

OCTOBER 2024

WORKFORCE DEVELOPMENT

Indiana's economic and social health relies on preparing Hoosiers to meet current and future workforce demands. Growing the employment base in industries that drive innovation in the national economy will be crucial to accelerating income growth. Slowing population growth, stronger demand for technical skills, and competition from other states make this a challenge. Indiana must also manage geographic inequality in economic opportunity. Metropolitan areas enjoy population growth while rural counties are still trying to manage population decline.¹

Hoosiers seek jobs that pay well, provide sufficient benefits, and offer emotionally fulfilling employment. Households that contribute to the labor force, cover their bills, save money, purchase a house, fund retirement, and have access to affordable medical insurance are the backbone of a strong economy. Stable employment within a family enhances physical and mental health, improves educational outcomes for children, and decreases the probability of traumatic events such as divorce, addiction, imprisonment, or accidental death. This reduces the need for state-funded social support and strengthens the capacity to grow income. Curating a healthy, happy, generously compensated workforce is the most efficient way Indiana can ensure a bright economic future.

Good jobs are an outcome of supply and demand. Hoosiers stand ready to supply their time, energy, and commitment to a rewarding employer. Employers have jobs that produce goods and services that customers want to buy. Well-educated and well-trained employees produce high value for their employers. The more value employees create, the higher the wage their employers can afford to pay. Thriving employers successfully compete to win customers. When an employer sells more to customers in other states and countries, they earn more income for their own business as well as for Indiana. Higher income fuels faster growth in employment and economic opportunity, and good jobs

come to states with workers who are available and able to produce high value for globally competitive firms. For this, Indiana must simultaneously ensure an education system that develops workforce-ready skills and a business environment that creates, recruits, and retains world-class companies.

This brief outlines the current workforce trends in Indiana, examines challenges to workforce development, and discusses policy options to improve workforce productivity and wages.

WORKFORCE TRENDS IN INDIANA

With unemployment close to 4%,² jobs are abundant in Indiana. Between June 2023 and June 2024, total non-farm employment grew 1.5% in the state,³ just slightly below growth of 1.7% nationally.⁴ Labor force participation of 62.4% in Indiana only slightly trailed the national rate of 62.6% in June 2024.^{5,6} The average hourly earnings of workers in Indiana in June 2024 were 86% of the national average and grew at less than half the national rate during the previous year (1.4% in Indiana versus 3.9% nationwide).^{7,8} These results are consistent with an established trend.

Indiana keeps close pace with the nation in employment and labor force participation but lags the nation in wage growth. Wages lag because productivity lags, which can be attributed to insufficiently skilled workers and inadequate recruitment of high-value industries. Out of 50 states, Indiana ranks 41st in educational attainment⁹ and 38th in the share of the workforce devoted to science, engineering, and advanced technology.¹⁰

World-class companies need highly educated workers to be globally competitive, and Indiana does not provide enough of them. For example, Indiana companies only hired 5,700 tech workers in January 2022, even though they wanted

to hire 11,600 (a deficit of 49%).¹¹ Despite being ranked the 6th best state for overall business,¹² high innovation industries will not locate in Indiana unless the state supplies the needed talent. Wages Hoosiers earn will continue to fall further behind the national average until Indiana's workforce productivity grows as fast as it does in the other 49 states. Stagnant wage growth can hasten depopulation, corporate divestment, and urban decay.

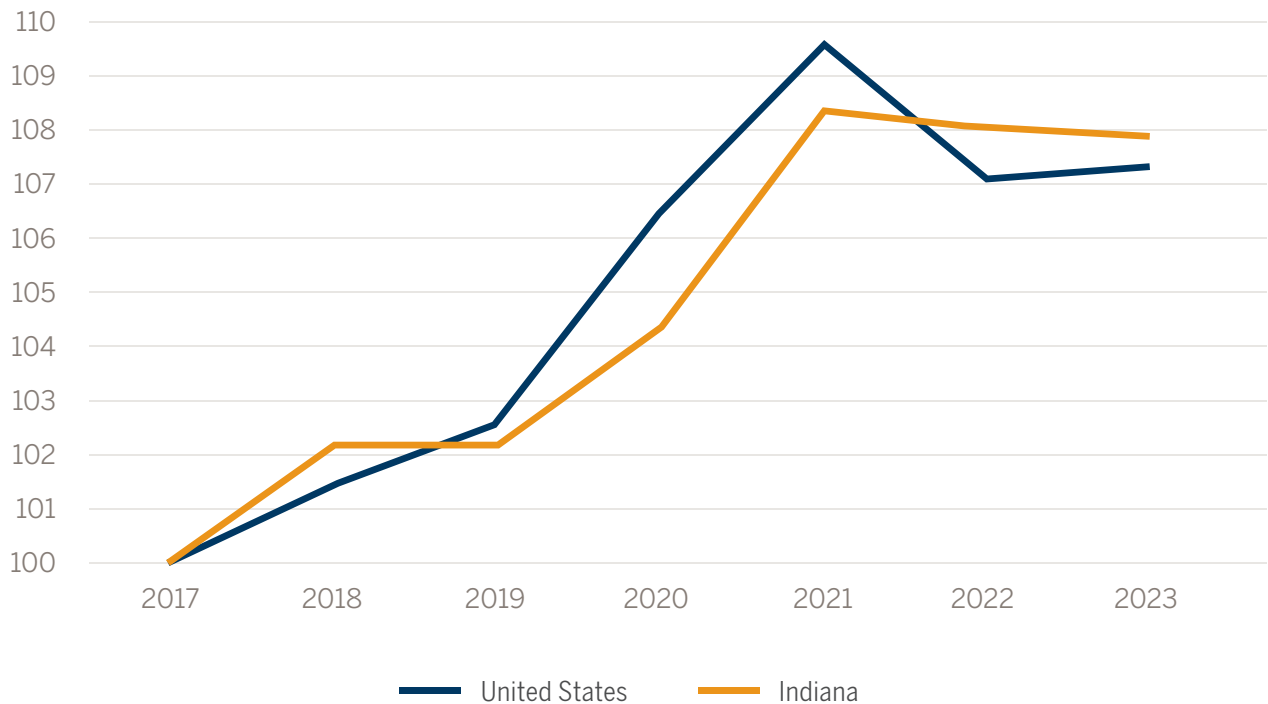
CHALLENGES TO WORKFORCE DEVELOPMENT

Indiana needs a more educated and better-trained workforce. The first challenge to this is information. The state must ensure individuals understand the money and time investments they can make to increase their earnings potential. Additionally, parents must comprehend how to position their children for career success.

The second challenge to workforce development is education. To benefit Indiana's workforce, not only must primary and secondary school curricula adequately

prepare students for the modern workplace, but higher education must also offer affordable access to degrees, diplomas, and certificates that guarantee a high-paying job. In the long run, education and training lift wages. Among the 50 states and the District of Columbia, Indiana ranks 38th in primary and secondary education funding per pupil.¹³ Charter schools and the Indiana Choice Scholarship Program provide state-funded educational options for low-income families. If smartly designed, these programs can offer a better alternative to low-performance schools for which these families are zoned.^{14,15} For high school graduates demonstrating financial needs, the Indiana 21st Century Scholars program pays up to 100% of tuition costs at an eligible Indiana college or university.¹⁶ Workforce Ready Grants make free training more accessible to Hoosier workers who cannot achieve a living wage. The depth and diversity of workforce programs available to economically challenged Hoosiers, and the funds they deploy, are measurably larger than in the recent past. Without continued innovation in public policy, employment and a living wage for every Hoosier able to work, though, remains elusive.

FIGURE 1. Relative productivity growth: Indiana versus the United States (2017–2023)



Note: Y-axis represents movement in labor productivity indexed against the baseline value in 2017. Indiana and the US have different starting points in 2017 which is set to 100. Thus, a value of 107 in a later year means cumulative growth of 7% in that region since 2017.

Source: U.S. Bureau of Economic Analysis and U.S. Bureau of Labor Statistics

The third challenge to workforce development is training. To address this challenge, adequate resources must be available for companies that want to upgrade the skills of their employees. High schools, colleges, and universities should also allow easy integration of apprenticeships, internships, and co-ops with a student's study schedule. Indiana's current governor, Eric J. Holcomb, made workforce development an early priority in his tenure announcing the Next Level Agenda in November 2017.¹⁷ This strategy launched the Governor's Workforce Cabinet and set goals for enrollment in postsecondary education and job training programs.¹⁸ New programs and initiatives currently advance Next Level priorities. As part of the Next Level Jobs Program, Workforce Ready Grants pay tuition and fees for certificate programs that elevate job skills.¹⁹ Career scholarship accounts provide high school students funds to pay for work-based learning experiences.²⁰ These accelerate the growth of apprenticeships that quickly integrate academics with workforce training.²¹ Proposed high school diploma changes also give students more flexibility to enhance the career relevancy of their courses and school schedule.²²

The fourth challenge to workforce development is retention and recruitment. The main question to consider in this regard is whether quality of life is sufficient to dissuade talented Hoosiers from migrating out of the state. If not, policy makers should evaluate whether economic and social opportunities are strong enough to convince workers in other states to move to Indiana.

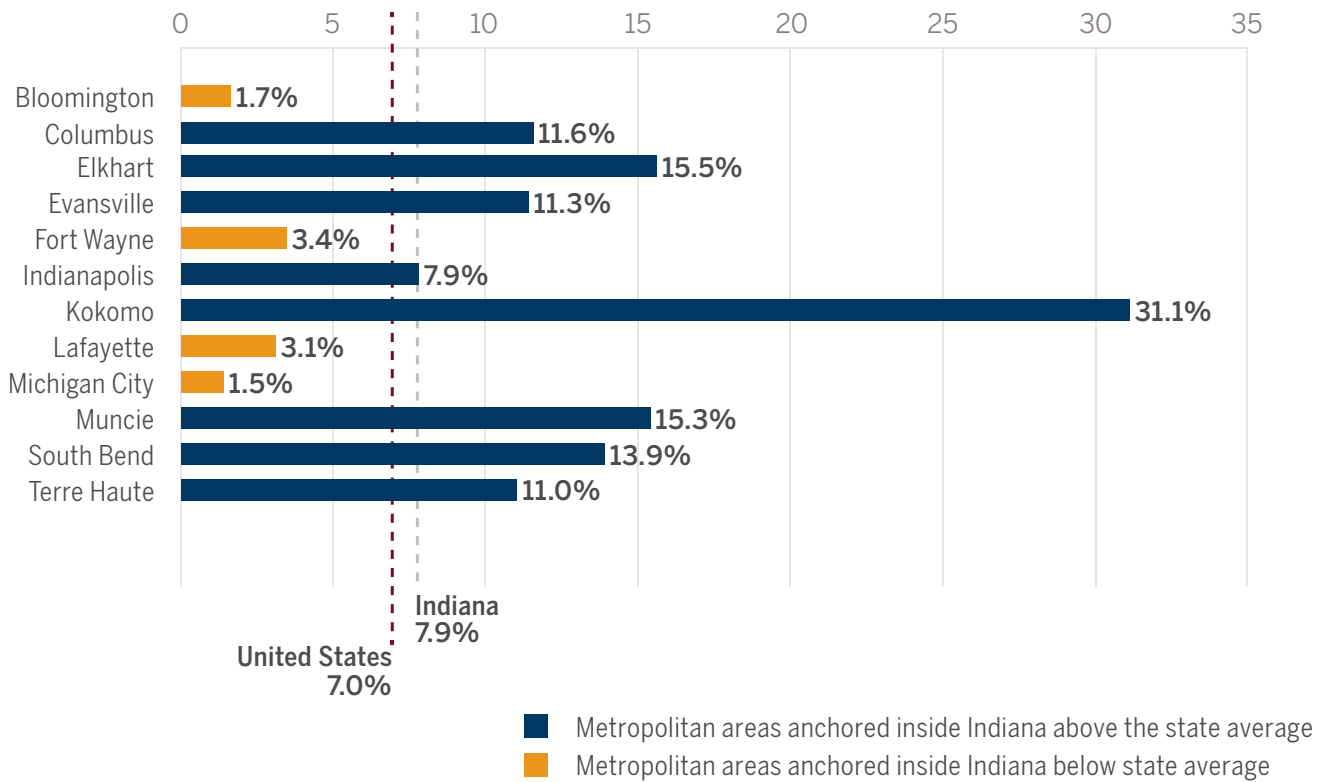
Beyond education and training, Regional Economic Acceleration and Development Initiative (READI) grants provide hundreds of millions of dollars to multi-county regions to improve quality of life in ways that attract and retain skilled talent.²³ Additionally, the Indiana Economic Development Corporation recruits companies from innovative industries like advanced manufacturing, agriculture bioscience, defense, life sciences, and logistics that offer high-paying jobs.²⁴

LABOR PRODUCTIVITY AND WAGES

Indiana's Next Level strategy achieved real labor productivity growth. Between 2017 and 2023, Indiana's growth in real labor productivity—the market value of goods and services produced in the state per worker (adjusted for inflation)—beat the nation (7.7% versus 7.2%).

Productivity also grew faster than in the nation in 8 of the 12 Indiana-anchored metropolitan areas between 2017 and 2022. These outcomes reversed a trend of productivity growth in Indiana that lagged the nation. Policy makers must prioritize workforce development programs to continue this positive trend. Figure 2 provides growth in real labor productivity for major metropolitan regions in Indiana compared with those outside the state. Real labor productivity in 7 of the 12 metropolitan areas anchored in Indiana grew at double-digit rates between 2017 and 2022. These include Kokomo, Muncie, South Bend, and Terre Haute, regions historically disadvantaged by the retreat of manufacturing that began in the 1980s. Momentum falls notably short in the regions that host the state's two largest state universities. Among the 12 metropolitan areas anchored in Indiana, real productivity growth between 2017 and 2022 was second lowest in the Bloomington region at 1.7% and third lowest in the Lafayette region (which includes West Lafayette) at 3.1%. Intensified work by Indiana University and Purdue University to fuel economic development and recruit corporate partners to their campuses can boost not-yet-realized labor productivity in the state.^{25,26} Despite this growth at the state and metropolitan levels, Indiana had a relatively low level of workforce productivity in 2022 (Figure 2). At this time, statewide real labor productivity had fallen to 87% of the national average.

FIGURE 2. Growth in real labor productivity in major metropolitan regions in Indiana compared with those outside the state (2017–2022)



Source: U.S. Bureau of Economic Analysis and U.S. Bureau of Labor Statistics

One economic truth anchors analysis of the metropolitan and state-level data. Productivity links intrinsically to wages and the latter must grow before the former. Prosperity in Indiana is directly linked to the wages workers earn. Despite a nationally recognized pro-business tax and regulatory environment, Indiana lags national growth in prosperity.²⁷ In 2007, just before the Great Recession, Hoosier workers earned 95% of the national average in hourly wages. By 2023, earnings were 88% of the national average, and Indiana’s poverty rate of 12.6% in 2022 exactly matched the nation’s.²⁸

Among all 50 states and the District of Columbia, workers in Indiana fell from being the 29th best paid in 2007 to the 35th best paid in 2023. Wages in Indiana also lag adjacent states. Workers in Illinois, Michigan, and Ohio earned 99%, 92%, and 91% of the national average respectively in 2023 compared to 88% in Indiana. Average hourly earnings were only lower in Kentucky, at 84% of the national average.

These percentages confirm Indiana’s comparatively low average earnings observed in Figure 3.

While Indiana’s Next Level strategy achieved real labor productivity growth faster than the nation, this did not translate into faster wage growth. Nominal wages grew 18.3% in Indiana from 2017 to 2022 versus 22.6% nationwide. Indiana’s wage growth more closely matches that of its neighbors. Wage growth of 49% in Indiana between 2007 and 2023 beat 45% in Illinois and Michigan but lagged 52% in Ohio and 59% in Kentucky (Figure 4). Average hourly earnings grew 49% in Indiana, while they grew 61% nationwide. Only 13 states grew faster than Kentucky during this time.

FIGURE 3. Real labor productivity and hourly earnings as a percentage of U.S. average

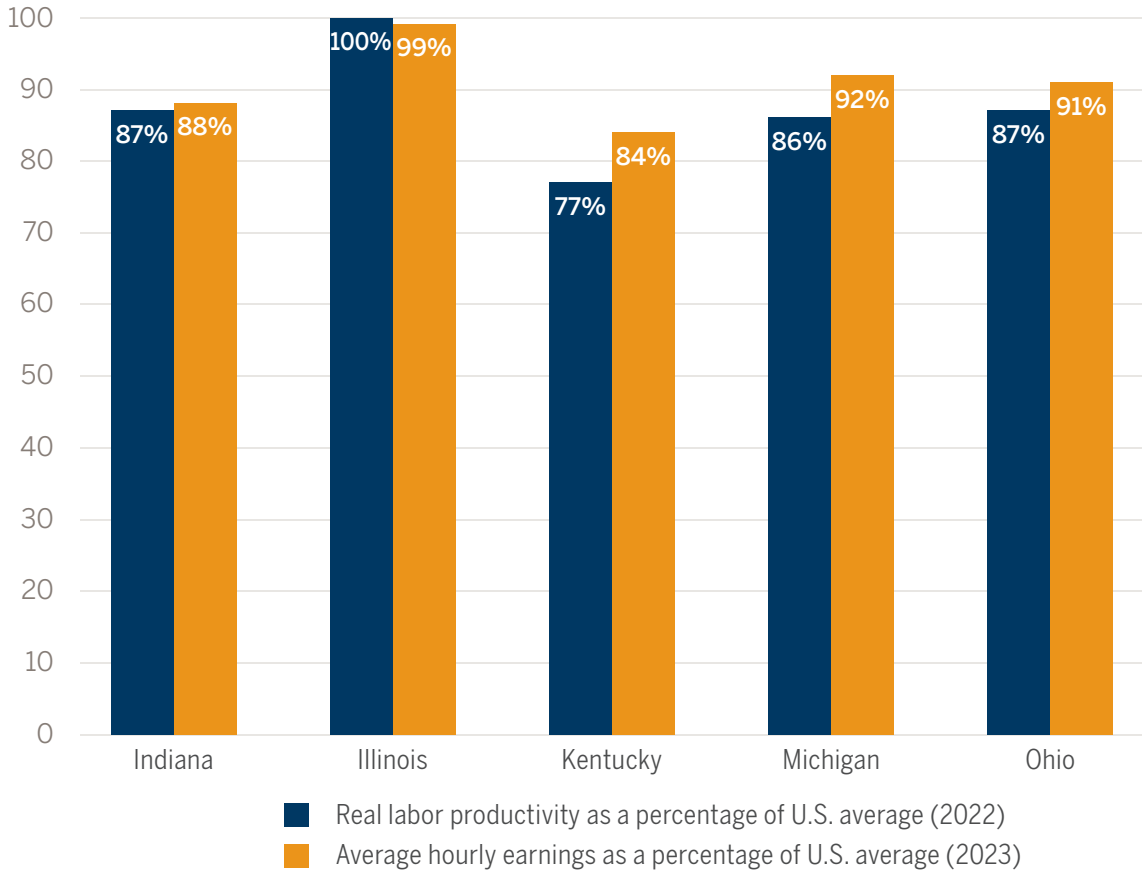
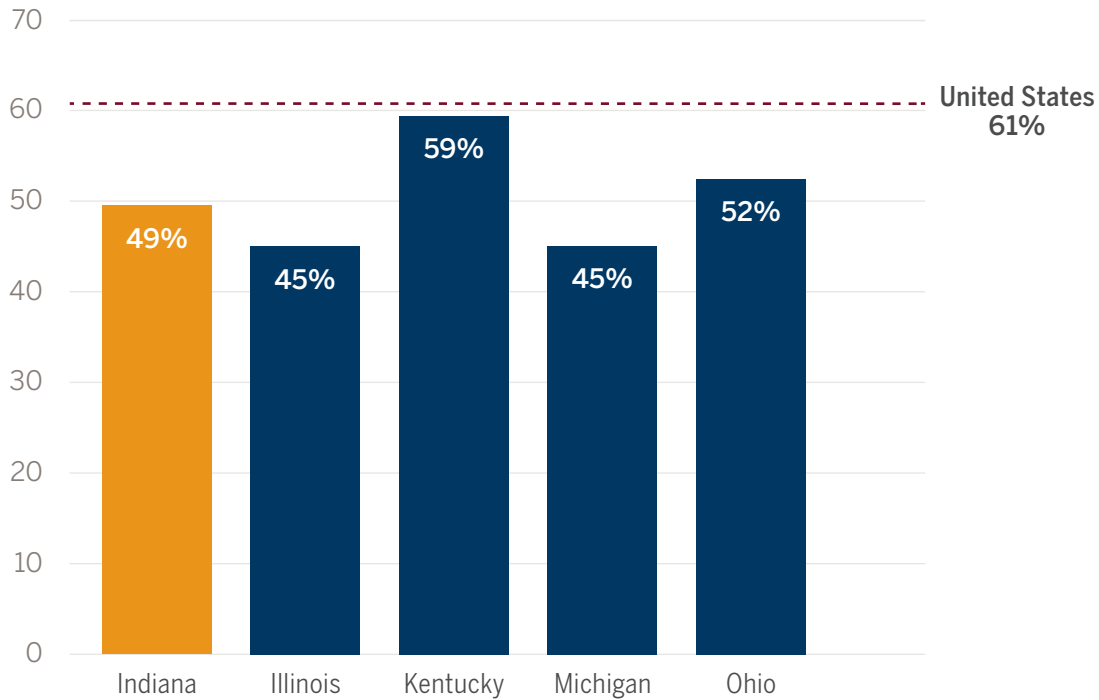


FIGURE 4. Average wage growth in Indiana and neighboring states 2007–2023



Source: U.S. Bureau of Economic Analysis and U.S. Bureau of Labor Statistics

Access to stable employment with a living wage and health insurance is the best path out of poverty. The living wage in Indiana for a single adult head of household with two children is \$44.16 per hour. The legislated minimum wage is \$7.25 in Indiana.²⁹ The average Hoosier earns \$30.07 per hour.³⁰ The workforce challenge for low-income Hoosiers is not access to a job—they are plentiful. The challenge is access to a job with sufficient pay.

In the short run, lawmakers can raise the minimum wage, but government-mandated higher wages can accelerate employers' technological automation of work and reduce employment opportunities.³¹ A rise in wages without an increase in productivity also reduces profit and destroys stockholder value.

Tax abatements for employers who create jobs paying higher wages present a creative alternative. The city of Indianapolis' Inclusive Incentives is an example of such a program.³² Under such a policy design, only new firms moving into a region or existing firms expanding employment receive tax reductions if they contractually promise to pay workers a living wage determined by the city or county. The pay for a living wage is significantly higher than the pay required to supply a legislatively mandated minimum wage.

Because wages paid to workers cannot exceed the revenue value of what they produce in a profitable business, an upturn in productivity must precede a rise in wages. A worker with higher productivity generates more output per hour and therefore earns a higher wage. Highly productive workers benefit all business stakeholders as greater output increases revenue and consequently profit. Higher revenues reduce the cost to produce a unit of output and allow a firm to reduce its price to be more competitive. Lower prices benefit customers and combat inflation.

Initiatives to raise wages cannot be justified without an increased market value of goods produced in Indiana or higher productivity of time spent in the workplace. Without this, the state can risk losing its competitive edge in the market. Although wages are not growing faster in Indiana than in the nation, the state is at a point where productivity is finally growing faster than in the nation. This is important good news. Policy makers must focus resources on improving the efficiency of existing programs and policy

options over increasing investment in new programs to move beyond mediocre returns. To alleviate poor wages, the state needs policy interventions targeting the root causes of lagging economic performance. Therefore, any public strategy to raise wages also must be a strategy to increase labor productivity. If the state continues to focus on productivity growth, wage growth will naturally flow. It is just a matter of time.

ELEVATING INDIANA'S MARKET COMPETITIVENESS AND LABOR PRODUCTIVITY

While education and training are important, recruiting and retaining world-class companies in targeted industries should be a primary policy focus for Indiana to increase the market value of goods produced in the state and elevate labor productivity. A competitive state exports products that buyers outside the state highly value. These products come from industries that leverage the state's historical and geographical competitive advantage.³³ World-class companies in tradable industries that attract most buyers from outside Indiana need highly skilled talent. Competitiveness in industry requires employers to use new technology in the workplace. Implementing new technology automatically lifts labor productivity. Therefore, promoting such industries will benefit the state. To increase wages, state policy makers must incentivize growth in these tradable industries.

When companies consider where to establish their operations, talent surfaces as an important factor.³⁴ Average educational attainment determines to a high degree how much talent a region possesses and predicts its eventual economic destiny. Nurturing talent requires public schools with curricula that endow high school graduates with baseline workforce-ready skills. Programs that allow students to count time spent in apprenticeships and internships toward diploma requirements are necessary elements of such curricula.³⁵ Affordable and accessible academic programs at universities and community colleges can improve regional talent pipelines. Such academic programs can attract students before they leave high school and improve their chances of attaining high-paying jobs with postsecondary qualifications employers value.

Upskilling an existing workforce requires large amounts of time and resources. Retaining university graduates within the state or recruiting workers from other states offers faster and more efficient ways to increase labor productivity. Indiana ranks 14th in the nation in university student recruitment from other states but only 40th in retaining them.³⁶ Since 61% of university graduates in the nation prefer to work close to where they went to school,³⁷ extraordinary investment in finding these students fulfilling careers within Indiana companies should deliver high economic returns for the state. Investment in public infrastructure that elevates quality of life will not only convince Indiana college graduates to stay but also persuade more skilled workers to relocate to the state. Indiana ranks 15th highest in the nation for affordability³⁸ and 14th lowest for tax burden.³⁹ These two factors give the state a competitive advantage in attracting new residents.

RECOMMENDATIONS FOR A BRIGHTER FUTURE:

Workforce development has been a policy priority for the Holcomb administration. Economic logic requires it to remain a priority for the next governor. Hoosier wages have grown slower than the nation. Incomes for Hoosier households will fall further and further behind until this is reversed. The economic value employees generate determines the wage they receive from their employers.

Wages, therefore, cannot increase unless the productivity of Hoosier workers increases multi-fold. To lift productivity, Indiana must recruit and retain world-class companies that bring new-generation technology to the workplace.

Education and training, though, are the most important drivers. For the state, how efficiently agencies and institutions deliver services is as important as the resources allocated to them. Making the public aware of programs and coordinating activities across agencies should be a primary focus for state government. The state should also hold the agencies and institutions involved—especially educational providers—accountable for improving workforce quality. Additional state funding may not always prove most effective in improving outcomes, especially as state reserves hit their lowest level since 2020.⁴⁰ Efficient focus on programs that increase labor productivity—especially in economically challenged communities—guarantees continued momentum in work to lift Indiana’s workforce.

REFERENCES

- 1 Kinghorn, M. (2024.) Indiana population projections to 2060. *Indiana Business Review* 99(2). <https://www.ibrc.indiana.edu/ibr/2024/summer/article1.html>
- 2 Federal Reserve Bank of St. Louis. (2024). *Unemployment rate in Indiana*. Federal Reserve Economic Database (FRED). <https://fred.stlouisfed.org/series/INUR>
- 3 Federal Reserve Bank of St. Louis. (2024). *All employees: Total nonfarm in Indiana*. Federal Reserve Economic Database (FRED). <https://fred.stlouisfed.org/series/INNA#0>
- 4 Federal Reserve Bank of St. Louis. (2024). *All employees: Total nonfarm in Indiana*. Federal Reserve Economic Database (FRED). <https://fred.stlouisfed.org/series/PAYEMS#0>
- 5 Federal Reserve Bank of St. Louis. (2024.) *Labor force participation rate for Indiana*. Federal Reserve Economic Database (FRED). <https://fred.stlouisfed.org/series/LBSSA18>
- 6 Federal Reserve Bank of St. Louis. (2024). *Labor force participation rate*. Federal Reserve Economic Database (FRED). <https://fred.stlouisfed.org/series/CIVPART>
- 7 Federal Reserve Bank of St. Louis. (2024). *Average hourly earnings of all employees: Total private in Indiana*. Federal Reserve Economic Database (FRED). <https://fred.stlouisfed.org/series/SMU18000000500000003>
- 8 Federal Reserve Bank of St. Louis. (2024). *Average hourly earnings of all employees: Total private*. Federal Reserve Economic Database (FRED). <https://fred.stlouisfed.org/series/CES0500000003>
- 9 *Best States Rankings—Educational attainment*. (2024). U.S. News and World Report. <https://www.usnews.com/news/best-states/rankings/education/higher-education/educational-attainment>
- 10 Milken Institute. (2022). *State and Technology Index—Indiana*. <https://statetechandscience.org/statetech2022.taf?page=state&state=IN>
- 11 TechPoint. (2024). *Tech workforce interactive data visualization*. Indiana Tech Workforce Data. <https://techpoint.org/indiana-tech-workforce-report/>
- 12 Chief Executive. (2024). *Best and worse states for business*. <https://chiefexecutive.net/best-worst-states-business/>
- 13 Hanson, M. (2024, July 24). *U.S. public education spending statistics*. Education Data Initiative. <https://educationdata.org/public-education-spending-statistics>
- 14 State of Indiana. (2024). *Indiana Charter School Board*. <https://www.in.gov/icsb/>
- 15 Indiana Department of Education. (2024). *Indiana Choice Scholarship Program*. <https://www.in.gov/doe/students/indiana-choice-scholarship-program/>
- 16 Indiana Commission for Higher Education. (2024). *21st Century Scholars*. Learn More Indiana. <https://learnmoreindiana.org/scholars/>
- 17 Governor Eric Holcomb. (2017, November 8). *Next Level 2018 Agenda*. <https://www.in.gov/gov/files/Final%20Agenda%20Handout.pdf>
- 18 Holcomb hits some workforce goals, still faces hurdles on others. (2019, January 24). *Indianapolis Business Journal*. <https://www.ibj.com/articles/72184-holcomb-hits-some-workforce-goals-still-faces-hurdles-on-others>

- 19 Next Level Jobs. (2024). *Workforce Ready Grant: How it works for Hoosiers*. <https://www.in.gov/dwd/nextleveljobs/workforce-ready-grant/>
- 20 Indiana Treasurer of State. (2024). *Career Scholarship Account (CSA)*. <https://www.in.gov/tos/csa/>
- 21 Charron, C. (2024, May 22). Workforce, education leaders tout importance of robust apprenticeship programs. *Indianapolis Business Journal*. <https://www.ibj.com/articles/workforce-education-leaders-tout-importance-of-robust-apprenticeship-programs>
- 22 Indiana Department of Education. (2024, March 27). *Indiana becomes first state to significantly redesign diplomas* [Press release]. <https://www.in.gov/doe/about/news/indiana-becomes-first-state-to-significantly-redesign-diplomas/>
- 23 Indiana Economic Development Corporation. (2024). *Regional Economic Acceleration and Development Initiative*. <https://www.iedc.in.gov/program/indiana-readi/overview>
- 24 Indiana Economic Development Corporation. (2024). *Industries*. <https://iedc.in.gov/>
- 25 Indiana University. (2023, October 10). *IU to invest \$111M to boost U.S. microelectronics sector, drive economic competitiveness*. [Press release]. <https://news.iu.edu/live/news/31928-iu-to-invest-111m-to-boost-us-microelectronics>
- 26 Vaughan, B. (2023, December 18). How Purdue University helped bring a 'hard tech corridor' to the heartland. *Fast Company*. <https://www.fastcompany.com/91000119/how-purdue-university-helped-bring-a-hard-tech-corridor-to-the-heartland>
- 27 Indiana Chamber Foundation. (2023, December). *Indiana Prosperity 2035: A vision for economic acceleration, report card*. https://www.indianachamber.com/wp-content/uploads/2023/12/INProsperity2035_ReportCard23.pdf
- 28 Benson, C. (2023, December). *Poverty in states and metropolitan areas: 2022*. United States Census Bureau. <https://www.census.gov/content/dam/Census/library/publications/2023/acs/acsbr-016.pdf>
- 29 Glasmeier, A.K. (2024). *Living wage calculation for Indiana*. Massachusetts Institute of Technology. <https://livingwage.mit.edu/states/18>
- 30 Federal Reserve Bank of St. Louis. (2024). *Average hourly earnings of all employees: Total private in Indiana*. Federal Reserve Economic Database (FRED). <https://fred.stlouisfed.org/series/SMU18000000500000003>
- 31 Congressional Budget Office. (2024, January 30). *How increasing the federal minimum wage could affect employment and family income*. <https://www.cbo.gov/publication/55681>
- 32 City of Indianapolis. (2024). *Inclusive incentives—Tax abatement*. Indy.gov. <https://www.indy.gov/activity/inclusive-incentives>
- 33 Porter, M.E. (1998). Clusters and the new economics of competition. *Harvard Business Review* 76(6): 77–90. <https://hbr.org/1998/11/clusters-and-the-new-economics-of-competition>
- 34 Parilla, J. & Liu, S. (2019, October). *Talent-driven economic development: A new vision and agenda for regional and state economies*. Metropolitan Policy Program, The Brookings Institution. https://www.brookings.edu/wp-content/uploads/2019/10/2019.10.15_Brookings-Metro_Talent-driven-economic-development_Parilla-Liu.pdf

- 35 Lerman, R.I. (2019, February 4). *Scaling apprenticeship to increase human capital*. The Aspen Institute. <https://www.aspeninstitute.org/longform/expanding-economic-opportunity-for-more-americans/scaling-apprenticeship-to-increase-human-capital/>
- 36 Lowery, C. (2023, April 4). *2023 State of Higher Education Address: The HOPE Agenda—Hoosier opportunities and possibilities through education*. Indiana Commission for Higher Education. https://learnmoreindiana.org/wp-content/uploads/2023/04/230404_State-of-Higher-Education-Address_Full-Text-1.pdf
- 37 Tallo. (2022, May 10). Where do students want to live after graduation? <https://tallo.com/data-insights/where-high-school-college-students-live-after-graduation/>
- 38 *Best States Rankings—Affordability* (2024). U.S. News and World Report. <https://www.usnews.com/news/best-states/rankings/opportunity/affordability>
- 39 York, E. & Walczak, J. (2022, April 7). *State and local tax burdens, calendar year 2022*. Tax Foundation. <https://taxfoundation.org/data/all/state/tax-burden-by-state-2022/>
- 40 Downard, W. (2024, July 23). Indiana’s reserve funds projected to hit post-pandemic low. *Indiana Capital Chronicle*. <https://indianacapitalchronicle.com/2024/07/23/indianas-reserves-funds-projected-to-hit-post-pandemic-low/>



INDIANA UNIVERSITY PUBLIC POLICY INSTITUTE

The IU Public Policy Institute delivers unbiased research and data-driven, objective, expert policy analysis to help public, private, and nonprofit sectors make important decisions that impact quality of life in Indiana and throughout the nation. As a multidisciplinary institute within the Paul H. O’Neill School of Public and Environmental Affairs, we also support the Center for Civic Literacy (CCL), Center for Health & Justice Research (CHJR), the Center for Research on Inclusion & Social Policy (CRISP), and the Manufacturing Policy Initiative (MPI).

AUTHORS

Philip Powell, Indiana Business Research Center

PREPARED BY

Nidhi Arun, Program Analyst

Elizabeth J. Van Allen, Technical Writer

Claire Menard, Graphic Designer

Medhavi Thakur, Graphic Designer

Emanuel Vargas, Graphic Designer



719 Indiana Avenue, Suite 302
Indianapolis, IN 46202

Phone: (317) 278-1305

Email: iuppi@iu.edu

policyinstitute.iu.edu

Follow us on X

[@IUPublicPolicy](https://twitter.com/IUPublicPolicy)

LinkedIn

[Indiana University Public Policy Institute](https://www.linkedin.com/company/indiana-university-public-policy-institute)

Watch what 2024 gubernatorial
candidates say about workforce
development

go.iu.edu/forum2024workforce