

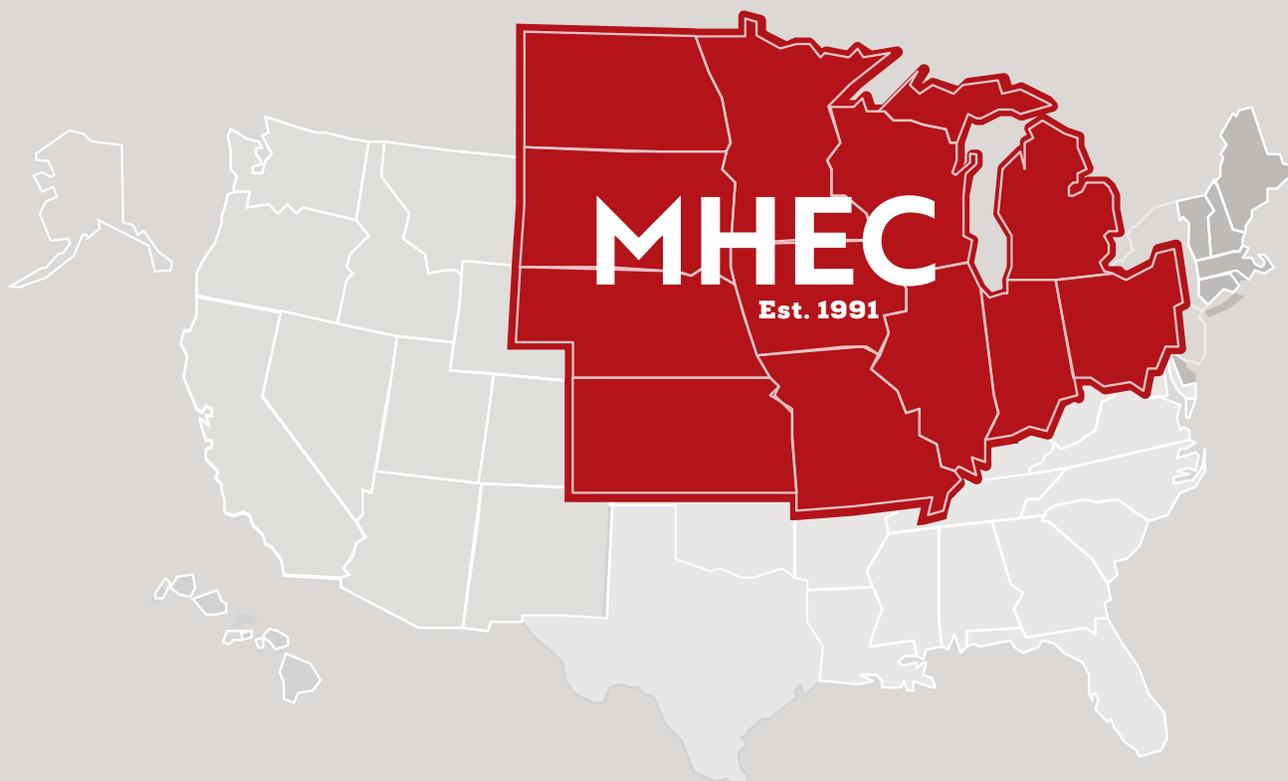


2023 State Performance Update

Supplement to *Higher Education in Focus 2019*



MISSOURI



ABOUT THE MIDWESTERN HIGHER EDUCATION COMPACT

As an interstate compact, the Midwestern Higher Education Compact (MHEC) brings together midwestern states to develop and support best practices, collaborative efforts, and cost-sharing opportunities. Through these efforts it works to ensure strong, equitable postsecondary educational opportunities and outcomes for all.

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Data analyses were conducted by Shaun Williams-Wyche, Associate Director of Research and Data Analysis.

MHEC would like to acknowledge the helpful feedback of members of the [Review Panel](#) for State Policy and Performance Data.

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Additional indicators are available in the MHEC Interactive Dashboard: <https://www.mhec.org/dashboard>.

Updates to this report may be found at: <https://www.mhec.org/policy-research>.

About this Report

This supplement to *Higher Education in Focus 2019* provides the latest data on a subset of indicators relevant to the goal of improving educational attainment in Missouri. Performance indicators are categorized within five areas: Preparation, Participation, Affordability, Completion, and Finance. Most indicators provide the national and Midwest regional values as well as the median of the top five states in the nation as possible benchmarks. Most performance indicators are also disaggregated by family income and race/ethnicity to assess critical opportunity and achievement gaps.

The 2023 Performance Update contains the same indicators presented in previous updates with the exception of the enrollment indicator shown in Figure 3: the percentage

of persons aged 18-24 who are currently enrolled or have completed some college or higher. While enrollment has been disaggregated by race and ethnicity in past updates, sampling problems that occurred during the 2020 administration of the American Community Survey did not allow reliable estimation of enrollment rates by race and ethnicity for the 2023 Performance Update.¹

The next version of *Higher Education in Focus* will be released in 2025 and every five years thereafter. The Performance Update will continue to be released annually during intervening years. For additional background, sources, and technical notes, see MHEC.ORG/policy-research for the full report. Additional indicators are available through the online [interactive dashboard](#).

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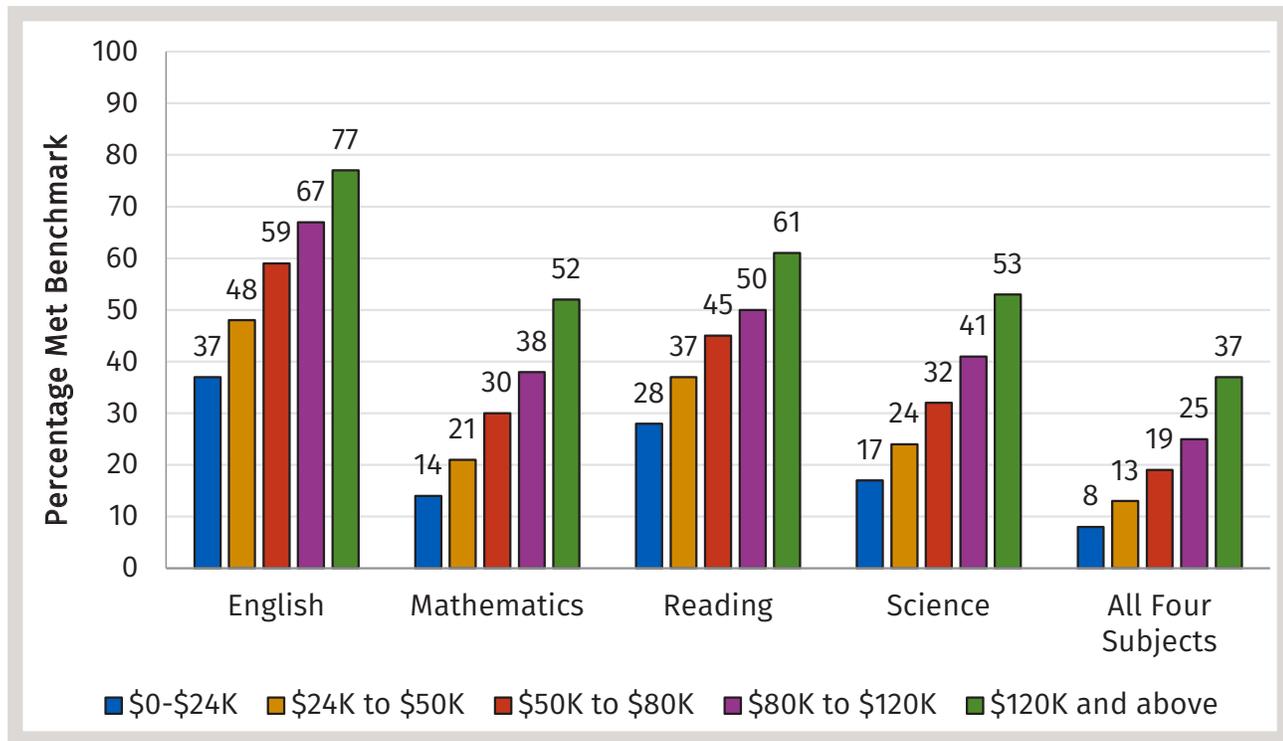
¹ For more information, see U.S. Census Bureau. (2021). *An assessment of the COVID-19 pandemic's impact on the 2020 ACS 1-year data*. See also the [Interactive Dashboard](#) for enrollment by race/ethnicity in previous years.

Preparation

Academic proficiency of high school graduates. The proportion of high school graduates taking the ACT who meet college readiness benchmarks provides one measure of the academic preparation of college-bound students. Benchmark scores defined by ACT in English (18), mathematics (22), reading (22), and science (23) delineate a 75 percent likelihood of attaining a grade of “C” or higher in first-year college-level courses. The percentage

of tested high school graduates meeting college readiness benchmarks is shown by family income and race/ethnicity. It should be noted that this indicator does not reflect the academic preparation of students who sought college enrollment without submitting ACT test scores under test-optional admissions policies, which have been increasingly adopted since the COVID-19 pandemic.

Figure 1: Percentage of ACT-Tested High School Graduates in Missouri Who Met or Exceeded College Readiness Benchmark Scores by Family Income



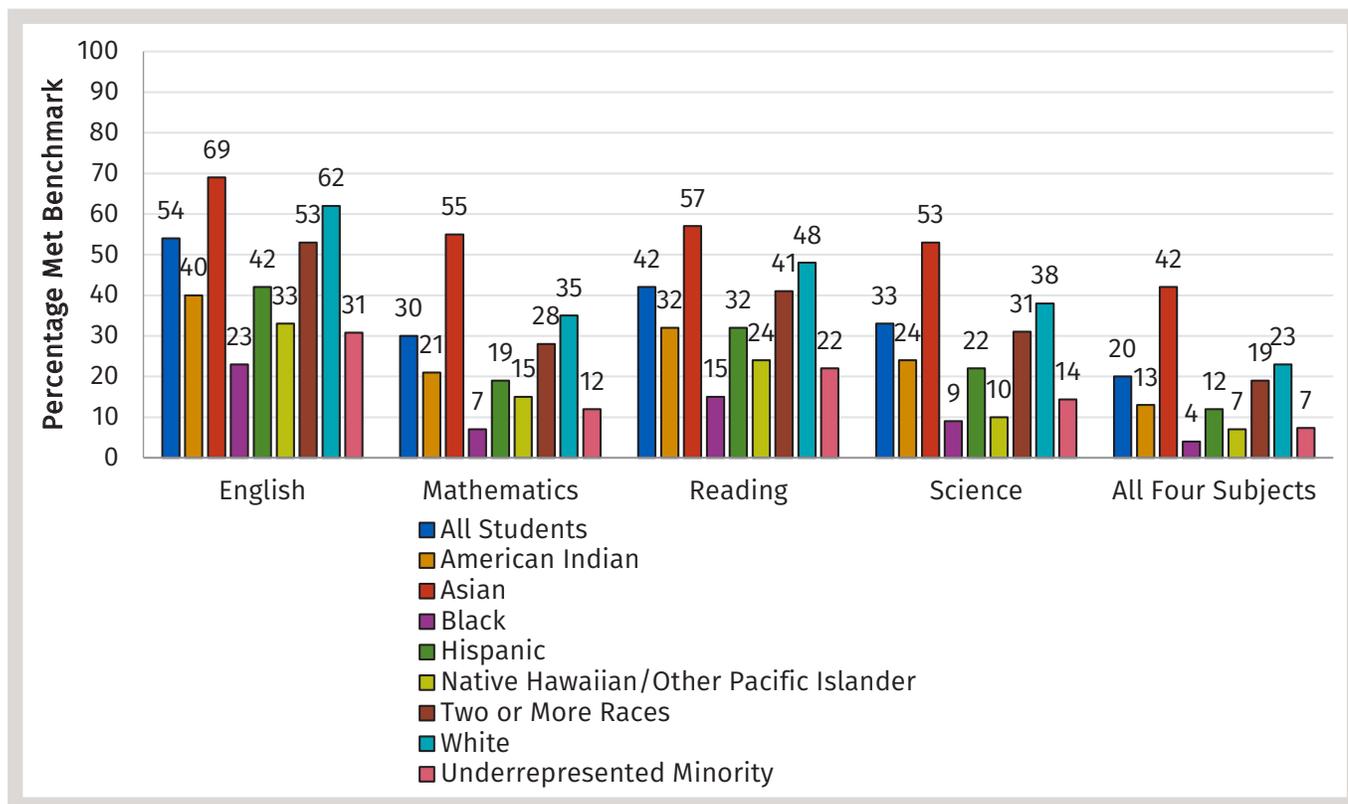
Source. ACT. (2023). *U.S. high school graduating class trends*.



More than half of tested graduates within the three highest income groups in Missouri met the ACT college readiness benchmark in English. However, academic preparation is strongly correlated with family income, as a much larger percentage of tested high school graduates from higher-income families met or surpassed college readiness benchmarks than graduates from lower-income families.

Preparation

Figure 2. Percentage of ACT-Tested High School Graduates in Missouri Who Met or Exceeded College Readiness Benchmark Scores by Race and Ethnicity



Source. ACT. (2023). *U.S. high school graduating class trends*. Note. The underrepresented minority category comprises American Indian, Black, Hispanic, and Native Hawaiian/Other Pacific Islander graduates. Some Asian subgroups are underrepresented in higher education (e.g., Hmong) but cannot be separated from the Asian category.



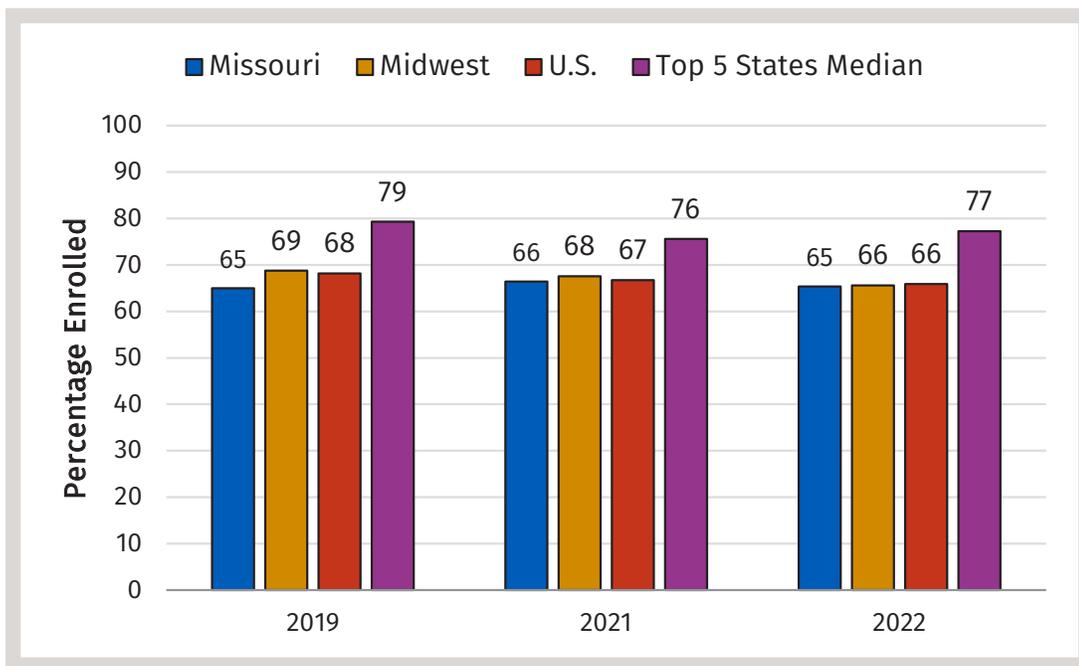
Forty-two percent of tested Asian graduates in Missouri met or exceeded the ACT college readiness benchmarks in all four tested subjects, compared to 23 percent of White graduates and 7 percent of underrepresented minority graduates.

Participation

Young adult enrollment. The participation of young adults in college is defined as the percentage of all 18- to 24-year-old adults in the state who are currently enrolled in college or have completed some college coursework/credits or a credential. Enrollment rates are provided for all young adults and family income groups. The

enrollment gap by income is gauged by comparing college enrollment rates among dependent 18- to 24-year-old residents by the family income quartiles of all households in the state. Low income is represented by the bottom quartile, middle income by the second and third quartiles, and high income by the top quartile.²

Figure 3. Percentage of Persons Aged 18-24 Who Are Currently Enrolled or Have Completed Some College or Higher



Source: U.S. Census Bureau. (2019, 2021, 2022). *American Community Survey single-year public use microdata sample*. Top 5 States, 2022: RI, ND, MA, NY, CT.

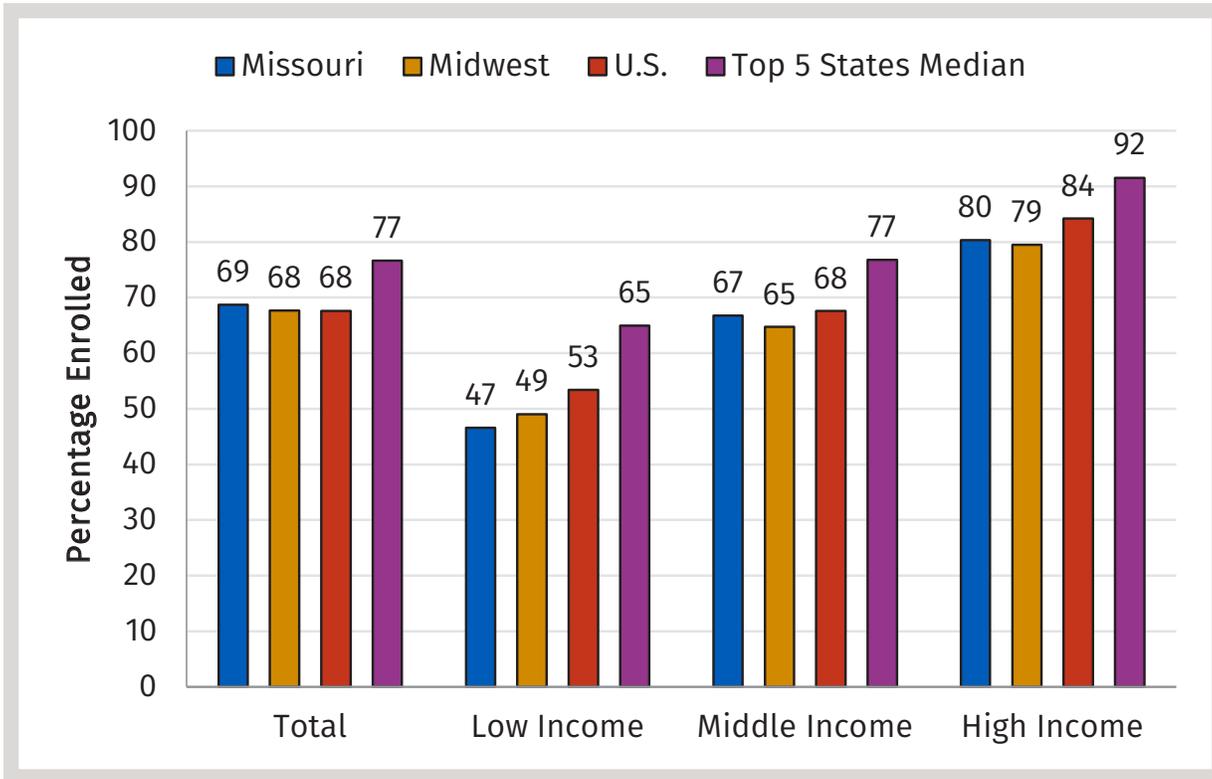


The college enrollment rate of 18- to 24-year-olds in Missouri was stable between 2019 and 2022, but it remains slightly below the Midwest and national benchmarks.

² Dissimilar to past editions of the *Performance Update*, enrollment is not disaggregated by race due to sampling problems that occurred during the 2020 administration of the American Community Survey. For more information, see U.S. Census Bureau. (2021). *An Assessment of the COVID-19 Pandemic's Impact on the 2020 ACS 1-Year Data*. See also the [Interactive Dashboard](#) for enrollment by race/ethnicity in previous years.

Participation

Figure 4. Percentage of Dependent 18- to 24-Year-Old Residents Who Are Currently Enrolled or Have Completed Some College or Higher by Family Income



Source: U.S. Census Bureau. (2017, 2018, 2019, 2020, 2021). *Current Population Survey*. Five-year estimates. Top 5 States, 2017-2021: Total Population: NJ, IL, NY, RI, CT; Low Income: NY, CT, CA, IL, NJ; Middle Income: IL, NJ, RI, CT, NY; High Income: MD, SD, IL, NJ, ND.



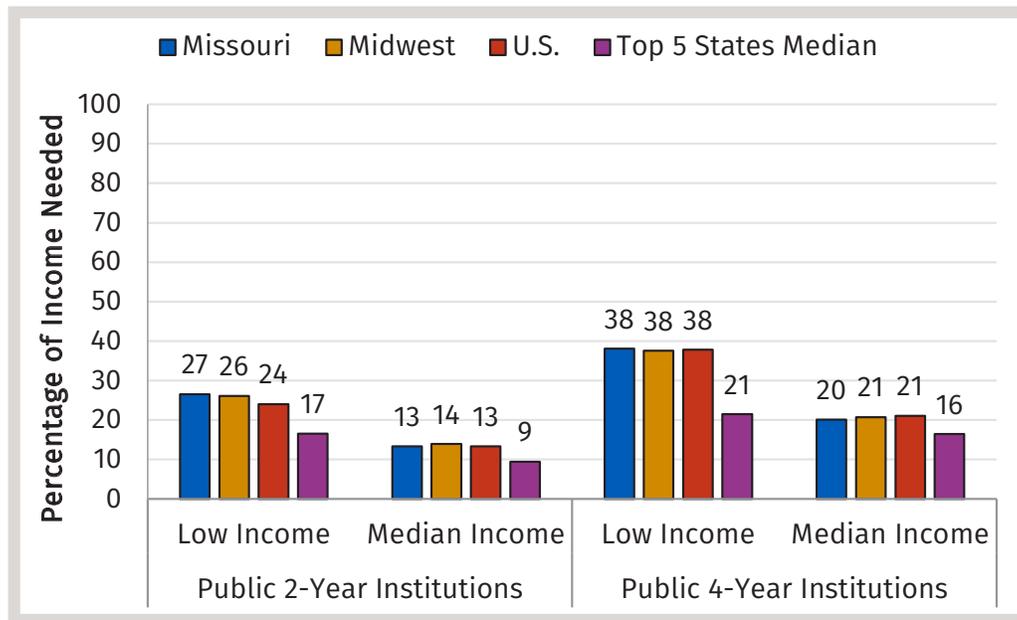
The total, middle-income, and high-income college enrollment rates for dependent 18- to 24-year-olds in Missouri are higher than the Midwest benchmarks. However, the enrollment rates of young adults from low- and middle-income families are considerably lower than the enrollment rate of young adults from high-income families. Similar disparities in college enrollment rates are seen across the Midwest and the nation.

Affordability

Ability to pay. The ability to pay for college is measured by the percentage of family income needed to pay the average net price of full-time enrollment at public two- and four-year institutions. The average institutional net price is calculated as the total cost of attendance (tuition and fees, books, supplies, and room and board) minus the average institutional, local, state, and federal grant aid. In order to

assess the degree of affordability for students of different income levels, this indicator is presented for families with median income (\$78,780 for Missouri in 2021) and families with low income, which is defined as an income equal to the federal poverty level for a family of four (\$26,500 in 2021). The indicator is also presented by the median income for families in each racial and ethnic group.

Figure 5. Percentage of Family Income Needed to Pay the Average Net Price of Full-Time Enrollment at Public Institutions for Low- and Median-Income Households



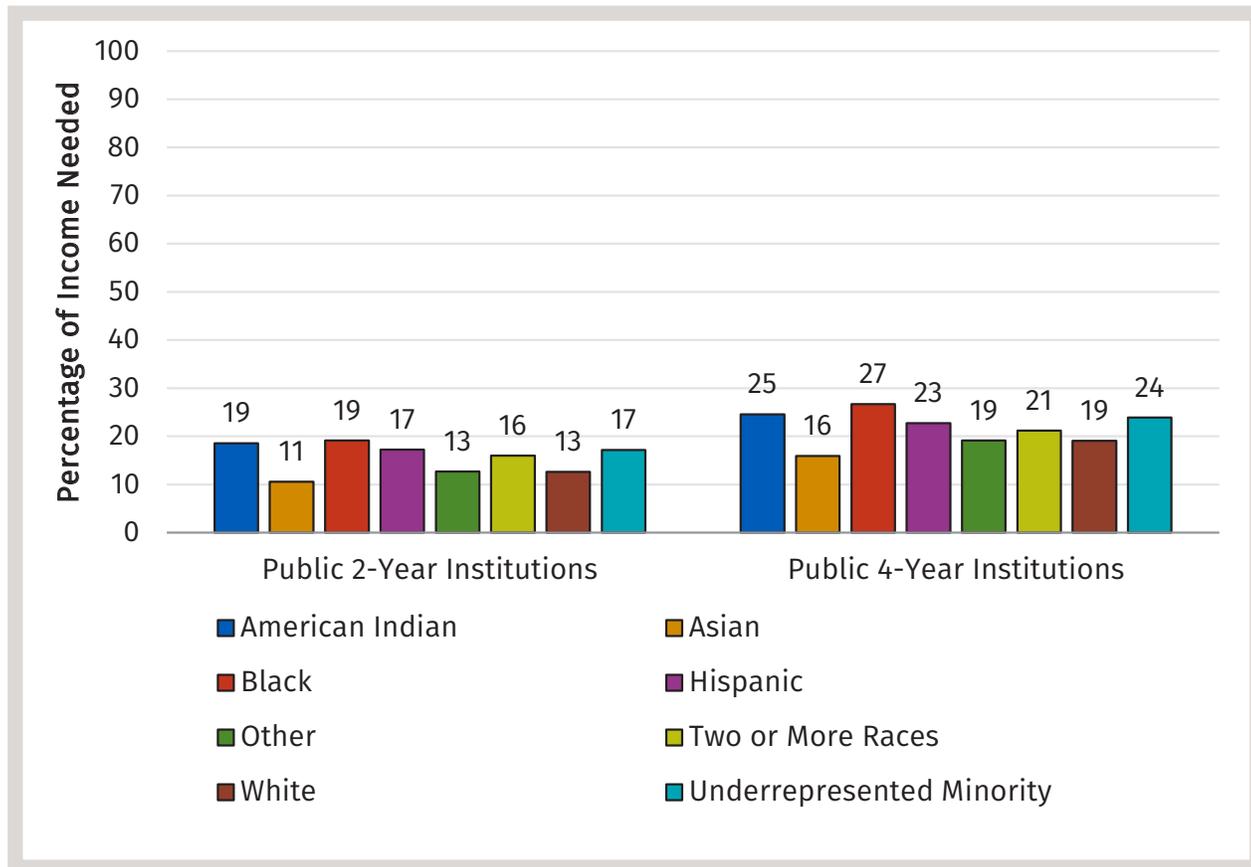
Source: NCES IPEDS. (2021). *Student financial aid and net price, winter 2021-22*. U.S. Census Bureau. (2021). *American Community Survey one-year estimates: Median family income in the past 12 months by presence of own children under 18 years*. Top 5 States, 2020-21: Public two-year institutions: (Low-income students: KY, MS, IL, MI, AL) (Median-income students: RI, CT, VA, KY, MD); Public four-year institutions: (Low-income students: FL, IN, AK, WY, CA) (Median-income students: FL, UT, WA, WY, CT).



The percentage of income needed to attend public two-year colleges in Missouri is higher than the Midwest and national benchmarks for students from low-income families but lower than the Midwest benchmark for median-income families. Conversely, the percentage of income needed for public four-year enrollment in Missouri meets the Midwest and national benchmarks for students from low-income families and is below the Midwest and national benchmarks for students from median-income families. Moreover, the percentage of family income needed for enrollment differs by income group. Two-year college attendance for students from low-income families requires 27 percent of family income, compared to 13 percent of income for students from median-income families. Four-year college attendance in Missouri for students from low-income families requires 38 percent of family income, compared to 20 percent of income for students from median-income families. Similar differences in college affordability are seen across the Midwest and the nation.

Affordability

Figure 6. Percentage of Family Income Needed to Pay the Average Net Price of Full-Time Enrollment at Public Two- and Four-Year Institutions in Missouri by Race and Ethnicity



Source: NCES IPEDS. (2021). *Student financial aid and net price, winter 2021-22*. U.S. Census Bureau. (2021). *American Community Survey one-year public use microdata sample*. Note: The underrepresented minority category consists of American Indian, Black, Hispanic, and Native Hawaiian/Other Pacific Islander families. Estimates for some racial and ethnic groups are unavailable due to small sample sizes. Some Asian subgroups are underrepresented in higher education (e.g., Hmong) but are not separated from the Asian category due to small sample sizes.



College attendance in Missouri requires a greater share of family income for American Indian, Black, and Hispanic students than for White and Asian students. Underrepresented students are disproportionately represented among lower-income students.

Completion

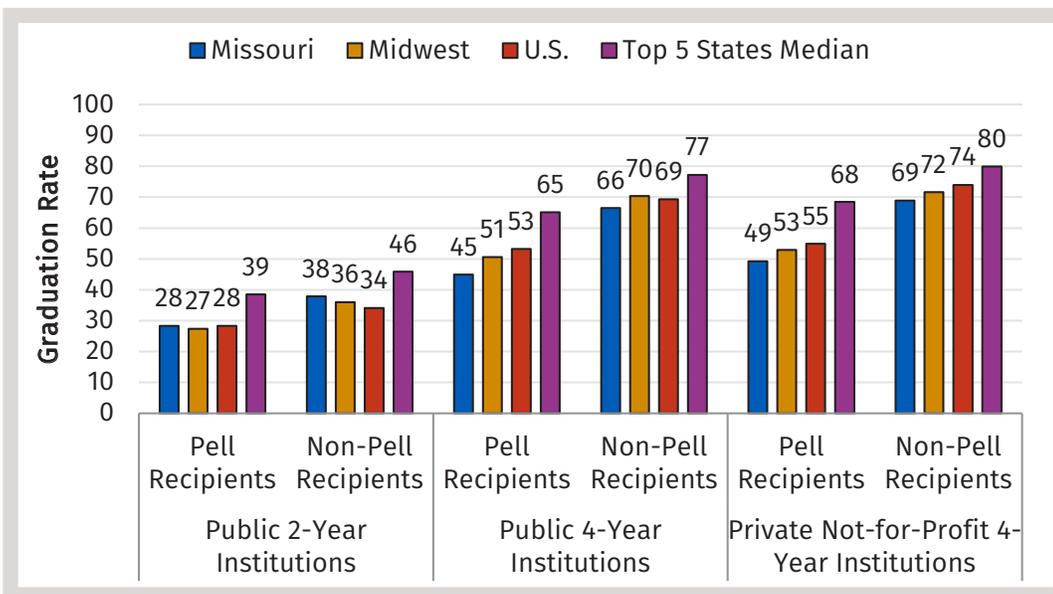
Institutional graduation rates. Institutional graduation rates are defined by the proportion of first-time, full-time students who graduate at their beginning institution.

Specifically, graduation rates at two-year colleges are measured by the proportion of first-time, full-time certificate/degree-seeking students in the fall 2018 cohort who completed an associate degree or certificate at their first public two-year college within three years (Figure 8 also counts students who transferred to another institution, whereas Figure 7 only counts completers due to data limitations). Graduation rates at four-year institutions are defined by first-time, full-time, bachelor's

degree-seeking students in the fall 2015 cohort who completed a bachelor's degree at their first four-year institution within six years (without accounting for transfer to another institution).

These indicators are provided for family income and racial/ethnic groups. The completion gap by income is estimated by comparing graduation rates among federal Pell Grant recipients and non-Pell recipients. In 2021-22, a dependent student from a family with a household size of four (two parents and two children) and an adjusted gross income of \$65,000 or less would be eligible for a Pell Grant.

Figure 7. Percentage of First-Time, Full-Time Degree/Certificate-Seeking Students Who Graduated Within Three Years From Their First Public Two-Year Institution and Graduated Within Six Years From Their First Four-Year Institution by Pell Grant Recipient Status



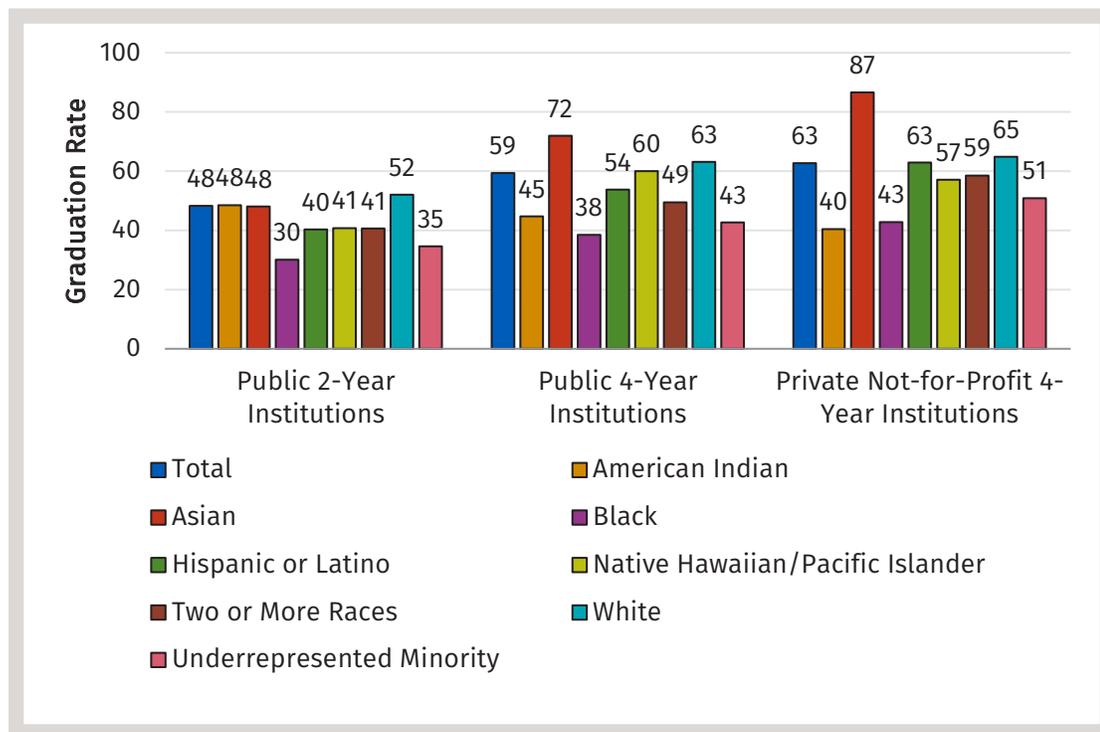
Source: NCES IPEDS. (2021). *Graduation rate, winter 2021-22*. Top 5 States, 2021: Public two-year: (Pell recipients: SD, FL, MS, KY, NE) (Non-Pell recipients: SD, ND, FL, KY, UT); Public four-year: (Pell recipients: FL, CA, NH, NJ, IA) (Non-Pell recipients: DE, VA, IA, CA, NJ); Private not-for-profit four-year: (Pell recipients: MA, CA, VT, RI, CO) (Non-Pell recipients: MA, RI, CT, ME, PA).



Graduation rates at public two-year institutions in Missouri for both Pell and non-Pell recipients meet or surpass the Midwest and national benchmarks. However, the graduation rates of low-income students (i.e., Pell Grant recipients) in Missouri lag behind the graduation rates of higher-income students at both two- and four-year institutions. Similar disparities in college graduation rates are seen across the Midwest and the nation.

Completion

Figure 8. Percentage of First-Time, Full-Time, Degree/Certificate-Seeking Students in Missouri Who Transferred or Graduated Within Three Years From Their First Public Two-Year Institution and Graduated Within Six Years From Their First Four-Year Institution by Race and Ethnicity



Source: NCES IPEDS. (2021). *Graduation rate, winter 2021-22*. Note. The underrepresented minority category comprises American Indian, Black, Hispanic, and Native Hawaiian/Other Pacific Islander students. Some Asian subgroups are underrepresented in higher education (e.g., Hmong) but cannot be separated from the Asian category.



The graduation rates of American Indian, Black, and Hispanic students in Missouri were lower than the graduation rates of White students across all types of institutions. However, data available in [MHEC's Interactive Dashboard](#) show that the graduation rates for American Indian, Hispanic, Pacific Islander, and White students attending public two-year colleges in Missouri met or surpassed the national benchmark, and the graduation rates for American Indian and Pacific Islander students at public four-year institutions in Missouri surpassed the Midwest and national benchmarks.

Finance

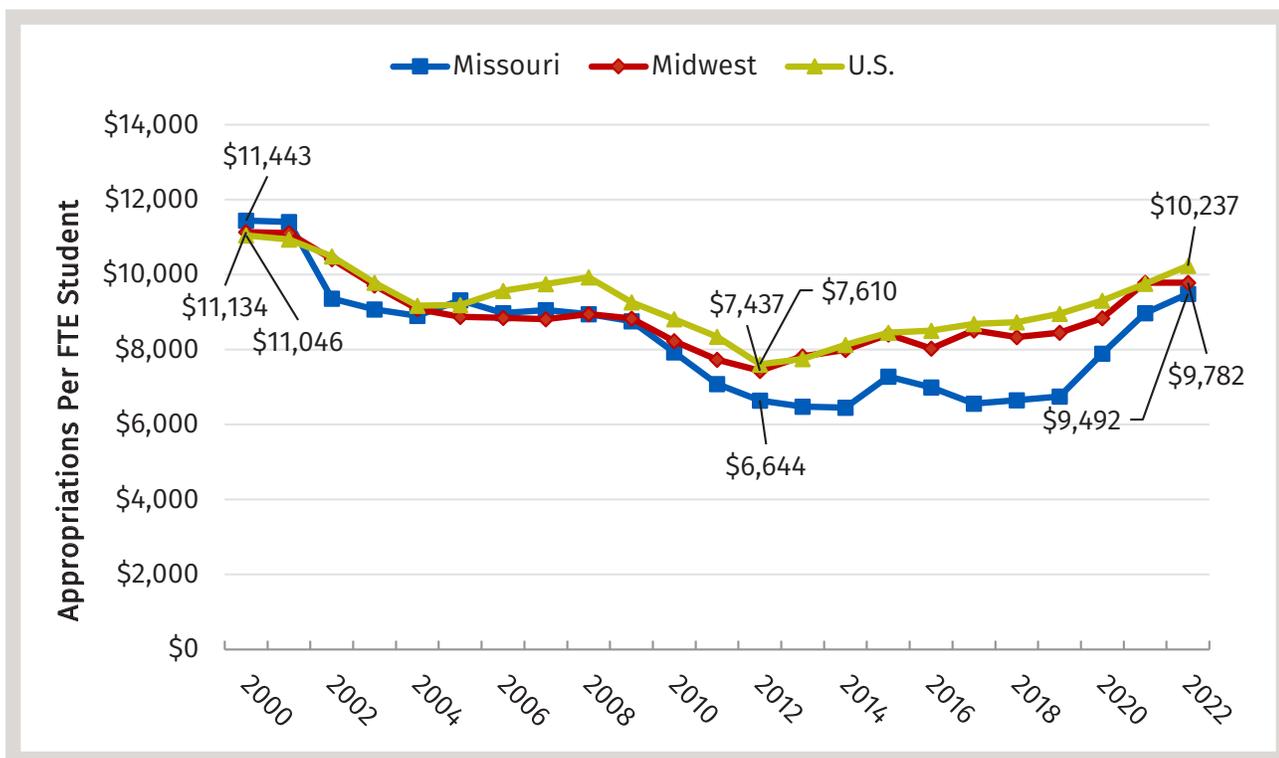
Educational appropriations. State and local educational appropriations for higher education include funds used for public institutional operating expenses and financial aid for students attending public institutions. These appropriations exclude spending for research, agriculture-related programs, and medical education, as well as support for private institutions or students attending them.

State funding effort. The state’s overall effort to fund higher education is portrayed as state and local fiscal support for higher education per \$1,000 of personal income. This is one measure for assessing the level of funding for higher education relative to available resources. State and local fiscal support consists of state

tax appropriations, local tax support, additional non-tax funds such as lottery revenue that support higher education, and funds appropriated to other state entities for specific higher education expenditures or benefits.

Need-based aid. Two indicators reflect state investments in student grant aid. First, the level of state funding for grant aid based on financial need (relative to solely merit or other criteria) is measured by the amount of need-based grant aid per full-time equivalent (FTE) student. Second, the state’s commitment to providing need-based aid is measured by need-based aid as a percent of total grant aid allocation.

Figure 9. State and Local Educational Appropriations for Higher Education Per FTE Student



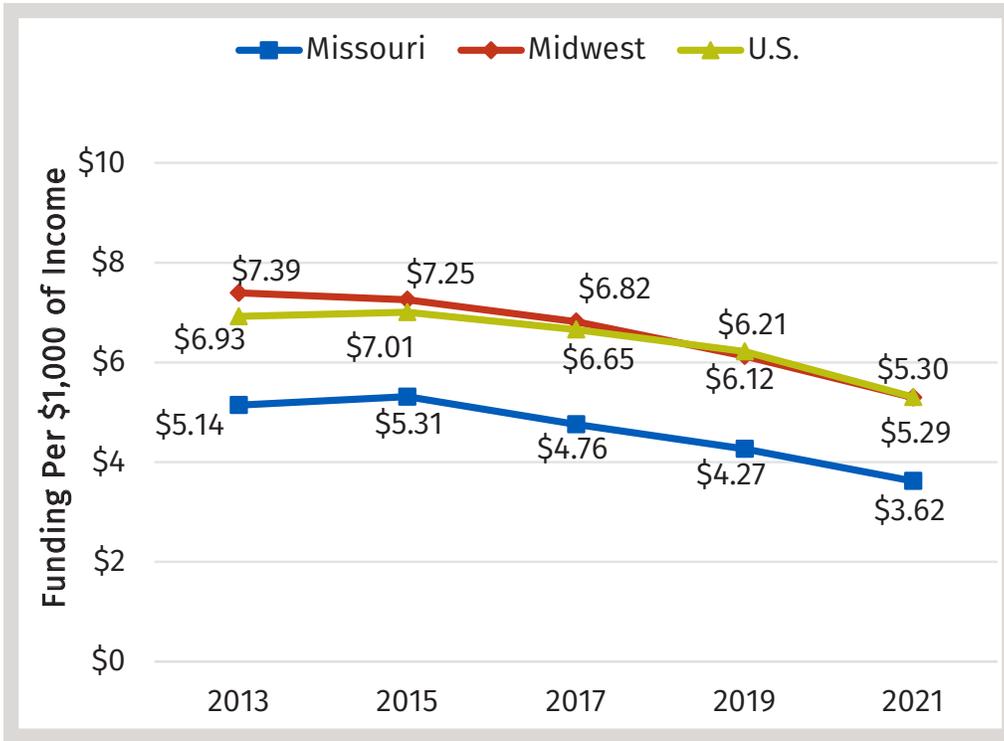
Source. SHEEO. (2023). *State higher education finance: FY 22*. Note. Estimates have been adjusted for inflation to 2022 dollars using the Higher Education Cost Adjustment.



State and local funding for higher education per FTE student in Missouri increased between 2021 and 2022 in inflation-adjusted dollars, though funding is slightly below the Midwest level.

Finance

Figure 10. State and Local Fiscal Support for Higher Education Per \$1,000 of Personal Income

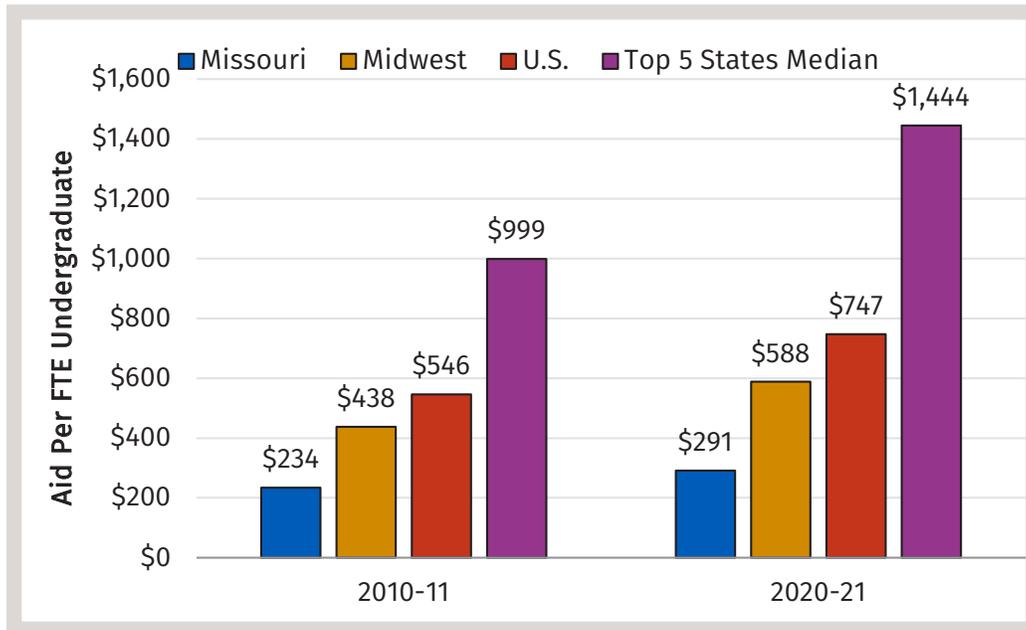


Source: SHEEO. (2023). *State higher education finance: FY 22*. Note. Estimates have been adjusted for inflation to 2021 dollars using the Consumer Price Index.



Funding per \$1,000 of personal income in Missouri was below the Midwest and national levels in 2021.

Figure 11. State Need-Based Grant Aid Per FTE Undergraduate Student

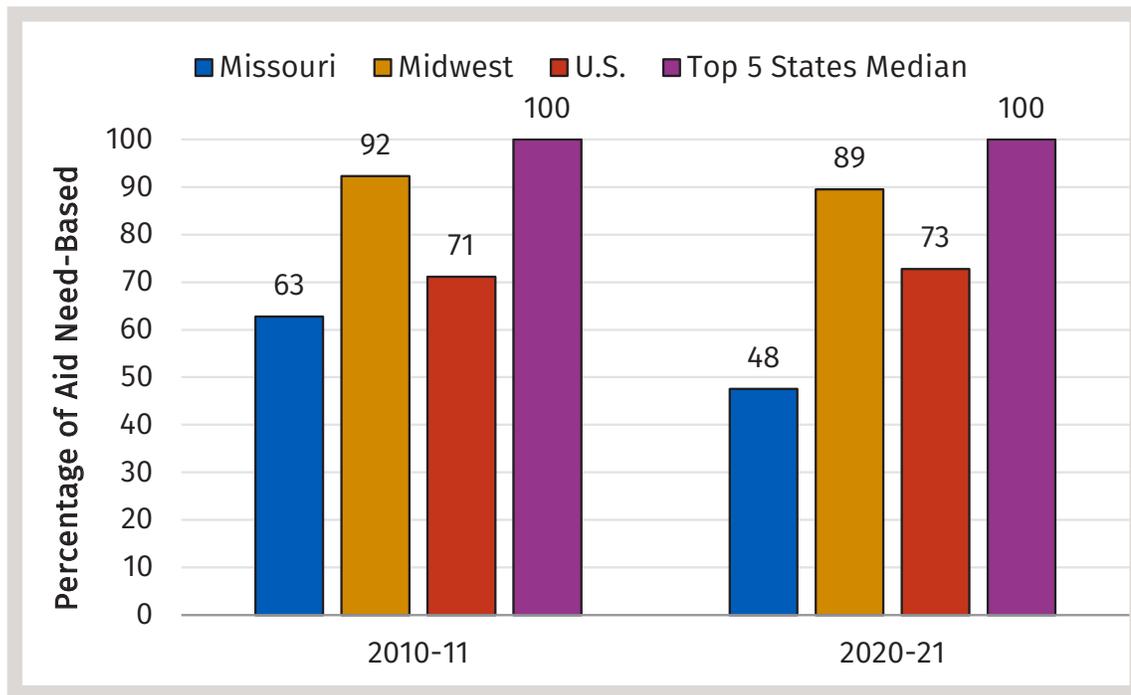


Source. National Association of State Student Grant and Aid Programs. (2011, 2021). *Annual survey report on state-sponsored student financial aid*. Note. Estimates have been adjusted for inflation to 2021 dollars using the Consumer Price Index. Top 5 States, 2020-21: WA, NJ, CA, VA, IN.



State need-based grant aid in Missouri increased over the past decade but was below the Midwest and national benchmarks in 2020-21.

Figure 12. Percentage of State Aid Defined as Need-Based



Source. National Association of State Student Grant and Aid Programs. (2011, 2021). *Annual survey report on state-sponsored student financial aid*. Top 5 States, 2020-21 (includes ties): AZ, HI, KS, ME, MN, MT, RI, TX, CA, IL, VT, NE.



Missouri allocates 48 percent of its grant aid based on financial need (rather than solely merit or other criteria), which is below the Midwest and national benchmarks.

Higher Education in Focus is produced on a periodic basis. The 2023 supplement supports *Higher Education in Focus 2019*. As MHEC prepares for the next version of *Higher Education in Focus*, feedback and ideas are welcomed on the content that will help support your state's work.



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