

The State of Rural Minnesota, 2023

The shifts in trends from the pandemic continue in the most recent data release.

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Each year, the Center for Rural Policy and Development provides an update on various economic and demographic data pertaining to rural Minnesota. As policy discussions concerning the various regions of the state unfold, it is important to understand the past, present, and potential futures of rural regions. This report provides historical data points illustrating how rural conditions have changed and where they are at now, making for healthy discussions about the current demographic and economic vitality of these areas.

Rural Atlas Online

To supplement and support the annual State of Rural Minnesota report, we also maintain and regularly update the Atlas of Rural Minnesota Online. This collection of interactive maps and charts provides readers with a higher-level analysis of the data, breaking it down in a variety of ways to give a better understanding of Minnesota's demographic, economic, and societal characteristics at the state, county, planning region, and economic development region levels. Visit www.ruralmn.org/atlas-online-2024/ to view the site.

The takeaways for 2023

People

Immediately following the pandemic there was a significant shift in population patterns. For the first time in decades rural counties were experiencing population gains while the seven-county metro was experiencing population loss. This trend continued in 2022.

- The newest population estimates reveal that rural Minnesota counties again experienced a population increase from in-migration, while at the same time, the Twin Cities' urban counties experienced enough out-migration to result in continued population decline.

- It should be noted that these recent shifts are sudden and modest. Unless something happens to cause significant changes over the long term in in-migration, either internationally or from other states, Minnesota's population is still projected to decline across much of the state over the next 20 to 30 years.
- BIPOC populations continue to be a significant percentage across many rural Minnesota counties, and the counties with the highest percentages will likely see population growth over the coming decades.

Economic Vitality

There are only a few significant differences among the industries that employ Minnesota residents when comparing urban and rural areas.

- The education and health services sector is the largest employer in a majority of Minnesota counties.
- Rural counties have a higher percentage of people employed in agriculture and government jobs or who are self-employed, while the Twin Cities area has a significant share of people employed in the professional and business services sector, which includes jobs like management of companies, legal advice and representation, and accounting.
- Greater Minnesota's climbing workforce vacancy rates are at all-time highs. The largest increases in wages for job vacancies have occurred in Greater Minnesota as well, although wages are now rising in the Twin Cities as the workforce shortage hits the metro area.
- Although rural Minnesota's median wages and earnings are still below those of the Twin Cities, regions outside of the Twin Cities are experiencing the largest increases.
- Increasing earnings and wages coupled with rural regions' lower cost of living makes up for the difference in wages and earnings.

Agriculture

After a rollercoaster decade, farmers appear to be getting some relief.

- After a decline in land values from their peak in 2014, values again have increased to historic highest in 2022. Land along the western side of the state has increased in value as much as 1,000% since 2000.
- Ag markets have improved over the last few years. Average incomes are finally exceeding expenses, resulting in some of the highest net incomes farms have seen recently.

People

Domestic migration driving changes in population growth rates.

While a majority of the state's most rural counties experienced a steady population *decline* during the 2010s, a shift seems to have occurred at the beginning of the 2020s and continues in 2022.

In 2019, 46 counties (all rural) had a lower population than in 2010, but just two years later, in 2022, only 36 counties (all rural) had lower populations compared to 2010. In Greater Minnesota, population growth can typically be found in three types of counties: counties that are considered recreational (central lakes), counties where non-white populations are concentrated (e.g. Nobles), and in metropolitan counties such as Blue Earth and Olmsted. However, since 2019, many counties that don't fit these categories are experiencing population growth, or at least, very minor declines.

Percent change in population since 2010

Many rural counties have higher population than in 2010

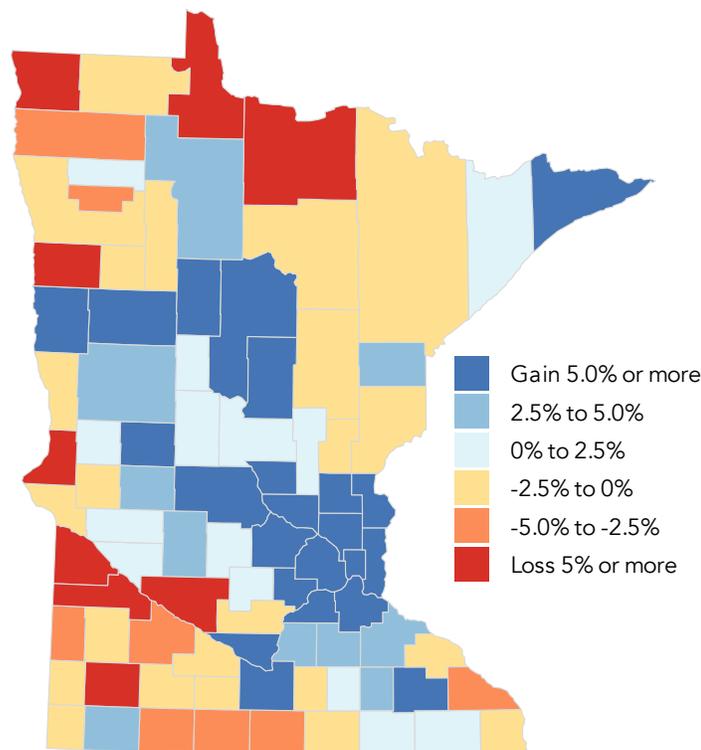


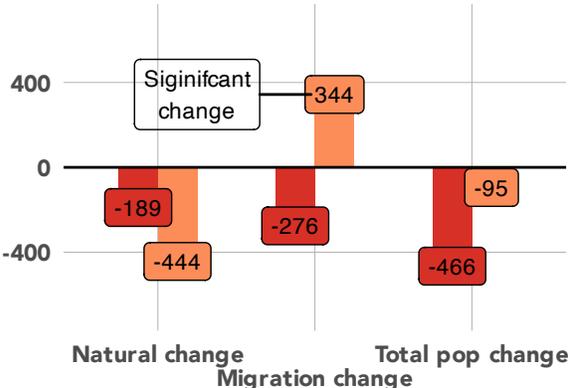
Figure 1: The number of counties that reported a higher population in 2022 than in 2010 has increased significantly over the last few years due to shifts in migration patterns. Data: U.S. Census Decennial Census & American Community Survey 5-year

Two factors drive population change: natural change (births minus deaths) and migration (out- and in-migration). Migration during the pandemic has been driving this distinct population shift that is now showing up in the data. Figure 2 provides the annual change in numbers of people for 2010-2019 and 2020-2022 based on both natural change and migration. As the data show, population driven by in-migration between 2020 and 2022 (orange) is significantly different from the average annual in-migration between 2010 and 2019 (red). For example, the entirely rural group of counties experienced an average out-migration of 276 people per year between 2010 and 2019. Between 2020 and 2022, they experienced an *in-migration* of 344 people. This shift is similar across town/rural and urban/town/rural mix counties. Interestingly, entirely urban counties experienced just the opposite, a significant *out-migration* between 2020 and 2022 that overwhelmed their modest growth through natural change.

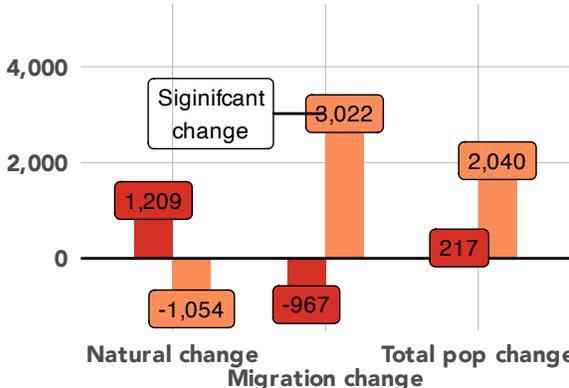
Average annual components of population change, 2010-2019 & 2020-2022

Rural areas are experiencing a significant in-migration

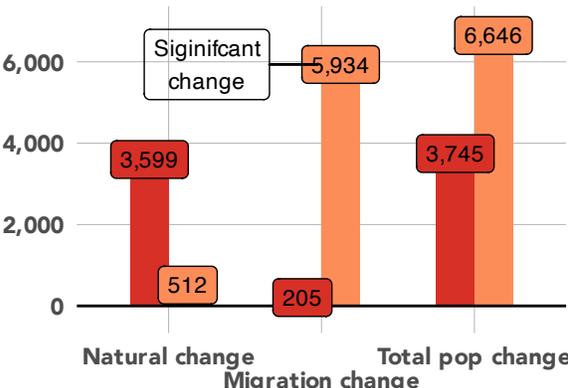
Entirely rural



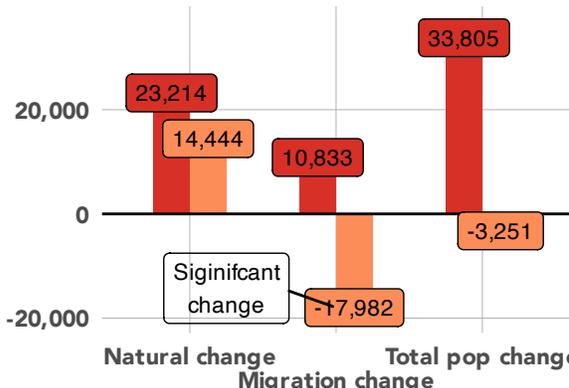
Town/rural mix



Urban/town/rural mix



Entirely urban



2010-2019 2020-2022

Figure 2 : Compared to the annual change from 2010 to 2019, rural areas of Minnesota are experiencing population gains due to in-migration. Data: U.S. Census Bureau, Population Estimates

But it wasn't this way for all entirely urban counties. The loss was mostly felt in the seven-county metro, not necessarily in the urban areas in Greater Minnesota. Figure 3 provides just the net migration change and splits up our entirely urban counties into two groups: entirely urban counties in Greater Minnesota—counties with the largest population centers—and the seven-county Twin Cities metro. The chart shows that the Twin Cities metro took the brunt of the loss due to out-migration—between 2020 and 2022, 19,663 residents left the seven-county metro region, compared to gaining nearly 10,000 annually from in-migration between 2010 and 2019. On the other hand, Greater Minnesota's population centers continued to grow, gaining more than 1,600 residents in 2020-2022, compared to an annual average of 1,100 previously.

Average annual migration change, 2010-2019 & 2020-2022

Major shift in migration between 2020 and 2022

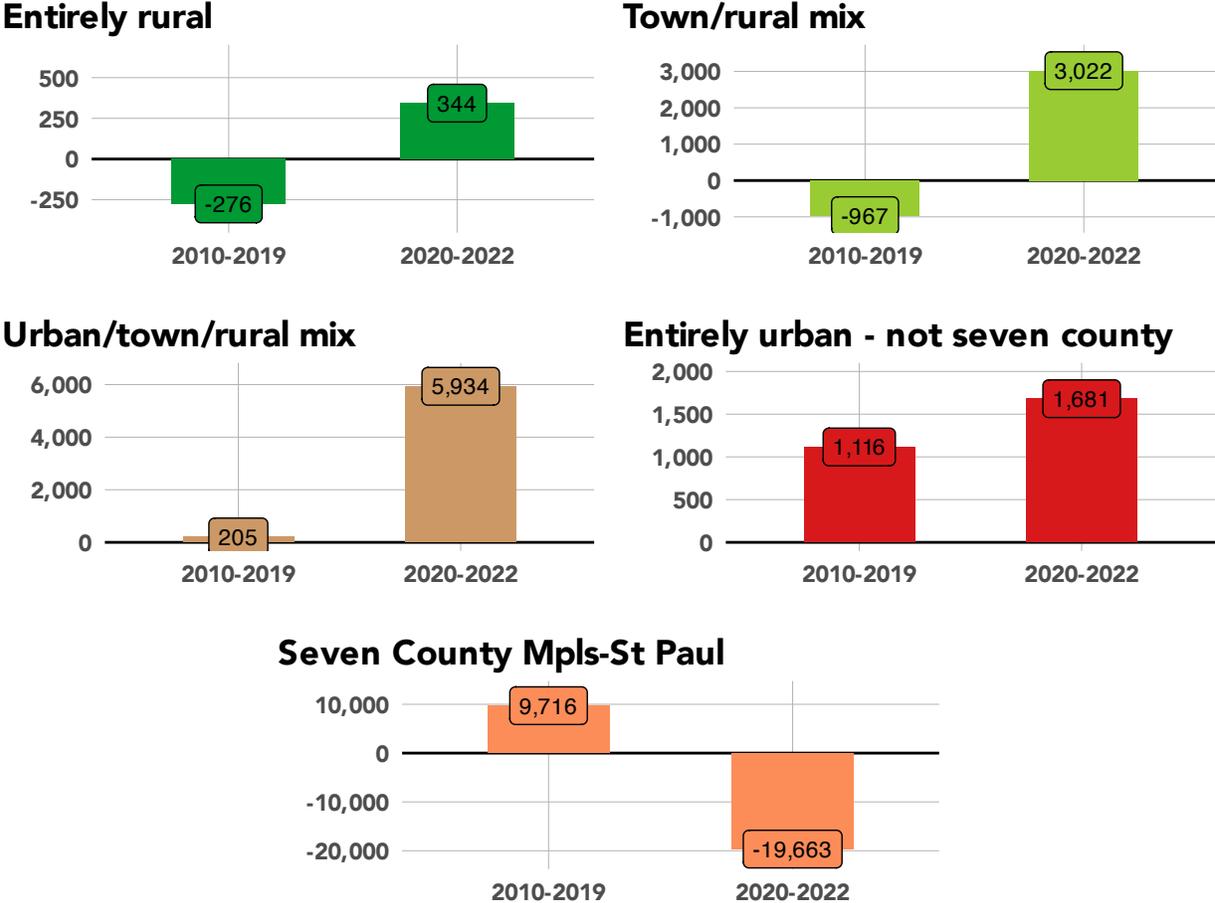


Figure 3: Entirely urban counties outside of the seven-county metro continued to experience net in-migration in 2020-2022, similar to 2010-2019. On the other hand, the seven-county metro experienced out-migration from 2020-2022 that was opposite of the 2010-2019 trends. Data: U.S. Census Bureau, Population Estimates

When discussing natural change and in-migration and comparing this decade to last, however, we need to be aware that this decade has not been typical at all. A major story that may be masked by the migration patterns around the state concerns what is going on with birth and death rates. Since 2007, death rates have been rising steadily for a variety of reasons, ranging from a population that is on average aging more rapidly to the growing epidemic of diseases and deaths of despair, the triad of drug abuse, alcohol abuse, and suicide that appears to be growing unabated across the country. Minnesota is no exception: according to Centers for Disease Control statistics, the death rate rose steadily from 713 deaths per 100,000 population in 2007 to 807 in 2019. At the same time, the state's birth rate has been dropping steadily, falling more than 17% between 2007 and 2019. A thousand fewer babies were born each year between 2017 and 2019, even while the population was growing.

In 2020, however, COVID pumped up the death rate to 926 deaths per 100,000 in 2020 and 905 in 2021. At the same time, the birth rate fell from 1,171 births per 100,000 in 2019 to 1,121 in 2020, a 4% drop. The birth rate recovered a bit in 2021, then fell again in 2022. That combination of low birth rates and high death rates hit rural regions particularly hard, where the average population is already older and counties have been experiencing a negative natural change rate for a number of years already. It's here that these surprising in-migration numbers may be particularly welcome.

Growth in BIPOC populations isn't only occurring in urban areas

Many tend to believe that Black, Indigenous, people of color, Latino and Hispanic populations are largely concentrated in metropolitan counties. However, Greater Minnesota has experienced considerable growth in these populations as well. In fact, three of the top five counties with the highest percentage of BIPOC populations are outside of the seven-county metro: Mahnomen (55%), Nobles (44%), Ramsey (40%), Hennepin (33%) and Watonwan (30%).

Percent of population that is Black, Indigenous, Person of color, Latino or Hispanic

Much of Greater Minnesota has experienced growth in BIPOC populations.

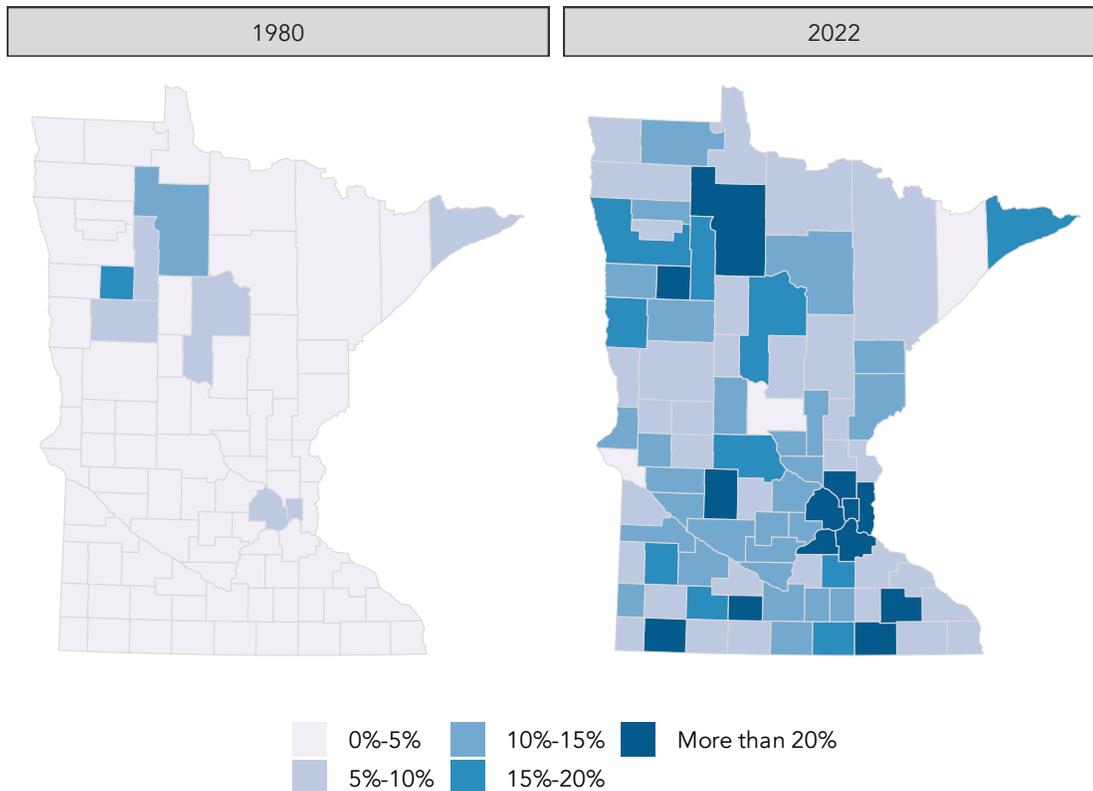


Figure 4: By 2022 many counties in Greater Minnesota have BIPOC populations making up over 10% of their total population. Data: US Census Bureau, ACS 5-year | Decennial Census

People recruitment: in-migration of 30- to 49-year-olds

Another aspect of migration data that can be hidden is the trend in migration by age group. Even though most rural areas have been experiencing an overall out-migration, it is not always a loss among all age groups. In fact, many rural counties see an in-migration of people between the ages of 30 and 49. In lake regions, that age range extends out to include even older households as they retire and move to lake homes.

Many rural development organizations, county boards, and municipal organizations are participating in “people recruitment” strategies to take advantage of this migration pattern, which is well documented by the [University of Minnesota Extension](#)¹ and in [our report on recruiting workforce](#).

Figure 5 provides a glimpse into this trend. For any location in the state, it can be expected that if all conditions stay the same, the number of 25- to 29-year-olds counted in the 2010 Census will be equal to

¹ Find more on this research at <https://extension.umn.edu/economic-development/rural-brain-gain-migration>

the number of 15- to 19-year-olds in the 2000 Census—the same people, just ten years older. All conditions do not stay the same, however: at the end of that ten-year period there may be more or fewer people than would be expected for that age group—hence an in-migration or out-migration.

Such is the case in Minnesota. Between 2000 and 2010, almost all rural counties experienced an out-migration of people who would be 25 to 29 years old in 2010 (Figure 5). They had migrated away somewhere in the previous ten years. But while this age group was migrating out, the next age group older, those entering their early 30s in 2010, were migrating into these rural counties. The question now, of course, is whether the 2020 Census will show this trend continuing. Given the patterns seen in figures 2 and 3, this trend likely held steady through the 2010s as well. We are still waiting for accurate data to confirm this trend.

Migration: % higher or lower of expected 25- to 29-year-olds (2000-2010)

Migration: % higher or lower of expected 30- to 34-year-olds (2000-2010)

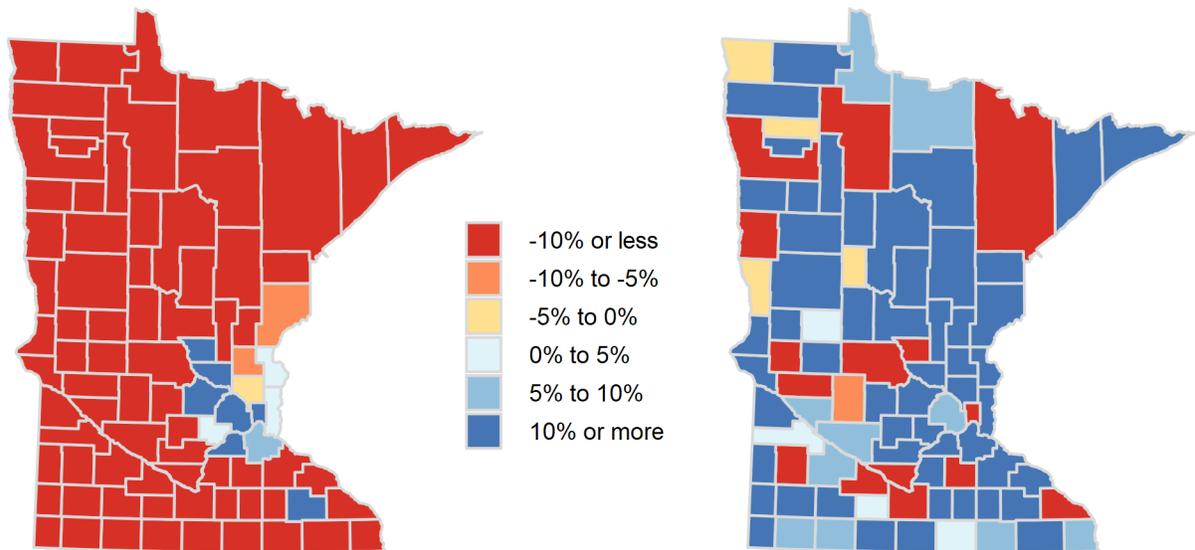


Figure 5: All counties outside the Twin Cities area except Olmsted and Benton saw an out-migration of 25- to 29-year-olds (left), but at the same time, rural counties saw significant in-migration of 30- to 34-year-olds (right). Rural areas tend to see this trend up to 49-year-olds. Data: U.S. Census Bureau Decennial Census

Economic vitality

Like the state’s urban areas, the rural economy is diverse. While the education and health services sector is the top employer in most counties, other industries, such as agriculture in the western counties, are also significant.

Where do people work?

Note: One issue that arises when looking at jobs and employment in rural areas is that many data sources only capture workers covered by unemployment insurance, which does not include most farm jobs. The information provided below is a mix of two data sources. Although mixing these data can be problematic, we feel that doing so more accurately captures the employment impacts of agriculture on the state’s economy. It should also be kept in mind that, as [our report on the impact of agriculture on rural Minnesota’s economy](#) shows, a large part of what we think of as agriculture—food processing, non-food processing, commodities trading—is in reality “ag-related industry” but is categorized into several separate industry sectors, including manufacturing, transportation, and financial.

As Figure 6 shows, the highest percentage of employment continues to be in the education and health services industry sector across most of Minnesota, but agriculture becomes more prominent in western

Top employment industry, 2022

Education and health services top employment industry across Minnesota

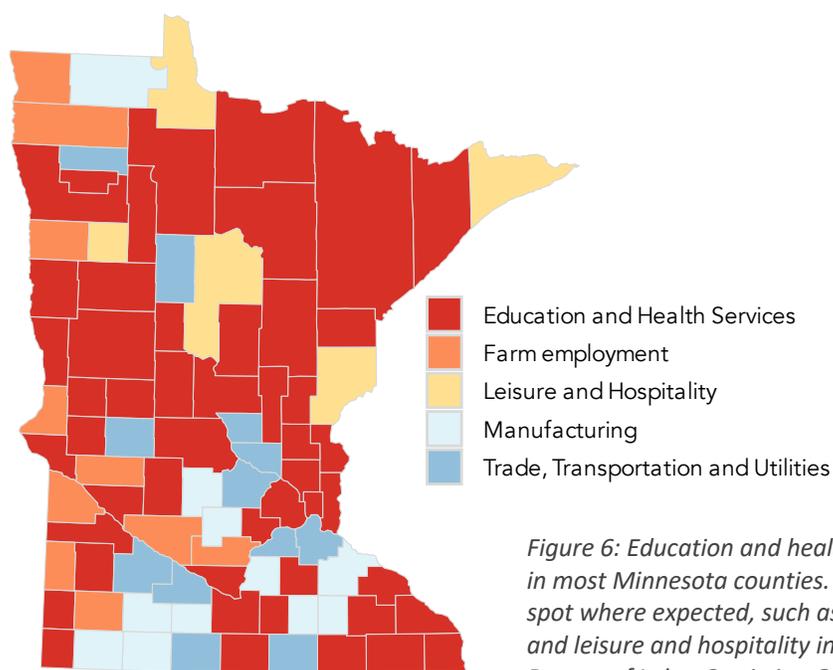


Figure 6: Education and health services is the top employer in most Minnesota counties. Other industries take the top spot where expected, such as agriculture in western counties and leisure and hospitality in some northern counties. Data: Bureau of Labor Statistics, Quarterly Census of Employment and Wages; Bureau of Economic Analysis, Local Area Personal Income and Employment.

counties, leisure and hospitality in a few northern counties, and manufacturing in central and southern Minnesota.

Besides education and health services, the top industries around the state in terms of employment include trade, transportation, and utilities; leisure and hospitality; manufacturing; construction; farm employment; and professional and business services. The one significant difference between the regions

is the high employment in the professional and business services in the entirely urban group of counties (Table 1).

Table 1: 2022 top five employment industries by RUCA group. Includes percent of total employment in each industry. Data: Bureau of Economic Analysis, Local Area Personal Income and Employment

Rank	Entirely rural	Town/rural mix	Urban/town/rural mix	Entirely urban
1	Education and Health Services, 21%	Education and Health Services, 23%	Education and Health Services, 26%	Education and Health Services, 25%
2	Farm employment, 20%	Trade, Transportation and Utilities, 19%	Trade, Transportation and Utilities, 19%	Trade, Transportation and Utilities, 18%
3	Trade, Transportation and Utilities, 17%	Manufacturing, 15%	Manufacturing, 14%	Professional and Business Services, 16%
4	Leisure and Hospitality, 11%	Farm employment, 9%	Leisure and Hospitality, 10%	Manufacturing, 10%
5	Public Administration, 7%	Leisure and Hospitality, 8%	Professional and Business Services, 6%	Leisure and Hospitality, 9%

Another difference is in the percentage of people employed by government. Government is a major employer in many rural counties, where the need for a baseline of services can be disproportionate to the population. In 2022, 16% of total jobs in the entirely rural county group were in government, 13% in the town/rural group and urban/town/rural group, and 10% in the entirely urban county groups (Figure 7).

Percentage of jobs in government

Rural areas continue to have highest percentage of total jobs in government

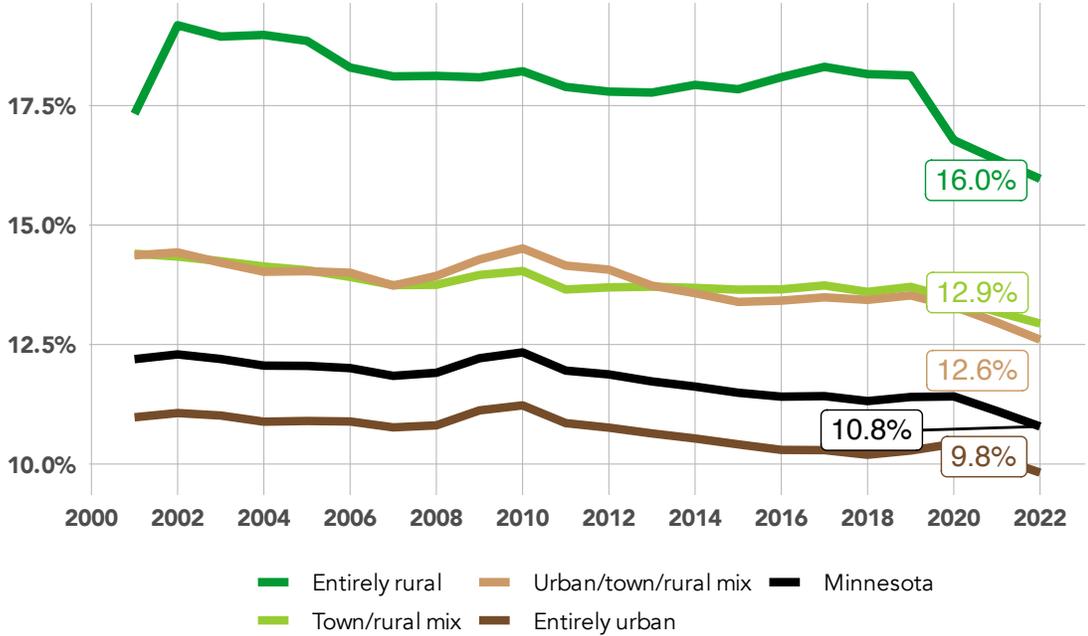


Figure 7: Government jobs include the executive, legislative, judicial, administrative, and regulatory activities of federal, state, and local governments and the military, plus government enterprises, which are government agencies that cover a substantial portion of their operating costs by selling goods and services to the public. These types of jobs make up a significantly higher percentage of the jobs outside of the entirely urban areas. Data: Bureau of Economic Analysis, Regional Personal Income and Employment

Percentage of jobs in government, 2022

Northern and West Central Minnesota have the highest percentages

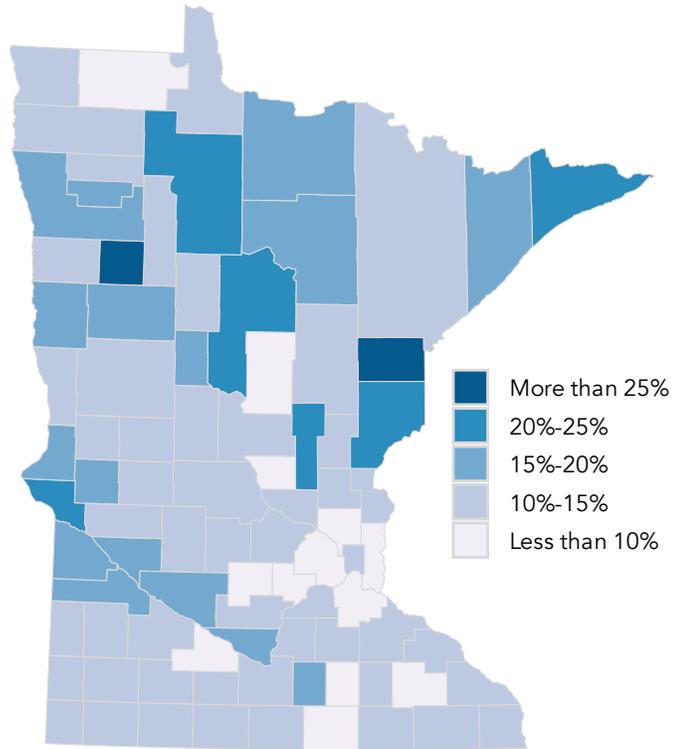


Figure 8: The highest percentage of jobs in government is in northern and western Minnesota.
Data: Bureau of Economic Analysis, Local Area Personal Income and Employment

It's no surprise that farming is a significant source of employment for the more rural areas of the state. Western counties have the highest percentage of employment in agriculture, with many over 20%. The largest share is in Marshall County, where 32% of employment is in agriculture. However, in most southern Minnesota counties, 10% or fewer of the jobs are in agriculture (Figure 9).

Percentage of jobs in farm employment, 2022

Farming is 20% and 30% of employment along the western border

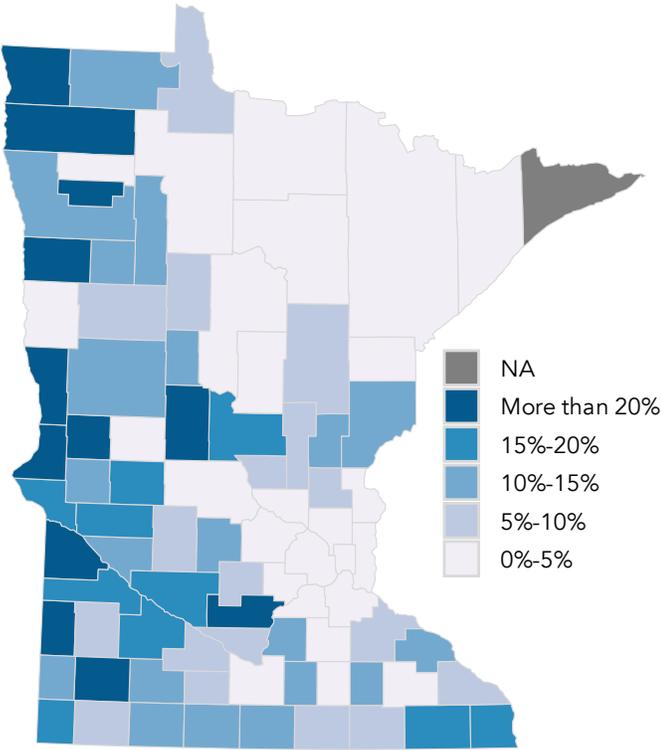


Figure 9: Farm employment includes workers engaged in the direct production of agricultural commodities, either livestock or crops, whether as a sole proprietor, partner, or hired laborer. These workers as a percentage of employment typically make up 20% or more of total employment in counties dominated by agricultural. Data: Bureau of Economic Analysis, Local Region Personal Income and Employment & U.S. Census Bureau, ACS 5-year

Another notable characteristic of employment in rural regions is the number of non-employers and self-employed. The state’s most rural regions have a higher percentage of these entities in relation to total jobs compared to more urban regions (Figure 10). It’s particularly high in northern counties, where non-employers and self-employed can represent 12% to 18% of total jobs. The highest percentage is in Hubbard, Cass, Sherburne and Cook counties with 18% (Figure 11).

Non-employers/self-employed as a percentage of total jobs

Rural areas have a high proportion of non-employers

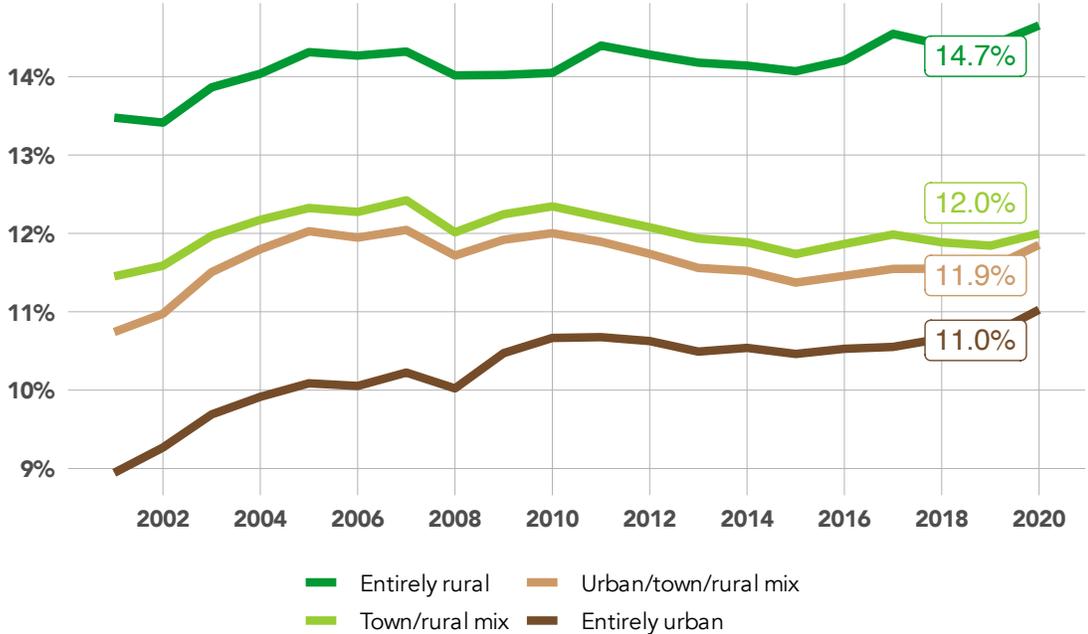


Figure 10: The percentage of the workforce recognized as operating non-employer businesses is significant in most rural areas of Minnesota. Being a non-employer means an individual operates a non-farm business with no employees, has annual business receipts of at least \$1,000, and is subject to federal income tax. Data: Census Bureau, Non-Employer Statistics

Number of self-employed/non-employers as a percent of jobs, 2020

Northern Minnesota has a high concentration of non-employers

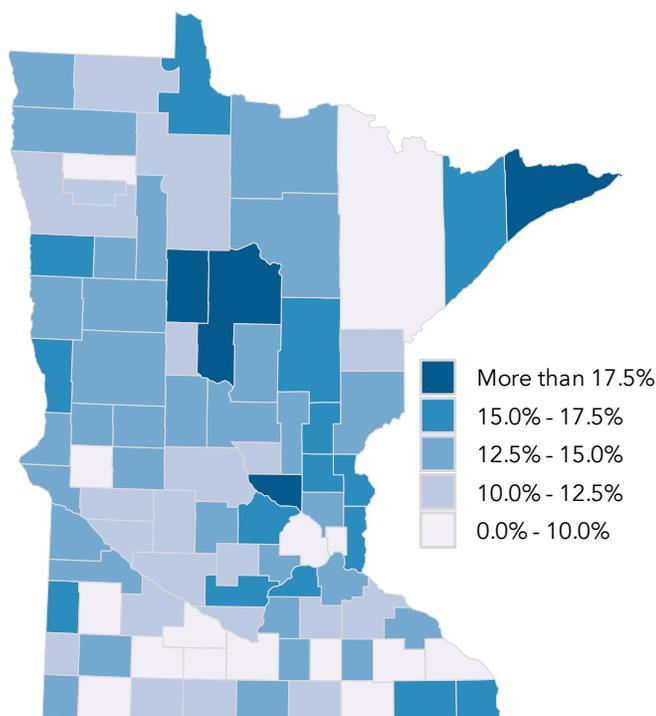


Figure 11: The highest number of self-employed and non-employers as a percentage of total jobs are in northern Minnesota. Hubbard County has the highest percentage with 18.2%. Data: U.S. Census Bureau, Non-Employer Statistics

Lower wages but lower cost of living

The gap in wages between rural and metro regions garners a lot of attention. Policy makers and other leaders continue to point at this gap as cause for concern. Although the gap in earnings persists, however, it's important to note that when factoring in the lower cost of living, earnings and wages in our rural areas can be quite competitive with metropolitan areas.

“Average earnings by place of work” shows the wages workers make, as opposed to their income, which can include both earned income, such as wages, and unearned income, such as interest and dividends. “Jobs” includes both full-time and part-time jobs (but is not the same as “employment” or “workers,” since one worker can hold more than one job at a time) and includes wage and salary jobs, sole proprietorships, and individual general partnerships, but not unpaid family workers or volunteers. This measure can be especially useful when assessing the economic vitality of areas in Greater Minnesota since it takes into account farm and non-employer incomes that are not captured in many other economic measurements.

Figure 12 shows the gap in average earnings between the entirely urban county group and the other three county groups and demonstrates how, in the entirely rural county group, earnings can follow the whims of the ag economy. These counties experienced a significant increase between 2011 and 2013 followed by a sharp decline. Over the last few years, it's increased again significantly. Figure 13 paints this picture as well. The highest earnings per job outside of the seven-county metro are in ag-dominated counties, whereas the lowest are in the central lakes region.

Currently, average earnings in the entirely rural county group are 75% of average earnings for the state, while average earnings in the town/rural group and the urban/town/rural mixed group are 78% and 80% respectively.

Earnings per job

Earnings continue to be significantly lower in rural areas

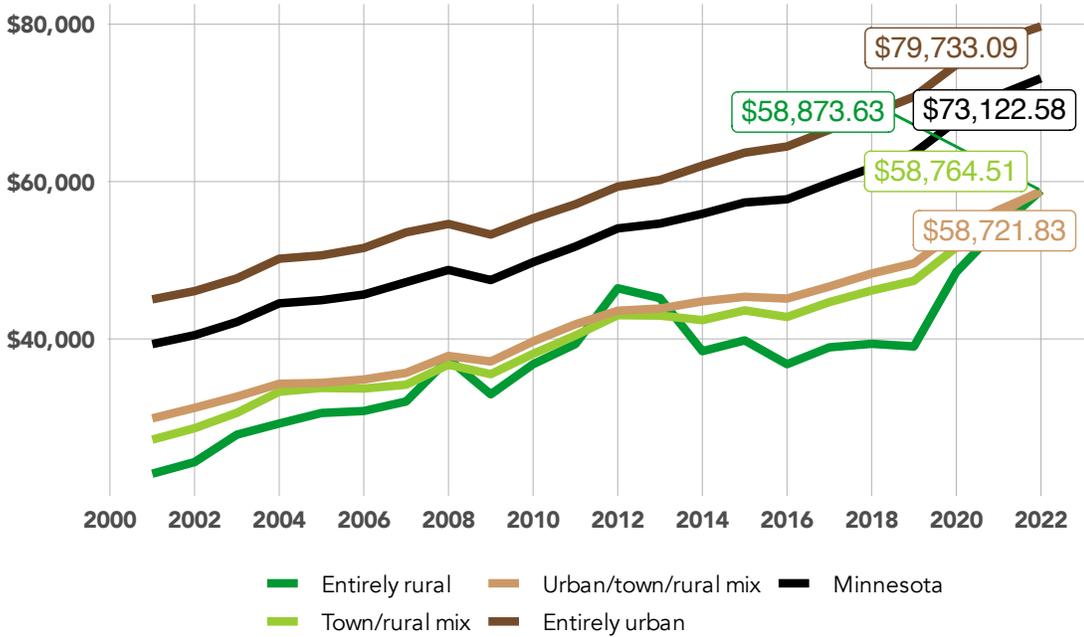


Figure 12: Earnings per job shows a persistent gap between entirely urban counties and the rest of the state. Agricultural income can have a significant impact on entirely rural counties, which can be seen especially between 2008 and 2014. Data: Bureau of Economic Analysis, Regional Personal Income and Employment

Earnings per job, 2022

Lowest earnings per job in the central lakes region

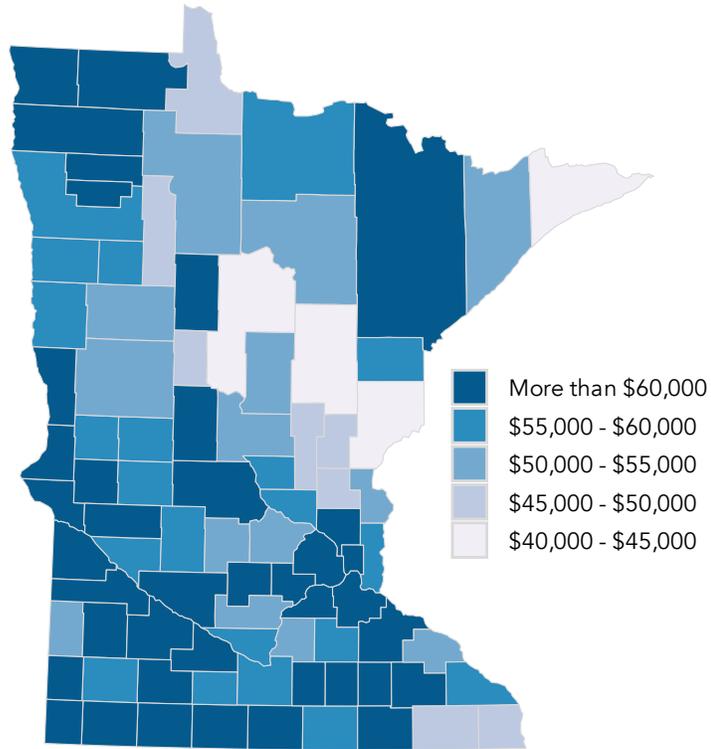
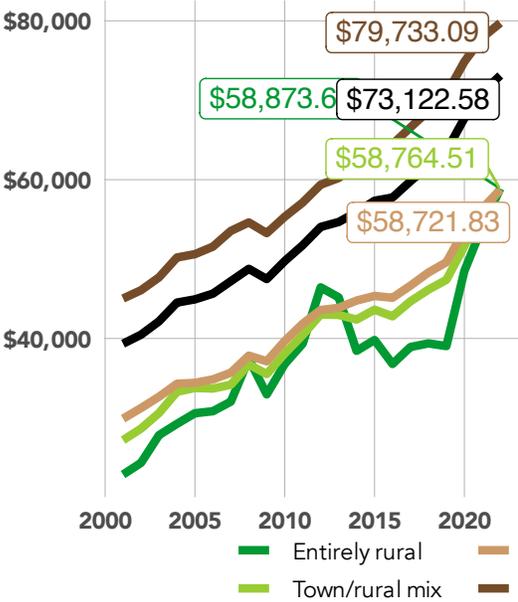


Figure 13: Earnings per job is significantly higher in the seven-county metro area while moderately high earnings are scattered throughout Greater Minnesota. Counties in southern Minnesota typically have higher earnings per job than counties in northern Minnesota. Data: Bureau of Economic Analysis, Local Area Personal Income and Employment

Figure 14 shows that although there remains a gap in earnings between entirely urban counties and all other county groups, the highest growth in earnings is occurring in our more rural areas. Between 2001 and 2022, the entirely rural group saw the largest growth in earnings per job at 140%, and town/rural mix counties had 122% growth. This is compared to lower percentages in the more urban county groups (Figure 14).

Earnings per job

Earnings continue to be significantly lower in rural areas



Change in earnings since 2001

Largest growth in rural Minnesota

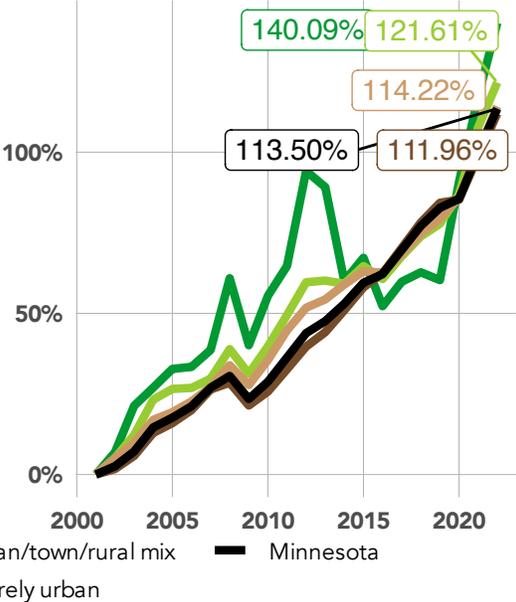


Figure 14: Increases in earnings among rural counties were significantly higher during the recession but have since dropped and kept pace with the larger metropolitan counties. Data: Bureau of Economic Analysis, Regional Personal Income and Employment

An often-overlooked aspect of Greater Minnesota’s economy is the variation in the cost of living from region to region. Part of the narrative surrounding the gap in wages is the assumption that lower earnings will make it harder to make ends meet. The other half of that equation, [the cost of living](#), is just as important to consider.

Figure 15 provides a map highlighting the percentage that the median wage of that county covers the cost of living in that county. The cost of living is calculated by MN DEED for a three-person household, one person working full-time and another working part-time with one child needing childcare. As the map shows, even though wages tend to be lower in Greater Minnesota, they do tend to cover the local cost of living as well. Much of that difference is due to lower housing costs in rural areas.

Median wages as a percent of the cost of living, 2022

Lower wages make up higher percentage of the cost of living in rural Minnesota

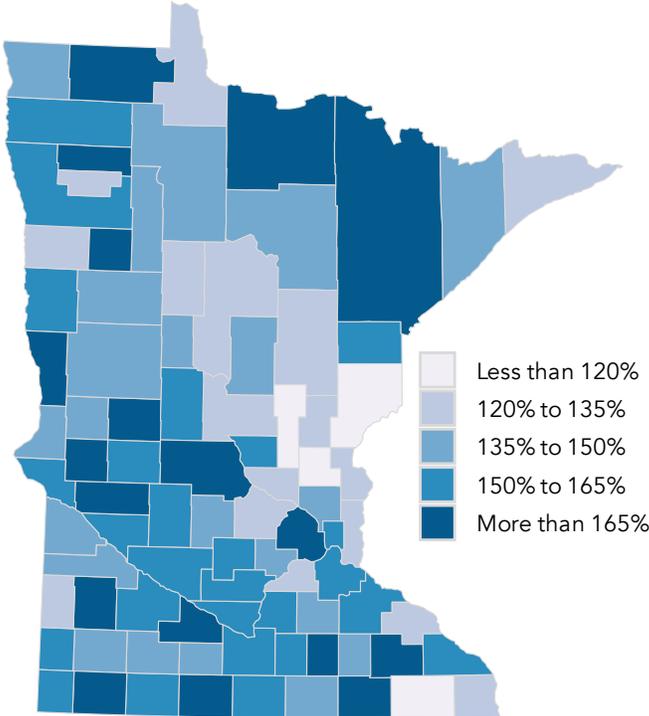


Figure 15: Even though wages in Greater Minnesota tend to be lower than in metro regions, they are still competitive when taking the lower cost of living into consideration. Data: MN DEED Cost of Living & QCEW

Greater Minnesota feeling pressure to fill job vacancies

Job vacancies were increasing across the state and were at their highest levels at any point since 2005 until the pandemic broke that trend, at least for a short time, in 2020. Job vacancies then increased significantly in 2021. They are expected to continue to do so due to retirements in the workforce, including the many early retirements brought on by the pandemic, as well as continued economic growth.

To get a sense of the pressure a region might feel in filling these vacancies, Figure 16 provides the average quarterly number of job vacancies for each year as a percentage of total jobs in the region. The higher the percentage, the more challenging it is to fill positions. Northeast Minnesota is currently experiencing the highest percentage, with an average quarterly vacancy rate of 9.35%. While the Twin Cities metro has been continuously lower in job vacancies, it spiked with the rest of the state in 2021. A “healthy” vacancy rate is considered to be 3%.

Job vacancies as a percent of total employment

Highest job vacancy rates exist in Greater Minnesota

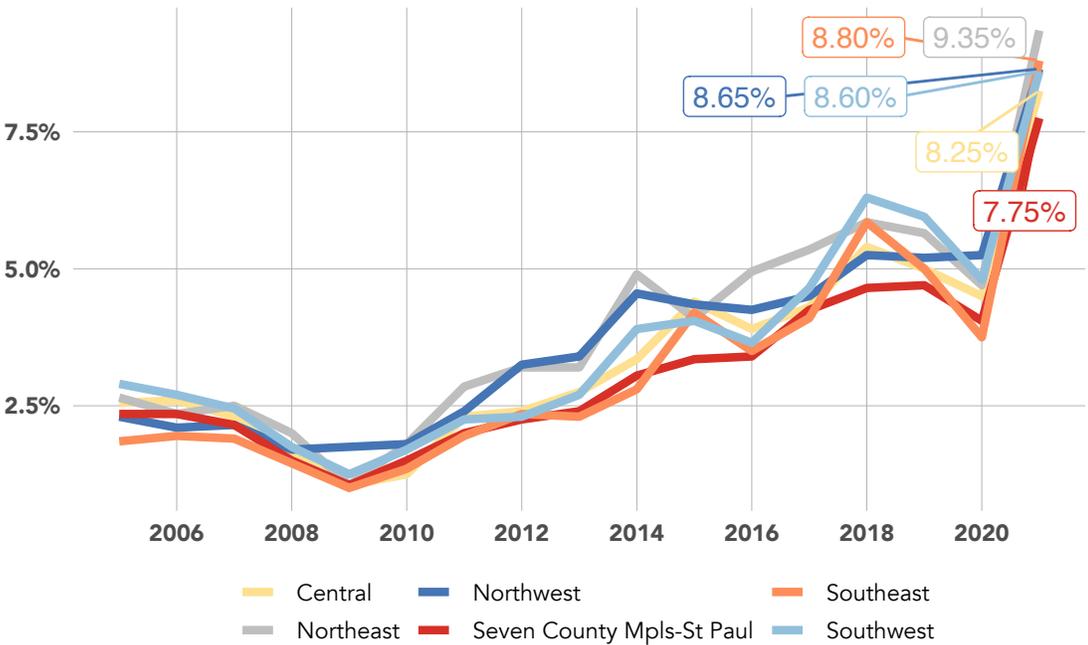


Figure 16: The job vacancy rate is the ratio of vacant job positions to all jobs. A high vacancy rate indicates a strong demand for workers. The highest job vacancy rates are found outside of the Twin Cities seven-county metro. Data: MN DEED Job Vacancy Survey

Directly related to job vacancies is the median wage, which continues to rise across the state. Although the median wage for all job vacancies is still lower in all of Greater Minnesota’s regions compared to the seven-county metro area, the largest increases between 2005 and 2017 were in Greater Minnesota, closing the gap considerably as rural regions felt the worker shortage earlier and more acutely. Now that the seven-county metro is also beginning to feel the pinch for workers, their wages have begun to increase significantly as well after remaining flat from 2009 to 2016 (Figure 17).

Median wages of job vacancies

Wages for job vacancies increase as employers feel pinch for workers

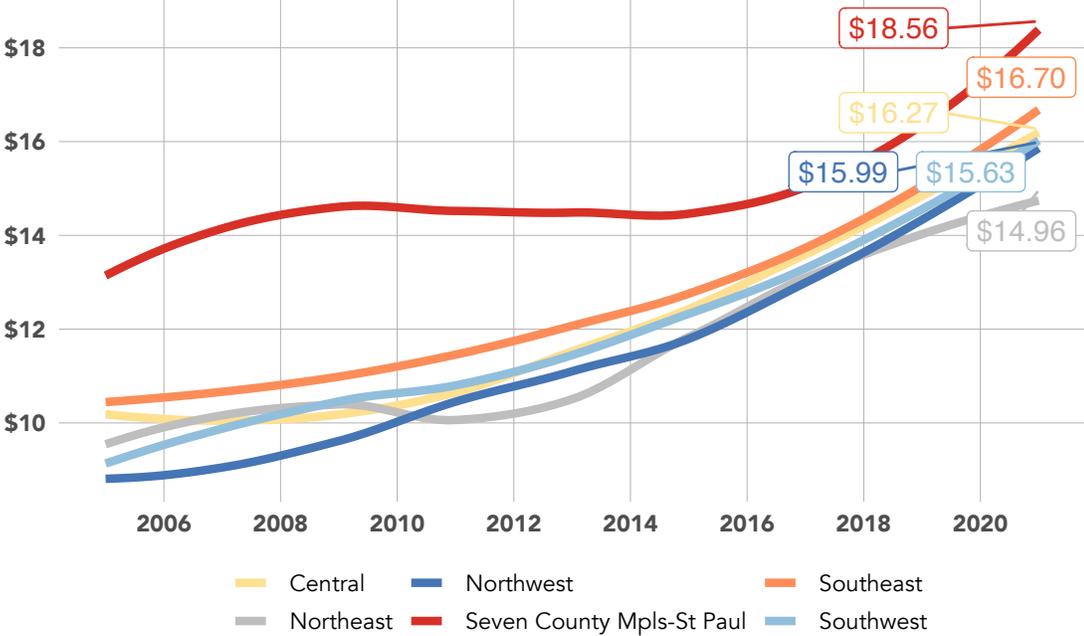


Figure 17: The median wages of all job vacancies in regions outside the Twin Cities are increasing steadily, as are the wages in the Twin Cities now. Data: MN DEED Job Vacancy Survey

Use of government payments are greatest in the most rural areas

Social Security payments are made up of monthly payments to retired and disabled persons, their dependents and survivors, plus lump-sum payments to survivors but does not include medical payments. The distribution of Social Security dollars from county to county is largely a reflection of the distribution of senior citizens. Therefore, we expect the highest per-capita payments to be in the most rural areas (Figure 18).

Social security payments per capita, 2022

Northern Minnesota has some of the highest social security payments per capita

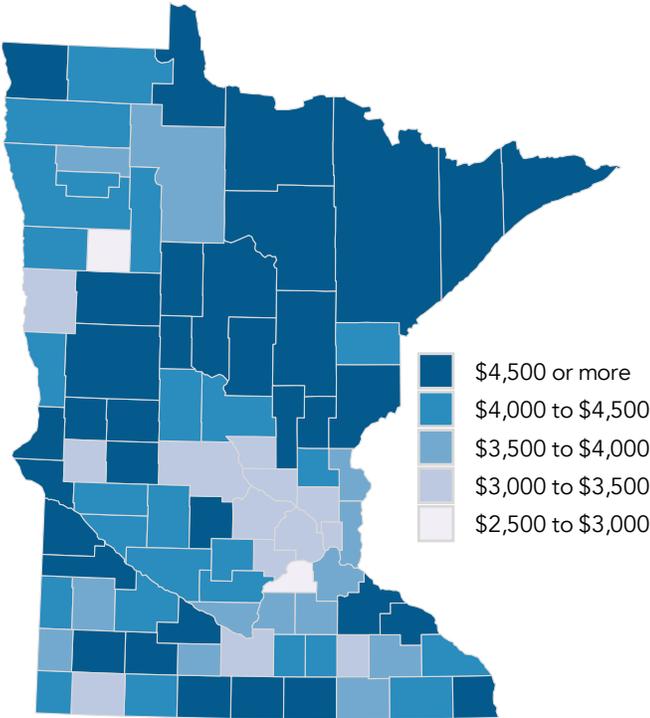


Figure 18: Not surprisingly, the largest Social Security payments are in counties with higher percentages of residents age 65 or older. Data: Bureau of Economic Analysis Local Region Personal Income and Employment, U.S. Census Bureau ACS 5-year

Public assistance payments include family assistance, food stamp payments, general assistance, supplemental security payments and other income maintenance benefits for families in need. It does not include medical payments or farm program payments.

The highest income maintenance benefits per capita continue to be in more rural areas. A few counties in northern Minnesota, where poverty rates tend to be higher, have some of the highest per-capita payments, exceeding an average of \$1,750 per person (Figure 19).

Annual income maintenance payments per capita 2022

Highest income maintenance payments per capita exist in northern Minnesota

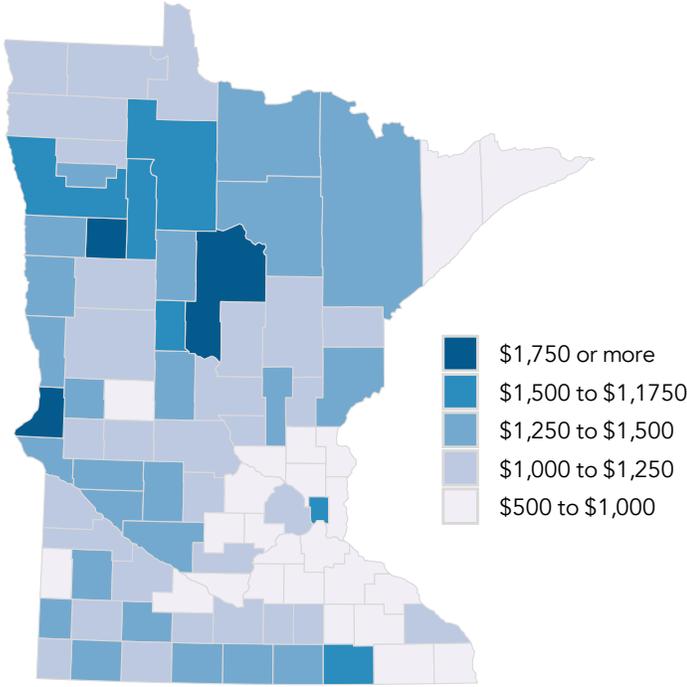


Figure 19: Public assistance payments include family assistance, food stamp payments, general assistance, supplemental security payments and other income maintenance benefits for families in need. It does not include medical payments or farm program payments. Data: Bureau of Economic Analysis, Local Region Personal Income and Employment & U.S. Census Bureau, ACS 5-year

Agriculture

After peaking in 2014, farmland values are stabilizing, as are net income for farmers after years of large fluctuations. (For more on this topic, see our report, [“The Impact of Minnesota’s Farm Economy on Greater Minnesota.”](#))

Land values in 2022 increased to match previous highs in 2014

Current land value estimates by the University of Minnesota Land Economics department remain historically high as they continue to reflect in part the high returns from farming between 2008 and 2012 (Figure 20). Although prices declined somewhat after their peak, they again jumped up to historic highs. In 2022, the value of ag land per acre for Minnesota was \$5,457, higher than the previous peak in 2014 (\$5,413). Demand for farmland for residential and commercial development continues to support values, as can be seen in the urban and suburban counties of the Twin Cities, where ag land values are the highest (Figure 21).

Minnesota - estimated value of farmland per acre

Ag land values in 2022 matched the previous high levels in 2014.

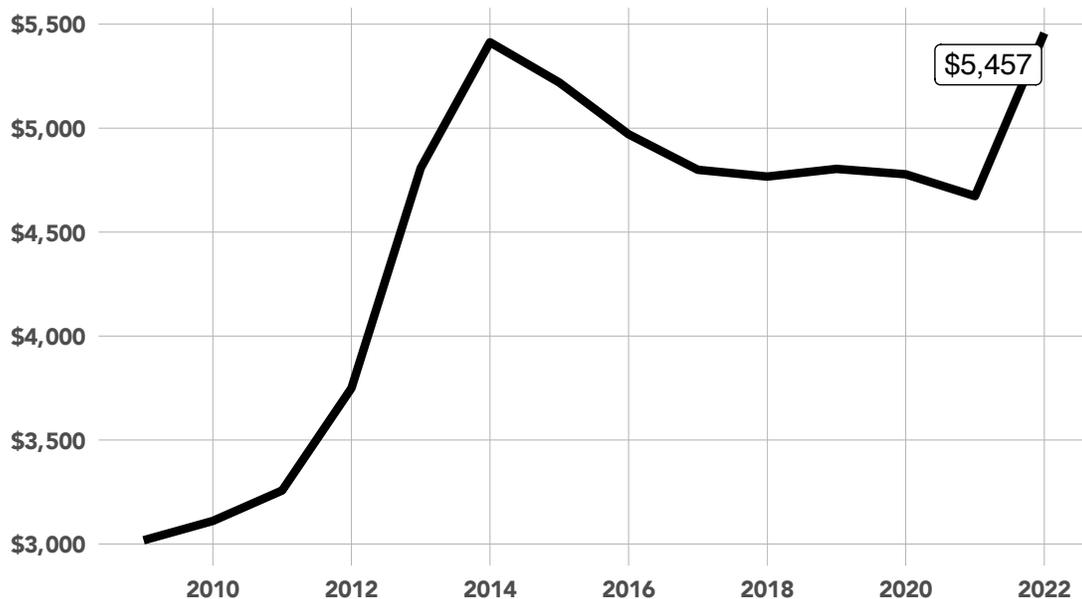


Figure 20: Farmland is defined as all agricultural 2a land, including Green Acres, minus the house/garage/first acre and the building site. This was called "deeded" land prior to 2009. The significant increase in value between 2011 and 2014 is due to the high returns from farming between 2008 and 2012, while increasing pressure for residential and commercial development is keeping values up in and around metropolitan areas.

Data: University of Minnesota Land Economics

Value of agricultural land per acre, 2022

Besides southern Minnesota, ag land values in seven county metro are also high due to demand for residential and commercial development

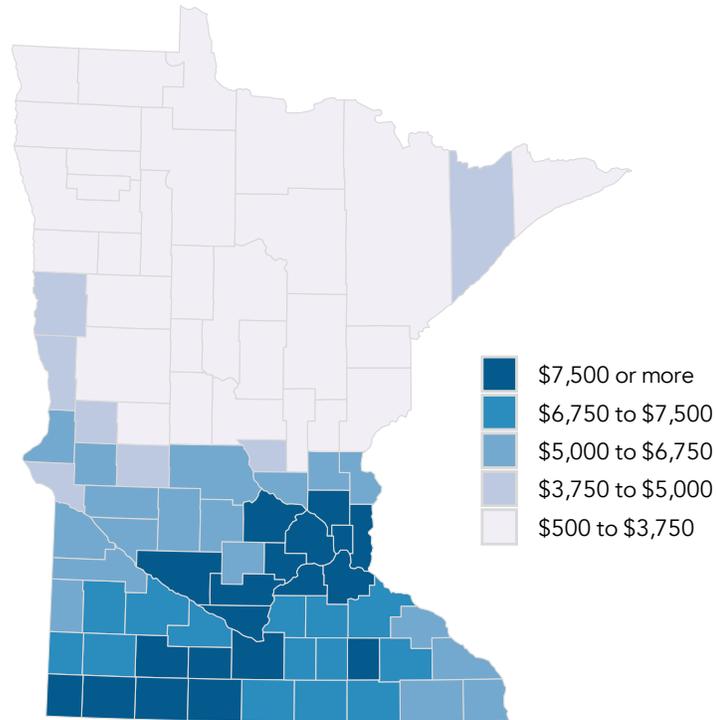


Figure 21: The value of agricultural land is highest in the Twin Cities metropolitan area, where this disappearing resource feels continued pressure from commercial and residential development. Data: University of Minnesota Land Economics

The change in ag land values continues to be dramatic. The value of ag land located along the western border of Minnesota grew as much as 1000% between 2000 and 2022. Most of Minnesota’s other regions experienced considerable increases as well, between 300% and 400% (Figure 22).

Change in ag land value, 2000 - 2022

Largest growth in ag land values are in western Minnesota

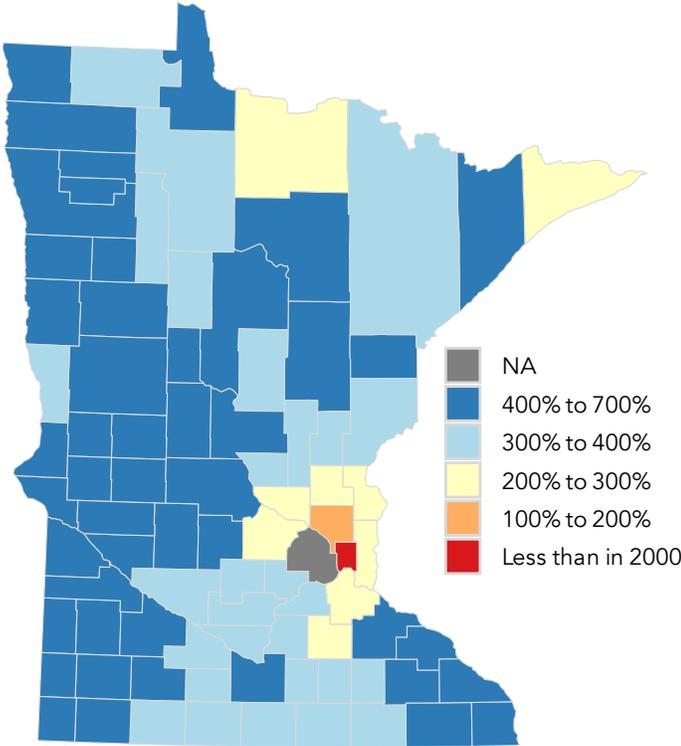


Figure 22: Change in agricultural land values since 2000 shows considerable variation across the state. The largest increases have occurred in western and central Minnesota. Data: University of Minnesota Land Economics

Net income for farming continuing to improve in 2022

Figure 23 shows the cost of production and cash receipts received per acre for farmers in Minnesota. These elements are defined as:

- Total cash receipts: gross revenue received by farmers from the sale of crops, livestock, and livestock products; and of the value of defaulted loans made by Commodity Credit Corporation and secured by crops.
- Production expenses: purchases of feed, livestock and poultry, seed, fertilizer, agricultural chemicals and lime, and petroleum products; labor expenses; machinery rental and custom work; animal health costs; and all other expenses, including depreciation.

Starting in 2015 and continuing into 2020, the cost of production equaled or exceeded the cash receipts for farmers in Minnesota due to increases in costs of inputs and decreased commodity prices. Things improved a bit in 2021 when the cost of production averaged \$796.31 per acre while cash receipts were \$872.19 per acre (Figure 23). The financial components continued to improve in 2022 with production expenses averaging \$978.01 per acres and cash receipts averaging \$1,106.21 per acre.

Financial components of farms per acre, 2022

Positive net income in 2022

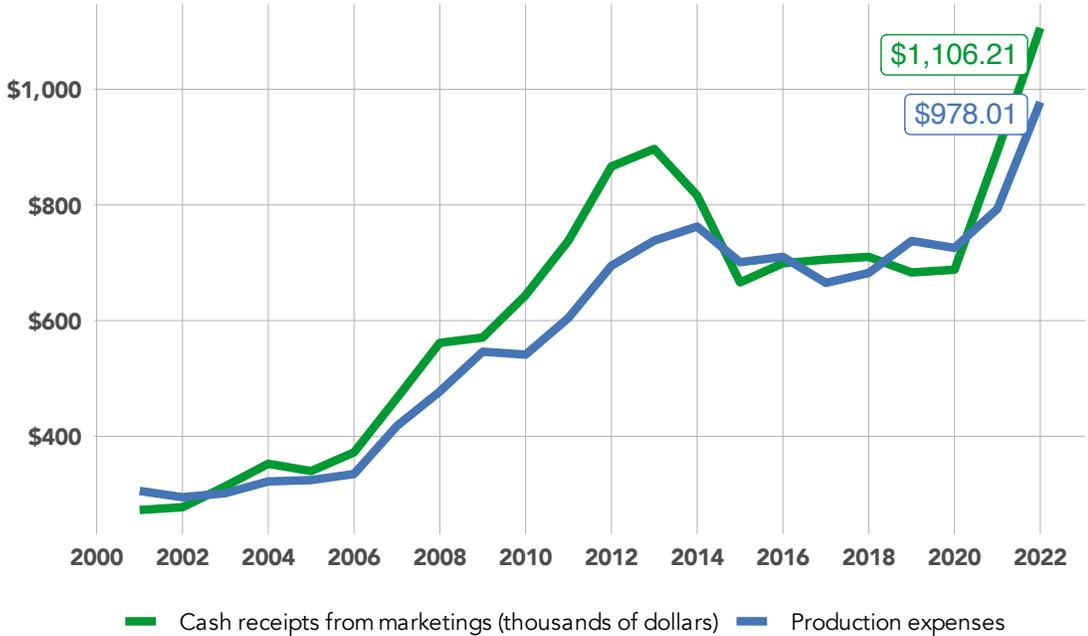


Figure 23: After a period between 2014 and 2020 when the overall cost of production equaled or exceeded cash receipts for farms per acre, farmers are once again making a profit. Data: Bureau of Economic Analysis, Local Region Personal Income and Employment

Federal government payments to farm operators consist of deficiency payments under price support programs for specific commodities, disaster payments, conservation payments, and direct payments to farmers under federal appropriations legislation.

The bulk of government payments in 2022 are attributable to agricultural commodity programs. In Minnesota, the median payment was 2.1% of total farm income. The largest percentages were in northern Minnesota, where they ranged from 10% to 20%.

Percent of income from government payments, 2022

Government subsidies are 2.5% to 10.0% of farm income

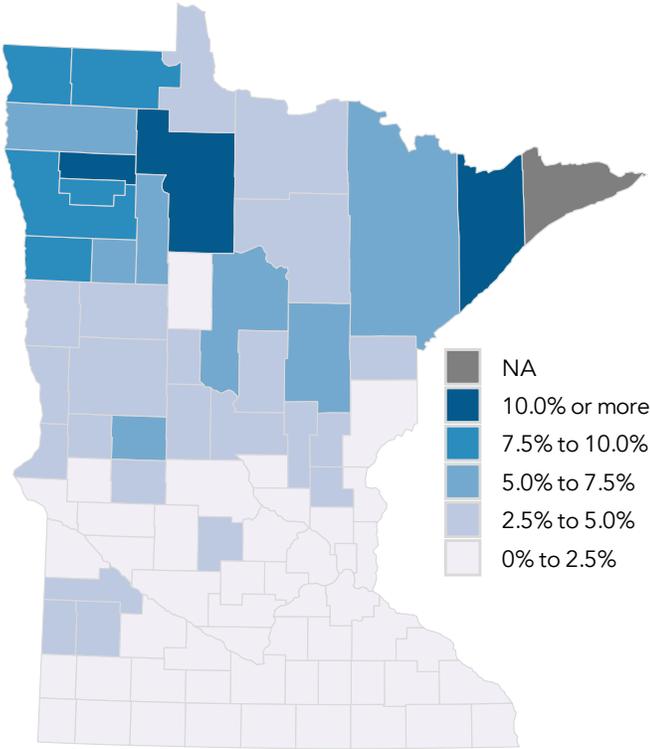


Figure 24: The bulk of government payments to farmers in 2021 are attributable to agricultural commodity programs. The average payments were 6% of total income across Minnesota. Data: Bureau of Economic Analysis, Local Region Personal Income and Employment

When including government payments, farm income (which is total cash receipts and income minus all expenses) gets above break-even, and farmers have a bit of net income for the year. The highest net income for farms were in the southern half of Minnesota for 2022 (Figure 25).

Net income per acre, 2022

Counties with the highest net income per acre are in Southern Minnesota

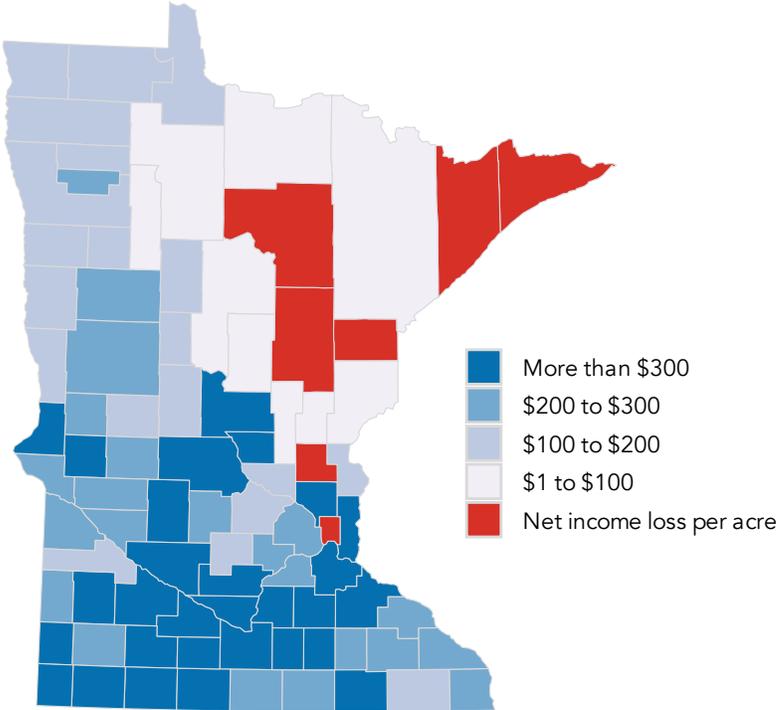


Figure 25: Net income includes cash receipts from marketings, government subsidies, and other income while subtracting the cost of production. In a majority of southern Minnesota counties, farmers made more than \$100 per acre. Data: Bureau of Economic Analysis, Local Region Personal Income and Employment

Appendix: Rural-Urban Commuting Areas

Throughout this report we present information using four county groups developed by the State Demographer and Minnesota's Demographic Center derived from the USDA's Rural-Urban Commuting Area codes. This definition provides a handy way to look at counties by similar characteristics rather than location.

Staff at the Minnesota Demographic Center examined each Census tract in the state to determine its "type" using the definitions in the Rural-Urban Commuting Area framework (explained below). Each county was then classified by its "mix" of Census tracts. For example, if a county has one Census tract that can be defined as "small town" and all other Census tracts could be defined as rural, the county is categorized as "town/rural mix." The number of counties within each category are i) entirely rural: 14; ii) town/rural mix: 35; iii) urban/town/rural mix: 25; and iv) entirely urban: 13.

Figure 26 shows how each county is categorized.

County categorizations based on rural-urban commuting areas

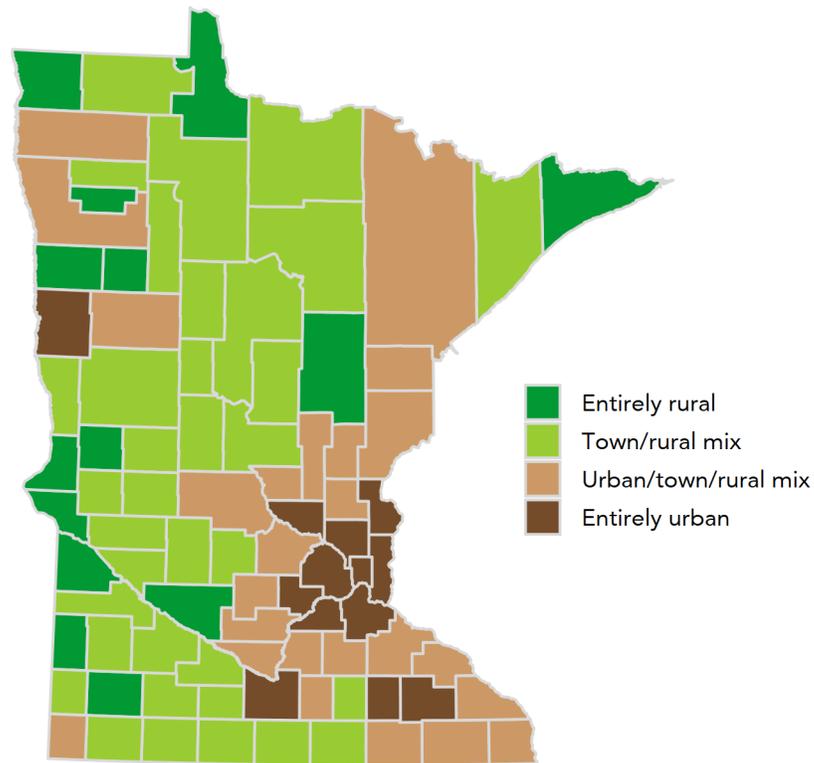


Figure 26: These categorizations are based on an analysis of the rural-urban commuting areas at each county's census tract level. Data: MN State Demographic Office

The United State Department of Agriculture Economic Research Service developed the Rural-Urban Commuting Area codes as a way to define geographic areas using more than population alone. These codes incorporate population density, urbanization, and daily commuting to define a geographic area. Below are the ten primary RUCA codes, grouped into their four geography definitions.

Urban Definition

- 1 Census tract is situated at the metropolitan area’s core and the primary commuting flow is within an urbanized area of 50,000 residents or more.
- 2 Census tract is within a metropolitan area and has higher primary commuting (30% or more) to an urbanized area of 50,000 residents or more.
- 3 Census tract is within a metropolitan area and has lower primary commuting (10-30%) to an urbanized area of 50,000 residents or more.

Large Town Definition

- 4 Census tract is situated at a micropolitan area’s core and the primary commuting flow is within a larger urban cluster of 10,000 to 49,999 residents.
- 5 Census tract is within a micropolitan area and has higher primary commuting (30% or more) to a larger urban cluster of 10,000 to 49,999 residents.
- 6 Census tract is within a micropolitan area and has lower primary commuting (10-30%) to a larger urban cluster of 10,000 to 49,999 residents.

Small Town Definition

- 7 Census tract has a primary commuting flow within a small urban cluster of 2,500 to 9,999 residents.
- 8 Census tract has higher primary commuting (30% or more) to a small urban cluster of 2,500 to 9,999 residents.
- 9 Census tract has lower primary commuting (10-30%) to a small urban cluster of 2,500 to 9,999 residents.

Rural Definition

- 10 Census tract has a primary commuting flow outside of urban areas and urban clusters.

The Minnesota State Demographer’s office analyzed each county to determine the combinations of census tract types in each one. The counties were then categorized into 4 groups;

- Entirely rural: every census tract was rural;
- Town/rural mix: the county had at least one census tract that was rural, and small or large town census tracts;
- Urban/town/rural mix: the county had at least one census tract that was rural, small or large town, and urban; and,
- Entirely urban: every census tract was urban.

For more information about these definitions check out their report - [“Greater Minnesota: Refined & Revisited”](#)

Four primary RUCA definitions by census tract

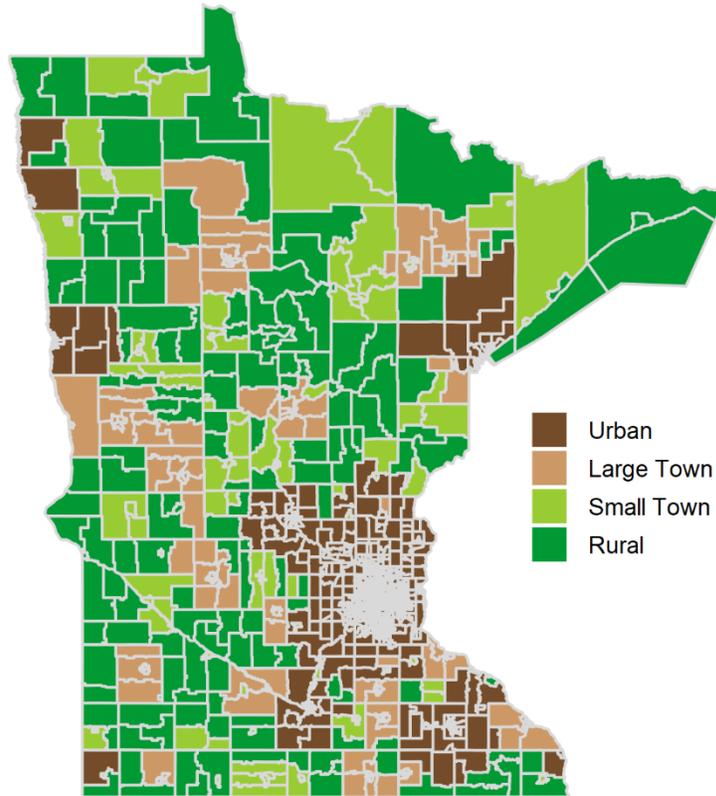


Figure 27: Each census tract was given one of the four definitions from the table above. Data: MN State Demographic Office