

Building Healthy Communities in the 21st Century:

Presented at

Conference on Agriculture and Rural Communities

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Outline: Why are we here?

1. Need to understand why places prosper if we want to help them prosper: **Compete or Retreat!**
 - Regions compete nationally and internationally
 - Not just Kansas City vs. St. Louis, but also StL vs Beijing
 - Regions that don't rise to this competition in terms of being a good place for business and a quality place to live will decline.
 - People, entrepreneurs, and investment will flow elsewhere.
 - This matters for rural areas
 - **Moral will be get the basics right, be patient and don't be fancy for fancy sake.**

Motivation--continued

2. Too many communities skip the basics.
 - We 'want' a quick fix!
3. Jump on the latest fad w/o even knowing if the previous fad worked.
 - ***Clean energy, ethanol, local foods, immigrants, creative class, value-added manufacturing, bio-technology, clusters, tax incentives.***

Motivation--continued

4. Rearview mirror: 'Regain a historical legacy.'
In Ohio, it's manufacturing; in Western Kansas farming, etc.
- They are great legacies, but 21st Century winners will differ from 19th & 20th Century winners.
 - This does not mean that manufacturing or farming failed!—productivity growth means each worker is more productive than before. **This should celebrated!**
 - **Rural Myth**—Grandpa's 1950 rural Kansas is today's rural Kansas w/o recognizing new opportunities.

Let's first beat up 'bad' policy

- **Bad Idea 1:** Ignore economic fundamentals and rely on gut hunches w/o foundation.
 - Color graphics & facilitation replace economic reality
 - Wishful thinking & good intentions replace good ideas
 - Economics doesn't have all the solutions, but neither does your local doctor for medical care.
- **Bad Idea 2:** We need a quick fix.
 - If it was easy, wouldn't someone have already done it?
 - Truth is that it takes time to attract new knowledge workers, entrepreneurs, & physical capital.
 - Five years is realistic for tangible effects.

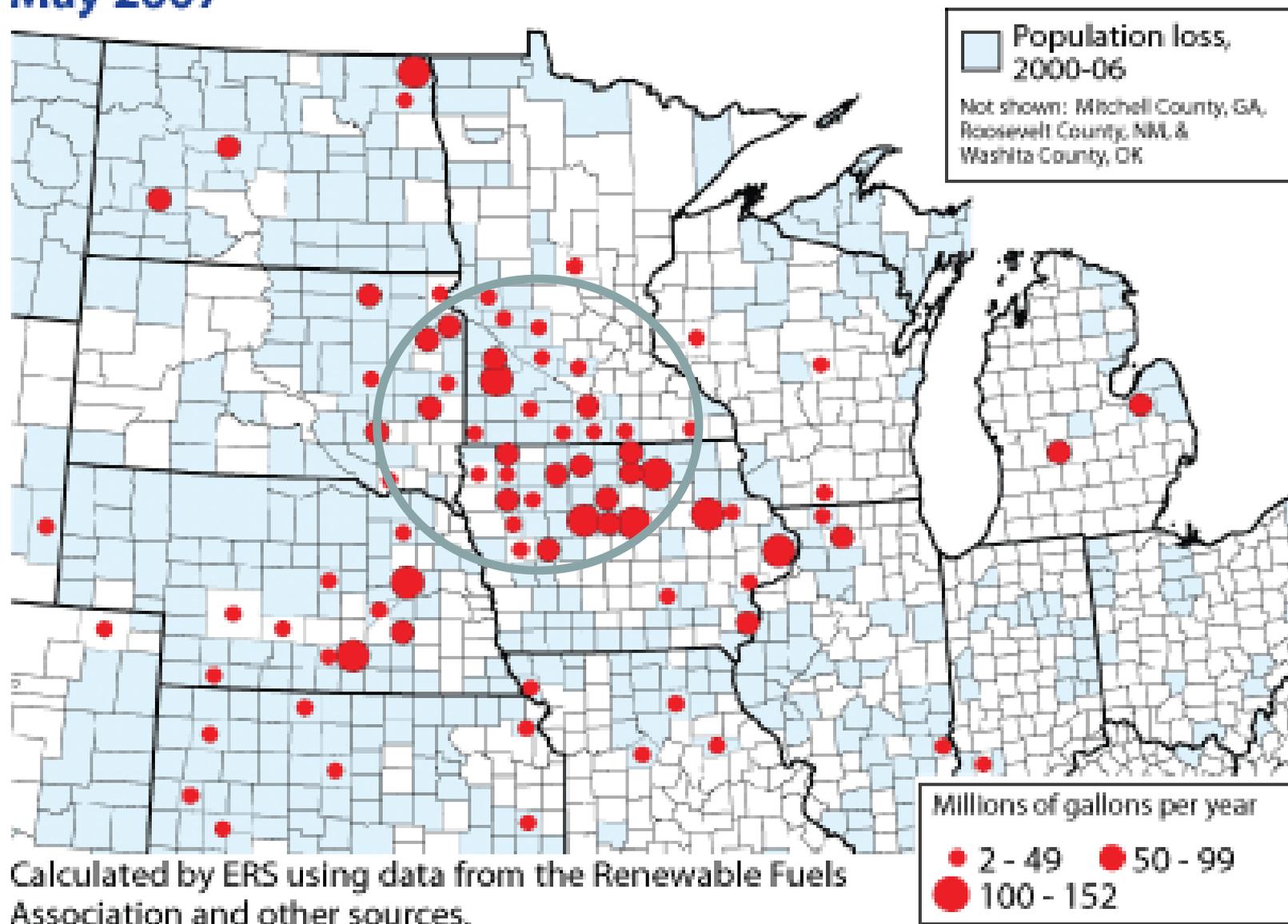
Losing Bad ideas

- **Bad idea 3:** Jump on the latest fads
- **Fad 1:** Clean Energy—wind and bio energy.
 - We need clean energy!, but is it a job creator?
 - Over the last 25 years, it now seems like cell phone towers are everywhere
 - How many permanent jobs did they create?
 - The problem is that wind turbines/cell towers are capital intensive and require few permanent workers.
 - Subsidies take money from other gov't programs.
 - Don't confuse clean energy policy with rural policy!

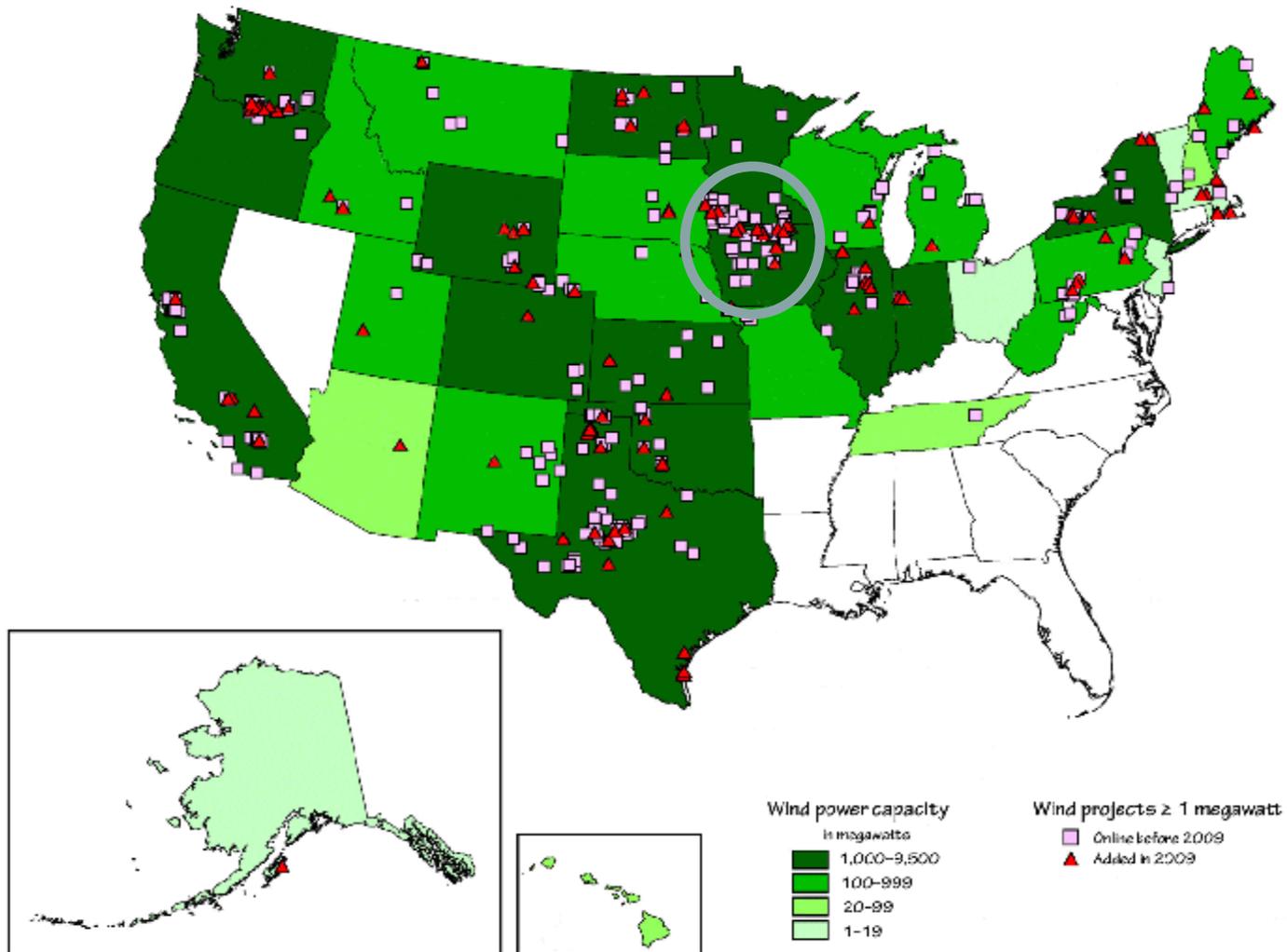
Fad 1, Cont: Rural Example—SW Minnesota/NW Iowa

- Many politicians argue alternative/green energy is especially good for rural economic development.
- Rural economies would be more sensitive to the effects of any economic shock.
 - SW Minn and NE Iowa is a good case study. I will show that alternative energy has not been a game changer when looking at their broad economy.

Ethanol production capacity in nonmetro counties, May 2007

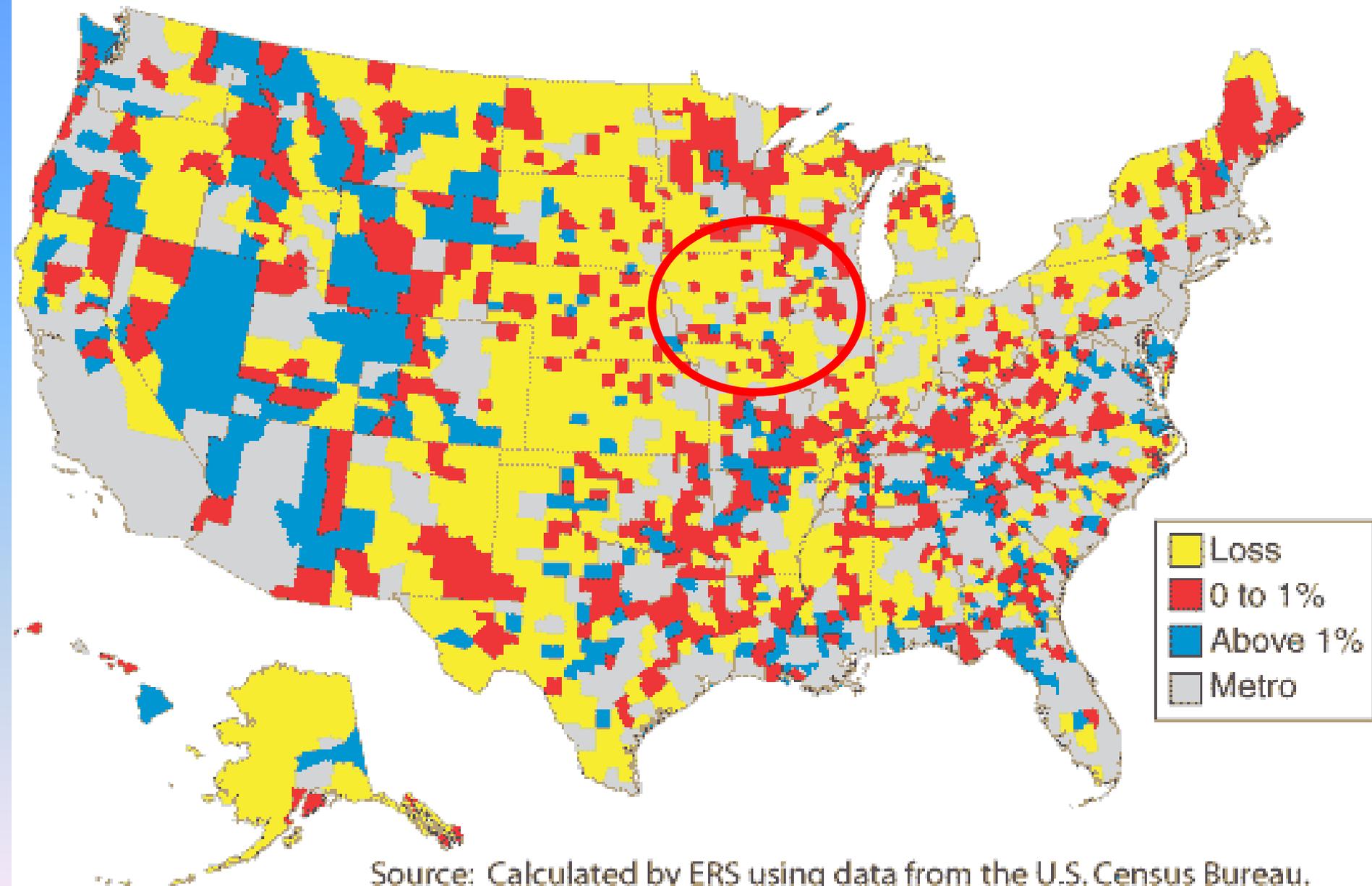


Map 1. Wind farms in the United States, as of year-end 2009



SOURCE: National Renewable Energy Lab, Department of Energy

Nonmetro population change from net domestic migration, 2005-06



Source: Calculated by ERS using data from the U.S. Census Bureau.

Losing Bad ideas

- **Fad 2: Firm Clusters or synergies**
 - Michael Porter from Harvard created a cluster buzz.
 - Economists had routinely discussed since the 19th Century
 - After winding down in the Bush years they have picked up with the name ***Regional Innovation Clusters***.
- Firms like to be near similar industries to take advantage of similar needs and workforce
- Sounds cool and consultants + politicians love it
- The actual evidence is shaky. Diversified communities do better.

Losing Bad Ideas:

Why do cluster strategies typically fail?

- **The logic is weak.** The point is, if a location was such a great place for business, private firms would move there on their own.
- The concept is too vague and nobody understands.
- The gains are typically small (agglomeration economies) are narrowly spread within the cluster
- Scarce tax dollars should not be diverted from high valued uses to support risky endeavors such as supporting a cluster that the private sector will not support.

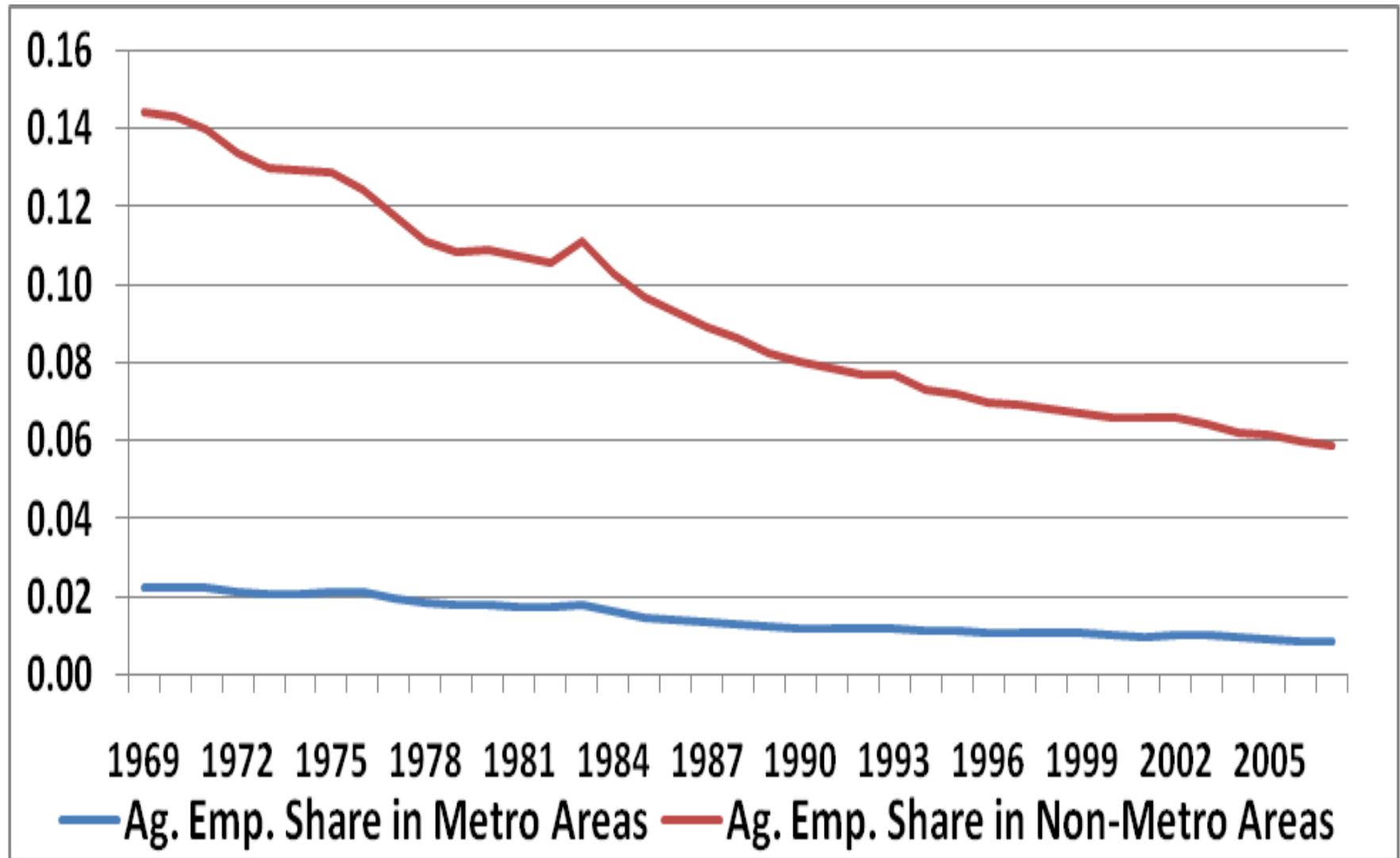
Losing Bad ideas

- **Bad idea 4:** Rearview mirror-backward-looking
- Keep doing the same thing over and over w/o considering new opportunities.
 - Could result from a legacy industry becoming so productive, fewer workers are hired
 - E.g., Ohio manufacturing.

Rural Myth: It is still 1950!

- **Rural Myth**—rural America's prosperity solely relies on natural resource sector.
 - This is a common media story—*New York Times*—**confuse the bucolic landscape with what the people do.**
 - Confuse sector prosperity with place prosperity.
 - My moral is healthy places will be a magnet for healthy sectors and businesses.

Agricultural Employment Shares in Metropolitan & Nonmetropolitan Areas



Source: U.S. Bureau of Economic Analysis, Regional Economic Information System. Available at www.bea.gov, accessed October 15, 2009.

Moral!

- Rural development is far more complex than supporting sectors.
 - Note the contradiction in (say) farm or manufacturing (etc) policy, farm or manufacturing competitiveness is producing **more** food with **fewer** workers—
 - Sector prosperity is **not** community prosperity!
- Sector-policy often conflicts with place policy.

What is the real of Rural America?

- Policy should be based on reality—not myth.
- The reality is that there are 3 rural North Americas:
 - 1) Amenity/recreation rich near mountains, lakes, oceans
 - 2) Metro adjacent with commuting—big and growing
 - This self-forming regions are what I want to talk about.
 - 3) Remote rural that is dependent on natural resource sectors—shrinking in size since the 1930s.

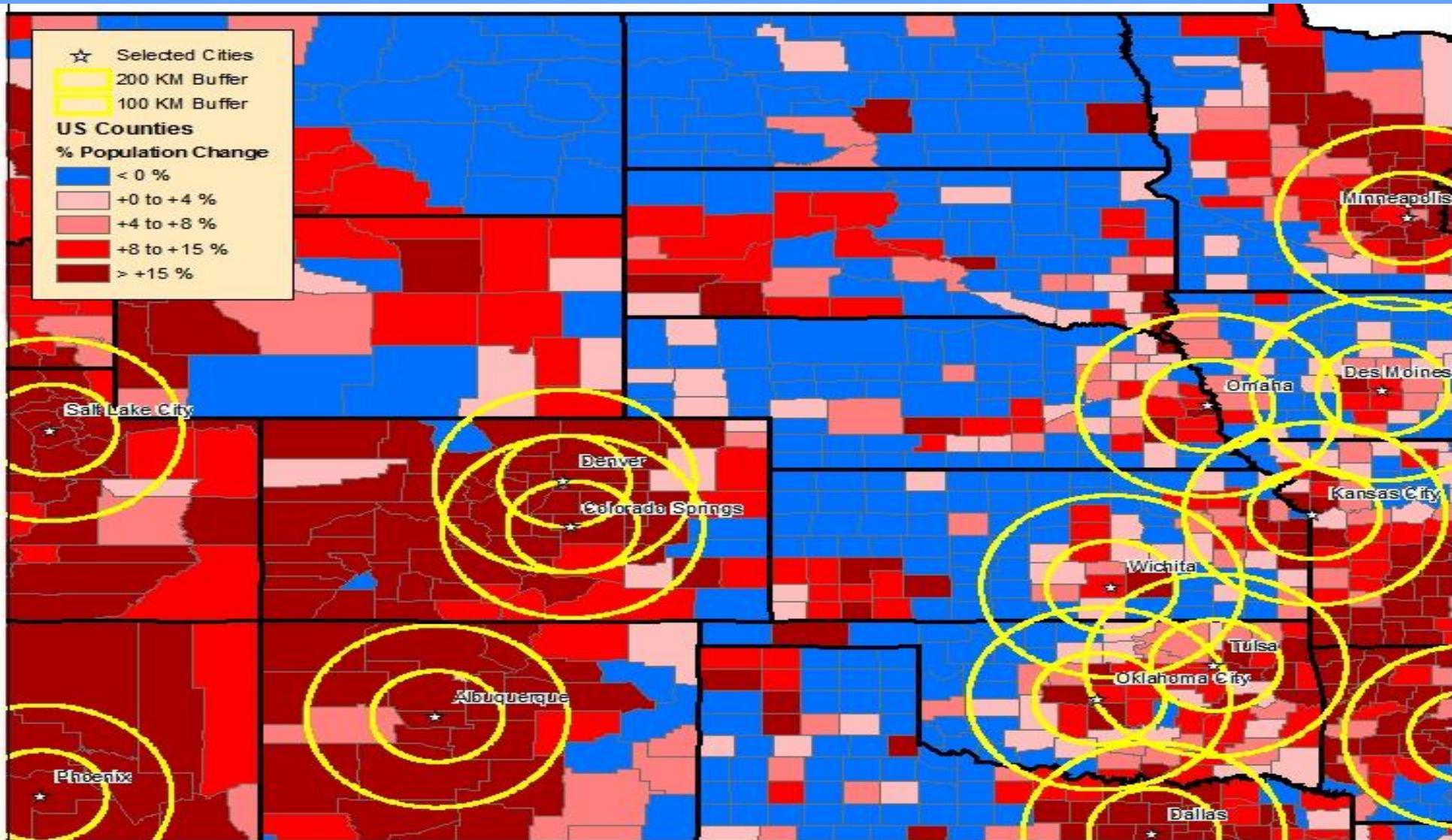
What is good strategy?

- *You don't have to pick the next hot industry, just be sure they want to be in your community. e.g., Seattle 1978 and Microsoft*

1. Recognize rural-urban interdependencies

- In 1950, communities detached from neighbors
- 21st Century communities are linked in webs
 - Growth spreads out a hundred of miles from a city as small as 30,000
- If someone can commute, they shop, utilize health care, participate in service organizations, etc.
- Regions share common interests and the gains should be exploited regionally.

Plains States Engines of Growth



Canada Rural Economy Research Lab (C-RERL)

www.crerl.usask.ca

Rural Depends on Urban for:

Urban Depends on Rural for:

Employment

Labor Force

Private and Public Services

Market for Private and Public Goods and Services

Urban Amenities

Market for Urban Amenities

Market for recreation activities

Recreation

Market for agriculture products

Food Safety and Security

Demand for Environmental Stewardship

Natural Environment

Property taxes/land market

Land for Residential and Industrial Expansion

Rural-Urban Shared Fates--cont

- Economists contend that gov't jurisdictions should reflect common interests & spillovers.
 - Spillovers need to be minimized with a regional 'authority.' Avoid pushing costs onto other places.
 - Tax sharing of common economic gain to share costs
 - Environmental costs and sprawl
 - Infrastructure is inherently regional

Example of Action

- Regions that realize they are linked will have a competitive advantage in the global economy.
 - Lower taxes, better infrastructure, better public services, stronger economic development
 - Just being a little more competitive will shift capital from around the world at the click of a mouse.
- Regionalism is the real sleeping giant for rural communities for sustainability.

Regionalism—continued

- Regionalism stops the “city” from keeping all of the gains while ‘remote’ communities lose
 - Currently, (say) Peoria keeps all of its tax revenues from the region’s shoppers. Regional approach would disperse some back to the country for regional projects.

Good Strategies—cont.

2. 21th Century will belong to places that use their knowledge to leverage their assets.

- Rural communities should be attractive to knowledge workers
 - Quality of life, pleasant environment, sustainable development—this is good economics!
 - Attract return migrants in the 30s after they have seen bright lights.
- Rural US counties with greater shares of knowledge workers grow faster than metro areas (even metros with knowledge workers) and they grow about twice the rate of rural counties with low shares.

• Source: see the appendix for a supporting chart

Good Strategies--cont

3. Business retention and expansion is better than tax incentives for outside investment. Building Entrepreneurship

- Treat all businesses alike.
- If you build a good climate for investment, your own businesses will thrive and STAY!
 - Small businesses buy locally.
 - Innovation comes from small firms. It is better products and lower costs. Not the next bio-tech invention.
 - Entrepreneurship is critical.

2008 Non-farm Self-employment Share of Total Employment



■
Minimum = 2.94
Median = 22.39
Maximum = 68.73

Nonfarm Self-Employment Share of Total Employment

- 1.90 - 15.00%
- 15.00 - 25.00%
- 25.00 - 35.00%
- 35.00 - 45.00%
- 45.00 - 70.00%

125 250 500 750 1,000 Miles

Data source: Bureau of Economic Analysis

Good Strategies—cont

Business Retention and Expansion

- Take advantage of farm entrepreneurship.
- Today's successful farmer:
 - 1. Tied to land—not outsourcing to China.
 - 2. Has experience managing medium sized business and has developed entrepreneurship.
 - 3. Understands futures markets, global markets, exchange rates, knows how to manage capital.
 - 4. Has financial wealth.
- This asset is not typically utilized!

Conclusions:

What have we learned?

- Drop the silly fads and focus on the real fundamentals that make your community attractive to firms and workers.
- Lose that rearview mirror and focus on the 21st Century.

Conclusions

- Focus on realities such as emerging regions that the people have self formed—the politicians lag what the people are doing.
- Adopt good strategies that don't require perfect foresight.
 - You just need to make it such that the best firms want to be in your community.
- Education & entrepreneurship are keys.
- Farmers are underutilized as potential leaders of entrepreneurship.

Thank you

Presentation will be posted at The Ohio State University, AED Economics, Swank Program website:

<http://aede.osu.edu/programs/Swank/>

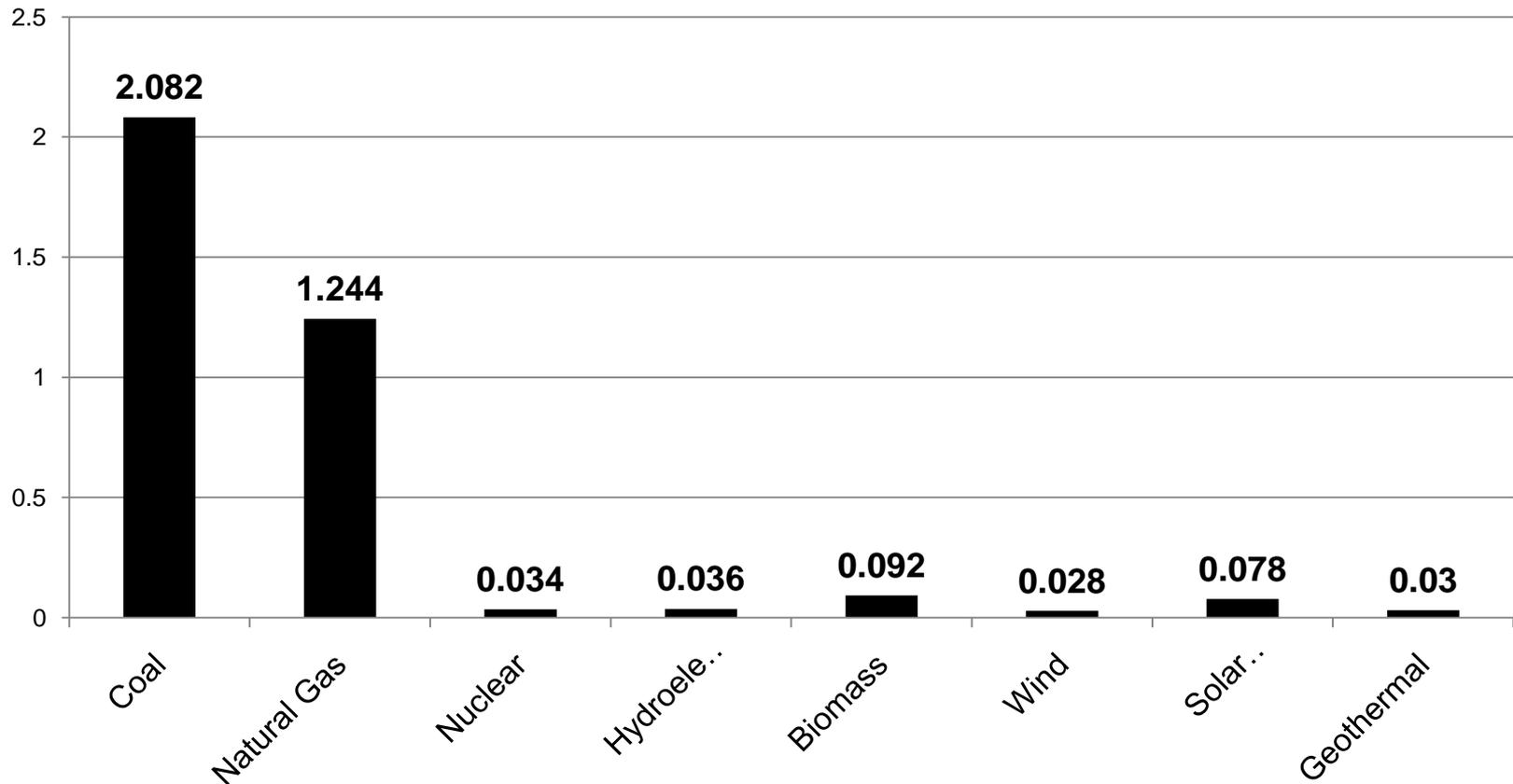
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Appendix Slides

Total carbon emissions per kWh generated by energy source

Life Cycle Emission Rates (lbs CO₂/kWh)

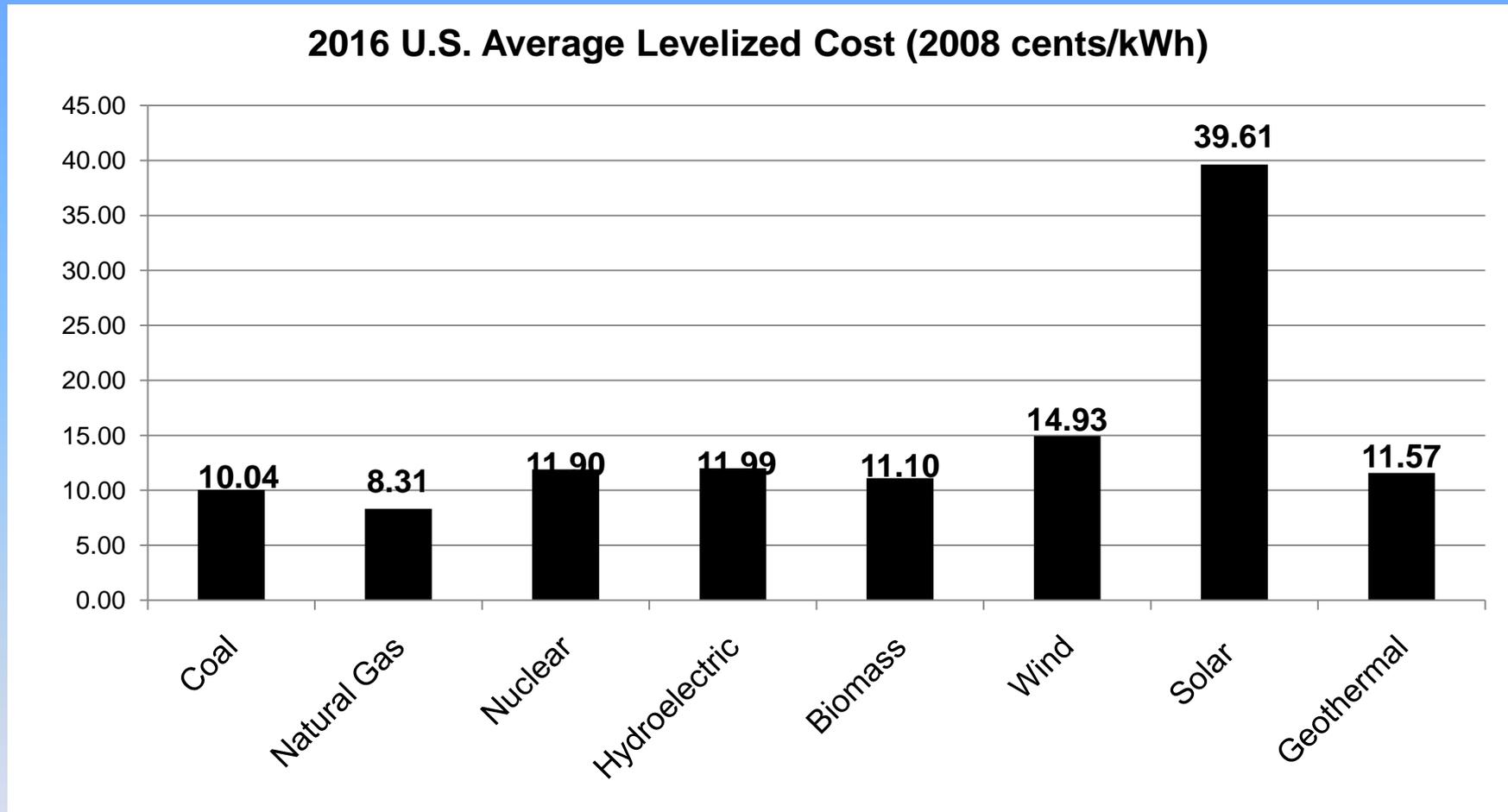


Note: Life cycle emissions rates includes the total aggregated emissions over the life cycle of the fuel to include extraction, production, distribution, and use.

Source: Meier, 2002.

http://cpsenergy.com/files/STP_Univ_Wisc_energy%20comparison.pdf

Energy production costs by energy source



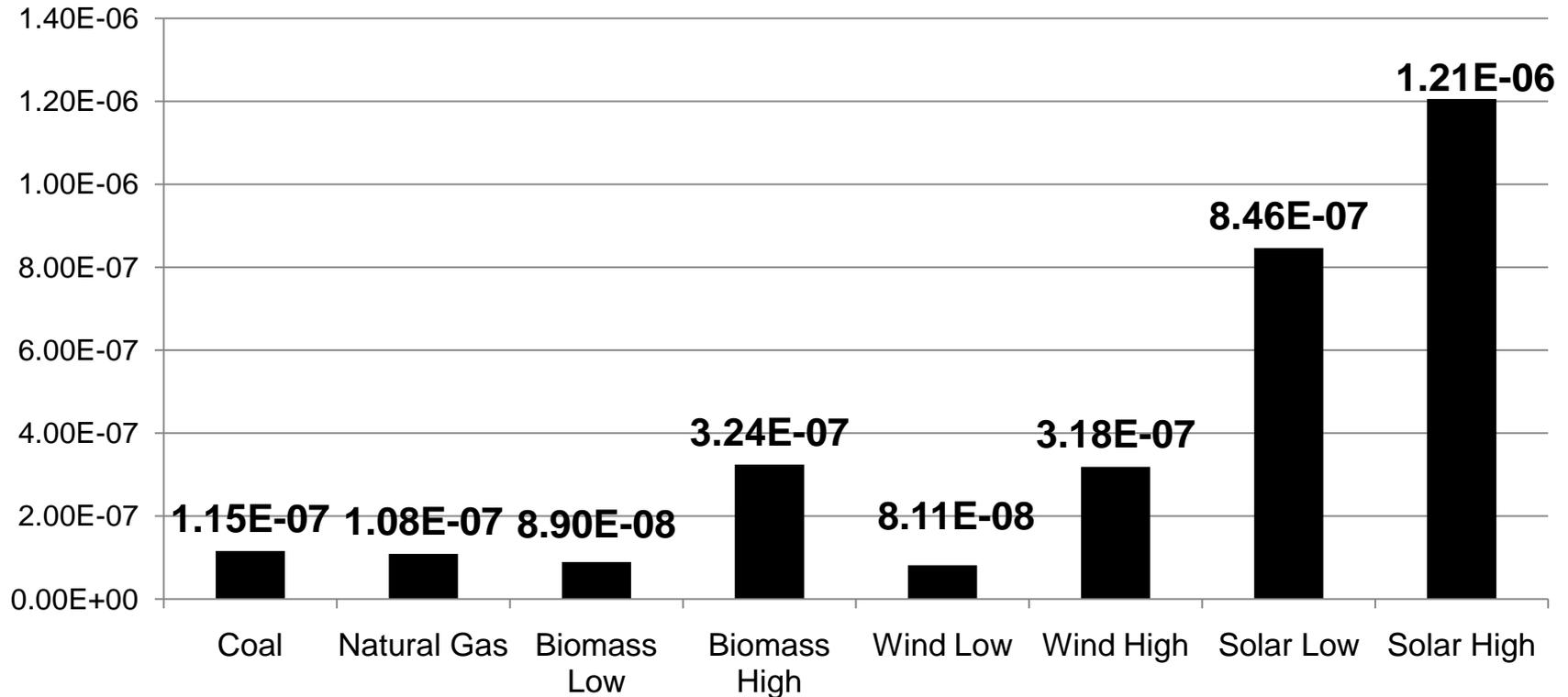
Note: The average levelized cost is the present value of all costs including building and operating the plants.

Source: US Department of Energy, 2010.

http://www.eia.doe.gov/oiaf/aeo/pdf/2016levelized_costs_aeo2010.pdf

Estimates of the number of jobs required to produce a kWh by energy source

Average Facility Employment (Jobs/kWh)



Source: Kammen, et al., 2004.

http://www.unep.org/civil_society/GCSF9/pdfs/karmen-energy-jobs.pdf

Effects of Replacing Coal with Wind

- Cost Effects of Replacing 25 percent of coal with wind

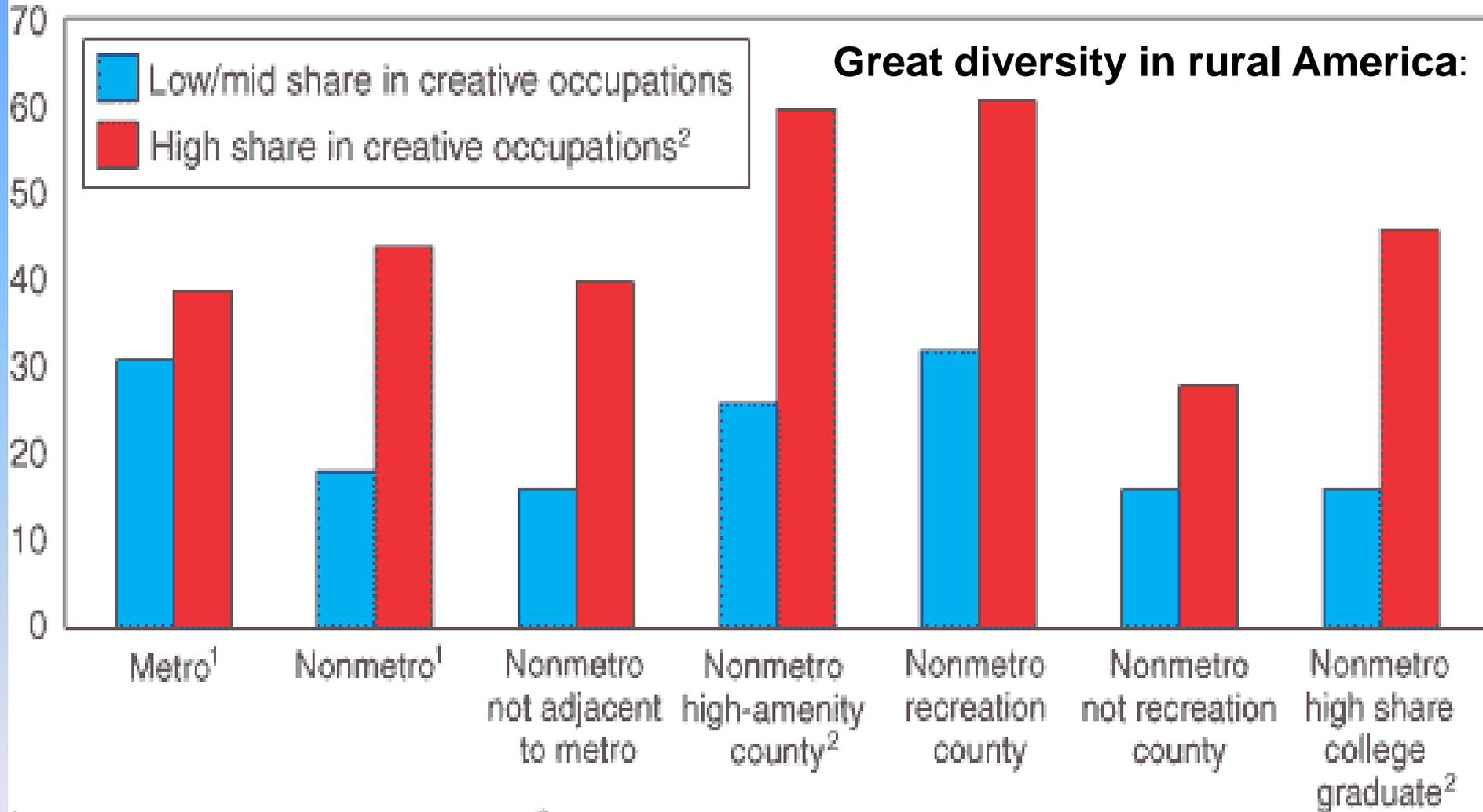
	2009 Total kWh	2009 Total Coal kWh	Changes in Total Emissions (lbs)	Total Annual Cost (Millions)	Total Cost Per Household (dollars/year)
US	3,951,117,000,000	1,764,486,000,000	-906,063,561,000	\$21,571	\$191.93
MI	101,642,000,000	67,822,000,000	-34,826,597,000	\$829	\$215.66
OH	135,949,000,000	113,824,000,000	-58,448,624,000	\$1,391	\$308.78

- Labor Effects of Replacing 25 percent of coal with wind

	Total Coal Jobs Based on Total kWh	Employment Change (low)	Employment Change (high)	Employment Change Share (low)	Employment Change Share (high)
US	203,440	-15,107	89,634	-0.012%	0.068%
MI	7,820	-581	3,445	-0.015%	0.089%
OH	13,124	-975	5,782	-0.019%	0.114%

Job growth in 1990-2004 by county type

Percent growth



¹1993 Metro-Nonmetro Classification.

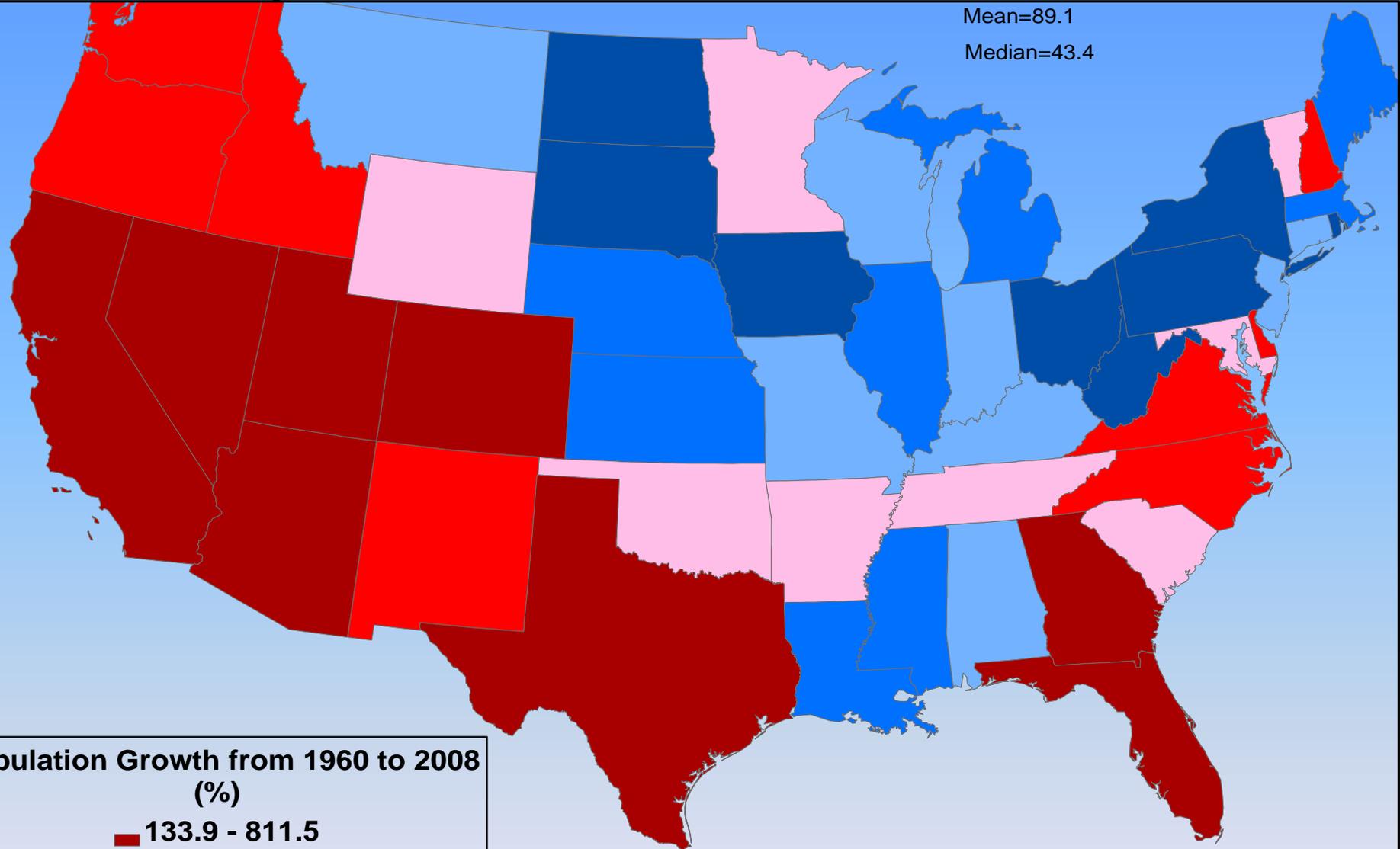
²Ranked in top quarter of all counties.

Source: Bureau of Economic Analysis, Regional Economic Information System files.

Population Growth from 1960 to 2008

Mean=89.1

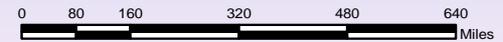
Median=43.4



Population Growth from 1960 to 2008

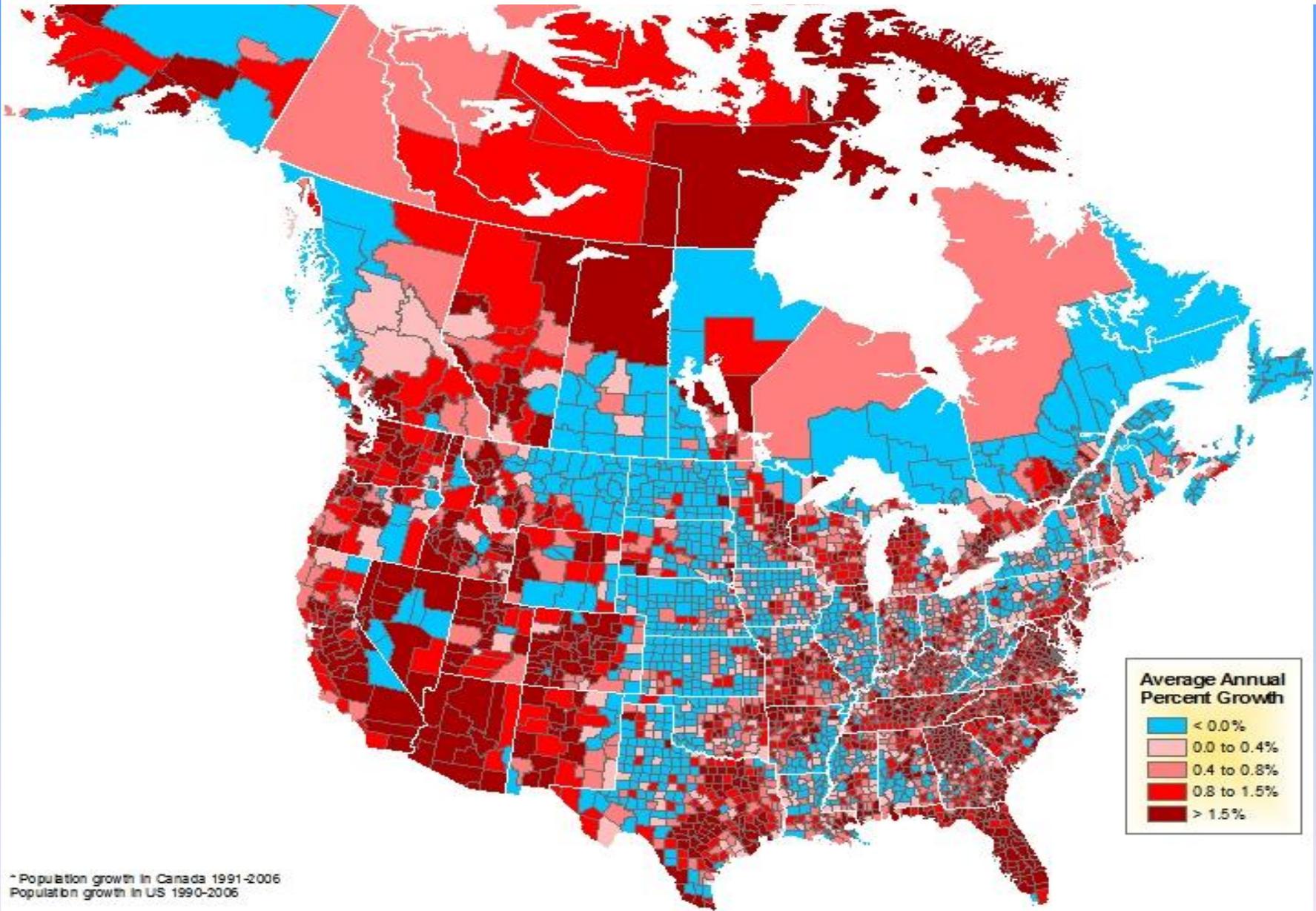
(%)

- 133.9 - 811.5
- 95.6 - 129.5
- 52.9 - 88.0
- 36.8 - 43.4
- 26.2 - 35.8
- 22.5 - 22.3



Map Created on November 16, 2009

1990/91-2006 North American Population Growth



* Population growth in Canada 1991-2006
Population growth in US 1990-2006

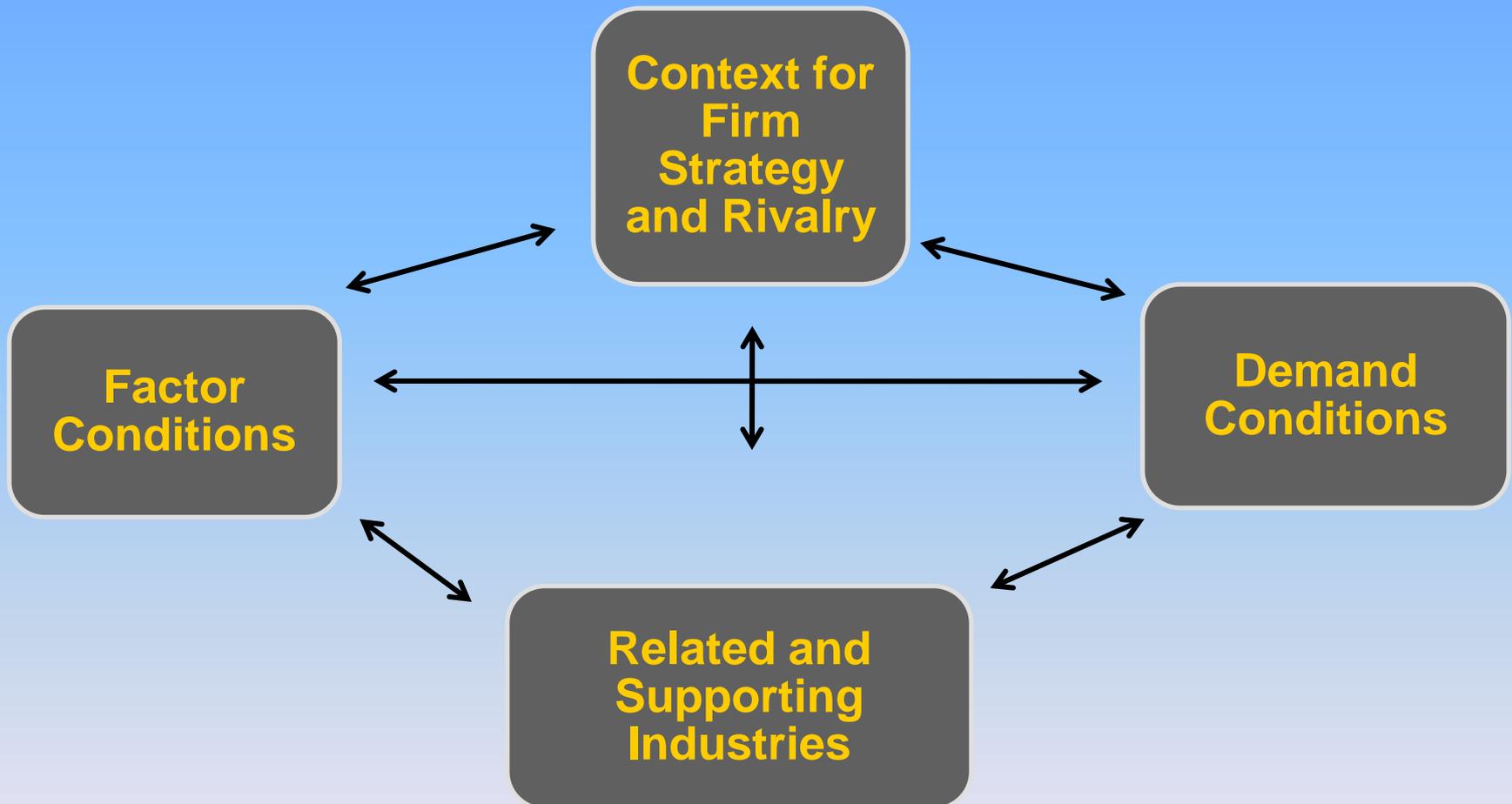
Source: Canada Rural Economy Research Lab, 1991 & 2006 Census, Statistics Canada; 1990 Census, U.S. Census Bureau; 2006 U.S. Census Bureau estimates.

Notes: The map shows 1990-2006 average annual percent growth for US counties.

The 1991-2006 percent population change for Canadian census divisions use Statistics Canada data and are based on 1996 consistent boundaries.

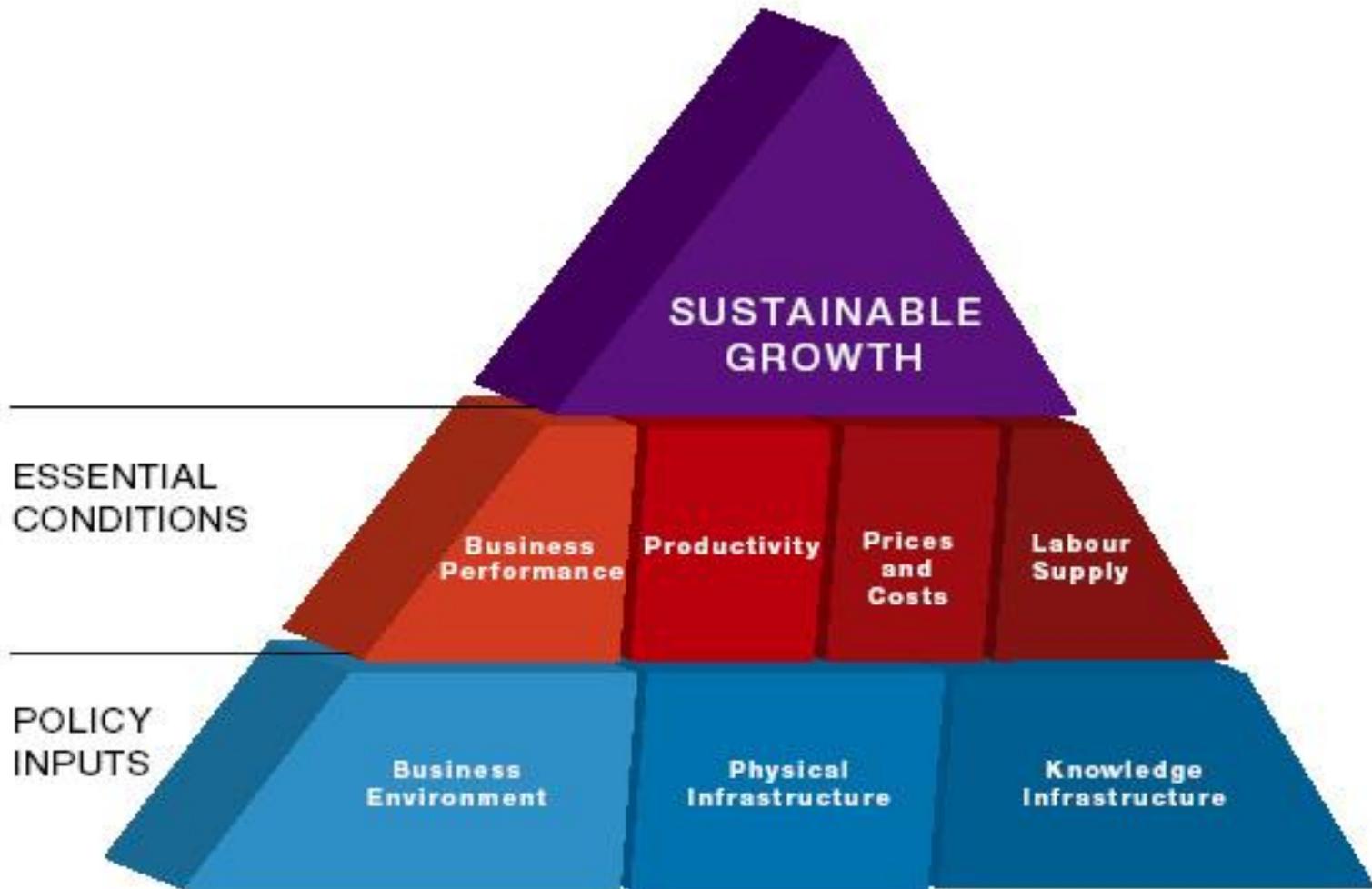
Broomfield County, CO (08014) is comprised of the counties of Adams (08001), Boulder (08013), Jefferson (08059) and Weld (08123). Source: <http://www.census.gov/geo/www/tiger/tychng.html#1990>

Conceptualizations of Competitiveness



The Porter Diamond Framework (Porter, 1998)

NCC Competitiveness Pyramid



Source: National Competitiveness Council

Wyoming: Alberta on Steroids!

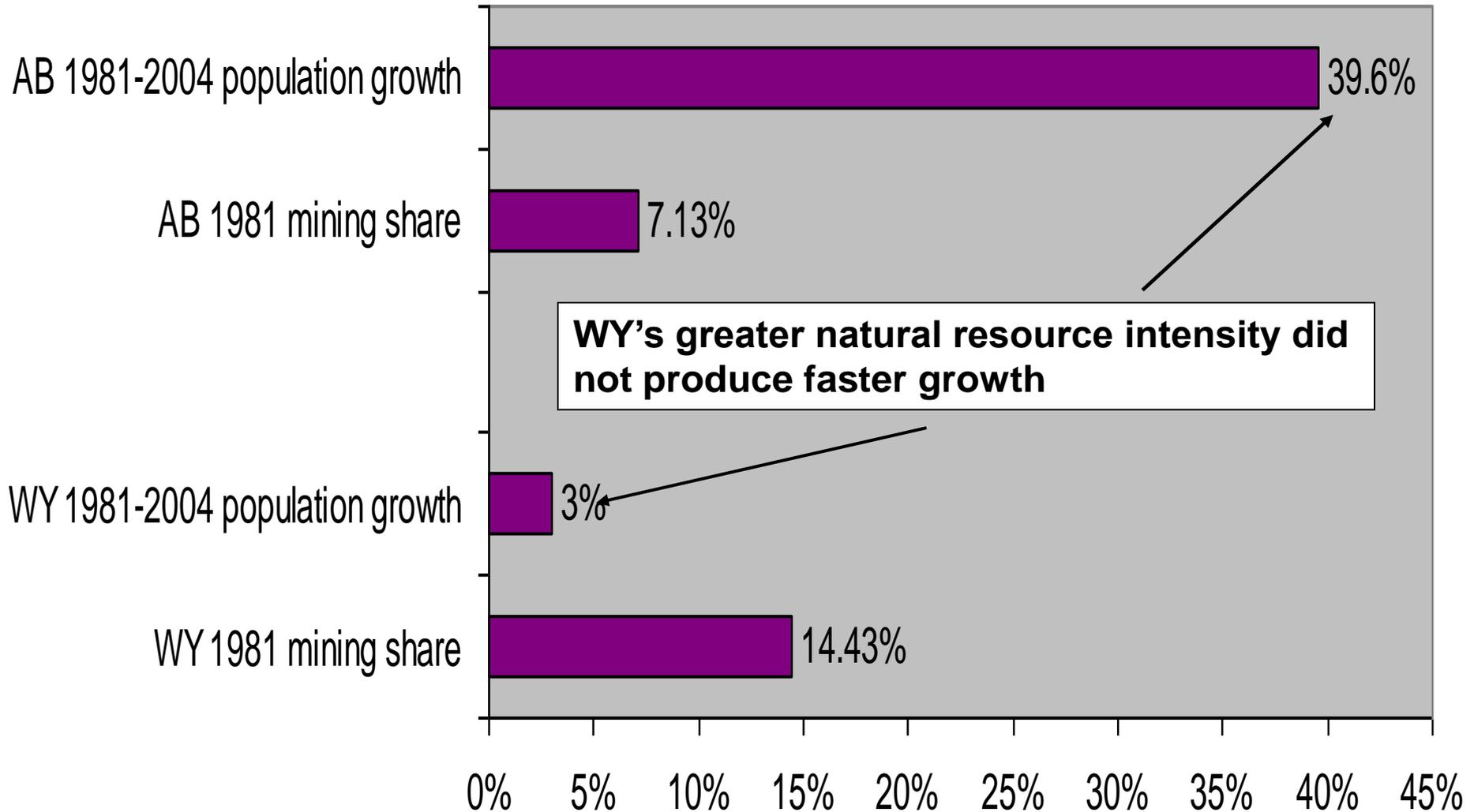
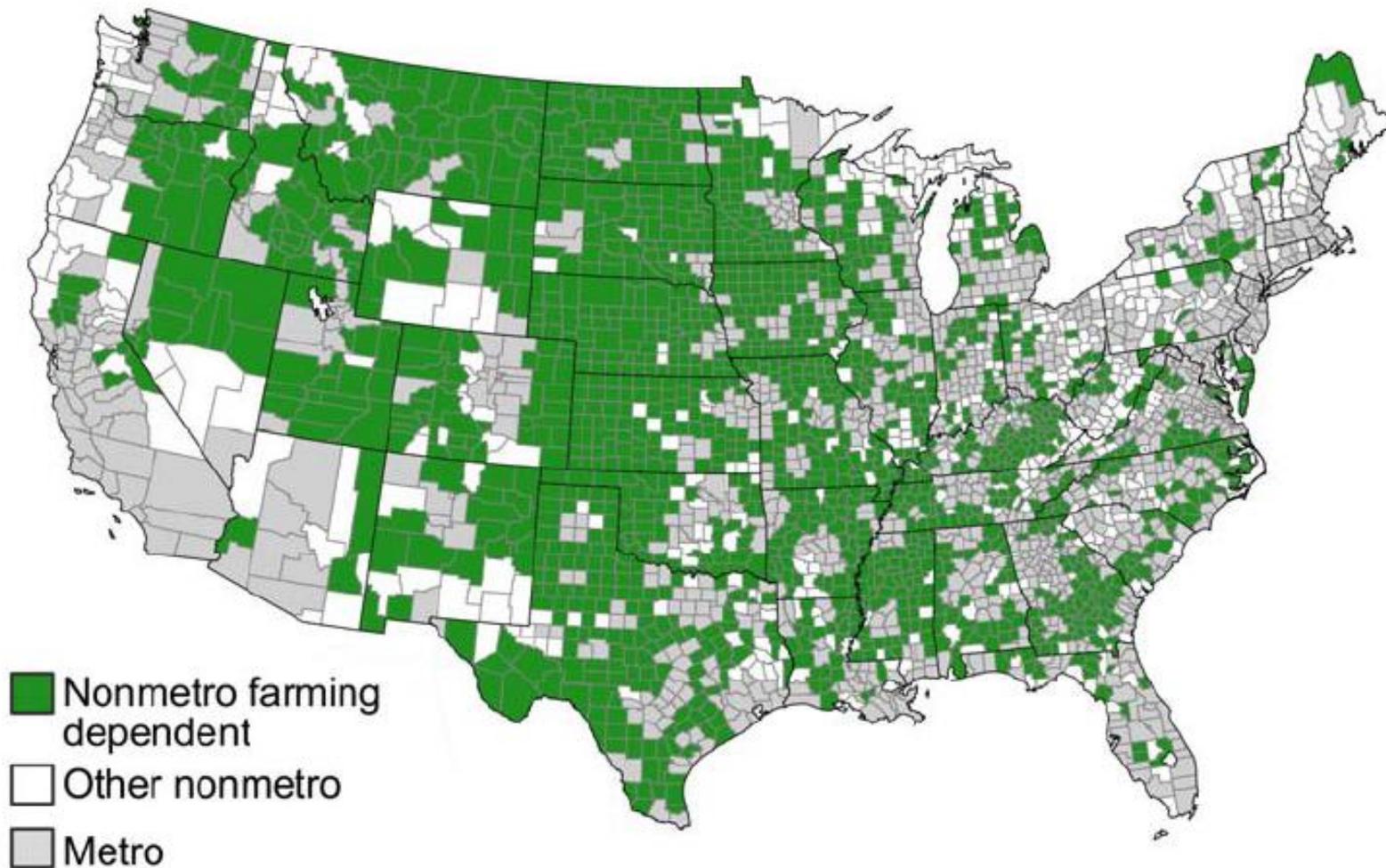
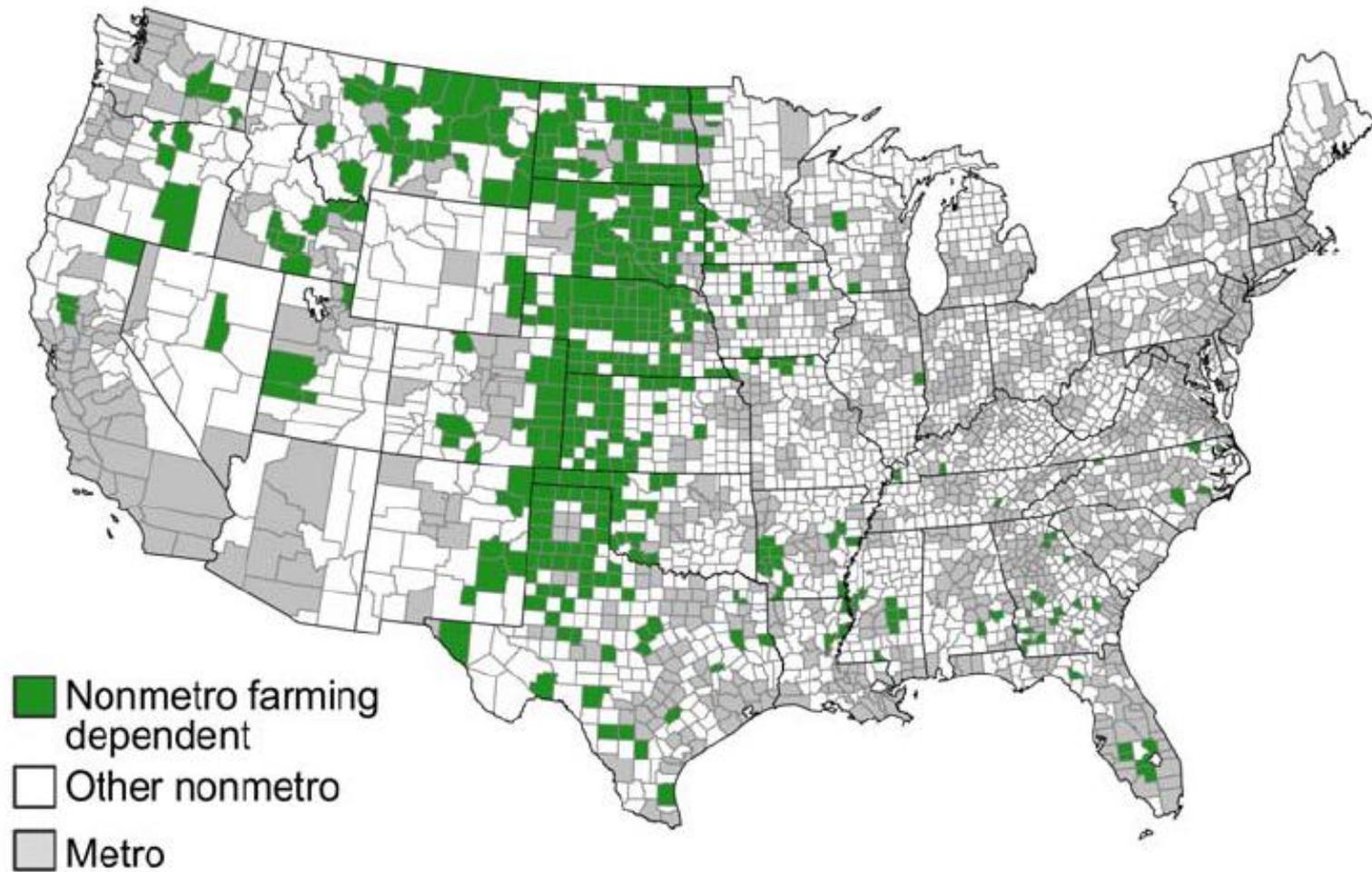


Figure 1. Farming-Dependent Counties in 1950 and 2000

Nonmetro farming-dependent counties, 1950

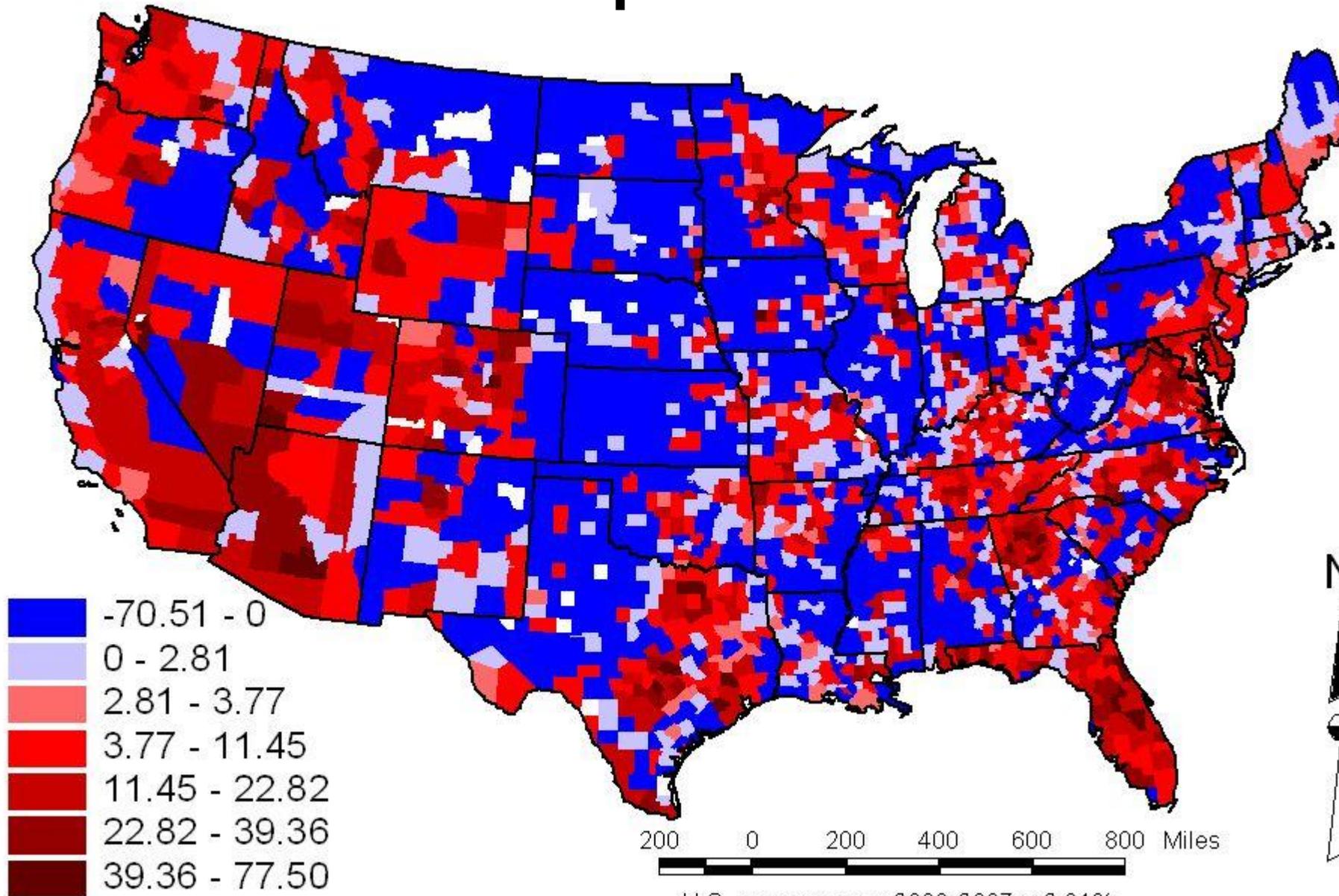


Nonmetro farming-dependent counties, 2000



Source: Farming-dependent counties are defined by ERS. Metro/nonmetro status is based on the Office of Management and Budget (OMB) June 2003 classification.

2000-2007 Population Growth



U.S. average over 2000-2007 = 2.81%