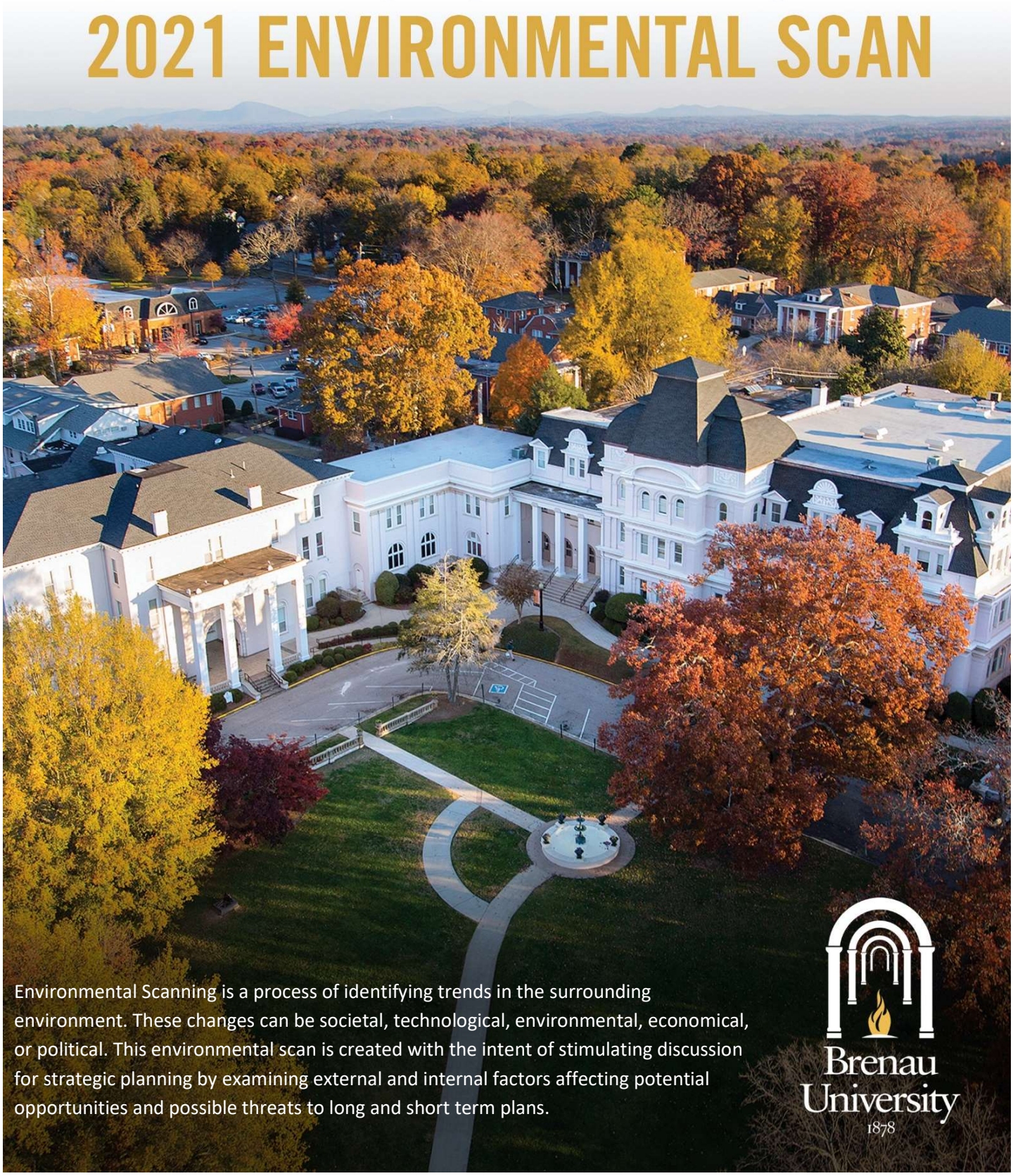
OFFICE OF INSTITUTIONAL RESEARCH AND PLANNING

BRENAU UNIVERSITY
2021 ENVIRONMENTAL SCAN



Environmental Scanning is a process of identifying trends in the surrounding environment. These changes can be societal, technological, environmental, economical, or political. This environmental scan is created with the intent of stimulating discussion for strategic planning by examining external and internal factors affecting potential opportunities and possible threats to long and short term plans.

Brenau University
1878

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EXECUTIVE SUMMARY

An environmental scan follows the STEEP process focusing on Societal, Technological, Economical, Environmental, Political topics and other current trends relevant to Higher Education.

- **Societal** – Census reveals diversification of U.S. population but a continued decrease in population growth. Undergraduate, transfer, and international enrollment drops continue to be reflected at institutions nationwide. Graduate enrollments have increased despite impacts to enrollment due to continued pandemic stress.

- **Technological** – More attention is being placed on teaching and learning technology as the impact of the pandemic continues to influence how students want and expect to be able to engage with faculty and course content. Open Education Resources are becoming popular as a way to save students money and adding a variety of resources to classroom teaching tools. Cybersecurity tools are also being heavily scrutinized for effective safeguarding of higher education data and data security compliance.

- **Economical –** The "Great Resignation" is creating headlines as a trend in employees quitting their jobs becomes more alarming for employers. Employers need to identify root causes of employee turnover and implement tailored retention programs as they evaluate the ongoing needs of their staff. Economic downturn and healthcare professional shortages are opportunities for higher education to leverage programming changes and course offering flexibility.

- **Environmental** – Climate survey data highlights concern among young people related to the health of the planet and environmental initiatives. Students entering college are putting an emphasis on what colleges and universities are doing to commit to actions which will lead to a reduced carbon footprint and climate mitigation.

- **Political** – Federal: A proposal to increase the cost of visa application processing is under review. This could add an additional financial burden for international students. A number of provisions for higher education funding included in the infrastructure bill have made it through to the final bill. Policymakers have an opportunity to review strategies to support college attainability and completion for more student populations. State: Georgia Board of Regents approved a policy to allow higher education institutions to remove tenured professors with nearly no faculty input. Some feel academic freedoms are at risk and that this will increase challenges in hiring and retaining talented faculty, thereby making student retention suffer.

SOCIETY (DEMOGRAPHICS)

POPULATION

Population growth is at its second-lowest rate in history, showing an increase of 7.4 percent over the last 10 years. Much of the growth is among minority communities. The Hispanic/Latin American population grew by 23 percent and the Asian population grew by 35.5 percent each and the Black/African American population grew by 88.7 percent (Jones et al., 2021). The White Non-Hispanic population is still the largest in the nation and makes up about 58 percent of the population but has decreased by 8.6 percentage points since 2010 (Brufke, 2021). This shows that the U.S. population is much more multi-racial and diverse than what has been seen in previous census results. In spite of this growth, over 52 percent of the counties in the U.S. saw population decreases from the 2010 to the 2020 Census. Shifts in migration within the nation show a drop of 2.8 percentage points in rural areas while an increase was noted for urban areas and suburbs (Brufke, 2021).

According to the 2019 SREB, Southern Regional Education Board: Population, Economy, Schools and Government section of the 2019 SREB Fact Book on Higher Education, increases in population in the United States are the largest in the southern region. This population increase has added 12.4 million new residents and is a 12.1 percent increase between 2008 and 2018. It is expected that there will be an additional increase of 15.5 million people in the southern region within the next decade. In 2018, Georgia was ranked among the top 10 most populous states, coming in at eighth place with 10.5 million people (*2019 SREB Fact Book on Higher Education*, 2019).

FIGURE 1 – Population Growth by Region (SREB Fact Book, 2019)

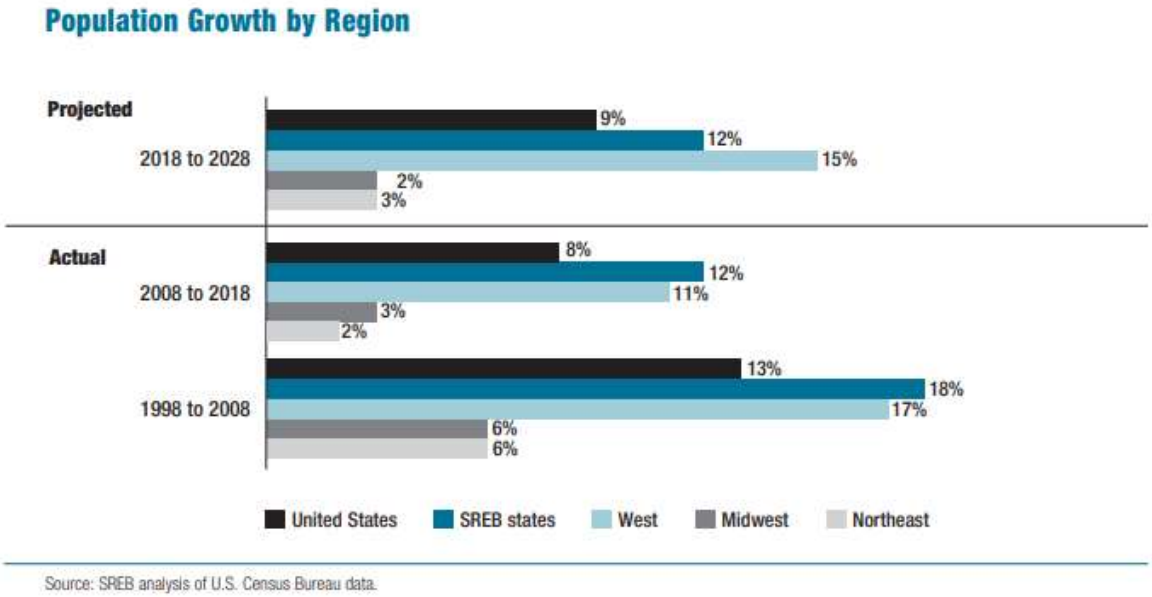
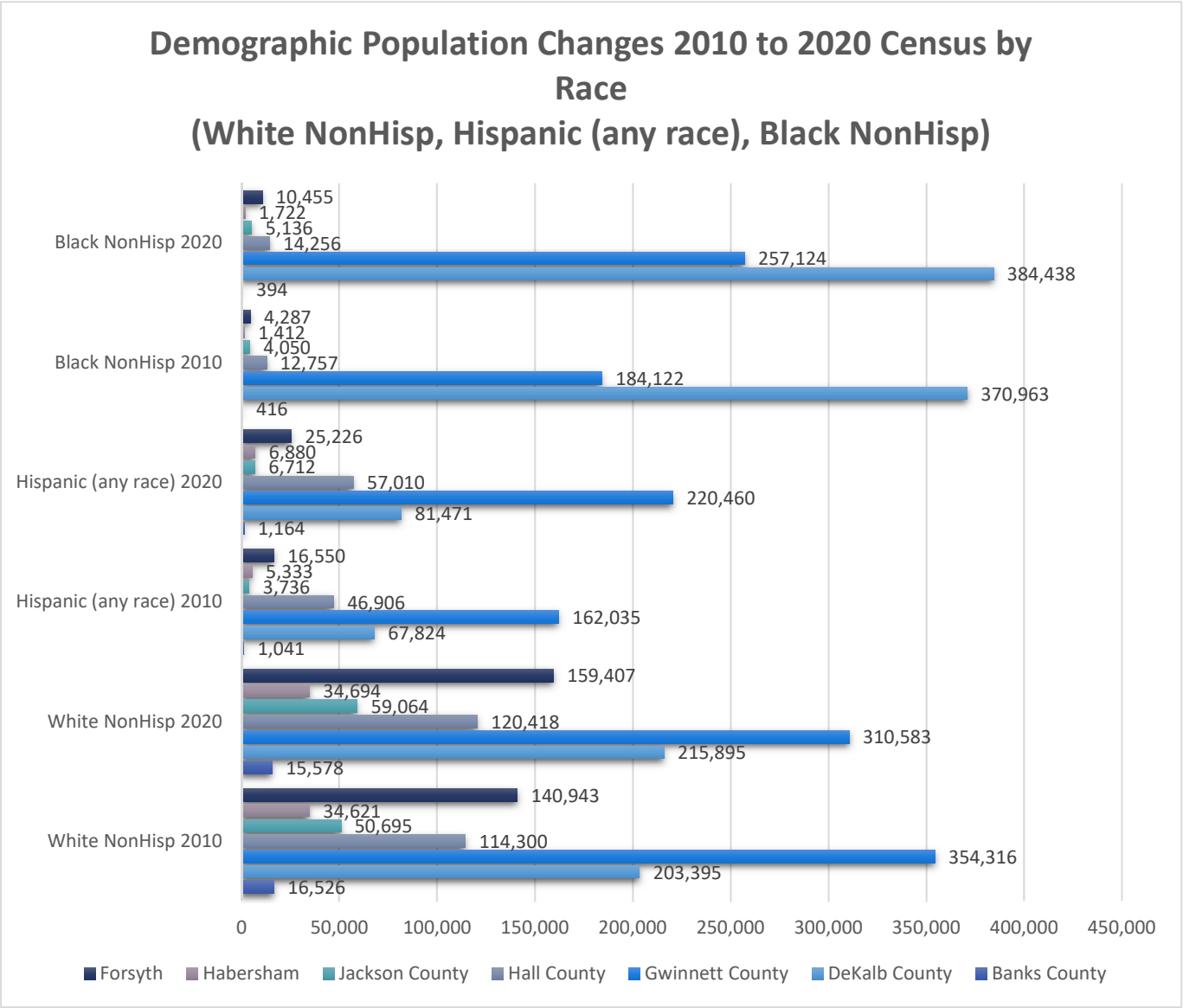


Figure 1 source: (*2019 SREB Fact Book on Higher Education*, 2019)

From 2007 to 2017, the U.S. Black/African American and Hispanic/Latino populations grew faster than White populations, 14 percent and 39 percent respectively. The Hispanic/Latino population, in SREB states makes up 37 percent of the nation's total Hispanic/Latino population and Black/African Americans make up 57 percent of the nation's Black/African American population. Population changes in the counties surrounding Brenau follow patterns noted in the 2020 Census

for White Non-Hispanics, Hispanics (any race) and Black/African Americans Non-Hispanic (*2019 SREB Fact Book on Higher Education*, 2019).

FIGURE 2 – PATTERNS OF POPULATION CHANGE BY COUNTY, CENSUS 2010 – CENSUS 2020



Data source: (*County Population Trends 2010 - 2020*, 2021)

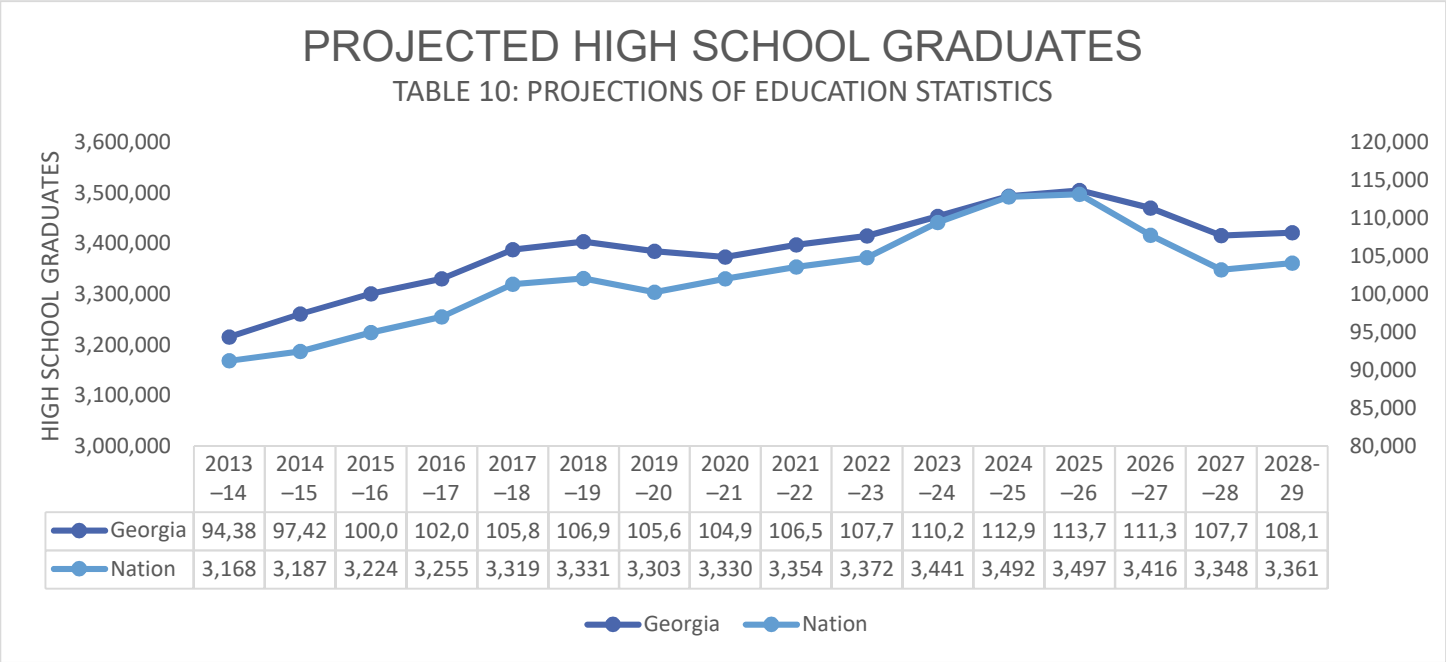
A higher population of undereducated individuals reside in Southern Regional Education Board (SREB) states than other regions. Among 25 to 45-year olds in SREB states, 3.7 million (11 %) did not have a high school diploma or GED credentials, 19 million (59%) have not earned an associate degree, and 22 million (68%) have not earned a bachelor's degree. In SREB states and across the nation, White adults attain a bachelor's degree or a higher credential at much higher rates than Black/African American or Hispanic/Latino adults. In spite of this, bachelor degree attainment rose 3 percentage points among Black/African American and Hispanic/Latino adults, and 4 percentage points for White adults (*2019 SREB Fact Book on Higher Education*, 2019). Higher education will be challenged to leverage this growing population and offer ways to support their specific educational goals and needs.

TRENDS IN COLLEGE READY POPULATION

POPULATION TRENDS

The number of high school graduates across the U.S. is projected to increase 7 percent between 2012-13 and 2028-29. That is roughly 3.7 million high school graduates nationwide. For the southern region there is a projected increase of 15 percent between 2012-13 and 2028-29.

FIGURE 3 – PROJECTED HIGH SCHOOL GRADUATES



Projections of Education Statistics to 2028, (Hussar, 2020)

GENDER ENROLLMENT TRENDS

A highly discussed trend is the decline in male high school graduate applications to colleges and universities. Less men are applying for college than ever before and this has only seen a continued drop as COVID continues to spread. College application numbers for the 2021-22 academic year show that there were 3.8 million applications submitted by women compared to the 2.8 million submitted by men as reported by the nonprofit, Common Application (Belkin, 2021). Many young men attribute not being sure what they want to do with their lives for their lack of interest in pursuing a college degree, while others believe the value of a college education is not justified when there are other avenues to earning an income without going into debt with student loans. Currently, high school graduates and prospective students are having to choose between going to college and helping support their families who now have a tighter budget and are challenged by limited child care options and ongoing pandemic health concerns (Fain, 2021).

Five years ago, U.S. colleges and universities had 1.5 million more students than they do today and data shows that men make up 71 percent of the decline in college enrollments. According to data from the National Student Clearinghouse, a nonprofit research group, by the end of the 2020-21 academic year, men made up 40.5 percent of the college student population and women made up 59.5 percent. This decline in percentage of male students is similar for both two- and four- year colleges and the gender enrollment difference is most pronounced at private four year universities. The college

enrollment decline of men is not limited to specific demographics and is impacting all men across race, geographical location, and socioeconomic status. For students who started their postsecondary education in 2012 at a four-year institution, 65 percent of women and 59 percent of men completed their education by 2018 (Belkin, 2021). With the implementation of diversity, equity, and inclusion programs, it will become necessary to adopt a way to support male students while being ever wary of those that might find it to be a population that has already benefited from the status quo and a male dominated society.

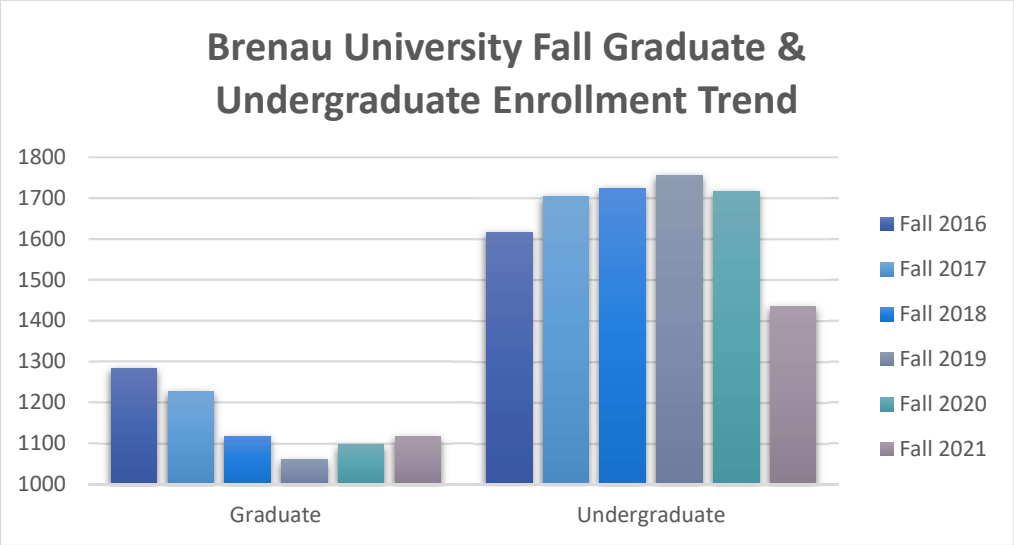
UNDERGRADUATE & TRANSFER-IN ENROLLMENT TRENDS

Undergraduate enrollment has seen a continued decrease again in Fall 2021. According to the National Student Clearinghouse (Burt, 2021b), the drop is about 8 percent across the past two years and 3.2 percent this year alone (Williams June, 2021). Community colleges have seen a 15 percent loss of new students, two-year schools saw a decline of 6 percent across the last two years, and the biggest dip in undergraduate enrollment is being felt by for-profit institutions. Doug Shapiro, the National Clearinghouse research center's executive director, said that if this current decline persists, it would be one of the largest enrollment declines seen in the U.S. in the last 50 years. The overall decline in postsecondary enrollment in 2021 is down 2.3 percent from a year before and 4.3 percent since 2019 with private non-profits seeing an undergraduate enrollment decline of -1.2 percent change from 2019 (Williams June, 2021).

Graduate enrollments have actually seen gains. Graduate enrollment saw a 2.7 percent increase in the 2020-21 academic year and this Fall graduate level enrollment is up 2.1 percent (Burt, 2021b).

At Brenau, graduate enrollment has had a slight increase over last year but undergraduate enrollment has dipped for Fall 2021.

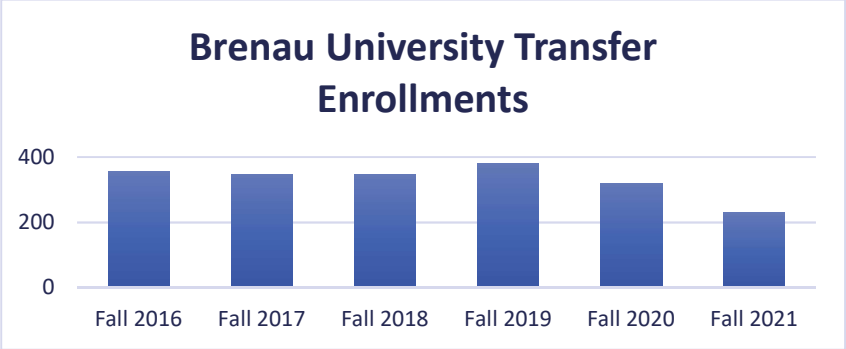
FIGURE 4 – GRADUATE AND UNDERGRADUATE ENROLLMENT TRENDS



The continued downward trend in undergraduate enrollments is compounded by declines in transfer enrollment. The National Student Clearinghouse blog is reporting a 10 percent drop in enrollment since Spring 2020. Community colleges have seen the largest drops (16.3 percent) in transfer enrollments, however upward transfers from two-year to four-year institutions is one education pathway that did see an increase particularly for Asian (5.9 percent) and Hispanic/Latino (1.4 percent) transfer enrollment. Unfortunately, upward transfers for both Black/African American (-6.1 percent) and Whites (-4.4 percent) students dropped (*COVID-19*, 2021). Overall, the increase in upward transfers was 1.5 percent this spring after having declined 5.5 percent last spring. Reverse and lateral transfers had declines of -18 percent and -12.6 percent, respectively (Sedmak, 2021). Some schools did experience increased transfer enrollment and they credit this increase to

long-standing relationships with local feeder schools as well as reducing existing barriers in their transfer applicant process. Other schools simply accepted more students, while others dropped their GPA requirements; some reported that the asynchronous environment helped students manage competing demands for their time due to the impacts of remote work and lack of childcare which made enrolling more appealing (Field, 2021).

FIGURE 5 –UNDERGRADUATE TRANSFER ENROLLMENT TRENDS

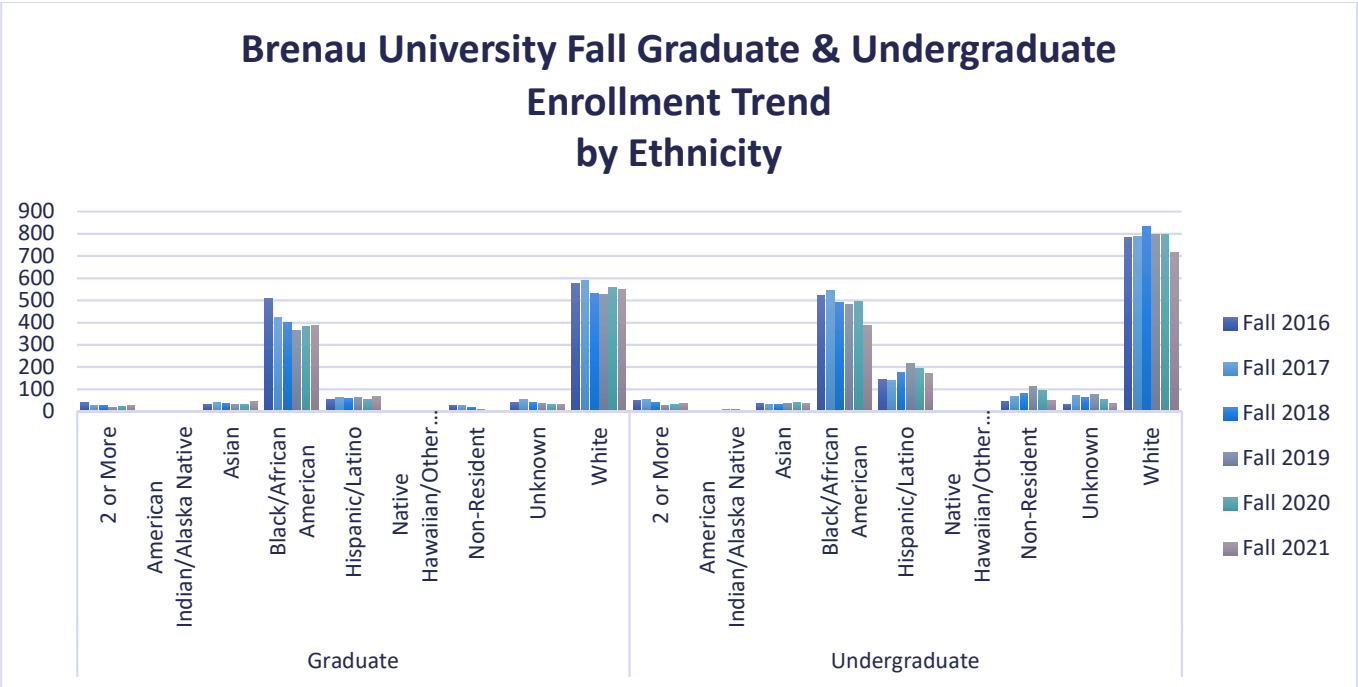


ETHNICITY TRENDS

Generally, Fall 2021 enrollment has seen some improvements compared to last Fall, but according to the National Student Clearinghouse all demographic sub groups are still in decline: Whites (-5.2 percent), Hispanic/Latino (-2.8 percent), Black/African American (-5.1 percent), Asians (-2.2 percent) and Native Americans (-5.6 percent). Very few states have gone unscathed by enrollment drops. The hardest hit was Mississippi with a -7.5 percent enrollment drop, followed closely by the following states: Delaware (-6.6 percent), Washington (-6 percent), and California, New Mexico, and Indiana all have a dip in undergraduate enrollment of -6 percent. (Burt, 2021b).

At Brenau, the largest drop in undergraduate enrollment is across Black/African American students, White students, and International students.

FIGURE 6 – ETHNICITY STUDENT ENROLLMENT TRENDS



INTERNATIONAL STUDENT ENROLLMENT TRENDS

Though international student enrollment is still down 3 percent from pre-pandemic numbers, it is still much better than the decline in enrollments seen due to COVID impacts on academic pursuits of new and returning students (Burt, 2021b). An Open Doors census of international enrollments, shows that the number of enrolled international students dropped 15 percent during 2021/2021 academic year but colleges are starting to report a 68 percent increase of new international students for Fall 2021. Across the higher education landscape, the enrollment numbers for international students grew by 4 percent.

Any increase in international student enrollment would benefit many smaller tuition dependent schools, as international students, "particularly at the undergraduate level, typically pay full tuition, and their presence helps buoy both campus bottom lines and college-town economies" (Fischer, 2021). However, the rebound in international student enrollment has not been even across the board. The Open Doors survey has evolved to include international students studying in person or online at U.S. colleges and universities. Even though schools pivoted to allow international student access to online courses, enrollment drops were 13 percent at doctoral universities, 23 percent at master's colleges and universities, 14 percent at baccalaureate colleges, and 24 percent at associate degree-granting colleges (Redden, 2021).

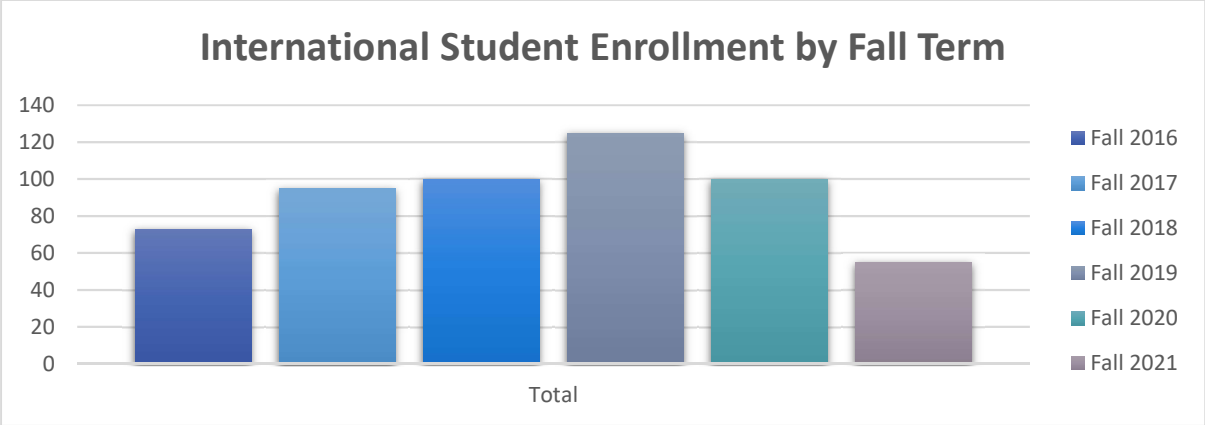
Concerns remain, that undergraduate international enrollment may not recover as quickly and may remain suppressed due to growing costs of higher education in the United States compared to competitor countries, continued increase in competition from other countries for international students, and political tensions that linger between the United States and China. The Open Doors census of international enrollments had already observed a downward trend of international enrollments in the U.S. during the last four academic years; 3.3 percent in 2016-17, 6.6 percent in 2017-18, 0.9 percent in 2018-19, and 0.6 percent in 2019-20. In addition, study abroad for U.S. students declined in all countries from 2018-19 to 2019-20 with the most dramatic decline of 79 percent in China (Redden, 2021).

While the enrollment data for fall 2021 from the National Student Clearinghouse Research Center show international graduate enrollment has increased by 13 percent, the number of international undergraduates continued to fall (Fischer, 2021). U.S. COVID- related travel restrictions for international students were lifted in the spring of 2021 and U.S. Consulates around the world prioritized the issuance of student visas. Between May and August of 2021 almost 276,000 student visas were approved. This is about 20,000 more than were issued during the same period pre-pandemic in 2019 (Fischer, 2021).

Students from China and India made up 53 percent of the international students studying in the U.S, according to the IIE 2021 Open Doors Report (*IIE Open Doors / Leading Places of Origin*, 2021). In Spring 2021, around 87,000 visas were approved for students from China and 65,000 visas were approved for Indian students. This was slightly more than the pre-pandemic rates for both countries. Visas issued to students from Saudi Arabia, which, pre-pandemic, had the 4th highest number of students to study in the US, was only at 40 percent of the number of visas issued in 2019 (Fischer, 2021).

At Brenau, international student return to campus, particularly for the China ANU partnership, remains low. Even when combined with other international enrollment, it is still not at levels seen pre-pandemic.

FIGURE 7 – INTERNATIONAL STUDENT ENROLLMENT TRENDS



TECHNOLOGY

ONLINE AND HYBRID TEACHING

The 2021 EDUCAUSE Horizon Report: Teaching and Learning Edition identified key technology areas that have emerged in the past year, largely influenced by the COVID-19 pandemic. These technologies include, Quality Online Learning, Open Educational Resources (OER), Learning Analytics, Blended/Hybrid Instruction and Artificial Intelligence (AI). Early in 2020, the Covid-19 pandemic forced colleges and universities to convert all classes to all online instruction almost overnight. Institutions needed to "become inventive and create an array of new course models to cope" with the restrictions required to protect faculty and students during the pandemic. As institutions start returning to increasingly "normal" conditions they are continuing to embrace many of the adaptations that were originally made out of necessity and proved to be good resources for on ground instruction as well as online (Pelletier et al., 2021).

The most obvious adaptation during the pandemic was the conversion of all classes to either fully online or hybrid course models. Many colleges and universities already offered a selection of courses in an online or hybrid format, but the need to convert all course offerings to a fully online or hybrid format forced instructors to find creative ways to teach topics that were traditionally expected to require in person instruction. Step-by-step labs were filmed by professors for students to watch and duplicate at home with supplies that had been packaged up and shipped to them. Simulation software went from an ancillary course addition to a necessary component for clinical courses (Pelletier et al., 2021).

The importance of Open Education Resources (OER) also became more apparent due to the pandemic. OER is defined as "any copyrightable work that is either in the public domain or licensed in a manner that provides everyone with free and perpetual permission to engage in the 5R activities: retain, reuse, revise, remix, and redistribute." OER increases societal equity for students by eliminating the often high cost of textbook resources. On average students spend about $600 per year on textbooks, a cost that is not usually factored into students' financial planning for college. The online nature of OER

also helps keep content more up to date. It can take years for an academic text to go from proposal to a published text, which can result in information being out of date before the book is even published. Because OER is often hosted online, it can be updated quickly to keep the material current (Pelletier et al., 2021).

Schools across the country have developed OER systems to provide access to a wide range of content for faculty and student use. The University of North Carolina System Course Enhancement and OER Collections provides a curated repository of high-demand course resources and materials across the UNC system, and San Diego State University is developing an open platform to make virtual anatomy resources available to all students enrolled in the California State University System.

Student and faculty engagement in online courses also needed to adapt. A survey conducted in the spring of 2020 by Every Learner Everywhere, Digital Promise and Tyton partners showed that "student satisfaction increased as larger numbers of traditional practices were incorporated into the course." "The pandemic required new pedagogical approaches for faculty to rethink content delivery, engagement activities, and authentic application and assessment." In order to ensure Quality Online Learning experiences for their students, colleges and universities needed to develop resources to assist their faculty in adapting to the online learning platforms used (Pelletier et al., 2021).

Western Sydney University created an Online Engagement and Teaching Hub for its faculty. This hub provided faculty with a curated suite of teaching strategies, recommended technologies aligned to evidence-based learning theories, and exemplars showcasing practices of peers in the university. Auburn University created high-quality simulated exhibits and labs to support online teaching and learning. The simulations were designed to be as realistic and intuitive as possible and instructors are able to record annotated videos that allow them to walk the students through the content. From faculty development to providing programs that enhance the online course content, what started out as support for an emergency adaptation is quickly developing into intentional improvement of the online learning experience (Pelletier et al., 2021).

The use of Leaning Analytics can offer instructors the ability to view data about teaching and learning patterns to help better construct classes and improve the learning experience, although the sheer quantity of data gathered makes effective use of the information challenging. The goal of Learning Analytics is "to make better, evidence-informed decisions about how best to serve an increasingly diverse population of learners in higher education settings" however, there is still a lot of debate about how to ensure ethical use of the information gathered (Pelletier et al., 2021).

Artificial Intelligence, especially bot programs, can make use of collected Learning Analytics data to address challenges in teaching, learning and learner success. The University of Iowa's Digital Learning Scorecard AI uses machine learning to "identify students who are struggling academically" and AI bots like the Holly program at Durham University in the UK are increasingly being used to shepherd students through the admissions process (Pelletier et al., 2021).

The amount of data collected and stored by universities also makes them a popular target for malicious software attacks, leading institutions to focus on cyber security needs. Dozens of institutions, including Howard University, The University of California at San Francisco, and University of Utah, have all experienced major data breaches since the beginning of the COVID-19 pandemic (Burt, 2021a). The need for cybersecurity has led to two distinct trends for Colleges and universities, enhanced protocols and new programming.

Institutions are taking steps to increase their cyber security protocols to protect student information by implementing stricter cyber security policies and utilizing systems such as single sign on passwords and multi-factor verification to eliminate known weaknesses in their cyber security. Jim Shreve , an attorney with Thompson Coburn LLP, who works with higher education clients as well as the Department of Education, advises Institutions to do a thorough review of staffing, user access, and ensure endpoint protection and response are part of their cyber risk response efforts. Shreve, who currently works with the Department of Education helping develop cybersecurity standards for higher education, says that ransomware is a big problem and will continue to get bigger. He adds that even though higher education is not the highest

on the list of target, it is high on the list of ransomware attacks, particularly because of the breadth of data that can be found at institutions of higher learning such as, financial information, healthcare information, valuable IP and other data (Burt, 2021a). Remote and cloud backups are also in use to help protect against potential data loss in the case of ransomware attacks. Anti-hacker bots are also employed to identify system weaknesses that need to be fixed (DeMuth, 2020). Hackers perpetrating ransomware attacks are simply trying to make money, so holding the data hostage is the quickest payout compared to trying to repackage and sell the data on the dark web. The outcomes of ransomware attack can range from long business interruptions to possible loss of data that was encrypted as part of a ransom demand. Good data backups which are safeguarded against these types of attacks are the best defense (Burt, 2021a)

The increased need for cybersecurity for academic institutions and all other fields has led to a need for larger numbers of cyber security professionals nationally. According to the article *Creating Cyber Warriors* from the May 2020 issue of Georgia Trend, at that time Georgia had a total cybersecurity workforce of 35,500, but there were more than 18,000 posted job openings (DeMuth, 2020).

A consortium of military, community and education partners, including Augusta University and Augusta Technical College in Georgia have created the Alliance for Cybersecurity Education (ACE). The goal of ACE is to develop a defined cybersecurity curriculum for grades 6 to 12 that will build a pipeline through post-secondary education and into employment (DeMuth, 2020).

There are currently eight four-year universities in the Georgia that are designated Centers of Academic Excellence in Cyber Defense by the National Security Agency (NSA) and the U.S. Department of Homeland Security. These institutions are Georgia Tech, University of Georgia, Augusta University, Columbus State University (CSU), Georgia Southern University, Kennesaw State University, Middle Georgia State University and UNG. Augusta Tech is the state's first two-year college to earn the designation (DeMuth, 2020).

ECONOMIC

UNEMPLOYMENT RATES & WAGES

According to a Job Openings and Labor Turnover Survey (JOLTS) report, released in August 2021, 10.1 million jobs were available. The sectors with the most growth included restaurants, bars, hospitality, leisure and travel. This sector was the hardest hit during the period when COVID-19 mandates were less relaxed. Now that those measures have been loosened, there is a mismatch in available jobs and available workers. This mismatch is creating competition for talent and many businesses are raising wages, offering sign-on bonuses and even tuition assistance to entice potential applicants (Kelly, 2021).

A term for the current trend for those leaving their jobs is called the "Great Resignation." The high demand for many unfilled positions, has job seekers looking for better opportunities without the worry of being locked out of jobs. This situation is creating labor shortages, with an average of one unemployed worker per available job. The unemployment rate is expected to fall to 3.5 percent from the current 4.1 percent in 2022 given additional re-openings and the expiration of unemployment benefits (Kelly, 2021). The highest resignation rates seem to be among mid-career employees between the ages of 30 and 45 which increased by 20 percent between 2020 and 2021. However, resignations decreased for younger employees aged 20 to 25. This is attributed to reduced demand for entry-level employees, as well as the fact that younger people face more financial uncertainty. Turnover rates have impacted various industries but the hardest hit were fields in which pandemic impact had the greatest increase in workload and burnout, such as health care and technical industries (Cook, 2021).

Employers who did not focus on retention and well-being programs are now facing the costs of attrition as many exit jobs where working conditions are less than desirable. Though employees are willing to work hard, it is hard for many to find room for advancement in their organizations due to suppressed wages and diminished economic mobility. Costs, as a result of poor employee retention, come in the form of slower response time to consumer demands, cuts in production, reduced distribution routes and considerable loss in market share, not to mention time to retrain new hires (Escobari, 2021).

Key metrics employers should focus on are job quality, economic mobility, and job equity. Job quality should focus on living wages and healthcare benefits. Economic mobility translates to access to steppingstone jobs and job equity efforts focus on racial and gender equity in internal promotions. Improved internal mobility reduces attrition costs for an organization, provides a more diverse group of entry-level employees, and helps contribute to a more stable workforce. Research shows that minorities, like women and people of color, are most underrepresented in higher wage jobs. This means that in the highest paying occupations, female employees under earn by $106 billion, Black/African American employees under earn by $153 billion and Hispanic/Latino employees under earn by $310 billion annually. Persistent mobility gaps are still evident among highly educated workers, in particular for female, Black/African American and Hispanic/Latino employees. In comparison to male, White, and Asian employees, these minority groups tended to move up less. As an example, in the healthcare field, White licensed practical nurses or LPNs move up to registered nurses at twice the rate of Black/African American and Hispanic/Latino LPNs (Escobari, 2021).

HIGHER EDUCATION – POSTSECONDARY EDUCATION OUTCOMES

An analysis of earnings, done by The Brookings Institute, of students who had attended community colleges where there were higher populations of minority students, showed that those colleges offered fewer programs which would lead to higher salaries. The Postsecondary Value Commission found that women and minority groups hold more positions in high social value jobs but at which lower wages are offered. According to the National Bureau of Economic Research, schools with better resources and institutional reputation are most likely to affect earnings of graduates (Carlson, 2021).

However likely those impacts are on wages for students who attended schools with better reputations or resources, inferences made from this data are tenuous at best, because many users of this information are currently making assumptions about earnings with limited data. For instance, the largest source of this data comes from The College Scorecard, a tool that was developed by the Obama administration. The College Scorecard only has about two years of earnings data for undergraduates who completed a bachelor's degree (Carlson, 2021). There is an expectation that over time, more data on earnings and more years of data collected will help provide a better picture of how graduates are navigating careers after college. This, in turn, should provide opportunities for college and university academic programs to examine how well they are preparing their students for the working world.

More information about college outcomes should help parents and prospective students make decisions about which schools offer the programs and career outcomes they are looking for but it also depends how transparent that data is. Are schools making it obvious that outcomes are based on limited earnings data? Or whether the data is skewed because it represents one group of students more than others or a very small subset of students in a small program? These are

not terribly difficult answers to illustrate but often the politics of an institution are what controls and drives what data is shared and how it is ultimately used. Institutions can choose and have chosen to turn a blind eye to metrics that they find to be taking away from the message they are trying to send (Carlson, 2021).

The costs to attend a college or university have increased considerably, nonetheless, and questions about the value of higher education continue to come into question daily, particularly when student debt load comes into the discussion. On the podcast, The Key with Inside Higher Ed: Debating the Value of College Arts (and Other) Programs, Kevin Carey of New America asserts that students are borrowing a lot of money and the earning's data comparatively does not look very good. Students are walking into careers that are not paying them enough to pay back their loans (Lederman, n.d.).

Data on earnings for the wide variety of available majors and programs can become unwieldly very quickly but are institutions ensuring a quality curricula and well-rounded learning for all their students no matter what program they enter? In 1950 there were just 270 occupational skills' profiles, now we have nearly 900 different designated occupations. Postsecondary programs have gone from just 410 in 1985 to about 2,260 when last researched in 2019 (Carnevale, 2019).

Earnings for specific career paths can be harder to track when employment can't be traced back to an earned degree at a particular institution. Doug Dempster, former Dean of the College of Fine Arts at the University of Texas at Austin, shares that from a study done by two economists at Northeastern, only 25 percent of professional artists or creatives have postsecondary degrees in the visual or performing arts. Though he admits this data is about ten years old, he estimates that if this data is accurate, then, the other 75 percent of that labor force have found another track into those fields. Roughly 60 percent of those in any visual or performing arts profession have a postsecondary degree even if it is in an unrelated program of study. (Lederman, n.d.).

The risk of walking out of postsecondary education with or without a degree and not earning enough to pay back loans is the area that needs more work. Colleges and universities need to invest in understanding and documenting the return on investment for all of their programs. As consumers become savvy about what they are risking and how much of their future income this will divert away from other areas of their life's goals, they will in turn take the necessary actions to more thoroughly assess the value and quality of particular programs in the short term and in the long term. Career preparation has always been part of the expectation of higher education but job market outcomes and social mobility, when discussed as performance metrics for college and university performance are often looked at dubiously. In response to questions about career preparation, Seth Bodnar, President of the University of Montana had this to say:

> "Students, families and employers have already spoken, and they are demanding that we do a better job at preparing students for work, plain and simple. As cliché as it may sound, postsecondary education is at a crossroads. We can ignore the trends and demands and hope that expectations from both students and employers go away. Or, we can embrace facts and lean into these expectations. This does not mean that we abandon general education or the liberal arts, simply that we must be willing to innovate the curriculum and the overall student experience in such a manner that creates a clear, aligned integration understood by students, families, and employers alike." "Despite increasing competition from private recruitment and training companies, now Google, industry leaders still believe that colleges and universities can be the source of such pre-professional skilling. However, that window is slowly closing and colleges and universities ultimately control their own destiny as it concerns such innovation, and ultimately for some, their survival (Fain, 2021, p. 8.)"

The University of Montana seeking to boost their students' job preparedness has created a partnership with Kaplan to offer upskilling in 30 technical fields, including cybersecurity, data science, data literacy, and digital marketing. These "credegrees" are in high demand in Montana in which the high-tech sector is rapidly growing at a faster pace than other areas of the state's economy (*UM Leads Career Readiness with New Partnership*, 2021).

Many argue that these short-term upskilling programs will quickly fall into obsolescence and that focusing only on first destination employment outcomes and income does not view education with an eye towards long-term value. Education and job experience is not a sprint but a series of long stages in and an endurance race. Liberal arts schools have long been accused of offering only the study of subjects with no earning potential or job success. However, research done by Richard A. Detweiler from a sample of 1,000 college graduates, shows longer-term success and life fulfillment is attained from broad educational exposure and higher levels of involvement in the academic community within an institution. These are some of the characteristics of liberal arts colleges and universities. In addition, students of liberal arts college and universities are likely to take many courses outside of their major and spend more time outside of courses engaging with faculty, which are both activities, associated with long-term success including higher income earnings and leadership opportunities (Jaschik, 2021).

In a Top Hat survey, 29 percent of students cited barriers to success that included lack of access to mentorship and support from faculty. Many students, 55 percent, noted that interacting and connecting with faculty were areas that excited them about the start of courses this Fall 2021. In fact, a Gallup-Purdue Index Report indicates that mentorship is one of six critical factors that impact a student's ability to feel a sense of wellbeing years after completion of a degree. Generally, more female, than male, and minority students find mentorship to be a vital part of their education. For these students (59 percent) it is important to them that faculty get to know them and their goals and 53 percent indicated that receiving faculty mentorship was key to helping them understand and use their strengths towards supporting their success (*Fall 2021 Student Survey*, 2021). A Gallup-Purdue Index report from 2014 also notes that students who had professors who cared about them felt two times more engaged in their post-graduation career experiences (Seymour, 2015).

CAREER OPPORTUNITIES

Opportunities are opening up for both higher education and students in nursing programs. Institutions should plan to use the nursing shortage that is occurring throughout the United States and expected to continue into 2030 to recruit more students into their programs. This critical nursing shortage has been exacerbated by the ongoing COVID-19 pandemic and the aging population.

The United States has seen nursing shortages since the early 1900s which were caused by world wars and recessions but within the last two years the demand for healthcare professionals has been incomparable and it is expected that over one million registered nurses will be needed within the next decade. In Georgia during 2020, there were 10.2 registered nurses

per 1000 people in the population. Currently, Georgia ranks sixth among states with the most severe registered nurses shortage, South Carolina sits fourth on the list and California is in the top spot. The registered nurse occupation is one of the most in demand jobs in the United States and the pandemic has not been the only contributor to this demand. The population of people over the age of 65 has increased from 41 million to 71 million as reported in 2019 and will be likely to reach 73 million by 2030 based on updated U.S. Census population numbers ("The 2021 American Nursing Shortage," 2021).

The shortage is not only being felt for those seeking to employ nurses but also by higher education. Educator shortages have made it difficult for colleges and universities to fill the demand for entry into nursing programs. The shortage in nurse educators is due to population aging as well the increased levels of stress the nursing profession has placed on nurses. Though the pandemic added to existing stressors faced by nurses, many already faced added workloads due to low hospital staffing which existed before COVID-19 hit. The average age of registered nurses has increased and that trend parallels the average age of nurse educators. Many are close to or at retirement age and have limited access to qualified educators to replace them. In 2020, over 80,000 nursing school applicants could not be admitted into either undergraduate or graduate programs because of the decrease in nursing faculty numbers. Other associated resources limitations included lack of clinical study sites, classroom space and strained budgets ("The 2021 American Nursing Shortage," 2021). According to U.S. News and World Report, the nurse practitioner occupation is among the top 100 Best Jobs in America for 2021 along with several other healthcare field jobs, including occupational therapists and speech-language pathologists. Colleges and universities can offer flexible learning environments to increase recruitment of qualified applicants and retention of working students who want to both work and go back to school to continue their education.

Business school graduates, particularly those with MBAs, may be seeing a demand for their skill set. According the Wall Street Journal, salaries for new MBA graduates are hitting record highs. Businesses looking to hire newly graduated MBAs include banks, consulting firms, and technology companies. Duke University's Fuqua School of Business, The Wharton School of the University of Pennsylvania and the University of Chicago's Booth School of Business reported that median salaries for this year's graduates have increased and range from $141,000 to $155,000. According to Wharton, this is the highest recorded median base salary. They also stated that 99 percent of their students who were looking for employment received job offers. Supply chain disruptions due to the pandemic are being cited as reasons why companies are offering better compensation for young professionals. The average salary for MBAs is expected to reach an all-time high of $115,000 for 2021 graduates as the economy and labor markets regain momentum (Thomas, 2021).

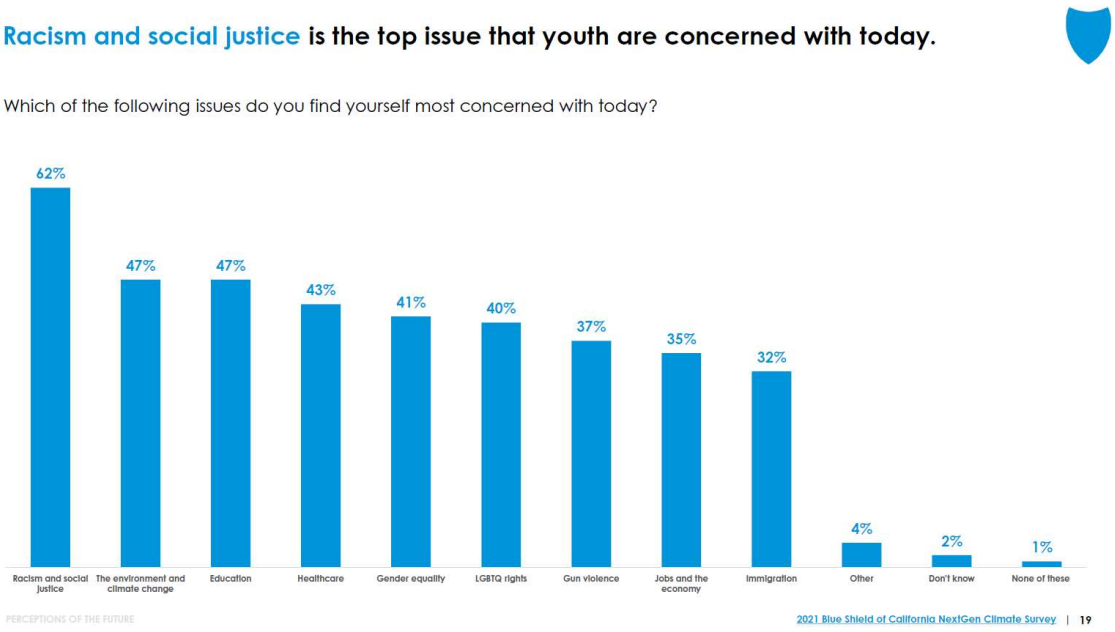
According to survey data from the Graduate Management Admission Council (GMAC), an association of the leading graduate business schools worldwide, U.S.-based MBA programs reported an increased number of applications for the 2019-20 academic year. This was at the beginning of the pandemic. According to the director of GMAC's industry insights and research communications, Rahul Choudaha, this is not unusual. Demand for graduate degrees tends to increase during periods of economic uncertainty. Most MBA applicants are looking to improve their skill sets so that they are prepared to navigate changes in economic downturns. In fact, the trend is similar to the one seen during the 2007-09 Great Recession. GMAC data also demonstrated an increase in interest for online MBA programs during the 2019-20 admissions cycle. Transitions to online MBA formats during COVID-19 has led to greater acceptance of distance learning but many are still hesitant to accept the learning format for an MBA, especially international applicants, which has resulted in deferrals of enrollment (Friedman, 2021).

ENVIRONMENT

STUDENT CONCERNS OVER ENVIRONMENTAL ISSUES

Between March 5 and March 12 of 2021 Blue Shield of California conducted a NextGen climate survey that reached 1,200 respondents between the ages of 14 and 24 (Gen Z), which included a population from middle school students to post-college graduates. The results of this study show a nationwide concern for environmental issues among people in this age group. According the Blue Shield of California Next Gen Climate Survey Report, more than 8 out of 10 (83 percent) of Gen Z youth are concerned about the health of the planet. When asked about issues they are concerned about, 47 percent of respondents expressed concern about "The environment and climate change", second only to "racism and social injustice" with 62 percent of respondents expressing concern for this topic (Blue Shield of California | News Center, 2021).

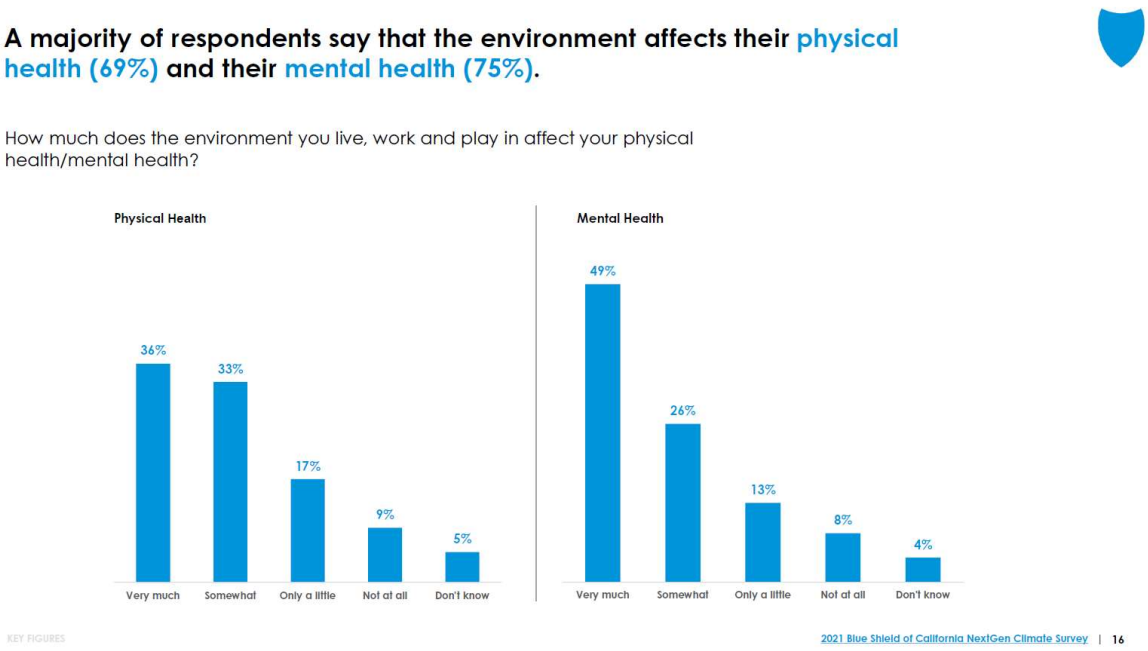
FIGURE 8 – NEXTGEN CLIMATE SURVEY TOP ISSUES



Data source: (Blue Shield of California | News Center, 2021)

Sixty-two percent of respondents in the survey said that their generation takes climate change at least somewhat seriously, compared to 34 percent who indicated that they thought their parent's generation takes climate change seriously. Eighty-six percent of respondents agreed or strongly agreed that the quality of the environment where they live, work and play affects their health and well-being. A majority say that their environment has an effect on their physical (69 percent) and Mental (75 percent) health (Blue Shield of California | News Center, 2021).

FIGURE 9 – NEXTGEN CLIMATE SURVEY RESPONSES ON ENVIRONMENTAL AFFECTS



Data Source: (Blue Shield of California | News Center, 2021)

Seventy-five percent of respondents to the Princeton Review's 2021 College Hopes & Worries Survey Report conducted in January and February of 2021 indicated that having information about a college's commitment to the environment would at least somewhat contribute to their decision about whether to apply to or attend the school. In recognition of students growing concern for environmental issues, for the past 12 years (since 2010) the Princeton Review has released an annual Guide to Green Colleges (*2021 College Hopes & Worries Survey Results Are Here!*, 2021). This guide includes a ranking of the Top 50 Green Colleges based on a methodology that ranks schools on a scale of 60 to 99 on items related to

1. whether students have a campus quality of life that is both healthy and sustainable;
2. how well a school is preparing students for employment in the clean-energy economy of the 21st century as well as for citizenship in a world now defined by environmental concerns and opportunities; and
3. how environmentally responsible a school's policies are. (*The Princeton Review Guide to Green Colleges: 2022 Edition Press Release | Green Guide | Press Release | The Princeton Review*, 2021)

In Georgia, a new initiative, Drawdown Georgia Higher Ed, was introduced in 2021 for the state's colleges and universities under the Guidance of the Georgia Climate Project. The Drawdown Georgia Higher Ed initiative "hopes to champion institutions of higher education as critical actors on the road to carbon neutrality in our state [… by] providing resources and guidance the state's colleges and universities need to take action on a wide variety of climate solutions." Initial institutional partners for this initiative include Agnes Scott, Columbus State, Emory University, Georgia Tech and the University of Georgia. These academic partners are co-developing curricular resources about climate mitigation options specific to Georgia to an open-source repository for use by all institutions to help unify efforts across Georgia's colleges and universities (Behnke, 2021).

POLITICAL

NATIONAL

INCREASED VISA COSTS

Due to an economic analysis of consular services provided, the U.S. Department of State is proposing increases in the cost of processing fees for student and exchange-visitor visas applications. The government aims to recover all costs both direct and indirect that are incurred through staffing, services and rent. Those costs will see 53 percent increase, going from $160 to $245. The government feels this increase would barely have an impact given all other costs involved for those seeking to come to the U.S. for education (*Busy Break Edition*, 2022).

Additionally, the U.S. Department of State is changing language which would give consular offices more leeway in terms of how they assess students' ties and post-graduation plans to return to their home country. The prior administration had sought to protect American jobs by directing consular officials to determine that students' intent to come to the United States was strictly for study only and not for long-term work or immigration (*Busy Break Edition*, 2022).

Changes to the policy's language indicates that visa officials may only assess students' present intent even if at some later date those plans change after a long period of time in the United States (*Busy Break Edition*, 2022). These changes were lobbied for by International-Education groups like NAFSA: Association of International Educators, one the of largest nonprofits dedicated to international education and exchange (*U.S. Higher Education Community Calls for a Return to Pre-COVID 19 International Student Enrollment Numbers and a National Strategy of Federal Actions and Policies to Increase International Student Enrollment*, 2021).

FEDERAL PELL GRANT

A $2 trillion infrastructure bill that is making its way through congress includes a number of provisions for higher education funding. While some high profile items, like tuition-free community college, did not make it into the final bill, a number of other provisions have been included in an effort to make higher education more affordable for a greater number of students. The maximum amount of funds that a student can receive in need-based Pell grants has been increased to more than $7,000, but the increased funding cannot be used by students attending for-profit colleges (Douglas-Gabriel, 2021). With the new legislation, students whose families received a means-tested benefit in the last 24 months must automatically be made eligible for the maximum Pell award. DACA students and those who have been granted legal residence through temporary protected status or deferred enforced departure are also eligible to receive Pell and other financial aid. This could benefit up to 280,000 students in Georgia (Lee, 2021).

Following on the push to address the racial inequality highlighted by the Black Lives Matter Movement and protests of 2020, grant funding has also been set aside for Historically Black Colleges and Universities (HBCUs) and other minority-serving institutions to improve research infrastructure, student support services, and need based financial aid (Douglas-Gabriel, 2021). Twenty-six (26) colleges and universities, public and private, in the state of Georgia would qualify for this funding (Lee, 2021).

> "Federal grants would replace all or a significant portion of tuition and fees for students from families with low incomes who attend eligible schools for the first 60 credit hours. The maximum per-student amount would be the national average of annual tuition and fees at public four-year colleges ($9,212), so private HBCUs like Spelman, Morehouse, Clark Atlanta and Paine College, which are more expensive, would receive grants to discount, but not fully waive, these costs for their eligible students. Schools

would be required to commit to a variety of student support services and participate in articulation agreements that ensure students with an associate degree transferring to four-year colleges can fully transfer their credits to a bachelor's degree (Lee, 2021)."

COVID-19 VACCINATION MANDATES

The OSHA COVID-19 Vaccination mandate that employers with more than 100 employees require all employees to be fully vaccinated against COVID-19 or submit weekly COVID tests to their employer is scheduled to go into effect on January 4, 2022. This mandate would apply to most, if not all, institutions of higher education and could significantly influence several aspects of operations.

While still being challenged in the court system, academic institutions and businesses with over 100 employees are implementing policies and encouraging employees to get vaccinated prior to the January 4th deadline, as the multi-dose vaccination process requires at time frame of 5-6 weeks for the Phizer and Moderna vaccines. Opponents of the mandate argue that, instead of getting vaccinated or submitting to weekly COVID tests, this will cause some employees to quit their current positions, further exacerbating an already bad labor shortage. Another argument submitted by opponents of the mandate is that the weekly testing requirements for non-vaccinated employees will put a financial strain on employers.

LOCAL

GEORGIA HIGHER EDUCATION

The political environment for higher education in Georgia is in a state of flux. As state Rep. Jasmine Clark of the GA House of Representatives Higher Education committee noted in an Atlanta Journal Constitution article *Georgia's university system prepares for critical period*, "the coronavirus pandemic has made administrators and state lawmakers take an expansive look at how public higher education is working in Georgia (Stirgus, 2021)." Six of the colleges and universities in the University System of Georgia have hired, or are currently in the process of hiring, new presidents, and the Georgia Board of Regents, which oversees all of the state's public higher education institutions, named a new acting Chancellor in June.

In October, Georgia's Board of Regents made headlines across the nation by approving a policy that allows colleges and universities in the University System of Georgia to "remove a tenured professor with little to no faculty input (Heyward, 2021)." This has led to a concern that academic freedom could be curtailed and that this policy could affect the state's ability to recruit and retain faculty and students at Georgia's public universities. This is of particular concern when, like many institutions across the nation, Georgia's colleges and universities find themselves " walking the tightrope of balancing the demands for social justice reforms against complaints by conservatives that campuses have become centers for liberal ideology (Stirgus, 2021)."

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