8-4-2014

Economic Emergency Program: St. Cloud Printing Plant Closure

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ECONOMIC EMERGENCY PROGRAM

St. Cloud Printing Plant Closure

On May 30 2014, Quad/Graphics announced the completion of its acquisition of Brown Printing Company. As part of integration plans following the acquisition, the company later announced the closure of the Quad/Graphics printing plant in St. Cloud, Minnesota. The plant currently has 280 employees who will be affected once the closure is completed as planned in late August of this year.

St. Cloud area decision-makers will need timely information regarding the potential economic impact of the closure. In response, University of Minnesota Extension and the St. Cloud State University School of Public Affairs Research Institute have prepared this economic emergency report. This report is presented with support from the EDA Center at the University of Minnesota-Crookston.

SUMMARY OF FINDINGS

On June 18, 2014, Quad/Graphics annouced the planned closure of the St. Cloud printing plant by the end of August 2014. This will result in the loss of 280 jobs at the St. Cloud plant. It is estimated that the closure will result in the total loss of 475 jobs, $72.7 million of sales, and $24.6 million of labor income in Stearns and Benton counties. In addition to the direct loss of jobs in the printing industry, the industries of food service and drinking places, wholesale trade, real estate establishments, and private hospitals will be most affected by the closure of the plant.

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 Extension's economic emergency program is designed to provide community leaders with information to assist in making decisions regarding the community's future. Extension partnered with the St. Cloud State University School of Public Affairs Research Institute to produce this report.

There are a few important things to note related to this analysis and the tool used. Information from the IMPLAN (MIG, Inc.) model is used in this analysis. 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. Quad/Graphics was not asked to furnish data for this report. Estimates of the economic impact of the plant closure on labor income and output are constructed from national and state benchmarks for the industry. When data are incomplete or missing, econometric techniques are implemented to fill in the gaps.

HISTORY OF PRINTING AND QUAD/GRAPHICS IN THE ST. CLOUD AREA

The printing industry in the St. Cloud area dates back to 1854, with the publication of *The Frontiersman* by what is known today as Sentinel Printing Company. Like many early firms including the precursor to Quad/Graphics, Sentinel was established in Benton County on the east side of the Mississippi River. Later firms like May Printing (1915) and Rengel Printing (1921) were founded in Stearns County, as the center of economic activity locally moved across the river.

Other area firms grew after World War II, including Bankers Systems (1952), Continental Printing (1948) and Nahan Printing (1962). Still more firms were spun off from these businesses. By 2001, over 40 firms and over 3,000 employees were in the printing industry in the St. Cloud area. But that appears to be the high-water mark; there were 38 such firms in 2007 and 31 in 2013.

Quad/Graphics' St. Cloud location is in Benton County. It was originally established as Volkmuth Printers in 1938 by Anton Volkmuth for production of the *St. Cloud News* (which eventually became the *Shopping News* and then *Photo News*, which was sold to and operated by Bill Moline in 1963; the Volkmuth brothers went on to operate another printing business which still exists.) It moved to the Mayhew Lake Road location in 1971, and then went through several ownership changes before Quebecor bought the firm in 1990. Quebecor merged with World Color Press in 1999, where the firm largely produced magazines and catalogs for a national market, with print runs between 5,000 and 200,000. World Color Press was known for printing such publications as *Sports Illustrated* and *Rolling Stone*. Quad/Graphics purchased the firm in 2010.

THE ROLE OF PRINTING IN THE ST. CLOUD METROPOLITAN AREA

St. Cloud, Minnesota is designated as a Metropolitan Statistical Areas (MSA). Employment (and other labor market) data are collected for the entire St. Cloud MSA, which is defined to include Stearns and Benton counties. This report therefore looks at the impact of the plant closure on these two counties.

St. Cloud area employment in June 2014 totaled 105,701. Of this number, 15,352 (representing 14.5 percent of workers) were employed in the manufacturing sector. St. Cloud area manufacturing accounts for a much larger share of employment than is typically found elsewhere around the state. For example, only 10.3 percent of Twin Cities workers are employed in manufacturing and 11.1 percent of workers statewide are employed in this sector. Despite the relative importance of the manufacturing sector in the St. Cloud area, there has been a steady decline in the share of regional jobs accounted for by manufacturing. In July 1998, one out of every five area workers (20.1 percent) were employed in the area manufacturing sector. By comparison, the health and educational sector accounted for only 12.6 percent of area employment in July 1998. Today this growing sector's share of St. Cloud area employment is 18.9 percent.

Employment in the St. Cloud area printing industry is subsumed within the area manufacturing numbers. In 2013, the area printing industry employed 1,382 people (about 1.3 percent of area employment). Some of the slide in area manufacturing can be accounted for by a decline in printing employment in the St. Cloud area. For example, 2009 employment in the area printing industry totaled 2,209 (representing approximately 2.3 percent of area jobs). As digital publishing has increased in popularity, the erosion of employment opportunities in the traditional printing industry has certainly been felt by local firms.

Evidence of the printing industry's decline in the United States is compiled in an IBISWorld report.[1] IBISWorld reports printing industry revenue is expected to decline by 5.2 percent in the five years following 2012. The report also highlights consolidation in the industry. Both trends appear to be occurring in the printing industry in the St. Cloud area. A detailed shift-share analysis can help parse the sources of changes in employment over time. Shift-share indicates what percent of employment change is a result of changes in the national economy, what percent is a result of changes in the industry itself, and what percent is a result of local conditions. Shift-share analysis for the St. Cloud MSA indicates that 70 percent of the employment loss between 2003 and 2013 was a result of industry trends and 30 percent as a result of local conditions.[2] Of course, closures of one business in a region can significantly affect the shift-share.

Displaced Quad/Graphics workers enter an area economy that has been growing fairly rapidly over the past several months. Area employment grew at a 2.8 percent rate over the previous twelve months and the most recent *St. Cloud Area Quarterly Business Report* cited firms' growing difficulty attracting qualified workers. As with the 2012 closing of the Verso paper mill in Sartell, local officials will need to be concerned about the prospect of structural unemployment for some of the displaced Quad/Graphics workers. The lack of printing industry workers' transferable skills to those St. Cloud area sectors that are experiencing employment growth (such as the health & educational and business & professional services sectors) could be a concern.

ECONOMIC IMPACT OF PRINTING PLANT CLOSURE

Quad/Graphics in St. Cloud, Minnesota employs 280 employees. All of these workers will be laid off once the company closes the plant by the end August 2014.[3] The loss of these jobs at the plant, and the corresponding decrease in sales, will impact other businesses in Stearns and Benton counties. This section of the report describes the impacts of the closure of a printing plant in Stearns and Benton counties. The analysis presented is for the average printing plant in the two counties, individual details for the Quad/Graphic's facility may vary.

According to the model used in this analysis, 280 employees in the printing industry in Stearns and Benton counties produce an estimated $48.5 million in economic activity annually. They earn an estimated $16.8 million in salaries, wages, and benefits. This is the direct impact shown in table 1.

A printing plant generates additional economic activity in the two counties as a result of the industry making purchases in the local economy. When the industry makes purchases of inputs and supplies in the local economy, this creates indirect or business-to-business impacts. When the industry's employees make purchases in the local economy, this creates induced or consumer-to-business impacts. If these purchases decrease as a result of the industry's closure, the corresponding local purchases will also decrease, causing a ripple of economic loss in the local community.

[1] IBISWorld (August 2012). Out of print: The industry struggles as printed media lose consumers to the web. IBISWorld Industry Report 32311. Retrieved from www.ibisworld.com.
[2] Source: Economic Modeling Systems, International.
[3] News reports indicated Quad/Graphics would discuss employment opportunities at its other facilities with its St. Cloud employees. Quad/Graphics does not have any other facilities in Stearns or Benton counties.

The loss of 280 jobs at a printing plant in Stearns and Benton counties will have direct, indirect, and induced economic impacts on these counties (table 1). When 280 employees are laid off, an additional estimated 195 jobs in industries that serve the printing plant and its employees will be lost. In total, 475 jobs in the two counties will be affected by this action. The manufacturing company itself will produce an estimated $48.5 million less in output because it is closed, which will contribute to a total loss of an estimated $72.7 million in output (sales) in the two counties. Labor income will also drop. Lost jobs at the plant will directly cause a decrease in labor income of $16.8 million for employees at the facility. The lost spending of these wages and other purchases by the plant will decrease total labor income in the two counties (Stearns and Benton) by an additional $7.8 million. Thus, the total loss of labor income will be an estimated $24.6 million.

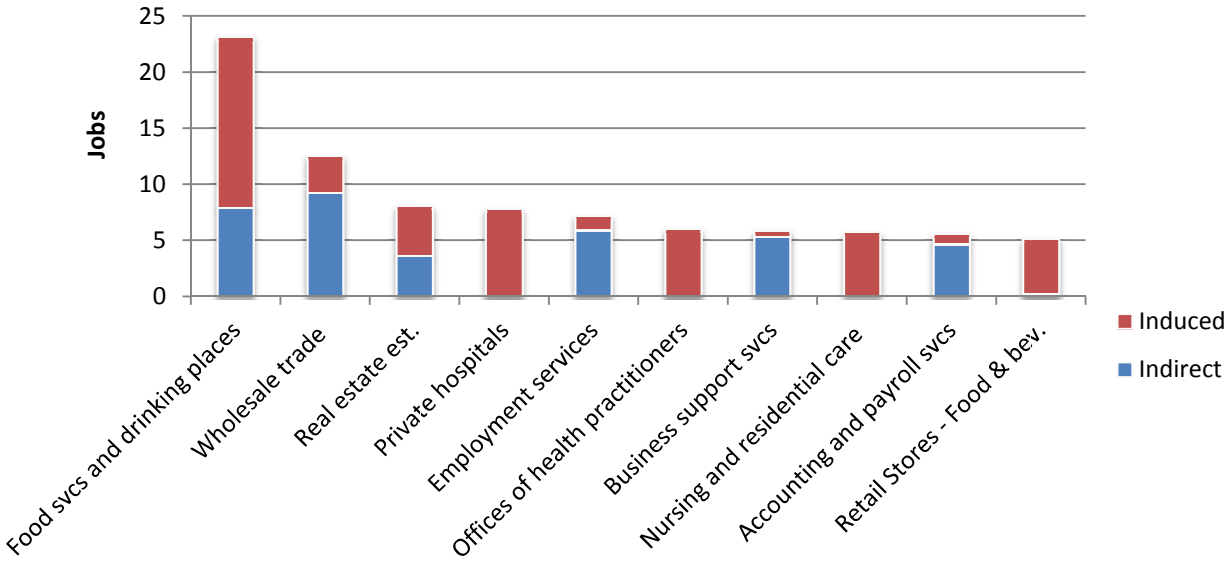
TABLE 1: ECONOMIC IMPACT OF PRINTING PLANT CLOSURE WITH 280 JOBS LOST: STEARNS AND BENTON COUNTIES, MINNESOTA

	Direct	Indirect	Induced	Total
	At Printing Plant	Business-Business	Consumer-Business	
Output (millions)	-$48.5	-$11.2	-$13.0	-$72.7
Employment	-280	-83	-112	-475
Labor Income (millions)	-$16.8	-$3.6	-$4.2	-$24.6

Estimates by the Extension Center for Community Vitality

The model can also provide estimates of the industries in Stearns and Benton counties that will feel the largest magnitude of impacts from the closure of a printing plant. In terms of employment, the highest level of indirect and induced impacts will be in the industries shown in chart 1.

Chart 1: Top Industries Affected by Closure of a Printing Plant in Stearns and Benton Counties: Indirect and Induced Employment Effects



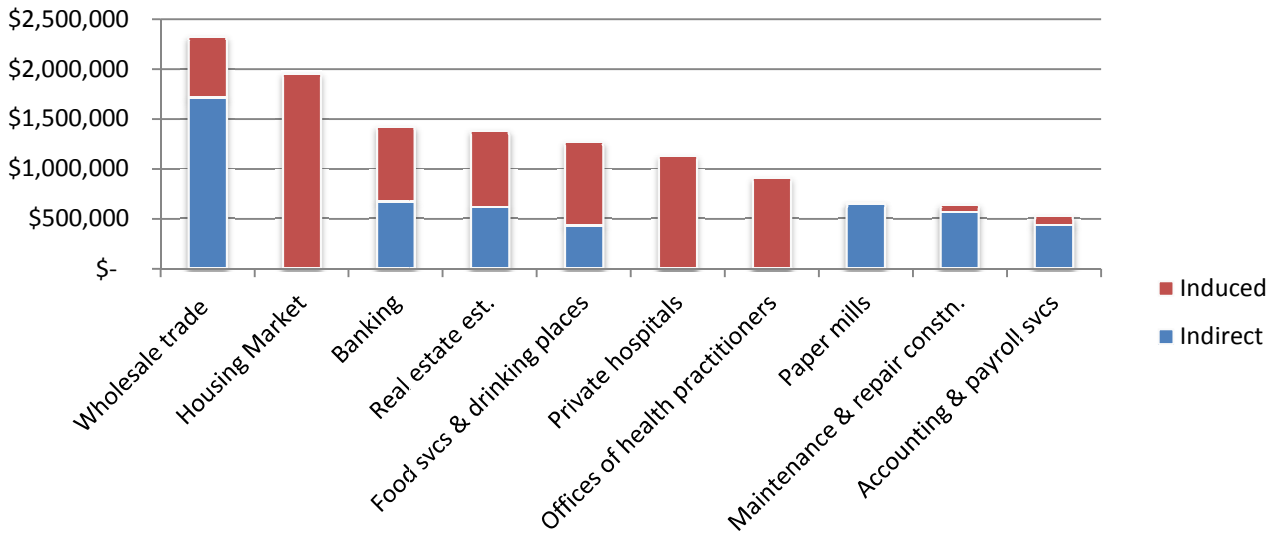
Impacts in food service and drinking places, wholesale trade, employment services, and business support services largely reflect the indirect impacts of the company no longer making local purchases (indirect effects). Impacts on private hospitals reflect purely induced effects from decreased labor income.

Employment impacts are often high in the food and drinking places industry for two reasons. First, the food services industry has a higher level of part-time employment than many other industries. In the model used in this analysis, one job is one job; therefore, in industries with part-time employment, the job impacts can accumulate quickly. Second, the food services industry is one with strong local connections. In other words, when a business or a consumer needs to purchase food services (catering or restaurant dining), they are very likely to use a local restaurant or business.

In terms of output, the highest indirect and induced impacts will be in the industries shown in chart 2. The highest impacts will be in the wholesale trade sector. A printing plant closure will also affect the housing market, both owner-occupied and rental units, and the banking industry in Stearns and Benton counties.

In chart 2, the housing market reflects decreases in the volume of payments for owner-occupied homes. Real estate establishments reflect decreases in the volume of payments for rental units.

Chart 2: Top Industries Affected by Closure of a Printing Plant in Stearns and Benton Counties: Indirect and Induced Output Effects



FOR FURTHER RESEARCH

The objective of this report is to provide the community with a sense of the scale of the economic effects of the Quad/Graphics facility closure, which industries are most likely to be affected by the closure, and how the impacts fit within the greater context of the St. Cloud area economy.

While the report provides critical information, it undoubtedly also raises additional questions for consideration. Additional questions might broadly be grouped into two categories: what additional information is needed and how should the community proceed with this information.

Additional information might include more detail on the impacts to local and state taxing districts. The State of Minnesota will likely experience a decline in payroll and sales tax losses. Local taxing districts might incur lost property tax revenues. The community may also experience a decline in philanthropic contributions from the company and its employees. Displaced workers may request additional training and may wish to develop new job skills. Demand for community support services might increase. While some of these impacts are hinted at in the report, a more detailed analysis could be of use.

The St. Cloud area community will also be asking itself how to proceed with this information. What are the implications of these results? What can or should the community consider doing to mitigate the impact? How will Quad/Graphics employees react to the facility closure as they consider re-employment opportunities? What potential exists for the abandoned facility? Is there an opportunity to use the available

commercial space to attract a new business to the area? These are valuable questions worth exploring. A community meeting has been scheduled for August 1, 2014 to explore these questions in further detail.

PREPARED BY UNIVERSITY OF MINNESOTA EXTENSION AND THE ST. CLOUD STATE UNIVERSITY SCHOOL OF PUBLIC AFFAIRS RESEARCH INSTITUTE

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APPENDIX: ASSUMPTIONS AND TERMS

Economic impact analysis is based on several critical assumptions. An understanding of the assumptions ensures the results are interpreted properly. Here are the key assumptions made in the analysis for Stearns and Benton counties.

First, there are assumptions that are standard for all economic impact analyses using the IMPLAN model. They are:

- One job is one job, regardless if the job is full-time, part-time, or seasonal. The jobs considered here are not full-time equivalents. Therefore, it isn't unusual for industries with high levels of part-time employment to experience higher employment impacts.
- The model is linear. Changes in output or employment can be modeled in a linear fashion.
- The model assumes all employees of the facility live in the counties. It does make adjustments to where their incomes are spent. If the regional hub is located in a nearby county, it will adjust to assume employees spend some of their wages and salaries in the nearby county. This should not be an issue here, as Stearns and Benton counties are a regional economic hub.
- The database is built on publicly-available data. When data is not available for a specific industry, say due to data disclosure issues, econometric models are used to create estimates for the industry.

Second, there is an assumption unique to the analysis in Stearns and Benton counties.

- The number of employees at Quad/Graphics was taken from published news reports. The IMPLAN model estimated the amount of output and labor income created by those employees based on national and state benchmarks for the industry.

The following are a few key terms used in economic impact analysis.

Output

Output is measured in dollars and is equivalent to total sales. The output measure can include significant double counting. For example, think of corn. The value of the corn is counted when it is sold to the mill, again when it is sold to the dairy farmer, again as part of the price of fluid milk, and then yet again when it is sold as cheese. The value of the corn is built into the price of each of these items and then the sales of each of these items are added up to get total sales (or output).

Employment

Employment includes full- and part-time workers and is measured in annual average jobs. Total wage and salaried employees as well as the self-employed are included in employment estimates in IMPLAN. Because employment is measured in jobs and not in dollar values, it tends to be a very stable metric.

In the model, one job is one job, regardless if the job is full-time, part-time, and seasonal.

Labor Income

Labor income measures the value that is added to the product by the labor component. For example, in the corn example, when the corn is sold, a certain percentage of the sale goes to the farmer for his/her labor. Then when the mill sells the corn as feed to the dairy farmer it includes in the price some markup for its labor costs. When the dairy farmer sells the milk to the cheese manufacturer, he/she includes a value for his/her labor. These individual value increments for labor can be measured. This is labor income. Labor income does not include double counting.

Direct Impact

The direct impact is equivalent to the initial change in the economy.

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.