

ILLINOIS MANUFACTURERS' ASSOCIATION

The Economic Impact of Manufacturing on Illinois

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Executive Summary

The Illinois manufacturing industry represents a key economic pillar of the state's economy. Comprising a diversified employment base across a wide range of industry subsectors, manufacturing is the state's largest industry when ranked by contribution to GDP.

The total economic impact of manufacturing on the state of Illinois is estimated to be between \$580 billion and \$611 billion annually. This figure reflects the dollar value representing all final goods and services produced statewide that can be attributed (directly or indirectly) to manufacturing. This level of economic activity corresponds to between 1,681,284 and 1,771,928 jobs and to between \$142 billion and \$150 billion in labor income for Illinois residents.

Although manufacturing's direct employment base alone represents roughly 9.5 percent of all jobs in Illinois, after accounting for the additional impacts resulting from all economic multiplier effects, this percentage jumps to 29.6 percent. This means that manufacturing ultimately supports nearly 30 percent of all jobs in Illinois, making it among the state's largest industry sectors.

The Illinois manufacturing industry maintains an employment multiplier of 2.7. This implies that for every 10 jobs that are supported directly by the manufacturing industry, an additional 17 jobs are created elsewhere in Illinois (for a total of 27 jobs). This multiplier effect is significantly higher than that of the average industry in Illinois, meaning that future expansions of manufacturing have the potential to generate relatively higher secondary employment impacts when compared to similar expansions of businesses in many other industry sectors.

these high-demand fields.

The majority of the manufacturing base in Illinois – approximately 65 percent – derives from the five major subsectors of Food and Agriculture Manufacturing, Metal Fabrication Manufacturing, Heavy Equipment Manufacturing, Pharmaceutical Manufacturing, and Transportation Equipment Manufacturing. The total annual economic impacts of these subsectors are \$135 billion, \$71 billion, \$61 billion, \$59 billion, and \$44 billion, respectively.

As a group, these five subsectors also contain among the highest employment multipliers and average wages across all of Illinois' manufacturing base. The pharmaceutical manufacturing subsector is an especially unique outlier with an employment multiplier of 3.7 and an ability to support jobs with an average wage 46 percent above that of the average job in the Illinois manufacturing industry as a whole.

The Illinois manufacturing industry continues to evolve in the face of rapid technological development. This study's examination of the requirements associated with manufacturing occupations projected to be in the highest demand over the next decade suggests a shift towards a more high-skilled, experienced workforce. As such, the Illinois Manufacturers' Association has supported the creation of two new worldclass Manufacturing Academies designed specifically to provide workforce training to Illinois residents in

SECTION I

The manufacturing industry represents one of the key economic pillars of the Illinois economy. Comprising a diversified employment base across a wide range of industry subsectors, manufacturing directly represents approximately 14 percent of the state's total economy (as measured by GDP) and has generated more than 16,000 new jobs since 2010. More recently, although total employment in Illinois dropped by 13.5 percent between February and April 2020 due to the pandemic-induced recession, the manufacturing industry has been more resilient, falling by just 8.3 percent over the same time period. Moreover, manufacturing is also the state's largest industry when ranked by contribution to GDP.

Yet despite having such a large direct economic footprint, the standard metrics cited above do not fully capture manufacturing's true impact. Because firms within the manufacturing industry hire workers and purchase various materials and supplies from in-state vendors to support their ongoing operations, they increase total demand and increase additional rounds of spending activity across many industries within the state. These secondary economic effects – known as multiplier effects – represent additional contributions to the economy that are not fully captured in standard measures of employment and GDP.

The total impact of manufacturing is also underreported for a second major reason, which is due to the nature of the manufacturing workforce itself. Manufacturers hire many of their employees through staffing agencies, and as such, the use of standard manufacturing industry classification codes typically does not capture these workers (nor the multiplier effects that arise from this worker activity).

After accounting for all multiplier effects and the unusual nature of the manufacturing workforce, this study estimates that the Illinois manufacturing industry generates an annual statewide economic impact of between \$580 billion and \$611 billion. This volume of economic activity is associated with between 1,681,284 and 1,771,928 jobs and between \$142 billion and \$150 billion in labor income for Illinois residents. Moreover, this impact reveals that manufacturing ultimately supports, directly or indirectly, nearly 30 percent of all jobs across the state of Illinois.





This study also finds that the Illinois manufacturing industry maintains an employment multiplier of 2.7. This implies that for every 10 jobs that are supported directly by the manufacturing industry, an additional 17 jobs are created elsewhere in Illinois (for a total of 27 jobs). This multiplier effect is significantly higher than that of the average industry in Illinois, which means that future expansions of the Illinois manufacturing industry would likely have disproportionately large impacts on the state's economy when compared to similar expansions in many other industry sectors.

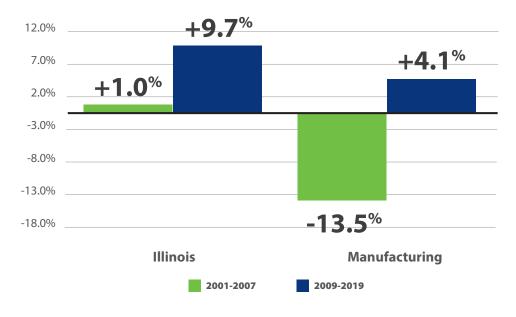
Thus, with such a sizeable statewide presence, both the ongoing recovery from the pandemic as well as the long-run economic health of Illinois will both depend heavily on the continued success of manufacturing. The remainder of this report quantifies the economic impact of manufacturing in Illinois in detail and presents the results of a manufacturing workforce profile. This profile generates a summary of the education, training, and experience requirements associated with the most in-demand manufacturing jobs in Illinois – along with a review of other sectors in Illinois likely competing for these workers. Such a profile will aid workforce training efforts and help to better align the curriculum of training facilities with known industry needs.



SECTION II MANUFACTURING TRENDS IN ILLINOIS

The 2020 global recession brought about by the COVID-19 pandemic ended a nearly 11-year economic expansion for the United States that began in July 2009 – an expansion that became the longest on record. Employment in Illinois grew consistently throughout this economic expansion at an annual rate of approximately 0.9 percent per year, which translates to a total growth rate of roughly 9.7 percent over the full duration of the expansion. The Illinois manufacturing industry, while experiencing just 4.1 percent total employment growth over this same time period, nevertheless saw a significant turnaround from previous long-run trends in which manufacturing had been in decline since the late 1990s.² As **Figure 1** illustrates, following a steady decline with total employment losses of 13.5 percent between 2001 and 2007, manufacturing experienced a significant rebound after the Great Recession and accompanying financial crisis (2007-2009) and grew by 4.1 percent between 2009 and 2019. This also helped to drive higher rates of total employment growth for Illinois during this more recent time period (+1.0% vs. +9.7%, respectively).





² U.S. Bureau of Labor Statistics, Current Employment Statistics, December 2019 vs December 2009, NSA



In addition to the growth rate itself, manufacturing is also Illinois' largest industry.³ As such, a given level of growth in manufacturing translates into a much higher economic contribution to the state's economy than that same level of growth would in a smaller industry. Figure 2 specifically illustrates the industry sectors in Illinois that contribute most to the state's economy, ranked by percentage contribution to GDP.

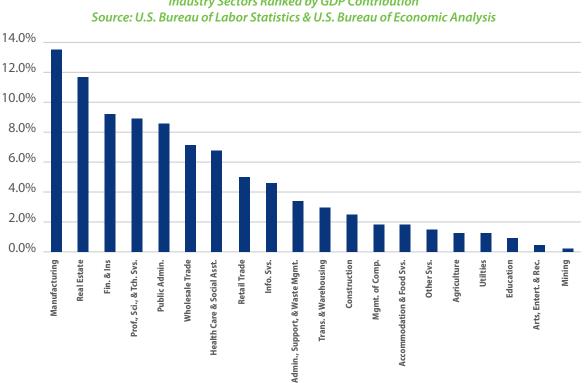




FIGURE 2 – PERCENTAGE CONTRIBUTIONS TO GDP BY INDUSTRY: ILLINOIS

The resurgence of manufacturing following the Great Recession was not uniform across all subsectors. Manufacturing's primary source of growth over the past decade has largely come from the subsectors of Fabricated Metal Products Manufacturing, Food Manufacturing, Chemical Manufacturing, Transportation Equipment Manufacturing, and Plastics & Rubber Parts

Manufacturing. These represent the five subsectors that both have experienced the highest growth rates and are the largest in absolute employment size. Figure 3 specifically highlights all 15 of the major manufacturing subsectors in Illinois, showing both their total growth rates and their size as a percentage of the total manufacturing industry.⁴

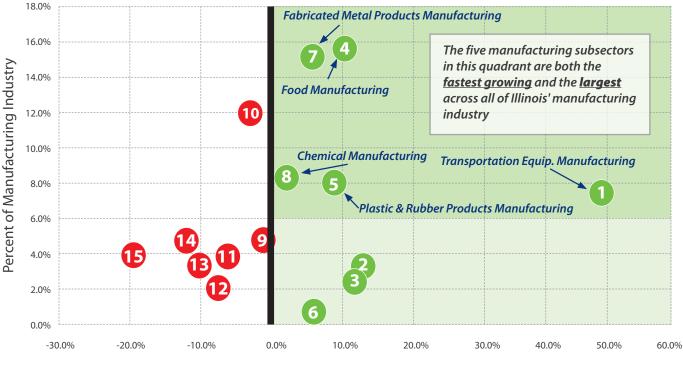
Section II - Manufacturing Trends in Illinois

³ Industry sectors are defined by standard two-digit North American Industrial Classification System (NAICS) codes. ⁴ Note that these subsectors represent the primary 3-digit manufacturing North American Industry Classification Codes (NAICS). Due to a lack of data availability from the U.S. Bureau of Labor Statistics, not all 3-digit NAICS codes are included in Figure 4.



FIGURE 3 – ILLINOIS MANUFACTURING SUBSECTOR TRENDS

Source: U.S. Bureau of Labor Statistics, CES-NSA



Total Employment Growth: 2009-2019

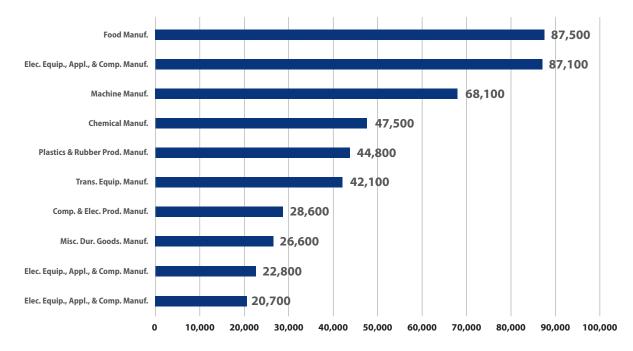
Subsector Legend Ranked by Employment Growth

No.	Subsector Name	Employment Growth	Pct. of Total Manuf. Industry
1	Transportation Equipment Manufacturing	+48.6%	7.4%
2	Primary Metal Manufacturing.	+12.1%	3.1%
3	Non-Metallic Mineral Products Manufacturing	+11.4%	2.5%
4	Food Manufacturing	+10.2%	15.5%
5	Plastics & Rubber Products Manufacturing	+9.5%	7.7%
6	Household Appliance Manufacturing	+6.9%	0.6%
7	Fabricated Metal Products Manufacturing	+5.9%	15.4%
8	Chemical Manufacturing	+1.5%	8.4%
9	Miscellaneous Durable Goods Manufacturing	-0.7%	4.7%
10	Machinery Manufacturing	-2.2%	12.0%
11	Elec. Equip., Appl., & Comp. Manuf.	-6.1%	3.7%
12	Furniture & Related Products Manufacturing	-7.0%	2.1%
13	Paper Manufacturing	-9.9%	3.1%
14	Computer & Electronic Products Manufacturing	-12.3%	5.1%
15	Printing & Related Support Activities	-19.1%	4.0%



Note that the major outlier within this group is Transportation Equipment Manufacturing, which primarily encompasses the aerospace and automotive sectors (along with their major suppliers). Between 2009 and 2019, employment growth in Transportation Equipment Manufacturing significantly exceeded the average growth rate of the manufacturing industry as a whole as well as for the broader Illinois economy. While employment growth for manufacturing and the state of Illinois were 4.1 percent and 9.7 percent between 2009 and 2019, Transportation Equipment Manufacturing grew by 48.6 percent. In other words, Transportation Equipment Manufacturing in Illinois consistently grew nearly 12 times the rate of the state's economy during the previous economic expansion.

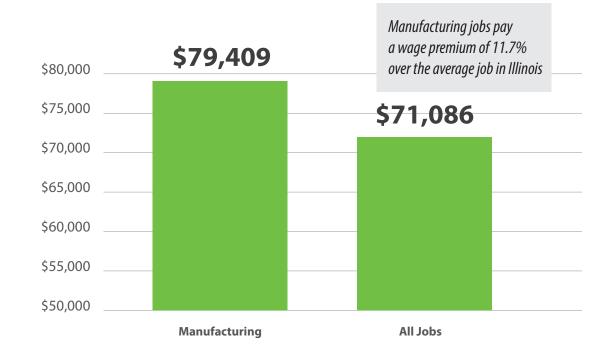
In terms of absolute size, Food Manufacturing represents the largest manufacturing subsector in the state of Illinois, followed by Fabricated Metal Products Manufacturing and Machinery Manufacturing. As **Figure 3** reveals, these subsectors represent 15.5 percent, 15.4 percent, and 12.0 percent of the state's manufacturing industry, respectively. **Figure 4** summarizes the specific direct employment total associated with each of the top ten manufacturing subsectors.







One of the most important and positive consequences of the growth of Illinois manufacturing has been the fact that this industry generates jobs that are typically skilled, high-wage positions. This increase has helped to establish and maintain the wage premium offered by manufacturing jobs in Illinois. For example, the current wage premium that Illinois manufacturing jobs offer over the average job in Illinois is 11.7 percent, as shown in **Figure 5** below.





In sum, the manufacturing industry represents one of the largest sectors of the Illinois economy that has made significant contributions to economic growth over the past decade. This is due, in part, to the fact that manufacturing is among the highest contributors to both GDP and employment in Illinois. These twin contributions allow any given level of growth in manufacturing to generate a relatively higher level of economic output. Additionally, manufacturing jobs often require high-skilled, high-wage positions and pay a wage premium of approximately 11.7 percent above the average wage across all jobs in Illinois. With such a sizeable economic footprint, this study now turns towards developing a more detailed and comprehensive profile of manufacturing in Illinois in order to fully quantify its total impact.



SECTION III THE CURRENT ECONOMIC IMPACT OF MANUFACTURING IN ILLINOIS

A NEW DEFINITION OF MANUFACTURING

Despite the fact that manufacturing is one of the largest contributors to the Illinois economy, manufacturing is often underreported as an industry sector due to the way in which some manufacturers hire workers. Specifically, in recent years manufacturers have come to rely more heavily on staffing agencies to help them to identify and recruit qualified workers.

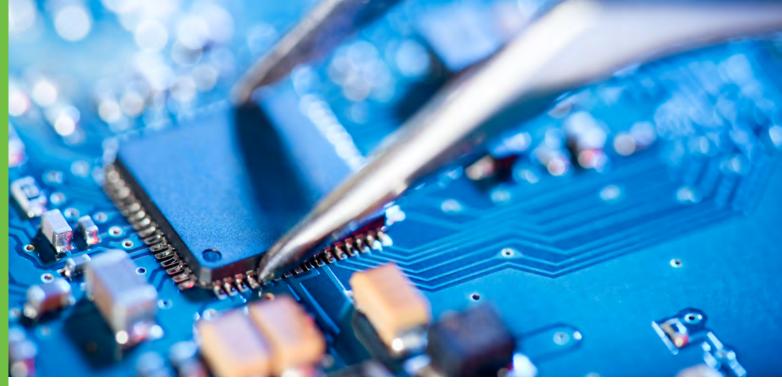
In this new hiring model, staffing agencies are the employers of record who then "place" workers with manufacturing firms. This provides a number of benefits to the manufacturers, including the flexibility to more easily adjust the size of their workforce as needed to accommodate regular changes in market demand. Thus, the workforce of many manufacturing firms includes direct hires as well as a contingent labor force. Because the staffing agencies are the employers of record for the contingent labor force, these workers do not show up as manufacturing employees in the standard manufacturing industry classification codes as compiled by the U.S. Bureau of Labor Statistics (BLS). Rather, they are classified under the "Employment Services" category as a subset of the broader "Professional and Business Services" employment category. In order to address this limitation, this study will define manufacturing in a new way – as a set of occupations using standard occupational code (SOC) listings as maintained by the BLS.

For example, consider the fact that all manufacturing employees fall into one of the following three categories:

- (1) Manufacturing occupations in the manufacturing industry
- (2) Non-manufacturing occupations in the manufacturing industry (e.g., security guards employed by manufacturing firms)
- (3) Manufacturing occupations in non-manufacturing industries (e.g., employment services/staffing agencies)

Standard manufacturing industry codes will generally capture categories (1) and (2) while leaving out category (3). In some cases, this can be a significant omission. For instance, in the case of the occupation category "Assemblers and Fabricators," approximately 77.8 percent of these employees are estimated to be working within the manufacturing industry. However, another 11.5 percent are estimated to work in the Employment Services industry – that is – likely working in manufacturing through staffing firms. Estimating the full impact of the manufacturing industry begins by quantifying each of these three categories.





As a first step, data from the U.S. Bureau of Labor Statistics' Industry/Occupation Matrix is used to identify all 867 occupation categories in the United States and to determine – for each occupation category – (a) what percentage of the manufacturing workforce is comprised of that occupation category and (b) what percentage of total employees in that occupation (across all industries) is employed in manufacturing. These data can then be used to quantify components (1)-(3) listed above. The Division of Research (DOR), in conjunction with the Illinois Manufacturers' Association (IMA), evaluated the full list of these 867 occupation categories as maintained by the BLS and identified 113 to be considered as "manufacturing occupations" for the purposes of this study. These categories were then combined with Illinois employment data in order to arrive at the estimates of components (1)-(3). These are summarized in **Table 1**. Note that all manufacturing data reflect employment totals from March 2022.

TABLE 1 – TOTAL DIRECT EMPLOYMENT OF THE MANUFACTURING INDUSTRY IN ILLINOIS

Category	Employment Total
Manufacturing Occupations in the Manufacturing Industry	299,573
Non-Manufacturing Occupations in the Manufacturing Industry	266,727
Manufacturing Occupations in Non-Manufacturing. Industries (Lower Bound)	62,118
Manufacturing Occupations in Non-Manufacturing Industries (Upper Bound)	95,998
Total (Lower Bound)	628,418
Total (Upper Bound)	662,298





The total number of employees in Illinois working directly for manufacturing companies is estimated to be 566,300. Of this total, 299,573 (53%) are in manufacturing occupations, while the remaining 266,727 (47%) are not. Manufacturing occupations include categories such as "Industrial Production Managers," "Machinists," and "Tool & Die Makers." Non-manufacturing occupations include categories such as "Marketing Managers," "Lawyers," and "Accountants & Auditors."

In addition to the employees working directly for manufacturing firms, there are also individuals working in manufacturing occupations for non-manufacturing firms. As previously noted, many staffing firms hire workers in manufacturing occupations who are then placed with manufacturing or manufacturing-related firms. Additionally, there is often significant crossover for some occupations between manufacturing and construction. As such, even though these workers are not employed by manufacturers directly, they nevertheless are part of the economic footprint of manufacturing in Illinois.

This additional manufacturing employment base was specifically quantified by using the 113 aforementioned manufacturing occupations as a starting point. For each occupation, if the BLS Industry/Occupation Matrix reported that the total number of employees in that occupation (across all industries) employed in manufacturing was greater than 70 percent, it was assumed that all of the remaining employees in Illinois working in that occupation were also employed in manufacturing-related firms. This assumption is based on the premise that manufacturing-related occupations that are most heavily employed in the manufacturing industry as defined by BLS are likely to be employed in manufacturing-related firms even if they are not explicitly identified as such. An additional broader scenario was also modeled using the assumption of 50 percent instead of 70 percent. **Table 1** illustrates the estimated number of employees working in manufacturing occupations for non-manufacturing firms to be between 62,118 (lower bound) and 95,998 (upper bound). This implies that the true direct impact of manufacturing in Illinois is between 628,418 and 662,298. A list of all occupations included in these employment estimates is provided in this study's appendix.





METHODOLOGY

As shown above, manufacturing in Illinois directly supports thousands of workers across the state and generates billions of dollars in economic activity every year. This includes all economic activity at manufacturing firms as well as additional manufacturing-related production generated by workers in manufacturing occupations who are employed in non-manufacturing firms. For example, if a temporary staffing firm were to hire and place 1,000 workers with manufacturing firms in Illinois, the economic activity generated by these 1,000 workers would be considered to be part of manufacturing's direct impact.

These direct effects also support additional economic activity via the economic multiplier effect. The expenditures that occur within the manufacturing industry and within non-manufacturing firms that involve manufacturing production lead to additional job creation and economic activity throughout Illinois by introducing additional rounds of spending. Economic multiplier effects can be divided into direct, indirect, and induced impacts. The direct impact reflects all in-state purchases made by firms conducting manufacturing-related activities. These include, for example, employee wages and benefits, equipment, building construction and remodeling, technology services, vendors, and other overhead or administrative costs. This spending activity increases demand and leads to the creation of new jobs and more income for employees and suppliers of these firms.

The indirect impact reflects additional economic activity that results from inter-industry linkages between local firms in Illinois. For example, if an automotive parts manufacturer were to purchase raw metal from an in-state supplier, then this metal supplier would experience an increase in demand. To satisfy this demand, the metal supplier would purchase additional inputs from its own vendors, and so on. These indirect effects ripple through the economy and affect many industrial sectors of Illinois.





The induced impact reflects additional economic activity that results from increases in the spending of household income. For example, when the aforementioned metal supplier purchases raw materials from one of its vendors and the overall demand for this vendor rises, some of the staff working for this vendor will see a rise in their income levels (or the vendor may hire new staff). Part of this income will then be spent locally on, for example, housing, gasoline, or food. These industries will then also see an increase in demand for their goods and services, which will lead to higher incomes for some of their employees, part of which will also be spent locally.

These successive rounds of indirect and induced spending do not go on forever, which is why it is possible to calculate a value for each of them. In each round, money is "leaked out" for a variety of reasons. For example, firms will purchase some of their supplies from vendors located outside of the local region. In addition, employees will save part of their income or spend part of it with firms located outside of the region. In order to determine the total economic impact that will result from an initial direct impact, economic multipliers are used. An economic multiplier can be used to determine the total impact (direct, indirect, and induced) that results from an initial change in economic activity (the direct impact). Multipliers are different in each sector of the economy and are largely determined by the size of the local supplier network as well the particular region being examined. Economic multipliers are available to calculate not just the total economic impact of an industry, but also the total employment and income levels associated with the total impact.

In this analysis, all multiplier effects are calculated using input-output analysis, which is the industry-standard method for estimation that is widely implemented across the United States. This analysis uses customized input-output models of the state of Illinois and its local regions, which contain specific information on economic linkages of over 500 different industries for each region. The IMPLAN software package was combined with these models to generate all estimates in this report.



PRIMARY RESULTS

As described above, the direct impact of manufacturing in Illinois as estimated earlier in this study is between 628,418 and 662,298 workers, which supports between \$341.9 billion and \$360.3 billion in annual direct economic activity for Illinois' economy. This direct employment impact is divided into three components that are illustrated in **Figure 6**.

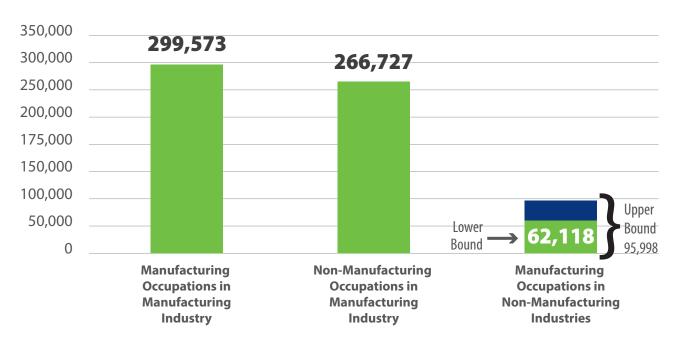


FIGURE 6 – COMPONENTS OF DIRECT MANUFACTURING EMPLOYMENT BASE IN ILLINOIS

The largest part of the direct manufacturing employment base is represented by the 299,573 workers in manufacturing occupations working for manufacturing firms (or firms in the manufacturing industry). The second largest component is represented by the 266,727 workers in non-manufacturing occupations working for manufacturing industry). Thus, collectively these two components represent all employees working for manufacturing firms in Illinois. The righthand bar in **Figure 6**, by contrast, represents employees working in manufacturing occupations for non-manufacturing firms. This study estimates that between 62,118 and 95,998 employees in Illinois are working in manufacturing occupations doing manufacturing-related production for non-manufacturing firms.⁵



These direct impacts also generate significant multiplier effects that make the total impact of manufacturing in Illinois far larger. The structural input-output models used in this analysis estimate impacts in terms of three specific measures: economic output, employment, and labor income. Economic output reflects the dollar value of all final goods and services that can be attributed (directly or indirectly) to manufacturing in Illinois. It can also be thought of as an aggregate measure of total spending activity that results from an initial direct expenditure. Because it includes all spending by consumers and businesses on both goods and services, it is an all-inclusive measure of the impact on total economic activity. Employment measures the total number of full-time equivalent positions associated with total economic output. Labor income reflects all employee compensation associated with total employment estimates, including wages, salaries, and benefits. **Tables 2 and 3** below highlight these estimates.

	Economic Output	Employment	Labor Income
Direct Impact	\$341.8 Billion	628,418	\$61.7 Billion
Indirect Impact	\$145.8 Billion	528,458	\$47.9 Billion
Induced Impact	\$92.4 Billion	524,408	\$32.6 Billion
Total Impact	\$580.0 Billion	1,681,284	\$142.2 Billion

TABLE 2 - ECONOMIC IMPACT OF MANUFACTURING ON ILLINOIS: LOWER BOUND

TABLE 3 - ECONOMIC IMPACT OF MANUFACTURING ON ILLINOIS: UPPER BOUND

	Economic Output	Employment	Labor Income
Direct Impact	\$360.3 Billion	662,298	\$65.0 Billion
Indirect Impact	\$153.7 Billion	556,949	\$50.5 Billion
Induced Impact	\$97.4 Billion	552,681	\$34.4 Billion
Total Impact	\$611.4 Billion	1,771,928	\$149.9 Billion



The 628,418 workers that represent the lower bound estimate of the direct employment base of manufacturing in Illinois generate a total of \$341.8 billion in total economic output annually. This level of direct economic activity leads to indirect effects totaling approximately \$145.8 billion in economic output and 528,458 jobs. These estimates reflect increased demand for goods and services of in-state suppliers resulting from in-state expenditures on the part of manufacturing firms and manufacturing-related production. The direct economic activity also leads to induced effects totaling \$92.4 billion in economic output and 524,408 jobs. This is a reflection of economic activity in Illinois generated across all industries that is the result of increased household spending. The combination of the direct, indirect, and induced effects leads to a total economic impact of approximately \$580.0 billion, which is associated with 1,681,284 jobs across Illinois. The upper bound estimate of the direct employment base of manufacturing in Illinois further increases these total impact estimates to \$611.4 billion in annual economic output along with 1,771,928 jobs.

One important takeaway from these estimates is to note the sheer size of manufacturing's economic presence in Illinois. Although manufacturing's direct employment base alone represents roughly 9.5 percent of all jobs in Illinois, after accounting for the additional impacts resulting from all economic multiplier effects, this percentage jumps to 29.6 percent. Or put more succinctly, manufacturing supports, either directly or indirectly, nearly 30 percent of all jobs in Illinois, making it among the state's largest industry sectors. This means that future gains (or losses) in the manufacturing industry will have disproportionately large effects on Illinois employment.

A second major takeaway of these statewide results is the fact that the total economic impact of the manufacturing industry is associated with an employment multiplier of 2.7. This implies that for every 10 jobs that are supported directly by the manufacturing industry, an additional 17 jobs are created elsewhere in Illinois (for a total of 27 jobs). This multiplier effect is significantly higher than that of the average industry in Illinois at 1.9. Such a multiplier effect also suggests that future expansions of the manufacturing industry have the potential to generate relatively higher secondary employment impacts when compared to similar expansions of businesses in many other industry sectors. **Figures 7 and 8** illustrate the county-level distribution of manufacturing's economic impact across all of Illinois. **Figure 8**, in particular, highlights the percentage that manufacturing contributes to each county's economy.

Manufacturing supports, either directly or indirectly, nearly 30 percent of all jobs in Illinois, making it among the state's largest industry sectors.



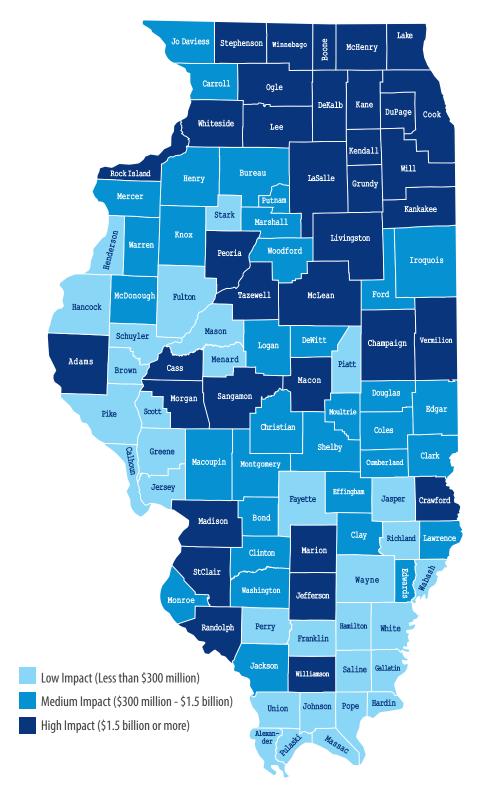


FIGURE 7 - COUNTY-LEVEL DISTRIBUTION OF THE ILLINOIS MANUFACTURING INDUSTRY

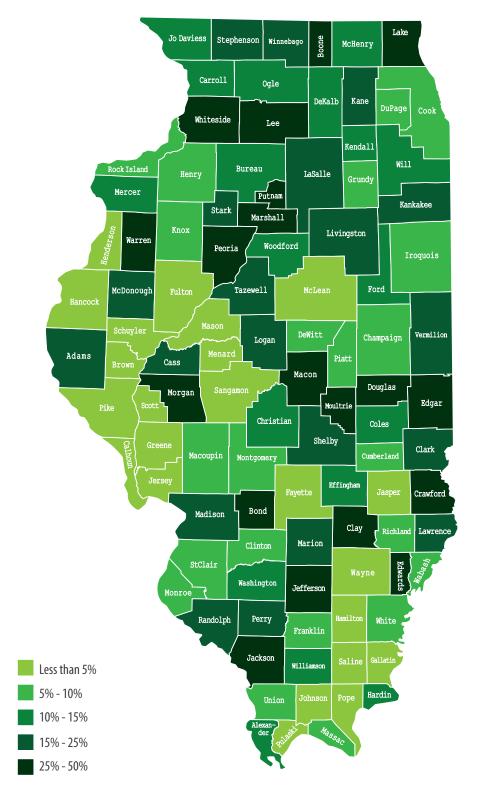
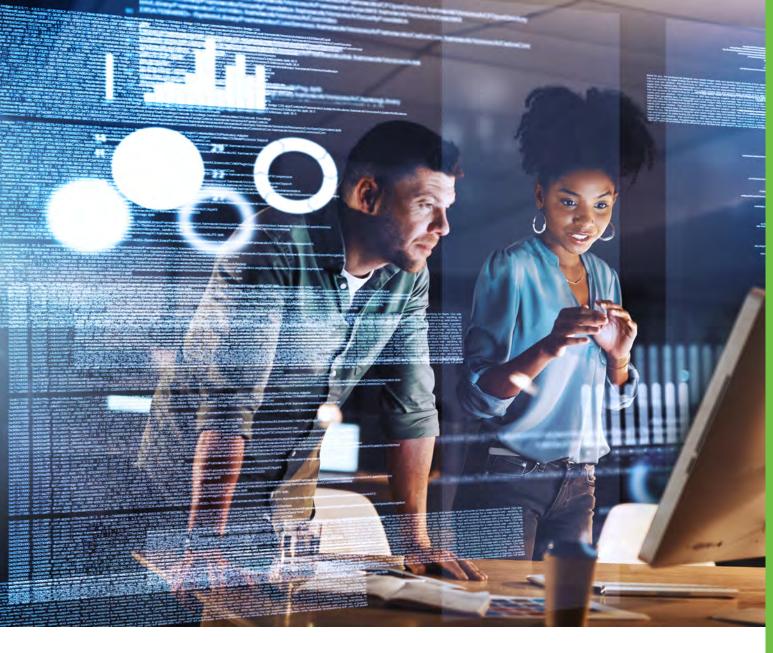


FIGURE 8 - PERCENT CONTRIBUTION OF MANUFACTURING TO EACH COUNTY





IMPACTS OF SELECTED MANUFACTURING SUBSECTORS

In addition to examining the statewide and county-level impacts of the total manufacturing industry in Illinois, this study also focuses specifically on estimating the total impacts of the following five manufacturing subsectors:

- Food and Agriculture Manufacturing
- Heavy Equipment Manufacturing
- Metal Fabrication Manufacturing
- Pharmaceutical Manufacturing
- Transportation Equipment Manufacturing

Combined, these five subsectors represent approximately 65 percent of the total manufacturing industry in Illinois.



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The food and agriculture manufacturing subsector broadly represents all food and beverage manufacturing and related products and is defined using NAICS codes 311000 and 312100. The economic impact of the food and agriculture manufacturing subsector is shown in **Tables 4 and 5**, which represent lower and upper bounds.

TABLE 4 - ECONOMIC IMPACT OF FOOD AND AGRICULTURE MANUFACTURING ON ILLINOIS: LOWER BOUND

	Economic Output	Employment	Labor Income
Direct Impact	\$72.3 Billion	117,044	\$9.1 Billion
Indirect Impact	\$44.6 Billion	175,138	\$12.3 Billion
Induced Impact	\$17.9 Billion	101,792	\$6.3 Billion
Total Impact	\$134.8 Billion	393,974	\$27.7 Billion

TABLE 5 - ECONOMIC IMPACT OF FOOD AND AGRICULTURE MANUFACTURING ON ILLINOIS: UPPER BOUND

	Economic Output	Employment	Labor Income
Direct Impact	\$76.2 Billion	123,355	\$9.5 Billion
Indirect Impact	\$46.9 Billion	184,581	\$13.0 Billion
Induced Impact	\$18.9 Billion	107,280	\$6.7 Billion
Total Impact	\$142.0 Billion	415,216	\$29.2 Billion

The 117,044 workers that represent the lower bound estimate of the direct employment base of food and agriculture manufacturing in Illinois generate a total of \$72.3 billion in total economic output annually. This level of direct economic activity leads to indirect effects totaling approximately \$44.6 billion in economic output and 175,138 jobs. These estimates reflect increased demand for goods and services of in-state suppliers resulting from in-state expenditures on the part of food and agriculture manufacturing firms and related production. The direct economic activity also leads to induced effects totaling \$17.9 billion in economic output and 101,792 jobs. This is a reflection of economic activity in Illinois generated across all industries that is the result of increased household spending. The combination of the direct, indirect, and induced effects leads to a total economic impact of approximately \$134.8 billion, which is associated with 393,974 jobs across Illinois. The upper bound estimate of the direct employment base of food and agriculture manufacturing in Illinois further increases these total impact estimates to \$142.0 billion in annual economic output along with 415,216 jobs.



The heavy equipment manufacturing subsector broadly represents all industrial machine equipment production including for the sectors of agriculture, construction, mining, metalworking, and engine, turbine, and power transmission. This subsector is defined using NAICS code 333000. The economic impact of the heavy equipment manufacturing subsector is shown in **Tables 6 and 7**, which represent lower and upper bounds.

	Economic Output	Employment	Labor Income
Direct Impact	\$35.9 Billion	72,630	\$7.9 Billion
Indirect Impact	\$13.7 Billion	58,141	\$5.3 Billion
Induced Impact	\$11.1 Billion	63,033	\$3.9 Billion
Total Impact	\$60.7 Billion	193,804	\$17.1 Billion

TABLE 6 - ECONOMIC IMPACT OF HEAVY EQUIPMENT MANUFACTURING ON ILLINOIS: LOWER BOUND

TABLE 7 – ECONOMIC IMPACT OF HEAVY EQUIPMENT MANUFACTURING ON ILLINOIS: UPPER BOUND

	Economic Output	Employment	Labor Income
Direct Impact	\$37.8 Billion	76,546	\$8.3 Billion
Indirect Impact	\$14.5 Billion	61,276	\$5.6 Billion
Induced Impact	\$11.6 Billion	66,432	\$4.1 Billion
Total Impact	\$63.9 Billion	204,254	\$18.0 Billion

The 72,630 workers that represent the lower bound estimate of the direct employment base of heavy equipment manufacturing in Illinois generate a total of \$35.9 billion in total economic output annually. This level of direct economic activity leads to indirect effects totaling approximately \$13.7 billion in economic output and 58,141 jobs. These estimates reflect increased demand for goods and services of in-state suppliers resulting from in-state expenditures on the part of heavy equipment manufacturing firms and related production. The direct economic activity also leads to induced effects totaling \$11.1 billion in economic output and 63,033 jobs. This is a reflection of economic activity in Illinois generated across all industries that is the result of increased household spending. The combination of the direct, indirect, and induced effects leads to a total economic impact of approximately \$60.7 billion, which is associated with 193,804 jobs across Illinois. The upper bound estimate of the direct employment base of heavy equipment manufacturing in Illinois further increases these total impact estimates to \$63.9 billion in annual economic output along with 204,254 jobs.



The metal fabrication manufacturing subsector represents all manufacturing associated with the production of iron and steel mills, ferroalloys, steel products, aluminum and aluminum processing, nonferrous metals, foundries, forging and stamping, cutlery and hand tools, architectural and structural metals, shipping containers, hardware, and spring and wire products. This subsector is defined using NAICS codes 331000 and 332000. The economic impact of the metal fabrication manufacturing subsector is shown in **Tables 8 and 9**, which represent lower and upper bounds.

TABLE 8 - ECONOMIC IMPACT OF METAL FABRICATION MANUFACTURING ON ILLINOIS: LOWER BOUND

	Economic Output	Employment	Labor Income
Direct Impact	\$41.7 Billion	112,975	\$9.4 Billion
Indirect Impact	\$16.3 Billion	70,180	\$5.9 Billion
Induced Impact	\$12.8 Billion	73,072	\$4.5 Billion
Total Impact	\$70.8 Billion	256,227	\$19.8 Billion

TABLE 9 - ECONOMIC IMPACT OF METAL FABRICATION MANUFACTURING ON ILLINOIS: UPPER BOUND

	Economic Output	Employment	Labor Income
Direct Impact	\$43.9 Billion	119,065	\$9.9 Billion
Indirect Impact	\$17.2 Billion	73,963	\$6.2 Billion
Induced Impact	\$13.6 Billion	77,011	\$4.8 Billion
Total Impact	\$74.7 Billion	270,039	\$20.9 Billion

The 112,975 workers that represent the lower bound estimate of the direct employment base of metal fabrication manufacturing in Illinois generate a total of \$41.7 billion in total economic output annually. This level of direct economic activity leads to indirect effects totaling approximately \$16.3 billion in economic output and 70,180 jobs. These estimates reflect increased demand for goods and services of in-state suppliers resulting from in-state expenditures on the part of metal fabrication manufacturing firms and related production. The direct economic activity also leads to induced effects totaling \$12.8 billion in economic output and 73,072 jobs. This is a reflection of economic activity in Illinois generated across all industries that is the result of increased household spending. The combination of the direct, indirect, and induced effects leads to a total economic impact of approximately \$70.8 billion, which is associated with 256,227 jobs across Illinois. The upper bound estimate of the direct employment base of metal fabrication manufacturing in Illinois further increases these total impact estimates to \$74.7 billion in annual economic output along with 270,039 jobs.

<u> Section III - The Current Economic Impact of Manufacturing in Illinois</u>



PHARMACEUTICAL MANUFACTURING

The pharmaceutical manufacturing subsector broadly represents all manufacturing associated with pharmaceutical and medicine production, electromedical and electrotherapeutic apparatus production, and the production of medical equipment and supplies. This subsector is defined using NAICS codes 325400, 334510, and 339100. The economic impact of the pharmaceutical manufacturing subsector is shown in **Tables 10 and 11**, which represent lower and upper bounds.

	Economic Output	Employment	Labor Income
Direct Impact	\$37.4 Billion	35,484	\$7.7 Billion
Indirect Impact	\$11.5 Billion	39,794	\$4.1 Billion
Induced Impact	\$9.9 Billion	56,577	\$3.5 Billion
Total Impact	\$58.8 Billion	131,855	\$15.3 Billion

TABLE 10 - ECONOMIC IMPACT OF PHARMACEUTICAL MANUFACTURING ON ILLINOIS: LOWER BOUND

TABLE 11 – ECONOMIC IMPACT OF PHARMACEUTICAL MANUFACTURING ON ILLINOIS: UPPER BOUND

	Economic Output	Employment	Labor Income
Direct Impact	\$39.4 Billion	37,397	\$8.1 Billion
Indirect Impact	\$12.2 Billion	41,939	\$4.3 Billion
Induced Impact	\$10.5 Billion	59,627	\$3.7 Billion
Total Impact	\$62.1 Billion	138,963	\$16.1 Billion

The 35,484 workers that represent the lower bound estimate of the direct employment base of pharmaceutical manufacturing in Illinois generate a total of \$37.4 billion in total economic output annually. This level of direct economic activity leads to indirect effects totaling approximately \$11.5 billion in economic output and 39,794 jobs. These estimates reflect increased demand for goods and services of in-state suppliers resulting from in-state expenditures on the part of pharmaceutical manufacturing firms and related production. The direct economic activity also leads to induced effects totaling \$9.9 billion in economic output and 56,577 jobs. This is a reflection of economic activity in Illinois generated across all industries that is the result of increased household spending. The combination of the direct, indirect, and induced effects leads to a total economic impact of approximately \$58.8 billion, which is associated with 131,855 jobs across Illinois. The upper bound estimate of the direct employment base of pharmaceutical manufacturing in Illinois further increases these total impact estimates to \$62.1 billion in annual economic output along with 138,963 jobs.



The transportation equipment manufacturing (or automotive manufacturing) subsector broadly represents all motor vehicle, aircraft, railroad, boating, motorcycle/bicycle, and military tank and armored vehicle manufacturing. It is defined using NAICS code 336000. The economic impact of the transportation equipment manufacturing subsector is shown in **Tables 12 and 13**, which represent lower and upper bounds.

TABLE 12 - ECONOMIC IMPACT OF TRANSPORTATION EQUIPMENT MANUFACTURING ON ILLINOIS: LOWER BOUND

	Economic Output	Employment	Labor Income
Direct Impact	\$27.2 Billion	39,060	\$3.0 Billion
Indirect Impact	\$11.2 Billion	41,920	\$3.6 Billion
Induced Impact	\$5.7 Billion	32,267	\$2.0 Billion
Total Impact	\$44.1 Billion	113,247	\$8.6 Billion

TABLE 13 – ECONOMIC IMPACT OF TRANSPORTATION EQUIPMENT MANUFACTURING ON ILLINOIS: UPPER BOUND

	Economic Output	Employment	Labor Income
Direct Impact	\$28.6 Billion	41,166	\$3.2 Billion
Indirect Impact	\$11.8 Billion	44,181	\$3.8 Billion
Induced Impact	\$6.0 Billion	34,007	\$2.1 Billion
Total Impact	\$46.4 Billion	119,354	\$9.1 Billion

The 39,060 workers that represent the lower bound estimate of the direct employment base of transportation equipment manufacturing in Illinois generate a total of \$27.2 billion in total economic output annually. This level of direct economic activity leads to indirect effects totaling approximately \$11.2 billion in economic output and 41,920 jobs. These estimates reflect increased demand for goods and services of in-state suppliers resulting from in-state expenditures on the part of transportation equipment manufacturing firms and related production. The direct economic activity also leads to induced effects totaling \$5.7 billion in economic output and 32,267 jobs. This is a reflection of economic activity in Illinois generated across all industries that is the result of increased household spending. The combination of the direct, indirect, and induced effects leads to a total economic impact of approximately \$44.1 billion, which is associated with 113,247 jobs across Illinois. The upper bound estimate of the direct employment base of transportation equipment manufacturing in Illinois further increases these total impact estimates to \$46.4 billion in annual economic output along with 119,354 jobs.



As already noted, these five manufacturing subsectors represent the majority (65%) of the total manufacturing industry in Illinois. Furthermore, as a group, these subsectors also contain among the highest employment multipliers and average wages across all manufacturing subsectors. As **Table 14** highlights, four of these five subsectors maintain employment multipliers above that of the manufacturing industry as a whole and two of the five subsectors maintain average wages above that of the manufacturing industry as a whole. The pharmaceutical manufacturing subsector is an especially unique outlier with an employment multiplier of 3.7 and an ability to support jobs with an average wage 46 percent above that of the average job supported by the Illinois manufacturing industry as a whole. These subsectors therefore represent much of the source of manufacturing's disproportionate contribution to the Illinois economy.

Illinois Manufacturing Subsector	Employment Multiplier	Average Wage	
Food and Agriculture Manufacturing	3.4	\$70,368	
Heavy Equipment Manufacturing	2.7	\$88,053	
Metal Fabrication Manufacturing	2.3	\$77,583	
Pharmaceutical Manufacturing	3.7	\$116,210	
Transportation Equipment Manufacturing	2.9	\$76,326	
All Manufacturing	2.7	\$79,409	

TABLE 14 - EMPLOYMENT MULTIPLIER AND AVG. WAGE BY ILLINOIS MANUFACTURING SUBSECTOR

As a group, these subsectors contain among the highest employment multipliers and average wages across all manufacturing subsectors.



SECTION IV A WORKFORCE PROFILE OF ILLINOIS MANUFACTURING

Following the pandemic-induced economic recession of 2020 and the rapid economic recovery that followed, a significant labor shortage emerged that has now permeated most industry sectors throughout United States. Much of this labor shortage has resulted from temporary factors that have simultaneously led to a decrease in the supply of workers and an increase in the demand for workers. For example, some individuals temporarily dropped out of the labor force due to health-related concerns over COVID-19 while at the same time businesses experienced more demand (and a greater need for workers) due to federal fiscal stimulus efforts that have temporarily increased household disposable income levels and government spending initiatives. When labor supply decreases while labor demand increases, the result is a temporary labor shortage.

However, another factor driving the current labor shortage is the relatively high volume of Baby Boomer retirements that have occurred since the onset of the pandemic. Unlike the factors cited above, this uptick in retirements is more permanent and is likely to create a longer-term labor shortage that will persist well-beyond the current economic recovery period. While there is no official definition, Baby Boomers are generally classified as the group of people born between 1946 and 1964, which means that they will steadily turn 65 between 2011 and 2029. In the absence of any major economic disruption, Baby Boomers would be expected to retire at a consistent rate over this eighteen-year period.

Unfortunately, this smooth pace of retirements among Baby Boomers has not occurred for two reasons. First, in the aftermath of the Great Recession (2007-2009) in which a major stock market contraction led to significant declines in retirement savings accounts, many of the older Baby Boomers had to postpone retirement and keep working for several years beyond 2011. Second, the pandemic-induced recession of 2020 led many Baby Boomers to retire early. Given that older people were among the most vulnerable to COVID-19 and that the stock market quickly grew to record highs in late 2020 and 2021, many Baby Boomers decided to permanently exit the labor force.





The net effect of both recessions was that a large percentage of the Baby Boomers exited the labor force over a very short period of time between 2020 and 2021. This has contributed to the existing labor shortage and its effects will likely persist throughout much of the 2020s.

Given such a strong U.S. labor market and accompanying workforce shortage that many Illinois industries (including manufacturing) face in 2022, Illinois will only be able to experience strong economic growth in the coming decade if it continues to meet employer demand in the face of market evolution both in manufacturing and across the broader economy. One way to assess market evolution in manufacturing is to examine the workforce profile of the cluster as a whole, which is an effort to which this study now turns.

MANUFACTURING OCCUPATIONS PROJECTED TO BE IN HIGHEST DEMAND

As previously noted, this study has identified 113 specific manufacturing occupations that currently exist in Illinois. Employment data on these manufacturing occupations can be combined with specific occupation projections made by the Illinois Department of Employment Security (IDES) through the year 2028 in order to determine which areas of manufacturing will likely experience the highest increase in demand.





As a group, the top 20 manufacturing occupations with the largest expected job growth are estimated to expand by a total of 3.1 percent through the year 2028 versus 1.0 percent across all occupations.

Table 15 shows the top 20 in-demand manufacturing occupations that are expected to experience the highest employment growth through the year 2028 based on these projections. For example, Illinois is expected to have more than 1,200 additional Helpers-Production Workers by 2028 as the overall demand for that occupation grows by approximately 8.3 percent. More generally, as a group, the top 20 occupations with the largest expected job growth are estimated to expand by a total of 3.1 percent through the year 2028 versus 1.0 percent across all occupations.

TABLE 15 – ILLINOIS MANUFACTURING OCCUPATION PROJECTIONS THROUGH 2028

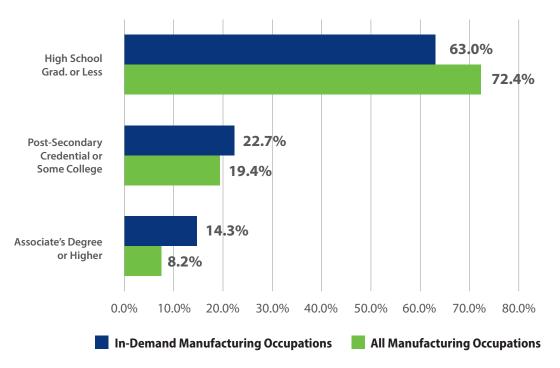
Top 20 Occupations Ranked by Expected Change in Employment

Occupation Title	Change Employment 2018-2028	Average Annual Wage (2021)	Pct. Emp. Growth	
Helpers-Production Workers	1,217	\$33,370	+8.3%	
Machinists	1,015	\$49,160	+3.2%	
Industrial Engineers	967	\$91,930	+9.9%	
Production Workers, All Other	584	\$36,260	+1.7%	
Food Batchmakers	392	\$37,210	+3.1%	
1st Line Spvrs/Mgrs Prod/ Operating Workers	368	\$67,620	+1.5%	
Bakers	315	\$32,260	+3.5%	
Welders, Cutters, Solderers & Brazers	303	\$46,160	5,160 +2.3%	
Multiple Machine Tool Setters/Operators	265	\$42,390	+2.1%	
Numerical Tool/Process Control Programmers	247	\$46,485	+21.6%	
Industrial Production Mangers	235	\$121,570	+2.2%	
Packaging/Filling Mach Operators/Tenders	214	\$36,780	+1.2%	
Butchers & Meat Cutters	192	\$34,020	+2.6%	
Slaughterers & Meat Packers	181	\$35,550	+4.3%	
Elec/Electron/ElectMech Asmbl, Ex Coil/Tape/Finish	158	\$37,070	+1.6%	
Dental Laboratory Technicians	114	\$51,280	+9.6%	
Engineering Techs, Ex. Drafters, All Other	101	\$72,430	+1.6%	
Cabinetmakers & Bench Carpenters	88	\$40,760 +2.4%		
Meat, Poultry & Fish Cutters/ Trimmers	85	\$35,530 +3.1%		
Ophthalmic Laboratory Technicians	82	\$37,610	+5.6%	
Average Annual	Wage Across all Illin	ois Jobs (2021): \$71,()86	



An explicit comparison between the education, experience, and on-the-job requirements associated with indemand manufacturing occupations versus that of all manufacturing occupations reveal some significant differences. First, a comparison of education requirements shows that the most in-demand manufacturing occupations over the next decade will typically require more education relative to the total manufacturing occupation base. As **Figure 9** reveals, approximately 37.0 of in-demand manufacturing occupations will require some form of post-secondary education compared to just 27.6 of across all manufacturing occupation categories.

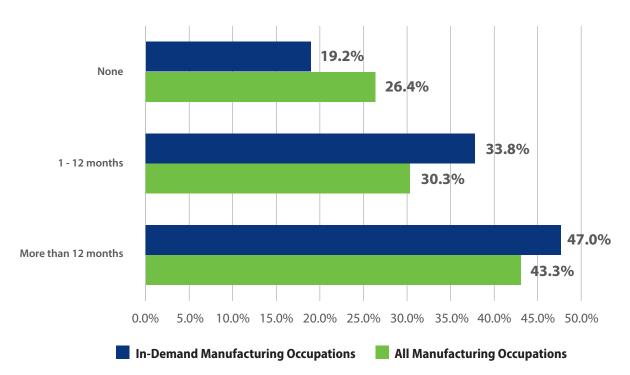
FIGURE 9 -EDUCATION REQUIREMENTS FOR ILLINOIS MANUFACTURING OCCUPATIONS Source: U.S. Bureau of Labor Statistics and O*Net





Accompanying these higher education requirements are greater experience requirements for in-demand manufacturing occupations. **Figure 10** reveals that 47.0 percent of the most in-demand manufacturing occupations over the next decade are likely to require at least one year of experience, compared to just 43.3 percent across all manufacturing occupations. Similarly, 26.4 percent of jobs across all manufacturing occupations will require no experience versus just 19.2 percent of in-demand manufacturing occupations.

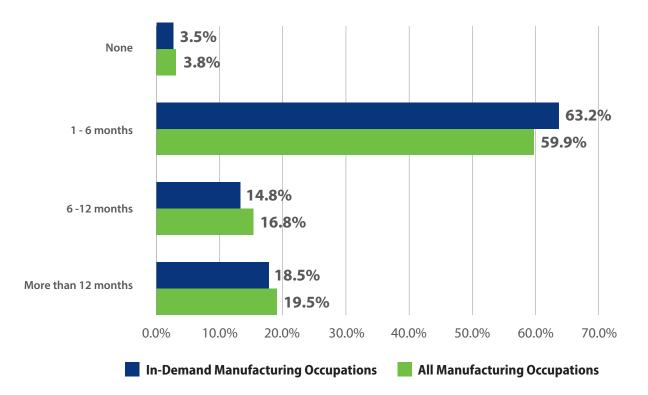
FIGURE 10 – EXPERIENCE REQUIREMENTS FOR ILLINOIS MANUFACTURING OCCUPATIONS Source: U.S. Bureau of Labor Statistics and O*Net





Examining differences in the on-the-job training requirements reveals more uniformity across all manufacturing occupations. As **Figure 11** denotes, the required training for both the most in-demand manufacturing occupations and manufacturing occupations as a whole are comparable across all training timeframes. The vast majority of all occupations typically require between one and six months of on-the-job training.

FIGURE 11 – ON-THE-JOB TRAINING TIME FOR ILLINOIS MANUFACTURING OCCUPATIONS Source: U.S. Bureau of Labor Statistics and O*Net





TRAINING THE ILLINOIS MANUFACTURING WORKFORCE IN THE 2020s

As part of its ongoing efforts to build and train the manufacturing workforce of the future, the Illinois Manufacturers' Association (IMA) recently successfully proposed the creation of two new world-class Manufacturing Academies that will open in the Fall of 2022. These academies will be funded as part of the Rebuild Illinois capital plan put forth by Governor JB Pritzker and the Illinois Department of Commerce and Economic Opportunity (DCEO).

Rebuild Illinois includes \$15 million for two training academics that will provide Illinois residents the ability to develop skills in advanced manufacturing. The new training facilities will be established at Heartland Community College (HCC) in Normal and Southwestern Illinois College (SWIC) in Metro East. These community colleges will partner with Rivian, DCEO, and other manufacturers to ensure a sustainable career pathway for both new entrants and re-entrants into the workforce.

At Heartland Community College, a \$7.5 million grant from the state will enable the development of the first-inthe-nation Electric Vehicle-Energy Storage Manufacturing Training Academy. HCC will develop a new auto shop used exclusively for training for EV manufacturing. An Electric Vehicle Technology Associate in Applied Science Degree is currently going through the approval process at HCC, which will prepare students to meet the demands of the emerging field of the diagnosis, service, and repair of electric powered vehicles. Additionally, the HCC plans to expand their EV-Energy Storage Training Academy to meet demand in aligned areas of advanced robotics, clean manufacturing, and renewable energy. HCC projects that 58 annual completions of the certificate or AAS level once facility construction is complete and programs are fully launched. The target date for fully launched programs is January 2023.

A \$7.5 million grant issued to Southwestern Illinois College will create a new advanced manufacturing education hub in Belleville, IL. There will be two phases as part of the development of this hub, with the first creating a new precision machining pathway and the second expanding career training for roles in industrial electricity and welding manufacturing. SWIC is also creating a new diverse recruitment program to help ensure that more women and minorities have the opportunity to participate in this training.

In addition, the IMA also successfully championed a new requirement that all high schools offer career and technical education in high schools starting in 2025. Two years ago, the IMA passed a dual credit program and new apprenticeship credit.



SECTION V CONCLUSION

Manufacturing is a primary economic driver in the state of Illinois. As the state's largest industry, manufacturing represents a diverse set of subsectors that provides high-skilled, high-wage jobs to Illinois residents and is a critical component of the state's current economic recovery from the COVID-19 pandemic as well as its long-run economic health.

This study has found that the Illinois manufacturing industry maintains a total annual economic impact between \$580 billion and \$611 billion annually. This level of economic activity corresponds to between 1,681,284 and 1,771,928 jobs and to between \$142 billion and \$150 billion in labor income for Illinois residents. Further, this statewide economic impact is associated with an employment multiplier of 2.7, meaning that for every 10 jobs created by the manufacturing industry, an additional 17 jobs are created elsewhere in the state (for a total of 27 jobs). These impact estimates reveal that manufacturing ultimately supports nearly 30 percent of all jobs in Illinois, making it among the state's largest industry sectors. Moreover, the pharmaceutical manufacturing subsector is especially unique in that it supports an employment multiplier of 3.7 and an ability to support jobs with an average wage 46 percent above that of the average job in the Illinois manufacturing industry as a whole.

This study also examines the ongoing evolution of manufacturing workforce demands in the face of rapid technological innovation. An analysis of manufacturing occupations in Illinois likely to be in highest demand over the next decade shows a marked shift towards a more high-skilled, experienced workforce. In response to these labor market trends, the Illinois Manufacturers' Association initiated the creation of two new world-class Manufacturing Academies designed specifically to provide training in these high-demand fields. These programs will help to ensure that manufacturing firms will be able to find the high-skilled labor they need to expand over time. This can provide significant positive spillover effects for the Illinois economy, including increased productivity that leads to higher wages for workers.

Because manufacturing is the state's largest industry and highest contributor to statewide GDP, any meaningful future economic expansion in Illinois must include manufacturing. Thus, it is essential for Illinois to continue to proactively respond to the ongoing evolution of manufacturing industry trends in order to maximize economic growth in the coming decade.



APPENDIX – OCCUPATIONS IN THE ILLINOIS MANUFACTURING INDUSTRY

* Denotes non-manufacturing occupations contained within the manufacturing industry

	OCCUPATION TITLE
	Adhesive bonding machine operators and tenders
	Aircraft structure, surfaces, rigging, and systems assemblers
	Bakers
	Butchers and meat cutters
_	Cabinetmakers and bench carpenters
	Chemical equipment operators and tenders
	Chemical plant and system operators
	Cleaning, washing, and metal pickling equipment operators and tenders
	Coating, painting, and spraying machine setters, operators, and tenders
	Coil winders, tapers, and finishers
	Computer numerically controlled tool operators
	Computer numerically controlled tool programmers
	Cooling and freezing equipment operators and tenders
	Crushing, grinding, and polishing machine setters, operators, and tenders
	Cutters and trimmers, hand
	Cutting and slicing machine setters, operators, and tenders
	Cutting, punching, and press machine setters, operators, and tenders, metal and plastic
	Dental laboratory technicians
	Drilling and boring machine tool setters, operators, and tenders, metal and plastic
	Electrical, electronic, and electromechanical assemblers, except coil winders, tapers, and finishers
	Engine and other machine assemblers
	Etchers and engravers
	Extruding and drawing machine setters, operators, and tenders, metal and plastic
	Extruding and forming machine setters, operators, and tenders, synthetic and glass fibers
	Fabric and apparel patternmakers
	First-line supervisors of production and operating workers
	Food and tobacco roasting, baking, and drying machine operators and tenders
	Food and coulded fourting, baking, and a fing interime operators and centers
	Food cooking machine operators and tenders
	Food processing workers, all other
	Forging machine setters, operators, and tenders, metal and plastic
	Foundry mold and coremakers
	Furnace, kiln, oven, drier, and kettle operators and tenders
	Furniture finishers



* Denotes non-manufacturing occupations contained within the manufacturing industry

	OCCUPATION TITLE
	Grinding and polishing workers, hand
Gri	nding, lapping, polishing, and buffing machine tool setters, operators, and tenders, metal and plastic
	Heat treating equipment setters, operators, and tenders, metal and plastic
	Helpersproduction workers
	Industrial engineering technologists and technicians
	Industrial engineers
	Industrial production managers
	Inspectors, testers, sorters, samplers, and weighers
	Jewelers and precious stone and metal workers
	Lathe and turning machine tool setters, operators, and tenders, metal and plastic
	Laundry and dry-cleaning workers
	Layout workers, metal and plastic
	Log graders and scalers
	Machinists
	Meat, poultry, and fish cutters and trimmers
	Medical appliance technicians
	Metal workers and plastic workers, all other
	Metal-refining furnace operators and tenders
	Milling and planing machine setters, operators, and tenders, metal and plastic
	Miscellaneous assemblers and fabricators
	Mixing and blending machine setters, operators, and tenders
	Model makers, metal and plastic
	Model makers, wood
	Molders, shapers, and casters, except metal and plastic
	Molding, coremaking, and casting machine setters, operators, and tenders, metal and plastic
	Multiple machine tool setters, operators, and tenders, metal and plastic
	Ophthalmic laboratory technicians
	Packaging and filling machine operators and tenders
	Painting, coating, and decorating workers
	Paper goods machine setters, operators, and tenders
	Patternmakers, metal and plastic
	Patternmakers, wood
	Petroleum pump system operators, refinery operators, and gaugers
	Photographic process workers and processing machine operators
	Plant and system operators, all other

Appendix



* Denotes non-manufacturing occupations contained within the manufacturing industry

OCCUPATION TITLE
Plating machine setters, operators, and tenders, metal and plastic
Pourers and casters, metal
Power distributors and dispatchers
Power plant operators
Prepress technicians and workers
Pressers, textile, garment, and related materials
Print binding and finishing workers
Printing press operators
Production workers, all other
Rolling machine setters, operators, and tenders, metal and plastic
Sawing machine setters, operators, and tenders, wood
Semiconductor processing technicians
Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders
Sewers, hand
Sewing machine operators
Shoe and leather workers and repairers
Shoe machine operators and tenders
Slaughterers and meat packers
Stationary engineers and boiler operators
Structural metal fabricators and fitters
Tailors, dressmakers, and custom sewers
Textile bleaching and dyeing machine operators and tenders
 Textile cutting machine setters, operators, and tenders
Textile knitting and weaving machine setters, operators, and tenders
Textile winding, twisting, and drawing out machine setters, operators, and tenders
 Textile, apparel, and furnishings workers, all other
 Tire builders
 Tool and die makers
Tool grinders, filers, and sharpeners
Upholsterers
Water and wastewater treatment plant and system operators
Welders, cutters, solderers, and brazers
Welding, soldering, and brazing machine setters, operators, and tenders
Woodworkers, all other
Woodworking machine setters, operators, and tenders, except sawing



* Denotes non-manufacturing occupations contained within the manufacturing industry

	OCCUPATION TITLE
	Accountants and auditors*
	Administrative services and facilities managers*
	Aerospace engineers*
	Agricultural and food science technicians*
	Aircraft mechanics and service technicians*
	Architectural and civil drafters*
	Architectural and engineering managers*
	Avionics technicians*
	Bartenders*
	Billing and posting clerks*
	Bioengineers and biomedical engineers*
	Bookkeeping, accounting, and auditing clerks*
	Bus and truck mechanics and diesel engine specialists*
	Buyers and purchasing agents*
Calibrati	on technologists and technicians and engineering technologists and technicians, except drafters, all other*
	Carpenters*
	Cashiers*
	Chemical engineers*
	Chemical technicians*
	Chemists*
	Chief executives*
	Cleaners of vehicles and equipment*
	Commercial and industrial designers*
	Compliance officers*
	Computer and information systems managers*
	Computer hardware engineers*
	Computer network architects*
	Computer network support specialists*
	Computer occupations, all other*
	Computer programmers*
	Computer systems analysts*
	Computer user support specialists*
	Construction laborers*
	Conveyor operators and tenders*
	Cost estimators*

Appendix



* Denotes non-manufacturing occupations contained within the manufacturing industry

OCCUPATION TITLE
Crane and tower operators*
Customer service representatives*
Database administrators and architects*
Demonstrators and product promoters*
Dispatchers, except police, fire, and ambulance*
Driver/sales workers*
Electrical and electronic engineering technologists and technicians*
Electrical and electronics repairers, commercial and industrial equipment*
Electrical engineers*
Electricians*
Electro-mechanical and mechatronics technologists and technicians*
Electronics engineers, except computer*
Engineers, all other*
Executive secretaries and executive administrative assistants*
Farmworkers and laborers, crop, nursery, and greenhouse*
Fast food and counter workers*
Financial and investment analysts, financial risk specialists, and financial specialists, all other*
Financial managers*
First-line supervisors of construction trades and extraction workers*
First-line supervisors of mechanics, installers, and repairers*
First-line supervisors of non-retail sales workers*
First-line supervisors of office and administrative support workers*
First-line supervisors of transportation and material-moving workers, except aircraft cargo handling supervisors
Food preparation workers*
Food scientists and technologists*
General and operations managers*
Graders and sorters, agricultural products*
Graphic designers*
Health and safety engineers, except mining safety engineers and inspectors*
Heating, air conditioning, and refrigeration mechanics and installers*
Heavy and tractor-trailer truck drivers*
Human resources assistants, except payroll and timekeeping*
Human resources managers*
Human resources specialists*
Industrial machinery mechanics*



* Denotes non-manufacturing occupations contained within the manufacturing industry

	OCCUPATION TITLE
	Industrial truck and tractor operators*
	Information security analysts*
	Installation, maintenance, and repair workers, all other*
J	anitors and cleaners, except maids and housekeeping cleaners*
	Laborers and freight, stock, and material movers, hand*
	Light truck drivers*
	Logisticians*
	Machine feeders and offbearers*
	Maintenance and repair workers, general*
	Maintenance workers, machinery*
	Management analysts*
	Market research analysts and marketing specialists*
	Marketing managers*
	Materials engineers*
	Mechanical drafters*
	Mechanical engineering technologists and technicians*
	Mechanical engineers*
	Medical scientists, except epidemiologists*
	Merchandise displayers and window trimmers*
	Millwrights*
	Natural sciences managers*
	Network and computer systems administrators*
	Occupational health and safety specialists*
	Office clerks, general*
Ot	verating engineers and other construction equipment operators*
	Operations research analysts*
	Order clerks*
	Packers and packagers, hand*
	Payroll and timekeeping clerks*
Personal service managers, al	other; entertainment and recreation managers, except gambling; and managers, all other*
	Plumbers, pipefitters, and steamfitters*
	Procurement clerks*
	Production, planning, and expediting clerks*
Project	nanagement specialists and business operations specialists, all other*
	Purchasing managers*

Appendix



* Denotes non-manufacturing occupations contained within the manufacturing industry

OCCUPATION TITLE
Receptionists and information clerks*
Retail salespersons*
Sales engineers*
Sales managers*
Sales representatives of services, except advertising, insurance, financial services, and travel*
Sales representatives, wholesale and manufacturing, except technical and scientific products*
Sales representatives, wholesale and manufacturing, technical and scientific products*
Secretaries and administrative assistants, except legal, medical, and executive*
Security guards*
Sheet metal workers*
Shipping, receiving, and inventory clerks*
Software developers and software quality assurance analysts and testers*
Stockers and order fillers*
Technical writers*
Training and development specialists*
Transportation, storage, and distribution managers*
Waiters and waitresses*
Weighers, measurers, checkers, and samplers, recordkeeping*





IMA-NET.ORG

The Economic Impact of Manufacturing in 2022 Adams County





\$592.2 Million in Salaries and Benefits

> 9,361 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Other Animal Food Manufacturing(2) Farm Machinery and Equipment Manufacturing(3) Motor Vehicle Body Manufacturing

For every 10 jobs support directly by the manufacturing industry, another 9 jobs are created elsewhere in the county.

y **10 jobs** directly by ufacturing , another re created ere in the unby \$73,443 Avg. wage across all

manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Alexander County



\$294.9 Million in Total Annual Economic Output

\$17.8 Million in Salaries and Benefits

> 288 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

Soybeans and Other Oilseed Processing
 Pharmaceutical Preparation Manufacturing
 Petroleum Refineries

Figure 10 and 10

2.0 For every **10 jobs** support directly by the manufacturing industry, another **10 jobs** are created elsewhere in the county.

\$49,233 Avg. wage across all

manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Bond County



\$485.3 Million in Total Annual Economic Output

\$102.9 Million in Salaries and Benefits

> 1,348 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Medicinal and Botanical Manufacturing(2) Other Motor Vehicle Parts Manufacturing(3) Reconstituted Wood Product Manufacturing

1.5 For every **10 jobs** support directly by the manufacturing industry, another **5 jobs** are created elsewhere in the county.

\$96,492 Avg. wage across all manufacturing jobs in

the county



The Economic Impact of Manufacturing in 2022 Boone County





\$578.4 Million in Salaries and Benefits

> 8,792 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Transportation Equipment Manufacturing
 (2) Other Motor Vehicle Parts Manufacturing
 (3) Motor Vehicle Gasoline Engine & Engine Parts Manufacturing

For every **10 jobs** support directly by the manufacturing industry, another **4 jobs** are created elsewhere in the county. \$72,565 Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Brown County





\$10.0 Million in Salaries and Benefits

> 302 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Pharmaceutical Preparation Manufacturing(2) Wet Corn Milling(3) Tother Animal Food Manufacturing

Z-Z For every **10 jobs** support directly by the manufacturing industry, another **12 jobs** are created elsewhere in the county.

\$36,653

Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Bureau County



\$649.3 Million in Total Annual Economic Output

\$145.1 Million in Salaries and Benefits

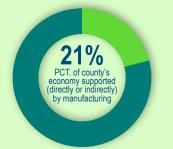
> 2,262 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Conveyor and Conveying Equipment Manufacturing
 (2) Valve and Fittings Manufacturing
 (3) Plastics Packaging Materials Manufacturing

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For every **10 jobs** support directly by the manufacturing industry, another **4 jobs** are created elsewhere in the county. \$72,072 Avg. wage across all manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 Calhoun County





\$3.6 Million in Salaries and Benefits

102 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Pharmaceutical Preparation Manufacturing(2) Wet Corn Milling(3) Petroleum Refineries

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1.6 For every **10 jobs** support directly by the manufacturing industry, another **6 jobs** are created elsewhere in the county.

\$43,025 Avg. wage across all

manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Carroll County



\$394.6 Million in Total Annual Economic Output

> \$70.3 Billion in Salaries and Benefits

> > 1,235 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Air Conditioning, Refrigeration, and Warm Air Heating Equipment Manufacturing
 (2) Other Basic Organic Chemical Manufacturing
 (3) Animal, Except Poultry, Slaughtering Manufac-

F su th i i 6 6

1.6 For every 10 jobs support directly by the manufacturing industry, another **6** jobs are created elsewhere in the county.

\$64,410 Avg. wage across all

manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Cass County



\$1.5 Billion in Total Annual Economic Output

\$189.7 Million in Salaries and Benefits

> 3,468 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Animal, except Poultry, Slaughtering(2) Meat Processing(3) Flour Milling

For every **10 jobs** support directly by the manufacturing industry, another **7 jobs** are created elsewhere in the county.

\$61,771 Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Champaign County





\$736.6 Million in Salaries and Benefits

> 12,582 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

Soybean and Other Soilseed Processing
 Other Plastics Product Manufacturing
 Toilet Preparation Manufacturing

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For every **10 jobs** support directly by the manufacturing industry, another **9 jobs** are created elsewhere in the county.

\$66,495

Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Christian County



\$715.4 Million in Total Annual Economic Output

\$126.1 Million in Salaries and Benefits

> 2,049 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Construction Machinery Manufacturing(2) Dry Pasta, Mixes, and Dough Manufacturing(3) Paper Mills

For every **10 jobs** support directly by the manufacturing industry, another **7 jobs** are created elsewhere in the county. \$70,711 Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Clark County



\$399.1 Million in Total Annual Economic Output

\$78.5 Million in Salaries and Benefits

1,453 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Other Motor Vehicle Parts Manufacturing(2) Telephone Apparatus Manufacturing(3) Fiber Optic Cable Manufacturing

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For every **10 jobs** support directly by the manufacturing industry, another **3 jobs** are created elsewhere in the county. \$61,224 Avg. wage across all manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 Clay County



\$1.2 Billion in Total Annual Economic Output

\$152.4 Million in Salaries and Benefits

> 3,135 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 Motor Vehicle Electrical and Electronic Equipment Manufacturing
 Animal, except Poultry, Slaughtering
 Pesticide and Other Agricultural Chemical Manufacturing

1.5 For every **10 jobs** support directly by the manufacturing industry, another **5 jobs** are created elsewhere in the county.

\$57,867 Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 **Clinton County**



\$458.9 Million in Total Annual Economic Output

\$97.2 Million in Salaries and Benefits

> 1,537 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 Prefabricated Metal Buildings and Components Manufacturing
 Soap and Other Detergent Manufacturing
 Petroleum Lubricating Oil and Grease Manufacturing

For every 10 jobs support directly by the manufacturing industry, another 5 jobs are created elsewhere in the county. \$73,955 Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 **Coles County**





\$206.5 Million in Salaries and Benefits

> 3,489 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Metal Cans Manufacturing(2) Printing(3) Dry Pasta, Mixes, and Dough Manufacturing

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1.8 For every **10 jobs** support directly by the manufacturing industry, another **8 jobs** are created elsewhere in the county.

\$69,049

Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 **Cook County**





\$32.6 Billion in Salaries and Benefits

> 375,228 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Transportation Equipment Manufacturing
 (2) Meat Processing
 (3) Paperboard Container Manufacturing

For every 10 jobs support directly by the manufacturing industry, another 11 jobs are created elsewhere in the county.

\$92,549 Avg. wage across all

manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Crawford County



\$3.3 Billion in Total Annual Economic Output

\$308.8 Million in Salaries and Benefits

> 3,420 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Petroleum Refineries(2) Other Basic Organic Chemical Manufacturing(3) All Other Petroleum and Coal Products Manufacturing

For every **10 jobs** support directly by the manufacturing industry, another **11 jobs** are created elsewhere in the county. \$149,119 Avg. wage across all manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 Cumberland County



\$343.6 Million in Total Annual Economic Output

\$78.0 Million in Salaries and Benefits

> 1,057 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Lawn and Garden Equipment Manufacturing
 (2) Other Animal Food Manufacturing
 (3) Paper Bag and Coated and Treated Paper Manufacturing

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For every **10 jobs** support directly by the manufacturing industry, another **5 jobs** are created elsewhere in the county. \$52,128 Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 **Dekalb County**





\$454.0 Million in Salaries and Benefits

> 7,004 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Petroleum Refineries
(2) Soybean and Other Oilseed Processing
(3) Motor Vehicle Electrical and Electronic Equipment Manufacturing

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For every **10 jobs** support directly by the manufacturing industry, another **7 jobs** are created elsewhere in the county. **\$77,393** Avg. wage across all manufacturing jobs in

anufacturing jobs the county





The Economic Impact of Manufacturing in 2022 **DeWitt County**



\$500.6 Million in Total Annual Economic Output

\$99.3 Million in Salaries and Benefits

> 1,274 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Pesticide and Other Agricultural Chemical Manufacturing
 (2) Turbine and Turbine Generator Set Unit Manufacturing
 (3) Prefabricated Metal Buildings and Components Manufacturing

1.6 For every 10 jobs support directly by the manufacturing industry, another 6 jobs are created elsewhere in the county.

\$89,559

Avg. wage across all manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 **Douglas County**





\$313.8 Million in Salaries and Benefits

> 4,737 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Metal Window and Door Manufacturing(2) Broom, Brush, and Mop Manufacturing(3) Other Basic Inorganic Chemical Manufacturing

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1.5 For every **10 jobs** support directly by the manufacturing industry, another **5 jobs** are created elsewhere in the county.

\$77,695 Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 **DuPage County**



\$33.8 Billion in Total Annual Economic Output

\$9.4 Billion in Salaries and Benefits

> 103,005 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Paperboard Container Manufacturing
 (2) Turned Product and Screw, Nut, and Bolt Manufacturing
 (3) Printing

For every **10 jobs** support directly by the manufacturing industry, another **9 jobs** are created elsewhere in the county. \$99,237 Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Edgar County



\$1.3 Billion in Total Annual Economic Output

\$197.4 Million Salaries and Benefits

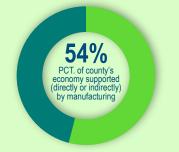
3,778 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Motor Vehicle Electrical and Electronic Equipment Manufacturing
 (2) Aircraft Engine and Engine Parts Manufacturing
 (3) Plastics Packaging Materials and Unlamented Film and Sheet Manufacturing

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For every **10 jobs** support directly by the manufacturing industry, another **4 jobs** are created elsewhere in the county. \$57,338 Avg. wage across all manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 Edwards County



\$432.3 Million in Total Annual Economic Output

\$63.9 Million in Salaries and Benefits

1,288 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Other Motor Vehicle Parts Manufacturing(2) Custom Compounding of Purchased Resins(3) Machine Tool Manufacturing

For every **10 jobs** support directly by the manufacturing industry, another **3 jobs** are created elsewhere in the county.

\$50,483

Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Effingham County





\$281.0 Billion in Salaries and Benefits

> 5,366 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Printing (2) Flour Milling (3) Institutional Furniture Manufacturing

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For every **10 jobs** support directly by the manufacturing industry, another **7 jobs** are created elsewhere in the county. \$59,008 Avg. wage across all

manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 **Fayette County**



\$174.8 Million in Total Annual Economic Output

\$26.7 Million in Salaries and Benefits

> 623 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Other Animal Food Manufacturing
 (2) Plastics Packaging Materials and Unlamented Film and Sheet Manufacturing
 (3) Welding and Soldering Equipment Manufacturing

1.6 For every 10 jobs support directly by the manufacturing industry, another **6** jobs are created elsewhere in the county.

\$46,571 Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Ford County



\$689.0 Million in Total Annual Economic Output

\$70.6 Million in Salaries and Benefits

> 1,157 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Soybean and Other Oilseed Processing(2) Farm Machinery and Equipment Manufacturing(3) Meat Processing

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1.5 For every **10 jobs** support directly by the manufacturing industry, another **5 jobs** are created elsewhere in the county.

\$62,081 Avg. wage across all manufacturing jobs in

anufacturing jobs the county



The Economic Impact of Manufacturing in 2022 **Franklin County**





\$44.5 Million in Salaries and Benefits

> 859 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Boat Building(2) Meat Processing(3) Mining Machinery and Equipment Manufacturing

For every **10 jobs** support directly by the manufacturing industry, another **4 jobs** are created elsewhere in the county.

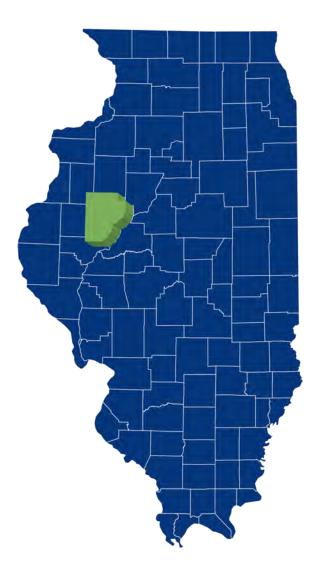
\$59,653

Avg. wage across all manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 **Fulton County**



\$188.4 Million in Total Annual Economic Output

\$28.6 Million in Salaries and Benefits

> 728 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Animal, except Poultry, Slaughtering(2) Other Snack Food Manufacturing(3) Metal Barrels, Drums, and Pails Manufacturing

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For every **10 jobs** support directly by the manufacturing industry, another **9 jobs** are created elsewhere in the county.

\$44,394

Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Gallatin County





\$4.2 Million Salaries and Benefits

133 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Pharmaceutical Preparation Manufacturing(2) Wet Corn Milling(3) Petroleum Refineries

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For every 10 jobs support directly by the manufacturing industry, another 9 jobs are created elsewhere in the county.

\$19,387

Avg. wage across all manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 Greene County



\$83.0 Million in Total Annual Economic Output

\$10.1 Million in Salaries and Benefits

> 271 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Pharmaceutical Preparation Manufacturing(2) Wet Corn Milling(3) Ferrous Metal Foundries

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1.6 For every 10 jobs support directly by the manufacturing industry, another **6** jobs are created elsewhere in the county.

\$35,669

Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Grundy County



\$1.8 Billion in Total Annual Economic Output

\$433.9 Million in Salaries and Benefits

> 3,613 Total Jobs (Direct & Indirect)

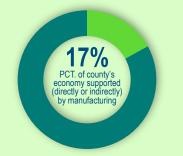
Top 3 Manufacturing Subsectors

(1) Plastics Material and Resin Manufacturing
 (2) Toilet Preparation Manufacturing
 (3) Other Basic Organic Chemical Manufacturing

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2.0 For every **10 jobs** support directly by the manufacturing industry, another **10 jobs** are created elsewhere in the county.

\$185,381 Avg. wage across all manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 Hamilton County





\$8.7 Million in Salaries and Benefits

242 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Construction Machinery Manufacturing(2) Meat Processing(3) Pharmaceutical Preparation Manufacturing

1.6 For every **10 jobs** support directly by the manufacturing industry, another **6 jobs** are created elsewhere in the county.

\$36,376 Avg. wage across all

manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Hancock County



\$155.4 Million in Total Annual Economic Output

\$24.4 Million in Salaries and Benefits

> 510 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Iron and Steel Mills and Ferroalloy Manufacturing
 (2) Pharmaceutical Preparation Manufacturing
 (3) Confectionery Manufacturing from Purchased Chocolate

1.5 For every **10** jobs support directly by the manufacturing industry, another **5** jobs are created elsewhere in the county.

\$49,274 Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Hardin County





\$10.6 Million in Salaries and Benefits

> 163 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Explosives Manufacturing(2) Wet Corn Milling(3) Petroleum Refineries

1.6 For every **10 jobs** support directly by the manufacturing industry, another **6 jobs** are created elsewhere in the county.

\$80,373 Avg. wage across all

manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Henderson County





\$3.8 Million in Salaries and Benefits

160 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Pharmaceutical Preparation Manufacturing
 (2) Tire Manufacturing
 (3) Animal, except Poultry Slaughtering

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For every **10 jobs** support directly by the manufacturing industry, another **4 jobs** are created elsewhere in the county. \$19,356 Avg. wage across all

manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 Henry County



\$752.5 Million in Total Annual Economic Output

\$136.3 Million in Salaries and Benefits

> 2,582 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Truck Trailer Manufacturing
 (2) Small Arms, Ordnance, and Accessories Manufacturing
 (3) Other Basic Organic Chemical Manufacturing

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For every **10 jobs** support directly by the manufacturing industry, another **5 jobs** are created elsewhere in the county. \$54,493 Avg. wage across all

manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Iroquois County



\$643.1 Million in Total Annual Economic Output

\$73.3 Million in Salaries and Benefits

> 1,365 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Soybean and Other Oilseed Processing(2) Animal, except Poultry Slaughtering(3) Flour Milling

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For every **10 jobs** support directly by the manufacturing industry, another **11 jobs** are created elsewhere in the county.

\$58,277 Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Jackson County



\$594.8 Million in Total Annual Economic Output

\$101.4 Million in Salaries and Benefits

> 1,941 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Other Aluminum Rolling, Drawing, and Extruding

 (2) Fluid Milk Manufacturing
 (3) Paper Bag and Coated and Treated Paper Manufacturing

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1.6 For every **10 jobs** support directly by the manufacturing industry, another **6 jobs** are created elsewhere in the county.

\$56,480 Avg. wage across all

manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Jasper County



\$122.6 Million in Total Annual Economic Output

\$13.9 Million in Salaries and Benefits

> 411 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Animal, except Poultry, Slaughtering
 (2) Iron, Steel Pipe, and Tube Manufacturing from Purchased Steel
 (3) Broom, Brush, and Mop Manufacturing

1.8 For every **10 jobs** support directly by the manufacturing industry, another **8 jobs** are created elsewhere in the county.

\$42,886 Avg. wage across all manufacturing jobs in

anufacturing jobs the county





The Economic Impact of Manufacturing in 2022 Jefferson County





\$464.0 Million in Salaries and Benefits

6,774 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Tire Manufacturing
 (2) Pharmaceutical Preparation Manufacturing
 (3) Iron and Steel Mills and Ferroalloy
 Manufacturing

1.6 For every **10 jobs** support directly by the manufacturing industry, another **6 jobs** are created elsewhere in the county.

\$77,655 Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Jersey County



\$129.1 Million in Total Annual Economic Output

\$24.9 Million in Salaries and Benefits

> 494 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Railroad Rolling Stock Manufacturing(2) Other Plastics Product Manufacturing(3) Wineries

Figure 1 and the set of the set o

1.5 For every **10 jobs** support directly by the manufacturing industry, another **5 jobs** are created elsewhere in the county.

\$56,413

Avg. wage across all manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 Jo Daviess County





\$96.9 Million in Salaries and Benefits

1,562 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Nitrogenous Fertilizer Manufacturing
 (2) Motor Vehicle Body Manufacturing
 (3) Cheese Manufacturing

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For every **10 jobs** support directly by the manufacturing industry, another **9 jobs** are created elsewhere in the county. \$77,032 Avg. wage across all manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 Johnson County



\$64.3 Million in Total Annual Economic Output

\$5.6 Million in Salaries and Benefits

326 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Animal, except Poultry Slaughtering(2) Other Basic Inorganic Chemical Manufacturing(3) Surgical and Medical Instrument Manufacturing

For every 10 jobs support directly by the manufacturing industry, another 12 jobs are created elsewhere in the county.

\$22,453 Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Kane County





\$4.1 Billion in Salaries and Benefits

57,100 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Other Plastics Product Manufacturing(2) Printing(3) Bottled and Canned Soft Drinks & Water

For every **10 jobs** support directly by the manufacturing industry, another **7 jobs** are created elsewhere in the county.

\$80,482 Avg. wage across all

manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Kankakee County



\$5.0 Billion in Total Annual Economic Output

\$933.3 Million in Salaries and Benefits

> 8,465 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Dehydrated Food Products Manufacturing
 (2) Biological Product (except Diagnostic) Manufacturing
 (3) Plastics Material and Resin Manufacturing

For every 10 support direct the manufact industry, and **3 jobs** are or elsewhere in county.

For every **10 jobs** support directly by the manufacturing industry, another **3 jobs** are created elsewhere in the \$93,834 Avg. wage across all

manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 Kendall County





\$338.7 Million in Salaries and Benefits

> 5,556 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Other Plastics Product Manufacturing
 (2) Construction Machinery Manufacturing
 (3) Dry, Condensed, and Evaporated Dairy Product Manufacturing

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For every **10 jobs** support directly by the manufacturing industry, another **7 jobs** are created elsewhere in the county. \$80,519

Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Knox County



\$629.8 Million in Total Annual Economic Output

\$112.7 Million in Salaries and Benefits

> 2,049 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Motor Vehicle Electrical and Electronic Equipment Manufacturing
 (2) Soybean and Other Oilseed Manufacturing
 (3) Farm Machinery and Equipment Manufacturing

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1.6 For every **10 jobs** support directly by the manufacturing industry, another **6 jobs** are created elsewhere in the county.

\$60,882 Avg. wage across all

manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Lake County





\$12.2 Billion in Salaries and Benefits

> 98,949 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Pharmaceutical Preparation Manufacturing(2) Other Plastics Product Manufacturing(3) Surgical and Medical Instrument Manufacturing

2.0 For every **10 jobs** support directly by the manufacturing industry, another **10 jobs** are created elsewhere in the county.

\$160,968 Avg. wage across all manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 LaSalle County





\$837.9 Million in Salaries and Benefits

> 11,343 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Other Concrete Product Manufacturing(2) Plastics Material and Resin Manufacturing(3) Other Basic Inorganic Chemical Manufacturing

Figure 1 and the set of the set o

For every 10 jobs support directly by the manufacturing industry, another 9 jobs are created elsewhere in the county. \$92,800 Avg. wage across all manufacturing jobs in

nufacturing jobs the county



The Economic Impact of Manufacturing in 2022 Lawrence County



\$558.7 Million in Total Annual Economic Output

\$73.3 Million in Salaries and Benefits

> 1,302 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Construction Machinery Manufacturing (2) Asphalt Paving Mixture and Block Manufacturing (3) Nonchocolate Confectionery Manufacturing

For every support di the manuf industry, **3 jobs** are elsewher cour

For every **10 jobs** support directly by the manufacturing industry, another **3 jobs** are created elsewhere in the county. \$60,222 Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Lee County





\$269.8 Million in Salaries and Benefits

> 4,333 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Flavoring Syrup and Concrete Manufacturing
 (2) Dry, Condensed, and Evaporated Dairy Product Manufacturing
 (3) Construction Machinery Manufacturing

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1.6 For every **10 jobs** support directly by the manufacturing industry, another **6 jobs** are created elsewhere in the county.

\$71,326 Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Livingston County





\$303.3 Million in Salaries and Benefits

> 3,781 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Other Engine Equipment Manufacturing
 (2) Other Commercial Service Industry Machinery Manufacturing
 (3) Motor Vehicle Body Manufacturing

1.6 For every 10 jobs support directly by the manufacturing industry, another **6 jobs** are created elsewhere in the county.

\$96,657 Avg. wage across all manufacturing jobs in

anufacturing jobs the county



The Economic Impact of Manufacturing in 2022 Logan County





\$137.1 Million in Salaries and Benefits

> 2,104 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Wet Corn Milling(2) Construction Machinery Manufacturing(3) Transportation Equipment Manufacturing

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For every **10 jobs** support directly by the manufacturing industry, another **4 jobs** are created elsewhere in the county. \$74,649 Avg. wage across all manufacturing jobs in

anufacturing jobs the county



The Economic Impact of Manufacturing in 2022 Macon County





\$1.7 Billion in Salaries and Benefits

> 22,295 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Wet Corn Milling(2) Construction Machinery Manufacturing(3) Transportation Equipment Manufacturing

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For every **10 jobs** support directly by the manufacturing industry, another **11 jobs** are created elsewhere in the county. \$103,493 Avg. wage across all manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 Macoupin County



\$587.3 Million in Total Annual Economic Output

\$90.0 Million in Salaries and Benefits

> 1,902 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Flour Milling (2) Fluid Milk Manufacturing (3) Construction Machinery Manufacturing

For every 10 jobs support directly by the manufacturing industry, another 11 jobs are created elsewhere in the county.

\$59,925 Avg. wage across all manufacturing jobs in

anufacturing jobs the county



The Economic Impact of Manufacturing in 2022 Madison County





\$1.8 Billion in Salaries and Benefits

23,205 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Petroleum Refineries
 (2) Iron and Steel Mills and Ferroalloy Manufacturing
 (3) Copper Rolling, Drawing, Extruding and Alloying

For every **10 jobs** support directly by the manufacturing industry, another **11 jobs** are created elsewhere in the county. \$102,951 Avg. wage across all manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 Marion County





\$222.4 Million in Salaries and Benefits

> 4,263 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Petroleum Refineries
 (2) Motor Vehicle Electrical and Electronic Equipment Manufacturing
 (3) Other Motor Vehicle Parts Manufacturing

Figure 1 and the second s

For every **10 jobs** support directly by the manufacturing industry, another **7 jobs** are created elsewhere in the county. \$61,644

Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Marshall County



\$533.4 Million in Total Annual Economic Output

\$90.1 Million in Salaries and Benefits

> 1,377 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Plastics Material and Resin Manufacturing
 (2) Nitrogenous Fertilizer Manufacturing
 (3) Prefabricated Metal Buildings and Components Manufacturing

1.5 For every **10 jobs** support directly by the manufacturing industry, another **5 jobs** are created elsewhere in the county.

\$76,668 Avg. wage across all manufacturing jobs in

the county



The Economic Impact of Manufacturing in 2022 Mason County



\$103.0 Million in Total Annual Economic Output

\$14.0 Million in Salaries and Benefits

> 343 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

Pharmaceutical Preparation Manufacturing
 Rendering and Meat Byproduct Processing

 (3) Mining Machinery and Equipment
 Manufacturing

For every **10 jobs** support directly by the manufacturing industry, another **3 jobs** are created elsewhere in the county. \$36,222 Avg. wage across all manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 Massac County



\$150.7 Million in Total Annual Economic Output

\$25.9 Million in Salaries and Benefits

> 345 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Petroleum Lubricating Oil and Grease Manufacturing
 (2) Industrial Gas Manufacturing
 (3) Mineral Wool Manufacturing

For esupporting the mindu **8 job** else

1.8 For every **10 jobs** support directly by the manufacturing industry, another **8 jobs** are created elsewhere in the county.

\$101,197 Avg. wage across all manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 McDonough County



\$897.3 Million in Total Annual Economic Output

\$151.3 Million in Salaries and Benefits

> 3,002 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Animal, except Poultry Slaughtering(2) Ball and Roller Bearing Manufacturing(3) Farm Machinery and Equipment Manufacturing

For supp the ind 5 jol else

1.5 For every **10 jobs** support directly by the manufacturing industry, another **5 jobs** are created elsewhere in the county.

\$57,456 Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 McHenry County





\$1.6 Billion in Salaries and Benefits

25,503 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

Other Plastics Product Manufacturing
 Animal, except Poultry, Slaughtering
 Paint and Coating Manufacturing

For every 10 jobs support directly by the manufacturing industry, another 8 jobs are created elsewhere in the county.

\$76,399 Avg. wage across all manufacturing jobs in 27% PCT. of county's economy supported (directly or indirectly) by manufacturing



the county

The Economic Impact of Manufacturing in 2022 McLean County





\$445.0 Billion in Salaries and Benefits

> 7,046 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Tire Manufacturing(2) Transportation Equipment Manufacturing(3) Surgical and Medical Instrument Manufacturing

1.8 For every **10 jobs** support directly by the manufacturing industry, another **8 jobs** are created elsewhere in the county.

\$69,948

Avg. wage across all manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 Menard County





\$3.3 Million in Salaries and Benefits

146 **Total Jobs** (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Pharmaceutical Preparation Manufacturing (2) Farm Machinery and Equipment Manufacturing (3) Breweries

For every 10 jobs support directly by the manufacturing industry, another 4 jobs are created elsewhere in the county.

\$17,653 Avg. wage across all manufacturing jobs in

the county



The Economic Impact of Manufacturing in 2022 Mercer County



\$303.1 Million in Total Annual Economic Output

\$46.6 Million in Salaries and Benefits

852 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Animal, except Poultry, Slaughtering(2) Farm Machinery and Equipment Manufacturing(3) Paperboard Container Manufacturing

For every **10 jobs** support directly by the manufacturing industry, another **7 jobs** are created elsewhere in the county. \$68,276 Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Monroe County



\$309.9 Million in Total Annual Economic Output

\$52.3 Million in Salaries and Benefits

> 1,046 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Small Electrical Appliance Manufacturing(2) Dry Pasta, Mixes, and Dough Manufacturing(3) Animal, except Poultry, Slaughtering

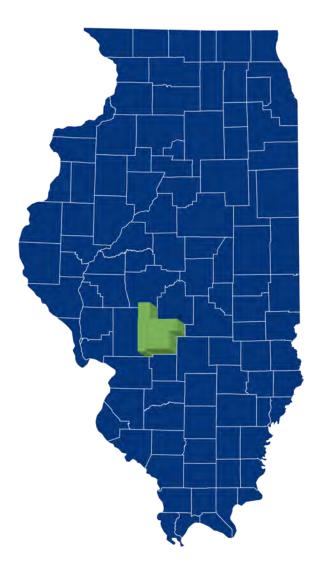
For every **10 jobs** support directly by the manufacturing industry, another **9 jobs** are created elsewhere in the county.

\$61,324

Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Montgomery County



\$316.9 Million in Total Annual Economic Output

\$62.8 Million in Salaries and Benefits

1,145 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Iron and Steel Mills and Ferroalloy Manufacturing
 (2) Farm Machinery and Equipment Manufacturing
 (3) Wood Preservation

For every **10 jobs** support directly by the manufacturing industry, another **7 jobs** are created elsewhere in the county. \$64,171

Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Morgan County



\$1.5 Billion in Total Annual Economic Output

\$325.1 Million in Salaries and Benefits

> 4,397 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Dry, Condensed, and Evaporated Dairy Product Manufacturing

 (2) Tire Manufacturing
 (3) Plastics Packaging Materials and Unlamented Film and Sheet Manufacturing

For every **10 jobs** support directly by the manufacturing industry, another **7 jobs** are created elsewhere in the county. **\$95,457** Avg. wage across all manufacturing jobs in

the county



The Economic Impact of Manufacturing in 2022 Moultrie County



\$932.3 Million in Total Annual Economic Output

\$235.3 Million in Salaries and Benefits

> 2,981 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Lawn and Garden Equipment Manufacturing

 (2) Wood Kitchen Cabinet and Countertop
 Manufacturing
 (3) Speed Changer, Industrial High-Speed Drive and
 Gear Manufacturing

For every **10 jobs** support directly by the manufacturing industry, another **3 jobs** are created elsewhere in the county. **\$88,437** Avg. wage across all

manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Ogle County





\$316.4 Million in Salaries and Benefits

5,125 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 Dry, Condensed, and Evaporated Dairy Product Manufacturing
 Construction Machinery Manufacturing
 Animal, except Poultry, Slaughtering

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For every **10 jobs** support directly by the manufacturing industry, another **7 jobs** are created elsewhere in the county. \$69,983

Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 **Peoria County**





\$3.0 Billion in Salaries and Benefits

29,574 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Construction Machinery Manufacturing(2) Other Basic Organic Chemical Manufacturing(3) Other Engine Equipment Manufacturing

For every **10 jobs** support directly by the manufacturing industry, another **11 jobs** are created elsewhere in the county.

\$146,411 Avg. wage across all manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 **Perry County**



\$291.5 Million in Total Annual Economic Output

\$117.1 Million in Salaries and Benefits

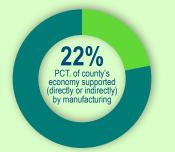
> 970 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Other Communication and Energy Wire Manufacturing
 (2) Pharmaceutical Preparation Manufacturing
 (3) Crown and Closure Manufacturing and Metal Stamping

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For every **10 jobs** support directly by the manufacturing industry, another **7 jobs** are created elsewhere in the county. \$178,093 Avg. wage across all manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 **Piatt County**



\$151.0 Million in Total Annual Economic Output

\$23.6 Million in Salaries and Benefits

> 384 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Pharmaceutical Preparation Manufacturing
 (2) Other Motor Vehicle Parts Manufacturing
 (3) Plastics Pipe and Pipe Fitting Manufacturing

F st tt i 4

For every **10 jobs** support directly by the manufacturing industry, another **4 jobs** are created elsewhere in the county.

\$69,830

Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 **Pike County**





\$13.7 Million in Salaries and Benefits

> 331 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Farm Machinery and Equipment Manufacturing(2) Explosives Manufacturing(3) Tire Manufacturing

1.5 For every **10 jobs** support directly by the manufacturing industry, another **5 jobs** are created elsewhere in the county.

\$40,869

Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 **Pope County**



\$29.0 Million in Total Annual Economic Output

\$2.2 Million in Salaries and Benefits

> 96 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 Confectionery Manufacturing from Purchased Chocolate
 Pharmaceutical Preparation Manufacturing

 (3) Petroleum Refineries

1.5 For every **10 jobs** support directly by the manufacturing industry, another **5 jobs** are created elsewhere in the county.

\$29,129 Avg. wage across all manufacturing jobs in

anufacturing jobs the county



The Economic Impact of Manufacturing in 2022 Pulaski County



\$59.3 Million in Total Annual Economic Output

> **\$7.1 Million** in Salaries and Benefits

> > 155 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Other Aluminum Rolling, Drawing, and Extruding
 (2) Other Animal Food Manufacturing
 (3) Other Miscellaneous Chemical Product Manufacturing

1.5 For every **10 jobs** support directly by the manufacturing industry, another **5 jobs** are created elsewhere in the county.

\$50,471 Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 **Putnam County**



\$366.8 Million in Total Annual Economic Output

\$103.4 Billion in Salaries and Benefits

> 842 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Other Basic Organic Chemical Manufacturing(2) Industrial Gas Manufacturing(3) Coffee and Tea Manufacturing

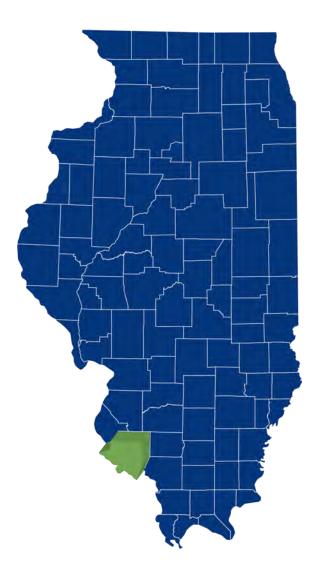
1.8 For every **10 jobs** support directly by the manufacturing industry, another **8 jobs** are created elsewhere in the county.

\$161,830 Avg. wage across all manufacturing jobs in

anufacturing jobs the county 49% PCT. of county's (directly or indirectly) by manufacturing



The Economic Impact of Manufacturing in 2022 Randolph County





\$229.3 Million in Salaries and Benefits

> 4,427 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Animal, except Poultry, Slaughtering(2) Dry Pasta, Mixes, and Dough Manufacturing(3) Fluid Milk Manufacturing

1.5 For every **10 jobs** support directly by the manufacturing industry, another **5 jobs** are created elsewhere in the county.

\$55,192 Avg. wage across all

manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 **Richland County**



\$221.0 Million in Total Annual Economic Output

\$39.2 Million in Salaries and Benefits

> 737 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Fluid Milk Manufacturing(2) Plastics Pipe and Pipe Fitting Manufacturing(3) Asphalt Shingle and Coating MaterialsManufacturing

1.6 For every **10 jobs** support directly by the manufacturing industry, another **6 jobs** are created elsewhere in the county.

\$61,148 Avg. wage across all

manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 **Rock Island County**





\$923.9 Million in Salaries and Benefits

> 13,050 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Farm Machinery and Equipment Manufacturing(2) Fluid Milk Manufacturing(3) Meat Processing

For every 10 jobs support directly by the manufacturing industry, another 4 jobs are created elsewhere in the county.

\$70,304 Avg. wage across all

manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Saline County



\$164.4 Million in Total Annual Economic Output

\$30.1 Million in Salaries and Benefits

> 594 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Fluid Milk Manufacturing(2) Toilet Preparation Manufacturing(3) Other Rubber Product Manufacturing

For every **10 jobs** support directly by the manufacturing industry, another **7 jobs** are created elsewhere in the county.

\$62,684 Avg. wage across all

manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Sangamon County





\$393.3 Million in Salaries and Benefits

> 6,466 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Transportation Equipment Manufacturing
 (2) Bottled and Canned Soft Drinks & Water
 (3) Other Commercial Service Industry Machinery Manufacturing

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1.8 For every **10 jobs** support directly by the manufacturing industry, another **8 jobs** are created elsewhere in the county.

\$62,479 Avg. wage across all manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 Schuyler County





\$10.9 Million in Salaries and Benefits

> 207 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Pharmaceutical Preparation Manufacturing(2) Dog and Cat Food Manufacturing(3) Surgical and Medical Instrument Manufacturing

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1.5 For every **10 jobs** support directly by the manufacturing industry, another **5 jobs** are created elsewhere in the county.

\$61,249 Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Scott County



\$39.5 Million in Total Annual Economic Output

\$5.2 Million Salaries and Benefits

109 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Air Conditioning, Refrigeration, and Warm Air Heating Equipment Manufacturing
 (2) Pharmaceutical Preparation Manufacturing
 (3) Brick, Tile, and Other Structural Clay Product Manufacturing

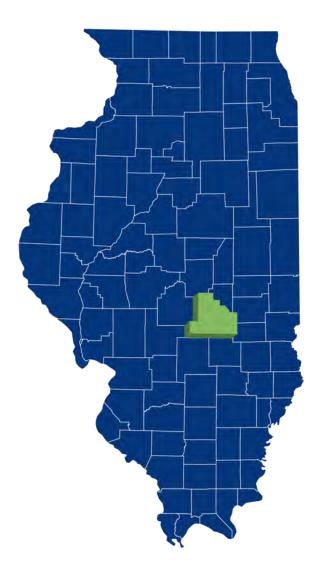
1.5 For every **10 jobs** support directly by the manufacturing industry, another **5 jobs** are created elsewhere in the county.

\$48,401 Avg. wage across all

manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Shelby County



\$584.1 Million in Total Annual Economic Output

\$110.2 Million in Salaries and Benefits

> 1,824 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Pesticide and Other Agricultural Chemical Manufacturing
 (2) Other Motor Vehicle Parts Manufacturing
 (3) Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

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1.6 For every **10 jobs** support directly by the manufacturing industry, another **6 jobs** are created elsewhere in the county.

\$72,719 Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Stark County





\$24.4 Million in Salaries and Benefits

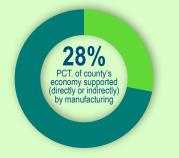
> 398 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Construction Machinery Manufacturing
(2) Other Basic Organic Chemical Manufacturing
(3) Pesticide and Other Agricultural Chemical Manufacturing

1.6 For every **10 jobs** support directly by the manufacturing industry, another **6 jobs** are created elsewhere in the county.

\$71,792 Avg. wage across all manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 St Clair County



\$3.9 Billion in Total Annual Economic Output

\$733.4 Million in Salaries and Benefits

> 11,179 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Petroleum Lubricating Oil and Grease Manufacturing

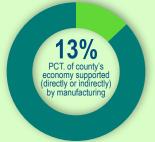
 (2) Meat Processing
 (3) Other Miscellaneous Chemical Product Manufacturing

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2.0 For every **10 jobs** support directly by the manufacturing industry, another **10 jobs** are created elsewhere in the county.

\$74,174 Avg. wage across all manufacturing jobs in

the county





The Economic Impact of Manufacturing in 2022 Stephenson County





\$317.1 Million in Salaries and Benefits

> 5,865 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Cheese Manufacturing(2) Soybean and Other Oilseed Processing(3) Animal, except Poultry, Slaughtering

1.8 For every **10 jobs** support directly by the manufacturing industry, another **8 jobs** are created elsewhere in the county.

\$71,764 Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 **Tazewell County**



\$3.6 Billion in Total Annual Economic Output

\$738.6 Million in Salaries and Benefits

> 10,365 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Construction Machinery Manufacturing(2) Other Engine Equipment Manufacturing(3) Other Basic Organic Chemical Manufacturing

1.8 For every 10 jobs support directly by the manufacturing industry, another **8 jobs** are created elsewhere in the county.

\$82,813

Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Union County



\$196.1 Million in Total Annual Economic Output

\$31.6 Million in Salaries and Benefits

> 589 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Other Engine Equipment Manufacturing

 (2) Explosives Manufacturing
 (3) Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

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For every **10 jobs** support directly by the manufacturing industry, another **7 jobs** are created elsewhere in the county. \$69,852 Avg. wage across all

manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Vermillon County





\$677.5 Million in Salaries and Benefits

> 10,338 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Fats and Oils Refining and Blending
 (2) Breakfast Cereal Manufacturing
 (3) Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

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2.0 For every **10 jobs** support directly by the manufacturing industry, another **10 jobs** are created elsewhere in the county.

\$78,399 Avg. wage across all

manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Wabash County



\$164.1 Million in Total Annual Economic Output

\$14.5 Million in Salaries and Benefits

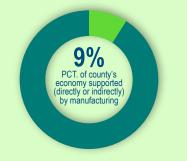
> 291 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Petroleum Refineries
 (2) Motor Vehicle Seating and Interior Trim Manufacturing
 (3) Photographic Film and Chemical Manufacturing

1.6 For every **10 jobs** support directly by the manufacturing industry, another **6 jobs** are created elsewhere in the county.

\$55,225 Avg. wage across all manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 Warren County





\$186.5 Million in Salaries and Benefits

> 2,931 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Heavy Duty Truck Manufacturing(2) Animal, except Poultry, Slaughtering(3) Meat Processing

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1.5 For every **10 jobs** support directly by the manufacturing industry, another **5 jobs** are created elsewhere in the county.

\$73,155 Avg. wage across all manufacturing jobs in

the county



The Economic Impact of Manufacturing in 2022 Washington County



\$820.5 Million in Total Annual Economic Output

\$164.9 Million in Salaries and Benefits

> 2,443 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Other Motor Vehicle Parts Manufacturing(2) Paperboard Container Manufacturing(3) Machine Shops

For every **10 jobs** support directly by the manufacturing industry, another **4 jobs** are created elsewhere in the county.

\$71,396 Avg. wage across all

manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Wayne County



\$128.4 Million in Total Annual Economic Output

\$3.4 Billion in Salaries and Benefits

445 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Pharmaceutical Preparation Manufacturing
 (2) Wet Corn Milling
 (3) Surgical and Medical Instrument Manufacturing

For every 10 jobs support directly by the manufacturing industry, another 11 jobs are created elsewhere in the county.

\$24,792 Avg. wage across all manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 White County



\$200.1 Million in Total Annual Economic Output

\$27.3 Million in Salaries and Benefits

> 609 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Other Engine Equipment Manufacturing(2) Animal, except Poultry, Slaughtering(3) Pharmaceutical Preparation Manufacturing

2.0 For every **10 jobs** support directly by the manufacturing industry, another **10 jobs** are created elsewhere in the county.

\$49,006 Avg. wage across all

manufacturing jobs in the county

16% PCT. of county's edirectly or indirectly) by manufacturing



The Economic Impact of Manufacturing in 2022 Whiteside County





\$491.0 Million in Salaries and Benefits

> 7,153 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Small Electrical Appliance Manufacturing
 (2) Switchgear and Switchboard Apparatus Manufacturing
 (3) Power, Distribution, and Specialty Transformer Manufacturing

1.6 For every **10 jobs** support directly by the manufacturing industry, another **6 jobs** are created elsewhere in the county.

\$83,611 Avg. wage across all

manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Will County





\$3.3 Billion in Salaries and Benefits

> 44,183 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Petroleum Refineries(2) Soap and Other Detergent Manufacturing(3) Other Plastics Product Manufacturing

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For every **10 jobs** support directly by the manufacturing industry, another **9 jobs** are created elsewhere in the county. \$89,267 Avg. wage across all

manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Williamson County



\$1.9 Billion in Total Annual Economic Output

\$316.8 Million in Salaries and Benefits

> 5,454 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

(1) Other Motor Vehicle Parts Manufacturing
 (2) Tire Manufacturing
 (3) Pharmaceutical Preparation Manufacturing

For every **10 jobs** support directly by the manufacturing industry, another **7 jobs** are created elsewhere in the county.

\$69,447 Avg. wage across all

manufacturing jobs in the county





The Economic Impact of Manufacturing in 2022 Winnebago County



\$11.2 Billion in Total Annual Economic Output

\$2.7 Billion in Salaries and Benefits

40,133 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Fluid Power Pump and Motor Manufacturing
 (2) Turned Product and Screw, Nut, and Bolt Manufacturing
 (3) Machine Shops

For every 10 jobs support directly by the manufacturing industry, another 9 jobs are created elsewhere in the county.

\$79,411 Avg. wage across all manufacturing jobs in the county



The Economic Impact of Manufacturing in 2022 Woodford County



\$586.8 Million in Total Annual Economic Output

\$124.1 Million in Salaries and Benefits

> 2,081 Total Jobs (Direct & Indirect)

Top 3 Manufacturing Subsectors

 (1) Pesticide and Other Agricultural Chemical Manufacturing

 (2) Plate Work Manufacturing
 (3) Machine Shops

1.5 For every **10 jobs** support directly by the manufacturing industry, another **5 jobs** are created elsewhere in the county.

\$69,641

Avg. wage across all manufacturing jobs in the county



