

FACTORS IN FIRMS' DECISIONS TO LOCATE
OR EXPAND IN KANSAS: A SAMPLE SURVEY

Robert A. McLean
Anthony L. Redwood, Director
Morris M. Kleiner, Acting Director

April 1983

Monograph #7

Kansas Labor Market Research Series
Institute for Economic and Business Research
University of Kansas

The Kansas Labor Market Information Project is funded by the State of Kansas through the Governor's Special Grant Component of the Comprehensive Employment and Training Act, and is sponsored by the State Employment and Training Council and the Kansas Department of Human Resources. All Views expressed are solely those of the authors. Research assistance for this project was provided by Matthew Anderson, Daniel Petree, Chris Rott, and Janet Willer.

The assistance of the Kansas Department of Economic Development in this research is gratefully acknowledged.

ABSTRACT

This monograph reports the results of an Institute for Economic and Business Research survey of Kansas manufacturing firms, either newly in place or that recently expanded their in-state operations. The survey instrument was designed to identify those characteristics of the State's labor market and labor force that encourage or inhibit manufacturing growth in Kansas.

More specifically, this research sought to use the survey results to answer five questions about manufacturing development in the State:

- Has it been labor or capital intensive?
- Has it depended more on the expansion of existing firms or on the attraction of new enterprises?
- How has it been influenced by labor market trends and developments?
- How has it been enhanced by labor market trends and developments?
- How has it been retarded by labor market trends and developments?

Although limitations both of the data and inherent in the survey method prohibit categorical conclusions, the results of the survey do permit several provisional generalizations:

- Growth in Kansas manufacturing has been more capital intensive than in the country as a whole.
- It is mostly propelled by the State's proximity to markets.
- A number of labor market factors--particularly the State's right-to-work law and availability of labor--appear as locational features attractive to new and expanding businesses.

- The relative importance of various factors in the decision to locate in Kansas (and probably the expansion decision) varies in different industries.
- The emphasis placed on favorable personal opinions of Kansas suggests that "home-grown" enterprises may be particularly important to the State's manufacturing development.
- Tax levels as well as local amenities and facilities appear to be unimportant to the decision to locate or expand in Kansas.

TABLE OF CONTENTS

	<u>Page</u>
Abstract	i
Table of Contents	iii
List of Tables	iv
I. Introduction	1
II. Survey Methods and Limitations	4
A. Choice of Survey Method	4
B. Questionnaires	5
C. Samples and Response Rates	5
D. Sources of Possible Bias in Results	5
III. Results of the Surveys: State Characteristics	7
A. Relative Importance of New Establishments and Expansion of Existing Establishments	7
B. Capital Intensity of Manufacturing Development	8
C. Factors Influential in Decisions of New Firms to Locate in Kansas	9
D. Factors in Expanded Firms' Decisions to Expand in Kansas	14
E. Industry Differences	17
IV. Results of the Surveys: A Comment on Community Characteristics	19
V. Conclusions	21
Previous Monographs in This Series	23
References	24
APPENDIX A: Questionnaire for Survey of New Kansas Establishments	25
APPENDIX B: Questionnaire for Survey of Expanded Kansas Establishments	30
APPENDIX C: Survey Responses of New Firms in Certain Industries	35
APPENDIX D: Survey Responses of Expanded Firms in Certain Industries	44

LIST OF TABLES

	<u>Page</u>
Table 1 Distribution of Respondents by Industry	6
Table 2 New Firms' Ratings of Factors in Decision to Locate in Kansas	10
Table 3 Factors Ranked Among the Three Most Important in New Firms' Decisions to Locate in Kansas	13
Table 4 Expanded Firms' Ratings of Factors in Decision to Expand in Kansas	15
Table 5 Factors Ranked Among the Three Most Important in Expanded Firms' Decisions to Expand in Kansas	16
Table 6 Illustrative Industry Differences in Most Important Factors in Decisions to Locate in Kansas	18
Table 7 Community Characteristics Ranked Among the Three Most Important in New Firms' Decisions to Locate in Kansas	20
Tables 1C - 8C - Appendix C: Survey Responses of New Firms in Certain Industries	35
Tables 1D - 4D - Appendix D: Survey Responses of Expanded Firms in Certain Industries	44

I. INTRODUCTION

Monograph #1 in this series¹ noted that the Kansas labor market is affected by the rate and character of economic development of the State and that characteristics of the Kansas labor market may, in turn, have an impact on that economic development. For this reason the Labor Market Information Program of the Institute for Economic and Business Research (IEBR) includes research on the relations between the Kansas labor market and economic development in the State.

The goal of the research reported here was to identify the effects that the characteristics of the Kansas labor force and the Kansas labor market have on the growth of manufacturing activity in the State of Kansas. (Although the focus of this research on manufacturing is somewhat narrow, the importance of manufacturing in employment growth in Kansas has been documented by Redwood, et al., 1981). In the summer of 1982, to estimate the degree to which the characteristics of the state's labor force and the labor market enhance or inhibit industrial growth, the Institute for Economic and Business Research (IEBR) conducted two surveys of firms listed in the Kansas Department of Economic Development (KDED) files on industrial growth: one survey of establishments newly in place (whether or not the firm had previously operated in Kansas) and one survey of establishments that had expanded their operations at the same locations. These files covered new establishments and expansions for 1977 through mid-year 1982.

¹A list of the previous monographs in this series is given on page 23.

The growth of manufacturing industry in Kansas is determined by the decisions of new and existing firms to locate new or expanded activities in the State rather than elsewhere.

The location of industry is a process driven by firms' desires to maximize the present values of their future profits. While some establishments are tied to particular locations, most manufacturing activity is not tied to any unique location by cost-minimizing considerations. Instead, firms serving diverse markets and not having significant weight loss during production can choose from among many locations. Certainly, cost minimization is the principal consideration in these decisions, but rarely, in an age of national markets, does a unique cost-minimizing location exist for any activity. Moreover, where costs are the same, or nearly the same, in different locations, firms will select the location offering the greatest non-cost advantages and amenities.²

Therefore, characteristics of a specific labor market can affect both producer costs and the amenities associated with any potential industrial location. For example, locally prevailing wage levels, the availability within the local labor force of required skills, and prevailing attitudes toward the employment relationship will all affect the costs of recruiting and employing labor. In brief, both objective labor market factors (wage levels, skill supplies) and subjective factors (attitudes toward work, attitudes toward unionism) vary across locations and have varying effects on firms' decisions to locate.

²For an extended introduction to industrial location theory, see Hoover (1971, chs. 3 and 4).

Since labor market characteristics are only one factor in firms' location decisions, the surveys gathered information on a wider basis. Thus, questions were included concerning public policy variables (tax rates, regulations), general economic conditions (transportation, utilities, business climate), and amenities (climate, opportunities for continued education and training, and personal opinions about life in Kansas).

Thus, the surveys provide information on the factors which firms report to have influenced their decisions to locate new or expanded manufacturing facilities in Kansas, and the place of various labor market characteristics in such decisions.

Using the results of the surveys, this research sought to answer the following questions:

- Has manufacturing development depended largely on an expansion of existing enterprises or on the attraction of new ventures?
- Has the manufacturing development of Kansas been labor or capital intensive?
- How has manufacturing development been influenced by labor market trends and developments?
- How has manufacturing development been enhanced by labor market trends and developments?
- How has manufacturing development been retarded by labor market trends and developments?

II. SURVEY METHODS AND LIMITATIONS

A. Choice of Survey Method

The determinants of industrial location may be studied by various methods. One research strategy is to identify those factors expected to either attract or repel industry, measure them across possible locations or over time, and regress some measure of industrial growth against a vector of those variables to determine the independent effect of each. Chang (1979), for example, used both geographic and time-series variation in a vector of independent variables to explain inter-regional growth differentials in the cotton textile industry.

Two considerations made a method such as Chang's infeasible at this stage in the research. First, many of the location-relevant variables (opportunities for education and training, for example) differ across Kansas counties. It is not appropriate, therefore, to use a state-average measure in an interstate comparison when adequate data for an intrastate, intercounty comparison do not exist.

Second, even if state averages were to be used, the measure of industrial growth at the state level so obtained would not capture the effects sought by this research. For example, because any growth rate is affected by the size of the base on which it is computed, minor activity in an area where earlier activity had been on a very small scale would generate a very large growth rate. Examining changes in the numbers of establishments would avoid that problem, but such data were available only on a statewide base.

Given these problems, it was decided to adopt the survey method in an effort to find out from the new and expanding firms 1) what the factors were that attracted them to their present locations and 2) which of a

number of listed factors were regarded as favorable, unfavorable, or irrelevant to their decisions to locate/or expand in Kansas.

B. Questionnaires

Copies of the two questionnaires used in the surveys are included in Appendices A and B. It will be seen that firms were asked to rate each of a number of possible factors on a five-point scale ranging from "Extremely Negative" to "Extremely Positive." Scores above "3" indicated that the factor was rated as positive (that is, favorable to location in Kansas); the response "3" indicated that the factor was not relevant to the firm's location decision.

C. Samples and Response Rates

All new firms listed in the Kansas Department of Economic Development records were included in the survey as were all Kansas firms known to the Department to have expanded their facilities in the period (1977 through mid-1982). There were 571 new establishments, and questionnaires were delivered to 454 (the remainder being undeliverable). Responses were received from 175, a response rate of 38.55 per cent. Questionnaires were delivered to 240 of the 264 firms known to have expanded (the remainder being undeliverable). Of these, 81 firms returned completed questionnaires, a response rate of 33.75 per cent. These response rates are quite high for a mailed survey.

Table 1 gives the distribution of responding firms by industry and shows that the sample included firms from practically all types of manufacturing.

D. Sources of Possible Bias in Results

Three sources of bias inherent in the survey method must be emphasized. First, the firms surveyed were those finding one or more Kansas

Table 1
Distribution of Respondents by Industry

<u>Industry Classification</u> (2 digit)	<u>New Establishments</u> NO.	<u>Expanded Establishments</u> NO.
Food and Kindred products	11	7
Apparel and other finished goods made from fabrics	5	0
Lumber and wood products except furniture	6	2
Furniture and fixtures	5	1
Paper and allied products	3	2
Printing and publishing	25	2
Chemicals and allied products	4	6
Petroleum and coal products	3	0
Rubber and plastic products n.e.c.	9	10
Leather and leather products	2	1
Stone, clay and glass products	7	2
Primary metal industries	2	1
Fabricated metal products	24	9
Machinery, except electrical	37	22
Electrical equipment and supplies	8	5
Transportation equipment	9	8
Instruments and related products	4	0
Miscellaneous manufacturing	4	1
Tobacco products	0	0
Textile mill products	0	1
Other	<u>7</u>	<u>1</u>
Total	175	81

locations to be optimal. Thus, these are the firms for which Kansas locations offered, on balance, positive locational advantages. Other firms that did not locate in Kansas found aspects of Kansas locations to be, on balance, negative. The responses to the advantages and disadvantages of Kansas as an industrial location, therefore, will be biased upwards (exaggerated in a positive direction) by a naive examination of these survey results.

Second, some survey respondents may have made the (quite natural) error of answering the questions in some manner that they believe IEER wished them to be answered. To minimize this possibility, a pre-test of the survey instruments was conducted, but such a response bias is unavoidable.

A third source of bias in the evaluation of such surveys is the tendency to report that factors that were actually negative merely did not enter into the location decision. This, like the first source error, represents sample selection bias. See Campbell and Stanley (1963), pp. 5-6.

III. RESULTS OF THE SURVEYS: STATE CHARACTERISTICS

A. Relative Importance of New Establishments and Expansion of Existing Establishments.

A simple count of new and expanded establishments clearly shows that new establishments accounted for more start-ups than did expansions during the period in question (there were almost twice as many new establishments as expansions). Expansions, however, averaged \$6,130,908 in investment, compared to new establishments' average investment of \$2,181,464 (the

difference between the two is statistically significant at the .05 level³). Thus, though fewer in number, expansions represented greater total investment than did new establishments. No information is available on the relative contribution of new and expanding firms to employment.

B. Capital Intensity of Manufacturing Development

The survey results allow for only broad generalizations about the capital intensity of Kansas manufacturing development. Further, due to data limitations, only statements about new establishments in Kansas can be made. As capital intensity is meaningful only in relative terms, the average capital/labor ratio in manufacturing in the United States can be employed as the comparison value. For 1980 (the midpoint of the investment period, 1977-1982), that average for the United States was \$51,638.91 per worker (see U.S. Department of Commerce, 1981, pp. 390 and 545).

A priori, the expectation is that the capital/labor ratio for manufacturing in Kansas would be slightly below the national average, as the national average is biased upward by inclusion of nonproductive (office, headquarters) capital. The new establishment respondents' average was \$58,324.80 per worker. Thus, new Kansas manufacturing establishments are somewhat more capital intensive than the average of all manufacturing establishments in the U.S.

It is important to note, however, the presence of a vintage effect in the estimates above. Over time, manufacturing tends to become more capital intensive (through capital deepening). The U.S. average is held down by

³This indicates that the probability of the difference being due to sampling error is only 5 per cent.

the presence of older facilities, while the figure for Kansas is for new establishments only. The data limitations prohibit comparing new Kansas establishments to the average for new establishments nationwide.

C. Factors Influential in Decisions of New Firms to Locate In Kansas

Table 2 shows the response of all new firms as to the effects of a large number of factors on their decisions to locate in Kansas. The table lists those factors and lists three statistics summarizing the response. The response of "3" indicates that the factor was not relevant in the firm's location decision. Thus, if the mean response to a factor is significantly greater than "3", the mean respondent found that factor to be a positive attribute of the State. The mean response to each of the factors is listed in the first of the statistical columns. All the factors were ranked as generally positive by the mean respondent.

Since these results are based on a sample, it is necessary to check whether they might simply be due to chance errors of sampling. The second statistical column presents the value of the "t-statistic" for each factor. The size of "t", in relation to sample size, indicates the probability that the observed difference between the mean response and the neutral response of "3" is greater than the limits of sampling error. Asterisks in this column identify those factors for which the positive evaluation indicated by the mean response may be assumed to be unlikely to have occurred by chance.

These means and t-statistics, however, mask a great deal of variation in importance among the factors. Indeed, as discussed above, the very fact that the respondents were those firms that chose to come to Kansas implies that for these firms no factor was likely to be regarded, on average, as negative. Rather, these firms' rankings are likely to suggest that a

Table 2

NEW FIRMS' RATINGS[†] OF FACTORS IN DECISION
TO LOCATE IN KANSAS

(N = 175)

Factor	Mean (\bar{x})	$\frac{t}{x-3}$	% of respondents finding positive
A. Personal opinions about Kansas	3.802	12.60*	62.9
B. The geographic location of the state	3.845	14.65*	66.4
C. Kansas' climate	3.142	2.60*	23.5
D. Presence of suppliers in or nearby Kansas	3.389	5.63*	47.5
E. Presence of markets in or nearby Kansas for your products	3.809	10.92*	69.1
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	3.441	7.24*	48.4
G. The cost and availability of energy in Kansas	3.186	3.14*	31.1
H. The cost and availability of water in Kansas	3.205	4.64*	23.0
I. State tax levels affecting business	3.097	1.63	22.1
J. State business climate	3.471	7.81*	43.3
K. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.106	2.42*	16.1
L. The nature of workmen's compensation and unemployment insurance laws in Kansas	3.094	1.60	22.5
M. General characteristics of the state labor force (such as turnover rates, absenteeism, attitudes towards work)	3.516	7.89*	55.3
N. Availability of workers with appropriate skills	3.395	5.76*	49.4
O. Kansas "right-to-work" laws	3.790	11.07*	52.5

[†] Firms were asked to indicate the extent to which each factor was positive or negative in its decision to locate in Kansas, on a scale ranging from 1) extremely negative to 5) extremely positive. The response "3" indicated that the factor did not play a role in the location decision.

* Statistically significant at .05 level.

factor that did not suit them simply did not enter into their location decisions.

To separate the most from the least favorable locational factors, the third statistical column in Table 2, providing the percentage of respondents to a given factor, indicates that the given factor was either somewhat positive or extremely positive in the location decision (rather than being extremely negative, somewhat negative, or not a factor). In this column, rather great variation among the factors can be seen. (Note that the base on which these percentages are calculated varies slightly from factor to factor, as not every respondent marked every factor.)

Examination of the third statistical column in Table 2 shows that the factor most often cited as being positive in the location decision is the State's proximity to markets. Also worthy of note is that the location of the State was cited by 66.4% of all respondents. Thus, to make the first generalization about manufacturing growth, the growth of new establishments appears to be market-driven (based on proximity to markets). Access to suppliers is of somewhat less concern.

Personal opinions about location in Kansas also appear to be a primary consideration among the firms responding. It is not clear what, if any, policy implications can be derived from this finding, although it may underscore the importance of home-grown enterprises in the State's economic development.

Labor force and labor market variables follow market-proximity and personal opinion factors in importance in location decisions. Workers' compensation and unemployment insurance laws receive relatively low marks from new establishments, perhaps suggesting some need for review of their features relative to those of other states. The Kansas right-to-work law,

however, was cited by new firms as a principal attractive feature of the State. This result is somewhat surprising, given the skepticism that earlier research has indicated as to the role of right-to-work legislation in location decisions (see Aebi and McLean, 1978, and Soffer and Korenich, 1961). In the Kansas case, however, the right-to-work law appears to be a major factor for those firms locating in the State. Still, at this point, the research cannot say that Kansas attracts more establishments due to the right-to-work law than it would without it. The case may be that the State is attracting that subset of firms which finds right-to-work laws attractive.

Table 3 provides additional insight into the motivations for the location of new firms in Kansas. This table presents the results of the responses to the request that firms choose, from among a given list of factors in summary categories not identical to those shown in Table 2, the three most important factors in the decision to locate in Kansas. While respondents were asked to rank order these "top three" factors, the table presents the percentage of all respondents ranking each factor among the top three, without regard to the precise "1,2, or 3" ranking.

As in Table 2, the leading factor in these location decisions is the geographic location of the State. Further support, then, is provided for the hypothesis that manufacturing development in Kansas is market-driven. A close second for top factor is personal opinion about Kansas, reflecting, it can be inferred, the importance of home-grown industry in the State's industrialization.

Labor force and labor market factors follow as leading factors in firms' location decisions. Again, the right-to-work law was cited as a major factor in location decisions. Both in Table 2 and Table 3, the

Table 3

FACTORS RANKED AMONG THE THREE MOST IMPORTANT IN
NEW FIRMS' DECISIONS TO LOCATE IN KANSAS

(N = 175)

<u>Factor</u>	<u>% of Respondents Ranking Factor</u>
Personal Opinion of Kansas	40.6%
Transportation Conditions	18.9%
Right-to-Work Law	29.7%
Labor Force, Availability	28.6%
Labor Force, Skills	15.4%
Labor Force, Other Characteristics	14.9%
State Tax Levels	2.9%
State's Location	57.7%
Specific Tax and Other Benefits	5.7%
Business Climate	17.7%
State Utility Costs	8.6%

availability of the labor force ranked highly, but skill levels and other characteristics (attitudes toward work, turnover rates, absenteeism) are viewed as less important. Some reluctance, however, may be evident among respondents to emphasize more than one labor force characteristic, so the relative importance of the three labor force factors is problematic. (The effect of wage levels is discussed under community characteristics, below).

Two additional generalizations emerge from these data. First, with the exception of the State's right-to-work law, the legal/regulatory framework of the State of Kansas has had little effect on the recent decisions to locate new manufacturing firms in the state. Second, while the availability of labor for manufacturing employment was viewed by new firms as a locational advantage for Kansas, the skill levels of the Kansas labor force was not so positive a factor. The weak attractiveness of available labor force skill is consistent with results reported by Redwood, et al. (1981).

D. Factors in Expanded Firms' Decisions to Expand in Kansas

Tables 4 and 5 (in the same form as Tables 2 and 3 respectively) give the results of the survey of firms expanding in Kansas.

The results for expanded firms in Tables 4 and 5 show that, in general, the responses follow those of the new firms. Location, the right-to-work law, and the general characteristics of the labor force were ranked as being particularly important in the decision to expand in the Kansas location rather than to build new facilities elsewhere. For expanded firms, the skill level and other characteristics of the labor force received a higher ranking than for new firms, perhaps because the expanding firms had already made an investment in the specific human capital of their

Table 4

EXPANDED FIRMS' RATINGS[†] OF FACTORS
IN DECISION TO EXPAND IN KANSAS

Factor	Mean (\bar{x})	t $\bar{x}-3$	% of respondents finding positive
A. Personal opinions about Kansas	3.581	7.32 *	52.7
B. The geographic location of the state	3.947	9.93 *	71.1
C. Kansas' climate	3.184	2.65 *	23.7
D. Presence of suppliers in or nearby Kansas	3.421	4.09 *	43.4
E. Presence of markets in or nearby Kansas for your products	3.579	5.81 *	51.3
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	3.533	5.81 *	56.0
G. The cost of reproducing the expansion at a new location	3.473	3.58 *	51.4
H. The cost and availability of energy in Kansas	3.427	4.67 *	42.7
I. The cost and availability of water in Kansas	3.329	3.99 *	28.9
J. State tax levels affecting business	2.945	-0.55	20.5
K. State business climate	3.297	3.04 *	37.8
L. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.132	1.80	23.7
M. The nature of workmen's compensation and unemployment insurance laws in Kansas	3.027	0.30	28.0
N. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	3.773	7.90 *	70.7
O. Availability of workers with appropriate skills	3.480	4.30 *	57.3
P. Kansas "right-to-work" laws	4.200	12.60 *	74.7
Q. Difficulty of hiring and training employees elsewhere	3.133	1.36	25.3

† Firms were asked to indicate, on a 5-point scale, the extent to which each factor was a positive or negative consideration in their decision to expand in Kansas rather than to build another facility in some other location. The scale ranged from 1 (extremely negative) to 5 (extremely positive). The response "3" indicated that the factor did not play a role in the location decision.

* Statistically significant at .05 level

Table 5

FACTORS RANKED AMONG THE THREE MOST IMPORTANT
IN EXPANDED FIRMS' DECISIONS TO EXPAND IN KANSAS

(N = 78)

<u>Factor</u>	<u>% of Respondents Ranking Factor</u>
Personal Opinion of Kansas	17.3%
Transportation Conditions	11.1%
Right-to-Work Law	45.7%
Labor Force, Availability	23.5%
Labor Force, Skills	11.1%
Labor Force, Other Characteristics	29.6%
State Tax Levels	0.0%
State's Location	40.7%
Specific Tax and Other Benefits	12.3%
Business Climate	9.9%
State Utility Costs	7.4%
Cost of Moving Facilities	44.4%

workforces (see Becker, 1975, pp. 16-44, and Oi, 1962). The right-to-work law was given greater emphasis than among the new firms.

It will be seen that Table 4 includes two factors additional to those listed in Table 2 ("cost of reproducing the expansion at a new location" and "difficulty of hiring and training employees elsewhere"). The first of these was considered to be of substantial importance, the second less so.

Table 5 also included the additional factor of "cost of moving facilities," and this factor was given considerable emphasis by the expanding firms.

E. Industry Differences

As indicated by Table 1, respondents to both surveys were distributed over a wide variety of industries. Appendices C and D report the results for those industries in which the number of respondent firms was 10 or more. (Results for the other industries are available from IEBR upon request.)

In most industry classifications the numbers of respondents were so small as to render meaningful comparisons impossible. Table 6 reports those interindustry differences which were statistically significant at the 10 per cent level (that is, they were so large that there is only a 10 per cent probability that they would arise by chance). Table 6 is derived from a comparison of the percentages of respondents in the industries with 10 or more respondent firms who ranked a factor as being among the three most important in their decisions to locate or expand in Kansas. No statistically significant differences were found between industries in the sample of expanding firms, but, as shown in the table, several were found among the new firms.

Table 6

ILLUSTRATIVE INDUSTRY DIFFERENCES[†] IN MOST IMPORTANT
FACTORS[§] IN DECISIONS TO LOCATE IN KANSAS

(New Firms)

<u>Factor</u>	<u>Industries Which Differ in % Respondents Ranking</u>
Transport	Food (54.5%) vs. Printing (4.0%), Fabricated Metals (16.7%), Machinery (non-electrical) (16.2%)
Right-to-Work Law	Fabricated Metals (50.0%) vs. Printing (19.0%)
Labor force, availability	Fabricated Metals (37.5%) vs. Printing (12.0%)
Location of State	Fabricated Metals (70.8%) vs. Printing (40.0%)

† The table shows only those differences which were statistically significant at the .10 level or less, that is, differences so large that there are only ten chances in a hundred that they arise from sampling error. There were no industry differences that were statistically significant among the expanding firms. It is possible (and very likely) that other industry differences exist among both new and expanding firms, but the smallness of the samples makes it impossible to establish that they are not due to sampling error.

§ The table compares the percentages of respondents in different industries who ranked a factor as among the three most important factors in their decisions to locate in Kansas.

These results, by demonstrating that certain interindustry differences exist, confirm the commonsense expectation that the relative importance of various factors in the location decision differs substantially in different industries. It is extremely likely that more differences exist than were demonstrated by this research and that they apply to decisions to expand as well as to locate, but the limitations of the samples prevent this likelihood from being established by the present research.

IV. RESULTS OF THE SURVEYS: A COMMENT ON COMMUNITY CHARACTERISTICS

This monograph focuses primarily on those features of the State of Kansas that manufacturing firms find attractive and repellent. Firms, however, look not only to states but to sites in making their location decisions. Thus, some discussion of local characteristics is warranted in any discussion of location-relevant variables.

Table 7 reports the percentage of responding new firms which ranked each community characteristic as among the three most important in their location choice. Ranked most often were the same factors that were most often mentioned for the State as a whole: location (in relation to suppliers and markets) and personal opinions about the community (which, again, may be a reflection of the numerical importance of "home-grown" establishments).

The factors next ranked most frequently were local business climate and two labor market variables: availability of the work force and wage levels. Other factors, including educational opportunities and community amenities, ranked much less frequently. For example, only 2.3 percent of these respondents ranked opportunities for training and education (even

Table 7

COMMUNITY CHARACTERISTICS RANKED AMONG THE
THREE MOST IMPORTANT IN NEW FIRMS' DECISIONS TO
LOCATE IN KANSAS

(N = 175)

<u>Characteristic</u>	<u>% of Respondents Ranking Characteristics</u>
Personal Opinions about the Community	41.7%
Community Amenities	5.7%
Community Public Facilities	4.0%
Location in Relation to Suppliers and Markets	50.9%
Local Wage Levels	23.4%
Local Labor Force, Availability	30.9%
Local Labor Force, Skills	14.3%
Local Labor Force, Other Characteristics	13.7%
Specific Tax and Other Benefits	10.9%
Opportunities for Training and Education	2.3%
Local Business Climate	33.1%

though pre-tests of the questionnaires suggested that educational opportunities were important, especially for large establishments).

A note of caution concerning the interpretation of these results should be reiterated. These survey results represent firms that chose to locate in Kansas communities. One interpretation of the low percentage of firms ranking community amenities, for example, is that such amenities are simply unimportant. An equally plausible interpretation, given the population surveyed, is that such amenities are, generally, important but that Kansas communities offer few of them. The firms that locate in Kansas, then, are those that find such amenities unimportant.

V. CONCLUSIONS

While the results of the survey reported here are tentative, several generalizations seem justified. First, manufacturing growth in Kansas, at least in the manufacturing sector, is driven by proximity to markets; therefore, the State's central location is largely responsible for its attraction of manufacturing establishments.

Second, manufacturing development in Kansas has been a little more capital intensive than in the United States as a whole.

Third, investment by existing firms has been more important in manufacturing developments in the State than investment by new firms.

Fourth, labor market factors have generally enhanced the economic development of Kansas. The presence of a right-to-work law was cited as an important factor by those firms that both located and expanded in Kansas. Also, the availability of labor was frequently cited as a positive feature of location in Kansas. However, the possession of skills by Kansas workers was not so often cited, and, although local wage levels received some

support as important in location decisions, that support was not overwhelming.

Fifth, tax levels and local amenities and facilities were viewed as not very important by those responding to the survey.

Finally, despite the limits of the samples, the research demonstrated that the relative importance of various factors in the decision of new firms to locate in Kansas differs in different industries. It seems likely that such differences are more extensive than could be established by this research and that they apply to firms' decisions to expand in Kansas as well as to decisions to locate there.

Previous Monographs in This Series

1. The Kansas Labor Market: Trends, Problems and Issues
(November, 1981);
2. Kansas Labor Market and Migration: A Note from Continuous
Work History Sample (May, 1982);
3. Kansas Labor Market Information System: A Technical Note
(August, 1982);
4. Economically Disadvantaged Workers in Kansas: Analysis
of Data from the Survey of Income and Education (1975-76),
(November, 1982);
5. CETA Eligibility Estimates for Selected Demographic and
Targeted Groups in Kansas and the United States (1978-82),
(November, 1982); and
6. Demographic Characteristics and Trends of the CETA-Eligible
Population of Kansas and United States, 1978-1982
(December, 1982)

REFERENCES

- Aebi, Timothy and Robert A. McLean. "Right-to-Work Laws and Industrial Expansion." Indiana Business Review (September-October 1978): p.7-10.
- Becker, Gary S. Human Capital, second edition. New York: Columbia University Press for the National Bureau of Economic Research, 1975.
- Campbell, Donald T. and Julian C. Stanley. Experimental and Quasi-Experimental Designs for Research. Chicago: Rand McNally, 1963.
- Chang, Hui S. "A Study of Industry Location from Pooled Time-Series and Cross-Section Data: The Case of Cotton Textile Mills." Quarterly Review of Economics and Business vol. 19, no. 3 (Autumn 1979): p.75-88.
- Dixon, Wilfrid J. and Frank J. Massey, Jr. Introduction to Statistical Analysis, third edition. New York: McGraw-Hill, 1969.
- Hoover, Edgar M. An Introduction to Regional Economics. New York: Alfred A. Knopf, 1971.
- Oi, Walter Y. "Labor as a Quasi-Fixed Factor." Journal of Political Economy vol. 70, no. 6 (December 1962): p.538-555.
- Palomba, Neil A. and Catherine A. Palomba. "Right-to-Work Laws: A Suggested Economic Rationale." Journal of Law and Economics vol. 14, no.2 (October 1971): p.475-483.
- Redwood, Anthony, Bharati Bhattacharyya, and Morris Kleiner. The Kansas Labor Market: Trends, Problems, and Issues. Lawrence, Kansas: University of Kansas, Institute for Economic and Business Research, November 1981.
- Soffer, Benson and Michael Korenich. "Right-to-Work Laws as a Locational Factor: The Industrialization Experience of Agricultural States." Journal of Regional Science vol. 3, no. 2 (Winter 1961): p.41-56.
- Tollefson, John O. and Joseph A. Pichler. "A Comment on Right-to-Work Laws: A Suggested Economic Rationale." Journal of Law and Economics vol. 17, no. 1 (April 1974): p.193-211.
- U.S. Department of Commerce, Bureau of the Census. Statistical Abstract of the United States, 1981. Washington, D.C.: U.S. Government Printing Office, 1981.

APPENDIX A

QUESTIONNAIRE FOR SURVEY OF NEW KANSAS ESTABLISHMENTS

QUESTIONNAIRE FOR
SURVEY OF NEW KANSAS ESTABLISHMENTS

Employer No. _____

Please complete this questionnaire for this new plant location.

1. What was the start-up date of this facility? _____
2. What are your principal product lines at this location? _____
3. In what county is this facility located? _____
4. What was the size of your facility's normal (average weekly) employment for 1981?

_____ total man-hours per week

_____ number of employees

If your plant is not yet in full operation, what do you expect to be its normal weekly employment (at full operation)?

_____ total man-hours per week

_____ number of employees

5. What is the value of your physical facility (please estimate)?
\$ _____ original cost plus any expansions or improvements
6. What was the dollar value of your facility's output in 1981 (either in sales, or in intra-company transfers, or both)(please estimate)?
\$ _____

7.a. Please indicate the extent to which each of the following factors was positive or negative in your firm's decision to locate this facility in the STATE OF KANSAS.

1	2	3	4	5
Extremely Negative Factor	Negative Factor	Not a Factor	Positive Factor	Extremely Positive Factor

PLEASE CIRCLE THE MOST APPROPRIATE RESPONSE.

- A. Personal opinions about Kansas 1 2 3 4 5
- B. The geographic location of the state 1 2 3 4 5
- C. Kansas' climate 1 2 3 4 5
- D. Presence of suppliers in or nearby Kansas 1 2 3 4 5
- E. Presence of markets in or nearby Kansas for your products 1 2 3 4 5
- F. Overall transportation conditions (such as rates, reliability of carriers, schedules) 1 2 3 4 5
- G. The cost and availability of energy in Kansas 1 2 3 4 5
- H. The cost and availability of water in Kansas 1 2 3 4 5
- I. State tax levels affecting business. Specific comment? _____ 1 2 3 4 5
- J. State business climate. Specific comment? _____ 1 2 3 4 5
- K. The nature of operational regulations in Kansas (such as pollution control, utility regulation) 1 2 3 4 5
- L. The nature of workmen's compensation and unemployment insurance laws in Kansas 1 2 3 4 5
- M. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work) 1 2 3 4 5
- N. Availability of workers with appropriate skills 1 2 3 4 5
- O. Kansas "right-to-work" laws 1 2 3 4 5
- P. Other (please specify) _____ 1 2 3 4 5

7.b. Please indicate the extent to which each of the following factors was positive or negative in your firm's decision to locate a facility in this particular COMMUNITY within Kansas. (please circle the most appropriate responses).

	1	2	3	4	5
	Extremely Negative Factor	Negative Factor	Not a Factor	Positive Factor	Extremely Positive Factor
A. Personal opinions about this community				1	2 3 4 5
B. Overall quality of local community amenities (such as schools, parks, and recreation)				1	2 3 4 5
C. Presence of suppliers in or near the community				1	2 3 4 5
D. Presence of markets for your products near the community				1	2 3 4 5
E. Overall quality of local public facilities (such as roads, railroads, water suppliers)				1	2 3 4 5
F. Cost of building a new plant in the community				1	2 3 4 5
G. Tax considerations for business				1	2 3 4 5
H. Availability of private sector financing				1	2 3 4 5
I. Availability of public sector financing mechanisms (such as industrial revenue bonds)				1	2 3 4 5
J. Local business climate				1	2 3 4 5
K. Local population density				1	2 3 4 5
L. Availability of unemployed workers in the local labor force				1	2 3 4 5
M. Size of the local labor force				1	2 3 4 5
N. Availability of workers with appropriate skills				1	2 3 4 5
O. Local wage levels				1	2 3 4 5
P. General characteristics of the local labor force (such as turnover rates, absenteeism, attitudes)				1	2 3 4 5
Q. Existence of suitable executive educational opportunities in the area				1	2 3 4 5
R. Existence of vocational training facilities in the area				1	2 3 4 5
S. Other (please specify) _____				1	2 3 4 5

8.a. Listed below are general categories of factors that are sometimes cited as reasons for locating plants in particular STATES. Please rank the three (3) factors that were most important in your firm's decision to locate in KANSAS. Rank them with the most important first.

_____ Personal opinions about Kansas	_____ State tax levels
_____ Transportation conditions	_____ Location in relation suppliers and markets
_____ State "right-to-work" laws	_____ Specific tax and other benefits
_____ Labor force availability	_____ State business climate (such as state laws affecting business, regulator's attitudes)
_____ Labor force skills	_____ Cost and availability of utilities
_____ Labor force characteristics (attitudes, turnover)	_____ Other (please specify in 8c)

8.b. Listed below are general categories of factors that are sometimes cited as reasons for locating plants in particular COMMUNITIES. Please rank the three (3) factors that were most important in your plant's COMMUNITY location decision. Rank them with the most important first.

_____ Personal opinions about the community	_____ Local labor force skills
_____ Community amenities	_____ Local labor force characteristics (attitudes turnover)
_____ Community public facilities	_____ Specific tax and other benefits.
_____ Location in relation to suppliers and markets	_____ Training and educational facilities
_____ Local wage levels	_____ Local business climate
_____ Local labor force availability	_____ Other (please specify in 8

8.c. If there were other factors not listed above, either positive or negative, that were important in the decision as to where to locate your plant, please explain.

APPENDIX B

QUESTIONNAIRE FOR SURVEY OF EXPANDED KANSAS ESTABLISHMENTS

Employer No. _____

QUESTIONNAIRE FOR
SURVEY OF EXPANDED KANSAS ESTABLISHMENTS

In completing this survey, please consider your plant's most recent expansion.

1. On what date was the expansion of this facility operational? _____

2. What are your principal product lines at this location? _____

3. In what county is this facility located? _____

4. What was the size of your facility's average weekly employment prior to expansion?

_____ total man-hours per week

_____ number of employees

5. What is the value of your expansion (please estimate)?

\$ _____ original cost

6. What was the dollar value of your plant's annual output prior to expansion (either in sales, in intracompany transfers or both) (if necessary please estimate)?

\$ _____

What was the dollar value of your plant's annual output following the expansion (if necessary, please estimate)?

\$ _____

7.a. How positive or negative was each of the following STATE-RELATED factors in your firm's decision to expand this existing facility, rather than to build another facility in some other location?

1	2	3	4	5
Extremely Negative Factor	Negative Factor	Not a Factor	Positive Factor	Extremely Positive Factor

PLEASE CIRCLE THE MOST APPROPRIATE RESPONSE.

- | | | | | | |
|---|---|---|---|---|---|
| A. Personal opinions about Kansas | 1 | 2 | 3 | 4 | 5 |
| B. The geographic location of the State | 1 | 2 | 3 | 4 | 5 |
| C. Kansas' climate | 1 | 2 | 3 | 4 | 5 |
| D. Presence of suppliers in or nearby Kansas | 1 | 2 | 3 | 4 | 5 |
| E. Presence of markets in or nearby Kansas for your products | 1 | 2 | 3 | 4 | 5 |
| F. Overall transportation conditions at current location (such as rates, reliability of carriers) | 1 | 2 | 3 | 4 | 5 |
| G. The cost of reproducing the expansion at a new location | 1 | 2 | 3 | 4 | 5 |
| H. The cost and availability of energy in Kansas | 1 | 2 | 3 | 4 | 5 |
| I. The cost and availability of water in Kansas | 1 | 2 | 3 | 4 | 5 |
| J. State tax levels affecting business
Specific comment? _____ | 1 | 2 | 3 | 4 | 5 |
| K. State business climate
Specific comment? _____ | 1 | 2 | 3 | 4 | 5 |
| L. The nature of operational regulations in Kansas (such as pollution control, utility regulation) | 1 | 2 | 3 | 4 | 5 |
| M. The nature of workmen's compensation and unemployment insurance laws in Kansas | 1 | 2 | 3 | 4 | 5 |
| N. General characteristics of the state labor force (such as turnover rates, absenteeism, attitudes towards work) | 1 | 2 | 3 | 4 | 5 |
| O. Availability of workers with appropriate skills in Kansas | 1 | 2 | 3 | 4 | 5 |
| P. Kansas "right-to-work" laws | 1 | 2 | 3 | 4 | 5 |
| Q. Difficulty of hiring and training employees elsewhere | 1 | 2 | 3 | 4 | 5 |
| R. Other (please specify) _____ | 1 | 2 | 3 | 4 | 5 |

7.b. How positive or negative was each of the following COMMUNITY-RELATED factors in your firm's decision to expand this existing facility, rather than to build another facility in some other location? (Please circle the most appropriate responses).

	1	2	3	4	5
	Extremely Negative Factor	Negative Factor	Not a Factor	Positive Factor	Extremely Positive Factor
A. Personal opinions about this community				1	2 3 4 5
B. Overall quality of local community amenities (such as schools, parks and recreation)				1	2 3 4 5
C. Presence of suppliers in or near the community				1	2 3 4 5
D. Presence of markets for your products near the community				1	2 3 4 5
E. Overall quality of local public facilities (such as roads, railroads, water suppliers)				1	2 3 4 5
F. Cost of expanding your plant in this community				1	2 3 4 5
G. Tax considerations for business				1	2 3 4 5
H. Availability of private sector financing				1	2 3 4 5
I. Availability of public sector financing mechanisms (such as industrial revenue bonds)				1	2 3 4 5
J. Local business climate				1	2 3 4 5
K. Local population density				1	2 3 4 5
L. Availability of unemployed workers in the local labor force				1	2 3 4 5
M. Size of the local labor force				1	2 3 4 5
N. Availability of workers with appropriate skills				1	2 3 4 5
O. Local wage levels				1	2 3 4 5
P. General characteristics of the local labor force (such as turnover rates, absenteeism, attitudes)				1	2 3 4 5
Q. Existence of suitable executive educational opportunities in the area				1	2 3 4 5
R. Existence of vocational training facilities in the area				1	2 3 4 5
S. Other (please specify) _____				1	2 3 4 5

8.a. Listed below are general categories of factors that are sometimes cited as reasons for expanding plants in particular STATES. Please rank the three (3) factors that were most important in your firm's decision to expand in KANSAS. Rank them with the most important first.

- | | |
|---|---|
| _____ Personal opinions about Kansas | _____ Location in relation to suppliers and markets |
| _____ Transportation conditions | _____ Specific tax and other benefits |
| _____ State "right-to-work" laws | _____ State business climate (such as state laws affecting business, regulators' attitudes) |
| _____ Labor force availability | _____ Cost and availability of utilities |
| _____ Labor force skills | _____ Cost and/or difficulty of moving |
| _____ Labor force characteristics (attitudes, turnover) | _____ Other (please specify in 8c) |
| _____ State tax levels | |

8.b. Listed below are general categories of factors that are sometimes cited as reasons for expanding plants in particular COMMUNITIES. Please rank the three (3) factors that were most important in your firm's expansion decision. Rank them with the most important first.

- | | |
|---|---|
| _____ Personal opinions about the community | _____ Local labor force skills |
| _____ Community amenities | _____ Local labor force characteristics (attitudes, turnover) |
| _____ Community public facilities | _____ Specific tax and other benefits |
| _____ Location in relation to suppliers and markets | _____ Training and educational facilities |
| _____ Local wage levels | _____ Local business climate |
| _____ Local labor force availability | _____ Other (please specify in 8c) |

8.c. If there were other factors not listed above, either positive or negative, that were important in your company's decision to expand its plant, please explain.

APPENDIX C

SURVEY RESPONSES OF NEW FIRMS IN CERTAIN INDUSTRIES

- Printing and Publishing
- Food and Kindred Products
- Fabricated Metal Products
- Machinery, Except Electrical

The number of new firms responding in each of the other industry classifications was very small. Responses of these firms are available, upon request, from IEBR.

Table 1C

NEW FIRMS' RATINGS[†] OF FACTORS IN DECISION TO LOCATE IN KANSAS
PRINTING AND PUBLISHING

n=25

Factor	Mean \bar{x}	t $\bar{x}-3$	% of respondents finding positive
A. Personal opinions about Kansas	3.727	4.13*	50.0
B. The geographic location of the state	3.364	2.35*	22.7
C. Kansas' climate	3.091	0.49	18.2
D. Presence of suppliers in or nearby Kansas	3.500	2.92*	50.0
E. Presence of markets in or nearby Kansas for your products	4.000	6.80*	77.3
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	3.273	2.33*	31.8
G. The cost and availability of energy in Kansas	3.045	0.29	22.7
H. The cost and availability of water in Kansas	3.227	2.00	18.2
I. State tax levels affecting business	3.190	1.07	18.2
J. State business climate	3.682	4.11*	50.0
K. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.136	1.36	18.2
L. The nature of workmen's compensation and unemployment insurance laws in Kansas	3.048	0.33	23.8
M. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	3.409	2.86*	40.0
N. Availability of workers with appropriate skills	3.364	2.60*	36.4
O. Kansas "right-to-work" laws	3.364	1.90	31.8

[†]Firms were asked to indicate the extent to which each factor was positive or negative in its decision to locate in Kansas, on a scale ranging from 1 (extremely negative) to 5 (extremely positive). The response "3" indicated that the factor did not play a role in the location decision.

*Statistically significant at .05 level.

Table 2C

FACTORS RANKED AMONG THE THREE MOST IMPORTANT
IN NEW FIRMS' DECISIONS TO LOCATE IN KANSAS
PRINTING AND PUBLISHING

n=25

<u>Factor</u>	<u>% of Respondents Ranking Factor</u>
Personal Opinion of Kansas	40.0%
Transportation Conditions	4.0%
Right-to-Work Law	19.0%
Labor Force, Availability	12.0%
Labor Force, Skills	19.0%
Labor Force, Other Characteristics	4.0%
State Tax Levels	8.0%
State's Location	40.0%
Specific Tax and Other Benefits	8.0%
Business Climate	20.0%
State Utility Costs	4.0%

Table 3C
NEW FIRMS' RATINGS† OF FACTORS IN DECISION
TO LOCATE IN KANSAS
FOOD AND KINDRED PRODUCTS

Factor	n=11	Mean \bar{x}	t $\bar{x}-3$	% of respondents finding positive
A. Personal opinions about Kansas		3.800	3.21*	60.0
B. The geographic location of the state		4.200	6.00*	90.0
C. Kansas' climate		3.000	0.00	10.0
D. Presence of suppliers in or nearby Kansas		4.200	6.00*	90.0
E. Presence of markets in or nearby Kansas for your products		4.000	3.88*	70.0
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)		3.700	3.29*	60.0
G. The cost and availability of energy in Kansas		3.200	0.61	50.0
H. The cost and availability of water in Kansas		3.400	2.45*	40.0
I. State tax levels affecting business		3.778	3.50*	40.0
J. State business climate		3.778	3.50*	50.0
K. The nature of operational regulations in Kansas (such as pollution control, utility regulation)		3.200	1.50	20.0
L. The nature of workmen's compensation and unemployment insurance laws in Kansas		3.200	0.69	30.0
M. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)		3.600	2.25	60.0
N. Availability of workers with appropriate skills		3.400	1.91	50.0
O. Kansas "right-to-work" laws		3.700	2.33*	40.0

† Firms were asked to indicate the extent to which each factor was positive or negative in its decision to locate in Kansas, on a scale ranging from 1) extremely negative to 5) extremely positive. The response "3" indicated that the factor did not play a role in the location decision.

* Statistically significant at .05 level.

Table 4C

FACTORS RANKED AMONG THE THREE MOST IMPORTANT IN
NEW FIRMS' DECISIONS TO LOCATE IN KANSAS
FOOD AND KINDRED PRODUCTS

Factor	n=11	% of Respondents Ranking Factor
Personal Opinion of Kansas		36.4%
Transportation Conditions		54.5%
Right-to-Work Law		27.3%
Labor Force, Availability		27.3%
Labor Force, Skills		0.0%
Labor Force, Other Characteristics		9.1%
State Tax Levels		9.1%
State's Location		63.6%
Specific Tax and Other Benefits		9.1%
Business Climate		18.2%
State Utility Costs		0.0%

Table 5C

NEW FIRMS' RATINGS[†] OF FACTORS IN DECISION TO LOCATE IN KANSASFABRICATED METALS PRODUCTS

Factor	n=24		% of respondents finding positive
	Mean \bar{x}	t $\bar{x}-3$	
A. Personal opinions about Kansas	3.792	6.60*	70.8
B. The geographic location of the state	3.875	5.37*	70.8
C. Kansas' climate	3.292	1.91	70.8
D. Presence of suppliers in or nearby Kansas	3.208	1.31	37.5
E. Presence of markets in or nearby Kansas for your products	4.000	5.88*	83.3
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	3.500	2.63*	50.0
G. The cost and availability of energy in Kansas	3.458	3.12*	41.7
H. The cost and availability of water in Kansas	3.208	2.45*	20.8
I. State tax levels affecting business	3.125	0.77	29.2
J. State business climate	3.333	2.15*	41.7
K. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.167	1.28	16.7
L. The nature of workmen's compensation and unemployment insurance laws in Kansas	3.250	1.45	37.5
M. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	3.625	4.31*	58.3
N. Availability of workers with appropriate skills	3.458	3.12*	50.0
O. Kansas "right-to-work" laws	4.042	6.32*	70.8

† Firms were asked to indicate, on a 5-point scale, the extent to which each factor was a positive or negative consideration in their decision to expand in Kansas rather than to build another facility in some other location. The scale ranged from 1 (extremely negative) to 5 (extremely positive). The response "3" indicated that the factor did not play a role in the location decision.

* Statistically significant at .05 level

Table 6C

FACTORS RANKED AMONG THE THREE MOST IMPORTANT
IN NEW FIRMS' DECISIONS TO LOCATE IN KANSAS
FABRICATED METALS PRODUCTS

n=24

Factor	% of Respondents Ranking Factor
Personal Opinion of Kansas	45.8%
Transportation Conditions	16.7%
Right-to-Work Law	50.0%
Labor Force, Availability	37.5%
Labor Force, Skills	16.7%
Labor Force, Other Characteristics	16.7%
State Tax Levels	4.2%
State's Location	70.8%
Specific Tax and Other Benefits	0.0%
Business Climate	12.5%
State Utility Costs	4.2%

NEW FIRMS' RATINGS[†] OF FACTORS IN DECISION TO LOCATE IN KANSAS

MACHINERY, EXCEPT ELECTRICAL

n=37

Factor	Mean \bar{x}	t $\bar{x}-3$	% of Respondents
			finding positive
A. Personal opinions about Kansas	3.886	5.83*	68.6
B. The geographic location of the state	3.857	5.99*	71.4
C. Kansas' climate	3.143	1.15	25.7
D. Presence of suppliers in or nearby Kansas	3.343	2.24*	48.6
E. Presence of markets in or nearby Kansas for your products	3.886	4.98*	71.4
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	3.294	2.53*	38.2
G. The cost and availability of energy in Kansas	3.118	1.00	26.8
H. The cost and availability of water in Kansas	3.118	1.28	17.6
I. State tax levels affecting business	2.813	-1.36	15.6
J. State business climate	3.273	2.05*	36.4
K. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.029	0.37	8.8
L. The nature of workmen's compensation and unemployment insurance laws in Kansas	3.000	0.00	17.6
M. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	3.441	2.88*	64.7
N. Availability of workers with appropriate skills	3.514	3.57*	60.0
O. Kansas "right-to-work" laws	3.800	4.91*	57.1

† Firms were asked to indicate, on a 5-point scale, the extent to which each factor was a positive or negative consideration in their decision to expand in Kansas rather than to build another facility in some other location. The scale ranged from 1 (extremely negative) to 5 (extremely positive). The response "3" indicated that the factor did not play a role in the location decision.

* Statistically significant at .05 level.

Table 8C

FACTORS RANKED AMONG THE THREE MOST IMPORTANT
IN NEW FIRMS' DECISIONS TO LOCATE IN KANSAS
MACHINERY, EXCEPT ELECTRICAL

n=37

<u>Characteristic</u>	<u>% of Respondents Ranking Characteristics</u>
Personal Opinion of Kansas	37.8%
Transportation Conditions	16.2%
Right-to-Work Law	32.4%
Labor Force, Availability	29.7%
Labor Force, Skills	27.0%
Labor Force, Other Characteristics	13.5%
State Tax Levels	0.0%
State's Location	62.2%
Specific Tax and Other Benefits	5.4%
Business Climate	16.2%
State Utility Costs	8.1%

Table 3C

RESPONSES OF NEW FIRMSAPPAREL AND OTHER FINISHED GOODS MADE FROM FABRICS

Question 7A	n=5	Mean \bar{x}	t $\frac{t}{\bar{x}-3}$	% finding positive
A. Personal opinions about Kansas		3.200	0.34	60.0
B. The geographic location of the state		3.800	2.14	40.0
C. Kansas' climate		3.000	0.00	0.0
D. Presence of suppliers in or nearby Kansas		2.600	-0.78	20.0
E. Presence of markets in or nearby Kansas for your products		2.600	-0.78	20.0
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)		3.000	0.00	40.0
G. The cost and availability of energy in Kansas		2.600	-1.00	0.0
H. The cost and availability of water in Kansas		2.600	-1.00	0.0
I. State tax levels affecting business		2.600	-1.00	0.0
J. State business climate		3.200	1.00	20.0
K. The nature of operational regulations in Kansas (such as pollution control, utility regulation)		3.000	0.00	0.0
L. The nature of workmen's compensation and unemployment insurance laws in Kansas		3.000	0.00	0.0
M. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)		3.000	0.00	0.0
N. Availability of workers with appropriate skills		2.600	-0.78	20.0
O. Kansas "right-to-work" laws		3.600	1.50	40.0

Table 4C

NEW FIRMSAPPAREL AND OTHER FINISHED GOODS MADE FROM FABRICPERCENTAGE OF RESPONDENTS RANKING

n=11

Personal Opinion of Kansas	80.0%
Transportation Conditions	0.0%
Right-to-Work Law	20.0%
Labor Force, Availability	60.0%
Labor Force, Skills	0.0%
Labor Force, Other Characteristics	20.0%
State Tax Levels	0.0%
State's Location	40.0%
Specific Tax and Other Benefits	0.0%
Business Climate	0.0%
State Utility Costs	0.0%

Table 5C

RESPONSES OF NEW FIRMS
LUMBER AND WOOD PRODUCTS, EXCEPT FURNITURE

n=6

Question 7A	Mean \bar{x}	t $\bar{x}-3$	% finding positive
A. Personal opinions about Kansas	3.833	2.71	66.7
B. The geographic location of the state	3.833	2.71	66.7
C. Kansas' climate	3.333	1.00	50.0
D. Presence of suppliers in or nearby Kansas	3.500	1.46	66.7
E. Presence of markets in or nearby Kansas for your products	4.000	3.88	83.3
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	3.833	2.71	66.7
G. The cost and availability of energy in Kansas	3.333	0.79	33.3
H. The cost and availability of water in Kansas	3.167	0.54	33.3
I. State tax levels affecting business	3.167	1.00	16.7
J. State business climate	3.500	1.46	33.3
K. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.000	0.00	16.7
L. The nature of workmen's compensation and unemployment insurance laws in Kansas	3.333	0.79	33.3
M. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	3.833	2.71	66.7
N. Availability of workers with appropriate skills	3.667	2.00	50.0
O. Kansas "right-to-work" laws	3.667	2.00	50.0

Table 6C

NEW FIRMS
LUMBER AND WOOD PRODUCTS, EXCEPT FURNITURE
PERCENTAGE OF FIRMS RANKING
n=6

Personal Opinion of Kansas	33.3%
Transportation Conditions	16.7%
Right-to-Work Law	33.3%
Labor Force, Availability	50.0%
Labor Force, Skills	16.7%
Labor Force, Other Characteristics	33.3%
State Tax Levels	0.0%
State's Location	66.6%
Specific Tax and Other Benefits	0.0%
Business Climate	0.0%
State Utility Costs	0.0%

Table 7C

RESPONSES OF NEW FIRMS
FURNITURE AND FIXTURES

n=5

Question 7A	Mean \bar{x}	t $\frac{t}{\bar{x}-3}$	% finding positive
A. Personal opinions about Kansas	3.600	2.45	60.0
B. The geographic location of the state	4.000	3.16	80.0
C. Kansas' climate	3.200	0.53	40.0
D. Presence of suppliers in or nearby Kansas	3.800	4.00	80.0
E. Presence of markets in or nearby Kansas for your products	3.600	2.45	60.0
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	4.200	6.00	100.0
G. The cost and availability of energy in Kansas	3.000	0.00	0.0
H. The cost and availability of water in Kansas	2.800	-1.00	0.0
I. State tax levels affecting business	3.400	1.63	40.0
J. State business climate	4.000	3.16	80.0
K. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.000	0.00	20.0
L. The nature of workmen's compensation and unemployment insurance laws in Kansas	3.000	0.00	0.0
M. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	3.400	1.63	40.0
N. Availability of workers with appropriate skills	3.600	2.45	60.0
O. Kansas "right-to-work" laws	3.800	1.53	40.0

Table 8C

NEW FIRMS
FURNITURE AND FIXTURES
PERCENTAGE OF FIRMS RANKING
n=5

Personal Opinion of Kansas	20.0%
Transportation Conditions	20.0%
Right-to-Work Law	40.0%
Labor Force, Availability	40.0%
Labor Force, Skills	20.0%
Labor Force, Other Characteristics	20.0%
State Tax Levels	0.0%
State's Location	80.0%
Specific Tax and Other Benefits	40.0%
Business Climate	40.0%
State Utility Costs	0.0%

Table 9C
RESPONSES OF NEW FIRMS
PAPER AND ALLIED PRODUCTS
n=3

Question 7A	Mean \bar{x}	t $\bar{x}-3$	% finding positive
A. Personal opinions about Kansas	2.667	-1.00	0.0
B. The geographic location of the state	3.333	1.00	33.3
C. Kansas' climate	3.000	0.00	0.0
D. Presence of suppliers in or nearby Kansas	2.667	-1.00	0.0
E. Presence of markets in or nearby Kansas for your products	4.000	∞	100.0
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	3.667	2.00	66.7
G. The cost and availability of energy in Kansas	3.000	0.00	0.0
H. The cost and availability of water in Kansas	3.000	0.00	0.0
I. State tax levels affecting business	3.000	0.00	33.3
J. State business climate	3.333	1.00	33.3
K. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	2.667	-1.00	0.0
L. The nature of workmen's compensation and unemployment insurance laws in Kansas	2.333	-1.00	0.0
M. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	3.000	0.00	33.3
N. Availability of workers with appropriate skills	4.000	∞	100.0
O. Kansas "right-to-work" laws	4.333	4.00	100.0

Table 10C

NEW FIRMSPAPER AND ALLIED PRODUCTSPERCENTAGE OF FIRMS RANKING

n=3

Personal Opinion of Kansas	0.0%
Transportation Conditions	66.7%
Right-to-Work Law	66.7%
Labor Force, Availability	66.7%
Labor Force, Skills	0.0%
Labor Force, Other Characteristics	0.0%
State Tax Levels	0.0%
State's Location	66.7%
Specific Tax and Other Benefits	33.3%
Business Climate	0.0%
State Utility Costs	0.0%

Table 13C

RESPONSES OF NEW FIRMS				
CHEMICALS AND ALLIED PRODUCTS				
Question 7A	n=4	Mean \bar{x}	t $\bar{x}-3$	% finding positive
A. Personal opinions about Kansas		3.750	1.57	50.0
B. The geographic location of the state		4.250	1.00	100.0
C. Kansas' climate		3.000	0.00	25.0
D. Presence of suppliers in or nearby Kansas		3.750	1.57	50.0
E. Presence of markets in or nearby Kansas for your products		3.250	0.40	25.0
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)		3.750	3.00	75.0
G. The cost and availability of energy in Kansas		3.000	0.00	50.0
H. The cost and availability of water in Kansas		3.750	3.00	75.0
I. State tax levels affecting business		3.250	0.40	25.0
J. State business climate		3.500	1.00	25.0
K. The nature of operational regulations in Kansas (such as pollution control, utility regulation)		3.500	1.00	25.0
L. The nature of workmen's compensation and unemployment insurance laws in Kansas		3.250	1.00	25.0
M. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)		3.750	1.57	50.0
N. Availability of workers with appropriate skills		2.750	-1.00	0.0
O. Kansas "right-to-work" laws		3.500	1.00	25.0

Table 14C

NEW FIRMS
CHEMICALS AND ALLIED PRODUCTS
PERCENTAGE OF FIRMS RANKING
 n=4

Personal Opinion of Kansas	75.0%
Transportation Conditions	0.0%
Right-to-Work Law	0.0%
Labor Force, Availability	0.0%
Labor Force, Skills	0.0%
Labor Force, Other Characteristics	25.0%
State Tax Levels	0.0%
State's Location	75.0%
Specific Tax and Other Benefits	25.0%
Business Climate	50.0%
State Utility Costs	25.0%

Table 15C
RESPONSES OF NEW FIRMS
PETROLEUM AND COAL PRODUCTS
n=3

Question 7A	Mean \bar{x}	t $\bar{x}-3$	% finding positive
A. Personal opinions about Kansas	3.667	2.00	66.7
B. The geographic location of the state	4.333	4.00	100.0
C. Kansas' climate	3.000	0.00	0.0
D. Presence of suppliers in or nearby Kansas	3.667	2.00	66.7
E. Presence of markets in or nearby Kansas for your products	4.333	2.00	66.7
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	4.333	4.00	100.0
G. The cost and availability of energy in Kansas	3.000	0.00	33.3
H. The cost and availability of water in Kansas	3.333	1.00	33.3
I. State tax levels affecting business	3.000	0.00	0.0
J. State business climate	3.667	2.00	66.7
K. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.333	1.00	33.3
L. The nature of workmen's compensation and unemployment insurance laws in Kansas	3.333	1.00	33.3
M. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	4.000	∞	100.0
N. Availability of workers with appropriate skills	4.000	1.73	66.7
O. Kansas "right-to-work" laws	5.000	∞	100.0

Table 16C

NEW FIRMS
PETROLEUM AND COAL PRODUCTS
PERCENTAGE OF FIRMS RANKING
 n=3

Personal Opinion of Kansas	0.0%
Transportation Conditions	66.7%
Right-to-Work Law	100.0%
Labor Force, Availability	0.0%
Labor Force, Skills	33.3%
Labor Force, Other Characteristics	0.0%
State Tax Levels	0.0%
State's Location	66.7%
Specific Tax and Other Benefits	0.0%
Business Climate	33.3%
State Utility Costs	0.0%

Table 17C
RESPONSES OF NEW FIRMS
RUBBER AND PLASTICS PRODUCTS, N.E.C.

n=9

Question 7A	Mean \bar{x}	$\frac{t}{\bar{x}-3}$	% finding positive
A. Personal opinions about Kansas	3.500	1.87	33.3
B. The geographic location of the state	3.875	3.85	66.7
C. Kansas' climate	3.125	0.42	33.3
D. Presence of suppliers in or nearby Kansas	3.125	0.42	33.3
E. Presence of markets in or nearby Kansas for your products	3.875	2.97	77.7
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	3.500	1.53	44.4
G. The cost and availability of energy in Kansas	3.250	0.80	22.2
H. The cost and availability of water in Kansas	3.125	1.00	11.1
I. State tax levels affecting business	3.000	0.00	0.0
J. State business climate	3.286	1.55	22.2
K. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.125	1.00	11.1
L. The nature of workmen's compensation and unemployment insurance laws in Kansas	2.625	-1.43	0.0
M. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	3.500	1.53	44.4
N. Availability of workers with appropriate skills	2.875	-0.31	33.3
O. Kansas "right-to-work" laws	3.375	1.43	22.2

Table 18C

NEW FIRMS
RUBBER AND PLASTICS PRODUCTS, N.E.C
PERCENTAGE OF FIRMS RANKING
n=9

Personal Opinion of Kansas	33.3%
Transportation Conditions	22.2%
Right-to-Work Law	11.1%
Labor Force, Availability	33.3%
Labor Force, Skills	0.0%
Labor Force, Other Characteristics	33.3%
State Tax Levels	0.0%
State's Location	66.7%
Specific Tax and Other Benefits	0.0%
Business Climate	11.1%
State Utility Costs	33.3%

Table 19C
RESPONSES OF NEW FIRMS
LEATHER AND LEATHER PRODUCTS

n=2

Question 7A	Mean \bar{x}	t $\bar{x}-3$	% finding positive
A. Personal opinions about Kansas	4.000	4.00	50.0
B. The geographic location of the state	4.000	∞	100.0
C. Kansas' climate	3.500	1.00	50.0
D. Presence of suppliers in or nearby Kansas	3.500	0.33	50.0
E. Presence of markets in or nearby Kansas for your products	4.500	3.00	100.0
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	4.000	∞	100.0
G. The cost and availability of energy in Kansas	3.500	1.00	50.0
H. The cost and availability of water in Kansas	3.500	1.00	50.0
I. State tax levels affecting business	3.500	1.00	50.0
J. State business climate	3.500	1.00	50.0
K. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.000	0.00	0.0
L. The nature of workmen's compensation and unemployment insurance laws in Kansas	3.000	∞	0.0
M. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	3.000	0.00	50.0
N. Availability of workers with appropriate skills	1.500	-3.00	0.0
O. Kansas "right-to-work" laws	4.000	1.00	50.0

Table 20C
NEW FIRMS
LEATHER AND LEATHER PRODUCTS
PERCENTAGE OF RESPONDENTS RANKING
n=2

Personal Opinion of Kansas	100.0%
Transportation Conditions	50.0%
Right-to-Work Law	50.0%
Labor Force, Availability	0.0%
Labor Force, Skills	0.0%
Labor Force, Other Characteristics	0.0%
State Tax Levels	0.0%
State's Location	50.0%
Specific Tax and Other Benefits	0.0%
Business Climate	0.0%
State Utility Costs	50.0%

Table 21C
RESPONSES OF NEW FIRMS
STONE, CLAY AND GLASS PRODUCTS
n=7

Question 7A	Mean \bar{x}	t $\bar{x}-3$	% finding positive
A. Personal opinions about Kansas	4.167	3.80	83.3
B. The geographic location of the state	4.167	3.80	83.3
C. Kansas' climate	3.333	1.00	16.7
D. Presence of suppliers in or nearby Kansas	3.667	2.00	50.0
E. Presence of markets in or nearby Kansas for your products	4.000	2.74	66.7
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	2.833	-0.35	33.3
G. The cost and availability of energy in Kansas	3.167	0.54	33.3
H. The cost and availability of water in Kansas	3.667	1.58	33.3
I. State tax levels affecting business	3.167	1.00	16.7
J. State business climate	3.500	2.23	50.0
K. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.333	1.58	33.3
L. The nature of workmen's compensation and unemployment insurance laws in Kansas	3.500	2.23	50.0
M. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	3.500	2.23	50.0
N. Availability of workers with appropriate skills	3.833	2.71	66.7
O. Kansas "right-to-work" laws	4.000	2.74	66.7

Table 22C

NEW FIRMS
STONE, CLAY AND GLASS PRODUCTS
PERCENTAGE OF RESPONDENTS RANKING
 n=7

Personal Opinion of Kansas	14.3%
Transportation Conditions	28.6%
Right-to-Work Law	28.6%
Labor Force, Availability	42.9%
Labor Force, Skills	0.0%
Labor Force, Other Characteristics	28.6%
State Tax Levels	0.0%
State's Location	42.9%
Specific Tax and Other Benefits	14.3%
Business Climate	14.3%
State Utility Costs	28.6%

Table 23C
RESPONSES OF NEW FIRMS
PRIMARY METAL INDUSTRIES

n=2

Question 7A	Mean \bar{x}	t $\bar{x}-3$	% finding positive
A. Personal opinions about Kansas	4.500	3.00	100.0
B. The geographic location of the state	4.500	3.00	100.0
C. Kansas' climate	3.000	0.00	0.0
D. Presence of suppliers in or nearby Kansas	3.000	†	0.0
E. Presence of markets in or nearby Kansas for your products	4.000	∞	100.0
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	4.000	∞	100.0
G. The cost and availability of energy in Kansas	3.000	0.00	50.0
H. The cost and availability of water in Kansas	3.000	0.00	50.0
I. State tax levels affecting business	2.500	-1.00	0.0
J. State business climate	4.000	∞	100.0
K. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.000	0.00	50.0
L. The nature of workmen's compensation and unemployment insurance laws in Kansas	2.500	-1.00	0.0
M. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	3.000	0.00	50.0
N. Availability of workers with appropriate skills	3.000	0.00	50.0
O. Kansas "right-to-work" laws	4.500	3.00	100.0

† t-statistic is zero divided by zero

Table 24C

NEW FIRMS
PRIMARY METAL INDUSTRIES
PERCENTAGE OF RESPONDENTS RANKING
 n=2

Personal Opinion of Kansas	50.0%
Transportation Conditions	0.0%
Right-to-Work Law	0.0%
Labor Force, Availability	50.0%
Labor Force, Skills	0.0%
Labor Force, Other Characteristics	50.0%
State Tax Levels	0.0%
State's Location	100.0%
Specific Tax and Other Benefits	0.0%
Business Climate	50.0%
State Utility Costs	0.0%

Table 29C

RESPONSES OF NEW FIRMS
ELECTRICAL EQUIPMENT AND SUPPLIES

n=8

Question 7A	Mean \bar{x}	t $\bar{x}-3$	% finding positive
A. Personal opinions about Kansas	4.125	3.81	75.0
B. The geographic location of the state	3.875	2.97	6.25
C. Kansas' climate	3.000	0.00	25.0
D. Presence of suppliers in or nearby Kansas	3.250	0.80	50.0
E. Presence of markets in or nearby Kansas for your products	3.125	0.28	37.5
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	3.500	2.65	50.00
G. The cost and availability of energy in Kansas	3.375	2.05	37.5
H. The cost and availability of water in Kansas	3.375	2.05	37.5
I. State tax levels affecting business	2.875	-0.48	12.5
J. State business climate	4.000	2.65	50.0
K. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.125	1.00	12.5
L. The nature of workmen's compensation and unemployment insurance laws in Kansas	3.500	1.87	37.5
M. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	4.250	1.00	87.5
N. Availability of workers with appropriate skills	3.750	2.40	75.0
O. Kansas "right-to-work" laws	4.000	3.06	62.5

Table 30C

NEW FIRMS
ELECTRICAL EQUIPMENT AND SUPPLIES
PERCENTAGE OF FIRMS RANKING
n=8

Personal Opinion of Kansas	12.5%
Transportation Conditions	37.5%
Right-to-Work Law	37.5%
Labor Force, Availability	12.5%
Labor Force, Skills	50.0%
Labor Force, Other Characteristics	25.0%
State Tax Levels	0.0%
State's Location	37.5%
Specific Tax and Other Benefits	12.5%
Business Climate	25.0%
State Utility Costs	0.0%

Table 31C
RESPONSES OF NEW FIRMS
TRANSPORTATION EQUIPMENT

n=9

Question 7A	Mean \bar{x}	t $\bar{x}-3$	% finding positive
A. Personal opinions about Kansas	3.875	2.97	62.5
B. The geographic location of the state	3.500	2.65	50.0
C. Kansas' climate	3.250	1.52	25.0
D. Presence of suppliers in or nearby Kansas	3.125	0.36	25.0
E. Presence of markets in or nearby Kansas for your products	3.125	0.28	37.5
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	3.125	1.00	12.5
G. The cost and availability of energy in Kansas	3.250	1.52	25.0
H. The cost and availability of water in Kansas	3.125	1.00	12.5
I. State tax levels affecting business	3.125	1.00	12.5
J. State business climate	3.000	0.00	12.5
K. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	2.875	-1.00	0.0
L. The nature of workmen's compensation and unemployment insurance laws in Kansas	2.875	-1.00	0.0
M. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	3.125	0.55	25.0
N. Availability of workers with appropriate skills	3.250	1.00	37.5
O. Kansas "right-to-work" laws	3.875	2.97	62.5

Table 32C

NEW FIRMS
TRANSPORTATION EQUIPMENT
PERCENTAGE OF FIRMS RANKING

n=9

Personal Opinion of Kansas	66.7%
Transportation Conditions	0.0%
Right-to-Work Law	33.3%
Labor Force, Availability	33.3%
Labor Force, Skills	22.2%
Labor Force, Other Characteristics	0.0%
State Tax Levels	0.0%
State's Location	55.5%
Specific Tax and Other Benefits	11.1%
Business Climate	0.0%
State Utility Costs	11.1%

Table 33C
RESPONSES OF NEW FIRMS
INSTRUMENTS AND RELATED PRODUCTS
n=4

Question 7A	Mean \bar{x}	t $\bar{x}-3$	% finding positive
A. Personal opinions about Kansas	3.750	1.57	50.0
B. The geographic location of the state	4.250	2.61	75.0
C. Kansas' climate	3.000	0.00	25.0
D. Presence of suppliers in or nearby Kansas	3.750	1.19	75.0
E. Presence of markets in or nearby Kansas for your products	3.500	1.73	50.0
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	3.000	0.00	50.0
G. The cost and availability of energy in Kansas	2.750	-0.40	25.0
H. The cost and availability of water in Kansas	3.250	1.00	25.0
I. State tax levels affecting business	4.000	1.73	50.0
J. State business climate	3.750	1.57	50.0
K. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	2.750	-0.40	25.0
L. The nature of workmen's compensation and unemployment insurance laws in Kansas	2.750	-0.40	25.0
M. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	3.250	0.33	50.0
N. Availability of workers with appropriate skills	3.000	0.00	50.0
O. Kansas "right-to-work" laws	4.000	1.73	50.0

Table 35C

RESPONSES OF NEW FIRMS
MISCELLANEOUS MANUFACTURING INDUSTRIES

n=4

Question 7A	Mean \bar{x}	t $\frac{t}{\bar{x}-3}$	% finding positive
A. Personal opinions about Kansas	4.000	∞	100.0
B. The geographic location of the state	4.000	1.00	50.0
C. Kansas' climate	3.000	0.00	0.0
D. Presence of suppliers in or nearby Kansas	2.500	-100.0	0.0
E. Presence of markets in or nearby Kansas for your products	3.500	1.00	50.0
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	4.000	∞	100.0
G. The cost and availability of energy in Kansas	3.500	1.00	50.0
H. The cost and availability of water in Kansas	3.500	1.00	50.0
I. State tax levels affecting business	3.000	†	0.0
J. State business climate	3.500	1.00	50.0
K. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.000	†	0.0
L. The nature of workmen's compensation and unemployment insurance laws in Kansas	3.500	1.00	50.0
M. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	3.500	1.00	50.0
N. Availability of workers with appropriate skills	3.000	0.00	50.0
O. Kansas "right-to-work" laws	3.000	†	0.0

† t-statistic is zero divided by zero

Table 36C

NEW FIRMS
MISCELLANEOUS MANUFACTURING INDUSTRIES
PERCENTAGE OF RESPONDENTS RANKING
 n=4

Personal Opinion of Kansas	50.0%
Transportation Conditions	0.0%
Right-to-Work Law	0.0%
Labor Force, Availability	25.0%
Labor Force, Skills	0.0%
Labor Force, Other Characteristics	25.0%
State Tax Levels	0.0%
State's Location	25.0%
Specific Tax and Other Benefits	0.0%
Business Climate	0.0%
State Utility Costs	0.0%

Table 6

TWO-DIGIT INDUSTRIES FOR WHICH
NO SURVEYS WERE RETURNED

New Establishments

Tobacco Manufacturers

Textile Mill Products

Expansions

Tobacco Manufacturers

Apparel and Other Finished
Goods Made from Textiles

Petroleum and Coal Products

Instruments and Related Products

APPENDIX D

SURVEY RESPONSES OF EXPANDED FIRMS IN CERTAIN INDUSTRIES

- Machinery, Except Electrical
- Rubber and Plastic Products
(not elsewhere included)

The number of expanded firms responding in each of the other industry classifications was very small. Responses of these firms are available, upon request, from IEBR.

Employer No. _____

SURVEY OF EXPANDED KANSAS ESTABLISHMENTS

In completing this survey, please consider your plant's most recent expansion.

1. On what date was the expansion of this facility operational? _____
2. What are your principal product lines at this location? _____
3. In what county is this facility located? _____
4. What was the size of your facility's average weekly employment prior to expansion?

_____ total man-hours per week

_____ number of employees

5. What is the value of your expansion (please estimate)?

\$ _____ original cost

6. What was the dollar value of your plant's annual output prior to expansion (either in sales, in intracompany transfers or both) (if necessary please estimate)?

\$ _____

What was the dollar value of your plant's annual output following the expansion (if necessary, please estimate)?

\$ _____

7.a. How positive or negative was each of the following STATE-RELATED factors in your firm's decision to expand this existing facility, rather than to build another facility in some other location?

1	2	3	4	5
Extremely Negative Factor	Negative Factor	Not a Factor	Positive Factor	Extremely Positive Factor

PLEASE CIRCLE THE MOST APPROPRIATE RESPONSE.

- | | | | | | |
|---|---|---|---|---|---|
| A. Personal opinions about Kansas | 1 | 2 | 3 | 4 | 5 |
| B. The geographic location of the State | 1 | 2 | 3 | 4 | 5 |
| C. Kansas' climate | 1 | 2 | 3 | 4 | 5 |
| D. Presence of suppliers in or nearby Kansas | 1 | 2 | 3 | 4 | 5 |
| E. Presence of markets in or nearby Kansas for your products | 1 | 2 | 3 | 4 | 5 |
| F. Overall transportation conditions at current location (such as rates, reliability of carriers) | 1 | 2 | 3 | 4 | 5 |
| G. The cost of reproducing the expansion at a new location | 1 | 2 | 3 | 4 | 5 |
| H. The cost and availability of energy in Kansas | 1 | 2 | 3 | 4 | 5 |
| I. The cost and availability of water in Kansas | 1 | 2 | 3 | 4 | 5 |
| J. State tax levels affecting business
Specific comment? _____ | 1 | 2 | 3 | 4 | 5 |
| K. State business climate
Specific comment? _____ | 1 | 2 | 3 | 4 | 5 |
| L. The nature of operational regulations in Kansas (such as pollution control, utility regulation) | 1 | 2 | 3 | 4 | 5 |
| M. The nature of workmen's compensation and unemployment insurance laws in Kansas | 1 | 2 | 3 | 4 | 5 |
| N. General characteristics of the state labor force (such as turnover rates, absenteeism, attitudes towards work) | 1 | 2 | 3 | 4 | 5 |
| O. Availability of workers with appropriate skills in Kansas | 1 | 2 | 3 | 4 | 5 |
| P. Kansas "right-to-work" laws | 1 | 2 | 3 | 4 | 5 |
| Q. Difficulty of hiring and training employees elsewhere | 1 | 2 | 3 | 4 | 5 |
| R. Other (please specify) _____ | 1 | 2 | 3 | 4 | 5 |

7.b. How positive or negative was each of the following COMMUNITY-RELATED factors in your firm's decision to expand this existing facility, rather than to build another facility in some other location? (Please circle the most appropriate responses).

	1	2	3	4	5
	Extremely Negative Factor	Negative Factor	Not a Factor	Positive Factor	Extremely Positive Factor
A. Personal opinions about this community	1	2	3	4	5
B. Overall quality of local community amenities (such as schools, parks and recreation)	1	2	3	4	5
C. Presence of suppliers in or near the community	1	2	3	4	5
D. Presence of markets for your products near the community	1	2	3	4	5
E. Overall quality of local public facilities (such as roads, railroads, water suppliers)	1	2	3	4	5
F. Cost of expanding your plant in this community	1	2	3	4	5
G. Tax considerations for business	1	2	3	4	5
H. Availability of private sector financing	1	2	3	4	5
I. Availability of public sector financing mechanisms (such as industrial revenue bonds)	1	2	3	4	5
J. Local business climate	1	2	3	4	5
K. Local population density	1	2	3	4	5
L. Availability of unemployed workers in the local labor force	1	2	3	4	5
M. Size of the local labor force	1	2	3	4	5
N. Availability of workers with appropriate skills	1	2	3	4	5
O. Local wage levels	1	2	3	4	5
P. General characteristics of the local labor force (such as turnover rates, absenteeism, attitudes)	1	2	3	4	5
Q. Existence of suitable executive educational opportunities in the area	1	2	3	4	5
R. Existence of vocational training facilities in the area	1	2	3	4	5
S. Other (please specify) _____	1	2	3	4	5

8.a. Listed below are general categories of factors that are sometimes cited as reasons for expanding plants in particular STATES. Please rank the three (3) factors that were most important in your firm's decision to expand in KANSAS. Rank them with the most important first.

_____ Personal opinions about Kansas	_____ Location in relation to suppliers and markets
_____ Transportation conditions	_____ Specific tax and other benefits
_____ State "right-to-work" laws	_____ State business climate (such as state laws affecting business, regulators' attitudes)
_____ Labor force availability	_____ Cost and availability of utilities
_____ Labor force skills	_____ Cost and/or difficulty of moving
_____ Labor force characteristics (attitudes, turnover)	_____ Other (please specify in 8c)
_____ State tax levels	

8.b. Listed below are general categories of factors that are sometimes cited as reasons for expanding plants in particular COMMUNITIES. Please rank the three (3) factors that were most important in your firm's expansion decision. Rank them with the most important first.

_____ Personal opinions about the community	_____ Local labor force skills
_____ Community amenities	_____ Local labor force characteristics (attitudes turnover)
_____ Community public facilities	_____ Specific tax and other benefits
_____ Location in relation to suppliers and markets	_____ Training and educational facilities
_____ Local wage levels	_____ Local business climate
_____ Local labor force availability	_____ Other (please specify in 8c)

8.c. If there were other factors not listed above, either positive or negative, that were important in your company's decision to expand its plant, please explain.

Table 1D

EXPANDED FIRMS' RATINGS[†] OF FACTORS IN DECISION TO EXPAND IN KANSASMACHINERY, EXCEPT ELECTRICAL

n=22

Factor	Mean \bar{x}	t $\bar{x}-3$	% of Respondents finding positive
A. Personal opinions about Kansas	3.667	4.12*	55.5
B. The geographic location of the state	3.842	4.81*	73.7
C. Kansas' climate	3.211	2.19*	21.1
D. Presence of suppliers in or nearby Kansas	3.211	1.17	31.6
E. Presence of markets in or nearby Kansas for your products	3.211	1.00	31.6
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	3.263	1.75	36.8
G. The cost of reproducing the expansion at a new location	3.632	3.61*	57.9
H. The cost and availability of energy in Kansas	3.333	2.92*	33.3
I. The cost and availability of water in Kansas	3.211	2.20*	21.1
J. State tax levels affecting business	2.944	-2.96*	22.2
K. State business climate	3.444	2.20*	44.4
L. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.263	1.57	31.6
M. The nature of workmen's compensation and unemployment insurance laws in Kansas	2.895	-0.70	15.8
N. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	3.579	3.02*	57.9
O. Availability of workers with appropriate skills	3.421	1.71	47.4
P. Kansas "right-to-work" laws	4.000	5.35*	68.4
Q. Difficulty of hiring and training employees elsewhere	3.105	0.56	21.1

[†] Firms were asked to indicate, on a 5-point scale, the extent to which each factor was a positive or negative consideration in their decision to expand in Kansas rather than to build another facility in some other location. The scale ranged from 1 (extremely negative) to 5 (extremely positive). The response "3" indicated that the factor did not play a role in the location decision.

* Statistically significant at .05 level

Table 2D

FACTORS RANKED AMONG THE THREE MOST IMPORTANT
IN EXPANDED FIRMS' DECISIONS TO EXPAND IN KANSAS

MACHINERY, EXCEPT ELECTRICAL

n=22

<u>Factor</u>	<u>% of Respondents Ranking Factor</u>
Personal Opinion of Kansas	31.8%
Transportation Conditions	18.2%
Right-to-Work Law	45.5%
Labor Force, Availability	27.3%
Labor Force, Skills	9.1%
Labor Force, Other Characteristics	31.8%
State Tax Levels	0.0%
State's Location	22.7%
Specific Tax and Other Benefits	4.5%
Business Climate	4.5%
State Utility Costs	9.1%
Cost of Moving Facilities	31.8%

Table 3D

EXPANDED FIRMS' RATINGS[†] OF FACTORS IN DECISION TO EXPAND IN KANSAS
RUBBER AND PLASTICS PRODUCTS

n=10

Factor	Mean \bar{x}	t $\bar{x}-3$	% of Respondents finding positive
A. Personal opinions about Kansas	3.333	2.00	33.3
B. The geographic location of the state	4.222	5.50*	88.9
C. Kansas' climate	3.111	1.00	11.1
D. Presence of suppliers in or nearby Kansas	2.889	-0.56	11.1
E. Presence of markets in or nearby Kansas for your products	3.889	3.41*	66.7
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	4.000	5.99*	88.9
G. The cost of reproducing the expansion at a new location	3.667	1.79	66.7
H. The cost and availability of energy in Kansas	3.333	0.82	44.4
I. The cost and availability of water in Kansas	3.556	2.30	44.4
J. State tax levels affecting business	2.889	-0.43	22.2
K. State business climate	3.000	0.00	22.2
L. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.111	1.00	11.1
M. The nature of workmen's compensation and unemployment insurance laws in Kansas	3.222	1.00	33.3
N. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	4.000	4.24*	77.8
O. Availability of workers with appropriate skills	3.444	1.51	44.4
P. Kansas "right-to-work" laws	3.667	2.83*	55.6
Q. Difficulty of hiring and training employees elsewhere	3.444	2.52*	44.4

[†] Firms were asked to indicate, on a 5-point scale, the extent to which each factor was a positive or negative consideration in their decision to expand in Kansas rather than to build another facility in some other location. The scale ranged from 1 (extremely negative) to 5 (extremely positive). The response "3" indicated that the factor did not play a role in the location decision.

* Statistically significant at .05 level

Table 4D

FACTORS RANKED AMONG THE THREE MOST IMPORTANT
IN EXPANDED FIRMS' DECISIONS TO EXPAND IN KANSAS

RUBBER AND PLASTICS PRODUCTS

n=10

<u>Factor</u>	<u>% of Respondents Ranking Factor</u>
Personal Opinion of Kansas	30.0%
Transportation Conditions	10.0%
Right-to-Work Law	20.0%
Labor Force, Availability	20.0%
Labor Force, Skills	10.0%
Labor Force, Other Characteristics	30.0%
State Tax Levels	0.0%
State's Location	40.0%
Specific Tax and Other Benefits	0.0%
Business Climate	0.0%
State Utility Costs	10.0%
Cost of Moving Facilities	60.0%

Table 1D

RESPONSES OF EXPANDED FIRMSFOOD AND KINDRED PRODUCTS

Question 7A	n=7	Mean \bar{x}	t $\frac{t}{\bar{x}-3}$	% finding positive
A. Personal opinions about Kansas		3.833	2.71	66.7
B. The geographic location of the state		4.667	5.01	83.3
C. Kansas' climate		3.500	1.17	50.0
D. Presence of suppliers in or nearby Kansas		4.333	4.00	83.3
E. Presence of markets in or nearby Kansas for your products		4.000	2.74	66.7
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)		3.667	1.35	50.0
G. The cost of reproducing the expansion at a new location		3.667	1.08	66.7
H. The cost and availability of energy in Kansas		4.000	2.74	66.7
I. The cost and availability of water in Kansas		3.833	1.75	66.7
J. State tax levels affecting business		3.833	1.58	33.3
K. State business climate		3.833	2.71	66.7
L. The nature of operational regulations in Kansas (such as pollution control, utility regulation)		3.167	0.54	33.3
M. The nature of workmen's compensation and unemployment insurance laws in Kansas		3.000	0.00	33.3
N. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)		3.167	0.28	50.0
O. Availability of workers with appropriate skills		3.167	0.28	50.0
P. Kansas "right-to-work" laws		4.667	7.90	100.0
Q. Difficulty of hiring and training employees elsewhere		3.333	1.00	16.7

Table 2D

EXPANDED FIRMS
FOOD AND KINDRED PRODUCTS
PERCENTAGE OF FIRMS RANKING

n=7

Personal Opinion of Kansas	14.3%
Transportation Conditions	28.6%
Right-to-Work Law	28.6%
Labor Force, Availability	0.0%
Labor Force, Skills	14.3%
Labor Force, Other Characteristics	14.3%
State Tax Levels	0.0%
State's Location	57.1%
Specific Tax and Other Benefits	0.0%
Business Climate	14.3%
State Utility Costs	14.3%
Cost of Moving Facilities	71.4%

Table 3D

RESPONSES OF EXPANDED FIRMSTEXTILE MILL PRODUCTS

Question 7A	n=1 Mean \bar{x}	t $\bar{x}-3$	% finding positive
A. Personal opinions about Kansas	4.000	∞	100.0
B. The geographic location of the state	4.000	∞	100.0
C. Kansas' climate	3.000	†	0.0
D. Presence of suppliers in or nearby Kansas	3.000	†	0.0
E. Presence of markets in or nearby Kansas for your products	4.000	∞	100.0
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	4.000	∞	100.0
G. The cost of reproducing the expansion at a new location	5.000	∞	100.0
H. The cost and availability of energy in Kansas	4.000	∞	100.0
I. The cost and availability of water in Kansas	4.000	∞	100.0
J. State tax levels affecting business	2.000	$-\infty$	0.0
K. State business climate	2.000	$-\infty$	0.0
L. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.000	†	0.0
M. The nature of workmen's compensation and unemployment insurance laws in Kansas	3.000	†	0.0
N. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	4.000	∞	100.0
O. Availability of workers with appropriate skills	4.000	∞	100.0
P. Kansas "right-to-work" laws	5.000	∞	100.0
Q. Difficulty of hiring and training employees elsewhere	2.000	$-\infty$	0.0

† t-statistic is zero divided by zero

Table 4D

EXPANDED FIRMS
TEXTILE MILL PRODUCTS
PERCENTAGE OF FIRMS RANKING
 n=1

Personal Opinion of Kansas	0.0%
Transportation Conditions	0.0%
Right-to-Work Law	0.0%
Labor Force, Availability	0.0%
Labor Force, Skills	0.0%
Labor Force, Other Characteristics	100.0%
State Tax Levels	0.0%
State's Location	0.0%
Specific Tax and Other Benefits	0.0%
Business Climate	0.0%
State Utility Costs	0.0%
Cost of Moving Facilities	100.0%

Table 5D

RESPONSES OF EXPANDED FIRMS
LUMBER AND OTHER WOOD PRODUCTS, EXCEPT FURNITURE

n=2

Question 7A	Mean \bar{x}	t $\bar{x}-3$	% finding positive
A. Personal opinions about Kansas	3.000	†	0.0
B. The geographic location of the state	4.000	1.0	50.0
C. Kansas' climate	3.000	†	0.0
D. Presence of suppliers in or nearby Kansas	3.500	1.0	50.0
E. Presence of markets in or nearby Kansas for your products	4.500	3.000	100.0
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	4.000	1.00	50.0
G. The cost of reproducing the expansion at a new location	2.500	-1.00	0.0
H. The cost and availability of energy in Kansas	3.000	†	0.0
I. The cost and availability of water in Kansas	3.000	†	0.0
J. State tax levels affecting business	3.000	†	0.0
K. State business climate	4.000	1.00	50.0
L. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.000	†	0.0
M. The nature of workmen's compensation and unemployment insurance laws in Kansas	2.500	-1.00	0.0
N. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	3.500	1.00	50.0
O. Availability of workers with appropriate skills	3.500	1.00	50.0
P. Kansas "right-to-work" laws	4.500	3.00	100.0
Q. Difficulty of hiring and training employees elsewhere	3.500	1.00	50.0

† t-statistic is zero divided by zero

Table 6D

EXPANDED FIRMS
LUMBER AND OTHER WOOD PRODUCTS, EXCEPT FURNITURE
PERCENTAGE OF FIRMS RANKING
n=2

Personal Opinion of Kansas	0.0%
Transportation Conditions	0.0%
Right-to-Work Law	100.0%
Labor Force, Availability	50.0%
Labor Force, Skills	50.0%
Labor Force, Other Characteristics	0.0%
State Tax Levels	0.0%
State's Location	50.0%
Specific Tax and Other Benefits	50.0%
Business Climate	0.0%
State Utility Costs	0.0%
Cost of Moving Facilities	0.0%

Table 7D

RESPONSES OF EXPANDED FIRMSFURNITURE AND FIXTURES

n=1

Question 7A	Mean \bar{x}	t $\bar{x}-3$	% finding positive
A. Personal opinions about Kansas	4.000	∞	100.0
B. The geographic location of the state	4.000	∞	100.0
C. Kansas' climate	3.000	†	0.0
D. Presence of suppliers in or nearby Kansas	4.000	∞	100.0
E. Presence of markets in or nearby Kansas for your products	4.000	∞	100.0
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	4.000	∞	100.0
G. The cost of reproducing the expansion at a new location	3.000	†	0.0
H. The cost and availability of energy in Kansas	4.000	∞	100.0
I. The cost and availability of water in Kansas	4.000	∞	100.0
J. State tax levels affecting business	4.000	∞	100.0
K. State business climate	4.000	∞	100.0
L. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.000	†	0.0
M. The nature of workmen's compensation and unemployment insurance laws in Kansas	3.000	†	0.0
N. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	4.000	∞	100.0
O. Availability of workers with appropriate skills	4.000	∞	100.0
P. Kansas "right-to-work" laws	4.000	∞	100.0
Q. Difficulty of hiring and training employees elsewhere	3.000	†	0.0

† t-statistic is zero divided by zero

Table 8D

EXPANDED FIRMS
FURNITURE AND FIXTURES
PERCENTAGE OF FIRMS RANKING

n=1

Personal Opinion of Kansas	0.0%
Transportation Conditions	0.0%
Right-to-Work Law	100.0%
Labor Force, Availability	0.0%
Labor Force, Skills	0.0%
Labor Force, Other Characteristics	0.0%
State Tax Levels	0.0%
State's Location	100.0%
Specific Tax and Other Benefits	0.0%
Business Climate	0.0%
State Utility Costs	0.0%
Cost of Moving Facilities	100.0%

Table 9D

RESPONSES OF EXPANDED FIRMSPAPER AND ALLIED PRODUCTS

n=2

Question 7A	Mean \bar{x}	t $\frac{t}{\bar{x}-3}$	% finding positive
A. Personal opinions about Kansas	3.000	†	0.0
B. The geographic location of the state	3.000	†	0.0
C. Kansas' climate	3.000	†	0.0
D. Presence of suppliers in or nearby Kansas	2.500	-1.00	0.0
E. Presence of markets in or nearby Kansas for your products	3.500	0.33	50.0
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	3.500	1.00	50.0
G. The cost of reproducing the expansion at a new location	3.000	†	0.0
H. The cost and availability of energy in Kansas	2.500	-1.00	0.0
I. The cost and availability of water in Kansas	2.500	-1.00	0.0
J. State tax levels affecting business	1.500	-3.00	0.0
K. State business climate	3.000	0.00	50.0
L. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	2.000	-1.00	0.0
M. The nature of workmen's compensation and unemployment insurance laws in Kansas	2.000	-1.00	0.0
N. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	3.500	1.00	50.0
O. Availability of workers with appropriate skills	3.500	1.00	50.0
P. Kansas "right-to-work" laws	5.000	∞	100.0
Q. Difficulty of hiring and training employees elsewhere	3.000	†	0.0

† t-statistic is zero divided by zero

Table 10D

EXPANDED FIRMS
PAPER AND ALLIED PRODUCTS
PERCENTAGE OF FIRMS RANKING

n=2

Personal Opinion of Kansas	0.0%
Transportation Conditions	0.0%
Right-to-Work Law	100.0%
Labor Force, Availability	0.0%
Labor Force, Skills	0.0%
Labor Force, Other Characteristics	50.0%
State Tax Levels	0.0%
State's Location	50.0%
Specific Tax and Other Benefits	0.0%
Business Climate	0.0%
State Utility Costs	0.0%
Cost of Moving Facilities	50.0%

Table 11D

RESPONSES OF EXPANDED FIRMSPRINTING AND PUBLISHING

n=2

Question 7A	Mean \bar{x}	t $\bar{x}-3$	% finding positive
A. Personal opinions about Kansas	4.000	∞	100.0
B. The geographic location of the state	4.500	3.00	100.0
C. Kansas' climate	3.000	†	0.0
D. Presence of suppliers in or nearby Kansas	3.000	†	0.0
E. Presence of markets in or nearby Kansas for your products	2.500	-1.00	0.0
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	4.000	∞	100.0
G. The cost of reproducing the expansion at a new location	3.000	0.00	50.0
H. The cost and availability of energy in Kansas	3.500	0.33	50.0
I. The cost and availability of water in Kansas	3.500	1.00	50.0
J. State tax levels affecting business	2.000	-1.00	0.0
K. State business climate	2.500	-1.00	0.0
L. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.500	1.00	50.0
M. The nature of workmen's compensation and unemployment insurance laws in Kansas	3.500	1.00	50.0
N. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	4.000	∞	100.0
O. Availability of workers with appropriate skills	3.500	1.00	50.0
P. Kansas "right-to-work" laws	5.000	∞	100.0
Q. Difficulty of hiring and training employees elsewhere	2.000	-1.00	0.0

† t-statistic is zero divided by zero

Table 12D

EXPANDED FIRMS
PRINTING AND PUBLISHING
PERCENTAGE OF FIRMS RANKING
 n=2

Personal Opinion of Kansas	0.0%
Transportation Conditions	0.0%
Right-to-Work Law	100.0%
Labor Force, Availability	0.0%
Labor Force, Skills	50.0%
Labor Force, Other Characteristics	0.0%
State Tax Levels	0.0%
State's Location	50.0%
Specific Tax and Other Benefits	0.0%
Business Climate	0.0%
State Utility Costs	0.0%
Cost of Moving Facilities	100.0%

Table 13D

RESPONSES OF EXPANDED FIRMS
CHEMICALS AND ALLIED PRODUCTS

n=6

Question 7A	Mean \bar{x}	t $\frac{t}{\bar{x}-3}$	% finding positive
A. Personal opinions about Kansas	4.000	3.88	83.3
B. The geographic location of the state	4.333	4.00	83.3
C. Kansas' climate	3.000	0.00	16.7
D. Presence of suppliers in or nearby Kansas	4.167	3.80	83.3
E. Presence of markets in or nearby Kansas for your products	3.833	2.08	50.0
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	4.167	6.99	100.0
G. The cost of reproducing the expansion at a new location	3.500	0.81	50.0
H. The cost and availability of energy in Kansas	3.667	2.00	50.0
I. The cost and availability of water in Kansas	3.833	2.07	50.0
J. State tax levels affecting business	3.167	0.35	33.3
K. State business climate	3.200	0.53	33.3
L. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.333	1.00	50.0
M. The nature of workmen's compensation and unemployment insurance laws in Kansas	3.000	0.00	16.7
N. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	4.167	3.80	83.3
O. Availability of workers with appropriate skills	3.667	1.58	66.7
P. Kansas "right-to-work" laws	4.167	3.80	83.3
Q. Difficulty of hiring and training employees elsewhere	3.000	0.00	16.7

Table 14D

EXPANDED FIRMS
CHEMICALS AND ALLIED PRODUCTS
PERCENTAGE OF FIRMS RANKING

n=6

Personal Opinion of Kansas	0.0%
Transportation Conditions	33.3%
Right-to-Work Law	66.7%
Labor Force, Availability	16.7%
Labor Force, Skills	0.0%
Labor Force, Other Characteristics	16.7%
State Tax Levels	0.0%
State's Location	83.3%
Specific Tax and Other Benefits	16.7%
Business Climate	33.3%
State Utility Costs	16.7%
Cost of Moving Facilities	16.7%

Table 17D

RESPONSES OF EXPANDED FIRMS
LEATHER AND LEATHER PRODUCTS

n=1

Question 7A	Mean \bar{x}	t $\bar{x}-3$	% finding positive
A. Personal opinions about Kansas	3.000	†	0.0
B. The geographic location of the state	3.000	†	0.0
C. Kansas' climate	4.000	∞	100.0
D. Presence of suppliers in or nearby Kansas	5.000	∞	100.0
E. Presence of markets in or nearby Kansas for your products	3.000	†	0.0
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	3.000	†	0.0
G. The cost of reproducing the expansion at a new location	3.000	†	0.0
H. The cost and availability of energy in Kansas	2.000	-∞	0.0
I. The cost and availability of water in Kansas	2.000	-∞	0.0
J. State tax levels affecting business	3.000	†	0.0
K. State business climate	3.000	†	0.0
L. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.000	†	0.0
M. The nature of workmen's compensation and unemployment insurance laws in Kansas	3.000	†	0.0
N. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	3.000	†	0.0
O. Availability of workers with appropriate skills	2.000	-∞	0.0
P. Kansas "right-to-work" laws	3.000	†	0.0
Q. Difficulty of hiring and training employees elsewhere	3.000	†	0.0

† t-statistic is zero divided by zero

Table 18D

EXPANDED FIRMS
LEATHER AND LEATHER PRODUCTS
PERCENTAGE OF FIRMS RANKING

n=1

Personal Opinion of Kansas	0.0%
Transportation Conditions	0.0%
Right-to-Work Law	0.0%
Labor Force, Availability	0.0%
Labor Force, Skills	0.0%
Labor Force, Other Characteristics	0.0%
State Tax Levels	0.0%
State's Location	0.0%
Specific Tax and Other Benefits	0.0%
Business Climate	0.0%
State Utility Costs	0.0%
Cost of Moving Facilities	0.0%

Table 19D

RESPONSES OF EXPANDED FIRMS
STONE, CLAY, AND GLASS PRODUCTS

n=2

Question 7A	Mean \bar{x}	t $\bar{x}-3$	% finding positive
A. Personal opinions about Kansas	4.000	∞	100.0
B. The geographic location of the state	4.500	3.00	100.0
C. Kansas' climate	3.00	+	0.0
D. Presence of suppliers in or nearby Kansas	2.500	-1.00	0.0
E. Presence of markets in or nearby Kansas for your products	3.500	1.00	50.0
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	4.000	∞	100.0
G. The cost of reproducing the expansion at a new location	4.500	3.00	100.0
H. The cost and availability of energy in Kansas	2.500	-1.00	0.0
I. The cost and availability of water in Kansas	3.000	+	0.0
J. State tax levels affecting business	3.000	+	0.0
K. State business climate	3.000	+	0.0
L. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.000	0.00	50.0
M. The nature of workmen's compensation and unemployment insurance laws in Kansas	3.500	1.00	50.0
N. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	4.000	∞	100.0
O. Availability of workers with appropriate skills	3.000	0.00	50.0
P. Kansas "right-to-work" laws	4.500	3.00	100.0
Q. Difficulty of hiring and training employees elsewhere	2.500	-1.00	0.0

† t-statistic is zero divided by zero

Table 21D

RESPONSES OF EXPANDED FIRMSPRIMARY METAL INDUSTRIES

n=1

Question 7A	Mean \bar{x}	$\frac{t}{x-3}$	% finding positive
A. Personal opinions about Kansas	4.000	∞	100.0
B. The geographic location of the state	2.000	$-\infty$	0.0
C. Kansas' climate	4.000	∞	100.0
D. Presence of suppliers in or nearby Kansas	2.000	$-\infty$	0.0
E. Presence of markets in or nearby Kansas for your products	2.000	$-\infty$	0.0
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	4.000	∞	100.0
G. The cost of reproducing the expansion at a new location	3.000	†	0.0
H. The cost and availability of energy in Kansas	4.000	∞	100.0
I. The cost and availability of water in Kansas	4.000	∞	100.0
J. State tax levels affecting business	2.000	$-\infty$	0.0
K. State business climate	3.000	†	0.0
L. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.000	†	0.0
M. The nature of workmen's compensation and unemployment insurance laws in Kansas	3.000	†	0.0
N. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	5.000	∞	100.0
O. Availability of workers with appropriate skills	4.000	∞	100.0
P. Kansas "right-to-work" laws	5.000	∞	100.0
Q. Difficulty of hiring and training employees elsewhere	3.000	†	0.0

†
t-statistic is zero divided by zero

Table 22D

EXPANDED FIRMS
PRIMARY METAL INDUSTRIES
PERCENTAGE OF FIRMS RANKING
 n=1

Personal Opinion of Kansas	0.0%
Transportation Conditions	0.0%
Right-to-Work Law	0.0%
Labor Force, Availability	0.0%
Labor Force, Skills	0.0%
Labor Force, Other Characteristics	100.0%
State Tax Levels	0.0%
State's Location	100.0%
Specific Tax and Other Benefits	0.0%
Business Climate	0.0%
State Utility Costs	0.0%
Cost of Moving Facilities	100.0%

Table 23D

RESPONSES OF EXPANDED FIRMS
FABRICATED METAL PRODUCTS

n=9

Question 7A	Mean \bar{x}	t $\bar{x}-3$	% finding positive
A. Personal opinions about Kansas	3.556	2.30	44.4
B. The geographic location of the state	4.000	4.24	77.8
C. Kansas' climate	3.333	1.41	88.9
D. Presence of suppliers in or nearby Kansas	3.444	1.83	88.9
E. Presence of markets in or nearby Kansas for your products	3.667	2.83	55.6
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	3.250	0.80	50.0
G. The cost of reproducing the expansion at a new location	3.375	0.89	37.5
H. The cost and availability of energy in Kansas	3.667	3.99	66.7
I. The cost and availability of water in Kansas	3.333	1.41	22.2
J. State tax levels affecting business	2.875	-1.00	0.0
K. State business climate	3.111	0.56	22.2
L. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.000	0.00	22.2
M. The nature of workmen's compensation and unemployment insurance laws in Kansas	3.000	0.00	33.3
N. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	3.667	1.79	66.7
O. Availability of workers with appropriate skills	3.667	2.31	66.7
P. Kansas "right-to-work" laws	4.556	6.43	88.9
Q. Difficulty of hiring and training employees elsewhere	3.125	0.28	33.3

Table 24D

EXPANDED FIRMS
FABRICATED METAL PRODUCTS
PERCENTAGE OF FIRMS RANKING

n=9

Personal Opinion of Kansas	22.2%
Transportation Conditions	0.0%
Right-to-Work Law	77.8%
Labor Force, Availability	33.3%
Labor Force, Skills	11.1%
Labor Force, Other Characteristics	33.3%
State Tax Levels	0.0%
State's Location	44.4%
Specific Tax and Other Benefits	22.2%
Business Climate	0.0%
State Utility Costs	0.0%
Cost of Moving Facilities	33.3%

Table 27D

RESPONSES OF EXPANDED FIRMS
ELECTRICAL EQUIPMENT AND SUPPLIES

n=5

Question 7A	Mean \bar{x}	$\frac{t}{\bar{x}-3}$	% finding positive
A. Personal opinions about Kansas	3.750	3.00	75.0
B. The geographic location of the state	3.600	2.45	60.0
C. Kansas' climate	2.800	-0.53	20.0
D. Presence of suppliers in or nearby Kansas	3.800	1.37	60.0
E. Presence of markets in or nearby Kansas for your products	3.600	2.45	60.0
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	3.200	0.53	40.0
G. The cost of reproducing the expansion at a new location	3.000	0.00	40.0
H. The cost and availability of energy in Kansas	3.000	†	0.0
I. The cost and availability of water in Kansas	3.000	†	0.0
J. State tax levels affecting business	3.200	0.41	20.0
K. State business climate	3.000	0.00	20.0
L. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.200	1.00	20.0
M. The nature of workmen's compensation and unemployment insurance laws in Kansas	3.400	1.63	40.0
N. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	4.000	3.16	80.0
O. Availability of workers with appropriate skills	3.600	1.50	80.0
P. Kansas "right-to-work" laws	4.400	3.50	80.0
Q. Difficulty of hiring and training employees elsewhere	3.200	0.41	20.0

† t-statistic is zero divided by zero

Table 28D

EXPANDED FIRMS
ELECTRICAL EQUIPMENT AND SUPPLIES
PERCENTAGE OF FIRMS RANKING

n=5

Personal Opinion of Kansas	20.0%
Transportation Conditions	0.0%
Right-to-Work Law	60.0%
Labor Force, Availability	20.0%
Labor Force, Skills	0.0%
Labor Force, Other Characteristics	40.0%
State Tax Levels	0.0%
State's Location	20.0%
Specific Tax and Other Benefits	40.0%
Business Climate	40.0%
State Utility Costs	0.0%
Cost of Moving Facilities	60.0%

Table 29D

RESPONSES OF EXPANDED FIRMSTRANSPORTATION EQUIPMENT

n=8

Question 7A	Mean \bar{x}	$\frac{t}{\bar{x}-3}$	% finding positive
A. Personal opinions about Kansas	2.875	-0.55	12.5
B. The geographic location of the state	3.375	1.16	37.5
C. Kansas' climate	3.000	0.00	12.5
D. Presence of suppliers in or nearby Kansas	3.250	1.00	37.5
E. Presence of markets in or nearby Kansas for your products	3.675	3.69	62.5
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	2.875	-0.55	12.5
G. The cost of reproducing the expansion at a new location	3.250	0.55	50.0
H. The cost and availability of energy in Kansas	3.500	2.65	50.0
I. The cost and availability of water in Kansas	2.875	-1.00	0.0
J. State tax levels affecting business	3.125	0.31	37.5
K. State business climate	3.500	1.87	62.5
L. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.000	†	0.0
M. The nature of workmen's compensation and unemployment insurance laws in Kansas	3.286	0.60	71.4
N. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	3.857	5.99	85.7
O. Availability of workers with appropriate skills	3.429	1.00	57.1
P. Kansas "right-to-work" laws	3.857	2.12	42.9
Q. Difficulty of hiring and training employees elsewhere	3.125	0.35	25.0

† t-statistic is zero divided by zero

Table 30D

EXPANDED FIRMS
TRANSPORTATION EQUIPMENT
PERCENTAGE OF FIRMS RANKING
n=8

Personal Opinion of Kansas	0.0%
Transportation Conditions	0.0%
Right-to-Work Law	25.0%
Labor Force, Availability	25.0%
Labor Force, Skills	12.5%
Labor Force, Other Characteristics	25.0%
State Tax Levels	0.0%
State's Location	25.0%
Specific Tax and Other Benefits	37.5%
Business Climate	12.5%
State Utility Costs	0.0%
Cost of Moving Facilities	50.0%

Table 31D

RESPONSES OF EXPANDED FIRMS
MISCELLANEOUS MANUFACTURING INDUSTRIES

n=1

Question 7A	Mean \bar{x}	t $\bar{x}-3$	% finding positive
A. Personal opinions about Kansas	4.000	∞	100.0
B. The geographic location of the state	4.000	∞	100.0
C. Kansas' climate	3.000	+	0.0
D. Presence of suppliers in or nearby Kansas	4.000	∞	100.0
E. Presence of markets in or nearby Kansas for your products	3.000	+	0.0
F. Overall transportation conditions (such as rates, reliability of carriers, schedules)	4.000	∞	100.0
G. The cost of reproducing the expansion at a new location	4.000	∞	100.0
H. The cost and availability of energy in Kansas	3.000	+	0.0
I. The cost and availability of water in Kansas	3.000	+	0.0
J. State tax levels affecting business	3.000	+	0.0
K. State business climate	3.000	+	0.0
L. The nature of operational regulations in Kansas (such as pollution control, utility regulation)	3.000	+	0.0
M. The nature of workmen's compensation and unemployment insurance laws in Kansas	3.000	+	0.0
N. General characteristics of the state labor force: (such as turnover rates, absenteeism, attitudes towards work)	4.000	∞	100.0
O. Availability of workers with appropriate skills	4.000	∞	100.0
P. Kansas "right-to-work" laws	3.000	+	0.0
Q. Difficulty of hiring and training employees elsewhere	4.000	∞	100.0

Table 32D

EXPANDED FIRMS
MISCELLANEOUS MANUFACTURING INDUSTRIES
PERCENTAGE OF FIRMS RANKING
 n=1

Personal Opinion of Kansas	0.0%
Transportation Conditions	0.0%
Right-to-Work Law	0.0%
Labor Force, Availability	0.0%
Labor Force, Skills	0.0%
Labor Force, Other Characteristics	100.0%
State Tax Levels	0.0%
State's Location	100.0%
Specific Tax and Other Benefits	0.0%
Business Climate	0.0%
State Utility Costs	0.0%
Cost of Moving Facilities	100.0%