




Indiana GPS Project Key Findings and Recommendations

Indiana's economy is at an inflection point. Fortunately, our state has a solid foundation on which to build. There are, however, challenges that need to be addressed with urgency and intentionality.



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The Path to Growth and Prosperity in our State



INDIANA GPS
PROJECT 

When it comes to the global economy, and the accelerating market and technology trends so rapidly reshaping it today, Indiana stands not only at the crossroads of America, but at the center of the world.

Of course, our Hoosier modesty makes such a statement hard to accept, but it is nonetheless true. This is because Indiana is both the most manufacturing-intensive state in the country and one of the nation's top three leading centers for the globally traded advanced industries. With specializations in automotive manufacturing, logistics, agribusiness, bioscience, medical equipment and devices, and defense, Indiana is one of the nation's most prolific exporting states. For example, when it comes to pharmaceutical and medical products, Indiana exports more each year than any other place in America except California—despite our much smaller size.



Advanced industries—which, in addition to generating massive exports, also hire more STEM-skilled employees, invest more in research and development, and pay more taxes and far better wages—are outsized economic drivers for any state. The good news is that Indiana has them in abundance. In fact, these

advanced industries are everywhere, broadly distributed throughout every region of the state and in all of our 92 counties. Because of this, the Indiana GPS Project focuses on 11 regions within the state, each centered around one or two metropolitan areas.

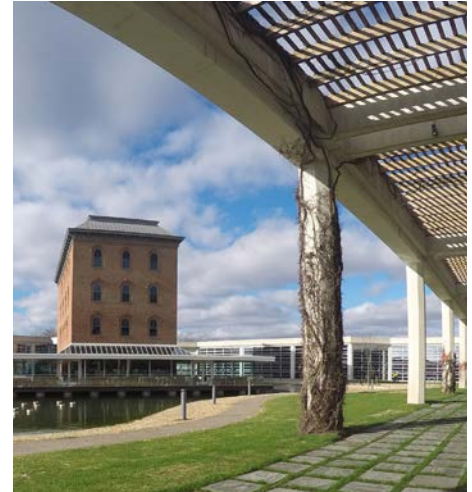
While the word metropolitan may connote high-rise buildings in coastal cities, the fact is that Indiana is home to 15 metro areas that include almost 50% of the state's counties while serving as the home for about 80% of our population. In recent years, Indiana has made a point of pursuing strategies in which metro areas serve as anchors around which multiple counties, both urban and rural, pursue regional development activities—an approach that makes sense given that metro areas are determined following analyses of labor markets and other indicators of shared economic activity. While Indiana's regions share some similarities, including a substantial statewide presence of advanced industries (in large part due to our intensive manufacturing sector), each region has its own unique economic attributes, sectors of strength, and current and future challenges.

Many of these challenges stem from the market and technology trends that position Indiana at the center of the global economy. Indiana should be proud of its advanced industries as they have been painstakingly built over many years by Hoosiers who know how to invent, how to make things, and how to work hard. Yet because these industries are so heavily influenced by global economics and advanced (and rapidly advancing) technologies, they are also, by their very nature, dynamic. Our dominance in them is never secure, and always demands additional focus and investment. And the very technologies that drive them today are also sources of disruption tomorrow.

The strong possibility of future disruption was made clear in two reports released in 2019 by the Brookings Institution's Metropolitan Policy Program. These reports, which respectively assessed the potential impacts of [automation](#) and [artificial intelligence](#), found Indiana to be the state most susceptible to seeing the effects of these increasingly important technologies. These reports closely followed another Brookings report, published in 2018, that found Central Indiana to have an insufficient number of ["good" jobs](#) paying a regionally adjusted, family-supporting wage, thus highlighting the potential consequences of economic disruption. These reports are among several that

suggest Indiana—and the middle of the country more generally—face future economic uncertainty. Our traditional industry strengths can also lead to some of our greatest economic challenges unless we are willing to take bold and intentional action to maintain and expand opportunities for even more of our citizens—and not only in advanced industries, but also in other sectors that generate truly good jobs for Hoosiers.

The Central Indiana Corporate Partnership (CICP) launched the Indiana GPS Project late in 2019 in hopes of offering some clarity in the midst of this uncertainty. With the generous support of Lilly Endowment Inc., CICP engaged expert researchers at the Brookings Institution and American Enterprise Institute (AEI) to undertake independent and in-depth studies designed to provide compelling data around key economic indicators that will aid in charting a path forward for Indiana.



AEI completed three studies: one looking at the state's demographic trends, another surveying Hoosier and national views on community and civic life, and a third, in conjunction with the Economic Innovation Group (EIG), assessing the state's Opportunity Zones. Meanwhile, Brookings developed a single, comprehensive study that takes an unprecedented deep and data-driven look at Indiana's economy—in all 92 counties—and key issues affecting both the state's industries and its workforce. Taken together, all four Indiana GPS Project studies make clear that Indiana's economy is at an inflection point. Fortunately, our state has a solid foundation on which to build. There are, however, challenges that need to be addressed with urgency and intentionality.

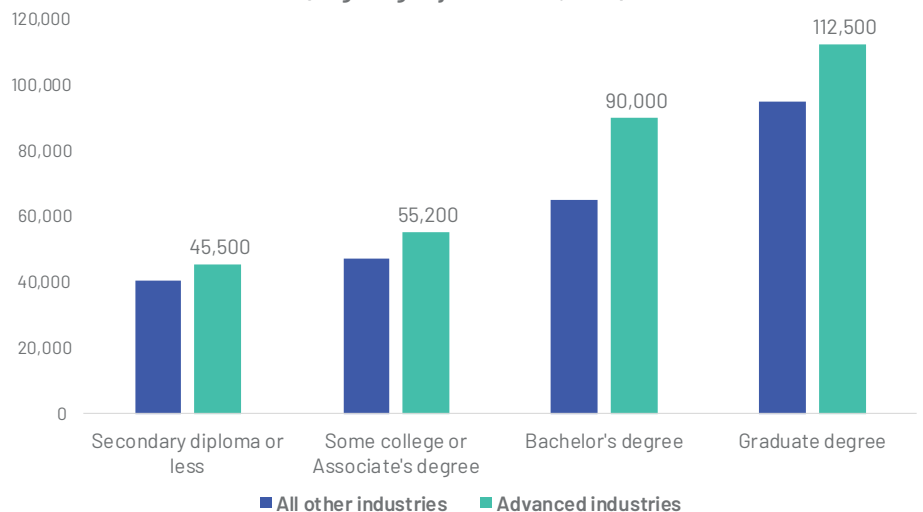
Key Findings

While Indiana is fortunate to have the third-highest concentration of employment in advanced industries, these industries have been losing a productivity advantage relative their counterparts in other states since at least 2007. A team of Brookings scholars found that Indiana’s advanced industries have been losing a productivity advantage over the past several years as their output per worker has declined relative to counterparts in other states. This lost productivity advantage is particularly concerning given the outsized role advanced industries have on Indiana’s economy. While such industries employ about 11%

And because of the state’s manufacturing legacy, these jobs are found in every region the state, from Elkhart to Evansville. The immense and positive impact of our advanced industries on the state economy underscores the need to do something about their productivity drift.

Indiana ranked just 37th among states for both its advanced-sector and whole-economy annual IT investment per employee—a factor that most likely contributes to the declining productivity advantage of our advanced industries. The Brookings team believes advanced industry

Advanced industries offer better pay across all education levels (Avg. wage by education, 2018)



SOURCE: Brookings Institution

of all Indiana workers, they make up 25% of the state’s GDP and are responsible for 60% of the state’s exports. Moreover, their long supply chains and multiplier effects are responsible for hundreds of thousands of jobs in other industries—so much so that, in total, Indiana’s advanced industries are directly or indirectly responsible for more than 1 million jobs.

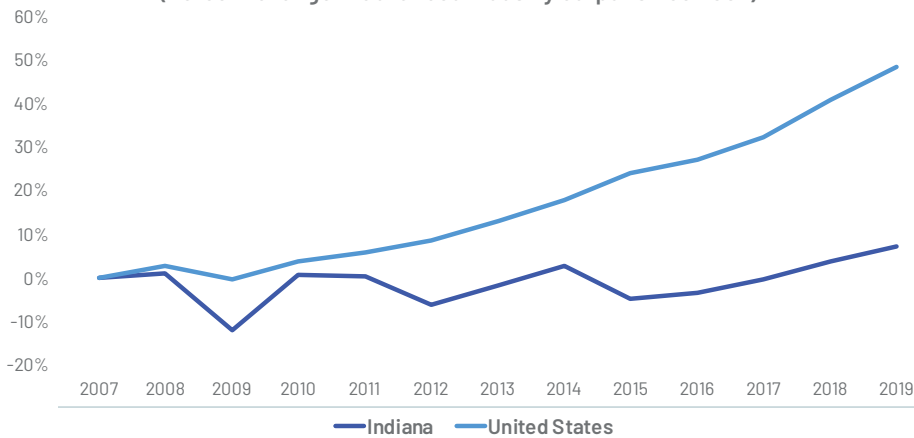
productivity drift is likely caused, at least in part, by an under-investment in technology. New analysis completed for this project shows that, while Indiana is third in the nation in terms of concentration of advanced industries in our economy, we ranked just 37th

among states in both our advanced-sector and whole-economy annual per employee IT investment. What is more, this underinvestment seems to be occurring in businesses of all sizes—small, medium, and large alike.

services employment—again, despite being third in overall advanced industry employment—a finding that clearly calls for diversification of our advanced industry base in addition to efforts to bolster the state’s manufacturing

2015—a full 15 years after the onset of the 2000–2001 recession and seven years after the start of the Great Recession. This is particularly worrisome given the slowdown prompted by the COVID-19 pandemic. Fortunately, early data indicates that Indiana has regained jobs lost due to the pandemic-related shutdowns at a quicker clip than nation as whole.

**Indiana’s advanced industries are losing competitiveness
(Percent change in advanced industry output since 2007)**



SOURCE: Brookings Institution

Within the state’s advanced industries, advanced services have seen increased productivity, but Indiana is just 41st in the nation in advanced services employment. Brookings also finds that the state’s heavy reliance on advanced manufacturing over advanced services likely presents additional challenges. This is because Indiana’s advanced sector productivity drift is being driven entirely by our advanced manufacturing sector as defined by the Brookings team. Our advanced services sector—which is driven by software, business marketing services, and scientific research—has seen productivity increases in recent years. But the state ranks 41st in advanced

sector. Relatedly, Brookings finds that Indiana ranks low (in the bottom third of all states) in the digitization of its economy as a whole.

The state’s recent (pre-pandemic) employment growth was stronger than our neighbors, but like our neighbors, Indiana’s employment growth lagged the nation, particularly in the wake of prior recessions. A further look at the economy as a whole yields other concerning findings. Over the last few years, Indiana has had better job growth than our neighbors—something that has not been the case when looking back further. Specifically, the Brookings team finds that Indiana has been slow to regain employment in the wake of past recessions. This is made clear by the fact that the state did not recover peak employment experienced prior to the 2000–2001 recession until May

Among all states, Indiana has the lowest share of employees working at new firms as well as more older firms than young firms—a trend that runs opposite to the country as a whole. While these early signs of post-pandemic recovery are positive, the state’s mixed record on employment growth sounds a cautionary note.

Despite recent job gains, there is some indication that the rate of recovery is waning and that the state may not be on track to replace all jobs lost. While this is worrisome on its own, it is made more so by findings from Kenan Fikri and the team from AEI/EIG who discovered that Indiana is last in the nation when it comes to the share of employees working at new firms. Brookings, meanwhile, finds that Indiana has more employer firms that are 16 years old or older than it has firms fewer than five years old—a trend that runs opposite to the country as whole. Together, these findings raise questions about the state’s dynamism and its ability to create additional new jobs in the wake of the COVID-prompted slowdown.

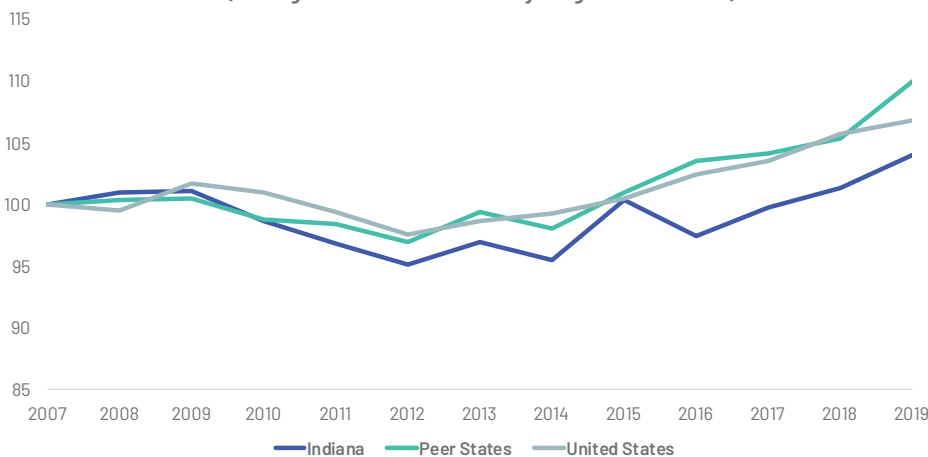
Like all states, Indiana has too few good jobs, with only 42% of Hoosier workers holding a job that provides a regionally adjusted, family-supporting wage and employer-sponsored health insurance. This prospect of a potential overall shortage of jobs in the near-term is complicated by the state's chronic and longer-term lack of producing more "good" jobs. Building on past Indiana-specific research, Brookings finds that almost 60% of Hoosier workers fail to hold a good job that provides a regionally adjusted, family-supporting wage and employer-sponsored health insurance. This is not Indiana's problem alone; in fact, Indiana rates in the second quintile among all states (16th overall) for good jobs. At the same time, however, the state's real median annual earnings growth was 46th in the nation over the period from 2000 through 2019—a fact that does not bode well for efforts to increase the number of good jobs.

The ability to secure a good job may be limited by educational attainment, and Hoosiers tend to overvalue a high school diploma and undervalue a four-year college degree. Looking further at the state's good jobs, Brookings finds that these jobs are typically and disproportionately held by those with four-year college degrees, with additional disparities cutting predictably across lines of sex and race. These findings—particularly those related to education—may portend obstacles to increasing the number of Hoosiers holding good jobs. This is because Brookings also finds a misalignment in the state's labor market, with firms demanding more post-secondary workers than this market can supply. Moreover, survey research from Dan Cox and colleagues at AEI found that Hoosiers, to a degree greater than Americans in any other region of the country, place more value in a high school diploma and less in a

four-year degree. That said, the state's industry mix does enable workers without a college degree access to good jobs. Over half of all sub-baccalaureate workers in a good job are employed in utilities, manufacturing, construction, and logistics. Unfortunately, the state's industry mix has increasingly shifted towards much lower-paying service sectors.

A skilled workforce—and a growing population more generally—is needed to ensure a growing and dynamic economy in the years ahead. Finally, AEI's Lyman Stone finds Indiana to be in the middle of a short window during which the state can decide to invest in ongoing and future population growth or take its chances and risk a future with almost certain population decline. Unlike many neighboring states which have fairly established population trajectories, Stone believes Indiana has it within its power to assure ongoing growth through any number of interventions, including efforts to retain and attract people to the state and its regions while also supporting families (thus encouraging the birth of more children) and taking other steps to boost population growth—steps that should, in sum, also prove to enhance economic dynamism.

**Indiana lags neighbors and the nation in wage growth
(Change in real median hourly wages since 2007)**



SOURCE: Brookings Institution

Research-driven Recommendations



Strategic and focused investments and interventions can increase the state's chances of stronger, inclusive economic growth if they are pursued intentionally and collaboratively across all economic sectors, all regions and all levels of government, and private companies and employers. For purposes of the Indiana GPS Project, the Brookings team has developed a set of recommendations organized around three pillars that encourage the state to:

- **Keep up on digital adoption** to drive economic growth and dynamism, bolstering the state's advanced industries, equipping workers with up-to-date skills, and ensuring broadband connectivity.
- **Promote favorable job-creation and worker transitions** to rewire the economy through focusing on advanced industry growth strategies, enhancing support for entrepreneurs, making better use of unemployment insurance, and continuing key workforce development efforts.
- **Do more to support workers who aren't in good jobs** by enhancing the state's Earned Income Tax Credit, exploring Medicaid buy-in enacting a childcare agenda and state-sponsored IRA, and encouraging employers to create more good jobs.

To their credit, State leaders are already pursuing a number of efforts related to these recommendations. Manufacturing Readiness Grants recently made available through the Economic Activity Stabilization and Enhancement (EASE) program have helped manufacturers across the state

make technological investments, the State has invested \$100 million in the Next Level Connections Broadband program, and the Governor recently announced plans to pursue the Next Level Regional Recovery program that will invest in state regional development efforts. Beyond State-level action, the Brookings team also identifies actions that can and should be taken at the regional level as well as by Indiana's employers.

Under its digital adoption pillar, for example, Brookings notes that regional leaders and local industry networks can play a critical role as they are well positioned to facilitate digital adoption awareness; organize networking, learning, and coaching opportunities; leverage local technology organizations, including university-sponsored initiatives, to provide expert advice; and continue leading creative efforts to improve digital skills and increase broadband availability. To promote favorable job creation and work transitions, regional development and business organizations are also positioned to drive growth in the advanced sectors through the creation of targeted regional development strategies as well as by designing, aligning, and delivering industry-relevant, worker-supportive education, training, and job-matching innovations for critical industry sectors. And to get more of Indiana's workers into good

jobs, Hoosier businesses should look at providing educational pathways and supportive services to help people get the skills needed to be more productive and earn more, while local and regional economic developers should consider incorporating an explicit focus on good jobs in their own strategies and incentive packages.

Given that there are a number of strong regional initiatives already underway throughout the state to aid in pursuing the above (or other) regional development strategies, the regions considered by the AEI and Brookings researchers are designed to overlap with such initiatives to the greatest extent possible. Additional data for these regions is available on both the Indiana GPS Project website—IndianaGPSProject.com—and the Brookings Institution’s website.

The leaders of these regional efforts have been among the many stakeholders that have supported CICP in undertaking the Indiana GPS Project. These leaders and their stakeholders supported CICP in facilitating numerous listening sessions through which scholars have shared and gathered feedback on their ideas, both informing and improving the research and sharpening the findings of the scholars with whom CICP has worked.

Over the course of 2021, CICP will be sharing findings and recommendations from the Indiana GPS Project with state, regional, corporate, and philanthropic leaders through a variety of venues and outlets. CICP is hopeful that the data and information made available through this project will prove to be both timely and helpful as Indiana and our various regions chart a future course and seek a more prosperous future.


The state’s economy is clearly at an inflection point that has been brought about by a number of factors, many of which stem from forces originating far beyond our state’s borders—something made all the more evident by the

COVID-19 pandemic. As a result, Hoosiers at all levels of government, in all sectors of the economy, and at home in both urban and rural communities across our state must recognize the challenges and opportunities we face. And then we must resolve to work together to build upon our great legacy and move forward to ensure growth and prosperity in our state.



Key findings and data provided by Brookings Institution and American Enterprise Institute.



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