

Executive Summary

Manufacturing has been one of the major bright spots in the economic recovery of the last few years, contributing more than 25 percent of the overall growth in GDP between 2009 and 2011 and adding roughly 500,000 new jobs between the beginning of 2010 and the end of 2012. This trend is especially welcome as manufacturing jobs often provide higher wages and better benefits than non-manufacturing jobs.

However, the importance of manufacturing to the economy is not uniform across the U.S. as manufacturing industries are concentrated in certain locations. In this report, we examine countylevel data to assess the importance of manufacturing in local economies throughout the U.S. and find that, although almost all states include some counties where manufacturing accounts for a significant share of jobs and earnings, such counties are concentrated in the Midwest and the South, are more likely to be outside metropolitan areas, and are relatively small.

Specifically, we find:

- In 2010, there were 629 counties, or roughly 20 percent of all U.S. counties, where earnings paid to manufacturing employees accounted for at least 20 percent of total earnings of all employees.
- Indiana and Ohio had the most counties where manufacturing accounted for at least 20 percent of total earnings (50 and 48 counties, respectively), followed by Tennessee (42 counties), Wisconsin (40 counties), Georgia (36 counties), Iowa (36 counties) and Kentucky (31 counties).
- These counties are more likely to be located outside of metropolitan areas; about 68 percent of counties with at least 20 percent of total earnings derived from manufacturing were located in rural or micropolitan areas.
- There were 181 counties spread over 27 states where manufacturing jobs made up at least 20 percent of total employment. Indiana and Ohio had the largest number of such counties, at 26 and 16, respectively. Again, these counties are more likely to be located outside of metropolitan areas as roughly 80 percent are located in rural or micropolitan areas.

By Brittany M. Bond

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Background and Data Description

Manufacturing has been one of the major bright spots in the economic recovery over the past few years. In 2011, the sector made up 11.9 percent of U.S. gross domestic product (GDP), up from 11.3 percent in 2009, and manufacturing accounted for more than 25 percent of the overall growth in GDP between 2009 and 2011. In addition, manufacturing accounts for 68 percent of all domestic investment on research and development (R&D) in the U.S and 60 percent of the country's total exports.¹ Employment growth in manufacturing during the recovery has been relatively strong, with roughly 500,000 new manufacturing jobs added between the beginning of 2010 and the end of 2012. This trend is especially welcome, as manufacturing jobs provide higher wages and better benefits, on average, than non-manufacturing jobs .²

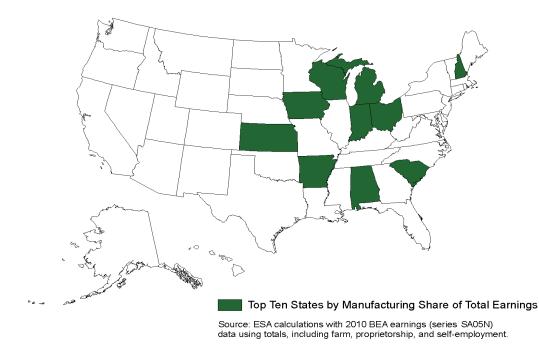
Most of the country's manufacturing is done in states that are big and populous and that boast a large share of overall commerce in the U.S. For example, California is the state with the largest manufacturing economy in an absolute sense, as it alone accounted for 13.4 percent of all compensation earned by manufacturing workers and 11 percent of all U.S. manufacturing jobs in 2010. But the overall size of the manufacturing industry in an area does not convey the importance of manufacturing to that area's economy relative to other industries and sectors. Rather, the *share* of a local economy that is related to manufacturing is a more telling indicator of the importance of manufacturing to a local economy relative to its importance in other parts of the country.

As the table below shows, manufacturing accounted for about 10 percent of total earnings nationwide in 2010, but in five states (Indiana, Wisconsin, Michigan, Iowa and Ohio) manufacturing accounted for over 15 percent of each state's total earnings and in another five states, manufacturing accounted for 14.5 to 15 percent of total earnings. Similarly, manufacturing workers accounted for around 7 percent of the total U.S. workforce in 2010, but in five states manufacturing employment accounted for more than 10 percent of the workforce, and in five additional states manufacturing employment was between 9 and 10 percent of total employment.³

However, even within a state, manufacturing is not uniformly distributed, and in some local areas manufacturing might be more important than would be reflected in the state-level data. The most direct approach to estimating the economic significance of manufacturing is to examine the share of economic output attributable to manufacturing. However, although such data are available for metropolitan areas, they are not available at a county level.⁴ Therefore, to address the importance of manufacturing to the economies of both metropolitan and non-metropolitan areas, it is necessary to look at measures of economic activity such as employment and earnings that are avail-

Manufacturing Share of Total Earnings and Employment, Top Ten States, 2010

	Earnings		Employment
Indiana	22.3%	Indiana	13.1%
Wisconsin	20.2%	Wisconsin	12.9%
lowa	17.6%	lowa	10.6%
Michigan	16.8%	Arkansas	10.6%
Ohio	16.0%	Ohio	10.0%
Kansas	14.9%	Michigan	9.9%
Alabama	14.8%	Alabama	9.8%
Arkansas	14.6%	Mississippi	9.4%
South Carolina	14.6%	Kansas	9.2%
New Hampshire	14.5%	Kentucky	9.2%
National Average	9.9%	National Average	7.0%



able at the county level.

The principle data sets used here to address these questions are found in the Bureau of Economic Analysis' (BEA's) Regional Economic Information System (REIS), specifically the personal income and earnings by industry (BEA code: CA05N) series and the total full-time and part-time employment by industry (BEA code: CA25N) series for 2010, the latest year available at the county level.⁵ Earnings comprise wage and salary disbursements and supplements as well as proprietors' income. Both earnings and employment are disaggregated at the county level according to place of work. Using these data, total earnings and total employment are calculated by county, as is earnings and employment for each of various industries, including manufacturing, allowing us to calculate the percentage of total earnings accounted for by manufacturing and the share of total employment accounted for by manufacturing. For the earnings series in 2010, the manufacturing data for 374 counties were suppressed because of disclosure concerns; in the employment series in 2010, manufacturing data for 358 counties were suppressed. These counties are excluded from the analysis.⁶

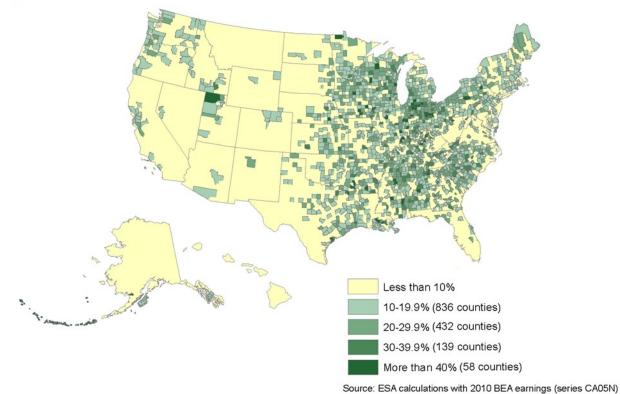
The earnings data series used in this report is the same as that used in research published in 2004 by the Economic Research Service (ERS) at the US De-

partment of Agriculture (USDA, but this report differs from the ERS report in several important ways. First, it updates the ERS' results and provides a more recent picture of the state of U.S. manufacturing. Second, it includes employment shares as an alternative measure of the importance of manufacturing to a local area. Finally, in contrast to ERS' focus on counties outside of metropolitan areas, this report examines the distribution between metropolitan and non-metropolitan areas.

This report also differs in the way it identifies the importance of manufacturing to a county. The ERS report defined "manufacturing-dependent counties" somewhat arbitrarily as those for which annual average earnings derived from manufacturing accounted for 25 percent or more of total county earnings.⁷ In contrast, this report uses a manufacturing share of 20 percent as a benchmark; this benchmark is chosen as the cutoff as it is roughly one standard deviation above the average manufacturing share for the nation.

USING EARNINGS SHARES TO MEASURE THE IMPORTANCE OF MANUFACTURING

In 2010, there were 629 counties, or roughly 20 percent of all U.S. counties, where total earnings



Share of Earnings Accounted for by Manufacturing by County, 2010

paid to manufacturing employees were at least 20 percent of total earnings (including earnings from farm, proprietorship, and self-employment).⁸

In roughly one-third of those counties, earnings from manufacturing represented 30 percent or more of total earnings, and in 58 counties (about 2 percent of all counties), earnings from manufacturing were 40 percent of the total. Although the counties in which manufacturing had the largest presence were spread throughout the country, they were concentrated in the Midwest and South. Indiana and Ohio had the most counties where manufacturing accounted for at least 20 percent of total earnings (50 and 48 counties, respectively), followed by Tennessee (42 counties), Wisconsin (40 counties), Georgia (36 counties), Iowa (36 counties) and Kentucky (31 counties).

In addition to being concentrated in the Midwest and the South, these counties were largely found outside of metropolitan areas. The table below shows the breakdown of counties by both the percentage of earnings accounted for by manufacturing and the distribution between metropolitan areas (MSAs), micropolitan areas $(\mu SAs)^9$ and "rural" areas (areas outside of both metropolitan and micropolitan areas).⁹ More than two thirds of counties where manufacturing accounted for more than 20 percent of earnings were outside of metropolitan areas. For the country as a whole, 62 percent of all counties were outside metropolitan areas; thus, counties where manufacturing is a relatively significant share of the local economy were slightly more likely to be outside metropolitan areas.

data using totals, including farm, proprietorship, and self-employment.

Likewise, counties with a relatively high share of manufacturing earnings had lower populations on average. For example, the average U.S. county population was roughly 111,000 persons in 2010. In contrast, for the 629 counties where manufacturing represented more than 20 percent of earnings, the average population was roughly 58,000.

Using Employment Shares to Measure the Importance of Manufacturing

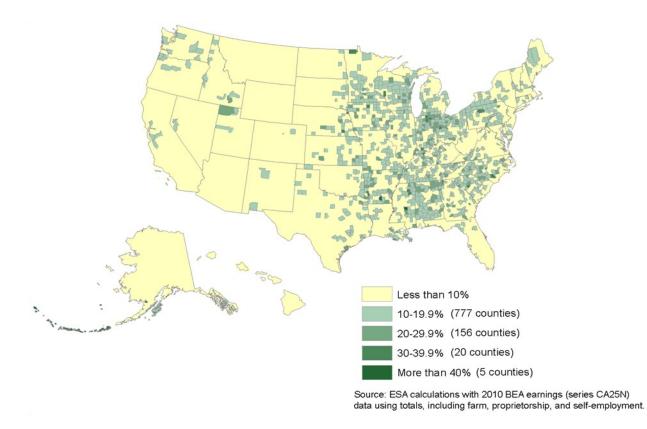
The manufacturing share of total employment in a county is another way to measure the importance of manufacturing to a local area's economy.

Manufacturing Share of Total Earnings, by Statistical Area Classification (Rural, Micopolitan, Metropolitan), 2010

Manufacturing				
Share	Rural	Micro	Metro	Total
Less than 10%	552	248	486	1,286
10-19.9%	276	214	346	836
20-29.9%	164	123	145	432
30-39.9%	50	47	42	139
More than 40%	25	17	16	58
Total	1,067	649	1,035	2,751

The last two years (2010 through 2012) represent the first extended period of U.S. job growth in the manufacturing sector since the late 1990s. Since its lowest employment level in January 2010, when manufacturing accounted for roughly 11.5 million jobs, the sector has rebounded, adding more jobs to the U.S. economy virtually every month. During this time, manufacturing employment rose by close to 4.0 percent, adding around 450,000 jobs to the manufacturing sector (through September 2012). This increase was largely shared across states.¹⁰

In 2010, 181 counties across 27 states¹¹ had a manufacturing share of employment greater than 20 percent.¹² Indiana and Ohio had the greatest number of such counties, with 26 and 16 counties respectively. As also reflected by earnings shares, these counties were more likely to be in non-metropolitan areas. In fact, 80 percent of the counties in which the manufacturing employment share was at least 20 percent were in non-metropolitan areas.



Share of Employment Accounted for by Manufacturing by County, 2010

Conclusion

Local economies where the manufacturing sector accounts for a relatively significant share of earnings and employment are found throughout the U.S., though they are concentrated in the Midwest and the South. Many of the counties are small in terms of population, and most are located in nonmetropolitan areas (68 percent by the earnings measure; 79 percent by the employment measurement). These counties can be expected to benefit disproportionately from the success of the manufacturing sector. Of course, manufacturing is not isolated from the rest of the economy, and in places where a significant portion of economic activity is due to manufacturing, other types of businesses benefit. In other words, the presence of manufacturing in a community generates direct and indirect jobs and confers additional economic benefits that exceed the earnings and employment measures described above. As the economy continues to recover, the hope and expectation is that manufacturing will continue its rebound and contribute to the generation of more relatively high paying jobs.

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Endnotes

¹ National Science Foundation, National Center for Science and Engineering Statistics. 2011. *Research and Development in Industry: 2006-07.* Detailed Statistical Tables NSF 11-301. Arlington, VA. Available at www.nsf.gov/statistics/nsf11301/

² D. Langdon and R. Lehrman, "The Benefits of Manufacturing Jobs," U.S. Department of Commerce, ESA Issue Brief #01-12, May 2012, <u>http://www.esa.doc.gov/sites/</u> <u>default/files/reports/</u>

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ments/1thebenefitsofmanufacturingjobsfinal5912.pdf

³The fact that the share of manufacturing earnings nationwide is higher than the share of employment is a sign that manufacturing jobs have above-average earnings, a characteristic supported by past research. See Langdon and Lehrman (2012).

⁴In 2010, there were 52 Metropolitan Statistical Areas where the contribution of manufacturing to total GDP was more than 25 percent.

⁵ Found at <u>http://bea.gov/iTable/index_regional.cfm</u>
⁶Though these represent roughly 12 percent of all U.S. counties, they account for only around 1 percent of total earnings in the U.S. in 2010.

⁷Economic Research Service. "Manufacturingdependent Counties, 1998-2000". US Department of Agriculture. 2004. <u>http://www.ers.usda.gov/Briefing/</u><u>Rurality/Typology/Methods/</u>. ERS also determined whether counties relied on other forms of economic activity, such as farming, mining, government or services.

⁸Using 19.5 percent as the benchmark, rather than 20.0 percent, would include 27 additional counties.

⁹Metropolitan Statistical Areas have a population of at least 50,000 and are composed of the "central county or counties containing the core, plus adjacent outlying counties having a high degree of social and economic integration with the central county as measured through commuting." (<u>http://www.census.gov/geo/</u>

<u>www/2010census/gtc/gtc_cbsa.html</u>). Micropolitan areas consist of at least 10,000 residents.

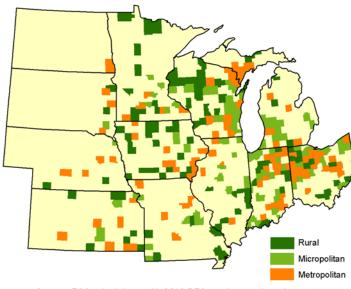
¹⁰ The total number of counties listed in the table, 2,751 is smaller than the official county count of 3,141 counties and county equivalents, because it excludes those counties in which data was suppressed in the BEA 2010

series. Only 12 states experienced any loss at all in manufacturing employment from January 2010 to August 2012 (the last month for which state data were available; July, August numbers are preliminary). Only 10 states experienced a loss greater than 1 % of its manufacturing labor force. BLS Establishment Survey Table B-1 Employees on NonFarm Payrolls by Industry Subsectors and Selected Detail. Retrieved October 3, 2012. ¹¹Using 19.5 percent as the benchmark would include 10 additional counties.

¹²The standard deviation for the county manufacturing share of total employment was .162 in 2010.

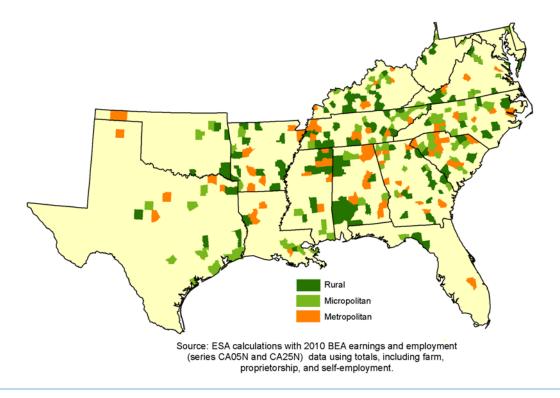
Appendix

Counties in the Midwest where Manufacturing Accounted for More than 20 percent of earnings or employment, by Rural, Micropolitan, and Metropolitan Classification, 2010



Source: ESA calculations with 2010 BEA earnings and employment (series CA05N and CA25N) data using totals, including farm, proprietorship, and self-employment.

Counties in the South where Manufacturing Accounted for More than 20 percent of earnings or employment, by Rural, Micropolitan, and Metropolitan Classification, 2010



	Manufacturing	Manufacturing	
	Share of Total	Share of Total	Metropolitan, Micropolitan,
County	Earnings	Employment	or Rural
Hancock, KY	73%	50%	Metropolitan
Calhoun, AR	71%	56%	Micropolitan
Roseau, MN	56%	38%	Rural
St. James, LA	53%	26%	Rural
Shelby, OH	52%	34%	Micropolitan
Scott, KY	51%	28%	Metropolitan
Kosciusko, IN	51%	32%	Micropolitan
Carroll, KY	51%	28%	Rural
Morris, TX	50%	29%	Rural
Cameron, PA	50%	34%	Rural
Little River, AR	50%	24%	Rural
Box Elder, UT	49%	24%	Micropolitan
Iowa, IA	48%	28%	Rural
Gibson, IN	48%	29%	Metropolitan
Gordon, GA	47%	30%	Micropolitan
Murray, GA	47%	38%	Metropolitan
Tioga, NY	47%	24%	Metropolitan
Union, OH	47%	27%	Metropolitan
Owen, IN	47%	26%	Metropolitan
Calhoun, TX	47%	22%	Metropolitan
Elk, PA	47%	32%	Micropolitan
Noble, IN	46%	33%	Micropolitan
Marion, IA	46%	28%	Micropolitan
Pontotoc, MS	46%	40%	Micropolitan
Sheboygan, WI	46%	26%	Metropolitan
Choctaw, AL	46%	22%	Rural
Posey, IN	46%	23%	Metropolitan
Aleutians West, AK	45%	47%	Rural
Marion, KY	45%	27%	Rural
Iberville, LA	45%	21%	Metropolitan
Scott, MS	44%	43%	Rural
Howard, AR	44%	40%	Rural
Whitley, IN	44%	30%	Metropolitan
Bristol Bay, AK	43%	40%	Rural
Williams, OH	43%	28%	Rural
Elkhart, IN	43%	35%	Metropolitan
Monroe, IA	43%	25%	Rural
Hancock, IA	43%	30%	Rural

List of All Counties with Manufacturing Share above 20 percent, 2010

	Manufacturing	Manufacturing	
	Share of Total	Share of Total	Metropolitan, Micropolitan,
County	Earnings	Employment	or Rural
DeKalb, IN	43%	28%	Micropolitan
St. Joseph, MI	43%	29%	Micropolitan
Trempealeau, WI	43%	32%	Rural
Montgomery, IN	42%	24%	Micropolitan
Price, WI	42%	26%	Rural
Simpson, KY	41%	27%	Rural
Chickasaw, MS	41%	34%	Rural
Logan, OH	41%	22%	Micropolitan
Saline, NE	41%	31%	Rural
Muscatine, IA	41%	25%	Micropolitan
Coosa, AL	40%	26%	Micropolitan
Boone, IL	40%	21%	Metropolitan
Auglaize, OH	40%	25%	Micropolitan
Fountain, IN	40%	26%	Rural
Decatur, IN	40%	28%	Micropolitan
Ashley, AR	40%	24%	Rural
Chattooga, GA	39%	28%	Micropolitan
Bartholomew, IN	39%	27%	Metropolitan
Sandusky, OH	39%	26%	Micropolitan
Lowndes, AL	39%	23%	Metropolitan
Lee, NC	39%	27%	Micropolitan
Whitfield, GA	39%	30%	Metropolitan
Jackson, MS	39%	24%	Metropolitan
McDowell, NC	39%	28%	Rural
Montgomery, KY	39%	25%	Micropolitan
Perry, IN	38%	21%	Rural
Logan, KY	38%	21%	Rural
Newberry, SC	38%	28%	Micropolitan
Marinette, WI	38%	22%	Micropolitan
McLeod, MN	38%	24%	Micropolitan
Hart, KY	38%	25%	Rural
Dakota, NE	38%	34%	Metropolitan
Allegan, MI	38%	20%	Micropolitan
Clinton, IN	38%	26%	Micropolitan
Monroe, TN	38%	23%	Rural
Fulton, PA	37%	22%	Rural
Clinton, KY	37%	31%	Rural
Clinch, GA	37%	24%	Rural
Unicoi, TN	37%	24%	Metropolitan
Obion, TN	37%	21%	Micropolitan

	Manufacturing	Manufacturing	
	Share of Total	Share of Total	Metropolitan, Micropolitan,
County	Earnings	Employment	or Rural
Bladen, NC	36%	32%	Rural
Hancock, WV	36%	22%	Metropolitan
Fulton, OH	36%	25%	Metropolitan
Marlboro, SC	36%	26%	Micropolitan
Arkansas, AR	36%	26%	Rural
Cherokee, SC	36%	24%	Micropolitan
Dubois, IN	36%	32%	Micropolitan
Talladega, AL	35%	23%	Micropolitan
Wyoming, PA	35%	20%	Metropolitan
Adams, IN	35%	21%	Micropolitan
Pike, OH	35%	22%	Rural
Louisa, IA	35%	26%	Micropolitan
Saluda, SC	35%	31%	Metropolitan
Clay, AL	35%	26%	Rural
Perry, MO	34%	25%	Rural
Ottawa, MI	34%	23%	Metropolitan
McDonald, MO	34%	27%	Metropolitan
Scott, AR	34%	26%	Rural
Cass, IL	34%	29%	Rural
Chesterfield, SC	34%	22%	Rural
Greene, AR	34%	24%	Micropolitan
Evans, GA	34%	30%	Rural
Laclede, MO	34%	22%	Micropolitan
Winnebago, WI	33%	23%	Metropolitan
Schley, GA	33%	24%	Micropolitan
Bedford, TN	33%	24%	Micropolitan
Tishomingo, MS	33%	24%	Rural
Hawkins, TN	33%	20%	Metropolitan
Alexander, NC	33%	25%	Metropolitan
Marshall, IA	33%	23%	Micropolitan
Holmes, OH	33%	27%	Rural
Power, ID	33%	25%	Metropolitan
Wayne, OH	33%	20%	Micropolitan
Randolph, IN	33%	21%	Rural
Marquette, WI	33%	21%	Rural
Walker, GA	32%	22%	Metropolitan
Franklin, AL	32%	29%	Rural
Randolph, NC	32%	25%	Metropolitan
Mississippi, AR	32%	23%	Micropolitan
Douglas, IL	32%	28%	Rural

	Manufacturing	Manufacturing	
	Share of Total	Share of Total	Metropolitan, Micropolitan,
County	Earnings	Employment	or Rural
Platte, NE	32%	23%	Micropolitan
Scott, IN	32%	20%	Micropolitan
Fremont, IA	32%	23%	Rural
Ford, KS	32%	29%	Micropolitan
Jay, IN	32%	26%	Rural
Lagrange, IN	32%	28%	Rural
Henry, OH	31%	20%	Rural
Blackford, IN	31%	20%	Rural
Huntington, IN	31%	20%	Micropolitan
Wyandot, OH	31%	23%	Rural
Smyth, VA	31%	21%	Rural
Marshall, IN	31%	24%	Micropolitan
Steele, MN	31%	20%	Micropolitan
Steuben, IN	31%	21%	Micropolitan
Titus, TX	31%	30%	Micropolitan
Barbour, AL	30%	25%	Micropolitan
Polk, GA	30%	21%	Micropolitan
Jackson, IN	30%	22%	Micropolitan
Montgomery, NC	30%	25%	Rural
Wilson, KS	30%	21%	Rural
Marion, AL	30%	24%	Rural
Van Wert, OH	30%	21%	Micropolitan
Waseca, MN	30%	21%	Rural
Rhea, TN	30%	24%	Rural
Carroll, AR	29%	24%	Rural
Hamblen, TN	29%	21%	Metropolitan
Marion, GA	29%	24%	Metropolitan
Allen, KS	29%	21%	Rural
Dawson, NE	29%	25%	Micropolitan
Manitowoc, WI	29%	23%	Micropolitan
Mercer, OH	29%	21%	Micropolitan
Jackson, AL	29%	22%	Micropolitan
Marshall, AL	29%	24%	Micropolitan
Barry, MO	29%	24%	Rural
Tippah, MS	28%	20%	Rural
Jackson, OH	28%	23%	Rural
Ohio, KY	28%	24%	Rural
Johnson, AR	28%	25%	Rural
Juniata, PA	28%	22%	Rural
Dodge, WI	28%	20%	Micropolitan

	Manufacturing	Manufacturing	
	Share of Total	Share of Total	Metropolitan, Micropolitan,
County	Earnings	Employment	or Rural
Catawba, NC	28%	23%	Metropolitan
Huron, OH	28%	21%	Micropolitan
Marion, AR	28%	21%	Rural
Winston, AL	28%	25%	Rural
Yell, AR	28%	25%	Micropolitan
Cass, IN	27%	22%	Micropolitan
Elbert, GA	27%	24%	Rural
Sioux, IA	27%	21%	Rural
Mitchell, GA	27%	28%	Rural
Newport News, VA	27%	21%	Metropolitan
Ida, IA	26%	22%	Rural
Crawford, IA	26%	23%	Rural
Patrick, VA	26%	21%	Rural
Warren, IL	26%	21%	Micropolitan
Nicollet, MN	26%	22%	Metropolitan
Dooly, GA	26%	23%	Rural
Buena Vista, IA	24%	22%	Micropolitan
Smith, MS	24%	22%	Rural
Randolph, IL	23%	22%	Rural
DeKalb, AL	22%	20%	Micropolitan
Bertie, NC	22%	25%	Rural
Duplin, NC	21%	22%	Rural
Tazewell, IL	44%	19%	Metropolitan
Tyler, WV	43%	17%	Rural
Crawford, IL	43%	19%	Rural
Howard, IN	43%	19%	Metropolitan
Moore, TN	41%	18%	Micropolitan
Mercer, KY	41%	18%	Rural
Hunt, TX	38%	19%	Metropolitan
Marshall, KY	38%	16%	Rural
Monroe, OH	38%	16%	Rural
McNairy, TN	38%	16%	Rural
Perry, MS	37%	15%	Metropolitan
Preble, OH	35%	20%	Metropolitan
King William, VA	35%	14%	Metropolitan
Mineral, WV	35%	18%	Metropolitan
Russell, KY	35%	19%	Rural
Morgan, OH	35%	10%	Rural
Racine, WI	34%	19%	Metropolitan
Humphreys, TN	34%	15%	Rural

	Manufacturing	Manufacturing	
	Share of Total	Share of Total	Metropolitan, Micropolitan,
County	Earnings	Employment	or Rural
Calhoun, SC	34%	15%	Metropolitan
Pulaski, VA	34%	18%	Metropolitan
Metcalfe, KY	34%	16%	Micropolitan
Jefferson, WI	34%	18%	Micropolitan
McPherson, KS	34%	18%	Micropolitan
McMinn, TN	33%	18%	Micropolitan
Champaign, OH	33%	17%	Micropolitan
Brooke, WV	33%	18%	Metropolitan
Bland, VA	33%	17%	Rural
Washington, AL	33%	16%	Rural
Union, TN	33%	15%	Metropolitan
Defiance, OH	33%	17%	Micropolitan
Marshall, TN	33%	19%	Micropolitan
Orange, TX	32%	15%	Metropolitan
Marshall, IL	32%	18%	Metropolitan
Meigs, TN	32%	14%	Rural
Clay, IL	32%	20%	Rural
Fayette, TN	32%	9%	Metropolitan
Lee, IA	32%	20%	Micropolitan
Waupaca, WI	32%	19%	Rural
Lawrence, MS	32%	15%	Rural
Wilcox, AL	32%	13%	Rural
Fulton, IN	32%	18%	Rural
Todd, KY	32%	8%	Rural
Grainger, TN	31%	14%	Metropolitan
Darlington, SC	31%	15%	Metropolitan
St. Charles, LA	31%	15%	Metropolitan
Columbia, WI	31%	16%	Metropolitan
Dodge, MN	31%	13%	Metropolitan
Knox, OH	31%	16%	Micropolitan
St. John the Baptist, LA	31%	13%	Metropolitan
Chippewa, WI	31%	16%	Metropolitan
Chester, SC	31%	18%	Micropolitan
Miami, OH	31%	18%	Metropolitan
Lawrence, AL	31%	11%	Metropolitan
Ralls, MO	30%	20%	Micropolitan
Harrison, KY	30%	14%	Rural
Giles, VA	30%	15%	Metropolitan
Newton, GA	30%	17%	Metropolitan
Wilson, NC	30%	18%	Micropolitan

	Manufacturing	Manufacturing	
	Share of Total	Share of Total	Metropolitan, Micropolitan,
County	Earnings	Employment	or Rural
Richland, WI	30%	16%	Rural
Laurens, SC	30%	19%	Metropolitan
Rockingham, NC	30%	17%	Metropolitan
Troup, GA	30%	19%	Micropolitan
Berrien, MI	30%	15%	Metropolitan
Austin, TX	30%	17%	Metropolitan
White, TN	29%	18%	Rural
Rusk, WI	29%	19%	Rural
Washington, WI	29%	19%	Metropolitan
Adair, OK	29%	18%	Rural
Snohomish, WA	29%	17%	Metropolitan
Taylor, FL	29%	18%	Rural
Charlevoix, MI	29%	15%	Rural
Henderson, TN	29%	18%	Rural
Macon, GA	29%	18%	Rural
Morgan, AL	29%	18%	Metropolitan
Seneca, NY	29%	13%	Micropolitan
Shelby, IN	29%	19%	Metropolitan
Koochiching, MN	29%	15%	Rural
Jackson, AR	29%	11%	Rural
Trumbull, OH	29%	14%	Metropolitan
Monroe, AL	29%	13%	Rural
Des Moines, IA	29%	16%	Micropolitan
Delaware, NY	29%	14%	Rural
Fond du Lac, WI	29%	16%	Metropolitan
Effingham, GA	29%	12%	Metropolitan
Hillsdale, MI	29%	16%	Rural
Montgomery, KS	29%	15%	Micropolitan
Sandoval, NM	29%	11%	Metropolitan
Lincoln, WI	29%	18%	Micropolitan
Calumet, WI	28%	16%	Metropolitan
Nelson, KY	28%	19%	Metropolitan
Gasconade, MO	28%	16%	Rural
Shelby, KY	28%	16%	Metropolitan
Lake, OH	28%	16%	Metropolitan
Van Buren, IA	28%	18%	Rural
Cherokee, KS	28%	15%	Rural
Venango, PA	28%	17%	Micropolitan
Jackson, MN	28%	17%	Rural
Carver, MN	28%	16%	Metropolitan

	Manufacturing	Manufacturing	
	Share of Total	Share of Total	Metropolitan, Micropolitan,
County	Earnings	Employment	or Rural
Lincoln, TN	28%	17%	Rural
Runnels, TX	28%	13%	Rural
Clinton, IA	28%	16%	Micropolitan
Winona, MN	28%	18%	Micropolitan
Natchitoches, LA	28%	11%	Micropolitan
Warren, TN	28%	18%	Micropolitan
Atkinson, GA	28%	20%	Micropolitan
Itawamba, MS	28%	14%	Micropolitan
Columbia, AR	28%	17%	Micropolitan
Ballard, KY	28%	14%	Micropolitan
Brookings, SD	28%	18%	Micropolitan
Grenada, MS	28%	19%	Micropolitan
Warren, MO	28%	13%	Metropolitan
Martin, NC	27%	15%	Rural
Monroe, MS	27%	17%	Rural
Chambers, TX	27%	14%	Metropolitan
New Madrid, MO	27%	18%	Rural
Wabash, IN	27%	16%	Micropolitan
Jackson, GA	27%	19%	Rural
Todd, MN	27%	15%	Rural
Allendale, SC	27%	19%	Rural
Carroll, IN	27%	19%	Metropolitan
Ritchie, WV	27%	17%	Rural
Haralson, GA	27%	17%	Metropolitan
Wapello, IA	27%	19%	Micropolitan
Anderson, KY	27%	12%	Micropolitan
Moultrie, IL	27%	14%	Rural
Marion, OH	27%	19%	Micropolitan
Granville, NC	27%	19%	Rural
Habersham, GA	27%	18%	Micropolitan
Wabasha, MN	27%	18%	Metropolitan
Gaston, NC	27%	12%	Metropolitan
Ste. Genevieve, MO	27%	19%	Rural
Wood, OH	27%	15%	Metropolitan
Pulaski, IN	27%	19%	Rural
Sedgwick, KS	27%	16%	Metropolitan
Grimes, TX	27%	15%	Rural
Barnwell, SC	27%	18%	Rural
Mifflin, PA	27%	19%	Micropolitan
Russell, AL	27%	15%	Metropolitan

	Manufacturing	Manufacturing	
	Share of Total	Share of Total	Metropolitan, Micropolitan,
County	Earnings	Employment	or Rural
Hancock, OH	27%	19%	Micropolitan
Washington, OR	27%	15%	Metropolitan
Durham, NC	27%	13%	Metropolitan
Midland, MI	27%	13%	Micropolitan
Lincoln, NC	27%	18%	Micropolitan
Abbeville, SC	27%	16%	Rural
Paulding, OH	27%	17%	Rural
Macon, IL	26%	17%	Metropolitan
Black Hawk, IA	26%	16%	Metropolitan
Santa Clara, CA	26%	14%	Metropolitan
Putnam, IL	26%	16%	Micropolitan
Chickasaw, IA	26%	15%	Rural
St. Bernard, LA	26%	8%	Metropolitan
Macomb, MI	26%	15%	Metropolitan
Sullivan, TN	26%	13%	Metropolitan
Stoddard, MO	26%	19%	Rural
Nash, NC	26%	14%	Metropolitan
Bourbon, KY	26%	14%	Metropolitan
Le Sueur, MN	26%	16%	Rural
Anderson, TN	26%	18%	Metropolitan
Ellis, TX	26%	15%	Metropolitan
McDuffie, GA	26%	18%	Metropolitan
Putnam, OH	26%	17%	Rural
Marshall, OK	26%	17%	Rural
Anoka, MN	26%	13%	Metropolitan
Dallas, AL	26%	16%	Micropolitan
Ashtabula, OH	26%	15%	Micropolitan
Benton, MN	26%	15%	Metropolitan
Woodford, KY	26%	13%	Metropolitan
Yalobusha, MS	26%	19%	Rural
Osage, MO	26%	15%	Metropolitan
Union, IA	26%	19%	Rural
Lamar, AL	26%	15%	Rural
Pettis, MO	26%	16%	Micropolitan
Jefferson, PA	26%	17%	Rural
Giles, TN	25%	15%	Rural
Ozaukee, WI	25%	16%	Metropolitan
Bartow, GA	25%	15%	Metropolitan
Crawford, OH	25%	19%	Micropolitan
Peach, GA	25%	16%	Micropolitan

	Manufacturing	Manufacturing	
	Share of Total	Share of Total	Metropolitan, Micropolitan,
County	Earnings	Employment	or Rural
Lenawee, MI	25%	13%	Micropolitan
Barren, KY	25%	15%	Micropolitan
Wexford, MI	25%	17%	Micropolitan
Geauga, OH	25%	15%	Metropolitan
Burnett, WI	25%	11%	Rural
Atchison, KS	25%	15%	Micropolitan
Howard, IA	25%	19%	Rural
Copiah, MS	25%	17%	Metropolitan
Polk, WI	25%	17%	Rural
Marengo, AL	25%	16%	Rural
DeKalb, TN	25%	19%	Rural
Clinton, PA	25%	17%	Micropolitan
Lamar, TX	25%	15%	Micropolitan
Lorain, OH	25%	13%	Metropolitan
Stephenson, IL	25%	15%	Micropolitan
Mayes, OK	25%	14%	Rural
Casey, KY	25%	15%	Rural
Jackson, WV	25%	11%	Rural
Rutherford, TN	25%	14%	Metropolitan
Edgar, IL	25%	18%	Rural
Warren, NJ	25%	12%	Metropolitan
Oconee, SC	25%	17%	Micropolitan
Barron, WI	25%	18%	Rural
Spartanburg, SC	25%	16%	Metropolitan
Menominee, MI	25%	16%	Micropolitan
Emanuel, GA	25%	18%	Rural
Coshocton, OH	25%	16%	Micropolitan
Beaufort, NC	25%	14%	Micropolitan
Warrick, IN	25%	12%	Metropolitan
Dale, AL	25%	20%	Micropolitan
Prentiss, MS	25%	19%	Rural
Butler, KY	25%	13%	Rural
Franklin, MO	25%	17%	Metropolitan
Grant, IN	25%	12%	Micropolitan
Osceola, MI	25%	19%	Rural
Washington, IN	25%	16%	Metropolitan
Jefferson, TN	25%	12%	Metropolitan
Steuben, NY	25%	12%	Micropolitan
Muskegon, MI	25%	14%	Metropolitan
Walworth, WI	25%	15%	Micropolitan

	Manufacturing	Manufacturing	
	Share of Total	Share of Total	Metropolitan, Micropolitan,
County	Earnings	Employment	or Rural
Greensville + Emporia, VA	25%	19%	Rural
Crockett, TN	25%	18%	Rural
Sullivan, NH	24%	16%	Micropolitan
Warren, GA	24%	16%	Rural
Smith, TN	24%	14%	Metropolitan
Somerset, ME	24%	14%	Rural
Wayne, IA	24%	14%	Rural
Marathon, WI	24%	18%	Metropolitan
Clark, IL	24%	14%	Rural
Taylor, WI	24%	18%	Rural
Henderson, KY	24%	20%	Metropolitan
Shenandoah, VA	24%	17%	Rural
Crawford, PA	24%	16%	Micropolitan
Jackson, LA	24%	10%	Micropolitan
Vermillion, IN	24%	12%	Metropolitan
Assumption, LA	24%	15%	Micropolitan
Humboldt, IA	24%	15%	Rural
Burke, NC	24%	17%	Metropolitan
Green, WI	24%	13%	Micropolitan
Tuscarawas, OH	24%	16%	Micropolitan
Anderson, SC	24%	14%	Metropolitan
Juneau, WI	24%	16%	Rural
Buchanan, MO	24%	16%	Metropolitan
Clarke, AL	24%	13%	Rural
Marion, TN	24%	14%	Metropolitan
Allen, OH	24%	13%	Metropolitan
Cache, UT	24%	16%	Metropolitan
Cowley, KS	24%	17%	Micropolitan
Ascension, LA	24%	7%	Metropolitan
Waller, TX	24%	15%	Metropolitan
Greenwood, SC	24%	15%	Micropolitan
Washington, IL	24%	15%	Rural
Caldwell, NC	24%	16%	Metropolitan
Hardeman, TN	24%	17%	Rural
Clarke, IA	24%	15%	Rural
Floyd, IA	24%	12%	Rural
Brown, MN	24%	16%	Micropolitan
Williamsburg, SC	24%	18%	Rural
Dyer, TN	23%	18%	Micropolitan
Jefferson, IN	23%	17%	Micropolitan

	Manufacturing	Manufacturing	
	Share of Total	Share of Total	Metropolitan, Micropolitan,
County	Earnings	Employment	or Rural
Van Buren, TN	23%	10%	Rural
Floyd, IN	23%	13%	Metropolitan
Madison, AR	23%	17%	Metropolitan
Darke, OH	23%	15%	Micropolitan
Chenango, NY	23%	15%	Rural
Delaware, IA	23%	13%	Rural
Jennings, IN	23%	17%	Micropolitan
Wythe, VA	23%	14%	Rural
Clay, IN	23%	17%	Metropolitan
Chautauqua, NY	23%	15%	Micropolitan
Audrain, MO	23%	15%	Micropolitan
Hoke, NC	23%	17%	Metropolitan
Miller, AR	23%	12%	Metropolitan
Hart, GA	23%	12%	Rural
Brazoria, TX	23%	9%	Metropolitan
Barry, MI	23%	12%	Metropolitan
Kewaunee, WI	23%	19%	Metropolitan
Kendall, IL	23%	11%	Metropolitan
Grant, SD	23%	11%	Rural
Kossuth, IA	23%	10%	Rural
Alcorn, MS	23%	15%	Micropolitan
Labette, KS	23%	15%	Micropolitan
Caldwell, KY	23%	13%	Rural
Porter, IN	23%	12%	Metropolitan
Bradley, TN	23%	16%	Metropolitan
Spencer, IN	23%	12%	Rural
Delta, MI	23%	13%	Micropolitan
Portage, OH	23%	13%	Metropolitan
Dallas, AR	23%	15%	Rural
Wayne, KY	23%	18%	Rural
Mason, KY	23%	13%	Micropolitan
Linn, OR	23%	14%	Micropolitan
Calhoun, MI	23%	16%	Metropolitan
McKean, PA	23%	14%	Micropolitan
Cocke, TN	23%	13%	Micropolitan
Johnson, TN	23%	10%	Rural
Ben Hill, GA	23%	16%	Micropolitan
Hardin, TN	23%	13%	Rural
Guernsey, OH	23%	14%	Micropolitan
Nobles, MN	23%	20%	Micropolitan

	Manufacturing	Manufacturing	
	Share of Total	Share of Total	Metropolitan, Micropolitan,
County	Earnings	Employment	or Rural
Turner, SD	23%	5%	Metropolitan
Winnebago, IL	23%	14%	Metropolitan
Whiteside, IL	23%	14%	Micropolitan
Clark, KY	23%	13%	Metropolitan
Haywood, TN	22%	19%	Micropolitan
Clark, WI	22%	16%	Rural
St. Croix, WI	22%	13%	Metropolitan
Linn, IA	22%	13%	Metropolitan
White, IN	22%	17%	Rural
Vermilion, IL	22%	13%	Metropolitan
Cecil, MD	22%	11%	Metropolitan
Henry, IA	22%	14%	Rural
Franklin, NC	22%	10%	Metropolitan
Wayne, NY	22%	16%	Metropolitan
Schuylkill, PA	22%	16%	Micropolitan
Lauderdale, TN	22%	15%	Rural
Clark, AR	22%	15%	Micropolitan
Rogers, OK	22%	12%	Metropolitan
Brown, TX	22%	13%	Micropolitan
Jefferson, GA	22%	14%	Rural
Washington, OH	22%	11%	Metropolitan
San Benito, CA	22%	14%	Metropolitan
Hardin, OH	22%	15%	Rural
Yamhill, OR	22%	13%	Metropolitan
Piscataquis, ME	22%	14%	Rural
Yadkin, NC	22%	15%	Metropolitan
Screven, GA	22%	15%	Rural
York, PA	22%	15%	Metropolitan
Florence, WI	22%	12%	Micropolitan
Alger, MI	22%	12%	Rural
Oxford, ME	22%	11%	Rural
Seneca, OH	22%	14%	Micropolitan
Ionia, MI	22%	13%	Metropolitan
Wells, IN	22%	16%	Metropolitan
Escambia, AL	22%	13%	Rural
Doniphan, KS	22%	12%	Metropolitan
Marshall, WV	22%	7%	Metropolitan
Richland, OH	22%	14%	Metropolitan
Lyon, KS	22%	16%	Micropolitan
Crawford, WI	22%	13%	Rural

	Manufacturing	Manufacturing	
	Share of Total	Share of Total	Metropolitan, Micropolitan,
County	Earnings	Employment	or Rural
Yankton, SD	22%	18%	Micropolitan
Hall, NE	22%	16%	Micropolitan
Pittsylvania + Danville, VA	22%	13%	Rural
Okeechobee, FL	22%	3%	Micropolitan
Lee, MS	22%	17%	Micropolitan
Upson, GA	22%	14%	Micropolitan
Dillon, SC	22%	16%	Micropolitan
Nodaway, MO	22%	13%	Micropolitan
Gilmer, GA	22%	15%	Rural
Harper, KS	22%	10%	Rural
Banks, GA	22%	12%	Rural
Tippecanoe, IN	22%	12%	Metropolitan
Pottawatomie, KS	22%	13%	Metropolitan
Outagamie, WI	22%	15%	Metropolitan
Nemaha, KS	22%	14%	Rural
Vinton, OH	22%	14%	Rural
Bradford, PA	22%	15%	Micropolitan
Jasper, MS	22%	20%	Micropolitan
Henry + Martinsville, VA	22%	16%	Rural
Sebastian, AR	22%	17%	Metropolitan
Mahaska, IA	21%	11%	Micropolitan
West Baton Rouge, LA	21%	12%	Metropolitan
Kershaw, SC	21%	12%	Metropolitan
Bremer, IA	21%	12%	Metropolitan
Cass, TX	21%	11%	Rural
Union, MS	21%	18%	Rural
Jasper, TX	21%	8%	Rural
Kalamazoo, MI	21%	12%	Metropolitan
Jefferson, TX	21%	10%	Metropolitan
Union, SC	21%	13%	Micropolitan
Dickinson, IA	21%	14%	Micropolitan
Kent, MI	21%	14%	Metropolitan
Davidson, NC	21%	13%	Micropolitan
Crenshaw, AL	21%	17%	Rural
Amherst, VA	21%	11%	Metropolitan
Hitchcock, NE	21%	11%	Rural
Cottonwood, MN	21%	19%	Rural
Lapeer, MI	21%	14%	Metropolitan
Dodge, NE	21%	15%	Micropolitan
Jasper, MO	21%	14%	Metropolitan

	Manufacturing	Manufacturing	
	Share of Total	Share of Total	Metropolitan, Micropolitan,
County	Earnings	Employment	or Rural
Loudon, TN	21%	15%	Metropolitan
Clarion, PA	21%	8%	Rural
Mercer, PA	21%	13%	Metropolitan
Richland, ND	21%	16%	Micropolitan
Langlade, WI	21%	15%	Rural
Chippewa, MN	21%	13%	Rural
Creek, OK	21%	11%	Metropolitan
Gibson, TN	21%	14%	Micropolitan
Jefferson, IL	21%	13%	Micropolitan
Desha, AR	21%	13%	Rural
Grayson, VA	21%	10%	Rural
LaPorte, IN	21%	14%	Metropolitan
Cleveland, NC	21%	12%	Micropolitan
Scott, TN	21%	16%	Rural
Clinton, OH	21%	14%	Micropolitan
Vernon, MO	21%	10%	Rural
Snyder, PA	21%	16%	Micropolitan
Cherokee, IA	21%	14%	Rural
Door, WI	21%	10%	Rural
Cowlitz, WA	21%	14%	Metropolitan
Sauk, WI	21%	13%	Micropolitan
Waukesha, WI	21%	15%	Metropolitan
Grayson, KY	21%	13%	Rural
Orangeburg, SC	21%	14%	Micropolitan
Palo Pinto, TX	21%	10%	Micropolitan
Broomfield, CO	21%	12%	Metropolitan
Lake, SD	21%	10%	Rural
Stone, MS	21%	10%	Metropolitan
Stephens, GA	21%	16%	Micropolitan
Erie, OH	21%	12%	Metropolitan
Fayette, AL	21%	13%	Rural
Guadalupe, TX	21%	13%	Metropolitan
Northumberland, VA	21%	12%	Rural
Herkimer, NY	21%	11%	Metropolitan
Codington, SD	21%	13%	Micropolitan
Erie, PA	21%	13%	Metropolitan
Lycoming, PA	21%	14%	Metropolitan
Wakulla, FL	21%	8%	Metropolitan
Lake, IN	21%	10%	Metropolitan
Lake, IL	21%	11%	Metropolitan

	Manufacturing Share of Total	Manufacturing Share of Total	Metropolitan, Micropolitan,
County	Earnings	Employment	or Rural
Union, NC	21%	14%	Metropolitan
Hubbard, MN	21%	10%	Rural
Wayne, GA	21%	10%	Micropolitan
Calhoun, MS	20%	14%	Rural
Winnebago, IA	20%	14%	Rural
Ottawa, OH	20%	12%	Metropolitan
Lawrence, IN	20%	10%	Micropolitan
Lowndes, MS	20%	11%	Micropolitan
Dorchester, SC	20%	10%	Metropolitan
Tipton, IN	20%	14%	Metropolitan
Oconto, WI	20%	15%	Metropolitan
Claiborne, TN	20%	16%	Rural
Washington, NY	20%	13%	Metropolitan
Juab, UT	20%	14%	Metropolitan
Sabine, LA	20%	12%	Rural
Iron, WI	20%	9%	Rural
Dickinson, MI	20%	13%	Micropolitan
Dixie, FL	20%	11%	Rural
Texas, OK	20%	19%	Micropolitan
Harvey, KS	20%	13%	Metropolitan
Marshall, KS	20%	14%	Rural
McCurtain, OK	20%	13%	Rural
Adams, IA	20%	5%	Rural
Hutchinson, TX	20%	10%	Micropolitan
Phillips, KS	20%	7%	Rural
Rush, IN	20%	14%	Rural
Jeff Davis, GA	20%	18%	Rural
Callahan, TX	20%	3%	Metropolitan
Accomack, VA	20%	19%	Rural
Hamilton, IA	20%	18%	Rural
Benewah, ID	20%	11%	Rural
Watonwan, MN	19%	20%	Rural