

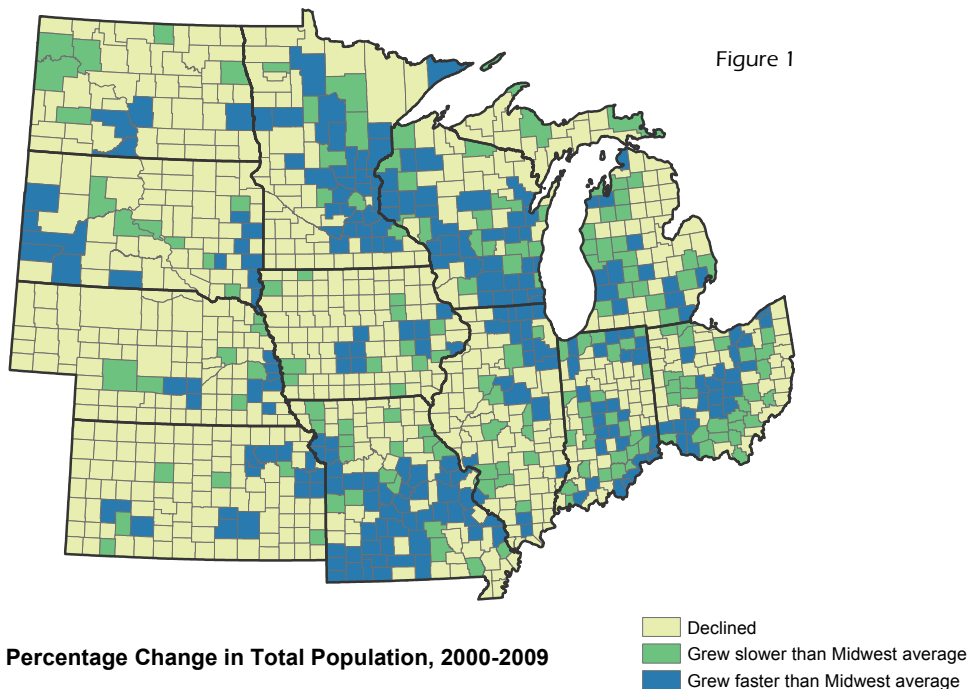
2000-2009 Population Growth in the Midwest: Urban and Rural Dimensions

Midwestern States Face Similar Challenges

Recent population estimates from the U.S. Census Bureau confirm what many Iowans already know about their state's recent growth patterns. Iowa's largest cities and their suburbs are growing while its rural areas are losing residents. What fewer residents may know is that this problem extends well beyond Iowa's borders. A similar story has been playing out across much of the Midwest during the last decade.

This report examines the rural-urban dimensions of population change across a 12-state region that includes Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. Using annual population estimates from the U.S. Census Bureau, the report examines patterns of population growth and decline from 2000 to 2009.

The Midwest region's total population grew at a modest 3.8 percent rate from 2000-2009, less than half the 9.1 percent growth rate for the total population of the United States. Figure 1 illustrates growth rates by county within the region, contrasting areas that grew faster or slower than the regional average with those that lost population.



Recent Midwestern Growth Favors Metropolitan Cities

For anyone familiar with the geography of the Midwest, it is quickly evident from Figure 1 that most of the counties growing faster than the regional average are located near metropolitan cities.

Figure 2 illustrates the locations and relative sizes of metropolitan areas in the 12-state region. The Chicago-Naperville-Joliet metropolitan area is the region's largest, with a population approaching 9.6 million in 2009. Michigan's Detroit-Warren-Livonia metro area follows with 4.4 million residents, and the Minneapolis-St. Paul-Bloomington metro is third with nearly 3.3 million residents.

Omaha-Council Bluffs qualifies as Iowa's largest metropolitan area and the region's 12th largest with a population of 850,000. The Des Moines metro area ranks 20th in the Midwest region with 563,000 residents. Iowa contains all or portions of seven other metropolitan areas.

The Sioux Falls MSA had the fastest rate of 2000-2009 population growth among the region's metros, growing by 27 percent. The Springfield (Missouri) and Des Moines metro areas followed in second and third place with growth rates of 17 percent.

The region's recent patterns of metropolitan growth and rural decline are dramatic when measured on a numeric, rather than a percentage, basis. Figures 3 and 4 illustrate the magnitude and location of population gains and losses from 2000 to 2009. In both maps, each dot represents the gain or loss of 100 residents in a county. (The dots are placed randomly within the county boundaries).

Population gains (Figure 3) were highly concentrated in and around the region's metropolitan areas. Population losses (Figure 4) were more widely dispersed across vast areas of the non-metropolitan Midwest.

Some Midwestern metropolitan areas did sustain population losses during the decade, especially in Indiana, Michigan, and Ohio. Grand Forks was the only metro area west of the Mississippi River to lose population. A few of the region's largest metro areas experienced population losses in their core counties and growth at the fringes. Those areas included the Chicago, Detroit, and St. Louis metro areas.

The rest of this report employs a more structured approach to explore the rural-urban dimensions of recent population change across the Midwest.

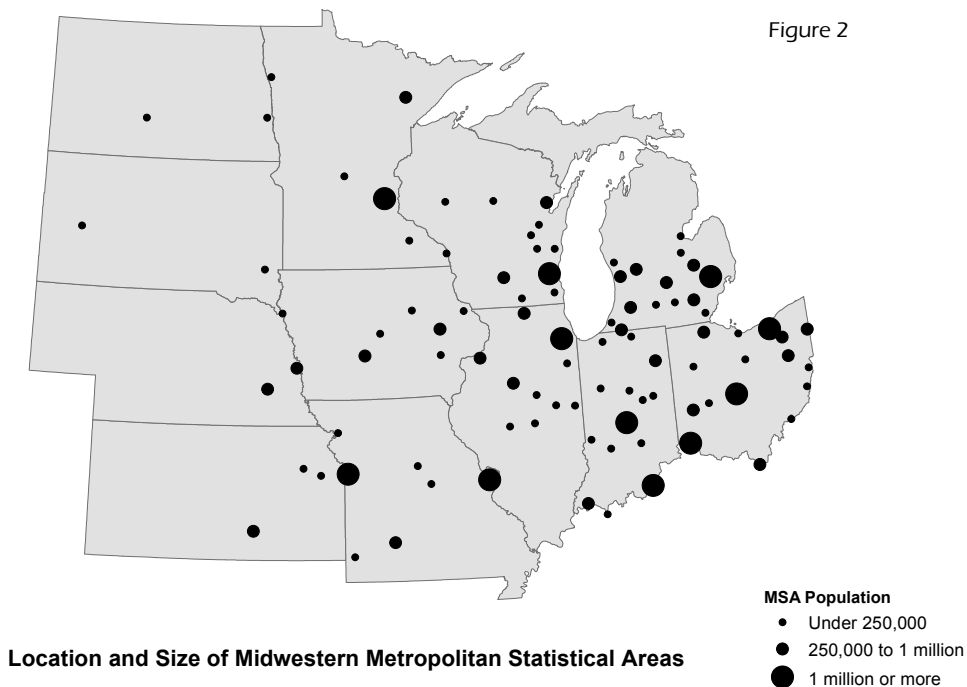
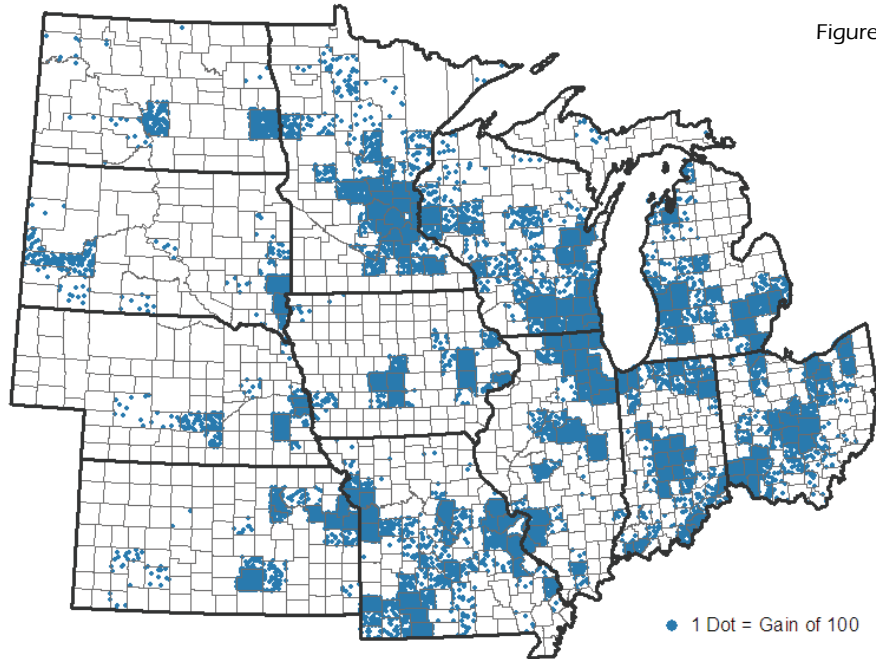
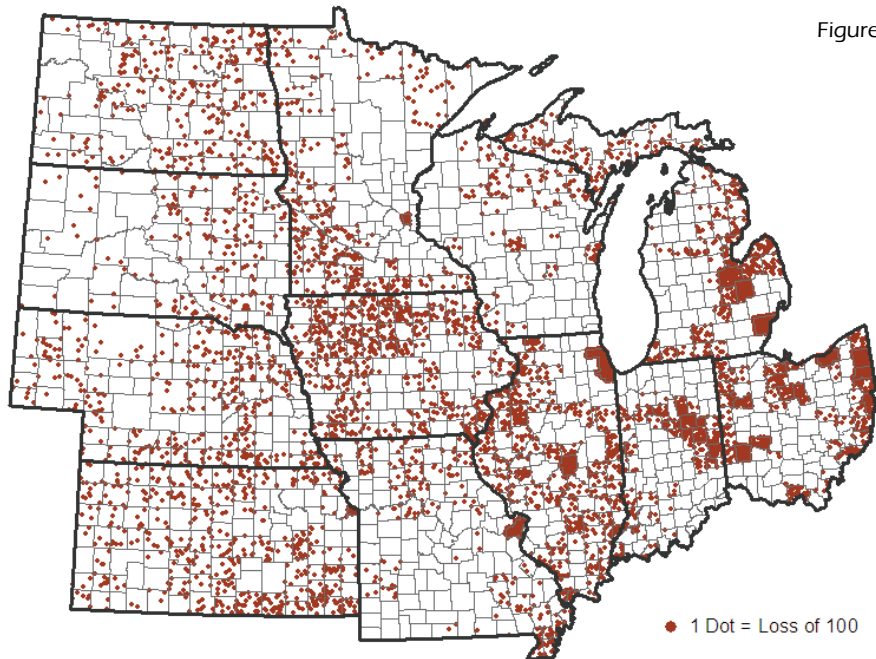


Figure 3



Counties With Total Population Gains, 2000-2009

Figure 4



Counties With Total Population Losses, 2000-2009

County Typologies: Measuring “Urban Influence”

The term “urban influence” describes a community’s access to sets of economic and other amenities that large, urban centers can provide. These amenities include diverse employment opportunities, trade, technology, and high-level services that depend on a large population base.

Large cities, by definition, have high levels of urban influence. Some smaller communities, by virtue of their proximity to a large city, have access to urban amenities that they could not provide on their own. Small communities and rural areas that are remote from large urban centers have lower access to many urban amenities.

The 12-state Midwest region includes a mix of very large metropolitan cities, mid-sized cities, small communities, and sparsely populated rural areas. This report investigates how population growth rates varied among these different types of communities. The report employs three different typologies to group the Midwest region’s 1,055 counties by degree of urban influence. The typologies are briefly introduced below, with more detailed descriptions following.

Metropolitan and Micropolitan Statistical Areas. The first typology identifies large urban centers using U.S. Office of Management and Budget (OMB) definitions for Metropolitan Statistical Areas (MSAs) and Micropolitan Statistical Areas. Each metro or micro area contains a central county with a core

urban area that meets a minimum population size and density threshold. The metro and micro areas also include any neighboring counties with significant economic ties to the central county, as measured by commuting flows.

Proximity to a Metropolitan Area . Large cities attract and support population growth and economic activity in a much broader region. They can also siphon growth from surrounding areas. In good times and bad, a large urban center’s performance can influence the fortunes of surrounding areas. Recognizing that a metro area’s influence can extend well beyond its borders, the second typology groups counties based on their spatial relationship to a metropolitan area.

Urbanization Level . Urbanization refers to the gradual consolidation of a region’s population into larger and larger cities over time. A county’s urbanization level may be inferred from the aggregate size of its population living in cities, with a larger urban population suggesting a higher level of urbanization, and thus, a higher degree of urban influence. The third typology groups counties into a continuum based on their urban population size in 2000. Rural counties are at the low end of the urbanization scale, and large metropolitan counties are at the high end. All counties within a particular MSA are assigned to the same group based on the overall MSA size, regardless of the counties’ own urban population size.

Metropolitan and Micropolitan Statistical Areas

Metropolitan. An OMB-defined metropolitan statistical area includes a central county with an urban core of 50,000 population or more, plus adjacent counties with a strong economic relationship to the central county (294 counties).

Micropolitan. A micropolitan statistical area contains central county with a core urban area of 10,000 to 49,999 population. The micro area also includes adjacent counties with strong economic ties to the central county (233 counties).

All Other Counties. Counties that are not part of an officially-defined metro or micro area (528 counties).

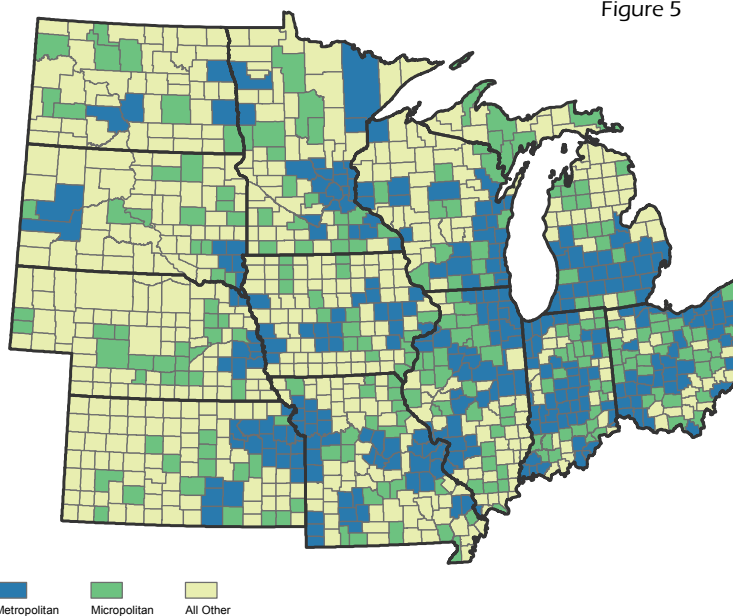


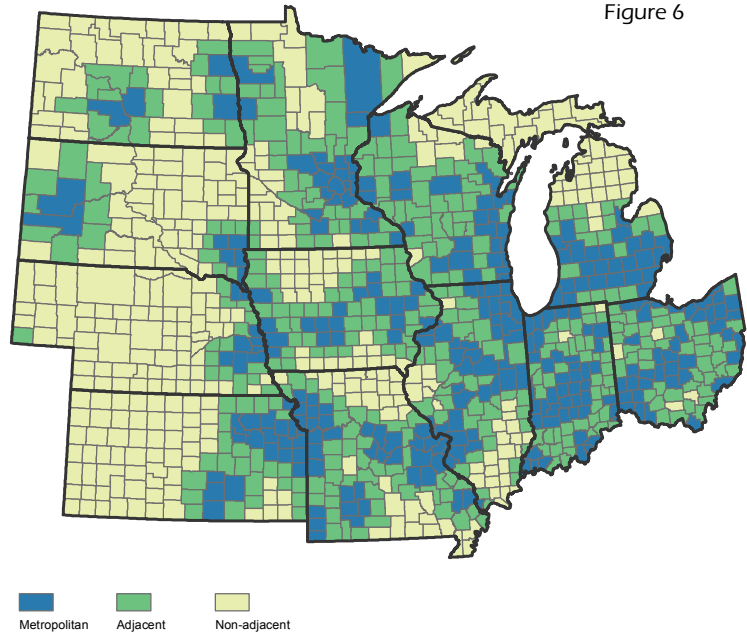
Figure 5

Proximity to a Metropolitan Area

Metropolitan. All counties within an OMB-defined metropolitan statistical area (MSA) (294 counties).

Adjacent. Counties that are not part of an officially-defined MSA, but that share a border or touch corners with any county that is located within a metropolitan area. (385 counties).

Non-Adjacent. Non-metropolitan counties that do not share a border or touch corners with any MSA county (376 counties).



Urbanization Level

Large Metro. Counties in a defined metropolitan statistical area (MSA) of 1 million or more population (104 counties).

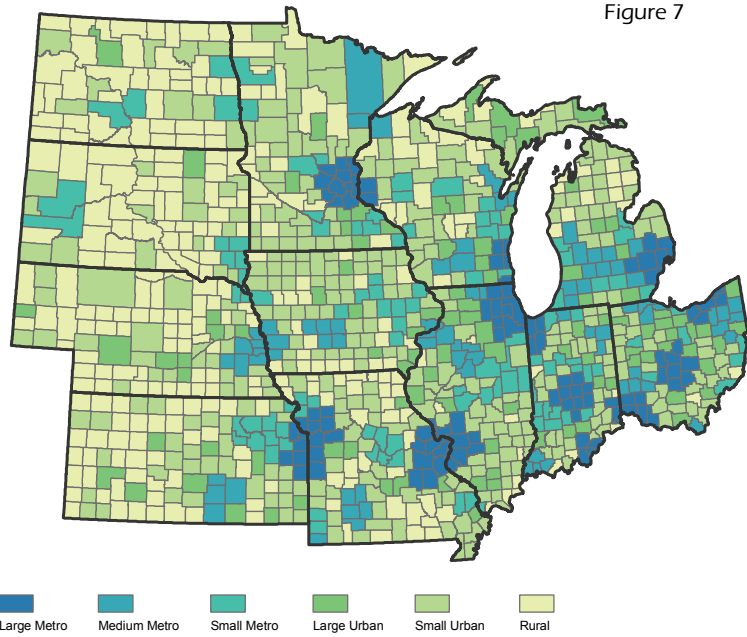
Mid-Sized Metro. Counties in a defined MSA with 250,000 to 1 million population (80 counties).

Small Metro. Counties in a defined MSA of 50,000 to 250,000 population (110 counties).

Large Urban. Counties with an urban population of 20,000 or more (104 counties).

Small Urban. Counties with an urban population of 2,500 to 20,000 (359 counties).

Rural. Counties with an urban population of fewer than 2,500 (298 counties).



Growth Rates by Metropolitan and Micropolitan Status

The population of the Midwest region as a whole grew by 3.8 percent from 2000 to 2009. Counties located in Metropolitan Statistical Areas (MSAs) grew at an average rate of 5.3 percent.

The region’s Micropolitan Statistical Areas showed relative stability, averaging less than 1 percent growth in population. Counties located outside of metro or micro area suffered an average decline of 3.2 percent in population.

Table 1 shows average rates of county growth by metropolitan and micropolitan status for Iowa and other states within the region. The states are listed in descending order by their total population growth rates. Higher growth rates are shaded in blue and lower rates are shaded in yellow.

South Dakota led the region with an overall population growth rate of 7.6 percent. South Dakota also had the most rapid rate of metropolitan growth with population increasing by nearly 21 percent in its two metropolitan areas.

All four states west of the Missouri River posted average metro area growth rates exceeding 10 percent. States in the eastern part of the region had slower growth in their metro areas. Michigan’s metro areas ranked the lowest, averaging growth under 1/2 of one percent.

Iowa has 20 counties located within nine different metropolitan areas. These MSA counties grew at an average rate of 9.1 percent, exceeding the overall Midwest metropolitan average.

Six states including Iowa experienced overall declines in their micropolitan area populations. Iowa’s 17 micropolitan counties, located within 15 distinct micro areas, lost 2.4 percent of their population. Only North Dakota had a faster rate of micropolitan loss than Iowa. Missouri showed the strongest growth in its micropolitan areas, posting an average growth rate of 5.5 percent.

Counties located outside of metropolitan or micropolitan areas experienced aggregate population losses in all states except Wisconsin and Ohio. The rates of loss were higher in the western half of the region, with North Dakota (-10.5 percent) and Kansas (-9.1 percent) posting the largest percentage declines. In Iowa, counties outside of metro or micro areas lost population at an average rate of 5.8 percent.

Counties outside of metropolitan and micropolitan areas in Iowa lost 5.8 percent of their population during the decade of the 2000s.

Table 1. Average Population Growth Rates by State and Metropolitan/Micropolitan Status

State	All Counties	Metropolitan	Micropolitan	All Other
South Dakota	7.6%	20.8%	1.8%	-5.0%
Minnesota	7.0%	9.2%	3.5%	-1.4%
Missouri	7.0%	8.6%	5.5%	-0.3%
Indiana	5.6%	7.4%	-0.1%	-1.5%
Wisconsin	5.4%	6.8%	2.7%	0.9%
Nebraska	5.0%	11.8%	1.9%	-9.0%
Kansas	4.8%	10.1%	-1.4%	-9.1%
Illinois	4.0%	5.0%	-1.9%	-4.0%
Region	3.8%	5.3%	0.7%	-3.2%
Iowa	2.8%	9.1%	-2.4%	-5.8%
Ohio	1.7%	2.1%	-0.1%	0.3%
North Dakota	0.7%	11.3%	-3.7%	-10.5%
Michigan	0.3%	0.4%	1.6%	-2.8%

Growth Rates by Proximity to a Metropolitan Area

Nearly three quarters of the Midwest region’s 1,055 counties are located outside of defined metropolitan statistical areas (MSAs). The total population in these non-metro counties dropped 1 percent from 2000-2009, in contrast to the MSA counties’ 5.3 percent gain.

Non-metro counties that are adjacent to an MSA fared slightly better than those more distant from an MSA. The adjacent counties declined in population by 3/10ths of one percent from 2000 to 2009. The region’s non-adjacent counties lost 2.5 percent of their population during the same period.

Table 2 shows each state’s average rates of population growth and decline in metropolitan, adjacent, and non-adjacent counties from 2000 to 2009. Iowa has 20 counties in the metropolitan group, 47 counties in the adjacent group, and 32 counties that are not adjacent to an MSA county.

Five states in the Midwest region experienced population growth in their adjacent county group. Missouri had the strongest performance with 3.8 percent growth in its adjacent counties. Wisconsin, South Dakota, Minnesota, and Ohio also experienced an overall population gains in their adjacent counties.

Iowa’s adjacent counties lost 3.6 of their population from 2000-2009, while its non-adjacent counties suffered a 6.2 percent population loss.

Seven states including Iowa experienced population losses in their adjacent counties. North Dakota saw the steepest rate of decline with a loss of 9 percent. Iowa’s adjacent counties experienced a 3.6 percent loss in population.

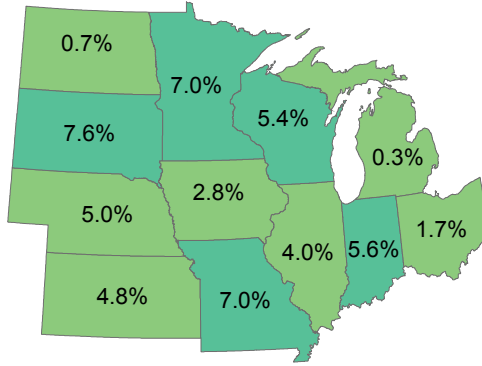
Indiana was the only state to experience growth in its non-adjacent counties, with population increasing by 1/10th of one percent. Iowa’s 6.2 percent rate of loss in its non-adjacent counties was exceeded only by North Dakota’s 6.9 percent loss. Kansas was third with a loss of 5.2 percent.

Figure 8 provides a graphical summary of growth rates by state and metropolitan, micropolitan, and metro-adjacency status.

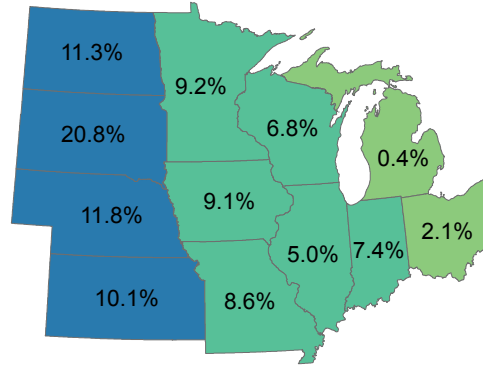
Table 2. Average Population Growth Rates by State and Proximity to a Metropolitan Area

State	Total	Metro	Adjacent	Non-Adjacent
South Dakota	7.6%	20.8%	2.1%	-3.2%
Minnesota	7.0%	9.2%	1.6%	-0.2%
Missouri	7.0%	8.6%	3.8%	-0.6%
Indiana	5.6%	7.4%	-0.5%	0.2%
Wisconsin	5.4%	6.8%	2.2%	-3.8%
Nebraska	5.0%	11.8%	-4.2%	-3.2%
Kansas	4.8%	10.1%	-4.8%	-5.2%
Illinois	4.0%	5.0%	-3.4%	-1.5%
Region	3.8%	5.3%	-0.3%	-2.5%
Iowa	2.8%	9.1%	-3.6%	-6.2%
Ohio	1.7%	2.1%	0.1%	-0.3%
North Dakota	0.7%	11.3%	-9.0%	-6.9%
Michigan	0.3%	0.4%	0.0%	-0.5%

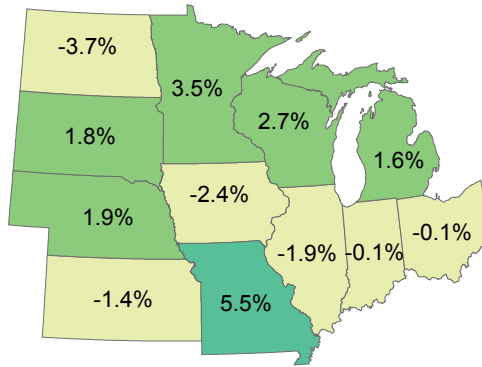
Figure 8. Comparison of Population Growth Rates by Metropolitan, Micropolitan, and Adjacency Status



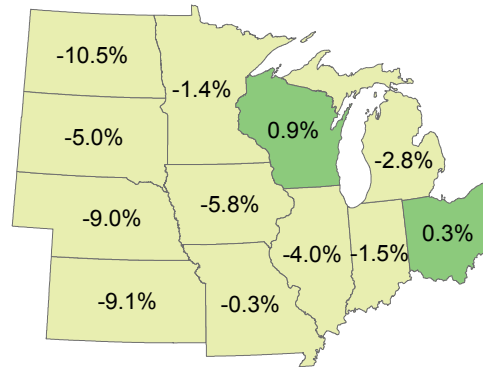
Statewide Average for All Counties



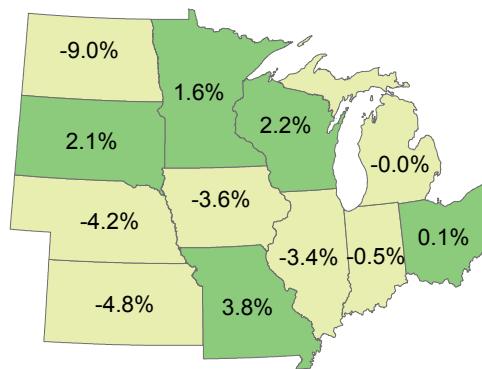
Metropolitan Counties



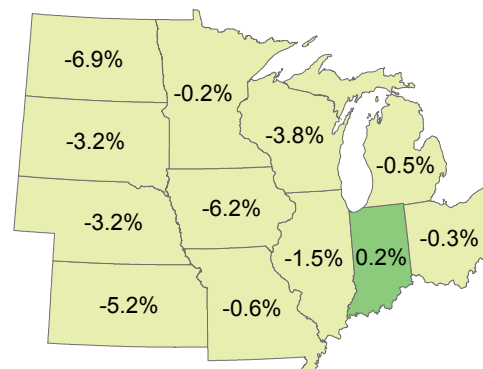
Micropolitan Counties



Counties Outside Metropolitan or Micropolitan Areas



Non-Metropolitan Counties: Adjacent to a Metropolitan Area



Non-Metropolitan Counties: Not Adjacent to a Metropolitan Area

Growth Rates by Urbanization Level

Counties in the 12-state Midwest region vary widely by population size, ranging from Arthur County's (NE) 340 residents to Cook County's (IL) population of nearly 5.3 million. Size mattered in their 2000-2009 population growth performance, with counties showing very different trends depending on their urbanization level.

Table 3 shows average rates of population growth and decline by urbanization level for each of the 12 states in the region. Iowa has no counties in the large MSA group; 9 counties in the mid-sized MSA group; 11 counties in the small MSA group; 8 large urban counties; 50 small urban counties; and 21 rural counties.

The Midwest region contains 11 metropolitan statistical areas (MSAs) of 1 million or more in population. Together, these large MSAs cover 104 counties and contain 47 percent of the total population in the 12-state region. Counties in these large metro areas grew at an average rate of 5.5 percent from 2000 to 2009.

The region has 25 MSAs with 250,000 to 1 million in population. Counties in these mid-sized MSAs averaged a 4.6 percent rate of growth. Missouri had the highest growth rate in its mid-sized MSA counties, at 15.4 percent. Ohio

experienced population losses among counties in this group. In Iowa, counties in this group out-performed the regional average with population growth of 12.1 percent.

Small MSAs with under 250,000 in population grew at an average rate of 5.2 percent across the region. South Dakota, which has no counties in the two larger MSA groups, led all 12 states with nearly 21 percent growth in its small MSA counties. Ohio experienced a population decline of 4 percent in its small MSA counties. Iowa's small MSA counties grew by 6.3 percent.

The region's large urban counties barely grew, increasing their overall population by less than 1 percent. Six states showed population growth and six states had declines in their large urban counties.

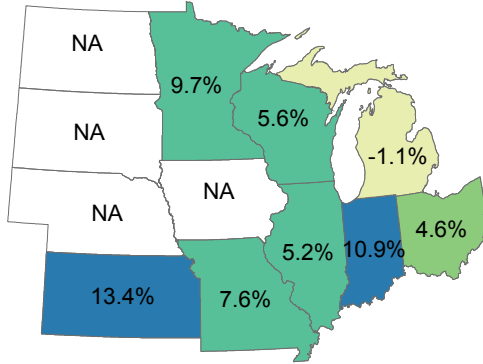
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Iowa's metropolitan areas out-performed regional average growth rates, but its smaller urban and rural counties experienced higher rates of loss.

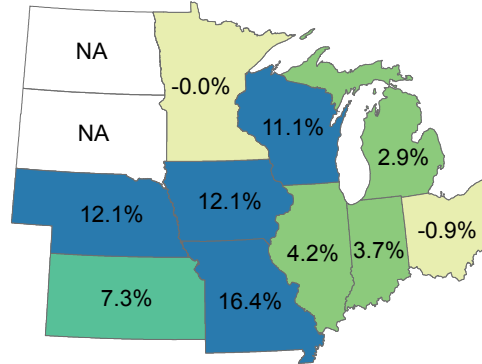
Table 3. Average Population Growth Rates by State and County Urbanization Level

State	All Counties	Mid-Sized					Rural
		Large Metro	Metro	Small Metro	Large Urban	Small Urban	
South Dakota	7.6%	NA	NA	20.8%	-0.7%	1.3%	-5.8%
Minnesota	7.0%	9.7%	0.0%	10.7%	5.5%	0.7%	-4.6%
Missouri	7.0%	7.6%	16.4%	8.4%	7.8%	1.6%	-0.9%
Indiana	5.6%	10.9%	3.7%	3.4%	-1.4%	0.1%	-0.3%
Wisconsin	5.4%	5.6%	11.1%	5.8%	3.2%	1.4%	-0.2%
Nebraska	5.0%	NA	12.1%	1.3%	3.4%	-5.5%	-11.1%
Kansas	4.8%	13.4%	7.3%	8.2%	-1.1%	-5.7%	-11.7%
Illinois	4.0%	5.2%	4.2%	4.3%	-1.3%	-3.6%	-8.3%
Region	3.8%	5.5%	4.6%	5.2%	0.9%	-1.3%	-5.1%
Iowa	2.8%	NA	12.1%	6.3%	-2.8%	-4.5%	-7.4%
Ohio	1.7%	4.6%	-0.9%	-4.0%	0.1%	0.1%	-2.5%
North Dakota	0.7%	NA	NA	11.3%	-3.0%	-5.6%	-10.9%
Michigan	0.3%	-1.1%	2.9%	1.4%	2.2%	-2.3%	-0.8%

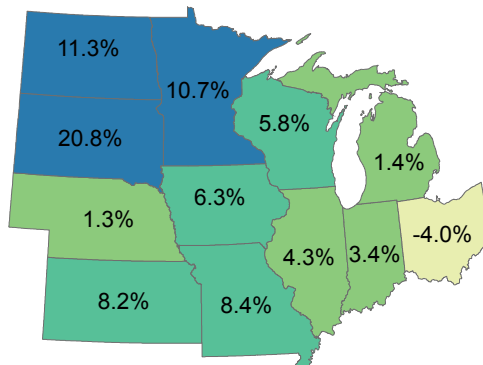
Figure 9. Comparison of Growth Rates in County Groups by Urbanization Level



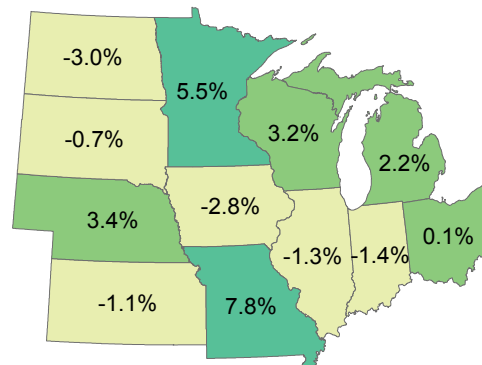
Large Metropolitan Area County Growth Rates



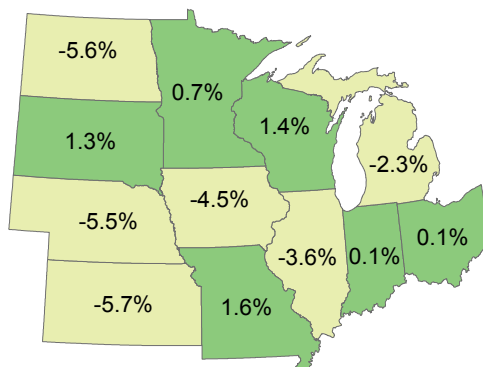
Mid-Sized Metropolitan Area County Growth Rates



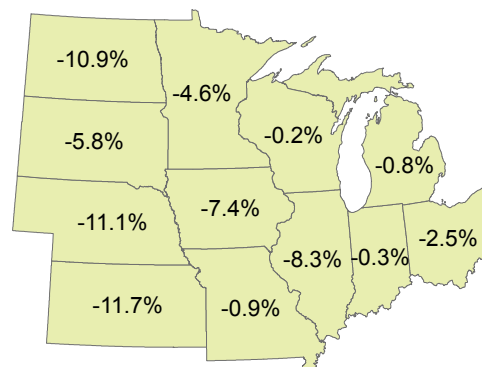
Small Metropolitan Area County Growth Rates



Large Urban County Growth Rates



Small Urban County Growth Rates



Rural County Growth Rates

Urbanization Level, Cont.

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Missouri's 7.8 percent gain was the highest and North Dakota's 3 percent loss was the lowest rate of change. Iowa was right behind North Dakota with a loss of 2.8 percent in its large urban counties.

Six states in the region had slight growth in their small urban counties, although none reached the 2 percent mark. Missouri had the highest rate at 1.6 percent. The regional average for the small urban county group was a decline of 1.3 percent. Kansas, North Dakota, and Nebraska had the highest rates of loss, exceeding 5 percent. Iowa's small urban counties lost 4.5 percent of their population.

Rural counties across the region averaged a 5.1 percent population loss from 2000 to 2009, which was the steepest rate of decline for any of the county groups profiled in this report. None of the region's 12 states experienced net growth in their rural counties. Wisconsin had the smallest decline with a loss of 2/10ths of one percent. Kansas and Nebraska had the highest rates of loss at 11.7 percent and 11.1 percent, respectively. Rural counties in Iowa lost 7.4 percent of their population from 2000 to 2009.

Figure 9 graphically summarizes the average growth rates by county urbanization for each state in the region.

Summary

Iowa's recent population growth patterns have echoed trends across the Midwest, where strong urbanization forces are in evidence. From 2000-2009, Midwestern population growth has concentrated in and around metropolitan cities, while most rural areas have lost population.

Outside of metropolitan areas, counties with larger cities fared better than their less urbanized counterparts. Proximity to a metropolitan area also bolstered growth or mitigated losses in some non-metro counties.

States within the region demonstrated some notable differences in their non-metropolitan growth patterns. Missouri and Wisconsin demonstrated more balanced growth across their metropolitan and non-metropolitan counties than other Midwestern states.

Individual state and local development strategies are unlikely to reverse the region's more dominant, urbanization trends. Still, understanding Iowa's experience in a broader, regional context may help policy-makers and planners in responding to the state's changing demographic landscape.

Iowa Population Reports

Regional Economics &
Community Analysis Program

www.recap.iastate.edu

17 East Hall
Iowa State University
Ames, Iowa 50011

Phone: 515-294-9903
Fax: 515-294-0592
E-mail: recap@iastate.edu

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