PURDUE UNIVERSITY

THE ROLE OF THE COMMUNITY IN SUPPORTING SUCCESSFUL ENTRY OF YOUTH INTO THE WORKFORCE

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1. Examine some key facts on Indiana's population, economy and education.

2. Take a look at supply and demand factors in the state when it comes to the labor force.

3. See how education and job-related challenges differ across urban and rural areas.

4. Discuss what the information means in terms of job preparation for youth, and the community's role.

THE FOCUS OF MY PRESENTATION TODAY

QUICK FACTS ON THE STATE OF INDIANA

- Average unemployment rate in 2016: 4.4%
  - Among the top 20 U.S. states
- Unemployment in June 2017: 3.2%
  - 12th best in the nation
- Nonfarm employment:
  - 2007: 2.98 million
  - May 2017: 3.35 million
- Population growth, 2007-2016
  - About 4% -- Ranking 35th in the U.S.

- Median household income: $50,532
  - 36th best in the country
- Percent of adults (25 + years old) with a high school degree or equivalent only: 34.3%
  - 3rd best in the nation
- Percent of adults (25 + over years old) completing a bachelor's degree or more: 24.9%
  - 43rd best in the U.S.

UNDERSTANDING THE EDUCATION & WORKFORCE LANDSCAPE

SUPPLY:

- Educational Profile of Indiana Resident
- Where are the Brain Gains in the State?

DEMAND:

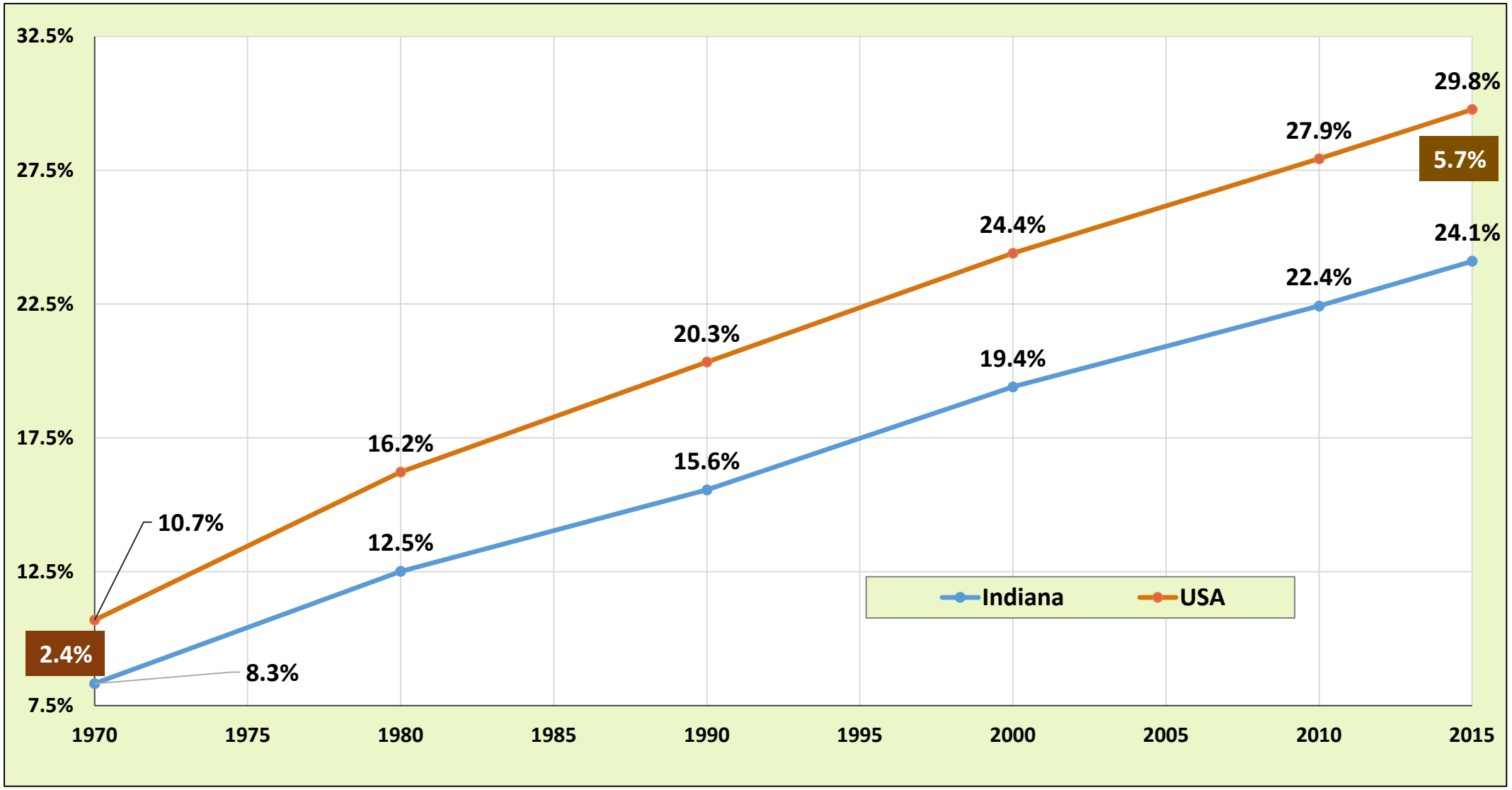
- The State of Indiana's Knowledge-Based and STEM-Based Economy
- Key Occupations in the State

Fact #1:

Indiana's Best Educated Adults . . .

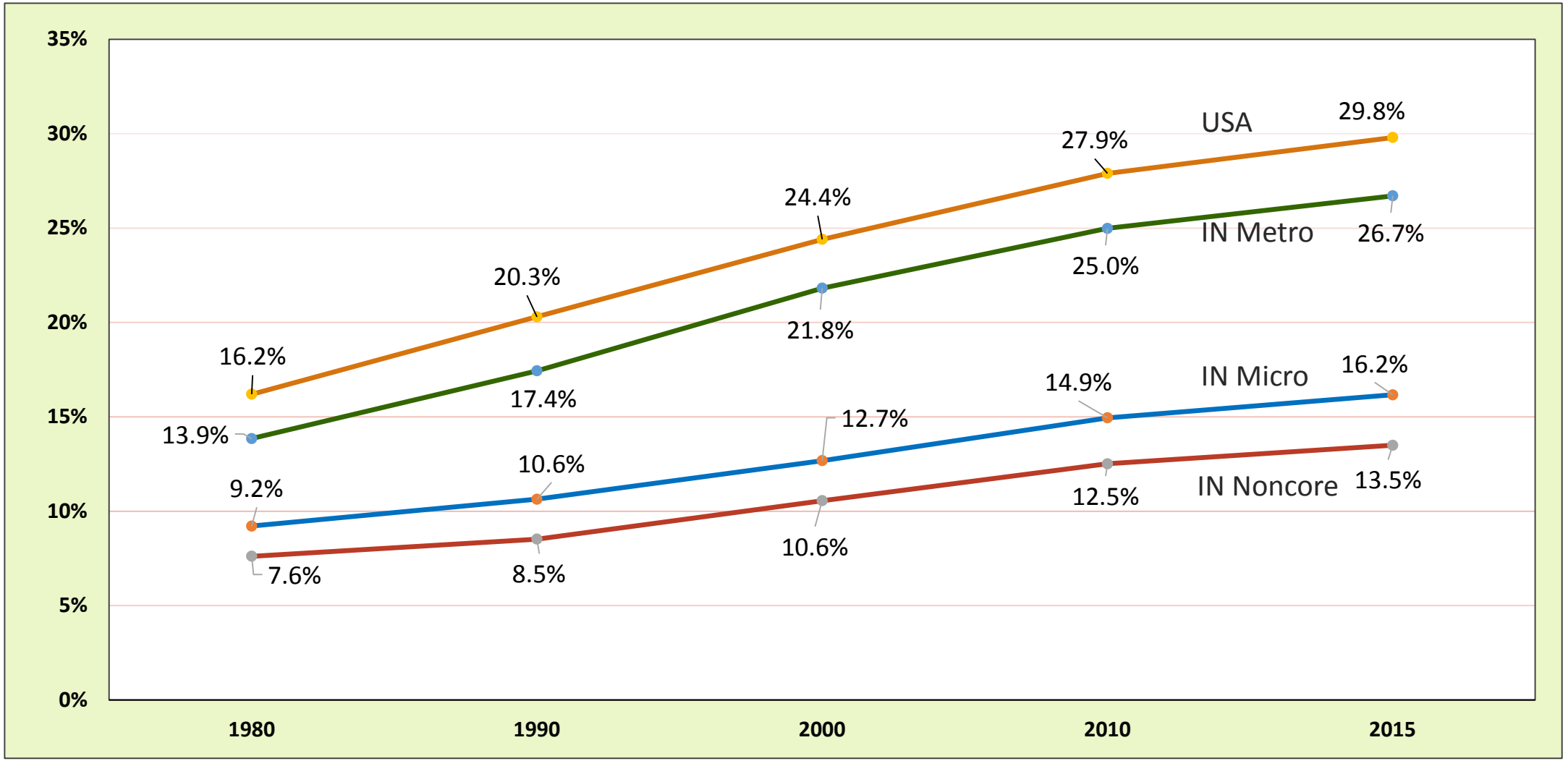
Not keeping pace with the U.S.

Percent of adults (25+ years of age) with a bachelor's degree or higher in the U.S. and Indiana, 1970-2015



Source: Census, ERS, NHGIS, PCRD, Waldorf 2006

Percent of adults (25+ years of age) with a bachelors' degrees or higher, by metropolitan status, 1970-2015



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DEFINING METROPOLITAN STATUS

Metropolitan Status	Definition
Metropolitan Counties	Central counties with an urban area of 50,000 persons or more, as well as outlying counties that have strong economic ties to the central counties. (44 counties in IN)
Micropolitan Counties	Counties with a city or cluster of 10,000 to 49,999 persons, as well as outlying counties that have strong economic ties to the micropolitan counties. (25 counties in IN)
Noncore Counties	Counties that have no city, town or urban cluster of 10,000 residents or more. (23 counties in IN)

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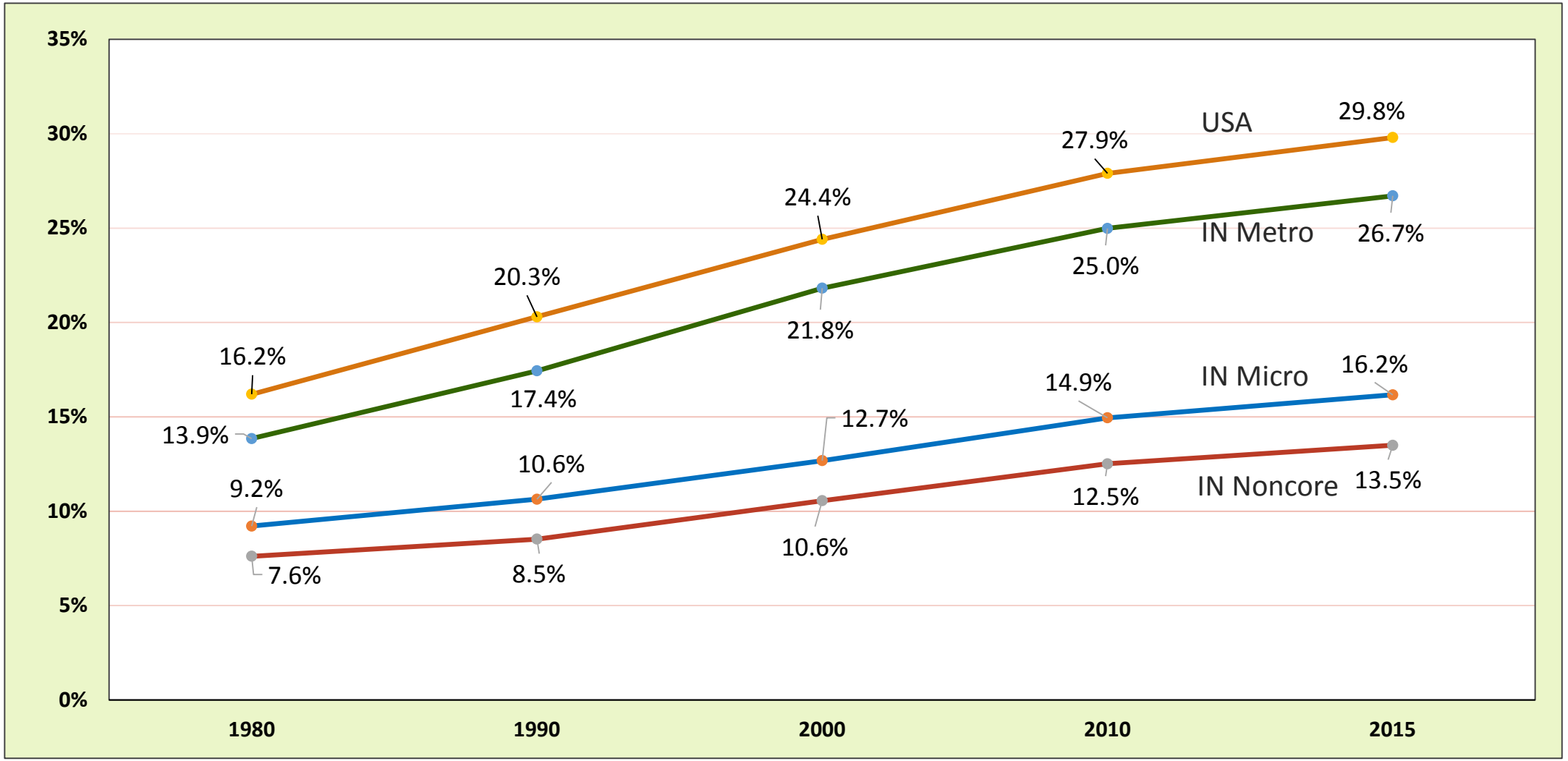

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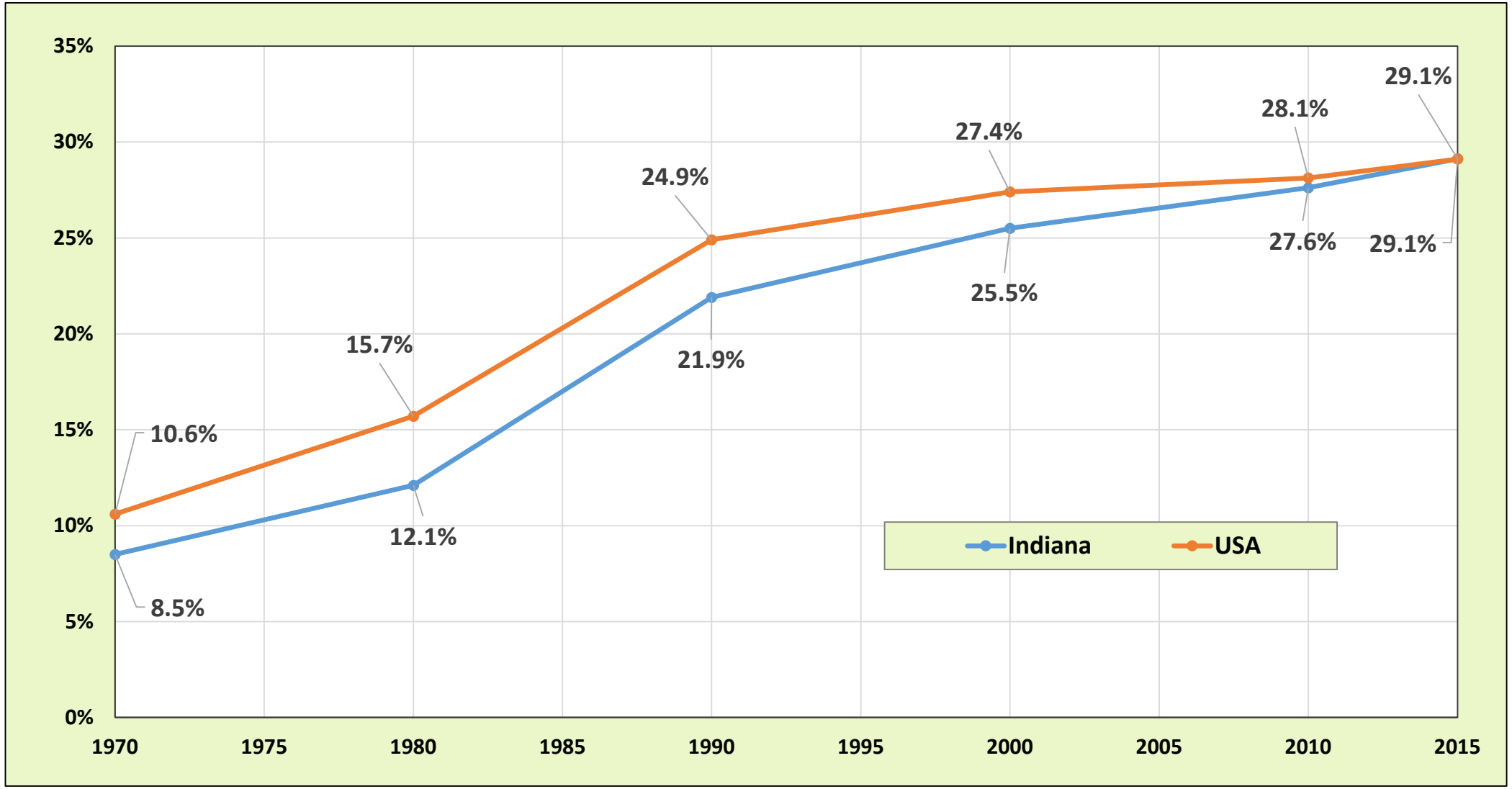
Fact #2:

Adults with Some College or Associate Degrees. . .

Matching the U.S., but reason for concern!

Percent of Adults (25+ years old) with some college or associate degrees, 1970-2015.



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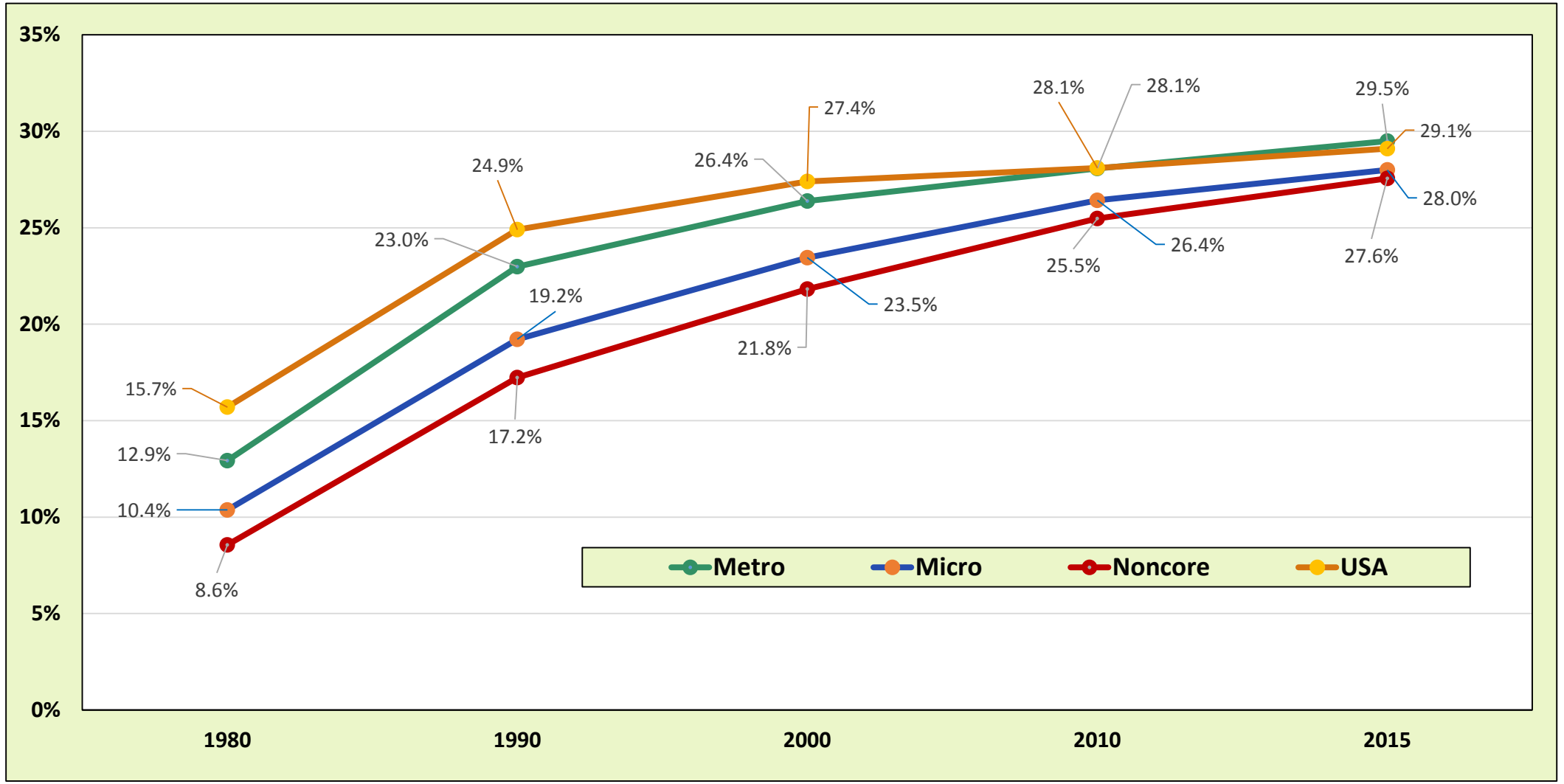

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Fact #3:

Brain Gains in Indiana:

Mix record over the past 25 years

Table 1. Shift-Share Analysis of Indiana's Educational Attainment, 1990-2015

Metropolitan Status	Bachelor's or higher, 2015	Expected Change (National Growth Rate, 1990-2015)	Actual Change (1990-2015)	Competitive Shift
Metro	567,128	432,051	111,555	- 320,496
Micro	70,254	60,304	6,667	- 53,637
Noncore	27,365	22,553	3,584	-18,969
Metropolitan Status	Some college or associate degree, 2015	Expected Change (National Growth Rate, 1990-2015)	Actual Change (1990-2015)	Competitive Shift
Metro	981,462	333,629	381,003	47,374
Micro	188,984	63,822	74,118	10,296
Noncore	86,415	26,724	38,318	11,594

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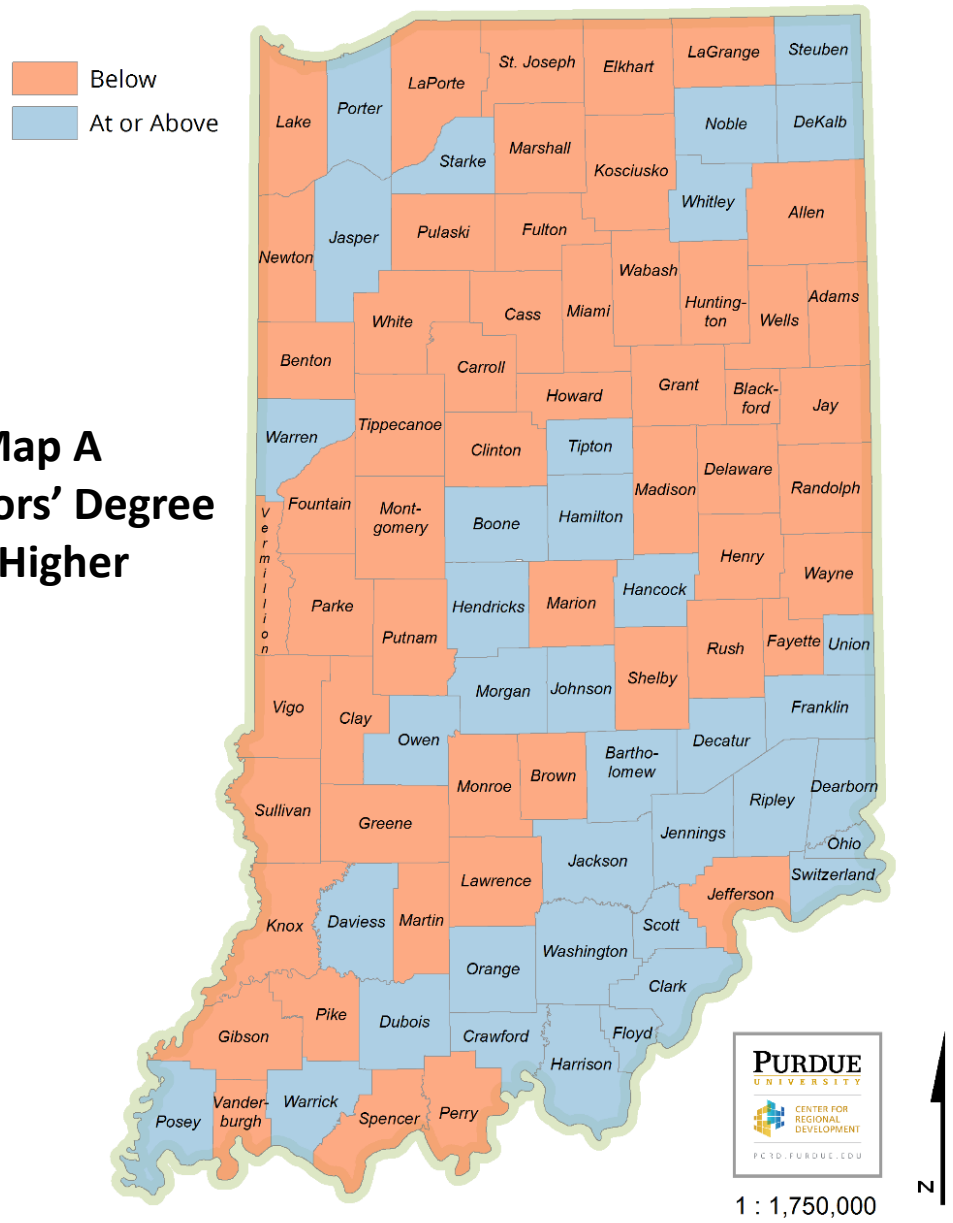
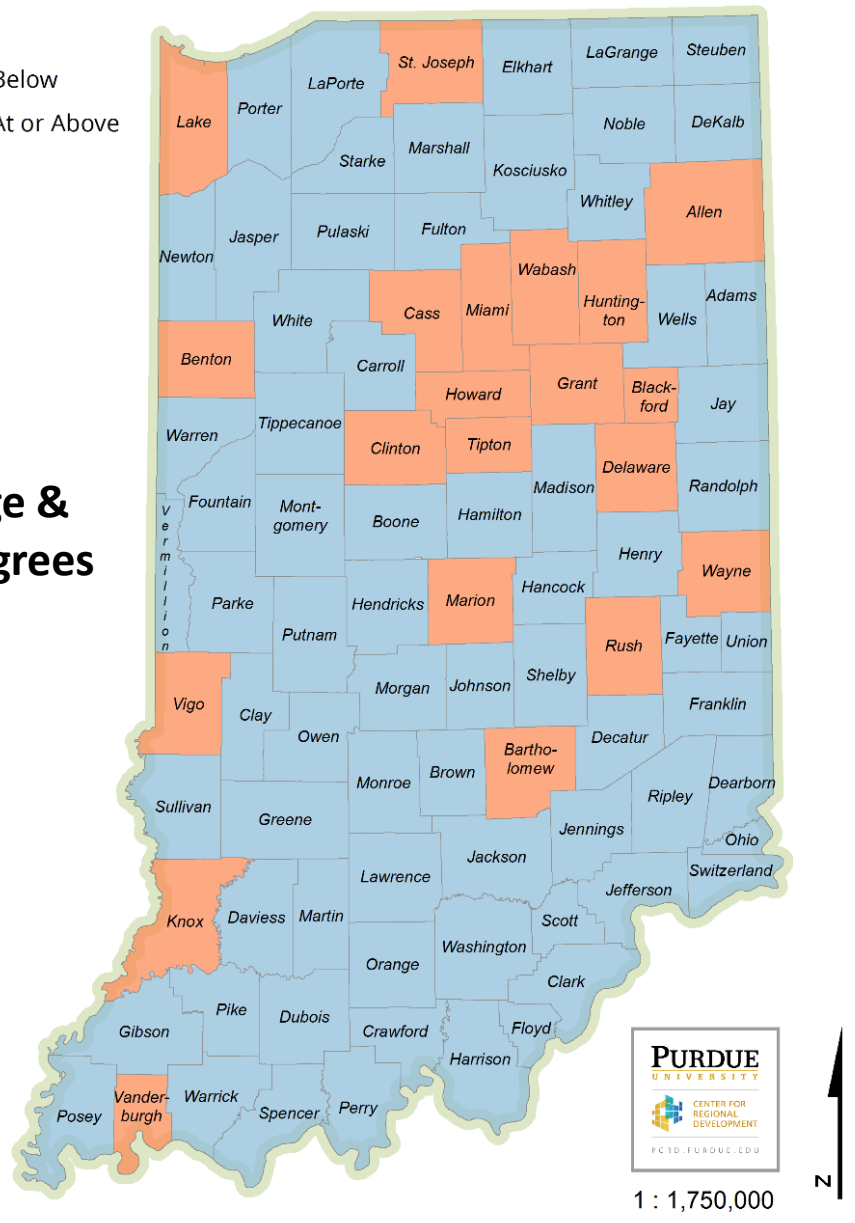
Map A
Bachelors' Degree or Higher



Map B
Some College & Associate Degrees

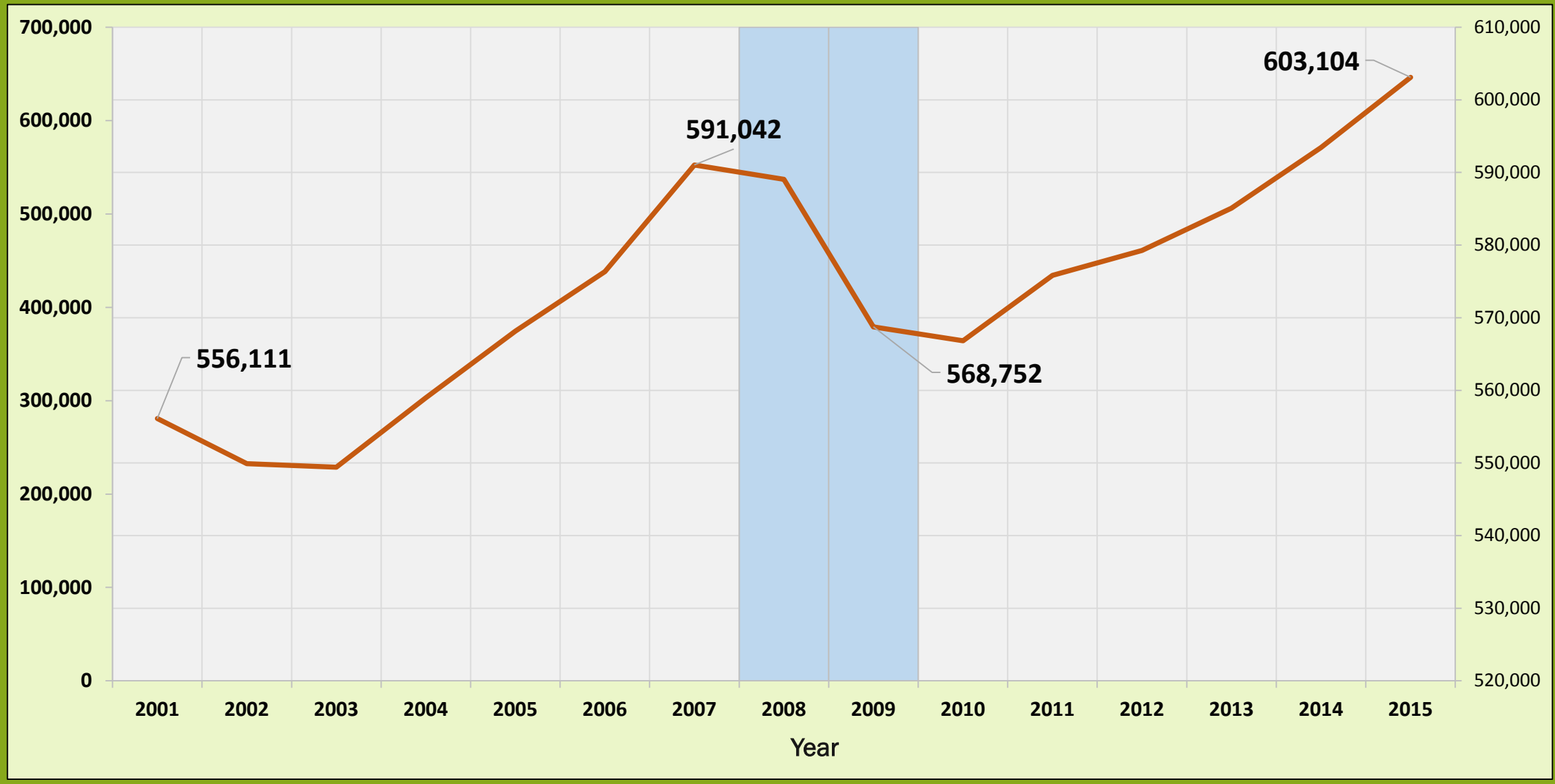


Fact #4:

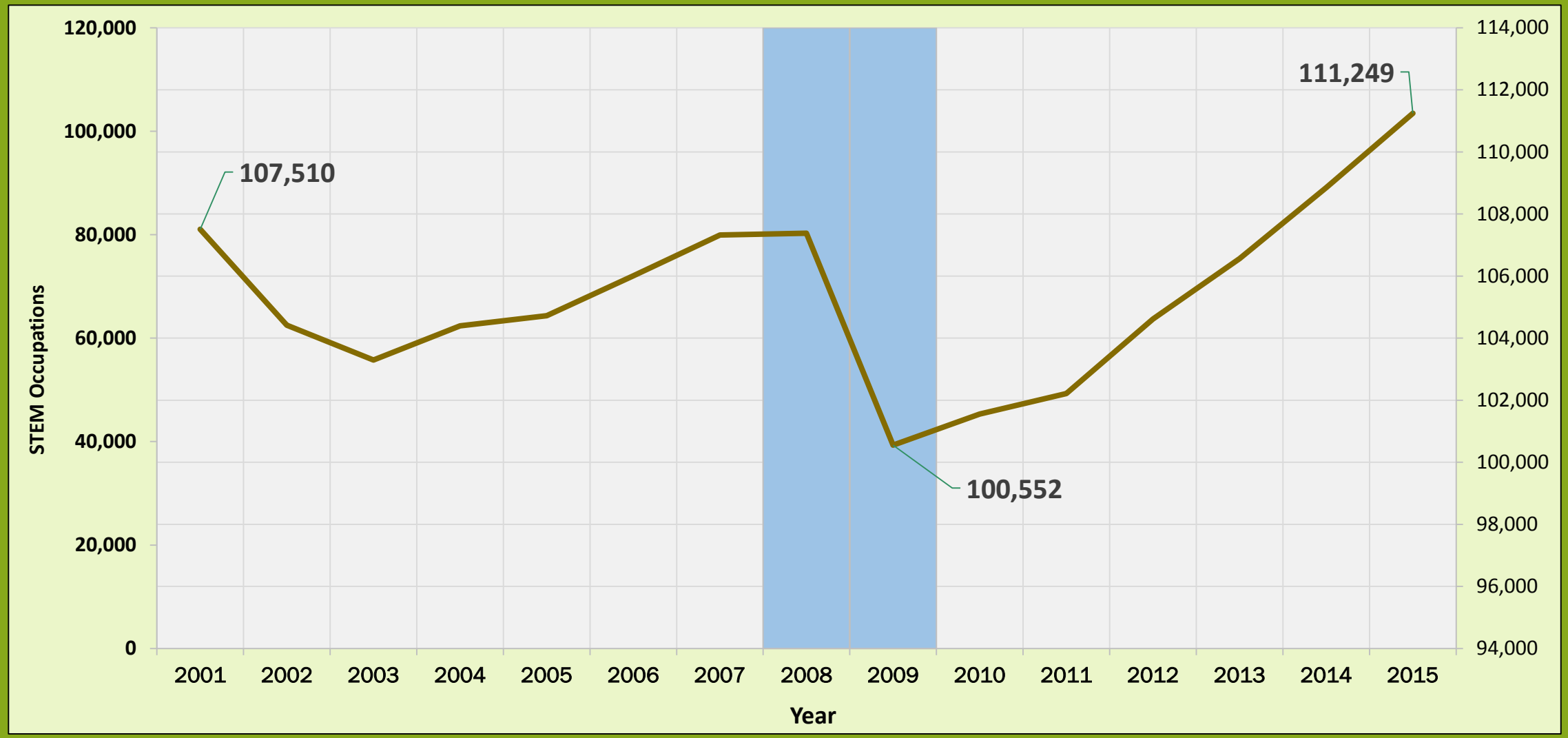
Knowledge-Based Economy:

"Creative" & "STEM" Occupations

Number of Jobs in the Creative Occupations in Indiana, 2001-2015



Number of Jobs in STEM-Related Occupations in Indiana, 2001-2015



Note: STEM occupations are comprised of 68 5-digit SOC groups delineated by using research from ESA, Dept. of Commerce and NSF. It does not include agriculture or arts.

Table 2. Number of Workers Associated with Seven Occupation Clusters in Indiana, 2001-2015

Technology-based Occupation Clusters	2001 Jobs	2015 Jobs	Change	% Change
Post-Secondary Education and Knowledge Creation	**34,321**	**43,301**	**8,980**	**26%**
Medical Scientists and Practitioners	**29,068**	**34,888**	**5,820**	**20%**
Information Technology	**55,768**	**61,711**	**5,943**	**11%**
Natural Sciences & Environmental Management	**11,224**	**12,186**	**962**	**9%**
Mathematics, Statistics, Data and Accounting	**65,036**	**67,433**	**2,397**	**4%**
Engineering	**38,380**	**34,991**	**- 3,388**	**- 9%**
Skilled Production-based Occupation Cluster	**302,971**	**280,826**	**-22,145**	**-7%**

HOW COMMUNITIES CAN HELP YOUTH TRANSITION INTO THE WORKFORCE

Improve Community College Graduation Rates

- Too many youth fail to complete their associate or technical degrees.
- Important to link degrees to local job opportunities.
- **What options might exist to do so?**

Invest in Post-Secondary Education and Job Opportunities for Youth

- Work with private & philanthropic entities to create scholarship programs for youth.
- Provide incentives and/or job opportunities for youth (so they can come back to their home community after college)

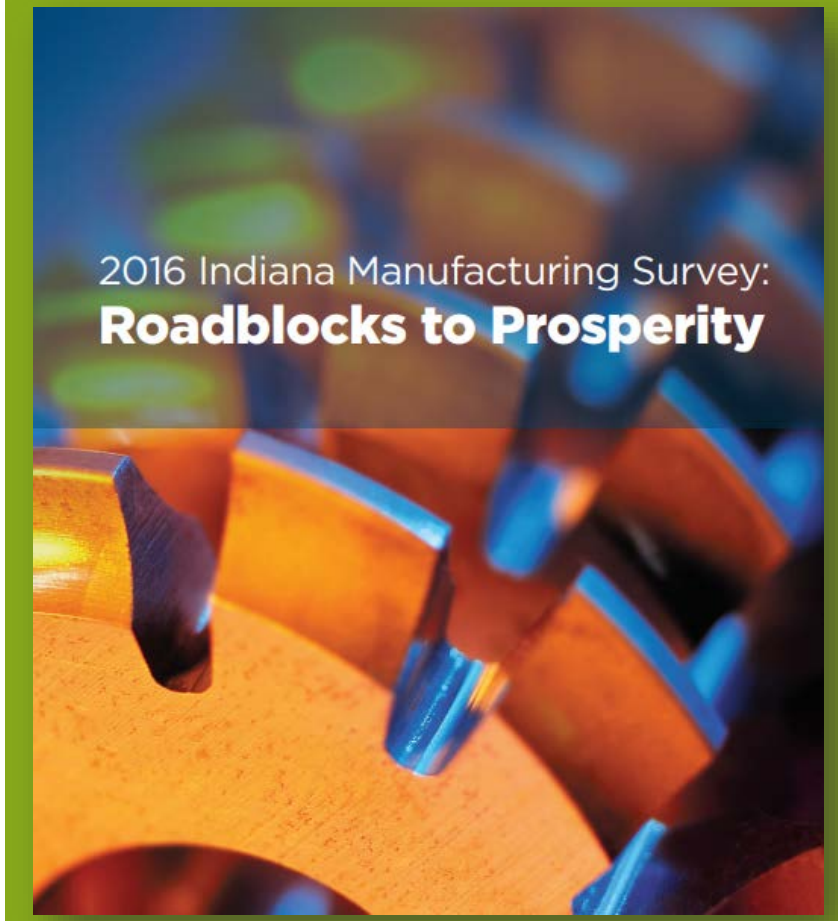
Help Youth Explore Job Options

- STEM and Knowledge-based jobs are important to Indiana's economy. BUT, middle-skilled jobs are a significant part of the state's economy as well.
- Provide youth with pathways to these different job options.
- Ensure parents recognize these options.
- **OTHERS?**

Expand Access to Broadband

- Helps youth gain access to more advanced online courses as well as be linked to their middle/high school.
- Serves to attract young entrepreneurs & businesses that need an online presence

Consistent with recent years, the biggest shortages remain in skilled production workers and in production support. Notably, for the first time in recent years, the 2016 results indicate a material shortage of unskilled production workers, with 14% of manufacturers now indicating this shortage is serious.



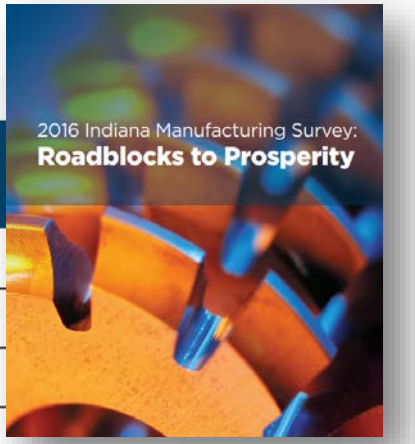
HOW COMMUNITIES CAN HELP YOUTH TRANSITION INTO THE WORKFORCE

Give Special Attention to Rural IN

- Important to expand the number of youth with college degrees in rural parts of IN.
- BUT, this can't be done without creating better job opportunities for college graduates to come back to.
- **How can we address this challenge?**

Equip Youth & Young Adults with Important Soft Skills

- Dependability, Communication Skills, Teamwork, Interviewing Skills, Critical Thinking/Problem-Solving, Budget/Finances, and more.
- ***NEW INITIATIVES***:
  - Purdue Extension IN Work program
  - Purdue Manufacturing Extension Partnership's Skills for Success program



SKILL DEFICIENCIES AMONG CURRENT EMPLOYEES AND REJECTED APPLICANTS

Skills Deficiencies:

Rejected Applicants

Current Employees

	Rejected Applicants	Current Employees
Inadequate Employment Skills	81%	52%
Inadequate Math Skills	52%	29%
Inadequate Problem-Solving Skills	68%	52%
Inadequate Communication Skills	56%	25%
Inadequate Technology Skills	44%	49%
Lack of Basic Technical Training	63%	46%

OPIOID EPIDEMIC: BIG IMPACT ON THE WORKFORCE

The opioid crisis is draining America of workers

by Patrick Gillespie @CNNMoney July 7, 2017: 6:46 AM ET

The opioid epidemic has crippled communities across the United States, spurred a public health crisis, and is responsible for nearly 100 overdose deaths each day.

Opioid abuse is also hurting America's job market.

The Federal Reserve found in its survey of businesses in May that employers were having a tough time filling low-skill positions. One reason: The applicants didn't have the minimum job skills.

The other: They couldn't pass a drug test.

WHAT YOU CAN DO BACK HOME?

- Determine if the **IN WORK** or **Skills for Success** programs might be of interest to business and school leaders in your community? If so, let us know!
- Check with your Community Foundation, local leaders and businesses to see if they could launch a program that provides scholarships to local youth who want to college or technical schools but lack the resources (if no such program exists).
- Work with the schools to provide youth with work mentoring and job shadowing opportunities, including those in the middle-skilled type of jobs in your community/county.
- Determine if a laptop loan program might be needed in the schools to help youth gain access to the internet for school work and career preparation activities.