Presents

Economic Snapshots: Our Region Today and Tomorrow
Supporting Data

September 10, 1998

Bureau of Business and Economic Research
Center for Economic Development
University of Minnesota Duluth
This summary outlines the findings from an analysis of nine defined industries in the Minnesota Power Service Area region. These nine industries contain most of the major firms in the region serviced by Minnesota Power.

The analysis looks at the nine industries’ contribution to (impact on) the region's economy, contribution to export levels, the historical trends in employment and output for the nine industries, and some views of the future of these industries in the region.

The data for this analysis comes from a variety of sources. However, the two principal sources of data are IMPLAN—a software system and database which can be used for impact analysis, and REMI—a similar model but one that also contains output and employment projections. Impacts will generally be stated in terms of output, employment, employee compensation, value added, and indirect business taxes (sales plus excise). Because of the number of differing taxing authorities in the region and because of the differing taxing policies that are industry specific, indirect business taxes were all that could be analyzed in the time given to this project.

**Total Impacts:**
- Taken as an aggregate, the nine industries listed account directly, indirectly, and by induced impact, for 55% of the region's total gross output of goods and services,
- they account for 45% of the region's employment,
- they account for 35% of the region's compensation to employees,
- they account for 45% of the region's value added, and
- they account for 39% of the region's indirect tax revenue.

**Why is this important?**

The strongest implication from these data is that the region's economy would be devastated if we could somehow take this collection of industries and move them to another location.

**The Export Picture:**

Exports are any sale made to customers outside the region. These sales bring outside money into the region, which can, in turn, be spent on needed imports or on other goods and services produced in the region. Exporting industries are the drivers of a regional economy.

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2. The counties included in this study are: Carlton, Cass, Crow Wing, Douglas, Hubbard, Itasca, Koochiching, Lake, Morrison, Pine, St. Louis, Todd, and Wadena.
3. All impacts are for the year 1995 unless otherwise noted. This is the most recent year for which impact data could be obtained.
• While only 14% of the region's total exports are to foreign countries, the nine industries for this analysis accounted for 43% of these exports.
• The nine industries also account for 43% of the region's exports to the rest of the United States.
• In other words, the nine industries account for 43% of the region's total exports to all customers.

Close to half of the region's driving force – exports – are accounted for by these industries.

Another View of Economic Base–An Industry View:

Another view of economic base utilizes a tool known as location quotients. Simply put, a location quotient is the percentage of regional activity made up by an identified regional industry divided by the percentage of activity in the national economy made up by that same industry nationally. If the quotient is greater than one, the industry is basic to the region–it is one of the drivers of the regional economy.

All location quotients were computed on the basis of gross output, both for the region and for the nation.

• Iron Ores exhibits a location quotient of 48.4. This means that it is 48 times more important to the region's economy than it is to the nation's. It is truly a driver of this region's economy.

• Paper Mills & Printing has a location quotient of 15.0

• Wood Products has a location quotient of 14.4

• State & Local Government has a location quotient of 1.9, meaning that, when looked at as a part of the region's economy, State & Local Government is one of the economy's drivers.

• Pipelines, Gas Production & Distribution, and Petroleum Refining has a location quotient of 1.5.

• Food Processing has a location quotient of 1.5.

• Hospitals has a location quotient of 1.3.

• Metal Products has a location quotient of 1.1

• Transportation has a location quotient of 0.9.
In other words, virtually all of the industries representing Minnesota Power's primary customers can be identified as basic to the region, or certainly very important relative to the same industry in the nation.

**Industry Impacts-Output:**

Remember, the nine industries taken as a group account for 55% of the region's gross output. These impacts come from the industry's direct contribution to production. They also come from the fact that these basic industries buy from other industries in the region. And finally, they come from the fact that these industries hire workers, paying compensation, which, in turn, is spent on local goods and services in the region.

- **Iron Mining** accounted for $1,300 million in direct output. When added to the indirect and induced multipliers, the industry accounted for $2,147 million of the region's total gross output.

- **Paper Products** accounted for $1,257 million in direct production. When taking the indirect and induced multipliers into account, the industry accounted for $2,041 million in total output.

- **Food Processing** accounted for $498 in direct output generation, and $894 million when the total effect is taken into account.

- **Wood Products** accounted for $481 million in gross output. When the indirect and induced effects are taken into account, the industry accounted for $794 of the region's output.

- **Metal Products** accounted for $84 million directly and $132 million in total.

- **Transportation and Utilities** accounted for $1,106 million directly and $1,542 million in total.

- **Hospitals** accounted for $442 million directly and $743 million in total.

- **Pipelines, etc.** accounted for $303 million directly and $396 in total.

- **State and Local Government** accounted for $1,320 directly and $1,971 in total.

Other impacts are included in the Supporting Data Report. The magnitudes of their multipliers are similar to those presented for output.

**Why Is This Important?**
It is often true that industries need to tell others in the region, in government circles, and even to some of their suppliers what they mean to a region's economy. A true impact analysis would go into much more detail than was prepared for this presentation. However, the elements for all procedures are the same. Each industry accounts for direct impacts, the output, employment, and related measures associated directly with their operations. This is not the end of the story, however. They also account for impacts on other industries in the region through the interaction of purchases and sales. The total impact needs to account for all of these elements. The data generated by this project allows at least an aggregate view of each of the nine industries studied in terms of their individual impacts on the region's economy. The data can be used for public relations, for lobbying, and for related purposes.

Past and Future Trends:

When looking at the trends for industries in the region, the general conclusion is that they will experience moderate levels of growth and decline between the base year, 1995, and the projected year, 2000. In short, the trend appears to be one of steady state, or one of stability for the region. Each industry's growth between 1995 and 2000 are presented below. All percentages relate to growth in output.

- **Iron Mining** has a slightly negative trend in gross output. REMI projects a modest 4.2% decline over the entire five year period. This is due to expected cyclical trends and newly added production capacity in so-called mini-mills, using scrap metal as an input.

- **Food Processing** is seen to grow a modest 2.4% over the five-year period. The sector is mature and developed, but demand for the sector's output is still increasing worldwide. There may be opportunities for growth in the international arena with freer trade. However, the world economic situation may mitigate against this opportunity in the short run.

- **Wood Products** is seen to grow a fairly significant 6.1% over the five-year period. Strong growth is seen to be possible in the furniture sector and in the demand for panel products. One caveat is possible significant capacity expansion in the world economy.

- **Paper Mills** is seen to grow in the region by a significant 7.3% over the five-year period. This is certainly subject to the resolution of the Asian Crisis. It is also subject to a possible over-expansion of paper producing capacity worldwide. However, the world's demand for paper is increasing significantly and is seen to continue to increase in the near term. China's emerging economy could significantly contribute to this expansion in world demand.

- **Metal Products** is seen to remain steady over the five-year period. It is an industry that is in heavy competition with low cost producers, both domestic and foreign.
Mini-mill expansion also affects this industry. The strong dollar is making foreign producers even more competitive, especially in the United States domestic market.

- **Transportation and Utilities** is seen to expand in the region by 2.2% over the five-year period. This sector, as defined, does not include the particularly fast growing industry of trucking. It also fails to include the Northwest Airbus facility, which came on board after 1995. REMI was not able to take this latter event into account. The projection is subject to the possible impact of a prolonged strike at Northwest. However, passenger demand is expected to grow at a healthy 5% annually. Great Lakes shipping is expected to improve with the settlement of trade disputes. The picture will be even brighter if the iron ore industry is able to remain competitive through cost cutting efforts and through the development of new products and processes.

- **Pipelines, Gas Production & Distribution, and Petroleum Refining** is expected to increase by 4.1% over the five year period. Demand for petroleum refined products are expected to increase in the region in 1999, but by less than the increase for the nation as a whole. There is great uncertainty concerning refined petroleum product prices, but the consensus still seems to be for increasing prices in the near term. Gas Production and Distribution is expected to follow a pattern that is similar to that of Petroleum refining.

- The **Hospital** industry has long been important to the region's economy. It is projected to grow by a healthy 7.9% over the five-year period. The concerns relative to this forecast relate to uncertainties associated with mergers and acquisitions, competition for foreign (Canadian) customers, Medicare rules and payments, and managed care.

- **State & Local Government** has been basic to the region for a long time and is projected to grow at a 6.9% rate over the five-year time period. Cigarette money from the settlement of the suit, a favorable revenue picture for the state government and for many local governments is the bright spot for government. Possible labor strife as unions try to capture new revenues for their membership is a possible negative influence over the near term.