

CICP Dashboard User Guide

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Economic Contribution Data

This section presents key economic indicators for the selected industry cluster or industry subcluster within Indiana or any of the state's Metropolitan Statistical Areas (MSAs). MSAs, as defined by the U.S. Office of Management and Budget (July 2023 delineations), represent urban centers and their surrounding counties that are economically linked. Some Indiana MSAs are entirely within the state, while others cross state boundaries and include counties in Illinois, Kentucky, Michigan, and Ohio. The dashboard reflects the full set of counties for each MSA. The complete list of Indiana's MSAs and their associated counties is provided below.

| MSA | Counties |
|--------------------------------------|--|
| Bloomington | Monroe, Owen |
| Columbus | Bartholomew |
| Elkhart-Goshen | Elkhart |
| Evansville | Posey, Vanderburgh, Warrick |
| Fort Wayne | Allen, Wells, Whitley |
| Indianapolis-Carmel-Greenwood | Boone, Brown, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, Tipton |
| Kokomo | Howard |
| Lafayette-West Lafayette | Benton, Carroll, Tippecanoe, Warren |
| Michigan City-LaPorte | LaPorte |
| Muncie | Delaware |
| South Bend-Mishawaka (IN-MI) | St. Joseph (IN); Cass (MI) |
| Terre Haute | Vigo, Clay, Sullivan, Vermillion |
| Chicago-Naperville-Elgin (IL-IN) | Lake, Porter, Jasper, Newton (IN); Cook, DuPage, Grundy, McHenry, Will, DeKalb, Kane, Kendall, Lake (IL) |
| Cincinnati (OH-KY-IN) | Dearborn, Franklin, Ohio (IN); Brown, Butler, Clermont, Hamilton, Warren (OH); Boone, Bracken, Campbell, Gallatin, Grant, Kenton, Pendleton (KY) |
| Louisville/ Jefferson County (KY-IN) | Clark, Floyd, Harrison, Washington (IN); Bullitt, Henry, Jefferson, Meade, Nelson, Oldham, Shelby, Spencer (KY) |



Each metric provides insight into the scale and significance of the industry cluster's economic footprint in the state.

- **Direct Economic Activity** shows the direct financial contribution of the selected industry cluster to Indiana's economy in terms of total dollars and percentage of Indiana total. This metric provides insight into the size of a specific industry or industry cluster and their significance to a state economy.
- **Total Economic Activity** reflects the full economic contribution of the selected industry cluster. It includes direct activity within the industry, indirect activity from its supply chain, and induced activity from household spending by workers. This metric provides a broader view of the cluster's overall significance to the state economy.
- **Employment** is the total employment in the selected industry cluster and a percentage of the state or region's total employment. This metric captures the number of workers whose livelihoods are directly impacted by the industry or industry cluster.
- **Average Wage** shows the mean annual pay in the selected industry cluster (total wages divided by total employment). This metric allows comparison with the statewide or regional average, helping assess how wage levels in this cluster compare to others.
- **Establishments** is the number of places in which business occurs within the selected cluster. This metric captures the business density and presence of an industry or industry cluster.



Gross Domestic Product Data

Gross Domestic Product (GDP)

The total value added to the economy from producing goods and services within an industry or cluster. Changes in GDP show whether an industry cluster is growing or declining. Comparing GDP levels or shares across geographies and clusters highlights the relative health and significance of a cluster or subcluster

Real GDP Line Chart

Displays the percent change in real GDP for the selected industry cluster in Indiana compared to the United States over time. This comparison shows how the cluster's performance in Indiana aligns with or diverges from the national trend

Share of GDP Donut Chart

Shows the share of total GDP in the selected geography (state or MSA) contributed by the chosen industry cluster or subcluster. The chart highlights the cluster's relative economic importance by displaying both its percentage of total GDP and the corresponding dollar value.



Employment & Establishments Data

Employment Counts Over Time Line Chart

This line chart tracks employment trends for the selected industry cluster over the past five years through the current year, with projections extending five years. It provides insight into how employment has evolved and is expected to change, helping users identify potential growth or contraction within the cluster.

Number of Establishments by Industry Subcluster Tree Map

This treemap visualizes the distribution of establishments by subclusters within the selected industry cluster. The size of each segment represents the relative number of establishments within each subcluster, providing a quick comparison of the business footprint across different subclusters.

Employment & Wages Detail Table

Breaks down employment, wage, and growth projections for individual industries within the selected industry subcluster.

- **Industry Subcluster:** The broader category selected (e.g., Pharmaceuticals), which contains related industries.
- **Industry:** Specific industries within the selected subcluster, each with its own employment and wage data.
- **Average Annual Salary:** The mean annual pay for workers in each industry.
- **Employment (Current Year):** The number of workers currently employed in each industry.
- **Projected Employment (Future Year):** The forecasted number of workers in each industry for the selected projection year.
- **% Change:** The projected percentage increase or decrease in employment from the current year to the projection year.



Top Jobs by 5-Year Growth Projections & Average Hourly Earnings Data

Distribution of Top 100 Employed Jobs Scatter Plot

This scatter plot visualizes the top 100 employed jobs by their growth rate over the next five years and current year median hourly earnings. Each bubble represents a job role, with larger bubbles indicating occupations that employ more people in the selected area in the current year of data.

Dynamic Numbers:

- **Median Hourly Earnings (Y-Axis):** The vertical position of each bubble reflects the median hourly earnings for that occupation. Higher positions on the graph indicate higher earnings.
- **5-Year Growth Projections (X-Axis):** The horizontal position represents the projected percentage change in employment over the next five years, showing how fast each job is expected to grow.
- **Bubble Size:** The size of each bubble indicates the employment count in the area, with larger bubbles representing occupations with higher numbers of employed individuals.

Static Numbers:

- **Geography Median (X-Axis):** The horizontal axis uses the median hourly wage, based on selected geography, from the Bureau of Labor Statistics, Occupational Employment and Wage Statistics across all industries.
- **Geography Average (Y-Axis):** The vertical axis uses the average employment growth rate for jobs in all industries, based on selected geography, over the next 5 years.

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Jobs & Wages Tab



How to Gain Insights on a Specific Occupation

While the dashboard does not currently support direct querying for a specific occupation, users can still gain detailed insights on particular occupations. To do this, **navigate to the Occupational Group filter on the right side of the tab, then select the occupational group related to the job you're interested in**, which will refine the displayed data to focus on relevant occupations within that group.

This filtering approach allows you to explore wage levels, current and future employment counts for the selected occupational group, job growth projections, and entry level education requirements, providing a focused view of the occupations of interest. Apply filters to refine the data:

- **Entry Level Education:** Filter occupations by minimum education requirements.
- **Occupational Group:** Select specific occupational groups to focus on particular job categories.
- **Occupation:** Refers to specific job roles or types of work classified by Standard Occupational Classification (SOC) codes. Each SOC code represents a distinct occupation or group of related job roles, For example, SOC code 17-2141 corresponds to mechanical engineers, a detailed occupational group within the broader architecture and engineering category.

Top 10 Jobs by Employment Count (Current Year)

Lists the 10 occupations with the highest number of workers in the selected cluster for the most recent year. The chart highlights the most common roles and shows where employment is most concentrated.

Top 10 Growing Jobs by Change (Projection Period)

Lists the 10 occupations in the selected cluster expected to add the most net new jobs over the projection period. Each bar shows the job title and the expected increase in employment, highlighting roles with the largest anticipated expansion.

Top 10 Jobs by Median Wage (Current Year)

Lists the 10 highest-paying occupations in the selected cluster based on median hourly wage. The chart highlights where the most lucrative opportunities are, useful for talent attraction and workforce planning.

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Education & Demographics Tab



Demographics Data

Race Distribution

Bar chart showing the percentage of employees in the selected cluster by race, compared with the same percentages across all industries in the selected geography.

Gender Distribution

Bar chart showing the percentage of male and female employees in the selected cluster, compared with the same percentages across all industries in the selected geography.

Age Distribution

Bar chart showing the percentage of employees in the selected cluster by age group, compared with the same age groups across all industries in the selected geography.



Entry-Level Education Requirement

This section shows the minimum education typically required to enter jobs in the selected cluster.

Minimum education requirement: Refers to the lowest level of education typically needed for a worker to enter a specific occupation or job. Lightcast defines the following education categories:

- **No Formal Education:** Jobs that require no formal educational credential, such as a high school diploma or equivalent.
- **High School Diploma or Equivalent:** Jobs that require at least a high school diploma or a General Educational Development (GED) certificate.
- **Some College (No Degree):** Jobs that require individuals who have attended college or other post-secondary institutions but haven't completed a degree or credential and are no longer enrolled.
- **Post-Secondary Nondegree Award:** Jobs that require a certificate or other credential earned after completing formal post-secondary schooling (but no degree).
- **Associate's Degree:** Jobs that require a two-year degree, typically from a community college or technical school.
- **Bachelor's Degree:** Jobs that require a four-year undergraduate degree.
- **Graduate or Professional Degree:** Jobs that require advanced education beyond a bachelor's degree, such as a master's, doctoral, or professional degree.

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Share of Jobs by Education Level (Current Year)

Pie chart showing the distribution of jobs in the selected cluster by required entry-level education. Each segment represents an education level and displays both the percentage share and total job count.

Median Wage by Education Level (Current Year)

Bar chart showing the median annual wage for jobs at each entry-level education requirement. This highlights wage differences by education level within the cluster.

Count of Jobs by Education Level Over Time

Stacked area chart showing the number of jobs by entry-level education across recent years, with projections into the future. Each area represents an education level, illustrating how job requirements by education are expected to shift over time.

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Data Sources & Limitations

Here is how the industry clusters and data points in the dashboard are defined and categorized:

- **Industry Clusters:** The industry clusters are based on classifications established by the Central Indiana Corporate Partnership (CICP) and its branded initiatives: AgriNovus Indiana, BioCrossroads, Conexus Indiana, and TechPoint. These classifications allow for a focused view of Indiana's advanced industries.
 - The **advanced manufacturing cluster** includes 13 subclusters that as captured in Conexus' report ["Assessing Indiana's Progress in the Fourth Industrial Revolution."](#) These subclusters capture the full breadth of manufacturing in Indiana which overlaps with the agbiosciences, life sciences, and technology.
 - The **agbioscience** cluster includes agricultural production, value-added food, plant science and crop protection, animal health and nutrition, and agtech as captured in AgriNovus' ["Accelerate 2050"](#) report. Figures illustrative of the size and impact of the cluster and subclusters are likely undercounts due to several data limitations.
 - Agricultural production figures presented in the dashboard do not account for the [47,575 Hoosier farm proprietors](#) as of 2023.
 - Industry data classification results in some plant science and crop protection companies appearing in data associated with agricultural production. As a result, the plant science and crop protection subcluster is likely understated.
 - Many animal health and nutrition companies fall within the pharmaceutical industry. A small percentage of the pharmaceutical industry was used to estimate the size of Indiana's animal health and nutrition subcluster. This estimate almost certainly results in an understatement of the size and impact of animal health and nutrition.
 - The **life sciences cluster** includes agricultural feedstock and industrial biosciences, bioscience related distribution, medical devices and equipment, pharmaceuticals, and research, testing, and medical laboratories subclusters. For many years, BioCrossroads has made use of this industry classification to maintain consistency with the Biotechnology Innovation Organization (BIO), which readily allows for cross-state comparisons.
 - The **logistics cluster** includes freight transportation and logistics and wholesale distribution subclusters as also captured in Conexus' report ["Assessing Indiana's Progress in the Fourth Industrial Revolution."](#)
 - The **technology cluster** includes the IT/tech services; telecommunications, internet services, and data hosting; software; and computer and electronics manufacturing subclusters as defined by [CompTIA](#). TechPoint makes use of this industry classification to readily enable cross-state comparisons.
 - The **advanced and traded industries cluster** includes nearly all the industries associated with the above listed clusters as well as any additional industries that sell goods or services across state and national lines (e.g., insurance). These industries were identified in [past CICP research](#) and include and build on Indiana's strengths in the R&D and STEM-worker intensive advanced industries as identified by the [Brookings Institution](#)

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Data Sources & Limitations

- **NAICS and SOC Codes:** The data is organized according to [North American Industry Classification System](#) (NAICS) codes and [Standard Occupational Classification](#) (SOC) codes. NAICS codes are used to categorize industries, while SOC codes connect job roles to NAICS codes based on staffing patterns. This approach ensures an accurate and comprehensive representation of economic trends and workforce distribution within the industry clusters.

By using NAICS and SOC codes, the dashboard provides standardized and reliable data insights, though limitations may arise from the aggregated nature of these codes.

Data Providers

The About the Data tab lists the key data providers contributing to the dashboard's content.

Lightcast

Lightcast supplies data on Gross Domestic Product (GDP), employment, wages by industry and occupation, demographic information, and job postings. Lightcast is a leading provider of labor market analytics, ensuring that data is current and comprehensive for both historical and projected values. The dashboard utilizes the IBRC's analysis of Lightcast data.

IMPLAN

IMPLAN provides impact figures used in the dashboard. It is an economic modeling software that supplies detailed input-output data for regional economic analysis, helping users understand the economic effects of different industries and workforce segments. The dashboard utilizes the IBRC's analysis of IMPLAN data.

Quarterly Census of Employment & Wages (QCEW)

Establishment counts are sourced from the QCEW, a program administered by the U.S. Bureau of Labor Statistics (BLS). QCEW data includes detailed information on employment and wages, which contributes to accurate establishment counts within the dashboard.

All data captured and presented on the Advanced Industry Dashboard should be cited as IBRC's analysis of Lightcast, IMPLAN, and QCEW data.