CICP
Central Indiana Corporate Partnership

CICP Dashboard User Guide

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Economic Contribution Data

Key financial and employment indicators for the selected industry cluster or industry subcluster within Indiana or the Indianapolis Metropolitan Statistical Area (MSA). This section presents key financial and employment indicators for the selected industry cluster or industry subcluster within Indiana or the Indianapolis Metropolitan Statistical Area (MSA).Other metro areas will be added to a future update to the dashboard. 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 or regional economy.

- **Total Economic Activity** includes both direct and indirect effects (i.e., the supply chain) as well as induced effects (i.e., household spending by the workforce) of the industry cluster, reflecting the broader economic impact in terms of total dollars and percentage of Indiana total. This metric helps to understand the broader economic contribution of an industry or industry cluster, which aids in understanding the relative significance of an industry or cluster to a state or regional 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** provides the average annual wage (total wages paid divided by total employment) within the cluster, allowing for a comparison with the statewide or regional average wage. This metric indicates how well workers within an industry or industry cluster are paid relative to other industries or industry clusters.

- **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.

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Economic Impact Tab

Gross Domestic Product Data

Key financial and employment indicators for the selected industry cluster or industry subcluster within Indiana or the Indianapolis Metropolitan Statistical Area (MSA).

Gross Domestic Product (GDP)

The value added to the economy through the production of goods or services within an industry or industry cluster. Changes in GDP (increases or decreases) illustrate the trajectory of an industry or industry cluster. Comparing GDP changes or shares across geographies or industries can illustrate the relative health or significance of an industry cluster or industry subcluster.

Advanced & Traded Real GDP Line Chart

This line chart compares the historical to present percent change in real GDP for the selected industry cluster in Indiana versus the United States. The comparison reveals how Indiana's performance in the chosen cluster aligns with or differs from the national trend.

Advanced & Traded Share of GDP Donut Chart

This donut chart shows the selected industry cluster's portion of Indiana's total GDP. The visualization highlights the cluster's economic significance by displaying the percentage of total GDP it represents, alongside the total GDP value based on the selected cluster and geographic area.

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Economic Impact Tab

Employment & Establishments Data

This section focuses on employment counts, projections, and the distribution of establishments within the selected industry cluster, providing a detailed breakdown of workforce trends and business presence.

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 sub-sectors.

Employment & Wages Detail Table

The Employment & Wages Detail table breaks down employment, wage, and growth projections for each subcluster within the selected industry cluster.

- **Industry Subcluster:** Subclusters within the industry cluster, allowing users to explore each subcluster's specific data.
- **Average Annual Salary**: Average annual salary for each subcluster, facilitating wage comparison across different areas within the cluster.
- **Employment (Current Year):** Current employment count in each subcluster.
- **Projected Employment (Future Year):** Projected employment numbers for each subcluster, giving insight into expected workforce demand.
- **% Change:** Projected percentage change in employment from the current year to the projection year, highlighting areas of anticipated growth or decline.

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 projections over the next five years and median hourly earnings**. Each bubble represents a job role, with larger bubbles indicating occupations that employ more people in the selected area.

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, you 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, growth projections, and employment counts for the selected occupational group, providing a focused view of the occupation(s) you're interested in. 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

Top 10 jobs in terms of employment count for the most recent year for which data is available. Each bar displays the job title, and the total number of individuals employed in that role, providing insights into the most common job roles within the selected cluster, helping regions understand where most employment is concentrated and informing workforce development strategies.

Top 10 Jobs by % Change

Top 10 jobs expected to experience the highest growth rates over the next five years. Each bar shows a job title alongside its projected growth percentage, indicating which roles are anticipated to see the most significant employment increase in the coming years. The chart provides insight into future labor market trends and helps guide workforce development and education strategies to meet future demand.

Top 10 Jobs by Median Wage

This bar chart lists the **top 10 jobs by median wage**, showing the highest-paying roles within the selected cluster. Each bar displays the job title along with the median hourly wage, helping to identify lucrative occupations in the workforce, which can attract talent to a region and provide information on where high-income opportunities exist.

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Education & Demographics Tab

Demographics Data

This section presents the demographic makeup of the workforce within the selected industry cluster, helping users understand diversity in race, gender, and age.

Race Distribution

This bar chart shows the **race distribution of employees within the industry cluster.** This data is indicative of the degree to which the workforce of an industry or industry cluster reflects the broader workforce of an area. Each bar represents a racial category and displays two values:

- **% of Total Cluster-Subcluster Selected:** The proportion of each racial group within the selected industry cluster.
- **% of Total All Industries:** The proportion of each racial group within all industries for comparison.

Gender Distribution

This bar chart presents the **gender distribution in the workforce**, showing the percentage of males and females employed in the selected cluster. This data indicates the degree to which the workforce of an industry or industry cluster reflects the broader workforce of an area. It provides both the cluster-specific and all-industry percentages, allowing for a comparison of gender representation within the industry.

Age Distribution

This bar chart displays the **age distribution of employees within the selected cluster**. This data indicates the degree to which the workforce of an industry or industry cluster faces generational shifts in the workforce and labor supply. The chart is divided into different age ranges, with each bar showing the percentage of total employees in that age group. This visualization helps identify the age diversity within the industry cluster.

Entry-Level Education Requirement

The Entry-Level Education Requirement section offers insights into the educational qualifications associated with jobs in the selected cluster, including the share of jobs by education level, median wages by education, and trends over time.

- **Minimum education requirement**: Refers to the lowest level of education typically needed for a worker to enter a specific occupation or job. Lightcast categorizes these education levels into tiers that reflect the training, credentials, or academic background necessary to perform the job effectively. These tiers are:
    - **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 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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Jobs & Wages Tab

Share of Jobs by Education Level

This pie chart shows the **distribution of jobs by required entry-level education**. Each segment represents a different educational qualification (e.g., high school diploma, bachelor's degree), displaying the percentage share and total count of jobs requiring that level of education. This chart helps users understand the most common education levels required in the industry.

Median Wage by Education Level

This bar chart displays the **median wage associated with each entry-level education requirement**. Each bar represents an education level and shows the median wage for jobs requiring that qualification, allowing users to assess wage differences by educational attainment.

Count of Jobs by Education Level Over Time

This stacked area chart tracks the **count of jobs by entry-level education over the last five years, with projections extending into the future**. Each segment represents a different education level, showing how job distribution by education is expected to evolve over time within the selected cluster.

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 cluste**r includes nearly all of the industries associated with the above listed clusters as well as a 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.

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.