The most recent decennial census reported Missouri’s population at 6,154,913, ranking as the 19th largest U.S. state in 2020. By 2022, Missouri rose to the 18th largest state with a population of 6,177,957. While notable, this increase obscures important trends, as two components of change are needed to fully understand population shifts: *natural change* and *net migration* (see sidebar for definitions).

Including Missouri, half of all U.S. states experienced a natural decrease in population between 2020 and 2022. When evaluating states on the level of natural change between 2020 and 2022, Missouri ranked 41st with an excess of 12,195 deaths over births — largely attributed to the COVID-19 pandemic. Missouri mitigated this natural decrease and ranked 17th in net migration by gaining 34,423 more residents.

When comparing Missouri’s border states during the same time frame, only Iowa experienced both a natural increase and positive net migration. However, Tennessee still experienced the largest total positive population change despite a natural decrease. Interestingly, Florida, while ranked 1st among all states during this period in net migration with nearly 800,000 new migrants, ranked last in natural change with an excess of 89,047 deaths over births.

As shown in the chart, *natural change* and *net migration* can run in opposite directions, which makes both important for understanding population trends. *Natural change* combined with *net migration* provides a comprehensive look at the forces impacting population change.
Population Dynamics and COVID-19

Prior to the COVID-19 pandemic (2010-19), over half of Missouri’s counties (57%) experienced a natural increase. Missouri’s metro areas saw a natural increase of 2.1% over this period, compared to 0.4% for nonmetro areas. Of the 51 counties experiencing a natural decrease from 2010-19, 86% were nonmetro.

As previously mentioned, the COVID-19 pandemic is partially responsible for an excess of 12,195 deaths over births between 2020 and 2022, resulting in a natural population decrease of 0.2% in Missouri. Metro (-0.01%) and nonmetro (-0.8%) counties alike experienced a natural decrease. During this time, only 16% of Missouri counties saw a natural increase.

Missouri mirrors national trends, as 73% of counties experienced a natural decrease in 2021, up from 46% in 2019. Between 2010 and 2019, 74% of Missouri’s counties experienced positive net migration, whereas only 30% experienced the same between 2020 and 2022.

Additional Notes and Resources

- The University of Missouri’s Center for Applied Research and Engagement Systems (CARES) offers data visualizations in topics ranging from health, the environment and agriculture to safety, education and the economy. CARES’ Map Room can be used to view trends over time, including the rate of natural population change.
- The U.S. Census regularly publishes stories related to their latest data releases. A recent story offers additional information on how migration patterns across the country were impacted by the pandemic.

All Missouri Economy Indicators briefs in this series are available at [http://muext.us/MissouriEconomyIndicators](http://muext.us/MissouriEconomyIndicators)

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