

# 2024 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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MHEC would like to acknowledge the helpful feedback of members of the <u>Review Panel</u> for State Policy and Performance Data.

Correspondence concerning this report should be sent to Aaron Horn, Associate Vice President of Research, <a href="mailto:aaronh@mhec.org">aaronh@mhec.org</a>.

Additional indicators are available in the MHEC Interactive Dashboard: <a href="mailto:mhec.org/dashboard">mhec.org/dashboard</a>.

Updates to this report may be found at: <a href="mailto:mhec.org/policy-research">mhec.org/policy-research</a>.

#### 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 six areas: Preparation, Participation, Affordability, Completion, Finance, and Workforce. 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 2024 Performance Update contains the same indicators presented in previous updates, along with a new Workforce category that focuses on unemployment rates, the retention of college graduates in the state workforce, and the earnings premium of a college

credential. Returning to the update after a three-year hiatus is the percentage of persons aged 18-24 who are currently enrolled or have completed some college or higher by race and ethnicity, as the requisite data are now available. Sampling issues during the 2020 administration of the American Community Survey did not allow reliable estimation of enrollment rates by race and ethnicity for the previous three versions of the *Performance Update*.<sup>1</sup>

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 <a href="mailto:mhec.org/policy-research">mhec.org/policy-research</a> for the full report. Additional indicators are available through the <a href="mailto:online">online</a> interactive dashboard.

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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	Median Earnings and Earnings Premium by Educational

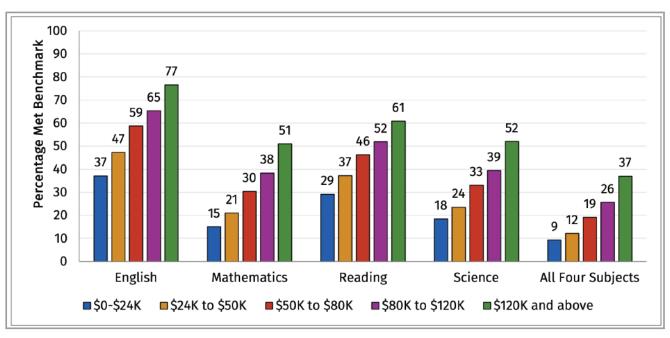
<sup>&</sup>lt;sup>1</sup>For more information, see U.S. Census Bureau. (2021). An assessment of the COVID-19 pandemic's impact on the 2020 ACS 1-year data. See also the <a href="Interactive\_Dashboard">Interactive\_Dashboard</a> for enrollment by race/ethnicity in previous years.

#### **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 preparedness of students who opted out of ACT testing but still enrolled in college under test-optional admission 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



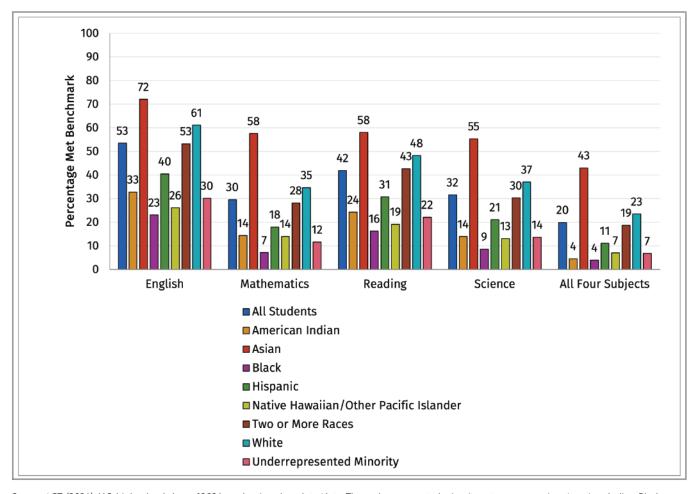
Source. ACT. (2024). U.S. high school class of 2024 graduating class data.



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. (2024). *U.S. high school class of 2024 graduating class data*. 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.



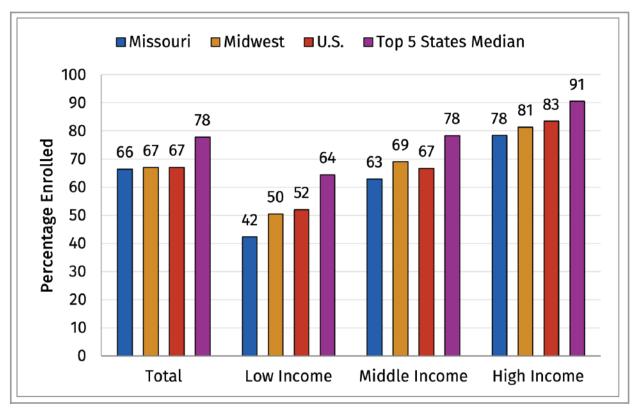
Forty-three percent of tested Asian graduates in Missouri met or exceeded the ACT college readiness benchmarks in all four tested subjects, compared to 23 percent of White graduates and 7 percent of underrepresented minority graduates.

#### **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 family income and racial/ethnic 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.

Figure 3. Percentage of Dependent 18- to 24-Year-Old Residents Who Are Currently Enrolled or Have Completed Some College or Higher by Family Income



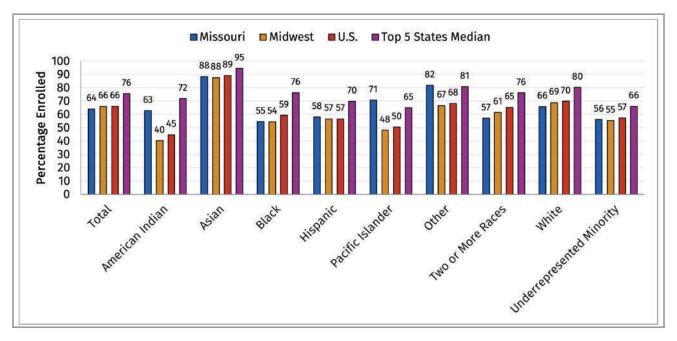
Source. U.S. Census Bureau. (2018, 2019, 2020, 2021, 2022). Current Population Survey. Five-year estimates. Top 5 States, 2018-2022: Total Population: NJ, RI, IL, NY, CT; Low Income: NY, CT, NJ, RI, CA; Middle Income: NJ, RI, CT, NY; High Income: IL, RI, MD, NJ, NY.



The enrollment rates of dependents from low-income families and middle-income families in Missouri are considerably lower than the enrollment rate of 18- to 24-year-olds from high-income families. Similar disparities in college enrollment rates are seen across the Midwest and the nation.

#### **PARTICIPATION**

Figure 4. Percentage of Persons Aged 18-24 Who Are Currently Enrolled or Have Completed Some College by Race and Ethnicity



Source. U.S. Census Bureau. (2021, 2022, 2023). American Community Survey one-year public use microdata sample. Top 5 States, 2021-2023: RI, MA, ND, NY, CT. Note. The underrepresented minority category comprises American Indians, Blacks, Hispanics, and Pacific Islanders. The "Other" and "Two or More Races" categories only include respondents who reported their ethnicity as non-Hispanic. Some Asian subgroups are underrepresented in higher education (e.g., Hmong) but are not separated from the Asian category due to small sample sizes. The estimate for Pacific Islanders in Missouri should be interpreted with caution due to a high margin of error.



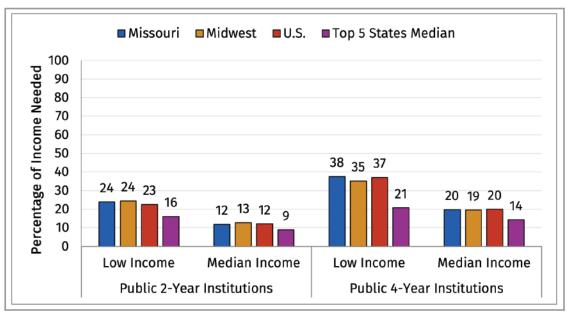
About 56 percent of underrepresented minorities in Missouri (ages 18-24) are currently enrolled or have completed some college, compared to 66 percent of Whites.

#### **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 (\$82,498 for Missouri in 2022) and families with low income, which is defined as an income equal to the federal poverty level for a family of four (\$27,750 in 2022). 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



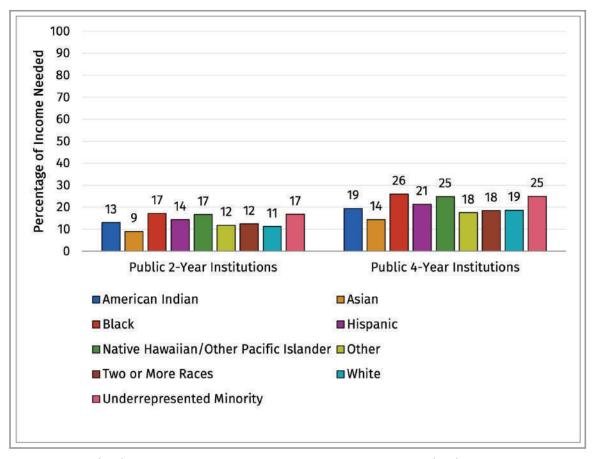
Source. NCES IPEDS. (2022). Student financial aid and net price, winter 2022-23. U.S. Census Bureau. (2022). American Community Survey one-year estimates, Table B19125: Median family income in the past 12 months by presence of own children under 18 years. Top 5 States, 2021-22: Public two-year institutions: (Low-income students: KY, IL, MS, AL, MI) (Median-income students: RI, VA, AL, IL, NC); Public four-year institutions: (Low-income students: FL, AK, IN, WY, HI) (Median-income students: UT, AK, HI, ND, FL).



The percentage of income needed to attend public two-year colleges in Missouri meets or is below the Midwest benchmark for students from both low-income and median-income families. The percentage of income needed for public four-year enrollment in Missouri is above the Midwest and national benchmarks for students from low-income families and meets the national benchmark 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 24 percent of family income, compared to 12 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. (2022). Student financial aid and net price, winter 2022-23. U.S. Census Bureau. (2022). 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. Some Asian subgroups are underrepresented in higher education (e.g., Hmong) but are not separated from the Asian category due to small sample sizes. The estimates for Pacific Islanders in Missouri should be interpreted with caution due to a high margin of error.



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

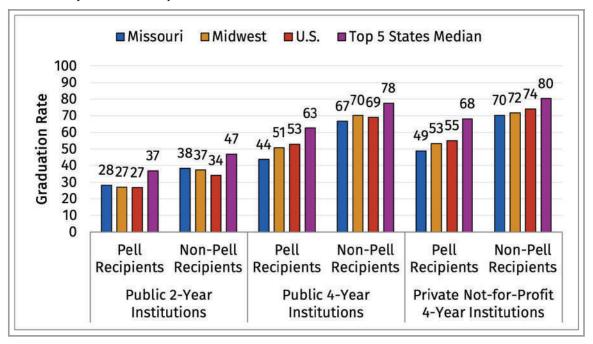
#### COMPLETION

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 2019 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 2016 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 2024-25, a dependent student from a family with a household size of four (two parents and two children) and an adjusted gross income of \$76,313 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



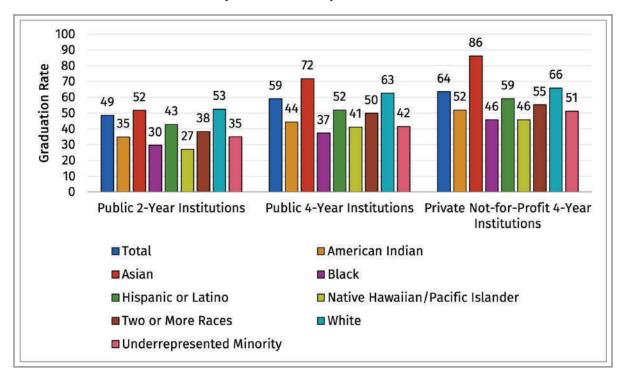
Source. NCES IPEDS. (2022). *Graduation rate, winter* 2022-23. Top 5 States, 2022: Public two-year: (Pell recipients: SD, KY, MS, WI, FL) (Non-Pell recipients: SD, ND, KY, MS, FL); Public four-year: (Pell recipients: FL, CA, NJ, IA, NH) (Non-Pell recipients: DE, VA, CA, FL, NJ); Private not-for-profit four-year: (Pell recipients: MA, UT, CA, CO, MD) (Non-Pell recipients: MA, CT, RI, CA, PA).



Graduation rates at public two-year institutions in Missouri for both Pell and non-Pell recipients 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. (2022). *Graduation rate, winter 2022-23*. 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 underrepresented students in Missouri were lower than the graduation rates of Asian and White students across all types of institutions. However, data available on MHEC's Interactive Dashboard show that the graduation rates for Hispanic and White students attending public two-year colleges in Missouri surpassed the national benchmarks, and the graduation rates for American Indian students at public four-year institutions in Missouri surpassed the Midwest and national benchmarks.

**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. State and local appropriations in this indicator are used for general operations, agriculture-related programs, public student aid, medical education, and support for independent institutions or students attending them.

**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 allocations.

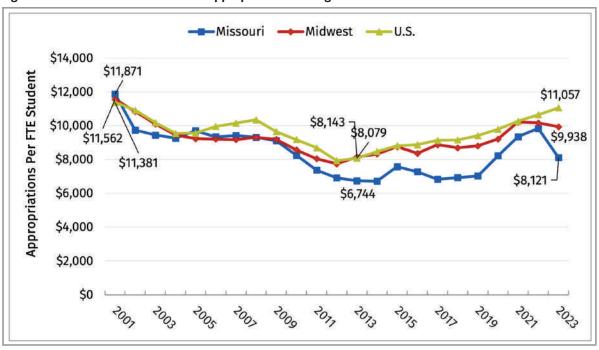


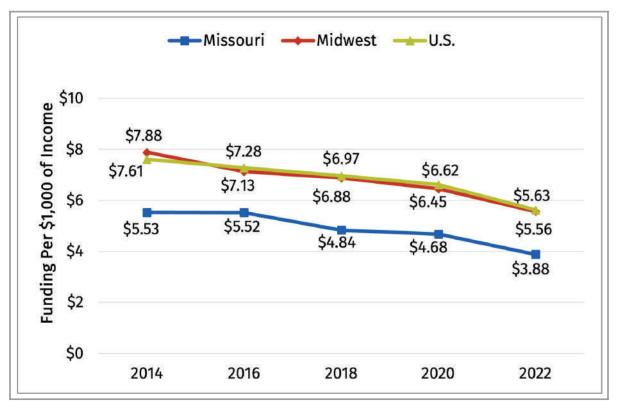
Figure 9. State and Local Educational Appropriations for Higher Education Per FTE Student

Source. SHEEO. (2024). State higher education finance: FY 23. Note. Estimates have been adjusted for inflation to 2023 dollars using the Higher Education Cost Adjustment.



State and local funding for higher education per FTE student in Missouri decreased between 2022 and 2023 in inflation-adjusted dollars, and funding is below the Midwest and national levels.

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



Source. SHEEO. (2024). State effort and capacity to fund higher education. State Higher Education Finance. Note. Estimates have been adjusted for inflation to 2022 dollars using the Consumer Price Index.



Funding per \$1,000 of personal income in Missouri was below the Midwest and national levels in 2022.

■ Missouri ■ Midwest ■U.S. ■ Top 5 States Median \$1,800 \$1,552 \$1,600 Aid Per FTE Undergraduate \$1,305 \$1,400 \$1,200 \$1,000 \$778 \$800 \$620 \$608 \$600 \$491 \$337 \$400 \$263 \$200 \$0 2011-12 2021-22

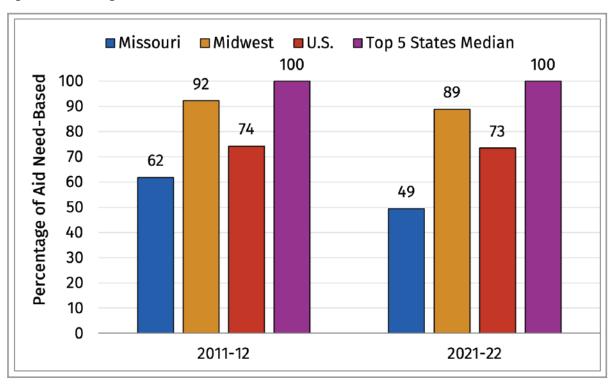
Figure 11. State Need-Based Grant Aid Per FTE Undergraduate Student

Source. National Association of State Student Grant and Aid Programs. (2012, 2022). Annual survey report on state-sponsored student financial aid. Note. Estimates have been adjusted for inflation to 2022 dollars using the Consumer Price Index. Top 5 States, 2021-22: WA, NJ, VA, CA, IL.



State need-based grant aid in Missouri increased over the past decade but was below the Midwest and national benchmarks in 2021-22.

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



Source. National Association of State Student Grant and Aid Programs. (2012, 2022). Annual survey report on state-sponsored student financial aid. Top 5 States, 2021-22 (includes ties): AZ, HI, ME, MT, RI, TX, MN, CA, IL, VT, KS.



Missouri allocates 49 percent of its grant aid based on financial need (rather than solely merit or other criteria), which is below the Midwest and national benchmarks.

Unemployment rates. This indicator provides comparisons of average unemployment rates among adults by educational attainment level. The unemployment rate reflects the average percentage (over a 12-month period) of persons aged 25 and older in the civilian labor force who are not employed, available for work (except for temporary illness), and have made specific efforts to find employment. Unemployment rates are shown for all persons aged 25 and older as well as for those whose highest level of education is (a) a high school diploma or equivalent; (b) some college but no degree or an associate degree; and (c) a bachelor's degree or higher. College certificates are included within the "some college/ associate degree" category.

**Cohort employment rates.** This indicator shows the percentage of college graduates employed anywhere in the United States 1, 5, and 10 years after completing a certificate, associate degree, or bachelor's degree. The data are organized by the state of the graduating institution and include graduates from 2006 to 2015. The number and types of institutions contributing data vary by state.

**College graduate retention.** This indicator shows the percentage of employed college graduates working in the state of their graduating institution 1, 5, and 10 years after completing a certificate, associate degree, or bachelor's degree. The indicator includes college graduates from 2006 to 2015. The number and types of institutions currently providing data vary by state.

College graduate earnings. The earnings level of college graduates is assessed through a comparison of median earnings by educational attainment level and the earnings premium. Median earnings is calculated among adults ages 25 and older with earnings over the previous 12 months whose highest level of education is a high school diploma (including equivalency), some college credit (including a certificate) or an associate degree, or a bachelor's degree. The college earnings premium is defined by the difference between the median earnings of adults with a specific level of postsecondary education and adults with only a high school diploma.

■ Missouri ■ Midwest ■ U.S. ■ Top 5 States Median 10 9 8 Percent Unemployed 7 5 4.0 3.9 3.9 2.8 2.8 3.0 2.9 3.0 2.5 3 2.2 2.1 1.7 1.7 1.6 1.5 2 1.0 1 0 High School Diploma Total Some College or Bachelor's Degree or Higher Associate Degree

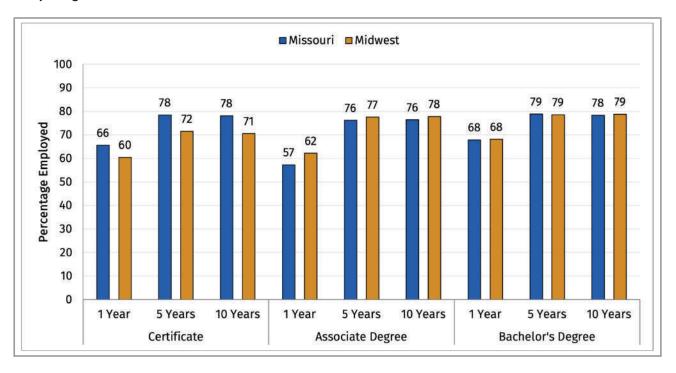
Figure 13. Average Unemployment Rate by Educational Attainment

Source. Bureau of Labor Statistics. (2023). Employment status of the civilian noninstitutional population 25 years and older, by educational attainment. Top 5 States (includes ties), 2023: Total Population: VT, ND, SD, NE, WY, AL, MD, NH; High School Diploma: SD, ND, NH, RI, WY, AL, MT; Some College or Associate Degree: VT, ND, HI, SC SD, AR, IA, UT; Bachelor's Degree of Higher: ND, NE, VT, WV, AK, SD, WY, AL.



Unemployment rates in 2023 were lower among adults with at least some postsecondary education, relative to those with only a high school diploma. In addition, the unemployment rate of bachelor's degree recipients in Missouri is below the national benchmark.

Figure 14. Percentage of College Graduates Employed Anywhere in the United States 1, 5, and 10 Years After Completing a Credential

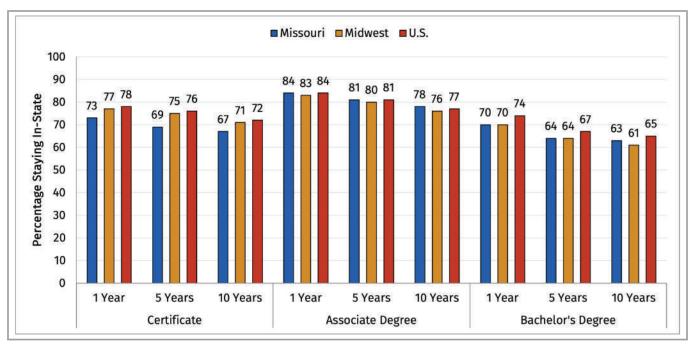


Source. U.S. Census Bureau. (2006-2010, 2007-2009, 2011-2015, 2013-2015). Postsecondary Employment Outcomes (PSEO) public-use data. Note. Data for Missouri were provided by the Missouri Department of Higher Education and Workforce Development and represent 50% of graduates from public and private institutions. The Midwest percentages reflect data from participating institutions in 9 of 12 states: IL, IN, IA, MI, MN, MO, OH, SD, and WI. The Midwest benchmarks include graduates from both public and private institutions. Ten-year employment outcomes are only available for graduates from 2006 to 2010.



The majority of Missouri certificate and degree recipients were employed 1, 5, and 10 years after completing a credential, and the percentages for certificate completers are above the Midwest benchmarks.

Figure 15. Percentage of Employed College Graduates Working in State of Graduating Institution 1, 5, and 10 Years After Completing a Credential

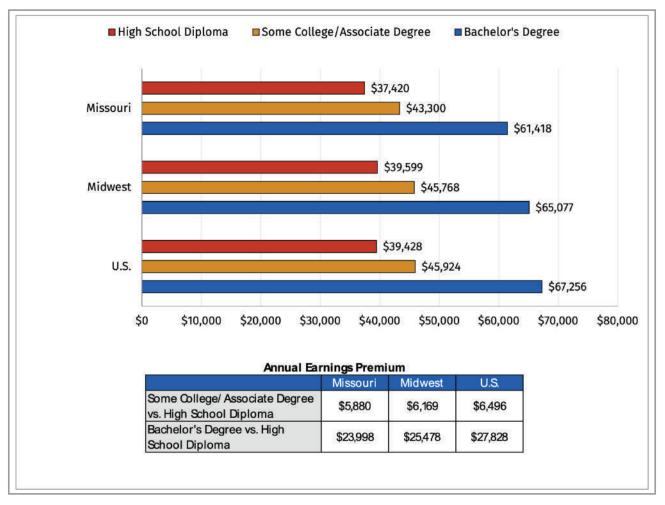


Source. U.S. Census Bureau. (2006-2010, 2007-2009, 2011-2015, 2013-2015). Postsecondary Employment Outcomes (PSEO) public-use data. Note. Data for Missouri were provided by the Missouri Department of Higher Education and Workforce Development and represent 50% of graduates from public and private institutions. The Midwest percentages reflect data from participating institutions in 9 of 12 states: IL, IN, IA, MI, MN, MO, OH, SD, and WI. The U.S. percentages reflect data from participating institutions in 30 states. The Midwest and U.S. benchmarks include graduates from both public and private institutions. Ten-year retention outcomes are only available for graduates from 2006 to 2010. The estimates include graduates with either in-state or out-of-state residency status upon initial enrollment.



The majority of employed Missouri certificate and degree recipients were working in Missouri 1, 5, and 10 years after completing a credential, and the percentages of associate degree and bachelor's degree graduates working in Missouri met or surpassed the Midwest benchmarks.

Figure 16. Median Earnings and Earnings Premium by Educational Attainment



Source. U.S. Census Bureau. (2023). American Community Survey one-year estimates, Table B20004: Median earnings in the past 12 months by sex by educational attainment for the population 25 years and over.



Individuals with some college credit (including a certificate) or an associate degree in Missouri earn an additional \$5,880 annually compared to high school graduates. For those holding a bachelor's degree, the earnings premium in Missouri is \$23,998.

Higher Education in Focus is produced on a periodic basis. The 2024 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.





#### MIDWESTERN HIGHER EDUCATION COMPACT

105 Fifth Avenue South, Suite 450 Minneapolis, MN 55401 PHONE: (612) 677-2777 FAX: 612-767-3353 E-MAIL: mhec@mhec.org

VISIT MHEC'S WEBSITE AT MHEC.ORG