
*The Impact of Basic Training
Graduate Companies on Oklahoma's Economy: 2010*

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The food processing sector plays an important role in Oklahoma's economy. In 2000, agricultural processing (food and nonfood) impacted the state's economy by contributing nearly \$3.3 billion to Oklahoma's Gross State Product (GSP). Of that, agricultural processing industries directly added \$1.7 billion to Oklahoma's income while supporting industries generated \$1.6 billion. As well, agricultural processing impacted the state's employment by attributing to 73,688 jobs; 39,609 directly in agricultural industries and 34,079 generated in supporting industries (Piewthongngam, et. al.).

The purpose of this report is to measure the economic impact graduate companies of the Food & Agriculture Products Center's Basic Training Workshop program have on Oklahoma's economy. Specifically, the report will focus on direct, indirect and induced, and total impacts these companies have on employment and income. Additionally, sales data will be reported. All data is aggregated to protect the privacy of the individual companies.

Background & Data Collected

The Robert M. Kerr Food & Agricultural Products Center (FAPC) at Oklahoma State University has been hosting a monthly workshop titled *Basic Training: A Guide to Starting Your Own Food Business* since July 1999. After ten years, scheduling of the workshop was changed to bimonthly, starting in 2009.

The need for such a program was realized early in FAPC's history. Frequently, entrepreneurs with similar questions and needs would call or visit the center. While many issues could be addressed by FAPC, some issues needed to be addressed by representatives with other

agencies such as the Health Department, Patent & Trademark Library, etc. A team from FAPC led by Dr. Rodney Holcomb began formulating an outline based on the most common basic needs expressed by Center clients.

The resulting workshop developed by FAPC helps the entrepreneur answer questions such as: How much up-front capital will I need? What regulations apply to me? Who are my target customers? How do I get my product into their hands? Topics covered include:

- Planning Your Business
- Health Regulations
- Product Evaluation and Marketing
- Labeling Requirements
- Patents, Trademarks, and UPC Codes
- Processing and Co-Packing
- Legalities and Liabilities
- Assistance Available to Entrepreneurs

Representatives from other agencies were recruited to be a part of the training staff. Having these agency experts committed to being a part of this program is a major reason this program is unique from any other entrepreneurial program offered at other universities. Additionally, these representatives live their respective topic on a daily basis and thus add credibility to the curriculum being covered.

By the end of 2010, 977 participants had graduated and 100 new companies had been started. As of January 2011, we knew of 60 companies still in business. The workshop participants and resulting businesses comprise a vast majority of the “Made In Oklahoma”

program's members. The products of these Oklahoma companies have been successfully marketed locally, regionally, nationally and internationally.

To get a more complete understanding of the economic impact these graduate companies have, we surveyed the 60 companies in April and May 2011 to determine their current employment, payroll and sales for 2010. Additionally, we asked these entrepreneurs if they are paying themselves salary/commission or if they are rolling their profits back into their business. We also asked if they used a co-packer and, if so, did they had plans to start their own production facility.

Measuring Economy-wide Impacts

The impact of value-added activities on the state's economy can be assessed through analysis of the food processing sector. The activities associated with food processing are defined as the *direct impacts*. Additional impacts are created when these processing industries purchase goods and services from other sectors to produce their final product and/or maintain the operations of the firm. These input purchases are called *indirect impacts*. During the process of supplying goods and services to food processing industries, the support industries pay wages to employees. When employees of direct industries and supporting industries purchase goods and services, they create *induced impacts* on the economy. Therefore, the total impacts of food processing on the economy are the summation of the direct, indirect and induced impacts.

The measurement of direct, indirect, and induced economy-wide impacts of food processing is accomplished using input-output analysis. This analysis can be used to explain flows from producers to intermediate and final consumers. To analyze the input-output model, a computer-based system, called IMImpact Analysis for PLANning (IMPLAN), was used. The

impacts of food processing in 2010 were calculated based on the industrial relationships of IMPLAN and using 2010 data provided by FAPC Basic Training graduate companies.

The IMPLAN program then generates Type III multipliers. Using these multipliers, one can differentiate the direct impacts from the indirect and induced impacts. For example, if a Type III multiplier for employment is calculated to be 1.5, then for every 1 job (direct impacts) in the industry being analyzed, an additional 0.5 jobs are created throughout the economy (indirect and induced impacts). Likewise, if a Type III multiplier for income is calculated to be 1.75, then for every \$1 of income (direct impacts) in the industry being analyzed, an additional \$0.75 of income is created throughout the economy (indirect and induced impacts).

Results

Through telephone and email follow-up, we discovered that the current number of Basic Training graduate companies is 55. Forty-four of these companies (80%), varied in size and scale of economic activity, participated in the survey. The forty-four companies employed 169 people (direct impacts). Total payroll and annual sales for 2010 were reported to be \$817,987 and \$5,793,586 respectively (direct impacts). For many of these businesses, employment was reported as seasonal or part-time.

Table 1 provides a detailed look at these direct impacts as well as the indirect and induced impacts and total impacts. The Type III multipliers generated for this study were 1.86 for employment and 1.97 for income. Thus for every 1 job provided by a Basic Training graduate company, an additional 0.86 jobs are created throughout Oklahoma's economy as a result of the companies' expenditures on inputs and services as well as employee spending in the

Oklahoma economy. Likewise, for every \$1 of income paid by a Basic Training graduate company, an additional \$0.97 of income is created throughout Oklahoma’s economy.

Table 1. Direct, Indirect and Induced, and Total Impacts of Basic Training Graduates on Employment, Payroll and Sales, 2010

	Direct	Indirect & Induced	Total
Employment	169	145	314
Payroll	\$817,987	\$793,447	\$1,611,434
Sales	\$5,793,586	\$5,619,778	\$11,413,364

Type III Employment Multiplier of 1.86
 Type III Income (Sales) Multiplier of 1.97

Using these multipliers, the indirect and induced impacts Basic Training graduate companies have on employment are estimated to be an additional 145 jobs created throughout Oklahoma’s economy. Eighteen of the companies surveyed use one or more co-packers to produce their product. Employment of these co-packers would be reflected in the Indirect & Induced impacts. Thus the total impact on Oklahoma’s employment attributed to the activities of these forty-four companies is estimated to be 314 jobs.

Likewise, the indirect and induced impacts Basic Training graduate companies have on payroll are estimated to be an additional \$793,447 in income throughout Oklahoma’s economy. When asked about payroll, many of the entrepreneurs reported paying part-time, seasonal or for shows only help. However, 19 of the 44 companies noted that they did not pay themselves but were rolling 100% of any profit back into their business; 4 reported they rolled a majority back into their business but did not give specific percentages; the remainder declined to answer this question. Thus the total impact on Oklahoma’s income attributed to the activities of these forty-four companies is estimated to be \$1,611,434.

Annual sales for 2010 were reported by 37 companies; the remaining 7 declined to answer this question. We also asked if 2010 sales were up or down from 2009. Twelve companies noted that sales were down with declines ranging from 8% to 60%. Five noted that either sales were steady or up; increased sales ranged from 9% to 200%. The remainder declined to answer the question.

When applying the income multiplier sales data, the total annual sales of \$5,793,586 generated by these companies impacted indirect and induced sales by \$5,619,778; thus creating a total sales impact of \$11,413,364 to Oklahoma's economy.

Conclusion

The food processing sector plays an important role in Oklahoma's economy. These forty-four small entrepreneurial companies alone have a total (direct, indirect and induced) impact on the state's employment of 314 jobs. As well, they impacted state income in total by approximately \$1,611,434 in payroll in 2010. Their impact on sales in Oklahoma totaled \$11,413,364 for the year.

All this is not only important to the economy as a whole, but to local and state government as well. Tax dollars generated from these activities help provide services to citizens such as education, law enforcement and fire protection.

While this study has examined the impacts of only forty-four entrepreneurial companies, the impacts estimated are significant. It is assumed that impact analysis of the remainder of the food processing industry will yield generally similar multiplier effects.

References

- Allen, C.W., Woods, M.D., and Doeksen, G.A., A Methodology for Assessing the Impacts of Business Activity, Stillwater: Oklahoma State University, Agricultural Experiment Station, B-793, November 1990.
- Alward, G., et.al., Micro IMPLAN Software Manual, Judy Olson, ed (St. Paul: Regents of the University of Minnesota, 1958.)
- Piewthongngam, K., et.al., “Impact of Agriculture on Oklahoma’s Economy: 2000,” Oklahoma Food and Agricultural Products Research and Technology Center, Department of Agricultural Economics, Oklahoma State University, Oklahoma Department of Agriculture, January 2002.
- Willoughby, Chuck et.al., “The Impact of Made In Oklahoma Coalition Member Companies on Oklahoma's Economy: 2010.” Robert M. Kerr Food & Agricultural Products Center, Oklahoma State University, April 2011.
- Woods, Mike, et.al., “The Economic Impact of Major Manufacturing Firms on the Economy of Pottawatomie County, Oklahoma,” Rural Development Cooperative Extension Service, Oklahoma State University. AE-01068, July 2001.

