RESEARCH PROJECT:

Minnesota Regional Manufacturing/Technology Opportunity Assessment:
Northwest Region

Round Table Discussion/
Executive Summary

DATE:
June 1996

Bureau of Business
and Economic Research

University of Minnesota Duluth
Center for Economic Development
I. INTRODUCTION

The purpose of this paper and five others like it is to describe the economic base of six regions in the state of Minnesota, and to identify possible future niches for development. The relative health of Minnesota’s economy today, and nearly full employment allows us an opportunity to plan strategically for the long term health of our state’s economy. For this reason, our philosophy in formulating this paper and our recommendations has been that economic development efforts should focus on industries providing high wage/high value jobs which lead to an improved quality of life for Minnesota’s citizens.

The economic base of Northwest Minnesota is decidedly not technology industry based, with the exception of one sector, Communications. Most other sectors of importance in this region are agriculture based, service based, or some aspect of retail trade. This economic base is described in the first section of this paper under the heading of Strongest Industries.

Our recommendations begin with a look at the top technology manufacturing performers in the region, identified by analyses of secondary data, focus group discussion, and individual interviews with knowledgeable people in the region. In the same way, we have identified candidates for business retention and development efforts that are important suppliers to the industries which comprise the economic base of the region.

Readers who are interested in further information are invited to look at reports 1 and 2 for the Northwest region.


Report #2: PRELIMINARY DATA, including Discussion of Data Sources, Data Organization, Industry Leaders, General Information and Analysis of Regional Structure for Key Industries, and tables of top performers.

The data for these reports are taken from secondary sources, including:

# Regional Economic Information System (REIS), United States Department of Commerce.

# County Business Patterns (CBP), United States Department of Commerce.

# NU OnRamp, University of Nebraska Bureau of Business Research computer based retrieval system (NUOR).

# IMPLAN 1993. MIG, Inc. Stillwater, MN.

# Standard Industrial Classification Manual, Executive Office of the President, Office of Management and Budget.
II. ECONOMIC BASE OF NORTHWEST MINNESOTA

STRONGEST INDUSTRIES

Many industries make up the economic base of the region: Industries that are large employers, present high value-added to the region, export from the region, either to the rest of the United States or to foreign countries, interact strongly with other industries in the local economy leading to spin-off economic impacts, and show good prospects for future economic growth. The region depends upon these industries in a very real way. Their strengths and weaknesses should be of major concern to those with an interest in the growth and development of the regional economy.

Economic base, in a technical sense, consists of industries that bring money in from outside the region through export activity. At least a part of this money is then used to buy local goods and services, either as semi-finished goods, or as professional services, both contributing to basic production. The secondary or local supplying industries are part of the infrastructure that makes a basic industry competitive in the global market place. Thus such industries as construction, local retail trade, and related servicing sectors both depend upon the basic industry and nurture it.

The following list of industries represent those that are dominant in the above categories of performance. To be included in the following list requires that the industry in question be in the top thirty industries (out of over 500 industries) in at least four categories of performance.

It is interesting to note that, by using these criteria, the Northwest region is decidedly not technology industry based. One sector, Communications, stands out in this regard. The rest are agriculture based, service based, or some aspect of retail trade. A few of the top industries will be discussed below:

Key Facts about Northwest Minnesota’s Economic Base: Top Industries from Analysis of Data Sources

<table>
<thead>
<tr>
<th>Top Non-Technology/Manufacturing Industries:</th>
</tr>
</thead>
<tbody>
<tr>
<td>n Sugar Crops</td>
</tr>
<tr>
<td>n Ranch Fed Cattle</td>
</tr>
<tr>
<td>Millwork</td>
</tr>
<tr>
<td>n Transportation Equipment, N.E.C</td>
</tr>
<tr>
<td>n Communications, Except Radio An</td>
</tr>
<tr>
<td>n Banking</td>
</tr>
</tbody>
</table>

values = in the top 30
blank cell = not in the top 30

Industries ranking in top 30 in at least four categories for Central Minnesota:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sugar Crops</td>
<td>47.37</td>
<td>110.28</td>
<td>67.19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Services, N.E.C.</td>
<td>43.82</td>
<td>65.16</td>
<td>1.65</td>
<td>1.46</td>
<td>1599</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ranch Fed Cattle</td>
<td>59.13</td>
<td>2.03</td>
<td>1.46</td>
<td>2595</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance And Repair Other Fa</td>
<td>21.06</td>
<td>94.14</td>
<td>2222</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Millwork</td>
<td>77.01</td>
<td>276.30</td>
<td>139.79</td>
<td>3342</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation Equipment, N.E.C</td>
<td>439.54</td>
<td>481.24</td>
<td>140.80</td>
<td>2134</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communications, Except Radio An</td>
<td>23.61</td>
<td>73.10</td>
<td>43.94</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automotive Dealers &amp; Service St</td>
<td>30.00</td>
<td>98.29</td>
<td>80.15</td>
<td>2587</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Banking</td>
<td>49.07</td>
<td>252.22</td>
<td>94.85</td>
<td>1735</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Sugar Processing

This industry is the strongest in the region appearing in the top 30 industries in every category of measurement we identified. It is truly basic to the region displaying high levels of compensation, high dollar value of exports (the technical base measure), high values of gross output, high levels of value added, and it interacts strongly with the rest of the economy in terms of its ripple effects (multiplier) on other industries as well as on the income level in the regional economy. Sugar Beet Processing employed 688 individuals in the region in 1993. This is essentially the same employment as in 1990. While it is large in absolute size and influence, it does not appear to have particularly strong growth potential for the future.

Sugar Processing was not mentioned by name in our focus group and individual interview sessions. However, a more generic industry, food processing, was mentioned as a key industry to the economy. Sugar Processing falls within this more generic, locally identified industrial category.

# Ranch Fed Cattle

Another industry identified out of the focus group and individual interview process was agriculture. Data confirming the importance of this broad category is associated with the Ranch Fed Cattle industry. It is interesting to note that, while this is a key industry in terms of exports, output, and its spin-off effects on other sectors of the economy, a value added component, Meat Packing Plants is not currently located in the region to any significant extent. Local respondents informed the research team that this industry is currently located in North Dakota. There may be enough of a product base in the Northwest region to warrant such an industry to be located here as well.

# Millwork

Millwork is indeed a significant manufacturing industry in the region, employing almost 3,000 individuals in 1993. It is not a particularly fast growing industry nationally, but it is growing in the region. There were 80 additional employees in this industry in 1993 when compared to 1990. The industry is a major employer, a major contributor to the compensation levels in the region, is a major exporter, and has high values of total output and value added. The focus group and interview process identified wood product processing as a major industry in the region, of which Millwork is a part.

# Communications

This is a composite sector with many sub-category definitions. It includes telephone, telegraph, cable and other pay television services, and such things as radar station operations, satellite earth stations, and missile tracking stations. There were close to 300 individuals employed in Northwest Minnesota in these various industries in 1993. This represents but a slight increase in such employment between 1990 and 1993. The focus group and individual interviews confirmed that communications was an important industry in the region. They also felt that this industry would be a significant growth leader in the years to come. The respondents were especially excited at the prospect of obtaining fiber optics in the near term, and held this prospect out as one of the keys to the future economic development of the region.

# Transportation Equipment, n. e. c.

This industry includes recreation vehicles such as snowmobiles. This industry was highlighted by the focus group and individual interviews as important at the present time and it was listed as an expected growth leader for the region in the future. The industry employed over 1,800 individuals in 1993, up almost 1,000 since 1990. It is a major growth industry in the region as
identified by the data and by responses from the focus group and interview processes. Both the focus group and individual interviewees identified this as an industry important to the future performance of the Northwest regional economy.

# Banking and Financial Services

Banking was identified by the data for the region as an extremely important industry. It is a major exporter from the region which means that other regions depend on Northwest Minnesota financial institutions for their financial needs. Banking was not identified as a current key industry during the focus group and individual interviews. However, several respondents identified a more generic financial services sector as a probable growth sector important to the future of the region.

# Other Industries

There were several service type industries also found to be important from an inspection and analysis of the data for the region. These will be simply listed here:

- Private Social Services, n. e. c.
- Maintenance and Repair Construction
- Automotive Dealers & Service Stations
- Nursing and Protective Care

In addition to those identified by the data, the focus group and individual interviews identified tourism as a key sector, both now and for the future. Tourism might explain the importance of Automotive Dealers and Service Stations from the analysis of the data. Other large employers in the region, such as hotels and motels, eating places, and similar retail industries might also be explained by a significant tourist influence on the regional economy.

RECOMMENDATIONS

Recommendation I: *A focus of economic development efforts should be on helping those existing industries which provide higher wage/value jobs to grow and survive, as opposed to emphasizing the recruitment of new businesses.*

This is a recommendation that should have had more discussion and attention within economic development circles than it has received until quite recently. There is an increasing awareness in development circles that economic development, especially in rural regions, stems from internal (endogenous) sources. Small-to-medium sized enterprises, begun and nourished by local residents, often define the economic future of a rural region or even of urban neighborhoods. Competitive industrial prospecting, combined with strong locational financial incentives, too often
amounts to a zero sum game in which one region in the state simply attracts firms from other regions in the state.

Further, it is not unusual to find industries offered incentives at a location they would have chosen in any case. Locating firms simply take advantage of these significant concessions from competing regions in the process. There is a question as to whether benefits and costs of industrial prospecting, coupled with tax and financial give-a-ways, add up to positive outcomes in many instances. What is more, once industries are located in a region, they are often ignored and taken for granted.

TOP TECHNOLOGY MANUFACTURING PERFORMERS

We identify in this section top performing technology industries with a strong local base. The technology sector definitions were provided to us for the purposes of this analysis by the sponsors of this research project, Minnesota Technology, Inc. These are industries which typically provide higher wages and may be worthy of additional economic development attention. Most of the technology industries are in the manufacturing sector, although a few services related to computers and engineering are also included. Individuals in the focus group/interviews confirmed that these industries were in the region and were roughly the size our data estimated them to be.

**# Construction Machinery Manufacturing**

This sector employed 104 individuals in the region in 1993, up from 68 in 1990. It is a growth sector nationally and its performance is strong in the region. Our analysis suggests that it is over represented in the region relative to the same industry nationally which indicates that it is an exporting, or basic industry. This is certainly an industry worthy of further economic development consideration.

**# Computer Peripheral Equipment, n. e. c.**

This is a composite industry that includes the manufacture of such things as printers, plotters, and graphic displays. It does not include modems and other interface equipment. The industry grew from 59 employees in 1990 to 64 in 1993. It is a strong growth industry nationally. Our analysis suggests that this industry is basic to the region as it brings in money from the outside through export activity.

**# Electronic Components Manufacturing**

The Electronic Components industry is another composite including such things as radio and TV equipment, printed circuit boards, primary batteries, and several “not elsewhere classified” product categories.
It had approximately 60 employees in 1993. It also experienced a slight increase in employment in the region between 1990 and 1993.

# Focus Group Reactions to the Possibility for Technology Industry in the Region

- The focus group and individual interviewees agreed that technology industry in the region will generally struggle unless they react dramatically to new technologies and to global competition.

- All agreed that there was a great need for fiber optic cables in the region. This was seen to be a necessary condition for successful technology firm location.

- It was generally agreed that the real chance for technology manufacturing in the region would come from within. The chances of prospecting for industries in this general sector were seen to be slim.

CANDIDATES FOR RETENTION EFFORTS IN NORTHWEST MINNESOTA

We found a number of industries in the Northwest region which are contributing significantly to the region’s economy but that are displaying signs of difficulty or that are declining in relative importance. (Our next several observations are out of an analysis of employment and employment trends.) These industries should be the focus of retention efforts on the part of local governments and development agencies. A successful retention effort is likely to pay dividends at least as large as high risk efforts to attract new industry into the region.

Sectors showing either absolute or relative decline include:

# Beat Sugar Processing

There is no need to panic on this one, the change in employment is slightly positive between 1990 and 1993. However, the degree of concentration of this industry in the region declined slightly over that three-year period and there was some indication that there was a coincident loss in competitive advantage to the rest of the United States during that same time period (perhaps to North Dakota?). These losses were small, but given the importance of this industry to the region, attitudes towards retention activities might be considered.

# Millwork

This almost sounds like a repeat of the basic industry list. Millwork is another industry quite important to the region. Unlike Beet Sugar, the negatives were substantial enough between 1990 and 1993 to cause some concern. There was a loss of over 200 employees over the three-year period and the level of concentration for the regional
industry relative to the rest of the United States fell as well. The industry is identified as being relatively slow growing from a national point of view. But there was also some indication that the industry lost competitive advantage in the region over the three-year time period. This industry is important enough to the region to warrant at least a casual analysis of its needs for retention and growth in the future.

### Industries That Have Left The Region

For several industries, retention is too late. A few will be mentioned here to point to the fact that retention should always be of concern to a regional economy:

- Packaged Frozen Foods (Lost 273 employees between 1990 and 1993)
- Groceries, General Line (Lost 212 employees between 1990 and 1993)
- Curtains and Draperies Mfg. (Lost 70 employees between 1990 and 1993)
- Industrial Machinery, n. e. c. (Lost 60 employees between 1990 and 1993)
- Computers, Peripherals & Software (Lost 40 employees between 1990 and 1993)

### Industries Identified by Focus Group/Interviewees

In addition to the above industries, the focus group/interview process identified others that were areas of concern:

- Service Sectors in General
- Higher Education, Especially Technical Colleges
- General Agriculture (Some Sectors)
- Health Sectors (Hospitals Closing and/or Downsizing)
- Fabric Manufacturing (Curtains and Draperies?)
- Locally Owned Retail Trade

*Many Other Local Industries Are At Threat Due To Intense Competition From North Dakota*

### RECOMMENDATION II: Because basic industries buy many of their inputs to production from other local firms, attention to these local suppliers’ needs helps to make the basic industries more competitive

A region’s economic future requires that the region be efficient in its production. Efficiency lowers the cost of production, making the region more competitive. Efficiency can be associated with those industries supplying the basic sector, the provision of government services, the character of the region’s infrastructure regarding roads and communications, and the efficiency of local resources, such as the productivity of its workforce. So much attention is often paid to a region’s exporting industries that those local industries supporting the base are often ignored or forgotten. This section looks at a few of those local industries that supply the economic base.

### Construction

One sector identified as the leading local supplier time and time again was that of Construction. Several important industries in the region identified Construction as a major supplier: Lumber & Wood Products, Wholesale Trade, Banking, Consulting & Research, and Motor Freight Transport and Warehousing.

Because the industry is competitive, little
government encouragement or interference is necessary. However, making sure the industry has what it needs in the way of skilled workers could be viewed as a responsibility of the local education structure. Monitoring the finance picture in the region to make sure funds for construction are there when needed could be the responsibility of government and of the business community itself. Quality assurance is the responsibility of everyone associated with construction in the region.

## Printing and Publishing

Printing and Publishing was seen to be a major supplier to many of the manufacturing enterprises in the region. It was less of a factor for major service providers.

## Business and Consulting Services

These really represent two separate industries. However, they are listed together because some of the local industries tended to use one while some used the other. They are also highlighted here because they are fast growing industries nationally and are, therefore, good candidates for development in the region. Either way, they are strong local suppliers to many important industries.

## Motor Freight and Warehousing

This is an important sector to almost all the manufacturing sectors in the region. It appears across the board in this regard. It is really a composite of several industries and is difficult to tell which of them are important. We can say for sure that it is a major local supplier in the region.

## Utilities

Suffice it to say that local utilities play a major role as a supplier to regional industries. There is much going on with utilities that could change the efficiency and nature of this industry in the very near future. The possibility of deregulation at the federal level, the existing fact of deregulation in the interstate wholesale transmission of electricity, ever present concerns over the environment as it relates to this industry, and the already occurring consolidation of the industry through multiple mergers and acquisitions, all serve to make this industry one of concern to this and to many other regions in the nation.

## Other Sectors

Other supplying sectors that appeared as being important on more than one occasion include:

- Fabricated Metal products
- Railroads and Related Services
- Communications
- Banking
- Real Estate
- Chemicals and Allied products
- Hotels and Lodging Places

### RECOMMENDATION III: Substituting locally produced goods and services for those previously imported defines a niche for future development. We recommend this option be explored.

The substitution of local goods and services for imported goods and services, or import substitution, is a particularly strong economic growth strategy because it not only provides the direct employment associated with the new facility, but it increases the interaction between local
industries which lead to greater spin-off impacts.

The first two sectors are identified by Minnesota Technology, Inc., as being technology based. This implies higher than normal wages/value are brought into the region should these industries be expanded.

**# Miscellaneous Computer Services**

This is a composite of several technology based industries that currently are not particularly prominent in the region. In fact, indications are that these services are currently imported into the region, i.e., employment is under represented in the region relative to other regions. The industry includes such services as computer programming, prepackaged software, computer integrated system design, data processing and preparation, information retrieval services, computer maintenance and repair, and computer services, n. e. c.

There are currently about 40 employees in these industries and there has been slight growth in the local industry between 1990 and 1993. The focus group and individual interviews all stated that they would like to see fiber optics installed in the region. If such installation comes to fruition, import substitution for these industries would be even more likely.

**# Engineering Services**

There are currently about 150 people employed in this regional technology based service. The industry grew in employment by about one third between 1990 and 1993. However, this industry is not seen to be basic to the region, that is, exporting. In fact, it is under represented in the region relative to the rest of the United States. This would be a good industry to study further for possible import replacement and as a future base industry.

**# Measuring and Controlling Devices, n. e. c.**

These devices include such things as meteorological instruments, testing equipment, nuclear radiation detection and monitoring instrumentation, etc. We list this
First, there is evidence that some of these products are currently being imported into the region, and therefore the region could benefit from recommendation III. Second, the industry did experience some growth in employment in the region between the years 1990 and 1993 with some indication that the region could be competitive in producing some of these instruments. This industry would be worthy of further study in terms of its possibilities.

# Other Possibilities

A few other possibilities follows:

- Communication Services
- Motor Vehicle Parts and Accessories (in association with the snowmobile manufacturing in the region)
- Additional Wood Products Manufacturing
- Cement Related Industries (It is interesting to view the ups and downs of these industries in the region. Employment changes have been rather profound, in both directions)

IV. POTENTIAL IMPEDIMENT TO FUTURE ECONOMIC GROWTH

This last section draws primarily on the information provided by focus groups and individual interviews. We asked the focus groups and those interviewed about their concerns and recommendations for future development. We also asked what government, local development agencies, and the business community itself might do to aid meaningful economic development. What follows is our interpretation of the interview responses, categorized by topic.

One other point concerning these interviews needs to be made. Our analysis was on a regional basis, based on the definitions associated with the so-called McKnight regions. One of those regions is the Northwest region, Minnesota. We were requested to divide this region into West Central and Northwest sub-components for separate analysis, which we did. We conducted separate personal interviews in each of the two regions. However, we held only one focus group session for the McKnight Northwest region. This focus group included individuals from both sub-regions. This section of the report comes out of the combined region focus group session plus the individual responses for the Northwest sub-region.

# Government

The individual interviews for the Northwest region were not only concerned about the absolute level of taxes in the state and their communities, they also felt that specific tax breaks should be given to firms and industries for which the region is in direct competition with North Dakota for industrial location. There was concern that the state government was not aware or was insensitive to what this region is going through in its attempt to retain and attract business.

There was also a call for more reasonable laws and regulations, especially in the
pollution control area. There was concern expressed that many pollution control regulations are enforced arbitrarily and without reason. There was a call for balance in environmental regulation that would permit reasonable economic development.

The interviewees identified a need for infrastructure in the region. This need applies especially to communications and access to such telecommunication entities as the Internet.

There were calls for greater cooperation between government and the private sector. Encouraging public/private partnerships were emphasized during one interview.

The focus group seemed to agree that local government should do more in the way of infrastructure development and maintenance in the region. In particular, modern telecommunications technology needs to be introduced or upgraded in the region. While such provision isn't a specific role for government, encouraging the regional telephone company to move in this area is a worthy task for government to undertake.

Another suggestion was for local government to prepare an economic development plan for the region. This plan should be backed by appropriate research and industry studies. The plan should also include a time line for upgrading the region's telecommunications (see above) and should also include some mechanism for identifying sources of additional financing of economic development opportunities. Finally, a mechanism needs to be created for carrying out these plans once they are in place.

# Local Development Agencies

The individuals interviewed called for accurate and timely needs assessment analyses. They felt that the local development agencies would be the natural entities to carry out such analyses.

The interviewees also felt that it was the development agencies' responsibility to make local industry aware of new technologies and market opportunities. This would require more dialog between industry and development agencies than is currently the case. It would also require the agencies to do more in the way of monitoring and research.

There was a call for more coordination and perhaps some consolidation between the development agencies.

Finally, there was a call by the interviewees for additional staff in the various development agencies so that they can better carry out their missions.

The focus group argued that development agencies should be involved in helping government establish an economic development plan for the region and should be involved in carrying out the provisions of such a plan. In addition, it is the responsibility of development agencies to match firms with experts and with sources of needed industrial research.

Some concern was expressed during the focus group session that local development efforts were not coordinated enough. It was thought that many development agencies overlap in their responsibilities and that duplicate service provision was inefficient. There might be some weeding out, merging, or better coordination of activities to avoid such duplication.

# Business

The individual interviews identified only one role for business in economic development that they felt was not being played at the present time. They felt that business should play a larger role in training and educating their own workforces.

From the focus group, most of the comments on what business can do to help local development revolved around workforce issues. Concern was expressed that local workforce supply was acting as an impediment to future economic growth. The absolute supply of workers was not adequate for positive economic growth. Just as
importantly, the skills needed for future growth were seen to be a problem.

Local business was encouraged to become more involved in worker training. Apprenticeship programs were mentioned in this regard. So was in-house training efforts on the part of local business. Coordination between business and local education institutions was also mentioned. All of these workforce enhancement activities should be carried out in conjunction with the economic development plan mentioned earlier.

# Housing

One issue that came up in every region we studied is that of affordable housing for tomorrow’s workforce. There is a very strong feeling in Greater Minnesota that the lack of housing creates an impediment to attracting an adequate workforce to rural Minnesota. Part of the problem is that manufacturing in rural Minnesota tends to be routine, leading to lower wages than technology based manufacturing is likely to offer. Lower wage levels make it difficult to afford and therefore produce necessary housing.

It was not clear from the focus group just whose responsibility it would be to address this issue. Presumably, government would play a role. Perhaps private industry and the development agencies should also be involved, at least in a supporting role. However there is no question that adequate housing is a problem. Addressing this problem should be a priority for the economic development efforts in this region.