

ECONOMIC FUTURES WORKSHOP

Lincoln County, Missouri

To learn more about the county's current economic situation and to explore opportunities for economic development, business owners and leaders from Lincoln County participated in a joint University of Minnesota Extension and University of Missouri Economic Futures Workshop on Tuesday, May 5, 2015, in Troy, Missouri. This report, summarizing the workshop, is presented in partnership with the North Central Regional Center for Rural Development (<http://www.ncrcrd.org/>).¹

WHAT IS AN ECONOMIC FUTURES WORKSHOP?

The Economic Futures Workshop is designed to help community leaders look objectively at the state of their local economy. The workshop examines the interactions within an economy - among businesses and between businesses and consumers. Using information about how these linkages function, leaders can begin to understand the full implications of change on the local economy. The Futures Workshop can also help communities understand how economic development activities can affect the economy.

The three-hour Futures Workshop provided a profile of the Lincoln County economy, an analysis of how eight selected industries interact, and a facilitated exploration and discussion of the eight industries.

PROFILE OF THE CURRENT ECONOMY

In 2014, there were 9,999 jobs in Lincoln County.² The number of jobs in Lincoln County grew steadily between 2000 and 2007. The number of jobs in the county then declined consistent with the Great Recession of 2008 to 2009, when most areas of the county lost jobs. Recovery from the Great Recession has been modest in Lincoln County (as measured by the number of jobs). Despite this, the number of jobs in Lincoln County was 10 percent higher in 2013 than 2001. Growth in the number of jobs in Lincoln County exceeded national and industry trends in the period.³ Comparatively, Lincoln County fared well, with its job growth rate exceeding all of the neighboring counties with the exception of St. Charles County.

Chart 1 illustrates employment by industry in Lincoln County.⁴ The largest industry is education and health services (both public and private) employing 27 percent of the workforce in the county. Nearly 23 percent of jobs in the county are in the trade, transportation, and utilities industry.

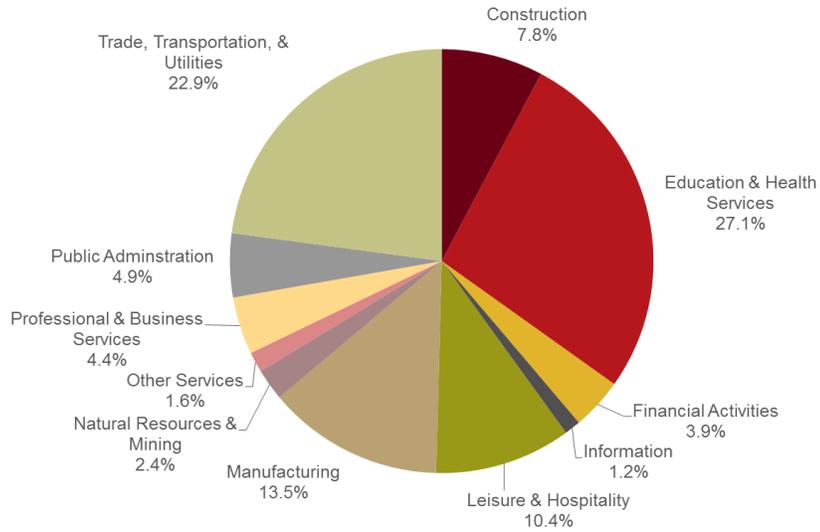
¹ The Futures Workshop is a current offering of University of Minnesota Extension. Through a NCRCRD grant, Minnesota Extension trained University of Missouri Extension on offering the workshop. Minnesota Extension then led a workshop in Missouri.

² Source: Quarterly Census of Employment and Wages (QCEW), Bureau of Labor Statistics, www.bls.gov/cew.

³ Source: Shift-share analysis based on QCEW data

⁴ Source: QCEW

Employment by Industry, Lincoln County 2013



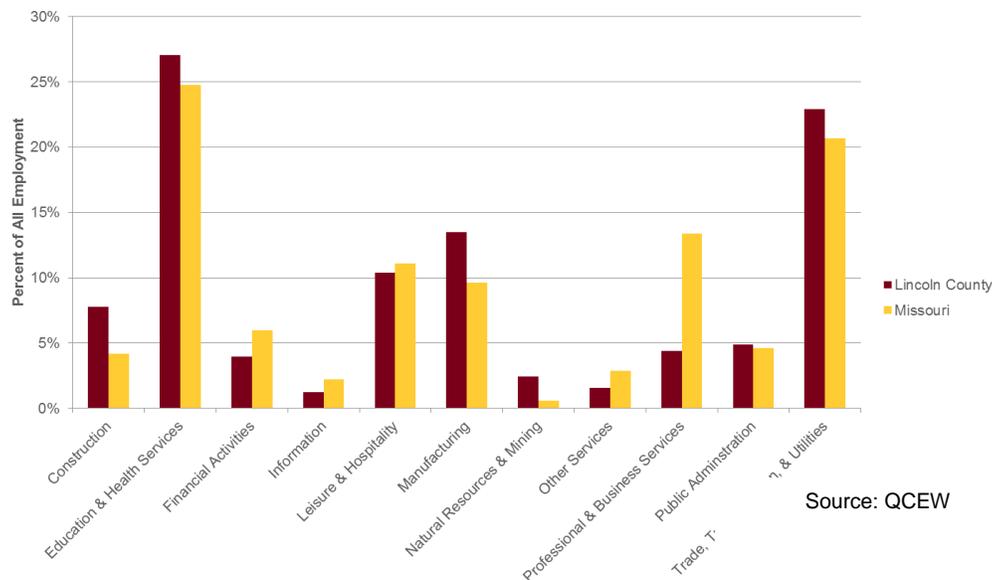
Source: QCEW

Employment by industry as compared to the average Missouri county is shown in chart 2. Lincoln County has a higher percentage of its employment in the manufacturing, construction, education and health services, and trade, transportation and utilities industries. Lincoln County has a comparatively smaller professional and business services industry, as compared to the average county. While Lincoln County is lower than the average in the business and professional service industry, the industry did add jobs in this industry between 2003 and 2013. The highest number of jobs were added in the education and health services industry.

Wages in Lincoln County are lower than the Missouri average. Lincoln County's average weekly wage in 2014 was \$634. Missouri's average weekly wage was \$843.⁵

⁵ Source: QCEW

**Percent of Employment by Industry:
Lincoln County Versus Missouri, 2013**



ANALYSIS OF INDUSTRIES

Eight industries were selected to be analyzed in Lincoln County. The input-output model, IMPLAN, was used to conduct the analysis. The industries studied and discussed at the May 5th meeting were:

Poultry and egg production

Nonferrous metal foundries

Machine shops

Retail - general merchandise

Transport by truck

Warehousing and storage

Business support services

Independent artists, writers, and performers

EXPLORATION AND DISCUSSION OF INDUSTRIES

After reviewing the current structure of the Lincoln County economy, attendees were divided into groups to explore the economic interdependencies of the selected industries. Each group was assigned two industries and asked to address the following four questions:

1. What surprises you about this information?
2. What information favors this industry in the region?
3. What information works against this industry in the region?
4. What could be done to support this industry in Lincoln County?

The small groups reported out to the full group their summary thoughts and considerations. (Notes from each industry discussion are provided in appendix one).

ACTION STEPS

At the conclusion of the workshop, attendees completed a workshop evaluation which included identifying potential future actions based on the information presented. Action items included:

- Work with school on what Lincoln Co has to offer. Work with school counselor to identify education that relates to jobs. Continue to be involved with this group.
- To work with economic developers group on setting priorities.
- Get to businesses/schools - find out how to partner. Discuss these findings with regional partners. Host economic forum. Work with career center and businesses to connect them together. Needs - workforce.
- Work more closely to support partner with schools. Better understanding of legislative issues facing our business.
- I will talk to our local paper - immediately. Begin to meet with same participants (and more) on a regular basis. Start the bridge building between our businesses and schools. I will personally reach out to all participants w/Dean to reconvene - as a region, on a regular basis to educate, educate, educate before a plan of action. I would like a list of our local participants with contact information.
- Merge the information I gained as I participate in the strategic direction of my industry. If possible, please forward 9 industry analysis packets to my email.
- Increase networking. Stress importance of incoming skilled labor workforce to colleagues.
- Continuing the discussions.
- Pursue interest involving topics discussed

EXTENSION STAFF

The following University of Minnesota Extension staff participated in the planning, preparation, and presentation of the Economic Futures Workshop in Lincoln County.

- Brigid Tuck, Senior Economic Impact Analyst, Presenter
- Neil Linscheid, Extension Educator, Facilitator

The following University of Missouri Extension staff participated in the planning, preparation, and execution of the Economic Futures Workshop in Lincoln County.

- Sharon Gulick, Extension State Specialist, Director Community Economic and Entrepreneurial Development
- Richard Proffer, Business Development Specialist, Southeast Region
- David Schmidt, Extension Associate Professor and State Specialist
- Pat Curry, Project Manager, Community Economic and Entrepreneurial Development
- John Gulick, Associate Extension Professional, Community Development Specialist

- Dean Larkin, Community Development Specialist and County Program Director

APPENDIX ONE: SUMMARY OF INDUSTRY EXPLORATION AND DISCUSSION

During small group discussions, the participants answered the following questions about eight selected industries. The responses, shared with the large group, are summarized below.

Questions for Discussion

1. What surprises you about this information?
2. What information favors this industry in the region?
3. What information works against this industry in the region?
4. What could be done to support this industry in Lincoln County?

Retail Trade

What surprised you?

- Wages very low
- Very little indirect investment

What favors this industry?

- Proximity to large population areas
- Less regulation in Lincoln Co

What works against this industry?

- Proximity to large population areas (converse of above)
- GM plant drove retail and land prices up – resulting in much lost farm land

What could be done to support this industry?

- We need to know how labor costs are determined
- Reduce labor costs
- Understanding application of technology
- Government policy drives many economic issues

Machine Shops

What surprised you?

- More operations than I thought
- Produce a lot but sell it elsewhere

What favors this industry?

- Relative lack of regulation

- Transportation costs are good
- Energy costs are low
- Some support services are available
- Good local work ethic

What could be done to support this industry?

- Competition for employees will only increase
- Schools should be pushing technical training – college is not for everyone

Artists, Writers, and Performers

What surprised you?

- Employee count, representative and realistic?
- County has few tourist opportunities
- Few activities versus lots of other activities in other counties
- Refers to people going elsewhere for entertainment and recreation

What favors this industry?

- Limited opportunities for employment
- Lack of a Lincoln County Arts Council
- Efforts in this area are scattered
- Could be an untapped resource to create jobs

What works against this industry?

- Wages too low to support other opportunities
- Too close to options in St. Louis
- Low disposable incomes
- If we create jobs, can we sustain them?
- Need money to create opportunities

What can be done to support this industry?

- Form an Arts Council
- Create wineries
- Create opportunities for communities to buy and mix together

Nonferrous Metal Foundries

What surprises you?

- Have support for it

- Employee count is a good surprise
- Room for growth in county for 2nd and 3rd tier manufacturers to automotive industry
- Is sustainable
- 100 jobs results in good growth
- Indirect and induced give similar results, unlike example
- Growth in other industries
- If close, will know it in all areas
- More establishments than thought

What favors this industry?

- Have automotive in county
- Seems to have good job at production of products
- Lots of intellectual capital in our community/small business
- Have flexibility to respond

What works against this industry?

- Potential labor shortage
- No community technology center
- Do we pull from Illinois?

What can be done to support this industry?

- Keep pushing STEM education
- Teach the whole process
- Reach out to youth to learn about industry
- Support our own

Warehouse and Storage

What surprises you?

- Very little “ripple” effect - total employment only 125
- Wage higher than expected - \$830 is \$200 higher than Lincoln County average
- Appears to be fairly recession-proof

What favors this industry?

- Strong link to transportation - which is a major asset for Lincoln County
- Lincoln County second fastest growing county in MO
- Currently Lincoln County real estate costs are inexpensive compared to St. Louis urban real estate costs

What works against this industry?

- Induced and indirect employment produce less than 25 additional jobs for 100 jobs in the industry

How support this industry?

- Clearly identify real estate expansion opportunities
- Hospital can provide support services locally such as pre-employment physicals and drug testing
- Can anything be done to assist other support services such as welders/mechanics
- Overall, this might not be the best industry to target for a lot of assistance because of the very low ripple effect

Transport by Truck

What surprises you?

- Low “ripple” effect - total employment only 135
- When looking back to Warehouse/storage we realized that almost all of the warehouse/storage growth has occurred since 2004
- High wages - \$827 - almost \$200 over Lincoln County average - do unions impact the wage level?
- Surprised that transport by truck wages are similar to warehouse wages
- 38 total establishments - 4 “BIG”

What favors this industry?

- Location at crossroads of several major interstate highways

What works against this industry?

- Federal regulation have reduced distances that drivers can drive without stopping
- Hours/braking requirements have especially impacted
- Low ripple effect with induced and indirect employment producing less than 35 additional jobs per 100 jobs in the industry

How support this industry?

- Hospital can provide support services locally such as pre-employment physicals and drug testing
- Overall, this industry has low ripple effect so probably not a good target for concentrated effort

Poultry and Egg Production

Summary notes are not available

Business Support Services

Summary notes are not available

APPENDIX TWO: INDUSTRY ANALYSIS SLIDES

NONFERROUS METAL FOUNDRIES: LINCOLN COUNTY

- 1,406 manufacturing jobs
- 55 establishments (QCEW for manufacturing)
- 66% of expenditures are for inputs
 - Aluminum products, wholesale trade, management of companies
- 34% are for labor
 - Average weekly wage: \$928 (QCEW for manufact.)
- Businesses primarily engaged in introducing molten nonferrous metal, under high pressure, into molds or dies to make nonferrous metal die-castings. Ex. Bodine Aluminum and Missouri Smelting Technology



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SHIFT-SHARE ANALYSIS

SHIFT-SHARE LINCOLN COUNTY					
	Employment Change 2004-2014	National Growth	Industrial Mix	Competitive Share	Competitive Share Percent
Manufacturing	-73	67	-308	168	11.9%

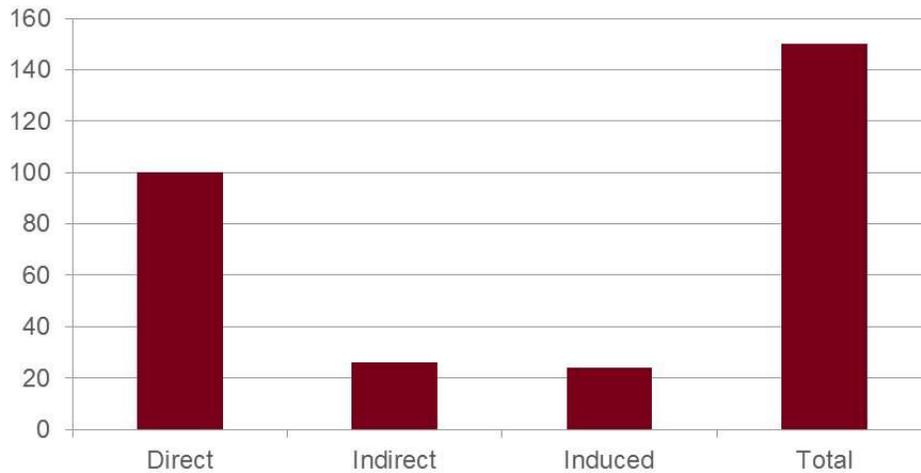
Source: Georgia Stats



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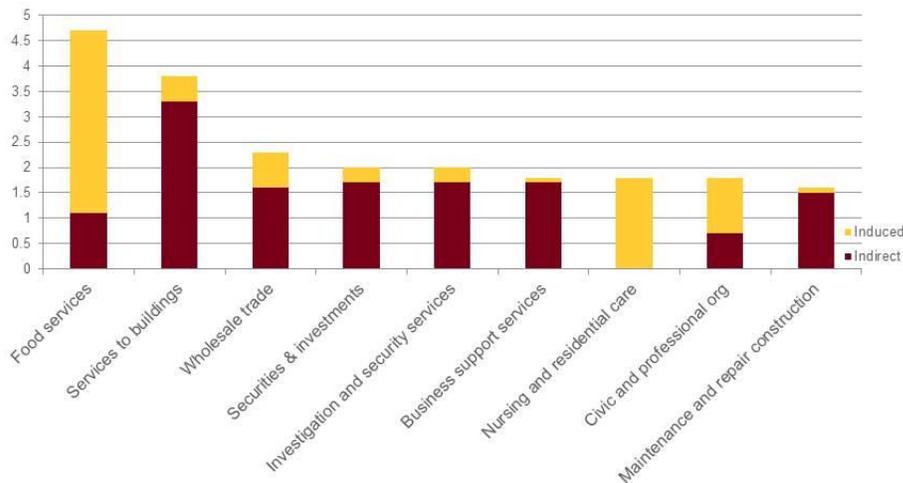
NONFERROUS METAL FOUNDRIES: LINCOLN COUNTY



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NONFERROUS METAL FOUNDRIES: TOP INDUSTRIES AFFECTED



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MACHINE SHOPS: LINCOLN COUNTY

- 139 employees in fabricated metal manufacturing
- 15 establishments (QCEW for fabricated metal manuf)
- 55% of expenditures for inputs
 - Plates, Iron & steel, Machined products
- 45% of expenditures for labor
 - Average weekly wage: \$830 (QCEW for fabricated metal)
- Machine metal and plastic parts and parts of other composite materials on a job basis. Generally low volume orders using machine tools, such as lathes; automatic screw machines; and machines for boring, grinding, and milling. Ex. Normandy Machine Co., Kientzy Machine Fabrication, Tab Tooling (?)



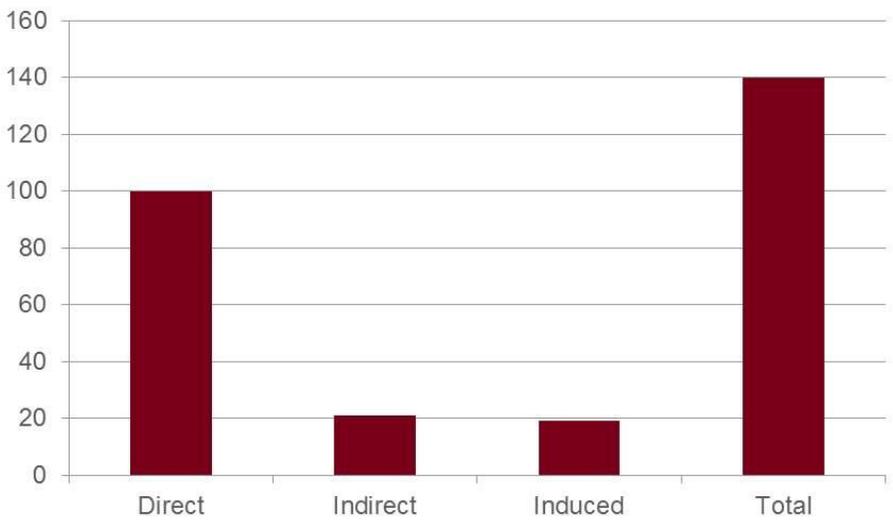
SHIFT-SHARE ANALYSIS

SHIFT-SHARE LINCOLN COUNTY					
	Employment Change 2004-2014	National Growth	Industrial Mix	Competitive Share	Competitive Share Percent
Fabricated metal manuf.	87	2	-2	87	100%

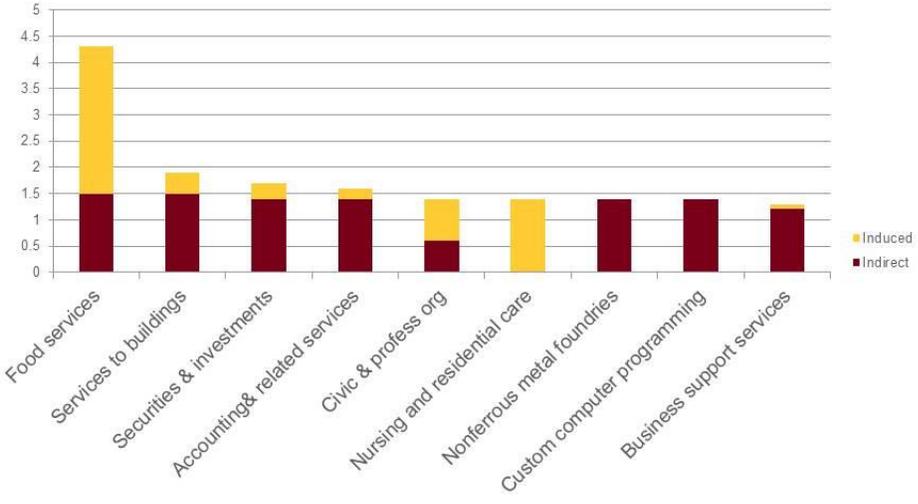
Source: QCEW data



MACHINE SHOPS: LINCOLN COUNTY



MACHINE SHOPS: TOP INDUSTRIES AFFECTED



RETAIL TRADE – GENERAL MERCH.: LINCOLN COUNTY

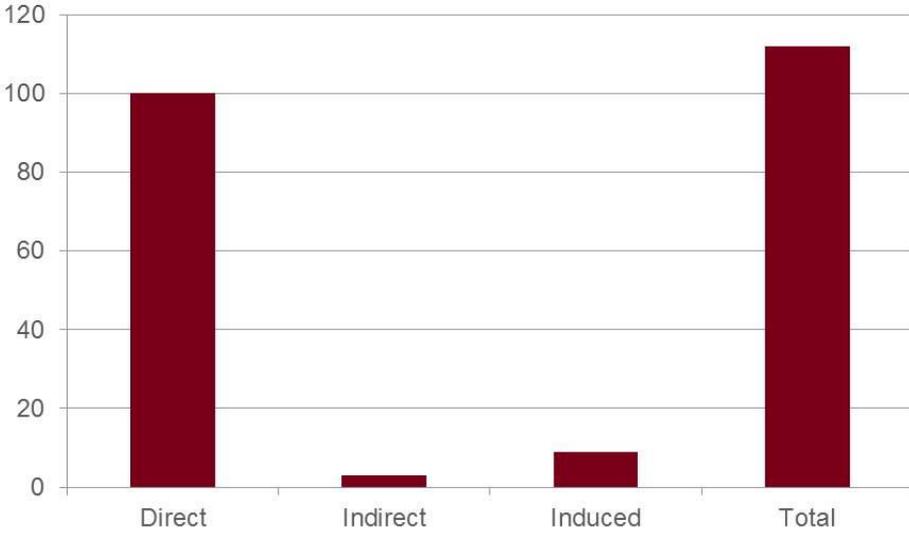
- Unknown number of employees (not disclosed by QCEW)
- 21% of expenditures are for inputs
 - Real estate, advertising, and banking
- 79% for labor
 - Average weekly wage: \$200-250 (based on other types of similar retail trade)
- General merchandise retailing includes discount and department stores that sell a wide variety of goods. Ex. Target and Walmart

SHIFT-SHARE ANALYSIS

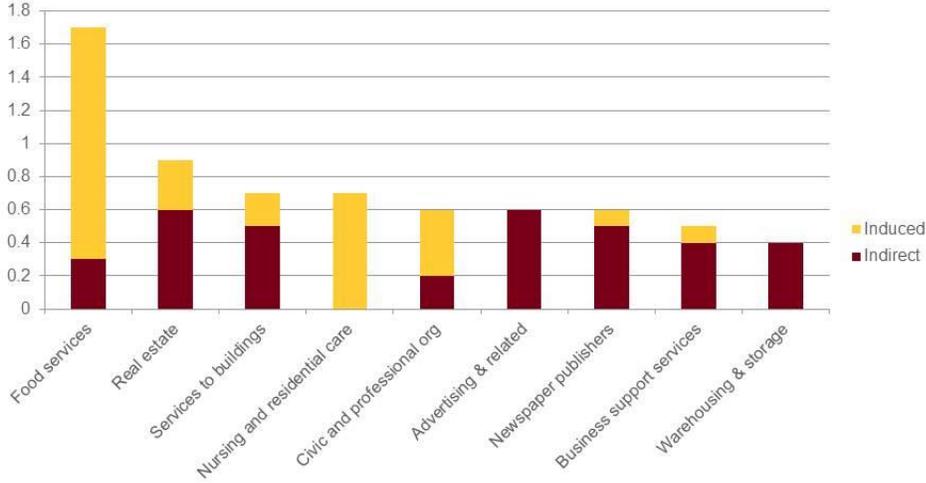
SHIFT-SHARE LINCOLN COUNTY					
	Employment Change 2004-2014	National Growth	Industrial Mix	Competitive Share	Competitive Share Percent
Trade, transportation & utilities	112	103	-74	83	3.8%

Source: EMSI, based on CEW data

GENERAL MERCHANDISE: LINCOLN



RETAIL – GENERAL MERCHANDISE: TOP INDUSTRIES AFFECTED



TRANSPORT BY TRUCK: LINCOLN COUNTY

- 444 employees
- 38 establishments (QCEW)
- 53% of expenditures for inputs
 - Petroleum products, couriers & messengers, truck transportation services
- 46% for labor
 - Average weekly wage: \$827(QCEW)
- Includes industries providing transportation by truck – including short-distance, long-distance, general and specialized freight, and moving services. Ex. Witte Brothers Exchange, Creech Companies, Coastal Carriers



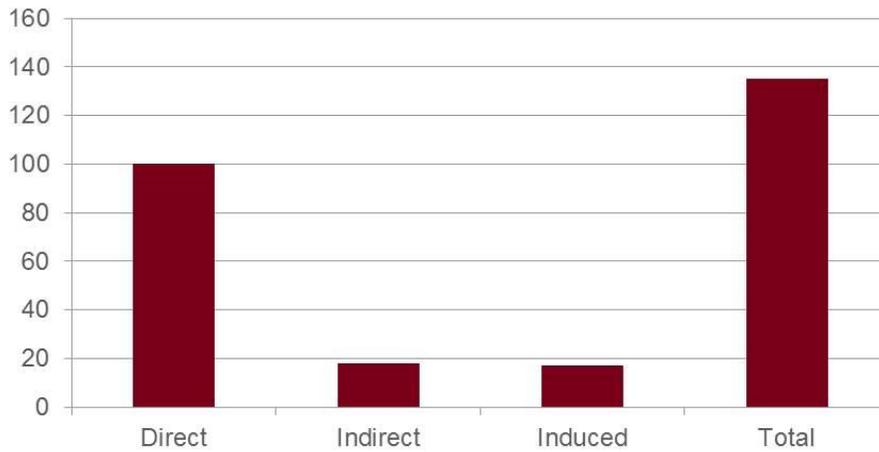
SHIFT-SHARE ANALYSIS

SHIFT-SHARE LINCOLN COUNTY					
	Employment Change 2004-2014	National Growth	Industrial Mix	Competitive Share	Competitive Share Percent
Transport by truck	16	16	6	-6	38%

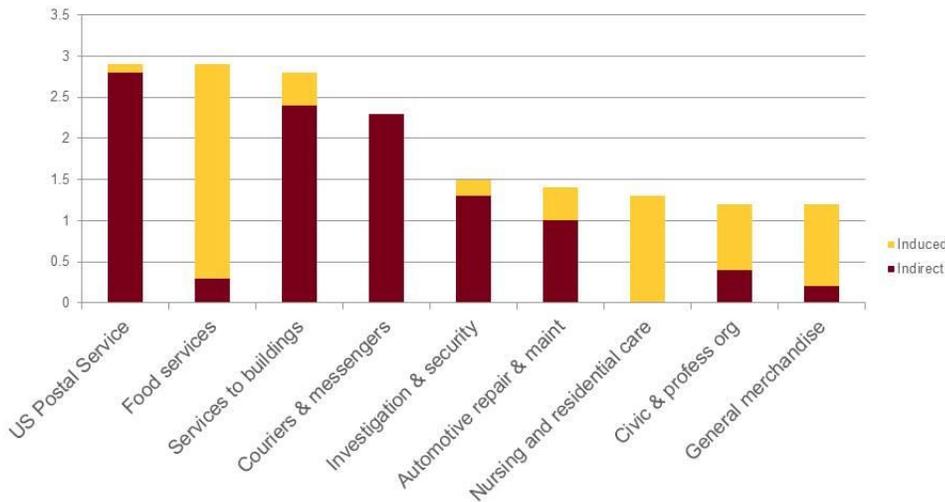
Source: QCEW



TRUCK TRANSPORTATION: LINCOLN COUNTY



TRUCK TRANSPORTATION : TOP INDUSTRIES AFFECTED



POULTRY AND EGG PRODUCTION: LINCOLN COUNTY

- 143 employees in agriculture & forestry
- 15 establishments (QCEW in agriculture & forestry)
- 80% of expenditures for inputs
 - Other animal food, grains, and poultry and egg products
- 20% for labor
 - Average weekly wage: \$558 (QCEW in ag.)
- Primarily engaged in producing chicken eggs, broilers, turkeys, and poultry hatcheries. Ex. Lincoln County Egg Farm (Rose Acre Farms)



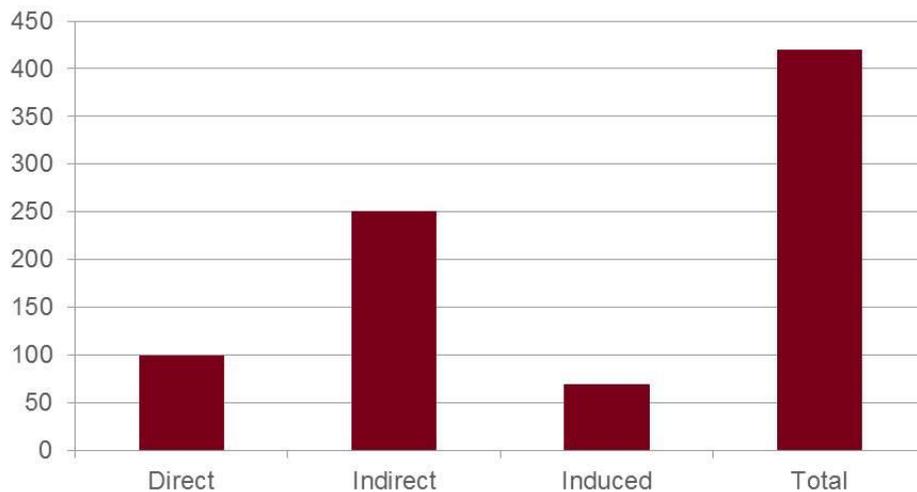
SHIFT-SHARE ANALYSIS

SHIFT-SHARE LINCOLN COUNTY					
	Employment Change 2004-2014	National Growth	Industrial Mix	Competitive Share	Competitive Share Percent
Agriculture, forestry, fishing and hunting	-59	7	10	-42	71%

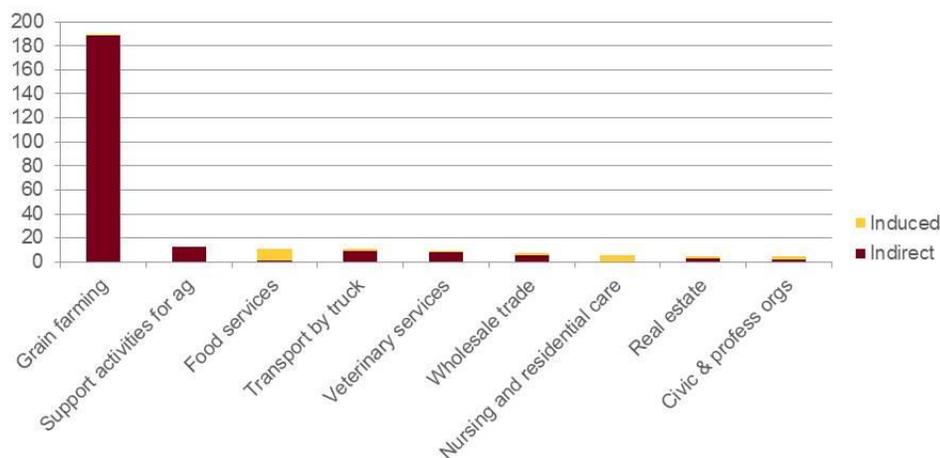
Source: QCEW data



POULTRY AND EGG PRODUCTION: LINCOLN COUNTY



POULTRY AND EGG PRODUCTION: TOP INDUSTRIES AFFECTED



WAREHOUSE & STORAGE : LINCOLN COUNTY

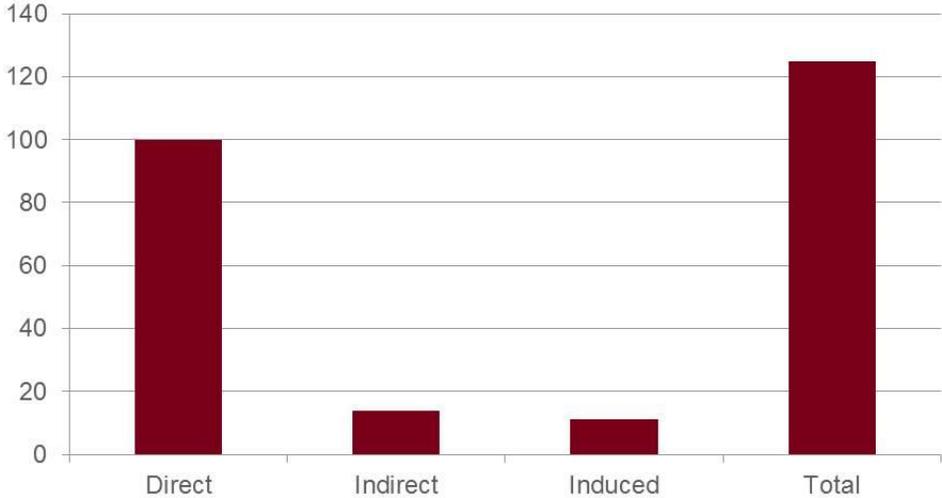
- 124 employees in 2014 (QCEW)
- 4 establishments (QCEW)
- 20% of expenditures are for inputs
 - Warehousing & storage, real estate, & electricity
- 80% for labor
 - Average weekly wage: \$830 (QCEW)
- Businesses operating merchandise warehousing and storage facilities. These establishments generally handle goods in containers, such as boxes, barrels, and/or drums, using equipment, such as forklifts, pallets, and racks. Includes refrigerated and farm products. Ex. Ex. Witte Brothers Exchange, Creech Companies, Coastal Carriers

SHIFT-SHARE ANALYSIS

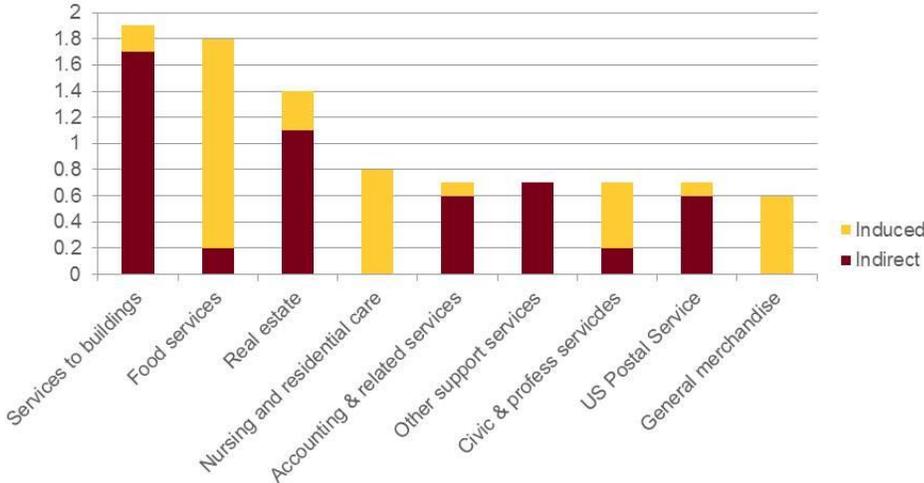
SHIFT-SHARE LINCOLN COUNTY					
	Employment Change 2004-2014	National Growth	Industrial Mix	Competitive Share	Competitive Share Percent
Warehouse & storage	107	0	4	103	96%

Source: QCEW data

WAREHOUSE AND STORAGE: LINCOLN COUNTY



WAREHOUSE & STORAGE: TOP INDUSTRIES AFFECTED



BUSINESS SUPPORT SERVICES: LINCOLN COUNTY

- 646 employees (administrative and support services)
- 47 establishments (QCEW)
- 33% of expenditures are for inputs
 - Employment services, telecommunications, & real estate
- 66% are for labor
 - Average weekly wage: \$346 (QCEW)
- Activities performed include: office administration, clerical services, solicitation, collection, security and surveillance services. Typically provided on a contract or fee basis. Ex. call centers



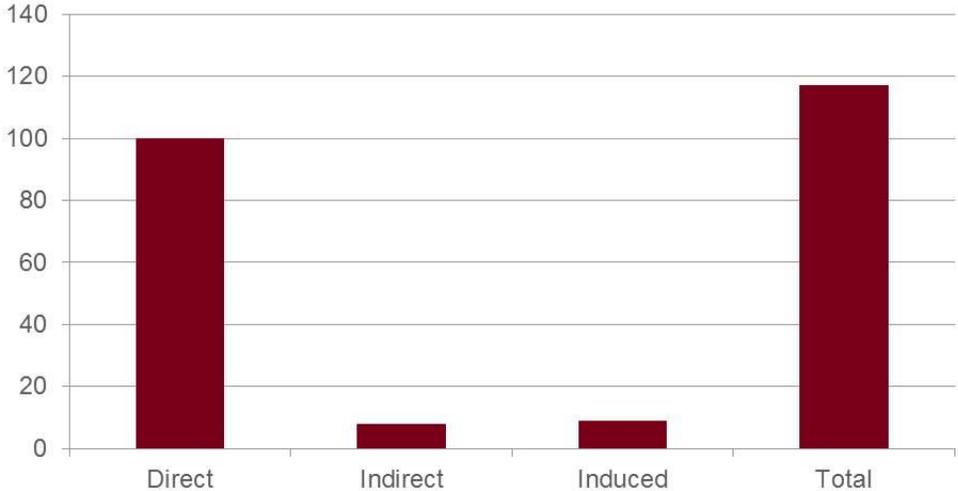
SHIFT-SHARE ANALYSIS

SHIFT-SHARE LINCOLN COUNTY					
	Employment Change 2004-2014	National Growth	Industrial Mix	Competitive Share	Competitive Share Percent
Administrative and support services	489	6	8	475	97%

Source: QCEW data



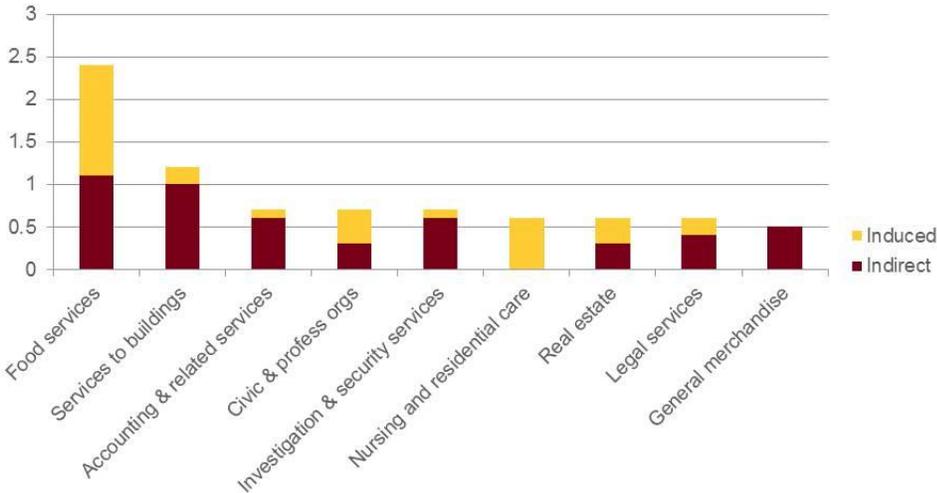
BUSINESS SUPPORT SERVICES: LINCOLN COUNTY



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BUSINESS SUPPORT SERVICES: TOP INDUSTRIES AFFECTED



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INDEPENDENT ARTISTS, WRITERS, & PERFORMERS: LINCOLN COUNTY

- 97 employees (amusements, gambling & recreation)
- 8 establishments (QCEW)
- 54% of expenditures are for inputs
 - Promotional services, spectator sports, & management, technical and scientific consulting
- 46% for labor
 - Average weekly wage: \$205 (QCEW)
- This industry comprises independent (i.e., freelance) individuals engaged in performing in artistic productions, in creating artistic and cultural works or productions, or in providing technical expertise.



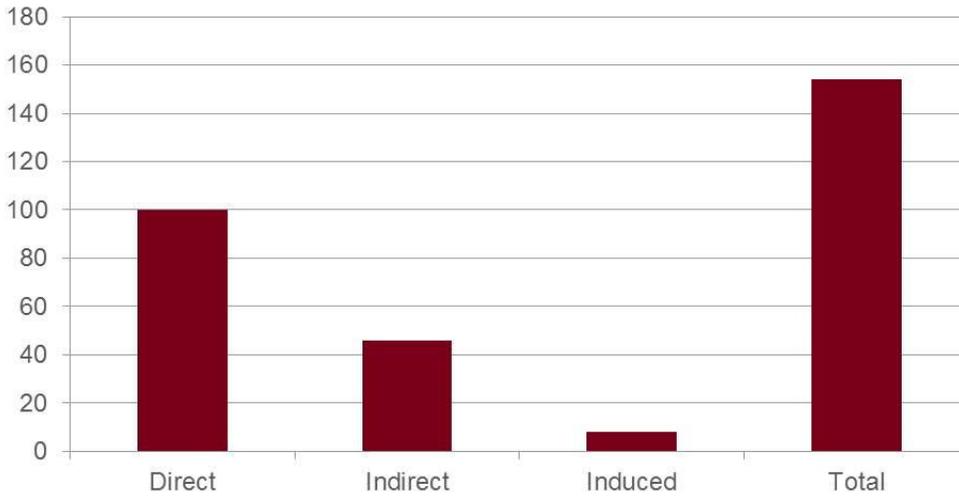
SHIFT-SHARE ANALYSIS

SHIFT-SHARE LINCOLN COUNTY					
	Employment Change 2004-2014	National Growth	Industrial Mix	Competitive Share	Competitive Share Percent
Amusements, gambling & recreation	39	2	5	32	82%

Source: QCEW data



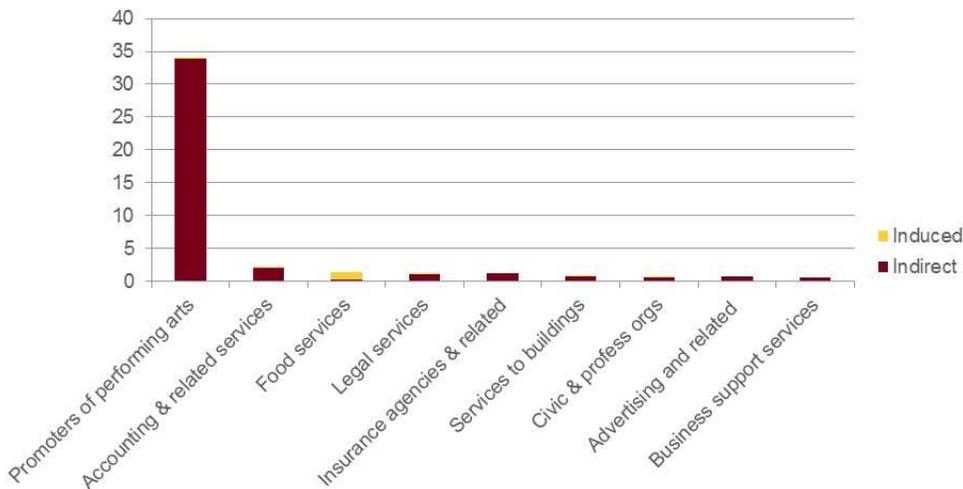
WRITERS, ARTISTS, AND PERFORMERS: LINCOLN COUNTY



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WRITERS, ARTISTS, & PERFORMERS: TOP INDUSTRIES AFFECTED



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APPENDIX THREE: DEFINITION OF TERMS

Eight of Lincoln County's industries were analyzed to measure their economic linkages for the workshop. To allow for comparison, the analysis considers the economic impact of 100 jobs in each industry. This allows one to compare and contrast the types of impacts each industry has in Pennington County. The IMPLAN model used in this analysis is linear; therefore, if a person wanted to consider the economic linkages of 10 jobs, it could be done by dividing the results for 100 jobs by 10.

Interpreting the results requires knowing several definitions. Those are included here.

Output

Output is measured in dollars and is equivalent to total sales.

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.

Direct Impact

The direct impact is equivalent to the initial change in the economy. For this workshop, the direct impact is 100 jobs.

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 their 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 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