ECONOMIC EMERGENCY PROGRAM

International Falls Plant Shutdown

On Thursday, May 2nd, Boise Inc. announced plans to shut down two of the four paper machines at its International Falls paper mill. As a result of these changes, 265 union and salaried jobs will be eliminated at the plant in International Falls. An additional 35 jobs within the corporate structure will also be affected. As the community of International Falls absorbs this announcement, city and county leaders will need to consider the future of their community. That future will have an effect on the economy of International Falls and Koochiching County. In response, the University of Minnesota Duluth's Bureau of Business and Economic Research, in partnership with University of Minnesota Extension, has prepared this economic emergency report.

WHAT IS AN ECONOMIC EMERGENCY?

Communities often face a sudden and unanticipated change in their local economy. A major employer announces it is reducing its workforce, a fire destroys an operating facility, or a flood damages downtown. In these situations, communities often need to make quick, but important, decisions about how to react. They work closely with the local business(es) affected and work to help the business(es) and community recover. The University of Minnesota economic disaster program is designed to provide community leaders with information to assist in making decisions regarding the community’s future. Information from the IMPLAN (MIG, Inc.) model is used in this analysis.

There are a few important things to note related to this analysis and the tool used. In the IMPLAN model, one job is one job regardless of whether the job is full-time, part-time, or seasonal, which should be considered when interpreting the results related to employment in this report. Further, core IMPLAN data is gathered from a variety of government sources. When data is incomplete or missing, econometric techniques are implemented to fill in the gaps.

*Photo courtesy of International Falls Chamber of Commerce
CURRENT ECONOMY

In 2011, there were 6,300 jobs in Koochiching County.¹ The manufacturing industry employs 1,100 of those workers, or approximately 17 percent of all jobs, thus making it the largest single industry in terms of employment (see chart 1). The government sector collectively employs 16 percent of all individuals with jobs in Koochiching County. The largest service industry in Koochiching County is the health and social services sector.

The Boise, Inc. paper mill in International Falls is classified as a manufacturing business. Of the 1,100 manufacturing jobs in Koochiching County, 900 are in paper mills. The loss of 265 jobs will account for almost 30 percent of paper mill jobs in the county.

Of the approximately 200 manufacturing jobs not at paper mills, 37 percent are in industries related to wood products, including saw mills, wood and pallet container manufacturing, and reconstituted wood products. Other manufacturing activities in Koochiching County include, but are not limited to, animal processing, printing, machine shops, dental laboratories manufacturing, and sporting and athletic goods manufacturing.

In many ways, the economy of Koochiching County mirrors the economy of the average Greater Minnesota county (see chart 2).² Koochiching County has a higher percent of its employees in

¹ Source: IMPLAN (MIG, Inc.) database
² Greater Minnesota encompasses the 80 Minnesota counties not in the seven-county metropolitan area.
manufacturing and government in comparison. It has a lower percent of its employees in the service industry, as a whole. It also has a lower percent of employees in the agriculture, forestry, and fishing industry. This may likely be due to the high concentration of agriculture in southern Minnesota counties.

According to the IMPLAN database, the average wage (including benefits) in Koochiching County is $46,700. The average wage of the manufacturing industry is $92,800. In Greater Minnesota, the average wage is $33,700.

ECONOMIC IMPACT OF BOISE INC. PAPER MILL DOWNSIZING

The Boise, Inc. paper mill in International Falls, Minnesota employs 845 individuals. The proposed shutdown will result in the loss of 265 jobs at the manufacturing plant. According to the model used in this analysis, 265 employees in the paper mill industry in Koochiching County produce an estimated $207 million in economic activity annually in the county. These employees are paid an estimated $26.7 million in labor income, or approximately $97,300 per employee\(^3\), including benefits (see table 1). Given these relatively high wages, one can assume the paper mill jobs are full-time, year-round positions. This average wage is well above the county average of $46,700.

Production at the Boise, Inc. paper mill generates additional economic activity in the county as a result of the mill making purchases in the local economy. When the mill makes purchases of inputs and supplies

---

\(^3\) Total output, labor income, and wages per job are estimates from the IMPLAN model based on secondary data and industry averages. They have not been verified or confirmed by Boise, Inc.
in the local economy, this creates indirect, or business-to-business impacts. When mill employees make purchases in the local economy, this creates induced, or consumer-to-business impacts. When these purchases decrease, as a result of the paper machine shutdowns, the corresponding local purchases will also decrease, causing a ripple of economic loss in the local community.

The loss of 265 jobs at the International Falls paper mill will have significant impacts on Koochiching County, as displayed in table 1. When employment at the plant decreases by 265 jobs, an additional 290 jobs in industries that serve the plant and its employees will be lost. In total, 555 jobs in the county will be affected by this action. The plant itself will produce $207 million less in output, which will contribute to a total loss of $248 million in output (sales) in the county. Labor income will also drop in Koochiching County. Lost jobs at the mill will directly cause a decrease in labor income of $26.7 million. The lost spending of these wages and other purchases by the plant will decrease total labor income in the county by an additional $11.5 million. Thus, the total loss of labor income will be $38.2 million.

The loss of nearly 30 percent of paper mill manufacturing jobs in the county represents a significant economic shock. With time, it is conceivable that some of the negative economic impacts will be mitigated. For example, laid off employees may find employment with other businesses, which will reduce the total impacts of the lost labor income. Further, an event of this magnitude could potentially alter the economic structure of the county, which would affect the model's results.

| TABLE 1: ECONOMIC IMPACT OF BOISE INC. PAPER MILL SHUTDOWN: KOOCHICHING COUNTY, MINNESOTA |
|-----------------------------------|-----------------|----------------|-----------------|----------------|
| Direct                           | Indirect        | Induced        | Total           |
| Output                           | -$207,474,800   | -$25,461,900   | -$14,726,000    | -$247,662,700  |
| Employment                       | -265            | -160           | -130            | -555           |
| Labor Income                     | -$26,658,400    | -$7,431,100    | -$4,085,500     | -$38,175,100   |
| Average Wage                     | $97,300         | $45,900        | $31,400         | $68,800        |

Estimates by University of Minnesota Duluth Bureau of Business and Economic Research and the Extension Center for Community Vitality

The model can also provide estimates of the industries in Koochiching County that will feel the largest magnitude of impacts from changes at the Boise Inc. paper mill. In terms of employment, the largest indirect and induced impacts will be in the following industries:

- Food services and drinking places (27 lost jobs)
- Maintenance and repair construction of non-residential structures (25)
- Commercial logging (21)
- Transport by truck (17)
- Wholesale trade (15)
Impacts in the maintenance and repair, commercial logging, transport by truck, and wholesale trade industries reflect the indirect impacts of the mill making local purchases. The food services and drinking places industry reflects the induced impacts related to lost wages. In the model, one job is one job. Food services and drinking places tend to have a high ratio of part-time employees; therefore, it is not unusual to see a high number of jobs impacted.

In terms of output, the largest indirect and induced impacts will be in the following industries:

- Imputed rental activity for owner-occupied dwellings, a proxy for the housing market ($3.6 million in lost sales)
- Electric power generation and transmission ($2.9 million)
- Transport by rail ($2.9 million)
- Monetary and depository credit banking ($2.3 million)
- Transport by truck ($2.3 million)

The largest losses measured in output (sales) will be in housing and real estate market, electric power, transportation by rail and by truck, and banking.

**REGIONAL IMPACTS**

Due to the size and scope of this plant shutdown, the impacts will extend beyond Koochiching County. Table 2 highlights the economic impact on Northeast Minnesota, including the counties of Aitkin, Carlton, Cook, Itasca, Koochiching, Lake, and St. Louis. Losses to the regional economy are larger than those for Koochiching County, as more supplies and inputs for the plant and its workers are located in the region.

The shutdown in International Falls will result in a total loss of 805 jobs in the region, a drop in labor income of $48.7 million, and $208.4 million less in regional output.

**TABLE 2: ECONOMIC IMPACT OF BOISE INC. PAPER MILL SHUTDOWN: NORTHEAST MINNESOTA (AITKIN, CARLTON, COOK, ITASCA, KOOCHICHING, LAKE, AND ST. LOUIS COUNTIES)**

<table>
<thead>
<tr>
<th></th>
<th>Direct</th>
<th>Indirect</th>
<th>Induced</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>At the Mill</td>
<td>Business-Business</td>
<td>Consumer-Business</td>
<td></td>
</tr>
<tr>
<td>Output</td>
<td>-$207,474,800</td>
<td>-$45,577,400</td>
<td>-$27,377,900</td>
<td>-$280,430,100</td>
</tr>
<tr>
<td>Employment</td>
<td>-265</td>
<td>-300</td>
<td>-240</td>
<td>-805</td>
</tr>
<tr>
<td>Labor Income</td>
<td>-$27,201,900</td>
<td>-$13,738,500</td>
<td>-$7,968,300</td>
<td>-$48,708,800</td>
</tr>
<tr>
<td>Average Wage</td>
<td>$97,300</td>
<td>$45,800</td>
<td>$33,200</td>
<td>$60,500</td>
</tr>
</tbody>
</table>

Estimates by University of Minnesota Duluth Bureau of Business and Economic Research and the Extension Center for Community Vitality.