# THE ECONOMIC AND COMMUNITY IMPACTS of the University of Alabama at Birmingham JANUARY 2023



# **LIABAMA AT BIRMINGHAM.**

# **LIZE THE UNIVERSITY OF** ALABAMA AT BIRMINGHAM.

# **EXECUTIVE SUMMARY**

**ECONOMIC IMPACT FY22** 

# STATE OF ALABAMA





**107,687 jobs** supported and sustained



### **UAB ACADEMIC**



\$5.5 billion generated in economic impact



**49,045 jobs** supported and sustained

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#### \$158.8 million generated in state and local taxes

### **UAB HEALTH SYSTEM**



**\$6.4 billion** generated in economic impact



57,128 jobs supported and sustained



\$206.2 million generated in state and local taxes

### SOUTHERN RESEARCH



**\$221.8 million** generated in economic impact



**1,514 jobs** supported and sustained



#### \$6.5 million

generated in state and local taxes

#### CHARITABLE GIVING AND VOLUNTEERISM



### \$115.4 million

in donated time and charitable giving by staff, faculty, and learners

#### The **\$115.4 million** impact includes:



**\$33.7 million** donated to local charitable organizations



**\$81.7 million** in value of volunteer time

**Note:** These benefits are in addition to the **\$12.1 billion** annual impact that the UAB generates for the state.



For every **\$1** in state funding received by the institution, UAB generates **\$39.35** in economic impact that is returned back to the state.



One in every **20 jobs** within the state of Alabama either is held directly by a UAB employee or is supported as a result of UAB's presence.



In addition, the UAB Health System supports more than **\$363.1 million** in charity care to underserved populations in Birmingham and across the state.







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### **EXECUTIVE REPORT**



#### About the University of Alabama at Birmingham

The University of Alabama at Birmingham (UAB) became an autonomous campus within The University of Alabama System in 1969. In only five decades, UAB has grown into a world-renowned research university and medical center, occupying more than 100 city blocks in Alabama's largest metropolitan area. UAB is the most significant driver of the Alabama economy, and it is also Alabama's largest employer.

UAB's daily operations provide economic and social benefits to the state's economy. UAB generated more than **\$12.1 billion** in economic impact to the state in FY22, supported **107,687 jobs** statewide, and generated **\$371.5 million** in local taxes to the state and municipalities throughout Alabama. The university significantly strengthens the statewide economy through expenditures, state and local taxes, and residents' employment and personal income. Beyond these financial benefits, UAB is preparing the workforce of the future and creating stronger communities throughout Alabama. This report also demonstrates that UAB is a driving force in research, innovation, and service that improves people's lives throughout Alabama, the nation, and the world.

Dedicated to excellence in teaching, research, and service, UAB is among the most extensive research institutions in the nation. UAB's mission is to serve students, patients, and the community and the global need for discovery, knowledge dissemination, education, creativity, and the application of groundbreaking solutions. In 2021, UAB was named America's No. 1 Best Large Employer by Forbes, topping the list of more than 500 public and private corporations, hospitals, universities, and Fortune 500 companies in dozens of industries. In addition, UAB is consistently recognized for achievements in diversity, being one of few universities recognized annually as a Diversity Champion by Insight into Diversity, and America's No. 4 Best Employer for Diversity by Forbes in 2021.

UAB's vision, mission, and shared values provide a foundation for the strategic plan, "Forging the Future." The UAB Grand Challenge, a signature initiative in the strategic plan, aims to identify and participate in solving complex societal problems by energizing the talent on and around UAB's campus.<sup>1</sup> Live HealthSmart Alabama, the inaugural UAB Grand Challenge, aims to make Alabama a model of healthy living. By expanding proven innovations and changing policies, neighborhoods, schools, and workplaces, Healthy Alabama 2030: Live HealthSmart aims to dramatically improve the health of all Alabamians by elevating the state out of the bottom 10 in national health rankings by 2030.

<sup>1</sup> See link to grand challenge: <u>https://www.uab.edu/plan/grand-challenge</u>

#### **Impact Study**

The impacts generated by UAB daily align with the strategic pillars of the university.

**Education:** With enrollment at nearly 22,000,<sup>2</sup> UAB generates impacts as a result of providing high-quality educational opportunities for these students to remain in the state to receive their higher education degrees. In addition, most of these students (64%) graduate and obtain jobs within the state, generating continued impacts for the state of Alabama. UAB is Forging the Future through new ideas and initiatives in the classroom, the laboratory, the studio, and the clinic. The university engages with the community in meaningful and mutually beneficial collaborations that contribute to the public good. UAB leads in delivering the highest-quality patient-centered integrative care in one of the nation's premier academic medical centers. The university offers diverse students a world-class, socially conscious education to prepare the next generation of citizens and leaders. UAB empowers innovative research, scholarship, and creative activities focused on improving society.

**Research, Innovation, and Economic Development:** UAB supports research efforts on and off campus through direct research with faculty and students and through collaborative partnerships with research institutes such as Southern Research. UAB also connects with the community by providing incubator space and fostering relationships between the community and the university to develop and sustain new businesses locally.

**Community Impact:** Caring, responsive service and community involvement are among UAB's core values. The institution engages and collaborates with a diverse range of individuals and organizations in its local and global communities to advance transformative initiatives, from free clinics to educational seminars, service in advocacy and professional organizations, workforce development, volunteerism, donations, and accessible health care to patients. UAB also connects with its community uniquely by bringing culture and the arts to the community, hospitals, and grade schools and by hosting nationally notable acts on campus. Its people are committed to building the platforms and programs that support the campus and surrounding communities to make Alabama and the world a better place.

**Patient Care:** UAB is a leader in patient care in the region and across the state. UAB Medicine welcomes almost 2 million patient visits a year. As the eighth largest hospital in the United States, the UAB Hospital provides a wide range of services and is the provider of choice for many in Birmingham and surrounding regions. The UAB Health System is dedicated to improving access to sustainable care across the state through affiliate and management agreements and a strategic alliance with other hospitals. UAB also specializes in eye care at the Callahan Eye Hospital, shaping eye care and research across the country and the globe.

This impact study attempts to quantify the economic, employment, state, and local taxes and community impacts UAB brings to the Birmingham region and the state of Alabama. However, multiple intangible impacts generated by UAB cannot be quantified, such as the importance of having an institution of higher education nearby. Both the qualitative and the quantitative impacts are outlined throughout this study to shed light on the depth of the importance of UAB to the region and the state.

<sup>2</sup> This study was completed for FY22. At the time of publication, total enrollment for UAB for fall 2022 had reached 21,639.

### METHODOLOGY



#### **Study Overview**

To quantify the economic impacts generated by UAB within the state of Alabama and operations in the city of Birmingham, UAB retained the consulting firm Tripp Umbach<sup>3</sup> to measure and communicate the university's economic impact and community benefits. This report serves as an essential deliverable for all stakeholders to understand better and identify the significant value, in both quantitative and qualitative terms, of UAB to the Alabama and Birmingham economies. It also demonstrates societal contributions locally, regionally, nationally, and globally.

This report measures the direct and indirect economic impacts of UAB's operations for the Fiscal Year 2022 (FY22). These impacts fall within the following categories:

- Business volume impacts (capital expenditures, operational expenditures, and payroll)
- Direct, indirect, and induced employment impacts
- State and local tax impacts
- Impact of employee and student spending on goods and services (retail/merchandise, hospitality, etc.)
- Impact of alumni on the economy (including wage premiums and job creation)
- Impact of visitor spending on the economy (including wage premiums and job creation)
- Impact of attracting external research funds, commercializing research and regional economic development
- The impact that employees and students have on the community through donations and volunteer
   work

<sup>3</sup> Tripp Umbach is an experienced provider of economic impact studies for academic health organizations, having completed similar studies over the past 30 years for more than 100 medical schools and more than 800 hospitals.

This economic impact analysis measures the effects of direct, indirect, and induced economic, employment, and state and local tax impacts for UAB Academic, UAB Health System, and Southern Research operations throughout the state of Alabama, as well as the Birmingham Combined Statistical Area (CSA).<sup>4</sup>

For the impact analysis, UAB is defined as the combined impacts of UAB Academic, the UAB Health System, and Southern Research. These entities are further defined as:

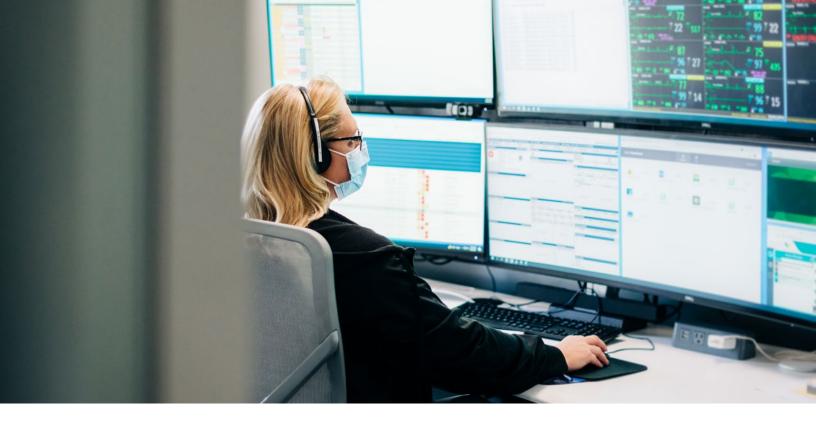
- UAB Academic The UAB Academic impact analysis included all schools and colleges of UAB, including UAB Arts and UAB Athletics.
- UAB Health System The UAB Health System impact analysis included the UAB Medicine Enterprise Corporate Office, the UAB Hospital, the University of Alabama Health Services Foundation (UAHSF), Medical West, Baptist Health System in Montgomery, Triton Health System / Viva Health Group, and UAB Callahan Eye Hospital Authority.
- Southern Research impact analysis included the operations of Southern Research and the capital spending.

Impact findings were generated for UAB Academic and Southern Research at the state and Birmingham CSA geographies; impact findings for the UAB Health System were generated for all of the entities above at the state-level geographic analysis but omitted Baptist Health for the Birmingham CSA analysis (Baptist Health is not located within the Birmingham CSA).



<sup>4</sup> The Birmingham Combined Statistical Area (CSA) was defined as the following Alabama counties: Bibb, Blount, Chilton, Coosa, Cullman, Jefferson, Shelby, St. Clair, Talladega, and Walker.

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#### **Economic Impact Methodology**

The methodology employed in the calculation of these impacts is IMPLAN.<sup>5</sup> Primary data utilized to conduct the analysis was collected directly from each institution analyzed. Data included capital expenditures (five-year average), operational expenditures, employment headcounts, payroll and benefits, taxes, and event information for FY22.<sup>6</sup> The multipliers used in this study were derived from the IMPLAN software. Tripp Umbach's approach to economic impact analysis is conservative by utilizing the industry standard software, IMPLAN, to conduct the impact analysis and using conservative assumptions for individual spending patterns. Tripp Umbach bases assumptions of spending on federal per diem rates.

Economic impact begins when an organization such as UAB spends money. Studies measuring economic impact capture the direct economic impact of an organization's spending, plus additional indirect and induced spending in the economy resulting from direct spending.

Total economic impact measures the dollars generated within the region because of the presence of UAB Academic, UAB Health System, and Southern Research. This includes spending on goods and services with vendors within the region; the spending of its faculty, staff, students, and visitors; and the economic impact generated by businesses that benefit from UAB's spending. It is important to remember that not all dollars spent by an organization remain in its home state. In the form of purchases from out-of-area vendors, dollars that are spent out of the region are not included in UAB's economic impact on the region. The multipliers utilized in this study were derived from IMPLAN.

The impact of UAB can be felt through its academic rigor, its health-care presence, its robust research activity, and its economic activity. For this impact analysis, "UAB" is defined as the combined impacts of UAB Academic, UAB Health System, and Southern Research. It is important to note that all impact values of UAB reported in this study occurred in FY22 unless stated otherwise.

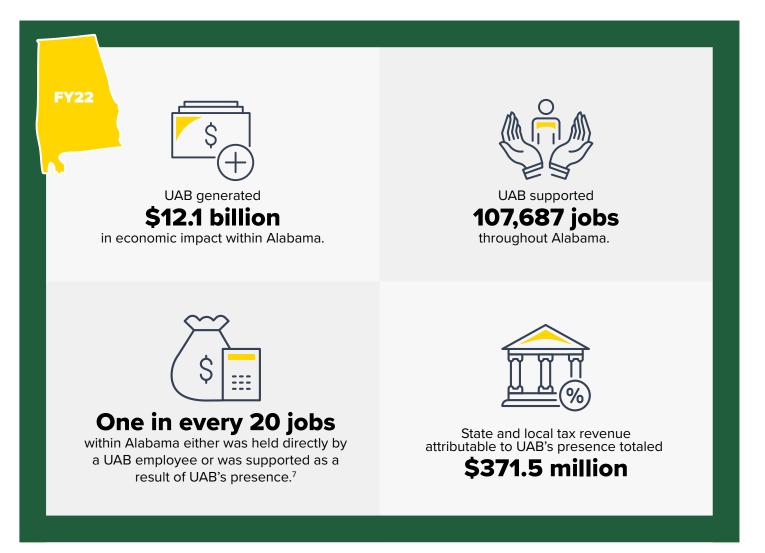
<sup>5</sup> Minnesota IMPLAN Group, Inc., (MIG) is the corporation responsible for producing IMPLAN (IMpact analysis for PLANning) data and software. IMPLAN is a micro-computer-based, input-output modeling system. With IMPLAN, one can estimate Input-Output models of up to 528 sectors for any region consisting of one or more counties. IMPLAN includes procedures for generating multipliers and estimating impacts by applying final demand changes to the model.

<sup>6</sup> FY22 represents the period from October 1, 2021, to September 30, 2022.

# THE UNIVERSITY OF ALABAMA AT BIRMINGHAM TOTAL IMPACT

UAB is a powerhouse for academic, clinical, and research innovation throughout the Birmingham region. UAB's story is remarkable growth in size, quality, reputation, and impact. UAB has transformed from its modest beginnings in 1936 as an extension center into an internationally known doctoral research university and academic medical center. With an enrollment of nearly 22,000 students, almost 28,000 direct employees, and employment of more than 46,804 full-time and part-time individuals and independent contractors, and more than 149,000 active alumni worldwide, UAB's impact can be felt close to home and throughout the world. As the largest single employer in Birmingham and in Alabama, UAB generates significant impacts for its employees and the region in terms of economic, employment, and government revenue impacts daily. UAB, the UAB Health System, and Southern Research drive a substantial regional economy.

UAB is a significant generator of economic, employment, and government revenue activity throughout Alabama. UAB spends in various ways and supports jobs across multiple economic sectors. UAB's presence helps create a diverse and stable economy locally and statewide.



<sup>7</sup> U.S. Bureau of Labor Statistics.



#### **Economic Impact of UAB on the State**

The economic impact is generated when an organization spends money directly in the economy. Direct spending by UAB to vendors and employees also generates additional spending throughout the state, known as indirect and induced impact. UAB affects economic growth in Alabama in two ways:

- 1. Direct expenditures for goods and services by UAB, its faculty, staff, students, and visitors. This spending supports local businesses, which employ local individuals to sell the goods and provide the services that UAB constituencies need.
- 2. Indirect or induced spending within the state of Alabama. The businesses and individuals that receive direct payments re-spend this money within the state, thus creating the need for even more jobs.

In FY22, the direct spending of UAB, in combination with the indirect and induced impacts of dollars being re-spent throughout the state economy, generated more than **\$12.1 billion** in overall economic impact.

(\$4.8 billion in direct impact and \$7.3 billion in indirect and induced impacts)

UAB's presence also affects Alabama through community events and benefits, visitor attraction, student spending, research activity, and economic development initiatives. Multiple additional impacts of UAB are outlined in this report.

The following table outlines the impacts generated by UAB Academic, the UAB Health System, and Southern Research.



#### **Employment Impact of UAB on the State**

In FY22, UAB directly employed or supported 46,804 jobs<sup>8</sup> throughout the state, making UAB Alabama's largest employer. Besides the jobs directly supported by UAB, thousands of additional jobs are indirectly supported because of spending by UAB, its employees, visitors, and patients. Indirect and induced employment is generated when an organization spends money in the economy, when those directly employed by an organization spend their earnings, and when visitors to the organization spend in the economy.

UAB supports thousands of jobs statewide in virtually every sector of the Alabama economy, including construction, business and professional services, restaurants and hotels, information technology, security, and temporary employment companies.

**In FY22, UAB supported 107,687 jobs in Alabama.** These jobs (both full-time and part-time) include not only those directly employed or supported by UAB (46,804 jobs) but also indirect and induced jobs (60,883 jobs) that are supported because of UAB, employee, student, and visitor spending.



### **One in every 20 jobs** within Alabama is either held directly by a UAB employee or supported by UAB's presence.<sup>9</sup>

#### **State and Local Tax Impacts**

It is a common misperception that public universities and nonprofit health systems do not generate tax revenue. **State and local tax impacts attributable to UAB's presence in FY22 totaled more than \$371.5 million** (\$114.9 million in direct impact and \$256.6 million in indirect and induced impact).<sup>10</sup> Through its local spending and direct and indirect support of jobs, UAB's presence stabilizes and strengthens the local and statewide tax base. UAB is integral to the state's economy, generating government revenue, jobs, and spending.

<sup>8</sup> Includes full-time and part-time faculty and staff as well as independent contractors.

<sup>&</sup>lt;sup>9</sup> U.S. Bureau of Labor Statistics.

<sup>&</sup>lt;sup>10</sup> Local and state government revenue impacts for this study were generated through the IMPLAN software with data provided by UAB. This study utilized the IMPLAN methodology; previous UAB economic impact analysis utilized a linear cash-flow methodology. Differences in methodology account for the differences in the final impact numbers between the previous study and the current study. For further explanation of the methodologies used, please refer to Appendix I.

### **TIES TO THE COMMUNITY**



UAB's impact on Birmingham and across Alabama goes beyond the numbers. Economic studies like this usually capture only that which can be assigned an actual number. Still, the value of the university goes far beyond what can be displayed on a spreadsheet. From fighting food insecurity to serving residents during the COVID-19 pandemic, UAB is committed to being a caring partner, a good neighbor, and an economic driver.

UAB Academic, UAB Health System, and Southern Research are strong community partners. The institutions themselves partake in several activities that support local businesses and nonprofits to succeed. As a committed anchor in Birmingham and in Alabama, UAB sees an opportunity in community-campus partnerships that serve the needs of the community and the state.

UAB provides countless opportunities for faculty, staff, and students to serve the community through institutional partnerships, programs, and service-learning projects that significantly impact the community. Through UAB's agenda, the university has developed partnerships with local charitable and community organizations, strengthening the Birmingham area and offering unique educational opportunities for UAB students.

Each UAB faculty, staff, and student has a broad and substantial focus on assisting the communities in which they are a part. UAB provides more extensive community access to faculty experts and adds richness and diversity to the region's activities. Assigning an exact dollar amount to UAB's outreach and community activities is challenging. Still, the lives of those in the surrounding communities are significantly enhanced daily by its presence in many ways.

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The following are a handful of the community activities in which UAB engages with the immediate and broader communities:

**UAB Benevolent Fund:** The UAB Benevolent Fund, established and governed by employees, recognizes the importance of supporting the community. The UAB Benevolent Fund has active partnerships with 124 local nonprofit agencies. The UAB Benevolent Fund looks to transform where residents live, work, and play. A total of 4,462 donors have given \$1.8 million.

**<u>UAB Habitat House:</u>** The UAB Benevolent Fund has completed three Habitat for Humanity homes in the Birmingham area in the past four years. All three homes were funded by employee contributions and built by UAB employees and student volunteers. In 2022, donors gave \$15,336.

**BlazerPulse:** BlazerPulse is a tool that helps connect the dots, fill in gaps, and support internal and community partners by creating a central place for seeking, fulfilling, and documenting community engagement by faculty, staff, and students. The online platform enables UAB to reduce barriers to community engagement, connects university expertise and effort with community needs and partners, and improves the university community's ability to communicate quickly and directly. This tool simplifies access for community partners who have difficulty finding a single point of contact — a front door — when they need support.

**Blazer Kitchen:** The UAB on-campus food bank serves UAB employees and students facing food insecurity with fresh and nonperishable foods. Blazer Kitchen partners with the Community Food Bank of Central Alabama to access low-cost food such as USDA food, food donated through grocery stores, and food available only to food banks. In 2022, donors gave \$123,492.

**Birmingham Promise:** UAB is committed to supporting access to educational opportunities for Birmingham students and developing the city's future leaders and workforce. Providing opportunities for students to receive a world-class, socially conscious education is a pillar of UAB's strategic plan, Forging the Future. UAB is the first academic partner to support the Birmingham Promise scholarship in providing Birmingham City Schools graduates an opportunity to attend the university with a one-to-one tuition scholarship match. In addition, the program directly aligns with the core principles of the University of Alabama System, which is committed to improving the lives and educational opportunities of all Alabama residents.

#### **Charitable Contributions**

UAB Academic directly and indirectly affects the Alabama economy and supports jobs throughout the state. It also touches the lives of residents by way of community support. UAB Academic, its employees, and its students all take active roles in engaging with the local and larger communities, donating time and dollars to support their community.

Tripp Umbach estimates that UAB Academic faculty, staff, and students generated more than **\$56.7 million** annually in charitable donations and volunteer services. These community impacts are in addition to the economic impact of UAB Academic and include:

- \$13.6 million donated to local charitable organizations by UAB Academic faculty, staff, and students.
- **\$43.1 million** in value of volunteer time provided to area communities by UAB Academic faculty, staff, and students.

### THE ARTS AT UAB



The presence of a large higher education institution brings many additional benefits to a region, such as cultural offerings that may be available only to the university. For UAB and Birmingham, this tremendous cultural exposure is provided through the Abroms-Engel Institute for the Visual Arts, Alys Stephens Performing Arts Center, ArtPlay, and UAB Arts in Medicine.

The impact of the arts in the Birmingham community because of UAB is substantial, and Birmingham would be significantly different if not for these events and activities. The following impact findings for UAB Arts quantify the spending and employment of UAB Arts. It is important to remember the intangible impacts that UAB Arts bring daily to the region and state.<sup>11</sup>

#### **Generating Economic Activity**

Direct spending by UAB Arts generates economic activity throughout the state. In FY22, the direct spending of UAB Arts, in combination with the indirect and induced impacts of dollars being re-spent throughout the economy, generated **\$6.6 million** in overall economic impact to the state of Alabama (\$3.6 million in direct impact and \$3 million in indirect and induced impact).

#### **Providing and Supporting Jobs**

In FY22, UAB Arts directly employed more than 70 individuals (full-time or part-time positions). This direct employment generates additional spending throughout the region and state that in turn supports additional indirect and induced jobs created when UAB Arts, its employees, and visitors spend in the region and state. In total, UAB Arts supports **129 jobs** throughout Alabama.

#### **Generating State and Local Government Income**

State and local government revenues attributable to UAB Arts' presence totaled approximately **\$203,808** in FY22.

<sup>&</sup>lt;sup>11</sup> The following impact values for the UAB Arts are a subset of the impact values presented in the UAB impacts of this report. UAB Arts impacts are included in the overall UAB economic, employment, and state and local tax impacts.

# ATHLETICS ATTRACTS IMPACTS ON THE REGION



UAB's pride is great in Birmingham and throughout the state, and this can be seen through its active athletics programs. Supporting 18 Division I sports teams, UAB attracts students and visitors to Birmingham for athletics events. Every year, UAB Athletics events attract visitors to the area who spend on goods and services (athletic merchandise, hotels, restaurants, etc.). In FY22 alone, 194,863 tickets were sold to UAB Athletics events. The spending associated with these visitors, along with the direct spending of the UAB Athletics Department, generate significant impacts for the Birmingham region and the state.<sup>12</sup>

#### **Generating Economic Activity**

Direct spending by UAB Athletics generates economic activity throughout the state. In FY22, the direct spending of UAB Athletics, in combination with the indirect and induced impacts of dollars being respent throughout the economy, generated **\$58 million** in overall economic impact to the state (\$19.6 million in direct impact and \$38.4 million in indirect and induced impact).

#### **Providing and Supporting Jobs**

In FY22, UAB Athletics directly employed 132 individuals (full-time or part-time positions). This direct employment generates additional spending throughout the region and state that in turn supports additional indirect and induced jobs created when UAB Athletics, its employees, and visitors spend in the region and state. In total, UAB Athletics supports **462 jobs** throughout Alabama.

#### **Generating State and Local Government Income**

State and local government revenues attributable to UAB Athletics' presence totaled approximately **\$2.5** million in FY22.

<sup>12</sup> The following impact values for the UAB Athletics are a subset of the impact values presented in the UAB impacts of this report. UAB Athletics impacts are included in the overall UAB economic, employment, and state and local tax impacts.

# UAB RESEARCH LEADING TO INNOVATIVE DISCOVERY



Research is foundational to UAB's mission. UAB secures more research funding every year than all other universities in Alabama combined, bringing high-impact innovations, jobs, and tremendous economic benefit to Birmingham, Alabama, and beyond. For FY22, UAB ranks among the top 5 percent of U.S. universities based on all federal research and development expenditures and in the top 1 percent of all public, private, and international organizations funded by the National Institutes of Health (NIH).

UAB is among the youngest universities in the United States to be ranked as a Tier 1 research university. From its start, UAB has embodied a spirit of discovery that advances knowledge, solves real-world problems, and drives economic development. The collective strength of UAB's research enterprise generated more than **\$715 million** in total research grants and extramural awards, up \$67.8 million from the previous year. This represents a **10.5 percent increase** for the year and a nearly 50 percent increase — an additional \$237 million — over the past five years. Research at UAB spans the spectrum and mingles disciplines to investigate, reveal, and apply the knowledge that changes individuals' lives and communities' fates.

UAB's research operations are an essential driver of the university's total economic impact. In FY22, UAB directly spent more than **\$231.2 million** on research activity in academic and clinical environments. Research at UAB generates local and statewide impacts through the spending of UAB and the employment of research faculty, staff, and students.<sup>13</sup> UAB's research expenditures — an indicator of activity and growth — and indirect and induced economic activity resulting from those expenditures totaled nearly **\$429.6 million** during FY22. UAB's spending of research dollars represents only the tip of the iceberg as a growing ecosystem of companies in the biomedical, advanced manufacturing, information technology, and bioscience industries generates millions in additional economic impact annually throughout the state because of UAB. While beyond the scope of this study, research commercialization, spin-off companies from research conducted at UAB, and companies attracted to Alabama to partner with UAB generate billions in additional economic impact.

<sup>13</sup> The following impact values for the UAB Research are a subset of the impact values presented in the UAB impacts of this report. UAB Research impacts are included in the overall UAB economic, employment, and state and local tax impacts.

#### **Generating Economic Activity**

In FY22, the direct spending of UAB Research, in combination with the indirect and induced impacts of dollars being re-spent throughout the economy, generated **\$429.6 million** in overall economic impact to Alabama (\$231.2 million in direct impact and \$198.4 million in indirect and induced impact).<sup>14</sup>

#### **Providing and Supporting Jobs**

In FY22, UAB Research directly employed 4,312 researchers (full-time or part-time positions). This direct employment generates additional spending throughout the region that in turn supports additional indirect and induced jobs created when UAB Research, its employees, and visitors spend in the region and state. In total, UAB Research supports **5,494 jobs** throughout Alabama.

#### **State and Local Tax Impact**

State and local government revenues attributable to UAB Research's presence totaled approximately **\$10.2 million** in FY22.



<sup>14</sup> The economic impact of the UAB Research activity for this study was calculated as a result of the research expenditures of UAB in FY22. Previous UAB studies estimated the research impacts of all research funding as opposed to the expenditures for a given year. Further explanation is provided in Appendix I.





#### **Construction Impacts**

A new <u>UAB Biomedical Research and Psychology Building</u> supported by two **\$76** million federal appropriations has received stage 1 approval by the UAB System Board of Trustees. The project is also supported by **\$29** million from the College of Arts and Sciences and UAB.

During the construction period, the **\$105 million** undertaking is projected to generate an overall economic impact of **\$179.6 million**, support **1,142 jobs**, and produce nearly **\$3.9 million** in state and local tax impact. This new space will increase the economic impact of research at UAB.

New wet and dry research laboratories and research support spaces in the new Biomedical Research and Psychology Building will provide the flexibility necessary for investigators from various fields and disciplines to utilize the space. Flexibility also will allow for optimized space utilization, enhancing interdisciplinary collaboration, and sharing scientific equipment and resources. This building will provide that additional space, which will be critical to expanding UAB's research portfolio.

In 2022, UAB announced a new <u>Genomics Building</u> project is being funded with **\$50 million** from the state of Alabama via the Public School and College Authority — the largest investment from the state in a university facility — and an additional \$5 million from Jefferson County along with UAB donors.

During the construction period, the **\$55 million** undertaking is projected to generate an overall economic impact of **\$94.1 million**, support **598 jobs**, and produce nearly **\$2.1 million** in state and local tax impact. This new space will increase the economic impact of research at UAB.

This new building will allow UAB to recruit upward of 75 additional investigators and some 350 new support staff over the next five-plus years to work alongside the talented and renowned researchers already in place. The leading-edge research conducted in the facility will attract an estimated **\$100 million** in additional research funding annually.

This building, a signature investment for the state, will have a tangible impact on the Alabama economy and the long-term health of its residents far beyond the dollars given. It will stimulate significant strides in science and medicine and serve as a wise investment with a great return that serves all Alabamians.

Subsequent to September 30, UAB received an additional **\$76 million** from the federal government. This additional funding will generate an overall economic impact of **\$129.9 million**, support **826 jobs**, and produce nearly **\$2.8 million** in state and local tax impact. The allocation of these funds to construction is still underway.

#### **Research Commercialization**

Research and innovation provide benefits beyond the economic and employment impacts generated by UAB operations. Not included in this economic impact of UAB Research is the impact of commercialization activities such as patents, licensing, and spin-off companies. Significant additional economic expansion and employment are created through the commercialization of research activities within Alabama executed by the university and its collaborating partners.

In October 2013, UAB streamlined many of its commercialization operations and procedures, including the UAB Research Foundation ("UABRF") and the UAB Institute of Innovation and Entrepreneurship, and in 2015, their joint operations were rebranded as the Bill L. Harbert Institute for Innovation and Entrepreneurship ("HIIE"). While the UABRF remains the assignee of all intellectual property developed at UAB and is the legal entity for all licenses and other transactions, the HIIE was created to foster an entrepreneurial community and innovative ecosystem. The HIIE not only has integrated the more traditional technology transfer activities of the UABRF but also functions as a resource center for UAB as it continues to advance its role in innovation, entrepreneurship, and economic development.

The HIIE serves as a nexus for UAB innovation and includes the engagement of faculty and students in creating new and experiential learning opportunities across disciplines in business and entrepreneurship. The HIIE can facilitate the rapid development of innovative ideas, products, and technologies and better prepare faculty, students, and researchers to be leaders and entrepreneurs in an increasingly technology-driven ecosystem.

UAB's partnership with the Bill L. Harbert Institute for Innovation and Entrepreneurship provides valuable opportunities for entrepreneurs across the UAB ecosystem to commercialize inventions, learn the legal and intellectual property aspects of entrepreneurship, and secure support for their entrepreneurial projects. UAB's partnership with the Birmingham Entrepreneurial Center has produced the most extensive high-tech business incubator in the Southeast — Innovation Depot, home to **138 client companies** with a sales impact of **\$1.7 billion** during the past five years and approximately **2,623 people** working at the facility.

#### Standout Numbers for 2022:

- \$5.6 million in revenue generated
- 8th straight year of profitability
- 8 U.S. patents issued
- 4 startups launched
- 53 innovative fellows
- 108 intellectual property disclosures
- 7 UAB startups received grants from Alabama Innovation Corporation<sup>15</sup>
- 39 licenses executed
- 417 inventors engaged

UAB Collat School of Business' entrepreneurship program has earned the top award in a national competition of entrepreneurship programs. The United States Association for Small Business and Entrepreneurship (USASBE) honored UAB's program with the prestigious 2022 Model Emerging Program Award at the association's annual conference in January 2022. USASBE is the country's premier professional organization for entrepreneurship educators and has been promoting entrepreneurship education worldwide for 40 years.

<sup>&</sup>lt;sup>15</sup> Seven UAB startups received grants from the Alabama AeroNeph Therapeutics Inc., AI Metrics LLC, Endomimetics LLC, Reliant Glycosciences LLC, Sunfire Biotechnologies LLC, Trialtus Bioscience LLC, and TruSpin Nanomaterial Innovation Inc.

# UAB GRADUATES CONTINUE TO IMPACT THE ECONOMY



UAB is a world-renowned institution that contributes a significant amount to the advancement of society. UAB graduates work in countries worldwide, allowing the university's reach to be felt on a global scale. UAB alumni play a significant role in both domestic and international economies. UAB is shaping a skilled workforce that will transform and lead an emerging global economy by educating the next generation of highly educated global citizens.

#### **UAB Enriches the Current and Future Workforce**

On average, UAB confers approximately 6,300 degrees each year for undergraduate and graduate students, which positions UAB to provide quality education to the next generation of leaders. By educating students, UAB adds to the talent pool of human capital worldwide. A degree from UAB increases a graduate's value, productivity, and earning potential in the job market.

Based on data on median annual earnings for university graduates, a bachelor's degree earned at a university increases a graduate's salary compared with a high school diploma by an average of about \$27,900. In contrast, a master's degree earned at a university increases a graduate's salary compared to a bachelor's degree by an average is \$32,000 for master's and \$45,000 for a doctoral.

In the academic year 2021-2022, UAB awarded 2,932 undergraduate degrees. Historically, 64 percent of UAB graduates remain in the state to work after completing their degree. For the undergraduate class of 2022, the increased earning power in their first year of employment equates to the creation of **\$53.2 million** in salary. A similar analysis applied to the 3,116 advanced (master's certificate, doctoral, and post-doctoral) degrees awarded in the academic year 2021-2022 equates to another **\$72.8 million** of value created for their first year of employment.

Therefore, on an annual basis, UAB **creates \$126.1 million of additional earning power** for members of each graduating class. This impact is in addition to the impact of the university's operations.

<sup>16</sup> Tripp Umbach estimates based on Bureau of Labor Statistics Data.

#### **Alumni Generate Impact for the Region**

The contributions of UAB graduates are critically important to the economic vitality of the state, across the United States, and internationally. UAB alumni number more than 149,000 and reside in all 50 states and in many countries. Given that 64 percent of the alumni of UAB stay in Alabama after graduating, this equates to approximately 95,360 alumni living, working, and generating impact within Alabama.

Over a lifetime of employment (40 years), UAB undergraduate alumni who remain in Alabama generate **\$39.8 billion** that would otherwise have been unachieved had these students not pursued an undergraduate degree. Likewise, over a lifetime of employment, UAB graduate alumni who remain in the state generate **\$54.2 billion**, which would otherwise not have been achieved had these students not pursued a graduate degree.<sup>17</sup>

In total, all UAB alumni living in Alabama generate an increased earning power of **\$94 billion over 40 years**. By teaching and retaining students within the state who utilize their education, UAB graduates are generating impacts every day.



<sup>17</sup> Accounting for forgone income while attending the university, future periods of unemployment, time out of the labor force for child rearing, and other life events, total earning power over 40 years of employment was adjusted down by 80 percent.

# THE UAB ACADEMIC ENTERPRISE TOTAL IMPACT

#### Introduction

The University of Alabama at Birmingham is a world-renowned institution offering more than 120 areas of study across 12 undergraduate and graduate schools/colleges:

- College of Arts and Sciences
- Collat School of Business
- Heersink School of Medicine
- Honors College
- School of Dentistry
- School of Education
- School of Engineering

- School of Health Professions
- School of Medicine
- School of Nursing
- School of Optometry
- School of Public Health
- The Graduate School

With nearly 22,000 enrolled students and more than 149,000 alumni living throughout the United States and world, the reach of UAB students and graduates and their outstanding educational experience is expansive. Every day, the UAB Academic Enterprise programs generate impacts to the Birmingham region and the state by educating students and attracting future scholars. The impacts of the UAB Academic Enterprise activities are outlined below.

#### **Generating Economic Impact for the State**

The UAB Academic Enterprise is a powerhouse for economic activity. The UAB Academic Enterprise spends in a variety of ways and across multiple economic sectors throughout Alabama. The presence of the UAB Academic Enterprise helps to create a diverse and stable economy locally as well as statewide.

The UAB Academic Enterprise direct spending to vendors and employees helps to generate additional spending in the area and throughout the state. The UAB Academic Enterprise operations directly or indirectly impact residents throughout Alabama every day. In FY22, the direct spending of the UAB Academic Enterprise, in combination with the indirect and induced impacts of dollars' being re-spent throughout the state economy, generated more than **\$5.5 billion** in overall economic impact.

As a result of expenditures on goods and services by the UAB Academic Enterprise, its faculty, staff, students, and visitors, the overall economic impact of the UAB Academic Enterprise operations on Alabama in FY22 totaled **\$5.5 billion** (\$1.4 billion in direct impact and \$4.1 billion in indirect and induced impact).



#### **Generating Impact in the Region**

The UAB Academic Enterprise direct spending also generates significant economic activity throughout the Birmingham region. In FY22, the UAB Academic Enterprise direct spending in combination with the indirect and induced impacts of dollars being re-spent throughout the regional economy generated **\$3.5 billion** in overall economic impact to the Birmingham region (\$1.1 billion direct impact and \$2.4 billion indirect and induced).

#### **Creating and Sustaining Jobs Throughout the State**

In FY22, the UAB Academic Enterprise supported **49,045 jobs** in Alabama. These jobs (both full-time and part-time) include not only direct employment by the UAB Academic Enterprise (15,758 jobs) but also indirect and induced jobs (33,287) that are supported as a result of the UAB Academic Enterprise, employee, student, and visitor spending.

The UAB Academic Enterprise directly supported **15,758 jobs** (full-time, part-time, and independent contractors) during FY22. The UAB Academic Enterprise supports thousands of jobs statewide in virtually every sector of the Alabama economy, such as construction, business and professional services, restaurants and hotels, information technology, security, and temporary employment companies. These indirect and induced jobs (33,287 jobs) support the more than 15,758 jobs held by Alabama residents directly employed by the UAB Academic Enterprise.

#### **Supporting Jobs in the Region**

In FY22, the UAB Academic Enterprise directly employed 14,584 individuals (full-time, part-time, and independent contractors) living, and therefore spending dollars, in the Birmingham region. This direct employment generates additional spending throughout the region that in turn supports additional indirect and induced jobs created when the UAB Academic Enterprise, its employees, students, and visitors spend in the region. In total, the UAB Academic Enterprise supports **34,435 jobs** throughout the Birmingham region.

#### **State Tax Impact**

It is a common misperception that public universities do not generate tax revenue. State and local tax revenues attributable to the presence of the UAB Academic Enterprise totaled **\$158.8 million** in FY22. Through its local spending and direct and indirect support of jobs, the presence of the UAB Academic Enterprise stabilizes and strengthens the local and statewide tax base. The UAB Academic Enterprise is an integral part of the state's economy, generating revenue, jobs, and spending.

#### **Local Tax Impact**

The local tax impact attributable to the presence of the UAB Academic Enterprise totaled **\$112.6 million** in FY22 for the Birmingham region.

### THE UAB HEALTH SYSTEM TOTAL IMPACT



#### Introduction

UAB Hospital, the flagship hospital of the UAB Health System, is the eighth-largest hospital in the nation.<sup>18</sup> UAB Hospital is Alabama's largest hospital, with 1,207 beds. The hospital was also again named the best hospital in Alabama by U.S. News & World Report in 2021. Eight adult specialties were ranked among the best in the nation, with seven within the top 30 and one ranked 31st. The magazine also noted UAB Hospital as "high-performing" in 14 adult procedures/conditions in the 2021-2022 Best Hospital rankings.

The impact analysis of the UAB Health System included all seven component parts of the organization: the UAB Medicine Enterprise Corporate Office, the UAB Hospital, University of Alabama Health Services Foundation (UAHSF), Medical West, Baptist Health System in Montgomery, Triton Health System / Viva Health Group, and the Callahan Eye Hospital. Besides the overall impact analysis for the UAB Health System, separate impact analyses were conducted for each of the component organizations. These impact analyses can be found in Appendices A through G.

#### **Economic Impact for the State**

Direct spending by the UAB Health System generates economic activity throughout Alabama. In FY22, the direct spending of the UAB Health System in combination with the indirect and induced impacts of dollars being re-spent throughout the economy generated **\$6.4 billion** in overall economic impact (\$3.5 billion direct impact and \$2.9 billion indirect and induced).

Economic impact is generated by the UAB Health System when it spends on goods and supplies, when patient care is provided, and when it pays its employees. These employees then generate indirect and induced impacts when they spend their paychecks on goods and services in the local economy such as food, personal goods, and mortgage/rent. The total impact of all of this spending amounts to the **\$6.4 billion** economic impact of the UAB Health System in the state.

<sup>18</sup> Becker's Hospital Review.



#### **Economic Impact for the Region**

Direct spending by the UAB Health System generates economic activity throughout the Birmingham region. In FY22, the direct spending of the UAB Health System in combination with the indirect and induced impacts of dollars being re-spent throughout the economy generated **\$4.7 billion** in overall economic impact (\$2.2 billion direct impact and \$2.5 billion indirect and induced).

#### **Employment Impact in the State**

In FY22, the UAB Health System directly employed 22,983 individuals (full-time or part-time positions). This direct employment generates additional spending throughout the state that in turn supports additional indirect and induced jobs created when the UAB Health System, its employees, patients, and visitors spend in the region and state. In total, UAB Health System supports **57,128 jobs** (22,983 direct and 34,145 indirect and induced jobs) throughout Alabama.

#### **Employment Impact in the Region**

In FY22, the UAB Health System directly employed 22,983 individuals (full-time or part-time positions) living, and therefore spending dollars, in the Birmingham region. This direct employment generates additional spending throughout the region that in turn supports additional indirect and induced jobs created when the UAB Health System and its employees, patients, and visitors spend in the region. In total, UAB Health System supports **37,314 jobs** throughout the Birmingham region.

#### **Tax Impact for the State**

Government revenues attributable to the UAB Health System's presence totaled more than **\$206.2 million** (\$59.1 million in direct impact and \$147.1 million in indirect and induced impact) in FY22. This income is generated when the UAB Health System and its employees, health professional students, patients, and visitors spend on goods in the region (e.g., at restaurants, retail, hotels/motels, etc.).

#### **Tax Impact for the Region**

State and local tax revenues attributable to the UAB Health System's presence totaled **\$138.5 million** (\$14 million in direct impact and \$124.5 million in indirect and induced impact) in FY22 for the Birmingham region.

#### **Connecting With the Community**

The UAB Health System is intimately engaged with the community through a number of events, donating to local organizations and volunteering time to provide care to residents.

Besides all of the care provided to the community by the organization, UAB Health System employees engage in community outreach on their own time as well. It is estimated that the UAB Health System physicians and staff generate more than **\$57.7 million** annually in charitable donations and volunteer services every year. These benefits are in addition to the \$6.4 billion annual economic impact of the UAB Health System and include the following:

- **\$19.7 million** donated to local charitable organizations in FY22.
- **\$38 million** in value of volunteer time provided to area communities in FY22.



#### **COVID-19 Response**

During the pandemic, UAB provided care for hundreds of COVID-19 patients, prioritized research to develop therapeutics and treatments to fight the disease and used remote and hybrid learning to keep students engaged. UAB employees were provided access to resources such as personal protective equipment, mental health tools (including wellness days), and assistance resources (e.g., food supplementation, child care support, etc.).

#### UAB COVID-19 Highlights:

- UAB experts prepared treatment guidelines and best practices and shared them with hospitals across the state.
- UAB supply chain leaders provided support and advice to the governor's office, the Alabama Hospital Association, and Jefferson County's supply chain efforts to secure personal protective equipment (PPE), not just for UAB but for all health care providers across the state.
- UAB pulmonologists helped the state evaluate proposals to purchase additional ventilators and made recommendations on the most appropriate options.
- As the pandemic grew, UAB worked with state and local health departments, emergency management agencies, and Jefferson County on a plan to transform the Sheraton Birmingham Hotel's 377 rooms into treatment rooms for patients in the event of a surge.
- Plans were also coordinated with the U.S. Army Corps of Engineers on creating two 36-bed acute care units, if needed, in the Birmingham-Jefferson Convention Complex.
- UAB physicians served on advisory panels and task forces to collaborate with and provide critical medical insights with local and state officials.
- The UAB Health System and the Division of Geriatrics created a five-point plan to help nursing homes cope with the pandemic. Town hall meetings with the Alabama Nursing Home Association, Alabama Hospital Association, and state and local health departments resulted in a care continuum to develop strategies to fight the spread of infection in nursing facilities and provide a best practices care plan for testing and treating infected patients.

UAB has been there through the beginning and will be there through the end of the COVID-19 pandemic. The university is uniquely positioned to deliver care to people with COVID and as a partner in disseminating knowledge to the medical community. Amid the many challenges of the pandemic, UAB is playing a leading role in helping Alabama respond to COVID.

### SOUTHERN RESEARCH TOTAL IMPACT



#### Introduction

Founded in Birmingham in 1941, Southern Research is a nonprofit scientific research organization that employs more than 250 scientists and professional staff. Over the past 80 years, the organization has helped shape modern cancer treatment practices, including developing seven FDA-approved cancer drugs and testing more than half of the active chemotherapies in the United States. Led by a worldclass executive team, Southern Research's scientists and professional staff comprise one of the nation's premier nonprofit translational research institutes.

Southern Research has conducted more than \$30 million in coronavirus research over the past two years, including collaborating on a COVID-19 vaccine currently in clinical trials, conducting thousands of PCR tests, and refining the underlying chemistry of critical treatments.

Under the banner "Be the Breakthrough," every member of its community of science plays a critical role in driving breakthroughs that improve our community and help heal the world. The team carries this noble mission with energy and resolve, acting as conduits between science and society.

Southern Research receives funding from multiple public and private sources, attracting "fresh" dollars into the Alabama and Birmingham economies. Funding partners include the National Cancer Institute, National Institutes of Health, the U.S. Department of Defense, the U.S. Department of Energy, NASA, hospitals, major aerospace firms, utility companies, and other private and government organizations.

#### **Southern Research Impact Overview**

Through its operations and spending by the institution, its employees, and visitors every year, Southern Research generates and supports:

- **\$221.7 million** in economic impact to the state.
- **1,514 jobs** throughout the state.
- **\$6.5 million** in state and local government revenue to the state.
- More than **\$1 million** in community benefit through donations and volunteer work.

#### **Generating Economic Activity in the State**

Direct spending by Southern Research generates economic activity throughout Alabama. In FY22, the direct spending of Southern Research in combination with the indirect and induced impacts of dollars being re-spent throughout the economy generated **\$221.7 million** in overall economic impact (\$99.7 million direct impact and \$122 million indirect and induced) to the state.

Southern Research generates economic impact when it spends on goods and supplies and when it pays its employees. These employees then generate indirect and induced impacts when they spend their paychecks on goods and services in the local economy such as food, personal goods, and mortgage/ rent. The total impact of all of this spending amounts to the **\$221.7 million** economic impact of Southern Research in Alabama.

#### **Economic Impact in the Region**

Southern Research direct spending also generates economic activity throughout the Birmingham region. In FY22, the Southern Research direct spending in combination with the indirect and induced impacts of dollars being re-spent throughout the regional economy generated **\$167.3 million** in overall economic impact to the Birmingham region (\$76.2 million direct impact and \$91.1 million indirect and induced).

#### **Providing and Supporting Jobs Across the State**

In FY22, Southern Research directly employed 405 individuals (full-time or part-time positions). This direct employment generates additional spending throughout the state that in turn supports additional indirect and induced jobs created when Southern Research, its employees, and visitors spend in the region and state. In total, Southern Research supports **1,514 jobs** (648 direct and 866 indirect and induced jobs) throughout Alabama.

#### **Employment Impact in the Birmingham Region**

In FY22, Southern Research directly employed 236 individuals (full-time or part-time positions) living, and therefore spending dollars, in the Birmingham region. This direct employment generates additional spending throughout the region that in turn supports additional indirect and induced jobs created when Southern Research, its employees, and visitors spend in the region. In total, Southern Research supports **846 jobs** throughout the Birmingham region.

#### **Tax Impact for the State**

State taxes attributable to Southern Research's presence totaled nearly **\$6.5 million** (\$1.5 million in direct impact and \$5 million in indirect and induced impact) in FY22. This income is generated when Southern Research, its employees, and visitors spend on goods in the region (e.g., at restaurants, retail, hotels/motels, etc.).

#### **Tax Impact for the Region**

Local taxes attributable to Southern Research's presence totaled **\$5.1 million** in FY22 for the Birmingham region.

#### **Connecting With the Community**

Southern Research is intimately engaged with the community. Southern Research faculty and staff generate more than an estimated **\$1 million** annually in charitable donations and volunteer services every year. These benefits are in addition to the **\$221.7 million** annual economic impact of Southern Research to the state and include the following:

- **\$404,125** donated to local charitable organizations in FY22.
- **\$600,000** in value of volunteer time provided to area communities in FY22.

#### **Construction Impact**

Southern Research is investing **\$108 million** to modernize campus and grow biotech. The goal is to build a biotech innovation center to anchor an urban research park. During the construction period, the **\$108 million** undertaking is projected to generate an overall economic impact of **\$184.7 million**, support **1,174 jobs**, and produce nearly **\$4.1 million** in state and local tax impact. This new facility will double lab space to study infectious diseases and expand capacity to research chronic diseases.



# CARING FOR RURAL AND UNDERSERVED COMMUNITIES

UAB Medicine partners with other hospitals in the state to bring the right health care resource to the patient and maximize the specialty care services of UAB Hospital. UAB Medicine is strengthening Alabama's rural hospitals with support from its statewide network, access to simulation training programs, and specialty care in their communities via telehealth. Without UAB, hospitals in rural Alabama would be forced to close, leaving the most vulnerable without access to hospital care. UAB has been awarded a grant from the Centers for Medicare & Medicaid Services to address disparities in health equity by improving access to quality health care in rural communities. This funding will help improve access to telehealth services for the more than 2 million Alabamians living in rural areas, with the goal of improving access, quality, and health outcomes.

#### **Bridging the Gap in Health**

The UAB Minority Health & Health Equity Research Center (MHERC) generates and disseminates research knowledge from biomedical, behavioral, and social sciences to reduce the health disparities experienced by vulnerable populations and disadvantaged communities locally, regionally, and nationally. Located in the heart of the region, the UAB Minority Health & Health Equity Research Center provides a critical connection between investigators and vulnerable populations. UAB's research and training programs enable young scientists to pursue research on health disparities, while our community outreach program identifies urgent health questions and needs and implements evidence-based strategies to reduce health disparities and promote health equity.

#### **The Grand Challenge**

UAB partakes in hundreds of activities that support local businesses and nonprofits in the immediate Birmingham region and statewide. Live HealthSmart Alabama, the first recipient in UAB's Grand Challenge, is an example of UAB's commitment to serving underserved communities throughout the state. Live HealthSmart Alabama is a comprehensive program that works with communities, businesses, schools, faith-based organizations, and nonprofits to enhance the health of Alabamians. Not only does Live HealthSmart Alabama offer meaningful guidelines for improving individual health and support neighborhood improvements, but a vital goal of the initiative is to help organizations meet the criteria to earn the designation of a Live HealthSmart Alabama business, school, or restaurant. Live HealthSmart Alabama has made changes in policy, systems, and the built environment that help bring about improvement in critical areas such as prevention and wellness, healthy eating, physical activity, and education. Live HealthSmart Alabama has already implemented several initiatives within the selected demonstration zones.

- In June 2021, Live HealthSmart Alabama celebrated phase one improvements in the Kingston community. These improvements culminated a yearlong implementation project to improve the community's infrastructure, including new and improved sidewalks, Americans with Disabilities Act-compliant street ramps, trees and flowers in Stockham Park, painted murals, new bus shelters, improved lighting in hard-to-see areas, and more.
- And in September 2021, Live HealthSmart Alabama along with neighborhood residents celebrated work done in Titusville and the creation of Birmingham's first Neighborway. The Neighborway which runs along Kappa Avenue South and Second Avenue South from Memorial Park to the Villas at Titusville connects a full mile of the Titusville community. This low-speed street can be safely shared by people who are biking, walking, driving, skating, jumping rope, or engaging in other fun activities.
- The Mobile Wellness van, which launched in October 2021, will also help to improve prevention and wellness access to residents in underserved communities.
- The Live HealthSmart Alabama Mobile Market, which provides healthy, fresh, and affordable food to neighborhoods with limited access to traditional grocery stores, recently expanded its footprint throughout the Birmingham area and will soon extend its model beyond Birmingham to other Alabama communities. Shoppers can purchase proteins, fruits, vegetables, grains, and a variety of other healthy food options using cash, card, EBT, or Double Up Bucks.
- In April 2022, Live HealthSmart Alabama hosted its first Spring Into Wellness event, which offered the Birmingham community access to free health screenings and services.

#### **New Cooper Green Facility**

UAB is moving forward with plans to replace the Cooper Green Mercy Hospital with a five-story, state-of-the-art \$120 million medical clinic that will total 207,000 square feet.

During the construction period, the **\$120 million** undertaking is projected to generate an overall economic impact of **\$205.2 million**, support **1,305 jobs**, and produce nearly **\$4.5 million** in state and local tax impact. The building will feature new equipment and includes plans for a magnetic resonance imaging machine, which will ease scheduling for Cooper Green patients to get an MRI and improve access to care. An expanded rehabilitation suite will include a covered outdoor section for developing outdoor skills such as navigating curbs and different ground surfaces.

This new Cooper Green facility will continue the mission of serving residents of the community regardless of their ability to pay. The new design will have an immediate impact on quality of care and health care outcomes, leading to health care cost savings and a healthier population.

The centerpiece of UAB's clinical enterprise, UAB Hospital, is located in Birmingham's Medical District. In the heart of UAB's major research centers and clinics, the 1,207-licensed-bed hospital was recently ranked the best hospital in Alabama and one of the top hospitals in the United States by U.S. News & World Report. UAB Hospital is nationally ranked in eight adult specialties and rated high-performing in three adult specialties and 17 procedures and conditions in the 2022 Best Hospital rankings.

With more than 1 million patient visits every year, groundbreaking research activity being conducted throughout the organization, and educational training for the physician and health care professional workforce of the future, UAB Hospital is a national leader in patient care. UAB Hospital is a major center for clinical research and the home of some of the top medical programs in the United States. Faculty physicians, nursing staff, and support personnel are committed to providing world-class care to every patient.

UAB physicians are acknowledged leaders in their specialty fields. They collaborate across disciplines to reach and complete the best personalized treatment plan for each patient, drawing on the vast academic and research resources of UAB to treat even the most difficult cases. Among them is the O'Neal Comprehensive Cancer Center at UAB, the only one in a five-state region.

With its wide range of clinical, research, and academic offerings, UAB Hospital generates significant annual impacts to the region and state. The following impact values for UAB Hospital are a subset of the impact values presented in the UAB Health System section of this report. UAB Hospital is one of seven components of the UAB Health System presented previously.

#### **Generating Economic Activity**

Direct spending by UAB Hospital generates economic activity throughout Alabama. In FY22, the direct spending of UAB Hospital in combination with the indirect and induced impacts of dollars being re-spent throughout the economy generated **\$2.3 billion** in overall economic impact (\$1.2 billion in direct impact and \$1.1 million in indirect and induced impact).

#### **Providing and Supporting Jobs**

In FY22, UAB Hospital directly employed 16,344 individuals (full-time or part-time positions). This direct employment generates additional spending throughout the state that in turn supports additional indirect and induced jobs created when UAB Hospital and its employees spend in the region and state. In total, UAB Hospital supports **27,009 jobs** throughout Alabama.

#### **State and Local Tax Impact**

State and local tax impacts attributable to UAB Hospital's presence totaled more than **\$84.1 million** in FY22.



# APPENDIX B: THE UNIVERSITY OF ALABAMA HEALTH SERVICES FOUNDATION TOTAL IMPACT

Founded in 1973, the University of Alabama Health Services Foundation P.C. (UAHSF) comprises multiple clinics and a network of suburban clinics that offer medical services in more than 35 specialties, as well as administrative, technical, and support departments. UAHSF plays a vital and visible role in delivering expert care within UAB's internationally known academic medical center. UAHSF is known for high-quality patient care and the compassion, dedication, and excellence of its employees.

The following impact values for UAHSF are a subset of the impact values presented in the UAB Health System section of this report. UAHSF is one of seven components of the UAB Health System presented previously.

#### **Generating Economic Activity**

UAHSF's direct spending generates economic activity throughout Alabama. In FY22, UAHSF's direct spending in combination with the indirect and induced impacts of dollars re-spent throughout the economy generated **\$1.5 billion** in overall economic impact (\$842.1 million in direct impact and \$657.9 million in indirect and induced impact).

#### **Providing and Supporting Jobs**

In FY22, UAHSF directly employed 4,945 individuals (full-time or part-time positions). This direct employment generates additional spending throughout the state that in turn supports additional indirect and induced jobs created when UAHSF and its employees spend in the region and state. In total, UAHSF supports **9,096 jobs** throughout Alabama.

#### **State and Local Tax Impact**

State and local tax impacts attributable to UAHSF's presence totaled **\$43.6 million** in FY22.



# APPENDIX C: UAB MEDICINE ENTERPRISE CORPORATE OFFICE TOTAL IMPACT

The following impact values for the UAB Medicine Enterprise Corporate Office are a subset of the impact values presented in the UAB Health System section of this report. The UAB Medicine Enterprise Corporate Office is one of seven components of the UAB Health System presented previously.

#### **Generating Economic Activity**

UAB Medicine Enterprise Corporate Office direct spending generates economic activity throughout Alabama. In FY22, the UAB Medicine Enterprise Corporate Office's direct spending in combination with the indirect and induced impacts of dollars being re-spent throughout the economy generated **\$135.6 million** in overall economic impact (\$72.2 million in direct impact and \$63.4 million in indirect and induced impact).

#### **Providing and Supporting Jobs**

In FY22, the UAB Medicine Enterprise Corporate Office directly employed 249 individuals (full-time or part-time positions). This direct employment generates additional spending throughout the state that in turn supports additional indirect and induced jobs created when the UAB Medicine Enterprise Corporate Office and its employees spend in the region and state. In total, the UAB Medicine Enterprise Corporate Office supports **904 jobs** throughout Alabama.

#### **State and Local Tax Impact**

State and local tax impacts attributable to the UAB Medicine Enterprise Corporate Office's presence totaled more than **\$3.8 million** in FY22.

# APPENDIX D: TRITON HEALTH SYSTEMS / VIVA HEALTH GROUP TOTAL IMPACT

Triton Health Systems offers customers competitive benefits, outstanding value, and quality providers. Since its establishment in 1995, Viva Health has grown to be one of the largest health plans in Alabama.

The following impact values for Triton / Viva are a subset of the impact values presented in the UAB Health System section of this report. Triton / Viva is one of seven components of the UAB Health System presented previously.

#### **Generating Economic Activity**

Direct spending by Triton / Viva generates economic activity throughout Alabama. In FY22, the direct spending of Triton / Viva in combination with the indirect and induced impacts of dollars being re-spent throughout the economy generated **\$195.9 million** in overall economic impact (\$110.1 million in direct impact and \$85.8 million in indirect and induced impact).

#### **Providing and Supporting Jobs**

In FY22, Triton / Viva directly employed 591 individuals (full-time or part-time positions). This direct employment generates additional spending throughout the state that in turn supports additional indirect and induced jobs created when Triton / Viva and its employees spend in the region and state. In total, Triton / Viva supports **1,126 jobs** throughout Alabama.

#### **State and Local Tax Impact**

State and local tax impacts attributable to the presence of Triton / Viva totaled **\$5.7 million** in FY22.



# APPENDIX E: BAPTIST HEALTH SYSTEM TOTAL IMPACT

Nestled in the heart of Alabama's state capital of Montgomery is Baptist Health, the area's premier health care provider and tertiary referral center. Baptist Health is a three-hospital, nonprofit, faith-based system serving central Alabama. Baptist Health is also the largest non-governmental employer in the area, with more than 5,000 employees (including contract employees).

Baptist Health is an affiliate of UAB. With more than 500 Baptist Health-affiliated physicians, a seasoned clinical staff, and a comprehensive offering of medical services, Baptist Health also serves the community and local businesses with a wide range of wellness programs and services designed to help people live healthier and happier lives.

The following impact values for Baptist Health are a subset of the impact values presented in the UAB Health System section of this report. Baptist Health is one of seven components of the UAB Health System presented previously.

#### **Generating Economic Activity**

Baptist Health's direct spending generates economic activity throughout Alabama. In FY22, Baptist Health's direct spending in combination with the indirect and induced impacts of dollars being re-spent throughout the economy generated **\$1.9 billion** in overall economic impact (\$1.1 billion in direct impact and \$800 million in indirect and induced impact).

#### **Providing and Supporting Jobs**

In FY22, Baptist Health directly employed 5,830 individuals (full-time or part-time positions). This direct employment generates additional spending throughout the state that in turn supports additional indirect and induced jobs created when Baptist Health and its employees spend in the region and state. In total, Baptist Health supports **15,565 jobs** throughout Alabama.

#### **State and Local Tax Impact**

State and local government revenues attributable to the presence of Baptist Health totaled **\$55.7 million** in FY22.

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# APPENDIX F: MEDICAL WEST TOTAL IMPACT

Medical West is a 310-bed acute care hospital offering a wide range of diagnostic, surgical, medical, rehabilitation, and emergency services. Primary care physicians, specialists, and sub-specialists have offices on the Medical West main campus. Residents of western Jefferson County and the Birmingham metro area can benefit from the convenience of Medical West health centers in their neighborhoods.

The following impact values for Medical West are a subset of the impact values presented in the UAB Health System section of this report. Medical West is one of seven components of the UAB Health System presented previously.

#### **Generating Economic Activity**

Direct spending by Medical West generates economic activity throughout Alabama. In FY22, the direct spending of Medical West in combination with the indirect and induced impacts of dollars being re-spent throughout the economy generated **\$220.7 million** in overall economic impact (\$123 million in direct impact and \$97.7 million in indirect and induced impact).

#### **Providing and Supporting Jobs**

In FY22, Medical West directly employed 2,060 individuals (full-time or part-time positions). This direct employment generates additional spending throughout the state that in turn supports additional indirect and induced jobs created when Medical West and its employees spend in the region and state. In total, Medical West supports **2,515 jobs** throughout Alabama.

#### **State and Local Tax Impact**

State and local tax impacts attributable to the presence of Medical West totaled **\$8.6 million** in FY22.

#### **Construction Impact of Medical West**

Medical West Hospital Authority, an affiliate of UAB Health System and UAB Medicine Enterprise, broke ground on its replacement facility in November 2022. The new building is scheduled to open in 2024 and will include a 412,000-square-foot, nine-story hospital with 200 beds and a 127,000-square-foot, five-story medical office building. The facility, a full-service hospital with an estimated cost of \$120 million, will feature a new surgical and endoscopy suite, state-of-the-art imaging technology, and more intensive care beds.

During construction, the **\$400 million** undertaking is projected to generate an overall economic impact of **\$684.1 million**, support **4,349 jobs**, and produce nearly **\$15 million** in state and local tax impact.

# APPENDIX G: UAB CALLAHAN EYE HOSPITAL AUTHORITY TOTAL IMPACT

The UAB Callahan Eye Hospital Authority (Callahan Eye Hospital) is the state's only facility dedicated to providing quality medical and surgical eye care to the people of Alabama and the Southeast. Callahan Eye Hospital's primary business consists of outpatient ophthalmology and ambulatory surgery, making it one of the busiest ophthalmology surgery centers in the country.

The following impact values for Callahan Eye Hospital are a subset of the impact values presented in the UAB Health System section of this report. Callahan Eye Hospital is one of seven components of the UAB Health System presented previously.

#### **Generating Economic Activity**

Callahan Eye Hospital direct spending generates economic activity throughout Alabama. In FY22, the direct spending of Callahan Eye Hospital in combination with the indirect and induced impacts of dollars being re-spent throughout the economy generated **\$158.2 million** in overall economic impact (\$80.9 million in direct impact and \$77.3 million in indirect and induced impact).

#### **Providing and Supporting Jobs**

In FY22, Callahan Eye Hospital directly employed 557 individuals (full-time or part-time positions). This direct employment generates additional spending throughout the state that in turn supports additional indirect and induced jobs created when Callahan Eye Hospital and its employees spend in the region and state. In total, Callahan Eye Hospital supports **913 jobs** throughout Alabama.

#### **State and Local Tax Impact**

State and local tax impacts attributable to Callahan Eye Hospital's presence totaled **\$4.5 million** in FY22.



# **APPENDIX H: DEFINITION OF TERMS**

Study Year	The fiscal year 2021-2022: October 1, 2021-September 30, 2022	
Total Economic Impact	The multiplier effect is the additional economic impact created as a result of the organization's direct economic impact. Local companies that provide goods and services to an organization increase their purchasing by creating a multiplier.	
Direct Economic Impact	The direct impact includes institutional, employee, and visitor spending on the institution.	
Indirect Economic Impact	Indirect impact, also known as the multiplier effect, includes the re-spending of dollars within the local economy by vendors/ suppliers and households.	
Multiplier Effect	The multiplier effect is the additional economic impact created because of the institution's direct economic impact. Local companies that provide goods and services to an institution increase their purchasing by creating a multiplier.	
Direct Tax Payments	An institution makes direct tax payments to a unit of government.	
Indirect Tax Payments	Governmental units collect government revenue in addition to those paid directly by an institution, including taxes paid directly by employees of the institution, visitors to the institution, and vendors that sell products to the institution.	
Direct Employment	The total number of employees at the institution is based on total jobs.	
Indirect Employment	Indirect employment is the additional jobs created because of the institution's economic impact. Local companies that provide goods and services to an institution increase their employees as purchasing increases, thus creating an employment multiplier.	

#### **Organizational Definitions**

For the purposes of the impact analysis, UAB is defined as the combined impacts of UAB Academic, the UAB Health System, and Southern Research. These entities are further defined as:

- UAB Academic The UAB Academic impact analysis included all schools and colleges of UAB, including UAB Arts and UAB Athletics.
- UAB Health System The UAB Health System impact analysis included the UAB Medicine Enterprise Corporate Office, UAB Hospital, the University of Alabama Health Services Foundation (UAHSF), Medical West, Baptist Health System in Montgomery, Triton Health Systems / Viva Health Group, and UAB Callahan Eye Hospital Authority.
- Southern Research Southern Research impact analysis included the operations of Southern Research and the capital spend.

#### **Methodology Definitions**

IMPLAN Methodology – UAB's economic impact was estimated using IMPLAN (IMpact Analysis for PLANning), an econometric modeling system developed by applied economists at the University of Minnesota and the U.S. Forest Service. The IMPLAN modeling system has been in use since 1979 and is used by more than 500 private consulting firms, university research centers, and government agencies. The IMPLAN modeling system combines the U.S. Bureau of Economic Analysis' Input-Output Benchmarks with other data to construct quantitative models of trade flow relationships between businesses and between businesses and final consumers. From this data, one can examine the effects of a change in one or several economic activities to predict its effect on a specific state, regional, or local economy (impact analysis). The IMPLAN input-output accounts capture all monetary market transactions for consumption in a given time period. The IMPLAN input-output accounts are based on industry survey data collected periodically by the U.S. BEA and follow a balanced account format recommended by the United Nations.

IMPLAN's Regional Economic Accounts and the Social Accounting Matrices were used to construct stateand CSA-level multipliers, which describe the economy's response to a change in demand or production as a result of UAB's activities and expenditures. Each industry that produces goods or services generates demand for other goods and services, and this demand is multiplied through a particular economy until it dissipates through "leakage" to economies outside the specified area. IMPLAN models discern and calculate leakage from local, regional, and state economic areas based on workforce configuration, the inputs required by specific types of businesses, and the availability of both inputs in the economic area. Consequently, economic impacts that accrue to other regions or states as a consequence of a change in demand are not counted as impacts within the economic area.

The model accounts for substitution and displacement effects by deflating industry-specific multipliers to levels well below those recommended by the U.S. Bureau of Economic Analysis. In addition, multipliers are applied only to personal disposable income to obtain a more realistic estimate of the multiplier effects from increased demand. Importantly, IMPLAN's Regional Economic Accounts exclude imports to an economic area, so the calculation of economic impacts identifies only those impacts specific to the



economic impact area. IMPLAN calculates this distinction by applying Regional Purchase Coefficients (RPC) to predict regional purchases based on an economic area's particular characteristics. The RPC represents the proportion of goods and services that will be purchased regionally under normal circumstances, based on the area's economic characteristics described in terms of actual trade flows within the area.

#### **Employment Definitions**

IMPLAN analysis is conducted to measure jobs/positions (part-time or full-time), not full-time equivalents (FTEs). Full-time and part-time employees generate impact in the economy and support additional indirect and induced employment throughout Alabama. Employment data of UAB Academic, UAB Health System, and Southern Research were provided as an output of all individuals who receive a paycheck from the respective institution. This includes all full-time, part-time, and employed faculty, staff, and students, as well as independent contractors.

#### **Economic Impact Value Definition**

The overall economic impact values provided in this report for UAB, UAB Academic, UAB Health System, and Southern Research include the following impact values that were broken out as sub-analyses:

- Organizational spending capital and operational
- UAB Arts
- UAB Athletics
- UAB Research

The impact values of UAB, UAB Academic, UAB Health System, and Southern Research that were presented in this report that are not included in the overall economic impact value and are, therefore, in addition to the economic impact of the organization are:

- Community Benefit Impacts
- Alumni Impacts
- Construction Impacts

#### **State and Local Tax Impact Definition**

State and local tax impacts generated in the current FY22 study included all taxes paid by each of the UAB entities to the state of Alabama and the Birmingham CSA (i.e., payroll, property, sales, unemployment, income, and any other taxes paid to the state and local government). Any federal taxes paid by UAB were not included in the state and local tax impacts (i.e., FICA payments).

#### **Visitor Definitions**

Impact analysis looks to quantify the impact of the attraction of "fresh" dollars to a region. Therefore, when including visitor spending in the impact analysis of a university, health system, or other organization, the analysis will include only those visitors coming to a region from outside of said region. Visitors to events who also live in the region would have spent their dollar in that region otherwise; therefore, this dollar was not attracted to the region as a result of the organization being analyzed.

For UAB, the impact analysis looked at impacts to the state of Alabama and the Birmingham CSA region. Visitors to UAB were counted only if they were from outside of the region being analyzed.

#### **Visitor Spending**

Tripp Umbach uses federal per diem rates to estimate visitor spending in an area. Per diem rates by area can be found at GSA.gov. Tripp Umbach has utilized per diem rates to estimate visitor spending as they can be considered a conservative measure (i.e., visitors generally spend more than the per diem rates in any given area).

The rates utilized specifically for this analysis were:

- Birmingham region: \$113 for lodging; \$69 for meal and incidental expenses
- Standard for Alabama: \$98 for lodging, \$59 for meal and incidental expenses

#### **Community Benefits**

Community benefits provided in this report outline two forms of impact — monetary donations made by employees and students to local nonprofits, as well as volunteer hours that are hours that are assigned a monetary value.

- Tripp Umbach has conducted survey research to estimate the amount of monetary donations a student, staff, faculty, and physicians will spend in a year. This amount differs per individual but ranges from \$500 to \$700. Tripp Umbach also understands that not all individuals donate; therefore, this is adjusted as well.
- The value of a volunteer hour has been quantified by Independent Sector to be \$29.95 per individual per hour. Tripp Umbach utilized this value with the understanding (also from survey research) of the average number of hours faculty, staff, and students engage in volunteer activities (estimated 100 hours per year, for 50 percent of the employees and students).

#### **Research Impact Definition**

For the 2022 analysis, research impact was quantified as the annual impact of UAB research expenditures in FY22. The analysis looks at the research expenditures that occurred in FY22 to estimate the annual impact of UAB research on the state economy.

#### What is economic impact?

Economic impact begins when an organization spends money. Economic impact studies measure the direct economic impact of an organization's spending, plus additional indirect spending in the economy as a result of direct spending. Economic impact has nothing to do with dollars collected by institutions, their profitability, or even their sustainability, since all operating organizations have a positive economic impact when they spend money and attract spending from outside sources.

Direct economic impact measures the dollars that are generated within a geographic region because of an institution's presence. This includes not only spending on goods and services with a variety of vendors within the region and the spending of its employees and visitors, but also the economic impact generated by businesses within the region that benefit from the institution's spending. It is important to remember that not all dollars spent by an institution stay in the geographic region of study. Dollars that "leak" out of the region in the form of purchases from out-of-area vendors are not included in an institution's economic impact on the region.

The total economic impact includes the "multiplier" of spending from companies that do business with an institution. Support businesses may include lodging establishments, restaurants, construction firms, vendors, temporary agencies, etc. Spending multipliers attempt to estimate the ripple effect in the economy where the spending occurs. For example: Spending by an institution with local vendors provides these vendors with additional dollars that they re-spend in the local economy, causing a "multiplier effect."

#### What is the multiplier effect?

Multipliers are a numeric way of describing the secondary impacts stemming from an organization's operations. For example, an employment multiplier of 1.8 would suggest that for every 10 employees hired in the given industry, eight additional jobs would be created in other industries, such that 18 total jobs would be added to the given economic region. The multipliers used in this study range from 1.8 to 2.0.

The Multiplier Model is derived mathematically using the input-output model and Social Accounting formats. The Social Accounting System provides the framework for the predictive Multiplier Model used in economic impact studies. Purchases for final use drive the model. Industries that produce goods and services for consumer consumption must purchase products, raw materials, and services from other companies to create their product. These vendors must also procure goods and services. This cycle continues until all the money is leaked from the region's economy. Three types of effects are measured with a multiplier: the direct, the indirect, and the induced effects. The direct effect is the known or predicted change in the local economy that is to be studied. The indirect effect is derived from local spending on goods and services by people working to satisfy the direct and indirect effects.

- **Direct effects** take place only in the industry immediately being studied.
- **Indirect effects** concern inter-industry transactions: Because an institution is in business, it has a demand for locally produced materials needed to operate.
- Induced effects measure the effects of the changes in household income: Employees of an institution and suppliers purchase from local retailers and restaurants.
- Total economic impacts are the total changes to the original economy as the result of the
  operations of an institution, i.e., direct effects + indirect effects + induced effects = total economic
  impacts.

#### What methodology was used in this study?

IMPLAN (IMpact analysis for PLANning) data and software. Using classic input-output analysis in combination with regional specific social accounting matrices and multiplier models, IMPLAN provides a highly accurate and adaptable model for its users. The IMPLAN database contains county, state, ZIP code, and federal economic statistics that are specialized by region, not estimated from national averages, and can be used to measure the effect on a regional or local economy of a given change or event in the economy's activity.

#### What is employment impact?

Employment impact measures the direct employment (employees, staff, faculty, administration) plus additional employment created in the economy as a result of an institution's operations.

Indirect and induced employment impact refers to other employees throughout the region who exist because of an institution's economic impact. In other words, jobs related to the population — city services (police, fire, EMS, etc.), employees at local hotels and restaurants, clerks at local retail establishments, and residents employed by vendors used by the institution.

#### What is the difference between direct and indirect taxes?

Direct tax dollars include sales taxes and net corporate income taxes paid directly by the institution to the state, while indirect taxes include taxes paid to the state by vendors that do business with an institution and individuals.

#### Is this a one-time impact, or does the impact repeat each year?

The results presented in this economic impact study are generated on an annual basis. The economic impact in future years can be higher or lower based on the number of employees, students, capital expansion, increases in external research, and state appropriations.



# **APPENDIX F: TRIPP UMBACH QUALIFICATIONS**

Founded in 1990 in Pittsburgh, Pa., Tripp Umbach is among the most established and respected private consulting firms in the United States. Tripp Umbach is a force in economic and community development, working in partnership with our health care, education, government, and corporate clients to improve communities' economic, social, and physical well-being worldwide. Tripp Umbach has a rich history of working with more than 1,000 organizations providing community assessment, economic impact assessment, and economic development strategies. Tripp Umbach has assisted UAB with multiple economic impact assessments over the past 20 years.









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