



INDIANA GPS PROJECT

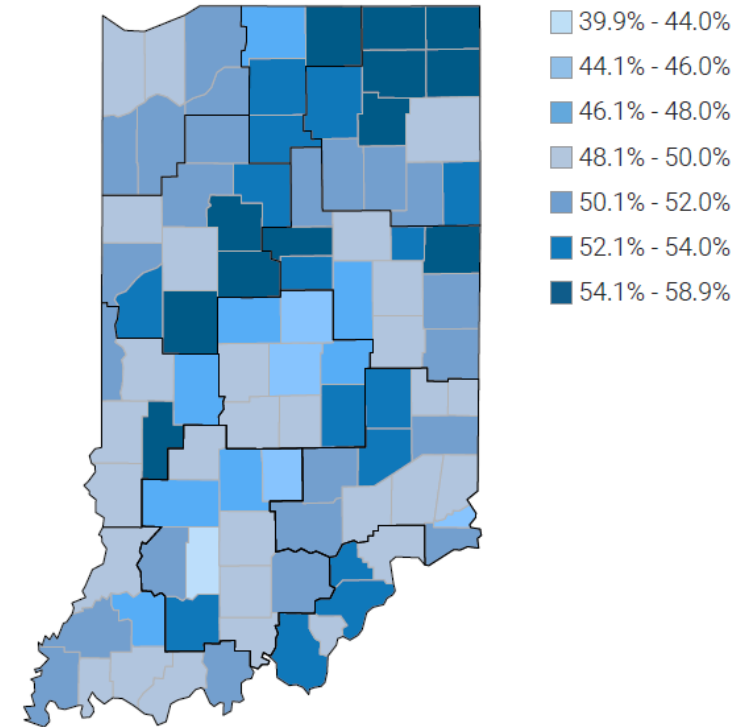


Employment, Economy, and Workforce
IPA Indiana Data Day
July 20, 2022



Indiana's economy is at an inflection point

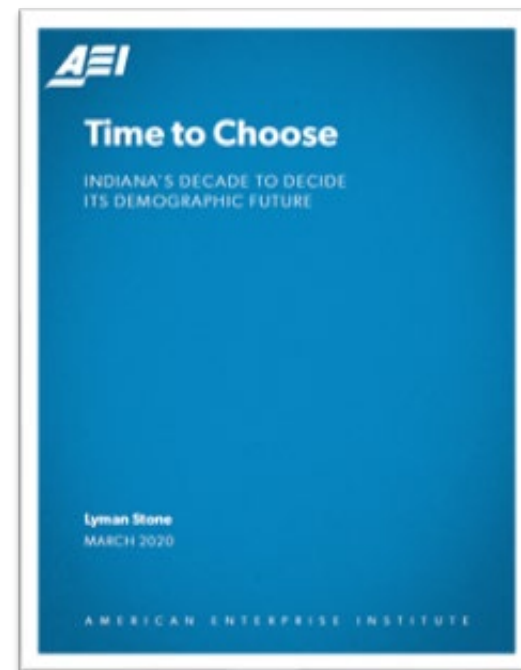
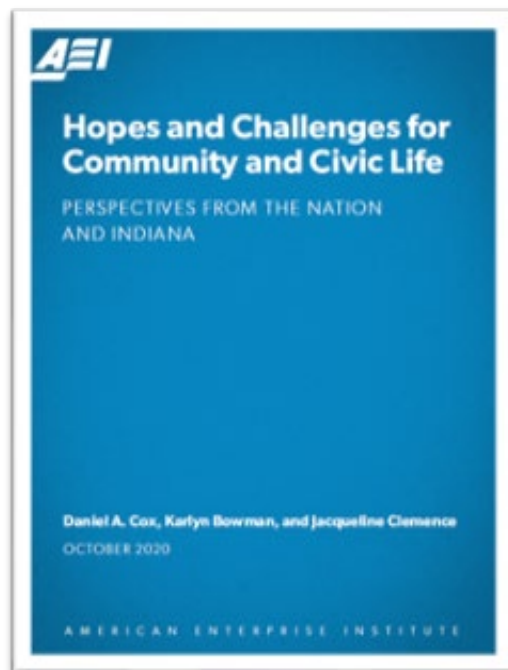
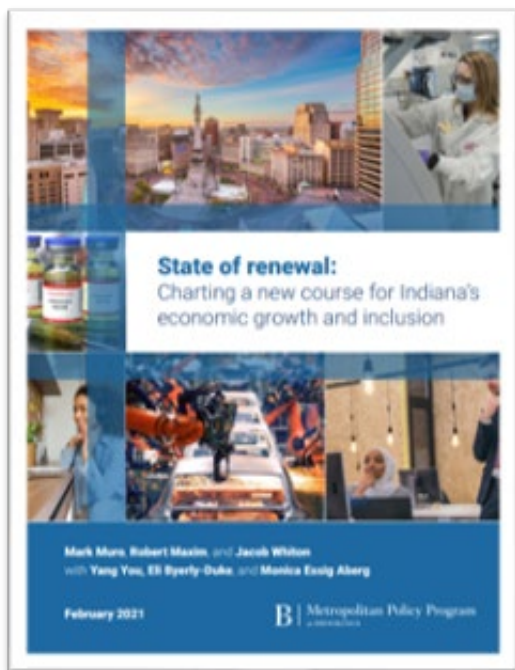
- Global economic trends are converging in Indiana
- Trade and technological developments keenly felt here
- Results in both threats and opportunities
- All Indiana regions have assets on which to build
- Need to first better understand current position



Automation potential by county, 2018

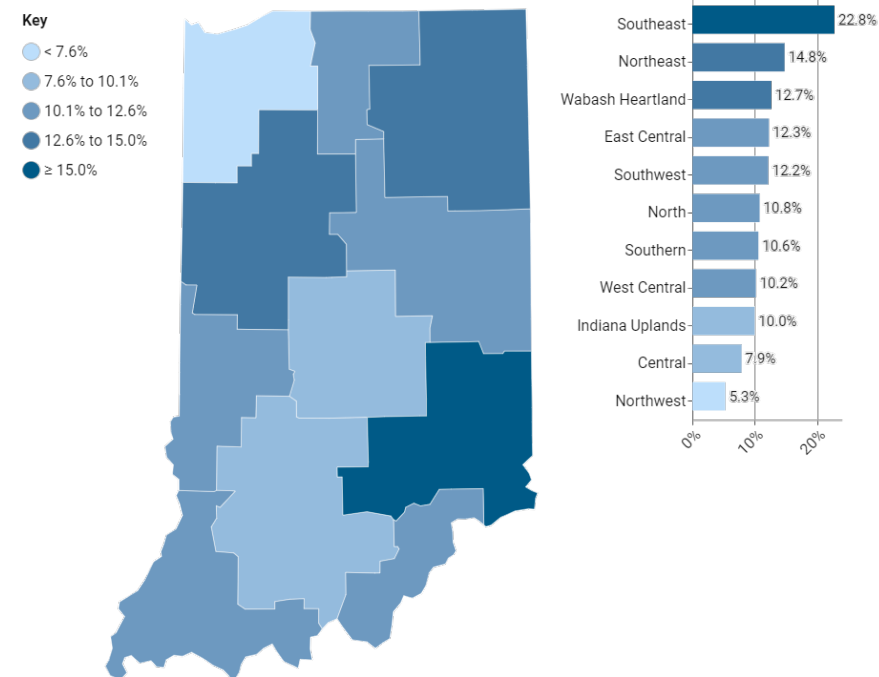
Source: Brookings analysis of BLS, Census Bureau, Emsi, Moody's Analytics, and McKinsey & Company data.

Expert research to help us assess where we are and chart a path forward



STEM worker and R&D intensive advanced industries drive Indiana's economy

- Advanced industries have
 - High R&D spending per worker
 - Jobs require a high degree of STEM knowledge
- They employ 10.5% of Hoosiers
 - Nation's 3rd highest share
- Indiana's advanced industries
 - Generate 25% of Indiana's GDP
 - Produce 63% of the state's exports
 - Create 700k+ jobs via multipliers
 - Pay all workers wage premiums

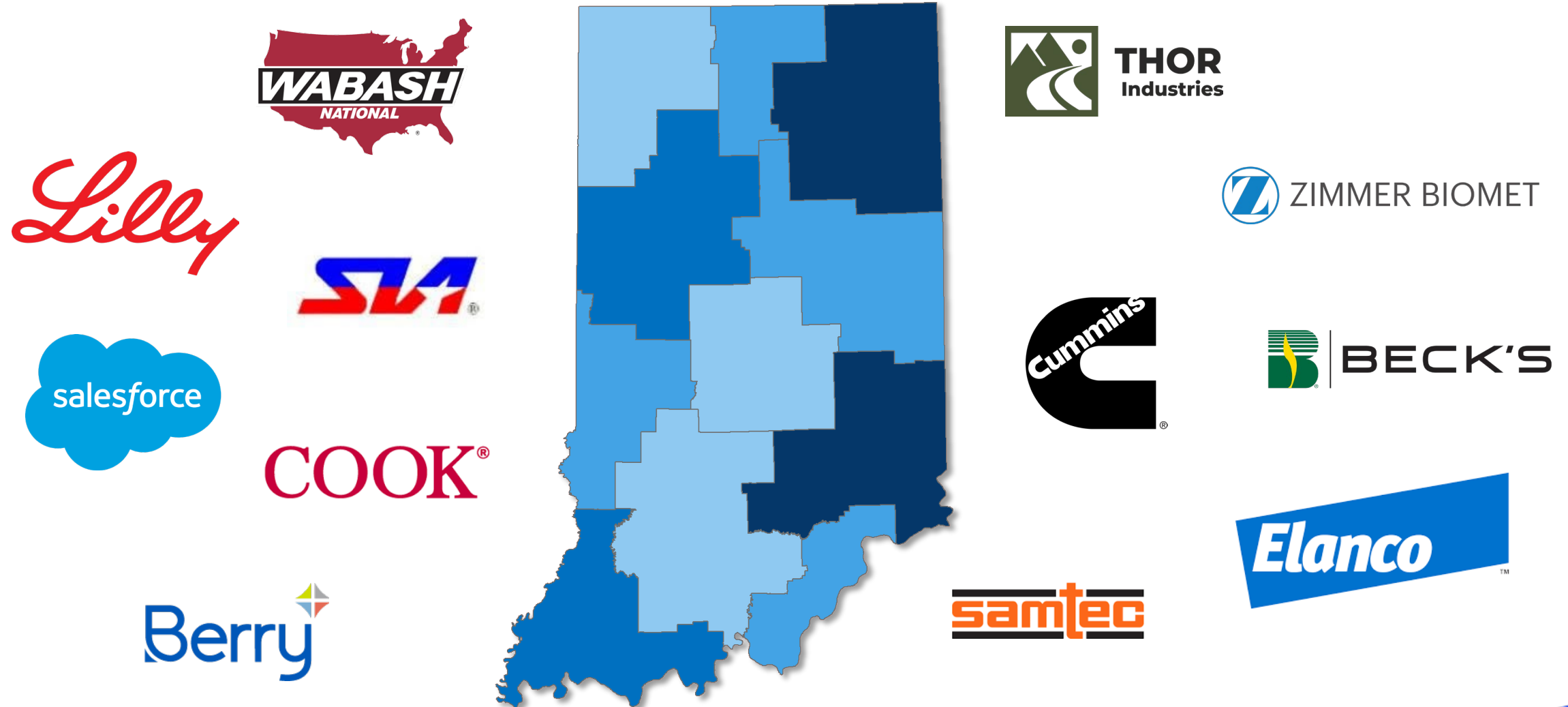


Advanced industry employment share by region, 2019

Source: Brookings analysis of Emsi data

Manufacturing dominates our advanced industry economy

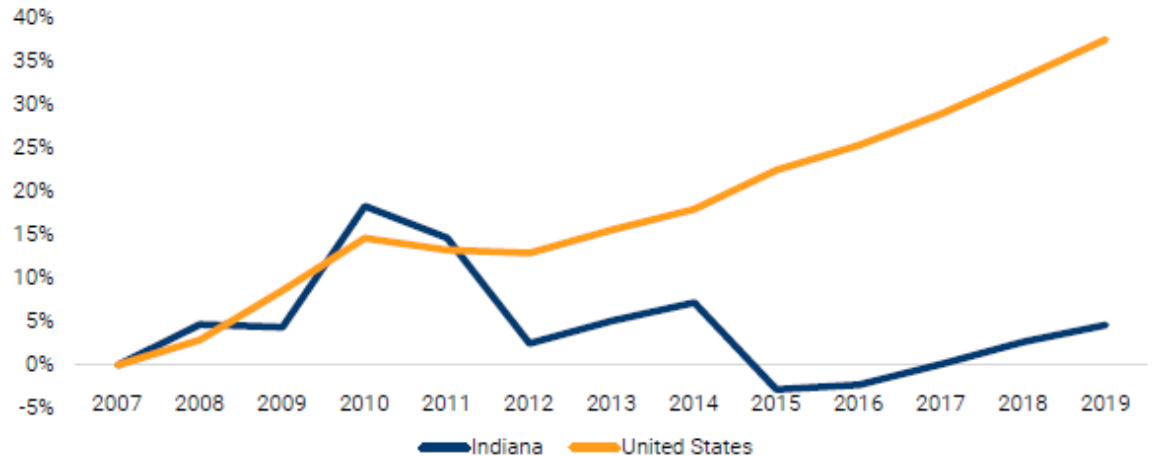
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Unfortunately, Indiana's advanced industries have lost a competitive advantage

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- Nearly all Hoosier industries operate at lower productivity levels than national counterparts
- Advanced industries have trailed the nation in employment, output, and productivity growth
- In 2007, the state's advanced sector had a 5% advantage over national counterparts
- Sector-wide this advantage has been erased, though there is some variation
 - Pharmaceuticals, motor vehicles and parts, and engine manufacturing maintained a productivity edge

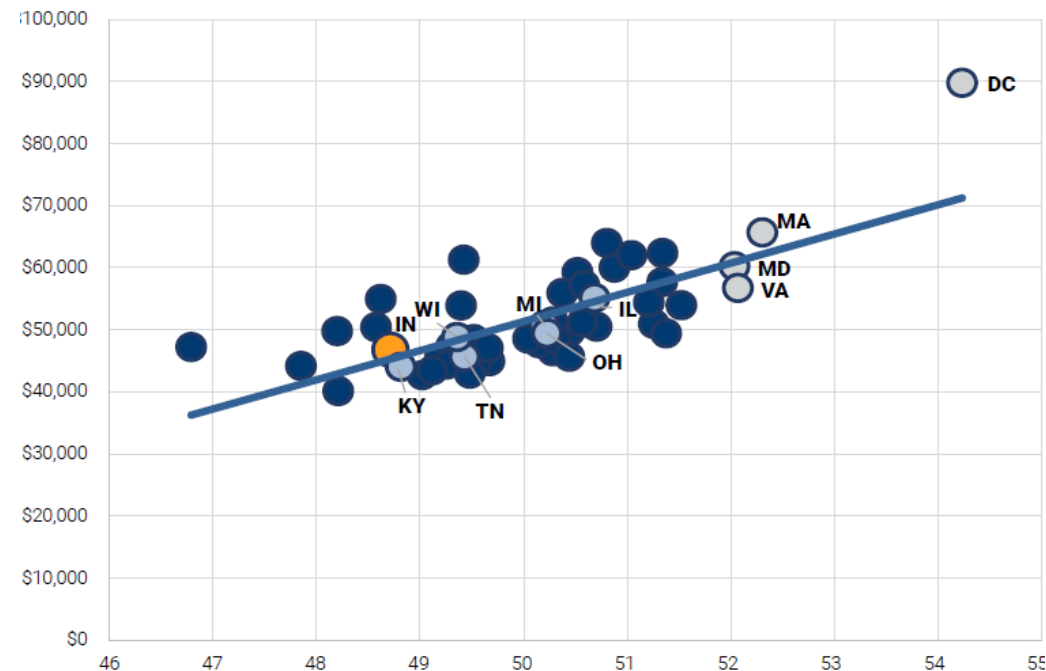


Advanced industry productivity growth in Indiana and the United States, 2007 - 2019

Source: Brookings analysis of Emsi and BEA data

Indiana industries are under-investing in technology when compared to other states

- Indiana is 37th in IT investment per employee
 - Low ranking consistent across industries and firm size
- Digital content of Hoosier jobs also relatively low
 - Digitization scores increasing slowly
 - Clear correlation between digitization and pay
- Digitization in advanced manufacturing is *decreasing*

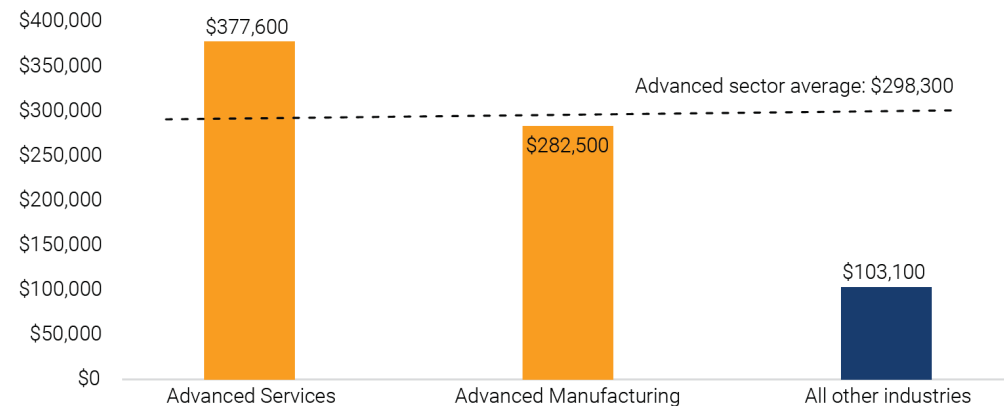


States' mean annual wages are correlated with their mean digital scores

Source: Brookings analysis of BLS and O*NET data.

Indiana's advanced industries under-rely on advanced services, a rapidly growing sector

- 41st in advanced services employment
 - Despite 3rd highest rate of advanced industry employment
 - Only 1.8% of Hoosiers work in advanced services
- Advanced services have seen increased productivity
 - Advanced services productivity is ~3x the rest of Indiana's economy

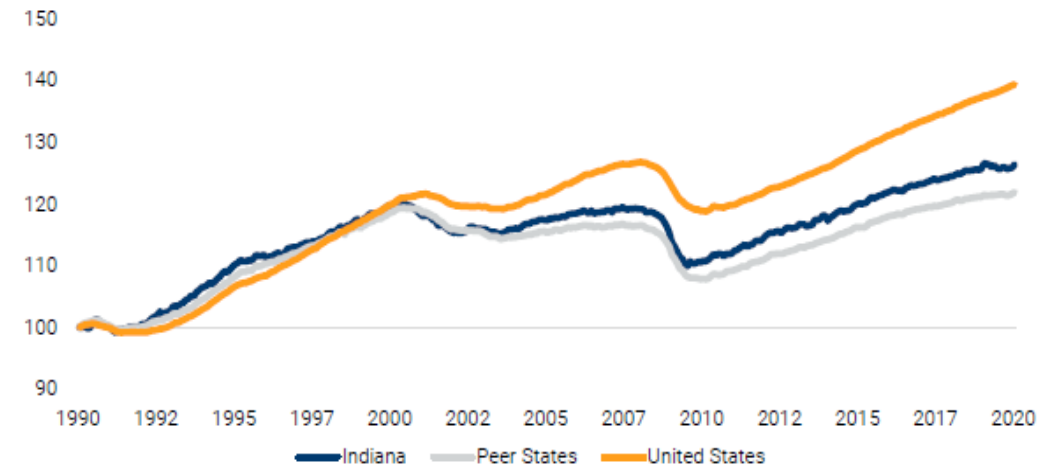


Productivity per worker by subsector in Indiana, 2019

Source: Brookings analysis of BEA and EMSI data.

Indiana's recent employment growth has been strong, but lagged the nation as a whole

- The state has grown jobs at a faster pace than neighbors
- Nation growing jobs faster than Midwest
- Indiana has taken much longer than nation to recover from recent recessions
 - In Indiana, peak employment prior to 2000-2001 recession not seen again until May 2015
 - Nation recovered peak employment in four years

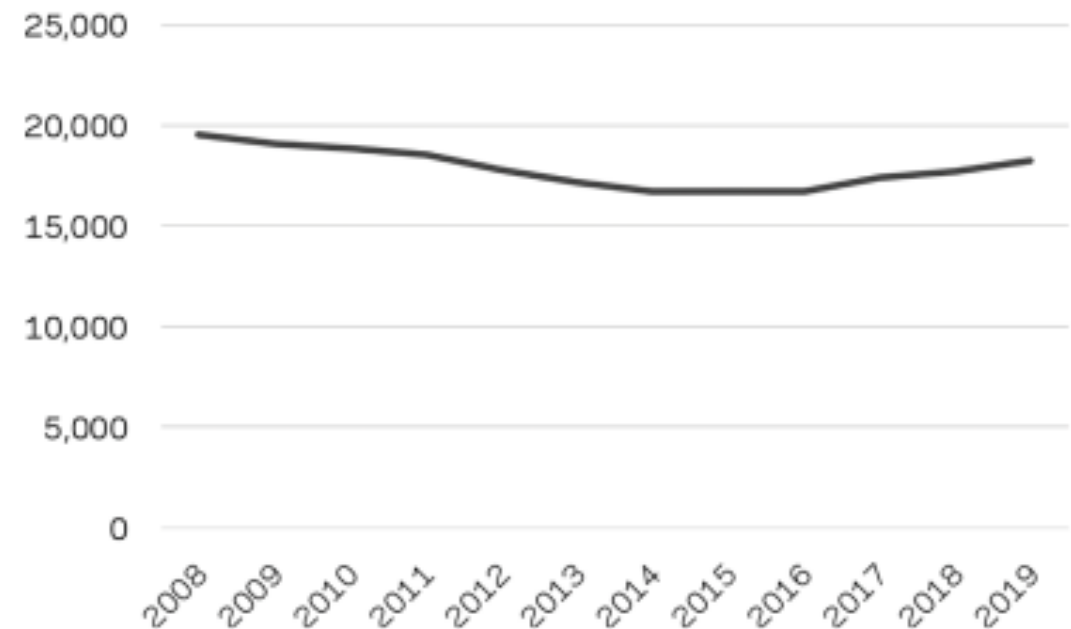


Indiana (non-farm) employment growth through recent recessions, January 1990-January 2020

Source: Brookings analysis of BLS data

Multiple datapoints suggest weak entrepreneurial activity in Indiana

- Indiana has more firms that are 16 years old or older than it has firms younger than 5 years old
 - This dynamic runs opposite to the country as a whole
- Share of employment at old firms higher than nation too
- New employer business applications relatively flat
 - Rate better than neighbors, but less than nation
- All contributes to lack of economic resilience
 - New firms also common source of productivity gains

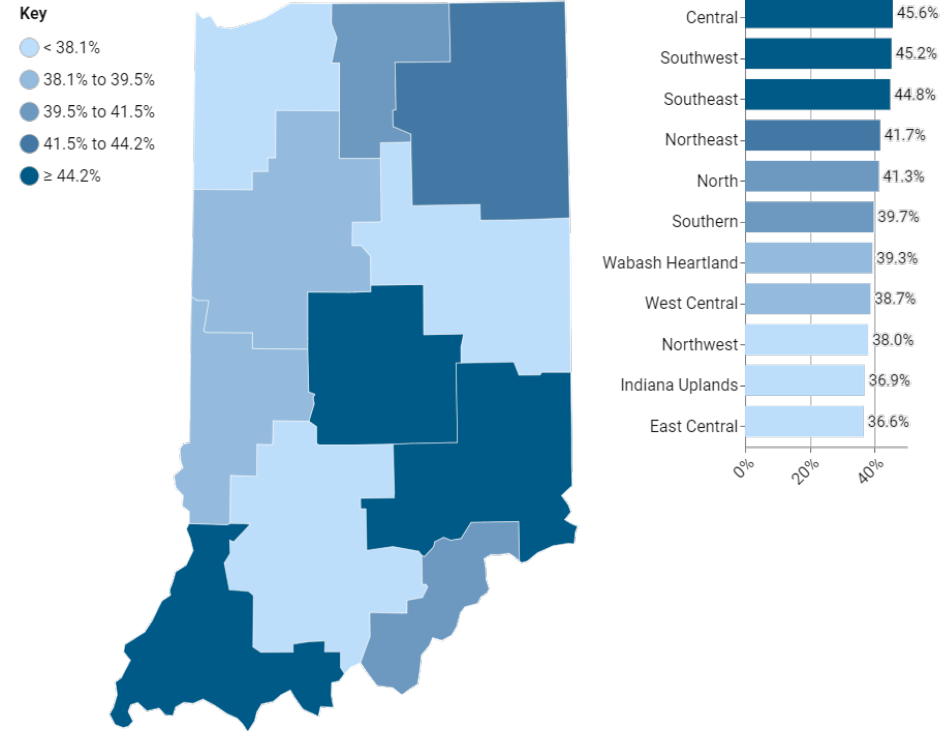


Indiana Probable Employer Business Applications, 2008-2019

Source: EIG Analysis of Census Bureau Business Formation Statistics

Like all states, Indiana has too few good, family-sustaining jobs

- Only 42% of Hoosier workers have a good job
 - Pays a regionally adjusted, family-supporting wage
 - Ranges from \$35,400 to \$41,100 annually
 - Employer-sponsored health insurance
- Hoosier median wage growth flat
 - 46th nationally from 2000-2019
 - Doesn't suggest share of Hoosiers in a good job will grow anytime soon



Share of Indiana workers in a good job, 2014-2018

Source: Brookings analysis of IPUMS USA 2014-18 5-year ACS microdata.

The ability to secure a good job increasingly tied to educational attainment

- Good jobs are frequently held by those with BA degrees
- State's industry mix enables sub-BA workers to have good job
 - 50% of sub-BA workers in a good job work in utilities, logistics, manufacturing, or construction
- Companies demand more BA workers than market providers
- Hoosiers tend to undervalue 4-year degree compared to nation

	Indiana	Mid-west	North-east	South	West
A high school diploma	25	18	18	16	15
Some college or trade school	48	54	43	44	44
A four-year college degree	21	22	28	30	31
A post graduate degree	6	5	11	8	10

Percentage who say _____ is needed to get ahead in life.

Source: AEI, "Hopes and Challenges for Community and Civic Life: Perspectives from the Nation and Indiana"

Research-driven recommendations focus on three critical areas



Drive digital adoption

- Bolster the state economy through a digital adoption initiative
- Equip workers with up-to-date skills
- Ensure broadband connectivity



Promote favorable job-creation and worker transitions

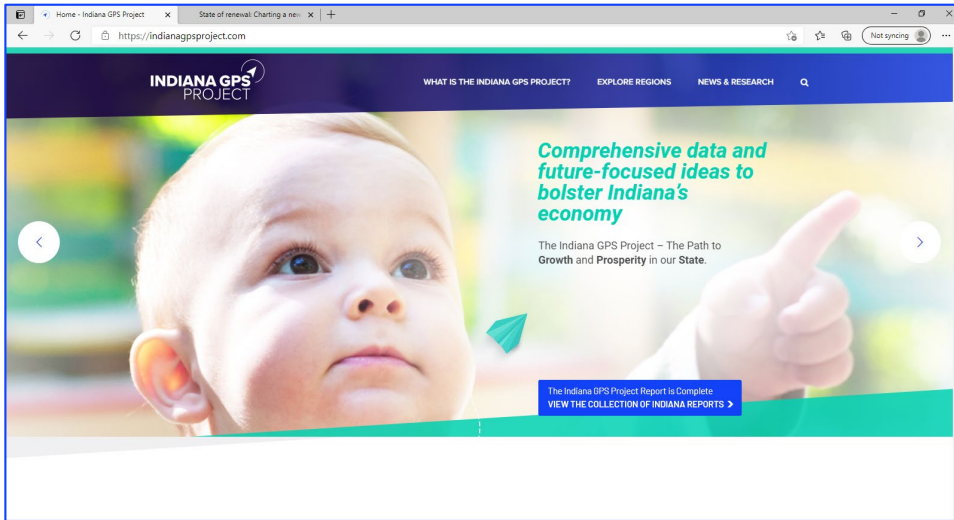
- Grow advanced industries through regional development efforts
- Enhanced support for entrepreneurs
- Better use unemployment insurance, including launch of workshare program



Do more to support workers who aren't in good jobs

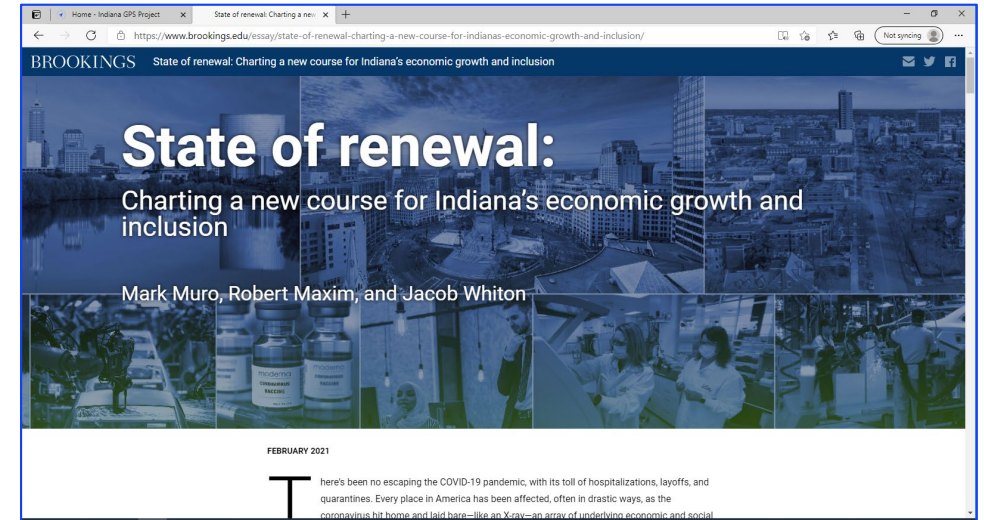
- Enact a comprehensive childcare agenda
- Explore Medicaid buy-in, a state-sponsored IRA, and EITC enhancement
- Choice Employer program to incent creation of good jobs

More information is available online



[IndianaGPSProject.com](https://indianagpsproject.com)

- AEI and Brookings reports
- Regional snapshots
- More info and links



[Brookings.edu](https://www.brookings.edu)

- Brookings report
- Interactive regional data
- Data appendix

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