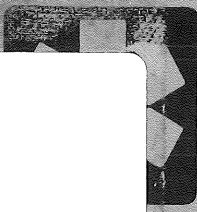


MINNESOTA'S ECONOMY

Current Status and Trends

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Minnesota Housing Finance Agency
Research Staff
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MINNESOTA'S ECONOMY: CURRENT STATUS AND TRENDS

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EXECUTIVE SUMMARY

- Since 1940 Minnesota's economy has undergone basic structural changes which have reduced employment in natural resource-based extractive industries in favor of manufacturing and services.
- Positive aspects of structural economic changes include the growth of industries with high export potential; the manufacture of goods with high value-to-weight ratios; and the employment of more nonproduction employees in manufacturing.
- Negative aspects of structural economic changes include worker dislocations, worker relocations, stressed rural economies, and declines in average salaries.
- In relation to the U.S. economy, structural changes have increased Minnesota's vulnerability to national business cycles, but some growth sectors have also insulated the state's economy from cyclical downturns.
- In international markets low labor costs, technological advances, and low-value currencies may limit Minnesota's export potential.
- In over-the-year comparisons between July 1985 and July 1986, 10 counties had unemployment rates 50 percent greater than the rate statewide and 15 counties had unemployment rates 25 percent greater than the rate statewide.
- In 22 Minnesota counties two-thirds or more of total employment in 1980 was in farming.
- The concentration of new jobs in traditionally low-paying industries contributed to a five percent decline in the inflation-adjusted statewide average salary between 1976 and 1983.
- In 1984, current dollar median family income in Region 11 was at least one-third higher than in any other region and was nearly twice the median family income in Regions 2, 5, and 6W.
- Between 1979 and 1984, constant dollar median family income declined in all regions of the state except Region 11. These declines exceeded 10 percent in Regions 3, 6W, and 8.
- Between 1980 and 1984 the share of households receiving Aid to Families with Dependent Children increased in every region except Region 11. Increases were particularly high in Regions 3 (+36%) and 5 (+28%).

INTRODUCTION

Recognizing its limited resources, the Minnesota Housing Finance Agency has begun a long range planning effort to determine what housing needs it can meet over the next five to ten years. Since the formation of new households is influenced by consumer purchasing power, an important determinant of housing needs will be the economic conditions characteristic of metropolitan and nonmetropolitan areas throughout Minnesota. In the discussion which follows, current economic conditions and emerging trends are summarized to provide a context within which housing policies can be assessed and evaluated.

CURRENT STATUS OF MINNESOTA'S ECONOMY

A description of Minnesota's economy today requires a look back at structural changes which have occurred over the last four decades, as well as a description of current employment trends. In the discussion which follows, the implications of structural changes are examined along with trends in industry employment, compensation levels, and job location.

Structural Changes

Minnesota's economy is best described in terms of changes which have occurred over the last 40 years. Since 1940 the number employed has more than doubled (916,300 to 1,883,600). More significant than the size of the increase, though, is the acceleration of growth, 41 percent of which occurred after 1970.¹ Between 1970 and 1980 Minnesota's economy grew faster than that of any of the other nine states in the upper midwest, except North Dakota.²

The explosion of the work force can be attributed in part to structural changes which have shaped Minnesota's economy and to a large extent have determined its future course. These changes include:

- (1) employment declines in goods-producing industries in favor of services-producing industries;³ and

¹ Minnesota Council of Economic Advisors (MCEA), Economic Report to the Governor, 1986, p. 26.

² "State Kept It's Wealth As Others Lost," Minneapolis Star and Tribune, April 8, 1984.

³ Includes the general industrial classifications of health services; wholesale and retail trade; finance, insurance, and real estate (FIRE); business services; membership organizations; and educational services.

(2) employment shifts

- (a) within the goods-producing sector (towards more employment in manufacturing and construction and less employment in agriculture and mining); and
- (b) within the services-producing sector (towards more employment in services and FIRE⁴ and less employment in TCPU⁵ and the retail trades).

Since 1940, economic activity in agriculture, forestry, and mining has declined in favor of increased activity in manufacturing and services. Agricultural employment alone declined from 31 percent of total employment in 1940 to only 6 percent in 1980, an average annual decline of 2 percent (see Table 1, page 5).

In contrast, manufacturing and services, respectively, accounted for 12 percent and 20 percent of total state employment in 1940; but by 1980 manufacturing's share had increased to 20 percent (a 67% increase) and service sector employment had risen to 30 percent (a 50% increase). The decline in raw materials industries is also evident in the distribution of employment between the goods-producing and services-producing sectors: between 1940 and 1980 goods-producing employment grew 38 percent, while services-producing employment increased 167 percent.

Thus, Minnesota's economy, once heavily dependent on extractive industries, has diversified. By 1983 the share of total employment provided by mining and agricultural services, for example, was lower than in the national economy, while the share of employment in durable goods manufacturing, wholesale/retail

⁴ Finance, insurance, and real estate.

⁵ Transportation, communications, and public utilities.

Table 1

EMPLOYMENT IN MINNESOTA'S MAJOR SECTORS

1940 vs. 1980

Sector	Employment (in thousands)				Percent Change in Employment 1940 - 1980
	1940		1980		
	Number	Percent	Number	Percent	
<u>Goods-Producing:</u>					
Agriculture	285.8	31%	108.7	6%	- 62%
Mining	8.0	1	15.2	1	90
Construction	38.0	4	99.4	5	162
Manufacturing	105.3	12	380.8	20	262
Total	437.1	48%	604.1	32%	38%
<u>Services-Producing:</u>					
TCPU*	65.8	7%	129.1	7%	96%
Wholesale Trade	35.5	4	92.2	5	159
Retail Trade	139.4	15	321.2	17	130
FIRE**	29.0	3	107.7	5	271
Services	179.1	20	559.8	30	213
Public Adm.	30.4	3	69.6	4	129
Total	479.2	52%	1,279.5	68%	167%
TOTAL	916.3	100%	1,883.6	100%	106%

Compiled from Minnesota Council of Economic Advisors, Economic Report to the Governor, 1986, p. 26.

* Transportation, communications, and public utilities.

** Finance, insurance, and real estate.

trade, and services was higher than for the U.S. economy.⁶ These changes are basic and general ones, and they have not only affected Minnesota's economy, but they have altered as well its relationship to the national economy and its vulnerability to competition in international markets.

Minnesota's economic environment has been both positively and negatively affected by these changes. The positive effects include:

- (1) Growth in industries with the highest percentage of "export" sales--Export sales generate positive income flows from outside the state. Where once agriculture and mining were Minnesota's most important basic industries, they have now been replaced by industries with even higher percentages of export sales (such as machinery and other manufacturing). These sales will enhance employment in non-basic sectors producing for local consumption (health services, retail trade, and FIRE, for example).
- (2) A manufacturing emphasis on the production of goods with high value-to-weight ratios--Whereas Minnesota's previous emphasis on natural resource-based commodities produced goods with very low value-to-weight ratios (e.g., iron ore and lumber), the largest share of Minnesota's manufacturing employment is now concentrated in industries producing goods with high value-to-weight ratios. Thus, "Pound for pound . . . computers are far more valuable than lumber," a factor which alleviates the competitive disadvantage of Minnesota's distance from major transportation routes and large population centers.⁷

⁶ MCEA, op. cit., p. 34.

⁷ Ibid., p. 36.

- (3) A high concentration of nonproduction employees in manufacturing sectors--Minnesota's manufacturing sector has traditionally employed a high proportion of nonproduction workers (i.e., employees involved in marketing, finance, administration, and research and development rather than actual goods production). Between 1970 and 1983, though, 80 percent of the employment growth in manufacturing occurred among nonproduction workers, a pace exceeding the addition of nonproduction manufacturing workers nationwide.⁸ A higher concentration of such workers should reduce the sensitivity to national business cycles experienced most keenly in manufacturing.

Negative aspects include:

- (1) Worker dislocations--The decline of once-dominant industries has left many workers unemployed. Their long-term prospects for employment are also limited, either because alternative employment opportunities are unavailable or because the unemployed lack the skills necessary for available positions. Table 2 (page 8) shows that 10 of Minnesota's 87 counties had seasonally unadjusted unemployment rates 150 percent above the statewide unemployment rate in July 1985 and July 1986.
- (2) Worker relocations--As a result of the worker dislocation described above, Minnesota's economy will also have to adjust to workers who leave depressed areas seeking employment. Some evidence of intrastate migration was evident

⁸ Ibid., p. 79.

Table 2

MINNESOTA COUNTIES WITH UNEMPLOYMENT RATES
OF TEN PERCENT OR MORE

July 1985 and July 1986

Region/County	Unemployment Rate*	
	July 1985	July 1986
<u>Region 1</u>		
Marshall	11.8%	11.9%
Polk	9.3	8.2
Red Lake	15.1	14.2
<u>Region 2</u>		
Clearwater	12.9	13.0
Mahnomen	10.1	10.2
<u>Region 3</u>		
Aitkin	10.2	9.0
Itasca	10.8	10.1
Lake	11.4	10.0
St. Louis	10.8	8.9
<u>Region 6E</u>		
Meeker	10.4	9.0

Compiled from Department of Jobs and Training, Review of Labor and Economic Conditions, August 1986.

* Seasonally unadjusted.

by early 1986 when over-the-year comparisons between February 1985 and February 1986 showed that the Twin Cities labor force had increased by 3.5 percent. In contrast, the labor force in the rest of Minnesota declined by 1 percent (nearly 9,000 workers) over the same period. "One must assume that some of those people, especially younger and more mobile workers, have moved to the Twin Cities, where job opportunities are more prevalent."⁹

Worker in-migration is also evident in Region 10, where during 1985 the labor force increased by 1 percent, while the unemployment rate increased 6 percent.¹⁰ The increase in Region 10's unemployment rate suggests that rural residents are looking to urban areas for employment. The relocation of more and more workers, though, may eventually strain healthy urban economies.

- (3) Repercussions from the farm economy--In 1985 there were an estimated 5,000 farm foreclosures in Minnesota.¹¹ Employment losses in three of Minnesota's most agriculturally involved areas (Regions 6W, 8, and 9) suggest that "the problems associated with the farm economy are beginning to affect the nonagricultural sector."¹² Furthermore, the highest employment losses have occurred where local economies are supported primarily by farm

⁹ Department of Jobs and Training, Current Minnesota Labor Market Conditions, March 1986, p. 4.

¹⁰ Department of Jobs and Training, Review of Labor and Economic Conditions, February 1986, p. 16.

¹¹ American Demographics, May 1986, p. 40.

¹² Department of Jobs and Training, Current Minnesota Labor Market Conditions, December 1985, p. 8.

income. As is the case with dislocated mining and timber workers, Minnesota's urban economies may become a haven for nonagricultural workers in rural communities.

- (4) Worker Compensation--Between 1976 and 1983 job creation in Minnesota outpaced job creation at the national level (17.8% vs. 16.5%).¹³ Table 3 (page 11) lists the number of new jobs and average salary for selected major industries in Minnesota. Over this period most industries paid salaries well above the 1983 statewide average salary of \$16,035 (1983 dollars):¹⁴ average salaries in FIRE, the wholesale trades, TCPU, construction, and manufacturing were 20-50% greater than the statewide average.

Unfortunately, only one-third of all new jobs were in these higher-paying industries; rather, two-thirds of all new jobs were added in industries where average salaries were below the statewide average. This was especially true in the retail trades where average salary was only about half of the statewide average. Thus, while these new jobs may have provided employment for new labor force entrants and dislocated workers from agriculture and other industries, they have done so primarily at the lowest compensation levels.

¹³ MCEA, op. cit., p. 34.

¹⁴ Ibid., p. 56.

Table 3

JOB CREATION AND AVERAGE SALARY IN SELECTED INDUSTRIES

1976-1983

Industry	Number of New Jobs	Percent of All New Jobs	Average Salary 1976-1983	Percent of 1983 Statewide Average Salary (\$16,035)
Manufacturing	24,500	12%		
Nonelectrical machinery*	9,295		\$23,942	149%
Instruments*	8,711		\$23,826	149%
Construction	1,100	1%	\$20,912	130%
TCPU**	7,653	4%	\$21,843	136%
Wholesale Trade	13,236	6%	\$20,424	127%
FIRE***	26,295	12%	\$19,429	121%
Retail Trade	37,142	17%	\$ 8,334	52%
Services	103,860			
Business services****	16,244	8%	\$13,130	82%
Health services****	42,472	20%	\$14,685	92%

Compiled from Minnesota Council of Economic Advisors, Economic Report to the Governor, 1986, pp. 34, 37, and 56-60.

* New employment in nonelectrical machinery and instruments represented half of all new manufacturing employment.

** Transportation, communications, and public utilities.

*** Finance, insurance, and real estate.

**** New employment in business and health services represented half of all new services employment.

Minnesota's relationship to the U.S. economy has also been altered by structural changes of the last 40 years. Minnesota's particular adaptations to these changes have, on the one hand, made the state's economy more vulnerable to national business cycles, but they have also encouraged growth in a number of less cyclically sensitive industries in which Minnesota has a competitive advantage.

The source of greater cyclical variability is the decline of agriculture and mining in favor of manufacturing in the goods-producing sector. Agriculture and mining are also cyclical industries, but agricultural cycles do not necessarily coincide with business cycles and the demand for Minnesota's iron ore lags business cycles at the national level. A review of manufacturing activity since 1972 shows that Minnesota now very closely follows the course of business cycles at the national level with durable goods manufacturing especially susceptible to cyclical downturns.

Minnesota's particular manufacturing focus has provided some protection from cyclical declines, though. For example, manufactured food products, which accounted for 10 percent of all manufacturing employment in 1983,¹⁵ are sold to households whose personal consumption expenditures are generally unaffected by business cycles. Similarly, the timing and duration of downturns and recoveries in fabricated metals and nonelectrical machinery manufacturing (29% of all manufacturing employment in 1983*) very closely approximates the timing and duration of expansions and contractions at the national level, but Minnesota's losses in recession are milder and its gains in recovery greater than at the national level.

¹⁵ Ibid., p. 37.

Furthermore, some Minnesota manufacturing is not at all cyclically sensitive. Nondurable manufacturing in both the printing/publishing and food-related sectors shows little variability over the business cycle, providing some stability to Minnesota's economy during a recession.

Finally, the expansion of Minnesota's service sector has generally increased stability in the face of expansions and contractions at the national level. In 1983 more than half (790,000¹⁶) of Minnesota's workers were employed in sectors of the service economy which have been generally immune to business cycle declines. Both the FIRE and aggregated services¹⁷ sectors, for example, have demonstrated their tenacity during recessions, enjoying slow and steady growth through each contractionary period since 1972.

Repercussions from the international economy will continue to affect mining and agriculture, but international economic conditions will also affect Minnesota's exports of nonelectrical machinery, fabricated metals, and instruments manufacturers, who employ 9 percent of all workers and 35 percent of all manufacturing workers.¹⁸ Potential repercussions from the international economy include price competition from countries with lower labor costs; technological advances that may reduce the competitive edge of Minnesota-produced goods; and the high value of the dollar which may continue to impede exports.

¹⁶ Ibid., p. 34.

¹⁷ Health, business, education and social services as well as membership organizations.

¹⁸ MCEA, op. cit., pp. 34 and 37.

Employment Trends

Over the period 1976-1983 Minnesota's labor market experienced a net increase of 212,000 nonagricultural jobs. Almost half of these new jobs were in aggregated services, especially health services (20% of all new jobs). Other sources of new jobs were the retail trades (+17%), FIRE (+12%), and manufacturing (+11%).¹⁹ Job creation in manufacturing is especially significant in view of (1) the large proportion of new jobs in durable goods industries and (2) a decline in manufacturing employment at the national level over this period.

Dramatic increases in some sectors were accompanied by declines in other sectors. The smallest contributions to new employment were in agricultural services,²⁰ construction, and nondurable goods manufacturing (less than 1% each), while jobs in mining actually declined by almost 50 percent (a loss of 7,200 jobs). Although job creation is essential to the long-term health of Minnesota's economy, compensation levels and job location are also important variables which may affect the state's economic health for many years.

¹⁹ Ibid., p. 34.

²⁰ Agricultural services include such activities as crop dusting and harvesting, fruit picking/grading/packing, and hay baling.

Compensation Levels

One objective measure of the adequacy of compensation is the extent to which salaries for newly-created jobs were above or below the state average salary (\$16,035 in 1983²¹). Between 1976 and 1983 jobs added in manufacturing, TCPU, construction, FIRE, and the wholesale trades generally paid salaries well above the 1983 state average. Average new job salaries in FIRE, for example, were 20 percent above the 1983 state average; average salaries in some new manufacturing jobs were almost 50 percent more than the 1983 state average salary.

The majority (63%) of new jobs created during this period, though, were in retail trade and services where average salaries are traditionally low. For example, 17 percent of all new jobs were in the retail trades where salaries averaged only half the statewide average. Average salaries in new service jobs were somewhat higher, but 90 percent were at levels below the 1983 state average. "As a result, the inflation-adjusted statewide average salary actually fell between 1976 and 1983, from \$16,877 to \$16,035."²²

Job Location

Table 4 (page 16) reveals some of the changes occurring in the location of jobs within the state. Between 1950 and 1980 job opportunities in all major industrial categories shifted from the northeast, west, and southeast areas of

²¹ MCEA, op. cit., p. 56.

²² Ibid., p. 60.

Table 4

**PERCENT CHANGE IN REGIONAL SHARES OF
STATE EMPLOYMENT BY INDUSTRY**

1950-1980

Sector	Region				
	Northeast (Regions 2, 3, & 5)	Central (Regions 6E, 7E, & 7W)	West (Regions 1, 4, 6W, & 8)	Southeast (Regions 9 & 10)	Metro (Region 11)
Agriculture and services, forestry, fishing and other	-27%	+1%	-1%	+7%	+30%
Mining	0%	-52%	+6%	+26%	+48%
Construction	-3%	+46%	-27%	-17%	+9%
Manufacturing	-49%	+118%	+53%	+21%	-5%
Transportation and Public Utilities	-38%	+47%	-8%	+7%	+9%
Wholesale Trade	-40%	+57%	-27%	-4%	+9%
Retail Trade	-15%	+28%	-23%	-10%	+10%
FIRE	-18%	+47%	-8%	-5%	+1%
Services	-24%	+21%	-19%	-12%	+13%
Public Administration	-3%	+23%	-15%	-6%	+2%
TOTAL	-29%	+ 7%	-34%	-13%	+27%

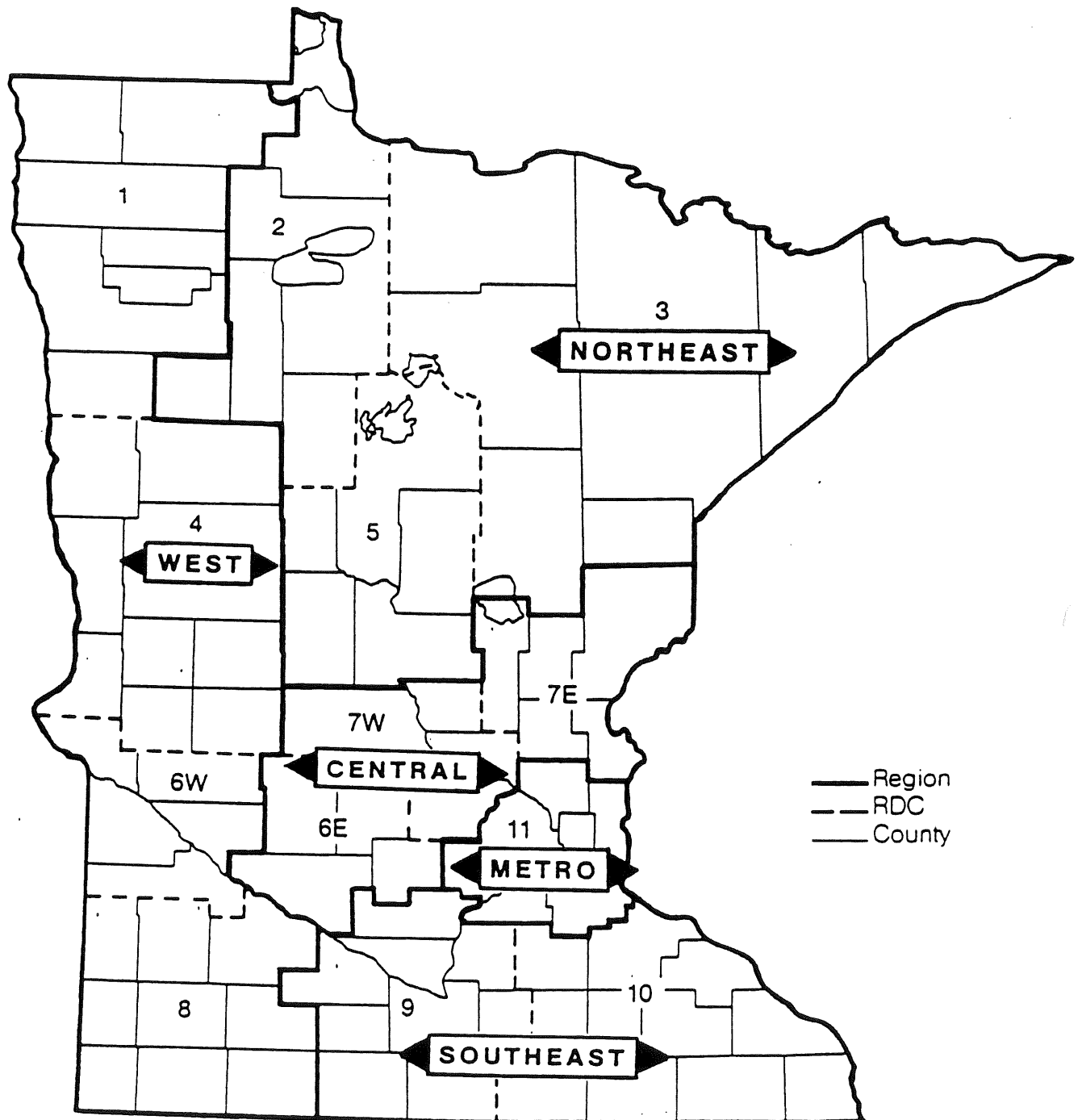
Compiled from Minnesota Council of Economic Advisors, Economic Report to the Governor, 1986, p. 112.

the state into the central and metro areas (see Economic Regions Map, page 18). The northeast registered declines in every sector; a similar pattern is evident in the west, with the exception of positive employment increases in manufacturing (+53%) and mining (+6%). The southeast fared only slightly better with increases in manufacturing and mining as well as in agriculture, agricultural services, and transportation/public utilities.

The central and metro areas, though, were the principal beneficiaries of job losses in the rest of the state. Employment in both of these areas was up in all but one sector, with the central part of the state generally realizing greater gains than the metro area.

These employment shifts within Minnesota suggest that in the northeast and western areas of the state adjustments must occur in the labor force, employment opportunities, or both. In the northeast the principal labor force problem is the excess of mostly older, blue collar workers who may have to choose between retraining for lower-paying jobs in new industries or permanent unemployment. Job growth in retail trade, FIRE, services, and public administration has compensated for some job losses in other industries, but without manufacturing growth this area of the state cannot continue to generate service-sector employment. In the west the principal labor force problems are the departure of young adults for jobs outside the area and a shortage of qualified workers to staff white collar jobs in new manufacturing concerns (between 1950 and 1980 the west's share of state manufacturing employment increased 53%).

MINNESOTA'S ECONOMIC REGIONS



Adapted from Minnesota Council of Economic Advisors,
Economic Report to the Governor, 1986.

REGIONAL ECONOMIES

The discussion of job location trends in Minnesota lends credence to the concept of a "dual economy" in which the Twin Cities metropolitan area has become the state's only vital economic force, compensating for economic declines in stagnant nonmetropolitan areas. However, "The actual situation is more complex than this viewpoint might suggest. The regions outside the metro area differ among themselves and do not present a uniformly gloomy picture."²³

Whatever regional differences there may be, regions outside the Twin Cities metropolitan area have one shared experience: over the last 40 years all have been forced to adjust to the decline of a former dominant industry. In response, some regions have diversified their economies, creating a new export base which will support activities of the local economy; others have met with less success. A closer look at conditions within development regions may clarify the extent of economic disparities throughout the state. The size of the labor force and the unemployment rate are good indicators of economic well being as are the level of incomes and dependency rates; these factors will be used as objective measures of Minnesota's regional economies. A more subjective analysis will follow, highlighting regional economic conditions and the strengths and weaknesses of regions in five areas of the state.

²³ Ibid., p. 103.

Labor Force Trends

Table 5 (page 21) compares the labor force, unemployed workers, and the unemployment rate in each of Minnesota's economic development regions in 1979, 1980, and 1984. Over these six years the U.S. economy experienced three periods of expansion (1979; late 1980-early 1981; and 1983-1984) and two periods of recession (early 1980 and late 1981-1982).

In 1979 Minnesota's labor force grew approximately 3 percent, the same rate typical of other years in the 1970's. However, a hint of future regional growth patterns is the 2.2 percent decline that year in Region 4's labor force.

Between 1980 and 1984 the state's labor force increased by the traditional 3 percent a year. However, the national recession of 1980-1982 was an exceptionally difficult time for Minnesota. Recent growth in machinery and high-tech manufacturing made its economy vulnerable to declines in exports and sales to other industries. Furthermore, as national demand for ore and taconite changed, Minnesota's mining industry began to suffer and many jobs were lost. Finally, a slowdown in farm exports hurt farmers, many of whom are still struggling with low farm prices, declining land values, and high debt-to-asset ratios.

Table 5 shows that statewide the average number of workers unemployed each month increased 47 percent during 1980 (85,388 to 125,579); this rise is also reflected in the average monthly unemployment rate which increased from 4.2 percent to 6.9 percent. Table 5 also shows the unemployment rate in each region

Table 5

AVERAGE MONTHLY LABOR FORCE, UNEMPLOYED WORKERS, AND UNEMPLOYMENT RATE

1979, 1980, and 1984

Region	1979			1980			1984		
	Labor Force	Unemployed Workers	Unemployment Rate*	Labor Force	Unemployed Workers	Unemployment Rate*	Labor Force	Unemployed Workers	Unemployment Rate*
1	45,642	2,885	6.3%	47,601	4,824	10.1%	43,231	4,826	11.2%
2	28,113	2,151	7.7	29,822	3,096	10.4	31,725	3,519	11.1
3	145,795	9,268	6.4	149,431	16,051	10.7	140,078	17,342	12.4
4	96,034	5,340	5.6	93,917	7,222	7.7	100,216	8,114	8.1
5	55,640	3,678	6.6	57,388	5,370	9.4	59,851	5,979	10.0
6E	55,850	2,489	4.5	57,252	3,525	6.2	54,112	4,375	8.1
6W	30,933	1,256	4.1	31,343	1,921	6.1	27,775	2,156	7.8
7E	45,537	2,528	5.6	47,859	3,990	8.3	54,804	4,293	7.8
7W	100,158	5,091	5.1	105,587	7,635	7.2	121,331	8,784	7.2
8	74,447	2,776	3.7	74,955	3,999	5.3	67,428	4,397	6.5
9	129,952	4,646	3.6	132,871	7,938	6.0	128,922	7,962	6.2
10	207,183	8,979	4.3	212,321	12,622	5.9	220,776	14,254	6.5
11	1,036,661	34,301	3.3	1,078,836	47,386	4.4	1,193,449	55,742	4.7
State	2,051,945	85,338	4.2%	2,119,183	125,579	5.9%	2,243,698	141,743	6.3%

Source: Department of Jobs and Training.

* Seasonally unadjusted.

in 1979, 1980, and 1984. Between 1979 and 1980 the unemployment rate increased in all areas; regional percent changes in the number unemployed ranged from a low of 35 percent in Region 4 to a high of 73 percent in Region 3. In 1984 Minnesota's economy continued to show signs of recession: statewide the number of unemployed workers increased by 16,000 (+13%) and the unemployment rate rose slightly; across the state, labor force declines occurred in Region 1 (-9%), 3 (-6%), 6E (-5%), 6W (-11%), 8 (-10%), and 9 (-3%), and the unemployment rate increased in all but two regions (7E and 7W).

By 1984 the rate of increase in statewide unemployment had declined dramatically. Two discouraging words, though, temper the significance of this change.

First, statewide changes mask persistently high unemployment rates in some regions. In Region 11, for example, the average unemployment rate in 1984 was 4.7 percent, while unemployment in Regions 1, 2, 3, and 5 was 10 percent or more.

Second, a comparison of unemployment rates over time ignores changes in the size of the labor force; consequently, a change in the unemployment rate may reflect not only a change in the number unemployed, but a change as well in the size of the labor force. Thus, the number unemployed and the unemployment rate might have been even higher had the size of the labor force remained about the same.

For example, in 1979 Region 1's labor force numbered 45,642 with 2,885 unemployed. By 1984 the number unemployed had increased by 1,941. Over the same period, though, the labor force decreased by 2,411. These workers likely

left Region 1's labor force as discouraged workers or to work outside the region. Had these workers stayed in Region 1 they would have swelled the ranks of the unemployed to 7,237 in a labor force of 45,642, or an unemployment rate of 15.8 percent.

Thus, recovery lags in several economic development regions in spite of economic expansion at the national level and improvements statewide. In particular, Table 6 (page 24) shows that in 1984 each region's share of the state's unemployed was higher than its share of the state's labor force, with the exception of Regions 9 (with nearly equal shares) and 11 (with a much lower share of the state's unemployed).

Table 6

REGIONAL SHARES OF MINNESOTA'S LABOR FORCE
AND UNEMPLOYED WORKERS

1984

Region	Labor Force	Percent of State	Unemployed Workers	Percent of State
1	43,231	1.9%	4,826	3.4%
2	31,725	1.4	3,519	2.5
3	140,078	6.2	17,342	12.2
4	100,216	4.5	8,114	5.7
5	59,851	2.7	5,979	4.2
6E	54,112	2.4	4,375	3.1
6W	27,775	1.2	2,156	1.5
7E	54,804	2.4	4,293	3.0
7W	121,331	5.4	8,784	6.2
8	67,428	3.0	4,397	3.1
9	128,922	5.8	7,962	5.6
10	220,776	9.8	14,254	10.1
11	1,193,449	53.3	55,742	39.4
State	2,243,698	100.0%	141,743	100.0%

Source: Department of Jobs and Training.

The comparison of unemployment rates in July 1985 and July 1986 (Table 2, page 8) shows a still depressed labor market in some counties of the state. Although seasonal variations may have affected the magnitude of the unemployment rate, the direction of change is clear. In 10 of Minnesota's counties unemployment was 50 percent above the statewide unemployment rate for the same month in both years. An additional 15 counties had unemployment rates 25 percent above the statewide rate in over-the-year comparisons between these two months. Employment prospects appear particularly slim in Regions 1, 2, and 3, where unemployment remains high in most counties, even in the peak employment periods of summer.

Table 7 (page 26) lists the 22 counties with two-thirds or more of their total employment in farming in 1980. "These counties have little other basic or outside income-producing industry to provide alternative sources of income."²⁴ Two counties, Marshall and Mahnomen (northeastern Minnesota) appear in both Tables 2 and 7, and may face additional economic distress as the farm crisis runs its course.

Income and Dependency Trends

The vitality of Minnesota's regional economies can also be assessed on the basis of income and dependency trends. Two data series are available for this purpose.

Tax returns filed for 1979 and 1984 are the basis for the regional income data shown in Table 8A (page 28). Although current dollar family income²⁵ rose in each region over this six-year period, two comparisons reflect regional disparities and the effects of inflation and lingering recession.

²⁴ Department of Finance, Minnesota Quarterly Financial Report, April 1985, p. 8.

²⁵ Adjusted gross income as reported on the federal tax form.

Table 7

MINNESOTA'S AGRICULTURALLY-DEPENDENT COUNTIES*

1985

<u>Region 1</u>	<u>Region 6W</u>
Kittson	Big Stone
Marshall	Lac Qui Parle
Norman	Swift
	Yellow Medicine
<u>Region 2</u>	
Mahnomen	<u>Region 8</u>
	Cottonwood
<u>Region 4</u>	Jackson
Grant	Lincoln
Murray	Pope
Traverse	Pipestone
Todd	Redwood
	Rock
<u>Region 6E</u>	<u>Region 9</u>
Renville	Sibley
	<u>Region 10</u>
	Fillmore

Source: Department of Finance, Minnesota Quarterly Financial Reports, April 1985, p. 8.

* Counties with two-thirds or more of total employment in farming.

Economically Distressed Counties

Minnesota

1985-1986

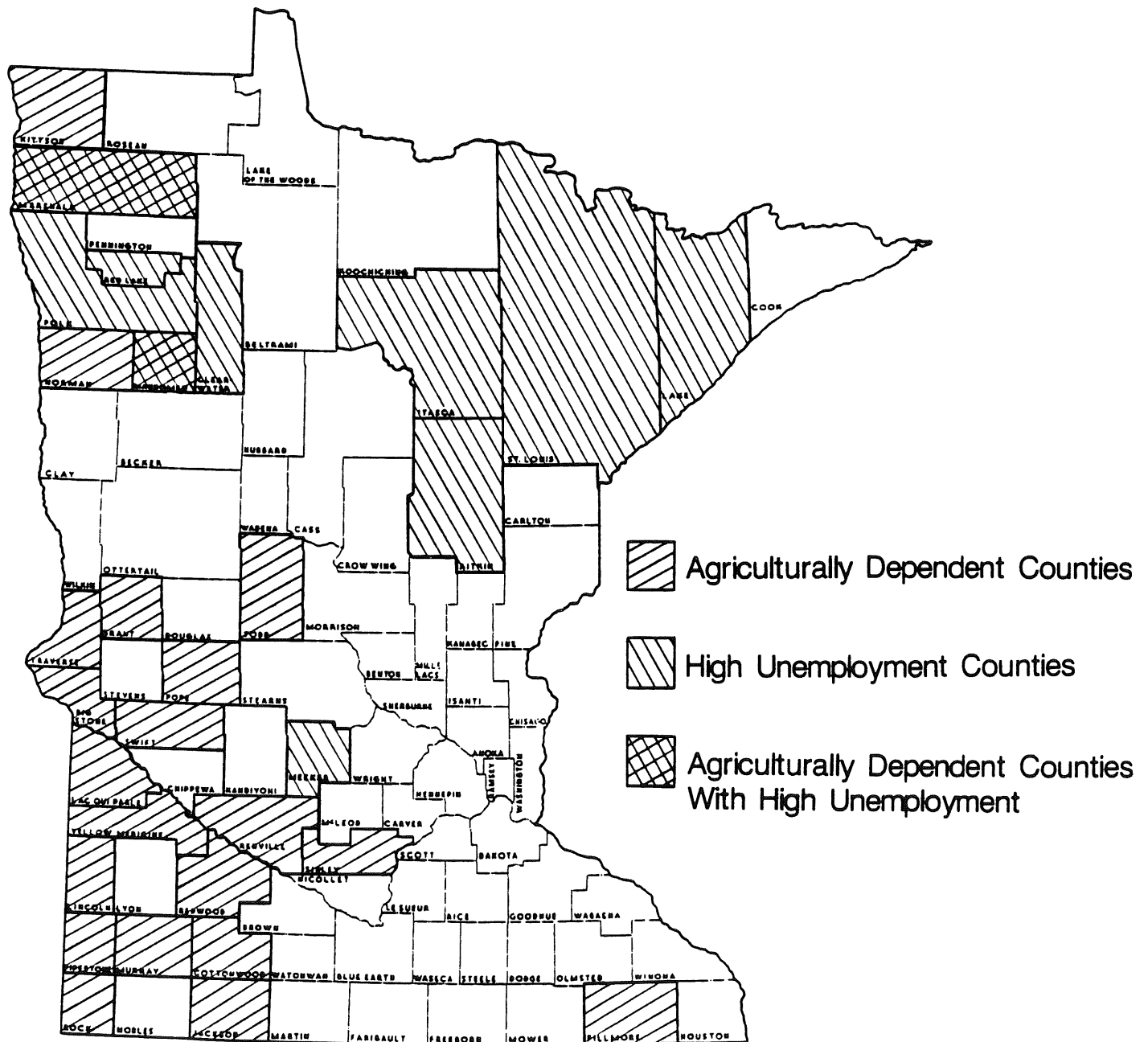


Table 8A

CURRENT DOLLAR MEDIAN INCOME OF MINNESOTA FAMILIES* BY REGION

1979 and 1984

Region	Current Dollar Median Income		Percent Change 1979-1984
	1979	1984	
1	\$14,561	\$18,006	23.7%
2	12,217	16,252	33.0
3	19,824	23,676	19.4
4	14,708	18,464	25.5
5	12,914	16,273	26.0
6E	16,634	20,688	24.4
6W	14,083	16,926	20.2
7E	16,591	21,447	29.3
7W	18,161	24,162	33.0
8	15,422	17,901	16.1
9	17,196	21,133	22.9
10	18,575	23,935	28.9
11	23,322	32,297	38.5
State	\$19,959	\$26,416	32.4%

Source: State Planning Agency, "Median Income Outpaces Inflation for Second Consecutive Year," Population Notes, April 1986.

* Families include all married couple families and other families, but exclude single individuals and other nonfamily tax filers.

First, a comparison of regional current dollar median incomes shows that median income was much higher in Region 11 than elsewhere in the state. In 1984 six other regions had median incomes above \$20,000, but no regional median was more than three-fourths as high as Region 11's.

More revealing, though, is the deterioration among regional median incomes. For example, the ratio of regional median income to Region 11's median income declined in every region between 1979 and 1984. This was especially true in Regions 3 and 8 where regional median incomes were 85 percent and 66 percent, respectively, of Region 11's median income in 1979, but only 73 percent and 55 percent, respectively, six years later.

Second, the constant dollar median incomes in Table 8B (page 30) indicate the effects of inflation and recession on Minnesota's regional economies. Between 1979 and 1984 median income in constant (1984) dollars declined by at least 2 percent in every region except Region 11. These constant dollar declines in family income were much greater than that experienced nationally (-.5%)²⁶ and were especially severe in Regions 3 (-11.9%), 6W (-11.4%), and 8 (-14.4%). Thus, Minnesota's troubled mining and agricultural economies have contributed to a decline in real median income statewide and in most regions and a real increase of only 2.1 percent in Region 11.

²⁶ U.S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States 1986, p. 450.

Table 8B

CONSTANT DOLLAR MEDIAN INCOME OF MINNESOTA FAMILIES* BY REGION

1979 and 1984

Region	Constant Dollar Median Income**		Percent Change
	1979	1984	1979-1984
1	\$19,749	\$18,006	(8.8)%
2	16,570	16,252	(1.9)
3	26,887	23,676	(11.9)
4	19,949	18,464	(7.4)
5	17,515	16,273	(7.1)
6E	2,561	20,688	(8.3)
6W	19,101	16,926	(11.4)
7E	22,503	21,447	(4.7)
7W	24,632	24,162	(1.9)
8	20,917	17,901	(14.4)
9	23,323	21,133	(9.4)
10	25,193	23,935	(5.0)
11	31,632	32,297	2.1
State	\$27,071	\$24,416	(2.4)%

Compiled from State Planning Agency, "Median Income Outpaces Inflation for Second Consecutive Year," Population Notes, April 1986.

* Families include all married couple families and other families, but exclude single individuals and other nonfamily tax filers.

** 1984 dollars.

Administrative records from the Department of Human Services are the basis for analysis of regional dependency trends. Table 9 (page 32) lists the count of all households receiving Aid to Families with Dependent Children (AFDC) either as a single parent household or a household with an unemployed father. Between 1980 and 1984 the share of all households receiving AFDC remained constant. However, the total number of recipient households changed over this period as did the composition of recipients.

Between 1980 and 1984 the number of recipient households increased by nearly 8 percent, but recent changes in eligibility requirements and shrinking job opportunities have reduced the share of single-parent households in favor of households with an unemployed father. More specifically, in 1980 less than 4 percent of all recipients were households with an unemployed father, but by 1984 unemployed father households accounted for 15 percent of all recipients. The largest increases occurred in Regions 6W, 8, 9, and 10, most likely because of the depressed farm economy in these regions.

Regional Economic Conditions²⁷

Statewide economic indicators may obscure regional strengths and weaknesses. Therefore, the following discussion provides a summary of current economic conditions and emerging trends in each of Minnesota's five economic regions.

²⁷ This discussion is based primarily on a similar discussion of regional economic conditions which appeared in the 1986 Economic Report to the Governor.

Table 9

NUMBER OF AFDC HOUSEHOLDS IN MINNESOTA AND
THE PERCENT OF ALL HOUSEHOLDS RECEIVING AFDC

1980 and 1984

Region	1980		1984	
	AFDC Households	Percent of all Households	AFDC Households	Percent of all Households
1	738	2.2%	918	2.6%
2	1,232	5.8	1,547	6.6
3	5,242	4.2	6,902	5.7
4	1,499	2.1	1,883	2.5
5	1,648	3.6	2,235	4.6
6E	678	1.8	868	2.1
6W	343	1.6	365	1.6
7E	1,193	3.6	1,452	4.0
7W	1,713	2.5	2,114	2.8
8	870	1.8	995	2.0
9	1,542	2.0	1,804	2.2
10	2,937	2.1	3,261	2.2
11	27,002	3.7	25,833	3.4
State	46,637	3.2%	50,177	3.3%

Source: Department of Human Services.

Region 11--Metro Area

Not having confronted the single-industry dependence characteristic of all other areas of the state, Region 11's economy is fairly diversified. With only half of the state's labor force, Region 11 provided 62 percent of the state's manufacturing employment in 1980.²⁸

Other strengths of the metro area include the high ratio of nonproduction workers in manufacturing employment and the high percentage of white collar workers. These strengths combine to provide Region 11 with a recession-resistant employment base that can generate income from outside the state and a workforce whose skills will be in high demand.

Region 11's potential weaknesses center around: (1) labor shortages (the baby bust is now entering the work force and women's labor force participation in the metro area has probably peaked); (2) a large dependent Southeast Asian immigrant population whose demographic characteristics are unique in Minnesota; and (3) economic declines in the rest of the state which may retard growth in the metro area or increase the flow of rural in-migrants looking for work.

Regions 2, 3, and 5--Northeast Minnesota

Regional unemployment data (pages 8 and 21) demonstrate the effects of recent recessions on these regions of northeast Minnesota. Employment prospects continue to be limited in this part of the state.

²⁸ MCEA, op. cit., p. 112.

Recessionary impacts and long-term structural changes have had the greatest effect on Region 3. This region's Iron Range has had an economy tied to the mining of iron ore. Slack demand for domestic steel, though, caused a decline in the demand for iron ore and, inevitably, a decline in the demand for mine workers. The Minnesota Department of Jobs and Training reports that between January 1985 and January 1986 more than 4,000 positions were eliminated in Region 3 (3.6% of all workers employed in January 1985). The size of the region's labor force has also declined 6 percent over the year (141,580 to 133,154).²⁹

In spite of the severity of economic declines in northeast Minnesota, these regions do have three characteristics which may ease the transition from single-industry economies: (1) an available labor supply from the pool of unemployed and discouraged workers; (2) low labor force participation among females who may compensate for low or no population growth; and (3) a growing retail and service sector economy which may compensate for employment losses in mining and timber.

On the other hand, these regions must also address: (1) the loss of employment in export-based industries; and (2) labor force deficiencies (a large unemployed force of older workers with high wage expectations but inappropriate skills).

²⁹ Department of Jobs and Training, Review of Labor and Economic Conditions, February 1986, p.15.

The central portion of Minnesota also suffered in the two most recent recessionary periods. In all three regions the number unemployed and the unemployment rate increased between 1979 and 1984. Hardest hit among these regions was Region 6E, in which increases in unemployment were accompanied by a decline in the size of the labor force.

Over-the-year comparisons between July 1985 and July 1986 show that the labor force continues to shrink in Regions 6E (-1,905) and 7E (-635). These declines, though, were matched by a labor force increase of 2,900 in Region 7W, suggesting that some workers may have relocated to the St. Cloud area.³⁰

These regions of the state will undoubtedly undergo additional stress. Current problems to be resolved include: (1) the heavy involvement of the labor force in agriculture; (2) the current emphasis on employment in cyclically-sensitive sectors (i.e., agriculture and agricultural services, construction, and durable goods manufacturing); and (3) a high percentage of manufacturing workers in production jobs.

Conversely, three characteristics of central Minnesota's economy will facilitate adjustments to new economic realities: (1) increased economic diversity will enhance employment prospects during recessions; (2) proximity to the Twin Cities metropolitan area will enhance employment and marketing opportunities; and (3) current low labor force participation among females may allow for labor force growth in the absence of population growth.

³⁰ Department of Jobs and Training, Review of Labor and Economic Conditions, August 1986, p.14.

Regions 1, 4, 6W, and 8--Western Minnesota

Between 1979 and 1984 Regions 1, 4, 6W, and 8 in western Minnesota experienced the same increase in the number unemployed and the unemployment rate characteristic of the rest of the state. As was the case in northeast Minnesota, one response to high unemployment has been a decline in the labor force: by 1984 the labor force in Regions 1, 4, 6W, and 8 had declined by 12,600. Some of these unemployed workers may have found jobs in Region 4 where the labor force increased by 4,000 between 1979 and 1984; others may have become discouraged workers now no longer seeking employment.

Over-the-year comparisons between July 1985 and July 1986 show that the labor force continues to shrink not only in Regions 1, 6W, and 8, but in Region 4 as well. By July 1986 almost 10,000 workers had left the labor force in these regions. More than half of these departures were recorded in Region 8.³¹

The west's high unemployment can be traced to its heavy ties to agriculture. In 1950 agriculture accounted for 50 percent of employment; by 1980 this dependence had declined to 11 percent of all jobs in western Minnesota, but these regions still accounted for one-third of the state's agricultural employment. Furthermore, six of the state's 22 most agriculturally-dependent counties are in Regions 1, 4, 6W, and 8. Hardship in these communities has quite naturally pervaded the local economy, including the nonfarm sector which supplies farm production equipment and household goods.

³¹ Ibid., pp. 14 and 16.

Western Minnesota can be expected to be the most adversely affected by continued declines in agriculture. These regions may be adversely affected as well by the cyclical nature of agricultural employment and the out-migration of young workers seeking jobs outside the area. On the other hand, attempts to diversify the economy may be hampered by a shortage of qualified white collar workers to staff new nonagricultural industries.

Although the west's heavy agricultural involvement poses substantial problems, it has fostered as well: (1) an economy not necessarily sensitive to national business cycles; and (2) nondurable manufacturing in food and food-related industries which have provided employment for displaced agricultural workers.

Regions 9 and 10--Southeast Minnesota

Economic performance within southeastern Minnesota is quite variable. Although some counties in these regions experienced slow population and labor force growth or actual declines, other counties established growth rates higher than the statewide average (Nicollet and Olmsted, for example). Between 1979 and 1984 the number unemployed in this part of the state increased 63 percent (13,625 to 22,216). Over this same period the labor force declined by about 1 percent in Region 9, while it increased by almost 7 percent in Region 10, likely a reflection of the presence in Region 10 of one of the state's five MSA's.

By July 1986 the size of the labor force had declined in Region 10 as well as in Region 9. More than 5,000 workers left the labor force in this one-year period, more than half in Region 10.³²

³² Ibid., p. 16.

The disadvantages inherent in southeastern Minnesota's economy include: (1) the relatively high percentage of workers employed in agriculture (at 29%, second only to western Minnesota's 34%); and (2) the high concentration of production workers in manufacturing employment. Rochester (Region 10), in particular, may be required to deal with rising joblessness if rural residents seek employment in the southeast's only MSA.

On the positive side, southeastern Minnesota has an abundance of white collar workers to staff new nonagricultural ventures. Also, its proximity to the Twin Cities metropolitan area will enhance employment and marketing opportunities in much the same way that central Minnesota benefits from its proximity to the metro area.