

MISSISSIPPI

*Money Down the Brain Drain: Are
Taxpayers Getting Their Money's
Worth?*

April 2022

SHAD WHITE
State Auditor

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Special Projects



Money Down the Brain Drain: Are Taxpayers Getting Their Money's Worth?

Executive Summary

Mississippi is one of only three states to lose population according to the 2020 census. Data from the Census Bureau also shows Mississippi has lost over 60,000 “Millennials”¹ since the 2010 census²—nearly 10% of the state’s Millennial population. Many of these Millennials are college-educated or skilled workers, and their departure is known as “brain drain.” Failure to maintain and replenish our state’s most highly educated population could be disastrous for the economic future of Mississippi.³

Because part of the mission of the Mississippi Office of the State Auditor (OSA) is to evaluate public spending and ensure taxpayer money is being used effectively, Auditor White has commissioned a series of analyses to evaluate Mississippi’s investments into college students who leave Mississippi after graduation. Mississippi invested over \$1.5 billion from its general fund into its public university attendees from 2015-2018, but half of those students did not hold a job in the state by 2020. The data trends in this report also suggest the problem is worsening as time passes.

Aside from highlighting the cost of brain drain to the taxpayers, the report identifies the schools and degree programs most likely to produce graduates who stay in the state. This information about which universities and programs are best at using taxpayer dollars on graduates who will stay and contribute to the economy could inform future policy decisions about Mississippi’s public universities.

To show brain drain’s impact on our state, OSA commissioned a report from Mississippi’s State Longitudinal Data System (SLDS)—a state-funded resource that includes administrative records from more than 25 workforce, education, and human service agencies in the state.

Data used in this report came from the Mississippi Institutions of Higher Learning (IHL) and the Mississippi Department of Employment Security (MDES) over a 12-year period beginning in 2008. The analysis for the report was conducted by Mississippi State University’s National Strategic Planning and Analysis Research Center (NSPARC), which serves as the data clearinghouse for the SLDS. It used graduation statistics⁴ and employment records to determine how many Mississippi public-college graduates held a job in Mississippi 3, 5, and 10 years after leaving college.

¹ According to the [Pew Research Center](#), Millennials are considered people born between 1981 and 1996.

² Information is calculated from [Single Year of Age and Sex for the Civilian Population](#) file.

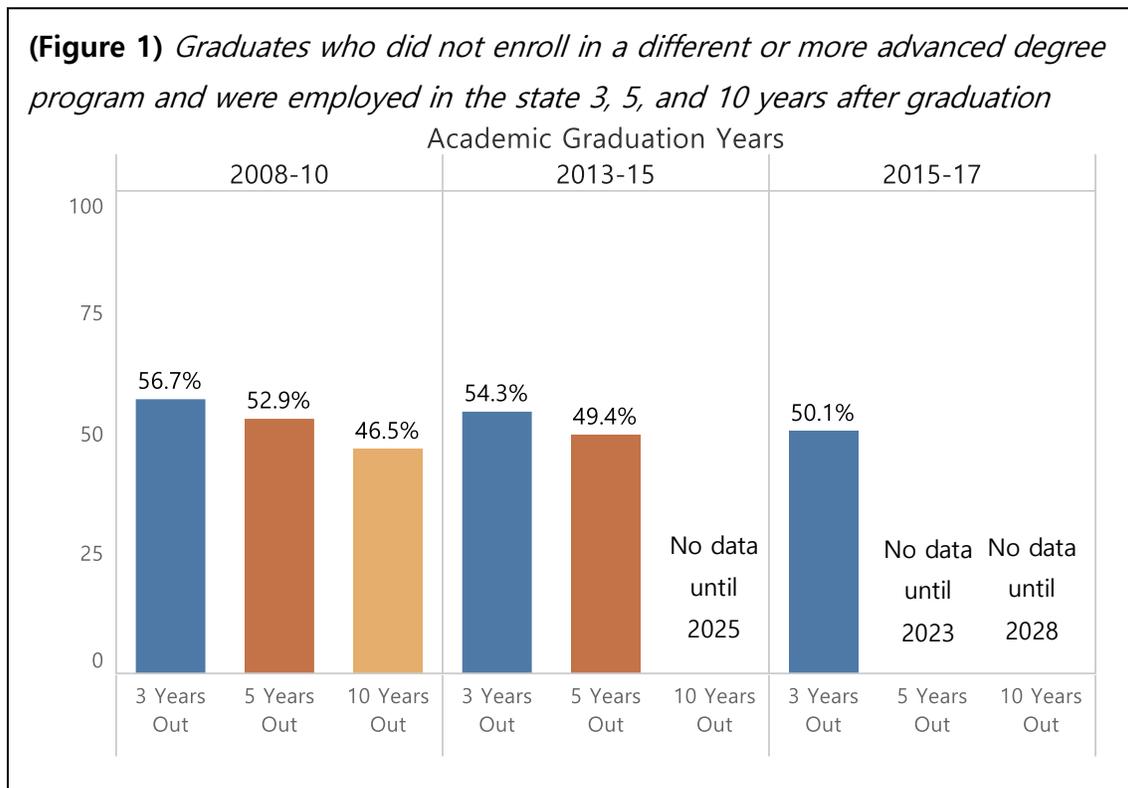
³ See [United States Congress Joint Economic Committee publication](#).

⁴ The University of Mississippi Medical Center is considered its own entity in this analysis.

Mississippi loses half its college graduates to brain drain within three years, and the problem is getting worse.

In 2020, only 50% of Mississippi’s public university graduates⁵ chose to work in the state three years after leaving college. As time passes, more college graduates will stop working for Mississippi companies. For example, fewer than 47% of all Mississippi public university graduates from 2008-2010 worked in the state by 2020—down from the 57% of those graduates who worked in Mississippi three years after leaving college. The data trends suggest substantially less than 50% of 2015-2017 graduates will be working for Mississippi companies by 2027. Moreover, an increasing number of graduates are choosing to not work in Mississippi at all.

Figure 1 shows 2008-2010 college graduates who worked in Mississippi for 3, 5, and 10 years; 2013-2015 graduates who worked for 3 and 5 years; and 2015-2017 graduates who were employed in Mississippi just 3 years after completing a degree at a public Mississippi university.



⁵ Only graduates who did not immediately re-enroll in a different degree program at a public college in Mississippi are considered.

Universities contribute to brain drain at different rates.

Graduates of some public universities were more likely to stay and work in Mississippi than others. For example, over 70% of Delta State University (DSU), Mississippi University for Women (MUW), Mississippi Valley State University (MVSU), and University of Mississippi Medical Center (UMMC) in-state graduates since 2008 worked in Mississippi at least 3 years after graduation. Fewer than 52% of 2015-2017 University of Mississippi (UM) in-state graduates and fewer than 58% of 2015-2017 Mississippi State University (MSU) in-state graduates held a job in the state by 2020. Figure 2⁶ shows the percentage of in-state graduates who worked in Mississippi 3 years after completing a degree at each of the public universities in Mississippi.⁷ The rate at which graduates of most public universities in Mississippi chose to work in Mississippi three years after leaving college declined over time.

(Figure 2) *Percentage of in-state graduates who worked in Mississippi 3 years after completing a degree at each of the public four-year universities in Mississippi*

School List	Academic Graduation Years		
	2008-10	2013-15	2015-17
UMMC	80.8%	80.0%	77.2%
MUW	69.7%	74.7%	76.9%
MVSU	71.6%	74.5%	74.1%
DSU	70.1%	73.9%	70.6%
JSU	68.0%	68.3%	67.7%
USM	69.0%	66.3%	64.9%
ASU	64.9%	64.3%	65.4%
MSU	64.2%	61.1%	57.7%
UM	54.8%	53.3%	51.7%

For perspective, University of Southern Mississippi (USM) and MSU produced approximately half of all in-state graduates included in this analysis who worked in Mississippi three years after leaving college. Also, among 2008-2010 graduates, more Mississippi residents completed a degree at UM and left the state within three years than worked in the state three years after completing a degree at MUW, MVSU, and UMMC combined. For both the 2013-2015 and 2015-2017 graduation groups, approximately the same number of in-state UM graduates left the state within three years of graduation as worked in the state three years after completing a degree at MUW, MVSU, and UMMC combined.

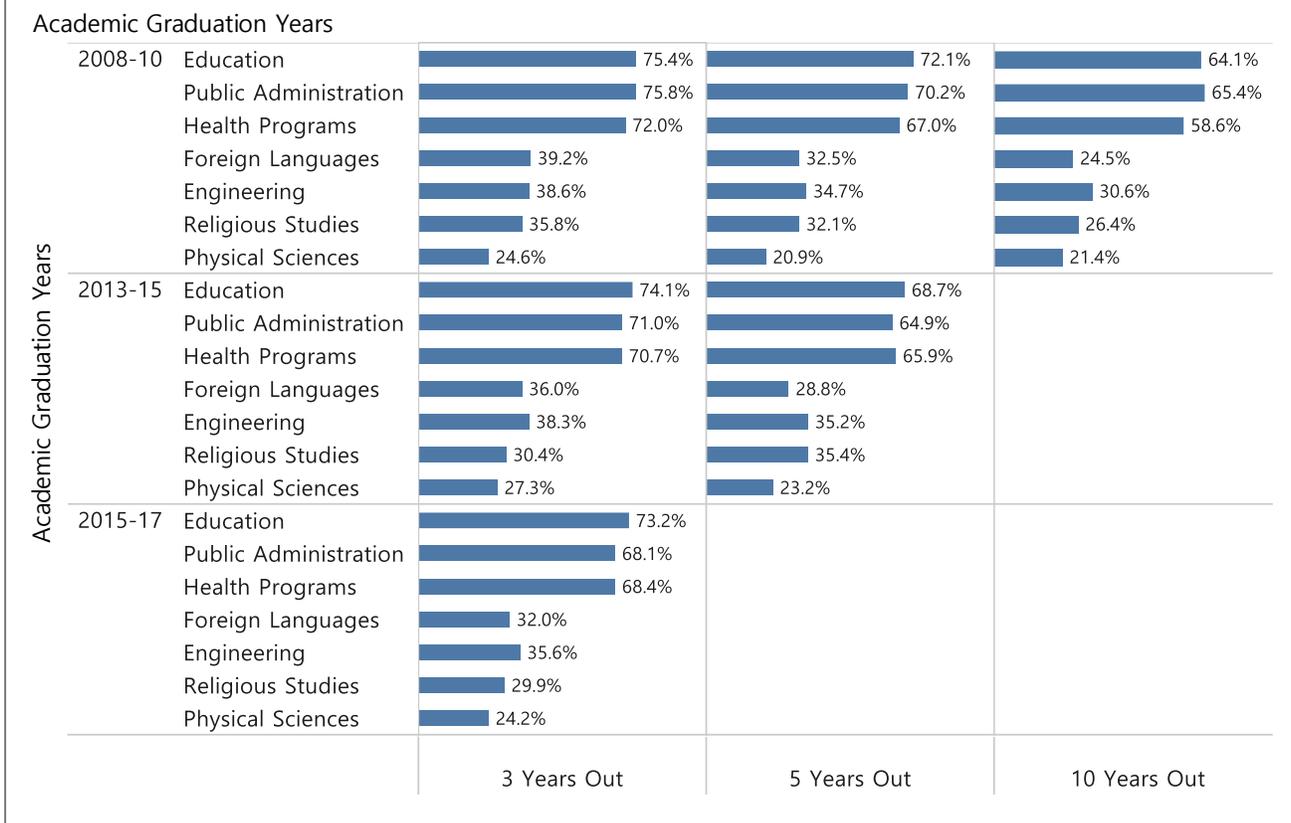
⁶ See Jackson State University (JSU) and Alcorn State University (ASU).

⁷ Only graduates who did not immediately re-enroll in a different degree program at a public college in Mississippi are considered.

Some career paths are more likely to lead to employment in Mississippi.

Academic programs were also analyzed to test whether graduates of certain programs were more or less likely to work in Mississippi after leaving college. Graduates of programs that train teachers, social workers, or nurses are most likely to work in Mississippi 3, 5, and 10 years after graduation. Graduates of physical sciences, philosophy/religion, foreign language, and engineering programs are least likely to work in Mississippi at any time after leaving college. Figure 3 compares the degree programs most likely to graduate a future Mississippi worker against the degree programs least likely to do so at 3, 5, and 10 years after graduation.⁸ The information in this figure remains generally consistent for all other graduation groups.

(Figure 3) *Percentage of graduates who worked in Mississippi after leaving college grouped by general degree program*



⁸ Only 2008-2010 graduates who did not immediately re-enroll in a different degree program at a public college in Mississippi are considered.

Figure 4 shows which specific degree programs⁹ were most likely to lead to employment in Mississippi three years after college¹⁰ for all graduates included in this analysis.

(Figure 4) *Specific degree-program of graduates most likely/least likely to work in the state three years after leaving college*

Most Likely to Work in Mississippi

1. Kindergarten / Preschool Education and Teaching
2. Social Science Teacher Education
3. Mathematics Teacher Education
4. Education, Other
5. Dental Hygiene / Hygienist
6. Social Studies Teacher Education
7. Elementary Education and Teaching
8. English / Language Arts Teacher Education
9. Child Development
10. Registered Nursing / Registered Nurse

Least Likely to Work in Mississippi

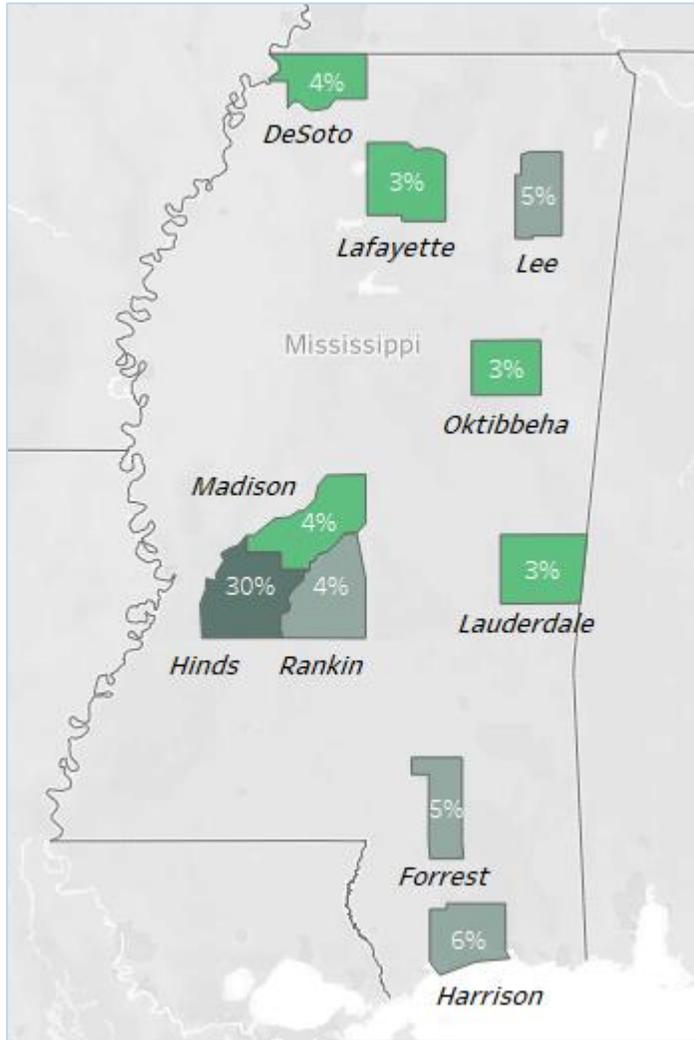
1. Hospitality Administration / Management, General
2. Geology / Earth Science, General
3. Real Estate
4. Marketing, Other
5. Drama and Dramatics / Theatre Arts, General
6. Business / Managerial Economics
7. Computer Engineering, General
8. Chemical Engineering
9. Chemistry, General
10. Philosophy

⁹ Only specific degree programs with at least 10 graduates working in Mississippi at all times during the reporting period are considered.

¹⁰ Only graduates who did not immediately re-enroll in a different degree program at a public college in Mississippi are considered.

Two-Thirds (67%) of analyzed public university graduates work in just 10 counties.

(Figure 5) AY 2015-17 Three years after graduation



Nearly half of all analyzed graduates who worked in Mississippi after completing a college degree worked in one of five counties: Hinds, Harrison, Lee, Forrest, and Rankin.¹¹ The next five counties—ranked by the percentage of college graduates working in them—account for over 17% of Mississippi public university graduates. They are Madison, DeSoto, Oktibbeha, Lafayette, and Lauderdale. This means two-thirds of the Mississippi college graduates analyzed in this report who are working in Mississippi have a job in one of 10 counties, with over half of those jobs being in Hinds, Madison, and Rankin Counties. See Figure 5 for a map of where 2015-2017 college graduates who worked in Mississippi three years after leaving college were employed. The information in this figure remains generally consistent for all other graduation groups.

¹¹ Data reflects where jobs were located—not where workers lived.

Conclusion

The Mississippi Office of the State Auditor published this report because taxpayers deserve to know whether they will see a return on the investment they make into higher education. College graduates have continued to leave Mississippi—sooner after graduation and at a faster rate than they did 10 years ago. Hundreds of millions of taxpayer dollars¹² now fund public colleges and universities each year. In addition to the cost of educating university students who do not stay, Mississippi loses future economic activity.

The Office of the State Auditor has also grappled with brain drain in its recruitment of accounting school graduates. To combat this problem, in February 2022, Auditor White announced the “Stay in the ‘Sip” Fellowship. The fellowship pays for a portion of an accounting student’s university education if the student agrees to work in the Auditor’s office for a minimum of two years after graduation. Visit www.stayinthesip.com to learn more about the program. The goal of both this report and the fellowship program is to start a conversation on how the state can more effectively fight against brain drain to retain talent and population.

¹² In 2021, SB 2904 and SB 2912 appropriated over \$450 million in general funds to the 8 IHL schools and UMMC.