

MINNESOTA DEED REPORT

STATE BY STATE ANALYSIS OF ECONOMIC CAPACITY

MARCH 26, 1987

EXECUTIVE SUMMARY

A recently released national study shows Minnesota in a strong competitive position for future economic growth. Ameritrust/SRI International released the study, "Indicators of Economic Growth" in December 1986. The study measured the capacity of states to compete for the technology and skill-intensive industries of the future. This study contrasts with the Grant Thornton approach, which emphasizes the importance of low cost, low skill labor and does not value either research investment or public infrastructure.

The Ameritrust/SRI study focused on U.S. regions rather than individual states. However, state-level data in the report allowed a comparative analysis of the 50 states on measures of economic capacity.

The Ameritrust/SRI study measured three factors of economic capacity; accessibility of technology to business, skill level and adaptability of the state labor force, and the availability of capital within the state. Minnesota ranked in the top ten states nationally on all three factors. The state was eighth in the U.S. on the technology factor, tenth in the nation on the labor force measure. Minnesota was ninth in the U.S. in capital availability.

Each factor was comprised of several economic indicators. Minnesota showed particular strength in indicators that measured the quality of engineering and science faculty, the amount of industry investment in university R&D and the number of patents issued per capita. Minnesota has the second highest average ACT scores in the U.S. and the highest proportion of students attending vocational technical training. The state ranks well above average on the amount of equity capital in commercial banks and has effective state policies to promote business growth.

BACKGROUND

The 1986 Ameritrust/SRI (SRI) study "Indicators of Economic Capacity" was a first attempt to evaluate the potential for U.S. regional economic growth in the U.S. considering changes that have taken place in the structure of the national economy. Structural change has occurred in the U.S. economy over the last 20 years and the impact of this change has not been uniformly distributed throughout the nation. However, it has been difficult to measure the geographic disparities associated with the changes and their impact on economic capacity. Ameritrust/SRI developed a set of economic indicators to assess the competitive advantages of nine regions in the emerging structure of the U.S. economy. The study included Minnesota in the Midwest region with Illinois, Indiana, Michigan, Ohio and Wisconsin.

The study identified three underlying forces that were effecting economic change: technological change, internationalization of the economy and growing entrepreneurship. Technological change effects not only the type of products that are produced but also the production processes. Rapid technological change has a geographic impact on the competitiveness of firms. Although technology is mobile, firms with easier access to emerging technologies have a competitive edge. Changing

technologies also impact on the work force by eliminating low skilled jobs and increasing the requirements for trained and adaptable workers who can adjust to the continuing process of technological and work place change.

Another impact on the work force is the result of internationalization of the economy. Production jobs of U.S. firms have tended to be exported to foreign facilities to capitalize on the lower costs of production found there. Remaining in the U.S. have been the research and development jobs (R&D), finance, marketing and other skilled jobs. Large U.S. businesses are also becoming more geographically dispersed within the country, locating production facilities in low cost areas and headquarters, R&D facilities, etc. where skilled employees are readily available. Therefore, geographic areas with skilled work forces are in a better position to capture this type of employment.

The final force acting on the U.S. economy is the growing importance of the entrepreneur. Access to capital is essential to translate entrepreneurial innovation into viable job producing businesses. Areas that promote or don't restrict capital formation have a competitive advantage.

With an understanding of the implication of these new economic forces, SRI identified three factors essential to the economic capacity of a geographic area: Accessible technology, skilled and adaptable labor, and capital availability. For each of these factors, the study identified a corresponding set of economic indicators that could be measured through an appropriate secondary data source.

The approach in the SRI assessment of economic capacity contrasts markedly with the methods used by Grant Thornton in its annual study of manufacturing climates. Grant Thornton concentrates on the current level of business activity. In the selection of indicators the emphasis is on low labor costs that are generally associated with low skilled jobs and low taxes that result from lower levels of state investment in education and infrastructure. Finally, Grant Thornton uses the opinions of manufacturing associations to assign weights to the various indicators.

A total of 27 economic indicators were used in the SRI study. SRI did not compile individual indicators into indexes measuring the factors of economic capacity and did not assign weight to any of the indicators. The report suggested that specific firms or industries would place more or less emphasis on indicators based on their own business needs. State level data was included in the report but the study did not rank the performance of the states. Rather, the study compared the relative performance of the nine regions on all 27 separate indicators grouping them for presentation into the three economic capacity factors.

ANALYSIS

This study is a state level analysis of the SRI data. The first goal of the analysis is to evaluate how Minnesota compares to other states with respect to the three factors of economic capacity identified in the SRI study. The second goal is to gain some insight into Minnesota's relative strengths and weaknesses by identifying the state's ranking on each of the individual economic indicators included in the study.



To arrive at a single quantitative score for each, three indexes were developed that correspond to SRI's three factors of economic capacity. Within each factor, the score for each economic indicator was divided by the U.S. average of that indicator. For indicators that were measured on a zero/one scale the actual number was used. This procedure essentially normalizes the scale for each variable, but does not change any state's relative position with respect to the variables. Each state's index score is the sum of all the indicators within a factor. States were then ranked according to their cumulative score on each of the three indexes.

RESULTS

Minnesota ranks in the top 10 states on each of the three indexes measuring economic capacity. Results for specific indexes are discussed below.

Index of Accessible Technology

Minnesota has the eighth highest score on the index measuring the accessibility of technology to state businesses; higher than any other state in the Midwest region. Table 1 presents the state rankings. Table 2 contains the rankings of states on each of the nine indicators that comprise the index. Minnesota ranks above the average in all but two of the indicators. The state ranks especially high in the number of research articles in scientific and engineering journals by faculty members at Minnesota colleges and universities and the quality of science and engineering faculty as reported by a National Research Council survey. Minnesota is also strong in the measure of industry R&D and the number of patents issued per capita.

The state is above average in the total per capita investments in university R&D and State and Local government investment in University R&D. Minnesota is only slightly below average in the number of graduating Ph.D.'s in science and engineering and the per capita investment of industry in university research. Finally, Minnesota ranks with those states that have developed programs to encourage commercialization of products developed through academic research.

Index of Skilled and Adaptable Labor

Minnesota ranks tenth on the index of skill level and adaptability of the resident work force. State rankings are presented in Table 3. Michigan, ranked ninth, is the only Midwest state with a higher cumulative score.

Individual state rankings for each of the 11 indicators in the index are in Table 4. Minnesota ranks at or above the average on eight of the 10 relevant indicators. Minnesota is not ranked on average Scholastic Aptitude Test (SAT) scores. Minnesota is second in the nation on average American College Testing (ACT) scores, the test that is most frequently administered in the state. Minnesota has the highest proportion in the nation of non-college students 16-24 years old attending vocational schools. It also ranks high in the proportion of this age group attending four-year colleges or universities.

Table 1. INDEX OF ACCESSIBLE TECHNOLOGY INDICATORS

Region	State	Index Score	Rank
New England	Massachusetts	16.57	1
West No. Central	Kansas	16.44	2
West No. Central	Nebraska	13.50	3
Pacific	Alaska	12.60	4
New England	Connecticut	12.30	5
Mountain	Utah	12.20	6
Mountain	Arizona	12.16	7
Midwest	MINNESOTA	11.54	8
Pacific	Washington	11.52	9
New England	Rhode Island	11.48	10
Mid Atlantic	New York	11.36	11
West No. Central	Iowa	11.30	12
Midwest	Wisconsin	11.15	13
Pacific	Hawaii	10.80	14
Midwest	Indiana	10.76	15
Pacific	California	10.38	16
Mid Atlantic	Pennsylvania	10.24	17
South Atlantic	Maryland	10.19	18
Midwest	Michigan	9.91	19
Midwest	Illinois	9.66	20
Mountain	Colorado	9.56	21
South Atlantic	North Carolina	9.24	22
West So. Central	Texas	9.23	23
Pacific	Oregon	9.09	24
South Atlantic	Delaware	8.98	25
Midwest	Ohio	8.93	26
New England	Vermont	8.86	27
South Atlantic	Georgia	8.61	28
Mountain	New Mexico	8.37	29
West No. Central	Missouri	8.11	30
Mid Atlantic	New Jersey	7.88	31
Mountain	Montana	7.35	32
West So. Central	Louisiana	6.95	33
New England	New Hampshire	6.70	34
South Atlantic	Virginia	6.51	35
South Atlantic	West Virginia	6.48	36
West No. Central	North Dakota	6.37	37
West So. Central	Oklahoma	6.25	38
Mountain	Wyoming	6.16	39
South Atlantic	South Carolina	6.05	40
Mountain	Nevada	5.55	41
East So. Central	Mississippi	5.22	42
New England	Maine	5.14	43
East So. Central	Tennessee	4.99	44
Mountain	Idaho	4.86	45
West So. Central	Arkansas	4.84	46
East So. Central	Alabama	4.68	47
East So. Central	Kentucky	4.68	48
South Atlantic	Florida	4.61	49
West No. Central	South Dakota	3.97	50

Source: Policy Analysis Division, DEED, analysis of:
Indicators of Economic Capacity, The Ameritrust/SRI,
December, 1986

Table 2. RANKED STATE SCORES ON ACCESSIBLE TECHNOLOGY INDICATORS

Rank	Quality Sci & Engineering Faculty	Faculty Research Articles	Sci & Eng Ph D Grad (per cap 000)	Total Univ R&D (\$/capita 000)	Industry Univ R&D (\$ per capita)	State & Loc Univ R&D (\$ per capita)	Industry's Own R&D* (\$ per capita)	Patents Issued (\$ per capita)	University Industry Initiatives**									
1	CA	62.3	CA	3.32	KS	1.14	AK	86.1	AK	6.5	NB	18.5	PA	233.2	DE	0.38	MN	1
2	MA	60.1	WI	3.17	MA	0.42	MD	82.2	MA	5.1	HI	14.4	NJ	233.2	NJ	0.37	IL	1
3	CT	58.4	MN	3.06	RI	0.41	MA	81.7	CO	3.5	KS	8.0	NY	233.2	CT	0.36	WV	1
4	WI	58.3	MA	3.03	CT	0.27	NM	54.2	AZ	3.3	AK	7.3	IN	197.5	MA	0.24	IN	1
5	MN	57.8	CT	2.66	UT	0.25	UT	52.2	NV	3.0	MT	7.2	MN	197.5	MN	0.22	WA	1
6	WA	57.4	NY	2.66	IA	0.25	CT	48.7	GA	2.9	WI	7.0	OH	197.5	MI	0.20	IA	1
7	IL	56.7	VT	2.47	OK	0.23	RI	46.5	VT	2.6	LA	6.7	IL	197.5	IL	0.20	UT	1
8	IN	56.0	IN	2.43	CA	0.23	CO	44.6	WY	2.6	UT	6.5	WI	197.5	CA	0.20	KS	1
9	NC	54.9	IL	2.41	IN	0.23	HI	43.6	NM	2.5	AZ	6.3	MI	197.5	NH	0.20	TX	1
10	NY	54.2	DE	2.29	WI	0.22	NY	42.1	RI	2.3	MS	5.8	NH	178.3	OH	0.19	NC	1
11	MD	54.2	WA	2.27	DE	0.22	WI	39.8	PA	2.2	WA	5.7	RI	178.3	PA	0.18	GA	1
12	MI	53.5	MD	2.19	MD	0.21	WA	39.8	UT	2.2	OR	5.5	VT	178.3	OK	0.18	NY	1
13	NJ	52.9	GA	2.17	IL	0.21	NB	39.3	OR	2.1	IA	5.5	CT	178.3	IN	0.17	OH	1
14	PA	52.5	PA	2.15	CO	0.20	CA	38.3	NB	2.0	NM	5.5	MA	178.3	AZ	0.17	MO	1
15	RI	52.3	AZ	2.08	NY	0.20	IA	38.2	WA	1.9	NC	5.1	ME	178.3	NY	0.17	CA	1
16	CO	51.4	ND	2.04	WY	0.17	VT	36.4	IN	1.8	RI	4.9	KS	148.7	WI	0.16	MD	1
17	OR	50.9	OR	2.03	NC	0.17	MN	35.5	DE	1.8	AR	4.2	NB	148.7	VT	0.15	SC	1
18	TX	50.7	CO	1.94	WA	0.15	AZ	34.9	VA	1.8	WV	4.1	ND	148.7	MD	0.15	MA	1
19	IA	50.2	TX	1.93	OR	0.15	OR	33.7	MT	1.7	MN	3.7	IA	148.7	CO	0.15	AZ	1
20	VA	49.6	MI	1.90	NB	0.15	ND	33.4	ID	1.7	TX	3.6	SD	148.7	RI	0.13	PA	1
21	FL	49.6	VA	1.75	HI	0.15	GA	30.2	NY	1.6	VA	3.0	MO	148.7	NV	0.13	CT	1
22	MO	48.8	RI	1.75	NH	0.14	DE	29.8	MI	1.5	CO	2.8	HI	114.3	UT	0.12	MI	1
23	AZ	48.8	IA	1.74	PA	0.14	NH	29.2	TX	1.4	VT	2.8	WA	114.3	TX	0.12	MT	0
24	GA	48.6	OH	1.66	NJ	0.14	PA	29.0	OK	1.4	ME	2.7	OR	114.3	WA	0.12	OR	0
25	HI	48.4	NJ	1.66	NM	0.14	WY	28.7	ND	1.3	KY	2.7	AK	114.3	OR	0.11	HI	0
26	UT	48.2	FL	1.64	MN	0.13	TX	28.3	IA	1.3	AL	2.5	CA	114.3	IA	0.10	ME	0
27	DE	47.4	NC	1.61	TX	0.13	NC	27.5	LA	1.2	MO	2.0	MD	67.8	MO	0.09	RI	0
28	TN	46.6	TN	1.50	OH	0.13	MO	26.3	MN	1.2	MI	1.8	FL	67.8	VA	0.09	NB	0
29	OH	46.4	UT	1.49	MI	0.13	MT	25.7	SD	1.2	ID	1.8	GA	67.8	FL	0.09	FL	0
30	ND	46.0	KY	1.42	MO	0.12	MI	24.8	TN	1.1	IN	1.8	NC	67.8	KS	0.08	NH	0
31	VT	45.3	LA	1.42	AZ	0.12	IL	24.6	AL	1.1	TN	1.8	VA	67.8	TN	0.08	SD	0
32	ME	45.0	HI	1.38	ND	0.11	KS	23.4	WI	1.1	NY	1.8	DE	67.8	ID	0.07	NM	0
33	AK	45.0	AL	1.37	TN	0.10	IN	22.5	OH	1.0	NH	1.7	SC	67.8	WY	0.07	TN	0
34	LA	45.0	SC	1.30	VA	0.10	LA	22.2	MO	1.0	OH	1.5	WV	67.8	NM	0.07	KY	0
35	KS	44.9	NB	1.30	VT	0.09	OK	22.0	SC	1.0	MD	1.4	TX	65.8	ND	0.07	DE	0
36	AL	44.1	KS	1.27	MT	0.08	NV	21.1	ME	1.0	CT	1.3	OK	65.8	SC	0.07	ID	0
37	KY	43.8	NV	1.25	GA	0.08	MS	19.5	KY	1.0	DE	1.1	LA	65.8	KY	0.07	CO	0
38	NH	43.7	MS	1.20	SC	0.07	VA	19.3	MS	0.9	NJ	1.1	AR	65.8	NC	0.07	MS	0
39	SC	42.1	NH	1.16	FL	0.07	OH	18.9	CT	0.9	ND	1.1	MT	61.7	WV	0.06	VT	0
40	WV	41.9	MO	1.10	LA	0.06	ID	18.3	FL	0.8	IL	1.0	UT	61.7	GA	0.06	NV	0
41	AR	41.6	AK	1.08	ID	0.06	AL	18.0	AR	0.8	MA	1.0	ID	61.7	ME	0.06	VA	0
42	WY	41.1	AR	1.05	KY	0.05	TN	17.1	NC	0.8	SD	0.9	NM	61.7	LA	0.06	LA	0
43	OK	40.4	MT	1.02	AL	0.05	ME	16.9	CA	0.8	FL	0.9	WY	61.7	MT	0.05	AR	0
44	MT	38.5	WY	0.95	WV	0.05	SD	16.8	KS	0.6	CA	0.9	NV	61.7	AL	0.05	OK	0
45	ID	36.2	ID	0.90	MS	0.02	FL	16.0	IL	0.5	OK	0.8	AZ	61.7	SD	0.04	AK	0
46	SD	36.0	OK	0.85	AR	0.02	AR	15.6	NJ	0.5	GA	0.8	CO	61.7	NB	0.04	NJ	0
47	NB	34.0	NM	0.82	NV	0.02	SC	14.8	NH	0.5	WY	0.6	MS	32.2	AR	0.04	AL	0
48	MS	32.7	ME	0.70	ME	0.01	NJ	14.1	WV	0.4	NV	0.4	KY	32.2	HI	0.03	ND	0
49	NV	32.0	WV	0.55	SD	0.01	KY	13.0	HI	0.3	PA	0.4	AL	32.2	MS	0.02	WI	0
50	NM	28.3	SD	0.50	AK	0.01	WV	11.1	MD	0.3	SC	0.3	TN	32.2	AK	0.02	WY	0

* Regional Average used for individual states within region

** 1 = yes 0 = no

Source: Indicators of Economic Capacity, The Ameritrust/SRI, December 1986

Table 3. INDEX OF SKILLED AND ADAPTABLE LABOR INDICATORS

Region	State	Index Score	Rank
Pacific	Alaska	14.90	1
Mountain	Arizona	12.40	2
Mountain	Colorado	12.17	3
Pacific	California	11.96	4
Mountain	Nevada	11.95	5
Mountain	Utah	11.89	6
Pacific	Oregon	11.34	7
Mountain	Wyoming	11.26	8
Midwest	Michigan	11.22	9
Midwest	Minnesota	11.06	10
New England	Massachusetts	11.02	11
Mid Atlantic	New York	10.96	12
West No. Central	Kansas	10.96	13
New England	Connecticut	10.92	14
South Atlantic	Delaware	10.45	15
West No. Central	Nebraska	10.34	16
Pacific	Washington	10.31	17
Mountain	Montana	10.30	18
New England	Rhode Island	10.22	19
South Atlantic	Florida	10.20	20
Mid Atlantic	New Jersey	10.09	21
Pacific	Hawaii	10.05	22
South Atlantic	Maryland	9.98	23
Midwest	Ohio	9.95	24
Mountain	New Mexico	9.82	25
Midwest	Illinois	9.78	26
West So. Central	Oklahoma	9.78	27
Mid Atlantic	Pennsylvania	9.74	28
Midwest	Wisconsin	9.69	29
West No. Central	Iowa	9.51	30
South Atlantic	Virginia	9.34	31
New England	Vermont	9.33	32
West So. Central	Texas	9.12	33
West No. Central	Missouri	9.07	34
New England	New Hampshire	9.06	35
Mountain	Idaho	8.97	36
West So. Central	Louisiana	8.94	37
South Atlantic	Georgia	8.78	38
West No. Central	North Dakota	8.77	39
Midwest	Indiana	8.77	40
New England	Maine	8.63	41
West No. Central	South Dakota	8.59	42
East So. Central	Alabama	8.34	43
South Atlantic	North Carolina	8.16	44
East So. Central	Tennessee	8.06	45
South Atlantic	West Virginia	8.04	46
East So. Central	Kentucky	7.75	47
South Atlantic	South Carolina	7.73	48
West So. Central	Arkansas	7.43	49
East So. Central	Mississippi	7.38	50

Source: Policy Analysis Division, DEED, analysis of:
Indicators of Economic Capacity, The Ameritrust/SRI, Dec. 1986

Table 4. RANKED STATE SCORES ON SKILLED AND ADAPTABLE LABOR INDICATORS

Rank	% population over age 25 with:			Expenditure /pupil (K-12) (\$ per pupil)	State & Local Tot Educ Expen (\$ per capita)	Average SAT Scores	Average ACT Scores	% State College Stnt at State Inst	No. attending as % of 16-24 population:		
	Grade 8 or less	Min 4 yrs High School	Min 4 yrs College						Noncollege at VoTech School	2-Year College	4-Year Coll/ University
1	UT 7.18	AK 82.8	CO 23.0	AK 7,325	AK 1,896.32	NH 931	WI 20.4	CA 96	MN 9.07	CA 24.52	NV 35.27
2	AK 8.68	UT 80.3	AK 22.4	NY 4,686	WY 1,013.58	OR 907	IA 20.2	TX 95	AZ 8.81	AZ 23.53	UT 32.37
3	NV 9.64	CO 78.1	CT 21.2	WY 4,045	WA 823.53	VT 907	MN 20.2	NC 94	CO 7.85	AK 16.77	RI 32.03
4	WY 9.93	WY 77.8	UT 20.3	NJ 4,007	NM 795.28	CT 904	NB 20.1	MS 92	NV 7.64	IL 16.47	MA 30.34
5	WA 10.77	WA 77.0	HI 20.3	CT 3,636	OR 788.39	DE 902	CO 19.7	LA 91	FL 7.30	WA 16.29	SD 27.29
6	CO 10.97	NV 75.5	MA 20.0	RI 3,570	UT 755.53	CA 897	MT 19.4	OK 91	MI 7.28	WY 15.25	VT 26.85
7	OR 11.83	MT 75.4	CA 19.8	OR 3,504	DE 753.48	MD 897	WY 19.3	AZ 91	GA 7.22	OR 14.96	NB 25.67
8	MT 13.49	OR 74.7	MD 19.8	DE 3,456	MI 747.80	MA 896	SD 19.2	MI 90	CT 6.97	FL 13.61	NH 25.32
9	ID 13.55	NB 73.8	VT 19.5	MD 3,445	CO 747.44	VA 894	OH 19.2	WI 90	KS 6.64	MI 13.40	MT 24.10
10	MA 13.59	CA 73.6	VA 19.2	MA 3,378	WI 743.43	NY 894	KS 19.2	SC 89	LA 6.62	MD 13.37	NY 23.83
11	CA 14.20	HI 73.4	WA 18.8	PA 3,329	ND 733.22	ME 892	ID 18.9	AL 89	DE 6.13	TX 11.61	ME 23.66
12	NB 14.47	ID 72.8	NY 18.7	MI 3,307	AZ 730.83	FL 890	MO 18.8	OR 89	PA 5.85	HI 11.36	ND 23.46
13	AZ 14.57	MA 72.7	NJ 18.6	MT 3,289	NY 723.78	PA 887	UT 18.8	TN 88	CA 5.65	NC 11.20	KS 22.68
14	MI 14.78	MN 72.4	NH 18.4	HI 3,239	CA 716.00	RI 885	MI 18.8	WA 88	NM 5.14	VA 11.11	MN 21.80
15	NH 14.88	KS 72.3	NM 17.3	WI 3,237	IA 715.67	NJ 876	AZ 18.7	UT 88	OH 5.14	KS 10.51	WV 21.57
16	OH 15.00	AZ 72.3	MT 17.3	WA 3,211	MT 714.95	HI 869	IL 18.7	OH 88	NJ 4.67	OK 10.45	CO 21.56
17	KS 15.10	NH 72.0	WY 17.2	CO 3,171	MN 712.82	TX 866	NV 18.7	WV 87	MT 4.62	WI 10.44	IA 21.48
18	DE 15.21	IA 71.2	OR 17.2	IL 3,100	MD 688.34	IN 864	AK 18.2	IL 87	NY 4.50	NY 9.58	IN 21.44
19	CT 16.01	CT 70.5	AZ 16.8	IA 3,095	VT 685.85	NC 827	KY 17.9	NB 87	MO 4.50	NJ 9.40	CT 21.36
20	HI 16.51	VT 70.5	MN 16.7	MN 3,085	NB 678.60	GA 822	ND 17.9	FL 87	AK 4.48	MS 9.29	WI 21.05
21	IN 16.81	WI 70.0	DE 16.3	KS 3,058	NJ 674.31	SC 803	TN 17.7	IN 86	AL 4.26	MA 9.26	DE 21.03
22	ME 16.99	SD 68.5	NB 16.1	VT 3,051	KS 668.53	OK NA	OK 17.6	KS 86	KY 4.18	CO 8.89	NM 21.03
23	IA 17.00	ME 68.5	ID 16.1	NB 2,984	RI 644.88	OH NA	NM 17.6	KY 86	RI 4.06	OH 8.88	MO 20.97
24	VT 17.11	MI 68.2	TX 16.0	NM 2,901	HI 642.97	KY NA	AR 17.6	MO 86	OR 4.01	IA 8.46	OK 20.32
25	MN 17.28	NM 68.2	OK 15.7	ND 2,853	OK 637.49	AZ NA	WV 17.4	NY 86	MA 3.87	NB 8.32	LA 19.56
26	MD 17.38	DE 67.8	KS 15.7	OK 2,805	VA 627.55	TN NA	AL 17.4	MA 85	OK 3.86	CT 8.31	PA 19.29
27	FL 17.47	NJ 67.8	RI 15.3	WV 2,764	LA 623.98	CO NA	LA 16.6	IA 84	TN 3.83	NV 8.21	OH 19.11
28	NJ 17.57	OH 67.4	GA 15.3	NH 2,750	TX 614.46	NB NA	MS 15.6	AR 84	AR 3.51	RI 8.20	ID 18.91
29	OK 17.93	FL 67.2	MI 15.2	LA 2,739	NC 612.08	ID NA	DE NA	PA 83	NB 3.31	UT 8.15	AZ 18.24
30	WI 17.96	MD 66.7	ND 15.2	CA 2,733	IL 609.22	KS NA	NY NA	GA 83	HI 3.24	MO 7.54	TN 17.96
31	NM 18.22	OK 66.7	NV 15.1	TX 2,731	SC 603.83	MT NA	NJ NA	CO 83	WA 3.19	PA 7.27	OR 17.80
32	PA 18.22	ND 66.5	WI 14.9	FL 2,680	IN 602.83	AL NA	SC NA	VA 82	SD 3.15	TN 7.26	AL 17.22
33	NY 18.43	NY 66.2	OH 14.8	OH 2,676	SD 598.72	NV NA	VT NA	RI 81	IN 3.10	SC 7.08	MI 17.11
34	IL 19.45	IN 65.9	FL 14.7	VA 2,620	CT 593.19	WV NA	MD NA	MN 81	VA 3.03	ID 6.94	KY 16.89
35	RI 20.48	IL 65.0	IL 14.5	NV 2,613	MA 592.83	NM NA	RI NA	HI 79	IL 2.93	AL 6.81	VA 16.88
36	VA 21.51	PA 64.5	SC 14.2	AZ 2,524	OH 591.53	LA NA	FL NA	NV 78	ME 2.83	ND 6.61	MD 16.83
37	TX 21.60	MO 63.7	SD 14.2	SD 2,486	ID 587.02	UT NA	NH NA	ND 78	WV 2.73	DE 6.51	TX 16.67
38	SD 21.85	VA 62.5	IA 14.1	MO 2,468	NV 584.98	MS NA	TX NA	MT 78	UT 2.52	MN 6.38	HI 16.49
39	MO 22.03	TX 61.4	MO 14.0	ME 2,458	WV 583.25	WY NA	MA NA	WY 78	MD 2.26	NH 5.75	IL 16.42
40	NC 24.08	RI 60.7	ME 14.0	IN 2,414	PA 556.60	MO NA	PA NA	NM 76	TX 2.25	VT 5.42	NC 15.76
41	GA 24.08	LA 58.0	PA 13.8	AL 2,177	MS 553.49	AK NA	ME NA	MD 76	ID 1.99	KY 4.96	AR 15.66
42	LA 24.41	AL 56.7	NC 13.4	GA 2,169	NH 547.09	WI NA	VA NA	ME 75	IA 1.75	NM 4.89	NJ 15.40
43	AL 24.44	WV 56.6	LA 13.4	NC 2,162	GA 530.78	MN NA	CA NA	ID 74	SC 1.64	GA 4.84	CA 14.81
44	ND 24.66	GA 56.5	MS 13.0	KY 2,100	FL 527.41	SD NA	CT NA	SD 73	WY 1.57	IN 4.23	WA 14.70
45	SC 25.31	TN 55.4	AL 12.6	ID 2,052	KY 524.96	MI NA	HI NA	CT 72	ND 1.33	WV 3.95	SC 14.58
46	MS 26.60	NC 55.3	IN 12.4	TN 2,027	MO 524.32	IA NA	NC NA	DE 71	WI 1.22	AR 3.91	GA 14.33
47	AR 27.36	MS 55.1	TN 11.9	SC 2,017	AL 522.70	ND NA	IN NA	NJ 70	NC 0.97	MT 3.14	MS 13.61
48	WV 27.51	AR 54.9	KY 11.0	UT 2,013	AR 521.80	AR NA	GA NA	VT 68	VT 0.79	ME 2.88	AK 13.17
49	TN 27.58	SC 54.0	WV 10.5	AR 1,971	ME 521.55	IL NA	OR NA	NH 65	NH 0.74	LA 1.83	FL 13.02
50	KY 32.82	KY 51.9	AR 9.7	MS 1,849	TN 478.52	WA NA	WA NA	AK 52	MS 0.61	SD 0.61	WY 11.54

Source: Indicators of Economic Capacity, The Ameritrust/SRI, December 1986

However, the state is below average in the proportion of these students that attend college within Minnesota. Minnesota is also below average in the proportion of this age group attending two-year colleges. A higher than average proportion of the Minnesota population over age 25 has a high school or college education. Minnesota is average in the relative proportion of the adult population with an eighth grade or less education.

Index of Capital Availability

Minnesota ranks ninth on the index measuring capital availability. Two Midwestern states, Ohio and Illinois are ranked seventh and eighth respectively. Table 5 presents the relative rankings of the fifty states.

Table 6 contains state level comparisons on the seven economic indicators that comprise the index. Five of the seven variables are yes-no measures of whether a state has the specific regulation or a state sponsored program related to capital availability. Minnesota rates positively on the absence of an interest rate ceiling, permitting branch banking, state sponsored equity and venture capital funds, and state sponsored programs to foster new businesses. Minnesota lacks a state sponsored loan guarantee program.

On the per capita measures, Minnesota ranks sixth in the venture capital funds and well above average in the total amount of equity capital in commercial banks.

CONCLUSIONS

Minnesota is well positioned for future economic health. The economic strengths of Minnesota are its educated, innovative population, education system, investment in research and state policies that promote business growth. The SRI study presents a positive outlook for economic growth in Minnesota. This study has gone beyond measuring economic health solely on a least cost dimension and has recognized the importance to states of investing in their future.

Table 5. INDEX OF CAPITAL AVAILABILITY INDICATORS

Region	State	Index Score	Rank
New England	Massachusetts	10.90	1
Mid Atlantic	New York	10.34	2
New England	Connecticut	8.22	3
New England	Rhode Island	7.52	4
Pacific	California	7.01	5
South Atlantic	Delaware	6.41	6
Midwest	Ohio	6.09	7
Midwest	Illinois	5.97	8
Midwest	Minnesota	5.59	9
West So. Central	Louisiana	5.11	10
Midwest	Indiana	4.83	11
Midwest	Michigan	4.78	12
New England	Vermont	4.65	13
New England	Maine	4.42	14
Pacific	Alaska	4.38	15
South Atlantic	Maryland	4.36	16
Mid Atlantic	Pennsylvania	4.20	17
West No. Central	South Dakota	4.14	18
South Atlantic	Virginia	4.12	19
Pacific	Oregon	4.08	20
Midwest	Wisconsin	4.04	21
East So. Central	Kentucky	3.95	22
Mid Atlantic	New Jersey	3.92	23
South Atlantic	Georgia	3.79	24
West No. Central	Iowa	3.70	25
West No. Central	Kansas	3.65	26
New England	New Hampshire	3.57	27
Mountain	New Mexico	3.31	28
West No. Central	Nebraska	3.27	29
West So. Central	Oklahoma	3.25	30
West No. Central	North Dakota	3.24	31
South Atlantic	West Virginia	2.92	32
Mountain	Arizona	2.90	33
Mountain	Colorado	2.85	34
West So. Central	Arkansas	2.85	35
Pacific	Washington	2.85	36
Pacific	Hawaii	2.83	37
East So. Central	Alabama	2.75	38
East So. Central	Mississippi	2.72	39
Mountain	Idaho	2.72	40
Mountain	Nevada	2.70	41
South Atlantic	North Carolina	2.62	42
Mountain	Utah	2.61	43
South Atlantic	South Carolina	2.53	44
Mountain	Wyoming	2.21	45
West No. Central	Missouri	2.14	46
Mountain	Montana	2.04	47
South Atlantic	Florida	1.82	48
East So. Central	Tennessee	1.73	49
West So. Central	Texas	1.69	50

Source: Policy Analysis Division, DEED, analysis of:
Indicators of Economic Capacity, The Ameritrust/SRI, Dec. 1986

Table 6. RANKED STATE SCORES ON CAPITAL AVAILABILITY INDICATORS

Rank	Tot Equity Capital in Comm Banks (000 \$ per capita)	Venture Capital Funds (\$ per cap)	Interest Rate Ceiling*	Branch Banking*	State Equity & Venture Cap Funds*	State Loan Guarantee Program*	State Business Incubators*
1	DE 2064.8	MA 202.7	MN 1	MN 1	MN 1	DE 1	MN 1
2	NY 1525.4	RI 183.6	CT 1	CT 1	OH 1	CT 1	OH 1
3	SD 1297.4	NY 110.6	OR 1	FL 1	WI 1	MI 1	GA 1
4	IL 838.1	CT 103.5	UT 1	MA 1	MA 1	CA 1	NY 1
5	AK 835.4	IL 62.1	CA 1	GA 1	IL 1	NH 1	CT 1
6	NB 772.5	MN 18.0	WA 1	RI 1	LA 1	OH 1	PA 1
7	IA 756.1	IA 17.9	ME 1	MD 1	IN 1	VT 1	VT 1
8	ND 753.6	KS 17.9	NJ 1	NJ 1	KS 1	LA 1	MS 1
9	TX 741.7	OH 13.5	MA 1	NC 1	MI 1	NY 1	MA 1
10	WY 731.6	NJ 11.8	PA 1	PA 1	AK 1	AR 1	IL 1
11	KS 723.2	PA 9.8	GA 1	SC 1	ME 1	HI 1	DE 0
12	OK 707.3	WI 7.4	IN 1	IN 1	CT 1	MD 1	SC 0
13	MN 684.9	MO 4.0	MD 1	VA 1	NY 1	KY 1	VA 0
14	MO 629.4	MI 2.7	DE 1	DE 1	DE 0	MA 1	IN 0
15	MT 628.7	KY 2.0	NC 1	WV 1	WV 0	NJ 1	WV 0
16	LA 607.0	MS 1.2	WI 1	WI 1	PA 0	ME 1	WI 0
17	PA 574.3	NB 0.0	SC 1	AR 1	AR 0	IN 1	AR 0
18	WV 554.9	SD 0.0	KS 1	MI 1	NJ 0	OR 1	KS 0
19	KY 543.3	AL 0.0	VA 1	NM 1	RI 0	RI 1	LA 0
20	CO 531.6	NH 0.0	NB 1	OH 1	NB 0	ND 1	NB 0
21	CA 524.4	IN 0.0	WV 1	WA 1	OK 0	MN 0	OK 0
22	AR 517.6	ND 0.0	SD 1	IA 1	SD 0	OK 0	SD 0
23	WI 516.2	VT 0.0	AK 1	AL 1	TX 0	TX 0	TX 0
24	RI 508.7	ME 0.0	KY 1	HI 1	KY 0	SD 0	KY 0
25	IN 502.5	TN 0.0	LA 1	MS 1	AZ 0	AZ 0	AZ 0
26	HI 483.0	DE 0	VT 1	LA 1	TN 0	TN 0	TN 0
27	AL 457.2	FL 4.4	OK 1	ME 1	CO 0	CO 0	CO 0
28	OH 452.7	GA 4.4	IL 1	OK 1	FL 0	MO 0	FL 0
29	MA 443.7	MD 31.6	WY 1	VT 1	ID 0	ID 0	ID 0
30	NM 443.0	NC 1.8	OH 1	CA 1	MD 0	KS 0	MD 0
31	TN 440.7	SC 4.2	AZ 1	OR 1	MT 0	MT 0	MT 0
32	MI 430.8	VA 57.1	MO 1	AZ 1	SC 0	SC 0	MI 0
33	FL 428.8	WV 0	CO 1	SD 1	NV 0	NV 0	NV 0
34	NV 422.1	AR 0	AL 1	AK 1	IA 0	WV 0	IA 0
35	MS 416.8	LA 4.4	ID 1	TN 1	NM 0	NM 0	NM 0
36	GA 413.9	OK 3.3	NY 1	ID 1	ND 0	WI 0	ND 0
37	ID 403.2	TX 18.2	MT 1	NY 1	UT 0	UT 0	UT 0
38	VA 400.4	AZ 12.1	IA 1	UT 1	MS 0	MS 0	RI 0
39	VT 394.2	CO 38.3	NV 1	KY 1	WY 0	WY 0	WY 0
40	NJ 377.2	ID 2	NH 1	NB 1	GA 0	GA 0	ME 0
41	UT 372.2	MT 0	ND 1	NH 1	NH 0	AK 0	AK 0
42	AZ 361.3	NV 0	MI 1	NV 1	VA 0	VA 0	NJ 0
43	OR 358.4	NM 22.8	NM 1	KS 0	CA 0	FL 0	CA 0
44	CT 351.6	UT 0	FL 0	TX 0	AL 0	AL 0	AL 0
45	NC 351.0	WY 0	HI 0	MO 0	HI 0	IL 0	HI 0
46	NH 343.5	AK 0	TX 0	WY 0	NC 0	NC 0	NC 0
47	MD 337.1	CA 123.1	TN 0	MT 0	VT 0	NB 0	NH 0
48	WA 321.0	HI 1.4	AR 0	CO 0	MO 0	IA 0	MO 0
49	ME 256.5	OR 19.3	MS 0	IL 0	OR 0	PA 0	OR 0
50	SC 255.5	WA 12.6	RI 0	ND 0	WA 0	WA 0	WA 0

* 1 = Yes 0 = No

Source: Indicators of Economic Capacity, The Ameritrust/SRI, December 1986