



THE OHIO STATE UNIVERSITY

The Urban/Rural Continuum and “Rural” Economic Development Policy?

Mark D. Partridge

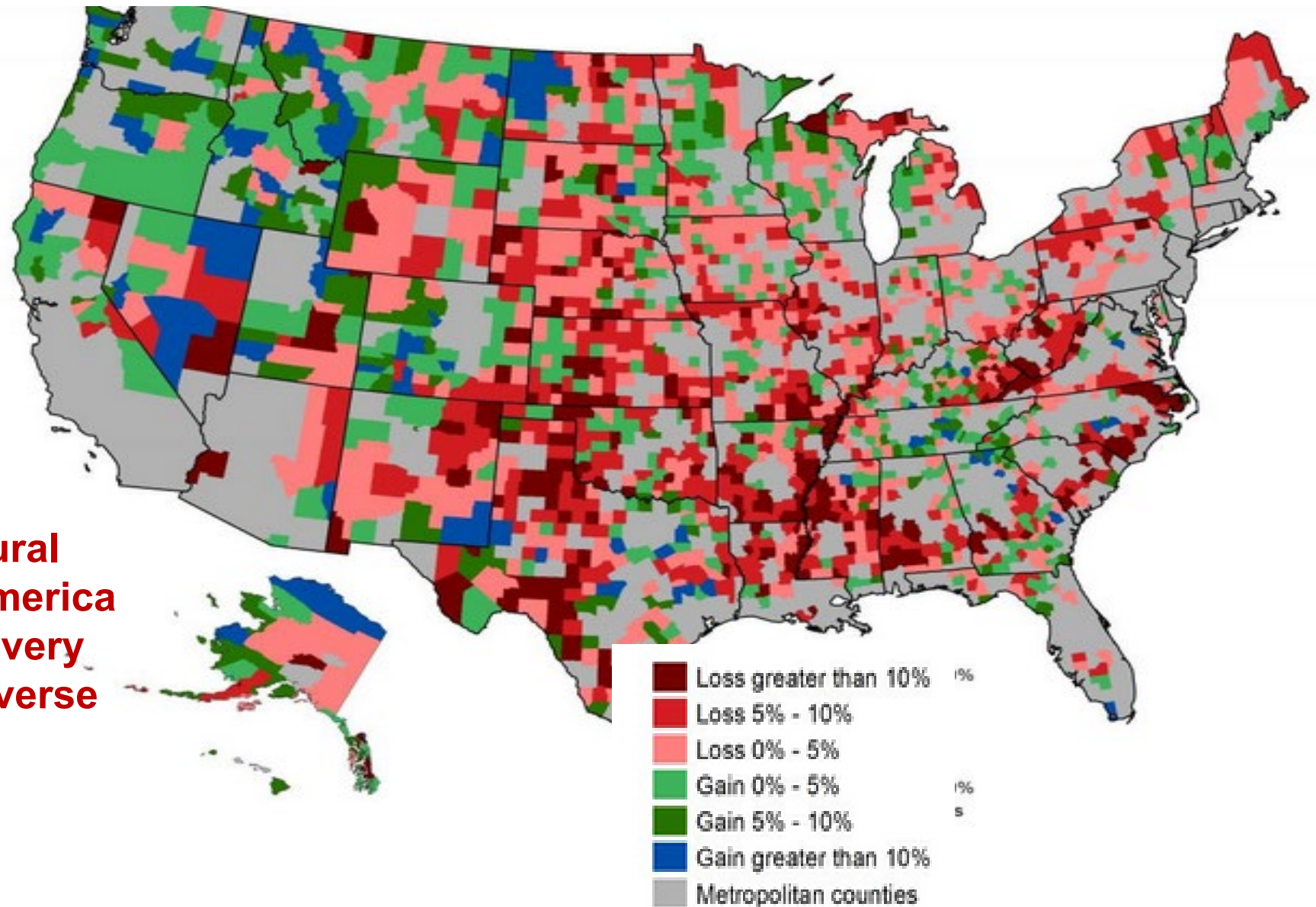
Swank Chair in Rural-Urban Policy

The Ohio State University, Jinan University, & GSSI

**FRB-Chicago/Upjohn Institute Rural Development Conference
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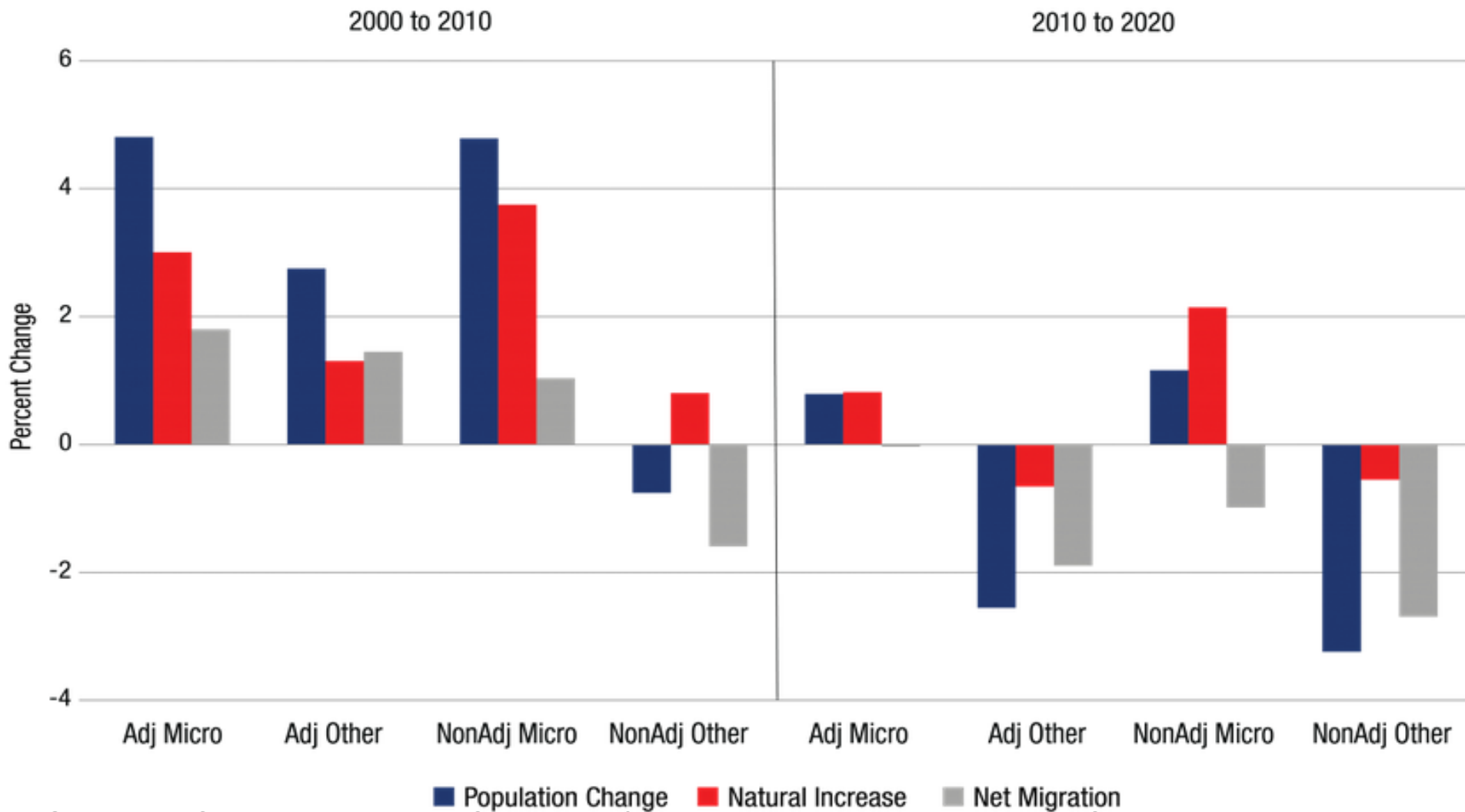
Population Change In Nonmetropolitan Counties, 2010 To 2020

Rural
America
is very
diverse



Source: Census Bureau, Census of 2020 and 2010. **Analysis:** K.M. Johnson, University of New Hampshire. <https://carsey.unh.edu/publication-rural-america-lost-population-over-past-decade-for-first-time-in-history>

Nonmetropolitan Demographic Change by Adjacency and Micropolitan Status, 2000 to 2020



Source: Census Bureau, Census of 2020, 2010, and 2000 and Census Estimates.

Analysis: K.M. Johnson, University of New Hampshire.

<https://carsey.unh.edu/publication-rural-america-lost-population-over-past-decade-for-first-time-in-history>



Introduction

4

1. **Rural/Urban is not an “either or” dichotomy but a continuum. But humor me and assume a “dichotomyish.”**
2. Different questions require different rural/urban definitions. Economic-development questions need a distinct definition versus (say) sociological, cultural, and political questions.
 - a) For economic development, rural is not defined as a landscape of farms, forests, or lakes. These could be what I call “low-density suburbs.”
 - b) “Rural” in economic development means little or no economic integration with an “urban” area.



Introduction—cont.

1. Urban is defined as having a sufficient population for “agglomeration economies.”
 - a) Labor pooling
 - b) Input sharing
 - c) Knowledge spillovers—learn from nearby firms.
2. Minimum population to be “urban” is rising over time due to technological change.
 - I. Demand Threshold effects—rural places need to grow.
 - II. Rural areas benefit from linking to larger urban areas to achieve critical mass for development.
3. Pre-1970ish, “urban” needed a core urban area/city of $> \approx 50,000$ rising to $> 100,000+$ today.



Introduction

6

- Area surrounding an urban area is defined as urban if there is sufficient economic integration with core urban area.
- Conceptually, this is the Census Bureau's definition for metropolitan and micropolitan areas, where integration is measured by commuting and county is the unit.
- However, current federal criteria for metro and micro areas are outdated or politically motivated.

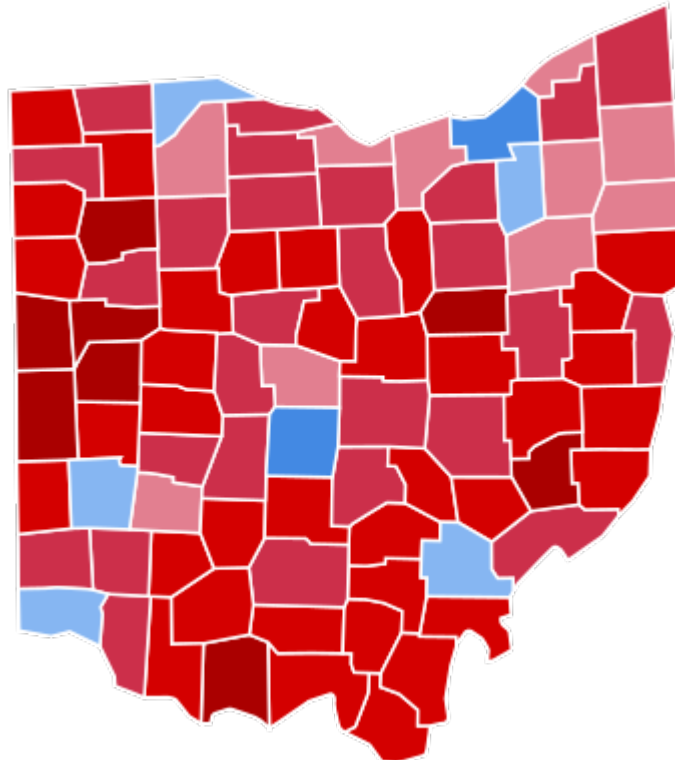


Example of different⁷ Cultural and Economic Effects across space.

- **2020 Ohio Presidential election results and rural/urban split.**
- **But different rural/urban split than for economic development.**

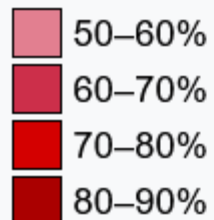


2020 Ohio Presidential Results by County

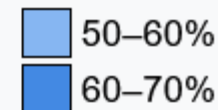


Source: https://en.wikipedia.org/wiki/2020_United_States_presidential_election_in_Ohio

Trump



Biden

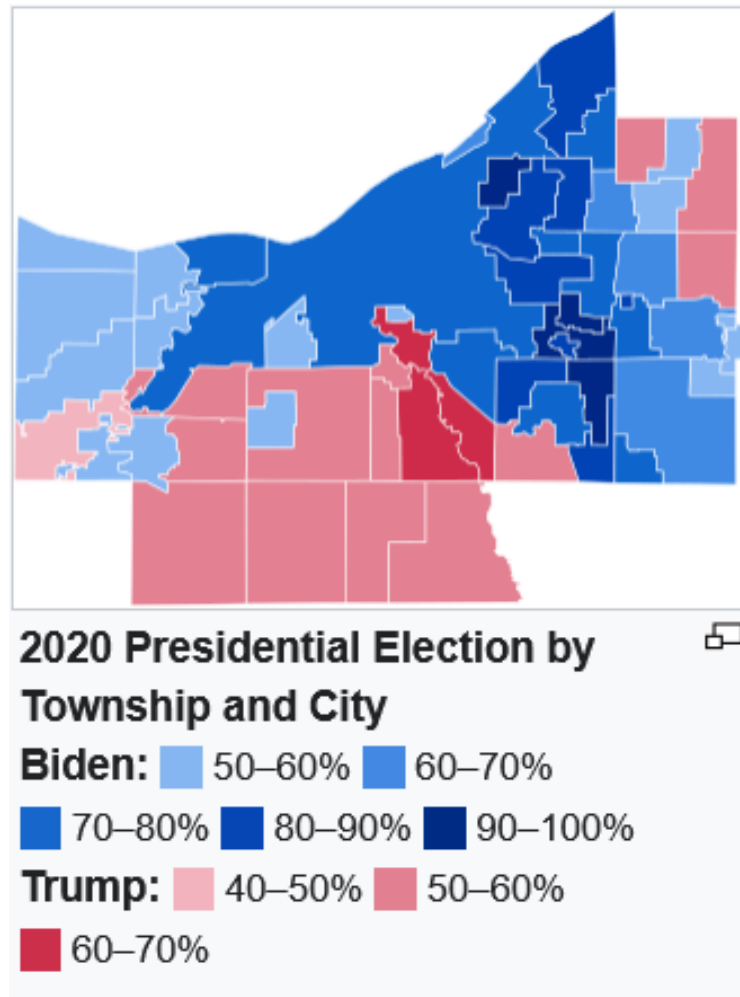




2020 Cuyahoga County Presidential Results by Municipality

Even within an urban county, voting pattern shifts as moving toward more rural.

Culture is affected by population density and proximity to urban core. More experience as urban also seems to matter.



**Table 1** 2016 Election Results for Trump

| | Metro Definition and Change | Total Metro Votes | Trump Metro Votes | Trump Metro Votes Share |
|-----|-----------------------------|----------------------|----------------------|----------------------------|
| (1) | Metro 1950 | 68,380,703 | 25,469,903 | 37% |
| (2) | Metro Def. Change 1950–1973 | 26,522,379 | 14,147,642 | 53% |
| (3) | Metro Def. Change 1973–1983 | 6,245,681 | 3,457,467 | 55% |
| (4) | Metro Def. Change 1983–1993 | 3,764,839 | 2,214,950 | 59% |
| (5) | Metro Def. Change 1993–2003 | 3,548,019 | 2,075,511 | 60% |
| (6) | Metro Def. Change 2003–2013 | 2,040,345 | 1,298,349 | 63% |
| (7) | Metro 2013 | 110,501,966 | 48,663,822 | 44% |
| (8) | Nonmetro 2013 | 19,409,615 | 12,401,021 | 64% |
| (9) | Total United States | 129,911,581 | 61,064,843 | 47% |

Source: Townhall.com. Missing county-level data for Alaska. Current metropolitan counties are split into those defined in 1950 and those that were subsequently reclassified as metropolitan by time period of reclassification.



What is rural for economic¹¹ development?

It's not "Census Urban" that has been around for over a century. If the place has $> 2,500$ residents, it is considered urban. [Urban has a core of 1,000 people per sq mile.]

- Even a village is defined urban.
- Does not include areas outside the municipality unless it is high-density development immediately adjacent to the municipality.
- This urban definition is shortly to rise to 5,000 residents (Census Bureau originally wanted 10,000).

It's not Commuting Zone—misnamed dataset on USDA website. Developed by rural sociologists and geographers. Does not include labor market criteria in its development.



What is rural for economic¹² development?

1. Strictest definition of rural for economic development are counties that are nonmetropolitan area (non-MSA) and non-micropolitan area—**Core Rural, the county does not even have a “city” of over 10,000 residents.**
2. Metropolitan/nonmetropolitan areas use counties as their building block.
 - i. Counties are generally functioning governments with large responsibilities. Economic development policy possible.
 - ii. Counties are large enough to include multiple census tracts (neighborhoods) when necessary. They are hard to describe as labor markets or as possessing a functioning “government.”
 - iii. Parts of counties have high (low) urban commuting links even though this high (low) level of integration does not generally apply for the county.



What is rural for economic¹³ development?

3. Definition of MSA starts with a core urban area/city:
 - i. County surrounding an urban area of \geq **50,000** people.
 - ii. Any county with at least **25%** cross-commuting between it and the MSA's core counties is included the MSA.
4. Definition of a micropolitan area:
 - i. County surrounding urban area of \geq **10,000** people (**& <50,000**).
 - ii. Any county with at least **25%** cross-commuting between it and the micropolitan core counties is included the micropolitan area.
5. “Modern” MSA definition is urban core $> 100,000$ residents. Commuting threshold equals 35%. Most countries use $> 25\%$ commuting threshold--e.g., Canada & Sweden use 50%. US MSAs can lack large urban core and the lack of integration means MSAs can be geographically huge and includes more “rural” counties.



What is rural for economic¹⁴ development?

- 6) Consolidated Statistical Area (CSA) definition:
 - i. 15% cross-commuting between MSAs and/or micropolitan areas—i.e., modest labor market links between separate urban areas.
 - ii. Named for most populous MSA.
 - iii. Does not add nonmetropolitan counties if they also have 15% commuting links between it and the CSA. **I HAVE NO CLUE AS TO WHY!!** This is problematic.
- 7) US needs official definitions for weak, moderate, or strong urban influence based on commuting.
- 8) No official definition for nonmetro counties with multiple urban commuting destinations. E.g., Clinton County OH has Cincy, C-bus, and Dayton.



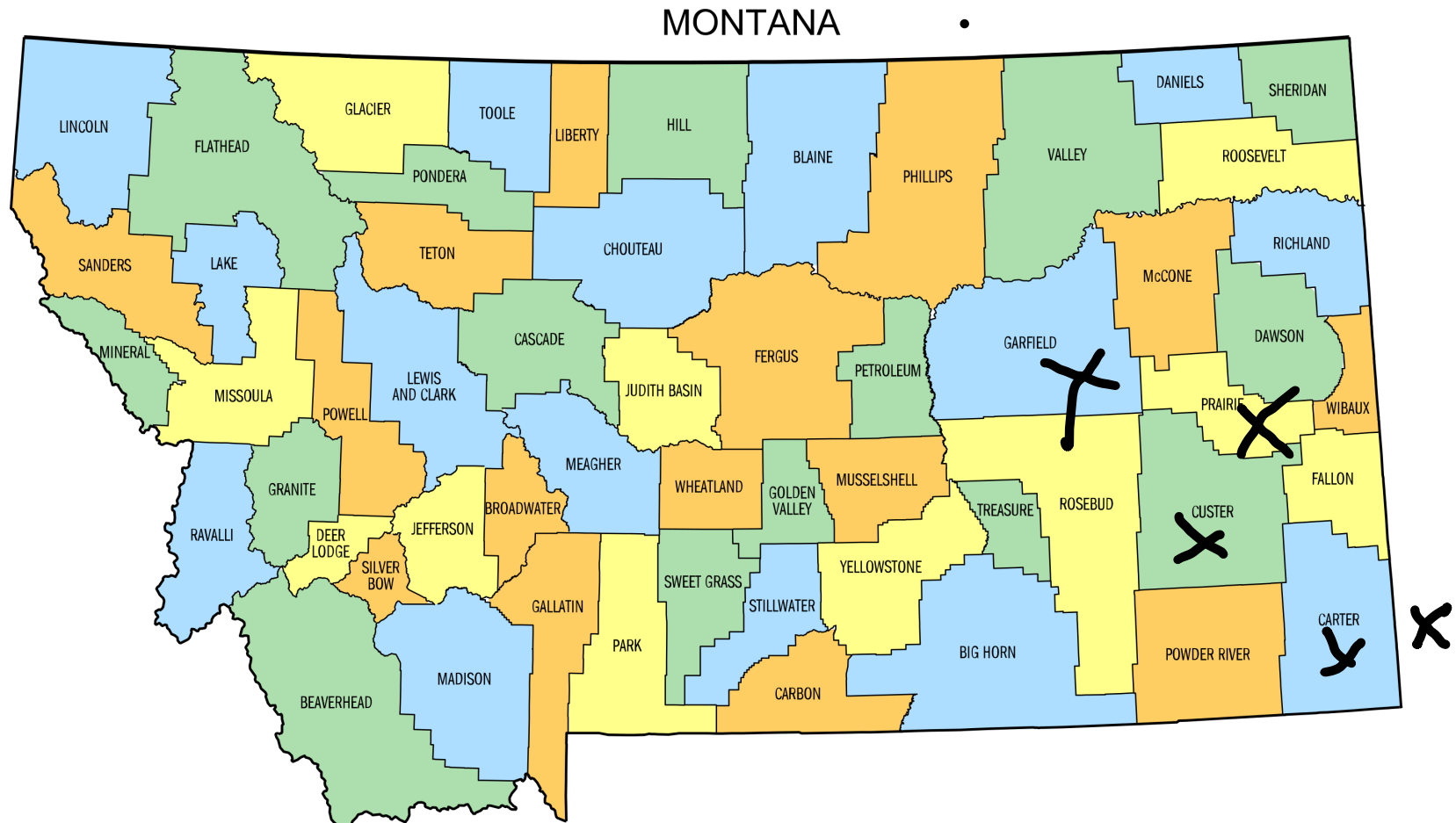
Start with Core Nonmetropolitan:

- (i) These are the most rural areas;**
- (ii) small or no urban spillovers;**
- (iii) few spillovers that would enable regionalism.**
- (iv) no one “town” has sufficient agglomeration economies;**
- (v) hard to employ urban-led growth or any growth aside from local entrepreneurship or natural amenity-led growth. Lack a population threshold to generate growth;**

E. Montana example—Miles City, MT commuting zone of Custer County with Fallon & Garfield counties.



Montana Counties & CZs: A big advantage, Ohio rural communities are proximate to cities.





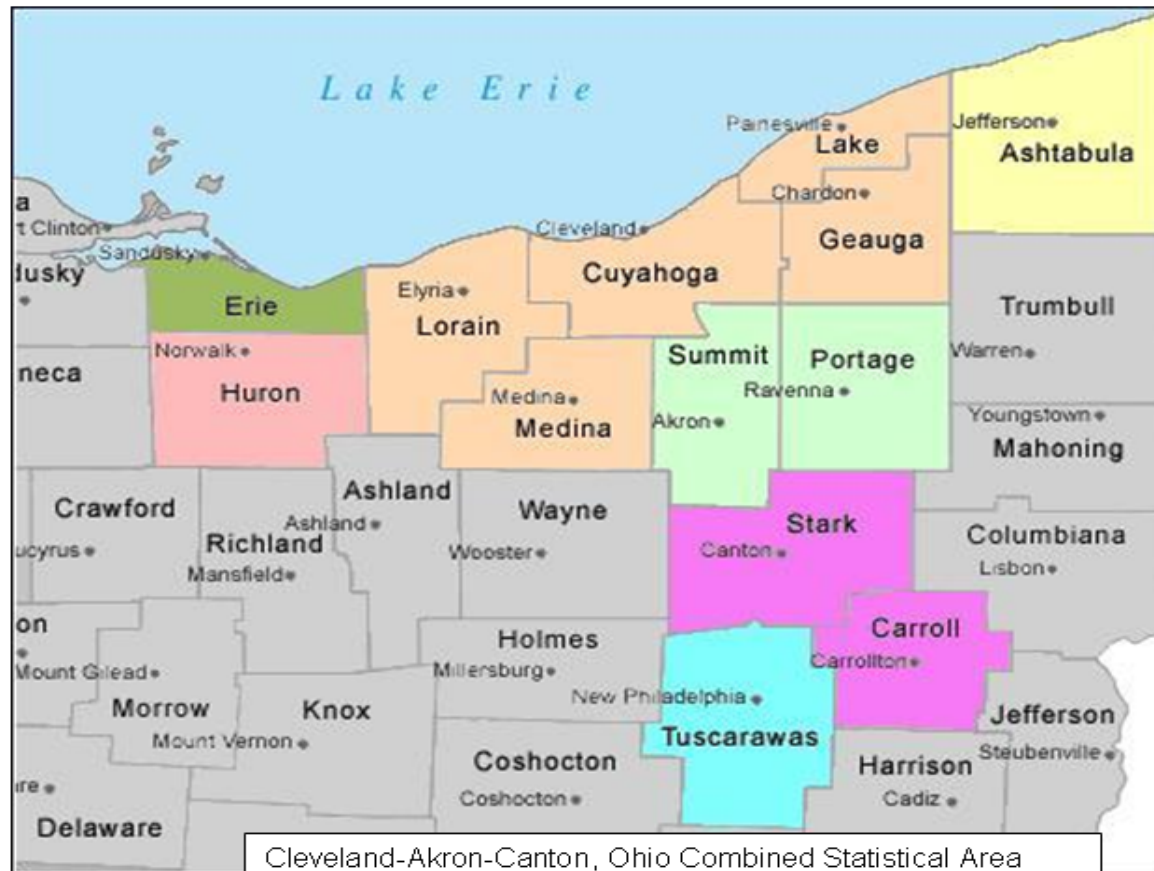
Miles City, MT commuting zone of Custer County linked with Fallon & Garfield counties: Labor Market Data

Miles City MT biggest core city

| IN/OUT | Custer | Garfield | Prairie | |
|--|------------------|-------------|------------|-------------------------------------|
| Custer | 5482 | 18 | 16 | |
| Garfield | 13 | 557 | 0 | |
| Prairie | 9 | 0 | 370 | |
| total emp | 5755 | 584 | 470 | |
| Largest City | | | | Entire CZ Live & work in own county |
| Pop | Miles City, 8600 | Jordan, 442 | Terry, 694 | |
| Share working in own county | 95.3 | 95.4 | 78.7 | 94.1 |
| share working in Custer | 95.3 | 3.1 | 3.4 | |
| share working in CZ outside own county | | | | |



Cleveland Region MSAs and Cleveland CSA Definition



Cleveland-Akron-Canton, Ohio Combined Statistical Area

- Cleveland-Elyria, Ohio Metropolitan Statistical Area
- Akron, Ohio Metropolitan Statistical Area
- Canton-Massillon, Ohio Metropolitan Statistical Area
- Ashtabula, Ohio Micropolitan Statistical Area
- New Philadelphia-Dover, Ohio Micropolitan Statistical Area
- Sandusky, Ohio Micropolitan Statistical Area
- Norwalk, Ohio Micropolitan Statistical Area

Source:

https://commons.wikimedia.org/wiki/File:Cleveland_CSA_2013_v.3.png

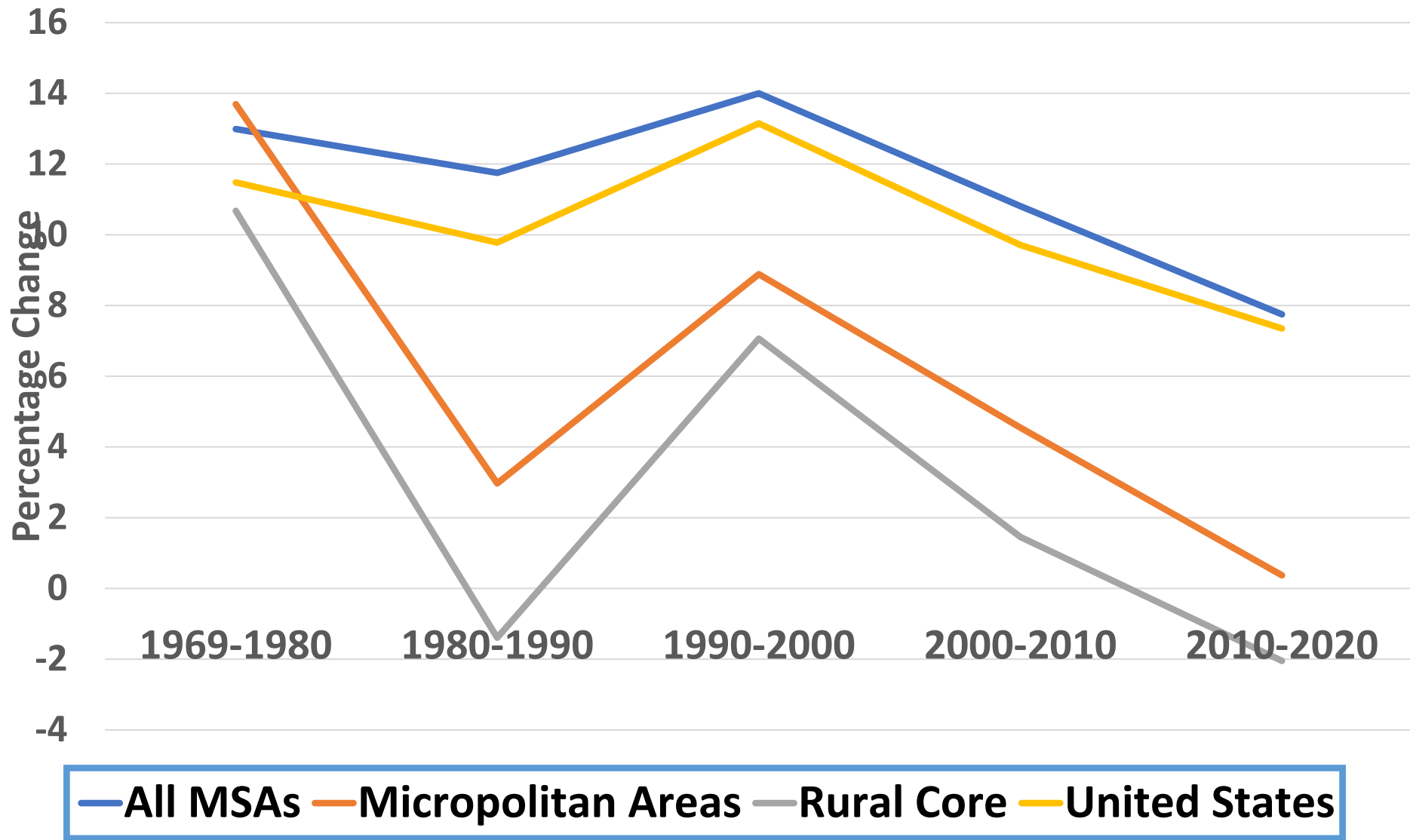


How are these various⁴⁹ classes of rural to urban faring?

What do recent patterns tell us about future rural economic development policies?

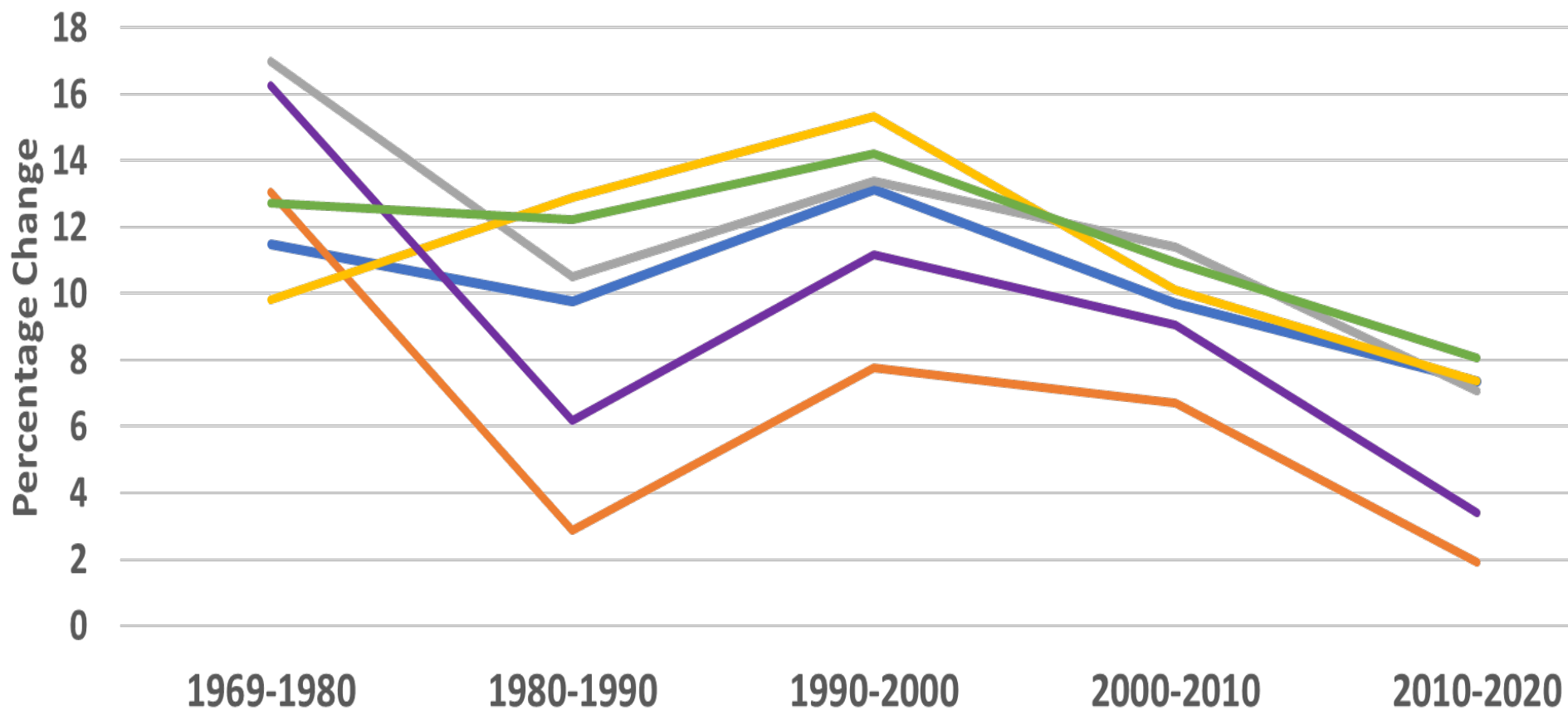
U.S. Ten-Year Population Growth (%)

By Selected Rural/Urban Classes: 1969-2020



U.S. Ten-Year Population Growth (%)

By Selected Rural/Urban Classes: 1969-2020



United States

MSAs under 150,000

MSAs between 150,000 and 1.5 million

MSAs over 5 million

OMB < 100K Core City MSAs (144 MSAs)

OMB > 100K Core City MSAs (248 MSAs)

| Different Urban Classes | 2020 Average Population |
|--|--------------------------------|
| All MSAs | 739,845 |
| MSAs under 150,000 | 114,403 |
| MSAs between 150,000 and 1.5 million | 429,257 |
| MSAs over 5 million | 8,624,273 |
| OMB < 100K Core City MSAs (144 MSAs) | 135,230 |
| OMB >100,000 Core City MSAs (248 MSAs) | 1,094,619 |
| Micropolitan Areas | 50,251 |



Figure 1 Population growth of non-metro area by historical MSA definition: 100 = 1969 Population

Data Sources: U.S. Bureau of Economic Analysis for population (2017), and U.S. Census Bureau for metro definitions (2017).

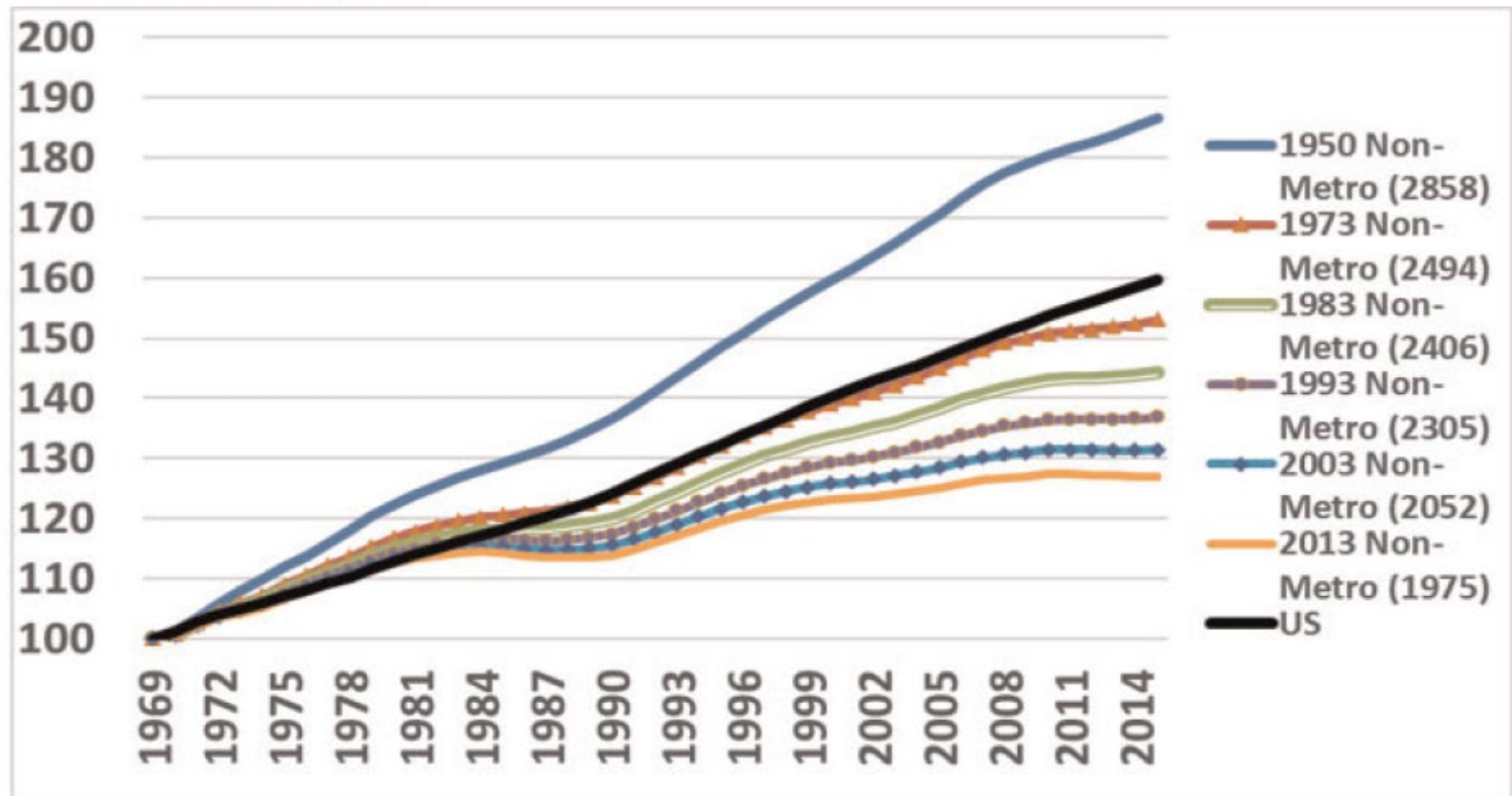
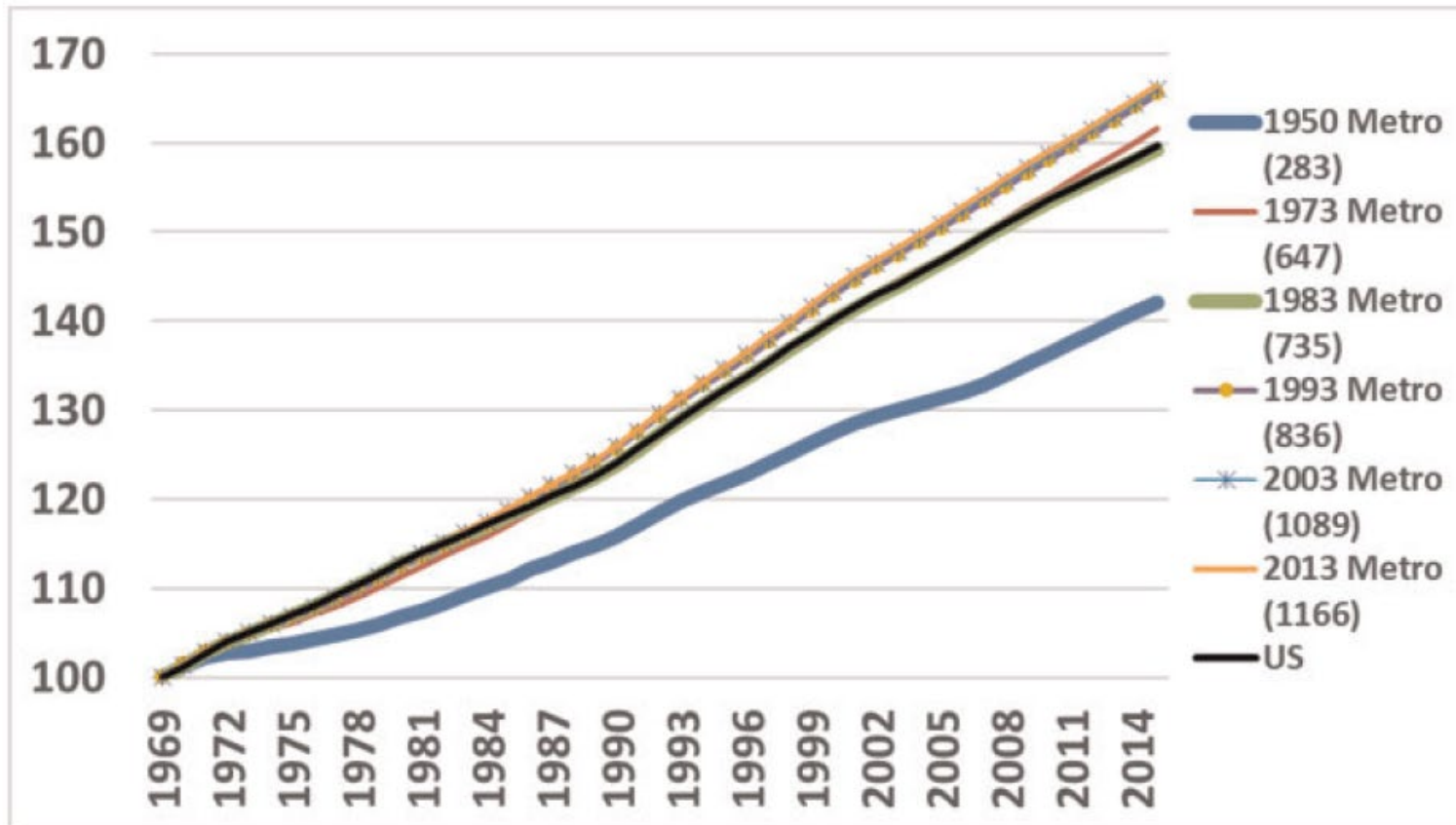




Figure 2 Population growth of metro area by historical MSA definition: 100 = 1969 Population

Data Sources: U.S. Bureau of Economic Analysis for population (2017) and U.S. Census Bureau for metro definitions (2017).





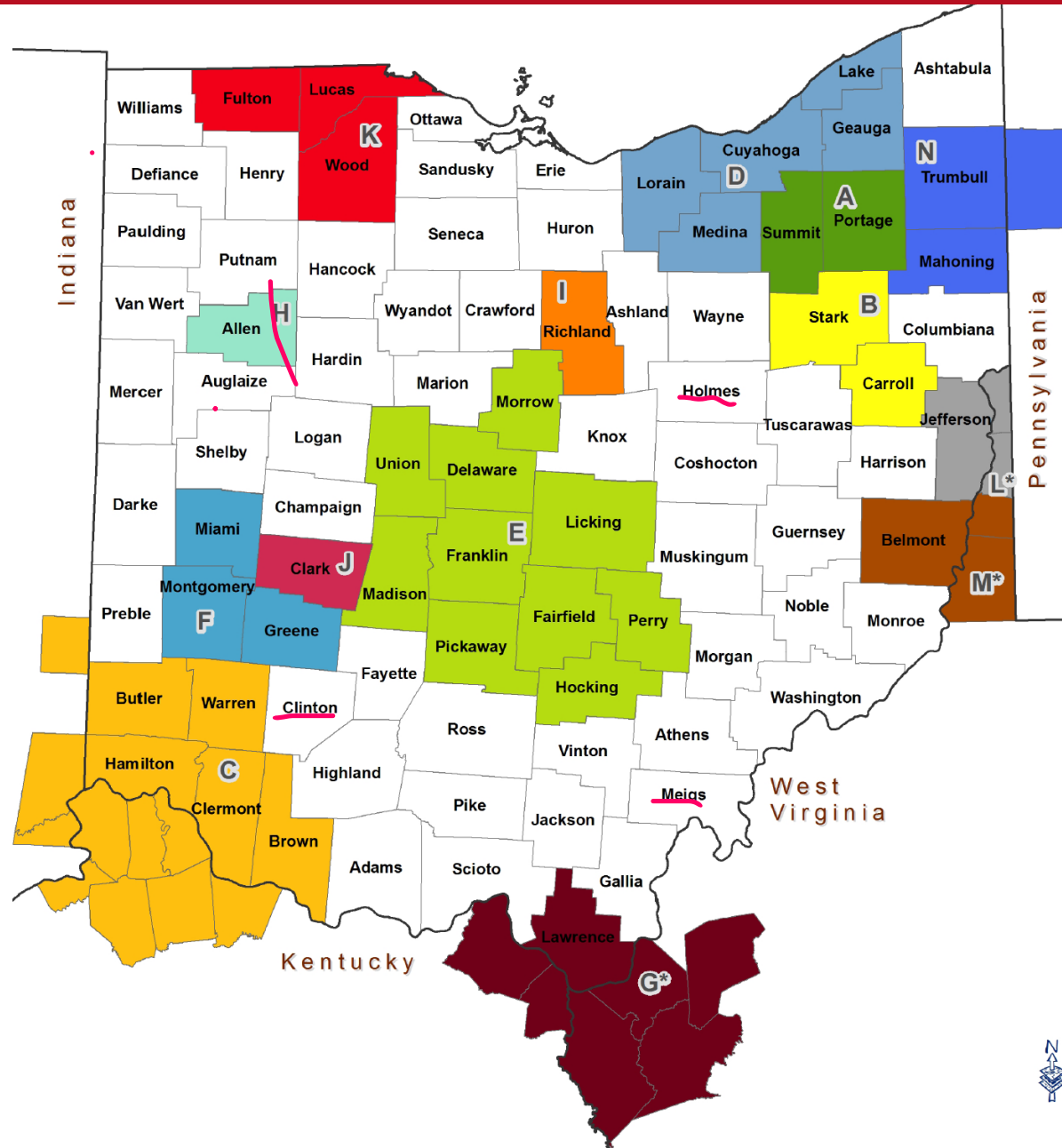
Rural-Urban Linkages²⁵ for development

- Rural economic development strategies often link rural areas with nearby urban centers who have advantages in generating economic growth via commuting. E.g., regionalism; regional hubs; growth poles, etc.
- Proximity to growing urban areas and sufficient transportation is required. This is much easier east of the Missouri/Mississippi Rivers with higher pop density.
- Better regional governance via cooperation, revenue sharing, and planning. **US local governance is highly fractured**
- Increases critical mass and improves economies of scale in public service delivery.



Clinton County, OH: Rural with strong rural-urban links

- i) Largest city: Wilmington, OH \approx 12,600**
 - ii) Has Wilmington College and S. State Community College**
 - iii) County Population 42,000 slightly down since 2008**
 - iv) Lost \approx 16,000 jobs in 2008 when DHL closed a facility**
 - v) 165 bed hospital with \approx 630+ employees**
-
- The big feature that helps Clinton County is the close access to three metro areas with jobs, recreation, and business services.**





Clinton County, OH-Out Commuting: 2011-2015, Nearby Urban Jobs!

| | |
|------------------------------------|---------|
| Cincinnati, OH-KY-IN MSA | 3,672 |
| Dayton, OH MSA | 1,213 |
| Columbus, OH MSA | 282 |
| Commuters Cin+Day+C-bus MSAs | 5,167 |
| Total population | 41,892 |
| Total residential employment (ACS) | 18,460 |
| Total commuters outside county | 6,594 |
| Wage and salary employment (BEA) | 17,253 |
| Net Commuting | (1,207) |



Meigs County, OH-Out Commuting: A County that needs urban out-commuting to survive

| | |
|---|--------|
| Athens County | 1,781 |
| Vinton County | 40 |
| Huntington WV | 127 |
| Charleston, WV | 65 |
| Parkersburg-Vienna, WV | 359 |
| Commuters to Hunt MSA, Char MSA, PB MSA | 551 |
| Total population | 23,473 |
| Total residential employment (ACS) | 8,770 |
| Total commuters outside county | 5,084 |
| Wage and salary employment (BEA) | 3,908 |
| Net Commuting | -4,862 |



Holmes County-Out Commuting, A successful rural county despite low educational attainment, weak urban links and subpar highway transport.

| | |
|--|---------------|
| Ashland County | 319 |
| Wayne County | 2,283 |
| Canton-Massillon, OH | 221 |
| Akron, OH | 59 |
| Cleveland-Elyria, OH | 173 |
| Commuters to Ash, Wayne, Canton, Akron, Clev MSAs | 3,055 |
| Total population | 43,436 |
| Total residential employment (ACS) | 19,207 |
| Total commuters outside county | 4,093 |
| Wage and salary employment (BEA) | 20,429 |
| Net Commuting | 1,222 |



Other rural development³¹ strategies

- Natural amenity-led growth, not necessarily tourism.
- Entrepreneurship and start-ups: Holmes County, OH
- Clean environment
- Quality-of-life to attract in-migrants or bedroom-community commuters.
 - One person argued having nice tasting/clear water.
- Good public schools as an attractor to parents and leads to better human capital in the future.
 - Rural areas begin attracting in-migrants around 30-39+ of age.
- Workforce development
- Better local governance that is inclusive to non-elites.



- **Smokestack chasing³² incentive strategies are not favored by economists due to its weak track record.**
- Picking winners is incredibly difficult—Wall Street experts can't do it, why should local officials with little underlying knowledge.
- Then local officials need to understand the industry's geography.
- Firms have all of the cards and extract all of the gains out of the local area and threat of winner's curse—e.g., Reno, NV and Tesla, Is Columbus/OH and Intel another example?



Other Rural Development No Nos.

(1) Follow latest economic development fad.

- i. Reshoring, biotech, high-tech (build the next Silicon Valley), EVs, value-added manufacturing, cool downtowns, etc.

(2) Only consider business profits or tax levels and not quality-of-life;

(3) Hoping outside firms will save you;

(4) Ignore small business and start-ups;

(5) Go back to the past—e.g., stay with good ol' manufacturing, or agriculture, or mining, or whatever. These are declining industries in terms of employment.

(6) Believe a “boom” industry is your salvation. Oil and Gas boom. Williston, ND or 21 of 22 OH, PA, and WV natural gas intensive counties lost population.



Concluding Thoughts³⁴

Defining “rural” for economic development is about strength of urban economic linkages.

- 1) Rural areas lack a sizable city with sufficient agglomeration economies to spur growth
- 2) Few to no urban economic links → rural for economic development
- 3) Bucolic farmland and open spaces can still be urban if sufficient economic integration. “low-density suburb”
- 4) US metro areas are conceptually correct but have too low thresholds for city size and cross-commuting. Many MSA economies are actually closer to rural.



- **Smaller MSAs, microp²⁵opolitan areas, and core rural counties have underperformed U.S. growth average since early 1980s.**
- **What about Covid?**
 - **Rural areas initially suffered less from Covid, but that changed. Does this suggest that healthcare access will be more important?**
 - **Covid increased remote work this is declining over time.**
 - **Remote work and online buying has long been posited as a rural development opportunity.**
 - **But, better online services means rural retail and other services can now be provided by urban competitors—e.g., Amazon. More Amazon means less for rural businesses.**



- **What about Covid—²⁶cont.?**
 - **Commuting may be the biggest bane of large city living.**
 - **What about the professional that wants to work remote in a nice rural setting?**
 - **At best, this is something for high-amenity areas that are most attractive.**
 - **Further limiting a rural renaissance from a “Covid bump” is that it appears few firms are going to fully remote work. Hybrid remote work still requires the employee to live near the place-of-work, which is usually urban areas,**



Thank you

Mark Partridge

Swank Chair in Rural-Urban Policy

AEDE, The Ohio State University

Google "Partridge Swank" and you will get my website

(614) 688-4907

partridge.27@osu.edu

Swank Program Website for policy brief.

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



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- 81% of MSAs grew 2010-2020
- 48% micros grew
- 53% of counties lost population
- 33% nonmetro counties gained pop 10-20
vs. 53% 00-10

Given the economic turbulence of the past decade, rural demographic change also varied depending on a county's economic base. Farming no longer dominates the rural economy, but it remains the most important economic activity in 443 rural counties. Nearly 78 percent of these counties lost population between 2010 and 2020 because minimal gains from natural increase were not enough to offset migration losses. Nearly 65 percent of the 357 counties dominated by manufacturing—traditionally a bright spot of rural demographic change—also lost population because migration losses exceeded dwindling natural increase. The demographic story was different in the overlapping groups of 296 nonmetropolitan recreational counties and 193 retirement destination counties which have natural amenities, recreational opportunities, or quality-of-life advantages. Here population gains were widespread because migrants were attracted by the proximate natural and built amenities and related economic opportunities. Though migration gains were smaller than in previous decades, they still produced a population gain in nearly 60 percent of the recreational and retirement destination counties. These four groups do not encompass all nonmetropolitan counties, but they illustrate that rural demographic change is far from monolithic.



Average Percent of Rural County Population with Access to Broadband

Residents of rural counties that grew from 2010-20 (blue bars) had a greater average percentage of their population with access to broadband (at least 25 Mbps down/3 Mbps up.)

■ Rural Counties that Lost Population ■ Rural Counties that Gained Population

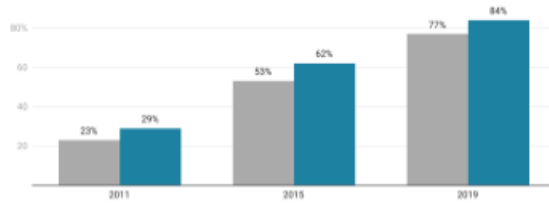
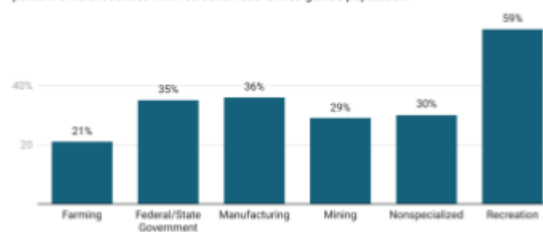


Chart: Brian Whitacre • Source: U.S. Census, Federal Communications Commission • Created with Datawrapper

Rural Counties with More Broadband Tended to Do Better in 2020 Census, Study Shows

Categorized by County Economic Type

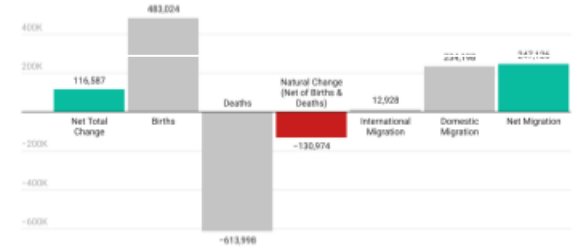
Only 21% of rural counties whose economies depend on farming gained population. Fifty-nine percent of rural counties with recreation economies gained population.



Census data processed by Anzevki Kastenis of the Associated Press and provided by the 2020 Census Co-op

Nearly 80% of Rural Farming-Dependent Counties Lost Population in Last Decade

Rural (Nonmetro) Counties -- Components of Pop. Change 2020-21



Rural is defined as counties that are not in a Metropolitan Statistical Area (MSA, 2010).
Chart: Daily Yonder • Source: U.S. Census Bureau • Created with Datawrapper

Rural Population Bounces Back in 2021