

RETAIN ALABAMA 2.0 SURVEY REPORT



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Spring 2022 Survey Results

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Note: All data in this report is compliant with the Family Educational Rights and Privacy Act (FERPA).

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Alabama Commission on Higher Education 2022 Retain Alabama 2.0 Survey Report

EXECUTIVE SUMMARY

Alabama's continued growth and prosperity requires a sustained skilled workforce. Governor Kay Ivey's *Success Plus* goal recognizes the need to add 500,000 highly educated and skilled individuals to the workforce by 2025. A recent progress report by Credential Engine shows that **Alabama is nearly halfway to reaching its** *Success Plus* **goal,** with 215,000 newly credentialed Alabamians entering the workforce between 2018 and 2021.

Nonetheless, Alabama struggles to retain graduates from its public institutions. According to the **employment outcomes data** published by the Alabama Commission on Higher Education (ACHE), only half of baccalaureate degree recipients were working in Alabama five years after graduation.

ACHE developed the *Retain Alabama Survey* as a tool for college leaders, employers, and policy makers to better understand the perspectives of soon-to-be-graduates and help keep talent in the state. In Spring 2022, ACHE partnered with 13 public and state-sponsored universities to conduct the *2022 Retain Alabama 2.0 Survey*. The 26-question survey asked a cohort of undergraduate students (sophomores, juniors, and seniors) about their plans to seek employment in Alabama after graduation and their impressions of specific factors of the state compared to the importance they place on those same factors when considering where to live and work. This year's survey also asked students about how they search for jobs and how confident they are in the Alabama job market.

A total of 6,805 survey responses were received (13.5% response rate) and analyzed based on students' self-identified demographic characteristics, including Alabama residency, gender, race/ethnicity, age, expected graduation year, first-generation status, and field of study (major). A number of statistically significant findings emerged that can inform statewide efforts to retain college graduates.

KEY FINDINGS

Staying in Alabama after Graduation

- Forty-four percent of respondents indicated they were "Very Likely" to live and work in Alabama after graduation, while only 14% said they were "Unlikely" or "Very Unlikely" to stay. When asked if they were interested in learning about career opportunities within their field of study in Alabama, the majority of respondents (85%) said "Yes."
- Forty-one percent of all respondents indicated they were "Likely" or "Neutral" about staying in Alabama, suggesting they have not made up their minds. Respondents in these categories make up the target group for the All in Alabama/Retain Alabama outreach efforts.

- There were important differences by demographic sub-groups as far as their interest in staying in Alabama after graduation:
 - Nearly double the number of Alabama residents indicated they were "Very Likely" to live and work in Alabama after graduation as compared with non-residents (51.8% of residents versus 26.5% of non-residents).
 - Fewer STEM-related majors said they were "Very Likely" to live and work in Alabama than non-STEM-related majors (37.4% versus 47.8%).
 - A larger proportion of females, white students, first-generation students, and non-traditional age students (≥25) said they were "Very Likely" or "Likely" to live and work in Alabama after graduation.
 - The closer students were to graduation, the more likely they were to select "Very Likely," with 50% of those graduating in 2022 indicating they were "Very Likely" to stay, as compared with 44% of those graduating in 2023 and only 37% of those graduating in 2024 or later.

Job Prospects

- Fifty-four percent of respondents indicated they were "Extremely Confident" or "Very Confident" in finding a job in their desired field immediately after graduation. Only 11% were "Not So Confident" or "Not at All Confident."
- STEM-related majors showed less confidence than non-STEM-related majors in finding a job in their desired field immediately after graduation (15% versus 30% of STEM-related students who are "Very Likely" to stay in Alabama).
- The majority of students plan to search for jobs by the following means: LinkedIn or other forms of networking (69.6%); internships or volunteering (62.3%); company websites (57.6%); and national job search sites (57%). Only a quarter of students intend to use their institution's career center or institution's career search site (28.5% and 28.3%, respectively).
- When asked about opportunities to improve their resume, 47% of the Class of 2022 indicated they have participated in an internship, and more than half of 2023 and 2024+ students indicated they want to participate in an internship (52% and 63%, respectively). Students across all graduation years were not familiar with registered apprenticeships (41.7%) or micro-credentials (53.5%).

Decision-Making Factors

- Respondents indicated the most important factors for their future plans were job
 opportunities, salary and benefits, cost of living, public safety, and potential for career
 advancement.
- Respondents had the highest impressions of Alabama's access to outdoor activities, proximity to family, natural environment, friendliness of the people, and opportunities to continue their education.

- Respondents had the lowest impressions of Alabama's overall image or reputation, quality
 of K-12 education, environmental issues, political environment, and acceptance of
 diversity.
- Respondents rated Huntsville/Madison, Birmingham and surrounding suburbs, and Gulf Shores/Orange Beach as the most desirable places to live and work after graduation.

Comparison with 2021 Survey Results

These findings from the 2022 Retain Alabama 2.0 Survey were in keeping with results of last year's survey, though this year's students were generally more optimistic about their intentions to live and work in Alabama. Only 15% of students said they were "Unlikely" or "Very Unlikely" to stay, compared with 25% in the 2021 survey. The student responses did not allow analysts to determine the reason for the higher percentage, but given the disruptions caused by COVID, one could posit that 2022 respondents were more optimistic in general. In addition, the factors that students deemed most important for making plans after graduation remained consistent, showing a strong focus on job prospects, salary/ benefits, and career advancement.

Recommendations

The results of the *Retain Alabama 2022 Survey* reinforce the need for the state to focus on keeping young talent in Alabama in the following ways:

- 1) Launching the All in Alabama outreach campaign, targeting those students open to staying in Alabama after graduation and raising awareness of Alabama's assets.
- 2) Making it easier for students to find high-quality job opportunities in Alabama.
- 3) Engaging communities in attracting and retaining talent.

The findings and recommendations in this report are intended to support the strategic vision for an ongoing *Retain Alabama* initiative led by ACHE, Alabama's public higher education institutions, the Economic Development Partnership of Alabama (EDPA), and the Higher Education Partnership (HEP).

RETAIN ALABAMA: BACKGROUND

Employment Outcomes for Alabama's Graduates

In 2020, ACHE published its **Employment Outcomes Report** based on a match of employment data from the Alabama Department of Labor and ACHE's student completions data. Overall, a majority of Alabama public higher education institution graduates (57%) were employed in Alabama five years after graduation, contributing to the state's economy and opportunities for growth. Yet, findings showed important differences between outcomes for graduates by degree level and residency status. Individuals earning higher levels of education tend to remain in the Alabama workforce at lower rates.

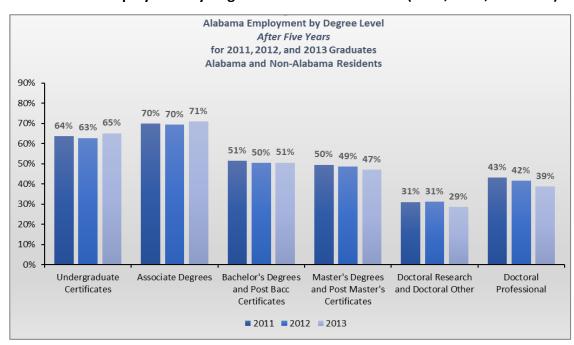


Figure 1. Alabama Employment by Degree Level After Five Years (2011, 2012, and 2013)

As shown in **Figure 1**, only 51% of the 2013 bachelor's degree recipients were employed in Alabama five years later, as compared to 71% of associate degree earners. At the graduate level, less than half of master's graduates (47%) were still employed in the state five years later, and only 29% of doctoral research graduates and 39% of doctoral professional graduates.

Like many other states, Alabama is losing its most highly educated talent at higher rates. The *Retain Alabama Survey* was designed as a follow up to the *Employment Outcomes Report*, with the goal of identifying factors that could help keep talent in Alabama.

METHODOLOGY

Survey Design and Development

The 2022 Retain Alabama 2.0 Survey was designed to help guide the state's efforts to better connect graduates with career opportunities and communities and inform community and state leaders about what is important to students entering the workforce. The survey was developed with modifications to the 2021 Retain Alabama Survey, including the addition of new questions on job prospects.

The survey contained 26 questions, compared with 20 questions in the 2021 version, and it included modified versions of some of the same questions, including students' desire to live and work in Alabama communities, intentions to stay in Alabama after graduation, and impressions of Alabama. The 2022 Retain Alabama 2.0 Survey also asked students to self-identify on demographic characteristics, including gender, race/ethnicity, age, residency status, first-generation status, field of study (major), enrollment status, institution, and anticipated graduation date. Two additional demographic variables were added to this survey asking students to select additional demographics from a list (e.g., Active Military, Single-Parent, Employed Full-Time, etc.) and to self-identify their socioeconomic status. The demographic variables were used to disaggregate the survey questions to deepen the understanding of the survey results. Respondents were not asked to supply any personal identifying information, with the result that their responses are considered anonymized.

The following questions were added to this survey:

- How do you plan to search for jobs?
- How confident are you in finding a job in your desired field immediately after graduation?
- Please select 1-3 industries in which you plan to seek employment after graduation.
- How familiar are you with the following opportunities to improve your resume?
- How familiar are you with the following statements about Alabama?

A full list of survey questions is available in **Appendix A**.

Survey Administration Process

Once the survey design and development were completed, representatives from ACHE and the 13 participating universities regularly convened to ensure smooth and consistent survey distribution. The target population was identified as undergraduate students at the sophomore, junior, and senior levels. Freshmen were excluded because many have yet to select a major course of study, which would have the potential to obscure results. University staff emailed target students from their institutions, inviting them to complete the survey and providing them a link. Some institutions also texted the link to students or posted an announcement about the survey to their Learning Management System. Several institutions offered incentives

to increase student participation. The survey was administered during the Spring 2022 semester between February 25, 2022 through May 16, 2022.

Overview of Respondents

Of the 50,467 students receiving the survey's link from the participating institutions, a total of 9,108 (18%) initiated feedback for the survey. Of those 9,108 (18%) interactions, 2,301 (25.3%) respondents partially completed their responses and were excluded from analysis. A total of 6,805 recipients completed the survey, and those responses were analyzed, representing a 13.5% response rate of those who received the survey from the 13 participating institutions and a 74.7% completion response rate of those who initiated feedback upon receiving the survey.

Campus and Student Demographics

Twelve public universities (Alabama A&M University, Athens State University, Alabama State University, Auburn University at Montgomery, Jacksonville State University, Troy University, University of Alabama at Birmingham, University of Alabama in Huntsville, University of Montevallo, University of North Alabama, University of South Alabama, and University of West Alabama) and one private/state-sponsored university (Tuskegee University) collaborated with ACHE on this project. **Figure 2** below shows the distribution of student responses received by institution.

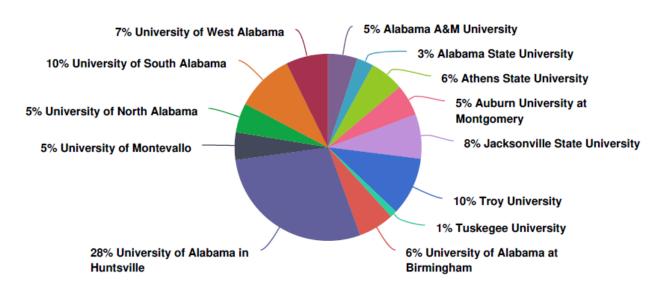


Figure 2. Campus and Student Demographics

Expected Graduation Year

The 2022 Retain Alabama 2.0 Survey surveyed undergraduate seniors, juniors, and sophomores graduating in 2022, 2023, and 2024 or later. The relatively even distribution of respondents across graduation year corresponds with the overall distribution of the undergraduate population (**Figure 3**).

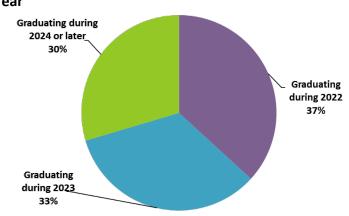
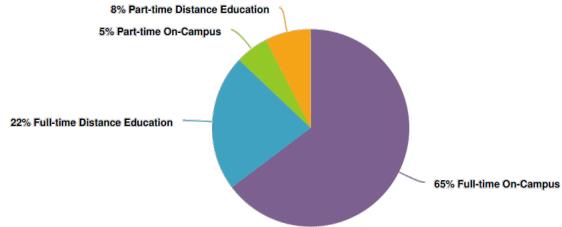


Figure 3. Expected Graduation Year

Enrollment Status

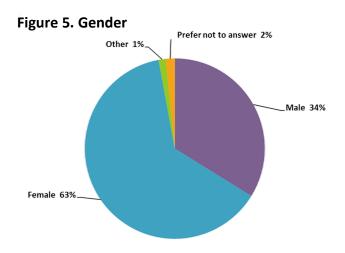
As shown in **Figure 4**, nearly two-thirds of respondents were enrolled in full-time, face-to-face programs, rather than online/distance education programs. This distribution of responses is representative of undergraduate enrollment patterns.





Gender

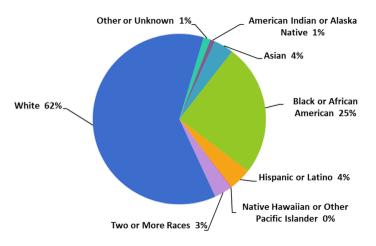
Students self-identified their gender as female (63%), male (34%), other (1%), or prefer not to answer (2%), as shown in **Figure 5**. Given the small number of respondents, "Other" and "Prefer not to Answer" have been combined for the data analysis. While the proportion of respondents selecting "Female" is greater than the distribution in the wider population, the proportion is relatively close to the overall distribution of undergraduate students, 59% of whom are female.



Race/Ethnicity

The survey asked students to self-identify their race/ethnicity using the categories identified by the Integrated Postsecondary Education Data System (IPEDS), managed by the US Department of Education. The distribution of responses is consistent with the race/ethnicity distribution of the overall undergraduate population as shown in **Figure 6**. For the purposes of this report, "American Indian or Alaska Native," "Asian," and "Native Hawaiian or Other Pacific Islander" have been combined. "Other or Unknown" and "Two more Races" have been combined as a separate category.

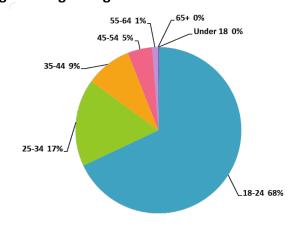
Figure 6. Race/Ethnicity



Age Range

For the purposes of this report, student ages have been combined into two reporting categories: "Traditional Age," which includes students identifying as 18-24, and "Non-Traditional Age," which includes those aged 25 and above. **Figure 7** shows the distribution of respondents by age. In this case, responses were overrepresented for non-traditional students, who comprise only about 15% of the overall undergraduate population but nearly one-third of the survey responses.

Figure 7. Age Range



Additional Identifiers

Students were asked to select any of the following additional identifiers that are applicable to them. Interestingly, nearly two-thirds of respondents indicated they were employed either full-time or part-time as they were pursuing their studies (**Figure 8**). Even among those aged 18-24, more than 60% reported being employed.

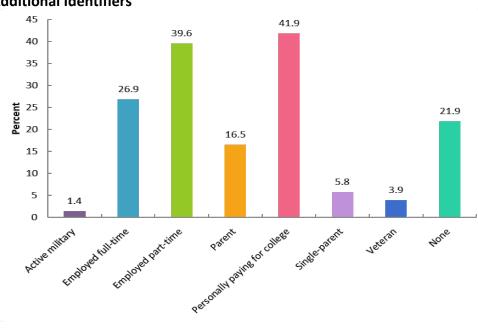


Figure 8. Additional Identifiers

Socioeconomic Income Levels

The survey asked students to self-identify on two questions related to their finances. As shown in **Figure 9**, the first circle graph represents whether they considered themselves "Self-Supported" (46%) or "Family-Supported" (54%). The second circle graph asked about socioeconomic status using income ranges pegged to the 2019 federal poverty level.¹

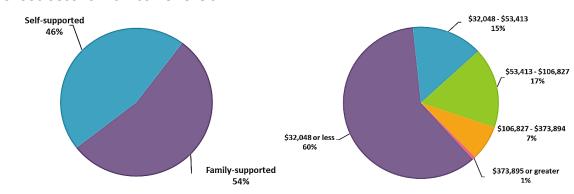


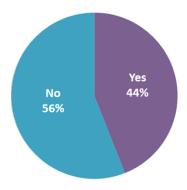
Figure 9. Socioeconomic Income Levels

 $^{^1}$ Income ranges attributed to Stephen Rose in US News: https://money.usnews.com/money/personal-finance/family-finance/articles/where-do-i-fall-in-the-american-economic-class-system based on his 2021 publication with Urban Institute: https://www.urban.org/sites/default/files/publication/103718/the-upper-middle-class-continued-to-grow-from-2014-to-2019_0.pdf .

First-Generation Status

While there are many definitions for a first-generation college student and colleges can apply their own definitions, ACHE has chosen to use the definition established by the Department of Education in the Higher Education Act of 1965 and 1998. This defines a first-generation college student as one whose parents did not complete a bachelor's degree, or in the case of students who live with and are supported by only one parent, a student whose only such parent did not complete a bachelor's degree. In this survey (**Figure 10**), 44% of students identified as first-generation, compared to 38% in the *2021 Retain Alabama Survey*.

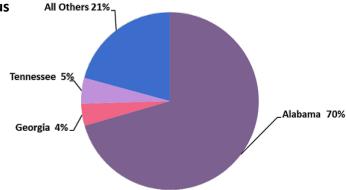
Figure 10. First-Generation Status



Residency Status

Students were also asked to share in which state they completed high school (or a GED). Students replying with any U.S. state or territory other than Alabama, or country outside of the U.S. were deemed non-resident students as indicated in **Figure 11**. Tennessee and Georgia emerged as the top residency locations outside Alabama.

Figure 11. Residency Status



STEM-Related Majors

ACHE utilizes the U.S. Department of Homeland Security (DHS) STEM Designated Degree Program list to determine which fields of study should be classified as STEM (science, technology, engineering, and mathematics). This list includes academic programs in engineering, biological sciences, mathematics, physical sciences, and related fields, which include programs involving research, innovation, or development of new technologies using engineering, mathematics, computer science, or natural sciences (including physical, biological, and agricultural sciences). **Appendix B** provides a list of majors, along with the designation of STEM or non-STEM.

Alabama Communities

In order to gauge students' familiarity with different geographical areas, ACHE identified a list of 16 communities (**Table 1**) formed from a composite of the following geographic distinctions (see **Appendix C** for additional tables related to the segmentation):

- The seven "Regional Workforce Regions" established by the Alabama Department of Commerce;
- Cities with 25,000 or greater populations according to the "Populations of Alabama Cities Ranked by Population Size" table from the U.S. Census Bureau, Census 2010;
- Universities' regional service areas.

Modifications made to the communities of the 2022 Retain Alabama 2.0 Survey were as follows:

- Athens/Decatur and Huntsville/Madison were separated to differentiate these regions;
- Tuskegee was separated from Auburn/Opelika/Phenix City to differentiate this region, as Tuskegee University was included in this survey.

Table 1. List of Alabama Regions for the Retain Alabama 2.0 Survey

Alabama Regions for Retain Alabama 2.0 Survey			
Athens/Decatur Gulf Shores/ Orange Beach			
Auburn/Opelika/Phenix City	Huntsville/Madison		
Bay Minette/Fairhope/Foley	Mobile/Saraland		
Birmingham & Surrounding Suburbs	Montgomery/Prattville/Wetumpka/Pike Road		
Demopolis/Livingston	Selma		
Dothan/Enterprise/Ozark	Troy		
Florence/Muscle Shoals/Tuscumbia	Tuscaloosa/Northport		
Fort Payne/ Guntersville	Tuskegee		
Gadsden/Anniston/Oxford/Jacksonville			

Analysis of Survey Results

The analysis of the survey results was completed using descriptive statistics and chi-square tests for statistical significance. Student responses to the survey questions are shared as percentages of the total. For selected questions, additional analyses were conducted by disaggregating the results by various demographic factors. The disaggregations include residency status, gender, race/ethnicity, age, expected graduation year, first generation status, and STEM-related major. A chi-square test of independence was performed to examine the relationship between the response options and these demographic variables. The analysis for this report used a 99% confidence interval, meaning that chi-square likelihood ratios less than or equal to .01 are considered statistically significant. All references to statistical significance in this report meet the 99% confidence interval (p = .01) threshold.

FINDINGS: Staying in Alabama After Graduation

"Alabama is where I was born, and feel comfortable living. Other states have different opportunities, but my city has an abundance of good jobs; I feel no need to move from where I am now."

- AL Resident Respondent

44.3%

A large percentage of respondents indicated they are Very Likely to stay in Alabama after graduation.

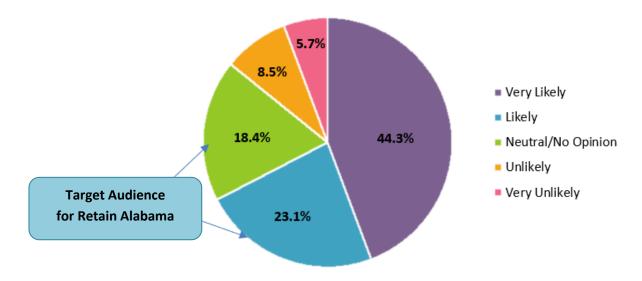
"I have a job opportunity in Nashville, but I would consider Alabama if I would receive the same salary or better. "

- Non-Resident Respondent

Overall

Students were asked about their intentions to stay in Alabama after graduation. Of the 6,805 completed responses, 44.3% indicated they are "Very Likely" to stay in Alabama after graduation, compared to the 33.4% who indicated *Yes* in the 2021 survey; 14.2% indicated they are "Unlikely" or "Very Unlikely" to stay in Alabama, compared to 23.4% who responded "No" in 2021; and 41.5% indicated they are "Likely to Stay" or "Neutral" on staying in Alabama, compared to 43.2% who responded "Maybe" in 2021 (**Figure 12**). See **Appendices B** and **C** for more details.

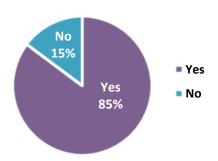
Figure 12: Students Intent to Stay in Alabama after Graduation (N = 6,805)



Openness to Career Opportunities in Alabama

Students were asked if they were interested in learning about career opportunities in Alabama, a question that was intended to gauge whether students were open to living and working in Alabama, as compared with the previous question about their intent to stay. As shown in **Figure 13**, the response was positive, with 85% of students surveyed responding "Yes."

Figure 13: Students interested in learning about career opportunities within their field of study (major) in Alabama



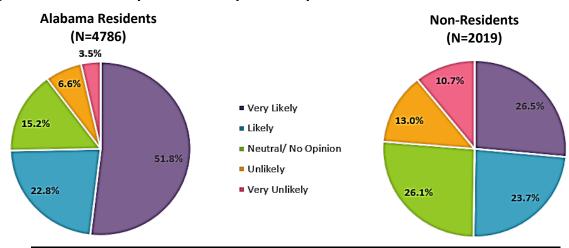
Only 15% indicated that they had no interest in career opportunities in Alabama, suggesting that those students are not open to staying after graduation and that targeted outreach will do little to change their minds. This percentage is consistent with the responses to the previous question, where 14.2% of respondents indicated that they were "Unlikely" or "Very Unlikely" to stay in Alabama.

Analysis by Demographic Variables

Analyzing student intentions to stay in Alabama after graduation by several demographic variables provides additional insights about students attending Alabama public four-year universities.

As shown in **Figure 14**, responses differed significantly based on residency status.

Figure 14. Intent to Stay in Alabama by Residency Status



Residency	Intent to Stay in Alabama Mean Rating (Max = 5)	
Resident	4.13	
Non-Resident	3.42	

^{*}Statistically significant difference

Almost twice as many Alabama residents said they were "Very Likely" to live and work in Alabama compared to non-residents (51.8% versus 26.5%). Conversely, more non-residents indicated they were "Very Unlikely" to live and work in Alabama after graduation (3.5% of residents versus 10.7% of non-residents). However, a larger group of non-residents fell in the target groups of "Likely" and "Neutral," 49.8% versus 38% for residents.

Responses also pointed to differences in gender. As shown in **Figure 15**, more female students indicated they were "Very Likely" to stay than male students (48% of females versus 39% of males). While the overall number was small, students who identified as other or prefer not to answer were dramatically less likely to indicate they had plans to stay (25%), and twice as likely to indicate they planned to leave than females or males.

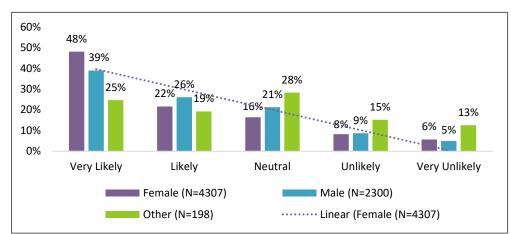


Figure 15: Intent to Stay in Alabama by Gender

Gender	Intent to Stay in Alabama Mean Rating (Max = 5)		
Female	3.98		
Male	3.85		
Other	3.28		

^{*}Statistically significant difference

When student responses were analyzed by race/ethnicity, students who identified as white were the most likely to say they intended to live and work in Alabama after graduation (mean rating = 4.01 out of 5), compared with students who identified as Asian American/Pacific Islander (mean rating = 3.88), Hispanic (mean rating = 3.79), African American/Black (mean rating 3.77), and other minority (mean rating = 3.71), as shown in **Figure 16** (p. 15).

Likelihood of Staying in Alabama Mean Rating (Max = 5)4.10 4.01 4.00 3.88 3.90 3.79 3.77 3.80 3.71 3.70 3.60 3.50 AAPI (N=322) AA/ Black Hispanic Other Minority White (N=1700) (N=290) (N=315) (N=4178)

Figure 16: Intent to Stay in Alabama by Race/Ethnicity

^{*}Statistically significant difference

Race/Ethnicity	Very Likely	Likely	Neutral	Unlikely	Very Unlikely
AAPI	39%	27%	22%	8%	4%
AA/ Black	36%	25%	25%	9%	6%
Hispanic	36%	27%	22%	9%	6%
Other Minority	40%	17%	24%	12%	7%
White	49%	22%	15%	8%	6%

Consistent with results from last year's survey, students who identified as first-generation college students indicated they were more likely to live and work in Alabama after graduation than non-first-generation students (**Table 2**).

Table 2: Intent to Stay in Alabama by First Generation Status

1 st Generation Student	Intent to Stay in Alabama Mean Rating (Max = 5)	
No	3.84	
Yes	4.02	

^{*}Statistically significant difference

When responses were analyzed by age, non-traditional students, namely those aged 25 years or older, indicated (**Table 3**) they were more likely to stay in Alabama than traditional students (those aged 24 and younger). Older students were also less likely than younger students to be unsure about their plans on staying in Alabama. These numbers follow the same trends found in the 2021 survey.

Table 3: Intent to Stay in Alabama by Student Age

Response Item	sponse Item Intent to Stay in Alabama Mean Rating (Max = 5)	
Non-Traditional (≥25)	4.15	
Traditional (≤ 24)	3.81	

^{*}Statistically significant difference

As shown in **Figure 17**, responses differed by expected graduation year. Students closest to graduation (Class of 2022) had the highest intent to stay in Alabama (mean rating = 3.99), while students furthest from graduation (Class of 2024 or later) had the lowest intent to stay (mean rating = 3.81), perhaps indicating that their plans are less fully formed overall.

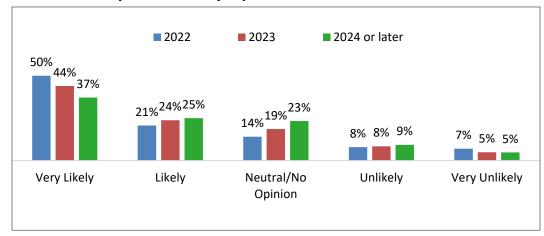


Figure 17: Intent to Stay in Alabama by Expected Graduation Year

Graduation Year	Intent to Stay in Alabama Mean Rating (Max = 5)	
2022	3.99	
2023	3.94	
2024 or later	3.81	

^{*}Statistically significant difference

Students in STEM related fields of study are less likely to stay in Alabama than students in non-STEM related fields of study (37.4% versus 47.8%). However, the largest percentage of STEM students are in the "Likely/Neutral" target group with 47.9% (**Figure 18**). See **Appendix D** for additional details based on various demographic variables.

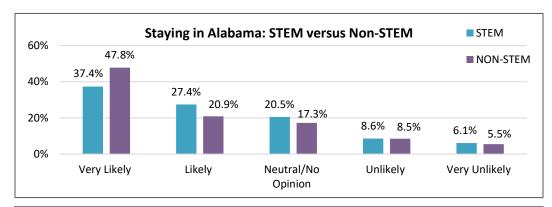


Figure 18: Students with Intentions to Stay in Alabama by STEM-Major Status

Response Item	Likelihood of Staying in Alabama Mean Rating (Max = 5)	
Non-STEM	3.97	
STEM	3.82	

^{*}Statistically significant difference

Open-Ended Question Responses

After being asked about their plans to stay, students were given the opportunity to explain their answer. Responses were segmented based on students' expressed interest in staying in Alabama, with particular attention to "Likely" and "Neutral" responses, who comprise the target group for statewide outreach efforts. Given the important differences between residents and non-residents, discussed above, responses were also segmented by residency status.

As shown in **Table 4**, the majority of the "Likely" responses, regardless of residency status, indicated they are willing to stay in Alabama if offered a job with competitive pay (i.e., comparable to cities in other states) and an opportunity to grow or advance in their career. Among resident respondents, 18% noted that they are more interested in pursuing careers outside of the state because they believe better opportunities for jobs, pay, career advancement and lifestyle exist outside of Alabama. Many of these residents indicated that while they are fond of the state, they desire to "see what else is out there." See **Appendix E** for sample comments from resident and non-resident students.

Table 4: "Likely" to Live and Work in Alabama after Graduation: Comment Analysis

Likely Responses	Residents (N=1092)	Non-Residents (N=479)
1. Stay if offered a good job/competitive pay/upward mobility	61%	80%
2. Pursuing better opportunities outside of Alabama; no incentive to stay; follow the money	18%	4%
3. Pursuing graduate school or further study	5%	5%
4. Unacceptable environment: political/social/education/climate		0%
5. Moving with the military or closer to/with family		4%
6. Unsure of plans	3%	5%
7. Distance education student	0%	0%

For those indicating they are "Neutral" about staying in Alabama after graduation (**Table 5**, p. 18), competitive pay was also the top reason given. Similar to the "Likely" group, 28% of residents indicated they are interested in searching outside of the state for better opportunities for jobs, pay, career advancement and lifestyle. Many of these respondents expressed a desire to get out of the state or Southeast, in general, for a period of time. For non-resident respondents, "Unsure of plans" was the second most frequent response at 26%. While many non-residents indicated they have enjoyed their time in Alabama, 19% indicated they are more likely to pursue better opportunities outside of the state.

Table 5: "Neutral" about Living and Working in Alabama after Graduation: Comment Analysis

Neutral Responses	Residents (N = 726)	Non-Residents (N = 526)
1. Stay if offered a good job/competitive pay/upward mobility	44%	40%
2. Pursuing better opportunities outside of Alabama; no incentive to stay; follow the money	28%	19%
3. Pursuing graduate school or further study	5%	4%
4. Unacceptable environment: political/social/education/climate	3%	1%
5. Moving with the military or closer to/with family	4%	3%
6. Unsure of plans	14%	26%
7. Distance education student	0%	6%

By way of comparison, **Table 6** shows responses for those who indicated that they are "Unlikely/ Very Unlikely" to stay. The largest percentages for both groups, 61% of residents and 36% of non-residents, noted greater opportunities for career, pay, and lifestyle exist outside of the state, often because they have already accepted a job offer out of state. Among resident respondents, the second most frequent reason given was concerns over the political/social/education outlook of the state, specifically that they felt Alabama was not welcoming to racial minorities or anyone with non-conservative ideologies. Among non-resident respondents, nearly a quarter (23%) indicated that they wanted to be closer to their families, and 17% noted that they were distance education students and had no physical connection to the state.

Table 6: "Unlikely/Very Unlikely" to Live and Work in Alabama after Graduation: Comment Analysis

Unlikely and Very Unlikely Responses		Non-Residents (N = 479)
1. Stay if offered a good job/competitive pay/upward mobility		3%
2. Pursuing better opportunities outside of Alabama; no incentive to stay; follow the money	61%	36%
3. Pursuing graduate school or further study	7%	6%
4. Unacceptable environment: political/social/education/climate	19%	15%
5. Moving with the military or closer to/with family	6%	23%
6. Unsure of plans	1%	0%
7. Distance education student	3%	17%

FINDINGS: Job Prospects

"After graduating, I am not opposed to starting my career in Alabama, or relocating to another state. It all depends on the job opportunity."

- AL Resident Respondent

"After completion of my internship if I am offered any jobs in Alabama I may stay. "

- Non-Resident Respondent

"After graduation, I am open to living and working in Alabama and I hope that I can; it is ultimately up to where I can get a job."

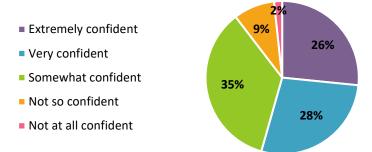
- Non-Resident Respondent

The 2022 Retain Alabama 2.0 Survey included new questions about how undergraduates are planning for their professional future. Given the importance that students place on career-related factors in their decision-making, it is hoped that these responses will inform statewide communications and outreach strategies.

Confidence in Finding a Job

When asked if they were confident in finding a job in their desired field immediately after graduation, students indicated that they felt positive, with more than half responding "Extremely Confident" or "Very Confident" (**Figure 19**). A further third of respondents indicated they were "Somewhat Confident" (35%).

Figure 19: Confidence in Finding a Job in Their Desired Field Immediately After Graduation



When responses were analyzed by gender (**Table 7**), females and males had similar confidence levels in finding a job (mean ratings of 3.72 and 3.68, respectively), while respondents who identified as other expressed much lower confidence levels (mean rating = 3.23).

Table 7: Confidence in Finding a Job after Graduation by Gender

Response Options	Female (Mean = 3.72)	Male (Mean = 3.68)	Other (Mean = 3.23)
Extremely confident	27%	26%	16%
Very confident	28%	28%	20%
Somewhat confident	35%	36%	40%
Not so confident	8%	8%	18%
Not at all confident	1%	2%	6%

^{*}Statistically significant difference

When viewed by race/ethnicity (**Table 8**), African American/Black and white students showed the highest confidence levels (mean ratings of 3.76 and 3.70, respectively), as compared with Asian, Hispanic and other minority respondents.

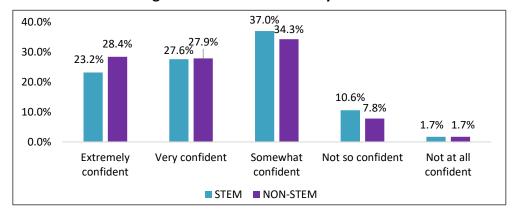
Table 8: Confidence in Finding a Job after Graduation by Race/Ethnicity

Response Options	AA/Black (Mean = 3.76)	White (Mean = 3.70)	Hispanic (Mean = 3.54)	Other Minority (Mean = 3.50)	AAPI (Mean = 3.49)
Extremely confident	29%	27%	19%	20%	20%
Very confident	28%	28%	31%	26%	26%
Somewhat confident	33%	35%	38%	41%	41%
Not so confident	8%	9%	11%	11%	11%
Not at all confident	1%	2%	1%	2%	3%

^{*}Statistically significant difference

When confidence is viewed by STEM-related or non-STEM-related field of study (**Figure 20**), the non-STEM students indicated more confidence (28.4% versus 23.2%).

Figure 20: Confidence in Finding a Job after Graduation by STEM versus Non-STEM Majors



Interestingly, an analysis of responses by expected graduation date (2022, 2023, and 2024+) did not show any statistically significant difference between the classes. This indicates that seniors did not feel any more or less confident than juniors or sophomores about their job prospects, suggesting that confidence in job prospects does not change much as students approach their graduation date.

Analysts also considered how students' job confidence levels corresponded to their intentions to stay in Alabama after graduation. As shown in **Figure 21** (p. 21), respondents who indicated that they were "Very Likely" to stay in Alabama had a similar level of confidence in their job prospects as those indicating that they were "Unlikely" or "Very Unlikely" to stay (mean rating of 3.74 and 3.69, respectively). By comparison, respondents who indicated that they were "Likely" or "Neutral" about staying (these comprise the Retain Alabama Target Group) showed less confidence overall. With a mean rating of 3.49 for confidence, more Target Group students indicated they were only "Somewhat Confident" (42%) in their job prospects and fewer Target Group students indicated they were "Extremely Confident" (17%).

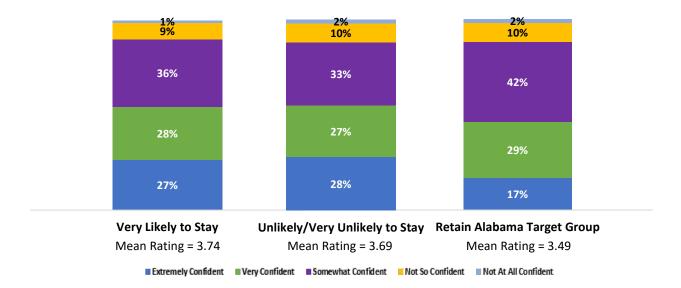


Figure 20: Confidence in Finding a Job after Graduation by Intent to Stay in Alabama

Searching for Jobs

Students were asked how they planned to search for jobs and were given nine options to select any or all choices, including "Don't Know" and "Other." The most frequently selected job search method, as shown in **Figure 21**, was "Linked-In or Other Forms of Networking," with 69.6% of respondents selecting it. Other methods chosen by a majority of the respondents were "Internships or Volunteering" (62.3%), "Company Websites" (57.6%), and "National Job Search Sites" (57.0%). Notably, students indicated they were much less likely to use their institution's career service options, with "Institution's Career Center" and "Institution's Career Search Site" only receiving 28.5% and 28.3%, respectively. However, almost half of students (45.5%) intend to participate in "On-Campus Career Fairs."

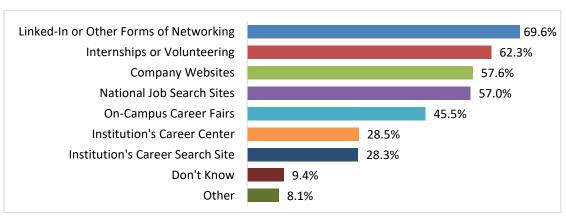


Figure 21: Searching for Jobs- All Students - How Do You Plan to Search for Jobs?

Interestingly, almost 1 out of 10 students indicated that they did not know how they would search for jobs (9.4%).

When responses were analyzed by expected year of graduation in **Figure 22**, significant differences were found between classes in the categories of internships and volunteering, oncampus career fairs, institution's career search site, and institution's career center. Sophomores indicated a greater interest across job search options, suggesting they had not formulated distinct plans related to jobs. Seniors had the lowest percentages across the categories, perhaps as a reflection of their actual job search patterns.

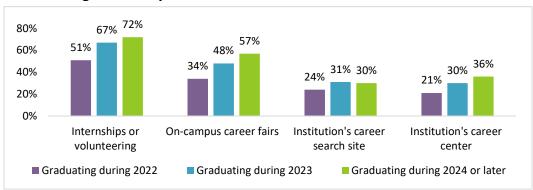


Figure 22: Searching for Jobs by Graduation Date

When viewed by gender, all groups are most likely to search for jobs using "Linked-In or Other Forms of Networking" as their first choice, with males being the most likely to use this search tool. The second and third choices vary for each group, although "Internships and Volunteering" is included in all groups.

The following choices in **Table 9** showed statistically significant difference between genders.

Response Item	Linked-In or other forms of networking	National job search sites (e.g., Indeed, Glassdoor, Monster)	On-campus career fairs	Institution's career center	Don't know
Female	66%	54%	43%	27%	9%
Male	76%	61%	51%	32%	9%
Other	67%	67%	41%	26%	21%

Table 9. Searching for Jobs by Gender

When viewed by race/ethnicity on **Table 10** (p. 23), a statistical significance was identified in all categories except for national job search sites (e.g., Indeed, Glassdoor, Monster), company websites, and don't know. However, each race/ethnicity group selected the following categories as their first, second and third choices:

1st Choice: Linked-In or other forms of networking

2nd Choice: Internships or volunteering 3rd Choice: On-campus career fairs

^{*}Statistically significant difference

Table 10: Searching for Jobs by Race/Ethnicity

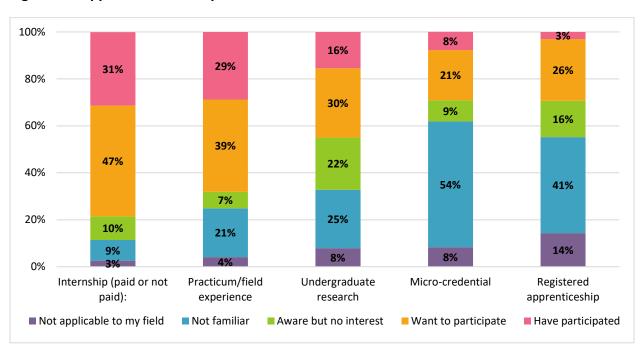
Response Item*	Linked-In or other forms of networking	Internships or volunteering	On-campus career fairs	Institution's career center	Institution's career search site
AAPI	75%	70%	58%	37%	37%
Black	73%	66%	55%	35%	29%
Hispanic	72%	66%	44%	26%	21%
Other Minority	71%	61%	42%	29%	31%
White	68%	60%	41%	25%	28%

^{*} Statistically significant differences between race/ethnicity for these categories

Opportunities to Improve Resume

Students were asked to indicate how familiar they were with the following opportunities to improve their resume: Internship (paid or not paid); Registered apprenticeship; Practicum/field experience; Micro-credential (course bundle related to in-demand skill set); and Undergraduate research. As shown in **Figure 23**, nearly 80% of respondents indicated they have participated or would like to participate in an internship. Almost 70% indicated they have participated or would like to participate in a practicum/field experience, and almost half indicated they have participated or would like to participate in undergraduate research. Awareness and interest dropped off significantly for the remaining options. For micro-credentials and registered apprenticeships, the most frequent response was "Not Familiar," indicating that more work must be done to educate students and faculty about these opportunities.

Figure 23: Opportunities to Improve Resume



Responses were analyzed by graduation year, and as expected, seniors were more likely to have participated in various opportunities to improve their resumes (**Figure 24**). Nearly half of the 2022 class indicated they participated in internships (47%), as compared with only 27% of 2023 and 16% of 2024+. Conversely, a majority of students in the classes of 2023 and 2024+ indicated they want to participate in an internship as their college career progresses. A similar pattern continues with practicum/field experience and undergraduate research.

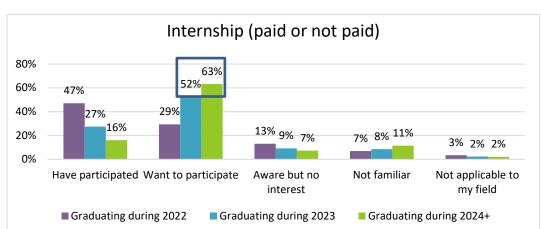
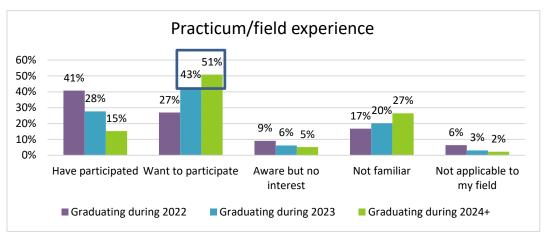
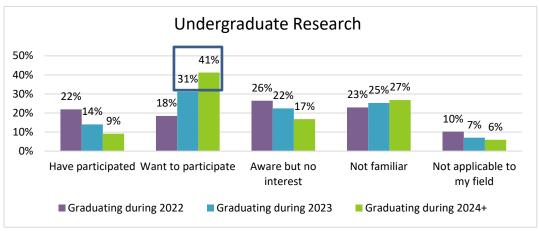


Figure 24: Opportunities to Improve Resume by Graduation Year





Top Industries for Employment

Students were asked to select 1-3 industries in which they plan to seek employment after graduation. **Table 11** shows the top 10 industries in which respondents plan to seek employment after graduation, ranked by percentage of students selecting the industry as their first choice. Education and healthcare were most often selected as the first-choice industry. It is also worth noting that several industries appeared as second choice options more frequently than they did as first choice options, including consulting services and non-profits, which did not make it into the top first-choice rankings. Industries ranked higher as a second choice appear with green highlighting in **Table 11**. See **Appendix F** for the complete list of industry options to seek employment after graduation.

Table 11. Overall top 10 Industries for Employment (All Majors)

Industry — All Students (STEM and Non-STEM Combined)	1 st Choice N=6805	2 nd Choice N=6041
Education	16.5%	10.1%
Medical Office, Clinic, Hospital Services	14.0%	6.5%
Computer Systems Services	8.3%	3.7%
Scientific Research and Development	6.4%	7.1%
Architectural, Engineering, and Related Services	5.5%	3.0%
Business Support/Administrative Services, including facilities	5.2%	7.4%
Social Work and Related Services	5.1%	4.3%
Arts, Entertainment, and Events	4.4%	3.7%
Accounting	4.0%	1.8%
Production/ManufacturingMetals, automotive, aerospace, electronics	3.0%	3.0%
Consulting services—Management, scientific, technical	1.4%	3.8%
Non-profit organizations, professional associations	1.4%	4.9%

As expected, the industry rankings differed for STEM-related majors versus non-STEM related majors. **Table 12** shows the top five industries selected as the first choice by major category.

Table 12. Top Five Industries in which STEM and Non-STEM Students Intend to Seek Employment

Industry – STEM Related (N=2922)	
Computer Systems Services	22.2%
Scientific Research and Development	16.3%
Architectural, Engineering, and Related Services	14.9%
Medical Office, Clinic, Hospital Services	10.9%
Production/ManufacturingMetals, automotive, aerospace, electronics	7.8%
Industry – Non-STEM Related (N=4513)	
Education	22.3%
Medical Office, Clinic, Hospital Services	15.6%
Social Work and Related Services	7.6%
Business Support/Administrative Services, including facilities	7.2%
Arts, Entertainment, and Events	6.2%

FINDINGS: Decision-Making Factors

"Alabama is one of the most historical places. The main reason, as an international student, I'd like to live here is because of the culture. I feel people in Alabama are welcoming and the hospitality never made me feel out-of-home."

- Non-Resident Respondent

"Alabama doesn't have the best social atmosphere for younger people but I think that it is a good place to make money and establish myself for the future."

- AL Resident Respondent

"Alabama enjoys great weather all year round. The state has great natural beauty including inland waterways and forests. The cost of living in Alabama is low and so are real estate prices. There are several highly rated colleges in the state and employment opportunities are plenty."

- Non-Resident Respondent

Overall

The survey presented 22 factors to gauge respondents' impressions of Alabama and importance in determining future plans. As shown in **Table 13**, these impression factors can be assigned to five areas: Overall, Economic, Career, Social and Community, and Outdoor and Entertainment. Students were asked to rate both their impression of Alabama for each factor and then the importance of the factors. Students completed the ratings using a 5-point Likert Scale that ranged from "Very Negative" (1) to "Very Positive" (5) for impressions of Alabama and "Not Important at All" (1) to "Very Important" (5) for importance. A numerical value was assigned to each response in order to support analysis.

Table 13: Decision-Making Factors Related to Impression and Importance

٠.	Alabama as a place to live	≥	Friendliness of the people
OVERALL	Alabama as a place to work	COMMUNITY	Acceptance towards people of diverse
\ VE	Alabama as a place to work	Σ	backgrounds
0	Overall social image or reputation	Σ	Opportunities to practice my faith
u	Cost of living	- ×	Proximity to family
ECONOMIC	Overall public safety		Political environment in-line with my priorities
2	Quality of K-12 education	SOCIAL	Political environment in-line with my priorities
0	Access to mass transit and walkability	SC	Emphasis on environmental issues
	Availability of quality childcare		Variety of dining options
	Job opportunities in my prospective field of study (major)	R & MENT	Access to cultural events/concerts
REER	Potential salary and employer-provided benefits	OUTDOOR &	Access to sporting events (local/college/pro)
₹	Potential for career advancement	OC.	Access to healthy/outdoor activities
	Flexibility to work remotely	Z	The state's natural environment
	Opportunities to continue education		Weather/temperate climate

Importance Ratings

A Likert scale was used to capture respondents' ratings on how important each factor was to their future plans presented in **Table 14**. The high majority of positive/very positive ratings reflects that most factors were considered important for decision-making.

Table 14: Importance of Each Characteristic (Likert Scale)

Importance			
Response Items	Very Important/ Important	Neutral/ No Opinion	Not Important/ Not Important at All
Cost of living	92.9%	6.4%	0.8%
Overall Public safety	91.1%	7.9%	1.1%
Quality of K-12 Education	79.4%	16.3%	4.3%
Access to mass transit and walkability	56.2%	30.9%	12.9%
Availability of quality childcare	58.2%	33.9%	7.8%
Job opportunities in my prospective field of study	93.7%	5.5%	0.8%
Potential salary and employer-provided benefits	91.9%	7.3%	0.8%
Potential for career advancement	88.9%	10.1%	1.0%
Flexibility to work remotely	58.0%	32.6%	9.4%
Opportunities to continue education	78.3%	17.7%	4.0%
Friendliness of the people	86.0%	11.8%	2.2%
Acceptance towards people of diverse backgrounds	86.1%	10.8%	3.1%
Opportunities to practice my faith	68.7%	22.1%	9.2%
Proximity to family	76.0%	17.2%	6.8%
Political environment in-line with my priorities	62.5%	31.6%	5.9%
Emphasis on environmental issues	69.8%	25.6%	4.7%
Variety of dining options	76.3%	18.9%	4.8%
Access to cultural events/concerts	63.3%	28.6%	8.1%
Access to sporting events (local/college/pro)	50.0%	31.1%	18.9%
Access to healthy/outdoor activities	85.0%	12.6%	2.4%
The state's natural environment	84.7%	13.5%	1.8%
Weather/temperate climate	73.6%	22.9%	3.5%

In order to aid in comparison across factors, student responses for each factor were assigned a numerical value and averaged to generate a composite score or mean rating ranging from 1 (lowest) to 5 (highest) as illustrated in **Table 15** (p. 28). The top four items for importance were job opportunities (4.63), salary (4.55), cost of living (4.55), and public safety (4.49). These numbers are similar to the 2021 top four, with the exception of public safety displacing career advancement. These factors reflect the importance of financial considerations for students in selecting where to live and work after graduation. Along with these top four, another eleven items had a mean rating between 4 and 5, meaning a rating between important and very important. Only seven of the 22 items had a mean rating below 4.00, with "access to sporting events (local/college/pro)" being the least important.

Table 15: Importance of Characteristics Listed from Highest to Lowest (Likert Scale)

Importance		
Response Items	Importance Mean Rating (Max = 5)	
Job opportunities in my prospective field of study (major)	4.63	
Potential salary and employer-provided benefits	4.55	
Cost of living	4.55	
Overall Public safety	4.49	
Potential for career advancement	4.45	
Acceptance towards people of diverse backgrounds	4.39	
Friendliness of the people	4.32	
Quality of K-12 Education	4.29	
Access to healthy/outdoor activities	4.27	
The state's natural environment	4.25	
Opportunities to continue education	4.17	
Proximity to family	4.12	
Variety of dining options	4.03	
Opportunities to practice my faith	4.00	
Weather/temperate climate	4.00	
Emphasis on environmental issues	3.96	
Political environment in-line with my priorities	3.83	
Availability of quality childcare	3.81	
Access to cultural events/concerts	3.79	
Flexibility to work remotely	3.76	
Access to mass transit and walkability	3.66	
Access to sporting events (local/college/pro)	3.45	

Impression Ratings

For the first three overall items ("Alabama as a place to live," "Alabama as a place to work," and Alabama's overall social image or reputation"), respondents were only asked to rate their impressions, not their importance, as shown in **Table 16**. Further details of these results are provided in **Table 17**.

Table 16: *Impressions* of Alabama as a Place to Live and Work and its Overall Social Image or Reputation

Response Items	Mean (Max = 5)
Alabama as a place to live	3.83
Alabama as a place to work	3.71
Alabama's overall social image or reputation	3.09

Table 17: Impressions of Each Characteristic (Likert Scale)

Impressions			
Response Items	Very Positive/ Positive	Neutral/ No Opinion	Negative/ Very Negative
Alabama as a place to live	68.5%	19.3%	12.3%
Alabama as a place to work	62.0%	25.1%	13%
Alabama's Overall social image or reputation	39.7%	25.5%	34.8%
Cost of living	74.3%	15.5%	10.2%
Overall Public safety	63.1%	22.2%	14.7%
Quality of K-12 Education	39.5%	28.0%	32.5%
Access to mass transit and walkability	26.6%	31.4%	42.0%
Availability of quality childcare	35.7%	50.2%	14.1%
Job opportunities in my prospective field of study (major)	74.4%	15.0%	10.6%
Potential salary and employer-provided benefits	59.9%	22.8%	17.3%
Potential for career advancement	64.8%	26.3%	8.9%
Flexibility to work remotely	47.5%	39.9%	12.6%
Opportunities to continue education	76.6%	18.6%	4.8%
Friendliness of the people	80.5%	14.1%	5.5%
Acceptance towards people of diverse backgrounds	48.0%	22.1%	29.9%
Opportunities to practice my faith	68.1%	25.3%	6.6%
Proximity to family	78.2%	14.0%	7.8%
Political environment in-line with my priorities	40.4%	32.8%	26.8%
Emphasis on environmental issues	38.4%	35.7%	25.9%
Variety of dining options	71.5%	17.3%	11.2%
Access to cultural events/concerts	54.5%	29.6%	15.9%
Access to sporting events (local/college/pro)	67.4%	26.7%	5.9%
Access to healthy/outdoor activities	81.0%	12.9%	6.1%
The state's natural environment	81.0%	15.0%	4.0%
Weather/temperate climate	63.9%	21.6%	14.6%

Impressions of Alabama Expressed as Mean Ratings

Each impression factor was assigned a composite score on a scale of 1 (very negative) to 5 (very positive) based on the average ratings by respondents as shown in **Table 18**. Overall, the impressions of Alabama with the highest mean rating were the "Access to healthy/ outdoor activities" (4.14), "Proximity to family" (4.13), and "The state's natural environment" (4.13), all of which indicate an overall impression between positive and very positive. Nineteen items had a mean impression rating between 3 and 4, indicating impressions between neutral/ no opinion and positive. Only one item had a mean impression rating below 3, indicating a neutral to negative impression: "Access to mass transit and walkability."

Table 18: Impression of Characteristics Listed from Highest to Lowest (Likert Scale)

Impressions	
Response Items	Impressions Mean Rating (Max = 5)
Access to healthy/outdoor activities	4.14
Proximity to family	4.13
The state's natural environment	4.13
Friendliness of the people	4.07
Opportunities to continue education	4.06
Job opportunities in my prospective field of study (major)	3.99
Opportunities to practice my faith	3.99
Cost of living	3.93
Access to sporting events (local/college/pro)	3.91
Variety of dining options	3.86
Alabama as a place to live	3.83
Potential for career advancement	3.82
Alabama as a place to work	3.71
Weather/temperate climate	3.68
Overall Public safety	3.67
Potential salary and employer-provided benefits	3.63
Access to cultural events/concerts	3.55
Flexibility to work remotely	3.50
Availability of quality childcare	3.31
Acceptance towards people of diverse backgrounds	3.28
Political environment in-line with my priorities	3.18
Emphasis on environmental issues	3.17
Quality of K-12 Education	3.12
Overall image or reputation	3.09
Access to mass transit and walkability	2.77

In comparison to the 2021 survey, only two items were rated higher than a 4.00 versus five items in this survey. "Proximity to family" moved into the top five and "Cost of Living" dropped slightly. In 2021, five items fell below 3.00, whereas in this survey, the only item to fall below 3.00 was a question added this year, "Access to mass transit and walkability."

When responses were analyzed by students' self-identified demographic characteristics, a number of key variances emerged with statistically significant differences.

Residency

Of the 22 impression items, Alabama residents and non-residents had statistically significant differences in impressions of Alabama for 20 items, with Alabama residents providing higher impression ratings than non-residents (likelihood ratio chi-squared < .001). The one exception was "Access to mass transit and walkability," which non-residents rated .03 higher. "Weather/temperate climate" had the same impression at 3.68. A detailed data table for residency also appears in **Appendix G**.

Gender

Females had higher impressions than males of 10 items but only 6 had statistical significance: continuing education, sporting events, quality childcare, environmental issues, quality of K-12 education, and mass transit. Males had higher impressions of 12 items, and six of those had statistical significance: outdoor activities, natural environment, cost-of-living, salary, remote work, and acceptance of diversity (on all likelihood ratio chi-squared < .001). Students who identified as other had more negative impressions for every item. A detailed data table for gender also appears in **Appendix G**.

Race/Ethnicity

Students who identified as African American/Black had higher impressions of more items than any other group. All 10 of these items were statistically significant: continuing education; sporting events; practicing faith; weather/climate; remote work; cultural events/concerts; quality childcare; environmental issues; K-12 education; and mass transit and walkability. Asian American/Pacific Islander students had the highest impressions (statistically significant) of 4 items: career advancement; salary/benefits; acceptance of diversity; and political environment. White students had the highest impressions of 4 items (statistically significant): natural environment; proximity to family; job opportunities; and public safety.

When the impressions were ranked for each race/ethnic group, important similarities and differences emerged. All five groups ranked mass transit and quality of K-12 education as among their lowest three impressions, and all groups, with the exception of white, included political environment in their lowest three. Natural environment and outdoor activities appeared in the top three impressions for all race/ethnicity groups, except for African American/Black. **Table 19** (p. 32) illustrates these impressions, and a detailed data table for responses can be found in **Appendix G**.

Table 19: Top Three Positive and Negative Mean Ratings of *Impressions* of Alabama, by Race/Ethnicity Group

Race/Ethnicity	Top 3 Positive AL Impressions	Top 3 Negative AL Impressions	
Asian American/ Pacific Islander*	Friendliness of the people	Quality of K-12 Education	
	The state's natural environment	Political environment in-line with my priorities	
	Access to healthy/outdoor activities	Access to mass transit and walkability	
African American/Black	Opportunities to continue education	Quality of K-12 Education	
	Proximity to family	Access to mass transit and walkability	
	Opportunities to practice my faith	Political environment in-line with my priorities	
Hispanic	The state's natural environment	Quality of K-12 Education	
	Access to healthy/outdoor activities	Political environment in-line with my priorities	
	Job opportunities in my prospective field	Access to mass transit and walkability	
Other Minority	Proximity to family	Political environment in-line with my priorities	
	The state's natural environment	Quality of K-12 Education	
	Access to healthy/outdoor activities	Access to mass transit and walkability	
White	The state's natural environment	Emphasis on environmental issues	
	Access to healthy/outdoor activities	Quality of K-12 Education	
	Proximity to family	Access to mass transit and walkability	

STEM and Non-STEM

Students with STEM-related majors had higher impressions of four items than non-STEM-related majors (statistically significant): natural environment; job opportunities; career advancement; and salary. Of the remaining items, non-STEM majors had higher impressions with all but friendliness of the people being statistically significant.

Impressions Compared with Importance

Comparing the factors that are most important to students with their impressions of Alabama can provide insights on how the state can target its outreach efforts to young professionals. **Table 20** shows the factors ranked by importance and calculates the difference between importance and impression, referred to as the "gap." Higher gaps indicate areas where students rated the factor as very important but had a lower impression of Alabama. Lower gaps indicate areas where the importance of the factor more closely matched the impression of Alabama. A negative gap means that an item's impression rating was higher than its importance rating.

Table 20: Gap Between Mean Rating for *Importance* and *Impression* of Alabama with Mean Rating for Each Item (Ordered High to Low by *Importance* via Likert Scale)

Item	Importance	Impressions	Gap (Importance - Impression)
Job opportunities in my prospective field of study (major)	4.63	3.99	0.64
Cost of living	4.55	3.93	0.62
Potential salary and employer-provided benefits	4.55	3.63	0.92
Overall Public safety	4.49	3.67	0.82
Potential for career advancement	4.45	3.82	0.63
Acceptance towards people of diverse backgrounds	4.39	3.28	1.11
Friendliness of the people	4.32	4.07	0.25
Quality of K-12 Education	4.29	3.12	1.17
Access to healthy/outdoor activities	4.27	4.14	0.12
The state's natural environment	4.25	4.13	0.12
Opportunities to continue education	4.17	4.06	0.11
Proximity to family	4.12	4.13	-0.01
Variety of dining options	4.03	3.86	0.17
Opportunities to practice my faith	4.00	3.99	0.01
Weather/temperate climate	4.00	3.68	0.32
Emphasis on environmental issues	3.96	3.17	0.79
Political environment in-line with my priorities	3.83	3.18	0.65
Availability of quality childcare	3.81	3.31	0.50
Access to cultural events/concerts	3.79	3.55	0.24
Flexibility to work remotely	3.76	3.50	0.26
Access to mass transit and walkability	3.66	2.77	0.89
Access to sporting events (local/college/pro)	3.45	3.91	-0.46

The items with the largest gaps were quality of K-12 education (1.17), acceptance of people with diverse backgrounds (1.11), and salary and benefits (0.92). These high gaps point to areas that are important to students, but where Alabama needs to work to improve students' impressions so that they are more inclined to stay.

Several other items had low gaps because they were important to students and Alabama was rated highly by students. In particular, friendliness of the people (importance = 4.32, impression = 4.07), access to healthy/outdoor activities (importance = 4.27, impression = 4.14), and the state's natural environment (importance = 4.25, impression = 4.13). Only two items had a negative gap, meaning the impressions of Alabama for these items were higher than the importance of these items. The items with negative gaps were proximity to family (-0.01), and access to sporting events (-0.46). These low-gap and negative-gap areas indicate strengths for Alabama that could be leveraged as part of outreach efforts.

FINDINGS: Alabama Communities and Familiarity with the State

"Depends on where I can find the best paying work, if it is in Huntsville, I'll stay here if not I'll move."

- Non-Resident Respondent

"I would love to work and live in Birmingham, but my goal is to make a difference wherever I land. I am open to wherever that may be."

- Non-Resident Respondent

"Although I am from Mississippi, over the last few years I have grown particularly fond of Mobile, Alabama, and especially the coast near Gulf Shores. I would love to continue to enjoy this state."

- Non-Resident Respondent

Overall

Students were asked to select one to three Alabama communities they perceive the most positively as places to live and work in Alabama and indicate the reason they chose each selection. Students could choose among the following reasons: advertising; general reputation; have lived/currently live in this community; history of the area; personal experience; possible job opportunities; word-of-mouth; and other. The 2022 top five selections are shown in **Table 21**, along with the reasons given.

Table 21: Top Five Alabama Community Selections and the Top Three Reasons for Each

Choice	Region	1st Reason	2nd Reason	3rd Reason	
#1 Choice	Huntsville/Madison	Have lived/currently live in this community	Possible job opportunities	Personal experience	
#2 Choice	Birmingham and surrounding suburbs	Possible job opportunities	Have lived/currently live in this community	Personal experience	
#3 Choice	Gulf Shores/Orange Beach	Personal experience	General reputation	Other	
#4 Choice	Auburn/Opelika/ Phenix City	General reputation	Personal experience	Have lived/currently live in this community	
#5 Choice	Athens/Decatur	Have lived/currently live in this community	Personal experience	Possible job opportunities	

As shown in **Table 21**, respondents ranked Huntsville/Madison as the number one choice as a place to live and work in Alabama. When the top five communities were viewed by reason for selection, "personal experience" was included as one of the top three reasons for each community. With the exception of Gulf Shores/Orange Beach, students also selected "have lived/currently live in this community" as one of their top three reasons. "Possible job opportunities" was selected as a top reason for Huntsville/Madison, Birmingham and surrounding suburbs, and Athens/Decatur.

Table 22 lists all communities included in the survey and the percentage of students who chose each region.

Table 22: Students Selecting Alabama Regions

Alabama Region	Overall Choice	#1 Choice	#2 Choice	#3 Choice
Huntsville/ Madison	23%	39%	18%	10%
Birmingham and surrounding suburbs	19%	19%	21%	16%
Gulf Shores/ Orange Beach	10%	4%	11%	14%
Auburn/ Opelika/ Phenix City	7%	6%	8%	9%
Athens/ Decatur	7%	4%	10%	7%
Mobile/ Saraland	6%	6%	5%	8%
Montgomery/Prattville/Wetumpka/Pike Road	5%	4%	5%	6%
Florence/ Muscle Shoals/ Tuscumbia	4%	4%	3%	5%
Bay Minette/ Fairhope/ Foley	4%	3%	4%	4%
Tuscaloosa/ Northport	4%	2%	4%	5%
Gadsden/ Anniston/ Oxford/ Jacksonville	3%	3%	3%	4%
Fort Payne/ Guntersville	3%	2%	3%	4%
Dothan/ Enterprise/ Ozark	2%	2%	2%	2%
Troy	2%	1%	2%	2%
Demopolis/ Livingston	1%	1%	1%	1%
Tuskegee	1%	0%	1%	1%
Selma	0%	0%	0%	0%

Lastly, students were provided with eight statements about the state of Alabama and then asked to rate on a Likert Scale their familiarity with the statements, with 1 = not familiar at all and 5 = very familiar (**Table 23**). Only one statement rated above 4.00, meaning that students were familiar or very familiar with the statement, concerning Alabama's aviation and aerospace industry. Students indicated they were the least familiar with Alabama's success with its First-Class Pre-K Program. The remaining six statements fell within the 3-4 range indicating recognition between neutral (did not know) and familiar.

Table 23: How Familiar are you with the following statements about Alabama?

How familiar are you with the following statements about Alabama?	Mean (Max = 5)
Alabama's aviation/ aerospace industry has been integral to U.S. space and defense programs for more than 50 years. It is the home of Airbus's only U.S. jetliner production facility (Mobile), as well as NASA's Marshall Flight Center (Huntsville), and is the future home of the new U.S. Space Command headquarters (Huntsville).	4.09
Alabama is home to 21 state parks, the world-class Robert Trent Jones Golf Trail, three MLB Double-A baseball teams, the Talladega Superspeedway, and the World Games 2022 (Birmingham).	3.65
Alabama is home to 13 Historically Black Colleges and Universities (HBCUs), the highest number of any state.	3.59
Alabama is the 5th largest producer of cars and light trucks nationally, with automotive assembly plants for Mercedes-Benz, Honda, Hyundai, and Mazda Toyota.	3.38
Alabama consistently ranks in the top 10 states for doing business, and in the past decade, companies such as Boeing, Lockheed Martin, Google, Amazon, GE Aviation, Polaris, and Blue Origin have established or expanded major Alabama operations.	3.36
Alabama's biosciences research institutions bring in nearly \$400 million dollars of National Institutes of Health (NIH) funding annually, with the University of Alabama at Birmingham ranked among the top 25 medical institutions nationally in federal research funding.	3.32
Alabama has the 3rd largest timberland base in the U.S. and is in the top ten producers of pulp, paper, lumber, and wood panel products.	3.01
Alabama's First-Class Pre-K Program has been consistently ranked among the nation's best state-funded pre-kindergarten programs by the National Institute for Early Education Research.	2.85

CONCLUSIONS AND RECOMMENDATIONS

The 2022 Retain Alabama 2.0 Survey was developed as tool to better understand what matters to Alabama's undergraduate students as they decide where to live and work after graduation. Survey results showed that a clear majority of respondents (85%) were open to staying in Alabama and would like to learn more about job opportunities in the state. Previous research on employment outcomes showed that only half of bachelor's degree holders actually remained in state five years after graduation. Taken together, these figures suggest that Alabama has the opportunity to retain a much greater proportion of its recent graduates.

Student responses to the survey offer some insight on how Alabama should proceed in its efforts to keep young talent in the state:

1) Launch the All in Alabama outreach campaign to raise awareness of the state's assets and target those students open to staying in Alabama after graduation.

ACHE worked with a professional design team to develop the *All in Alabama* brand to promote Alabama as a desirable location for college graduates with opportunities for growth in the careers of tomorrow.



The All in Alabama campaign is designed around the

following key messages as it can all be found in Alabama. Alabama has a wealth of career opportunities across the industries of tomorrow. Reasons to believe Alabama has it all is as follows:

- 1. Great jobs in the fields of tomorrow: tech, healthcare, aerospace, finance, and more
- 2. Rise fast with more space for growth
- 3. Quality of life-work life balance

Survey results showed that students overwhelmingly look to career and financial factors to inform their decision-making about staying in Alabama. Yet, student respondents gave Alabama relatively low marks for potential salary and benefits, cost of living, and potential for career advancement, indicating potential areas for improvement. Alabama received high marks on its natural environment and access to outdoor activities, both factors that were important to students. In addition, the Birmingham and Huntsville areas were identified as the two most desirable areas to live and work in state. These strengths lend themselves to being incorporated into the broader outreach efforts of *All in Alabama*.

Supporting points of the All in Alabama campaign are as follows:

- Alabama has a wealth of career opportunities across the industries of tomorrow.
- Rise faster and go further in the industries of tomorrow: tech, engineering, healthcare, finance.
- Job opportunities, connections, career growth, and quality of life for recent college grads.
- Beaches and mountains, green spaces and city life, plus Southern charm.
- College grads, this is your way in.
- Live more for less in Alabama.
- Putting the life in work-life balance.
- Get so much more than a foot in the door.

2) Make it easier for students to find high-quality job opportunities in Alabama.

Currently, colleges and universities have different resources and capacities to support students in searching for jobs, which makes it difficult for Alabama-based employers to recruit Alabama graduates in systematic ways. Adopting a more coordinated, statewide approach will help students find job opportunities in state and also help employers connect with the talent they need. The partners are exploring tools and resources that can support a more connected recruitment ecosystem.

3) Engage communities in attracting and retaining talent.

The Economic Development Partnership of Alabama (EDPA) worked with a professional design team to develop the FuelAL brand in order to connect with employers, community leaders, and economic developers around attracting young professionals. Through the FuelAL Talent Conference and Fellowship, FuelAL aims to improve retention of Alabama's brightest minds post-graduation. The fellowship program enables interns to participate in training, experiences, and exposure to professional opportunities and life outside the office.

Going Forward

For fiscal year 2023, Alabama lawmakers allocated \$900,000 for the *Retain Alabama* initiative. The initiative is designed around public-private partnerships between the Alabama Commission on Higher Education, Alabama's state-supported universities, EDPA, the Higher Education Partnership (HEP), community leaders, and employer partners. The findings and recommendations in this report are intended to support the strategic vision of the *Retain Alabama* partners.

APPENDICES

Appendix A: Retain Alabama Survey 2.0

Agricultural, Animal Sciences

Retain Alabama 2.0

Retaining Alabama's Talent

1. Institution you currently attend:*

Alabama A&M University Alabama State University Athens State University Auburn University Auburn University at Montgomery Jacksonville State University Troy University Tuskegee University University of Alabama University of Alabama at Birmingham University of Alabama in Huntsville University of Montevallo University of North Alabama University of South Alabama University of West Alabama

2. Expected graduation: *

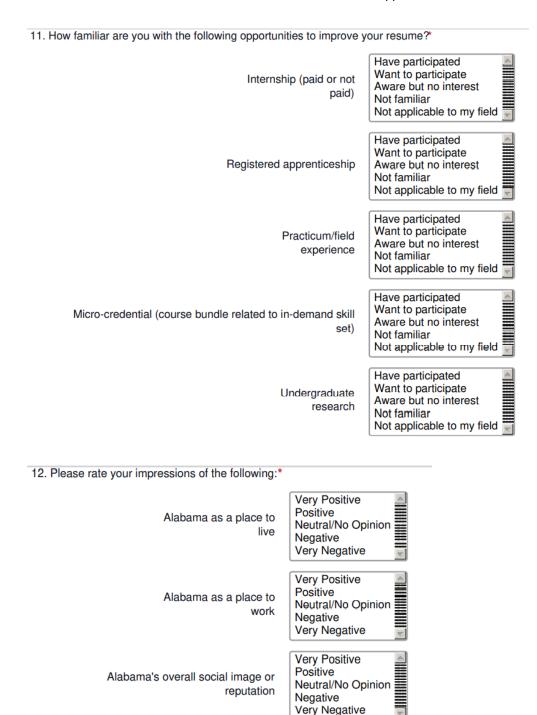
Graduating during 2022 Graduating during 2023 Graduating during 2024 or later

3. Enrollment status: *

Full-time On-Campus Full-time Distance Education Part-time On-Campus Part-time Distance Education 4. Field of study (major) (select the one that most closely matches your major):

Architecture, Community Planning and Design Arts, Visual and Performing Athletic Training Aviation Mgmt, Professional Flight Biological/ Biomedical Sciences Biology, Marine Business Administration/ Management Business, Accounting Business, Data Analytics Business, Entrepreneurship Business, Finance/ Banking Business, Human Resources Business, International Business, Logistics/ Supply Chain Business, Management Information Systems Business, Marketing Business, Other Communications, Journalism, Media Computer Science, Cybersecurity Computer Science, General, Programming Computer Science, Information Systems/ IT Criminal Justice, Emergency Mgmt, Homeland Security **Culinary Arts** Cultural Studies, African American Studies, Women's Studies **Economics** Education, Art Education, Career/ Technical Education, Counseling Education, Early Childhood Education, Elementary Education, English Language Arts Education, Foreign Language Education, Instructional Technology/ Media

5. Are you interested in learning about career opportunities within your field of study (major) in Alabama *
Yes
6. How likely are you to live and work in Alabama after graduation?
Very Likely Likely Neutral/No Opinion Unlikely Very Unlikely
7. Please briefly explain your response to question #6 (75 words or less):
8. How do you plan to search for jobs (select all that apply)?*
☐ Linked-In or other forms of networking
☐ National job search sites (ex., Indeed, Glassdoor, Monster)
☐ On-campus career fairs
☐ Institution's career center
☐ Institution's career search site
☐ Company websites
☐ Internships or volunteering
☐ Don't know
Other - (please specify)
9. How confident are you in finding a job in your desired field immediately after graduation? * Extremely confident
10. Please select 1-3 industries in which you plan to seek employment after graduation.*
Accommodation and Food Services Accounting



13. For each item below, please rate your impressions of and the importance you place on the following Social and Community aspects of life in Alabama compared to other states you may have considered: * Impression Importance Very Positive Very important Positive Important Friendliness of the people Neutral/ No Opinion Neutral/ No Opinion Negative Not important Very Negative Not important at all Very important Very Positive Positive Important Acceptance towards people of diverse Neutral/ No Opinion Neutral/ No Opinion backgrounds Not important Negative Very Negative Not important at all Very Positive Very important Important Positive Neutral/ No Opinion Opportunities to practice my faith Neutral/ No Opinion Negative Not important Not important at all Very Negative Very Positive Very important Positive Important Proximity to family Neutral/ No Opinion Neutral/ No Opinion Negative Not important Very Negative Not important at all Very Positive Very important Positive Important Neutral/ No Opinion Political environment in-line with my priorities Neutral/ No Opinion Not important Negative Very Negative Not important at all Very Positive Very important Positive Important Emphasis on environmental issues Neutral/ No Opinion Neutral/ No Opinion Negative Not important Very Negative Not important at all

14. For each item below, please rate your impressions of and the importance you place on the following Career aspects of life in Alabama

compared to other states you may have considered: *	Impression	Importance
Job opportunities in my prospective field of study (major)	Very Positive Positive Neutral/ No Opinion Negative Very Negative	Very important Important Neutral/ No Opinion Not important Not important at all
Potential salary and employer-provided benefits	Very Positive Positive Neutral/ No Opinion Negative Very Negative	Very important Important Neutral/ No Opinion Not important Not important at all
Potential for career advancement	Very Positive Positive Neutral/ No Opinion Negative Very Negative	Very important Important Neutral/ No Opinion Not important Not important at all
Flexibility to work remotely	Very Positive Positive Neutral/ No Opinion Negative Very Negative	Very important Important Neutral/ No Opinion Not important Not important at all
Opportunities to continue education	Very Positive Positive Neutral/ No Opinion Negative Very Negative	Very important Important Neutral/ No Opinion Not important Not important at all

Very important

Not important

Very important

Important

Neutral/ No Opinion

Not important at all

Neutral/ No Opinion
Not important

Not important at all

Important

15. For each item below, please rate your impressions of and the importance you place on the following Economic aspects of life in Alabama compared to other states you may have considered: * Impression Importance Very Positive Very important Positive Important Cost of Living Neutral/ No Opinion Neutral/ No Opinion Not important Negative Very Negative Not important at all Very Positive Very important Positive Important Overall public safety Neutral/ No Opinion Neutral/ No Opinion Not important Negative Very Negative Not important at all Very Positive Very important Positive Important Quality of K-12 education Neutral/ No Opinion Neutral/ No Opinion Negative Not important Very Negative Not important at all

Very Positive

Very Positive

Neutral/ No Opinion

Neutral/ No Opinion

Positive

Negative Very Negative

Positive

Negative Very Negative

Access to mass transit and

Availability of quality childcare

walkability

Page | 46 ACHE 2022 Retain Alabama 2.0 Survey Report 16. For each item below, please rate your impressions of and the importance you place on the following Outdoor and Entertainment aspects of life in Alabama compared to other states you may have considered: *

labama compared to other states you may have considered:	Impression	Importance
Access to healthy/ outdoor activities	Very Positive Positive Neutral/ No Opinion Negative Very Negative	Very important Important Neutral/ No Opinion Not important Not important at all
The state's natural environment	Very Positive Positive Neutral/ No Opinion Negative Very Negative	Very important Important Neutral/ No Opinion Not important Not important at all
Weather/ temperate climate	Very Positive Positive Neutral/ No Opinion Negative Very Negative	Very important Important Neutral/ No Opinion Not important Not important at all
Access to cultural events/ concerts	Very Positive Positive Neutral/ No Opinion Negative Very Negative	Very important Important Neutral/ No Opinion Not important Not important at all
Access to sporting events (local/ college/ pro)	Very Positive Positive Neutral/ No Opinion Negative Very Negative	Very important Important Neutral/ No Opinion Not important Not important at all
Variety of dining options	Very Positive Positive Neutral/ No Opinion Negative Very Negative	Very important Important Neutral/ No Opinion Not important Not important at all

17. Please select 1-3 Alabama communities you perceive the most positively as places to live and work in Alabama and the reason you chose each selection: *

	Community Selection	Reason for Selection
1st Choice	Athens/Decatur Auburn/Opelika/Phenix City Bay Minette/Fairhope/Foley Birmingham and surrounding suburbs Demopolis/Livingston Dothan/Enterprise/Ozark Florence/Muscle Shoals/Tuscumbia Fort Payne/Guntersville Gadsden/Anniston/Oxford/Jacksonville Gulf Shores/Orange Beach Huntsville/Madison Mobile/Saraland Montgomery/Prattville/Wetumpka/Pike Road Selma Troy Tuscaloosa/Northport Tuskegee	Advertising General reputation Have lived/currently live in this community History of the area Personal experience Possible job opportunities Word-of-mouth Other
2nd Choice	Athens/Decatur Auburn/Opelika/Phenix City Bay Minette/Fairhope/Foley Birmingham and surrounding suburbs Demopolis/Livingston Dothan/Enterprise/Ozark Florence/Muscle Shoals/Tuscumbia Fort Payne/Guntersville Gadsden/Anniston/Oxford/Jacksonville Gulf Shores/Orange Beach Huntsville/Madison Mobile/Saraland Montgomery/Prattville/Wetumpka/Pike Road Selma Troy Tuscaloosa/Northport Tuskegee	Advertising General reputation Have lived/currently live in this community History of the area Personal experience Possible job opportunities Word-of-mouth Other

How familiar are you with the following statements about Alabama?*

Alabama is the 5th largest producer of cars and light trucks nationally, with automotive assembly plants for Mercedes-Benz, Honda, Hyundai, and Mazda Toyota.

Very Familiar Familiar Neutral/ Did not know Not familiar Not familiar at all

Alabama has the 3rd largest timberland base in the U.S. and is in the top ten producers of pulp, paper, lumber, and wood panel products.

Very Familiar Familiar Neutral/ Did not know Not familiar Not familiar at all

Alabama's aviation/ aerospace industry has been integral to U.S. space and defense programs for more than 50 years. It is the home of Airbus's only U.S. jetliner production facility (Mobile), as well as NASA's Marshall Flight Center (Huntsville), and is the future home of the new U.S. Space Command headquarters (Huntsville).

Very Familiar Familiar Neutral/ Did not know Not familiar Not familiar at all

Alabama's biosciences research institutions bring in nearly \$400 million dollars of National Institutes of Health (NIH) funding annually, with the University of Alabama at Birmingham ranked among the top 25 medical institutions nationally in federal research funding.

Very Familiar Familiar Neutral/ Did not know Not familiar Not familiar at all

Alabama is home to 13 Historically Black Colleges and Universities (HBCUs), the highest number of any state.

Very Familiar Familiar Neutral/ Did not know Not familiar Not familiar at all

Alabama's First Class Pre-K Program has been consistently ranked among the nation's best state-funded pre-kindergarten programs by the National Institute for Early Education Research.

Very Familiar Familiar Neutral/ Did not know Not familiar Not familiar at all

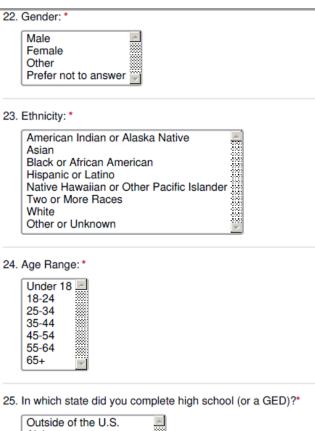
Alabama consistently ranks in the top 10 states for doing business, and in the past decade, companies such as Boeing, Lockheed Martin, Google, Amazon, GE Aviation, Polaris, and Blue Origin have established or expanded major Alabama operations.

Very Familiar Familiar Neutral/ Did not know Not familiar Not familiar at all

Alabama is home to 21 state parks, the world-class Robert Trent Jones Golf Trail, three MLB Double-A baseball teams, the Talladega Superspeedway, and the World Games 2022 (Birmingham).

Very Familiar Familiar Neutral/ Did not know Not familiar Not familiar at all

	rie	ease s	elect all that apply to you	:"		
		Activ	e military			
		Empl	oyed full-time			
		Empl	oyed part-time			
		Parent				
		Perso	onally paying for college			
		Singl	e-parent			
		Veter	ran			
		None)			
20.	Ho	w wo	uld you self-identify your	socioeconomic status?*		
			Income Support	Income Level		
	Sta	atus	Family-supported Self-supported	\$32,048 or less \$32,048 - \$53,413 \$53,413 - \$106,827 \$106,827 - \$373,894 \$373,895 or greater		



Alabama
Alaska
American Samoa
Arizona
Arkansas
California
Colorado
Connecticut
Delaware
District of Columbia

26. Select the area of the state where you completed high school (or a GED) (or the nearest city/metropolitan area from the list):

Athens/Decatur Auburn/Opelika/Phenix City Bay Minette/Fairhope/Foley Birmingham and surrounding suburbs Demopolis/Livingston Dothan/Enterprise/Ozark Florence/Muscle Shoals/Tuscumbia Fort Payne/Guntersville Gadsden/Anniston/Oxford/Jacksonville Gulf Shores/Orange Beach Huntsville/Madison Mobile/Saraland Montgomery/Prattville/Wetumpka/Pike Road Selma Troy Tuscaloosa/Northport Tuskegee

Appendix B: Majors by STEM Status

CIP Title	STEM/Non	CIP Code
Agricultural, Animal Sciences	STEM	01.0000
Architecture, Community Planning and Design	NON-STEM	04.0000
Arts, Visual and Performing	NON-STEM	50.0000
Athletic Training	NON-STEM	51.0913
Aviation Management, Professional Flight	NON-STEM	49.0000
Aviation Management, Professional Flight	INOIN-STEIVI	26.0101, 26.0200, 26.0500, 26.0800,
Biological/ Biomedical Sciences	STEM	26.0900, 26.1000, 26.1500, 26.9900
Biology, Marine	STEM	26.1300
Business Administration/ Management	NON-STEM	52.0100, 52.0200
Business, Accounting	NON-STEM	52.0300
Business, Data Analytics/ Management Science	STEM	52.1300
Business, Entrepreneurship	NON-STEM	52.0700
·		52.0800
Business, Finance/ Banking	NON-STEM	
Business, Human Resources	NON-STEM	52.1000
Business, International	NON-STEM	52.1100
Business, Logistics/ Supply Chain	NON-STEM	52.0202
Business, Management Information Systems	NON-STEM	52.1200
Business, Marketing	NON-STEM	52.1400
Business, Other	NON-STEM	52.9900
Communications, Journalism, Media	NON-STEM	09.0000
Computer Science, General, Programming	STEM	11.0100, 11.0700
Criminal Justice, Emergency Management, Homeland Security	NON-STEM	43.0000
Culinary Arts	NON-STEM	12.0500
Cultural Studies, African American Studies, Women's Studies	NON-STEM	05.0000
Cybersecurity	STEM	11.1000
Economics	NON-STEM	45.0600, 52.0600
Education, Art	NON-STEM	13.1302
Education, Career/ Technical	NON-STEM	13.1319
Education, Counseling	NON-STEM	13.1101
Education, Early Childhood	NON-STEM	13.1210
Education, Elementary	NON-STEM	13.1202
Education, Grades 6-12 English Language Arts	NON-STEM	13.1205
Education, Grades 6-12 Foreign Language	NON-STEM	13.1205
Education, Grades 6-12 Mathematics	STEM	13.1205
Education, Grades 6-12 Science	STEM	13.1205
Education, Grades 6-12 Social Science	NON-STEM	13.1205
Education, Instructional Technology/ Media	NON-STEM	13.0500
Education, Leadership/ Administration	NON-STEM	13.0400
Education, Music	NON-STEM	13.1312
Education, Other	NON-STEM	13.0000
Education, Physical and Health	NON-STEM	13.1314, 13.1307
Education, Special Education	NON-STEM	13.1001
Engineering Technology	STEM	15.0000
Engineering, Aerospace	STEM	14.0200
Engineering, Architectural/ Construction	STEM	14.0400
Engineering, Biomedical/ Medical	STEM	14.0500
Engineering, Chemical	STEM	14.0700
Engineering, Civil	STEM	14.04800
Engineering, Computer/ Software	STEM	14.0900
Engineering, Electrical/ Electronics/ Communications	STEM	14.1000
Engineering, Environmental	STEM	14.1400
Engineering, General/ Management	STEM	14.0100
Engineering, Industrial	STEM	14.3500

CIP Title (continued)	STEM/Non	CIP Code
Engineering, Materials/ Metallurgical/ Polymer	STEM	14.1800, 14.2000, 14.3200
Engineering, Mechanical	STEM	14.1900
Engineering, Other	STEM	14.9900
Engineering, Systems	STEM	14.2700
English Literature, Writing	NON-STEM	23.0000
Environmental Sciences, Forestry, Sustainability	STEM	03.0000, 30.3300
Foreign Languages and Literature	NON-STEM	16.0000
General Studies, Liberal Arts	NON-STEM	24.0000
Geographic Information Systems/ Geography	STEM	45.0700
Health Professions, General Health Sciences	NON-STEM	51.0000
Health Professions, Healthcare Administration/ Leadership	NON-STEM	51.0700
Health Professions, Medical/Laboratory Technology	NON-STEM	51.1000
Health Professions, Nursing	NON-STEM	51.3800
Health Professions, Other	NON-STEM	51.9999
Health Professions, Physical/ Occupational Therapy	NON-STEM	51.2300
Health Professions, Public/Community Health	NON-STEM	51.2200
Health Professions, Speech-Language Pathology/ Audiology	NON-STEM	51.0200
History	NON-STEM	54.0000
Hospitality and Tourism	NON-STEM	31.0504
Human/ Family Development, Consumer Sciences	NON-STEM	19.0000
Information Systems/ IT	STEM	11.0400
Interdisciplinary, Individualized Major	NON-STEM	30.0000, 30.9990, 30.9999
Kinesiology and Exercise Science	NON-STEM	31.0505
Law, Legal Studies	NON-STEM	22.0000
Manufacturing, Industrial Technology	STEM	15.0500, 15.0600
Mathematics, Applied	STEM	27.0300
Mathematics, General	STEM	27.0100, 27.9900
Mathematics, Statistics	STEM	27.0500
Nutrition and Dietetics	NON-STEM	19.0500, 51.3100
Philosophy and Religious Studies	NON-STEM	38.0000
Physical Sciences, Atmospheric and Earth Systems	STEM	40.0400
Physical Sciences, Chemistry	STEM	40.0500
Physical Sciences, General	STEM	40.0100
Physical Sciences, Geology	STEM	40.0600
Physical Sciences, Materials Science	STEM	40.1000
Physical Sciences, Other	STEM	40.9999
Physical Sciences, Physics	STEM	40.0800
Physical Sciences, Space Science	STEM	40.9900
Psychology	NON-STEM	42.0000
Public Policy/ Administration	NON-STEM	44.0200, 44.0400, 44.0500
Sciences, General Science/ Natural Science	STEM	30.0100
Social Sciences, Anthropology	NON-STEM	45.0200
Social Sciences, General	NON-STEM	45.0100
Social Sciences, International Relations	NON-STEM	45.0900
Social Sciences, Other	NON-STEM	45.9900
Social Sciences, Political Science/Government	NON-STEM	45.1000
Social Sciences, Sociology	NON-STEM	45.1100
Social Work and Human Services	NON-STEM	44.0000, 44.0700
Sport/ Recreation Management	NON-STEM	31.0100, 31.0300
Sporty necreation infinagement	INOIN-21 EIVI	31.0100, 31.0300

Appendix C: Alabama Communities

The Alabama map below depicts the state's seven Regional Workforce Council Regions and fourteen public universities. The following pages of this appendix provides the population of the Alabama cities.



Populations of Alabama Cities Ranked by Population Size (Source: U.S. Census Bureau, Census 2010) Alabama - 4,779,736

Birmingham	212,237	Troy	18,033	Russellville	9,830
Montgomery	205,764	Center Point	16,921	Gulf Shores	9,741
Mobile	195,111	Helena	16,793	Clay	9,708
Huntsville	180,105	Hueytown	16,105	Rainbow City	9,602
Tuscaloosa	90,468	Talladega	15,676	Boaz	9,551
Hoover	81,619	Fairhope	15,326	Valley	9,524
Dothan	65,496	Ozark	14,907	Sheffield	9,039
Decatur	55,683	Alexander City	14,875	Andalusia	9,015
Auburn	53,380	Cullman	14,775	Clanton	8,619
Madison	42,938	Scottsboro	14,770	Tuscumbia	8,423
Florence	39,319	Millbrook	14,640	Southside	8,412
Gadsden	36,856	Foley	14,618	Fultondale	8,380
Vestavia Hills	34,033	Jasper	14,352	Guntersville	8,197
Prattville	33,960	Hartselle	14,255	Greenville	8,135
Phenix City	32,822	Fort Payne	14,012	Arab	8,050
Alabaster	30,352	Gardendale	13,893	Bay Minette	8,044
Bessemer	27,456	Saraland	13,405	Demopolis	7,483
Enterprise	26,562	Muscle Shoals	13,146	Pinson	7,163
Opelika	26,477	Eufaula	13,137	Hamilton	6,885
Homewood	25,167	Sylacauga	12,749	Spanish Fort	6,798
Northport	23,330	Pell City	12,695	Орр	6,659
Anniston	23,106	Jacksonville	12,548	Oneonta	6,567
Prichard	22,659	Irondale	12,349	Wetumpka	6,528
Athens	21,897	Leeds	11,773	Monroeville	6,519
Daphne	21,570	Moody	11,726	Lanett	6,468
Pelham City	21,352	Calera City	11,620	Tarrant City	6,397
Oxford	21,348	Fairfield	11,117	Montevallo	6,323
Albertville	21,160	Atmore	10,194	Lincoln	6,266
Selma	20,756	Chelsea	10,183	Satsuma	6,168
Mountain Brook	20,413	Pleasant Grove	10,110	Chickasaw	6,106
Trussville	19,933	Tuskegee	9,865	Roanoke	6,074

Populations of Alabama Cities Ranked by Population Size (*Continued*) (Source: U.S. Census Bureau, Census 2010) Alabama - 4,779,736

Attalla	6,048	Citronelle	3,905
Orange Beach	5,441	Marion	3,686
Brewton	5,408	Odenville	3,585
Pike Road	5,406	Centre	3,489
Midfield	5,365	Livingston	3,485
Daleville	5,295	Heflin	3,480
Robertsdale	5,276	Moulton	3,471
Jackson	5,228	Dadeville	3,230
Childersburg	5,175	Warrior	3,176
Glencoe	5,160	Red Bay	3,158
Rainsville	4,948	Weaver	3,038
Brent	4,947	Clayton	3,008
Smiths Station	4,926	La Fayette	3,003
Piedmont	4,878	Hanceville	2,982
Tallassee	4,819	Brighton	2,945
Winfield	4,717	Eutaw	2,934
Fayette	4,619	New Hope	2,810
Adamsville	4,522	Luverne	2,800
Headland	4,510	Centreville	2,778
Geneva	4,452	Kimberly	2,711
Margaret	4,428	Abbeville	2,688
Hokes Bluff	4,286	Priceville	2,658
Thomasville	4,209	Hartford	2,624
Columbiana	4,197	Jemison	2,585
Haleyville	4,173	Bayou La Batre	2,558
Springville	4,080	York	2,538
Argo	4,071	Sumiton	2,520
Valley Grande	4,020		
Union Springs	3,980		
Evergreen	3,944		
Elba	3,940		

Appendix D: Intentions to Stay in Alabama by Demographic Variables

Category	Demographic Variable	# Students	Very Likely	Likely	Neutral/ No Opinion	Unlikely	Very Unlikely
Residency	Alabama Resident	4786	2481	1092	726	318	169
Status*	Non-Resident	2019	536	478	526	263	216
	Female	4307	2072	932	705	352	246
Gender*	Male	2300	896	600	491	199	114
	Other/ PNTA	198	49	38	56	30	25
	Asian-American/ PI	322	124	87	71	27	13
	African American	1700	610	423	421	151	95
Race/Ethnicity*	Hispanic	290	105	78	65	25	17
•	Other Minority	315	126	53	76	38	22
	White	4178	2052	929	619	340	238
1st Generation	1st Generation	2993	1455	646	524	233	135
Status*	Non-1st Generation	3812	1562	924	728	348	250
	Traditional (≤ 24)	4623	1747	1221			265
Age*	Non-Traditional (≥ 25)	-	1270	349	1		120
Expected	2022		1256	520			175
Graduation	2023	2287	1010	544	427	194	112
Year*	2024 or after	2015	751	506	472	188	98
STEM-Related	STEM related		858	629			139
Major*	Non-STEM related	-	2159	941	783	384	246
•	Agriculture, Food, and Natural Resources	88	25	25	27	8	3
	Architecture and Construction	115	37	29	27	16	6
STEM-Related	Bus Management and Administration	13	4	4	1	4	0
Major	Education & Training	_	61	15	1	3	3
Category*	Health Sciences	_	1	2	7		2
0 /	Information Technology	_	189	145	107	42	41
	Manufacturing	Interaction 2993 14 Interaction 3812 15 Interactional (≤ 24) 4623 17 Interactional (≥ 25) 2182 12 Interactional (≥ 25) 2182 12 Interactional (≥ 25) 2287 10 Interactional (≥ 25) 2287 10 Interactional (≥ 25) 75 75 Interactional (≥ 2015) 75 75 Interactional (≥ 292) 85 85 Iture, Food, and (a) 88 2 Interaction (a) 88 2 Interactional (≥ 292) 85 2 Interactional (≥ 292	*	*	*	*	*
	<u> </u>	1445	540	409	726 318 526 263 705 352 491 199 56 30 71 27 421 151 65 25 76 38 619 340 524 233 728 348 954 436 298 145 353 199 427 194 472 188 469 197 783 384 27 8 27 16 1 4 8 3 7 3 107 42	121	84
	Architecture and Construction		4	4		318 263 352 199 30 27 151 25 38 340 233 348 436 145 199 194 188 197 384 8 16 4 3 3 42 * * * * * * * * * * * * *	3
	Arts, A/V Tech & Comm	362	78	94	95	64	31
	Bus Management and Administration	661	329	138	115	52	27
	Education & Training		761	196			57
	Finance	360	186	68		19	21
Non-STEM-	Govt & Public Admin	42	6	12	11		5
Related Major	Health Sciences	785	379	185	119		39
Category*	Hospitality & Tourism	60	17	10			5
•	Human Services	619	256	139		64	33
	Law, Public Safety/ Admin	166	59	43			10
	Marketing	136	53	32	28	16	7
	Other Social Sciences	79	30	20	14	7	8
	Transportation, Distribution & Logistics	*	*	*	*	*	*

^{*}Statistically significant difference (likelihood ratio chi-square ≤ 0.01)

Appendix E: Staying in Alabama after Graduation Comments

Sample Open-Ended Responses by Resident and Non-Resident Status

Students were asked to briefly explain their response to question #6, "How likely are you to live and work in Alabama after graduation?" The following categories were used to group the responses from the Likely and Neutral response target groups, and the Unlikely or Very Unlikely respondents. The following samples of open-ended responses are broken down by Likert Scale response (Likely; Neutral; and Unlikely and Very Unlikely); residency status (Resident versus Non-Resident); and response category (the top two response categories for each group are provided).

Stay in Alabama –Likely (Target Audience)

RESIDENT #1 Response: (61%)

Stay if offered a good job/competitive pay/upward mobility

I currently have no plans on moving out of Alabama or finding a job outside the bounds of Alabama, but I would not turn down an offer in another state if given the opportunity.

I can see myself living in Alabama because my family will be in the state. I can also see myself living in a big city like Nashville, New York, or Chicago. I really just want to live where my job takes me and if it is Alabama, that is perfectly fine.

After graduation, I plan to move back home to Birmingham Alabama and work to get social work experience. Eventually I see myself moving to a bigger state where I can grow in the field of social work.

I believe I will definitely stay in Alabama, or at least the south, for a good few years after I graduate to gain work experience while still utilizing the low cost of living many towns in Alabama offer, before moving closer up north later in my career journey.

All of my family lives in north Alabama. I would like to live and work in the state of Alabama, specifically Huntsville or Birmingham with what I'm majoring in (Forensic Investigation). I am open to Tennessee and Florida.

I am from California and would eventually like to move closer to home. I would stay in Alabama because of how many great opportunities I have gotten here.

I am open to work anywhere. Whatever business will hire me as an Industrial Engineer, I will be excited to work.

Cheaper price of living in Alabama, family resides mostly in the state, job opportunities in larger cities in the state (Birmingham, Huntsville, etc.), overall experience with the state and its natural scenery and landmarks as well.

Cost of living good, family is here. Not a lot of job opportunities, but a new age is dawning and I can live with a remote job from a different state.

Huntsville is a large city with a lot of opportunities and if I can find a good internship/job I would love to stay. If I find a job elsewhere, though, I would take it.

RESIDENT #2 Response: (18%)

Pursuing better opportunities outside of Alabama; no incentive to stay; follow the money

I will look for jobs in the immediate area after graduating but I am very open to better opportunities outside of the state as well.

I love Alabama and would jump at the chance to grow and make a change within my home state. However, I am also open for a career advancement opportunity out of state.

I like living in Alabama and do not want to have to live family. I will go where the job takes me though.

I know there are a lot of opportunities in Nashville for accountants, so I might go there or another surrounding state.

RESIDENT #2 Response: (18%) - Continued

Pursuing better opportunities outside of Alabama; no incentive to stay; follow the money

I was born and raised in Alabama and would love to be here with my family forever. But wherever my job takes me is where I will reside. Hopefully I get to stay with my family!

I would ideally like to work outside of Alabama after I graduate, but it is far more realistic to remain here a short time after I graduate.

I would like a job with great growth opportunities. I would like to work for a bigger corporation. If that is out of Alabama I would be happy to look at it.

I would love to explore options outside of Alabama, as I've lived here my whole life, but I also enjoy what Alabama has to offer so it's a split decision.

While Alabama has some good options for my field of study, I think bigger states might have some better ones that pay better or are just better in general but I might stay here.

There are opportunities all around the world, who knows what may be in store for me after graduation. I've learned to keep my options open.

NON-RESIDENT #1 Response: (80%) Stay if offered a good job/competitive pay/upward mobility

After completion of my internship if I am offered any jobs in Alabama I may stay.

Although I am from Mississippi, over the last few years I have grown particularly fond of Mobile, Alabama, and especially the coast near Gulf Shores. I would love to continue to enjoy this state.

I am originally from Southern California and I have a desire to return home at some point, however, the opportunities in this state for my field of work are numerous so it is likely I will at work for at least some time in Alabama.

I am more likely to have a job here in Alabama because I will do all my clinicals and preceptorships here.

I am from the Midwest, but I think there are more career opportunities here for me.

Currently residing in the Huntsville area and am inspired by the flourishing industry. I think it would be a nice place to work and there are many things to do.

I am from Los Angeles and moved to a small town like Troy, as I realized staying in the city for all my life would stifle my full potential. Alabama taught me that the world is bigger than I ever expected, and I would love to work here, though I do not see it as a "must."

Alabama has a lot more places for aerospace engineers to work than North Carolina, where I'm from.

Depending on my skills, experience and degree if I land an opportunity I'll live and work in Alabama.

I am from Denver, CO so I could see myself staying in AL or going back to CO.

NON-RESIDENT #2 Response: (5% Each)

Pursuing graduate school or further study; and Unsure of plans

Depends on where I get accepted for grad school.

I am waiting to get accepted into master programs but after I plan on moving and living in Alabama.

I plan to start my Master's after I get my bachelor's degree. Even if this plan does not work I would stay in Alabama since I like the place and the cost of living is very affordable.

I would love to stay here to pursue graduate school and also be employed in a growing city like Huntsville.

I love the South, but am not sure where my career path will be most successful.

Would prefer to live in Alabama, but depends on career opportunities.

I'm a Florida resident by birth, so I'm a bit partial to my home state. However, the work opportunities for my major are quite extensive in Alabama.

I will be attending grad school in Ohio in hopes of returning to Alabama after.

I plan on going to grad school, but if that doesn't work out for me, I will be staying in Alabama.

Depends on where jobs are related to my field.

Stay in Alabama – Neutral (Target Audience)

RESIDENT #1 Response: (44%)

Stay if offered a good job/competitive pay/upward mobility

I am open to staying in Alabama, but I have few ties to the state so I am also open to accepting jobs outside of Alabama.

I am open to moving anywhere, I want to take full advantage of my degree and make the most money possible.

Depending on the situation I am in at the time is what will decide where I live. I would like to travel, but whatever is more financially smart for me is what I will go about doing.

Dependent upon area or job, I am will to stay within the state of Alabama but my current aspirations are to leave.

Huntsville, Alabama has many great opportunities for my field of study but I have no reservations about moving to a different state if a potentially more fruitful option opened up.

I am currently looking for opportunities outside of Alabama. But if a position is offered with good benefits that fit my aspirations I'll take it.

I am exploring all possibilities but I am not against staying in Alabama, especially if there are worthwhile careers to pursue.

I am not opposed to working in Alabama however if better job opportunities are out of state I will choose what is best for my long-term career.

I don't dislike Alabama, but I have always planned to live out west. I would gladly take a good enough job in Alabama.

I enjoy the state of Alabama, but I would really enjoy moving out and seeing the world. I want to be a sports journalist so a lot of moving will have to be done but I wouldn't mind staying in Alabama.

RESIDENT #2 Response: (28%)

Pursuing better opportunities outside of Alabama; no incentive to stay; follow the money

I don't know as of right now if I want stay in Alabama. I feel as though I would miss out on other opportunities by staying here.

I am born and raised in Alabama. I chose my major to be able to travel world and get a fresh start with new opportunities. I am neutral about this decision because I will be blessed to have a job in my field, and I could always relocate in the future.

Alabama is a great place to live; however, the pay rate and opportunities aren't so great.

Alabama has a low pay scale for nurses. 3 of the four bordering states (FL, GA and TN) offer more pay with similar cost of living. Alabama is run exclusively by Republicans, not against Republicans or Democrats but there is no balance in its policies, everything here is conservative. No collective bargaining allowed makes the job environment pro-business/employers, not a good situation for healthcare employees.

Alabama is definitely my home where all my family is located, but I also think it's important to branch out and explore new places because you never know the opportunities it holds until you get there.

As of now I am unsure of my plans after graduation. Though it seems other state pay significantly more than Alabama does currently for Social Workers.

I am going to find the best job that will support my family and I. I would love to stay in Alabama but the pay and benefits are so low compared to other places.

Currently Co-Oping with Chevron in Pascagoula, MS

Chemical Engineering is fluid major. Not necessarily to be confined to one region of the U.S.

I am from Alabama and would like to stay, my family is in Alabama as well. Unfortunately, healthcare workers particularly Nurses in Alabama are one of the lowest paid in the country. Due to that I will need to move, fellow classmates have the same agenda.

NON-RESIDENT #1 Response: (40%) Stay if offered a good job/competitive pay/upward mobility

After Graduation, I am open to living and working in Alabama and I hope that I can; it is ultimately up to where I can get a job.

Alabama has opportunities however; the pay does not compare to other areas.

Alabama is a nice area. I wouldn't mind starting a future here!

Being young I am willing to move where ever I am needed in order to obtain a good and stable job. Whether that be AL, GA, FL etc.

I am from Atlanta, Ga and could possibly be moving back home after graduation to seek employment, but I am open to employment in Alabama if it can fit well with my major.

I am not originally from Alabama so the only way I would stay is if a job opportunity presented itself.

I am not sure about working in Alabama. It is definitely different from the west coast. I think I'd like to go back to that side. However, I wouldn't be opposed to working here if a great opportunity came along.

I am open to positions in Alabama but I currently live in Tennessee. They usually pay better for nurses, but if I had a better opportunity in Alabama for a career I'd take it.

I am originally from Illinois, and will work wherever there are jobs in aerospace, particularly on the space side.

I do not care where I live or work after graduation. It will be wherever I have the best job opportunity. Since I am from Texas, I will be looking for jobs either here or back home.

NON-RESIDENT #2 Response: (26%) Unsure of plans

Being from another home state and within a strong tri-state area, it can be difficult to know for sure where I'll end up.

Depends on job availability and pay rate compared to other nearby states.

Depends on job offers, career advance is important to me.

I am from SC, so I have a 50/50 chance of staying in Alabama or going back to SC.

Huntsville provides a lot of opportunity but I am still unsure if I want to stay in Alabama.

I chose neutral because I am not sure if Alabama is where I want to live in the near future.

I enjoy living in the South and wouldn't mind living in Alabama, however I'm still unsure.

I have no final destination thought process right now to where I would like to live/work. I suppose it would depend on the environment in Alabama, living situation and pay rate

I haven't fully decided if I really want to live in Alabama after I graduate

I like Alabama but I am from Tennessee and my family is there so I don't know where I'll want to work when I graduate.

Stay in Alabama - Unlikely, Very Unlikely

RESIDENT #1 Response: (61%)

Pursuing better opportunities outside of Alabama/ no incentive to stay/ follow the money

I plan on leaving Alabama to pursue a career elsewhere. Alabama has a lot of growing that will not happen in my lifetime.

I want to feel like I am moving on and starting my professional journey without ties to where I grew up.

I'd like to move outside of Alabama as I know there are better opportunities elsewhere.

Staying in Alabama is an option of last resort for me. I'd rather live in a high COL area with better opportunities.

The cost of living has gotten too high and the pay has not risen enough to cover basic expenses much less student loans or large purchases such as a house or car.

There are few job opportunities here, and the ones there are don't pay well. Not to mention religion runs this state, racism is rampant, and we are last in education.

Alabama does not offer enough incentives to stay within the state and the network is much smaller for jobs in Alabama versus jobs elsewhere.

I have lived in Alabama my entire life, even though there as many opportunities for me here, I am ready to leave. I feel there is something bigger for me outside of Alabama not only within myself but for my career.

I have nothing that keeps me here and I will simply go wherever the career is.

There is an extremely limited job market in Alabama, and almost no room for career growth if you can even get a job here.

RESIDENT #2 Response: (19%)

Unacceptable environment: political/ social/ education

I think Alabama is a beautiful state, but I don't agree with a lot of the political and religious views shared in the state. Working out of the state will also mean better pay, education, and housing.

My political views are not represented in state government. Hostile conservative policies have me looking elsewhere.

Political ideology, treatment of minority groups, unfair laws such as prohibited marijuana, lack of major tech and space sector

Politics and districting in Alabama are not representative of the state's residents.

The laws here kill so much opportunity. Alabama ranks near the bottom in many categories, and the "freedom" everyone loves to defend shrinks every year.

This state is culturally backwards, economically trashed, and among the worst places to work due to right wing labor policies. The wages suck, housing is terrible, and the right to unionize has been robbed from us. There is no future here for anyone who hasn't totally accepted the status quo as great.

Alabama does not politically match or socially match the expectations I have for the state I wish to raise a family and children in the future.

Alabama is a backwards that that is ranked dead last in just about everything (education, healthcare, standard of living, etc.) Why would I want to live and work here exactly?

I love the south dearly and don't want to leave, but I can't spend the rest of my life in a place so incongruent with my values. I want to live where equity, education, culture, and opportunities are of the utmost importance. While there are a few places in AL where this is true, it is quite the opposite overall. So many educated young people leave because we are exhausted with the uphill (and, frankly, useless) battle against government's refusal to progress.

The number one piece of advice that I have received from respected members of my chosen field has been to "get out of Alabama", this is always stated in conjunction with discussions about better opportunities, better pay, and more respect within the field.

NON-RESIDENT #1 Response: (36%)

Pursuing better opportunities outside of Alabama/ no incentive to stay/ follow the money

I've considered staying in Alabama after graduation because the cost of living is not as expensive, however, the resources and opportunities available are limited.

The majority of "entry-level" jobs require 5+ years in engineering and/or 2+ years doing something specific. Otherwise, not entry-level. Other states aren't like this.

More out-of-state opportunities than in-state. Prefer urban environment, Huntsville and Birmingham not quite up to snuff, but getting closer.

While Alabama, especially Huntsville, have a lot of opportunities for Engineering majors it is not as great for Chemical Engineering. I was finding multiple jobs in Alabama that would have worked for my major but the salary ranges were consistently well below anything I would find in other states for the same position.

I have lived in Alabama for 15 years. After seeing what Alabama can offer for my career and as a place to live, I feel there are better opportunities in other states.

I do not want to live in Alabama, and I plan to move much farther away to be in a bigger, more progressive city.

I don't see many growing industries in Alabama.

I do not like the state of Alabama, everything is slow and outdated and just not a place for a 21-year-old to live if they want to grow.

Although the state has many companies relocated in Alabama, the number that are located near the Georgia/Alabama line are few in number and the salaries are not competitive or exceed pay in Georgia.

As an international student, it seems a lot of the job opportunities here, especially in Huntsville are defense related and require citizenship, which I do not have. Therefore, I am looking in other more international friendly places to live.

NON-RESIDENT #2 Response: (23%) Moving with the military or closer to/ with family

I'm active duty and I am unsure where I'll live once I get out of the military.

I'm unlikely to stay in Alabama for a career because I have no family here. I'm a homebody so family around is important.

I wouldn't move or work in Alabama after graduation because all of my family is out of state and I can't see myself being hours away from them.

I haven't found many opportunities for work or career growth in Alabama so far. I would probably go to Atlanta for that and also because my family is there.

I have recently moved to the state as part of a military family. So far, I have not seen much to recommend the state as a whole. I like the fact that Huntsville is expanding however, I am not so sure about other areas.

I am from San Jose, CA, so I am planning on moving back to the S.F. Bay Area to both be close to family and because the Silicon Valley (obviously) has a lot of tech job opportunities.

I'm from Atlanta and after spending five years here while it's been great I miss my family back home, the fast pace life of being around such a big city, and for a larger job market.

I love to be near my loved ones, and currently, none of them live in Alabama.

My fiancé has already landed a job in Mississippi, so I will be looking for a job around that area.

I want to go back to my home state after graduation.

Appendix F: List of Industry Options for Employment after Graduation

List of Alabama Industry Options
Accommodation and Food Services
Accounting
Advertising, Public Relations
Agriculture
Animal Production, Fishing, Hunting
Architectural, Engineering, and Related Services
Arts, Entertainment, and Events
Business Support/Administrative Services, including Facilities
Buying and Selling, Durable and Consumable Goods
Child Care Services
Computer Systems Services
Construction
Consulting ServicesManagement, scientific, technical
Design Services
Education
Finance and Insurance
Forestry, Timber Harvesting
Inspection, Estimation, Forecasting Services
Legal Services
Logistics, Transportation, and Warehousing
Maintenance and RepairAutomotive, machinery, electronics
Management of Companies and Enterprises
Media and Communications
Medical Office, Clinic, Hospital Services
Non-Profit Organizations, Professional Associations
Oil and Gas Extraction, Mining
Personal Services
Production/ManufacturingChemicals, paper, plastics, pharmaceuticals
Production/ManufacturingFood, beverage, textiles
Production/ManufacturingMetals, automotive, aerospace, electronics
Public Administration
Real Estate and Leasing
Religious Organizations
Residential Care Services
Scientific Research and Development
Social Work and Related Services
Sports, Fitness, and Recreation
Utilities, Power Generation/Distribution, Water Treatment
Veterinary Services

Appendix G: Importance and Impression Tables by Demographic Variables

The tables below provide the mean ratings for impressions of Alabama and importance of the items for students responding to the survey disaggregated by four demographic variables. For impressions of Alabama, the scale used was very negative (1), negative (2), neutral/ no opinion (3), positive (4), and very positive (5). For importance of the item, the scale used was not important at all (1), not important (2), neutral/ no opinion (3), important (4), and very important (5).

Mean Importance and Impression Ratings by Residency Status

Response Item		nt (N=4786) Ratings	Non-Resident (N=2019) Mean Ratings		
	Importance	Impressions	Importance	Impressions	
Proximity to family	4.22	4.42	3.88	3.46	
Access to healthy/outdoor activities	4.29	4.18	4.22	4.04	
The state's natural environment	4.29	4.17	4.17	4.04	
Friendliness of the people	4.36	4.12	4.23	3.95	
Opportunities to continue education	4.22	4.09	4.05	3.97	
Opportunities to practice my faith	4.08	4.05	3.81	3.83	
Job opportunities in my prospective field of study (major)	4.66	4.01	4.56	3.93	
Access to sporting events (local/college/pro)	3.48	3.98	3.40	3.75	
Cost of living	4.57	3.95	4.49	3.89	
Variety of dining options	4.05	3.91	4.00	3.73	
Potential for career advancement	4.48	3.84	4.38	3.78	
Overall Public safety	4.53	3.73	4.40	3.53	
Weather/temperate climate	4.00	3.68	3.99	3.68	
Potential salary and employer-provided benefits	4.58	3.63	4.48	3.62	
Access to cultural events/concerts	3.83	3.57	3.71	3.49	
Flexibility to work remotely	3.79	3.51	3.70	3.50	
Availability of quality childcare	3.91	3.36	3.58	3.22	
Acceptance towards people of diverse backgrounds	4.43	3.29	4.30	3.26	
Political environment in-line with my priorities	3.85	3.22	3.77	3.06	
Emphasis on environmental issues	3.99	3.19	3.88	3.11	
Quality of K-12 Education	4.41	3.15	4.00	3.04	
Access to mass transit and walkability	3.68	2.76	3.62	2.79	

Mean Importance and Impression Ratings by Gender

D H	Female (N=4307) Mean Ratings		-	N=2300)	Other (N=198) Mean Ratings		
Response Item	Importance	Impressions	Importance	Ratings Impressions	Importance	Impressions	
Proximity to family	4.20	4.16	4.02	4.11	3.43	3.77	
Access to healthy/outdoor	4.20	4.10	4.02	4.11	3.43	3.77	
activities*	4.29	4.11	4.25	4.21	3.93	3.84	
Opportunities to continue education*	4.26	4.11	4.02	4.01	3.79	3.48	
The state's natural environment*	4.26	4.10	4.24	4.21	4.10	3.84	
Friendliness of the people	4.36	4.06	4.27	4.14	3.97	3.44	
Opportunities to practice my faith	4.10	4.02	3.88	4.00	3.25	3.13	
Job opportunities in my prospective field of study (major)	4.64	3.98	4.62	4.03	4.49	3.54	
Access to sporting events (local/college/pro) *	3.49	3.96	3.48	3.86	2.33	3.57	
Cost of living*	4.56	3.86	4.53	4.09	4.47	3.67	
Variety of dining options	4.07	3.86	3.99	3.88	3.79	3.55	
Potential for career advancement	4.45	3.82	4.48	3.85	4.17	3.37	
Weather/temperate climate	4.03	3.70	3.96	3.69	3.92	3.15	
Overall Public safety	4.54	3.68	4.42	3.70	4.26	3.11	
Potential salary and employer-provided benefits*	4.57	3.59	4.53	3.73	4.43	3.15	
Access to cultural events/concerts	3.88	3.58	3.63	3.52	3.67	3.12	
Flexibility to work remotely*	3.82	3.51	3.65	3.53	3.76	3.07	
Availability of quality childcare*	3.92	3.36	3.66	3.28	3.24	2.77	
Acceptance towards people of diverse backgrounds*	4.48	3.29	4.21	3.35	4.53	2.18	
Emphasis on environmental issues*	4.01	3.23	3.85	3.10	4.12	2.45	
Political environment in-line with my priorities	3.87	3.20	3.72	3.23	3.98	2.02	
Quality of K-12 Education*	4.36	3.19	4.20	3.03	3.72	2.40	
Access to mass transit and walkability*	3.71	2.87	3.54	2.64	4.01	1.99	

^{*}Statistically significant difference between females and males.

Mean Importance and Impressions Ratings by Race/Ethnicity

Doggood Itom	AAPI (N=322)		AA/ BLACK (N=1700)		HISPANIC (N=290)		OTHER MIN (N=315)		WHITE (N=4178)	
Response Item	Importance	Impressions	Importance	Impressions	Importance	Impressions	Importance	Impressions	Importance	Impressions
Friendliness of the people	4.25	4.08	4.31	3.91	4.32	3.95	4.23	3.93	4.34	4.15
The state's natural environment	4.17	4.06	4.16	3.98	4.31	4.09	4.24	4.01	4.29	4.21
Access to healthy/outdoor activities	4.19	4.05	4.25	4.02	4.33	4.07	4.25	3.97	4.28	4.21
Proximity to family	4.13	4.05	4.13	4.09	4.02	3.90	4.02	4.03	4.12	4.18
Cost of living	4.55	4.01	4.56	3.86	4.53	3.91	4.55	3.80	4.54	3.97
Opportunities to continue education	4.20	3.99	4.33	4.15	4.17	3.98	4.10	3.88	4.11	4.05
Job opportunities in my prospective field of study (major)	4.54	3.92	4.59	3.94	4.58	4.00	4.56	3.80	4.66	4.02
Potential for career advancement	4.48	3.86	4.53	3.84	4.42	3.76	4.42	3.70	4.42	3.82
Access to sporting events (local/college/pro)	3.50	3.83	3.80	3.99	3.41	3.88	3.26	3.73	3.33	3.90
Opportunities to practice my faith	3.89	3.81	4.22	4.04	3.84	3.83	3.87	3.76	3.94	4.00
Potential salary and employer-provided benefits	4.52	3.70	4.56	3.69	4.55	3.60	4.45	3.44	4.56	3.61
Weather/temperate climate	3.97	3.70	4.08	3.79	4.06	3.61	3.99	3.55	3.96	3.65
Variety of dining options	4.02	3.69	4.20	3.85	3.97	3.80	4.02	3.70	3.97	3.89
Overall Public safety	4.48	3.68	4.53	3.66	4.49	3.63	4.45	3.52	4.48	3.69
Flexibility to work remotely	3.92	3.64	4.06	3.72	3.79	3.54	3.72	3.40	3.63	3.41
Acceptance towards people of diverse backgrounds	4.38	3.48	4.47	3.43	4.47	3.25	4.35	3.17	4.36	3.21
Access to cultural events/concerts	3.76	3.46	3.99	3.64	3.89	3.46	3.73	3.37	3.71	3.53
Availability of quality childcare	3.77	3.36	4.05	3.53	3.88	3.27	3.72	3.04	3.72	3.25
Emphasis on environmental issues	3.95	3.34	3.98	3.44	4.08	3.07	3.91	3.07	3.94	3.05
Quality of K-12 Education	4.16	3.28	4.34	3.34	4.30	3.07	4.17	2.92	4.28	3.03
Political environment in-line with my priorities	3.66	3.23	3.81	3.20	3.77	2.99	3.77	3.01	3.85	3.19
Access to mass transit and walkability	3.81	2.75	3.94	3.29	3.92	2.68	3.69	2.57	3.51	2.58

Mean Importance and Impression Ratings by STEM-Related Major

Response Item		ed (N=2292) Ratings	Non-Stem Related (N=4513) Mean Ratings		
	Importance	Impressions	Importance	Impressions	
Access to healthy/outdoor activities	4.22	4.18	4.29	4.11	
The state's natural environment	4.21	4.14	4.27	4.12	
Job opportunities in my prospective field of study (major)	4.66	4.09	4.62	3.93	
Friendliness of the people	4.24	4.04	4.36	4.08	
Cost of living	4.52	3.98	4.56	3.91	
Opportunities to continue education	4.00	3.98	4.26	4.09	
Proximity to family	3.93	3.98	4.21	4.21	
Potential for career advancement	4.45	3.90	4.45	3.78	
Opportunities to practice my faith	3.75	3.88	4.13	4.04	
Variety of dining options	3.95	3.80	4.08	3.89	
Access to sporting events (local/college/pro)	3.23	3.79	3.57	3.97	
Potential salary and employer-provided benefits	4.54	3.79	4.56	3.54	
Weather/temperate climate	3.93	3.64	4.04	3.70	
Overall Public safety	4.40	3.59	4.53	3.71	
Flexibility to work remotely	3.65	3.49	3.82	3.51	
Access to cultural events/concerts	3.63	3.46	3.88	3.59	
Availability of quality childcare	3.57	3.21	3.94	3.37	
Acceptance towards people of diverse backgrounds	4.29	3.17	4.45	3.33	
Political environment in-line with my priorities	3.70	3.03	3.89	3.25	
Emphasis on environmental issues	3.93	3.01	3.97	3.24	
Quality of K-12 Education	4.10	2.94	4.38	3.21	
Access to mass transit and walkability	3.59	2.59	3.69	2.86	