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# ECONOMIC IMPACT ANALYSIS

## The LaSalle County Mining Industry



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## **The LaSalle County Mining Industry**

**Prepared by Brian Harger, Research Associate  
Center for Governmental Studies at Northern Illinois University**

## Acknowledgments

This analysis was prepared on behalf of the LaSalle County Mining Coalition and the Illinois Association of Aggregate Producers by Brian Harger of the Center for Governmental Studies at Northern Illinois University. Questions and inquiries regarding the contents of this report can be directed to Mr. Harger (815) 753-0934. For more information on the Center for Governmental Studies, please visit our website at [www.cgs.niu.edu](http://www.cgs.niu.edu).

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# EXECUTIVE SUMMARY

The LaSalle County Mining Coalition and the Illinois Association of Aggregate Producers contracted with the Center for Governmental Studies (CGS) at Northern Illinois University to complete an analysis of the economic impact of the LaSalle County mining industry. For the purposes of this analysis the mining industry was defined as the companies that mine and process construction aggregates (sand, gravel and crushed stone), industrial minerals (silica sand) and cement manufacturers, a primary consumer of aggregate materials produced in the area.

The mining industry has had a significant presence in the Illinois River Valley dating back to the mid-19<sup>th</sup> century converting the area's abundant natural resources into products used by the construction, transportation, energy and manufacturing sectors throughout the region and beyond. It also supports the local economy by purchasing goods and services from other local businesses, while the spending by mining industry employees support jobs and wages in the housing, healthcare, personal services, and retail sectors.

The economic impacts of the mining industry were calculated using the IMPLAN input/output (I/O) model. Below is a summary of the economic impacts of the mining industry operations in 2013 (Figure 2).

**Figure 2. Estimated Impacts of the Mining Industry (2013)**

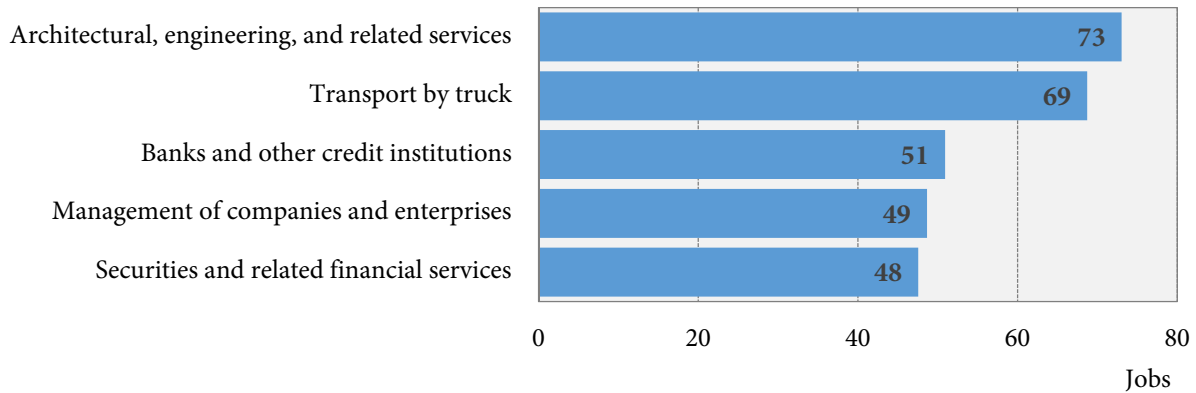
<b>LaSalle County, Illinois</b>	<b>Direct</b>	<b>Indirect</b>	<b>Induced</b>	<b>Total</b>	<b>Multiplier</b>
Employment	820	766	393	1,979	2.41
Output (\$millions)	\$1,051.1	\$148.1	\$45.0	\$1,244.2	1.18
Value-added (\$ millions)	\$290.9	\$84.4	\$28.9	\$404.2	1.39
Employee Compensation (\$ millions)	\$61.8	\$33.9	\$11.9	\$107.6	1.74

*Source: IMPLAN, 2013.*

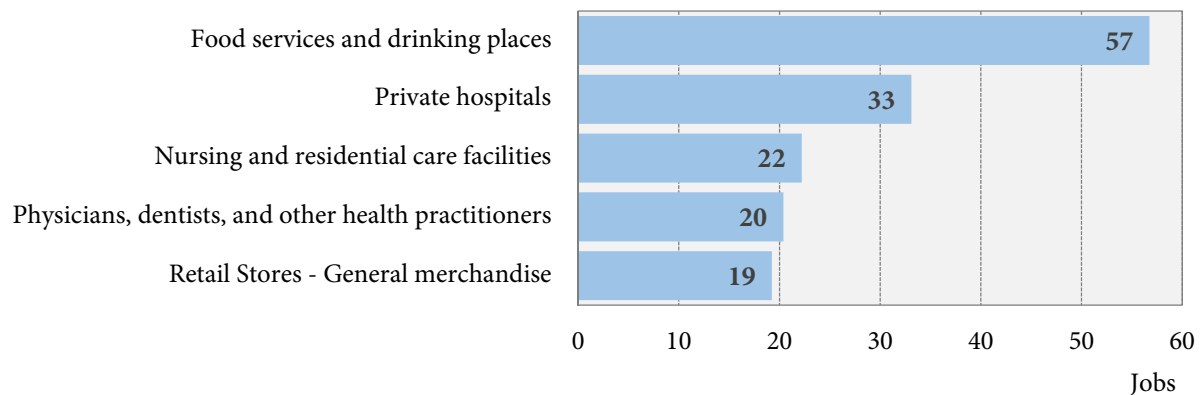
## Summary of Employment Impacts

In 2013, the mining industry was responsible for sustaining 1,979 jobs in LaSalle County. Of these, 820 were provided directly by the mining companies, with another 766 jobs being supported by the industry's spending with other companies and an additional 393 supported by the household spending by mining industry employees (Figures 3 and 4).

**Figure 3. Greatest *Indirect* Employment Impacts of the LaSalle County Mining Industry**



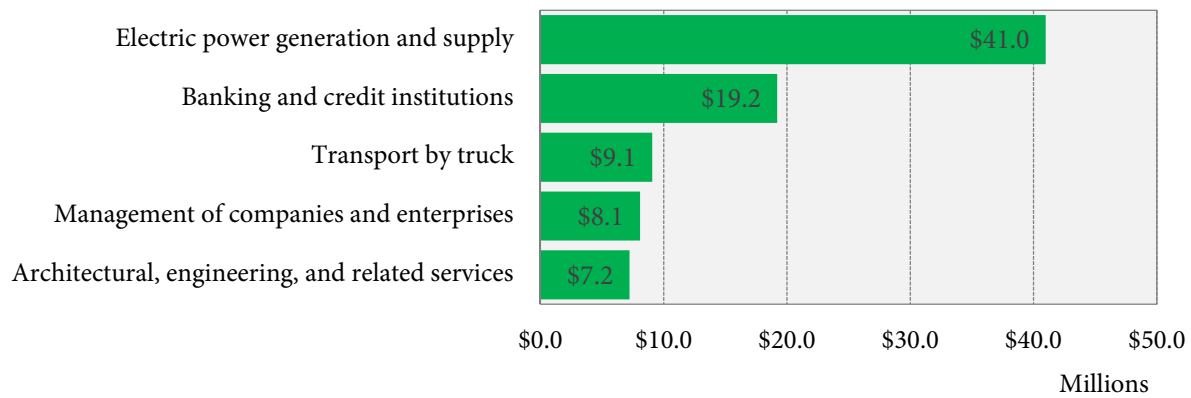
**Figure 4. Greatest *Induced* Employment Impacts of the LaSalle County Mining Industry**



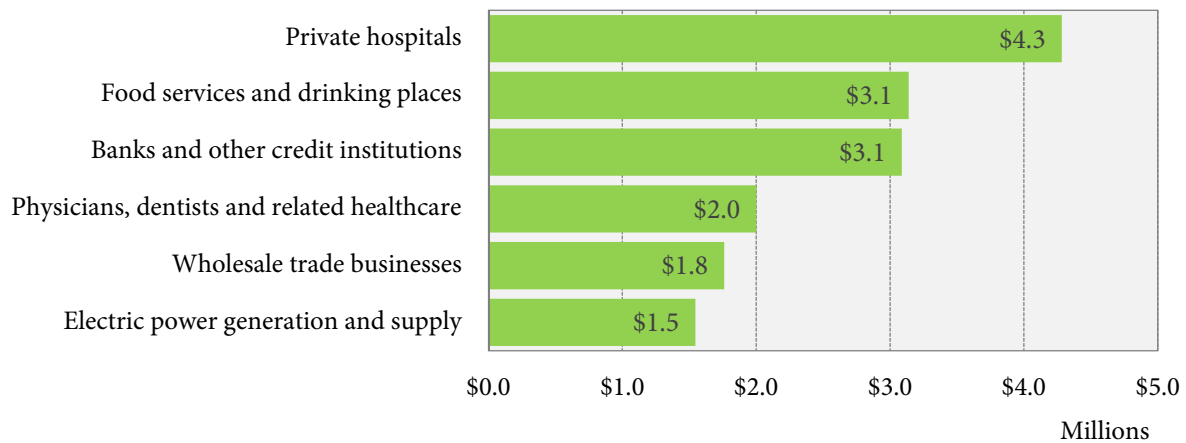
## Summary of Output Impacts

Output represents the value of an industry’s business activities including sales and is used as a measure of overall industry productivity. The mining industry generates approximately \$1.2 billion in direct and indirect sales or revenue per year in LaSalle County, \$1.1 billion directly from the mining companies themselves and an additional \$193 million in indirect and induced impacts. The greatest indirect and induced output impacts are illustrated in Figures 5 and 6.

**Figure 5. Greatest *Indirect* Output Impacts of the LaSalle County Mining Industry**



**Figure 6. Greatest *Induced* Output Impacts of the LaSalle County Mining Industry**

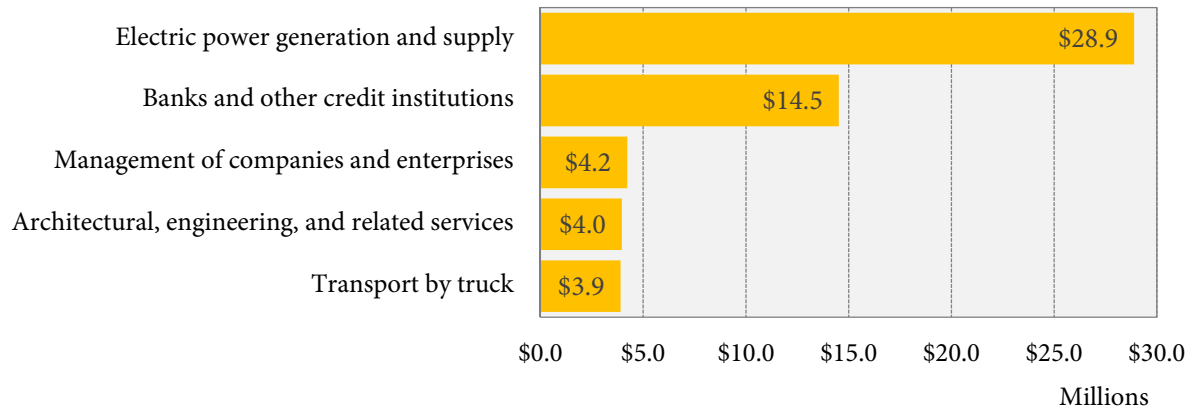


The companies participating in this analysis also reported approximately \$56 million in spending on contractors across eight industry sectors. Of this \$56 million, about \$27 million or 48% is estimated to have been spent within LaSalle County<sup>1</sup>

## Summary of Value-Added Impacts

The value added of an industry, also referred to as gross domestic product (GDP)-by-industry, is the contribution of a private industry or government sector to overall GDP. It consists of compensation of employees, taxes on production and imports, less subsidies, and gross operating surplus. The greatest indirect and induced value-added impacts are illustrated in Figures 7 and 8.

**Figure 7. Greatest *Indirect* Value-Added Impacts of the LaSalle County Mining Industry**

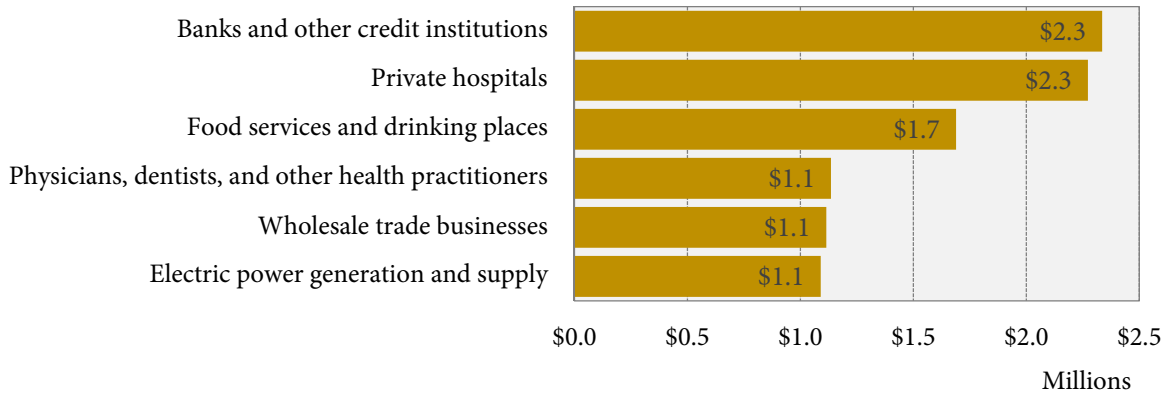


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<sup>1</sup> Note that this figure may be higher because information on contractor expenditures was derived from the six companies that participated in the survey. Data from the three companies that did not participate was not estimated.



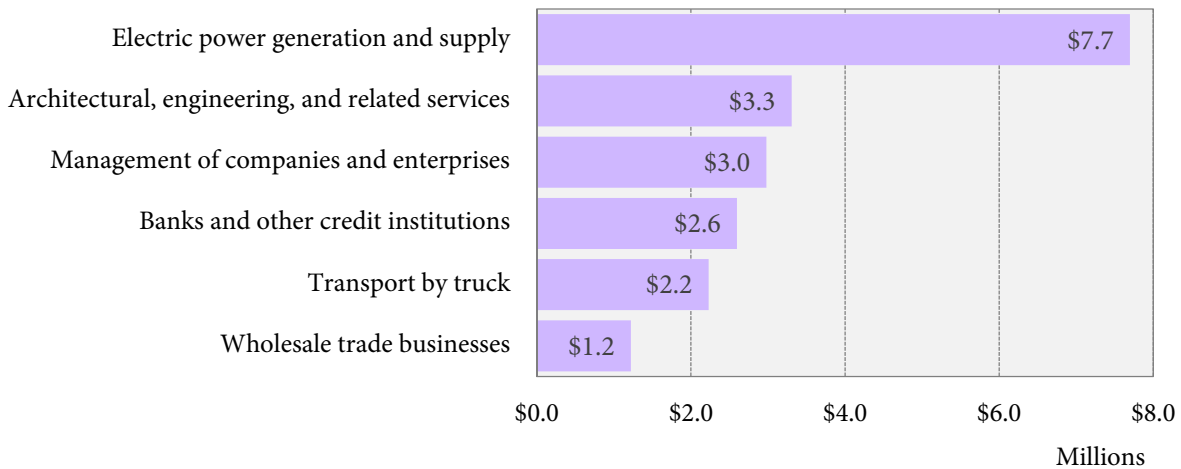
**Figure 8. Greatest *Induced* Value-Added Impacts of the LaSalle County Mining Industry**



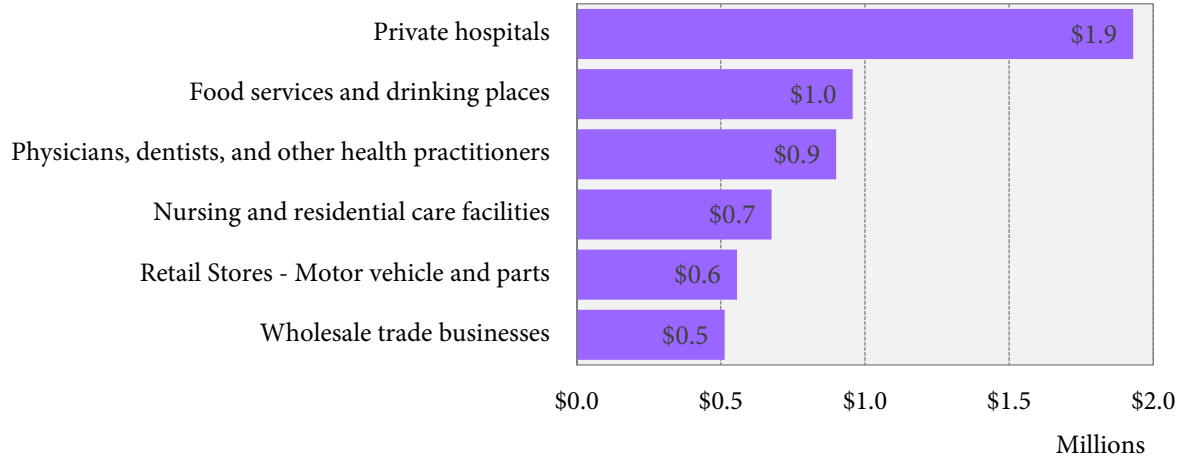
## Summary of Employee Compensation Impacts

The LaSalle County mining companies paid \$107.6 million in employee compensation in 2013. Of this amount \$61.8 million was paid by the mining industry itself (direct impacts) with an additional \$33.9 million being paid as a result of the mining industry’s purchases of goods and services from other local businesses (indirect impacts) and another \$11.9 million being generated by the household spending of the mining industry’s employees (induced impacts). The greatest indirect and induced value-added impacts are illustrated in Figures 9 and 10.

**Figure 9. Greatest *Indirect* Employee Compensation Impacts of the LaSalle County Mining Industry**



**Figure 10. Greatest *Induced* Employee Compensation Impacts of the LaSalle County Mining Industry**



## Other Impacts

- The LaSalle County mining industry contributed an estimated **\$42.1 million in federal taxes** and **\$35.3 million in state and local taxes** in 2013. This includes an estimated **\$1.4 million in state and local sales tax revenue**.
- Local mining companies **paid \$2.5 million in property taxes** in LaSalle County in the 2013-2014 tax year.
- In 2013, local mining companies provided summer employment for **38 high school and college students, paying over \$271,000 in wages and benefits**.
- LaSalle County mining company employees contributed **6,793 hours to volunteer service activities** that benefited their communities.

# ECONOMIC IMPACT OF THE MINING INDUSTRY

## Introduction

The LaSalle County Mining Coalition and the Illinois Association of Aggregate Producers contracted with the Center for Governmental Studies (CGS) at Northern Illinois University to complete an analysis of the economic contribution of the LaSalle County mining industry. For the purposes of this analysis the mining industry was defined as the companies that mine and process construction aggregates (sand, gravel and crushed stone), industrial minerals (silica sand) and cement manufacturers, a primary consumer of aggregate materials produced in the area. The objective of the study is to define the contribution of the mining industry to the local economy.

The mining industry has had a significant presence in the Illinois River Valley dating back to the early 19<sup>th</sup> century turning the area's abundant natural resources into products used by the construction, transportation, energy and manufacturing sectors throughout the region and beyond. It also supports the local economy by purchasing goods and services from other local businesses, while spending by mining industry employees supports jobs and wages in housing, healthcare, personal services, and retail sectors.

## Mining Industry in LaSalle County

### History of the Mining Industry in LaSalle County

Blessed by abundant mineral resources, LaSalle County's settlers used coal they dug from outcroppings. The County's mining industry dates back to 1855 when the first commercial coal mine shaft was put into commission, providing a cheap and efficient source of power for the region<sup>2</sup>. Locally mined coal and aggregates were responsible for the establishment and growth of many communities along the Illinois River Valley. The mining industry, which included coal as well as aggregates was responsible for the establishment and growth of many of the communities along the Illinois River Valley. The mining industry was also responsible for the growth of other industries especially zinc processing, brick making, glass manufacturing, concrete and cement, as well as the suppliers of goods and services to the mines. The industry continued to grow through

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<sup>2</sup> Sauer, Carl Ortwin. Bulletin No. 27: Geography of the Upper Illinois Valley and History of Development. Urbana, IL: State Geological Survey, 1916, pages 188-189.

the 19th century as the region's transportation network expanded with the opening of the Illinois and Michigan Canal in 1848 and the arrival to the railroads in the 1850's.

Beginning in the late 19th and early 20th centuries, the region's mining companies turned to limestone and deposits of high quality silica sand which have proved especially valuable to the industry's continued expansion. Four large quarries were producing stone for cement manufacture in 1925<sup>3</sup>. By 1927, at least fifteen mines were operating in the area producing silica sand. The rock stratum that contains this silica, known as St. Peter sandstone, predominates the area around the communities of Ottawa and Utica and is easily accessible. Silica sand is a basic material in the production of glass, industrial molds and the extraction of oil and gas<sup>4</sup>.

During World War II, LaSalle County's mineral resources were exploited by forty-four companies operating in Dayton, Lowell, Ottawa, Streator, Marseilles, Utica and Wedron to produce numerous products like brick and tile, cement blocks, coal, face brick, glass, gravel, sand and gravel, silica sand, sodium silicate, structural and refractory clay, and structural tile. Of these forty-four companies, nine were mining or processing silica sand at fourteen sites in the County<sup>5</sup>.

### Present Day Mining Industry in LaSalle County

Industrial minerals have played a critical role in the development of Illinois since the beginning of pioneer settlement in the eighteenth century. Illinois industrial minerals include rocks such as limestone, dolomite, and shale and nonmetallic minerals such as silica sand, clay, and fluorite. Major industrial minerals produced in LaSalle County today are crushed limestone, sand and gravel, and silica sand. Production and use of industrial minerals have been and will continue to be a key component of the state's economy.

Limestone and dolomite are the most widely quarried rocks in Illinois, and crushed stone is the state's most important rock product. Millions of tons of stone are crushed annually for use as construction aggregates, road surfacing material, agricultural limestone, and lime. High calcium limestones are also used as a scrubbing agent for pollution control in power plants and incinerators

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<sup>3</sup> Krey, Frank and Lamar, J.E. Bulletin No. 46: Limestone Resources of Illinois. Urbana, IL: State Geological Survey, 1925, pages 138-140

<sup>4</sup> Lamar, J.E. Bulletin No. 53: Geology and Economic Resources of the St. Peter Sandstone of Illinois. Urbana, IL: State Geological Survey, 1927, page 55.

<sup>5</sup> Willman, H.B. and Payne, J. Norman. Bulletin No. 66: Geology and Mineral Resources of the Marseilles, Ottawa, and Streator Quadrangles. Urbana, IL: State Geological Survey, 1942, pages 232-235.

and as a major ingredient of cement, the binding agent used in concrete pavements and foundations. Limestone and dolomite quarries are located where thick stone deposits occur near the surface. Portland cement is produced in La Salle County from low-magnesium limestone.

Sand and gravel deposits are widely distributed in select locations across the state; in LaSalle County along the Illinois River corridor. Sand and gravel in much of Illinois was deposited by water from the melting glaciers. The huge ice lobes of continental ice sheets that moved into Illinois from Canada carried enormous amounts of rock debris, much of which was washed and sorted by meltwaters into various sand and gravel deposits. Sand deposits of more recent origin are found in larger streams and rivers, where they are recovered by dredging. Many deposits of sand and gravel are used as construction aggregate in asphalt and in concrete pavements and commercial and residential structures, especially in the northern half of the state.

Silica sand consists of fine grains of the mineral quartz. Commercial silica sand is produced from sandstone bedrock and some glacial deposits. Silica sand from northern Illinois is famous for its high purity and is widely used in making high-quality glass. Silica sand is also used as molding sand because it can withstand the high temperatures used in casting steel and other metals. It is also used in fracture-treating wells to help increase oil and natural gas production. In ground or fine powder, silica sand is used as an ingredient in paint fillers, pottery glazes, and enamel<sup>6</sup>.

## Methodology

The analysis consists of three parts. The first discusses the impacts generated by the employment and operations of the mining companies in terms of employment, output (sales), and value-added (employee compensation, rent, taxes, and profit paid or earned, etc.). The second part concerns the impacts of spending by the mining companies on a range of contractors that provide those services that are critical to their operation. The final part deals with impacts of taxes paid by the industry to support local government services such as schools, infrastructure and public safety, as well as other contributions of the mining companies and their employees to their communities.

The economic impacts of the mining industry were calculated using the IMPLAN input/output (I/O) model. The model is unique in that the I/O coefficients are based on county specific patterns and include both industry specific direct and indirect impacts. Input-Output models are generally

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<sup>6</sup> Excerpted from Illinois State Geological Survey's Illinois' Industrial Minerals webpage at <https://www.isgs.illinois.edu/research/industrial-minerals/illinois-industrial-minerals> (accessed 7/21/14).

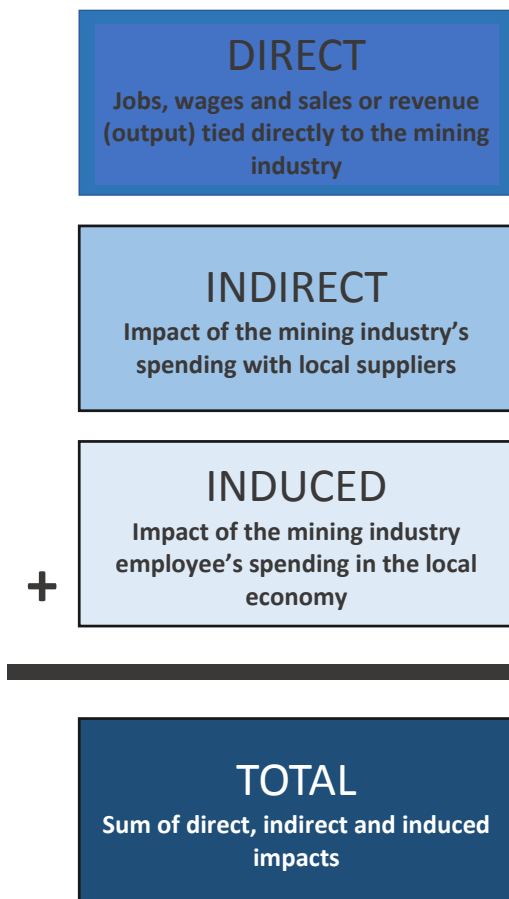
accepted tools used by economists and planners to estimate the movement of money within a specified region. These estimations are based on the availability of products and services within the region that are known to serve as inputs to an end user.

For example, the construction of a new factory requires the services of both trades and service sector workers, as well as purchases of building materials. Some of these services and materials may be purchased locally while others can only be obtained from outside the area. The money remaining within the region continues to stimulate new economic activity as it moves up the supply chain until the source of a product or service falls outside the area. In a similar fashion, the workers employed directly or indirectly as a result of the project also contribute to the local economy through their household spending for goods and services such as housing, clothing, healthcare and entertainment. These expenditures also enhance the economic effects of the project as their money moves up the supply chain.

The economic activity of an industry is linked with other industries in the general economy. Sales, employment and payroll figures only illustrate a portion of the importance of an industry or individual facility to the local economy. Indirect effects in the regional economy result from businesses-to-business purchases of goods and services such as machinery and equipment, fuel, electricity, office supplies, and accounting and other services. Induced effects result from the Company's employees spending a portion of their income in the local economy for food, housing, furniture and appliances, transportation and entertainment (Figure 11).

Economic multipliers help predict the "ripple effects" of new and expanding, as well as declining, industry. A new or expanding company can have economic impacts beyond the jobs and income generated by the company

**Figure 11: Economic Impact Components**



itself. A multiplier is a single number which summarizes the total economic benefits resulting from a change in the local economy. Four multipliers were calculated for this analysis: employment, output, value-added and employee compensation.

The baseline data on employment, sales, contractor expenditures, compensation and property taxes was collected from 6 companies operating in the County in 2013. Data was also estimated for the 3 companies that declined to participate<sup>7</sup>. The economic impacts were calculated based on the following assumptions:

- The study area for the analysis is defined as LaSalle County, Illinois.
- Employment data for the companies that did not participate was derived from the Mine Data Retrieval System (MDRS) maintained by the Mine Safety and Health Administration of the U.S. Department of Labor. All other data, with the exception of contractor expenditures was estimated based on the averages for the participating companies.
- *Industry definition.* The study included companies whose primary business activity is:
  - **NAICS 212312:** Crushed and Broken Limestone Mining and Quarrying
  - **NAICS 212321:** Construction Sand and Gravel Mining
  - **NAICS 212322:** Industrial Sand Mining
  - **NAICS 327310:** Cement Manufacturing

A summary of the industry’s impacts are illustrated in Figure 12.

Figure 12. Estimated Contribution of Mining Industry Operations (2013)					
LaSalle County, Illinois	Direct	Indirect	Induced	Total	Multiplier
Employment	820	766	393	1,979	2.41
Output (\$millions)	\$1,051.1	\$148.1	\$45.0	\$1,244.2	1.18
Value-added (\$ millions)	\$290.9	\$84.4	\$28.9	\$404.2	1.39
Employee Compensation (\$ millions)	\$61.8	\$33.9	\$11.9	\$107.6	1.74
<i>Source: IMPLAN, 2013.</i>					

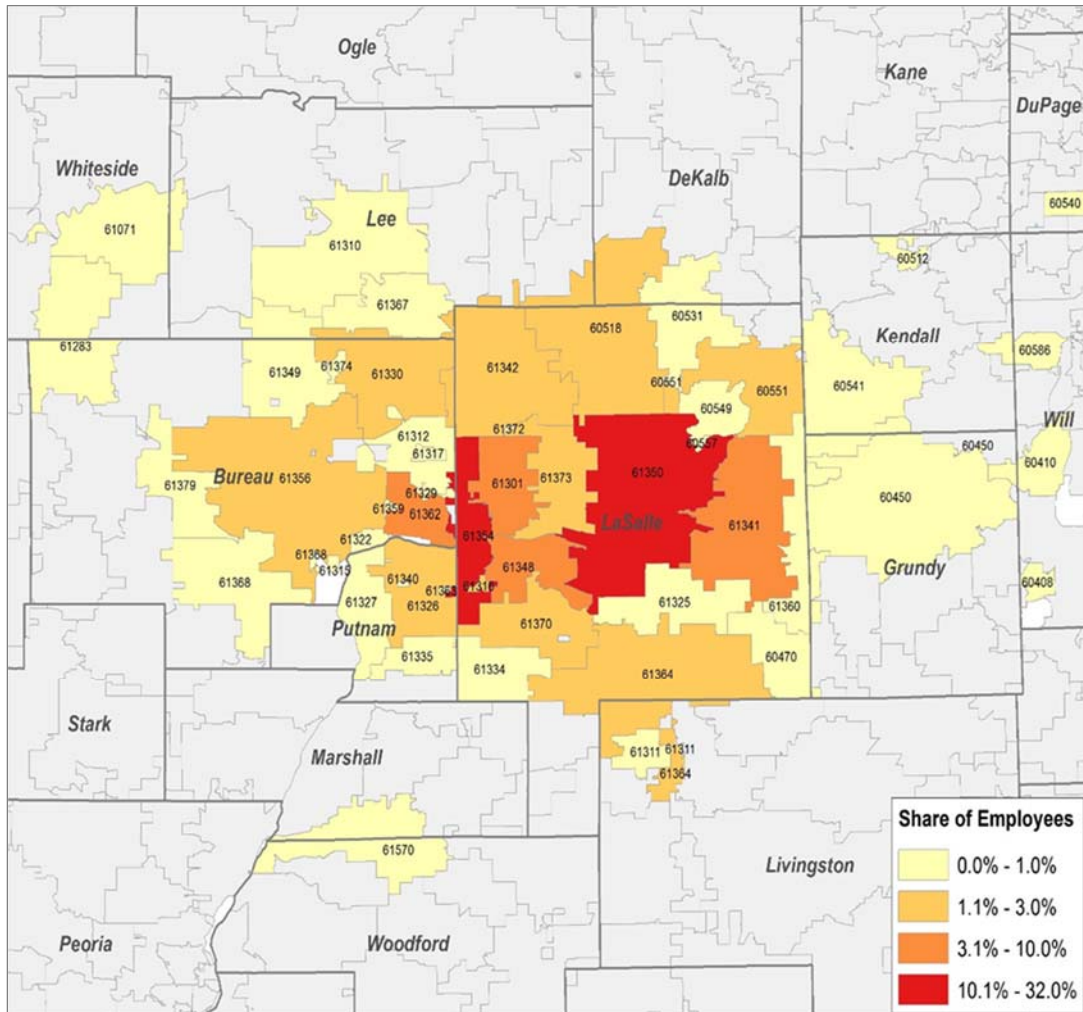
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<sup>7</sup> The year 2013 was selected for the analysis since this was the most recent year for which require information was available. The survey only included those companies that were in operation during the 2013 calendar year.

## Employment Impacts

Mining employment is probably the strongest and most visible evidence of the industry’s economic contribution to the area. Based on a survey of the mining companies, 83% of the industry’s employees live in LaSalle County with much of the balance residing in nearby counties (Figure 13).

Figure 13. Mining Industry Employees - Residence by ZIP Code



In 2013, the LaSalle County mining industry was responsible for sustaining 1,979 jobs. Of these 820 were employed by the mining companies themselves (*direct impacts*). The purchase of local goods and services by mining companies (*indirect impacts*) was responsible for sustaining 766 jobs in other business sectors, while the household spending by mining industry workers (*induced impacts*) helped to create or support another 393 workers. Because of the differences in spending patterns between businesses and individuals,



## Economic Impact Analysis: The LaSalle County Mining Industry

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their impacts on other industries also differ. The top indirect and induced employment impacts by industry are listed below:

- The greatest **indirect** employment impacts occur in the following industries:
  - 79 in architectural, engineering, and related services
  - 69 in transport by truck
  - 51 in banks and other credit institutions
  - 49 in management of companies and enterprises
  - 48 in securities and related financial services
- The greatest **induced** employment impacts occur in the following industries:
  - 57 in food services and drinking places
  - 33 in private hospitals
  - 22 in nursing and residential care facilities
  - 20 in physicians, dentists, and other health practitioners
  - 19 in retail stores - general merchandise

### Multiplier Effect

For every 10 jobs created or supported by the operation of these facilities, another 14 jobs will be created or support other business sectors in LaSalle County – an employment multiplier of 2.41 (Figure 14).

**Figure 14. Mining Industry Multiplier Effect: Employment**



## Output Impacts

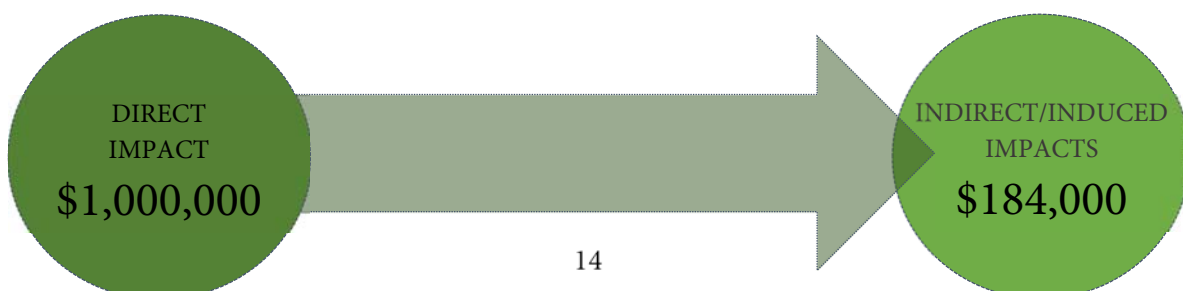
Economic output measures the value of all sales of goods and services of a company or industry and is used as a measure of overall industry productivity. The mining industry generates approximately \$1.2 billion in direct and indirect output per year in LaSalle County, \$1.1 billion directly from the mining companies themselves and an additional \$193.1 million in indirect and induced impacts. Because of differences in the spending patterns between businesses and individuals, these impacts on other industries also differ. The top indirect and induced output impacts by industry are listed below:

- The greatest *indirect* output impacts occur in the following industries:
  - \$41.0 million in electric power generation and supply
  - \$19.2 million in banks and other credit institutions
  - \$9.1 million in transport by truck
  - \$8.1 million in management of companies and enterprises
  - \$7.2 million in architectural, engineering, and related services
- The greatest *induced* output impacts occur in the following industries:
  - \$4.3 million in private hospitals
  - \$3.1 million in food services and drinking places
  - \$3.1 million in banks and other credit institutions
  - \$2.0 million in of physicians, dentists, and other health practitioners
  - \$1.8 million in wholesale trade businesses
  - \$1.5 million in electric power generation and supply

## Multiplier Effect

For every million dollars of output generated by the mining industry, an additional \$184,000 in output will be generated in other business sectors in LaSalle County – an output multiplier of 1.18 (Figure 15).

**Figure 15. Mining Industry Multiplier Effect: Output**



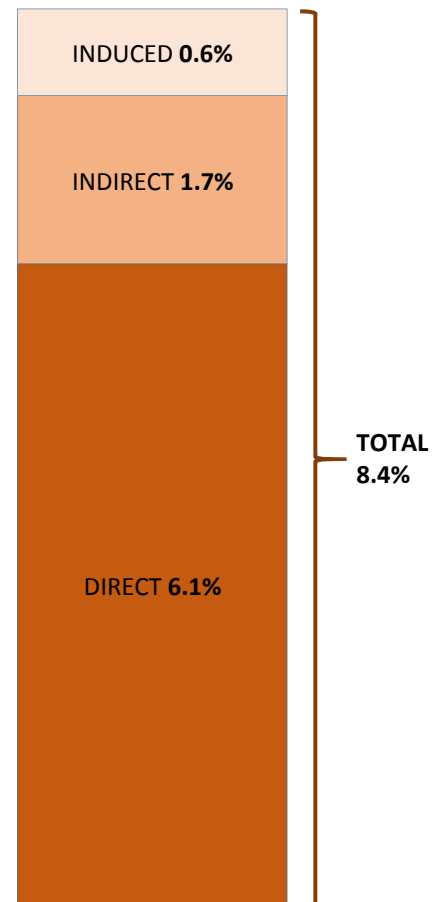
## Value-Added Impacts

The value-added of an industry, also referred to as gross domestic product (GDP-by-industry), is the contribution of a private industry or government sector to overall GDP. It consists of compensation of employees, taxes on production and imports, less subsidies, and gross operating surplus. Value-added focuses only on additional value of goods and services produced, thus it is defined as economic output minus intermediate inputs (i.e. the value of goods and services used as inputs in production process, including raw materials, services and various other operating expenses).

In 2013, the mining industry's contribution to LaSalle County economy (GDP) was \$404.2 million; 8.4% of total the GDP (Figure 16). Most of this contribution (\$290.9 million) came directly from industry operations with an additional \$84.4 million coming from the purchases of goods and services from local businesses (*indirect* impacts) and \$28.9 million being generated by the household spending of the industry's employees (*induced* impacts). Because of differences in the spending patterns between businesses and individuals, these impacts on other industries also differ. The top indirect and induced value-added impacts by industry are listed below:

- The greatest *indirect* value-added impacts occur in the following industries:
  - \$28.9 million in electric power generation and supply
  - \$14.5 million in banks and other credit institutions
  - \$4.2 million in management of companies and enterprises
  - \$4.0 million in architectural, engineering, and related services
  - \$3.9 million in transport by truck

**Figure 16:**  
Mining Industry Value-Added as a Share  
of Total LaSalle County GDP



Source: LaSalle County Mining Coalition; IMPLAN; and the Center for Governmental Studies.

- The greatest *induced* value-added impacts occur in the following industries:
  - \$2.3 million in banks and other credit institutions
  - \$2.3 million in private hospitals
  - \$1.7 million in food services and drinking places
  - \$1.1 million in physicians, dentists, and other health practitioners
  - \$1.1 million in wholesale trade businesses
  - \$1.1 million in electric power generation and supply

## Multiplier Effect

For every million dollars of value-added generated by mining, an additional \$390,000 will be generated by other businesses in LaSalle County – an output multiplier of 1.39 (Figure 17).

**Figure 17. Mining Industry Multiplier Effect: Value-Added**



## Employee Compensation Impacts

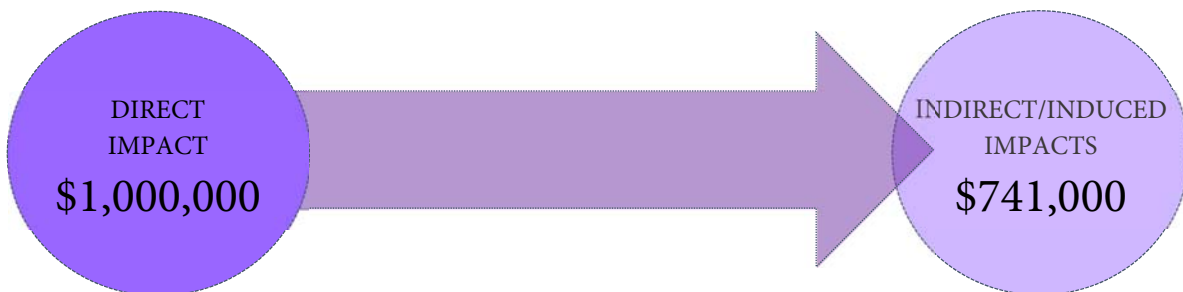
Employee compensation includes the salary or wages paid by the industry, as well as the cost of employee benefits. The LaSalle County mining companies were responsible for generating \$107.6 million in employee compensation in 2013. Of this amount \$61.8 million was paid by the mining industry itself (*direct* impacts) with an additional \$33.9 million being paid as a result of the mining industry's purchases of goods and services from other local businesses (*indirect* impacts) and another \$11.9 million being generated by the household spending of the mining industry's employees (*induced* impacts). The top indirect and induced employee compensation impacts by industry are listed below:

- The greatest *indirect* employee compensation impacts occur in the following industries:
  - \$7.7 million in electric power generation and supply
  - \$3.3 million in architectural, engineering, and related services
  - \$3.0 million in management of companies and enterprises
  - \$2.6 million in banks and other credit institution
  - \$2.2 million in transport by truck
  - \$1.2 million in wholesale trade businesses
- The greatest *induced* employee compensation impacts occur in the following industries:
  - \$1.9 million in private hospitals
  - \$957,000 in food services and drinking places
  - \$900,000 in physicians, dentists, and other health practitioners
  - \$676,000 in nursing and residential care facilities
  - \$556,000 in retail stores - motor vehicle and parts
  - \$513,000 in wholesale trade businesses

## Multiplier Effect

For every million dollars of employee compensation paid to workers in the refinery, other businesses in LaSalle County will pay an additional \$741,000 in employee compensation – an employee compensation multiplier of 1.74 (Figure 18).

**Figure 18. Mining Industry Multiplier Effect: Employee Compensation**



## Impacts of Industry Spending on Contractors

In addition to the expenditures by the mining companies on employees and their wages and benefits, they purchase various types of goods and services from contractors that are critical to their operations. These contractors in turn support or generate employment, wages and business-to-business purchases in other industry sectors. The economic contribution of contractor expenditures shows up as part of the indirect impacts.

The companies participating in this analysis reported approximately \$56 million in spending on contractors across eight industry sectors. Of this \$56 million, about \$27 million or 48% is estimated to have been spent within LaSalle County<sup>8</sup> (Figure 19).

**Figure 19. Indirect Impacts of Mining Industry Spending on Contractors (2013)**

Industry Sector	Employment	Output	Value-Added	Employee Compensation
Architectural, engineering, and related services	73	\$7.2	\$4.0	\$3.3
Transport by truck	69	\$9.1	\$3.9	\$2.2
Services to buildings and dwellings	45	\$2.3	\$1.2	\$0.9
Maintenance and repair construction of nonresidential structures	19	\$2.7	\$1.2	\$0.9
Accounting, tax preparation, bookkeeping, and payroll services	16	\$1.4	\$1.0	\$0.5
Support activities for other mining	13	\$3.5	\$0.3	--
Commercial and industrial machinery and equipment repair and maintenance	5	\$0.6	\$0.5	\$0.3
Management, scientific, and technical consulting services	4	\$0.3	\$0.2	\$0.1
<b>Total</b>	<b>244</b>	<b>\$27.2</b>	<b>\$12.2</b>	<b>\$8.2</b>

*Note: Output, Value-Added and Employee Compensation figures are in millions of dollars.*

*Source: IMPLAN, 2013.*

<sup>8</sup> Note that this figure may be higher because information on contractor expenditures was derived from the six companies that participated in the survey. Data from the three companies that did not participate was not estimated.

## Other Impacts

The mining industry also contributed an estimated \$42.1 million in federal taxes and \$35.3 million in state and local taxes in the 2013 calendar year. This includes an estimated \$1.4 million in state and local sales tax revenue, as well as \$2.5 million in property taxes paid to LaSalle County in the 2013-2014 tax year.

The mining industry and its employees are also involved in their communities, donating their time, money and talents to various local civic groups, charities and community projects.

- In 2013, LaSalle County mining industry employees contributed over 6,700 hours to volunteer service activities that benefited their communities.
- The industry is involved in helping young people gain valuable work experience and earn money to pursue their dreams by providing summer employment opportunities. Local mining companies provided summer employment for 38 high school and college students, paying them over \$271,000 in wages and benefits.
- Local companies also support education at all levels by providing access to their facilities and other resources for teachers, students, and researchers in science, environmental studies and geology. Some of the schools and institutions that have benefitted from this partnership include:
  - University of Illinois at Chicago
  - Knox College
  - Illinois State Geological Survey
  - Serena Grade School
  - Sheridan Grade School
  - Harding Grade School
- Many LaSalle County charities and civic organizations receive contributions of time, talent, goods, services, sponsorships, and monetary donations from mining companies and their employees. Figure 20 includes a *partial* list of the schools, civic groups and causes that have benefited from these donations.

**Figure 20. LaSalle County Groups and Community Projects Supported by the Mining Industry and its Employees**

Camp Tuckabatchee, Incorporated	LaSalle County Regional Office of Education
Canal Corridor Association	LaSalle Excellence in Education Association
Central Illinois Memorial Kidney Fund	Marquette Academy
Central Immediate School	Neighbors Park – Utica
Children’s Miracle Network	North Central Illinois ARTworks
Community Food Basket in Ottawa	Oglesby Ambulance Association
Community Unit School District #2	Ottawa Area Chamber of Commerce & Industry – Welcomeburger event
Cops 4 Cancer	Ottawa Crushers Kids Wrestling Club
Court Appointed Special Advocates (CASA) of LaSalle County	Ottawa Downtown Merchants
Dayton Bluff Preserve	Ottawa Elementary School District #141
Easter Seals of LaSalle & Bureau Counties	Ottawa First
Five Loaves and Two Fish – Bethany Lutheran Church	Ottawa High School
Freezin’ for a Reezin’	Rotary Park in LaSalle
Habitat for Humanity	Salvation Army
Hegeler Carus Foundation	Serena High School
Horizon House Foundation	St. Margaret’s Hospital Foundation
Illinois Adopt-A-Highway program	Trinity Catholic Academy
Illinois Foundation FFA	United Way of Eastern LaSalle County
Illinois Valley Area Chamber of Commerce	United Way of the Illinois Valley
Illinois Valley Center for Independent Living	University of Illinois Extension Office
Illinois Valley Community College Foundation	Utica Community Fire Protection District
Illinois Valley Food pantry	Utica Little League
Illinois Valley P.A.D.S.	Village of Naplate
Illinois Valley Symphony Orchestra	Waltham Elementary School PTCC
Illinois Valley YMCA	Waltham Presbyterian Church
Illinois Veterans Home in La Salle	Wedron Park
IUOE Local 150 Food Bank	Willey World Community Productions
Junior Achievement	Woodland High School
LaSalle County Court Appointed Special Advocates	Youth Service Bureau of Illinois Valley
LaSalle County Farm Bureau	



## APPENDIX

To understand the full effect that a firm or industry has on the economy, including its impact on other sectors, input-output analysis is employed. Input-output analysis is based on the principle that industries are interdependent. One industry purchases inputs from other industries and households (i.e., labor) then sells its output to other industries, households, or the government. Additional induced impacts occur when workers involved in direct and indirect activities spend their wages on consumer goods produced or sold in the region and local economy. Therefore, economic activity in one sector impacts other sectors.

- **Direct Economic Impacts** are created by the operations of the facility itself or of a particular project (such as building construction or renovation), primarily the employment, payroll, and local expenditures.
- **Indirect Economic Impacts** refer to additional jobs and payroll created in the surrounding economy as a result of the purchase of inputs by the facility. This might be goods such as food, office supplies and computer equipment or services such as accounting and legal services.
- **Induced Economic Impacts** are the additional impact that results from the employees spending their income in the local economy.

For reporting purposes, the indirect and induced impacts are commonly combined into a single figure and reported as indirect impacts. This is the case in this report. All discussion of indirect impacts includes both the induced and indirect impacts as discussed above.

The economic variables referred to in this report are as follows:

- **Employment (Jobs)** For the purposes of this analysis an employee is defined as a person that enters into an agreement which may be formal or informal, with a business or enterprise to perform work in return for compensation in cash or in kind. In IMPLAN, jobs are equivalent to the annual average of monthly jobs in that industry (the same definition used by Quarterly Census of Employment and Wages, the Bureau of Labor Statistics, and the Bureau of Economic Analysis nationally). Thus, 1 job lasting 12 months = 2 jobs lasting 6 months each = 3 jobs lasting 4 months each. A job can be either full-time or part-time.
- **Output** represents the value of an industry's production. For mining and manufacturing this would be sales plus or minus any change in inventory.
- **Value-Added** is a measure of the study area's economic output similar to "Gross Domestic Product" or "GDP". It represents the difference between the value of goods and services purchased as production inputs and the value of the goods and services produced.

- ***Employee Compensation*** is a component of the value-added variable and represents the total payroll cost of the employee paid by the employer. It includes wage and salary; all benefits (health insurance, retirement, etc.), and employer paid payroll taxes (employers portion of social security, unemployment insurance, etc.).

## PRINCIPAL INVESTIGATOR

The principal investigator on this project was Brian Harger. He is an economic development practitioner, researcher and analyst with over 25 years' experience. His current work focuses on effective practice, project feasibility, applied research and policy studies in economic development, industry occupational cluster analyses, comprehensive planning and development strategies (CEDS), and the economic impacts of universities and community colleges. Recent projects include assessment of regional economic development opportunities in Northwest Illinois, identifying demographic and economic benchmarks, and designing and implementing a new regional economic development web portal.



Previous career experiences included the development and management of local and regional economic development research programs to support business recruitment and retention efforts; delivering technical assistance to public and private sector clients including local and regional economic development and planning organizations, chambers of commerce, small business development centers and corporations; participation in business recruitment and retention programs; creating publications and websites in support of local and regional economic development efforts, including manufacturers and organized labor directories, available site and building databases, demographic profiles, retail trade area analyses, and economic development newsletters.

Mr. Harger holds a Bachelor of Arts degree in Geography from the University of Northern Iowa, and a Master of Science degree in Economic Development from the University of Southern Mississippi. He also holds an Economic Development Finance Professional (EDFP) certification through the National Development Council.

Brian's professional associations include the Council for Community and Economic Research, International Economic Development Council, Mid-America Economic Development Council, and the Illinois Economic Development Association.

His research interests include industry targeting economic impacts analyses, competitive intelligence, retail market analysis, economic gardening (entrepreneurship as a development strategy), and local economic development planning and implementation.