



Development of a Regional Knowledge Economy Index



Purpose

A Knowledge Economy Index will aid the region by:

- Generating awareness about the state of our Knowledge Economy,
- Facilitating the development of targeted regional Knowledge Economy economic development strategies,
- Providing context, by comparing scores to state averages and
- Assisting us in monitoring progress over time.



Knowledge Economy Categories

- Knowledge Jobs
- Talent
- Innovation Capacity
- Digital Economy
- Globalization
- Economic Dynamism



Knowledge Jobs - Indicators

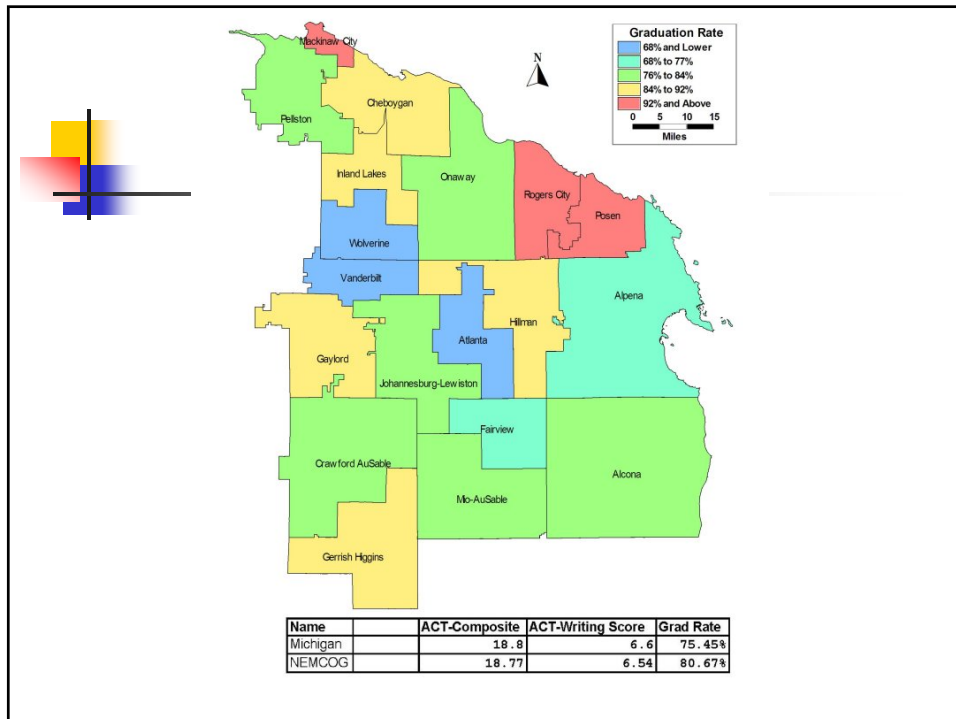
We propose to measure Knowledge Jobs by the percentage of the workforce employed in IT, biomedical and high-tech jobs. Examples of these jobs include:

- Computer software engineers
- Network systems analysts
- Engineering technicians and drafters
- Environmental engineers
- Physicians, RNs, chemists, biologists



Talent - Indicators

We propose to measure Talent by the number of certificates and degrees granted by local colleges and by high school graduation rates.





Innovation Capacity – Indicators

We propose to measure Innovation Capacity by the number of venture capital firms, the amount of private research and development investment, and the number of patents registered.



Innovation Capacity - Data

Primary Inventor Patents

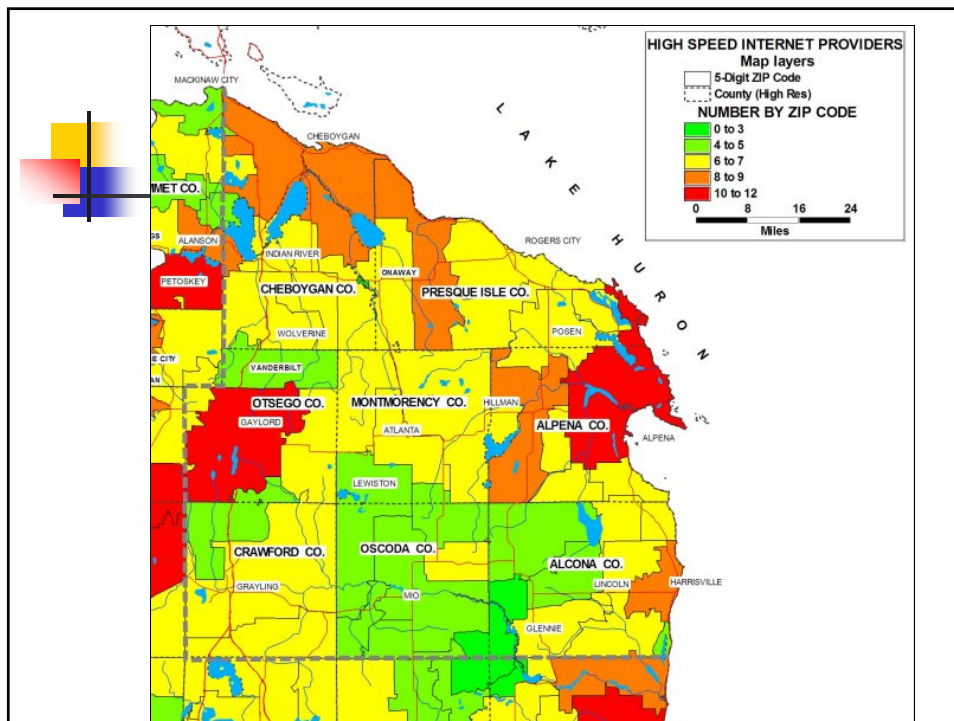
	NE MI	State
No.	19	3,695
Rate per 100,000 Residents	13.58	36.94

Percentage of MI Population: 2.97%

Percentage of MI Patents: 0.27%

Digital Economy – Indicators

We propose to measure Digital Economy by the number of high-speed internet providers, the percentage of local units engaged in e-governance, the number of e-prescribing pharmacies and the number of wireless hotspots.





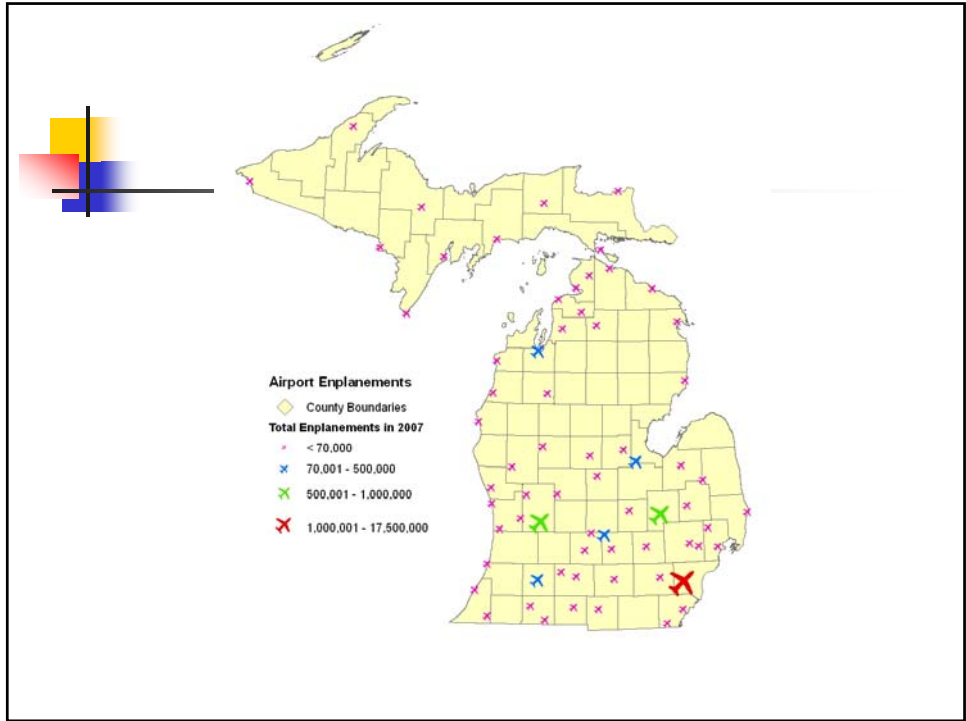
Globalization

The indicators in this category reflect the degree to which our region is engaged globally.



Globalization - Indicators

We propose to measure Globalization by the number of exporting firms, the rate of air travel, and number of foreign guest skilled workers.



Globalization – Data

The number of foreign guest skilled workers is measured by the number of H-1B visas.

	NE MI	State
No.	113	13,483
Rate per 100,000	80.8	134.78

Percentage of MI Population: 2.97%

Percentage of Visas in MI: 0.91%



Economic Dynamism - Indicators

We propose to measure Economic Dynamism by the percent change in employment, wages, new enterprises and dissolutions.



Economic Dynamism - Data

- High-tech job change (rate and state average—more than one quarter).
- WIA data—wage and turnover for healthcare.



Data We Can't Use

- Too Few Surveyed
 - American Community Survey (US)
 - Institute for Public Policy and Social Research (MI)
- Region Doesn't Match (doubles population)
 - Occupational Employment Statistics (US)
 - Bureau of Economic Analysis (US)



Data No One Collects

- High Speed Internet Availability
 - Proxy: # HS Internet Providers per Zip
- Wireless Internet Availability
 - Proxy: AT&T and T-Mobile Listings
- R&D Investment



Data We Can't Process

- Incorporation Statistics
 - Hard copy only, 100s-1000s of pages per month
- Licensed Engineers
 - Database not usable



Questions?
Comments?
