RESEARCH PROJECT:

Minnesota Regional Manufacturing/Technology Opportunity Assessment: West Central Region

Round Table Discussion/Executive Summary

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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 West Central Minnesota is still defined today by non-technological, agriculture-related industry. 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 West Central region.

Report #1: SUPPORTING DATA, including the Notion of Economic Base, Measuring Economic Base, Employment in West Central Minnesota, Location Quotient Values for West Central Minnesota, Shift-share Analysis for West Central Minnesota, Input-output: Industry Ranking by Output Levels, Manufacturing - Technology Rankings, and appendix material with complete data.

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 WEST CENTRAL 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 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. This money is then used to buy local goods and services either as semi-finished goods or professional services 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 construction, local retail trade, business services, and other industries such as these both depend on 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.

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

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<tr>
<td>Sugar</td>
<td>24.57</td>
<td>168.66</td>
<td>172.15</td>
<td>38.59</td>
<td>2.06</td>
<td>1.50</td>
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<tr>
<td>Cheese, Natural And Processed</td>
<td>52.29</td>
<td>188.45</td>
<td>2.45</td>
<td>1.88</td>
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<td>Abrasive Products</td>
<td>15.38</td>
<td>67.38</td>
<td>71.97</td>
<td>33.86</td>
<td>367</td>
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<tr>
<td>Packaging Machinery</td>
<td>17.51</td>
<td>42.88</td>
<td>77.88</td>
<td>29.14</td>
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<td>Electric Services</td>
<td>22.28</td>
<td>36.32</td>
<td>107.94</td>
<td>71.55</td>
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<td>Automotive Dealers &amp; Service St</td>
<td>49.67</td>
<td>38.36</td>
<td>79.25</td>
<td>80.94</td>
<td>2781</td>
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<td>Eating &amp; Drinking</td>
<td>53.49</td>
<td>33.77</td>
<td>149.36</td>
<td>73.01</td>
<td>6291</td>
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<td>Banking</td>
<td>50.39</td>
<td>114.11</td>
<td>259.89</td>
<td>97.20</td>
<td>1793</td>
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<tr>
<td>Nursing And Protective Care</td>
<td>52.14</td>
<td>43.13</td>
<td>77.70</td>
<td>62.92</td>
<td>3658</td>
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<td>Colleges, Universities, Schools</td>
<td>27.66</td>
<td>37.39</td>
<td>65.79</td>
<td>29.07</td>
<td>1685</td>
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Sugar Processing

Little needs to be said about this important industry. It was among the top industries in every category of performance we identified, with high absolute values of compensation, exports, output, and value added. The industry also has significant spin-off (secondary) impacts on the region’s income and on the dollar value of output from other, related (supplying) regional industries. The industry employed close to 300 individuals in 1993 which actually represented a slight loss in employment (about 30 individuals) since 1990. It should be noted that food processing industries were identified as particularly important to the region during focus group and interviews with individuals knowledgeable about the economy of the region.

Cheese, Natural and Processed

Another food processing industry is also shown to be important to the region. It brings in money from the outside as a result of significant levels of exports and it is another industry that exerts strong spin-off effects on both regional income and on other supplying industries’ outputs in the region. It employed over 200 individuals in 1993. This is about the same level of employment as existed in the industry in 1990. Again, food processing was identified as an industry of particular significance to the region by focus group participants and individual interviewees.

Abrasive Products

This manufacturing industry produces abrasives, asbestos, and miscellaneous nonmetallic mineral products. It employs over 300 people in the region and has been relatively stable at that level over the past several years. It is among the top thirty firms in terms of total worker compensation, levels of exports (bring in from outside of the region), total output and value added.

Packaging Machinery Manufacturing

This is a particularly interesting industry in the region. It is one of the region’s leading manufacturing employers with over 500 employees in 1993. What is more, it is a growth sector in terms of employment with an increase of almost 200 employees between the years 1990 and 1993. It is also seen to be a faster than average growth industry (again, in terms of employment) nationally which partially accounts for the industry’s strong regional performance. But the region picked up even more employees in this industry than would have been indicated by its share of the national growth in employment. In other words, the region seems to hold some kind of competitive advantage in growing this particular industry.

In addition to employment, this industry is seen to have high levels of worker compensation in the region, is a major exporter from the region, and has significantly high levels of output and value added. So, whether we look at this industry from an employment or from a dollar point of view, it comes out as being increasingly significant to the economic development of the region.

Other Industries

There are a few additional industries that are important to the region’s economic base which will either be commented on later or that require little in the way of additional comment. They will simply be listed here:

- Electric Services
- Automotive Dealers and Service Stations (A very interesting case with significant employment, growth in employment, output, and export values. These high values have been confirmed from a number of different sources of data.)
- Eating & Drinking Establishments (Another retail sector seen to be very important to the region. Perhaps these last two reflect the region’s tourism industry.)
- Banking
- Nursing and Protective Care
- Private Colleges, Universities, Schools

We also identify industries put forward by the
focus group/interviewees as being important to the West Central economy:

- Metal Fabrication
- Recreational Vehicle Manufacturing
- Farm Equipment Manufacturing

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 requires more discussion and attention within economic development circles than it has received until quite recently. There is an increasing awareness in economic development circles that economic development, especially in rural regions, stems from internal 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 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. Finally, once industries are located in a region, they are often ignored and taken for granted.

TOP TECHNOLOGY MANUFACTURING PERFORMERS

Here we have identified top performing technology industries with a strong local base. These are industries which typically provide higher wages and may be worthy of additional economic development attention. Individuals in the focus group/interviews did confirm that these industries existed in the region.

**# Conveyors and Conveying Equipment Manufacturing**

This industry consists of establishments engaged in manufacturing conveyors and conveying equipment for installation in factories, warehouses, mines, etc. The industry employed 287 individuals in 1993, up from 91 employees in 1990. The region outperformed the rest of the nation in attracting employees. In other words, the region seems to hold some competitive advantage for growing this particular sector. The industry also grew significantly as an exporter from the region, bringing in external dollars which can be re-spent in the region. It looks like a strong sector for future performance in the region. Conveyors and Conveying Equipment was not identified by the focus group/interview process as either a
currently leading sector or as a strong future possibility.

# Relays and Industrial Controls

This is a manufacturing sector engaged in manufacturing relays; motor starters and controllers; and other industrial controls and control accessories. Government data sources show that this industry was not present in the region in 1990. In 1993, these data sources list 191 employees in this sector. Once again, this was not a sector identified in conversations with focus groups and from individual interviews with people knowledgeable about the local economy.

# Aircraft parts and Equipment, n. e. c.

This is a very diverse industry with too many products to effectively list. However, the industry saw an increase in employment in the region from 38 individuals in 1990 to 80 in 1993. The industry has become increasingly basic (exporting) from the region, again generating local impacts by bringing outside money into the region. This industry was not identified out of the focus group/interview process.

# Computer Programming Services

A recent addition to the region, Computer Programming Services went from an employment of 4 individuals in 1990 to 134 employees in 1993. While this industry could be identified as relatively fast growth nationally, the national performance does not account for the industry’s performance in West Central, Minnesota. There appears to be something in the region that leads to this comparative advantage, to a growth rate that is greater than is true for other regions in the nation. The industry does not appear to be a major exporter from the region, however. This would seem to indicate that there is a strong enough local market to account for the growth in this sector. This may be a case where substituting local production for production previously imported from other regions has taken place and could continue to occur in the future. This industry was not identified out of the focus group/interview process.

# Computer Maintenance and Repair

Much of what was said for Computer Programming Services applies to this industry as well. It went from being virtually absent from the region in 1990 to employing 67 in 1993.
It is not identified by our data as being a major exporter from the region, so it must be servicing local needs. Again, this could be due to import replacement activities. This industry was not identified out of the focus group/interview process.

# Engineering Services

This industry employed 84 individuals in the region in 1993, up from 74 in 1990. It appears that most of this industry’s sales are local and not for export. In fact, there is some indication that a portion of the engineering services utilized in the region are imported from other regions, making this industry a possible candidate for import substitution. Most of the growth in employment in this industry is probably due to its participation in national trends for this same industry. The industry was not identified out of the focus group/interview process.

# Technology Firms Identified by Focus Groups and Individual Interviewees

The focus group and interview process did not identify technology changes as likely growth drivers in the future. They emphasized value added in agriculture as being their niche in the near future. At the same time, the respondents did feel that manufacturing was unlikely to decline in the region, i.e., that this broad sector would hold its own.

CANDIDATES FOR RETENTION EFFORTS IN WEST CENTRAL MINNESOTA

We found a number of industries in the West Central 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.

Technology industries either disappearing from the region or declining in competitive advantage include: Industrial Trucks and Tractors Manufacturing, Radio and TV Communications Equipment (apparently has left the region), Environmental Controls Manufacturing (apparently has left the region), and Computer Integrated Systems Design (a very significant decline).

Other sectors showing significant declines in employment include:
# Wood Products, n. e. c.

This is an extremely diverse industry too wide to adequately define. The U. S. Government’s definition reads, “Establishments primarily engaged in manufacturing miscellaneous wood products, not elsewhere classified, and products from rattan, reed, splint, straw, veneer, veneer strips, wicker, and willow.” However, it went from being a major exporter from the region to being under represented when compared to the same industry in other regions. The region lost 242 employees in this industry between the years 1990 and 1993. It may be too late for this industry at this time, but some analysis as to what exactly happened here may provide clues for other retention efforts in the future.

# Poultry Slaughtering and Processing

This is an interesting sector since value added agriculture was overwhelmingly identified by local individuals as the key sector for future employment growth in the region. Poultry Slaughtering and Processing lost over 1,200 employees between 1990 and 1993 according to the U. S. Department of Commerce and NUONRAMP data sources. The final employment figure reported for 1993 was 169 individuals. This may be a sector worthy of retention efforts. Like the previous sector, it could also serve as a useful case study for future retention efforts in the value added agriculture sectors.

# Farm Machinery and Equipment Manufacturing

This is another sector that took a rather large hit between the years 1990 and 1993. This industry lost over 100 employees over that time period.

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.*

There are now 40 individuals remaining in the industry according to federal data sources. The industry also lost significantly in terms of its export potential over that same time period.

# Retail and Service Sectors

One concern expressed in the focus group and individual interviews was that local communities were losing employment in the retail sector, and more specifically, losing locally owned retail establishments in the regions small towns. Our data seemed to confirm at least the first of these two statements; employment in retail trade was definitely falling in many sectors in the region. Our data are not organized in a way that would permit analysis of the second statement; that outside owned firms are taking the place of those locally owned. However, the latter statement would be consistent with national trends in this regard and there is no reason to doubt the focus group, interviewee observations.

An apparent trend towards concentration in larger establishments is affecting both the number and diversity of establishments in the retail sector. There is an apparent desire on the part of those interviewed to retain a diverse retail sector in the small towns in the region. It could be that special retention actions will need be taken if this locally owned industry is to be healthy in the region.

A region’s economic future requires that the region be efficient. 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 and 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. Four industries identified in a previous report as being particularly important to the region all identified Construction as a major supplier to their operations: Health Services, Food and Kindred Products Manufacturing, Electronic Equipment Manufacturing, and Non-Electrical Machinery Manufacturing.

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.

# 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 de-regulation at the federal level, the existing fact of de-regulation 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.

# Motor Freight Transportation and Warehousing

This industry is really a composite of several industries identified by the government through the Standard Industrial Classification Code. Therefore, it is somewhat difficult to tell whether this is an industry that would also be a possible candidate for import substitution. We can say that it was a major local supplier to various manufacturing industries in the region.

# Other Sectors

Other supplying sectors that appeared as being important more than once include:

- Wholesale Trade
- Business Services
- Banking
- Communications
- Printing and Publishing

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. We should point out that none of these possibilities occurred to or were mentioned by the focus groups and the interviewees.
Management Services

This is a rapidly growing industry nationally and one that is currently under represented in the region in terms of employment. All of our data indicate that this service is used in the region but produced elsewhere. An opportunity for local production could well exist in this industry.

Engineering Services

This industry was already mentioned under the technology section of this report. Little more need be said except that this may very well be an industry worth exploring for the possibility of substituting locally produced services for those currently imported.

Fabricated Structural Metal

This is an interesting industry in the region. It is shown by our data to be an exporter from the region in 1990 but an industry who’s products were imported in 1993. This is a declining industry in the region and went from over represented in the region when compared to the nation to one that is under represented. An analysis of what happened to this industry might reveal the prospects for turning it around and for import substitution.

Business Consulting, n. e. c.

Business Consulting is among the fastest growing industries nationally. This is partially a result of the trend towards outsourcing many management functions on the part of American industry. The industry is currently under represented in the region, at least in terms of employment. It may very well be an industry worthy of development efforts, substituting local production for production currently imported into the region.

Accounting, Auditing, and Bookkeeping

This industry is currently under represented in the region in terms of employment, but there is some evidence that it is growing on its own. There are 71 additional employees in this industry in 1993 when compared to 1990. In 1993, almost 270 individuals were employed in this industry. It has been a growth industry nationally, much like Business Consulting above, and seems to be a prospect for further growth in the region.

Computer Programming Services

This industry was also discussed under the technology section above. Little more will be said here. It is a growth sector, both nationally and in the region. It was still under represented in the region in terms of employment in 1993, however. This makes it a prospect for further growth in the region as local production is substituted for imports from other regions.

Other - Retail Trade and Services

There were a very large number of industries classified under retail trade and service provision that were under represented in the region in terms of employment in 1993. These sectors will not be listed here. However, there may be several sectors in this category that are capable of growth in the region given the will and effort to do so. Further exploration of this possibility would have to be undertaken on a sector by sector basis.

IV. POTENTIAL IMPEDIMENTS 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 individually 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 titled the Northwest region, Minnesota. We were requested to divide this region into
West Central and Northwest components for separate analyses, 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
regions. This section of the report comes out of the combined region focus group session plus
the individual responses for the West Central region.

# Government

The individual interviews for the West Central region emphasized taxes and regulation
when discussing government’s role in economic development. Government must
recognize that paying for its operations becomes a cost of doing business in the
private sector, according to the respondents. Whereas there was no argument against
paying for necessary services, unnecessary taxes and government programs should be
discouraged. There was also some concern coming out of the individual interviews about
the worker’s compensation issue. This was identified as an oppressive cost to Minnesota
businesses.

A second issue was that of government regulation. “Too much of it,” was one
response. But more importantly, there were complaints about the seeming arbitrariness
of much of the regulation. Environmental regulation was singled out as a special area
of concern in this regard.

The same types of comments came out of the focus group session. However, there
were additional specifics from this source worth mentioning.

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 local telephone
company to move in this area is a worthy
task for government to undertake.

Another suggestion was for local government to develop an economic development plan
for the region. This plan should be backed by appropriate research and industry studies.
The plan should 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

Development agencies should be involved in helping government establish an economic development plan and should be involved in carrying out its various provisions. In addition, it is the responsibility of development agencies to match firms with experts and with needed industrial research.

Some concern was expressed concerning coordination of local development efforts. It was thought that many development agencies overlap leading to duplicate services being offered. There might be some weeding out, merging, or coordination activities to avoid such duplication.

# Business

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.

# One Other Issue: 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 produce necessary housing.

It was not clear from the focus group interviews 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. There is no question that adequate housing is a problem, however. Addressing this problem should be a priority for the economic development efforts in this region.