



Graduates and the Labor Market

*Leveraging Mississippi's Higher Education Pipeline
for Added Economic Growth*

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Leveraging Mississippi's Higher Education Pipeline for Added Economic Growth

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THE QUESTION

Does Mississippi have the workforce capacity to compete for the fastest growing jobs in the nation that require a four-year college degree? The purpose of this brief is to show that Mississippi's Institutions of Higher Learning, when leveraged as a value proposition for economic development, can support efforts to attract these jobs and play a role in reversing trends where many of the state's college-educated workers are leaving the state; a problem known as "*brain drain*."

This brief presents data on the top 10 fastest-growing groups of jobs in the nation. National trends and projections indicate that many of the fastest growing career opportunities over the next decade will require a four-year college degree.¹ The good news is that data presented here show that Mississippi's public university system is already producing a steady pipeline of graduates with degrees that align with these emerging opportunities. This brief also presents information on the ongoing concern of brain drain in Mississippi and discusses the portion of Mississippi IHL graduates who eventually return home for employment in high-growth fields.

The data presented in this brief indicate that Mississippi can leverage its college graduates for added economic growth that would also create opportunities for past graduates to return home. This can be jump-started through economic development initiatives designed to attract high-skill employment opportunities that will help the state better retain current and future graduates of Mississippi's university system as well as bring home, at higher rates, past graduates who moved away but would prefer to call Mississippi home. As college graduates power additional economic growth, more employment opportunities will be created for even more graduates who desire to return home. This growth loop has the potential to positively impact brain drain trends, keep the state's labor market competitive for all jobs, and help Mississippi's economy to flourish.



THE ANALYSIS

Data for this analysis are drawn from three primary sources: the U.S. Department of Labor's Bureau of Labor Statistics (BLS) Employment Projections Program, the National Center for Education Statistics, and two recent reports created for IHL's Office of Strategic Research.² BLS data provide the current and projected employment for major job groups in the U.S. and Mississippi. The National Center for Education Statistics provides a crosswalk that aligns postsecondary degree programs with their relevant jobs. The IHL reports provide the number of graduates from the state's public universities, their in-state employment outcomes, and information on graduates not in the state's workforce after graduation but returning within the subsequent 10 years.

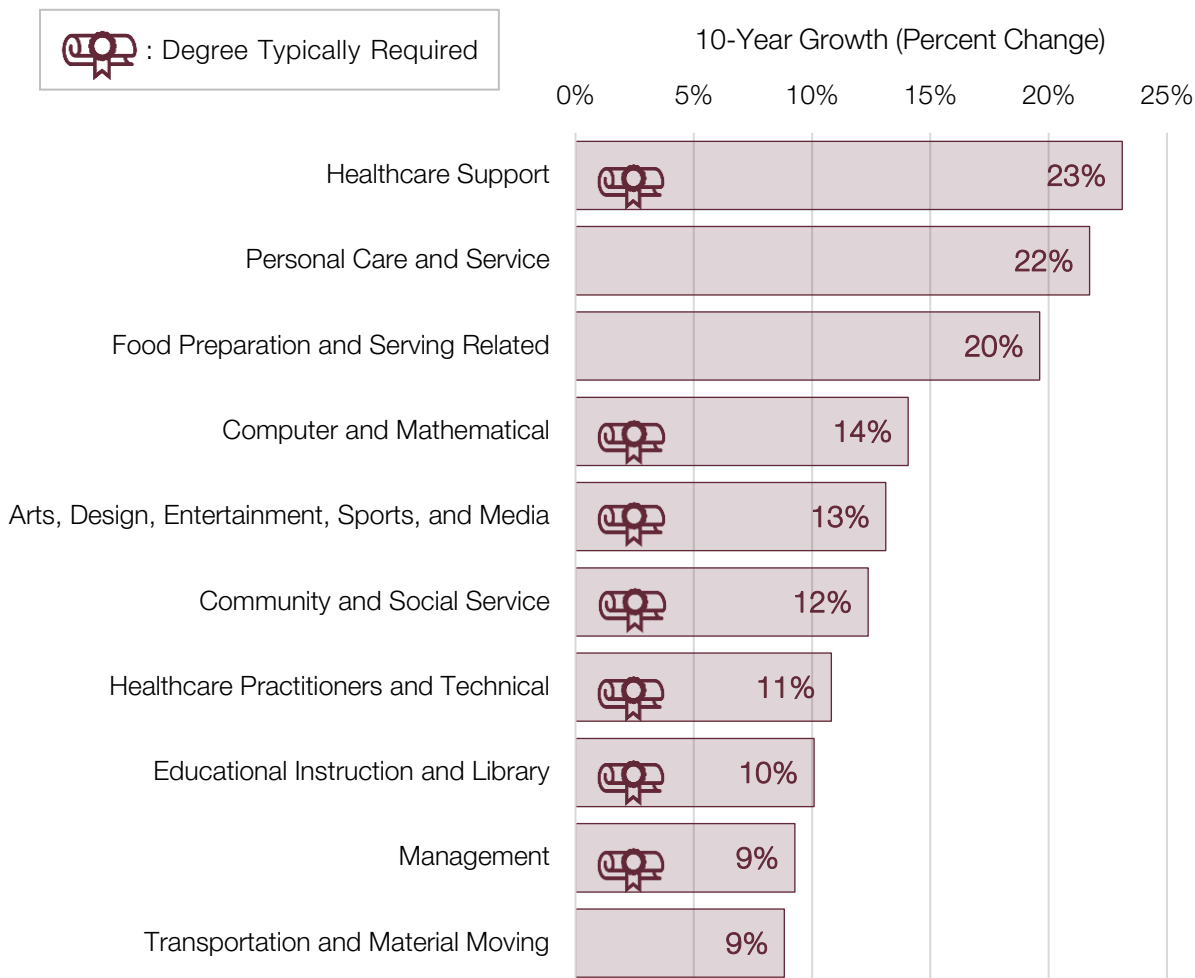
MAKING THE CONNECTIONS

The data show that the current career landscape in Mississippi is, like the nation, dominated by jobs that do not typically require a four-year college degree. In 2020, 68 percent of Mississippi's jobs only required a 2-year degree or less.

However, the BLS predicts that the fastest growing job groups over the next decade will be dominated by those requiring four years of postsecondary education. More specifically, jobs requiring four-year degrees are expected to grow nearly 12 percent by 2030, double the rate of jobs that will require less education.

As a result of this higher education-centric growth, seven of the top ten fastest-growing job groups in the nation will require at least a bachelor's degree (see Figure 1).³ If Mississippi keeps pace with this national growth, by 2030 the state's labor market will have created nearly 40,000 additional jobs for graduates with Bachelor's, Master's, or Doctoral degrees.

FIGURE 1: THE NATION'S FASTEST-GROWING OCCUPATIONS TYPICALLY REQUIRE A BACHELOR'S, MASTER'S, OR DOCTORAL DEGREE



To take full advantage of this labor market shift, Mississippi’s employers will require a strong supply of university-educated employees. Fortunately, Mississippi’s 4-year education pipeline is already continuously producing a steady supply of graduates, most of whom have deep ties to the state. Mississippi’s eight public universities produce an average of more than 18,000 graduates each year — over 13,000 of whom are Mississippi residents (see Figure 2). Even more importantly, nearly 70 percent of Mississippi’s recent graduates have earned degrees in fields aligned with these fastest-growing occupations (see Figure 3).

FIGURE 2: MISSISSIPPI’S UNIVERSITIES GRADUATE MORE THAN 13,000 RESIDENTS EACH YEAR

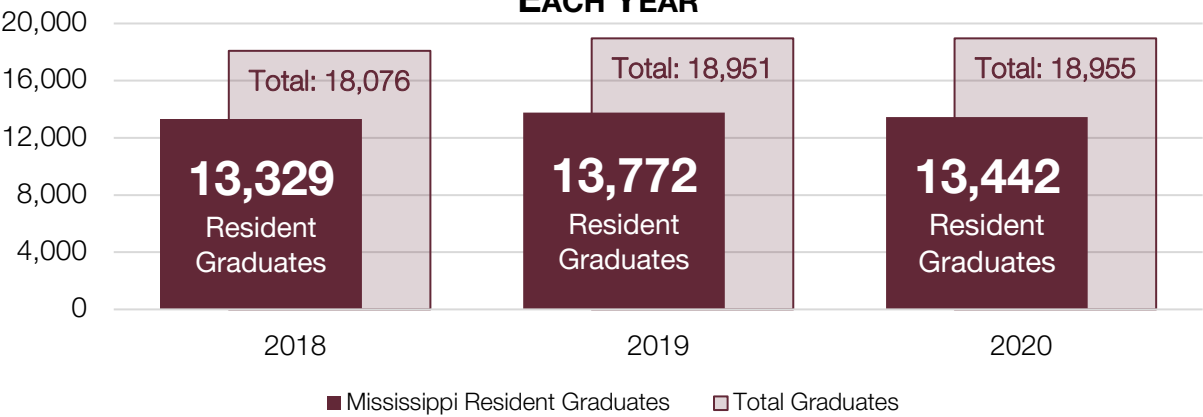
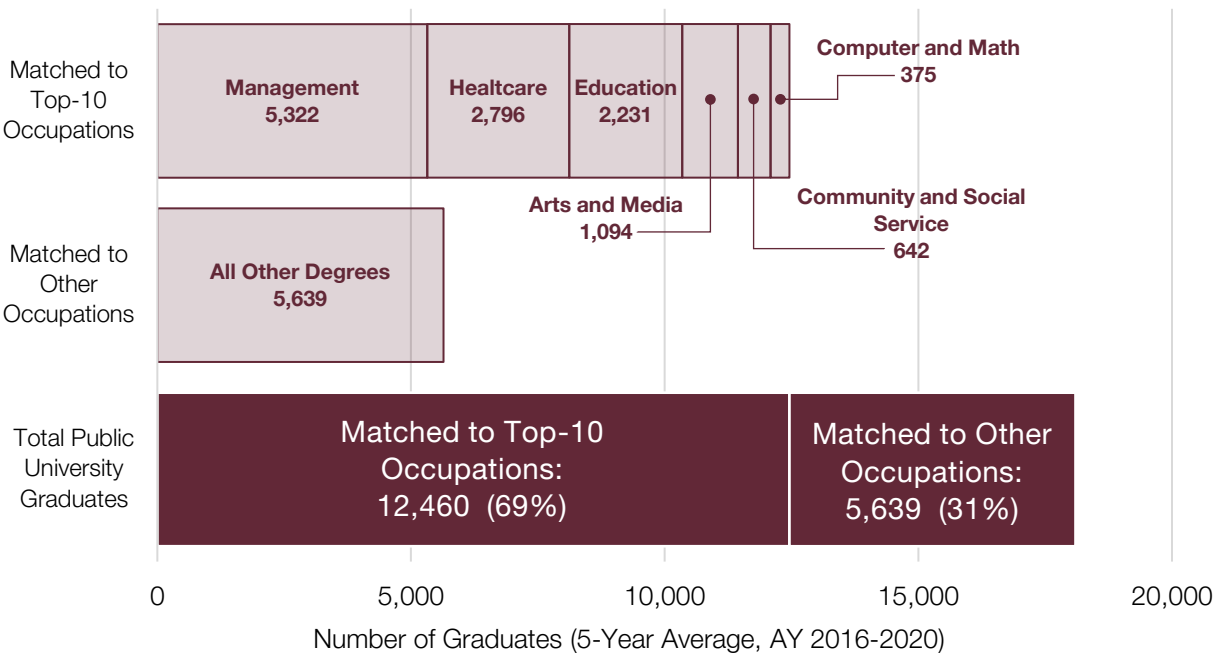


FIGURE 3: NEARLY 70% OF MISSISSIPPI’S GRADUATES ARE ALREADY PREPARED FOR THE NATION’S FASTEST-GROWING OCCUPATIONS

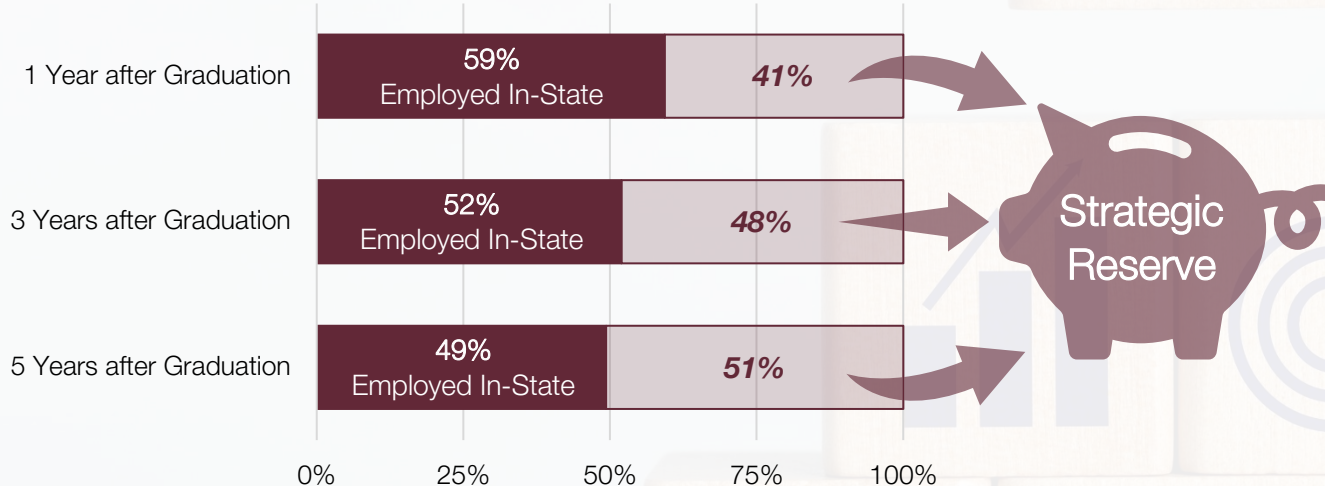


GROWTH AND PROSPERITY

Through strategic efforts to keep a larger percentage of our college graduates in-state, Mississippi can combat its perceived lack of competitiveness and attract additional economic investment. Presently, brain drain is short-circuiting Mississippi's full potential. Like all states, Mississippi loses a portion of its highly educated population to jobs elsewhere. However, Mississippi tends to have a high level of brain drain when compared to other states. A recent national report⁴ shows that Mississippi ranks 14th in the nation on a measure of "gross" brain drain—the loss of highly educated adults leaving the state relative to those that stay. The report shows that Mississippi ranks particularly high—5th in the nation—when the flow of highly educated leavers is compared to those entering the state (i.e., net brain drain), and that the state has experienced the second largest increase in brain drain in the nation from 1970-2017.

In-state studies show similar results. A 2019 workforce outcomes report on IHL graduates shows that 59 percent of the state's university graduates are working in Mississippi within a year of completing their degrees. This in-state employment rate drops to 52 percent by the third year after graduation, and 49 percent by the fifth year after graduation (see Figure 4).⁵ These results reflect the findings of a 2022 report released by Mississippi's State Auditor, who found that the 10-year employment rate fell below 47%.⁶

FIGURE 4: MISSISSIPPI'S GRADUATES REPRESENT A STRATEGIC RESERVE OF HUMAN CAPITAL



Although this situation is not ideal, the graduates leaving the state can be viewed as a **strategic reserve** of highly educated and experienced individuals available to return to Mississippi for the right employment opportunities that creates a value proposition for economic development. In fact, research suggests that Mississippi is already benefiting from a portion of this strategic reserve of workforce. A 2022 analysis of the long-term outcomes of Mississippi's IHL graduates found that, of those not working in the state within a year of graduating, 24 percent entered the state's workforce within 10 years.⁷ Moreover, the analysis found that over 60 percent of these graduates were working in high-demand sectors aligned with the nation's fastest-growing job groups.

LOOKING FORWARD

Mississippi has an opportunity to establish a positive feedback loop of continuous economic growth driven by the state's robust pipeline of college graduates. This report shows that creating opportunities in the nation's fastest growing job clusters could activate a "reverse brain drain" in Mississippi. Currently, a fraction of the state's college-educated former-residents are returning to the state to accept jobs in these fields, and it is reasonable that many more would return if the right jobs were available. The evidence indicates that Mississippi's public universities are preparing graduates for many of the fastest-growing jobs of the future. This suggests that initiatives to create more knowledge-based jobs are highly likely to improve Mississippi's retention of university-trained graduates. Increased retention of graduates coupled with an influx of talent from the workforce strategic reserve can move Mississippi into an era of *economic growth driven by higher education*.

¹ According to CareerOneStop, a career resource sponsored by the U.S. Department of Labor, 40 percent of the fastest-growing careers between 2020 and 2030 will require a 4-year degree or higher. Data downloaded from <https://www.careeronestop.org/Toolkit/Careers/fastest-growing-careers.aspx> in September, 2022.

² Mississippi Institutions of Higher Learning, 2019, *Workforce Outcomes of Public University Graduates*; Mississippi Institutions of Higher Learning, Office of Strategic Research, 2022, *Employment Outcomes of IHL Graduates*.

³ The specific occupations contained within each of these groups can be found at www.bls.gov/oes/current/oes_stru.htm.

⁴ United States Congress Joint Economic Committee. 2019. Losing our Minds: Brain Drain across the United States. Accessible at www.jec.senate.gov/public/index.cfm/republicans/2019/4/losing-our-minds-brain-drain-across-the-united-states.

⁵ It is important to note that this analysis does not count graduates who are employed out of state, and it excluded graduates who subsequently enroll in graduate degree programs.

⁶ White, Shad, Michael Piazza, and Logan Reeves. 2022. Money Down the Brain Drain: Are Taxpayers Getting their Money's Worth? Office of the Mississippi State Auditor. Accessible at www.osa.ms.gov/documents/Special_Reports/Brain%20Drain%20Report.pdf.

⁷ Graduates who subsequently enrolled in graduate degree programs were excluded from this analysis.