

Local Employment Dynamics

An SDC Perspective

Indiana Business Research Center

State Data Center partner since 1978

March 14, 2011



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Indiana Business Research Center

- SDC/BIDC lead partner
- BEA Working Group
- Census Liaison

We have a National focus with local action

- STATS Indiana, STATS America, Measuring Distress, Innovation Capacity – just a few of the web sites we developed that utilize LED in large or small part
- IN Context and Indiana Business Review publish frequent LED-based articles
- Impact studies, benchmarking reports, defense research, all have utilized LED in some way



LED: Most Popular Uses, Quarter in and Quarter Out

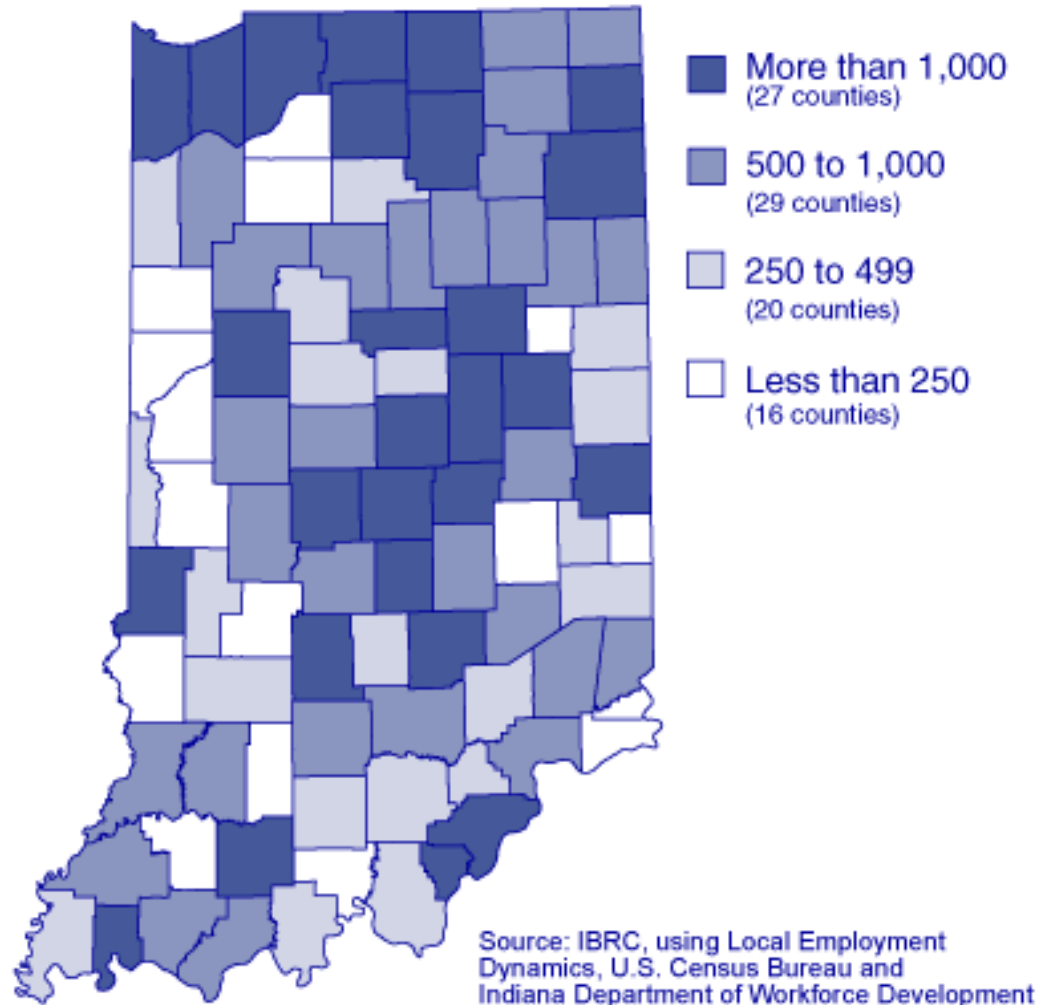
- Aging workforce
- Wages for new hires (comps by industry)
- Commute shed analysis
- Job creation numbers



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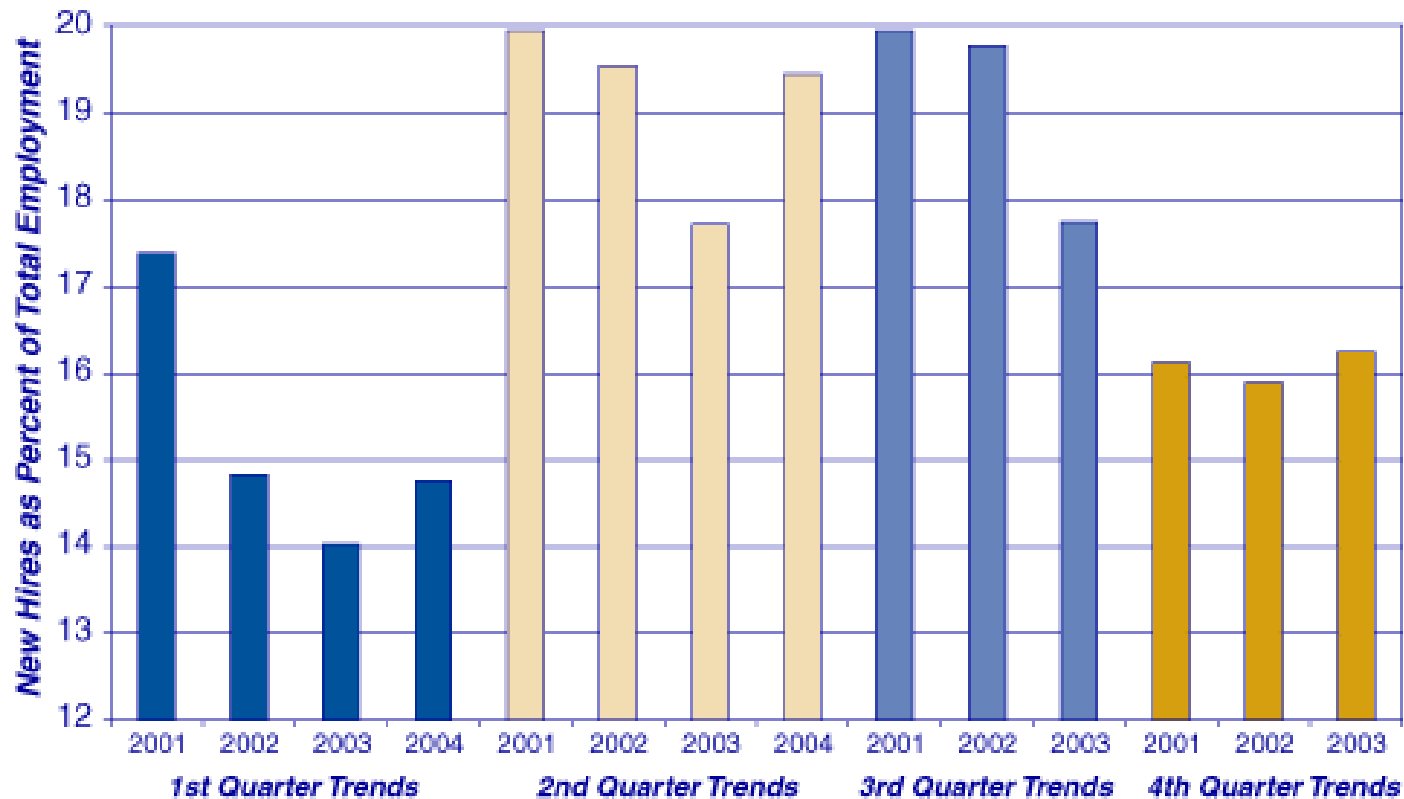
Marion led in numbers; Tippecanoe led in percentage

Job creation data has been “job 1” for LED use in Indiana.





The most new hiring occurs in the second and third quarters of each year



Source: IBRC, using Local Employment Dynamics, U.S. Census Bureau and Indiana Department of Workforce Development

Tracking new hiring has been important, too.

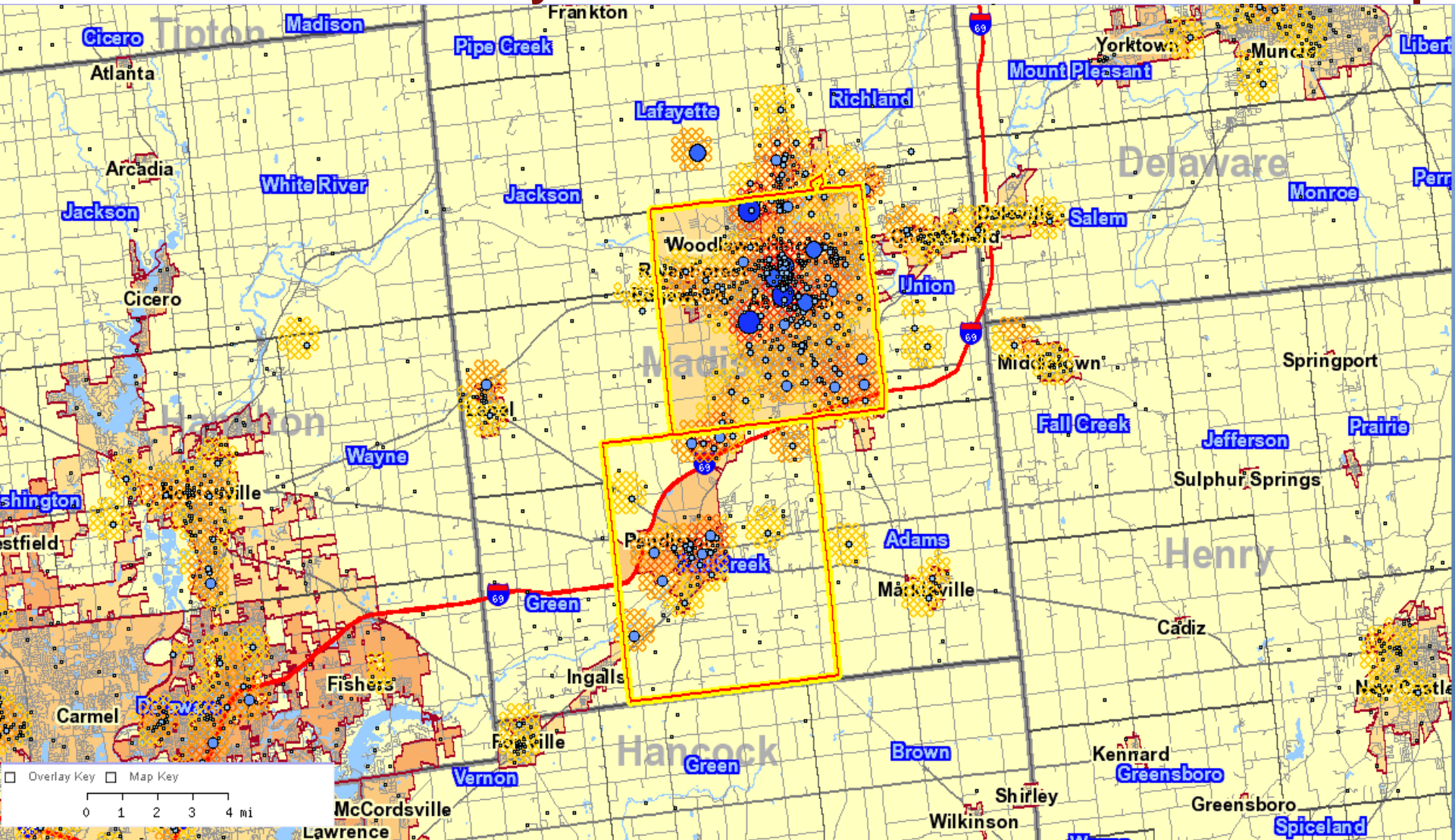
#1 request for economic
development in Indiana



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Commute Shed

City of Anderson and Fall Creek Township



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*The boom is already
being felt by
employers*





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Other ways to skin the apple



Multiple data sources provide critical information on our capacity to innovate, foster business formation, and improve the workforce

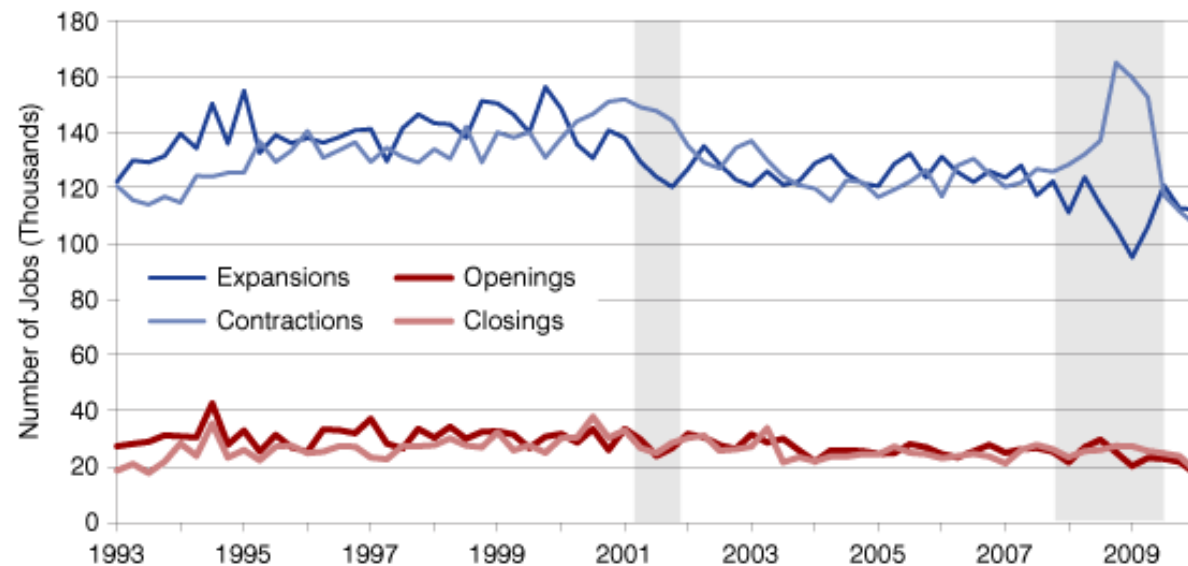


BED – Business Employment Dynamics

Components of Employment Change

The majority of Indiana's employment changes are the result of expansions or contractions of existing establishments. Since 1993, expansions have accounted for 82 percent of Indiana's quarterly job gains on average while 83 percent of quarterly job losses result from establishment contractions. Given that changes at existing establishments drive these data, the trend in Indiana's expansion- and contraction-based job gains largely mirror that of the gross job changes (see **Figure 3**).

Figure 3: Components of Indiana Private Sector Gross Job Gains and Losses, 1993:1 to 2010:1



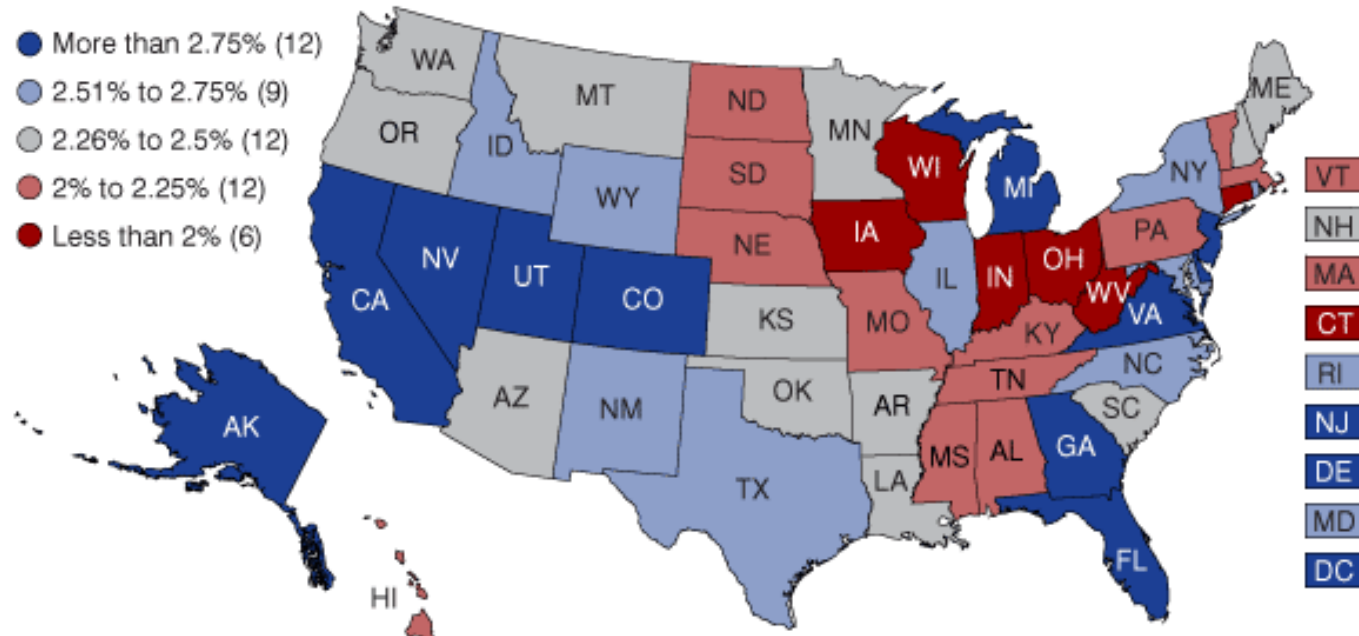
Note: Data are seasonally adjusted. Shaded area refers to U.S. recession periods.

Source: IBRC, using Bureau of Labor Statistics data



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Figure 4: Average Establishment Birth Rates by State, 2009:2 to 2010:1



Source: IBRC, using Bureau of Labor Statistics data

Indiana's lower birth rates mean that the state's economy is more reliant on established companies and traditional industries. As of the first quarter of 2010, 57 percent of Indiana's establishments had been open for 10 years or more compared to 51 percent for the United States (see **Figure 5**). These older employers account for 77 percent of the state's private sector jobs. Meanwhile, 26 percent of Indiana's establishments have been open for four years or less but these younger employers contribute just 11 percent of the state's jobs.



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Figure 7: Survival Rates of Private Sector Establishments by Year Born and Average Number of Employees at Surviving Establishments, 1994 to 2009



Note: Survival rates refer to establishments still in operation as of March 2010. Annual cohorts are defined as establishments that opened between April of the previous year and March of the year listed.

Source: IBRC, using Bureau of Labor Statistics data

We also see that though new employers do start small, successful establishments expand employment on average as they mature. Indiana typically has more employees per establishment than the U.S. and that gap tends to grow over time suggesting that state is somewhat more dependent on larger firms.



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New Uses We've Thought of ...

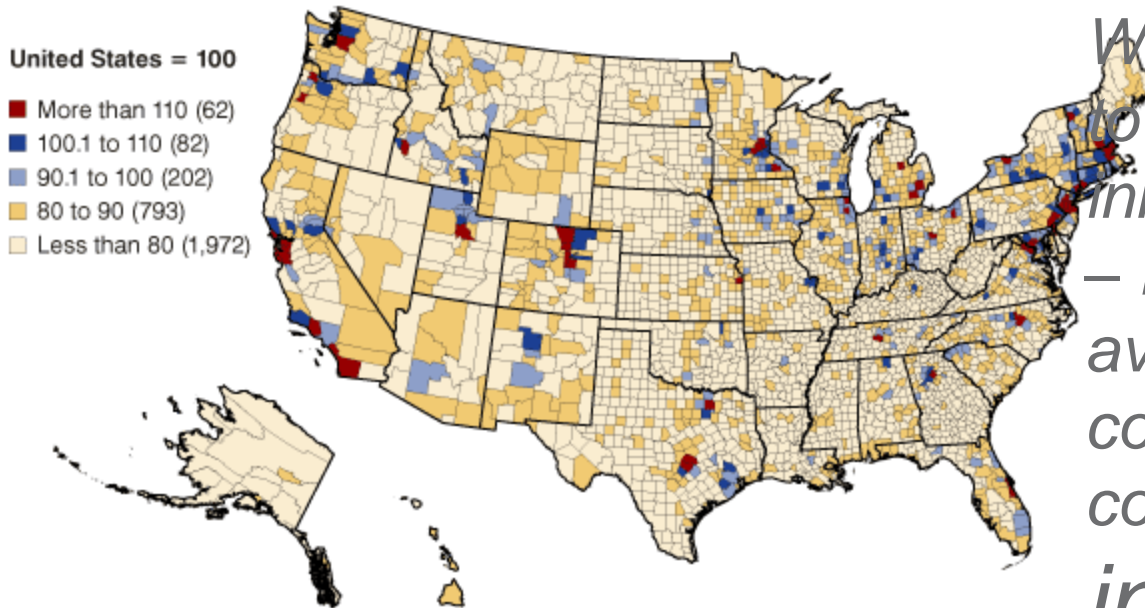




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Innovation Capacity of America's Counties

Can we begin to utilize local churn from LED?



We created models to measure innovation capacity – LED, once available for all counties in the U.S., could provide critical inputs.

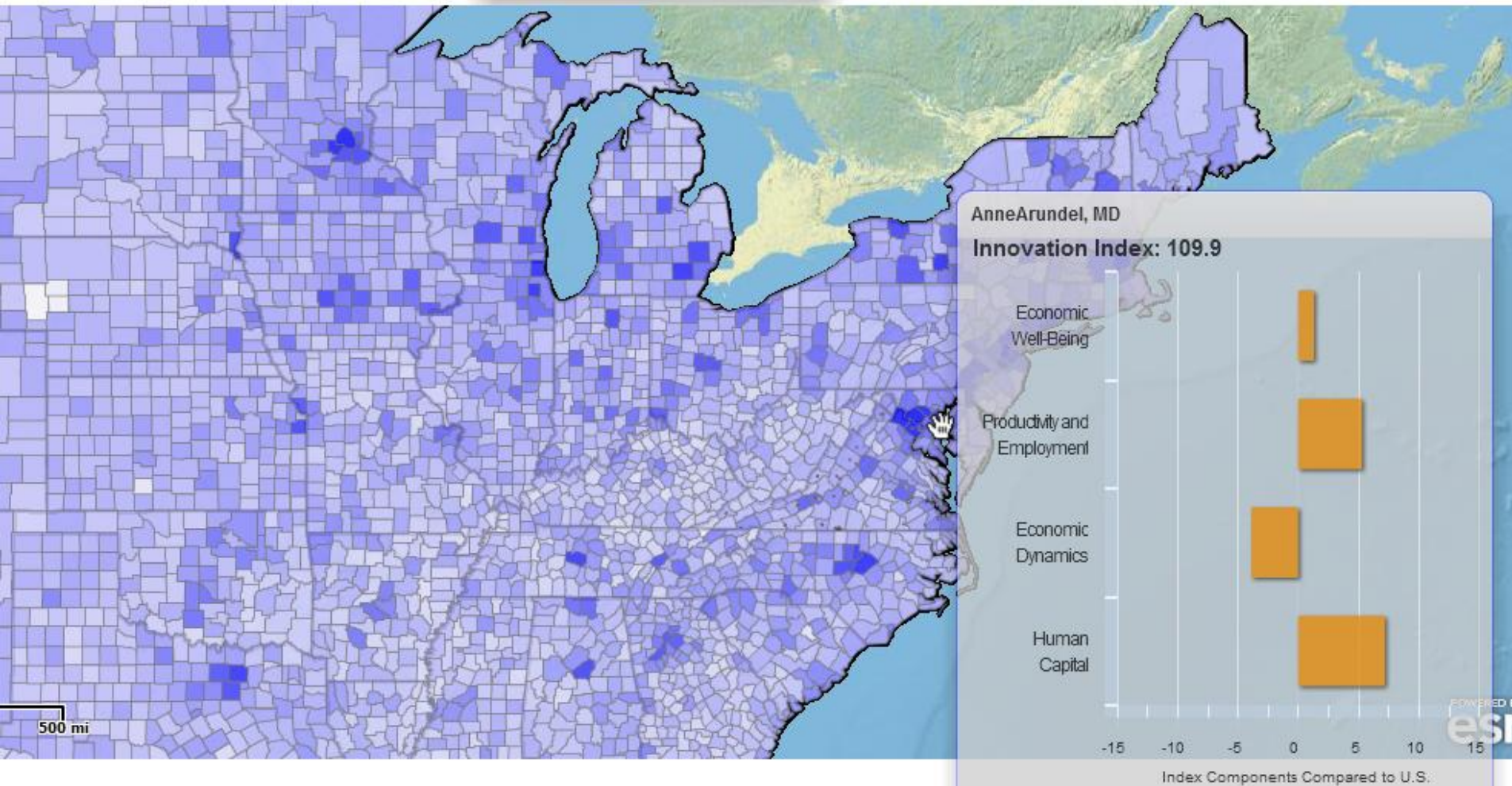
Source: Indiana Business Research Center

www.statsamerica.org/innovation



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Innovation Index



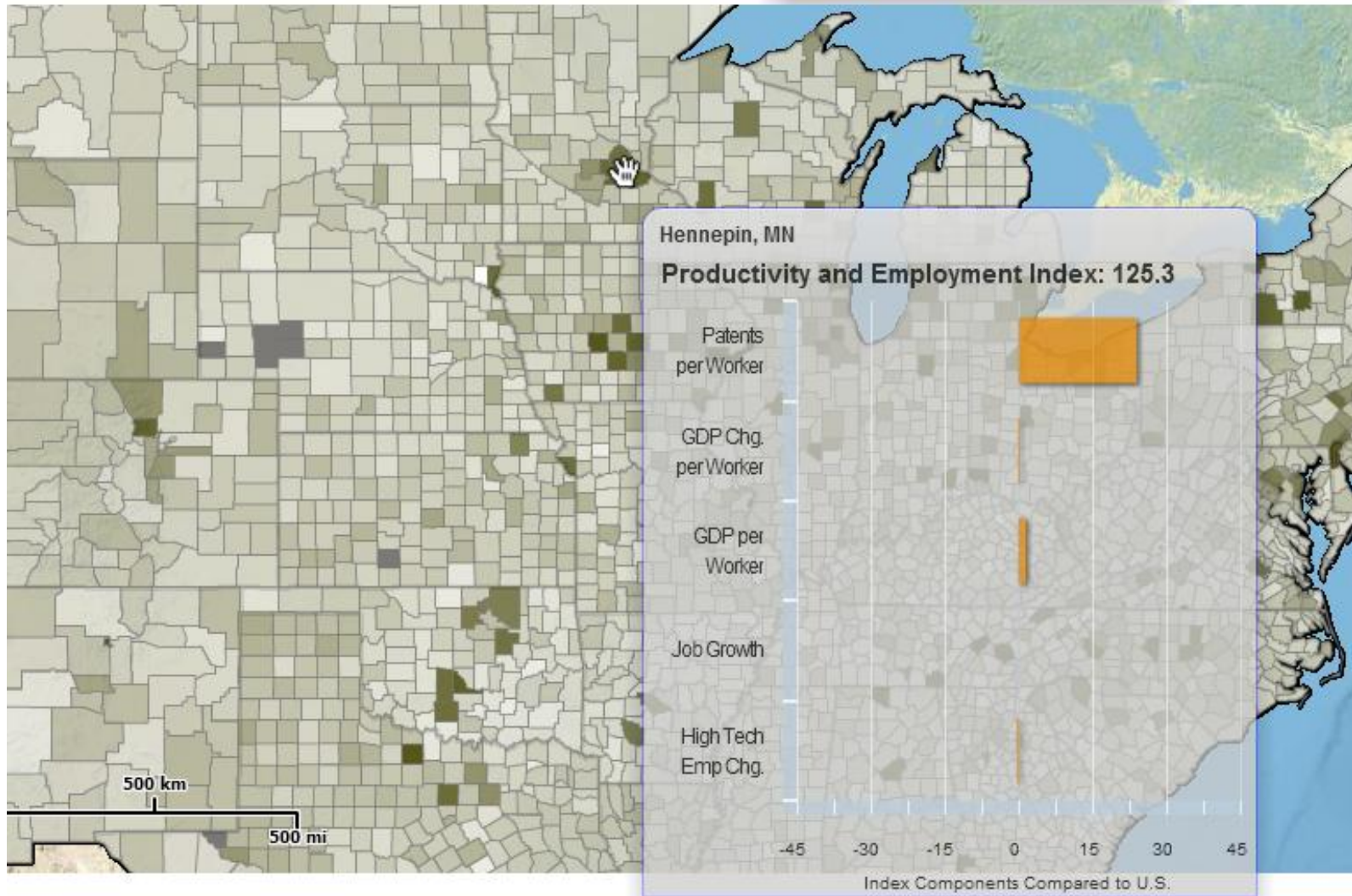
www.statsamerica.org/innovation

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Productivity and Employment Index ▾



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HOOSIERS by the NUMBERS

An interactive data application analyzing Indiana's workforce

Indiana Department of
Workforce Development

Indiana Business Environment Radius Profiles

This profile gives an overview of the business environment for a radius around the selected point. It only includes estimates for Indiana companies.

1. Select a Location

Enter an address, zip code, city or click a location directly on the map.

2. How Big Do You Want the Radius?

Small radius searches return results faster.

Number of Miles:

3. Get Profile

Industry Sector

Top employers, employment and establishment by major industry, and leading companies by sales value.

Establishment Size

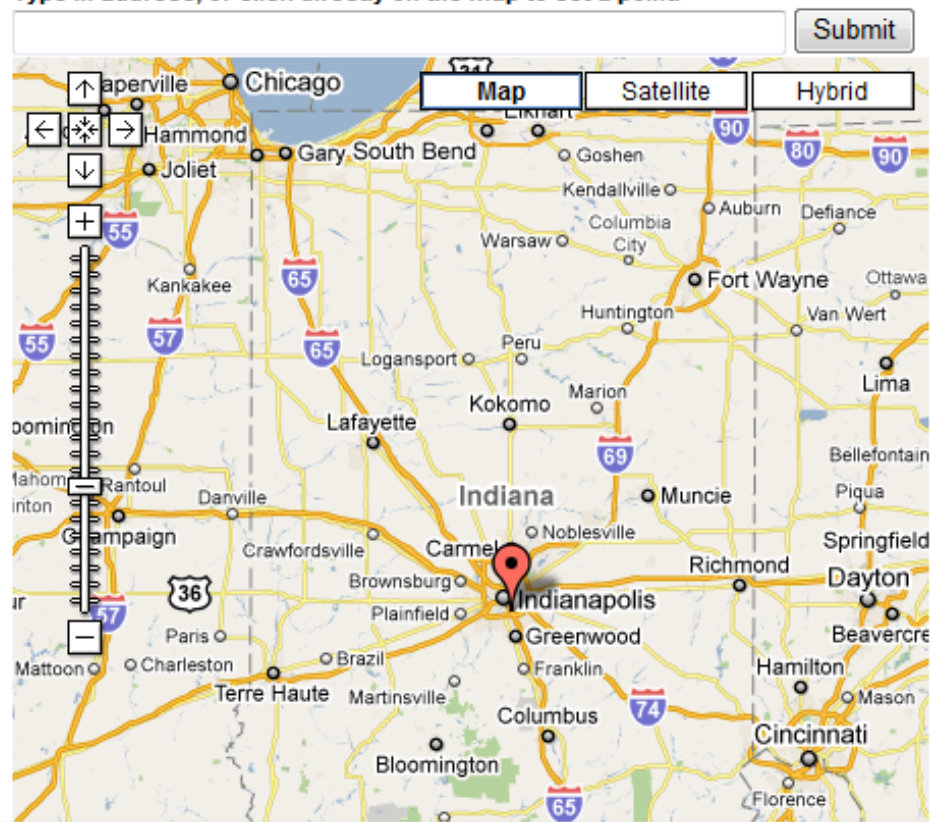
Employment and establishments for 6 size classes.

Industry Sub-Sector

Top employers, employment and establishment by sub-sector, and leading companies by sales value for a single sector.

Select a sector:

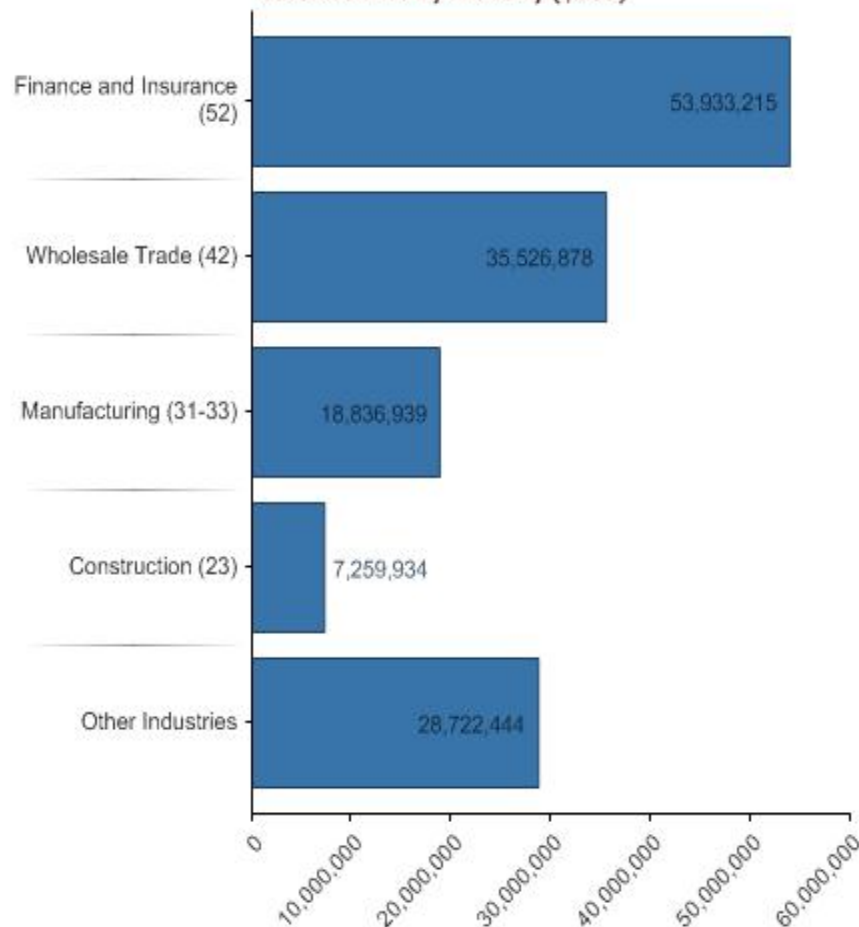
Type in address, or click directly on the map to set a point:





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Sales Volume By Industry (\$000)



Top Companies by Sales Value

| | Industry | Sales |
|-------------------------------|---|------------------|
| Federal Home Loan Bank | Banks (522110) | \$46,599,066,000 |
| Eli Lilly & Co | Pharmaceutical Products-wholesale (424210) | \$8,358,000,000 |
| Indianapolis Power & Light Co | Electric Companies (221122) | \$3,620,000,000 |
| General Motors Metal Fab Div | Automobile-manufacturers (336111) | \$2,608,161,000 |
| Allison Advanced Dev Co Inc | Aircraft Engines & Engine Parts-mfrs (336412) | \$2,193,000,000 |
| M&i Bank | Banks (522110) | \$2,032,695,000 |
| Allison Transmission Inc | Transmissions-automobile-manufacturers (336350) | \$1,919,000,000 |
| Manheim Indianapolis | Automobile Auctions (whls) (423110) | \$1,110,000,000 |
| Cvs Caremark Distribution Ctr | Distribution Centers (whls) (423990) | \$944,000,000 |
| Adesa Indianapolis | Automobile Auctions (whls) (423110) | \$925,000,000 |



We could model the LED data and use as an input.

Note our use of the google api.



Index for January 2011

The economic recovery seems to have found its legs. Since the lazy days of summer 2010, the Leading Index for Indiana (LII) has increased for 5 consecutive months.

| | |
|----------------------------|------|
| LII Value | 97.4 |
| Change from Previous Month | 0.1% |
| Warning Sign ? | No |

[View data](#) | [Downloadable 13-month graph](#)



Note: Hover over the lower graph and move the slider to change the time period displayed.

The LII rose to 97.4 in January, the highest it has been since the economy rapidly unraveled in the fall of 2008. Given that the recession started in late 2007 and 2008 saw a rapid decline in the LII from over 100 to less than 96, it will still take some time for the LII to return to its pre-recession levels.

Other economic indicators corroborate this story. [The Ceridian-UCLA Pulse of Commerce Index™ \(PCI\)](#), a real-time measure of the flow



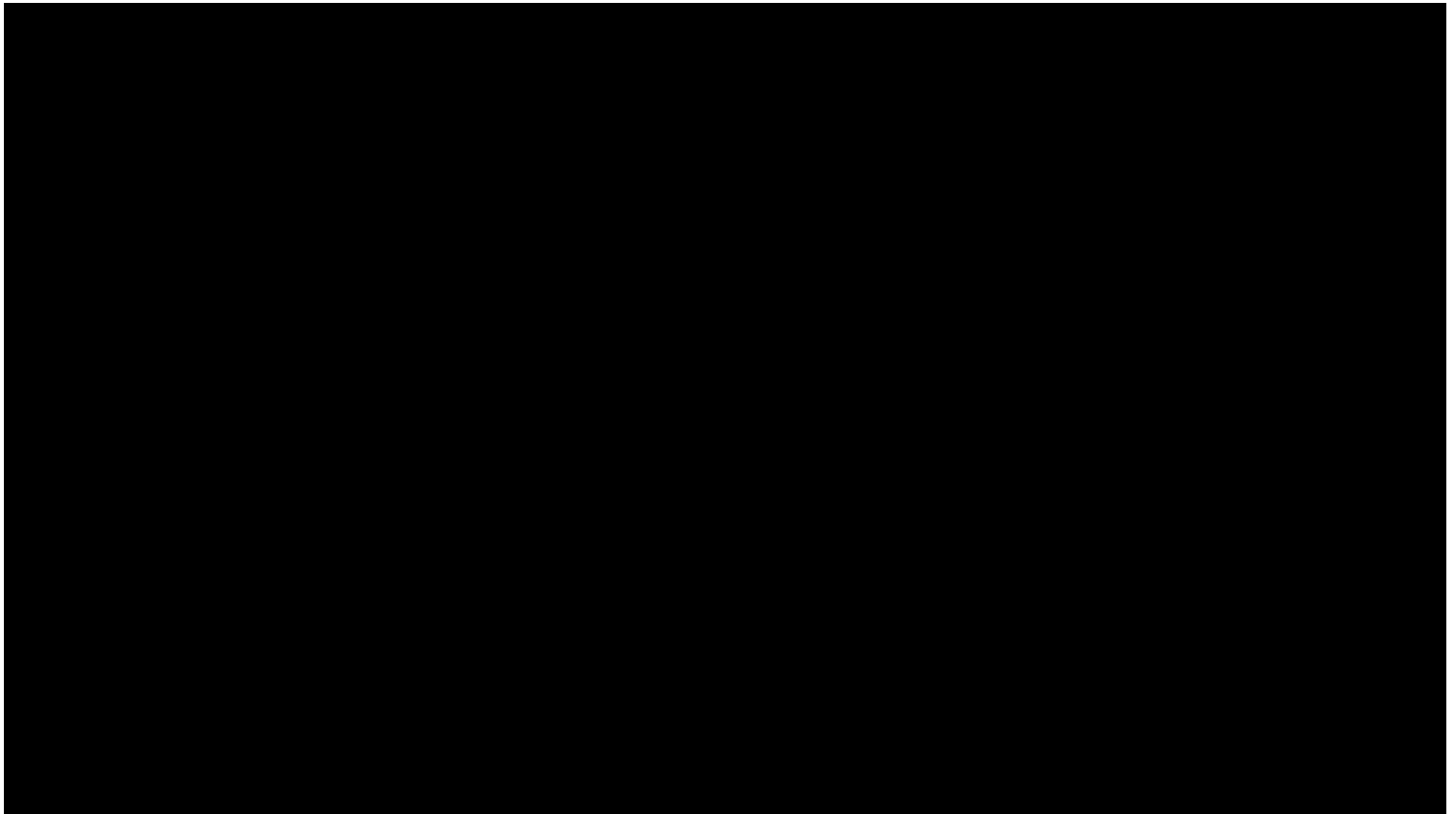
Some ideas ...

- Create ways we can embed LED components (including On the Map) on our own websites



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Embedding





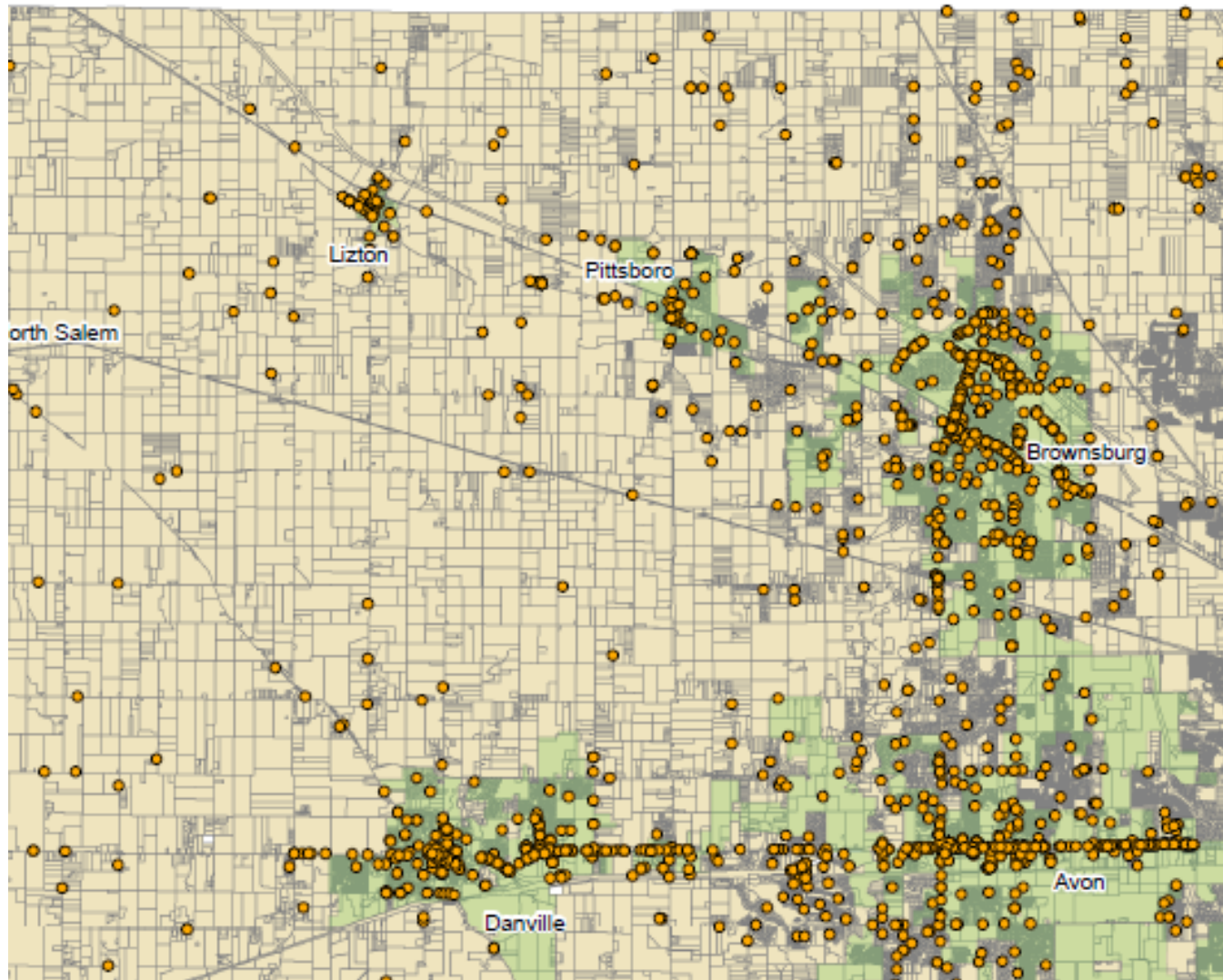
Homes and businesses and more could be shown

- Consider incorporating property parcel data as a layer for On the Map



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Locations of Major Employers



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- Utilize universities willing and able to deploy their massive computing abilities to serve as mirrors or additional computing power

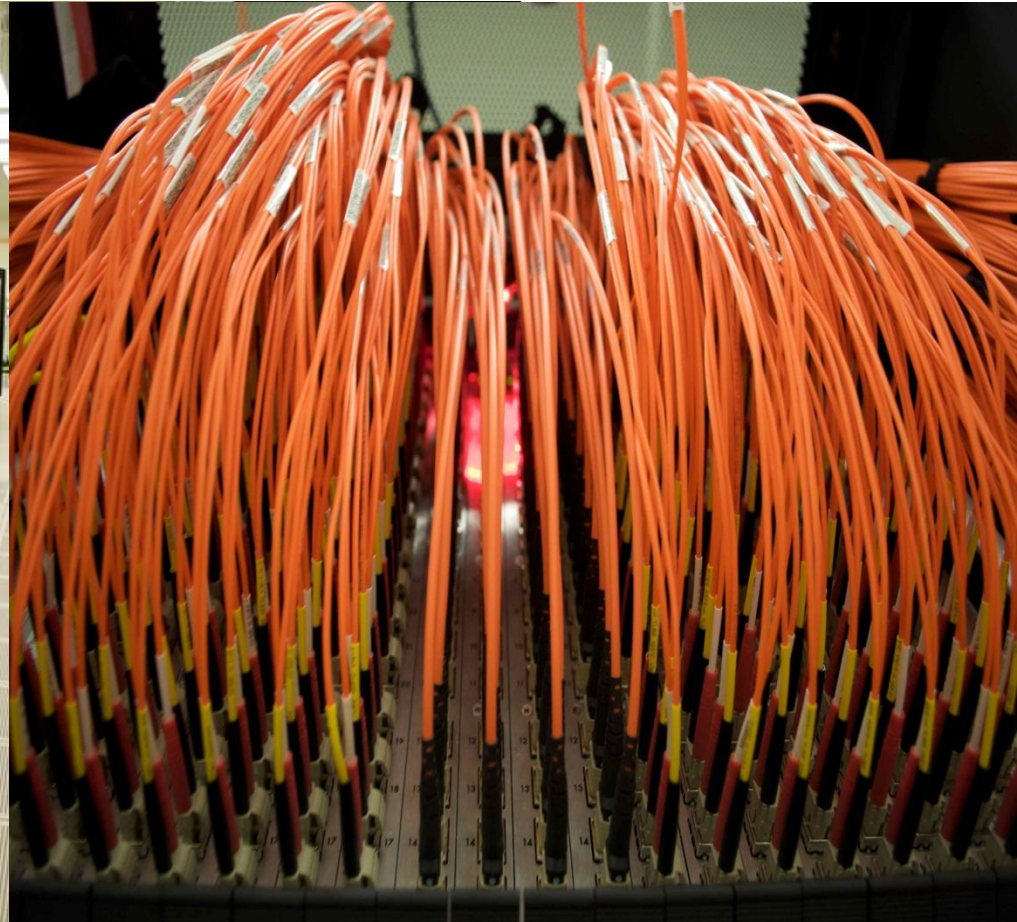
Big

Red



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40 teraflops, and has achieved more than 28 teraflops on numerical computations





“Most people forget 90% of what they are told within 24 hours”

—www.llrx.com/columns/guide27.htm

True or False?