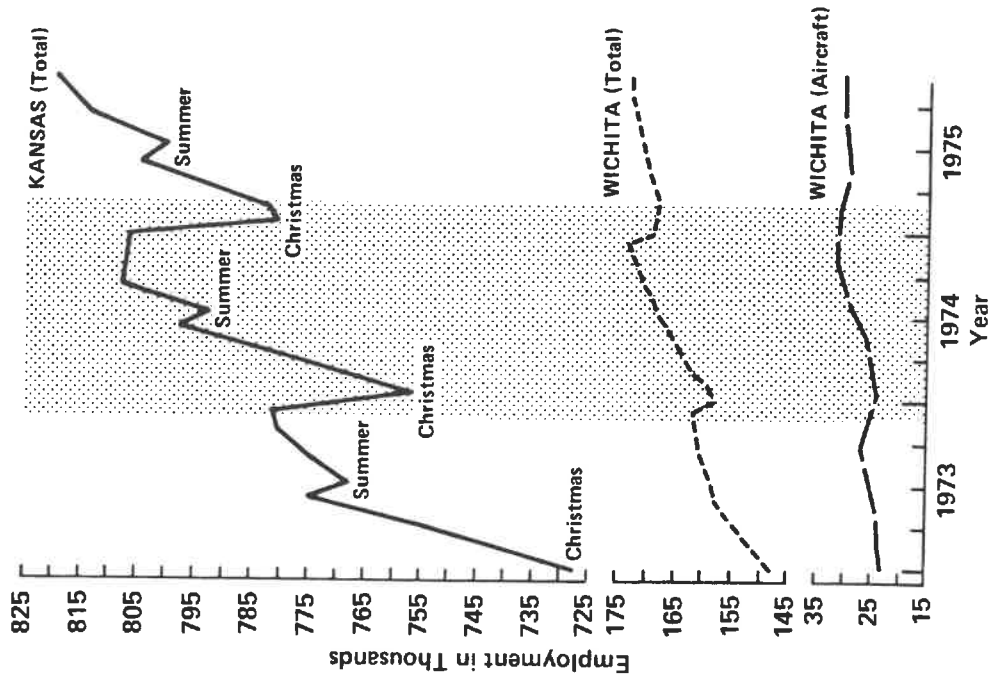
## Conclusions

Kansas's relative stability prior to the 1980-1982 recessions is somewhat misleading. Specifically, the state's comparative calm appears to have been the consequence of the instability in farm receipts and in aircraft production offsetting each other. During 1980-1982, when they turned down together, the result was a major slump in the state's economy.

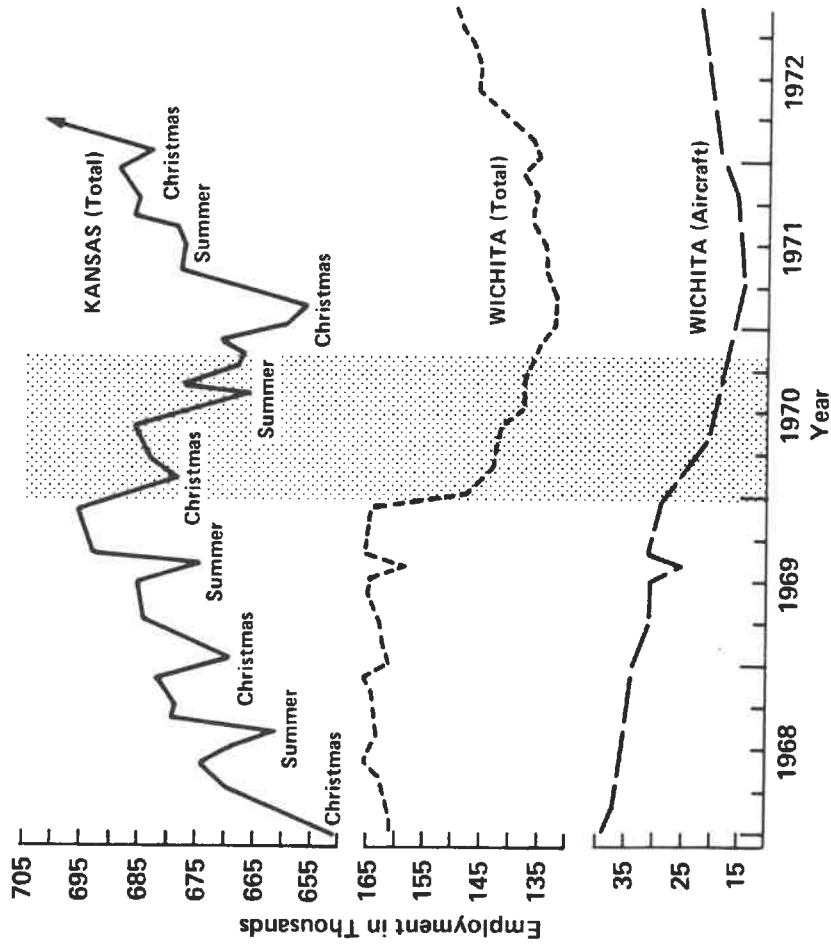
This section concludes by returning to the important question raised earlier: Is there sound basis upon which to expect that the volatile economic sectors in Kansas will continue their tendency to offset as they have done in the past? The elements of the economic instability in Kansas, namely automobile manufacturing, beef, and the domestic component of aircraft demand, are geared around the national business cycle. Yet, any of a number of exogenous influences, agricultural supply variability, various



**Figure 2.20**  
**Employment for Kansas, Wichita and**  
**The Wichita Aircraft Industry**  
**1973-1975**



**Figure 2.19**  
**Employment for Kansas, Wichita and the Wichita Aircraft Industry**  
**1968-1972**



international factors, and the military situation, may act to reinforce or to counteract the basic cyclical tendency of the Kansas economy. These exogenous factors are largely independent of each other and of the domestic business cycle. Therefore, they cannot be counted on to offset the business cycle, nor can they be expected to consistently exacerbate it.

### III. KANSAS DEMOGRAPHIC TRENDS

There have been significant demographic consequences to this great change in the Kansas economic structure. The most important have been:

- (1) The Kansas population has declined from 2.27 percent of the U.S. population in 1890 to 1.04 percent in 1980. It is projected to be 0.93 percent in 2000 and could be below 0.80 percent in 2030 if present trends continue.
- (2) Kansas has had one of the slower population growth rates in the nation.
- (3) The state has experienced net outmigration every census decade since 1890; the net outflow was around 130,000 for 1960-70 and 25,000 for 1970-80. For 1980 to 84, net outmigration is estimated to be about 6,000. The predominant groups of outmigrants have been young adults and persons with higher education and skill levels.
- (4) The average age of Kansans is above the U.S. average, and the state has a substantially higher proportion of persons over 65. Kansas ranks ninth among states in the proportion of population 65 and over. This relative aging of the Kansas population will continue.
- (5) Although the state still has a larger rural population (33 percent) than the U.S. average (26 percent), a great many people have moved to regions of employment opportunity in the eastern part of the state (much of it concentrated in the area roughly bounded by Interstates 35, 135, and 70)

#### Population Level and Growth

While the Kansas population level has increased almost every decade since the first Census, Kansas's share of the total U.S. population has declined from around 2 percent in 1890 to 1 percent in 1980. It is projected to be 0.93 percent in 2000 and possibly as low as 0.75 in 2030 on the basis of existing trends (Table 3.1, Figure 3.1).

As well Kansas has had one of the lowest state population growth rates in the nation, and this is likely to continue if present trends persist. It can be seen in Table 3.2 that the Kansas rate has been well below that of Colorado and Oklahoma in our region, and about the same as Nebraska and Missouri. This pattern is projected to continue.

**Table 3.1**  
**Kansas Population and**  
**Proportion of US Population 1890-2030 (Proj.)**

Year	Kansas Population	Kansas/US Ratio
1890	1,428,108	2.27
1900	1,470,495	1.93
1910	1,690,949	1.83
1920	1,769,257	1.66
1930	1,880,999	1.53
1940	1,801,028	1.36
1950	1,905,299	1.26
1960	2,178,611	1.21
1970	2,249,071	1.10
1980	2,363,679	1.04
1990(Proj.)	2,463,500	0.99
2000(Proj.)	2,494,400	0.93
2030(Proj.)	2,668,300	0.75

SOURCE: Bureau of the Census.

**Table 3.2**  
**State Population Growth Rates (%)**

Period	US	KS	CO	OK	MO	NE
1950-1960	18.5	14.4	32.4	4.3	9.2	6.5
1960-1970	13.2	3.2	25.8	9.9	8.3	5.2
1970-1980	11.4	5.1	30.7	18.2	5.1	5.7
1980-1990(Proj.)	9.7	4.0	29.5	15.5	3.0	4.2
1990-2000(Proj.)	7.3	1.3	24.0	12.6	0.1	1.4

SOURCE: Bureau of the Census, Series P-25, No. 937.

Given that Kansas birth and death rates approximate those of the nation, the above situation has been caused largely by net outmigration. This can also be described as chronic over time, in that Kansas has experienced net outmigration each censal decade since 1890. Of course, the level and distribution of a population will be determined largely by the level, nature and location of economic activity, so that people stay or migrate according to the availability and attractiveness of economic opportunities at home and elsewhere. During the decade 1960-70, the state experienced a net outmigration of around 130,000 people which was over 6 percent of the 1960 state population; estimates of net outmigration between 1970 and 1980 range from 20,000 to 25,000.

Net migration will ebb and flow over time according to how well the state's economy is doing (and in which sectors) relative to other states. For example, significant net outmigration occurred from 1970-75 as employment growth weakened, and net immigration from 1975-80 when job creation was stronger. However net outmigration has been modest in the 1980s, despite below average economic growth, suggesting that the underlying cause of the past outflow, namely labor displacement from the farm sector, is no longer the dominant force it once was.

### **Population Structure and Distribution**

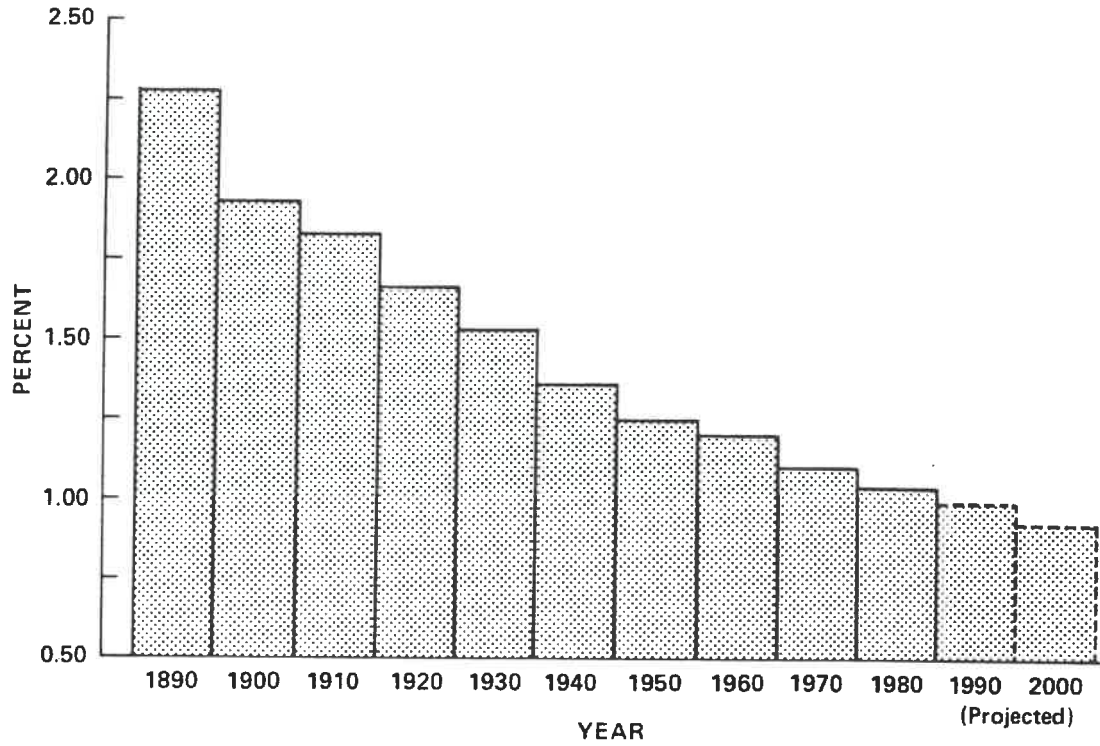
The population of the state has experienced significant redistribution in recent decades as agriculture has become much less labor intensive and as other economic sectors have evolved. New economic activity has become concentrated in the area roughly bounded by Interstates 35, 135, and 70. Serious losses of population have occurred from the western half of the state, although overall the state still has a higher rural population (33 percent) than the U.S. overall (26 percent). (Figure 3.2).

With respect to age structure, the population of the nation and the state have been aging. In 1970 the median age of Kansans was 28.7 years, compared with that of all U.S. residents of 28.0 years. By 1980, Kansas's median age was 30.1 and that for the nation as a whole was 30.0. This apparent narrowing is a favorable movement, though it could partly reflect statistically by the relatively strong influx of 18-24 year olds to our public and private colleges from other states during the 70s.

The age distribution of Kansans is not uniform across the state. The median age of the Kansas population in 1980 ranges from 22.8 years in Riley county to 44.8 years in Elk county. In general, median ages were much higher in north-central and south-eastern Kansas than in other regions of the state (Figure 3.3).

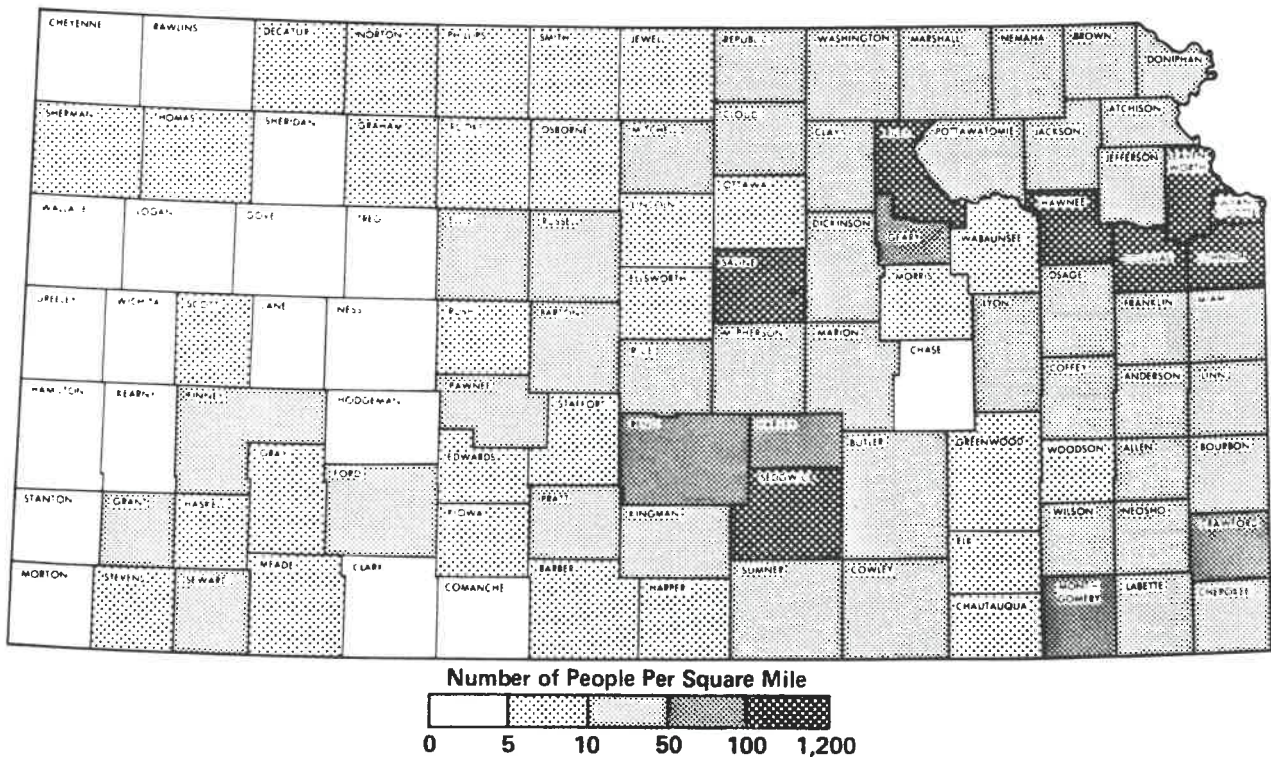


Figure 3.1  
**Kansas Population as a Percent of U.S. Population  
 (1890-2000 Projected)**



Source: Bureau of The Census.

Figure 3.2  
**POPULATION DENSITY OF KANSAS COUNTIES, 1980**



Statewide the percent of the population aged 65 and over was 13 percent in 1980 as opposed to 11 percent in the nation as a whole (Figure 3.4). Again the aged population was not uniformly distributed. Figure 3.5 shows the county-by-county distribution of Kansans aged 65 and over. It ranged from 5.5 percent of the Riley County population being 65 years and over to 26 percent in Elk county. As the median age data indicated, the north-central and south-eastern portions of the state had the highest concentrations of older Kansans. This aging phenomenon has important social policy implications for the state.

The actual age structure of the Kansas population for 1980 and recent projections of it for 1990 and 2000 by the Census Bureau are given in the Table 3.3.

**Table 3.3**  
**Projections of Kansas Population by Age Group**

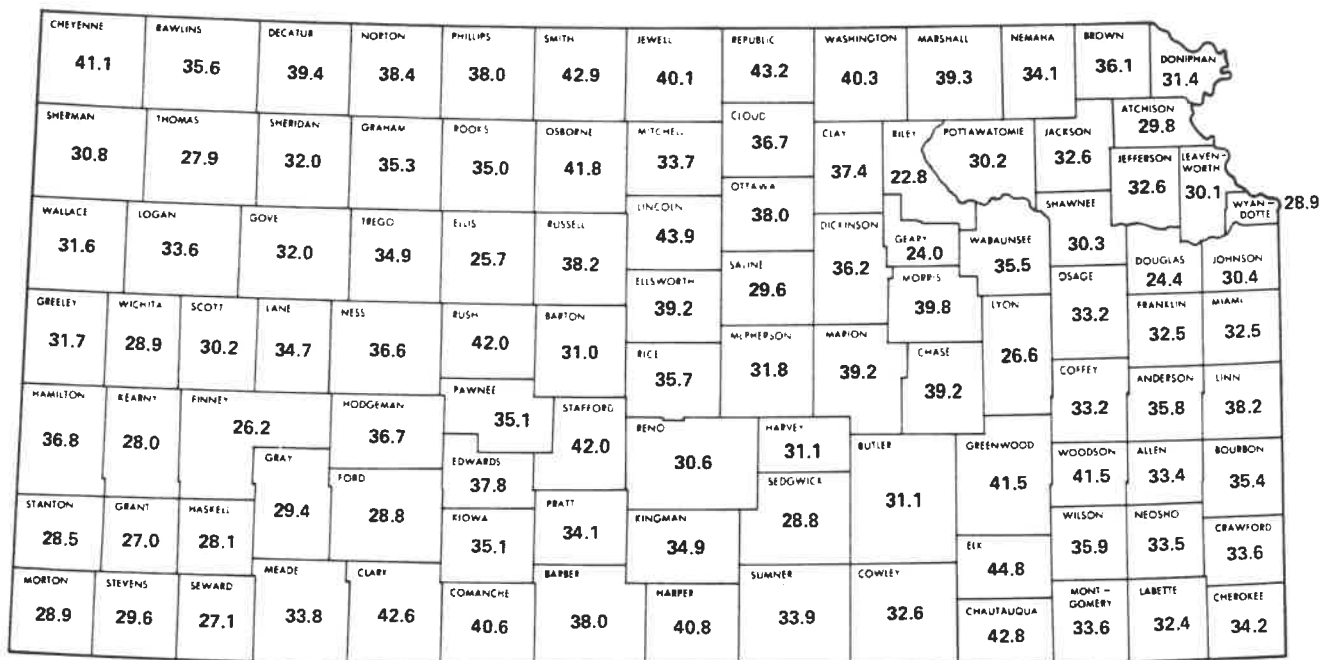
Age Group	1980 Actual	%	Projection	%	Projection	%
under 5	180,877	7.7	199,200	8.1	174,200	7.0
5 - 14	344,378	14.5	373,300	15.2	374,100	15.0
15 - 19	217,721	9.2	166,200	6.7	192,900	7.7
20 - 24	232,788	9.9	178,300	7.2	175,100	7.0
25 - 34	374,618	15.9	404,800	16.4	308,500	12.4
35 - 44	249,600	10.6	359,900	14.6	379,800	15.2
45 - 59	351,300	14.9	342,200	13.9	458,900	18.4
60 - 69	200,241	8.4	203,800	8.3	180,100	7.2
70 and over	212,055	8.9	235,800	9.6	250,800	10.1
Total	2,363,679	100.0	2,463,500	100.0	2,494,400	100.0

Several aspects are worth noting:

- 1) The 15-24 age group will decline from 19.1 percent of the Kansas population in 1980 to 14.7 percent in 2000.
- 2) The 25-44 age group will increase from 26.5 percent in 1980 to 31 percent in 1990 and 27.6 percent in 2000.
- 3) The 45 and over group will increase from 32.2 percent in 1980 to 35.7 percent in 2000.
- 4) These developments will mirror similar changes in the U.S. population age structure except that, if anything, the Kansas population and workforce will continue to be slightly older than the U.S. averages.



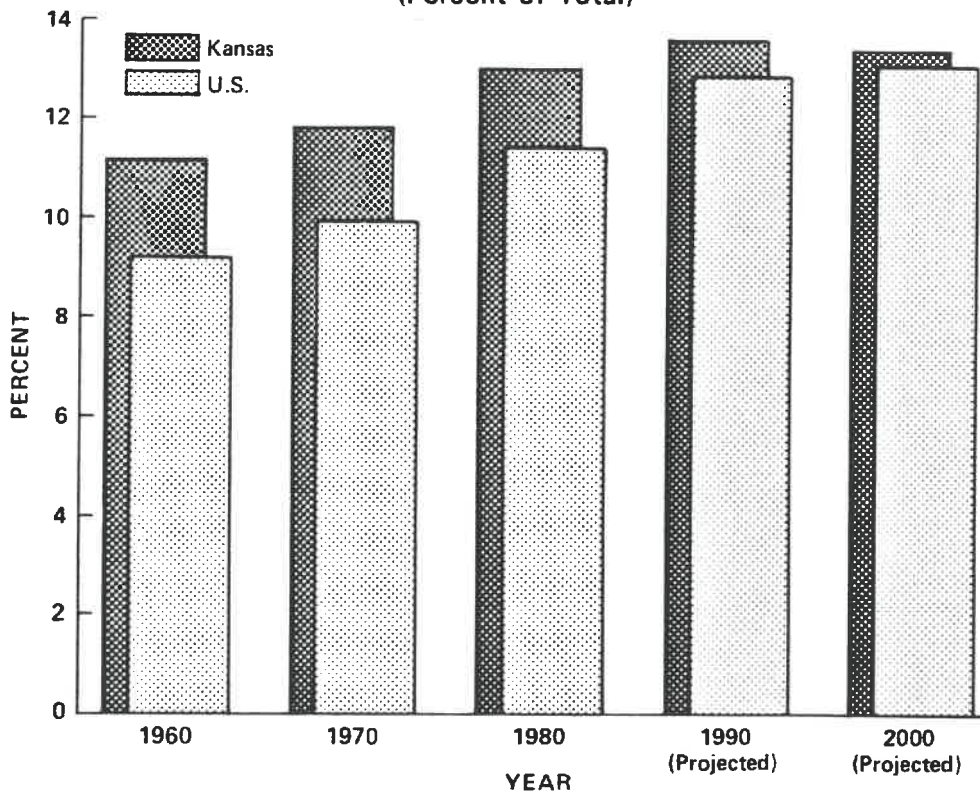
**Figure 3.3**  
**MEDIAN AGE OF POPULATION BY COUNTY, 1980**



Source: U.S. Department of Commerce, Bureau of the Census.

State - 30.1 years

**Figure 3.4**  
**Population Over 65 Years of Age for Kansas and U.S.**  
**(Percent of Total)**



Source: Bureau of the Census, PC(1) - B1.

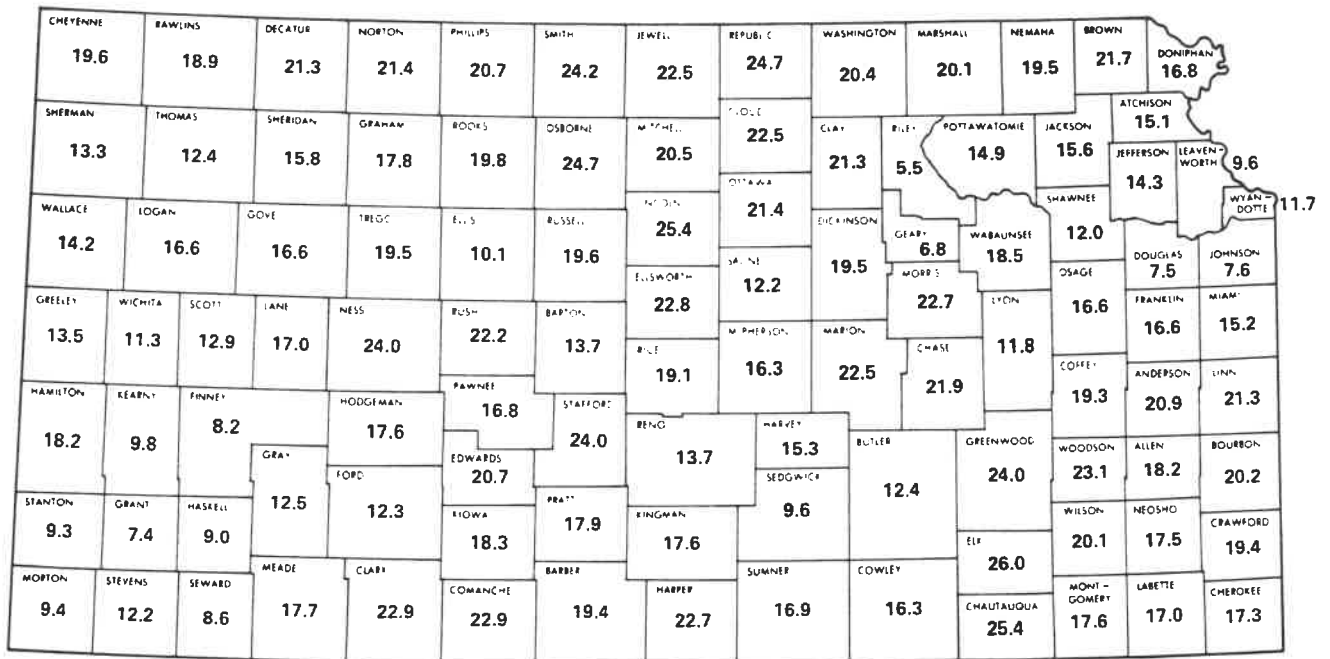
One of the great challenges facing Kansas in the next 15 years will be to adjust our education and training system (and other social and economic policy mechanisms) to this changing population structure and aging workforce, in an era of rapid technological change.

## **Migration**

There are two additional aspects of the migration picture that should be identified in addition to the net flows in and out of the state mentioned earlier. The first relates to the age structure. When the state experiences net outmigration it is concentrated heavily in the 25-35 years age group. Some of this reflects the departure of out-of-state youth who come here for college; but many are Kansas youth, including the better educated, who have been unable to secure appropriate job opportunities in the state. Even when the state experiences net immigration overall, as for the period 1975-80, net outmigration tends to occur for the 25-29 age group. The implication is clearly that the state must not only create an adequate number of jobs, but also good quality jobs.

Second, regardless of the interstate migration situation, most counties in the state have experienced continuing net outmigration. For some, the outflow has been significant, being up to 25 percent of a county's population over a decade. The net migration patterns for all Kansas counties are shown for 1960-70 (Figure 3.6) and 1970-80 (Figure 3.7) respectively. This development raises multiple concerns and questions over the future of our rural communities.

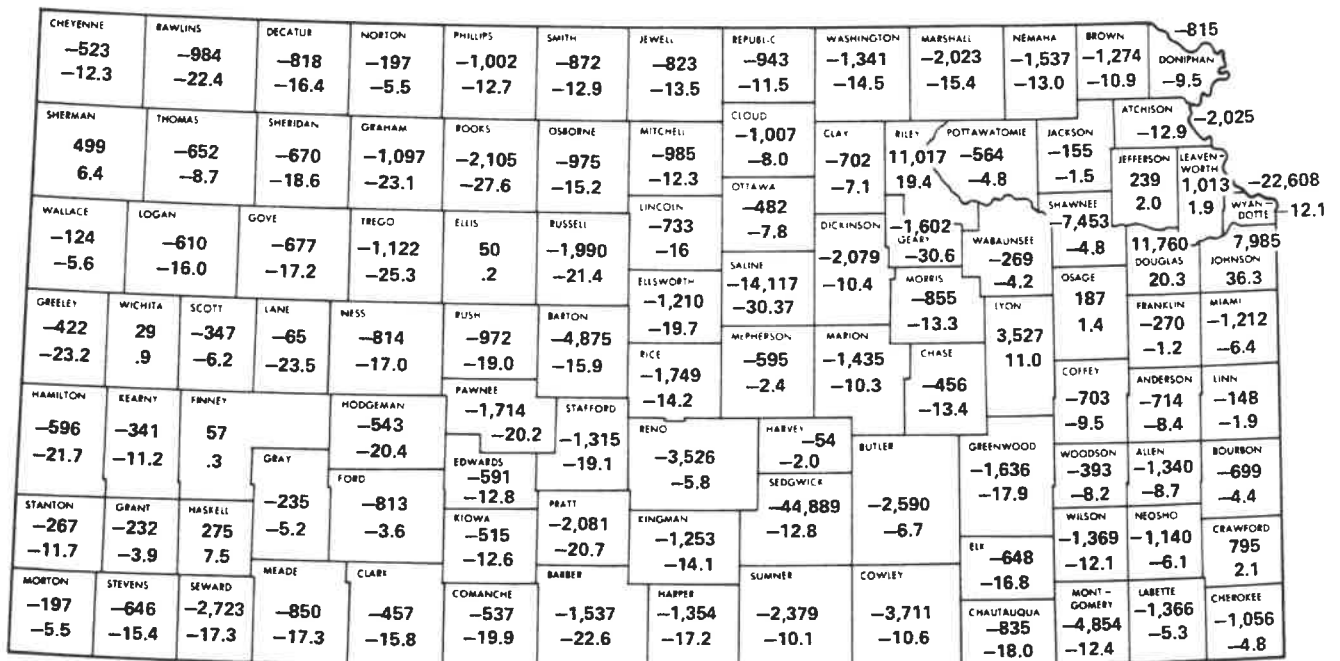
Figure 3.5  
PERCENT OF POPULATION 65 YEARS AND OVER, 1980



Source: U.S. Department of Commerce, Bureau of the Census.

State - 13.0%

Figure 3.6  
MIGRATION IN KANSAS, 1960-1970



Source: U.S. Department of Commerce, Bureau of the Census.

For each county, the top number represents the actual number of people migrating to (from) the county. The bottom number represents migration as a percent of base year population.

**Figure 3.7**  
**MIGRATION IN KANSAS, 1970-1980**

CHEYENNE -545 -14.34	RAWLINS -355 -8.26	DECATUR -499 -8.63	NORTON -500 -7.46	PHILLIPS -487 -6.41	SMITH -565 -8.83	JEWELL -661 -11.60	REPUBLIC -447 -6.12	WASHINGTON -568 -6.31	MARSHALL 62 .47	NEMAHIA -852 -7.47	BROWN 425 3.57	DONIPHAN -89 -1.00
SHERMAN -767 -10.09	THOMAS 254 3.02	SHERIDAN -526 -13.15	GRAHAM -893 -2.03	ROOS -707 -9.68	OSBORNE -183 -2.95	MITCHELL 90 1.05	CLADE -676 -5.12	CLAY 21 .21	RILEY 74 .1	POTTAWATOMIE 2,371 16.13	JACKSON 1,008 8.33	ATCHISON -8.1 -1.462
WALLACE -367 -16.68	LOGAN -519 -14.42	GOVE -447 -11.18	TRICC -236 -5.36	ELLS -1,313 -4.71	RUSSELL -437 -4.65	HINCOK -289 -7.0	OSAGE -62 -9.8	DICKINSON -384 -19.0	WABAUENSEE -7,767 -26.0	WABAUENSEE 425 5.9	SHAWNEE -1,274 -8.04	JEFFERSON 2,755 18.25
GREELE -143 -7.94	WICHITA -751 -25.47	SCOTT -481 -8.15	LANE -365 -14.04	NESS -304 -6.33	RUSH -408 -8.33	BARTON -1,149 -3.66	ELLSWORTH 604 9.9	SAVINE -1,291 -2.65	WYANDOTT -19.0	WYANDOTT -81 -1.21	OSAGE 1,820 11.82	LEAVENWORTH 4,700 6.95
HAMILTON -332 -11.50	BEAR -13 -.35	FINNEY 1,567 6.56	HODGEMAN -457 -19.04	PAWNEE -491 -5.99	STAFFORD 166 2.59	KEOSAUQUO -407 -3.4	WAPHERSON 1,220 4.62	MARION -143 -1.08	CHASE 25 .74	LYON 326 .92	OSAGE 2,219 22.64	JEFFERSON 2,755 18.25
STANTON -258 -9.56	GRANT -101 -1.38	HASSELL -451 -10.49	GRAHAM 106 2.04	FORD -243 -1.01	EDWARDS -280 -6.6	FRANKLIN -69 -1.77	SENECA 613 .96	HARRIS 1,776 5.92	BUTLER 4,187 9.08	GREENWOOD 30 .33	WOODSON 511 11.36	JEFFERSON 2,755 18.25
MORTON -496 -13.41	STEVENS -46 -.98	SEWARD -937 -5.48	MEADE -301 -6.14	CLATSOP -196 -7.0	COMANCHE -52 -1.93	BARBER -444 -7.0	HARRIS 123 1.56	SUMNER 1,048 4.26	COWLEY 1,348 3.75	ELE 420 11.35	WILSON 1,025 8.54	JEFFERSON 2,755 18.25
											CHAUTAUKUA 777 17.27	JEFFERSON 2,755 18.25
											MONTGOMERY 2,330 5.71	LABETTE -275 -1.06
											ROCKWELL 300 17.0	LABETTE -275 -1.06
											WAGON WHEEL -386 -1.06	LABETTE -275 -1.06
											FRANKLIN 1,224 5.7	LABETTE -275 -1.06
											FRANKLIN 1,224 5.7	LABETTE -275 -1.06
											FRANKLIN 1,224 5.7	LABETTE -275 -1.06
											FRANKLIN 1,224 5.7	LABETTE -275 -1.06
											FRANKLIN 1,224 5.7	LABETTE -275 -1.06

Source: U.S. Department of Commerce, Bureau of the Census.

For each county, the top number represents the actual number of people migrating to (from) the county.  
The bottom number represents migration as a percent of base year population.

#### IV. OUTLOOK FOR THE KANSAS ECONOMY

One theme of Section II is the current weakness in wealth-creating industries in Kansas, the industries which serve as a foundation for the Kansas economy. Traditionally, the basic industries of aviation, oil and gas, and agriculture have served Kansans well. However, recent trends and current performance of these industries create policy choices for Kansans with respect to future economic development. The purpose of this section is to provide a view of the inherent strengths and weaknesses of Kansas in order to underpin informed choices concerning the future discussed in Section V.

The assessment of the inherent strengths and weaknesses of Kansas has two aspects. First the industries that have traditionally served as the foundation of the Kansas economy, aircraft, oil and gas, and agriculture, are examined. The conclusion is that while these industries should not be relied upon to serve as the entire foundation of the Kansas economy, they will serve Kansans well as cornerstones in the foundation.

The second aspect in this assessment of the strengths and weaknesses of Kansas concerns the desirability of Kansas as a place to do business. The factors that affect a firm's ability to make a profit or more generally affect the business climate of Kansas are examined. We conclude that Kansas has a set of important strengths to build upon. Indeed barriers to economic development in Kansas exist but they are barriers which are not overwhelming and can be removed.

##### Traditional Industries

The traditional Kansas industries of aviation, oil and gas, and agriculture are not currently in a strong position. A key question in the economic development of Kansas is whether we should anticipate further decline in these industries. We conclude that these industries are probably at or near their nadir. The probable scenario is that these traditional sectors will improve modestly after the next several years.

Aircraft. The aircraft industry in Kansas consists of two divisions, commercial aviation and general aviation. Commercial aviation aircraft consists of large commercial transport aircraft, that is, large commercial jets. General aviation aircraft are the smaller recreational, business, and regional carrier aircraft.

The commercial aircraft industry delivered an estimated 275 aircraft in 1985, up sharply from the 188 units delivered in 1984. The Boeing 737 is a very successful model in this market.



Fortunately for Kansas, a large portion of the assembly of 737 occurs at Boeing's Wichita plant.

The U.S. Department of Commerce predicts that world traffic growth and the need for replacement aircraft will keep demand strong for large transport aircraft. Due to the fact that Boeing and McDonnell Douglas are the only domestic builders of these large transports, we anticipate that Boeing in Wichita will provide growing employment opportunities.

In contrast to the vigor of the commercial transport sector is the general aviation section. Approximately 60 percent of general aviation aircraft that are produced in the United States are produced in Kansas. In 1979, 17,048 general aviation aircraft were shipped. This number fell to 2,691 by 1983. In 1985 the number of units shipped was 2,050. The U.S. Department of Commerce estimates that 2,200 units will be produced in 1986 (see Table 4.1).

The reasons for the decline are not clear. Initially, it was believed that the downturn in general aviation aircraft was simply reflecting the general downturn of the 1980 recession and the 1981-1982 recession. It is now evident that although the recessions may have aggravated the negative trend, there are other factors involved.

Partial explanations of the reduction in general aviation aircraft shipments include the changing nature of the regional airline industry and the strong dollar favoring increased imports of foreign produced aircraft. In 1980 imports of general aviation aircraft accounted for 20 percent of the market; in 1985 imports increased to 37 percent of the market. Several foreign manufacturers are aiming at the growing 20-60-seat market.

The U.S. Department of Commerce expects more structural shifts in the general aviation industry; in particular they forecast a growth in the industry of 3.6 percent for each of the next five years. In terms of units, this growth would be quite small since current production is very low. It therefore expects that the general aviation industry is highly unlikely to attain its former status.

The prospects for the aircraft industry in Kansas are mixed. The general aviation sector has been weak, and the first quarter of 1986 was the worst ever for the industry and for the production of general aviation aircraft. However the recent decline in the strength of the dollar will be a source of strength for general aviation. Kansas should continue however to benefit from the strong market for large transports.

**Table 4.1**  
**U.S. Aircraft Shipments**  
**1970-86**

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General Aviation

Year	Unit
1970	7,292
1971	7,466
1972	9,774
1973	13,646
1974	14,166
1975	14,056
1976	15,451
1977	16,904
1978	17,811
1979	17,048
1980	11,877
1981	9,457
1982	4,266
1983	2,691
1984	2,438
1985 <sup>1</sup>	2,050
1986 <sup>2</sup>	2,200

---

<sup>1</sup>Estimated.

<sup>2</sup>Forecast.

SOURCE: U.S. Department of Commerce: International Trade Administration; general aviation: General Aviation Manufacturers Association.

Oil and Gas. The Kansas petroleum industry is extremely sensitive to variations in the price of crude oil. Because of the low output of many of the wells, they are marginally profitable; as the price of oil declines the number of operating wells declines rapidly. Kansas has the largest number of stripper wells (about 50,000). A stripper well produces less than ten barrels a day. Kansas wells produce an average of three barrels per day.

One measure of the tenuous existence of the oil industry in Kansas is the rate that active wells are abandoned as the price of crude oil falls. A RAM study estimates that when the price of crude falls to \$18 a barrel, over 15 percent of Kansas wells will be abandoned; if the price falls to \$15 a barrel approximately 23 percent of the wells will be abandoned. Another measure of the



sensitivity of the Kansas petroleum industry to the price of crude oil is the correlation between the number of active drilling rigs and the price of crude. In 1979 when the well-head price of oil averaged around \$12.5 per barrel the average rig count was 66; in 1980 the average price jumped to \$21.5 per barrel and the number of rigs was 120. More recently the number of active drilling rigs has been declining steadily from a high of 224 rigs attained in 1984: in September 1985 the count was 120 and in mid-February 1986 the count of active rigs declined to between 50 and 60 as oil prices continued to fall. Collins and Eck (Kansas Business Review, Spring 1984) estimate that for every dollar change in the price of well-head crude, the rig count will change (in the same direction) by 10.

During the second half of the seventies many developing countries became dependent on oil revenues. The demise of the oil cartel--with the resulting price decline--has forced these countries to attempt to maintain oil revenues by increasing output. This abundant supply of oil will, we believe, become the status quo. The chronic oversupply of oil will keep downward pressure on the price of oil. This price consideration combined with the nature of the Kansas oil industry certainly leads to the conclusion that although the industry is an important source of wealth for Kansas, it cannot be relied upon to generate much greater income than the present level.

Agriculture. Wheat and cattle have been the mainstay of Kansas agriculture, historically producing 70 to 75 percent of agriculture receipts. In the wheat market we see little relief for the Kansas farmer, but there may be an improvement in the cattle market.

The worldwide supply of wheat has been continuously increasing. Countries such as India and China which used to import wheat now export it. Since this increasing supply of wheat has outpaced the demand, stockpiles have been increasing (see Table 4.2). Unless there are interruptions in the worldwide supply, we anticipate a continuing increase in the stock of wheat. This growing wheat surplus will, of course, put downward pressure on its price. Offsetting the effect of growing wheat surpluses, the decline in the value of the dollar will increase the demand for U.S. wheat. The outcome is that while little improvement is likely, further significant decline is unlikely.

The U.S. Department of Agriculture anticipate rising beef prices. While this is certainly good news for cattle producers, it will not solve the agricultural problem in Kansas as wheat farmers and cattle operations are generally separate. It will however help offset weaknesses in other sectors.

Table 4.2

## World Supply and Demand of Wheat

	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85 <sup>E</sup>	1985-86 <sup>P</sup>
<u>WHEAT</u>							
Area (hectare)	227.6	236.9	238.7	237.5	229.1	231.1	230.0
Production (metric ton)	422.8	442.9	448.4	479.1	491.0	513.9	505.2
Exports (metric ton) <sup>1</sup>	86.0	94.1	101.3	98.6	102.9	107.2	90.9
Consumption (metric ton) <sup>2</sup>	443.5	445.7	441.4	467.9	486.6	500.6	494.2
Ending stocks (metric ton) <sup>3</sup>	80.4	78.2	85.1	96.5	100.8	114.1	125.1

E - Estimated.

P - Projected.

<sup>1</sup> Excludes intra-EC trade.<sup>2</sup> Where stocks data not available (excluding USSR), consumption includes stock changes.<sup>3</sup> Stocks data are based on differing marketing years and do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 1980 data correspond with 1979-80, etc.

Source: U.S. Department of Agriculture.

## Kansas as a Place to do Business

The traditional industries of Kansas are expected to grow only modestly in the near future, so Kansas must retain existing industries and attract new ones. This section is an assessment of the strengths and weaknesses of Kansas as a place to do business. Are factors in Kansas favorable or unfavorable for business profitability? Our conclusion is that Kansas has, relative to neighboring states, a good business climate.

Kansas has an important set of strengths to build upon. Although these strengths are not overwhelming, Kansas is competitive with neighboring states. This competitiveness serves as a basis for promoting Kansas. Existing barriers to development are not ingrained in the character of Kansas and can be removed.

The outlook for Kansas is potentially promising. There are many fundamentally strong factors which could attract business to Kansas. These factors include: labor market characteristics, energy costs, transportation and, for the most part, taxes in Kansas.

Labor market. We believe that one of the most important strengths of Kansas, if not the most important strength, is its people. Kansans have a strong work ethic: they perform a day's work for a day's pay. This is not to imply that Kansans are not paid well for the day's work. Kansas has a relatively high wage rate, but this should not impede development.

It is true that Kansas and the neighboring states have hourly manufacturing wage rates higher than the U.S. average, and regionally Kansas is second only to Iowa (see Table 4.3). However, the average hourly wage rate in Kansas is distorted by the high paying aviation, auto, and rubber industries. The frequency distribution of hourly wage rates in Kansas is bimodal: there is a large group of Kansans who are highly paid and a large group of Kansans with moderate wages. Also, it is not astute to look at wages without also considering productivity.

Kansas ranks higher than any of the neighboring states in terms of value added by manufacturing employee per dollar of payroll. For every dollar paid to a Kansas manufacturing employee there are dollars added to the value of the product. Kansas ranks fifth among all states in this category. This data shows that Kansans are paid well and they are worth it (see Table 4.4).

Many manufacturing firms like to locate where the unemployment rate is high, thus ensuring an adequate supply of labor. While, historically the unemployment rate in Kansas has been lower than the nation a hidden supply of labor is available in

**Table 4.3**  
**Average Annual Manufacturers Wages,  
and State Rankings**

	1983 Wage Dollars/M	State Rank (1=lowest wage)
U.S.	8.71	-
Kansas	9.28	35
Missouri	8.89	26
Oklahoma	9.21	34
Colorado	8.97	28
Nebraska	8.75	21
Iowa	10.09	42

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings, Washington, D.C., May, 1984.

**Table 4.4**  
**Value Added Per Payroll Dollar 1982**

	Value Added by Manufacturing Employee per Dollar of Production Payroll	Rank
U.S.	4.05	-
Kansas	4.69	5
Missouri	4.14	21
Oklahoma	3.92	33
Colorado	4.27	17
Nebraska	4.44	13
Iowa	4.55	8

SOURCE: U.S. Department of Commerce, Bureau of the Census, 1982 Census of Manufacturers, Preliminary Report Summary Series, MC-82-Sum-2(p), Washington, D.C., December, 1984.

many counties of the state. A study by Francke (see Kansas Business Review, May 1981) indicates that for Kansas the low unemployment rate may be misleading concerning available labor supply to firms in search of a location. The reason is that in many counties there is a large supply of "latent labor", persons who would enter the labor force under certain economic conditions.

The extent of union activity in manufacturing is low in Kansas relative to both the nation and neighboring states (see Table 4.5). Studies show that firms are attracted to areas with low union activity. One reason for the low union activity in Kansas is that Kansas is a right-to-work state and this is also viewed positively by firms.

Table 4.5

**Union Manufacturing Employment  
as a Percent of Total Manufacturing Employment, 1984  
United States, Kansas and Neighboring States**

	Percent	Rank
U.S.	21.0	--
Kansas	12.8	15
Missouri	41.6	45
Oklahoma	17.6	24
Colorado	11.0	11
Nebraska	12.5	14
Iowa	31.0	37

SOURCE: Alexander Grant and Company, 1985.

Another quality of the Kansas work force is the educational level of Kansans. The availability of a technically qualified, trainable work force is a necessary requirement for firms in location decisions. Kansas ranks seventh in the United States in median years of schooling. A higher proportion of Kansans get engineering and business degrees than the U.S. proportion (see Table 4-6). Where vocational education is concerned Kansas fares less well, and, as these institutions are where specific training programs occur, this may be a weakness when enticing a firm to a community. Also, as the educational institutions are located in general in the eastern and central areas of the state, the communities in western Kansas do lack some access to the institutions.

**Table 4.6**  
**Education Levels of the United States,**  
**Kansas, and Neighboring States**

	<sup>1</sup> Median Years Schooling	<sup>2</sup> Percent High School Educated Adults Age 25-64		<sup>1</sup> Percent Adults 25+ Years of Age w/4+ Years College
		Percent	State Rank	
U.S.	12.5	78.94	--	16.2
Kansas	12.6	85.62	7	17.0
Missouri	12.4	78.25	29	13.9
Oklahoma	12.5	79.38	26	15.1
Colorado	12.8	86.95	6	23.0
Nebraska	12.6	87.97	2	15.5
Iowa	12.5	83.28	13	13.9

SOURCES: <sup>1</sup> 1980 Census of the Population.

Taxes. The evidence on the weight firms attach to taxes when making location decisions is mixed. Certainly, however, anything that affects the bottom line will affect the decision. Our experience is that it is necessary that a state's taxes do not stand out on the negative side. In general, Kansas taxes do blend in with the neighboring states, but there are exceptions to this. These exceptions are barriers to development which, in our view, should be removed.

Kansas is one of few states in the nation that has a sales tax on machinery and equipment used in manufacturing. Another tax detrimental to development is the property tax on inventories. Kansas is unique in the region for having this tax. But, although Kansas taxes may tend to be a little high for business, removal of these anomalies, which is being considered, will bring Kansas into line with neighboring states.

Energy. Energy costs and availability are another factor which influence firms' location decisions. Kansas has relatively inexpensive fuel and electric costs. We were ranked tenth in the nation (1 being low) in energy cost (see Table 4.7). Further, with Wolf Creek, the availability of electricity is not a concern. [It should be noted that the data in Table 4.7 is for 1981, Wolf Creek coming on-line may change the relative position of Kansas.]



Table 4.7

Fuel and Electric Costs for Manufacturers,  
United States, Kansas and Neighboring States, 1981

	Costs (Dollars/Million BTU)	Rank (1 = lowest)
United States	4.92	-
Kansas	3.84	10
Missouri	4.54	22
Oklahoma	3.69	7
Colorado	4.12	16
Nebraska	3.71	8
Iowa	3.99	13

SOURCE: Alexander Grant and Company.

Geographical location. The geographical location of Kansas is often cited as a benefit Kansas has in attracting firms. However, in order for the geographical location to be exploited, a good transportation network is necessary. Kansas must maintain its highway network to take advantage of this inherent strength. Our research shows that although there are areas of concern, such as southwest Kansas, the condition of highways is satisfactory. Air services are however lacking in many areas of the state.

Perceptions. The above analysis shows that Kansas has a solid foundation upon which economic development can build. A confirmation of this conclusion is provided by the results of a survey done by the Institute for Public Policy and Business Research, and Midwest Research Institute. In general, business leaders and policy makers see Kansas as a good place to do business.

Only 18 percent of those surveyed considered the business climate negatively. Compared with neighboring states the business climate in Kansas is viewed as better than in Iowa and Nebraska, as good as in Missouri and Oklahoma, and behind only Colorado.

The most important positive characteristics of the business climate in Kansas are perceived to be the abundant, trained labor force and the Kansas work ethic. The two most frequently mentioned factors which inhibit business growth in the state were: 1) Kansas drinking laws; 2) Kansas's image; and 3) the lack of nontraditional financing. These first two are probably intertwined. It is also perceived that outsiders see Kansas as a state that lacks social and cultural attractions and does not encourage new ventures. In general however outsiders have a



rather neutral perception of Kansas, not a negative perception as many Kansans believe. Kansans must not sell themselves short.

While the overall perceptions of Kansas's business climate are positive, there are some widely held concerns. It must be noted, however, that the positive factors (e.g., the quality of the labor force) are more ingrained in the fabric of Kansas's character, while the negative factors (e.g., Kansas drinking laws) are relatively superficial and easily removed.

### **New Industry**

Kansas is not overrepresented by growth industries (see McLean, Kansas Business Review, 1984). Therefore, new industries need to be recruited. To attract new industries it is cost effective to identify and target those industries whose requirements can be fulfilled by the attributes of the area. This identification process has been carried out for the Institute for Public Policy and Business Research by Midwest Research Institute. The product of this exercise is an industry list representing high growth industries having a good fit for the State of Kansas. This list, while not long, represents industries with a solid potential. The list includes: 1) food and food products, 2) chemicals and biological products, 3) metal fabricators and tooling, 4) machinery and equipment, 5) instrumentation.

### **Conclusion**

Further deterioration of the industries that have historically served Kansas well is not anticipated, but any growth will be modest. Although these industries remain an important feature of the Kansas economy, they should not be relied upon to provide a foundation for sufficient employment opportunities in Kansas.

In order to provide sufficient employment opportunities in Kansas it is necessary that firms locate in or expand in Kansas. Kansas has several attractive features that firms look for. Perhaps the most important is the character of the work force in Kansas. The barriers to good business climate in Kansas are not overwhelming and can be removed. Kansas does suffer from some negative perceptions among business people, but in general business people in Kansas like the business climate in Kansas. By acting upon its strengths Kansas can succeed in the competition to provide its citizens' economic opportunities.

## V. POLICY CHOICES FOR ECONOMIC GROWTH

It is clear from our preceding analysis that important policy choices must be made that will affect the economic future of Kansans. This concluding section will focus on the following key questions:

- a) Will a continuation of existing trends provide an acceptable level of economic welfare for Kansans?
- b) What form of economic development is realistically feasible for Kansas?
- c) What basic strategy will produce optimum economic development for Kansas?
- d) What will be the key elements of a successful strategy?

### Existing Economic Trends: Accept or Change?

Will a continuation of existing economic trends provide an acceptable level of social and economic welfare for Kansans? Should we allow these trends to continue or should we attempt to influence them for the better? What is the "cost" of doing "nothing"?

Kansas performance has been less than U.S. average this decade and this was illustrated with respect to income and employment data in Sections I and II. From 1979 to 1985, U.S. personal income grew at an average annual rate of 2.57 percent while for Kansas it grew at 2.06 percent. If Kansas had grown at the same rate as the U.S. over this period, Kansas personal income would be larger by \$4.6 billion (1985 dollars). This would have been associated with an additional 40-50,000 jobs, and the state would have received revenue of an additional \$240-250 million (1985 dollars). These are rough estimates, but they are indicative of the consequences of relatively weak economic performance. Furthermore, this revenue "loss" seriously affects the capacity of the state to provide basic social services to the disadvantaged, to fund public and higher education, and to maintain roads and other physical infrastructure at a level enjoyed by other Americans.

Extrapolating into the balance of this decade, if Kansas could achieve a 0.5 percent increase in the annual growth rate of personal income for 1986-1991, that is, notionally achieve U.S. average performance, personal income would be greater by \$2.7 billion (1985 dollars), there would be 30-40,000 more jobs than there otherwise will be, and state revenue would be greater by \$135-140 million (1985 dollars), on the basis of tax provisions prevailing prior to the 1986 changes.

Again, while these are ballpark estimates only, they do illustrate the serious consequences for Kansans if recent trends continue for the balance of the decade. And of course the erosion of our relative standard of living would continue to compound in the next decade.

Since a continuation of existing trends will not provide an acceptable level of economic welfare for Kansas, policy makers must become pro-active in order to enhance the economic environment of Kansas.

### Potential Economic Structure

What form of economic development is feasible in the future? What type of industry structure can the state realistically aim to develop? Should we envision an industrial structure based on our existing economy, or is it feasible to aim for a relatively different composition based on new industry?

The ultimate source of jobs and income in Kansas is the state's economic base. The economic base comprises those industries that produce goods and services that are "exported" from the state to other states or countries, and hence bring new money to Kansas. It also includes those industries which supply other Kansas industries with goods and services that would otherwise be imported, and economic activities like tourism where the services are provided to non-Kansans.

All other industries can be characterized as the local market economy, which involves trade within the state. They do not bring new money into the state, but simply recirculate that which is already here. The size of the local market economy is largely determined by the size of the economic base, and will contract or expand in response to changes in the latter.

A state achieves economic growth therefore by increasing the value of output of its economic base. The increased earnings of Kansans arising from that expansion then circulate in the local market economy, creating additional jobs and income in that sector. The primary focus of a successful economic development strategy therefore must obviously be on the expansion of the state's economic base.

The Kansas economic base consists of the following industries:

- agriculture, mostly wheat and beef
- mining, primarily oil and gas

--manufacturing, particularly aviation and food processing

--exported services, like engineering, software development, and tourism.

This means that we have clusters of producers, suppliers, skills, knowledge, infrastructure, and institutions that are geared to and concentrated in relation to the above sectors. Further, we have this particular set of traditional industries because the attributes of our state provided a competitive advantage in the past to the production of these particular goods and services in Kansas compared with other localities.

Our previous analysis indicated that the prognosis and outlook for this Kansas economic base is for, at best, relatively weak growth in the future. This means that just as this base has not been able to generate adequate income and employment in the recent past, it will also not provide an adequate foundation for the future. In essence, the vision of a future Kansas economy with the same structure as today is not a viable alternative in itself. The traditional sectors can no longer carry the state as they did in the past.

Should we countenance an approach of allowing our current base to fade away and be replaced by a completely new structure? This could only occur if the substitute industries were also based on comparative advantage. However, our previous analysis indicated that while the state has some strengths, these are not sufficiently distinctive or strong to underpin massive new development based on new industry outside our traditional sectors. Further, if a substitute economic structure were based on artificial comparative advantage, like developing a wine industry in competition with California, it would be very expensive and very vulnerable. It is simply not a viable option for us to abandon our traditional sectors.

The inevitable conclusion is that we cannot rely on our traditional base nor can we depend on the development of a radically different industrial mix. A realistically feasible form of economic development for Kansas must incorporate the old into the new. If we conceive of the current Kansas economic "stool" as having three legs, namely, agriculture, oil and gas, and manufacturing (particularly aviation and food processing), the future stool must have a foundation of four legs, namely the present sectors plus a fourth sector comprising some share of the new evolving industries in this era of technological development and application. We have important traditional basic industries in Kansas, yet these industries need to be enhanced with new basic industries.

## Factors Underlying an Optimum Strategy

What basic strategy will produce an expanding economic base of the future comprising a mix of traditional industry and new development? How can Kansas retain, nourish, and strengthen traditional sectors and concurrently attract and nurture new industry?

The traditional sectors will only survive in a significant form and remain as the primary component of the economic core, if they become the gateways or conduits through which new products or processes emerge. This necessarily involves the application of new science and technology to these industries so that resources are utilized in the most competitive and innovative manner to compete in world markets.

The objective of an economic strategy is to foster timely adaptation to change and transition. The harsh reality of the world economic order is that those industries which develop and apply new knowledge the most rapidly and the most efficiently will be the ones with the competitive edge. For Kansas this will involve providing the environment and support for innovation in and the application of science and technology to the existing economic base as well as building upon existing strengths, and removing barriers, to develop new industry.

Where will the impetus come from? What is the role of the state, the private sector, other key institutions and groups in Kansas? First, the role of the state is limited, but it is vital. It does not have the capacity or power to conduct a comprehensive industrial policy that makes broad, strategic allocation decisions affecting all aspects of economic development. Nor does the state have control over commodity markets, tariffs, capital markets, or the money supply. And the state has limited scope to be an active partner in enterprises in light of the prevailing philosophy of free enterprise and the traditional perception of the function of state government in our society.

But the state can play a vital role by creating the pre-conditions for economic development to flourish. This involves

- (i) establishing an optimum foundation for development (tax structure, physical infrastructure, etc.);
- (ii) fostering productive linkages and interrelationships (private sector-state cooperation, university-business research, etc.);
- (iii) cultivating a favorable business climate and environment; and



- (iv) removing barriers and obstacles to entrepreneurship and innovation.

Further, the state will need to identify the few key areas where its involvement is critical for success, and establish priorities for this intervention and the use of state resources.

While the state can and must establish the preconditions, the foundation for economic growth, it cannot itself be the main party to development. It is the private sector and other groups that must respond to the window of opportunity that the state will open for profitable venture.

What then will constitute the basic strategy for development? Where should the focus and emphasis be? These key considerations are prime determinants of what will work for Kansas, and they bear repetition:

- 1) The outlook for the traditional base is neither bleak nor bullish, but for moderate long run performance. As such it will remain the foundation of the state economy.
- 2) The economic fundamentals underlying business location and profitability in Kansas are sound. State wage levels, energy costs, worker productivity, state and local services, transportation costs and network, are NOT out of line, on average and on balance. The basis exists for profitable business activity in the state.
- 3) The state has a set of important strengths that can be built upon for future development. In a comparative sense, the set is not great, but it is sound. If it were better, Kansas would be attracting more industry from outside. If it were less, Kansas would be losing industry to outside.
- 4) Significant barriers to economic development exist however that are harmful to small business development and to innovation and entrepreneurship. These include inadequate research and development expenditure, impediments in the state tax structure, lack of risk capital, insufficient links between key groups, and inadequate funding for the state effort. These barriers are not overwhelming, but they are retarding. They can be removed or ameliorated.

Consequently, an optimum strategy for the economic development of Kansas should emphasize a balanced approach of supporting the existing economic base as well as fostering growth through the expansion of old and the attraction of new industry. Such an approach would incorporate the following thrusts:



- 1) Enhance and extend the traditional sectors, for example through diversification into new agricultural products and greater value added in processing. The future viability of these sectors will depend on their ability to adapt to new products and processes as well as on their competitiveness with current products.
- 2) Retain, sustain, and expand existing industry. This is largely small to medium scale in nature, a scale of operation that seems to be highly compatible with the Kansas environment. Given that 70 to 80 percent of new job creation will occur in small businesses, the Kansas structure provides a favorable basis for vitality through
  - a) expansion based on modernization and enhanced competitiveness, and
  - b) new business formation through entrepreneurship.
- 3) Develop new industry. Despite sound fundamentals, important strengths, and limited barriers, the state is not overly attractive to outside industry. Some improvement in attractiveness will occur with any enhancement of the fundamentals and strengths, or removal of barriers, but the scope for this would be inadequate to rely on as the foundation for future progress. In seeking new industry, we need to recognize:
  - a) That only certain types of industry will find Kansas attractive; and
  - b) that foreign investment is an important source for job creation, and is being actively pursued by other states.

### Key Elements of a Kansas Economic Development Strategy

Given this focus on development from within, complemented by the attraction of new industry to the state, what then are the key elements of an optimum strategy for Kansas? These would seem to be as follows:

- 1) Foster competitiveness through innovation.
- 2) Foster appropriate linkages and interrelations.
- 3) Encourage entrepreneurship.

- 4) Provide the optimum infrastructure and business climate.
- 5) Remove barriers to development.

Economic development initiatives need to be directed towards and evaluated in terms of their contribution to these basic elements of strategy.

### 1) Innovation

Individual firms, particularly small business, have insufficient resources and technical capacity to learn about new technological developments and to capitalize on new ideas. New technology will not be a separate industry, but rather will be at the heart of every industrial sector. Existing Kansas industry will not survive, let alone expand, unless it innovates, and the future viability of the weakened traditional sector depends on it.

Economic development initiatives to foster competitiveness and to create a culture of innovation would include

- a) increasing the pool of innovation, through university research, both basic and applied, and joint university-business research;
- b) improving access to innovation, through mechanisms for technology transfer and industry liaison; and
- c) creating incentives to innovate, such as R&D tax credits and tax exemptions for R&D facilities.

### 2) Linkages

Success will depend on a committed and cooperative effort by many groups and purposeful leadership at many levels. The lack of an integrated approach has handicapped the state program to date in terms of level, direction, and effectiveness.

Linkages and organization can be improved significantly by

- a) more directed policy formation, through legislative committees and the establishment of a blue ribbon policy advising group;
- b) broader input to policy formation, through private sector and other key group participation; and

- c) greater operational effectiveness, through better organization of the state effort, and closer involvement of and with the local communities.

### 3) Entrepreneurship

Kansas will need imaginative, risk-taking entrepreneurs able to turn ideas for new products and processes into successful business ventures. "Entrepreneurs exist in all communities, but the vigor with which they emerge depends on the entrepreneurial environment--the availability of the role models, access to financial institutions, rewards to risk-taking, and above all the absence of barriers," (The Wealth of States, p. 59). The availability of capital is the key element to new business development and expansion, and is the primary barrier to small business growth in Kansas. The primary cause of failure is lack of management competence and knowhow.

Initiatives to cultivate homespun entrepreneurship include

- a) encouraging university connections and settings (research park, research incubators);
- b) developing risk and venture capital pools; and
- c) providing technical assistance and support for managerial development and operation.

### 4) Business Climate and Infrastructure

The key objective of infrastructure development and business climate enhancement is to influence the competitiveness and profitability of existing and potential Kansas industry. The task is to cultivate both the notion and reality that Kansas is a good place to locate economic activity. If the business environment is rewarding to existing industry, it will also be attractive to new industry.

Initiatives of the following kind can improve the business environment:

- a) make physical infrastructure development compatible with state economic goals, e.g., by supporting infrastructure development related directly to business activity (loan pools for transportation and industrial park development), and by establishing priorities for road and other physical investment based on economic purpose;

- b) get the state tax structure into line with regional patterns, especially as it impacts business, e.g., through sales tax exemption for capital equipment, and removal of the property tax on inventories;
- c) provide special needs for individual firms, specially small business, e.g., information and technical services, and oversee marketing support;
- d) provide relevant and effective incentives to encourage business location in Kansas, e.g., property tax abatement option to local government, venture capital and R&D tax credits;
- e) retain commitment and support for public and higher education, to maintain the state's greatest asset;
- f) ensure work skill development meets industry needs;
- g) enhance the quality of life; and
- h) create the notion that Kansas is a good place for business.

#### 5) Barriers

Some significant impediments to business development can be found in the Kansas business environment. As such, they retard expansion and discourage new industry. Their removal is crucial to the release of entrepreneurship and enhancement of business confidence. Examples include:

- a) tax measures impacting Kansas business unduly, e.g., sales tax on plant and equipment, property tax on inventories;
- b) lack of non-traditional capital;
- c) lack of technical assistance and support for small business management;
- d) transportation linkages;
- e) regulatory impact on business; and
- f) constitutional limitation on the involvement of the state in economic development.

There are three further dimensions in relation to a successful strategy that need to be addressed:

- A. The state should not adopt a strategy for development based on tax incentives, but rather should have a tax structure that is consistent with that of competing states with regard to business taxes. A strategy based on tax incentives is expensive and there is no evidence it would work. On the other hand Kansas will lose its attractiveness relative to competing states if its tax structure and levels contain significant anomalies or fail to send the right 'signals' about business climate. In particular, the state must avoid having a tax generally not found in competing states that negatively impacts business in any significant way. The Kansas tax structure does contain some impediments to business development, and the tax burden on business is perceived to be slightly high.
- B. To achieve a significant long term improvement in the economic base, the state will need to make a large and sustained funding investment over the next decade to support a well-designed package of economic development initiatives. Even so, there is no absolute guarantee of success from a large scale effort. Patience will be necessary because the specific pay-offs will be long term and uncertain.
- C. Transition through structural change can be uneven and painful. While the strategy outlined above provides the opportunity for development anywhere in the state, success is more likely in some parts than in others. Appropriate social policies will therefore be necessary to ensure that all Kansas shares the fruits of economic development, with a particular focus on displaced persons and distressed areas.

### Conclusion

While the challenge facing Kansas is not an insurmountable one, it will be difficult. The path to progress will require substantial investment, patience, leadership and commitment. It can be done.

## References

- Francke, Daniel W. Assessing Kansas' Latent Labor Force. 1981. Kansas Business Review 4:9.
- Kirlin, John J. and Donald R. Winkler. 1985. California Policy Choices, 1985. Sacramento, CA: Sacramento Public Affairs Center, University of Southern California.
- Kirlin, John J. and Donald R. Winkler. 1984. California Policy Choices, 1984. Sacramento, CA: Sacramento Public Affairs Center, University of Southern California.
- McLean, Robert A. 1984. Kansas Economic Development in the Decade Ahead: A Method and Application. Kansas Business Review 8:1.
- Redwood, Anthony, Daniel Petree, and Gary Albrecht. 1985. Long-Term Structural Changes in the Kansas Economy. Kansas Business Review 8:2.
- Sexton, Richard, and John Cita. 1982. The Changing Structure of the Kansas Farm. Kansas Business Review 5:6.
- Sexton, Richard, and Robert Glass. 1983. Instability in the Kansas Economy. Kansas Business Review 6:4.
- Vaughan, Roger, Robert Pollard, and Barbara Dyer. 1984. The Wealth of States. Washington, DC: CSPA.

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## CHAPTER TWO

### FACTORS CONSIDERED IN SITE LOCATION DECISIONS

#### SUMMARY

##### Introduction

Business location decisions for firms are directly linked with an area's economic growth. An area consistently favored for site location is likely to experience a higher rate of economic growth than other areas. Likewise, business decisions to discontinue operations in an area or to relocate are seen as signs of economic decline, perhaps signalling problems with the area's economic/business climate. The research reported in this study provides an analysis of the factors associated with industry site selection for Kansas. The research was conducted along four major tracks:

- (1) review of the industrial site location literature;
- (2) analysis of factors in firms' decisions to locate or expand in Kansas;
- (3) analysis of factors in firms' decisions not to locate, not to expand, or to cease operations in Kansas; and
- (4) analysis of factors considered most important by professional site consultants.

##### Review of the Industrial Site Location Literature

A major issue in the literature of industrial site location is whether tax and financial incentives are effective in attracting new industry and whether they can result in net benefits to the state or community. While the latter question can only be answered on a case-by-case basis, generalizations about the effectiveness of such incentives can be made. At best, tax and financial incentives may be effective in attracting business away from an otherwise similar locality. However, tax levels and financial incentives do play a role in site selection through their role on the overall business climate.

Measures of business climate are highly controversial: some focus on taxes and regulatory environment, others focus on labor market and quality of life. Critics of the rankings note that some are simply based on per capita taxes, some use old data or double count data, and some measure variables inappropriately. Further, the relationship between such rankings and changes in employment or business activity is weak. For example, Fantas

ranked California 47th in business climate although the state has been a consistent leader in manufacturing employment growth.

The literature shows that labor force factors may be the most important determinant of site location. There is evidence that higher wage levels inhibit growth; one study found that a 10 percent increase in wages resulted in a 9 percent decrease in new business. The literature also shows that increases in unionization cause decreases in new business activity.

The availability of a skilled work force was found to be important in attracting business to an area. One study showed that work force skills were the number-one priority in business location decisions. Further, range and availability of public sector training has become more and more important in recent years.

The importance of energy costs and transportation facilities seem to depend upon the type of industry under consideration. However, in general the literature shows that energy costs play a relatively small role in site selecting and that transportation systems usually rank high in importance.

## **Analysis of Factors in Firms' Decisions to Locate or Expand in Kansas**

### Methodology

In 1983, the Institute for Public Policy and Business Research (IPPBR), formerly the Institute for Economic and Business Research (IEBR), conducted two mail surveys of Kansas firms, one of new establishments and the other of recently expanded establishments, to determine the factors in firms' decisions to locate or expand in Kansas. The response rates of 38.55 percent for new firms and 33.75 percent for expanding firms are considered high for a mail survey. A current telephone survey of new and expanding firms in Kansas conducted by Midwest Research Institute (MRI) augments and updates the IPPBR study. But the MRI survey was less successful with a response rate of only approximately 20 percent--a figure considered statistically insufficient on which to base any conclusions. Therefore, the MRI report is restricted to a consensus of perceptions of the surveyed firms. Since the IPPBR and MRI results are reported each in different form, direct statistical integration is impossible. This report is therefore also limited to perceptual rather than statistical analysis.

### Results

The factor in the IPPBR report most often cited by firms as responsible for a decision to locate in Kansas was the geographic

location of the state, i.e., its close proximity to markets. Presence of suppliers in or nearby Kansas also played a role in the location decision. The MRI report also upheld these findings, suggesting that the growth in Kansas manufacturing is fueled by the proximity of markets for the goods produced.

Second most often cited as a factor in location was Kansas's right-to-work law. Expanding firms mentioned it as influencing their location decision more often than did new firms. The MRI study also supported this claim, reporting that right-to-work laws were very influential to their surveyed firms.

Personal opinions about Kansas proved to play an important role in location decisions, ranking third in the IPPBR survey. The MRI report did not contain a factor which directly paralleled this concept.

Fourth-ranked as important in the location decision was the availability of workers with appropriate skills. General characteristics of the labor force, including turnover rates and absenteeism also were important. The MRI survey contradicted the finding that availability of labor was a determining factor in site location, while supporting the IPPBR conclusion that Kansas's labor productivity was an important variable in the decision making process.

The significance of the individual community was viewed as an important factor by both the IPPBR and the MRI respondents. The IPPBR study concluded that the factors most important at the community level paralleled those at the state level. Location in relation to suppliers and markets, personal opinions about the community, the local business climate, and local labor force availability were judged as the most important factors.

Transportation was seen as only moderately important by the respondents to the IPPBR survey. MRI reports that highway transportation is more important than air or rail transportation.

Utility cost and tax levels appear to be only a minor issue to firms that have located or expanded in Kansas.

Table 1 summarizes the survey results by enumerating the factors firms considered important in the site location decision.

**Table 1**  
**Most Important Factors in Site Location**  
**to Firms Which Recently Located or Expanded**  
**in Kansas**

Rank	Factor
1	State's geographic location
2	Right-to-work law
3	Personal opinions about Kansas
4	Labor force characteristics
5	Transportation conditions
6	Business climate
7	Taxes
8	Utility costs

Biases are inherent in the IPPBR and MRI reports. The results report only the opinions of those firms which actually located or expanded in Kansas; those businesses which chose not to develop in Kansas were excluded from these results. Therefore, those surveyed only represent a sample of the population for which Kansas offered locational advantages.

#### **Factors Affecting Firms' Decisions Not to Locate or to Cease Operations in Kansas**

Just as the survey of firms choosing to locate in Kansas exhibited a favorably skewed bias, responses from firms which chose not to locate in Kansas will likely contain a net negative bias. By analyzing both survey perspectives, a more complete picture of factors in determining Kansas's business attractiveness can be attained. IPPBR conducted a telephone survey of firms that recently ceased doing business in Kansas and a mail survey of firms that considered locating in Kansas but chose not to do so.

#### Why Existing Businesses Close or Cease Operations in Kansas

##### Methodology

The Kansas Department of Economic Development supplied a list of thirty firms that had ceased operations in Kansas in 1985. The closing of the thirty firms represents a loss of over 3,400 Kansas jobs. However, due to methodological problems in data collection and deficiencies in the data itself, the

conclusions drawn from the information are only explanatory of the companies actually surveyed, and cannot be generalized to any other population of firms.

### Results

Most of the firms that closed in 1985 were branch facilities. In most cases, adverse economic or market conditions precipitated consolidation of production facilities in a larger capacity plant outside the state. When retrenchment was needed, it was usually the Kansas branch of the national or international firm that was closed. The reason given was frequently that Kansas plants were smaller or more isolated than the parent company's or other branch plants. The decision to close a facility appears to be as much related to company-specific factors as it is to Kansas economic and/or business climate factors. The variables such as cost and availability of labor, energy, and transportation that were viewed as determining factors in site selection were not mentioned as important factors in plant closing decisions.

### Why Firms Which Considered Locating in Kansas Subsequently Chose Not to Do So

#### Methodology

The Kansas Department of Economic Development identified and mailed IPPBR surveys to 39 companies which had considered locating in Kansas over the last three years but had not done so. The survey suffers from severe methodological problems and cannot meet the standards of scientific inquiry. However, some useful conclusions can still be drawn.

#### Results

Factors considered by the firms to be major advantages in locating in Kansas include

- (1) Fiscal stability in the state government
- (2) Cost of land
- (3) Right to work law
- (4) State and local attitudes toward business
- (5) Quality of assistance from local chambers of commerce
- (6) Availability of land for development

When firms were asked to give the major disadvantages or reasons why they did not locate in Kansas, the responses included

- (1) Availability of skilled labor
- (2) Geographic location: proximity to markets and suppliers
- (3) Climate
- (4) Kansas wage levels
- (5) Availability of existing buildings and plants
- (6) Relative corporate income tax
- (7) Relative property taxes
- (8) Relative tax burden on business
- (9) Unemployment insurance tax

Some general inferences can be drawn from these results. Even though firms which located in Kansas did not consider the tax structure important, the firms that did not locate in Kansas found the tax burden in Kansas influenced their decision to locate elsewhere. A possible explanation for this disparity may be the home-grown nature of the Kansas economy. Those conditioned to the Kansas tax structure may not consider it to be disadvantageous, while it may appear to be so to outsiders.

Also, both of the surveys refute the notion that Kansas is favorably located due to its central geographic location. In fact, many businesses perceive Kansas as being remote--too far away from markets and suppliers. This contradicts the conclusion of the firms that did choose to locate in Kansas. A possible explanation is that firms with nearby markets have chosen to locate in Kansas, while those with more distant markets have chosen not to do so.

#### Factors Considered Important by Professional Site Consultants

The Institute for Public Policy and Business Research conducted in-depth interviews with site consultants to augment the survey data with professional perceptions of factors affecting firms' decisions to locate or expand in Kansas.

Both organizations stressed that the primary unit of analysis is the community rather than the state. It is essential that a community have a full-time economic development professional with a high level of competence and a professional,



accurate, and up-to-date community profile. These are indicative of a city well-organized for economic development.

Also important for attracting firms to a community are speculative buildings and industrial parks.

Transportation costs are an important factor. Kansas communities are often eliminated from consideration because the state is considered too far from major markets on the west coast and the industrial midwest. There exists the general feeling that Kansas is remote and hard to get to. However, this problem is not unique to Kansas; other plains states suffer from the same perceptions.

The state transportation infrastructure is considered very important. An extensive interstate highway system, along with close proximity to a major airport, are factors crucial to a site location decision. Due to the perceived problems with location and transportation costs in Kansas, the consultants suggest that companies producing non-consumer products or using processes involving low freight costs may be the best for Kansas.

Important in the decision process is the availability of skilled labor. The labor force characteristics of the Kansas City and Wichita areas are considered very different from the rest of the state, having higher wages and unionization rates than the rest of the state. On these points they are considered less favorable than what is referred to as "rural" Kansas, which is characterized by a union-free environment, relatively well-educated and inexpensive labor, and a good work ethic. However, the metropolitan areas are viewed as having a broader population base and a greater choice and mix of amenities. On the whole, it was suggested that Kansas did not have the population base to be attractive to many types of firms.

Closely tied to the availability of labor is the presence of vocational and technical schools. Since very few companies will transfer blue collar workers, they rely on vo-tech schools in the area to provide skilled labor. The presence of universities is important to some companies--especially their interaction and cooperation with local businesses and research partners.

Taxes and utility costs tend only to be important at the margin. A location decision between states may be decided by the tax structure or utility advantages one state has over another.

To a large extent, economic development in an area is a result of the decisions made by business owners and managers concerning the location or expansion of their facilities. An area that is consistently favored over other areas in the site location decision is likely to experience a higher rate of economic growth than areas that are chosen less often in this

process. Likewise, business decisions to cease operations in an area are seen as indicators of economic decline and may signal problems with that area's economic/business climate.

A business site location decision or decision to cease operation on several factors that may be influenced by governmental action. The research reported in this section provides a comprehensive examination of the factors associated with site selection, particularly as they pertain to Kansas:

- (1) review of industrial site location literature;
- (2) analysis of factors in firms' decisions to locate or expand in Kansas;
- (3) analysis of factors affecting firm's decisions not to locate or expand in Kansas and those factors affecting firms' decisions to cease operation in Kansas; and
- (4) analysis of factors considered most important by professional site consultants.

## A REVIEW OF THE LITERATURE ON SITE LOCATION

### The Effects of Tax and Financial Incentives

Economic development, through the attraction and retention of industry, is a major concern on both the state and local level. Especially in the last two decades, when faced with high unemployment and stagnant economies, state and local governments have engineered a variety of economic development incentives to attract new industry and create an infusion of jobs into the area. These incentives usually take the form of tax concessions and/or financial assistance. What remains to be shown is first, whether these incentives have been able to attract industry, and second, whether the benefits from attracting the firms outweigh the costs of the incentives. Whether or not there are net benefits from the attraction of industry will differ from one case to another, and no generalization can be made. (Mulkey & Dillman, 1976). However, the issue of the effectiveness of tax and financial incentives in attracting industry has been frequently debated. Steven Kale (1984) states the arguments on both sides:

Proponents argue that incentives a) are a prompt and available means of reducing business costs; b) can prove to be the swing factor in close location decisions; c) can offset other adverse factors; d) have a symbolic value to businessmen, as a pledge of community support and understanding; e) can encourage

firms to expand at home rather than elsewhere; and f) are self-correcting when used to excess because they are harmful only to the decision-making donor state--not to the nation--when they are too generous. Industrial incentives, according to their opponents, a) are ineffective development tools because they cannot outweigh regional wage, raw material, and transportation cost differentials in locational considerations; b) frequently discriminate unfairly between the new and established firm; c) can sap revenues that would help to achieve other state and local fiscal policy objectives--such as taxpayer equity, ease of administration, or locational neutrality as between locations in a state; d) distort decisions made by firms on how to produce and thereby adversely affect economic efficiency; e) are substantially diluted by the operation of the federal income tax; and f) inefficiently shift industry location among regions without necessarily contributing to economic expansion.

Evidence is mixed as to the extent these incentives significantly impact either the distribution or the level of economic activity. This is probably due to the methodological difficulty of isolating the effects of economic development incentives in a dynamic economy. In other words, it is not easy to estimate the degree to which particular firms would have located in specific areas in the absence of such incentives.

Many researchers have long suspected that tax and financial incentives can be important in site location decisions only on a secondary level. It is only after other, primary considerations such as labor force characteristics, have sufficiently narrowed the site location choices, that the secondary considerations of tax and financial incentives become influential.

A 1980 study by Schmenner provides results that demonstrate that tax and financial incentives have little influence on almost all location decisions. He finds that, at best, they may act as tie-breakers between otherwise equal sites. Table one below sets out some of the results from the Schmenner study.

Table 1

Influences on Site Selections: Factors Viewed  
 "Desirable, if Available"--All Industries

Factor	Percent of Those Plant Openings Citing at Least 1 Factor Which Check This Factor	Percent of Those Movers Citing at Least 1 factor Which Check This Factor
Favorable labor climate	74	44
Low land costs	60	50
Near markets	42	22
Low taxes	35	19
On expressway	35	28
Rail service	30	22
Low construction costs	29	33
Low wage rates	28	25
College nearby	26	14
Low energy costs	25	14
Government help with roads, sewerage, water labor training	25	3
Near suppliers	23	25
Government financing	13	6
Available land/buildings	3	11
Near other divisions facilities	3	3
Air transportation	1	0
Quality of life	1	0
Retain labor force	0	3
Number of plants citing at least one factor	159	36

Source: Schmenner study, 1980.

Schmenner cautions, however, that this does not mean states and localities can ignore tax levels and financial incentives since they still play a role in site selection through their effect on the overall business climate. The existence of incentives and level of taxes is an indication to firms of a government's attitude toward business. Therefore, a fiscally conservative city or state would set tax rates and create incentives with the goal of blending into the background of its neighbors.

## Site Location and Business Climate Rankings

Certain consulting firms and publications including Fantas, Alexander Grant, and Inc. magazine, have performed studies that rank states or localities according to their "business climate." These barometers of business climate are highly controversial. One reason for this is that they tend to focus on different criteria. Some rankings are concerned with taxes and regulatory environment, others focus on labor market and quality of life. This is not surprising given the ambiguous nature of the term "business climate." Plant and Pluta (1983) note that a favorable business climate is usually associated with low state and local taxes, right to work laws, little union activity, and cooperative state and local government. However, the exact constitution of good business climate is not at all clear. Thus, "like many poorly defined concepts, business climate has become both an all encompassing term that includes a multitude of factors alleged to be important in location decisions as well as a term that takes on different meanings depending on whether the user is a corporate executive, location consultant, public official, or academic," (p. 99).

The imprecision of the term "business climate" allows the various business climate rankings to employ different criteria, which creates disparities in the rankings of a specific state or locality. Comparisons of various Fantas, Alexander Grant, and Inc. rankings show that there is little agreement on which states should receive high rankings.

In a critical assessment of a Fantas study, commissioned by the Illinois Manufacturing Association, Biermann (1984) notes: . . . the variables used in that ranking were dominated by the tax and tax-related variables, several of which incorporated double counting, and since most of these later variables were measured in per capita terms, the rankings were essentially rankings on the basis of comparative state and local taxes per capita.

Biermann also criticizes the Alexander Grant studies. He states that a number of factors are double-counted, the best sources of information are not used, the measurement of certain variables is not appropriate, and the measurement of some variables uses old data.

Another important criticism of the rankings is that the relationship between economic development and business climate has probably not received the testing it deserves, therefore, the implied relationship between climate rankings and industrial growth is not fully substantiated. Although evidence does suggest that business climate rankings do correlate significantly with certain measures of industrial growth (Plant and Pluta, 1983), over half of the variation in growth cannot be explained by differences in business climate rankings. Such a correlation



would naturally be hard to find if the criteria used to perform the rankings were unsound.

In Biermann's analysis of the Grant study, he found that states ranked high in business climate, for example North and South Dakota, Nevada, Utah, and Nebraska, all displayed minimal employment growth in manufacturing. In the same study, Biermann criticizes the Fantas report, which ranked California 47th although the state had been a consistent leader in the growth of manufacturing jobs. Biermann maintains that business climate rankings do a poor job of explaining changes in employment or changes in overall business activity.

### **Economic Development and Labor Force Characteristics**

The consensus among many professionals is that labor force factors may be the one most important consideration in a company's site selection decision. The labor force variables are multi-faceted and, in many cases, industry specific. A particular firm's criteria may include labor costs, availability of labor, skill-level of the workforce and state-supported training systems, or any number of other factors that relate to the quality of a particular state's or locality's labor force.

Plant and Pluta (1983) found that labor related factors (labor cost, availability, union activity, and productivity) are important determinants of state output and employment growth, but the same factors have little effect on capital stock growth. The authors conclude that desirable labor market conditions for the firm result in growth in labor-intensive industry. Plant and Pluta note that industry is attracted to states with high unemployment and low levels of union activity. However, the authors find that industry is not repelled by either high wage rates or low productivity. Most of the relationships between the latter variables and different measures of industrial growth were statistically insignificant.

The wage rate variable shows interesting results in other studies. Carlton (1979) found that for new plant locations and plant expansions in three industries, wages were a significant and negatively related factor. In other words, higher wage levels in an area were associated with lower levels of industrial growth. However, in follow-up research Carlton (1983), found that wages were not significantly related to plant location or expansion decisions for any of three industries studied. Carlton states that, in predicting new plant location and expansion activity, the wage coefficient is subject to a very wide confidence interval, and he notes that in the study wages might be ". data simply do not allow us to determine this effect with much precision (1983, p. 446)."



Bartik (1985) tends to support the reasoning of Carlton. The former's results show that wages exert a significant effect on the plant location decision. Bartik found that a ten percent increase in wage level in a particular state is associated with a nine percent decrease in the number of firms choosing that state for a new site location.

As previously noted, Plant and Pluta found that industry is attracted by high unemployment and low union activity. Other research has resulted in more qualified conclusions. Carlton (1979 and 1983) reports that both the levels of significance and the size of the coefficients change when examining unemployment effects on plant location and expansion decisions in different industries. The ambiguity of the results is especially evident in Carlton (1983) where the author found the relationship between unemployment and industrial growth to be negative and statistically significant for one industry, negative but not significant for a second, and positive but not significant for a third.

The evidence concerning site selection and union activity is more conclusive. Unionism impacts heavily on the location decision in several studies. For example, Bartik (1985) reports that the effect of unionization on the business location decision is large and statistically significant. He notes that a ten percent increase in the level of unionization corresponds to a 30 to 45 percent decrease in new business activity even when dummy variables are introduced to control for region. Hence, a substantial increase in union activity in any state, regardless of what region of the country it is in, is associated with reduced levels of new business activity.

Apparently, it is the extent or levels of unionization that most firms object to in making a business location decision. Bartik (1985) found that work stoppages have no effect on the location decision. The conclusion is that the objections to unions are based on the restrictions they put on managers rather than interruptions they create in the form of strikes. Schmenner reinforces this notion when he claims that virtually every manufacturer in any industry would choose to remain non-union. This preference does not stem from the avoidance of higher wages; to remain non-union a firm may have to pay a wage and benefit package comparable to those of union companies. Instead,

. . . it springs from the inflexibility which union-negotiated work rules, such as manning requirements, job classification, advancement procedures, and task definitions bring to the manufacturing operation. The inability of the managers to pursue technological advanced or enhanced productivity because of a contract clause acceded to years prior but whose importance was not recognized until a change in techniques is entertained

frustrates the manager's effective control of the operation. In the end, it means higher total costs than are implied by the wages themselves (p. 124).

The availability of a skilled workforce may also be a factor in site location decisions. Lewis (1984) found that industry recruiters are nearly unanimous in ranking the availability of technically qualified workers as the number-one priority in business location decisions.

Carlton's 1983 results are not quite as emphatic as Lewis's: He finds that technical expertise in the form of number of engineers was a significant factor in attracting one of the three industries he studied.

Lewis states that many states and localities have recognized the need to develop a labor pool suitable for employment in high technology companies. These efforts have resulted in programs of applied research involving a state's universities in combination with private business, as well as increased financial commitment to technical training in an effort to increase the pool of skilled workers.

Ressler also places emphasis on the importance of manpower training by pointing to the importance that availability of a technically skilled labor force has played and continues to play in industrial site selection. He explains, however, that the range and availability of public sector training has become more and more important in recent years. Particularly important is a community education program responsive to the demands of the increasingly sophisticated processes and equipment of business and industry. Ressler notes that medium to small firms have particular difficulty in obtaining trained or trainable persons. He observes that secondary schools and two-year colleges are the educators of such pivotal personnel as technicians and skilled tradesmen.

Goldstein places emphasis on the technical expertise and research capabilities provided through higher education by suggesting that perhaps the most essential factor in high-tech site selection decisions is a firm's access to educational facilities. Many companies are deciding to locate near universities, and are enjoying the benefits of a steady supply of computer-skilled graduates, and university curricula tailored to an industry's or a particular company's needs. Many technical schools are increasingly contributing to industry research programs, and some are even underwriting entire projects. This situation especially aids smaller companies with little financial backing, but has also benefitted larger companies as well.

Pat Choate, a senior policy analyst for TRW, states that the key to future plant location decisions is skilled labor. Choate points specifically to South Carolina, Louisiana, and North Carolina as leaders in using training and retraining as economic development incentives by placing industrial training consultants at technical schools, and by using community and technical colleges as the deliverer of training.

A separate, but related issue to labor force skill level is the general education level of the workforce. While Bartik (1985) found that education of the workforce was not significantly related to the business location decision, others place specific emphasis on the existence of good schools for a new business location. This emphasis is due not only for reasons of quality in the labor force, but for quality of life as well. Scanlon suggests local institutions and public schools attract growth industries in three ways. First, a good public school system is an "enduring wellspring of talent," capable of serving the organization through the long run. Secondly, relocated growth industry employees with high standards and expectations for their own children will not be satisfied with a location which offers less than quality education. Thirdly, the opportunity for the employee to continue his/her own education enables the organization to evolve internally.

In short, there is some agreement that education of the labor force and educational facilities are vital factors in the site selection decision. However, the education variable has received scant attention from researchers. The reason that arguably very important labor force characteristics such as the education levels of the workers has received so little research is that it is something that is difficult to control for and, probably, quite firm specific. Much of the research in this area is aggregated macro-level research that does not really offer answers to many economic development questions. Perhaps future research will give us better answers to the ties between economic development and education. For now, in the light of increasingly complex business and industrial technology, it seems only logical that a highly trained and educated work force would be a substantial incentive to industry concerned with its ability to grow and adapt in a continuously changing competitive environment.

### **Site Location and Energy Costs**

The relationship between energy cost and availability, and economic development seems to be somewhat inconclusive in the research literature. Plant and Pluta found that energy cost and availability is directly and significantly related to output and growth of capital stock. However, energy plays a seemingly minor role in state employment growth.

Much of the survey data on site selections tends to support the notion that energy costs and availability are not major components of the plant location decision for most industries. For example, Schmenner (1982) presents survey data which shows that low energy costs had some influence on only 25 percent of plant openings and 14 percent of plant relocations (p. 51). The study does illustrate, however, that energy costs act as influences on site selection at the margin for specific industries such as specialty chemicals and heavy metals, which are highly energy dependent (1982, p. 51).

Carlton (1979) found that energy costs in the form of electricity prices were negatively and highly significantly related to new plant location and expansion decisions in two out of the three industries he studied. The findings on the third industry were that energy costs were not a significant factor. Carlton (1983) found, again, that electricity prices exerted a large effect on the location decision of three industries under study. The author does suggest, however, that energy prices may be acting as a proxy for prices of other production inputs. On the other hand, Bartik (1985) found that energy costs were not significant factors in plant location decisions.

In summary, the economic development literature shows that energy costs play a relatively small role in site selection compared with other incentives and factors. Two considerations are in order. The first is that energy costs are much more important to some industries than others in their site selection decisions. The second consideration is that for certain industries, energy availability may be more important than energy prices, depending on how large a factor of production energy costs are, and on the firm's ability to pass energy costs through to consumers.

### **Economic Development and Transportation**

The notion that transportation is important in the site selection decision is evident in much of the literature. Typical of this is Schmenner's 1982 comment that industries that serve broad geographic markets and have significant transportation costs are most likely to use a multi-plant strategy, locating plants within several market areas in order to reduce transportation costs. Examples of industries with a high proportion of transportation costs are food processing, lumber or paper converting, common chemicals, plastics, glass, metal, and metal fabrication. Typically, survey data on plant location factors show that transportation ranks high in importance to many firms. For some firms, air transportation or rail service may be important. However, the majority of firms and site selection consultants view access to highway transportation, generally the federal primary system, as being a necessity.

The impact of transportation systems on economic development has not been extensively reported in the empirical literature. In numerous survey results, however, transportation factors are mentioned as significant in site location decisions more often than low taxes and wages or other traditional variables.

#### **FACTORS IN FIRMS' DECISIONS TO LOCATE OR EXPAND IN KANSAS**

Research conducted by the Institute for Public Policy and Business Research, formerly (IEBR), in 1983 established as its goal the identification of factors affecting growth of manufacturing activity in the state of Kansas.<sup>1</sup> Current research conducted by Midwest Research Institute (MRI), serves to expand and update the IPPBR report.

The primary objective of this research is twofold:

- (1) to determine what factors attracted firms to their current location within Kansas, and
- (2) to determine which of a number of factors are considered favorable, unfavorable or neutral relative to Kansas.

#### **Method**

Both the IPPBR and MRI studies contained surveys of new or recently expanded firms. IPPBR conducted two mail surveys of firms listed in the Kansas Department of Economic Development (KDED) files. One survey was of new establishments, the other was of recently expanded establishments, and both were limited to activity from 1977 through mid-year 1982. MRI conducted telephone interviews with firms identified by KDED as being a new or expanded establishment over the years 1982 through 1985 to update the Institute's 1983 study.

During the period of 1977 through mid-year 1982, there were 571 new establishments opened. Of these, questionnaires were deliverable to only 454. Responses were received from 175, a rate of 38.55 percent. There were 264 expansions during the same period. Of the 240 deliverable questionnaires, there were 81 returned, a response rate of 33.75 percent. These response rates are considered quite high for mailed surveys.

The response to MRI's telephone survey was less favorable. While the list of firms provided by KDED contained nearly 400 businesses, approximately 200 were considered inadequate leads due to lack of complete information. Of the 200 or so adequate leads, 82 interviews were completed. This results in a response rate of approximately 20 percent and is considered insufficient



on which to base any statistically valued conclusions.

Both surveys in the 1983 IPPBR study focused on manufacturing firms while the present MRI study included manufacturing but was broader in scope. Table 1 shows the distribution of survey respondents by 2-digit SIC codes for each of the three surveys conducted and confirms that nearly all types of manufacturing are represented.

## Results

The results mentioned in this section are based upon the integrated findings reported in the 1983 IEBR report and MRI's 1985 Interim Report; Kansas Economic Development Study, Target Industry Analysis.<sup>2</sup> While the IPPBR surveys received response rates that made statistical analysis meaningful, the MRI survey did not. Because of this, MRI's results are in the form of

**Table 1**  
Distribution of Respondent by Industry

SIC	Industry Classification	IPPBR (1983) New Establishments N=175	IPPBR (1983) Expanded Establishments N=81	MRI (1985) N=82
20	Food & kindred products	6.3%	8.6%	4.9%
23	Apparel & other finished goods made from fabrics	2.9	0.0	1.2
24	Lumber & wood products except furniture	3.4	2.4	7.3
25	Furniture & fixtures	2.9	1.2	4.9
26	Paper & allied products	1.7	2.4	> 20.7
27	Printing & publishing	14.3	2.4	
28	Chemicals & allied products	2.3	7.4	2.4
29	Petroleum & coal products	1.7	0.0	0.0
30	Rubber & plastic products n.e.c.	5.1	12.3	2.4
31	Leather & leather products	1.1	1.2	0.0
32	Stone, clay & glass products	4.0	2.4	6.1
33	Primary metal industries	1.1	1.2	0.0



Table 1

Distribution of Respondent by Industry (continued)

SIC	Industry Classification	IPPBR (1983)	IPPBR (1983)	MRI
		New Establishments N=175	Expanded Establishments N=81	(1985) N=82
34	Fabricated metal products	13.7	11.1	7.3
35	Machinery, except electrical	21.1	27.2	17.1
36	Electrical equipment & supplies	4.6	6.2	13.4
37	Transportation equipment	5.1	9.9	0.0
38	Instruments & related products	2.3	0.0	0.0
39	Miscellaneous manufacturing	2.3	1.2	1.2
22	Textile mill products	0.0	1.2	0.0
	Other	4.0	1.2	0.0
49	Electric, Gas & Sanitary services	0.0	0.0	1.2
59	Miscellaneous retail trade	0.0	0.0	1.2
73	Business services	0.0	0.0	1.2
89	Miscellaneous services	0.0	0.0	1.2

consensus of perceptions of the firms which were surveyed. Since the results in each report are in vastly different form, direct integration into statistically meaningful numbers is impossible. Instead, this report must follow the pattern set by MRI and is limited to perceptual rather than statistical analysis.

A dominant feature of the IPPBR report is that the geographic location of the state, in particular, its proximity to markets was the factor most often cited as positive in a firm's decision to locate in Kansas. It was also the most frequently mentioned factor when firms were asked to identify the three most important factors in their decision to locate in Kansas. Presence of suppliers in or nearby Kansas was also seen as a positive factor in the location decision, although to a substantially lesser extent than proximity to markets.

MRI's results support this finding. Firms rated both proximity to markets and proximity to suppliers as very important in their location decision and indicated that Kansas was viewed very favorably in this regard. The firms which did not consider geographic location to be an important factor tended to rate Kansas as neutral on this point. Both studies suggest that the growth of manufacturing in Kansas is driven by the proximity of markets for the goods produced.

The factor cited second most often in the IPPBR report as being a positive factor in the decision to locate in Kansas was the right-to-work law. Firms expanding their operations in Kansas mentioned it as a positive factor more often than did new firms choosing to locate in Kansas. Both groups consistently considered this factor to be among the most important in their location decision. This result is supported by the MRI study which reports that right-to-work laws tended to be very important to the firms in their survey.

It appears that personal opinions about Kansas play a very important role in decisions to locate or expand in the state. In the IPPBR study personal opinion about Kansas was chosen third most often as one of the most important factors in the site selection process. The MRI report did not contain a factor which directly parallels this concept. However, it reports that quality of life in the state is viewed as a neutral to unfavorable factor but that many firms who perceived it in this way do not consider it to be an important factor in the final decision. The difference in the results indicated by the two studies are not irreconcilable. It is possible that the positive ratings obtained by IPPBR are indicative of the presence of home-grown enterprises in the state's economy. If this is true, opinions about the state and its quality of life may be biased upward. It is equally likely that Kansas may be viewed unfavorably in respect to the amenities which the quality of life factor attempts to capture but that these factors are unimportant to those who choose to locate in Kansas. If the home-grown element in the economy is a prominent factor, it is likely that these amenities are unimportant.

Labor force and labor market variables follow in importance as factors in the location decision. Availability of workers with appropriate skills appears to be the dominant variable in this category, however, general characteristics of the labor force (such as turnover rates, absenteeism, and attitudes toward work) also appear to be important.

These results are partially confirmed and partially contradicted by the MRI results. They report that the availability of labor is not an important factor and that Kansas' image in this regard is neutral. Conversely, labor productivity and work attitudes were considered to be very important factors on which Kansas has a very positive image. Wage levels were considered somewhat important in the location decision and Kansas tends to be viewed favorably on this factor.

Both IPPBR and MRI report the significance of the individual community in the final decision. In the MRI survey, community attitude toward business development received the overall most positive response in terms of the importance of this factor and its applicability to communities in Kansas. The IPPBR study

reports that the factors considered most important at the community level parallel those at the state level. The most important factors on the community level tended to be: (1) location in relation to suppliers and markets, (2) personal opinions about the community, (3) local business climate, and (4) local labor force availability.

While the Kansas business climate is generally reported as being favorable, there are aspects of it that are deficient. On the positive side, those firms that considered the availability of financing to be important tended to rate Kansas favorably on this aspect. However, in terms of cost of property and construction, Kansas has a neutral image and an unfavorable image in terms of the availability of developable land and speculative buildings.

Transportation was considered moderately important by the respondents to the IPPBR surveys. MRI reports that air and rail transportation tended to be less important than highway transportation. Kansas was viewed as positive in regard to road transportation but neutral on the other aspects.

Worthy of mention is the absence of major airports outside of the Kansas City area. While Wichita maintains a moderate sized airport, it is not considered a transportation hub. Air travel to cities other than Kansas City Metro and Wichita is possible only on small carriers. Firms which consider air transportation to be important are therefore unlikely to locate in Kansas.

Utility cost and availability appears to be only a minor issue to firms which have located or expanded in Kansas.

Likewise, tax levels appear to be of lesser importance although certain taxes, such as unemployment insurance and workers' compensation were considered to be very important to a substantial number of respondents.

Table 2 shows the factors considered as most important in the site location decision as best determinable in light of the diversity of data which was reported.

Table 2

Most Important Factors in Site Location  
to Firms Which Recently Located or Expanded in Kansas

Rank	Factor
1	State's Location
2	Right-to-Work Law
3	Personal Opinions About Kansas
4	Labor Force Characteristics
5	Transportation Conditions
6	Business Climate
7	Taxes
8	Utility Costs

Conclusion

As reported in the 1983 IPPBR report, it is reasonable to assume that the results of this study are biased upward (favorably toward Kansas) for three primary reasons. First, the results reported in this section represent opinions of those who actually located or expanded their business in the state. They had already decided that at least one location in Kansas was optimal. The surveyed firms represent a population for which Kansas offered, on average, positive locational advantages. Those firms for which Kansas did not offer net advantages were excluded from these results by their decision not to locate in Kansas. Because of this, responses toward the negative end of the scale have been largely eliminated. This was the case in both IPPBR surveys in which all factors were rated above the neutral classification. Additionally, the MRI survey found that Kansas rated unfavorably on only three categories: (1) quality of life, (2) vocational/technical education, and (3) availability of developable land and speculative buildings.

A second type of bias is likely to occur when respondents answer questions in the manner in which they believe the surveyor wishes them to answer.

The third type of bias which can be expected is the tendency to report that factors which were actually negative did not enter into the site location decision. This would also influence the results to appear more positive than they really are.

Due to the constraints on the sample, it is not possible to generalize these results to any population other than firms which have chosen to locate or expand in Kansas. However, for this group, it appears that location decisions are:

- (1) Driven by the desire/necessity to be close to the markets they serve.
- (2) Influenced favorably by opinions currently held about the State of Kansas and by labor force characteristics.
- (3) Moderated by the Kansas business climate and transportation conditions.
- (4) Virtually unaffected by taxes and utility costs.

#### **FACTORS AFFECTING FIRMS' DECISIONS NOT TO LOCATE IN KANSAS OR TO CEASE OPERATIONS IN KANSAS**

This section explores a population of firms excluded in the examination of firms that recently located or expanded -- those firms that considered locating in Kansas but chose not to do so and those firms that have recently ceased operations in Kansas.

A major reason for this undertaking is the presumed favorable bias in the responses from Kansas based firms. Just as those responses are likely to embody favorable biases, it is likely that responses from firms that chose not to locate in Kansas will contain a net negative bias. Considering the results from each of these research tracks in light of the other, a more accurate picture of these factors as they relate to Kansas is expected.

The research reported in this section was conducted in two parts: (1) a survey of firms that recently ceased doing business in Kansas, and (2) a telephone survey of firms that considered locating in Kansas but subsequently chose not to do so. The surveys were conducted by the staff of the Institute for Public Policy and Business Research at the University of Kansas. The surveys and their results are discussed below and are followed by a commentary which integrates the results established by each.

#### **The Determination of Why Existing Businesses Close or Cease Operations in Kansas**

One important aspect of the economic health of any geographic region is the extent to which existing businesses in that region cease operations and the underlying reasons for their doing so. There are many reasons why an existing business may close. Firm closings brought about by product market degeneration have different implications than if caused by overall economic distress or by more favorable business climate in other geographic regions. Before policy recommendations can be made



concerning the nature of business closings in Kansas, it is necessary to understand the relative size of this phenomenon and the reasons for its occurrence. Unfortunately there is currently no systematic procedure for determining this information.

## Method

A list of approximately 50 businesses that ceased operations in Kansas during 1985 was obtained from the Kansas Department of Human Resources. After eliminating small retail and service establishments for which information would be of little use, a population of 30 firms remained. The closing of these 30 firms represents a loss of over 3,400 jobs in Kansas in 1985.

Useful information was obtained from 15 of the 30 firms. Due to the methodological problems encountered in collecting the data and the deficiencies in the data itself, the conclusions drawn must be considered as explanatory of the companies actually contacted and not necessarily generalizable to any other population of firms.

The firms were contacted via telephone survey. This required initial phone calls to the chamber of commerce in the city where the business was located. In some instances the local chambers were able to provide information about why the business closed. In other instances, the local chambers were able to provide names and phone numbers of parent companies or other branch offices which could provide direct information. In still other instances, the local chambers were unable to provide any information that could assist in locating the principles in the business in question. In a minority of cases, some of the businesses on the list had, in fact, not closed and were still going concerns.

In addition to the original list containing names of firms which had not ceased operations, it is also likely that due to the absence of any systematic procedure for gathering this type of information, some firms which had ceased operations were excluded.

A telephone survey instrument was developed and used to record the information obtained. A copy of the instrument is provided in Appendix 3.

## Results

The information obtained through the survey, though limited in scope, does provide a number of interesting conclusions. One major result of the study is that most of the surveyed firms that closed in 1985 were branch facilities. In most cases adverse economic or market conditions precipitated consolidation of



production facilities. Specific conditions mentioned included foreign competition for textiles, medical products, and other manufacturing firms, the adverse farm economy for agriculturally related firms, and depressed oil prices for petroleum related firms. In any event, when these generally poor economic and market conditions resulted in retrenchment, it was usually the Kansas facility of national or international firms that was closed down. The reason for this was frequently that Kansas plants were smaller and/or more isolated than the parent company's other branch plants. For example, when a major medical products firm chose to consolidate operations in response to decreased international demand, it moved production to a larger capacity plant in Arkansas and closed a smaller, though quite efficient, plant in Kansas.

Related to the notion that many of the closed plants were branch facilities or subsidiaries (over two-thirds of the plants on the original list were branch facilities), is the fact that the decision to close these plants was frequently made outside the state by a parent firm or new owner. Production was moved to a variety of branch plants outside Kansas to places as far ranging as Mountain Home, Arkansas; Anaheim, California; the Bronx, New York; or Taiwan. For one oil well service company, two agriculturally related firms, and at least two manufacturing facilities, the plant closings were directly related to changes in management when these local firms were purchased by larger parent companies from outside Kansas. For example, one company that had three manufacturing facilities in Kansas had a philosophy that small, easily manageable plants were the most desirable. When this company was sold to an outside interest, this managerial philosophy was changed to a belief that consolidation and economies of scale were more appropriate. The net result of this transaction was the closing of two Kansas plants and a net loss of jobs.

It is worth noting that many of the variables such as the cost and availability of labor, energy, capital, transportation, and the tax burden on industry that were typically viewed as being determinants in the site selection literature were not mentioned as being important factors in the decision to close the plants contacted in this survey. These factors were only mentioned twice; one manufacturing firm noted that transportation was a small factor in the decision to close, and one agriculturally related company stated that the inventory tax had been mentioned unfavorably by firms attempting to reopen a closed processing plant.

Three of the manufacturing facilities that were contacted in this survey were closed down despite the fact that they were productive and efficient. In one case, for reasons of increased capacity, the company actually relocated production to a plant that had higher labor costs and taxes. In another case, the

production facility that was closed in Kansas had frequently won company-wide awards for productivity and efficiency. It, likewise, was closed to consolidate production in a larger capacity plant outside the state.

In several cases local and state officials made attempts to persuade parent companies not to close local plants. When contacted, officials of the parent companies generally stated the recurrent theme that economic and/or market conditions forced the closing of local plants, and that there was nothing that the state or local governments could do to prevent it.

### **The Determination of Why Firms Which Considered Locating in Kansas Subsequently Chose Not To Do So**

The impetus for this subsection is the assumption that firms which considered locating a facility in Kansas and subsequently chose not to do so, may be able to provide insight on areas where the Kansas economic/business climate is noncompetitive.

#### **Method**

Subtask 3.2 of the Kansas Economic Development Study proposal called for a telephone survey of firms identified by KDED, the Kansas Chamber of Commerce, and local chambers of commerce, as having considered locating in Kansas over the past three years but not having done so. Because of difficulties in obtaining a list of such firms, direct contact with these companies via telephone was impossible. As a compromise measure, an indirect mail survey was performed. The Institute for Public Policy and Business Research (IPPBR) developed a survey instrument (see Appendix 4). KDED and 12 of the most active local chambers of commerce identified companies that had contacted them indicating an interest in locating in Kansas within the past three years but that had not done so. While the number of firms each local chamber actually identified is unknown, KDED identified only 39. KDED and the 12 local development agencies agreed to send the surveys to the companies with which they had contact.

The inability to control the sampling process as well as ignorance concerning the number of surveys actually sent makes generalization of results impossible. Even so, some anecdotal conclusions may be drawn. Since prior to this study no information existed on this topic, even modest understanding of the phenomenon is considered useful.

#### **Results**

Eight surveys were returned. Since the actual number of surveys sent out is unknown, the response rate cannot be

determined. However, it is very low in any case, making it impossible to draw statistically meaningful conclusions.

Of the eight companies responding, three only briefly considered Kansas, two moderately considered Kansas and three seriously considered Kansas as a possible site location. There appeared to be no correlation between the extent to which a firm considered locating in Kansas and its responses to the remaining questions on the survey.

Advantages and Disadvantages. Question 2 on the survey provided a list of factors to be rated as either advantages or disadvantages of locating in Kansas. The vast majority of these were rated as neutral or close to neutral on the positive or negative side. The average response to each item is shown in Table 3. A response of 3.00 indicated that, on average, the responding firms considered Kansas to be neutral in regard to that factor. Average responses less than 3.00 indicate that Kansas was perceived to have a relative advantage in regard to that factor, while responses greater than 3.00 indicate that Kansas was perceived to be disadvantaged in that regard.

Table 3

Factors in the Site Location Decision

Factor	Average Response Actual Mean
1. Quality of Higher Education . . . . .	2.75
2. Access to Venture Capital . . . . .	3.125
3. Availability of Energy . . . . .	3.125
4. Availability of Skilled Labor . . . . .	2.9
5. Availability of Good Water . . . . .	3.125
6. Fiscal Stability in State Government . . . . .	2.5
7. Adequate/Safe Waste Disposal . . . . .	2.9
8. Cost of Housing . . . . .	3.125
9. Cost of Land . . . . .	2.4
10. Quality of Life in the State . . . . .	3.25
11. Quality of Assistance from Kansas Department of Economic Development . . . . .	2.75
12. Cost of Construction . . . . .	3.0
13. Cost of Living . . . . .	2.9
14. Relative Personal Income Tax . . . . .	3.0
15. Relative Corporate Income Tax . . . . .	3.6
16. Relative Property Taxes . . . . .	3.5

Table 3

Factors in the Site Location Decision (continued)

Factor	Average Response Actual Mean
17. Relative Tax Burden on Business. . . . .	3.7
18. Construction Regulations . . . . .	3.1
19. Unemployment Insurance Tax . . . . .	3.5
20. Workers' Compensation Insurance. . . . .	3.0
21. State Energy Regulation. . . . .	2.9
22. Cost of Energy - Gas . . . . .	3.0
23. Cost of Energy - Electricity . . . . .	3.1
24. Sales Tax. . . . .	3.3
25. Kansas' Image. . . . .	3.0
26. Extent of Unionization . . . . .	3.5
27. Right to Work Law. . . . .	1.9
28. Quality of Primary/Secondary Education . . . . .	2.7
29. Local Government Attitude Towards Business . . . . .	2.2
30. State Government Attitude Toward Business. . . . .	2.2
31. Geographic Location - Proximity to Markets . . . . .	3.6
32. Geographic Location - Proximity to Suppliers . . . . .	4.1
33. Road Transportation System . . . . .	2.9
34. Rail Transportation System . . . . .	2.9
35. Climate. . . . .	3.7
36. Quality of Assistance from Local Chambers of Commerce. . . . .	2.3
37. Kansas Wage Levels . . . . .	3.25
38. Employee Work Attitude . . . . .	2.6
39. Employee Productivity . . . . .	2.7
40. Cultural Opportunities . . . . .	3.1
41. Regulatory Climate . . . . .	3.0
42. Availability of Land for Development . . . . .	2.4
43. Incentives for Business. . . . .	3.1
44. Higher Education/Business Cooperation. . . . .	2.9
45. Availability of Vocation/Technical Training. . . . .	2.7
46. Availability of Financing. . . . .	2.9
47. Availability of Existing Buildings or Plants . . . . .	3.5

Factors considered to be the major advantages of locating in Kansas include:

1. Fiscal stability in the state government.
2. Cost of land.
3. Right to work law.
4. State and local government attitudes toward business.
5. Quality of assistance from local chambers of commerce.
6. Availability of land for development.

Factors which appear to represent the major disadvantages to locating in Kansas include:

1. Relative corporate income tax.
2. Relative property taxes.
3. Relative tax burden on business.
4. Unemployment insurance tax.
5. Geographic location: proximity to markets and suppliers.

When the firms were asked to give the major reason why they did not locate in Kansas, the primary responses were:

1. Availability of skilled labor.
2. Geographic location: proximity to markets.
3. CLimate
4. Kansas wage levels.
5. Availability of existing buildings and plants.

These answers are consistent with the perceptions of these factors as disadvantages of locating in Kansas with the exception of the availability of skilled labor. Why the availability of skilled labor was rated as an advantage and yet was also among the reasons for not locating in Kansas remains unexplained at this time.

Other States Considered. It appears that Kansas was often considered when the surrounding states were also considered. Missouri, Iowa, Arkansas, Nebraska, Colorado, and Oklahoma were frequently considered along with Kansas. However, more distant states also received consideration. These include: Georgia, Texas, Washington, North Carolina, and South Carolina.

Missouri (2), Arkansas (1), Georgia (1), and Washington (1) were chosen as site locations in the four instances in which a new facility was opened. (One company opened two facilities; one in Missouri and one in Georgia.)

Factors in the Selection of Other States. Many factors were mentioned as influential in the decision to choose a particular state over Kansas. Those considered to be the major reasons, and the state to which they apply are shown in Table 4.

**Table 4**

**Important Factors in the Selection of Other States**

Factor	State
Wage Levels . . . . .	Missouri Georgia Arkansas
Cost of Energy. . . . .	Missouri Georgia Washington
Availability of Skilled Labor . . . . .	Arkansas
Established Industrial Parks . . . . .	Arkansas
Road Transportation System. . . . .	Arkansas
Air Transportation (Major Airports) . . . . .	Missouri
Cost of Construction. . . . .	Arkansas
Cost of Land. . . . .	Arkansas
Availability of Financing . . . . .	Washington
High Technology Educational Institutions. . . . .	Washington
Quality of Assistance from Local Officials. . . . .	Missouri

Types of Businesses. The companies responding represent a variety of industries. Table 5 shows the type of business, decision to open a facility, and the location chosen.

**Table 5**

**Types of Businesses and Decisions Made**

Business	Opened New Facility	Location
Metal Working . . . . .	No	
Agrichemical. . . . .	Yes	Missouri
Electronics . . . . .	Yes	Georgia
Catalog Distribution Center . . . . .	No	
Plastic Molding . . . . .	No	
Butter Manufacturing. . . . .	No	
Distribution Center . . . . .	Yes	Missouri
Electronic Component Manufacturing. . . . .	Yes	Washington
Electronic Component Manufacturing. . . . .	Yes	Arkansas



## Conclusions

The inability to control the sampling process for the survey of firms which considered locating in Kansas but chose not to do so seriously compromised the legitimacy of the survey.

In spite of the methodological problems encountered, some general conclusions may be drawn. Whereas firms which located in Kansas did not consider the tax structure to be an important factor. The firms which did not locate in Kansas suggested that the tax burden in Kansas influenced their decision to locate elsewhere. A possible reason for this disparity may be the home-grown nature of the Kansas economy. Those conditioned to the Kansas tax structure may not consider it to be disadvantageous while it may appear to be so to outsiders.

Both of the surveys in this section also refute the notion that Kansas is favorably located due to its geographic location near the center of the United States. Many businesses perceive Kansas as remote--as being too far away from their suppliers and markets. This is again contradictory of the survey of Kansas firms which indicated that the Kansas economy is market driven. A possible explanation is that firms with nearby markets have chosen to locate in Kansas while those with more distant markets have chosen not to do so. This magnifies the importance of identifying potential markets in and around Kansas and increasing efforts to attract businesses which could exploit those markets.

A final conclusion worthy of mention is the apparent subsidiary nature of the Kansas economy. When companies with more than one branch are forced to retrench, the Kansas branch is often closed. For the companies that could be contacted in this survey, the decision to close a facility appears to be as much related to company-specific factors as it is to Kansas economic and/or business climate factors. Changes in management and centralization decisions are factors which Kansas policy makers cannot affect. However, it may be possible to influence the location of the centralized facility by making Kansas' business climate more favorable. Since the great majority of the closings were due to exogenous factors it appears that incentives to encourage larger businesses to locate in Kansas and efforts to improve perceptions of Kansas as a place to live and work are in order.

## FACTORS CONSIDERED IMPORTANT BY PROFESSIONAL SITE CONSULTANTS

Many businesses utilize the services of professional site consultants when making site location decisions for new or expanded facilities. Since these site consultants have wide exposure to a diverse group of businesses, it is expected that they should have developed a feel for which factors are generally

considered important to their clients. Additionally, since these consultants may recommend one location over another they must have an understanding of the relative advantages of the areas in question.

The Institute for Public Policy and Business Research conducted in-depth interviews with two site consultants: A.T. KARNEY and FANTAS, both of Chicago, in order to determine which factors are considered important by professionals in this field.

Both organizations stressed that the primary unit of analysis is the community rather than the state. The early phases of the analysis include several weeks of desk research that generally include some type of statistical screening of states based upon client specifications and factors such as: (1) labor force characteristics, (2) labor market characteristics, (3) economic climate, and (4) general population characteristics. Once obviously undesirable states are excluded, the unit of analysis shifts to and remains at the community level. Generally, the state economic development agency (such as KDED) is asked to identify several cities which meet the basic requirements specified by the clients. Factors are then analyzed from the community level.

#### **Local Professional**

This level of analyses calls attention to one of the factors mentioned as most important. It is essential that a community have a full-time economic development professional with a high level of competence. This person plays a major role in the selection process since it is through him/her that the community is represented in the early phases. Ad-hoc or unprofessional behavior during the initial screening process will most likely result in elimination of that community from further consideration. It is through this person that information is gathered.

The community should have a professional, accurate and up-to-date community profile. This indicates that the city is well-organized for economic development. Both consultants emphasized that companies often desire various kinds of information and that communities should attempt to assess what the company wants, and provide it in as timely a manner as possible.

FANTAS also stressed that local efforts at economic development are very important. Speculative buildings and industrial parks are especially important for small communities since without them a client may perceive no need to visit the community. If a town cannot afford an industrial park, they should at least have plans available for what they would do if a firm wanted to locate in their community. This may include having

options on land for building sites, and plans for extending utilities.

### **Transportation**

Transportation costs are an important factor to be considered. Although these costs vary widely in relation to the product, Kansas is generally disadvantaged in this regard due to its location. Communities in Kansas are often knocked out of consideration because they are perceived as being too far removed from the mainstream. This is due to two factors. First, Kansas is considered to be too far from major markets on the west coast and the industrial midwest. Costs of transporting goods to these markets are often so great that they override other positive factors. There is a general feeling that Kansas is remote and hard to get to. However, this is not a problem that is specific to Kansas. The other plains states, particularly those from Kansas north to the Canadian border suffer from the same perceptions.

Second, the transportation infrastructure is considered very important. Both consultants indicated a unwillingness of firms to locate a facility more than 20-25 miles from an interstate highway. Additionally, A.T. KARNEY indicated that most firms will want to be within a one hour drive of a major airport. A major airport was defined as one serving major carriers with flights in all directions. This criteria effectively eliminates all of Kansas with the exception of the Kansas City and Wichita areas.

Due to the perceived problems with location and transportation costs, the consultants suggest that non-consumer products or processes involving low freight costs may be best for Kansas.

### **Labor Force Characteristics**

The availability of skilled labor and other labor force characteristics are important in the decisions process. In this regard the Kansas City and Wichita areas are considered very different from the rest of the state. These two cities are considered much the same as other metropolitan areas such as Chicago or St. Louis. They are perceived as having higher wages and unionization rates than the rest of the state. On these points they are considered less favorable than what is often referred to as "rural" Kansas which is characterized by a union-free environment, relatively well-educated and inexpensive labor, with a good work ethic.

On the other hand, the metropolitan areas are viewed as providing more highly skilled and technical workers. In addition, they offer a broader population base from which to draw. Many

firms are reluctant to locate in small communities due to the small population base and lack of amenities. While the choice and mix of amenities varies widely and remains a matter of choice, few firms will consider locating in a community in which they would employ more than ten percent of the labor force. It was suggested that Kansas did not have the population base to be attractive to many types of firms.

### **Education**

Closely tied to the availability of skilled labor is the presence of vocational and technical schools. Very few companies will transfer blue collar workers and therefore rely on the vocational/technical schools in the area to provide the skilled labor. An issue that is frequently investigated is whether the graduates of these schools stay in the area or not. If they do not, it is comparable to not having the school there.

The presence of universities is important to some companies but to a lesser extent than vocational/technical schools. One issue is whether universities and businesses are working together as research partners. The other issue centers around the amenities that often accompany the presence of a university.

### **Taxes and Utilities**

Other costs such as taxes and utilities are important in the total cost figure but lesser so when considered individually. Both consultants indicated that the total operating cost was estimated and that advantages on one factor often offset disadvantages on another. Taxes and utility costs tend to be important only at the margin. That is, a decision to locate a facility in western Kansas versus eastern Colorado may hinge on taxes. Everything else about the two prospective areas may be similar but the tax structure of one state may make it preferable over the other. The same may be true for utility costs. Considerable time is dedicated to studying the tax structure since it is one of the few factors that vary considerably between states.

### **Conclusions**

The site consultants emphasized that no one factor dominates in the selection process. Several weeks of desk research go into determining the best potential areas based upon client specifications. Once potential states are determined, contact is made with the state economic development agency for recommendations of specific communities within their state which meet the characteristics specified. Detailed information in the

form of community profiles is obtained through contact with the local economic development official. When the possibilities have been narrowed down to approximately six or so communities, the consultants visit the location for approximately one week of on-site research.

The field evaluation consists of (1) refining previously obtained data, (2) visiting with all major manufacturers, (3) conducting a wage survey, (4) obtaining written estimates on the yearly tax that would be assessed on the type of investments that will be made, and (5) obtaining written estimates on the utility costs anticipated. They are also likely to (1) evaluate the quality of public schools, (2) evaluate the stability of the local government, (3) interview the president of the league of women voters to determine what the political issues in the community are, and (4) meet with local government officials to try to assess just how interested the community is in having that particular firm locate in the community.

While the analysis is at the community level, it is the overall package that counts. This will obviously include factors from the state level such as tax structures. Emphasis will fall on different factors depending on the type of facility under consideration. If a distribution facility is under consideration, emphasis will be placed on transportation costs and tax on inventories. If it is a manufacturing facility, the emphasis will be on transportation costs, energy costs, and labor force characteristics. If the facility is a headquarters or branch office, then educational facilities and amenities will be emphasized.

The high costs of transporting products from Kansas to the major markets on the coasts generally makes Kansas non-competitive on the total cost picture. Additionally, the image that Kansas is remote and hard to get to due to the absence of major airports and the rural nature of Kansas towns discourage many businesses from considering Kansas. Also the population base is insufficient in areas outside of Kansas City and Wichita to support many large manufacturers.



## REFERENCES

- Alexander, Grant, General Manufacturing Business Climates, various issues, 1980-85.
- Bartik, Timothy J. "Business Location Decisions in the United States: Estimates of the Effects of Unionization, Taxes, and Other Characteristics of States." Journal of Business and Economic Statistics, Vol. 3 No. 1, Jan. 1985 pp.14-22.
- Biermann, Wallace W. "The Validity of Business Climate Rankings: A Test," Industrial Development March/April 1984, pp. 17-25.
- Carlton, Dennis W., "Why New Firms Locate Where They Do: An Econometric Model," Interregional Movements and Regional Growth, ed. W. Wheaton, Washington, D.C., Urban Institute 1979, pp. 13-50.
- Carlton, Dennis W., "The Location and Employment Choices of New Firms: An Econometric Model with Discrete and Continuous Endogenous Variables," Review of Economics and Statistics, 65 (1983) pp. 440-49.
- Ellenis, Manny, "Six Major Trends Affecting Site Selection Decisions to the Year 2000," Dun's Business Month, Vol. 123, No. 5, November 1983, pp. 116-130.
- Glass, Robert, "Age Structure and Economic Growth in Kansas," Kansas Business Review, Vol. 6, No. 2, November/December 1982, pp. 6-10.
- Goldstein, Mark L., "Choosing the Right Site," Industry Week, April 15, 1985, pp. 57-60.
- Kale, Steven R., "U.S. Industrial Development Incentives and Manufacturing Growth During the 1970's." Growth and Change, January 1984, pp. 26-34.
- Kieschnick, Michael, Taxes and Growth: Business Incentives and Economic Development, Washington, D.C.; Council of State Planning Agencies, 1981.
- Lewis, Mike, "What it takes Now to Lure Businesses to Your Area," Nation's Business, May 1984, pp. 36A-E.



- McLean, Robert A., Monograph #7, Kansas Labor Market Research Series, Institute for Economic and Business Research, University of Kansas. Factors in Firms Decisions to Locate or Expand in Kansas: A Sample Survey. 1983.
- Midwest Research Institute, Interim Report on the Kansas Economic Development Study: Target Analysis. 1985
- Mulkey, David and B. L. Dillman, "Location Effects of State and Local Industrial Development Subsidies," Growth and Change, April 1976, pp. 37-43.
- Newman, Robert J., "Industrial Migration and Growth in the South," Review of Economics and Statistics, Vol. 65, 1983, pp. 76-86.
- Plant, Thomas R. and Joseph E. Pluta, "Business Climate, Taxes and Expenditures, and State Industrial Growth in the United States," Southern Economic Journal, 50, July 1983, pp. 99-115.
- Posner, Bruce G., "A Report on the States," Inc., October 1982, pp. 95-102.
- Rasmussen, David W., Marc Bendick, Jr., and Larry C. Ledebur, "A Methodology for Selecting Economic Development Incentives," Growth and Change, January 1984, pp. 18-25.
- Redwood, Anthony L., Daniel L. Petree, and Gary R. Albrecht, "Long-Term Structural Changes in the Kansas Economy," Kansas Business Review, Vol. 8 No. 2, Winter 1984-85, pp. 1-9.
- Ressler, Ralph, "Manpower Training in Site Selection," Industrial Development, March/April 1983, pp. 21-23.
- Rubin, Berry M., and C. Kurt Zorn, "Sensible State and Local Economic Development," Public Administration Review, March/April 1985, pp. 333-9.
- Scanlon, Jay R., "Site Seletion and Design for the Growth Industries," Industrial Development, Vol. 153 No. 2, March/April 1984, pp. 26-29.
- Schmenner, Roger, "Location Decisions of Large Firms: Implications for Public Polcy," Commentary Vol. 5 No. 1, January 1981, p. 307.
- Schmenner, Roger, Making Business Location Decisions, Prentice Hall, Inc., Englewood Cliffs, N.J. 1982.

U. S. Government Bureau of the Census, 1980 Census of the Population.

United States Bureau of the Census, Statistical Abstract of the United States, 1984.

United States Bureau of Labor Statistics, Employment and Earnings monthly, various issues, Employment, Hours, and Earnings, States and Areas.

## CHAPTER THREE

### KANSANS' PERCEPTIONS OF ECONOMIC DEVELOPMENT ISSUES

#### SUMMARY

The initial step in the Kansas Economic Development Study was an assessment of the perceived strengths and weaknesses of the Kansas economy, and the key factors affecting economic development in the state. To achieve a comprehensive, informed analysis, information was gathered from individuals in development organizations, community government, business and industry, organized labor, financial institutions, and state agencies geographically distributed throughout the state. These people were able to help identify the issues, concerns, and limitations in the Kansas economy. This provided the focus for further research in developing the appropriate strategy and recommendations for state action.

Personal interviews were conducted with Kansas business and political leaders, and with key individuals involved in Kansas economic development activities. The majority of those interviewed expressed a negative impression of Kansas economic growth. Most noted was the decline in three of Kansas's large industries, agriculture, aircraft, and oil and gas. Stagnant manufacturing and an overall shift to service industries were seen as contributing to a declining trend. Any improvements in the state economy were viewed as resulting from improvements in the national economy. Overall, the Kansas economy was seen as making very slow progress.

The Kansas business climate, however, was considered generally competitive with surrounding states. The interviewees reported several positive influences on firms' decisions to locate operations in Kansas, mentioning labor force characteristics, the good attitude of the legislature, and the right-to-work law. Listed as inhibiting economic development were the tax burden and lack of incentives for business, the state's image, and the lack of air transportation and a quality network of highways throughout the state.

Next, after this general assessment, the investigators asked Kansas leaders for specific suggestions as a means of focusing the Institute's recommendations for economic development. Respondents strongly endorsed changes in tax policy. Kansas leaders supported the elimination of the inventory tax, the sales tax on new machinery and equipment, and the property tax assessment using the trending factor method. A number of tax incentives were also suggested. Respondents proposed the sales tax, a state lottery, and corporate taxes as revenue generators

to ameliorate a possible reduction in revenue resulting from the tax changes.

With respect to education, interviewees emphasized a need for better cooperation between the business community and educational and state institutions, and a need for better vocational/technical education.

To combat the image problem, more resources need to be allocated to aggressive advertising outside the state and to generating a good feeling about the state among Kansans.

Among other changes recommended by the respondents were creation of an economic development committee for each legislative house, and encouraging greater support for economic development in the business sector.

Further assessment of economic development perceptions was accomplished by a mail survey of Kansas political and business leaders. Unlike those interviewed, who perceived the Kansas economy to be stagnant or growing slowly, respondents agreed that the Kansas economy is declining. And less than half of the business and government leaders in the state considered the business climate positive.

The first step in addressing Kansas's economic development problems is to determine the state's greatest strengths and weaknesses. Respondents rated Kansas's top ten assets in descending order as: the quality of higher education, right-to-work laws, employee productivity, quality of life in the state, employee work attitudes, availability of land for development, availability of energy, availability of good water, quality of primary and secondary education, and the low cost of skilled labor.

Factors inhibiting business growth in the state were also stressed. The ten greatest liabilities listed in descending order are: Kansas drinking laws, Kansas's image, the relative tax burden on business, cultural opportunities, workers' compensation insurance, the availability of operating capital, unemployment insurance tax, relative property taxes, relative tax burden on persons, and the limited extent to which entrepreneurship is encouraged.

Next, the business and government leaders suggested areas of state policy in need of change. The state's promotional and public relations efforts were considered inadequate and of poor quality by the majority of the survey respondents, and desperately in need of change. Confirming interview finding, survey respondents listed taxes as a major factor discouraging business growth, and the consensus was that state taxes required modification, perhaps major overhaul.

In addition to changes in current policies, the respondents made suggestions on new initiatives. Almost half of the respondents suggested tax incentives; some form of direct state financing was requested as well.

The business and government leaders also compared the importance of economic development policies to five major issues facing state government. Few respondents considered economic development less important than prison overcrowding, toxic wastes, the quality of roads, the funding of education and erosion of the tax base. Furthermore, the overwhelming number of business and community leaders, 78 percent, insisted that "state and local governments need to take bold, new actions to encourage economic development." Nearly all want bold, aggressive government to reverse Kansas' declining economic future.

## I. INTERVIEWS WITH KANSAS BUSINESS AND POLITICAL LEADERS

Personal interviews were conducted with twenty-nine key individuals within Kansas. The sample consisted of persons in the private and public sectors who were involved in economic development activities, business, or politics. Representatives from eight Kansas chambers of commerce were interviewed in addition to several business leaders, organized labor representatives, political figures and economic development specialists. Further interviews with local community officials were conducted and supplemented with mail surveys in order to ensure that the local perspective was adequately represented.

Interviews were conducted by K.U. and W.S.U. faculty. Everyone interviewed was asked the same set of questions from a standard questionnaire. Each individual assessed the trend of economic development in Kansas and its general business climate. Interviewees also rated a comprehensive list of factors considered to be either assets or liabilities of the state with respect to economic development. They then were asked for their views on state tax, regulation, and education/training policies; state marketing and promotion strategies; state incentives for business; and state government attitudes toward and support of business. Each interviewee expressed opinions and suggestions related to economic development in terms of the role of the private sector, economic incentives for firm attraction, problems unique to specific parts of the state, small business development, and state actions that would promote economic development in the state.

### The Trend of Economic Development in Kansas

The interviewees' overall impression of the trend of economic development in Kansas was split between the response

"improving, but slowly" and "little growth, about unchanged". The decline in three of Kansas's large industries, agriculture, aircraft, and oil and gas, was recognized. Other factors cited as contributing to a declining trend included stagnant manufacturing, a low unemployment rate in combination with a small labor force, and an overall shift to service industries. Improvements in the state economy were viewed as a result of improvements in the national economy. In general, the Kansas economy was seen as making very slow progress.

### Kansas Business Climate

Kansas leaders did not perceive extreme differences between the overall business climate of Kansas and the climates of surrounding states. Compared with Oklahoma, Colorado, and Missouri, Kansas was viewed as having a somewhat poorer business climate in terms of taxes (because of the inventory tax and the corporate income tax) as well as in terms of economic development initiatives and incentives. Poor marketing of the state's good qualities was mentioned as a contributing factor to the state's image problem.

On the other hand, an equal number of respondents considered Kansas to be somewhat better than other states in terms of business climate. The good attitude of the legislature, a stable, predictable business climate, and the right-to-work law were cited as positive aspects of the state's business climate.

When asked to rank characteristics as positive and negative influences on firms' decisions to locate operations in Kansas, most interviewees mentioned labor force characteristics, including work ethic, productivity, education, and wages, as the most positive influence on economic development. The next most frequently mentioned assets were the right-to-work law and the central location of the state.

Other positive characteristics were the state's low energy costs, a low cost of living, state fiscal stability, availability of transportation and abundant resources.

The state's image was chosen most often as having a negative influence on site location decisions. Second was the lack of incentives for business (inability to offer tax abatements, restrictiveness of the Enterprise Zone legislation, high limits on the job investment credit act). The tax burden on business because of the inventory tax, the trending factor, and the sales tax on machinery and equipment ranked third as a factor that would influence decision makers not to locate their business in Kansas. The lack of air transportation, the low quality of highways in southeastern Kansas, and the absence of high tech or



other high growth core industries in the state were also seen as inhibiting economic development.

Kansas business and government leaders were next given a set of factors known to be important in site selection decisions, and they were asked to choose whether each factor was an asset or a liability to economic development in Kansas. Below is their breakdown. An asterisk indicates a strong majority rating.

<u>Assets</u>	<u>Liabilities</u>
*Quality of Higher Education	*Access to Capital
*Quality of Primary/Secondary Education	Image of State
*Availability of Energy	Adequate/Safe Water
*Availability of Cost of Good Water	Disposal
*Fiscal Stability in State Government	Relative Corporate
*Cost of Housing	Income Tax
*Cost of Land	State Energy
*Quality of Life in the State and Locally	Regulation
*Environmental Regulation	Incentives for
*Cost of Construction	Business
*Cost of Living	Higher Education and
*Cost of Energy-Gas, Electricity	Business
*Right-to-Work Law	Cooperation
*Extent of Unionization	
*Employee Work Attitude and Productivity	<u>Split Between</u>
*Availability of Level of Development	<u>ASSET/LIABILITY</u>
*Transportation System-Rail and Road	Relative Personal
*Geographic Location-Proximity to	Income Tax
Markets and Supplies	Relative Property
Availability of Skilled Labor	Taxes
Unemployment Insurance Tax	Relative Tax Burden
Local Government Attitude Toward Business	on Business
Kansas Wage Levels	Workers' Compensation
Local Regulatory Climate	Insurance
Relative Tax Burden on Persons	Sales Tax
Construction Regulations	Climate
	Cultural
	Opportunities
	Availability of Vo-
	catational/Technical
	Training
	State Government
	Attitude
	Toward Business

\*Indicates strong majority rating.

When local community leaders were asked to choose which factors were assets and which were liabilities, their judgments

were very similar to those of other Kansas leaders. However, the following factors were ranked as assets by local leaders and as liabilities by others: adequacy of safety of waste disposal, state energy regulation, higher education and business cooperation, sales tax, incentives for business, and relative corporate income tax. Geographic location was rated as a liability by community leaders and as an asset by others.

After asking these general questions, the investigators asked Kansas leaders for specific suggestions as a means of focusing the Institute's recommendations for economic development. Their responses identified important issues of concern and areas for improvement, which were later examined, evaluated, and finally addressed in the form of recommendations to the Kansas legislature.

### State Tax Policy

In general, respondents voiced strong support for changes in tax policy. Kansas leaders supported the elimination of the inventory tax, the sales tax on new machinery and equipment, and property tax assessment using the trending factor method. A need for consistency and uniformity in tax policy at the state and local level and between Kansas and surrounding states was voiced. While tax incentives were not viewed as a major tool to attract industry, there was support for tax incentives that are tied to economic development. The suggestion was also made to drop any tax incentives that are not working. Respondents expressed concern over a possible reduction in revenue resulting from tax changes to promote economic development and proposed the sales tax, a state lottery, and corporate taxes as additional revenue generators.

A number of tax incentives were suggested. The most frequently mentioned were less restrictive Enterprise Zone laws and property tax abatement. As one would expect, community officials especially supported changing state law so that communities could offer property tax abatements to businesses that don't have Industrial Revenue Bond funding. Other suggested incentives were tax breaks such as exempting high-tech firms from taxes for a period of time, lowering limits on the job tax credit, and giving tax credits for neighborhood and downtown improvement expenditures. Reductions in rates for state unemployment insurance and workers' compensation insurance were also suggested. Another incentive mentioned was some means to reduce businesses' federal corporate income tax liability. With such a variety of proposals, not all could be addressed. Nevertheless, general issues were identified.

## **Incentives from the State**

This topic also generated numerous suggestions. The important concerns identified were 1) local infrastructure financing, 2) venture capital and start-up capital funding and 3) value-added processing of agricultural goods. The Community Development Block Grant program was suggested as a means to fund capital improvements for economic development. Another idea was to adopt the "Philadelphia Plan" whereby the city initially carries the taxes for improvements and recovers the money later. Some interviewees said that the state should provide technical assistance with infrastructure and specific plant improvements.

Many suggestions were for financing economic development efforts. State guarantees of high risk loans were suggested to encourage bank financing of new ventures. Better assistance from the Kansas Development Credit Corporation was also requested. As alternative financing methods for businesses and communities, a state operated revolving loan pool, state issuance of taxable bonds, and use of HUD money were considered possibilities.

It should be noted that feelings about state involvement in providing incentives or managing a loan pool were mixed. Several individuals were against direct state involvement. They felt the state should help and support businesses and communities but should not try to operate everything. The state was not considered to have the financial capacity to fund major projects. The feeling was that the private sector should be responsible for providing land and capital.

## **State Education and Training Policy**

In the other topic areas, suggestions were of a more general nature. Many respondents stressed a need for better cooperation between the business community and educational and state institutions and a need for better vocational/technical education. KDED was mentioned as a means of bringing businesses and universities in contact. Additional funding for Kansas Industrial Training was also suggested. One individual felt that any changes in the state's education and training policy should demonstrate ties to economic development.

## **State Marketing and Promotion Strategy**

Interviewees stated that as economic development progresses, more resources need to be committed to advertising outside the state and generating a good feeling about the state among Kansans. Smaller communities feel they are not being promoted to industry prospects as well as the five largest cities are. Local governments want the state to help promote communities to target

industries, market industrial sites, and make personal contacts in order to attract firms. Hiring a public relations firm was one idea to improve promotion efforts. The consensus was that the present strategy is inadequate.

### **State Organization**

Business and community leaders perceived state government to be the leader of economic development. It was recommended that each legislative house have an economic development committee educated in local economic problems and their causes. Leaders identified a need for better information systems and technical assistance from KDED for local economic development groups' efforts. Community officials suggested that local and state agencies need to take advantage of the research and consultative capabilities of state universities. Finally, respondents stated that the Governor should take an active, visible role in promoting Kansas to groups and businesses within and outside the state.

### **Role of Private Business**

As to the business sector's role, respondents felt that business could support economic development in several ways. Businesses could provide funds for community improvements, and the state could offer tax credits to encourage this funding. Businesses could also become active in chambers of commerce and support development organizations. Banking should be more aggressive in financing small business, and private developers could fund their own projects. Also, development corporations could be established as private profit organizations (such as Hillsboro has) where shareholders operate an industrial park. The function of the Kansas Cavalry was endorsed, but additional support and participation from state government is needed. If given encouragement, the business sector appears ready and willing to do its part for economic development within the state.

### **Problem Areas**

Some statewide problem areas previously mentioned were re-emphasized and some specific regional problems were stressed. Transportation was considered a major problem. Communities need better access to highways, and there seems to be a need for major state projects to link developing centers of commerce with southeastern and southwestern Kansas. Another transportation problem included is the need for better air service to Wichita and Topeka. As for industrial development, Salina needs assistance with incubators, Topeka and Winfield want industrial speculative plants to encourage business to locate there, and Olathe lacks a major developer. Lawrence lacks a technically skilled work force

due to a lack of vocational/technical education. Lenexa has plenty of land but it is not ready for development. Kansas City, Kansas has a problem with the Enterprise Zone law which gives a "benefit per job based on Kansas resident employees" because plants there have many Missouri resident employees. The regional problems are diverse, yet clearly relate to economic development. Not every problem can be solved immediately; however, some of the problems that hinder economic development were evaluated and then addressed by the recommendations in terms of realistic state actions and overall impact.

## II. MAIL SURVEY OF KANSAS BUSINESS AND POLITICAL LEADERS

Further assessment of economic development perceptions was accomplished by a mail survey of Kansas political and business leaders. In October 1986 confidential questionnaires were mailed to 600 individuals representing state and local governments, private businesses, and organizations involved in economic development activities. A stratified random sampling approach was employed to ensure a representative sample of different types of individuals from the public and private sectors. Two follow-up reminders were sent to non-respondents to increase the sample size.

Data collection efforts were discontinued in January 1986 with a response rate of 60 percent, which is quite good. The 362 returned questionnaires represented a sample of 24.6 percent mayors or city managers, 8.4 percent Kansas legislators, 10.8 percent Kansas Chamber of Commerce and Industry board members, 15 percent chamber of commerce executives, 0.3 percent savings and loan executives, 9.3 percent Kansas Industrial Development Association members, 13.8 percent banking executives, and 16.6 percent of the Kansas Cavalry. The sample slightly over-represented mayors or city managers and bankers. When grouped by public officials, chamber of commerce executives, and private business leaders, the sample underrepresented public officials and overrepresented chamber of commerce executives. The sample and actual population of the three groups is shown in Table 1.



**Table 1**

**Sample and Actual Population Distribution**

	Sample		Actual Population	
	N	%	N	%
Public	110	32.9	790	42.6
Chamber of Commerce	50	15.0	203	10.9
Private	174	48.1	863	46.5

**The State of the State's Economy**

Overall judgment. Unlike interviewees, who perceived the Kansas economy to be stagnant or growing slowly, respondents agreed that the Kansas economy is declining. When asked about the state, 49 percent saw slow decline and 9 percent rapid decline. Less than 1 percent felt the state's economy was rapidly improving, although 19 percent observed slow improvement. When asked to focus on their own community, respondents were less discouraged but expressed similar views. Eleven percent described the economy of their local communities as rapidly declining, and 42 percent anticipated slow decline. Four percent envisioned rapid improvement and 28 percent slow improvement in their local communities. These results are summarized in Table 2.

**Table 2**

**Assessment of the Economy**

Assessment of the current economy:

	of the State of Kansas (Q1)	of your community (Q2)
Rapidly improving	0.6%	3.7%
Slowly improving	19.4	27.9
No change	22.0	16.0
Slowly declining	49.4	42.3
Rapidly declining	8.6	11.3
	<u>100.0%</u>	<u>100.0%</u>
valid cases =	350	351



As shown in Figure 1, respondents from the different regions in the state had different views of the state's economic future. Respondents from the north-east and north-central region were the least pessimistic. Less than half thought the state's economy was declining. In all other regions, over 60 percent foresaw a declining future, with the most pessimistic residing in the south-east region. The differences are more pronounced when asked about their own communities. Eighty-eight percent of those in the north-central and north-west region anticipated a declining economy, whereas only 22 percent of those in the east-central region predicted decline for their communities.

The negative perception of the Kansas economy is softened by the respondents view of the state's business climate. Only 18 percent considered the business climate negative or extremely negative. A third were neutral. These results are, nonetheless, worrisome. Less than half of the business and government leaders in the state considered the business climate positive. These results are summarized in Table 3.

Table 3

Perceptions of the Business Climate

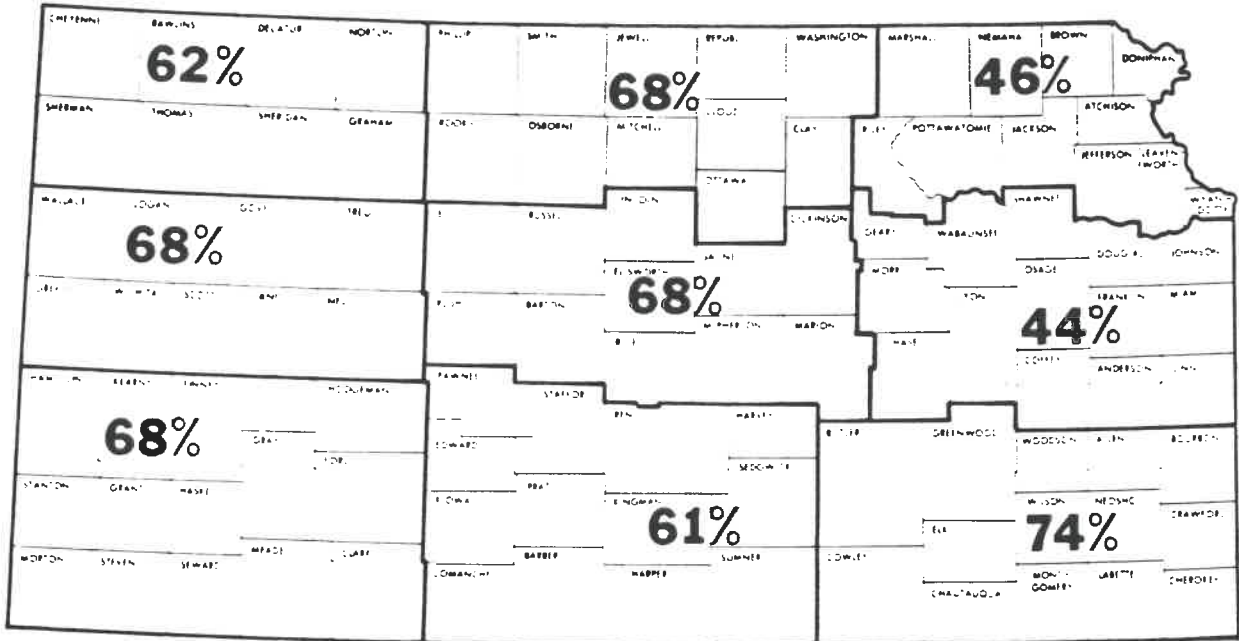
Q3 What is your overall judgement of the state of Kansas as a place for business? Does Kansas have a business climate that is:

Extremely negative	0.6%
Negative	17.8
Neither negative of positive	34.2
Positive	44.8
Extremely positive	<u>2.6</u>
	100.0%
valid cases =	348

Comparative judgment. Respondents were also asked to compare Kansas with neighboring states. As a place for business, business and government leaders consider Kansas the same or better than Iowa and Nebraska. Half felt Kansas's business climate was worse than Colorado's. Respondents were fairly evenly divided as to whether the Kansas business climate was better, the

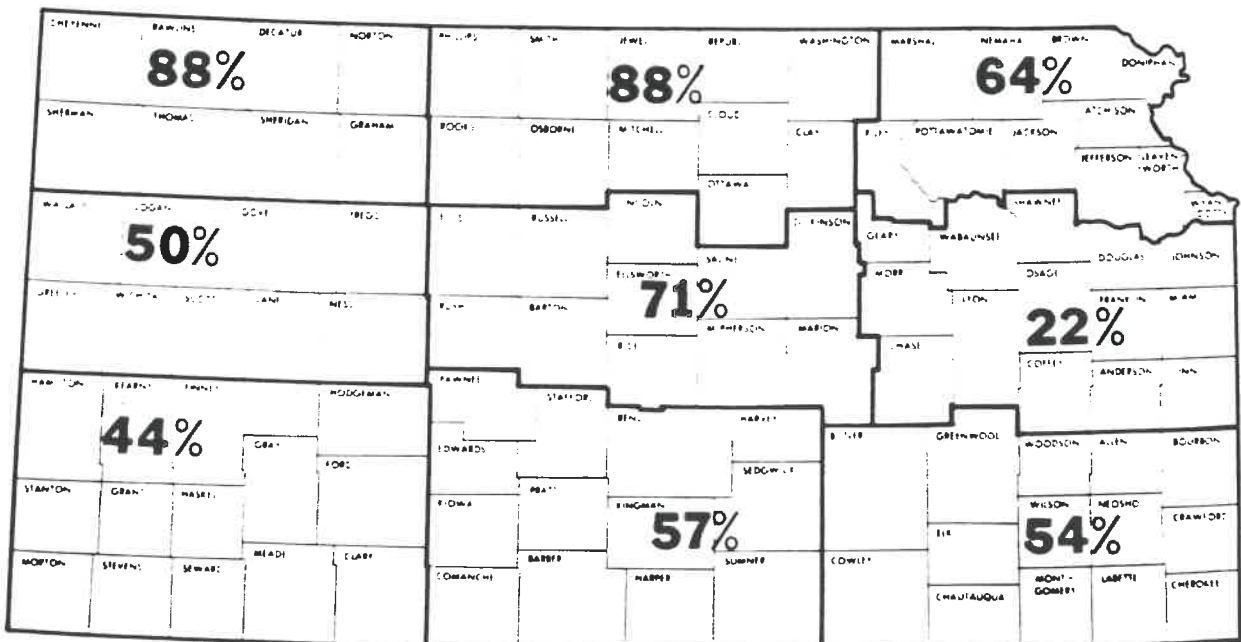
Figure 1. VIEWS OF THE ECONOMIC FUTURE BY REGION

Percent Who Consider the State's Economy Declining.\*



\*Differences approach statistical significance (chi square = 24.2; df = 16; p = .09)

Percent Who Consider Their Region's Economy Declining.\*\*



\*\*Differences are statistically significant (chi square = 61.99; df = 16; p < .001)

same, or worse than Missouri and Oklahoma's. These results are summarized in Table 4.

**Table 4**

**A Comparison of Business Climate**

The business climate in Kansas is...

than...	Better	the Same	Worse	(Cases)
Colorado	20.1%	30.8%	49.1%	(338)
Iowa	41.0	46.1	13.0	(332)
Nebraska	42.4	48.1	9.6	(335)
Missouri	31.2	33.5	35.3	(340)
Oklahoma	29.0	33.7	37.3	(338)

**Factors Affecting Economic Development**

Kansas's assets and liabilities. The first step in addressing Kansas's economic development problems is to take stock. What are Kansas's economic assets? What are our liabilities? Respondents rated 53 factors as an advantage or disadvantage in encouraging business growth. The following are Kansas's top ten assets in descending order: the quality of higher education, right to work laws, employee productivity, quality of life in the state, employee work attitudes, availability of land for development, availability of energy, availability of good water, quality of primary and secondary education, and the low cost of skilled labor. (These factors were ranked by means. A low mean indicates a consensus that the factor was a greater asset.)

Respondents were also asked to list the three most important positive characteristics of the business climate in Kansas. Abundant trained labor and the Kansas work ethic were the most frequently mentioned. Our educational institutions and employee productivity are, in the respondents' views, basic ingredients of economic growth. These ten factors are the state's primary resources for encouraging business growth; they must be husbanded and strengthened.

Numerous factors also inhibit business growth in the state. Listed in descending order are the ten greatest liabilities in the state: Kansas drinking laws, Kansas's image, the relative tax

burden on business, cultural opportunities, workers' compensation insurance, the availability of operating capital, unemployment insurance tax, relative property taxes, relative tax burden on persons, and the limited extent to which entrepreneurship is encouraged. These results confirm interview findings that limited access to capital and the state's image are perceived as liabilities to economic development.

Direct questioning confirmed the respondents' stress on image and taxes. When asked to list the three most negative characteristics of the state's business climate, 59 percent thought outsiders harbored negative views of Kansas as a place for business; 7 percent thought our image was very negative (question 15). In general, business and government leaders are troubled that outsiders see Kansas as a state that lacks social and cultural attractions and does not encourage new ventures. Respondents considered Kansas's relative tax burden on individuals and business a deterrent to growth, even though state taxes are comparable or lower than neighboring states. Although the availability of financing and venture capital were not identified as a major liability, many felt that funding for new and expanding businesses is limited in the state. This finding is summarized in Table 5.

Table 5

Availability of Funding

	Financing for existing business	Venture Capital for new and expanding business
Not available	6.2%	16.3%
Inadequate	38.8	54.5
Adequate	50.3	27.4
More than adequate	<u>4.7</u>	<u>1.8</u>
	100.0%	100.0%
valid cases =	340	332

Kansas Policy Options

Policies that need change. The business and government leaders surveyed suggested areas of state policy in need of

change. These are summarized in Table 6. Two-thirds targeted marketing and promotional efforts as needing major change. This finding was reinforced by the 65 percent of those surveyed who felt the state's promotional and public relations efforts were inadequate and of poor quality (question 14). Slightly less than 60 percent also felt that state government support and incentives for business needed reform.

Confirming interview findings, survey respondents listed taxes as a major factor discouraging business growth, and less than 10 percent felt that no tax reform was needed. Over forty-one percent felt state taxes required major overhaul, and 49 percent felt they needed modification. State education and training programs were listed as major assets to the state, and only one-fourth felt they needed major changes, while half of the respondents suggested minor changes. Similarly, most think state regulation policy requires only minor changes.

Table 6

Policies in Need of Change

	Extent of Change Needed			(cases)
	Major	Minor	No	
State tax policy	41.4%	48.8%	9.8%	(326)
State regulation policy	16.7	60.1	23.2	(323)
State education and training policy	26.2	52.2	26.2	(324)
Marketing and promotion strategy	66.2	25.8	8.0	(325)
State government support for business development	58.0	33.1	8.9	(326)
State incentives for business ventures	58.7	32.4	8.9	(327)

New policies required. In addition to changes in current policies, the respondents made suggestions on new initiatives. One open-ended question asked them to suggest three new economic development incentives. Nearly 50 percent listed tax incentives. Twenty percent suggested some form of direct state financing. These results are summarized in Table 7.

**Table 7**

**New Economic Development Incentives**

Incentive	
Tax incentives	48.5%
Infrastructure	5.8
Financing	19.9
Labor	6.3
Other	19.5
	100.0%
valid cases =	206

All public policies involve trade-offs. We asked business and government leaders to rate eight economic development proposals in terms of their benefit or harm to the general community. These results are summarized in Table 8. In general, none of the common economic development policies are considered harmful. Although most anticipate net benefits from all policies, business and government leaders anticipate more negative effects from public and private partnerships, tax incentives, and using public money to fund development than from other policies. The community leaders overwhelmingly consider industrial parks and advertisement beneficial. Even though 11 percent thought tax incentives carried risks, 85 percent anticipated only benefits.

**Table 8**

**Perceived Impact on the Community**

	Impact on the Community			(cases)
	Harmful	No Effect	Beneficial	
Partnerships between public and private organizations	18%	15%	67%	(337)
Advertisement and promotion of local communities	3	8	89	(339)
Tax incentives given to new businesses, such as Industrial Revenue Bonds (IRB's) and tax abatements	11	4	85	(338)



Table 8

Perceived Impact on the Community (continued)

	Impact on the Community			
	Harmful	No Effect	Beneficial	(cases)
Enterprise zones	5	24	71	(329)
Industrial parks	2	8	91	(337)
Incubator facilities	4	33	63	(304)
Centralized offices for licenses, permits and assistance for new development	4	24	72	(335)
Spending public money for economic development	13	7	80	(339)

Public and private officials disagree, however, on the benefits of several of these proposals. Although 90 percent of the private officials consider tax incentives to new businesses a benefit to the general community, only 72 percent of those in government agree. Similarly, public officials are more skeptical of incubator facilities. Fifty-eight percent of public officials, as opposed to 73 percent of the private officials, consider incubators beneficial. Enterprise zones elicit even stronger differences. A little more than half of the public officials were positive about enterprise zones, whereas 86 percent of the business leaders saw benefits. These differences are summarized on Table 9.

Table 9

Differences between Public and Private officials Regarding Benefits

	Percent considering beneficial		
	Government leaders	Chamber of commerce	Business leaders
Partnerships between public and private organizations	65%	66%	71% <sup>a</sup>

Table 9

Differences between Public and  
Private Officials Regarding Benefits (continued)

	Percent considering beneficial		
	Government leaders	Chamber of commerce	Business leaders
Advertisement and promotion of local communities	85	96	89 <sup>a</sup>
Tax incentives given to new businesses, such as Industrial Revenue Bonds (IRB's) and tax abatements	74	96	89 <sup>c</sup>
Enterprise zones	54	49	86 <sup>c</sup>
Industrial parks	88	85	92 <sup>a</sup>
Incubator facilities	58	44	73 <sup>b</sup>

a. Differences are not statistically significant.  
b. Differences are statistically significant,  $p < 0.01$   
c. Differences are statistically significant,  $p < 0.001$

The Importance of Economic Development

The business and government leaders also compared the importance of economic development policies to five major issues facing state government. The responses indicate the importance of economic development. Few respondents considered economic development less important than prison overcrowding, toxic wastes, the quality of roads, the funding of education and erosion of the tax base. Between half and two-thirds considered economic development of equal importance to the quality of roads, funding of education, and eroding tax base, three issues closely associated with economic development. These results are summarized in Table 10.

Table 10

Relative Importance of Economic Development

Economic development is...

	More important	Of equal importance	Less important
than...			(cases)
Prison overcrowding	49.4%	33.0%	17.5% (342)
Toxic wastes	38.5	43.7	17.8 (343)
Quality of roads	25.4	63.7	10.8 (342)
Funding of education	21.3	62.1	16.6 (343)
Eroding tax base	37.1	49.0	13.9 (337)

The importance of economic development was underscored by a question characterizing attitudes of the respondents. Less than 3 percent agreed with the statement that "State and local governments should not get involved. If left alone, free enterprise will take care of the problem." Twenty percent agreed that "State and local governments should make minor changes in their policies to encourage economic development." The overwhelming number of business and community leaders, 78 percent, insisted that "State and local governments need to take bold, new actions to encourage economic development."

CONCLUSION

In sum, the interviews with and surveys of business and government leaders demonstrate widespread concern about the economic future of the state. Although the state has assets, such as solid higher education and productive and skillful labor, most survey respondents anticipate economic decline. Doubts about Kansas's future are deepest outside of the greater Kansas City area.

The interviews and surveys also indicate a strong desire for state government action to encourage business growth and to attract new businesses to the state. Although some individuals do not feel that the state should fund economic development, few community leaders worry about potential negative effects of new incentives or changes in tax laws, and most business and govern-

ment leaders surveyed consider economic development the highest priority for the state. Nearly all want bold, aggressive government to reverse Kansas's declining economic future.

## CHAPTER FOUR

### RECOMMENDATIONS

#### TRADITIONAL INDUSTRIES

**Recommendation 1: Establish a Task Force on Agriculture Development and Marketing to develop a strategy on:**

- a) the diversification of Kansas agriculture into new products;
- b) the application of science and technology to the value-added processing of Kansas commodities within Kansas; and
- c) the provisions of technical assistance for production, processing, and market development.

(In April of 1986 the Legislature passed House Bill 3122, which creates an interim task force for agricultural research.)

#### Purpose

Currently the economic problems of Kansas agriculture are negatively impacting farmers, agribusiness and related industries, and the state economy as a whole. Investigation into agricultural diversification and value-added production is proposed as a means of revitalizing the agricultural sector of the Kansas economy. In order to implement successful diversification and value-added programs, technical assistance for production and market development must be made available to farmers and agribusinesses.

#### Rationale

One of the functions of the Task Force would be to develop a research and implementation strategy for programs for agricultural diversification into new products, application of technology to value-added processing of Kansas commodities, and provision of technical assistance to Kansas farmers and businesses for production processing and market development.

Another function of the Task Force is to develop a strategy for value-added production. Value-added production is the adding of labor services to Kansas produced agricultural commodities and includes activities such as conditioning, storing, packaging, and processing. The major benefit would be the employment of local people in processing facilities.

Midwest Research Institute's Target Industry Analysis, included in this report, suggests potential value-added products that would be suitable to Kansas:

\*Freezing and cold packing food specialties--Kansas agricultural goods could be used in frozen processed foods like donuts and pizza. Consumer demand for low calorie, high quality frozen entrees has been growing more than 15 percent a year, and MRI predicts that this growth will continue for at least the next 5 years.

\*Manufacturing "dry" bakery products--grains grown and milled in Kansas would be the principal ingredient in cookies and crackers. MRI predicts that the cookie and cracker industry will generate 1.7 percent annual real growth between 1985 and 1990.

Further, the Task Force should develop a means for providing technical assistance to transfer diversification and value-added strategies to the farmer. Technical assistance on market development should also be provided.

According to ASLAN's report, in Volume III of this study, a similar agricultural task force in Nebraska recommended the creation of a food processing center in conjunction with the University of Nebraska. The center was subsequently established, and now Nebraska food processing firms can go to the center for technical assistance, research, and lab facilities.

**\*Recommendation 2:** Expand the research program on enhanced oil recovery, and increase the transfer of new technology to independent oil well operators.

### **Purpose**

The oil and gas industry in Kansas is composed of many small independent operators who do not have access to much of the advanced technology that major oil companies developed and used. As one of Kansas's basic industries, emphasis should be placed on helping this industry be competitive in all types of markets. Funding has been provided to develop enhanced oil recovery methods applicable to Kansas firms and Kansas geology. It is important that efforts to transfer this technology continue to be supported. With the declining price of oil, improved efficiency is the key to survival for many small firms.



## Oil Industry

In Kansas there are approximately 4,700 licensed operators. Fifty of these are considered major. The number of the remainder is declining daily with each drop in the price of oil. However, these small independent operators pump roughly 75 percent of the oil produced in Kansas and account for an even higher percentage of oil and gas employment.

<u>Size of Establishment</u>	<u>Percent of Kansas Oil Produced</u>
1-4 employees	56
5-9 employees	16
10-19 employees	13
20-49 employees	10
50-99 employees	3
100-249 employees	2
250-499 employees	(less than 1)
	<u>100</u>

The small independent operators do not have access to large research staffs as the major companies do. State funding is necessary to increase the technology available to Kansas small operators.

The oil industry is one of Kansas's basic industries, and the recent decline in oil prices has caused employment in this industry to decrease at an alarming rate.

### Petroleum Industry Employment

<u>Date</u>	<u>Number of Employees</u>
peak 1981	17,900
Feb. 1984	15,500
Jan. 1986	14,700
Feb. 1986	13,600
Mar. 1986	12,500
Apr. 1986	10,900

Source: Kansas Department of Human Resources

## **Enhanced Oil Recovery Program**

Federal, state, and industry funds have supported research in tertiary oil recovery through the Tertiary Oil Recovery Project (TORP) at Kansas University. In order for the state's independent operators to take advantage of this pioneering technology, it must be transferred from the laboratory to the field. Semi-annual TORP conferences inform Kansas oil operators of the latest research on oil recovery. A series of publications describing procedures or "how to" manuals is being developed. Currently, one field engineer from TORP is working with independent operators and explaining new methods of enhanced oil recovery.

The field engineer takes procedures developed in the laboratory and collaborates with operators in a field test of the technology. Most of the projects completed have been in eastern Kansas. In the past 18 months, six field projects have been completed, there are eight projects underway, and five projects are pending.

In order to expand the project to central and western Kansas, different technology is needed because of differing geology. These methods are being developed, but one field engineer is not sufficient to service the entire state. One field engineer to cover central Kansas is needed immediately, and within five years another field engineer will be required for western Kansas.

TORP field engineers are not meant to take the place of oil field consultants, although the technology developed by TORP is available to consultants. Field engineers help transfer new laboratory techniques to the field, where data relating to the practical application of new technology is then collected.

## **TAXATION**

**Recommendation 3:** Allow a sales/use tax exemption on all machinery and equipment used in manufacturing and on computers for business use.

### **Purpose**

Kansas currently allows refunds for sales tax on machinery and equipment only in the rare instance that it is paid by firms located in an Enterprise Zone who qualify for job and investment tax credits. Business leaders in Kansas have noted in interviews that the sales tax on machinery and equipment is a major

disadvantage to economic development within the state, since most other states offer some form of reduction or exemption. Allowing the exemption to also apply to computers used in business could lead to more jobs in the service and high-technology sectors.

### **Rationale**

Several business studies have shown that the presence of a sales tax on machinery and equipment used in manufacturing contributes to a state's reputation for a poor business tax climate. Kansas has suffered in these climate rankings as a result of a number of tax impediments, including the sales tax on machinery and equipment. Separate studies done by ASLAN and the Advisory Commission on Intergovernmental Relations indicate that Kansas has a relatively poor business tax climate. Both of these studies have cited the sales tax on machinery and equipment as a problem in the business tax structure of Kansas.

The economic effect of assessing a sales tax on new machinery and equipment when other states exempt these items is to raise the relative price of capital in Kansas. This is particularly disadvantageous to new capital intensive industries and to existing capital intensive industries seeking to apply new technology using computers or robotics. This results in an overall lower level of use of capital in the state, and hinders the development of science and technology.

### **Cost**

The Kansas Department of Revenue has estimated the cost to the state of a sales/use tax exemption on all new machinery and equipment used in manufacturing in fiscal year 1987 at approximately \$15.8 million. The cost in fiscal year 1986 of the existing limited refund for sales tax paid on the purchases of manufacturing machinery and equipment is zero. This is due to the fact that no firms have qualified for this sales tax refund under the existing limitations.

### **Other States**

Currently there are 39 states which exempt some or all new machinery and equipment from the sales/use tax. Of the seven states in this region, which includes Arkansas, Colorado, Iowa, Kansas, Missouri, Nebraska, and Oklahoma, only Kansas does not exempt all new machinery and equipment used in manufacturing from the sales tax. Iowa has recently repealed the sales tax on all industrial machinery and equipment used in manufacturing and on computers used in business.

(For a more detailed analysis of the issues involved in this recommendation, the reader is referred to the Appendix to Volume II.)

**Recommendation 4: Allow a reduction in state corporate income tax liability through a tax credit given for research and development expenditures.**

(In April 1986 the Legislature passed Senate Bill 754, which targets a research and development tax credit.)

### **Purpose**

This measure will encourage the long-run competitiveness of the state's industry by encouraging Kansas firms to lead rather than lag in technological innovation. The promotion of research and development within Kansas would lead to a higher level of interaction between the business community and universities as well as increase the business community's role in research and development.

### **Rationale**

Adopting such a tax credit would provide incentives for firms to continue to increase the amount of research and development done in Kansas.

Although the ASLAN Report Vol. III, questions the cost effectiveness of a tax credit for research and development, well known macroeconomist Edwin Mansfield assessed the impact of tax policy on research and development in "Tax Policy and Innovation," Science, March 1982, and concluded that this type of incentive has a positive effect on the rate of research and development and technological innovation.

By the end of 1985, 19 states offered either a tax exemption or tax credit to encourage research and development. The programs of most of these states have been successful in raising the quantity of research and development performed in their states.

It has also been reported that Kansas has been losing a large percentage of college graduates to other states, where there are increased job opportunities. Increasing the amount of research and development in Kansas will provide more job opportunities for college graduates, encouraging Kansans to remain within the state.

## Cost

The cost to the state of Iowa, which provides a tax credit equal to 6.5 percent of qualified research expenditures in excess of a three year average base, was approximately \$1 million in both fiscal year 1984 and fiscal year 1985. Wisconsin has a similar program with a credit equal to 5 percent. Two hundred corporations took advantage of the program in Wisconsin with a cost to the state in fiscal year 1984 of \$3.8 million.

**Recommendation 5: Allow a reduction in state income tax liability through a tax credit for investment in private, state-approved venture capital funds and state chartered venture capital corporations.**

(In April 1986 the Legislature passed Senate Bill 756. This bill creates a statewide risk capital system, which includes Kansas Venture Capital, Inc., a state chartered venture capital corporation whose investors are eligible for certain tax credits. The passage of Senate Bill 757 allows credit from income tax liability for investment in private, state certified venture capital companies.)

## Purpose

This tax credit will encourage the formation of private venture capital funds in Kansas to support entrepreneurship and innovation. Officials from other states have adopted venture capital programs, believing that companies backed by venture capital will create more jobs and tax revenue in the state. The role of Kansas government would be to certify that the funds are targeted for new technology and innovation oriented business activity in Kansas.

## Rationale

IPPBR surveys in Chapter III show that a lack of seed and venture capital has been clearly identified as a significant weakness in Kansas. Venture capital is vital to smaller firms, since other types of capital are very difficult for them to secure. Research has shown that smaller firms with fewer than twenty employees generate most of the new jobs in the United States.

In Volume III, ASLAN reports that this type of tax credit "increases the real rate of return on investments in state approved or chartered corporations by reducing the real rate of income tax on denied investment income." This is similar to the tax exemption on industrial revenue bonds. ASLAN strongly

recommends that Kansas provide income tax credits for investment in state approved or chartered corporations.

Approximately 30 states have some form of state-government initiated and/or sponsored venture capital program. These states have used various capital programs including 1) creating a public sector fund; 2) operating a fund through a quasi-public entity; 3) creating a state-chartered private fund; 4) encouraging the use of public pension fund investments; and 5) providing tax incentives. Two states, Indiana and Maine, have initiated very successful venture capital programs, which included tax incentives. Vermont recently began a program modeled after Maine's.

### Cost

Most states have set a limit on the total amount of tax credits to be given over a period of years. The Kansas legislature could set similar limits thereby restricting the cost of the program to the state.

(For a more detailed analysis of the issues involved in this recommendation, the reader is referred to the Appendix to Volume II.)

**Recommendation 6:** Allow local taxing jurisdictions to give property tax abatements for new and expanding manufacturing facilities, research and development facilities, equipment and machinery, and for a limited scope of non-manufacturing facilities having a potential for job creation. The authority to grant the abatement should be detached from the issuance of industrial revenue bonds.

(A constitutional amendment to allow property tax abatement for economic development was approved by the Legislature with the passage of House Concurrent Resolution 5047 in April of 1986. The proposed amendment will be voted on at the August 1986 primary election.)

### Purpose

Local government plays a vital role in economic development. Providing local communities the opportunity of giving property tax abatements or exemptions to specified new or expanding businesses will allow these communities to encourage the development of new industry in the state as well as enhance the expansion of existing industry. Property tax abatements or



exemptions could be offered only for new or expanding manufacturing facilities, research and development facilities, equipment and machinery, and to a limited scope of non-manufacturing facilities. Communities could determine the appropriateness of granting the exemptions using criteria that might include (1) creation of jobs, (2) the effect of the exemption on the local tax base, (3) area of the proposed location or expansion, and (4) history of the requesting company.

### **Rationale**

Presently Kansas allows a moratorium on land and capital improvements and equipment only if purchased with industrial revenue bonds. However, the federal income tax exclusion on interest earnings from industrial revenue bonds is being phased out. Thus, the total quantity of industrial revenue bonds issued in Kansas will decline, thereby limiting local jurisdictions' opportunities to offer tax abatements.

ASLAN argues that property tax abatements are not effective economic development incentives, since they may increase competition among local governments. But results of surveys of businesses that did not locate in Kansas indicated that the high tax burden on businesses in the state was a major negative factor in their decision. The detachment of tax abatements for the described properties from the issuance of industrial revenue bonds will provide communities with a continuing capacity to compete on an equal footing with other communities.

There are at least 32 states now providing a tax exemption or moratorium on one or more of the types of property described above. In this region, Iowa offers a property tax abatement on new research facilities, and Missouri provides a 25-year property tax incentive for redevelopment of urban areas. Neither state ties the abatement of property tax to IRBs. The Oklahoma legislature recently passed a bill allowing property tax exemptions on all new and expanding manufacturing facilities and equipment. It now goes to vote before the people of the state.

(For a more detailed analysis of the issues involved in this recommendation, the reader is referred to the Appendix to Volume II.)

**Recommendation 7: Support the 1986 constitutional amendment that would eliminate the property tax on inventories.**

### **Purpose**

Kansas is one of only seven states that does not exempt

inventories from property tax. In this region, Colorado, Iowa, Missouri, Nebraska, and Oklahoma all exempt business inventories from property taxes. In fact Iowa has recently repealed its personal property tax altogether. Elimination of this tax on inventories will put Kansas business climate on a more equal footing with other states.

### **Rationale**

Business leaders across the state have cited the property tax on inventories as a major contribution to the heavy tax burden on Kansas businesses. The tax is a disincentive for certain types of industries to develop in Kansas.

### **Cost**

The estimated cost to Kansas in fiscal year 1985 would have been \$70 million. Yet the amendment adopted by the legislature in the 1985 session would phase in the property tax exemption on inventories, thus the cost to the state would be much less each year.

## **EDUCATION, RESEARCH, AND TECHNOLOGY TRANSFER**

**Recommendation 8:** Substantially expand the program and level of funding for centers of excellence in basic research.

(Some progress toward implementation of this recommendation was made with the passage of Senate Bill 755 in April 1986. Senate Bill 755 creates the Kansas Technology Enterprise Corporation, which is charged with awarding funding to centers of excellence for basic research.)

### **Purpose**

The Centers of Excellence Program is based on the premise that research institutions operating on the cutting edge of science and technology have the potential to stimulate economic growth. In order to accomplish this, technological transfer from the laboratory to the boardroom must receive high priority. Substantial increase in funding would allow the acquisition and retention of the highest quality researchers as well as the expansion of the Centers of Excellence Program.

## Rationale

Kansas currently has three Centers of Excellence, located at the University of Kansas, Kansas State University, and Wichita State University. In 1985, \$168,000 was allocated to each Center. This was matched 50 percent by industrial funding. The present program is funded at a minimum level, and unless it is substantially increased, Kansas stands to lose many of the potential benefits that the program could generate. The academic talent necessary to produce maximum output in terms of potential industrial application of high technology research is not inexpensive. Recognizing this, Indiana recently approved an initial funding level of \$2.5 million for 1985-1987 for the Indiana Endowment for Educational Excellence. They have made it a top priority to secure structured and long range funding necessary to attract and develop teaching and research excellence in Indiana's universities. The state funding is supplemented by contributions from corporations interested in sponsoring research in a particular field.

This aggressive stand serves notice to other states that Indiana is prepared to compete for the best academic talent at both the professional and graduate student level. Further they have recognized the importance of transforming academic research into useful business practice.

Interviews with 29 prominent Kansas leaders during the latter part of 1985 showed that Kansas is considered disadvantaged in terms of the quality of high-tech research and education. These leaders further indicated that Kansas must take a hard look at the quality of technical education in the state. They further indicated that Kansas did not fare well in terms of business-university relationships and that economic development would be enhanced if this could be improved. Stronger commitment to the Centers of Excellence Programs is seen as a method of addressing these concerns.

With the increasing importance of specialized expertise in industry and the increasing competition for high caliber scholars, funding for Centers of Excellence must be substantially increased. At \$167,000 per center, the program cost \$501,000 for three centers in fiscal year 1986. This amount should at least be substantially increased to assure that Kansas can continue to compete on this front and realize the benefits this program promises to provide. The economic impact of most of the current research projects at the Centers will not be realized for two to four years. Continued support is critical at this stage. For similar programs, approximately 20 states provide substantially higher levels of funding than does Kansas. It is not unusual for state funding to exceed \$5 million for establishing such centers.

**Recommendation 9: Substantially expand the level of funding for the Research Matching Grant Program.**

(In April 1986, the Legislature passed Senate Bill 755, creating the Kansas Technology Enterprise Corporation, which is charged with awarding the state funds for this program.)

**Purpose**

The Research Matching Grant Program is designed to make Kansas industry more competitive by encouraging university-industry collaboration and stimulating technology transfer. The program focuses on the applied research phase of the innovation process, supporting university-industry projects that have the clear potential for commercialization. The Kansas Advanced Technology Commission directs investment of state funds in research projects at Regents' Institutions. Sponsoring industrial firms match state support. The commission's goal is to maximize the return to the state by investing state funds as seed money for projects with high potential for job creation. The Commission also recommends expansion of this program.

**Rationale**

In 1985, the National Conference of State Legislatures emphasized the need to address the link between higher education and business. Virtually every state is doing as much as possible to enhance this linkage since private sources of funding are the leading indicators of the concerns that businesses have about future technological developments.

As was mentioned in the discussion of Centers of Excellence, business leaders in Kansas are greatly concerned about the extent that Kansas businesses and Kansas universities work together to solve pertinent business problems. The Matching Grant Program assures that state funds will be available to support research that industry believes to be worthy of investment.

Expanding the fund would (1) directly raise the level of private research sponsorship at Kansas universities, (2) enable more grants to be awarded, (3) enable larger grants to be awarded, (4) enable more universities to participate, and (5) directly raise the level of economic development in terms of return to the investing firms. A further benefit would be realized by providing funding for scholars who might otherwise be siphoned off by other states willing to provide research dollars.

New York offers an example of commitment to joint university-business projects. The seven New York state university campuses, both public and private, participate in the New York

Applied Research Program. The universities are awarded \$1 million each so that they can provide an important link between theoretical university research and practical application of that research to the business sector.

While the program is relatively young, preliminary evaluation suggests promising results. New York has encouraged university faculty to participate in this program by granting credit toward tenure to those who do so. This has been a part of the tenure program at Cornell for some time and warrants consideration in Kansas.

The link between higher education and business was rated as a neutral factor by surveyed firms that considered locating in Kansas but chose not to do so. Expanding the Research Matching Grant Program would serve to improve this image. It must be improved to the point where Kansas offers clear advantages as a business location site.

**Recommendation 10: Establish Institutes for Applied Science and Technology at the major research universities and centers for technology transfer at educational institutions.**

(In April 1986 the Legislature passed Senate Bill 755, creating the Kansas Technology Enterprise Corporation, which is charged with awarding funding to centers of excellence for applied research and development and to centers of excellence for technology transfer.)

### **Purpose**

The objective of these institutes would be to foster the application of advanced science and technology to Kansas business and industry. Each Institute would concentrate on linking its academic strengths to Kansas industry and could embrace existing university programs. The existence of such Institutes would provide a campus focus and direction to this objective and a visible focal point for industry/university applied research.

### **Rationale**

As in the case of Centers of Excellence and Research Matching Grant Programs, it is clear that technological development and technological transfer into industry is of prime importance in economic development efforts. Michigan reports that the role of their universities is not limited to education and the support of existing businesses; it is also to serve as



breeding grounds for new technology-based businesses that will strengthen the growth of the state's economic base. Michigan reports specific success in launching new businesses in the fields of machine vision, computer software, computer-aided design, and manufacturing and engineering systems for automobile, aerospace, and defense industries as a direct result of existing university research programs.

Indiana has taken a slightly different route in their concern for applied science and technological research, but nevertheless, it serves as an excellent example of the magnitude of this concern in other states. The Indiana Corporation for Science and Technology was established in 1982 to serve as a catalyst for drawing together the resources of public, private, and educational sectors of the economy for the advancement of science and technology. This institution has been funded at \$20 million for the period of 1985-1987.

Oklahoma State University's 21 Century Center is a bold attempt to move Oklahoma to the forefront of research in agriculture and renewable natural resources. This is a \$30 million facility intended to attract the top researchers in specific fields so that advances in these areas will occur in Oklahoma, rather than elsewhere.

Rhode Island's Partnership for Science and Technology is another example of the importance placed on applied research and product development. Its primary objectives are (1) the strengthening and expansion of Rhode Island's research and technology base to help existing industries adapt, compete, and survive; (2) increased growth of new industries and the creation of new job opportunities in high growth fields; and (3) development of the critical mass of research knowledge and technology needed to attract new industries and jobs.

The Michigan, Indiana, Oklahoma, and Rhode Island programs serve as models for what the proposed Institutes for Applied Science and Technology in Kansas would hope to accomplish. Such Institutes would (1) channel academic research for the benefit of Kansas industry; (2) attract major federal grant funds as exemplified by the new Aviation Institute at Wichita State University, which recently received a \$7 million federal grant; (3) provide the means to attract and retain nationally recognized faculty and graduate students to the state's universities; and (4) attract corporate sponsorship on a national level thereby creating more opportunities for jobs and investments in Kansas.

The desirable level of funding to maintain a primary institute at the University of Kansas, Kansas State University, and Wichita State University and a secondary institute at Emporia State University, Pittsburg State University, and Fort Hays State University approaches a minimum of \$10 million. This



amount, although substantial, is significantly below the commitment made by other states. It does, however, indicate a sincere effort on the part of the state to compete in this area. It is estimated that much less money would be required in future years to maintain the program.

**Recommendation 11: Provide resources to the state universities for the purpose of upgrading the quality and increasing the quantity of applied social and economic research.**

(In April 1986 the Legislature passed House Bill 755, which establishes the Kansas Technology Enterprise Corporation, a body charged with funding educational institutions to create technical information data bases. In April the Legislature also passed House Bill 2960, establishing Kansas, Inc., which is to support the state's econometric modeling.)

#### **Purpose**

Applied social and economic research relates directly to both the fiscal stability of the state and the ability of Kansas firms to make sound business decisions. This recommendation would provide support for the development and maintenance of such resources as an econometric model and a data base and related support activities. This would enhance the fiscal stability of the state by providing more accurate projections of revenue. Moreover, it would allow for modeling of the effects of various incentives on industries and the state economy. Finally, the development of a data base and supporting activities would provide a resource for businesses to turn to in the decision-making process. This would assist firms by reducing uncertainty and allowing decisions of higher quality.

#### **Rationale**

In the past, Kansas has given low priority to applied social and economic research. Last year, for example, requested support for an econometric modeling capability was not approved for forwarding to the legislature despite acknowledgement that such a capability is essential to the state of Kansas. Given recent revenue problems in Kansas, the importance of this recommendation is difficult to deny.

Applied social and economic research is also important for linking state economic goals to the business community through the educational institutions. Modeling capability would allow the state to forecast the effects of particular industries on the

state's economy as well as the impact of different types of financial incentives. The development of a data base with population projections, small business research, and import/export related activity would serve as a vital source of information to new and developing firms. In an immensely competitive environment faced with changing technology and product markets, this type of information can be increasingly important to industry. Moreover, this type of applied social and economic research serves to increase cooperation between the business community and the state's educational institutions. The resulting cooperation tends to strengthen and sustain the link between education and business and serves to enhance the development of new industry.

### Costs

The funding for this recommendation would be from \$185,000 to \$385,000 in fiscal year 1987. The minimum figure would allow for the development of econometric modeling capability. The large figure would add \$100,000 for the development of a state data base along with \$100,000 for population projection, small business research, and international import/export related activity. Increasing the budget to \$500,000 in fiscal year 1988 would allow for the establishment of regional centers for business research.

**Recommendation 12: Provide funding for the establishment of an industry liaison function at state universities.**

(In April 1986 the Legislature passed Senate Bill 755, creating the Kansas Technology Enterprise Corporation, which is charged with funding educational institutions to establish industrial liaison offices.)

### Purpose

Present liaison between higher education and the business sector is limited and haphazard. It has not received adequate priority, and as a consequence the potential benefits that close interaction promises have not been realized. An organized liaison function would improve research and academic ties to business and make both parties more aware of the needs to be filled and the services available.

## Rationale

The importance of linking education and business in economically productive research and application is becoming more widely recognized. Leading Kansas businessmen are concerned about the lack of cooperation and collective effort between Kansas universities and industry. One of their suggestions during IPPBR interviews was to establish an agency that could facilitate the interaction between universities and industry. This is consistent with nationwide concern for technological transfer from the laboratory to the factory. It should be noted that Kansas has not neglected to address this problem. However more must be done to ensure that Kansas does not fall behind states that are making nationwide efforts to become known for strong university-industry linkage. Kansas's Centers for Excellence and Research Matching Grant Programs are examples of effort in a positive direction. But this effort is not enough. A formal industry liaison function at the universities would facilitate the interaction and transfer of technology.

The university-industry liaison would (1) allow for research and training capabilities to corporate and industrial clients, (2) participate in activities that relate to corporate and industrial needs, (3) enhance the opportunities for Kansas university graduates within the Kansas economy, (4) help Kansas industry improve its productivity and ability to make best use of advanced technology to upgrade its competitive position, and (5) help new companies obtain technology for jobs and growth in the economy.

Kansas universities are continually doing research and developing techniques and breakthroughs that could enhance our existing Kansas industry and keep them on the leading edge of technology. Kansas industry is in constant need of assistance from our universities and can benefit greatly from joint research projects. Neither have done a good enough job of making the necessary contracts and establishing the rapport necessary to form the relationship that would benefit both. An industry liaison function at each of Kansas's universities could serve to bridge that gap between academia and industry, with mutual benefits to both and to Kansas communities.

**\*Recommendation 13: Selectively enhance university programs in management and associated areas crucial to economic development.**

## Purpose

Economic development is a long-term exercise. In order to

make long-lasting and profound changes in the Kansas economy, future business managers must evolve from a cutting-edge curriculum. Kansas's firms must be innovative and quality conscious if they are to remain competitive in the international market place. To provide future managers with tools that will further the state's economic development goals and at the same time provide the necessary state of the art education, selected areas in the major universities' curriculum should be enhanced. To achieve these goals schools of business and other relevant academic units should be encouraged to place additional emphasis on such areas as small business management, international business, advanced production and operations management, and modern information systems. This will necessitate the funding of additional faculty and programs in these areas, because the major business schools in the state are barely able to support a basic quality program with current funds.

### **Rationale**

Enhancement of programs should be viewed in two dimensions - in teaching and in research. In curricula, additional courses should be established in targeted areas. At the same time certain topics such as international business, small business management, and information systems should be integrated into many areas of existing courses. Research by university scholars in these areas can facilitate the rapid dissemination of advanced methods and technology to Kansas businesses. It is important that scholars be competitive on a national basis.

Further, business schools are barely able to adequately support existing programs. Enhanced programs require additional faculty and related expenditures for programs. Small business management, international business, advanced production and operations management, and modern information systems have been given emphasis in other states. If Kansas does not develop programs in these areas, the quality of management in Kansas will decline and Kansas' firms will not be competitive.

**Recommendation 14: Endorse strongly a continuation and expansion of the state's commitment to all levels of public education in Kansas. Public education in general and higher education in particular are crucial elements for the future progress of Kansas.**

(House Bill 3122, passed by the Legislature in April 1986, provides for the establishment by the Legislative Commission on Kansas Economic Development of an interim task force to analyze funding needs of state universities.)

## Purpose

Kansas has a quality differential in education. It would be catastrophic for development if this were to erode. A common theme in other states' economic development programs is an increased commitment to funding of higher education. In relation to higher education, the Kansas Board of Regents has clearly articulated the potential for erosion. The Board of Regents budget issue papers indicated a shortfall on the order of \$85-\$95 million in state funding for the universities. Similar funding problems exist for the community college system and the elementary and secondary public education systems. In this report, we endorse these urgent concerns and propose remedies with respect to faculty pay and benefits, instructional equipment and research instrumentation, student resources, and library needs.

## Rationale

Public education in general and higher education in particular are crucial elements for the future progress of Kansas. Many economic development professionals emphasize the importance of quality education as a factor in site location decisions, since it can affect the quality of the local labor force, the satisfaction of relocated employees seeking quality education for their children, and the ability of the organization to evolve internally through the continuing education of its existing work force.

Some types of industry are particularly concerned with the quality of higher education in an area. For many high-tech companies, access to educational facilities in institutions of higher learning has become a primary factor in site selection decisions. High-tech companies want facilities near research universities that generate a steady supply of computer-skilled graduates and contribute staff time, equipment and funds to industry research programs. California's Silicon Valley and Boston's Route 128 corridor, for instance, have evolved in part because of their proximity to major research universities.

Kansas, as Table 1 illustrates, has a highly educated population, both in comparison to the United States on average and to the region.

**Table 1**  
Education Levels of the United States,  
Kansas, and Neighboring States

	<sup>1</sup> Median Years Schooling	<sup>2</sup> Percent High School Educated Adults Age 25-64 Percent	State	<sup>1</sup> Percent Adults 25+ years of age w/4+ years College
U.S.	12.5	78.94	-	16.2
Kansas	12.6	85.62	7	17.0
Missouri	12.4	78.25	29	13.9
Oklahoma	12.5	79.38	26	15.1
Colorado	12.8	86.95	6	23.0
Nebraska	12.6	87.97	2	15.5
Iowa	12.5	83.28	13	13.9

Sources: <sup>1</sup> 1980 Census of the Population  
<sup>2</sup> Alexander Grant and Company, 1985

That Kansas is a net provider of education is exhibited in Table 2. Kansas has a higher proportion of college students than would be expected on the basis of its population.

**Table 2**  
Higher Education Enrollment

	Total Enrollment	State Enrollment as a Percentage of Total U.S. Enrollments	State Population as a Percentage of Total U.S. Population
U.S.	12465	100.00	100.00
Kansas	142	1.14	1.04
Missouri	248	1.99	2.12
Oklahoma	174	1.40	1.41
Colorado	173	1.39	1.34
Nebraska	95	0.76	0.68
Iowa	153	1.23	1.24

Source: U.S. Statistical Abstract, 1986

State support for education is shown in Tables 3 and 4. Kansas ranks 16th in per pupil spending for public elementary and secondary education and ranks 14th in per capita spending for higher education.



**Table 3**  
Selected Public School Financial Data

	Per Capita Spending 1985 (dol.)	Average Expenditures Per Pupil in ADA* 1985 (dol.)	Rank
U.S.	451	3429	-
Kansas	628	3668	16
Missouri	452	2993	35
Oklahoma	612	3264	29
Colorado	591	3398	24
Nebraska	519	3128	31
Iowa	573	3489	21

\*Average daily attendance.

Source: U.S. Statistical Abstract, 1986.

**Table 4**  
State Spending on Higher Education

	FY 1985 (\$ million)	FY 1986 (\$ million)	Percent Change 1985-86	<sup>1</sup> 1985 Per Capita Spending	Rank (1= highest)
U.S.	27,803.2	30,105.2	8.3	120.1	-
Kansas	336.2	343.7	2.2	139.6	14
Missouri	387.6	524.9	32.0	80.3	45
Oklahoma	416.8	482.6	15.8	131.2	18
Colorado	295.9	340.0	14.9	97.2	40
Nebraska	213.2	214.9	0.8	134.4	15
Iowa	419.7	419.0	-0.2	144.5	13

Source: National Conference of State Legislation

<sup>1</sup>Based on Bureau of Census estimated population.

The strong tradition of quality education in Kansas is a major asset to the state, and the threatened erosion of this asset is a very serious concern for state economic development efforts. Steps must be taken to ensure the continuation of the state's commitment to high quality education.

#### FINANCE, CAPITAL FORMATION, AND INNOVATION

**Recommendation 15:** Establish a public/private program to provide equity or debt financing for new and existing

**firms that are unable to obtain conventional capital for developing innovative products.**

(In April of 1986, the Legislature passed Senate Bill 756, creating a statewide risk capital system, which includes Kansas Venture Capital, Inc.)

### **Purpose**

The difficulty that new firms experience in obtaining capital has been identified as a highly significant barrier to the development of modern technology-based enterprise in Kansas. Kansas currently has no publicly approved or chartered organizations that provide equity or near equity financing. This represents a serious gap in the state's efforts to attract innovative firms.

The KCID would serve to meet the needs for this type of financing by (1) supplementing private sources of venture capital to start businesses with innovative products when alternative sources of financing are not available, and (2) providing financing to existing industries that are developing innovative products or applying new technology in order to be more competitive.

### **Rationale**

The logic behind state-run venture capital firms is that the firms they back will create new jobs for the state and generate new tax revenue in the future. At least 20 states have supported venture capital companies in the last decade. Some states, like Michigan and Illinois, set aside state funds to form privately managed, state sponsored venture funds. Other states offer tax breaks to encourage the formation of new venture funds. Regardless of the form they take, these Corporations for Innovation Development (CID) Programs serve the needs of innovative, technology-based business ventures by providing supplements to private venture capital when alternative sources are not available. The ASLAN Report, Volume III, strongly recommends CID programs as desirable additions to Kansas's economic development programs as long as the equity need is not being met by the private sector.

The KCID would have three responsibilities:

1. It would make direct investments in new/innovative businesses. Alternatively, the KCID would make direct investments in private venture capital funds investing in state targeted industries.

2. The KCID would provide equity and loan financing to established industries to develop new products.

3. The KCID would invest in newly established Small Business Investment Companies (SBIC) and would induce additional private investment in these SBICs through tax credit mechanisms.

Direct investment would provide seed capital to entrepreneurs just beginning production when the risk precludes investment by banks and other traditional sources. The KCID could also offer assistance to entrepreneurs in the form of technical expertise. Equity and loan responsibility would provide a supplement to conventional financing for established industries developing new products. It would allow existing firms to harness new technology and meet the changing demands of the competitive environment. A network of SBICs throughout the state would allow small businesses to expand.

The Governor would initiate KCID with the designation of two or three Kansas entrepreneurs as the initial incorporators and members of the board. A tax credit against Kansas tax liability would stimulate private investment. This type of private sector involvement is highly desirable. The ability of new, high risk, innovative firms to attract equity capital would be enhanced, and small business development should contribute to an improved state economy.

(For a more detailed analysis of the issues involved in this recommendation, the reader is referred to the Appendix to Volume II.)

**Recommendation 16: Establish a Kansas product development program.**

(The Kansas Legislature addressed the need for product development when it established a seed capital fund as part of the Kansas Technology Enterprise Corporation with Senate Bill 755 in April 1986.)

#### **Purpose**

The Kansas Product Development Corporation's major goal is to coinvest with Kansas firms in the research, development, and marketing of new products. The KPDC would structure its investment as a loan, as equity, or as a royalty agreement, providing financing for very high risk ventures where traditional sources of funding are not available. By helping the state's innovative entrepreneurial businesses with the cost of new product development, ability to survive by responding to

competitive activity will be enhanced. The resulting growth in these entrepreneurial firms will create new jobs and revenue sources and eventually generate additional capital for further investment.

## Rationale

The ASLAN report suggests that although equity and near equity financing are cost effective tools for economic development, Kansas has no organization that provides this type of financing. The report concludes that the product development corporation is a desirable and highly recommended addition to the Kansas economic development effort.

One of the basic findings of the Interim Report on the Kansas Economic Development Study is that the state should adopt an approach that sustains existing industry by supporting competitiveness, modernization, and expansion. The Kansas Product Development Corporation addresses this goal by providing support to encourage entrepreneurship in these mostly small businesses. The KPDC differs from KCID in the risk of the venture involved. The KPDC would provide the link between research and development of marketable products where special skills are needed to identify viable ideas early in the process and provide assistance to entrepreneurs.

A number of states have viable product development corporations. The most prominent example is the Connecticut Product Development Corporation (CPDC). The CPDC provides investments in product development, which are repaid through royalties on sales. Alternatively, the state provides a revolving loan program where six-year loans of up to \$200,000 are offered at below prime rates in order to provide new firms with working capital. Iowa and Illinois also have product development programs that offer capital for new companies.

The Kansas Product Development Corporation would be a quasi-public organization chartered by the state and governed by an appointed board of directors who guide policy and make investment decisions. The criteria for providing risk capital should include the feasibility of the proposed product, the track record and skills of key personnel in the company, the product market, and the ability of the product to generate new jobs.

## Cost

The preferred funding would be \$1 million in fiscal year 1987, growing to \$2 million in each of fiscal years 1988 and 1989. The KPDC has the advantage of being more targeted than other incentives such as tax credits. In addition, the royalty

payback plan should ultimately allow the KPDC to be selfsupporting. In fiscal year 1985 the Connecticut PDC reported return on investment of 18.5 percent and creation of 1,000 new jobs as a result of this initiative. Other impacts reported were increased tax revenue and reduced unemployment.

(For a more detailed analysis of the issues involved in this recommendation, the reader is referred to the Appendix to Volume II.)

**Recommendation 17: Establish a state fund to match federal Small Business Innovation Research Grants to Kansas small businesses.**

(The Kansas Legislature established the small business innovation research matching grant program in April 1986 as part of the Kansas Technology Enterprise Corporation with Senate Bill 755.)

#### **Purpose**

The federal SBIR program was established in 1982 to provide funding for research and development by small businesses in order to promote the commercialization of new products and the growth of new technology-based companies. Federal Phase I Awards of \$50,000 or less are made to allow small firms to demonstrate the scientific and technical merit and feasibility of the innovation. Firms that successfully complete Phase I may be selected for Federal Phase II funding of up to \$500,000 to further develop the innovation. Under the Kansas SBIR matching grant program, small businesses in the state that receive Phase I awards would also receive a matching grant from the state. Such a state grant is to help small business in Kansas develop products with commercial potential and to increase the probability of their receiving a Phase II award.

#### **Rationale**

The competition for SBIR funding is very stiff. The Wall Street Journal (October 7, 1985, p. 25) reports that 88 percent of the 8,000 proposals submitted during 1984 were turned down. Because of this, many states are taking steps to help their small businesses become better prepared to compete for both Phase I and Phase II awards.

The matching grant programs serves two major functions. First, it helps ensure that Phase I work is completed as specified in the original proposal. Second, there is generally a

six-month lag between completion of Phase I and awarding of Phase II grants. The matching grant money helps the business during this lag, allowing operations to continue operations. The continuation of funded research by the state significantly strengthens the application for Phase II awards.

Eighteen states provide SBIR matching grants. This puts their business at a distinct advantage over those in states that do not. An SBIR matching grant program in Kansas would (1) raise the number of Kansas-based applications for the federal program, (2) bridge the funding gap between Phase I and Phase II awards, (3) provide very small Kansas firms increased chances of winning SBIR awards, (4) increase Phase I awardees chances of obtaining Phase II funding, and (5) stimulate job creation and retention as a result of continuing applied research. The ASLAN Report, Volume III, maintains that the state will benefit from such a program so long as the innovation is successfully brought to market and the firm expands in Kansas.



**Recommendation 18: Establish a Kansas Technology Enterprise Corporation.**

(In April 1986, the Legislature passed Senate Bill 755, establishing the Kansas Technology Enterprise Corporation (K-TEC).)

**Historical Note**

This recommendation originally called for the establishment of a Kansas Science and Technology Authority, which would operate the following programs:

1. the Kansas Corporation of Innovation Development (see recommendation 15),
2. the Kansas Product Development Corporation (see recommendation 16),
3. the Kansas SBIR Program (see recommendation 17),
4. the management of a high technology venture capital fund,
5. the construction and operation of incubators, and
6. the solicitation and facilitation of joint research contracts and grants between state universities, businesses and government.

After further refinement and development by the Kansas Legislature, in consultation with the Institute for Public Policy and Business Research, this recommendation has reemerged as the Kansas Technology Enterprise Corporation (K-TEC). K-TEC has been altered to exclude the construction and operation of incubators and to include the financing of the Centers of Excellence Program.

**Purpose**

The purpose of the K-TEC is to foster innovation in existing industry and the development of new industry in key exporting areas of special importance to the Kansas economy, including but not limited to

- (1) existing resource based industries of agriculture, oil, gas, coal, and helium;
- (2) existing advanced technology industries of aviation, pharmaceuticals, computers and electronics; and
- (3) emerging industries of telecommunications, computer software, information services, and research services.

The Corporation shall achieve these purposes by

- (1) awarding applied research matching grants to educational institutions and private enterprises in order to move innovation and applied research toward commercial application;
- (2) financing Centers of Excellence at educational institutions to engage in basic and applied research that potentially has application in existing and new Kansas industries;
- (3) engaging in seed-capital financing for the development and implementation of innovations or new technologies for exporting industries; and
- (4) providing managerial assistance and technical referral services to such exporting enterprises and encouraging educational institutions to establish technical information data bases and industrial liaison offices for both private and public sector organizations.

#### **Rationale**

There exists in Kansas a great opportunity for cooperation between private enterprise and educational institutions in the areas of innovation, basic and applied research, and the transfer of new technologies between educational institutions and private enterprises. There also exists a lack of seed-capital financing for the development of new products or processes by small innovative enterprises or new enterprises that engage in, or supply to, key exporting industries of special importance to the Kansas economy. Encouraging these activities can lead to increased industrial and commercial development that will provide and maintain employment and revenues. These opportunities for innovation and growth lie particularly in those small enterprises engaged in agricultural, manufacturing and technology-based exporting industries, which are increasingly recognized as the sources of new job creations within Kansas and the nation.

The various coordinating and financing mechanisms need to be organized by a single authority. This would allow the programs to operate more efficiently and would avoid possible duplication of effort and staff. K-TEC will be the umbrella administrative unit for the programs, institutes, and financing corporations set out above. Funding of \$275,000 in fiscal year 1987 would provide for five full-time employees.

**Recommendation 19:** Sponsor a program of financial symposia on capital formation.

## Purpose

Kansas venture capital markets are small, and relatively little information is passed between funding sources and potential borrowers. In many instances, promising companies leave Kansas to find funding in other states, or if the company particularly wants to stay in Kansas, funding from outside the state is found. Some system to facilitate the linkage between Kansas companies and the type of funding that is appropriate and available in private markets should be established.

There are several ways this could be accomplished. Financial symposiums and venture capital networks are among several different strategies that have been tried and seem to meet the need of developing the information flow in the Kansas venture capital market.

## Rationale

A financial symposium is a meeting of businesses with financing needs with those who have funds to invest. Companies with new products, processes, or other high growth potential present their business plans to an assembly of venture capitalists, investment bankers, and other investors such as pension funds, utilities, insurance companies. After the presentations, investors are given a chance to meet privately with a certain number of companies. A chance for cooperative financial packaging is a major advantage to these meetings. Several lenders together may be able to negotiate joint financing. Approximately 20 to 40 companies over a two- or three-day period would be involved.

Most financial symposiums or venture capital fairs are patterned after the American Electronics Association annual conference in Monterrey, California. The first meeting was in 1976 and, the conference has grown into two three-day sessions with about 60 companies at each. It is larger than most and has no trouble attracting high quality firms or investors. No statistics are kept on how many deals have been financed or how successful they have been, but the continued growth of the conference suggests that investors have been pleased with the results.

The University of Michigan's Institute of Science and Technology has sponsored an annual Growth Capital Symposium for the past six years. Around 70 percent of the attendees have been successful in raising a total of over \$80 million in capital at the conference. They sponsor 25 companies over a two-day period. The School of Business of the University provides help with business plans and critiques of taped practice presentations. In the six years of operation the number of venture capital firms in

Michigan has gone from three to 20 and the year-round network is becoming efficient enough so that the conference may not be required in a few years.

There are many conferences each year, primarily where venture capital markets are already operating at least to some extent. While some conferences have not been successful, many more have succeeded. Some reasons for failure could be poor quality companies or poor preparation by organizers. The state of Washington attempted to organize a symposium, but investors report that it failed due to poor planning.

A complimentary strategy to establish more efficient venture capital markets in Kansas is linkage between a financial symposium and a venture capital network.

These networks are computer data bases that match private investors and entrepreneurs. Private investors do not have a systematic process to learn about companies needing financing. At the same time, they do not want to be publicly available to everyone. Through a network, investors can receive brief descriptions of companies that match their preferences. More information is made available if the investor is interested. The network can be financed by fees charged to businesses that wish to be listed or by charging a small percent of the final loan. Normally these networks are non-profit and have been set up by universities, state government, or some association between a private industry association and a government unit. New Hampshire, Oklahoma, Texas, Indiana, and Florida each have some form of financial capital network.

#### Cost

Estimates of funding requirements per conference vary from \$9,100 to \$60,000. Nevada proposed to spend \$10,000 for an annual conference, but the symposium has not yet been formally organized. The University of Michigan, which provides more extensive technical assistance for companies estimated the cost to be between \$40 thousand and \$60 thousand per year, which will be partly recovered from attendance fees.

#### **Recommendation 20: Provide temporary state funding for Certified Development Companies.**

(House Bill 2951 authorized the Division of Existing Industry Development with the Department of Commerce to make performance grants available to Certified Development Companies in April 1986.)

## **Purpose**

The 15 Certified Development Companies in Kansas provide SBA guaranteed long-term, low down-payment financing for fixed assets to new and expanding businesses. They are the only entities that can provide this particular SBA loan program. In addition, they provide assistance to small businesses in packaging other public/private loans and locate other sources of technical assistance. CDCs receive their main support from a 0.5 percent charge on the loans they service. As a result, in their early years of existence they do not have sufficient loans outstanding to be self-supporting. Grants of \$40 thousand should be available to each CDC for five years to enable them to establish and develop their services on a permanent basis.

## **Rationale**

Congress created the Section 503 Certified Development Company Loan Program to promote the growth and development of small business. The program offers subordinated mortgage financing to healthy and expanding eligible small commercial and industrial concerns at reasonable prices with low down payments.

On a national scale, over 60 percent of all jobs have been created by small business. To an even greater extent, Kansas is a state of small businesses. Recognizing the importance of small businesses in the Kansas economy, the state has created a new Division of Small Business in the Kansas Department of Economic Development. Temporary support of certified development companies during their under-capitalized formative years would be consistent with the concern for developing the small business base in Kansas.

During the early stages of the present economic development study, the staff at the Institute for Public Policy and Business Research conducted interviews with several prominent leaders in Kansas. These individuals noted a need for state support of the 503 loan program. The ASLAN Report, Volume III, highly recommends funding of CDCs, with the caveat that they be encouraged to consider a broader array of financing instruments.

The concept of CDCs is excellent, and Kansas has the rudiments of a good network. But to be successful at economic development, additional state funding is required. The current inadequate funding of CDCs almost guarantees them a limited role in state economic development.

It is clear that Kansas benefits from the efforts of CDCs and should, as a result, consider fostering their proliferation. The Certified Development Companies in Kansas give small



businesses an important source of financing when funds are unavailable from a more conventional financial institution. These are especially helpful to firms that would like to expand into new areas of production but cannot get traditional financing. They are also helpful to firms that would like to expand their markets.

These nonprofit organizations are certified by the Small Business Administration. Usually, CDC Boards are made up of lenders, local government officials, business leaders, and community organization representatives. The financing package of a CDC always involves a participating bank. A typical loan is financed in the following proportions:

- 50 percent by the participating bank at negotiated term and rate,
- 40 percent by subordinate debt to Small Business Administration, and
- 10 percent by small business equity addition.

Such loans can be an important source of financing for Kansas firms that wish to expand.

State funding is necessary to assist the CDCs in their formative years so they can hire sufficient staff to package additional loans for expanding small business. They are financed primarily by a 0.5 percent charge on loans they organize. However, during their early years of existence they do not have sufficient loans outstanding to provide enough income to hire staff and maintain an office. As loan volume increases the CDCs will become self-supporting.

We purpose state funding of \$400 thousand to support CDCs annually for five years. A pool of funds would be established for which each CDC could compete. Currently the state is funding two CDCs at \$40 thousand each.

To be eligible for funding a CDC would have to (1) demonstrate a need for temporary state funding and (2) demonstrate that its activities are having a positive economic development effect in its area. Emphasis should be on financing for small businesses that are creating primary jobs, which bring new dollars to a community, rather than on local service jobs that primarily recycle dollars within that community.

**Recommendation 21: Expand the secondary market for the SBA guaranteed portion of bank loans.**



## **Purpose**

Secondary market sales of SBA guaranteed loans have been permitted since 1972. The purpose of such a program is to increase the flow of capital to small businesses by allowing lenders to sell their loans to investors who normally do not lend funds directly to small businesses. The advantages of such a program include increased liquidity for a bank and a sound investment for the organization buying the SBA guaranteed loan. This would advance economic development in the state, especially in rural areas where banks are typically less liquid.

## **Rationale**

Kansas is a state with an extremely low level of risk capital available. There are special difficulties in raising risk capital for smaller businesses, more traditional enterprises, more mature sectors of economic activity, and firms located far from major population centers. Kansas needs to create a statewide rural/urban system to deliver technical support and risk capital for the above types of firms as well as for new and innovative enterprises.

Secondary market programs have been viewed as a cost effective tool in increasing the amount of risk capital available to small business. Because the secondary market program purchases only the SBA guaranteed portion of the loans made to small businesses, the program is essentially risk-free to investors. In their report, ASLAN strongly recommends that Kansas establish a secondary market program in SBA guaranteed small business loans.

**\*Recommendation 22: Establish an export assistance program to aid small and medium-sized firms in exporting Kansas products to international markets.**

## **Purpose**

Small and medium-sized firms (those with less than 1,000 employees) are not being reached by federal programs. State governments can be more effective in providing direct services to small businesses or in serving as a delivery system for federal export financing programs. Since Kansas differs from other states in the type, destinations and finance terms of its exports, a state-specific export financing program would prove very beneficial to Kansas exporters. A number of states are in the process of establishing export financing programs. Such state efforts help businesses secure improved export financing, thus leading to an expanded, strengthened, more flexible export financing system in the United States. ASLAN has strongly

recommended that Kansas set up such a program.

### Rationale

To increase cooperation in export finance between the federal and state governments, Congress renewed Eximbank's legislation in 1983 with the inclusion of three major changes:

- (1) For the first time, it mandates that a representative of the state government point of view would sit on Eximbank's advisory board.
- (2) It requires Eximbank to provide lines of credit or guarantees to state export finance agencies and other entities.
- (3) It stipulates that Eximbank will promote small business exports and small business export financing programs in cooperation with state agencies.

Based on the current favorable environment for state level export financing and the export finance initiatives planned by other states, it appears that there are five basic programs, which if properly structured, could increase state exports:

- (1) Export finance counseling services to raise awareness of the importance of proper financing, explain the mechanics of export credit, and provide information that will help exporters arrange satisfactory credit with their banks and other financial institutions.
- (2) Pre-shipment and post-shipment guarantee programs to bolster the creditworthiness of smaller firms that are otherwise unable to arrange satisfactory loans with the commercial banks.
- (3) Medium-term fixed rate funding programs to help exporters that need such funding but cannot arrange it on competitive terms without such support.
- (4) Post-shipment export credit insurance programs, in which the state would take out a policy with FCIA or other private insurers and offer coverage to small exporters, helping them to fulfill policy requirements.
- (5) An Eximbank delivery system program, under which the state would issue and help service modest-sized Eximbank loans and guarantees under discretionary authority granted by Eximbank, or would otherwise help exporters fulfill Eximbank's requirements to obtain its financial services.

## Other States

At the present time half of the 50 states have passed or have pending legislation authorizing either financing programs or the ability to approve export credits under existing authority. State approaches to export financing range from ambitious to cautious, yet all share the common goal to increase state exports. The following is a list of states currently involved in the establishment of export financing programs.

### States that Have Passed Legislation

1. California
2. Colorado
3. Illinois
4. Indiana
5. Louisiana
6. Maryland
7. Michigan
8. Minnesota
9. Mississippi
10. Missouri
11. Nevada
12. Ohio
13. South Carolina
14. Tennessee
15. Texas
16. Utah
17. Washington
18. Wisconsin
19. West Virginia

### States that Have Pending Legislation

1. Alabama
2. Florida
3. Georgia
4. Massachusetts
5. New Jersey
6. New York
7. Pennsylvania

First Washington Associates, Ltd., a consulting firm that has studied state export financing on behalf of the Commerce Department, presented six reasons why states should consider offering export finance programs.

1. The reduction in U.S. Eximbank activity has contributed to a decline in sales abroad for firms throughout the United States.
2. Eximbank's reduction in activity has heavily affected small and medium-sized firms.
3. The reduction in export sales has contributed to generally low levels of business activity.

4. Small and medium-sized exporters, reliant upon Eximbank and commercial banks, are not competitive in the financing area with their foreign counterparts.
5. Many states have large enough exports to justify export finance programs.
6. Smaller export finance programs, on a county or state level, can be run in a financially sound manner.

All six reasons relate to foreign trade initiatives already being taken in Kansas. An export finance program would tie in with the recommendation to establish a new international trade division within the Kansas Department of Economic Development. Kansas could benefit from such efforts to improve foreign trade. If Kansas exporters are to become more competitive international markets, efforts must be made to give them more and better state assistance.

(For a more detailed analysis of the issues involved in this recommendation, the reader is referred to the Appendix to Volume II.)

**\*Recommendation 23: Establish a loan guarantee program to facilitate financing of new or expanding businesses in primary industries.**

#### **Purpose**

Effective December 31, 1986, the U. S. Congress has terminated the tax exemption status of all small issue industrial revenue bonds. In 1985 more than 103 bonds were issued in Kansas providing businesses with over \$313,810,798 in financing. Rates on IRBs are typically 60-75 percent of commercial loan rates, and they provide borrowers with longer terms than an average commercial loan. Many established businesses would not have been able to expand and create more jobs without the lower rates and longer terms provided by IRBs. Without their tax-exempt status IRBs will not be attractive to issuers. ASLAN has recommended a loan guarantee program as an alternative. This type of program has been consistently demonstrated in research literature to be the most cost efficient financing program. The state should develop such a program that is consistent with Kansas overall economic development goals.

## Rationale

A loan guarantee program would provide access to capital for basic job-creating manufacturing, research and development, or other special enterprises when either adequate financing is not available, or financing terms are prohibitive. The program's objective is to concentrate private capital into job-creating projects by reducing the risk to lenders. The program could guarantee conventional first mortgages on buildings or land or fixed-asset loans. This is not a particularly risky program for the state. ASLAN's research has shown that at a relatively high 22 percent default rate, this program is still the most cost-effective financial incentive. The breakeven point for a program has been calculated at around a 40 percent default rate. Loan guarantees are a highly cost-effective means for leveraging private investment resources. The program would require only initial capitalization since, if well managed, it would become self-sustaining through user fees.

The state can guarantee from 40 to 90 percent of various loans up to a specific maximum amount. The state receives a fee, which can be collected initially or on yearly outstanding balances. In most cases, the fee is 1 percent of initial loans or 0.5 percent yearly of the outstanding balance. The fees are collected in a loan loss reserve fund where more guarantees can be written as the fund grows and as loans are paid off.

Thirteen states currently have loan guarantee programs:

California	Mississippi
Connecticut	Missouri
Indiana	New Hampshire
Louisiana	New Jersey
Maine	Ohio
Maryland	Vermont
Minnesota	

Some states target funds to specific areas or to specific groups. For example, Maine's loan guarantee program is limited to veterans who are owners of small businesses. On the other hand, some states, such as California, have no restrictions as to type of business, area of the state, or type of loan. Louisiana targets agricultural firms, but all types of businesses are eligible.

Criteria that should be used in granting loan guarantees are

-the consequences of the proposed financing for state employment

- the number of jobs created or retained by the proposed financing
- whether or not the borrower could obtain reasonable financing without the guarantee
- the collateral and other forms of security offered by the borrower
- the borrower's capacity to repay the loan
- the competitive impact of the proposed financing on other state businesses

#### STATE ORGANIZATION FOR ECONOMIC DEVELOPMENT

**Recommendation 24:** The Legislature should establish a permanent joint House-Senate Committee on Economic Development or, alternatively, separate committees in each house.

(The Legislature created standing committees and a joint committee on economic development with House Bill 3122 in April 1986.)

#### **Purpose**

A more sustained and focused commitment to economic development by the Kansas Legislature is needed. A permanent committee(s) is essential to ensure that this commitment is long term. Over time, members of this committee would acquire valuable knowledge and experience on public policies affecting economic growth and development in Kansas.

#### **Rationale**

The Legislature needs a permanent structure for considering legislation on economic development. Such a committee (or committees) would give greater visibility to this area and would focus legislative responsibility for economic development. The committee(s) would have responsibility for proposing legislation on economic development in the state.

Other states that are serious about growth have a legislative committee for economic development, which provides leadership and direction in carrying out the state's economic development plan.



**Recommendation 25: The Small Business Division of the Kansas Department of Economic Development should be substantially expanded and additional field offices established.**

(In April 1986 the Legislature passed House Bill 2951, which created a new Existing Industry Division of the Department of Commerce, and included funding for additional department field offices.)

### **Purpose**

In order to implement a number of the economic development recommendations, additional administrative capability will be required of existing state organizations. At present, the Small Business Division is too small to be effective. If adequately staffed and funded, the Small Business Division could

- a. coordinate state efforts to increase financing of small businesses;
- b. coordinate technical assistance to small businesses for communities and organizations involved in economic development;
- c. assist in small business incubator development;
- d. work with Small Business Development Centers at state universities and at colleges that provide technical assistance to small businesses; and
- e. help small businesses secure federal contracts.

To serve all areas of the state, additional field offices should be established. The two existing field offices, in Garden City and Hill City, cannot meet the current needs of the entire state.

### **Rationale**

If economic development is to include small business establishment and expansion, support and growth of the Small Business Division is needed.

The recommended funding level would increase the number of KDED field offices from the current two to a total of five. The variations in the funding levels represent increases in the staff in each office. Salaries for 13 employees--three staff in each new office and two additional staff in the two current offices, would come to \$350,000. (Each existing office is staffed by one

person.) Staff duties will include technical assistance, financing counseling, assistance with incubators, an existing industry and business retention program, and work with the state's Small Business Development Centers.

Numerous states are committed to small business assistance and development. Many list small business support as a primary economic development goal. However, to implement small business programs, the supporting organization must have the capacity and resources to administer these programs across the state.

**Recommendation 26: An existing industry program should be initiated in the Kansas Department of Economic Development.**

(In April 1986 the Legislature passed House Bill 2951, which established an Existing Industry Division within the Kansas Department of Commerce.)

#### **Purpose**

Existing industry is the core of the Kansas economic base. Thus, increased attention should be focused on industries already in Kansas. An existing industry program in the Kansas Department of Economic Development would work with Kansas industries to

- a. identify problems that prevent Kansas firms from being competitive and expanding,
- b. propose solutions to the extent possible for the above problems, and
- c. interview firms leaving Kansas to identify areas where the state is not meeting the needs of businesses in Kansas.

#### **Rationale**

About two-thirds of Kansas's economic growth in the next few years will most likely come from the expansion of existing industry. Yet, the major priority of the Kansas Department of Economic Development has been to attract out-of-state firms to locate in Kansas. This effort is important to the growth of the economy in Kansas. But also vital to the Kansas economy are the firms already existing in the state. By working with existing industries in a systematic manner the state would increase the likelihood of retaining these industries and facilitating their expansion.

In their target industry analysis, MRI strongly recommends that Kansas develop a state level business retention program. This would involve encouraging industry to remain in Kansas and expand their operations, assisting firms in relocation, and helping them to secure financing.

According to the 15 Certified Development Companies in Kansas, there are many industries that desire to expand in Kansas but cannot do so for a lack of financing. An existing industries program should be able to help these firms in obtaining the needed capital for their projects.

Providing more assistance to firms already doing business in Kansas should lead to the creation of more jobs and the expansion of the tax base.

### **Cost**

The cost to the state in fiscal year 1987 would be approximately \$120,000. This allows for the addition of two staff members to work with existing industries and for travel, and workshops.

**Recommendation 27:** A new international trade division should be established within the Kansas Department of Economic Development.

(In April 1986 the Legislature passed House Bill 2951, which establishes a Division of Trade Development within the Kansas Department of Commerce.)

### **Purpose**

International trade is becoming increasingly important for many Kansas industries. Efforts must be made to enhance the marketing of Kansas products internationally. For maximum effectiveness, such efforts should be concentrated in KDED as a separate division, staffed with international marketing experts.

The purpose of the international trade division would be to provide Kansas firms desiring to initiate or expand exports with assistance in international marketing, export financing, licenses, import requirements, and cultural/language issues. A complete package of services and information could be made available to small businesses in need of exporting assistance.

## **Rationale**

Kansas depends on international trade. International trade is of major importance to the state's agricultural and industrial economic development. At present, the responsibility for international marketing is spread among several state agencies. Consistency and uniformity of policy and organization is needed if international marketing is to get the recognition and funding it deserves.

The role of the KDED International Trade Division unit is to assist Kansas companies with export/import trade problems distinct from international industrial development activities. The funding provides varying levels of staffing and some funds for contracting costs with universities. A budget of \$125,000 in fiscal year 1987 would provide for three staff positions. This funding does not include funds for advertising.

**Recommendation 28: Increased efforts should be made to attract foreign firms to locate in Kansas.**

(In April 1986 the Legislature passed House Bill 2951, which established Kansas Department of Commerce offices in Europe and Japan.)

## **Purpose**

At present the industrial development division of the Kansas Department of Economic Development has responsibility for attracting foreign firms to Kansas. Funding and staffing should be increased for this function so that Kansas can effectively compete with other states in their efforts to attract foreign investment. Numerous states are attempting to increase foreign investment and international trade as part of their economic development strategies.

## **Rationale**

The important benefits to economic development resulting from increased foreign investment have become obvious to many states. States are stepping up efforts to take advantage of international investment interests. These opportunities to attract investment do exist and are being successfully tapped. For example, the Japanese interest in U.S. investments and site selection may be summarized by quoting from a speech given by Masaaki Nagao, chief executive director for the Japan Trade Center, at the Kansas Economic Outlook Conference (October 25, 1985):

"...Japanese businesses are attaining a very firm footing here in the United States. Recent experiences have shown us that Japanese investments have been contributing significantly to the economic well-being of many U.S. communities. They have created and continue to provide more employment. They have been bringing in new technology, which helps revitalize the American economy."

Yet, Kansas is one of only ten states that have no Japanese firms located in the state.

Kansas has characteristics that foreign investors consider important when researching site location, i.e., a high quality of labor, reasonable land and construction costs, and high labor productivity. However, to attract foreign firms and investors to Kansas, increased efforts are needed to make them aware of the state's positive characteristics.

An amount of \$750,000 in fiscal year 1987 would fund two international offices--one in Japan and one in Europe. Kansas currently has a \$40,000 contract with a consulting firm in Japan, which represents the state. There is no such arrangement in Europe. It is assumed that funds would be evenly divided between the two offices.

**Recommendation 29:** Kansas Department of Economic Development should implement a marketing program aimed at targeted industries.

(In April 1986 the Legislature passed Senate Bill 759, which provides funding for business recruitment advertising aimed at targeted industries.)

### **Purpose**

Only certain firms will find Kansas attractive for business location. The MRI Target Industry Analysis, found in Volume IV, identifies growth industries particularly suited for Kansas. By developing individual marketing programs aimed at these industries, the Kansas Department of Economic Development can best utilize its resources in attracting new industry into the state.

In addition, a targeted industries study should be continued. A second phase of this study would identify target industries for the major regions of Kansas.

## Rationale

Because Kansas may have difficulty attracting certain types of industry due to the limited amount of natural resources available in Kansas and the distance between Kansas and the population centers of the country, using a broad marketing program to attract any type of industry would be wasting valuable resources. By targeting industries particularly suited for Kansas, the Kansas Department of Economic Development could optimally allocate marketing resources to develop new industry growth in the state. Methods of marketing would include advertising in particular trade journals and staff contacts with individual firms.

## Cost

The cost to the state in fiscal year 1987 is estimated to be \$750,000.

**Recommendation 30:** Kansas should initiate a national promotion campaign aimed at improving the image of Kansas among business leaders with responsibility to make business location decisions.

## Purpose

Kansas leaders perceive the state's image as a liability to economic development, yet rate the state's quality-of-life as an asset. These leaders suggest marketing the state to target industries. Initiating a long-term marketing effort aimed at business leaders would send out the message that Kansas is a good place for business and that the state is committed to providing a positive business climate. A reasonable and moderate promotion campaign relaying Kansans' belief in their state's assets could bring a high return.

## Rationale

A major problem identified by Kansas leaders is that Kansas has a poor image as a place to do business. When asked to list negative characteristics of the Kansas business climate that influence a firm not to expand or locate in the state, Kansas leaders chose the state's negative image as the most important factor. Even so, the belief among Kansans is strong that Kansas is a good place to do business. There is a need to bring perceptions in line with reality.



A University of Kansas legislative issues poll conducted in January 1986 revealed that fewer than 7 percent of Kansans believe that the image of Kansas in other areas of the country is excellent. By comparison, 30 percent of New Jersey, Nebraska, Texas, and Mississippi inhabitants, when questioned in similar surveys, gave their states excellent image ratings.

**Recommendation 31: Repeal or amend the Kansas Constitutional prohibition on internal improvements to permit state economic development initiatives.**

(Senate Concurrent Resolution 1635, passed in April 1986, proposed a constitutional amendment to the internal improvements prohibition. This will be voted on in the August 1986 primary election.)

#### **Purpose**

In May of 1986, Senate Committee Resolution 1635 was signed by the Governor. SCR 1635 provides that the proposal to repeal Article 11, Section 9 of the Kansas Constitution prohibiting state participation in works of internal improvements be submitted to the electors of the state. The purpose of this legislation is to allow the legislature the option of developing programs that are designed to foster economic development in Kansas and that require some commitment of state funds to private or quasi-public enterprises. In order to allow such investment, the Internal Improvements Prohibition must be modified or repealed.

#### **Rationale**

The Internal Improvements Prohibition of the Kansas Constitution limits the state's role in economic development by preventing the state from becoming a party to works of spending for internal improvement. Previous amendments allow exceptions only for highway construction, flood control, and, when provided by federal law, matching of federal funds that are distributed by the state. These exceptions cover most of the types of improvements that were envisioned by the framers of the Kansas Constitution. In this sense the prohibition has already been stripped of most of the effect it was intended to have. Yet, by its presence in our Constitution, the prohibition continues to hinder the passage of other types of legislation. For example, several of the recommendations contained in this study are prohibited under the existing constitutional language. Prohibited recommendations include the establishment of a Kansas Technology Enterprise Corporation (Rec No. 18), a state matching fund for

federal small business innovation research grants (Rec. No. 17), a state incubator development loan pool and low-interest matching loans (Rec. Nos. 34 & 35), a Kansas Product Development Corporation (Rec. No. 16), a Corporation for Innovation Development (Rec. No. 15), temporary state funding for Certified Development Companies (Rec. No. 20), and a state community development block grant program (Rec. No. 39). The types of financing arrangements called for in these recommendations were not the types under consideration by the writers of our Constitution when they prohibited state investment in internal improvements.

The inability of Kansas lawmakers to consider certain economic development programs puts the state at a real disadvantage in its competition with other states for new jobs. Out of the 50 states, only six, including Kansas, have comprehensive internal improvements prohibitions; of these six, three have specific exceptions for economic development initiatives.

Repeal of the internal improvements prohibition would obviously allow the state much greater freedom in choosing appropriate economic development initiatives than would an amendment. Also, the time consuming process of amending this constitutional provision could cause a very late response to the urgent state need for economic development. In order to allow the timely passage of legislation designed to foster economic development in Kansas, the internal improvements prohibition must be repealed.

(For a more detailed analysis of the issues involved in this recommendation, the reader is referred to the Appendix to Volume II.)

**\*Recommendation 32: Establish an overall travel and tourism strategy for the state. A funding increase is necessary for**

1. research on travel and tourism,
2. marketing of Kansas attraction in and out of the state, and
3. development of state parks and other major attractions.

### **Purpose**

It is imperative that a general and permanent increased investment be made in travel and tourism in Kansas so that (1) initial and ongoing research in travel and tourism will provide

the state with enough information to develop an effective travel strategy and (2) the strategy can be carried out with proper marketing and/or establishment of major attractions. The state should view such an investment as cost-effective since it will increase jobs in the travel industry, increase tourist revenue from outside the state, and enhance the state's image.

### Rationale

Kansas currently ranks only 44th among states in funding for the travel and tourism office. Within the region, Kansas ranks fifth of six states in overall travel spending, advertising, and film promotion.

#### Spending by State for Travel and Tourism

	1985 Travel Budget	U.S. Rank	1984 Travel Advertising Expenditures	Rank	1984 Film Promotion Expenditures	Rank
Kansas	\$1,144,260	44	\$201,190	31	\$ 16,220	29
Iowa	1,014,964	46	180,750	32	15,000	30
Nebraska	1,166,630	43	692,631	17	N/A	-
Missouri	3,198,686	24	670,000	19	39,000	27
Colorado	4,500,000	20	N/A	-	178,239	8
Oklahoma	3,976,373	22	681,500	18	87,332	19
U.S. Average	4,300,000		1,221,463		116,648	

Sources: NASDA 1984 State Development Agency Expenditure and Salary Survey.  
Survey of State Travel Offices

The travel and tourism aspect of economic development is important to the state in three ways: as an industry, in terms of image, and as a factor in quality of life.

### Industry

The travel industry, which includes such sectors as food service, hotel and motel, is a major growth industry in the United States. In Kansas, the travel industry ranks second in employment with over 40,000 jobs. In 1983, the U.S. Travel Data Center estimated that \$162 million in travel-generated tax revenue was collected in Kansas. More and more states are

spending increasing amounts on the travel industry as their traditional manufacturing and industrial sectors have declined. Kansas's spending level has not kept pace. It is an appropriate role of economic development to coordinate the state's overall strategy. Some natural resources such as the Cheyenne Bottoms Wildlife Refuge are tourist attractions that benefit private industries in the area. Communities need advice on how best to cooperatively market or develop potential tourist attractions. The state will reap benefits in terms of increased tax revenue from tourist spending and creation of additional jobs in the travel sector.

### Image

Basic research needs to be done in order to develop an overall tourism strategy. Opportunities and concrete reasons for people to travel in Kansas should be studied. To promote Kansas's image, planners must be able to develop a visitor profile, which will answer such questions as: Why are people traveling through Kansas? What percentage of travelers come to Kansas on business? What types of conventions are (or could be) attracted to Kansas? KDED Travel and Tourism Department must be provided with the staff and funding required for developing and continually researching such a profile. Because of insufficient staff and lack of computer capabilities, it is not now possible to tabulate and evaluate the many tourist inquiries about the state. One staff person is overburdened simply responding to inquiries. With computer capabilities and increased manpower, the valuable information contained in the inquiries could be utilized to answer many pertinent questions.

Tourist Information Centers should receive continued support. Four full-time Tourist Information Centers are scheduled to be in operation in 1986. These are located near Goodland, Bonner Springs, South Haven, and at the Statehouse in Topeka. The gateway information centers are an immediate opportunity to convince visitors to get off the highway and spend money. A visitor profile, as indicated, would provide information on how to induce increased spending by these travelers. Other Tourist Information Centers should be supported to serve visitors in the southwestern and south-central regions of the state.

### Quality of Life

Quality of life is an important variable in high-tech firms' location decisions. The Travel and Tourism Department can directly influence the quality of life in Kansas by promoting cultural opportunities and providing increased recreational activities. In a Federal Reserve Bank of Kansas City survey, 52 percent of high-tech firms indicated that improving recreational

facilities would be significant in their decision to expand and that proximity to recreational and cultural opportunities was a significant factor in determining business locations.

**\*Recommendation 33: Upgrade the Kansas Department of Economic Development data and information systems necessary for economic development.**

### **Purpose**

Information is the engine of development today. It is vitally important that the state's economic development organization have access to the latest and most complete information sources in a timely manner. Today this means having access to computerized data bases that are flexible enough to provide data for several functions. Recommendations 19, 25, 26, 27, 28, 29, and 36 would all require such a computerized data base system with information that includes:

- (1) Community profiles,
- (2) Site profiles,
- (3) Manufacturers and products,
- (4) Business services, especially high technology, and
- (5) Technology information.

Interviews with site selection consultants by the Institute indicated that without timely, accurate information, states and communities would automatically be eliminated from consideration as possible locations for new business.

### **Rationale**

Community profiles are a good example of work that could be accomplished using adequate computerized data. They are important in two ways: first, as essentials in recruitment and second, as a necessary first step for KDED to provide technical assistance. A state-level computerized data bank would facilitate information sharing and gathering between local communities and KDED. The network would be responsible for working with the local agencies, KDED, and other interested state agencies in gathering and disseminating all relevant information about economic development. Information on file should include detailed, up-to-date, professionally prepared community profiles. These profiles would contain information about the economic state of each community and specific details on the following:



- (1) Industrial Parks
- (2) Land Costs
- (3) Utility Availability and Rates
- (4) Tax Rates
- (5) Road Systems
- (6) Railroad Linkages
- (7) Existing Industry
- (8) Population Base
- (9) Community Characteristics and Amenities
- (10) Wage Levels
- (11) Education System
- (12) Speculative Buildings

Currently hard copy files hold some of this information for over 200 Kansas communities. A computerized system would be able to retrieve all communities matching specified criteria.

The data bank would also compile information on reasons existing firms cease operation in Kansas. An "exit interview" format could be developed to record at least basic reasons for plant and business closings. This information would probably have to be obtained at the local level but would be compiled at the state level. Considerable assistance from local officials is necessary.

The current research effort brought into the foreground the inadequacies of the state's economic development data management system. At present, there is no mechanism for systematically gathering information about why firms cease operation in Kansas. This could be valuable information for improving the business/economic climate. Additionally, there is not a central record of business inquiries about possible location sites in Kansas. KDED and the local chambers of commerce both maintain records of firms with which they have had contact. However, there is no basis for sharing information between the local areas and with KDED. KDED is often unaware of interested businesses and can therefore do nothing to support an area's efforts to attract that business.

In addition to providing a complete perspective of the opportunities for economic development in Kansas and the inquiry into possible development, this data bank would serve as a valuable source of data for research. There can be no doubt that the current research effort was compromised by the poor quality of data and lack of control over some aspects of important research methodology. A central data base available to state research agencies would facilitate and improve further research for economic development in Kansas.

Specifically, a network system with terminals available for staff should be installed. A data base manager should be hired or contracted to set up the systems in Recommendations 19, 25, 26,



27, 28, 29, and 36, and to train those individuals using the system. Currently at KDED, only one personal computer is available for purposes other than word processing, and it is devoted exclusively to the Kansas Directory of Manufacturers. The directory is now in the process of being converted to a data base system. No research or other department in KDED has access to any type of computing except word processing.

Targeted marketing efforts, international marketing, existing industry programs, small business technical assistance, and travel and tourism are but a few of the programs that would benefit drastically from improved computing resources.

## COMMUNITY DEVELOPMENT AND SMALL BUSINESS

**Recommendation 34:** Provide low or no-interest matching loans to local governments and nonprofit organizations to facilitate the establishment of incubators.

### Purpose

The problems of finding adequate, affordable space, organizing and managing a business, securing financing, and hiring qualified employees create substantial barriers to the establishment of new businesses. Business incubators mitigate some of these difficulties by providing physical facilities for new firms. Incubators may also offer new businesses below market rents, assistance in obtaining financing, flexible leases, employee training and placement services, and the opportunity to reduce costs of support staff by sharing with other new businesses in the facility.

### Rationale

Incubators help draw out and develop entrepreneurs from within a community. They are very adaptable, meeting the needs and using the resources of highly dissimilar communities. As a result, new jobs are generated, new technologies are created and marketed, and employees are trained, adding to the wealth of Kansas.

Eleven states have passed legislation to promote incubators, usually setting aside a lump sum for first-year funding and providing grants or low-interest or interest-free loans to communities that are working to establish incubators. For

example, in response to the decline in the steel industry, Pennsylvania established an incubator program in the late 1970s. The goals of its Ben Franklin Partnership Program are to create jobs in new advanced technology enterprises, to improve productivity, and to diversify the state's economy. The state's investment of \$18 million has been matched with \$56 million from program participants, and 16 incubators have been created.

Although the Legislature authorized KDED to establish incubators in 1984, no public funds were allocated. One privately funded incubator was established in Lawrence in 1984, and other privately sponsored incubators are being planned. The Kansas incubator program should be sufficiently flexible to allow such private sector operation of incubators even though the state provides initial financing assistance.

**Recommendation 35:** Establish a revolving loan pool for infrastructure development available for use by communities to promote economic development.

#### **Purpose**

The purpose of the general loan pool would be to allow communities to make infrastructure improvements that would encourage or facilitate economic development. Funds would be targeted for specific economic development purposes such as industrial park improvements, improvements associated with an incubator, or the preparation of a site for business use. Infrastructure improvements would include road, water, and sewer facility construction and maintenance.

#### **Rationale**

Public infrastructure improvements help facilitate the expansion of existing businesses and attract new businesses, thus creating new jobs and stimulating investment in the community.

Public infrastructure improvements are costly. Often, a locality is not able to pay the full cost of improvements. Businesses are therefore faced with the underwriting of these improvements. If the business cannot afford to pay for needed infrastructure improvements, it may locate in a state that is able to provide the public infrastructure needed.

When surveying prominent Kansas business and government leaders about economic development, the issue of infrastructure was mentioned again and again. Many communities do not have the resources to make necessary improvements in existing

infrastructure, and infrastructure is a major factor in community economic development efforts.

**Recommendation 36: Substantially expand technical assistance to communities on how to promote economic development.**

(In April 1986, the Legislature passed House Bill 2951, which expands the small business division of the Department of Commerce by setting up additional field offices.)

### **Purpose**

When considering a site for locating or expanding a business, a firm will evaluate the characteristics not only of a state but also of the communities. However, communities in Kansas have only recently started economic development programs. In order to continue and encourage such efforts, communities are in need of technical assistance in a number of areas:

- incubator development
- industrial parks
- site development
- financing programs
- existing industry programs
- providing information to firms and site consultants
- identifying and targeting industrial prospects
- international markets
- infrastructure

In interviews with Kansas leaders, a need for more technical assistance to communities was strongly evident. When questioned about unique local problems associated with economic development, requests for assistance with industrial park and site development, incubators, infrastructure, and industry contacts came up time and again. Many Kansas communities are committed to economic development and would benefit greatly from state provided technical assistance. According to the business leaders interviewed, these communities need expertise.

Staffing for technical assistance should be sufficient to serve all parts of the state and to allow employment specialists in key areas such as international trade. Kansas is too large and diverse a state to have all communities served by Topeka. Such technical assistance would best be provided by the expansion of KDED field offices.

Economic development efforts at the local level are vital to the state's economic development. Local development should be

supported by the state whenever possible. Provision of technical assistance from the Kansas Department of Economic Development would foster economic development in communities and show state support for local initiatives.

**\*Recommendation 37: Incentives should be offered to encourage regional coordination and effectiveness of economic development efforts.**

An important issue in economic development is how communities should organize for economic development. Small towns in particular do not have sufficient resources to hire staff to coordinate economic development. Yet, rural communities must have staff devoted to economic development (1) to insure that they participate in state initiatives already passed by the legislature, (2) to actively recruit new firms in their areas, and (3) to assist in developing local strategies for development. To be successful, rural communities must make bold efforts to adjust to economic changes, which suggests that a regional strategy covering a number of counties may be most efficient.

Several regional institutions already exist that play an important role in rural economies. The Certified Development Corporation, Inc. (CDC) is organized in most parts of the state to assist small businesses with financing. They have also, in some cases, assumed additional responsibilities for economic development, such as recruiting firms to their area. Regional planning commissions also perform some functions relating to economic development. In addition, some larger cities and counties in rural areas have hired economic development coordinators. Obviously, overlapping responsibilities and rural communities working against each other and depleting scarce resources are potential problems. Although state government should probably not impose a structure for cooperation among rural counties, incentives should be offered to multi-county areas throughout the state if they agree to coordinate strategies and programs for economic development. Such incentives should be temporary.

To start this process, the Department of Economic Development should work with interested parties to define viable regions for economic development and to sort out the roles of each participating agency and unit of government. Those regions that establish acceptable business plans would be eligible for temporary state financial assistance.

**Recommendation 38: Federal Community Development Block Grants should be used to the fullest extent possible for economic development projects.**

#### **Purpose**

The purpose of this recommendation is to increase the amount

of Federal Community Block Grants (CDBGs) currently being used for economic development. In 1982, federal law began allowing states to set aside a portion of the CDBG funds to be used exclusively for economic development. Currently 30 percent of Kansas CDBGs are being used for economic development. This percentage should be increased to the highest amount allowed by the federal guidelines of the CDBG program. These funds would provide additional financial support for the stimulation of economic development by financing local infrastructure, supporting industrial park development, or providing incubator financing.

### Rationale

The ASLAN Report to the Kansas Legislature suggests that CDBG programs tend to provide an instrument that allows a rapid response to business financing needs. This may be particularly important with the forthcoming loss of tax-exempt IRB financing. Although the report notes that direct loans may not be as cost effective as other sources of assistance, it still suggests that Kansas "permit the flexible use of CDBG funds for economic development."

The Omnibus Budget and Reconciliation Act of 1981 gave states the option of administering the Small Cities CDBG program. Most states have since chosen the option of self-administration. This program provides grant funds for economic development, public facilities, and housing projects. Since 1982, states have been permitted to set aside such funds exclusively for economic development. The results of these programs have generally been reported to be positive. For example, in Indiana the FY 1982 program reported creating 6,836 jobs and retaining 5,217 jobs while leveraging 139.5 million dollars. Illinois created or retained 2,500 jobs and leveraged \$33 million in their 1984 program.

**Recommendation 39: A state community development block grant program should be established and targeted toward economic development.**

### Purpose

The purpose of this recommendation is to establish a state CDBG program that would use state appropriated funds to make grants available to local communities for infrastructure improvements related to economic development, incubators, and industrial parks. All such grants should be targeted to projects that will stimulate economic development in Kansas but should not



be limited to low income areas. Kansas should set up its own guidelines for a state CDBG program, not necessarily following the federal guidelines of a similar program.

### **Rationale**

The federal Small Cities CDBG program through which Kansas has received millions of dollars over the past few years, is being reduced. A state CDBG program could be used to supplement funds received from the federal program and replace funds lost through recent federal cutbacks. A state CDBG program would establish a pool of discretionary funds to be set aside for the purpose of economic development. By setting up its own guidelines, Kansas could increase its flexibility in meeting state objectives in economic development.

All funds in a state program should be tied to economic development, i.e. used for infrastructure improvements directly related to economic development, incubators, and industrial parks. For example, a Kansas community may require an expanded sewer system or new highway spur to facilitate new industry or the expansion of an existing firm. Grants used for purposes such as these enable a community to remain competitive in attracting new business.

Grants given from a state CDBG program would also assist a community in financing infrastructure improvements, incubators, etc. that it may not be able to finance on its own. This would be extremely beneficial to many communities in Kansas due to the rural nature of the state.

### **Cost**

The cost to the state in FY 1987 would be approximately \$5.3 million and \$10.6 million in FY 1988.

### **Recommendation 40: Expand the "Certified Cities" Program.**

#### **Purpose**

Kansas Department of Economic development designed the Certified Cities Program to publicly acknowledge those Kansas communities that have demonstrated their readiness for industrial growth. As part of the established certification process, communities, with the help of industrial development, community development, and small business staffs, would make a comprehensive assessment of their strengths and weaknesses in

regard to economic development. The analysis required for this certification process is in itself valuable for communities and industrial prospects.

### Rationale

IPPBR conducted interviews with site consultants in order to determine which factors are considered important by professionals in this field. Site consultants stressed that the primary unit of analysis is the community rather than the state. They emphasized that the community should have a professional, accurate and up-to-date community profile. This indicates that the city is well-organized for economic development. The Certified City Program would help the community develop such a profile, since documentation for certification must include the following:

- \*industrial development organization; bylaws and membership roster
- \*name and responsibilities of designated industrial development professional
- \*marketing program of mailings, advertisements, out-of-state industry calls
- \*industrial development action plan
- \*industrial development team training plan
- \*industrial development funding/budget
- \*community profile (in KDED or comparable format)
- \*community fact book
- \*industrial site data (in KDED or comparable format)
- \*8" x 10" photo of available industrial buildings
- \*industrial building data (in KDED or comparable format)
- \*map of industrial site
- \*proof of control of industrial site
- \*development team membership
- \*flexible presentation for industrial prospect
- \*industry appreciation program
- \*financial resources committee

Communities will recognize their strong points and weaknesses through the certification process, and industrial prospects will recognize certified cities as being prepared to meet their needs.

Several other states, including Minnesota, Georgia and Indiana have similar programs.

**Recommendation 41: Provide state funding for the Small Business Development Center (SBDC) network to expand technical assistance to small businesses through consulting and training sessions.**

(House Bill 2951 authorizes the new Department of Commerce to make performance grants available to Small Business Development Centers.)

### **Purpose**

Kansas is a state of small and medium sized businesses and the major source of economic growth in the state will be from new and expanding small businesses. The two major needs of small businesses are for financing and technical assistance. Financing needs are addressed with the establishment of the state-wide risk capital system. Small businesses do need assistance in such areas as marketing, accounting, finance and personnel. The SBDCs are established at the six Regents' Institutions plus Johnson County Community College and Washburn University. They currently provide technical assistance using their own staff, university faculty, and students. Expansion of this function would be permitted by state funding. Currently, federal funding for these services is provided through the Small Business Administration, but this funding is not sufficient to serve the need for technical assistance by Kansas small businesses. It is recommended that the Kansas Small Business Development Centers receive \$350,000 in funds to be divided among the existing centers on an annual basis.

### **Rationale**

New and existing businesses face major financial, technological, and management difficulties and often lack the resources for the kind of high-caliber professional consulting services that would ensure their competitive posture and profitability. Meanwhile, universities offer historically underused faculty and student management and technological expertise. Clearly, state governments have tremendous potential to develop state-wide higher education networks to provide consulting services to businesses and industries.

**\*Recommendation 42: Continue and expand the state's commitment to a high quality of life in Kansas communities by encouraging the arts. Funding for the arts should be increased to the mean per capita level of the fifty states.**

## Purpose

A central element of our economic development strategy must be to continue and expand the state's commitment to a high quality of life in Kansas. Benefits to the state from state funding for the arts do not stop with aesthetics. These expenditures make an enormous contribution to economic development efforts through their impact on quality of life. When the question of a state's quality of life arises in the context of economic development, there is a tendency to dismiss it as "softer" and less influential than taxes, financial incentives, or wage rates. The fact is, however, that when business people make decisions about where to locate new firms or expand existing firms, a community's quality of life emerges as a major, sometimes primary, siting consideration. Increased funding for the arts would facilitate the state's economic growth by helping to attract firms to the state and by encouraging existing, growing firms to expand in the state. Funding should be increased to 83.3 cents per capita, the mean per capita funding level of the fifty states.

## Rationale

In his book, Making Business Location Decisions, Roger Schmenner discussed the effect quality of life has on business location decisions:

Several industries, notably those in high technology areas, have no particular location-sensitive costs such as transportation or labor which constrain their location decisions in important ways. Companies such as Motorola, IBM, Burroughs, Perkin-Elmer, and Honeywell are remarkably free to locate their production capacity almost anywhere in the United States.

In the absence of some primary concerns that affect location, such firms usually consider certain subjective aspects when generating and evaluating potential sites. In assessing the competitive demands placed upon their manufacturing operations, many high technology companies have concluded that the best locations for their plants are those most likely to be attractive environments for their engineers and managers...Their plant location decision is one of analyzing where the most attractive places to live in the United States are located.

A Harvard-MIT Joint Center for Urban Studies national survey of manufacturing executives identified "attractive place for

engineers and managers to live" as more important in plant location decisions than "low labor rates" or any other government-controlled cost factor. In a survey of high-technology manufacturers conducted by the Federal Reserve Bank of Kansas City, 43 percent of the survey respondents reported "cultural amenities" as having significance in determining their location in a state. In the same survey, 51 percent reported "improve cultural amenities" as having significance in determining expansion. Finally, a 1981 survey of 500 of the 1,000 largest U.S. industrial corporations ranked "quality of life for employees" as seventh in importance compared to twenty-five other factors.

### **Cultural Amenities in Kansas**

In an IPPBR mail survey, prominent Kansas business and government leaders identified numerous factors that inhibit business growth in our state. "Cultural opportunities" was identified as the fourth greatest liability to the Kansas business climate. A National Assembly of State Arts Agencies survey reveals that Kansas's state per capita spending on the arts is currently very low in comparison with other states. State spending on the arts in Kansas is 24.2 cents per capita; ranking Kansas forty-fifth among the fifty states.

A prospering, active arts environment creates many cultural benefits for a state. These cultural benefits help foster a high quality of life and thus contribute significantly to the economic development of the state.

Annual Survey  
 State Arts Agencies Legislative Appropriations Fiscal Year 1986

	Rank	Per Capita (cents) 1986	Appropriations (dollars) 1986	Line Items
Alabama	49	27.6	\$1,100,000	\$
Alaska	1	800.1	4,000,700	43,000
Arizona	44	33.1	1,010,200	632,300
Arkansas	36	41.3	970,694	
California	33	45.6	11,692,000	
Colorado	47	29.6	940,622	
Connecticut	30	46.9	1,479,000	
Delaware	18	80.9	496,000	
District of Columbia	4	268.5	1,673,000*	
Florida	17	88.9	9,761,077	2,522,660
Georgia	38	37.7	2,200,588	
Hawaii	8	215.3	2,237,297	
Idaho	56	13.7	137,600	5,800
Illinois	23	64.8	7,462,701	
Indiana	43	33.3	1,830,576	
Iowa	54	18.0	522,593	
Kansas	51	24.2	589,711	
Kentucky	35	42.0	1,564,400	
Louisiana	46	31.3	1,397,646	
Maine	40	36.4	420,292	
Maryland	34	43.6	1,897,527	
Massachusetts	3	282.5	16,379,066**	
Michigan	13	113.4	10,291,500	2,420,400
Minnesota	22	66.0	2,747,400	889,100
Mississippi	53	18.9	490,354	
Missouri	12	137.9	6,904,051	3,000,000
Montana	16	92.1	758,507	12,500
Nebraska	39	37.4	599,844	
Nevada	52	19.1	174,270	
New Hampshire	45	33.1	323,000	
New Jersey	11	138.3	10,391,000	1,709,000
New Mexico	29	50.1	713,500	
New York	5	248.5	44,078,900	
North Carolina	24	63.8	3,932,233	10,000



## Annual Survey (cont.)

## State Arts Agencies Legislative Appropriations Fiscal Year 1986

	Rank	Per Capita (cents) 1986	Appropriations (dollars) 1986	Line Items
North Dakota	41	36.2	248,196	
Ohio	21	69.8	7,509,753	
Oklahoma	27	55.2	1,821,462	
Oregon	55	16.7	445,965	
Pennsylvania	26	56.5	6,724,000	
Rhode Island	32	46.2	444,357	74,200
South Carolina	19	78.8	2,602,010	80,000
South Dakota	37	39.6	279,885	
Tennessee	20	76.7	3,615,800	75,000
Texas	25	58.0	9,280,000	
Utah	15	96.1	1,588,200	
Vermont	31	46.3	245,500	7,500
Virginia	42	34.6	1,947,865	
Washington	28	51.4	2,236,974	75,000
West Virginia	14	108.5	2,117,238	668,226
Wisconsin	50	24.2	1,154,200	
Wyoming	48	28.3	144,605	
Mean Per Capita Spending		83.3		

\* Pending, not yet final

\*\* Does not include state lottery revenue.

**ECONOMIC DEVELOPMENT STRATEGY IN STATE POLICY MAKING: HUMAN RESOURCES, INFRASTRUCTURE AND REGULATION**

**\*Recommendation 43:** Develop a coordinated human resources strategy for Job Training Partnership Act Program, vocational education, and Kansas Industrial Training that is focused on economic development.

**Purpose**

Kansas has few competitive advantages, but its labor force is probably its greatest. Every effort should be made to utilize this asset in marketing and enhancing the state's competitiveness. Workers must be qualified to fill the jobs that

are created in the future. This can best be done by ensuring that the state's training system provides employees with the skills firms need if they are to locate or expand in Kansas. Even though the Kansas labor force is highly educated, it too often lacks skills in areas of particular concern to employers, such as electronics. The state has several training programs that can be coordinated and focused on matching labor supply with the demand of employers.

### Rationale

As noted in the 1984 monograph by Kenneth Walker and Anthony Redwood, Goals and Strategy for Kansas Human Resources Policy, Kansas has a highly educated labor force. At the same time, the state has a problem with chronic outmigration and hidden unemployment.

....Mismatches between demands for and supply of labor with general and specific skills may hamper industrial development in Kansas. Such mismatches may occur in particular industries and/or in particular regions of the state. Because surplus skilled labor will outmigrate, as in the past, it is not feasible to remedy this situation by the strategy of developing a pool of broadly based skilled labor in order to attract industry from out of the state. It is necessary, therefore, to find ways of adjusting the supply of skills more swiftly in response to specific industrial development opportunities.

Several southeastern states have used training programs as a highly effective tool in helping existing industries expand and in recruiting new industries.

**\*Recommendation 44: The major policy goal of the state Job Training Partnership Act Program (JTPA) should be to promote economic development.**

### Purpose

The U.S. Congress has set the goal for JTPA as investing in human capital to increase the earnings and employment of participants. This is entirely compatible with the state's goal of promoting economic development. Indeed, Kansas would best serve JTPA participants by providing training for jobs in new and expanding industries where prospects for job retention and advancement are best.

The orientation of JTPA to economic development purposes can be advanced in several ways:

- (1) Establishing formal coordination between JTPA, KDED, and the Department of Education through a JTPA job training liaison located in KDED.
- (2) Providing a heavy weight to a job creation standard in the JTPA performance standards for incentive grants.
- (3) Allocating state funds to supplement JTPA programs to provide more flexibility and to facilitate a more active role in economic development.

The overall goal of such initiatives would be to establish a coordinated job training program that would provide customized training for employers in the skills and occupations they designated. The funding for such training could be provided by federal JTPA funds, vocational education or state funds as appropriate. An emphasis on customized training would permit the state's job training system to work closely with employers in designing training programs specific to the employers needs.

## **1. Coordination and Leadership**

A cohesive human resources strategy must have the full support and commitment of all interested parties. Priority at the highest levels must be given to cooperation and facilitation of economic development objectives. The state has the authority to set priorities for the spending of JTPA federal funds. Several state agencies would need to be involved in order to plan and implement a program that would meet the goal of an integrated human resources strategy.

The proposed JTPA Job Training Liaison to be located at KDED is an initial step in the right direction. This person will be responsible for facilitating the development of co-funded programs with JTPA, KIT, and vocational education. A program of this type is the kind of cooperative effort that must be encouraged at the highest levels. JTPA can contribute to the expansion of firms in Kansas. Retraining and upgrading in other areas can help distressed firms become viable again.

## **2. JTPA Performance Standards**

A conscious effort must be made to devote JTPA training programs to economic development. JTPA requires that 6 percent of a portion of the state's allotment be used to provide incentive grants to areas that exceed certain standards. Performance standards have been developed to evaluate the various areas. A heavy weight should be given to the job creation standard. Furthermore, a disincentive for occupations with low

wages and unpromising outlooks should also be reflected in the performance standards.

### 3. State Funding

Kansas should allocate state funding to supplement JTPA programs. Kansas does not currently and never has provided state funds to supplement JTPA funding in an integrated program. State complimentary funding will allow more flexibility and permit JTPA to play a more active role in economic development than is possible now.

Below is a summary of approximate state funding for surrounding states:

#### State Complimentary Support for JTPA

State	State Appropriating Funds to Supplement JTPA Programs	Amount of State Funding	States Where JTPA Funds are Used For Economic Development
Kansas	no	\$0	yes
Missouri	yes	\$1.75 million	yes
Illinois	yes	\$2.0 million	yes
Iowa	yes	\$2.46 million	no
Oklahoma	no	\$0	yes
Nebraska	yes	\$272,000	yes
Colorado	no	\$0	yes

Kansas JTPA has done a limited amount of funding economic development activities with JTPA dollars. JTPA funds from individual SDAs have been used to fund training programs for new firms establishing facilities in the SDA and existing firms in the SDA that are expanding. These limited programs are funded with a package of KIT, Vocational Education and that SDAs Title IIa funds. Much more needs to be done in this area.

**\*Recommendation 45:** Establish a task force to review the vocational education system with the objective of ensuring responsiveness to changing industry needs for skilled employees.

Vocational education must become more market-driven. The key question is: What kind of skilled employees are needed by current and future employers. The vocational education system has a

crucial role in deciding what skills are required and providing training in those areas. A task force would address issues such as:

- How can vocational education better coordinate with JTPA and KIT, to promote economic development?
- How can the private sector have appropriate input in vocational education?
- How can vocational education ensure that the quality of training (equipment, instructors, facilities) is at an appropriate competitive level?

Greater interaction should take place between training providers and the private sector. Vocational schools should regularly and systematically survey industries in their areas to determine present and future needs. A study should be performed to determine if vocational education graduates are being trained for the types of jobs that are available and will be available in the future.

South Carolina, Louisiana, and North Carolina are considered to be leaders in using training programs as an economic development incentive. They have placed industrial training consultants at vocational schools, thereby creating a liaison between industry and the schools.

A major concern of private industries is quick response time. Especially in site location decisions, an effective training program must be designed in a short time. KIT has responded to this need, but more should be done in cooperation with other training areas such as vocational education.

**\*Recommendation 46: Expand the Kansas Industrial Training Program (KIT) and improve coordination with other training programs.**

Kansas's competitive advantage lies in its labor force. Increased and aggressive emphasis should be placed on KIT's flexibility and value to the state. Training specific to needs of individual employers is a factor in the influencing expansion or location in Kansas. Such programs are important because employees can control content and relevance to firms.

The KIT funds are needed to supplement JTPA and vocational education funds because they are the most flexible, in particular KIT funds can be committed quickly and can be used to train any employee in any skill. Such flexibility is crucial in putting

together a coordinated job training program involving vocational education and JTPA. An expanded KIT would permit the state to use job training as a major strategy. Such a strategy is important and appropriate for Kansas.

**\*Recommendation 47:** Review the state's budgeting procedures to determine how the state can expand its investment in public infrastructure to support economic development, particularly highways, airports, water resource development, recreation and wildlife improvements, and state agency facilities.

An adequate public infrastructure is of great importance for economic development. The quality of public services, particularly in such areas as highways and water resources, is important in attracting business investment, external and internal, to the state. Overall, Kansas has been making an inadequate investment in public infrastructure.

Professor Ed Flentje, of Wichita State University, has conducted a study on capital finance and public infrastructure for the Special Commission on a Public Agenda for Kansas. He found that:

Relative to construction costs, overall state expenditure, and personal income for Kansas expenditures for capital improvements in 1985 fell 33 percent, or \$148 million, below the average level of the last 25 years. Declining federal assistance, a dominant pay-as-we-go philosophy, and inadequate capital planning and budgeting, among other factors, have contributed to this funding deficit. As a result, new highway projects have reached a virtual standstill, recreation and wildlife improvements have been postponed, action on new correctional facilities has been stalled, preventive maintenance of state facilities has been reduced, and a backlog of unfunded capital improvements for state purposes has occurred.

A continuation of inadequate funding for public infrastructure will impair the state's economic development efforts.



**\*Recommendation 48:** The allocation of state highway funds should, to the fullest extent possible, be linked to economic development. Priority should be given to projects that promote economic growth in the state.

### **Purpose**

Kansas's transportation system has developed and is designed primarily to transport agricultural products to market. Kansas ranks second in the United States in number of secondary highway miles, most of which were designed to benefit the agricultural industry. Because of a limited population base, Kansas is not able to properly maintain such an extensive highway system. Every year the state falls short of the minimum amount needed to maintain roads. Selective disinvestment in the state's transportation system is occurring. This disinvestment will have definite effects on the state's potential for economic development. A system of priorities must be established to identify the elements in the transportation network that are critical to economic development.

### **Assessing Capital Spending Priorities**

State highway and other infrastructure spending should be integrated into economic development objectives. The state should assess priorities for capital spending based on the state's economic development strategy. A state coordinating body should be established to review the state's plan for highway spending each year. Overall maintenance policies would also be reviewed.

Other states have coordinating bodies that review key economic decisions made by that state's government officials. In Massachusetts a Development Cabinet coordinates these activities. In Colorado an Economic Growth and Development Council with key state officials and private sector advisory members has been proposed in order to coordinate and review various state agencies' plans to ensure they are consistent with economic development goals. Hawaii's State Plan Policy Council has a similar function with 13 state officials, four county planning directors and nine representatives of the general public.

### **Selective Disinvestment**

In the past ten years a gradual deterioration of some roads, bridges, railbeds, and other infrastructure has occurred because of lack of maintenance. County roads, railbeds, and bridges are critical to the transport of agriculture products and the enhancement of other economic development opportunities in rural

areas. The critical areas in the transportation system for each region need to be identified. The effect of selective disinvestment must be recognized and economic development priorities must be established.

In a Special Committee on Infrastructure Report to the 1984 Legislature, the Kansas Department of Transportation estimated that capital outlays and maintenance would require a minimum of \$241.5 million annually through 2000. In 1983 spending for capital outlays and maintenance totaled \$214 million, almost \$30 million short of the amount needed for minimal maintenance of roads, and many roads are in dire need of more than minimal maintenance. It is not probable that Kansas will be able to adequately fund maintenance and expansion of its transportation system. Indeed, the state ranks 45th in state disbursements per mile of highway.

**Total Highway Miles and State Disbursements  
for Capital Spending and Maintenance  
United States, Kansas and Neighboring States, 1983**

	Total Miles	Rank	Expenditure Per Mile	Rank
U.S. Average	16,540		34,498	
Kansas	32,621	2	8,001	45
Colorado	9,846	36	26,305	21
Iowa	23,769	10	7,952	46
Missouri	26,878	6	12,240	40
Nebraska	20,965	18	31,529	17
Oklahoma	16,745	26	11,227	42

Source: Statistical Abstract of the United States 1986.

A cost benefit study must be made to determine which roads and bridges can be abandoned. Perhaps some roads do not need to be paved, but whichever options are chosen, transportation spending must be based on critical economic factors.

**Highways in Southeast/Southwest Kansas**

Many firms require that plant locations be close (within 20 miles) to an interstate system. Much of the employment growth in Kansas has come along the interstate highway system. The southeastern and southwestern parts of the state are not connected to the interstate system. The southeastern part has experienced the worst decline in employment in the state. It will be difficult for that area to attract or develop new industry

without improved transportation. Southeast Kansas in particular will not experience economic revitalization without resolving this highway problem. Indeed, without a major 4-lane highway linking this area to Wichita or Kansas City, continued decline is likely.

**\*Recommendation 49:** Conduct feasibility studies to examine the need for major highways in southeast and southwest Kansas.

Four-lane, limited access highways have become the major element in the nation's transportation system. Access to such highways is crucial to an area's economic development. There are sufficient good business locations on or near interstate highways, so that many firms will not consider locating or expanding in "isolated" areas far removed from the interstate highway system.

Southwest Kansas, in particular, is seriously disadvantaged by the lack of an interstate highway and is unlikely to experience significant economic growth until its highway problem is resolved. A feasibility study should address the costs and benefits of a major limited access north-south highway from the Kansas City area to southeast Kansas and also an east-west highway to Wichita.

Similarly the costs and benefits should be determined for a major limited access highway west from Wichita. In southwest Kansas Highway 54 in particular should be reviewed for a major upgrade. This is a key highway in that part of the state but it is not currently adequate to handle the heavy trucks that now use it.

**\*Recommendation 50:** The impact of regulations on state economic development should be added to the criteria that regulatory bodies must use in carrying out their regulatory responsibilities, and, where they exist, be given greater emphasis. Existing and proposed regulations should be reviewed by Kansas Inc. to ensure that they are not unnecessarily impeding economic development.

### **Purpose**

Impact on economic development should be explicitly weighed against other priorities during the regulatory process.



## Rationale

Change has been the hallmark of regulatory policy in the past decade. More and more industries have been deregulated at the federal level and many states are examining their own policies in light of this. In a survey of high-tech firms, 47 percent said that state regulatory policies were a significant factor in determining a state in which to locate. Eighty percent of expanding firms said that cutting red tape was significant. Recently Kansas has changed the financial regulations to encourage venture capital formation. State banking regulations have been the last in the country to change. Other major industries, such as oil and gas, have also been affected by state regulations. Changes must still be made to ensure a satisfactory business climate. Other areas of regulatory policy that need study include:

1. Transportation,
2. Health and Safety,
3. Telecommunications,
4. Utilities,
5. Securities and banking, and
6. Environment

Transportation, for example, is a critical area in the state's economic development. The cost of transportation is mentioned over and over as a key in site selection. In a ten district Federal Reserve Bank study of high-tech firms' location decisions, transportation ranked second only to labor factors in overall importance in initial site selection.

In Kansas, both trucking and busing industries must file intrastate routes and rates with the KCC. There is usually a thirty day waiting period for revision. These regulations do not effectively control inflow into the industry or enhance safety. Interstate routes, which carry a major portion of the traffic, are not regulated. A study completed by Professor Douglas Houston of the University of Kansas does not show any overall adverse impact of interstate deregulation, but rather some substitution of trucking for rail transportation. Intrastate regulation takes significant amount of effort. However, the condition of the state's infrastructure also comes into play making this a highly complex issue that must be further studied.

