



ECONOMIC EMERGENCY PROGRAM

Brainerd Paper Mill

In February 2013, Wisconsin-based Wausau Paper announced plans to close its paper mill located in Brainerd, Minnesota, leaving its 134 area employees without jobs. Wausau Paper placed the mill and site up for sale. Since then, community leaders and elected officials in Brainerd and Crow Wing County have been exploring options to restore the mill site as a productive economic engine in the region. One viable option that has emerged is to repurpose the facility to recycle old corrugated containers into new paper products to be used for packaging. As decision-makers look to the future, they need information on the potential economic role of a repurposed mill. To assist the community, University of Minnesota Extension has prepared this economic emergency report. This report is presented in partnership with EDA Center at the University of Minnesota-Crookston.

SUMMARY FINDINGS

A proposed paperboard mill which recycles corrugated containers has the potential to employ 100 workers in Crow Wing County. A University of Minnesota Extension analysis concludes there will be an estimated 330 jobs in Crow Wing County generated by operations of the mill. The 330 jobs will pay a total of \$19.0 million of labor income in the county. Of the 330 jobs, 100 will be at the mill itself, the addition 230 jobs will be at businesses in the community which support mill operations and its employees. To the extent actual mill operations differ from industry standards, these results may vary.

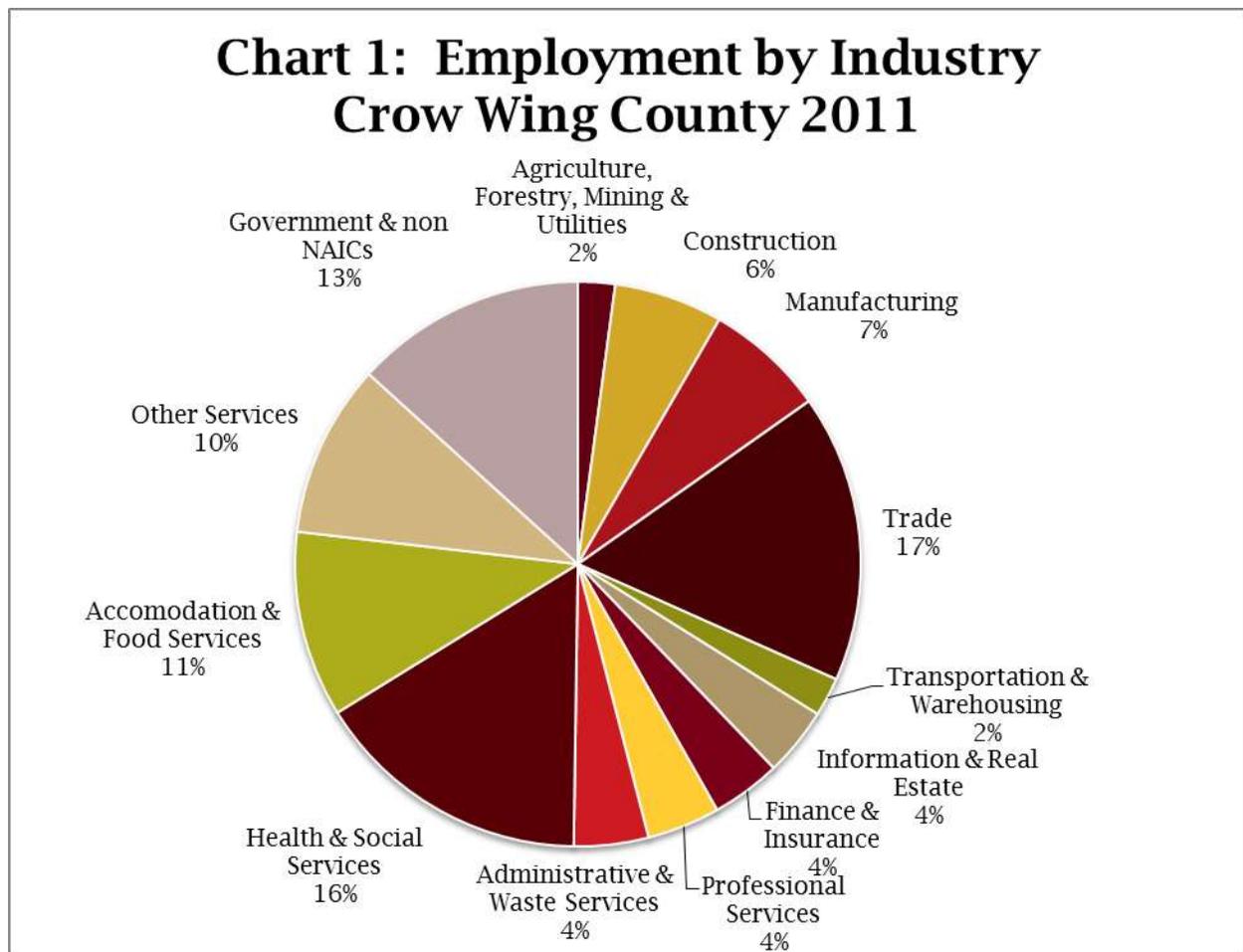
WHAT IS AN ECONOMIC EMERGENCY?

Communities often face a sudden and unanticipated change in their local economy. A major employer announces its reducing its workforce, a fire destroys an operating facility, or a flood damages a downtown. In these situations, communities often need to make quick but important decisions about how to react. They work closely with the local business affected and work to help the business and community recover. The University of Minnesota Economic Emergency 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.

CURRENT ECONOMY

In 2011, there were 33,950 jobs in Crow Wing County. The trade industry (including both wholesale and retail trade) employs 5,600 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 service industry collectively employs 53 percent of all individuals with jobs in Crow Wing County. The largest single service sector within the industry is health and social services. In the IMPLAN model, one job is one job regardless if the job is full-time, part-time, or seasonal.

The Wausau Paper Mill in Brainerd is classified as a manufacturing business. Total manufacturing employment in Crow Wing for 2011, including the Wausau Paper jobs, is presented in chart 1. Manufacturing in Crow Wing County employs 2,300 people. The 134 employees laid off by Wausau Paper represent 6 percent of the jobs in that industry.



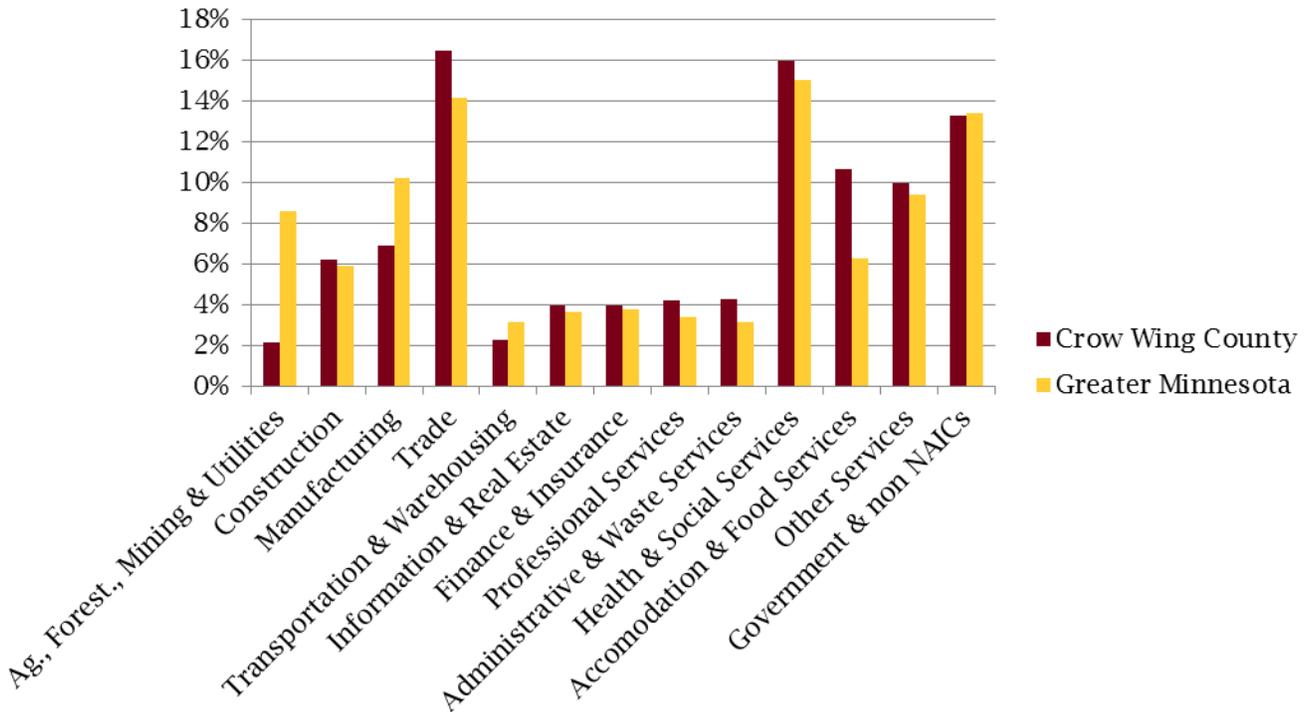
Compared to other counties in Greater Minnesota¹, Crow Wing County's economy is more dependent on the trade and service sectors. (See chart 2.) In particular, while 6 percent of employment in Greater Minnesota is in the accommodations and food services industry, 11 percent of Crow Wing County's employment is in that industry. Crow Wing County noticeably differs from Greater Minnesota in its agricultural, forestry, mining, and utility employment.

¹ Greater Minnesota is defined as the 80-counties not in the seven-county Twin Cities area.

The manufacturing industry, the focus of this study, employs seven percent (2,300 people) of the county's work force. The largest sectors within the manufacturing industry include fabricated metal production (800 employees), printing and related services (320 employees), and paper mills (200 employees).

According to the IMPLAN database, the average labor income payment per worker in Crow Wing County is \$37,000. For comparison, in Greater Minnesota, it's \$39,600. The average labor income payment per worker of the manufacturing industry in Crow Wing County is \$53,200.

**Chart 2: Employment by Industry
Crow Wing County versus Greater
Minnesota
2011**



ECONOMIC IMPACT FROM THE OPERATION OF A BRAINERD PAPERBOARD MILL

With the closure of the Wausau Paper mill facility in Brainerd, 134 workers lost their jobs. According the model used in the analysis, those employees produced \$99.7 million in economic activity in the county. The workers earned an average wage (including benefits) of \$60,000 a year, which contributed \$8 million in labor income to the economy. This average wage was above the average wage earned by other workers in the county.

An opportunity to repurpose the facility has emerged. With this new design, the plant will be able to recycle corrugated containers into paper for packaging. The proposed plant will employ

between 100 and 125 people. For this analysis, we will focus on 100 employees.² The plant is categorized in the paperboard mills industry sector.

A new paperboard mill in Brainerd employing 100 people will generate a total of \$114.3 million of economic activity in Crow Wing County annually (table 1). Based on state and national averages, the plant itself will generate estimated sales of \$80.7 million. As it purchases inputs (goods and services) from other businesses in the county, the mill could stimulate \$23.1 million in sales from other businesses in the county (indirect impacts). As mill employees spend their paychecks in the county, they would generate an estimated \$10.5 million in sales (induced impacts).

The 100 jobs at the mill will create additional employment in Crow Wing County; a total of 330 jobs will be generated by the mill. The model estimates that mill operations will support 130 jobs at local businesses supplying the mill. In addition, the mill will induce 100 jobs at local businesses serving mill employees. The 330 jobs generated by the mill will create a total of \$19.0 million of labor income.

Table 1: Economic Impact of Operation of Corrugated Container Recycling Facility Located in Brainerd Minnesota on Crow Wing County

	Direct	Indirect	Induced	Total
	At the Plant	Business-Business	Consumer-Business	
Output	\$80,700,000	\$23,100,000	\$10,500,000	\$114,300,000
Employment	100	130	100	330
Labor Income	\$9,600,000	\$6,300,000	\$3,100,000	\$19,000,000

Estimates by University of Minnesota Extension Center for Community Vitality

Three caveats should be considered when interpreting these results. One, these results show the positive benefits of the new plant operation. In a way, however, these positive impacts are offsetting the negative impacts the local economy is currently experiencing from the closure of the Wausau Paper mill operation. A quick analysis indicates the positive impacts of 100 jobs in the new plant will nearly compensate for the negative impacts from the lost 134 jobs. Two, the reported figures are based on industry standards for output per worker and labor income per worker. Since this is an economic emergency report, we did not make extensive modifications to the model. To the extent actual mill operations differ from the industry standards, these results might be different. Finally, this analysis is based on the available purchasing opportunities in Crow Wing County. Consumers may choose to spend their labor earnings elsewhere and supplies for the plant may be purchased outside the region.

² The model is linear, which means it can be scaled up by 25%, if one wants to consider 125 jobs.

INDUSTRIES MOST LIKELY TO EXPERIENCE IMPACT

The model can also provide estimates of the industry sectors in Crow Wing County that will experience the largest magnitude of impacts from the redesigned paperboard mill. In terms of employment, the largest indirect and induced impacts will be in the following sectors:

- Maintenance and Repair Construction of Nonresidential Structures (21 jobs)
- Food Services and Drinking Places (20)
- Wholesale Trade (12)
- Transport by truck (9)
- Employment services (9)

Impacts in the maintenance and repair construction sector, the wholesale trade sector and the transport by truck sector reflect the indirect impacts of the paperboard mill making local purchases. The food services and drinking places sector and employment services sector impacts reflect the induced impacts related to wages.

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

- Electric Power Generation, Transmission, and Distribution (\$5.0 million)
- Natural Gas Distribution (\$2.7 million)
- Maintenance and Repair Construction of Nonresidential Structures (\$2.1 million)
- Wholesale Trade (\$1.9 million)
- Imputed Rental Activity for Owner-Occupied Dwellings (\$1.8 million)

The largest impacts measured in output will be from utilities serving the plant - electricity and natural gas. Imputed rental activity for owner-occupied dwellings is a measure of the housing market. In short, employees of the plant will be able to make their mortgage payments.

SHORT-TERM CONSTRUCTION AND RENOVATION IMPACTS

The proposed repurposing of the Wausau Paper mill will require renovations and equipment acquisition. Estimates indicate plant renovations and retooling could cost \$49.5 million.³ Of this, we assume half will be purchases of specialized equipment that will be acquired outside of the county (and thus, does not contribute to economic impact). Thus, locally, an estimated \$24.8 million will be spent on renovation and retooling. The model estimates that in order to complete this work, 250 construction-related workers will be employed at the mill during the renovation phase (table 2). These workers will be paid \$13.5 million in labor income. As a result of construction and equipment spending in the region, an estimated \$37.4 million in output will be generated in the county during or shortly after the construction period, including 365 jobs and \$17.3 million in labor income. These impacts will dissipate once the construction phase ends.

Table 2: One-Time Economic Impact of Renovation of Corrugated Container Recycling Facility

³ Estimates on total cost of renovations and retooling were provided to Extension from the Brainerd Lakes Area Economic Development Corporation. Extension made general assumptions based on the information provided. Results should be interpreted with consideration of those assumptions.

Located in Brainerd Minnesota on Crow Wing County				
	Direct	Indirect	Induced	Total
	At the Plant	Business-Business	Consumer-Business	
Output	\$24,800,000	\$3,000,000	\$9,600,000	\$37,400,000
Employment	250	25	90	365
Labor Income	\$13,500,000	\$1,000,000	\$2,800,000	\$17,300,000
Estimates by University of Minnesota Extension Center for Community Vitality				

DEFINITIONS OF TERMS

Direct Impact

The direct impact is equivalent to the initial change in the economy. For this analysis, the direct impact is 100 jobs at the paperboard mill.

Indirect Impact

The indirect impact is the summation of changes in the local economy that occur due to **spending for inputs** (goods and services) by the industry or industries directly impacted. For instance, if employment in a manufacturing plant increases by 100 jobs, this implies a corresponding increase in output by the plant. As the plant increases output, it must also purchase more of its inputs, such as electricity, steel, and equipment. As it increases its purchase of these items, its suppliers must also increase its production, and so forth. As these ripples move through the economy, they can be captured and measured. Ripples related to the purchase of goods and services are indirect impacts.

Induced Impact

The induced impact is the summation of changes in the local economy that occur due to **spending by labor** by the employees in the industry or industries directly impacted. For instance, if employment in a manufacturing plant increases by 100 jobs, the new employees will have more money to spend to purchase housing, buy groceries, and go out to dinner. As they spend their new income, more activity occurs in the local economy. This can be quantified and is called the induced impact.

Total Impact

The total impact is the summation of the direct, indirect and induced impacts.

PREPARED BY

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