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## Brain Drain in Mississippi

Clifford Adam Conner

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Brain Drain in Mississippi

by  
Clifford Adam Conner

A thesis submitted to the faculty of the University of Mississippi in partial fulfillment of the requirements of the Sally McDonnell Barksdale Honors College.

Oxford  
April 2021

Approved by

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Advisor: Dr. Melissa Bass

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## Dedication

For every Mississippian who has ever been told, “That’s the way we do things here; if you don’t like it, then leave.”

## ACKNOWLEDGEMENTS

I cannot begin to express my gratitude to my advisor, Dr. Bass. Without her, this thesis would be a perfectly incomplete tapestry of tangential threads woven together to form a poorly punctuated, grammatically incorrect, 150-page string of numbers and incoherent thoughts. I would also like to thank my committee members for their guidance, patience, and wisdom. Finally, I must acknowledge the incredible Mississippians who took the time to share with me their perspectives, knowledge, and expertise. Without any of these folks, this research wouldn't have been worth doing.

ABSTRACT  
CLIFFORD ADAM CONNER: Brain Drain in Mississippi  
(Under the direction of Dr. Melissa Bass)

Brain drain is the out-migration of educated individuals from an area. It is a problem with which Mississippi is overly familiar. This thesis uses data gathered from a survey of 965 respondents to identify who is leaving the state and for what reasons. The data gathered suggest confirmation that brain drain is an issue for the state, with roughly two-thirds of respondents having left the state or seriously considering doing so. The impetus for this varies with each individual, but respondents underscore economic and societal factors within Mississippi as pushing them away from the state. Quality of life factors are discussed by fewer respondents as a reason for staying in Mississippi, particularly among the one-third of respondents who stayed in, never seriously considered leaving, or returned to the state. The three factors are further emphasized through solution-seeking interviews with knowledgeable Mississippi residents.

## PREFACE

Growing up as a gay kid in Mississippi, I always dreamed of leaving the state for a more fast-paced, inclusive society. As I grew older, poverty and a lack of resources kept me from doing so. I was eventually able to find stability and pursue an education, but, inexplicably, my feelings toward Mississippi had changed. I understood my home and its society, though I often disagreed with it. I watched as many of my friends left the state to pursue success or, more commonly, put down roots in an area where they could feel free to hold the hand of their significant other in public without fear of backlash from their neighbors. Though Mississippi has slowly begun to change, the oppositional socio-political system of the state continues to drive countless wonderful individuals away. Because of this, I pursued an education in public policy leadership and political science, so I would be better equipped to make the sort of substantive changes necessary to transform Mississippi into a state that is respectful of and welcoming to differences. As part of the requirements for the Sally McDonnell Barksdale Honors College, I was given the opportunity to conduct research in an area of my choosing. Naturally, I chose to focus on Mississippi and the reasons for the state's out-migration.

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## **Chapter One: Introduction**

Mississippi is losing population, and of particular concern to Mississippians is the number of young people leaving the state (Census Evaluation Estimates, 2020; Henderson, 2021). Data from the 2017 American Community Survey suggest that Mississippi has lost 10% of its college educated millennial population (Parisi, 2018). This was the greatest decrease in the United States at a time when Millennials became the largest generational group in the nation (Maciag, 2017). Data from Mississippi Lifetracks, the state longitudinal data system, find that nearly half of all graduates from Mississippi's public colleges and universities leave the state within 5 years of graduation (Mississippi Lifetracks, 2021). Jake McGraw of the William Winter Institute and Rethink Mississippi suggests that lost revenue from net out-migration cost the state nearly \$170 million between 2011 and 2016 (McGraw, 2020).

This thesis will examine the nature of brain drain, or the loss of skilled labor, in Mississippi, as well as general out-migration trends. Using a bifurcated mixed-methods survey to collect both qualitative and quantitative data, I hope to answer three key research questions. First, is brain drain a problem for Mississippi? I hypothesize that Mississippi's slight population decrease in the most recent decennial census estimates obscures a larger pattern of out-migration among specific populations within the state. This leads me to my second research question: are some groups more likely to leave than others? Given Mississippi's historic and contemporary oppositional perspective on minority groups, I hypothesize that some groups are more likely to leave the state than others (Ward, 2018; Kennedy, 2018; Johnson et al., 2018). Finally, what are

the push and pull factors that contribute to or mitigate brain drain and out-migration in Mississippi? I hypothesize that, given the aforementioned opposition, the overall society of Mississippi will play a very big role in “pushing” people out of the state. Because of Mississippi’s lackluster economy relative to other U.S. states, I hypothesize that economic opportunities elsewhere act to “pull” Mississippians away from the state, as well (U.S. News & World Report, 2019).

## **Background**

Data from the Census Bureau show that the South is experiencing faster growth than any other region of the country. In 2010, this rate was 14.3%, with the West shortly behind at 13.8%, and the Midwest and Northeast far behind at 3.9% and 3.2% growth respectively (U.S. Census Bureau, 2011). The Census Bureau’s Population Clock shows that the South’s growth continued between 2010 and 2019 at a rate of 9.3% (compared to 8.7% in the West, 2% in the Midwest, and 1.1% in the Northeast) (Census Population Clock, 2019).

However, this growth is disparate, with urban and suburban Southern areas increasing their populations while the populations in rural Mississippi and other Southern areas continue their century-long decline (USDA, 2017; Hornbeck and Naidu, 2014; Voth et al., 1996). Mississippi, a predominantly rural state, lost an estimated 511 people in the past decade (Census Evaluation Estimates, 2020). Not necessarily worrisome, but it does beg the question “Why?” once the decrease is compared to data from other southern states. Of the 16 southern states (broadly defined) and the District of Columbia, only two, Mississippi and West Virginia, saw a decrease in population (see Appendix A).

Data from the U.S. Congress Joint Economic Committee report show that this drop is a continuation of a long-term trend for the state. Using census and American Community Survey information dating back to 1940, the report found that Mississippi has been unable to attract or retain educated individuals for decades. This has led to one of the highest brain drain rates in the nation over the past half century, despite experiencing brain gain as recently as 1970. The data suggest that educated Mississippians are seeking out neighboring states and other Southern locales, such as Texas, Alabama, Louisiana, Tennessee, and Georgia (U.S. Congress Joint Economic Committee, 2019).

Statistics from the University of Mississippi's State Data Center of Mississippi (SDCM) suggest that this pattern of population stagnation and slight decline in Mississippi will continue into the mid-21st century (State Data Center, 2019). The SDCM population estimates for the 2020 projections are higher than the Census Evaluation Estimates, but the demographic breakdown of the population figures by age group and race show worrisome trends of decline for almost all ages under 70 (see Appendix B).

According to SDCM estimates, Mississippi's population will decrease by 0.1% between 2020 and 2050. However, the share of white Mississippians is projected to decrease by 10.6%, while the number of nonwhite Mississippians is expected to increase by 13.7%. The growing minority population will almost completely offset the shrinking white population.

A closer look at the data shows, first, that the nonwhite category is expected to see consistent growth across nearly all ages. Conversely, the white category is expected to see consistent, large decreases by 2050 for all ages under 75. Second, Mississippians 75 years and older will grow faster than any other age groups. Finally, there is expected to be a decrease of 5% in the number of working-age adults. There is little doubt that this net decrease in the number

of working-age adults will impact the state financially through loss tax revenue. Furthermore, working-age adults leaving the state will take their children with them, further depriving Mississippi of generations of potential future citizens.

So, why is Mississippi's population stagnant in the fastest growing region in the country? There are numerous push and pull factors at play, a salient push factor can be best explained with the phrase "Thank God for Mississippi." The phrase is most often used to describe Mississippi's perennial presence - real or perceived - in the bottom tier of states in national rankings on desirable metrics, as well as its presence at the top of national rankings on undesirable metrics. It is often used by those in neighboring states to discount their poor rankings as not being as bad as Mississippi's. For instance, an Alabaman might say, "We may be 49th in education, but thank God for Mississippi!"

For example, with respect to health care, Mississippi ranks 50th on health care access, 50th in health care quality, and 48th in public health. Regarding economic opportunity, Mississippi is first for its low cost of living, but its overall opportunity score is pulled down (to 44th) by other factors like its low household income (49th) and high poverty rate (50th). (See Appendix C for complete results).

While Mississippi performs poorly nationally, it is far from the only Southern state to do so. Mississippi and three of its four neighbors, occupy four of the bottom five slots nationally (see Appendix D). Census Bureau Evaluation Estimates for 2020 (see Appendix A) show that by no coincidence Arkansas, Alabama, Mississippi, and Louisiana are four of the six slowest growing states in the South. The two other states are West Virginia and Kentucky, which are likewise in the bottom tenth of national rankings.

A second salient factor related to Mississippi's stagnant population is how the state differs from its neighbors with respect to the lack of a strong urban hub to act as a pull factor for in-migrants from the rest of the country. There is a common adage in Mississippi that "its three biggest cities are Memphis, New Orleans, and Mobile," cities located in Tennessee, Louisiana, and Alabama respectively but, adjacent to or relatively near the borders of Mississippi. They are all larger than Jackson, the state's largest city. Jackson is Mississippi's capital and has a 2021 census-estimated population of 154,340- down from 173,514 people in 2010. This is part of a larger trend that has seen Jackson's population drop every census from the city's 1980 peak of 202,895 people- a drop of 23.9% (World Population Review, 2021). (See Appendix D). This is a third salient factor related to Mississippi's stagnant population.

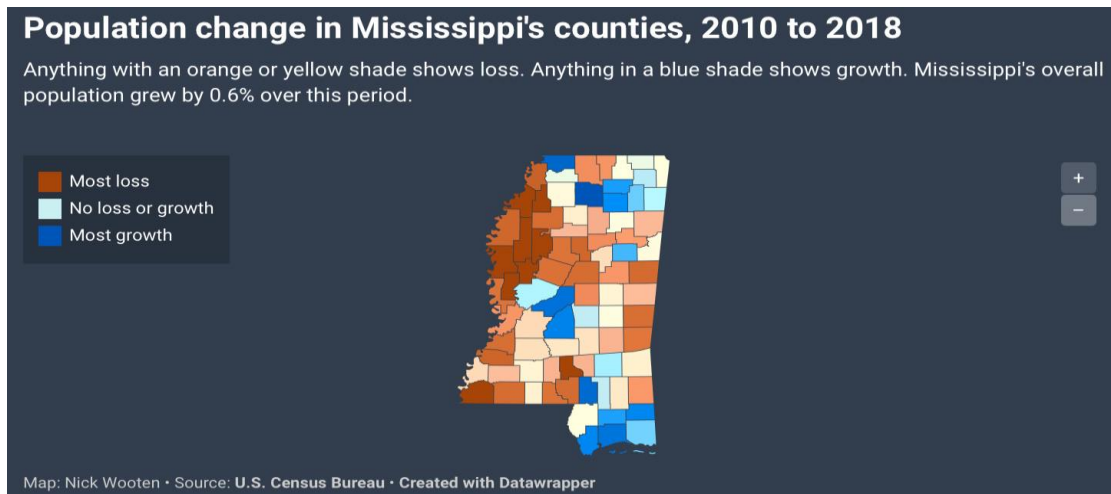
Jackson, a majority-African American, more liberal, Democratic leaning city in a rural, majority-white, conservative, and Republican leaning state, has hemorrhaged upper and middle-income citizens who prefer the comfort of Madison and Rankin counties which are suburbs of Jackson. This socioeconomic segregation is the direct result of the integration of Jackson's neighborhoods in the mid to late 20th-century. According to research by Boustan, each Black in-migrant to a white area led to 2.7 white departures, which, in turn, depressed housing prices and increased the number of vacant buildings (Boustan, 2010). In Jackson this resulted in a decreased urban tax base that has been unable to provide the same quality and level of services, leading to further population decline as out-migrants seek out better-funded areas to call home.

Suburban Madison and Rankin Counties grew over the period of Jackson's decline. White flight has similarly boosted the population of Desoto County in Northwest Mississippi. Immediately adjacent to Mississippi's "largest city," Memphis, Tennessee, Desoto County grew nearly four-fold (from 53,930 in 1980 to an estimated 190,971 in 2021), fueled partly by

proximity to a major FedEx shipping hub and two trans-national interstate corridors, I-40 and I-55.

Two other regions of the state, the Northeast and the Gulf Coast, also have seen population growth spread across multiple counties (see figure 1). The Northeast includes Lafayette County, which has experienced growth due to the presence of the state’s flagship university and a resultant increased ability to both retain and attract residents (Voth et al., 1996). The Gulf Coast is anchored by the New Orleans and Mobile metropolitan areas, and Mississippi’s second-largest city, Gulfport. None of these counties or regions, however, has a city as large or as economically powerful as Jackson. While the Coast and the North are rapidly growing and may surpass Jackson in size in the distant future, the next-largest city is Gulfport, at roughly half of Jackson’s size. This puts Mississippi at a distinct disadvantage when it comes to attracting large companies- particularly those needing a large, educated workforce that is dispersed across the northern, central, and southern parts of the state.

Fig.1



Source: The Biloxi Sun-Herald: Most of Mississippi’s counties are losing people. What about the Coast? Retrieved from <https://www.sunherald.com/news/local/article229717184.html>.

## **What Comes Next**

This chapter has provided a brief background description of the most salient population challenges facing Mississippi. In Chapter Two, I dive into the scholarly literature on migration and brain drain to better understand these challenges, as well as my own primary research. In Chapter Three, I apply the analyses and findings of these studies to my research design, explaining how I developed and deployed my study of brain drain causes among Mississippi's degree holding and non-degree holding adults, as well as Mississippi's college students. In Chapter Four, I present my survey results, which help to answer: (1) whether brain drain is a problem for Mississippi, (2) whether some groups are more likely to leave than others, and (3) what are the push and pull factors that contribute to or mitigate brain drain and out-migration in Mississippi? In Chapter Five, I discuss the meaning and significance of my results, placing them in conversation with the existing literature. In Chapter Six, I discuss several relevant policy solutions proposed and enacted by Mississippians, as well as provide my own recommendations. In Chapter Seven, I provide a brief summary of the purpose of this study, my findings, and the recommendations before concluding my thesis.

## **Chapter Two: Literature Review**

In this chapter, I will first review existing theories of migration to establish a theoretical framework in which brain drain occurs. Second, I will cover brain drain from an international standpoint, as this literature is more concerned with the migration of specific groups. Third, I will explore brain drain and internal migration within the United States to explain the migration of domestic groups. Finally, I will present an overview of migration in Mississippi in an historical and contemporary sense.

### **Existing Theories of Migration**

The scientific study of migration in the modern era arguably began with Ernest George Ravenstein's *The Laws of Migration* in 1885. According to John Corbett's work, *Ernest George Ravenstein: The Laws of Migration, 1885* (2001), Ravenstein's use of British census data from 1871 to 1881 led to seven assertions or "laws" based on the flow of populations. These laws generalize migrants as following streams from rural to urban areas, and often lead to an inverse "counter-current" of migration. Though many of these laws are antiquated considering modern methods of study, core aspects remain solid foundations from which to develop further studies of population movement, particularly the movement of migrants towards "centers of absorption" (Corbett, 2001).

In Waldo Tobler's *Migration: Ravenstein, Thornthwaithe, and Beyond* (1995), Ravenstein's laws are revisited to see how they "have withstood the test of time." Tobler points to Central and North American migration patterns as evidence supporting the continued validity



of Ravenstein's laws. He cites Warren Thonhwaite, a climatologist, as an early pioneer in viewing migration through a pressure-based lens, specifically detailing Thornthwaite's mention of "pressure gradients" increasing or decreasing from one area to another in line with the availability of economic and social opportunities. Tobler ends his analysis by citing the overall long-term stability of general migration patterns and "structural regularities" (Tobler, 1995).

Everett S. Lee's *A Theory of Migration* (1966) disaggregates the factors involved in the act of migration, the volume of migration, migratory streams and counter streams, and the characteristics of migrants to develop a "Push-Pull Factors" model. Lee's work emphasizes the objective and subjective differences between points of arrival and departure and the ways these differences affect the rate and extent of migration and counter-migration. He emphasizes the impermanence of these factors, noting that they are affected by time, policy, the life stages of migrants, and individual characteristics (Lee, 1966).

Gurieva and Dzhioev's work, *Economic Theories of Labor Migration* (2015), analyzes classical and neoclassical migration theories from an economic perspective. The authors build on Ravenstein's original pattern-based movements to infer additional laws in his work that emphasize the economic aspects of migration as a premier factor in the movement of people. Lee's Push-Pull Factors Model is discussed with an emphasis on the economic conditions influencing migrants' departure and arrival, along with intermediate factors, like distance, transportation costs, and the availability of information. Macro and microeconomic processes are broken down, with an emphasis on migrants' rational decisions affecting the migration process. They refer to Wallerstein's World Systems Theory to consider economic migration in the age of globalization, with the world divided into an advanced core (i.e., the developed countries) that attracts migrants and controls economic flows, and the less developed periphery countries whose

economic systems often benefit core nations. Finally, the authors study analyses based on labor migrations and new economic geography, concluding that imperfect competition brings increasing returns to advanced countries at the expense of less-developed ones. The “catch-up effect”, where a backwards area becomes an economic leader by taking risks unpalatable to the old leaders, is discussed as a way forward for national, regional, and local economies (Gurieva and Dzhioev, 2015).

Whereas the aforementioned authors focus on migration primarily in an international context, Ivan Etzo’s *Internal migration: a review of the literature* (2008) discusses the existing literature from an internal and interregional perspective. Etzo first discusses the literature on internal migration modelling with regards to micro and macro theoretical models, with micro theories focusing on the individual decisions leading up to migration, and macro theories focusing on the places being migrated to or from and the aggregate streams of migrants. Etzo then details the determinants of internal migration with regard to the Human Capital Theory, in particular the demographic factors (age, gender, skill level) that are among the biggest influencers in whether an individual will seek to migrate. He notes that migration rates are high for children 0-4, working age individuals, and the highly skilled. Attention is given to the gravity variables (population size and distance), economic variables (GDP, income per capita, and other variables that influence where migrants depart from and move to), labor market variables (high unemployment pushing people to migrate), and environmental variables (factors influencing the desirability of an area). Etzo then looks at the consequences of internal migration, emphasizing that the loss of human capital negatively impacts economic growth unless a society compensates for the loss of people through subsidies and taxes. Primarily, Etzo’s work highlights the over-

reliance of migration studies on economics and neoclassical assumptions that can lead to misleading results (Etzo, 2008).

In Karen O'Reilly's *International migration and social theory* (2013), migration is analyzed in a causal framework that includes external and internal structure, social practices, and resultant outcomes. External structures are characterized as impediments to and opportunities for migration. These include broadly encompassing historical and global forces, as well as more specific forces, such as laws and policies, natural disasters, economic realities, or housing and transportation links. Internal structures are more specific to groups or individuals, and include ways of thinking, cultural practices, and knowledge of the strengths and weaknesses of a given space. Rather than defining outcomes as an end-stage in the process of migration, O'Reilly places it within a "Structuration Theory of Practice" that can impact and alter migration at any stage. Building on this causal framework, O'Reilly looks at four types of migration through case studies, of which three are particularly relevant. Affluent British migrants seeking a more leisurely atmosphere along the Spanish coast illustrate "lifestyle migration". The case study on "labour migration" details the modern and historical factors that have encouraged migration from Mexico to the United States. Finally, O'Reilly discusses "forced migration", which includes refugees, the internally displaced, the trafficked, and those induced to migrate due to development or disaster. O'Reilly suggests future studies on migration look at myriad factors that influence the decision to migrate, saying that doing so allows for a more fully formed understanding of objective and subjective factors that influence individual migratory experiences (O'Reilly, 2013).

Vilmante Kumpikaite and Ineta Žičkutė's *Synergy of Migration Theories: Theoretical Insights* (2012) advocate for a synthesis of existing theories in order to gain a deeper

understanding of migration theory, though they acknowledge the futility in seeking a single, unified theory of migration. The authors cite Bauer and Zimmerman's "Economic Equilibrium Theory" of wage and labor differences between regions as a driver of migration. Regions with labor shortages and higher wages see influxes of workers, while regions with inexpensive labor forces see an influx of capital that will eventually lead to an economic equilibrium. Sjaastad's "Human Capital Theory" is cited as defining migration in terms of individual opportunity: an individual invests in themselves by migrating to an area where their education or skills can provide them with increased earnings and career advancement. Wallace's "Consumption Theory" is contrasted with traditional economics-focused theories in that the cause of migration is considered to be "value maximization." In other words, the decision to migrate consists of material values, like income, but also immaterial values, like family distance, climate, and quality of life. "Network Theory" is used to develop the notion that migrants' links with friends and family in new areas ease the process of migration and reduce the likelihood of failure, as well as costs, by helping new migrants find a job, a home, and information. Zelinsky's "Spatio-Temporal Model" establishes the idea that different societies experience inflows and outflows of migration at different rates based on their level of advancement, with advanced societies being more appealing to migrants. This theory was further applied to world migration by Skeldon, who divided countries into tiers of development that change over time, including: (1) resource niche countries with weak migration flows, (2) labor frontier countries with strong out-migration flows, (3) expanding core countries which experience both in-migration and out-migration, (4) old and new core countries with strong inflows of migrants, and (5) old/declining core countries with strong outflows of migrants. Though primarily internationally oriented, this model could be applicable subnationally to Mississippi and the United States. Kumpikaite and Žičkutė finish by

implying that all existing models of migration fall under the umbrella of Lee's "Push and Pull Model," with the theoretical migration-affecting factors in each individual model constituting various push and pull factors that attract or repel migrants (Kumpikaite and Žičkutė, 2012).

## **International Brain Drain**

Migration theories are useful for better understanding brain drain in both a theoretical and a practical sense. Whereas migration theory delves less deeply into the specifics of which individuals and groups are migrating and why, the literature on brain drain is much more specifically focused, albeit usually with an international perspective.

Abdelbaki's *Estimation Of The Economic Impact Of Brain Drain On The Labor Expelling Country* (2009) analyzes the direct, indirect, and opportunity costs associated with brain drain in source countries, using Egypt as a proxy. This study focuses on both skilled and unskilled migrants, though skilled migrants are often given priority because "skilled labor have positive impacts on unskilled [labor] and that their migration out of the national economy would cause losses resulting from the reduction of productivity of the remaining non-migrating labor." Negative and positive outcomes associated with brain drain are mentioned. Negative outcomes include: lost opportunity costs from financially investing in migrants' education and health pre-migration; lost tax revenue; the loss of expertise for innovation and research; and negative productivity impacts as a result of remittances. Positive outcomes include: remittances; domestic expertise gained through migration channels; lowered unemployment rates; and, potentially, increased foreign direct investment. Though a lack of available data prevented the author from

fully analyzing all consequences of the brain drain in Egypt, the data available showed an increasingly negative impact overall (Abdelbaki, 2009).

In contrast, Kuhn and McAusland's *The International Migration of Knowledge Workers: When is Brain Drain Beneficial?* (2006) argues that "beneficial brain drain" can allow the source country to "free ride" on the contributions skilled workers make to the international economy after they emigrate. The authors propose that the "knowledge goods production" of immigrants, especially those in the United States, and weak intellectual property rights protections in source countries create beneficial outcomes for all involved. The receiving country benefits from the knowledge produced by the immigrant, while the "remaining residents" of the source country benefit from the immigrant's ability to "produce better knowledge (such as more effective medicines, more entertaining movies, or more effective software) abroad" (Kuhn and McAusland, 2006).

Horvat's *Brain Drain. Threat to Successful Transition in South East Europe?* (2004) looks at the causes and impacts of emigration from non-EU Balkan states, as well as potential solutions. The author cites "troubled economies, political instability, severe unemployment, and ...war" as drivers of increased Balkan emigration, and advocates for long-term policies that increase return migration. Ultimately, Horvat believes it is the intellectual elite - as opposed to the socio-political elite - who must be attracted home in order to provide their nations with the skills and expertise necessary to successfully transition to democratic governance that will further attract more skilled migrants. Their skills further can be used to raise their countries' living standards and become attractive hubs for skilled migrants from outside of the Balkans (Horvat, 2004).

Kazlauskienė and Rinkevičius' *Lithuanian "Brain Drain" Causes: Push and Pull Factors* (2006) surveyed 416 Lithuanians with university degrees living abroad on the factors determining their migration. According to their results, "bad socio-economic conditions are not sufficient cause for the labour migration and 'brain drain'" in the country. Rather, six factors were found. First, "professional attractions," which includes things like good pay, skill improvement opportunities, and demand abroad for one's profession. Second, "socio-economic status with push effects," which includes low wages, little possibility of professional advancement, poor labor conditions, and low demand for one's profession. Third, the "state academic system and collaboration," which focus on the contrast between the "strong influence of the conservative education system of Lithuania, and the "open and flexible influence of the education system abroad." Fourth, the "state macro-economic status and governmental policy," which includes the country's economic realities, as well as various state economic, fiscal, and social policies. Fifth, the "ecological factor" was mentioned by over a third of those surveyed, particularly those living in warmer climates. Finally, the "family reunification" factor was a significant motivator to migrate abroad for a quarter of respondents. This factor was also mentioned as one that deterred respondents from returning, given their familial ties in their new homes. Kazlauskienė and Rinkevičius conclude their study by noting that "better possibilities abroad," rather than "the absence of various possibilities at home" seem to significantly fuel migration, especially among those young and socio-economically satisfied pre-migration (Kazlauskienė and Rinkevičius, 2006).

Ngoma and Ismail's *The determinants of brain drain in developing countries* (2013) uses data from 102 countries to examine wages, source country migration rates, population levels, educational expenditures, government effectiveness, and distance as factors in determining

which countries are most likely to experience brain drain. Their findings suggest that high wages attract skilled migrants to developed countries, and that income gaps between developed and developing countries incentivize skilled migration, though this incentivization is reduced as the income gap narrows. Population size and distance to destination countries negatively impact skilled migration, though political instability positively impacts it. The authors suggest that reducing wage disparities and political instability, along with proactive emigration policies, will stem the outflow of skilled migrants and pull skilled expats home (Ngoma and Ismail, 2013).

Docquier, Lowell, and Marfouk's *A gendered assessment of brain drain* (2007) expands on the Docquier-Marfouk data set on international migration to determine gender-based trends in brain drain in the late 1990s and 2000s. Based on data from 195 countries, the authors show skilled women are migrating to OECD at a rate 17% above skilled men. They correlate this gender gap in migration with gender gaps in educational attainment in source countries, and advocate for equal educational attainment without regard to gender in source countries to reduce the gender gap in brain drain (Docquier et al., 2007).

Bang and Mitra's *Gender bias and the female brain drain* (2011) further analyzes the gender gap in brain drain. Bang and Mitra use the updated Docquier-Marfouk data set to determine gender and educational attainment outcomes. The authors build a model to test factors affecting this gap, like GDP per capita, population, and source country unemployment rates. Political institutions are considered to further analyze socio-political stability factors. Finally, the Human Development Rate and World Development Indicators are used to measure gender equity. Based on the data, the authors find that educated women have a greater incentive to migrate than males and unskilled women. They believe this bias can be partially explained by unequal access to education and high fertility rates, though they find lower pay and lower rates



of political representation to be insignificant. They suggest that institutional quality likely impacts brain drain in a general way, though the impacts are not gendered (Bang and Mitra, 2011).

### **Domestic Brain Drain and Internal Migration in the United States**

The literature on migration within the United States is extensive and diverse. Different terms are often used to describe similar problems from varying academic perspectives, with “brain drain” and “brain gain,” “domestic migration,” “economic migration,” “human capital flight,” “internal migration,” “interstate migration,” “in-migration” and “out-migration,” “push-pull migration,” “rural-urban migration,” and so on all used to explain the movement of people from one area to another within the United States. This literature primarily takes an economically oriented perspective, though many of the studies examine other factors as well.

Borjas, Bronars, and Trejo’s *Self-selection and internal migration in the United States* (1992) uses data from the 1979-1986 National Longitudinal Surveys of Youth to analyze internal migration flows under the assumption that younger workers are “especially responsive to economic incentives for migration.” The findings indicate that a “mismatch” between an individual’s skill set and wages offered by employers in their native state leads skilled individuals to migrate to states where they will receive a better return for their skills. Unskilled individuals, on the other hand, are more likely to migrate to states with lower wages. Skilled workers in high wage states and unskilled workers in low wage states are less likely to migrate (Borjas et al., 1992).

Yankow's *The Wage Dynamics of Internal Migration within the United States* (1998) also uses data from the 1979 National Longitudinal Survey of Youth to measure the effect interstate migration has on long-term wages. This study finds that migrants earn an average of 5% more than non-migrants five years after moving, even if their initial wages were identical to non-migrants before moving. Yankow correlates this with Chiswick's "Favorable Self-Selection Hypothesis," which suggests that migrants tend to be more skilled or more highly motivated than non-migrants, though he argues that other factors (age, education, skills, etc.) are far more important in the eventual wage outcome (Yankow, 1999).

Molloy, Smith, and Wozniak's *Internal Migration in the United States* (2011) use Census and American Community Survey data, Annual Social and Economic Supplement of the Current Population Survey data, Internal Revenue Service migration data to better understand interstate migration. They find a century of increasing annual interstate migration peaked in the late 20th century (1980s and 1990s) and has begun to decline in the 21st century across all demographic and socioeconomic groups. Some groups (the unemployed, renters, 18–24-year-olds) are more likely to move interstate than others, but the proportion who do so is declining. Their data further clarify the likelihood of a given individual or group migrating. Those who are young, working-age adults are more likely to migrate than older, work-age adults and the elderly. Those who are more educated are more likely to migrate than those who are less so. Minorities and those born abroad are less likely to migrate than white or native-born individuals. Childless adults are more likely to migrate than those with children. Renters and the unemployed are far more likely to migrate than those who are homeowners and those who are employed. Though some individuals and groups are more likely to migrate than others, the authors note that the

reason for declining interstate migration rate is likely due to national socioeconomic factors (Molloy et al., 2011).

Robert R. Preuhs' *State Policy Components of Interstate Migration in the United States* (1999) cites "Public Choice Theory" as a driving factor in migration. Individuals migrate from one area to another in response to the policy choices in each area. Migrants will migrate to areas with public policy that allows them to most benefit from their human capital. This is analogous to an individual voting with their feet in response to government policy. Indeed, Preuhs argues that the "Consumer-Voter Model" incentivizes states in a decentralized federal system to craft policy to both retain citizens and attract new ones. His findings suggests that: (1) political ideology matters, with more liberal states experiencing higher levels of immigration; (2) migrants prefer states that emphasize investment over consumption; (3) tax preferences shift over time; (4) state income levels do not play a strong role (for example, between 1991-94 migrants preferred states with lower median incomes) (Preuhs, 1999).

Gimpel and Schuknecht's *Interstate Migration and Electoral Politics* (2001) also contends that ideology matters, hypothesizing that interstate migrants are more likely to identify with the Republican party. Given the supposed benefits to the GOP of in-migration in new locations, Democrats conversely benefit due to the out-migration of right-leaning voters leaving a solidly Democratic base. Ultimately, the authors find evidence to support their hypothesis with several caveats, including: (1) that deeply conservative areas may ultimately be vulnerable to losing political strength from migrants who, while not liberals, are not quite as conservative as natives; (2) that a small number of migrants can decisively shape local and state politics if they vote for a different political bloc than native residents; and, most importantly, (3) that these

findings are only applicable for as long as voter ideology is definitively linked with socioeconomic status (Gimpel and Schuknecht, 2001).

Davanzo and Morrison's *Return and Other Sequences of Migration in the United States* (1981) believe that traditional studies of internal migration fail to account for the 20-30% of migrants who are "return migrants" coming to areas in which they have previously lived. They identify two factors pulling a migrant back to a previous residence. First, "location-specific capital," or pre-existing links to an area, may be more influential than potential links in a new home. This is especially likely if an individual is returning to where they grew up. Second, "imperfect information" of a new destination may lead to an overestimation of perceived benefits, prompting a relatively rapid return. Davanzo and Morrison further break down return migrants into two subgroups. First, "disappointed movers," who believe the grass is greener where they came from. These return migrants usually move back to their original home within a year of leaving. These individuals are likely to be less educated, with more highly educated disappointed movers preferring to move on to a new location. Second, "fixed-term migrants," like college students, military personnel, etc., are those who never intended to stay in their new destination beyond a "pre-meditated" length of time. Additionally, individuals who are unemployed or unable to hold a job in their new destination are more likely to return to their original location. Finally, Davanzo and Morrison find that a third of all internal migrations and more two-thirds of multi-locational moves go unrecorded over a five-year period due to relatively short stays in each new location (Davanzo and Morrison, 1981).

Kritz, Gurak, and Lee's *Will They Stay? Foreign-Born Out-Migrants from New U.S. Destinations* (2011) demonstrates that foreign-born migrants also migrate within the United States. They find that these decisions are driven by economic conditions and links to like

migrants, with foreign-born migrants in robust markets and areas with high levels of native compatriots less likely to migrate to new areas. These findings apply particularly well to college-educated foreign-born migrants' whose education affords them more opportunity to selectively choose an area that maximizes both economic and social ties (Kritz et al., 2011).

Carr and Kefalas's *Hollowing Out the Middle: The Rural Brain Drain and What It Means for America* (2009) shows a similar socio-economic divide among native-born individuals, particularly the young and educated who have more to gain from the metropolitan-based economic and social opportunities that are missing in rural America. The authors view this brain drain of America's rural, educated youth as a "zero-sum phenomenon" that benefits thriving metropolises at the expense of rural regions, and conducted a multi-year study on the town of Ellis, Iowa in order to better understand the phenomenological effects of brain drain. They believe America's current economic phase in which industrial factories have moved overseas and farming has become a primarily corporate sector led to new socioeconomic winners and losers in rural America. They divide these winners and losers into four groups: (1) Achievers, who are often "selected" for success by community members based on some seemingly innate talent or skill, are encouraged to leave to find success. (2) Stayers, described as those who did not attend college, work blue-collar jobs, and transition to adulthood more quickly than others. The authors describe this group as an "untapped resource" ignored by local and state policies that too often seek to re-attract the educated groups that communities push out of rural America and toward success. (3) Seekers, who, like achievers, feel driven to leave their small towns- often by way of the military. Seekers are depicted as average individuals who want to see the world and gain opportunities outside of their community. (4) Returners return to their rural communities after finding new experiences. They are further broken down into two groups: (A) High-flyers, the

sought after high achievers who have come to find comfort and opportunity in the familiarity of the rural home they left; and (B) Boomerangs, the (often female, community college educated) individuals who temporarily left before coming back home to marry and start a family.

The authors ultimately imply that small towns like Ellis are, in part, responsible for their own declines due to the amount of resources they invest in the best and brightest who are all but certain to leave. The authors' solutions include, first, investing in economic infrastructure and amenities that may attract educated entrepreneurs, which, in turn, spurs creativity, innovation, and economic growth. Second, revamping public education systems, promoting job (re)training, and upgrading digital and physical infrastructure to help rural areas to shift away from agricultural and industrial sectors no longer relevant towards the global marketplace. Third, incentivizing skilled foreign-born migration through federal immigration exemptions, integration initiatives, and tolerance-based public-awareness campaigns (though the authors warn of the social backlash that emerged when former Iowa governor Tom Vilsack tried this). Fourth, "economic gardening," which sees "multiple seeds for local growth" planted through the creation of youth opportunities, the cultivation of and support for entrepreneurial talent, the use of charitable endowments to train, upskill, and invest in residents, and localized, communally subsidized free land programs contingent on medium to long-term residency (Carr and Kefalas, 2009).

Sherman and Sage's *Sending Off All Your Good Treasures: Rural Schools, Brain-Drain, and Community Survival in the Wake of Economic Collapse* (2011) build upon parts of Carr and Kefalas' work by looking at how schools and education are viewed by community members in rural, economically depressed Golden Valley, California. They found that education was viewed differently by two sets of residents. The first saw the local school system as a pillar of the

community, but also a driver of the town's brain drain. This group tended to be better educated, traditionally employed, and of a relatively higher social class. Many in this group recognized education as a path to success for their children, with the implication being that success lay outside of Golden Valley. The second group tended to be less well educated and underemployed. This group spoke of feeling alienated from the education system, which developed into hostility based on the belief that their children were being neglected by educators who prioritized the children of the first group. Many in this second group felt that their children didn't need a college degree or to be educated by "uncredentialed and unprofessional" school teachers who reinforced perceived socially exclusionary norms. The children of the first group were, naturally, more likely to leave Golden Valley, while the children of the second group were more likely to stay, but also experience underemployment, work "non-living wage jobs," and face community rejection due to their lack of acquired skills and social support (Sherman and Sage, 2011).

## **Migration and Mississippi**

Hornbeck and Naidu's *When the levee breaks: black migration and economic development in the American South* (2012) similarly analyzes a rural area with distinct social divisions. The authors look at the economic and migrational effects of the Great Mississippi Flood of 1927 using county-level census data from 1900 to 1970. The authors identify the Mississippi Delta as an economically underdeveloped agricultural region with racially stratified labor relations and laws used to exert control over black residents. These labor relations and legal barriers created an abundance of cheap labor that made mechanization relatively expensive. However, the Great Flood erected a shift that increased out-migration. In the aftermath of the

flood, the Red Cross established refugee camps under the administration of politically powerful white plantation owners who turned them into “centers of repression and racial abuse” where refugees were “conscripted and forced to work” for free. These planters diverted relief aid and withheld rations, which drove away black refugees, though planters attempted to catch and beat those who tried to leave. These events forced “two-thirds to four-fifths” of families from some areas of the Delta, pushing black refugees to Northern cities. Hornbeck and Naidu’s research shows that this population decline continued to 1970. Research has found that black migrants from flooded counties were 14% more likely to leave their county, almost 18% more likely to leave their state, and almost 7% more likely to leave the South, relative to white migrants. This long-term decline in labor force availability drove mechanization and modernization, leaving fewer jobs for the laborers who stayed, but the value of agricultural land in flooded counties still decreased over time (Hornbeck and Naidu, 2012).

Voth, Sizer, and Farmer’s *Patterns of In-Migration and Out-Migration: Human Capital Movements in the Lower Mississippi Delta Region* (1996) analyzes migration trends between 1975 and 1980 in counties, spanning seven states, making up the Lower Mississippi Delta region, which is described as an economic “matter of concern” for the states due to migration affecting the “quality” of their labor force. The authors divided the counties into six groups based on location and population. The results of this analysis showed different patterns based on age, education level, and county type. Out-migration was prompted more by a migrant’s education level than age, with the most highly educated more likely to migrate to an urban county or a county with a college or university. Rural counties were found to have low rates of out-migration among those without a college education, and high rates of out-migration among those with at least some college education. Rural Core Delta counties were found to have lower rates of in-



migration overall, but also had higher rates of both in-migration and out-migration among the least educated. Counties with a college or university experienced higher in-migration of the highly educated, but lower in and out-migration of the least educated. Urban counties experienced higher rates of in-migration without regard to age or education (Voth et al., 1996).

Brown and Cromartie's *Black Homeplace Migration to the Yazoo Mississippi Delta: Ambiguous Journeys, Uncertain Outcomes* (2006) looks at black return migration to the rural Mississippi Delta through the eyes of Dorothy Scott, a cyclical migrant. The authors note the 1970 shift in the migration of African Americans from the Great Migration to the North into a return migration to the South. Though the majority of returning black migrants settle in urban hubs, an estimated 20 to 30% settle in rural, traditionally black areas, like the Mississippi Delta. Given the Delta's poverty, the authors consider return migration to this region to be "home-place migration" defined by familial ties, rather than economic prospects. These homeplace migrants comprised 87% of black migrants to the Delta between 1985 and 1990, with a majority estimated to: live in poverty (58%), have less than a high school education (53%), be female (53%), and be under the age of 26 (51%). Brown and Cromartie use ethnographic methods to explore Scott's life. She was born in Sunflower County, Mississippi in 1919 and grew up working on a plantation. She married secretly as a young teenager and studied nursing in a segregated Delta vocational school before moving to Chicago. For the next 50 years she frequently cycled back and forth between the two areas to be with her husband. Despite restrictions on black land ownership, Scott was able to buy 51 acres of land. Scott returned home to Sunflower County for good in the 1980s due to violence in Chicago and leased 43 acres of her land to white farmers "in an ironic reversal of roles." These men never paid the rent they owed her, and the local courts were of little help. She spent her final years in poverty in her home with no heat, air

conditioning, or running water, before being murdered in June 1999 for \$60. The state crime lab never processed the incriminating evidence in the murder, so the murder was never indicted. He went on to rob, rape, and beat a 93-year-old woman who survived and was able to testify against him. Because he was sentenced to life in the Parchman Penal Farm, the Sunflower County district attorney felt no need to press charges against him for Scott's murder. Following her death, her property was divided into plots for her heirs and property taxes failed to be paid. If those taxes go unpaid for two years, the law in Mississippi allows this land to be taken. Two corporations paid a total of \$282 to claim the Scott land, however the family was eventually notified and sold the land before it could be claimed. The poverty, systemic discrimination, violence, and apathy in this story are not unique in the Delta for return migrants or non-migrants. Scott was able to succeed, however, when so many like her had not when she fulfilled her dream of becoming a landowner in the place she felt was home (Brown and Cromartie, 2006).

Mississippi native Savannah Smith's *Brain Drain in Mississippi: Why Some of the State's Best and Brightest Are Leaving* (2018) takes a similarly narrative style to analyze the out-migration of Mississippi's educated millennials. She identifies three key factors contributing to brain drain: (1) the state government, (2) the social climate, and (3) a lack of economic opportunity. Smith notes that differences of opinion in state government have hampered efforts to tackle commonly recognized issues. Then-Lieutenant Governor and President of the Senate Tate Reeves told Smith that brain drain is a non-issue, a manufactured "crisis that...is really not a crisis at all." A bill unanimously passed by the Mississippi House in 2018 sought to incentivize those with a college degree to live in Mississippi by providing up to five years of tax breaks. It died in committee in the Mississippi Senate. Smith mentions that improving public schools could help to reverse brain drain, but that the legislature was unable to pass a bill that would "rewrite

the current formula” for the Mississippi **Adequate** Education Program. The program, created in 1997, has only “been fully funded twice.” Moss Point Representative, Jeremy Anderson, is quoted as saying that “backwards and regressive thinking” drives millennials out of state, with Smith noting that the state legislature plays a role in fanning the flames. She then discusses racial inequality, historically and contemporarily, citing then-Governor Phil Bryant’s declaration of April as Confederate Heritage Month and Confederate symbols around the state as exemplary of this. Further evidence of the regressive thinking Anderson refers to is Mississippi’s hostility towards LGBT rights. Following the legalization of same-sex marriage, the legislature passed a religious freedom law allowing individuals, businesses, and religious organizations “to deny service to people based on their sexuality” if it conflicted with a “sincerely held religious belief or moral conviction.” This “codified discrimination” has led to significant national and local backlash, with some arguing that the state’s religiously motivated attitudes impede it from discussing “the culture of discrimination [impacting] marginalized groups.”

Smith interviews several individuals who say that Mississippi’s infamous reputation leads to a stigma of Mississippi expats as being racist or unintelligent. Interviews with some millennials highlight the fact that a lack of economic opportunity has driven them away from Mississippi. Smith cites Forbes Magazine as ranking the state 50th in innovation, 51st in science, technology, engineering, and mathematics graduates, 51st in the demand for STEM jobs, and 51st in invention patents. Infrastructure is discussed as further holding the state back. Though companies like C-Spire have begun taking steps to address fiber internet access, physical infrastructure remains lackluster. A bill passed by the House in 2018 to fund road and bridge repair died in conference in the Senate, roughly half a month before then-Governor Bryant closed 83 bridges in disrepair on the advice of the federal government. A lack of funding for

Mississippi's higher education and health care system are similarly fueling the state's brain drain, though programs offering full scholarships to potential teachers and medical professionals in exchange for working in-state for four to five years after graduation have helped retain hundreds who would have otherwise left. Smith goes on to cite statistics about destinations millennials seek out, with an emphasis on the urban environments and amenities that Mississippi is unable to offer. Despite the difficult subjects discussed, Smith finds that most of the out-migrant subjects interviewed "have a deep love for this place that does not always love in return." She suggests that leaving may be the key for migrants to find solutions to Mississippi's problems that they can one day bring home (Smith, 2018).

The literature seen above underscores the numerous aspects from which brain drain can be studied. From a theoretical perspective, migration flows can be discerned through quantitative data. From a practical standpoint, migration can be correlated with economic and societal changes, both at home and abroad. Regardless of how it is measured, the decision to migrate is made by an individual as a response to circumstances. Because of this, I chose to develop a method of studying brain drain in Mississippi that would allow me to understand who chooses to move and why.

### **Chapter Three: Research Design**

Brain drain is an example of a “wicked problem” in public policy (Logue, 2009). A symptom of some greater issue, Mississippi’s wicked brain drain problem is not attributable to a single cause, like a poorly educated populace or a low quality of life. Rather, the issue is complex, with economic, social, political, and personal factors converging to push some Mississippians toward perceived greener pastures out of state. Accordingly, no one method of research can capture the totality of the issue. With this in mind, I use a mixed-methods approach to my research, employing a bifurcated survey. In order to collect quantitative data, I designed a survey that recorded participant responses on 19 demographic and residency-related questions. Qualitative information was recorded based on personal experiences using 75 open-ended response questions.

#### **Survey**

I created and administered my survey using Qualtrics. The survey, titled “Brain Drain in Mississippi,” had 95 questions: 1 question on consent; 19 multiple choice questions concerning demographics and residency; and a two-part section of 75 mostly open-ended questions designed to capture the qualitative impact of brain drain on Mississippi’s adults and college students. Potential respondents were provided with information on the scope and aims of the study before being asked to (1) verify they were 18 or older, and (2) to consent to participate in the survey. The survey was designed to protect the anonymity of respondents, with neither myself nor my advisors able to discern a respondent’s identity.

No respondent was asked to, nor able to, answer all 95 questions. The 44 open-ended response questions were designed to appear in response to the answer a respondent gave on a prior question; most respondents were prompted to answer only 4 or 5 open-ended questions. Because of this, most respondents finished their survey in less than 5 minutes. Respondents were, naturally, allowed to discontinue taking the survey at any time they liked, which led to 91 incomplete responses being recorded in the data. This sample attrition will be seen in the quantified portions of the results chapter as the number of respondents decrease between initial and follow-up questions.

### **Development of the Survey and IRB Approval**

This survey uses standard demographic questions to ascertain respondent age, gender, race/ethnicity, sexual orientation, education, and so on. Respondents were also asked to self-identify their social class and individual annual income in a single question, which, in hindsight, should have been two separate questions, as a high-earning, upper class Mississippian (one who makes \$80,001+/year) would not be able to afford the same lifestyle on the same income in a place like California or New York. Due to confusion over the wording of the income question, I modified it to specify that I was asking specifically about *individual* income several days after the survey went “live.” Roughly half of the respondents had already answered the question prior to my clarification, so, while I would like to assume the prior respondents provided their individual income, it is more likely than not that many of these initial respondents answered based on the income of their entire household.

All respondents were asked to answer the initial demographics questions, but I designed the remainder of the survey using skip logic to hide questions not relevant to a particular respondent, so as not to overwhelm them with questions they need not answer. For instance, a respondent answering “yes” to the question “Are you currently in college?” would see a substantially different survey than a respondent answering “no.”

Respondents who were enrolled in college at the time they took the survey were asked questions designed to ascertain their likelihood of personal and professional success, including questions about their GPA, extracurricular activities, leadership positions, and social circle. I asked additional questions about their intentions and attitudes post-graduation vis-à-vis residing in Mississippi, as well as their likelihood of achieving their goal of staying or leaving. Some of these questions allowed for open-ended responses to elaborate on, for example, why these students wanted to stay or leave, or whether anything might convince them to stay or return.

Respondents not currently enrolled in college at the time of the survey were asked questions about their level of education, whether they were educated in Mississippi, and whether they stayed in or left Mississippi after completing their education. Some of these questions allowed for open-ended responses to elaborate on their experiences, as well as their attitudes on staying in, leaving, or returning to Mississippi.

With the help of Jennifer Holt, the Administrative Assistant for Surveys in the University of Mississippi Office of Institutional Research, Effectiveness, and Planning, as well as several of my Delta Tau Delta fraternity brothers, I was able to beta test the survey to receive feedback. These test responses were deleted from the data pool before the survey received IRB approval on November 6, 2020.

## **Sampling, Data Collection, and Participants**

Immediately following approval, the survey went live, and data collection began. I received responses from three distinct groups.

First, I shared the survey link with friends and family via text, social media (Facebook, Instagram, Snapchat, and GroupMe), and email.

Second, I made use of Reddit, a social media site with several Mississippi-specific “subreddit” groups, including r/Mississippi, r/Olemiss, and r/Jackson. The Mississippi community on Reddit enthusiastically responded when I shared the survey link with them, and they made up roughly two-thirds of respondents. While most of these groups have a couple of thousand members at most, the largest, r/Mississippi, had roughly 20,000 members at the time the survey was posted.

Finally, I submitted a Sample Panel Application to the University of Mississippi’s Office of Institutional Research, Effectiveness, and Planning. Once approved, the OIREP sent an invitation to take the survey to a representative group of University of Mississippi students and faculty. The UM sample panel was demographically representative, and included full-time, part-time, and online adult students and faculty across all UM campuses and programs. No incentive was offered in exchange for participation in the survey, apart from the personal satisfaction that comes from contributing to scientific research.



## **Chapter Four: Results**

My survey was launched on November 6, 2020 and ran until January 24, 2021. 1,029 responses were recorded. 938 respondents completed the survey in full, while 91 respondents did not complete the survey. Partial responses were included in the data, as I expected the sample attrition rate to be much higher than 9%.

### **Residency Information**

Respondents were initially asked for their consent to participate in the survey before being asked a series of residency-oriented questions.

The first residency question was: “Have you ever lived in Mississippi?” The 965 respondents who answered affirmatively were able to continue with the survey. The 58 respondents who answered with “No” were thanked for their participation and excused. The next question was: “Are you from Mississippi? (i.e., were you born or raised in Mississippi?)” Of the 963 remaining respondents, 69% (668 respondents) said “Yes”, while 31% (295 respondents) said “No.” All 963 respondents were then asked whether they currently lived in Mississippi. 74% (709 respondents) stated that they were living in Mississippi at the time they were surveyed, while 26% (254 respondents) stated that they were not.

The respondents living in Mississippi at the time they were surveyed were then asked whether they lived in a rural, suburban, or urban area, or non-metropolitan small city or large town. Examples of each type of area in or near Northwest Mississippi were provided (rural-

Water Valley; suburban- Southaven; urban- Memphis; non-metropolitan small city or large town- Oxford), however the interpretation of the type of area in which a person lived was ultimately left up to the respondent. Nearly half (48%; 339 people) of the 705 people who answered lived in a non-metropolitan small city or large town; 25% (175 people) lived in a suburban area; 20% (139 people) lived in a rural area; and 7% (52 people) lived in an urban area.

The 254 respondents who were not living in Mississippi were then asked a series of questions about where they were living. They were asked whether they lived outside of the South, with 42% (107 people) not living in the South, and 58% (146 people) living in the South. No definition of the South was provided in order to allow for the inclusion of culturally, but not geographically, Southern areas.

Based on data provided by later questions, 53% of all respondents living outside of Mississippi (134 people) lived in an urban area; 30% (76 people) in a suburban area; 12% (30 people) in a non-metropolitan small city or large town; and 5% (13 people) in a rural area. Those living outside of Mississippi but still in the South were then asked about their home areas. No examples were provided, so the interpretation of each type of area was left up to the respondent. Of the 146 people who answered the question, 51% (75 people) lived in an urban area; 35% (51 people) in a suburban area; 10% (14 people) in a non-metropolitan small city or large town; and 4% (6 people) in a rural area.

Those living outside of Mississippi *and* outside of the South were then asked whether they lived in the Midwest, Northeast, West, or outside of the United States. The South, along with the Midwest, Northeast, and West are the four primary regions of the United States as defined by the Census Bureau (U.S. Census Bureau, 2013), however each respondent decided

their region for themselves. Of the 107 people living outside of the South, 48% (51 people) lived in the West; 25% (27 people) in the Midwest; 22% (23 people) in the Northeast; and 6% (6 people) lived outside of the United States altogether. 55% of these 107 respondents (59 people) reported they lived in an urban area; 23% (25 people) in a suburban area; 15% (16 people) in a non-metropolitan small city or large town; and 7% (7 people) in a rural area. Specifically, 67% (34 people) of the 51 people living in the West lived in urban areas; 20% (10 people) in suburban areas; 12% (6 people) lived in a non-metropolitan small city or large town; and 1 person (2%) lived in a rural area. A similar pattern was seen in the 23 respondents living in the Northeast: 65% (15 people) lived in an urban area; 26% (6 people) in a suburban area; and 9% (2 people) in a non-metropolitan small city or large town. No respondents reported living in a Northeastern rural area. The 27 Midwestern respondents, however, showed a fairly equal distribution across each area. 30% of respondents (8 people) reported living in a suburban area; 26% (7 people) in an urban area, and the same number in a non-metropolitan small city or large town (26%, 7 people); 19% (5 people) lived in a rural area. Of the 6 people living outside of the United States, 50% (3 people) lived in an urban area, while 17% (1 person) each lived in either a rural area, a suburban area, or a non-metropolitan small city or large town.

After answering residency-oriented questions, respondents were asked to answer a series of demographic questions, including their age, gender, race and ethnicity, sexual orientation, class and income, political identity, student status, and employment field.

## Demographic Information

Of the 947 people who responded to the age question, 45% (423 people) were between the ages of 18 and 24, 31% (293 people) were between 25 and 34, 16% (151 people) were between 35 and 44, 5% (51 people) were between 45 and 54, 2% (16 people) were between 55 and 64, 0.6% (6 people) were over age 65.<sup>1</sup>

The 947 respondents were then asked their gender. 57% (542 people) identified as male, 41% (391 people) identified as female, and 1% (14 people) selected the “Other” option. The question made no attempt to discern between an individual’s biological sex and their gender identity.

Respondents were next asked “Which race and/or ethnicity do you identify as?” They were able to select multiple options, leading to 987 responses for 947 respondents. Of these 40 ‘surplus’ responses, 32 respondents were biracial and 4 triracial. Ethically-speaking, I feel uncomfortable picking and choosing any part of a respondent’s racial or ethnic identity in order to neatly fit all 947 respondents into racial categories, so the totals below will add up to 987.

Of the 987 responses, 88% of respondents identified as white (869 people); 4% (39 people) identified as Black or African American; 3% (34 people) identified as Asian; 3% (26 people) identified as Hispanic; 1% (13 people) chose the “Other” option; 0.4% (4 people) identified as American Indian or Alaska Native; and 0.2% (2 people) identified as Native Hawaiian or Pacific Islander.<sup>2</sup>

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<sup>1</sup> 1% (7 people) of respondents were under the age of 18. After answering this question, they were thanked for their participation and excused from the survey.

<sup>2</sup> For comparison, the Census Bureau estimates 59% of Mississippians are white, 38% Black or African American, 3% Hispanic, 1% Asian, 1% multiracial, 0.6% American Indian or Alaska Native, and .1% Native Hawaiian or Pacific Islander (U.S. Census Bureau, 2019).

In terms of sexual orientation, respondents were given five choices: ‘heterosexual’, ‘homosexual’, ‘bisexual’, ‘other’, and ‘prefer not to say.’ 81% of respondents (769 people) self-identified as heterosexual; 10% (90 people) identified as bisexual; 5% (49 people) identified as homosexual; 2% (21 people) chose the ‘other’ option; and 2% (18 people) preferred not to disclose.

Respondents were then asked to self-identify their social class and income. As was mentioned in the method section, this question was flawed. The question, “Do you consider yourself to be:” was followed by 6 answer choices. The choices were originally (1) “Upper class (bringing in \$80,001 or more per year)”, (2) “Upper-middle class (bringing in \$50,001 to \$80,000 per year)”, (3) “Middle class (bringing in \$35,001 to \$50,000 per year), (4) “Lower-middle class (bringing in \$25,001 to \$35,000 per year)”, (5) “Working class (bringing in \$15,001 to \$25,000 per year)”, and (6) “Poor (bringing in \$15,000 per year or less)”. Following feedback, several things became clear- mostly that my question itself was not clear. I clarified the answer choices by adding the phrase “per person” before the phrase “per year,” however roughly half of respondents had already answered the question at this point, so, naturally, the results are likely to include many responses based on *household*, rather than *individual*, income. Additionally, it was pointed out to me that class and income are highly relative to a specific area. The answer choices were based roughly around the per capita annual income for Mississippians (\$24,369 in 2019 according to the U.S. Census Bureau’s QuickFacts), as well as the rough amount a low-earning, childless, adult individual must make to be ineligible (at the upper end for) an Affordable Care Act subsidy for health insurance. As these answers were based around data relevant to Mississippi, the class and income choices are mostly irrelevant for those respondents living outside of Mississippi. Finally, class is a highly subjective identifier, and different individuals

with the same income might consider themselves to be in different social classes based on numerous factors beyond income. Because respondents were essentially assigned a class based on income, as well as every other flaw in this question, the results are likely wholly inaccurate at capturing identifiers for the population surveyed. Regardless, the data provided by the 947 respondents will be listed below, however I will largely refrain from referring to it beyond this section.

31% (297 people) of respondents selected the “Upper class” option; 28% (263 people) the “Upper-middle class” option; 19% (181 people) the “Middle class” option; 7% (66 people) the “Lower-middle class” option; 7% (69 people) the “Working class” option; and 8% (71 people) selected the “Poor” option.

The 947 respondents were then asked, “How do you identify politically?” 46% (432 people) identified as “Democrat,” 21% (198 people) identified as “Independent,” 19% (180 people) identified as “Republican,” 8% (80 people) selected “Other,” and 6% (57 people) selected the “N/A” option.<sup>3</sup>

Finally, respondents were asked if they were currently in college. The 46% (434 people) who affirmed they were in college were asked further questions relating to their college experience and their post-collegiate plans. The 54% (513 people) who were not in college were asked further questions about their employment and post-education experiences.

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<sup>3</sup> For comparison, a 2017 Gallup poll found 45% of Mississippi adults to be or lean Republican and 38% to be or lean Democratic (Gallup, 2017), while a 2014 Pew study found 62% of Mississippi to be or lean Republican, 29% to be or lean Democratic, and 9% to have no political lean (Pew, 2014).

## Non-College Student Data

Those who were not in college were asked a series of questions aiming to get a better understanding of their experiences in both quantitative and qualitative terms. The qualitative responses do not total to 100%, nor to the number of respondents surveyed, as many respondents gave multiple reasons when detailing their perspective. Due to sample attrition, the number of responses decreased between some initial and follow-up questions.

Respondents were initially asked “Which field or industry are you primarily employed in?” 310 responses were recorded, some in more detail than others. The word cloud in Appendix E.1 gives an idea of the most common employment words (see Appendix E.1). Larger words are mentioned more, while smaller words are mentioned less. The most commonly mentioned keywords were “technology” (47 respondents), “information” (29 respondents), “education” (25 respondents), “engineering” (19 respondents), “software” (12 respondents), “healthcare” (12 respondents), “development” (11 respondents), “sales” (10 respondents), “marketing” (10 respondents), and “government” (10 respondents). These numbers do not total to the number of respondents, as many respondents are counted across multiple fields. For instance, a Department of Defense engineer would be counted in both the engineering field and the government field. A table of the 17 sectors mentioned most can be found in Appendix E.2.

Respondents were next asked “What is the highest level of education that you have completed?” 35% (174 respondents) had completed graduate school; 45% (225 respondents) had graduated from a four-year college or university; 8% (39 respondents) had completed community college or trade school; 8% (40 respondents) had completed some college; 3% (15 respondents) had graduated high school or earned a GED; and 1% (5 respondents) had completed their

education before high school. The survey then branched off to better understand the different experiences of those who had earned a college degree or trade certificate relative to those who had not completed either.

### **College Graduate Data**

Those respondents who had completed community college or trade school, four-year college or university, or graduate school were then asked whether they completed any part of their education in Mississippi. Of these 437 respondents, 81% (355 respondents) affirmed that they had completed at least part of their higher education in Mississippi, while 19% (82 respondents) said that they had not completed any part of their higher education in Mississippi.

Of the 355 respondents who had completed part of their higher education in Mississippi, 91% (324 respondents) said they had completed most of their higher education in Mississippi, while 9% (31 respondents) had received most of their education outside of the state.

Those who had received most of their education in Mississippi were then asked whether they stayed in Mississippi after completing their education. Out of 324 respondents, 53% (172 respondents) said that they had stayed, while 47% (152 respondents) said that they had left.

The 172 respondents who stayed in Mississippi after completing their education were next asked whether they had seriously considered moving away from the state, with 78% (135 respondents) saying that they had seriously considered moving away. Just over a fifth of



respondents (22%, 37 respondents), had not seriously considered leaving Mississippi after completing their education.

Those 135 respondents who had considered moving were asked to explain why. The overwhelming majority of the 133 responses mention economics as a factor in considering moving away (68%, 90 responses), while half of respondents (49%, 65 responses) mention societal reasons, and 41% (55 responses) believe a better quality of life can be found outside of Mississippi. 20% (27 responses) specifically mention politics and a lack of representation. 15% (20 responses) cite family reasons for considering leaving, including better educational and social opportunities for their children elsewhere. 7% (10 responses) specifically cite discrimination (gender, race, and orientation) as a reason to consider leaving. These responses include heartbreaking stories about being unable to date outside of one's race, concerns for the safety of biracial children, fear of showing love for a same-sex partner, and an inability to advance professionally because of one's gender. Only 13% of responses (18 respondents) cited neither an economic nor a societal reason for leaving.

The 37 respondents who had not considered leaving Mississippi after completing their education were asked to expand on their reasons for wanting to stay. 68% of respondents (25 responses total) cited family, with 17 responses having family as the first (and in five cases only) word. 46% (17 responses) associated Mississippi with "home," with many mentioning their community and their social network as part of the intangible aspects of the concept. Several respondents went on to speak of the love they have for their community, and their desire to make a difference. 30% (11 responses) touted the quality of life Mississippi affords them, including the

small towns and the environment. 24% (9 responses) mentioned an economic reason for staying in Mississippi, including careers and the low cost. Two respondents specifically cited an economic reason as contributing to an inability to seriously consider leaving.

The 152 respondents who had completed most of their higher education in Mississippi and left afterward were asked to explain why they had left Mississippi. 149 respondents chose to answer. 81% (120 responses) cited economic reasons for leaving the state, with 68% of total responses (102 responses) specifically mentioning jobs. A lack of jobs was a primary concern, however pay was also an important factor, with one respondent mentioning that their income doubled just by leaving the state. 24% of respondents (36 responses) mentioned social concerns as a reason for leaving. This includes politics, community experiences, lack of amenities and social opportunity, and the overall culture. 10% (15 responses) specifically mentioned racial, gender, identity or sexual orientation discrimination, often in depth. One respondent discussed an inability to earn a living in the state as a “visible queer person” and mentioned the danger they felt in professional environments. Another respondent mentioned wanting to return home and interviewing for two jobs in Mississippi in 2020 in order to do so. Both times the respondent heard derogatory comments promoting residential and educational racial segregation. A further 10% of respondents (15 responses) mentioned a reason that was neither economic nor social in nature. These responses were varied, but mostly concerned following family and loved ones or returning to their pre-collegiate home.

These respondents were then asked whether they would consider returning to Mississippi. Of the 149 responses, 40% (59 responses) said they would never consider returning to

Mississippi. 34% (50 responses) said they may consider returning. 27% (40 responses) said they would consider returning to Mississippi. Respondents were then asked to explain their answers.

Of the 59 respondents who said they would never consider returning to Mississippi, 57 chose to explain. 81% (46 responses) mentioned social concerns as preventing them from considering returning. 40% (22 responses) specifically mentioned political concerns, including several mentions of corruption. 21% (12 responses) mentioned gender, racial, or LGBTQ+ discrimination as a reason; these responses discuss the casual attitude towards discrimination, including one respondent who felt their life was in danger for something as basic as using a public restroom, and went on to advocate for their right to basic human decency. 18% (10 responses) mentioned the religiosity of Mississippi as an issue, including one respondent who mentioned their status as a non-Christian clergyperson. The same respondent also noted that they did not “trust Mississippi with the well-being” of their biracial, LGBT daughter on the autistic spectrum.

Of the 50 respondents who said they may consider returning, 60% (30 responses) mentioned improved economic conditions might influence them to return; 44% (22 responses) said societal changes; 34% (17 responses) said family ties; and 24% (12 responses) specifically mentioned that political change might influence them to return, with some respondents mentioning specific policy changes, including medical marijuana legalization, lower state income taxes, and an overhauled healthcare system. These responses do not total to 50, nor do they add up to 100%, since many respondents mentioned multiple reasons when considering returning.

Of the 40 respondents who said they would consider returning, 55% (22 responses) mentioned family; 48% (19 responses) mentioned economic reasons; and 30% (12 responses)

mentioned societal reasons. 33% (13 respondents) mentioned that they had already returned to the state.

Of the 355 respondents who had completed part of their higher education in Mississippi, 31 had received most of that education outside of Mississippi. These respondents were then asked whether they returned; 45% (14 respondents) had returned, and 55% (17 respondents) had not.

These 14 who did return were asked why they decided to return, with 13 respondents choosing to answer. 46% (six responses) mentioned education as a factor for staying in Mississippi, with most remaining in the state after graduation or having a partner in school in Mississippi. 38% (five responses) mentioned economic reasons for returning to Mississippi, with two mentioning working in Memphis and living in Mississippi. 31% (four responses) mentioned family as a reason for returning to or staying in the state. 15% (2 responses) mentioned Mississippi's society when explaining their return, though they had different reasons for doing so: one saw the social and faith-oriented opportunities as a benefit to living in the state, while the other had social concerns that were causing them to discuss leaving the state.

The 17 respondents who had completed a small part of their higher education in Mississippi were asked why they chose not to return or stay. Of the 16 responses provided, 81% (13 responses) mentioned economic concerns, mostly a lack of available jobs. 38% (six responses) mentioned social concerns, including discomfort at the thought of raising children in a "restrictive society". 31% (5 responses) mentioned family as a reason for living elsewhere, mostly in relation to a significant other's ability to work. 25% (4 responses) signaled a lack of ties to the state.

These respondents were then asked whether they would ever consider returning to Mississippi. One respondent (6%) said that they would consider returning; eight respondents (47%) may consider returning; and another eight (47%) would not consider returning to Mississippi.

The respondent who would consider returning said it would require a compelling job opportunity. Of the eight respondents who might consider returning, 38% (three responses) said they might consider returning for job opportunities; 25% (two responses) said that they might if a more progressive political and social environment was cultivated; another 25% (two responses) said that they might return to retire; 13% (one respondent) said they might consider returning because of family ties; and another 13% (one respondent) said they might consider returning because they miss their college town. Of those who refused to consider returning to Mississippi, all seven who chose to respond (100%) mentioned sociopolitical and discriminatory concerns as reasons; 43% (three respondents) additionally mentioned economic concerns.

Of the 82 respondents who completed their education entirely outside of Mississippi, 57% (46 respondents) replied that they had not returned to Mississippi, while 43% (35 respondents) had moved to or returned to Mississippi after completing their education (81 respondents chose to answer).

The 35 respondents who decided to move to or return to Mississippi after completing their education were asked to explain their reasons, and 34 chose to respond. 59% (20 responses) moved here for the first time after completing their education. 71% (24 responses) mentioned economic reasons for moving or returning to Mississippi, including job opportunities. 29% (ten responses) indicated that they returned or moved to Mississippi because of family ties here,

while 24% (eight responses) did so for quality of life reasons, including quality schools for children, the climate, and the low cost of living.

The 46 respondents who chose not to return to Mississippi after completing their education were asked to explain. 83% (38 responses) mentioned economic reasons, including job opportunities. 33% (15 responses) had developed stronger social and economic ties elsewhere, while 22% (ten responses) cited social concerns.

When these 46 respondents were asked whether they might consider returning to Mississippi, 45 chose to answer. 24% (11 respondents) said “yes;” 47% (21 respondents) said “maybe;” and 29% (13 respondents) said “no.” Respondents were then asked to explain their reasons.

Of the 11 respondents who would consider returning, 55% (six responses) mentioned family ties and 36% (four responses) mentioned both social and economic reasons. 46% (five responses) noted that they had already returned. Of the 21 respondents who might consider returning, 90% (19 responses) mentioned they might be influenced to return by socio-political changes, including policy changes, infrastructure improvements, and a shift in social acceptance of minority groups; 62% (13 responses) mentioned family ties, often with mention of aging parents; and 43% (nine responses) mentioned economic opportunities. Of the 13 respondents who would not consider returning to Mississippi, 77% (ten responses) mentioned quality of life, including the climate, government dysfunction, and a lack of commercial and recreational opportunities. 46% (six responses) mentioned economic concerns. Another 46% (six responses) mentioned social concerns, including discrimination and regressive mindsets.

## **Non-College Graduate Respondents**

60 respondents indicated that their highest level of education completed was either some college, high school or a GED equivalent, or some high school. These respondents were asked a series of questions about their post-education experiences. When asked, 62% (37 respondents) indicated that they stayed in Mississippi or moved here after completing their education, while 38% (23 respondents) indicated that they had left Mississippi after completing their education.

The 23 respondents who left Mississippi were asked to explain their reasons for leaving. Out of 21 responses, 68% (13 responses) mentioned leaving for economic reasons, while 42% (eight responses) mentioned leaving due to societal concerns.

The 21 respondents were then asked whether they would ever consider returning to Mississippi. 48% (ten respondents) said that they would consider returning, 29% (six respondents) said that they might consider returning, and 24% (five respondents) said that they would never consider returning to Mississippi. Respondents were then asked to explain their answers.

Of the ten respondents who would consider returning to Mississippi, 70% (seven responses) mentioned quality of life, including the environment, cost of living, and cultural ties; 50% (five responses) mentioned family as a factor; and 30% (three responses) mentioned economic opportunity. 40% (four respondents) indicated that they had already returned to Mississippi.

Of the six respondents who might consider returning to Mississippi, 67% (four responses) mentioned improved economic opportunity; 50% (three responses) mentioned socio-political changes; and 17% (one response) mentioned that family might influence a return to the state.

Of the five respondents who would never consider returning to Mississippi, 80% (four responses) mentioned Mississippi's exclusionary society, and 60% (three responses) mentioned a lack of economic opportunity as factors preventing them from wanting to return.

The 37 respondents who stayed, returned, or moved here after completing their education were asked why they chose to do so, with 35 responding. 51% (18 responses) mentioned family ties. 31% (11 responses) mentioned economic or financial reasons for continuing to live in Mississippi. 17% (six responses) mentioned wanting to leave but being unable to do so, mostly due to a lack of resources. 14% (five responses) mentioned social or cultural reasons.

Respondents were then asked whether they had ever seriously considered moving away from Mississippi. Out of 36 responses, 78% (28 respondents) said they had, while 22% (eight respondents) said that they had not. The 28 respondents who had considered moving away were asked to explain, with 27 responding. 48% (13 responses) mentioned social pressures, 37% (ten responses) mentioned the political environment, 33% (nine responses) mentioned economic reasons, 22% (six responses) mentioned discrimination, 19% (five responses) mentioned family or social ties elsewhere, and 15% (four responses) mentioned a better quality of life elsewhere.

The eight respondents who had never seriously considered moving away were asked their reasons for wanting to stay in Mississippi. 75% (six respondents) mentioned family and friends as tying them to the area, 13% (one respondent) mentioned wanting to pursue an education in



Mississippi, and another 13% (one respondent) mentioned cultural, political, and historical reasons for wanting to stay in Mississippi.

### **College Student Data**

46% of survey respondents (434 people) affirmed that they were in college at the time they were surveyed. They were asked further questions relating to their college experience and their post-collegiate plans. Because the University of Mississippi Office of Institutional Research, Effectiveness, and Planning aided me in surveying a representative sample of UM students, it can be assumed that a plurality of collegiate respondents attend the University of Mississippi. However, it is likely that many non-UM students are included in the data set due to my posting the survey on popular social media sites. The qualitative responses do not total to 100%, nor to the number of respondents surveyed, as many respondents gave multiple reasons when detailing their perspective. Due to sample attrition, the number of responses decreased between some initial and follow-up questions.

Of 433 collegiate respondents surveyed, 17% (72 respondents) were freshmen, 16% (68 respondents) were sophomores, 23% (100 respondents) were juniors, 31% (135 respondents) were seniors, and 13% (58 respondents) were in graduate school. Respondents were next asked about the field in which they were seeking their degree, with the results available in Appendix F. Respondents were then asked whether they attend school in Mississippi. 94% (398 out of 422 respondents) were enrolled in a school in Mississippi, while 6% (24 respondents) were enrolled in a college or university out of state.

The respondents attending college or university in Mississippi were then asked whether they planned to stay in Mississippi after finishing their education. Out of 397 responses, 53% (209 respondents) said they did not intend to stay in Mississippi, 35% (137 respondents) said they might stay, and 13% (51 respondents) said they planned to stay in the state. These responses were cross-referenced with the question “Are you from Mississippi?” Of the 51 respondents who plan to stay in Mississippi, 77% (39 respondents) are from Mississippi and 24% (12 respondents) are not. Of the 137 respondents who might stay in Mississippi after graduation, 80% (109 respondents) are from Mississippi and 20% (28 respondents) are not. Of the 209 respondents who do not plan to stay in Mississippi, 53% (111 respondents) are from Mississippi and 47% (98 respondents) are not. In total, 71% (98 respondents) out of 138 non-Mississippi native college students intend to leave the state after finishing their education, while 43% (111 respondents) of native Mississippi students intend to leave the state.

When asked why they planned to stay in Mississippi, the 51 respondents mentioned five primary reasons. 51% (26 responses) emphasized that Mississippi was their home, as well as their family ties to the state. 33% (17 responses) mentioned a job or career, with most speaking in definitive terms of established careers and job offers. 31% (16 responses) highlighted the sociocultural aspects of Mississippi as a reason, mostly in terms of friends and community. 22% (11 responses) spoke of a desire to improve Mississippi, as well as to help local communities. 16% (8 responses) spoke of staying in the state for education-related reasons, including pursuing advanced degrees or fulfilling scholarship residency requirements.

These respondents were then asked what they hoped to accomplish while living in Mississippi. Out of 49 responses, 69% (34 responses) spoke of career goals; 35% (17 responses)

social goals; 33% (16 responses) familial goals; 19% (nine responses) educational goals; another 19% (nine responses) leadership goals; 12% (six responses) monetary goals; and 4% (two respondents) mentioned only staying as long as they were contractually obligated.

The 137 collegiate respondents who said they might stay in Mississippi after finishing their education were asked whether they would *prefer* to stay. 18% (24 respondents) said they would prefer to stay, 39% (54 respondents) would prefer not to stay, and 43% (59 respondents) were unsure.

The 24 respondents who said they would prefer to stay were asked to explain, with 23 choosing to respond. 70% (16 responses) mentioned family or “home;” 48% (11 responses) mentioned quality of life reasons; another 48% (11 responses) mentioned cultural reasons; 26% (six responses) mentioned a desire to contribute to or improve Mississippi; and 22% (five responses) mentioned career reasons for preferring to stay. 22 respondents then chose to speak about what they hoped to accomplish if they were able to stay in Mississippi. 68% (15 responses) spoke of social goals; 59% (13 responses) career goals; 41% (nine responses) leadership goals; 36% (eight responses) familial goals; 32% (seven responses) monetary goals; and 18% (four responses) educational goals.

The 54 respondents who said they might stay in Mississippi after finishing their education but would *prefer* not to were asked why. Out of 49 responses, 65% (32 responses) mentioned social reasons; 53% (26 responses) quality of life concerns; 45% (22 responses) economic reasons; 18% (nine responses) mentioned discrimination; 16% (eight respondents)

preferred to live in a different climate; 14% (seven respondents) mentioned a preference for somewhere else in the South; 12% (six responses) touched on political and governmental objections; and 10% (five responses) preferred to live closer to family members out of state.

The respondents were then asked what they hoped to accomplish if they were to live outside of Mississippi. Out of 47 responses, 64% (30 responses) mentioned career goals; 57% (27 responses) social-oriented goals; 21% (ten responses) mentioned a desire to live in an urban area; 19% (nine responses) mentioned family-oriented goals; another 19% (nine responses) mentioned educational goals; 13% (six responses) sought to escape discrimination; 11% (five responses) mentioned monetary goals; and 9% (four responses) mentioned leadership goals.

The 59 respondents who said that they might stay in Mississippi after finishing their education but were unsure of whether they would *prefer* to stay were asked what might influence them to stay in Mississippi. Out of 58 responses, 57% (33 responses) mentioned jobs, income, and opportunities for advancement; 31% (18 responses) familial and social ties to the state; 22% (13 responses) extant quality of life factors; 14% (eight responses) mentioned some sort of social change; 12% (seven responses) educational opportunities; and 10% (six respondents) were unsure of what, if anything, might influence them to stay. These respondents were not asked what they hoped to accomplish after finishing their education.

The 209 respondents attending college or university in Mississippi who said that they do not plan to stay in Mississippi after completing their education were asked whether they *preferred* to stay in Mississippi. Out of 208 responses, 91% (190 respondents) said they would

not prefer to stay in Mississippi; 7% (14 respondents) said they were unsure of whether they would prefer to stay; and 2% (four respondents) said they would prefer to stay in Mississippi.

The 190 respondents who do not plan to stay in Mississippi and would prefer not to were asked why. Out of 183 responses, 77% (141 responses) mentioned social concerns; 49% (90 responses) economic concerns; 32% (58 responses) political, governmental, and policy concerns; 27% (49 responses) mentioned objections to the discrimination endured while living here; 26% (48 responses) quality of life concerns; 15% (28 responses) desired to live in an urban area; 11% (21 responses) mentioned educational goals not obtainable here (either for themselves or a family member); 10% (18 responses) wished to live closer to family; 4% (seven responses) mentioned objections to the local climate or environment; and 3% (six responses) expressed a desire to someday return to Mississippi after living somewhere else.

Respondents were next asked what they hope to accomplish should they leave Mississippi. Out of 176 respondents, 52% (92 responses) mentioned career goals; 31% (54 responses) quality of life goals; 22% (39 responses) socially-oriented goals; 18% (32 responses) family goals; 17% (30 responses) financial goals; 15% (27 responses) educational goals; 8% (14 responses) had avoiding discrimination as a goal; 7% (13 responses) had personal growth goals; 3% (six responses) were unsure; another 3% (five responses) had leadership goals; a further 3% (five) had philanthropic goals; and a final 3% (five responses) mentioned moving abroad as a goal.

The 14 respondents who do not plan to stay in Mississippi and were unsure of whether they would prefer to stay were asked what might influence them to stay. Out of 14 responses,

71% (ten responses) mentioned better economic opportunities; 43% (six responses) mentioned quality of life; 21% (three responses) said family ties; and 14% (two responses) mentioned a social shift against discrimination.

The four respondents who do not plan to stay in Mississippi but would prefer to were asked why they would prefer to stay. 75% (three responses) mentioned quality of life, and 50% (two responses) mentioned a lack of opportunity preventing them from staying. The four respondents were then asked what they hoped to accomplish while living in Mississippi should they be able to stay. Out of four responses, 50% (two responses) mentioned educational goals; 50% (two responses) mentioned healthcare-related goals; and a final 50% (two responses) mentioned philanthropic goals.

The answers of the 24 respondents attending college or university outside of Mississippi were cross-referenced with the questions “Are you from Mississippi?” and “Do you plan to return to Mississippi after completing your education?” 79% (19 respondents) do not plan to return to Mississippi, including 74% (14 respondents) who consider themselves to be Mississippians and 26% (five respondents) who do not. 17% (four respondents) planned to return, including three Mississippians and one non-Mississippian. 4% (one respondent) said they might return, and they did consider themselves to be a Mississippian.

The 19 respondents attending college or university outside of Mississippi and who do not plan to return were asked to explain their reasons for not returning. Out of 18 responses, 61% (11 responses) mentioned economic concerns; 56% (ten responses) social concerns; 33% (six

responses) quality of life concerns; another 33% (six responses) political or governmental concerns; 22% (four responses) mentioned concerns of being discriminated against; 17% (three responses) mentioned educational concerns; and 6% (one respondent) had moved abroad.

The four respondents attending college or university outside of Mississippi who plan to return after graduation were asked to explain why they plan to return. Out of four responses, 50% (two responses) mentioned family ties in the state; 25% (one response) economic ties to the state; and another 25% (one response) mentioned a desire to improve the state. Two respondents noted that they attend schools out of state but still reside in Mississippi.

The four respondents were asked what goals they hoped to accomplish if they were able to return to Mississippi. Out of four responses, 75% (three responses) mentioned social goals, 75% (three responses) leadership goals, 50% (two responses) economic goals, and 25% (one response) mentioned an educational goal.

The one respondent attending college or university outside of Mississippi who said they might return to Mississippi was asked whether they would *prefer* to return. The respondent said that they would prefer to return, and then was asked to explain. The respondent mentioned feeling a connection to the state and a desire to better it. Finally, the respondent was asked what they hoped to accomplish in Mississippi if they were able to return, to which the respondent replied, "Help educate the next generation of Mississippians."

Overall, 1,029 responses were recorded. 19 questions on residency and demographics were asked, the results of which show respondents were largely college-educated, white Mississippians between the ages of 18 and 44. Respondents were broken up into two primary groups. The first, post-education respondents, were subdivided into college graduates and non-graduates, with both groups asked to provide detail on and explanations for their residency post-education. Two word clouds of the responses from post-education respondents can be found in Appendix G. College students were asked their plans to stay in or leave Mississippi post-graduation, as well as to provide reasoning for their plans. Two word clouds of the responses from student respondents can be found in Appendix G. These responses will be further discussed in the next chapter.



## **Chapter Five: Discussion**

The answers I found for my research questions broadly fit with existing migration theories and studies. Economics proved an important factor in the decision to migrate for many, as noted by many studies discussed in this paper's literature review, though it was not *the* most important factor.

The external and internal societal structures mentioned by O'Reilly were repeatedly mentioned by leavers who felt other states and areas have laws and ways of thinking more conducive to their wellbeing. This is particularly evident in the responses that gave detailed accounts of experiences with the various prejudices prevalent in Mississippi's culture and laws.

Lee's push and pull factors formed a sort of all-encompassing umbrella which Kumpikaite and Žičkutė felt allowed for both generalized patterns of migration and individual migratory experiences. Indeed, this model was far more relevant to domestic migration within a wealthy nation than those models that analyze international migration between disparate national economies. Because of this, some estimates of the positive impacts of brain drain mentioned by Abdelbaki may not be applicable to Mississippi. Negative impacts (sunk costs from investing in leavers, lost tax revenue, and a loss of expertise) likely remain applicable, but Mississippi, unlike poorer nations, is not likely to benefit from positive impacts, like remittances and increase direct investment through migratory channels.

There are parallels between this study and the study conducted by Kazlauskienė and Rinkevičius, in that several primary factors act to influence migration. Naturally, professional attractions, socio-economic status with push effects, state macro-economic status and governmental policy, ecological factors, and family reunification were major drivers for both

leavers and stayers- though each category and the respective groups within them emphasized different primary factors to a different degree.

Docquier et al. and Bang and Mitra's gender gap in skilled migration was seen, albeit to a far less extent. Because their studies analyzed skilled international migration with an emphasis on gender attainment gaps, the lower rates of gendered skilled migration seen in this survey may reflect decreased gender disparities in advanced economies.

Davanzo and Morrison's analysis of return migration patterns may also be relevant to these findings, as many respondents who left reported returning, or desiring to return, to Mississippi at a later time. This study did not seek to discover how rapidly this occurred, so there is no way of saying whether these return migrants make up an "unrecorded" stream missed in government records.

Carr and Kefalas's research on rural brain drain in Iowa was far more in-depth than what was possible in the scope of this survey, however some similarities are evident in the data gathered. The various groups of stayers and leavers identified in this study seem to have some of the same characteristics as Carr and Kefalas's winners and losers. Many respondents in my study would fit easily into Carr and Kefalas's seekers and returners, though I am unable to definitively identify my own study's equivalent of Carr and Kefalas's achievers and stayers, given a lack of emphasis on the resources invested in Mississippians.

Finally, Smith's narrative on brain drain in Mississippi proved highly relevant to the results of this study, as she discussed many identical themes as those found in the responses provided by leavers and stayers. The primary themes she highlighted (the state government, the social climate, and a lack of economic opportunity) don't provide a complete picture of out-

migration push factors, but certainly help to add context to the societal and economic factors mentioned by the respondents in this survey.

This literature is useful for establishing a general framework for brain drain, as well as for understanding the specifics of migration from or to Mississippi. Because of this, migratory trends commonly discussed in the literature (economics, community ties, individual pull and push factors) are observed in the answers to the three research questions of this thesis.

### **Research Questions:**

#### ***(1) Is brain drain a problem for Mississippi?***

Though census data shows that Mississippi is experiencing population loss, this study is unable to determine the extent to which that loss is occurring. However, the data gathered by this study suggest that human capital flight of both the skilled and the unskilled is a pressing concern for the state. 26% of respondents have left the state altogether, with 94% of these individuals holding a college degree. Of further concern are the 64% of resident respondents who plan to leave the state or have seriously considered doing so. In total, only one-third of surveyed respondents have not left Mississippi or considered doing so.

#### ***(2) Are some groups more likely to leave Mississippi than others?***

Yes, though response rates vary from question to question and group to group, there are notable trends in the dataset. 58% of college graduates surveyed have either left or have seriously considered leaving. Among current college students, only 13% say they will stay in or return to Mississippi after graduating. 85% of non-binary individuals have left or seriously considered leaving the state. Women are slightly more likely than men to leave or seriously consider leaving the state at 73% to 71% respectively. As a whole, 87% of respondents of minority race or ethnicity report leaving or seriously considering leaving, relative to 68% of white respondents. Similarly, two-thirds of straight respondents report leaving or seriously considering leaving, versus nearly four-fifths of LGB+ respondents (77%). Democrats (90%) and Independents (82%) are also more likely to leave than Republicans, political others, and the politically averse (72%).

***(3) What are the push and pull factors that contribute to or mitigate brain drain and out-migration?***

Push and pull factors are widely viewed as some of the greatest determinants in the decision to migrate, with Kumpikaite and Žičkutė (2012) implying they form an umbrella under which all other models of migration fit (Brown and Cromartie, 2006; Carr and Kefalas, 2009; Davanzo and Morrison, 1981; Kazlauskienė and Rinkevičius, 2006; Kritz et al., 2011; Kumpikaite and Žičkutė, 2012; Lee, 1966; O'Reilly, 2013; Voth et al., 1996). Though specific factors vary from person to person, there are broad categories that encompass individual factors. For instance, one respondent may decide to leave Mississippi for better job opportunities, while another may decide to stay due to the low-cost of living. These are both economic factors working to influence the decision to migrate.

For the purpose of my research, I have categorized qualitative responses into three broad categories of push and pull factors: (1) responses which are economically oriented, (2) responses which are socially oriented, and (3) responses which are focused on quality of life. There are many instances of overlap between the three categories in individual responses. For instance, one college-educated individual identified the reasons she chose not to return to Mississippi after completing her education was because of a lack of well-paying jobs and opportunity for advancement in a male-dominated field (economics, societal), a lack of large cities (quality of life), and the response to the coronavirus by state leaders and residents (societal). When examining these categories, I have broken down the respondents who answered the qualitative questions into 2 main categories: (1) “stayers,” and (2) “leavers.”

### *Stayers*

Stayers comprise about one-third of respondents (36%). They include those who stayed in or returned to Mississippi and have not seriously considered moving away, as well as those open to returning. For this category, quality of life acts as a strong magnet, and is mentioned in 65% of responses. They see Mississippi as “home,” and their responses invariably mention family or friends. One respondent summed up the gamut of responses when saying, “It’s cheap to live here. Close to family. Where I’m from. Southern culture.” Many spoke of “family, small town, and community,” how they “hold [the countryside] dear to [their] heart,” and the benefits of “living in a place with plenty of space while still being close (~15 minutes) to the capital city.”

Economics was a distant second factor for stayers, mentioned in only one-third of responses. When brought up, economic responses were on opposite ends of the spectrum. Most

emphasized extant pull factors that acted like a magnet for stayers, keeping them in or attracting them to Mississippi. These include inexpensive housing and cost of living, or the availability of jobs in nearby large markets, like Memphis or New Orleans. Some responses, though, elaborated on the potential changes necessary to keep respondents here or pull them back. “Expansion in sophisticated market sectors,” career opportunities with room for advancement, and better infrastructure links with regional markets were frequently discussed. STEM fields, finance, healthcare, and education were repeatedly mentioned as sectors in which the state could use improvement. Some desired the ability to work remotely, but many emphasized the need for competitive salaries relative to the rest of the region and nation. Several respondents expressed a desire to retire in Mississippi, feeling that the relaxed pace and inexpensive essentials would afford them a higher caliber of life as they aged.

Finally, societal factors are an afterthought for most stayers, occurring in just 25% of responses. A minority of stayers who mentioned aspects of Mississippi’s society touched on the local culture, saying something along the lines of, “excellent gun laws, rich history, great food, and nice people.” Most respondents who discussed societal factors emphasized a need for change. This was almost always seen among responses from college students and respondents living out of state and open to returning. These responses, though varied, mentioned socio-political changes, like marijuana legalization, greater political representation, and improvements to the state’s healthcare and education systems. For those open to living in Mississippi, however, societal factors were overwhelmingly linked with giving back to the community, with one respondent elaborating by saying, “Most people I’ve ever been in classes with at the University and at MSMS always said how much they couldn’t wait to leave. They said this because Mississippi wasn’t worth it to them. I want to make Mississippi a better place.”

### *Leavers*

Leavers comprise roughly two-thirds of respondents (64%). They include those who are considering leaving Mississippi, as well as those who have left and are not open to returning. Unlike stayers, leavers emphasized the societal factors of the state as a strong repellent. 57% of their comments touched on society in some way, almost overwhelmingly in negative terms. One respondent highlighted the concerns of many others when listing “nepotism, corruption, bigotry, intolerance, racism, science denial, poverty, heat, humidity, insects, and people who care more about football than their fellow man” as reasons for why the individual left the state. Others were more diplomatic, with one leaver noting, “Old times there are not forgotten.” Many respondents belonging to a minority group referred to a fear of being “hate crimed” when explaining their responses. One respondent, a self-identified “queer pansexual white woman” co-parenting a biracial child, felt she had no future here. She said that others in the state did not see her as her own individual, but as the identity markers that “inform but do not define” her.

Economic factors were similarly viewed as pushing leavers out of and away from Mississippi, with half of leavers mentioning them. Most of the economic reasons include a lack of opportunity for jobs in a relevant or desirable field, a lack of adequate compensation, and a lack of opportunity for advancement within available jobs. One respondent discussed economic, quality of life, and societal factors when saying that there are “no labor protections for any job I may find, bad healthcare options, questionable educational options for my child (public or private), crime/safety, no possibility to live without owning a car, bad transportation links.” Most respondents were frank when discussing the economic potential of Mississippi as being “less than favorable,” and chastised the state for a lack of emphasis on tech and start-ups.

Finally, just over a quarter of leavers (29%) discussed Mississippi's quality of life. As with stayers, some leavers saw family and friends as a pull factor tying them to the state or potentially attracting them back. For many leavers, however, family and friends elsewhere were important enough factors to encourage them to depart from Mississippi. Others felt their personal quality of life in the state was lackluster, with one respondent noting, "There was little potential for growth in both personal and professional aspects of my life. The political capital was being wasted on fixing non-issues instead of the huge hurdles that face the state. There was no real startup culture, which is strange given how low the cost of living is. The biggest city has a lot of crime issues and no focus on livability, and everyone that works there lives in Madison, which is just dreadfully homogenous." Often, quality of life came down to a choice between familiar comforts and new experiences, with many mentioning something along the lines of "I want to experience new things. I have been in Mississippi my whole life, and I want to explore what the world has to offer. The world is too big to spend my whole life in Mississippi." A repeated theme among respondents was the appeal of other environments, like big cities and "better" atmospheres in which they could raise their children. One respondent mentioned that "Jackson doesn't have the vibe of another big city," before going on to discuss the crime and poor infrastructure they experienced there. One student discussed dismissive attitudes by many in the state, saying, "I've watched many people around me scoff about COVID-19 and whine about having to do the bare minimum to keep themselves and others safe. It's immature and disheartening--certainly nothing that I want anything to do with. There's also a historic intolerance issue, which while some strides are being made, there are equally large efforts put forth to stop this progress." Others still objected to the climate, with many of these objections emphasizing that Mississippi is "ridiculously hot."



The answers to my three research questions ([1] is brain drain a problem from Mississippi, [2] are some groups more likely to leave Mississippi than others, and [3] what are the push and pull factors that contribute to or mitigate brain drain and out-migration) shed light on the phenomenon the state is experiencing. In Appendix G, four word clouds of responses on staying in or returning to Mississippi and leaving or not returning to the state provide an idea of commonly reiterated themes and phrases. Through the multitude of individual perspectives, a better understanding of the issues can be gained. Respondents were mostly unable to offer detailed solutions to reverse Mississippi's brain drain. Solutions, however, are available for the problem, and will be discussed in the next chapter.

## **Chapter Six: Recommendations**

As I've researched this topic, I've reached out to people all over Mississippi in search of solutions. I've been privileged to speak with many thoughtful and insightful Mississippians about the problem brain drain poses. It's apparent to many that Mississippi is in need of effective responses, and I've been fortunate enough to hear a plethora of them. We, as a state, have exemplary models for every obstacle we face. We can look to our neighbors in the South, where states like Alabama, Florida, Georgia, North Carolina, Tennessee, and Texas have demonstrated their respective ability to capitalize on their comparative advantages and create greater success and prosperity. We can set our sights beyond our region, to the East, the Midwest, and the West, to find models that work. We can turn abroad, where innumerable communities, big and small, have demonstrated that numerous solutions exist for every problem. First, perhaps, we should turn inwards and set our gaze on ourselves. After all, few understand the obstacles Mississippi faces as well as Mississippians themselves.

### **Native Solutions**

As I began my preliminary research on brain drain, I spoke with a wide range of Mississippians who were enthusiastic about combatting the problem. Because there was so much interest, I am unable to include the solutions posed by every individual I interviewed. However, I have tried to include a variety of perspectives on the subject. First, I will cover the suggestions of Jake McGraw, who has researched brain drain in Mississippi as part of his work with the William Winter Institute. Second, I will highlight the ideas of Courtney Jones, who has used his media platform to find modern solutions from Mississippi's past. Third, I will address the bills Trey

Lamar has guided through Mississippi's House of Representatives. Fourth, I will focus on the recommendations of Allen Kurr and the Oxford-Lafayette County Economic Development Foundation. Fifth, I will discuss Mississippi's comparative advantages and potential, as understood by former U.S. Representative Chip Pickering. Finally, I will present the advice of the Mississippi Development Authority's chief marketing officer, Laura Hipp.

### ***Jake McGraw***

Jake McGraw, the public policy coordinator at the William Winter Institute, has conducted his own research on brain drain in Mississippi. I was privileged to be able to interview him and hear his ideas. His first piece of advice for me was that solving a problem like brain drain takes time. There is no magic wand to be waved that can immediately fix everything.

McGraw emphasized the necessity of local solutions. After all, people move to specific cities, not general areas. Residents of Mississippi will be, first and foremost, residents of the local community in which they live. In that line of thinking, McGraw advocated for communities to become "poles of attraction," using the assets they possess to draw new residents in. He used the thriving college towns in the state as examples, such as the "Oxford bubble" and the Golden Triangle of Columbus, Starkville, and West Point. Within the Golden Triangle specifically, McGraw underscored the attraction of walkable neighborhoods, locally owned businesses, and master city plans that integrated student housing into the community.

However, these bubbles are small and can only attract so many new residents. For Mississippi to truly thrive, it needs an urban core to act as an engine of economic growth. Jackson, the largest city in Mississippi, has lost almost a quarter of its population in the past four decades (World Population Review, 2021). The suburbs, however, have been able to siphon off

much of the population hemorrhaging from the urban core. McGraw said that this has created an oppositional situation where the city of Jackson has become 80% African American and Democratic, while the suburbs are overwhelmingly white and Republican. A “structural challenge” has emerged where Jackson and its suburbs are in different counties, with no one county home to a majority of the metro area population. Jackson, as evidenced recently by the month-long crisis in which residents lost access to clean, running water, is desperate for resources that the state and suburbs are unwilling to help provide (Stribling, 2021). What is needed, McGraw said, is a master growth plan encompassing the metro area, one able to move beyond “racial and ideological divisions.” Coordination is missing: the citizens of the respective metro-area cities and counties each have their leaders, but the leaders of Jackson and state and suburban leaders are dominated by political parties with opposing ideologies and competing interests. In order to overcome these seemingly chasmic divides, new multijurisdictional institutions of governance are needed to coordinate a comprehensive path forward for the entire area. Then, rather than competing with one another for scarce resources, the area may be able to jump-start the economic engine of the urban core and compete among the major metro areas of the Southeast.

Naturally, such a solution will require massive investment- though Mississippi is not exactly strapped for cash (U.S. News & World Report, 2019; Pender and Harrison, 2021). Jackson, on the other hand, is. McGraw noted that the state of Mississippi possesses “a lot of property” within city limits but is exempt from paying taxes on it to the government of Jackson. McGraw went on to emphasize the untapped potential of the state government. By crafting a “statewide vision” that “places state interest above local, racial, political interests” Mississippi can ensure any potential investment program has enough “universality.” Rather than prioritizing

one city over another, the state can ensure that every part of the metro area, as well as other regions throughout the state, can benefit from well-invested public funds. This is key because there is a “huge competition for resources...especially when there aren’t enough.”

Another key to success within the state, according to McGraw, lies with federal solutions. “Mississippi will disproportionately benefit from safety net spending.” Indeed, data from the Tax Foundation shows that federal aid made up 43.4% of Mississippi’s general revenue in fiscal year 2017 (Cammenga, 2020). McGraw emphasized that the current model of aid, “federal funds in block grants” with “conditions for distribution left up to the states,” has led to inordinate amounts of money wasted before reaching the average Mississippian.

A study by the Center on Budget and Policy Priorities supports this conclusion, highlighting the fact that “states used their spending flexibility under TANF [block grants] to ease budget shortfalls and fund other state priorities, shifting funds away from helping poor families meet basic needs or prepare for work. (Schott, 2017). This has been made all the more evident with the 2020 revelation of what State Auditor, Shad White, called the “largest public embezzlement case in state history” (Mississippi Office of the State Auditor, 2020). \$94 million dollars was embezzled over several years from the Mississippi Department of Human Services, mostly from block grants intended for the Temporary Assistance for Needy Families fund” (Wolfe, 2020).

As the embezzlement occurred, the Department of Human Services rejected 98.5% of welfare applications received in 2017, despite \$50 million in un-embezzled funds going unused (Wolfe, 2020). A substantial portion of the money was laundered through the well-connected New family, staunch supporters of and political donors to various state officials, including then-governor Phil Bryant and current governor Tate Reeves (Wolfe, 2020; Wolfe, 2020; Pittman,

2019; Pittman, 2021). Additional millions were siphoned off through a former Green Bay Packer, Brett Favre, to go to Prevacus, a “concussion research venture” in which he invests, as well as to the University of Southern Mississippi athletic foundation for a new volleyball stadium (Wolfe, 2020). Nancy New is a member of the foundation’s board, and Favre’s daughter played volleyball for the university (Wolfe, 2020; University of Southern Mississippi, 2018). Money was also fraudulently obtained by the News from the Mississippi Department of Education. The money was ostensibly for reimbursements for their private schools from the Education Scholarship Accounts voucher program created by then lieutenant governor, Tate Reeves (Pittman, 2021).

Though McGraw and I didn’t discuss the TANF issue, he emphasized that there needs to be a more “direct connection” between the federal government and both communities and individuals that “gives states less control” in order for more Mississippians to benefit from block grant funds. McGraw believes that local governments have a better ability to leverage the funds in ways that allow them to “innovate” and “experiment” with “local social programs, safety nets, greenspaces, and community arts programs.”

Of additional importance is the relationship between the private sector and “organizational influence.” McGraw stresses that this is a priority for economic development, as the interests of the private sector must “align with need” for local and state businesses to “retain and recruit employees and employers.” He gave an example of the Mississippi Development Authority, which “works mainly with established interests.” Instead, it is essential that increased import is placed on “promoting entrepreneurship and new industries” within local communities.

According to McGraw, the three ways to make the greatest impact on Mississippi’s brain drain problem are to (1) fully fund K-12 education, (2) expand Medicaid, and (3) raise the gas

tax to fund infrastructure improvements. He noted that Jim Hood, the Democratic candidate for governor in 2019, Bill Waller Jr., a Republican candidate for governor in 2019, and Delbert Hosemann, the current lieutenant governor, all made these ideas planks of their respective campaign platforms- a signal that these are commonsense, bipartisan solutions.

McGraw said that fully funding education leads to more teaching jobs. Similarly, expanding Medicaid and raising the gas tax for the first time since 1987 (Wilson, 2019) will lead to more nursing and construction jobs. Not only is this “necessary for state growth,” McGraw notes that the newly created jobs will be evenly distributed across the state, rather than concentrated in metro areas. “Creating a few hundred extra jobs each year,” will lead to a positive feedback loop in which “more people stay, more customers and taxpayers” are gained, leading to an invigorated economy. The cycle then repeats. A better economy leads to even greater numbers of people staying, leading to increased property values and tax revenue, which further boosts the economy.

Furthermore, McGraw stressed that the discriminatory practices of the state government will need to cease in order to attract people. As a positive example, he cited the replacement of the former state flag, which included the Confederate battle flag, by voters in 2020. As an example of what still needs to change, he cited House Bill 1523, which allows those with sincere moral convictions or religious beliefs to deny services, housing, and non-emergency medical aid to LGBT+ individuals (H.B. 1523, 2017). This law, and others like it, “confirm negative stereotypes” of Mississippi, “discourage new growth,” and “encourage us to leave even if we want to see Mississippi succeed.” To move beyond brain drain and change its reputation, the government of Mississippi “must focus on basics, not social norms.”

McGraw said that finding specific communities open to trying new policies could be a game changer in the state’s approach to brain drain. If one particular policy or area finds success in attracting new residents, it will have a “domino effect” that will push other areas to follow. The best place to try these new policies are “innovative hubs,” like Oxford, whose late 20th century and early 21st century beautification efforts spurred other college towns in the state to do likewise.

Finally, McGraw proposed a change to the state corporate code, so that “b-corps,” or benefit corporations, could more easily incorporate within the state. These corporations “include philanthropic causes in their charters,” making directing profits to “underserved areas” of communities an “integral part of their corporate mission.” He referred to this as “social entrepreneurship,” and noted that start-ups and smaller companies incorporated with this philosophy in mind attract a different caliber of investors and shareholders- ones who can’t easily direct profits out of state, because local charitable causes are protected by b-corp charters. Furthermore, McGraw emphasized that “lots of social problems will benefit” from this solution, particularly if Mississippi lawmakers are able to incentivize the incorporation of b-corps with tax benefits (McGraw, 2020).

### ***Courtney Jones***

Courtney Jones, a content creator at ‘Sipp Talk Media, a “digital platform that seeks to change the narrative of Mississippi through cultural education, community, and positive content that centers the Black Mississippi experience,” has used his platform to focus on the systemic inequalities present in Mississippi (Gen Global, 2020). Jones offered a perspective centered



around local and community empowerment, with an infectious demeanor that exuded confidence in the knowledge that change is just around the corner.

Jones and I began our discussion with the Delta, often cited as the “poorest corner of the poorest state in America” (BBC, 2012). The Delta is a “food desert,” an area where “people have little to no access to conventional grocery stores and fresh produce” (Brown, 2011). A recent study of five rural Lower Mississippi Delta towns found that only 11 of 97 food stores identified were grocery stores (Goodman et al., 2020). Jones highlighted that expanding food access in areas like the Delta are crucial to creating a livable environment. He promoted education and awareness as tools to “empower communities” to create local farmers’ markets. However, he acknowledges a “vacuum of resources,” saying the “people in power are fine, but few others are.” To counter this lack of resources, he points to Mileston, Mississippi, a “resettlement community” designed in the 1940s as part of a Farm Security Administration “experimental poverty eradication program” encouraging upward mobility for Delta sharecroppers and tenants through “landownership, training, cooperative management, and economic assistance” (Wood, 2018). In the aftermath of massive resistance, the South’s campaign in opposition to integration, Mileston became a target of intimidation by white Mississippians (Eubanks, 2020). Though the program was short lived, Jones cited it as an example of success in poverty eradication, and increased healthcare access, educational attainment, and political enfranchisement. Jones also pointed to it as an example of reparations to the descendants of the enslaved people in the Delta by the federal government, before noting that local junior and community college systems in the state can be used in the same way to eradicate poverty in the region- particularly if they can begin offering inexpensive bachelor degrees.

The state government of Mississippi, however, has been far less proactive in poverty eradication, as a “segregated society still exists” in Mississippi. Until the state uses “identity creation [of a common Mississippi identity] to overcome racial differences,” Mississippi will be unable to “fight stereotypes and real problems.” Jones called inequity in Mississippi a “zero-sum game” where the “fear of losing” encourages the dominant players to “downplay others’ humanity.” He went on to clarify that “oppression is a choice, but not a conscious one,” using the public school system as an example. As part of massive resistance, many white residents in the state left the public school system for private “segregation academies,” which began a decades-long decline in government and public support for the public school system. In the modern era, this battle has been revitalized with “school choice advocates” promoting voucher programs that provide parents with subsidies to enroll their children in what then-lieutenant governor Tate Reeves referred to as a tax-paid private school system (Wolfe, 2014). Jones wondered what would happen when the money for such ideas ran out; whether the public education system would become another Mileston, with those who stand to benefit the most forgotten by the government in the long-term.

Though the obstacles to solving Mississippi’s brain drain problem are obtrusive, Jones highlighted a particular path forward: creative unity. Mississippi has a “strong artistic tradition” that can be used to start the conversation on “issues that go undiscussed in Mississippi society.” By investing in “creative networks” to brainstorm problem solving techniques suited to local issues, Mississippi can find a way to ensure that all residents benefit from, and are protected by, the public resources available (Jones, 2020).

### ***Trey Lamar***

Mississippi House of Representatives Ways and Means Chair, Trey Lamar (R-Senatobia), has formulated a more clinical approach to countering brain drain, sponsoring bills to address the problem through tax refunds for college graduates. Specifically, five years after moving to Mississippi, college graduates could receive a tax refund provided they had purchased real estate or started a business. “Once someone stays somewhere for five years,” Lamar said, “they are likely to stay for good.” College graduates can “help pull the state along,” and “contribute more to the economy.” Lamar’s tax incentives proposal was approved in the 2021 legislative session, and was signed by Governor Tate Reeves (Mississippi Today, 2021).

Mississippi is on the bottom of the list for many recent graduates “because the private sector is small.” Lamar, when pressed on solutions for growing the private sector in Jackson, said that “policy changes are needed to fuel growth” and turn Jackson into a hub of private sector growth. Because of the COVID-19 pandemic, “tax incentives for people moving here and working from home” may be able to help spur that growth. He went on to add that Jackson State University, the city’s flagship collegiate institution, is a “leader in higher education,” and “can revitalize downtown growth” to better attract the private sector (Lamar, 2020).

### ***Allen Kurr***

Allen Kurr, the Vice President of the Oxford-Lafayette County Economic Development Foundation, is a proponent of an economic development formula created by Heartland Forward, a non-profit think tank which seeks to improve economic performance in the American “heartland.” The Heartland model seeks to promote economic growth across a variety of different sectors and industries. According to Kurr, there are five points a community must focus

on to implement the model: (1) invest in people, (2) “live like you give a damn,” because “if your yard looks good, it’ll create community pride;” (3) promote “strong” networks for local and regional communication; (4) support local businesses; and (5) “be data driven.” Kurr notes objective metrics for data analysis are important for measuring these points, including: population, assessed value, total employment, civilian labor force, annual average wage, per capita income, and retail sales. By cultivating this holistic approach, more people will be attracted to a community, leading it to grow. A growing community attracts business, which, in turn, attracts larger industry, improving local economic metrics. Additionally, formal and informal regional partnerships allow for coordinated strategies for secure long-term growth that doesn’t rely on competitively poaching businesses and workers from neighboring communities.

Heartland Forward has identified seven “major attributes” for economic success in micropolitan areas (Devol and Wisecarver, 2018). Their study identified Oxford, Mississippi as exemplary in these respects. First, “universities and research institutions” are able to play pivotal roles in “catalyzing and sustaining” local economic development through their graduates and faculty. Second, “community colleges and workforce development” can quickly adapt to local labor demand. Third, “entrepreneurial awareness, support, and access to early-stage risk capital” through public-private partnerships are essential to “long-term vibrancy and dynamism.” Fourth, “diversified and thoughtful strategic economic development planning” to promote local growth without “chasing smokestacks for job creation.” Fifth, “manufacturing, logistics/supply chain, and foreign direct investment” connect a local economy to regional, national, and international economies. Sixth, “technology, professional, scientific, and technical services” to increase wages and promote economic diversification. Last, “quality of place,” which can attract and retain young families through “low business and housing costs,” “cultural, recreational, and lifestyle

amenities,” public safety, quality schools and healthcare, “low commute times, and an equitable work-life balance.”

The Heartland model can be adapted to communities throughout Mississippi. Kurr cited the project director of the Stennis Institute of Government at Mississippi State University, Joe Fratesi, as developing a template for the design and implementation of “collaborative investments” that centers around four key areas designed to transform local and regional economies: (1) collaboration on networks of entrepreneurship and innovation, (2) collaborating to develop “quality, connected” communities, (3) collaborating on “new narratives,” and (4) collaborating to retain and attract “21st century talent and brainpower.”

The benefits of this approach are apparent in Oxford. Kurr touted the Heartland model as enabling Oxford to diversify its economic portfolio in a way that protects it from capricious market forces. Further, the model has allowed the city to grow “from the inside out” in a way that has helped it to retain its local culture and identity. Small, local enterprises have enabled this by growing with local ideas and needs in mind. Larger corporations from elsewhere, Kurr said, “bring their own corporate culture” that can, on occasion, conflict with local values. Through this process, Oxford has achieved a 2% population growth rate “for the last three decades” while many communities in Mississippi have seen their populations fall. Oxford aside, Northeast Mississippi’s growth has been “flat.”

Kurr noted, however, that other communities and regions in the state have yet to implement comprehensive economic development models conducive to growth. Jackson, for instance, “must become a hub” of innovation on a wide range of issues or the state as a whole will fail to grow. He mentioned a “lack of infrastructure, quality of life, and culture” as holding the city back from its full potential before going on to advocate the city systematically revitalize

its downtown “block by block” in order to make it a more appealing locale for new residents and businesses. The Delta, on the other hand, faces regional challenges. Kurr emphasized that, due to underinvestment in the region’s workforce, “traditional” economic plans won’t work without increased “education and upskilling” initiatives. He went on to highlight a potential “succession crisis” developing in the region “due to the number of small business owners retiring.” Planning for business succession and “entrepreneurial education” are essential to prevent the region from falling further behind. Overall, Kurr proposed the state pivot with a focus on “internal growth,” by “building up existing small businesses” and reinvesting resources, rather than exclusively chasing after large national and multinational corporations that aren’t guaranteed to stay in state for the long haul. By following the Heartland Model and replacing an internally competitive coexistence with structures of mutual support and cooperation, Mississippi, and the communities in it, will be better suited to become a powerhouse of regional and national growth in the 21st century (Kurr, 2020).

### ***Chip Pickering***

Former U.S. Representative for Mississippi’s Third District, Chip Pickering, believes that Mississippi is well-suited for economic success. During our interview, he pointed out the transformation that began in the early 2000s as the state’s rural, agrarian economy with a dependence on the textile industry began to shift toward the automotive and aerospace industries, along with major regional distribution hubs. He went on to say that many of Mississippi’s neighbors and regional partners offer ideal templates for rural development and state-wide success.

Pickering highlighted four comparative advantages that Mississippi can leverage to jump to the forefront in the coming years and decades.

First, the state is a “crossroads for the fastest growing region in the U.S.” FedEx is headquartered just across the northern border of the state in Memphis, providing Mississippi with an important connection to the global marketplace. Pickering further mentioned that, given Mississippi’s central location, the state would be wise to promote investment in “aerial and drone systems and autonomous vehicles” to make better use of this comparative advantage. Importantly, Pickering emphasized that the state’s existing automotive industry can be utilized to further this goal.

Second, Mississippi is home to, and hosts the headquarters of, C-Spire, a telecommunications and technology corporation. This unique asset can pave the way for Mississippi to take the lead in 5G deployment, as well as promote new advances in “telemedicine, precision agriculture, and unmanned aerial vehicles.” In addition, public-private investment in 5G networks can be used to generate a “regional advantage in high performance computing,” with the state eventually being able to parlay that position into the national spotlight in “artificial intelligence and quantum computing.” Pickering pointed to well-funded government institutions suited to help achieve this goal, such as the universities, the Vicksburg District of the Army Corp of Engineers, and the Stennis Space Center, NASA’s rocket testing facility. Investment in these areas, he emphasized, “allows for the creation of an economy that helps keep the best and the brightest” at home. In addition, the state’s regional links allow it to benefit from access to similar hubs in North Carolina’s Research Triangle, Atlanta’s Georgia Institute of Technology, and Alabama’s aerospace and defense industry in Huntsville.

Third, Mississippi “has culture.” Pickering underscored the benefit the state’s “cuisine, music, and literature” can play in drawing people to the state. By “integrating into our cities” the unique cultural attributes the state possesses, an internationally recognizable identity can be developed and harnessed to Mississippi’s advantage. He suggested looking to Austin, Texas and Nashville, Tennessee as models for developing this identity in regional hubs around Memphis, the Gulf Coast, and Jackson.

Building on this, Pickering listed Mississippi’s fourth comparative advantage: its college towns. Though small, these hubs can be utilized to build a better Mississippi for future generations. Through investment and advertising, they can pull in residents from elsewhere, and the respective cities’ culture, education systems, and green spaces can be used to spur population growth.

There is a catch, however, with Jackson. When asked, Pickering said, “for the last two decades, rural/urban and racial divides have made it difficult to build Jackson into a great city. Rural representatives go to [the capital] with an adversarial view that is compounded by racial divisions.” In order to build Jackson into “a central hub” for economic growth, the state “must overcome these divides.” There exists a “private leadership gap” that has emerged over the decades. “As Jackson went from majority white to majority black, its leadership did too. Since the 80s, the new political and private leadership of Jackson and the state have not worked well together, leading to disparities.” Pickering emphasized there are “signs it's changing,” with “federal, state, local, and private leaders starting to work together and invest” in the city. He mentioned numerous federal and state leaders, like Senator Roger Wicker, Lieutenant Governor Delbert Hosemann and House Speaker Phillip Gunn as working well with the mayor of Jackson, Chokwe Lumumba, and took care to point out the progress leaders have made together, as with



Jackson’s controversial “One Lake Project” that seeks to dam the Pearl River to create “valuable waterfront property for development” (Judin, 2020).

Pickering discussed the intergovernmental cooperation and “public-private strategy and coordination” that could be used to help Mississippi “leap beyond rural/urban and racial divides and the private leadership gap.” He believes the state is at the “beginning of a changing economic development strategy,” one in which “subsidies are out” and money is “better spent attracting STEM grads to Mississippi.” Highlighting the growth suburban Madison and Desoto counties have seen from “all over the South,” Pickering said that their models for growth had proven successful, emphasizing “good schools, retaining the best and brightest talent, and attracting residents from out of state.” He went on to mention that companies like Google and Amazon have begun to put down roots in the state, with Amazon’s Madison center “using advanced robotics reliant on 5G,” in addition to homegrown talent like Hiro Telemedicine’s Healthcare Integrated Rescue Operations drone, which can be used to provide emergency healthcare in the aftermath of disasters and deliver medicines to rural areas of the state (Beebe, 2019). These assets, along with “out-migration [from] super-cities, like New York City, to mid-sized cities with a high quality of life,” can be used to turn around Mississippi’s brain drain into brain gain (Pickering, 2021).

### ***Laura Hipp***

Laura Hipp, the chief marketing officer for the Mississippi Development Authority, sees similar bright spots on the horizon for Mississippi. In her experience, “some of brain drain just boils down to a lack of jobs,” while others who leave want to “explore the world.” Hipp identified the key to success for Mississippi as laying with 30- to 50-year-olds who must be

attracted to the state, especially with new tech jobs. She mentioned the “Ole Miss, South Miss, Jackson State, Institutes of Higher Learning research consortium” is working to “improve tech jobs,” but the initial lack of a tech base has made for a slowly unfolding process. In order to build this base, two things must be done. First, tech hubs and groups must be created through investment in smaller companies. Second, a more conducive innovative atmosphere must be cultivated through “university and research partnerships.” She emphasized that “without coordination, we won’t get anywhere.”

Other avenues exist to reverse brain drain, as well. Hipp mentioned an initiative by the city of Natchez, Shift South, which provides remote workers \$2,500 in moving expenses and twelve months’ worth of \$300 monthly stipends on the condition that new residents purchase a home worth at least \$150,000 (Natchez, Inc., 2021). Other cities, Hipp noted, are also finding a path forward. Jackson, for example, “is improving,” but the process of creating a “walkable and livable” community is a slow one. Meridian “is working on their downtown,” and livable downtowns with “flats” are essential for “attracting young folks.” The Gulf Coast, too, “is attracting people,” showing that there are several places in Mississippi bucking the out-migration trend. Ultimately, there is a “suburbs versus city” issue in that “young people don’t want suburbs until they start families,” but there are far more suburban than urban areas in the state.

There is, though, a “limit to what government can do.” Hipp pointed to the private sector as leading the way forward. Nashlie Sephus, a Jackson native and Mississippi State University graduate, is aiming to create a “12-acre tech park in downtown Jackson.” Her \$25 million “Jackson Tech District” is planned to incorporate seven buildings and a half million square feet of workspace in order to build a “self-sustaining village where people can live, work, play, and eat” (Carr, 2021). “There are a lot of bright spots, but we get bogged down in the bad,” Hipp

says. She went on to discuss more of these silver linings. The Vicksburg District of the Army Corp of Engineers' Engineer Research and Development Center is "a top research facility," that is "growing quickly, with tech spin-offs." Stennis Space Center is experiencing "privatization," with "Relativity Space and Adranos, Inc. investing in the facility" and bringing "3D printed rockets and rocket engine research" to Mississippi. "SpaceX even tests at Stennis."

Hipp underlined the benefits of access to companies like these. "Raising per capita income requires high wage jobs, which requires big companies." She mentioned the importance of "higher investment in fewer, but higher paying, jobs." However, "fewer jobs are not as politically popular as multiple jobs," even though she says attracting fewer jobs is necessary "to attract some tech companies." This would require "some change in state investment metrics," but she noted that "state investment rarely goes belly up," especially since Mississippi has "the sort of investments that can't pick up and move like manufacturing does" (Hipp, 2021).

### **Further Recommendations**

Ultimately, these solutions are comprehensive in their pursuit of economic and quality of life improvements. They should, if successfully implemented, help to revitalize the state and turn a surfeit of out-migration and brain drain around. In time, this may prove an impetus away from the pervasive societal problems discussed by the leavers, but they also may not be. Several of the individuals I interviewed were frank about the need for a change in social attitudes, but none had any recommendations on how to create this sort of change, either from the ground up or from the top down. I'm certain solutions exist, but I think the keys to fostering rapid and positive societal

improvements are what Donald Rumsfeld referred to as “known unknowns,” or something we know we don’t know (Graham, 2014).

Despite the lack of clear solutions, we ought not to let the fear of change, or the fear of trying something differently, hold us back from locally sourced methods of improvement. Further research on ways to improve Mississippi’s economic, societal, and quality of life factors is absolutely necessary for future researchers of out-migration in Mississippi, but until then, my only recommendation that hasn’t been suggested by any of the perceptive Mississippi “brains” above is this: Try to look beyond the differences we find in others. It’s easy to point out identity markers and assume that is the extent of a person’s character, but, as one survey respondent eloquently said, identity markers “inform, but do not define” us. For Mississippi to ever move beyond its fractious and uncomfortable past, its negative stereotypes, its dirt-poor reputation, we, as a society, must make a choice, here and now and for every moment after, to respect one another as individuals; to understand one another as flawed, but human; and to hold on to one another, from Southaven to Gulfport and Cleveland to Meridian, as part of a collective and coherent society that possesses a unique and storied ability to build a better, more egalitarian tomorrow. We are, above anything else, Mississippians, and I trust that we can find within ourselves the ability to demonstrate to the world that the Hospitality State accepts and welcomes each and every individual without regard to the differences that have been emphasized in our past.

## **Chapter Seven: Conclusion**

The purpose of this thesis was to examine the nature of brain drain in Mississippi. It sought to collect qualitative and quantitative survey data from respondents in order to answer three research questions.

First, is brain drain a problem for Mississippi? The answer to this is yes. Evidence suggests that population loss is occurring, and many respondents who remain report seriously considering leaving the state. Due to the oppositional nature of Mississippi's government and society, many educated out-migrants refuse to ever consider returning. Those who do consider returning voice a precondition of substantial economic and social change.

Second, are some groups more likely to leave than others? The data gathered suggests yes. Non-binary individuals, members of the LGBT+ community, and those ascribing to a non-Republican political ideology unambiguously signaled their discontent.

Last, what are the push and pull factors that contribute to or mitigate brain drain and out-migration? These data show that factors vary with each individual. However, three general themes emerged that acted as a push factor for some and a pull factor for others: economics, society, and quality of life. Furthermore, two broad categories of respondents emerged based on these data: stayers and leavers. Stayers, who report a greater likelihood of staying in, returning to, or moving to Mississippi, are strongly affected by the pulling force of local quality of life, like family and social ties, the local environments they inhabit, and the climate. Leavers, on the other hand, report having been pushed away by economic factors, like a lack of well-paying jobs, and societal factors, like discrimination, an oppositional government, or the social culture.

Recommendations gathered from locals who are best suited to understand and address the issues contributing to brain drain discussed comprehensive economic and quality of life solutions, but societal solutions seem beyond the purview of any one Mississippian. Certainly, more research is needed to better understand how to overcome the problem of brain drain, with particular respect to bridging divides between different social groups. Ultimately, I am confident that the Hospitality State will one day find a path forward that accepts and respects differences without needing to use them to define another individual.

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**Appendix A: Population Change in the South between 2010 and 2020**

State	2010 Population	2020 Population Estimate	Total Increase or Decrease	% Increase or Decrease
Alabama	4,779,736	4,921,532	141,796	3%
Arkansas	2,915,918	3,030,522	114,604	3.9%
District of Columbia	601,723	712,816	111,093	18.5%
Delaware	897,934	986,809	88,875	9.9%
Florida	18,801,310	21,733,312	2,932,002	15.6%
Georgia	9,687,653	10,710,017	1,022,364	10.6%
Kentucky	4,339,367	4,477,251	137,884	3.2%
Louisiana	4,533,372	4,645,318	111,946	2.4%
Maryland	5,773,552	6,055,802	282,250	4.9%
Mississippi	2,967,297	2,966,786	-511	-0.01%
North Carolina	9,535,483	10,600,823	1,65,340	11.2%
Oklahoma	3,751,351	3,980,783	229,432	6.1%
South Carolina	4,625,364	5,218,040	592,676	12.8%
Tennessee	6,346,105	6,886,834	540,729	8.5%
Texas	25,145,561	29,360,759	4,215,198	16.8%
Virginia	8,001,024	8,590,563	589,539	7.4%
West Virginia	1,852,994	1,784,787	-68,207	-3.7%

Source: United States Census Evaluation Estimates. (2020). Annual Estimates of the

Resident Population for the United States and the District of Columbia: April 1, 2010 to July 1,

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[documentation/research/evaluation-estimates.html](https://www.census.gov/programs-surveys/popest/technical-documentation/research/evaluation-estimates.html)

## Appendix B: State Data Center of Mississippi Population Statistics

### B.1. Mississippi Population Estimates for 2020

	Mississippi - 2020								
	WHITE			NONWHITE			TOTAL		
	BOTH SEXES	MALE	FEMALE	BOTH SEXES	MALE	FEMALE	BOTH SEXES	MALE	FEMALE
<b>TOTAL</b>	<b>1,734,411</b>	<b>853,694</b>	<b>880,717</b>	<b>1,331,971</b>	<b>638,556</b>	<b>693,415</b>	<b>3,066,382</b>	<b>1,492,250</b>	<b>1,574,133</b>
<b>0 - 4</b>	98,853	50,821	48,032	110,469	56,038	54,431	209,322	106,859	102,462
<b>5 - 9</b>	98,670	51,303	47,367	108,863	55,270	53,593	207,533	106,573	100,960
<b>10 - 14</b>	101,429	50,851	50,578	101,702	51,783	49,920	203,131	102,634	100,497
<b>15 - 19</b>	111,738	56,500	55,239	108,457	55,233	53,224	220,195	111,732	108,463
<b>20 - 24</b>	105,919	55,251	50,669	97,805	48,752	49,052	203,724	104,003	99,721
<b>25 - 29</b>	100,644	50,487	50,157	88,616	42,083	46,533	189,260	92,570	96,690
<b>30 - 34</b>	105,730	53,359	52,371	90,531	43,365	47,166	196,261	96,724	99,537
<b>35 - 39</b>	107,200	54,095	53,106	92,162	44,118	48,044	199,363	98,212	101,150
<b>40 - 44</b>	95,925	48,345	47,580	80,364	37,717	42,646	176,289	86,062	90,227
<b>45 - 49</b>	100,374	50,601	49,773	72,615	35,093	37,523	172,989	85,693	87,296
<b>50 - 54</b>	116,457	58,192	58,265	81,085	36,669	44,416	197,541	94,861	102,681
<b>55 - 59</b>	122,965	60,314	62,651	76,459	34,563	41,896	199,424	94,876	104,547
<b>60 - 64</b>	124,489	61,089	63,400	76,260	35,827	40,433	200,749	96,916	103,833
<b>65 - 69</b>	114,005	53,939	60,066	62,971	29,318	33,653	176,976	83,257	93,719
<b>70 - 74</b>	90,745	42,368	48,377	37,029	15,729	21,300	127,774	58,097	69,677
<b>75 - 79</b>	62,814	27,645	35,169	21,811	8,734	13,076	84,624	36,379	48,245
<b>80 - 84</b>	42,593	17,384	25,209	13,549	5,157	8,392	56,142	22,541	33,601
<b>85 +</b>	33,861	11,153	22,708	11,224	3,107	8,117	45,084	14,260	30,825

Source: State Data Center of Mississippi. (2 May 2019). County and State Population Projections for Mississippi, 2020 - 2050. Retrieved from <https://sdc.olemiss.edu/population-projections/>.

## B.2. Mississippi Population Estimates for 2050

	<b>Mississippi - 2050</b>								
	WHITE			NONWHITE			TOTAL		
	BOTH SEXES	MALE	FEMALE	BOTH SEXES	MALE	FEMALE	BOTH SEXES	MALE	FEMALE
<b>TOTAL</b>	<b>1,550,682</b>	<b>758,283</b>	<b>792,399</b>	<b>1,513,906</b>	<b>734,244</b>	<b>779,662</b>	<b>3,064,588</b>	<b>1,492,528</b>	<b>1,572,060</b>
<b>0 - 4</b>	87,239	44,844	42,394	115,603	59,039	56,564	202,841	103,884	98,958
<b>5 - 9</b>	87,691	45,589	42,103	112,245	57,373	54,873	199,937	102,961	96,975
<b>10 - 14</b>	89,080	44,954	44,127	106,436	54,469	51,967	195,516	99,423	96,094
<b>15 - 19</b>	96,581	49,354	47,227	120,954	62,135	58,819	217,536	111,490	106,046
<b>20 - 24</b>	91,725	47,012	44,713	104,491	52,275	52,216	196,216	99,287	96,929
<b>25 - 29</b>	89,047	44,547	44,500	96,764	46,912	49,852	185,811	91,459	94,352
<b>30 - 34</b>	90,751	45,904	44,847	93,049	45,549	47,499	183,800	91,454	92,346
<b>35 - 39</b>	94,686	46,452	48,233	90,051	43,529	46,522	184,736	89,981	94,755
<b>40 - 44</b>	88,916	45,735	43,181	87,801	42,907	44,894	176,717	88,642	88,075
<b>45 - 49</b>	88,561	44,017	44,544	85,811	42,683	43,128	174,371	86,700	87,671
<b>50 - 54</b>	97,703	48,131	49,572	95,716	45,318	50,398	193,419	93,450	99,970
<b>55 - 59</b>	90,953	45,006	45,947	84,484	41,421	43,063	175,438	86,427	89,010
<b>60 - 64</b>	92,329	45,050	47,279	85,996	40,849	45,147	178,326	85,900	92,426
<b>65 - 69</b>	88,338	42,450	45,888	67,475	32,237	35,238	155,813	74,687	81,126
<b>70 - 74</b>	88,049	41,431	46,618	60,797	26,145	34,652	148,846	67,575	81,270
<b>75 - 79</b>	81,095	35,862	45,233	49,542	20,496	29,046	130,636	56,358	74,279
<b>80 - 84</b>	60,073	25,095	34,978	32,760	13,045	19,714	92,832	38,140	54,692
<b>85 +</b>	47,864	16,850	31,014	23,932	7,861	16,071	71,796	24,711	47,085

Source: State Data Center of Mississippi. (2 May 2019). County and State Population

Projections for Mississippi, 2020 - 2050. Retrieved from <https://sdc.olemiss.edu/population-projections/>.

B.3. Mississippi Percent Population Change from 2020 to 2050

Age	White Both Sexes	White Male	White Female	Nonwhite Both Sexes	Nonwhite Male	Nonwhite Female	Total Both Sexes	Total Male	Total Female
<b>Total</b>	-10.6%	-11.2%	-10.0%	+13.7%	+15%	+12.4%	-0.1%	+0.02%	-0.1%
<b>0-4</b>	-11.7%	-11.8%	-11.7%	4.7%	5.4%	3.9%	-3.1%	-2.8%	-3.4%
<b>5-9</b>	-11.1%	-11.1%	-11.1%	3.1%	3.8%	2.4%	-3.7%	-3.4%	-3.9%
<b>10 - 14</b>	-12.2%	-11.6%	-12.6%	4.7%	5.2%	4.1%	-3.8%	-3.1%	-4.4%
<b>15 - 19</b>	-13.6%	-12.7%	-14.5%	11.5%	12.5%	10.5%	-1.2%	-0.2%	-2.2%
<b>20 - 24</b>	-13.4%	-14.9%	-11.8%	6.8%	7.2%	6.5%	-3.7%	-4.5%	-2.8%
<b>25 - 29</b>	-11.5%	-11.8%	-11.3%	9.2%	11.5%	7.1%	-1.8%	-1.2%	-2.4%
<b>30 - 34</b>	-14.2%	-14.0%	-14.4%	2.8%	5.0%	0.7%	-6.4%	-5.5%	-7.2%
<b>35 - 39</b>	-11.7%	-14.1%	-9.2%	-2.3%	-1.3%	-3.2%	-7.3%	-8.4%	-6.3%
<b>40 - 44</b>	-7.3%	-5.4%	-9.3%	9.3%	13.8%	5.3%	0.2%	3.0%	-2.4%
<b>45 - 49</b>	-11.8%	-13.0%	-10.5%	18.2%	21.6%	14.9%	0.8%	1.2%	0.4%
<b>50 - 54</b>	-16.1%	-17.3%	-14.9%	18.0%	23.6%	13.5%	-2.1%	-1.5%	-2.8%
<b>55 - 59</b>	-26.0%	-25.4%	-26.7%	10.5%	19.8%	2.8%	-12.0%	-8.9%	-14.9%
<b>60 - 64</b>	-25.8%	-26.3%	-25.4%	12.8%	14.0%	11.7%	-11.2%	-11.4%	-11.0%
<b>65 - 69</b>	-22.5%	-21.3%	-23.6%	7.2%	10.0%	4.7%	-12.0%	-10.3%	-13.4%
<b>70 - 74</b>	-2.3%	-2.2%	-3.6%	64.2%	66.2%	62.7%	16.5%	16.3%	16.6%
<b>75 -79</b>	29.1%	29.7%	28.6%	+127.1%	134.7%	122.1%	54.4%	54.9%	54.0%
<b>80 - 84</b>	41.0%	44.4%	38.8%	141.2%	153.0%	134.9%	65.4%	69.2%	62.8%
<b>85+</b>	41.4%	51.1%	36.6%	113.2%	153.0%	98%	59.3%	73.3%	52.8%

Source: State Data Center of Mississippi. (2 May 2019). County and State Population Projections for Mississippi, 2020 - 2050. Retrieved from <https://sdc.olemiss.edu/population-projections/>.

## Appendix C: Mississippi National Rankings

### C.1. Healthcare Rankings

<b>Healthcare Total Score</b>	<b>50/50</b>
Healthcare Access	50/50
<i>Affordability</i>	<i>49/50</i>
<i>Insurance Enrollment</i>	<i>46/50</i>
<i>Adult Dental Visits</i>	<i>49/50</i>
<i>Adult Wellness Visits</i>	<i>30/50</i>
<i>Child Dental Visits</i>	<i>16/50</i>
<i>Child Wellness Visits</i>	<i>46/50</i>
Quality	50/50
<i>Hospital Quality</i>	<i>48/50</i>
<i>Medicare Quality</i>	<i>36/50</i>
<i>Nursing Home Quality</i>	<i>44/50</i>
<i>Preventable Admissions</i>	<i>49/50</i>
Public Health	48/50
<i>Mental Health</i>	<i>44/50</i>
<i>Low Infant Mortality Rate</i>	<i>49/50</i>
<i>Low Obesity Rate</i>	<i>49/50</i>
<i>Low Smoking Rate</i>	<i>45/50</i>
<i>Low Suicide Rate</i>	<i>17/50</i>

Source: U.S. News & World Report, 2019 Best State Ranking, Retrieved from:

<https://www.usnews.com/news/best-states/mississippi>

C.2. Education Rankings

<b>Education Total Score</b>	<b>46/50</b>
Higher Education	33/50
<i>2-Year College Graduation Rate</i>	<i>14/50</i>
<i>4-Year College Graduation Rate</i>	<i>35/50</i>
<i>Low Debt at Graduation</i>	<i>33/50</i>
<i>Educational Attainment</i>	<i>46/50</i>
<i>Tuition and Fees</i>	<i>15/50</i>
Pre-K to 12	45/50
<i>College Readiness</i>	<i>49/50</i>
<i>High School Graduation Rate</i>	<i>33/50</i>
<i>NAEP Math Scores</i>	<i>47/50</i>
<i>NAEP Reading Scores</i>	<i>49/50</i>
<i>Preschool Enrollment</i>	<i>13/50</i>

Source: U.S. News & World Report, 2019 Best State Ranking, Retrieved from:

<https://www.usnews.com/news/best-states/mississippi>

### C.3. Economic Rankings

<b>Economy Total Score</b>	<b>48/50</b>
Business Environment	49/50
<i>Entrepreneurship</i>	<i>43/50</i>
<i>Patent Creation</i>	<i>50/50</i>
<i>Low Tax Burden</i>	<i>32/50</i>
<i>Top Company Headquarters</i>	<i>45/50</i>
<i>Venture Capital</i>	<i>48/50</i>
Employment	46/50
<i>Job Growth</i>	<i>18/50</i>
<i>Labor Force Participation</i>	<i>48/50</i>
<i>Low Unemployment Rate</i>	<i>45/50</i>
Growth	50/50
<i>GDP Growth</i>	<i>44/50</i>
<i>Growth of Young Population</i>	<i>49/50</i>
<i>Net Migration</i>	<i>44/50</i>

Source: U.S. News & World Report, 2019 Best State Ranking, Retrieved from:

<https://www.usnews.com/news/best-states/mississippi>

#### C.4. Infrastructure Rankings

<b>Infrastructure</b>	<b>45/50</b>
Energy	42/50
<i>Electricity Price</i>	<i>17/50</i>
<i>Power Grid Reliability</i>	<i>45/50</i>
<i>Renewable Energy Usage</i>	<i>33/50</i>
Internet Access	30/50
<i>Broadband Access</i>	<i>49/50</i>
<i>Ultra-fast Internet Access</i>	<i>2/50</i>
Transportation	46/50
<i>Commute Time</i>	<i>27/50</i>
<i>Public Transit Usage</i>	<i>50/50</i>
<i>Road Quality</i>	<i>39/50</i>
<i>Bridge Quality</i>	<i>39/50</i>

Source: U.S. News & World Report, 2019 Best State Ranking, Retrieved from:

<https://www.usnews.com/news/best-states/mississippi>



C.5. Opportunity Rankings

<b>Opportunity Total Score</b>	<b>44/50</b>
Affordability	15/50
<i>Cost of Living</i>	<i>1/50</i>
<i>Housing Affordability</i>	<i>18/50</i>
Economic Opportunity	49/50
<i>Low Food Insecurity</i>	<i>47/50</i>
<i>GINI Index</i>	<i>38/50</i>
<i>Household Income</i>	<i>49/50</i>
<i>Low Poverty Rate</i>	<i>50/50</i>
Equality	27/50
<i>Disability Employment Gap</i>	<i>3/50</i>
<i>Education Gap by Race</i>	<i>30/50</i>
<i>Employment Gap by Race</i>	<i>32/50</i>
<i>Income Gap by Gender</i>	<i>44/50</i>
<i>Income Gap by Race</i>	<i>37/50</i>
<i>Labor Force Participation gap by Gender</i>	<i>10/50</i>

Source: U.S. News & World Report, 2019 Best State Ranking, Retrieved from:

<https://www.usnews.com/news/best-states/mississippi>

C.6. Fiscal Stability Rankings

<b>Fiscal Stability Total Score</b>	<b>44/50</b>
Long-Term Fiscal Stability	46/50
<i>Government Credit Rating Score</i>	<i>33/50</i>
<i>Pension Fund Liability</i>	<i>47/50</i>
Short-Term Fiscal Stability	16/50
<i>Budget Balancing</i>	<i>8/50</i>
<i>Liquidity</i>	<i>20/50</i>

Source: U.S. News & World Report, 2019 Best State Ranking, Retrieved from:

<https://www.usnews.com/news/best-states/mississippi>

C.7. Crime & Corrections Rankings

<b>Crime &amp; Corrections Total Score</b>	<b>26/50</b>
Corrections	31/50
<i>Low Incarceration Rate</i>	<i>48/50</i>
<i>Least Juvenile Incarceration</i>	<i>8/50</i>
<i>Equality in Jailing</i>	<i>24/50</i>
Public Safety	26/50
<i>Low Property Crime</i>	<i>34/50</i>
<i>Low Violent Crime</i>	<i>16/50</i>

Source: U.S. News & World Report, 2019 Best State Ranking, Retrieved from:

<https://www.usnews.com/news/best-states/mississippi>

C.8. Natural Environment Rankings

<b>Natural Environment Total Score</b>	<b>11/50</b>
Air and Water Quality	3/50
<i>Urban Air Quality</i>	<i>8/50</i>
<i>Drinking Water Quality</i>	<i>9/50</i>
Pollution	33/50
Low Industrial Toxins	38/50
Low Pollution Health Risk	25/50

Source: U.S. News & World Report, 2019 Best State Ranking, Retrieved from:

<https://www.usnews.com/news/best-states/mississippi>

### Appendix D: Southern States National Rankings

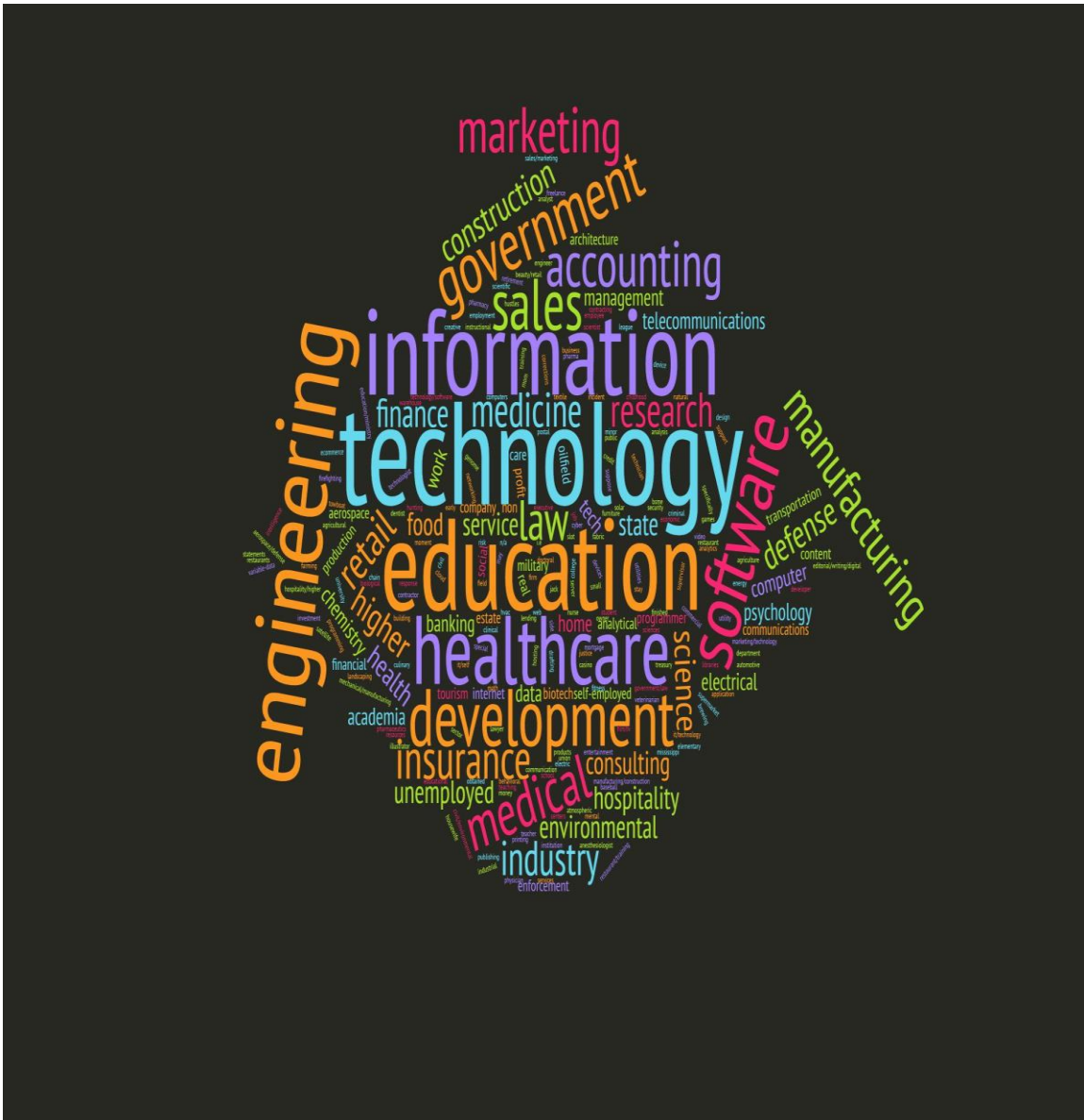
State	Overall Score	Healthcare	Education	Economy	Infrastructure	Opportunity	Fiscal Stability	Crime & Corrections	Natural Environment
Alabama	49	46	50	45	38	45	23	45	35
Arkansas	45	49	42	43	47	32	21	47	19
Delaware	23	15	23	17	19	23	18	36	47
Florida	13	29	3	9	14	38	2	31	21
Georgia	17	39	30	11	10	21	9	27	20
Kentucky	40	44	38	39	26	20	45	11	12
Louisiana	50	45	48	49	48	50	43	50	50
Maryland	6	8	13	26	21	5	15	22	25
Mississippi	48	50	46	48	45	44	44	26	11
North Carolina	18	30	25	14	18	36	4	14	36
Oklahoma	43	47	39	34	39	25	32	41	42
South Carolina	42	36	43	16	36	41	20	46	34
Tennessee	30	43	35	12	13	26	1	43	37
Texas	38	37	34	15	33	39	12	33	40
Virginia	7	18	7	25	35	9	8	9	18
West Virginia	47	48	44	50	50	30	34	21	41

Source: U.S. News, Best States 2019: Ranking Performance Throughout All 50 States,

Retrieved from: <https://www.usnews.com/media/best-states/overall-rankings-2019.pdf>

## Appendix E: Employment Data

### E.1. Non-College Student Employment Word Cloud



E.2. Non-College Student Employment Sector Data<sup>4 5</sup>

<b>Respondent Employment Sector</b>	<b>Percentage of Respondents Employed</b>	<b>Number of Respondents Employed</b>
Tech	24%	75
Medical	13%	40
Education	12%	36
Finance	10%	31
Engineering	8%	26
Sales	7%	22
Government	7%	21
Agriculture	4%	11
Manufacturing	3%	10
Not Traditionally Employed	3%	10
Energy	3%	9
Entertainment	3%	8
Food & Beverage	3%	8
Legal	3%	7
Insurance	3%	7
Tourism	3%	6
Self-Employed	2%	5

<sup>4</sup> Numerous other professions are mentioned that don't neatly fall into any of the above categories, including those in the non-profit field, the tugboat sector, and the HVAC industry.

<sup>5</sup> Percentages have been rounded to the nearest whole number, and do not total to either the number of respondents or 100%. Respondents may be counted across multiple fields.

## Appendix F: Majors of Surveyed Students

<b>Respondent Major</b>	<b>Percentage of Respondents</b>	<b>Number of Respondents</b>
Physical Sciences	15%	63
Business or Finance	12%	51
Engineering	10%	43
Medicine	9%	40
Other	8%	32
Education	6%	24
Social Sciences	6%	24
Technology	6%	24
International Affairs or Language	5%	20
Public Policy Leadership	5%	20
Communications or Media	5%	19
Health or Social Services	4%	17
Humanities	4%	15
Arts	4%	15
Law	2%	10
Mathematics	2%	8









