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## INDEPENDENT FEASIBILITY STUDY FOR A STATE-SPONSORED RESIDENTIAL HEALTH SCIENCE HIGH SCHOOL IN ALABAMA

Prepared for  
**THE ALABAMA  
LEGISLATURE**

*Presented by  
Tripp Umbach, Stantec,  
and Jeck Consulting*





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Turning Ideas Into Action

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## Consulting Team

### About Tripp Umbach

Since 1990, Tripp Umbach has worked in hundreds of communities worldwide with a commitment to improving the well-being of our client communities and changing the world for good. Over our long history, the firm has completed approximately 3,000 consulting assignments for hospitals, academic medical centers, colleges and universities, public school districts, government entities, and industry associations. Tripp Umbach has completed over 100 feasibility studies for medical and health science programs throughout the United States and internationally in Canada, Australia, England, Mexico, and the United Arab Emirates. We are proud to be the nation's leading consulting firm in academic medicine and community health assessment.

Our work has opened 30 medical schools in the United States, including the Alabama College of Osteopathic Medicine in Dothan, AL. Tripp Umbach has completed high school to health professions pipeline studies in Georgia, Indiana, Nevada, and Nebraska. Tripp Umbach is also a pioneer and national leader in community health needs assessment, having completed studies and plans in more than 500 communities. Our work conducting economic and social impact studies with hundreds of universities, including for many years for UAB, makes Tripp Umbach the leading economic design firm serving the education and healthcare sectors nationally.

Headquartered in Kansas City, Missouri, with consulting offices in Maryland and Ohio, Tripp Umbach provides our clients with actionable roadmaps rooted in market research, strategic planning, financial modeling, site selection, and economic impact assessment. Our collective work has generated billions of dollars in new initiatives.

[www.trippumbach.com](http://www.trippumbach.com)

### About Stantec

Communities are the cornerstone of Stantec's existence, whether in the immediate vicinity or far-reaching corners of the world. Communities provide the essential foundation, fostering a sense of place and belonging. This principle is at the core of our approach at Stantec.

Stantec's commitment extends deeply into the communities they serve. This unique perspective enables Stantec to assess their needs, harness their expertise, appreciate the subtleties, and explore uncharted possibilities. By embracing diverse viewpoints, Stantec creates a collaborative environment that leads to shared success.

Within Stantec's team of designers, engineers, scientists, and project managers, Stantec thrives at the intersection of community, creativity, and client relationships. Stantec diligently balances these priorities, resulting in projects that enhance the quality of life in communities worldwide.

[www.stantec.com](http://www.stantec.com)

## About Jeck Consulting

Dr. David Jeck, a retired educator from the Fauquier Public School System in Northern Virginia, founded Jeck Consulting in 2023. He is a dedicated and skilled educational leader committed to improving education. Driven by his passion for collaboration and pursuit of excellence, he has extensive experience in educational administration. This includes fiscal and human resource management expertise, organizational infrastructure, instructional technology utilization, instructional planning, and curriculum development.

As an Educational Expert Consultant at Tripp Umbach, Dr. Jeck leverages his former principal and school district superintendent background. He specializes in developing initiatives for specialty high schools and understanding the importance of financial considerations, constraints, and opportunities. Over his fifteen-year career, Dr. Jeck has successfully formulated, presented, and defended various budgets, covering projects like construction, renovation, specialized programs, and career and technical education enhancements.

## The Project Team

Paul Umbach; Founder & CEO

Ha Pham; Senior Principal

Matilda Kudaya; Project Assistant

### Stantec

Bill Bradley; Principal

Brandon Dennis; Research Coordinator

### Jeck Consulting

David Jeck; Education Consultant



## Introduction

Alabama's need for more healthcare providers is causing a looming public health crisis. There are not enough caregivers available to meet the growing healthcare needs of its population. Addressing this crisis must be a top priority, and one potential solution lies in developing pipeline training programs that span from high school through college and post-graduate training in various healthcare fields, including medicine, nursing, pharmacy, and allied health. These programs have a proven track record of producing healthcare professionals more likely to stay and practice in their home state, making them valuable in addressing the state's healthcare workforce shortage. This is particularly crucial in addressing the healthcare needs of rural areas in Alabama.

A vital component of this approach involves initiating fully emerged health sciences training at the high school level. Providing high school-aged students with a strong foundation in health sciences is essential to ensure a steady supply of future healthcare practitioners. By investing in pipeline training programs that begin at the high school level and extend through post-graduate education, Alabama can secure its future healthcare workforce and improve access to healthcare services, particularly in underserved areas.

In August 2023, the Legislative Services Agency retained Kansas City-based Tripp Umbach to conduct an independent feasibility study to develop a residential health science high school in Alabama's black belt or other locations within the state. Tripp Umbach is a national leader in health science education consulting, having completed more than 50 feasibility studies for medical and health science education programs in all regions of the United States. The Tripp Umbach-led consulting team included representatives from Stantec, an internationally recognized education planning and design firm, and Dr. David Jeck, a national expert in high school planning, curricular design, and student affairs.

### This study aimed to answer three fundamental questions:

#### **1. Need for a State-Supported Health Science High School**

The study's first question was whether there is a need for a state-supported health science-focused high school in Alabama. Given that the state already supports three specialty high schools, the study sought to determine if there was a compelling case for adding a health science-focused high school to this list. The goal was to assess whether such a school could address the state's healthcare workforce shortage.

#### **2. Feasibility of Developing a Health Science Residential High School**

The second question explored in the study was the feasibility of establishing a health science-focused residential high school. This aspect involved evaluating the practicality of creating a specialized educational institution dedicated to health sciences training at the high school level. Factors such as funding, infrastructure, curriculum development, and faculty recruitment were considered to determine the viability of such a project.

### 3. Optimal Location for the School

The third and final question addressed in the study was selecting the best location within Alabama for this specialized high school. Several factors influenced this decision, including healthcare needs, workforce shortages, parent/guardian needs and interests, curriculum development, faculty recruitment, and geographical considerations. The study focused on areas with more significant health needs and more severe workforce shortages, such as the "black belt" region, to identify the most suitable location, but was broad enough to consider areas throughout the state.

## Methodology

The consulting team collected and analyzed primary and secondary data as appropriate to evaluate the need and feasibility of developing a residential health science high school. The feasibility analysis included vital stakeholder interviews in seven communities<sup>1</sup>, an environmental scan, a financial analysis, site selection criteria, and scoring and building recommendations to identify the interaction between Health Science education themes, building programs, and site development strategies.

During on-site visits to seven Alabama communities, Tripp Umbach interviewed more than 150 key stakeholders from target communities in person or focus group settings. In addition, more than 20 interviews were conducted virtually with regional healthcare providers, community colleges, universities, county and local elected leaders, state and federal elected leaders, education leaders, and economic development agencies. Interviews allowed the Tripp Umbach team to identify opportunities and challenges associated with developing a health science-focused school, including governance, funding opportunities, and options for and proposed educational partnerships.

In addition to interviews and site visits, the consulting team conducted a detailed analysis of demographics, population health, healthcare workforce data, and other health science high school education opportunities in the region and throughout the state. The consulting team also researched similar health science high school programs outside of Alabama to provide an understanding of the current education infrastructure and the feasibility of developing residential healthcare and health science specialty high school programs.

The consulting team completed an in-depth financial analysis to determine startup and operating costs for the new school and a 3–5-year sustainability plan. Dr. Jeck evaluated each component, determined what works, and revised as needed based on feedback and new information on the best possible residential health science high school in Alabama. The goal is to maximize finite resources and provide the number one customer (students) with a world-class learning environment.

In determining the best site within recommended communities, the consulting team evaluated zoning regulations, accessibility, proximity to major roads, public transportation, and the availability of parking facilities. The site should be easily reachable and have appropriate transportation infrastructure. Other

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<sup>1</sup> Centerville (Bibb County), Demopolis (Marengo County), Dothan (Houston County), Montgomery (Montgomery County), Pell City (St. Clair County), Selma (Dallas County), and Tuskegee (Macon County).

considerations include the site size and layout to accommodate the necessary buildings, facilities, and outdoor spaces required for a health science high school. Site selection focused on safety, accessibility to Alabama families, and feasibility of constructing the required buildings and facilities on the chosen site. The health science high school's potential economic and societal benefits to the surrounding community were an important consideration. Since a high level of community engagement is essential to the ultimate success, our team weighed community interest and active engagement highly.



## Executive Summary

To evaluate the feasibility and potential impact of such an initiative, the Alabama Legislative Services Agency authorized an independent study by a team of consultants led by Tripp Umbach. The following executive summary outlines key findings from the consulting team in determining the need, feasibility, and optimal locations for a statewide health science-focused high school.

## Key Findings

### **1. There is a need for a residential health science high school in Alabama.**

Community health status in rural Alabama is among the lowest in the United States, underscoring the need for a health science-focused high school to educate students on addressing community health improvement, health disparities, and access to healthcare. While Alabama has poorer health status and a greater need for more healthcare providers than other states, healthcare services is one of the largest industry sectors in Alabama. Further, unlike other industries with high geographic concentrations, healthcare represents one of the top three areas of employment in every one of Alabama's 67 counties. Healthcare jobs are also in demand throughout the state. According to the Alabama Department of Labor, 15 of Alabama's top 30 fastest-growing occupations from 2020 through 2030 are in healthcare: The overall projections for healthcare-related occupations in Alabama show a need for 3,910 new positions each year between now and 2030. This number only includes jobs in the fastest-growing fields, such as physical therapists, nurse practitioners, physician assistants, and occupational therapy assistants. Since these numbers represent only newly created positions in the fastest group job categories, the number of new and vacant positions in all healthcare employment categories is substantially larger.<sup>2</sup>

The proposed residential specialized health science high school will position graduates to continue their education to fill the thousands of available healthcare positions. The healthcare industry in Alabama has available jobs for persons with a wide range of academic achievements, including jobs for high school graduates who complete nursing and other certificate programs while in high school. Dual enrollment programs with Alabama higher education institutions are essential for preparing some graduates to enter the workforce directly after completing the health science program. Alabama health science high school students will have enrichment opportunities with college and university programs, leading to enrollment in associate, bachelor's, master's, and professional doctoral programs at Alabama-based institutions.

### **2. A health science-focused high school is feasible.**

The consulting team believes a state-supported Alabama-based health science-focused high school is feasible. We based this conclusion on the following: 1) Primary data showing that Alabama Parents and

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<sup>2</sup> [Alabama Department of Labor](#)

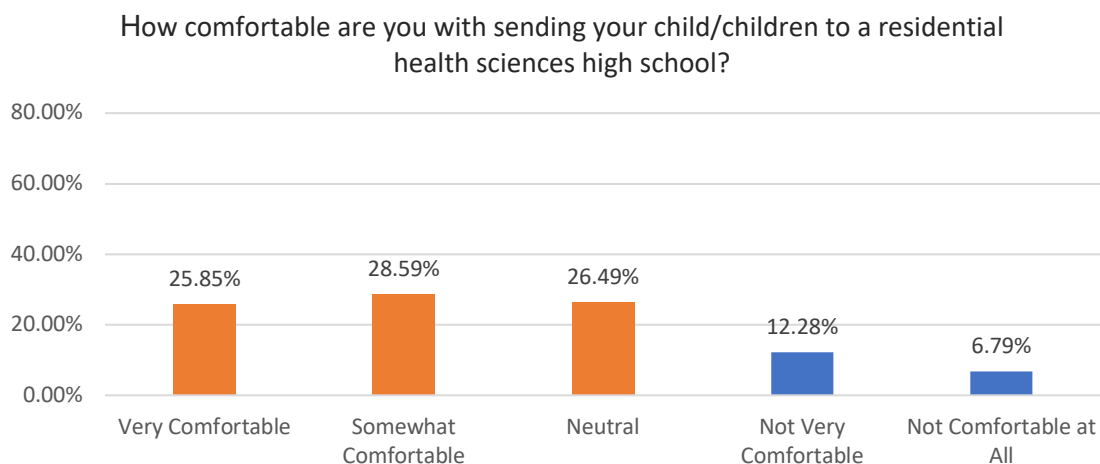
Guardians will likely send their students to a health science-focused residential high school, 2) Alabama communities and hospitals are interested in hosting a health science-focused residential high school, 3) A health science-focused high school in Alabama can recruit highly qualified faculty, 4) A health science-focused high school can recruit students from all parts of Alabama, 5) A health science-focused residential high school can maintain an enrollment of 325 Alabama students, and 6) An Alabama based health science-focused residential high school is financially feasible.

### Alabama parents and guardians will likely send their students to a health science residential high school.

The most crucial element in the project methodology is determining the level of interest in parents and guardians sending high school-aged children to a residential high school. Based on findings from a statewide statistically significant survey of over 600 parents and guardians, respondents are interested in sending high school-aged children away to a rural/suburban area in Alabama. (Appendix A)

Parents were asked about the comfort level of sending children to a residential health sciences high school. A significant portion of participants, totaling 80.93% collectively, expressed various degrees of comfort: very comfortable (25.85%), somewhat comfortable (28.59%), and neutral (26.49%) with the idea. Less than 20%, comprising 12.28% of respondents, expressed discomfort, while 6.79% indicated they were extremely uncomfortable with the prospect. (Figure 1)

Figure 1: Comfort Level of Sending Kids to Residential School



Source: Project Survey

### Alabama communities and hospitals want to host a health science residential high school.

Exceptional levels of community engagement are required for a rural community to support and sustain a residential health science high school in Alabama, especially if a rural community is selected. The consulting team conducted in-depth site visits to seven Alabama communities over three months in late 2023 and early 2024. The consultants engaged more than 150 Alabamians in interviews, focus groups, and community tours. The consultants conclude that Alabama communities are interested in hosting,

promoting, and engaging with a residential health science high school. The consultants believe from their national experience planning health science programs that community engagement and active partnering with the high school are the most critical success factors. The consultants evaluated educational and extracurricular joint programming opportunities with local high schools, colleges and universities, hospitals, and research institutes. Significant resources are available for a successful program in each location.

Hospitals, health systems, community clinics, nursing homes, public health agencies, and physician offices represent the most important audience for integrated partnerships, as these organizations are critical to a successful health science high school program. The consulting team analyzed interest among nearby hospitals in all seven communities to participate as residential healthcare and science school training sites and found high interest and excitement about the potential program. Healthcare facilities in six of the seven communities expressed great interest in active collaboration with a potential health science high school. The consultants tried to complete interviews with healthcare leaders in Montgomery on multiple occasions with no response.

#### **A health science high school in Alabama can recruit highly qualified faculty.**

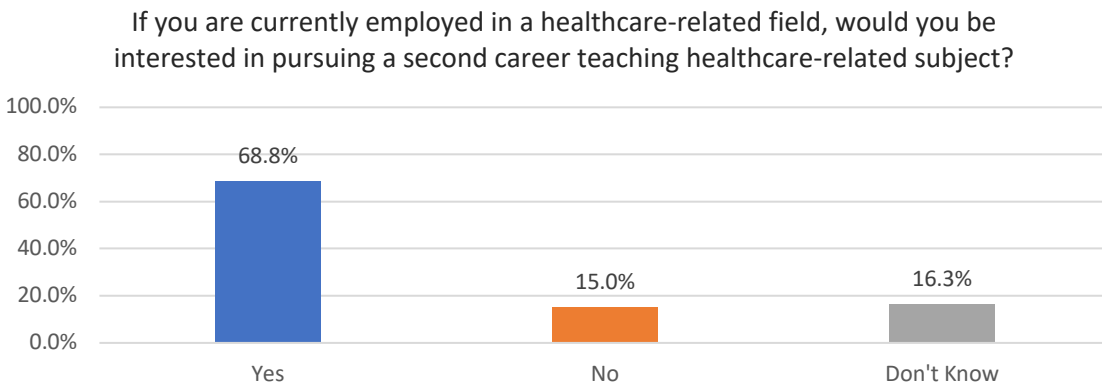
Attracting experienced healthcare professionals to teach full-time, part-time, and adjunct instructors is critical to the success of a health science high school. With healthcare responsible for more than 13.9 percent of Alabama's workforce<sup>3</sup>, many qualified instructors already work there. Tripp Umbach surveyed 80 healthcare professionals throughout Alabama who are both mid-career and nearing retirement. Survey results from healthcare professionals show a high level of interest in having a health science high school, a strong interest in teaching, and a high degree of openness to teaching in a suburban or small-town rural setting. (Appendix A)

According to the data collected from respondents, a significant majority, accounting for 68.8% (55 individuals), expressed interest in pursuing a second career teaching healthcare-related subjects, reflecting a notable inclination towards educational roles within the healthcare sector. Conversely, a smaller proportion, comprising 15.0% (12 respondents), indicated a lack of interest in such a transition, and 16.3% (13 participants) admitted being uncertain about their inclination toward pursuing a second career in teaching healthcare-related subjects. (Figure 2)

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<sup>3</sup> [Data USA](#)

Figure 2: Pursuing a Second Career



Source: Project Survey

### Recruitment of faculty and staff

Conversations with administrative staff from the three magnet schools in Alabama have provided valuable insights into recruitment dynamics in the education sector. One notable finding was the contrast between recruiting students and recruiting staff. While recruiting students is a formidable challenge, faculty recruitment appeared relatively manageable.

Despite the prevailing national teacher shortage, none of the school systems we engaged with reported significant staffing issues. This shared sentiment among magnet school leaders emphasized the role of flexibility with licensure and salary negotiations in successfully recruiting and retaining staff. The ability to offer alternate or local licensure options, or even to forego licensure requirements, emerged as a significant benefit that expanded the pool of potential educators. Additionally, the capacity to negotiate salaries, especially when attracting prospective teachers, was seen as a key factor in attracting and retaining highly qualified educators. These insights collectively underscored magnet schools' adaptability and innovative strategies to navigate recruitment challenges in the ever-evolving education landscape.

Regarding school staffing, several key recommendations emerge from best practices and insights from educational institutions. Firstly, initiating the recruiting process for teachers and staff at least one year before the school is set to open is essential. This early start allows for a thorough search, ensuring the school can secure the most qualified educators and support staff aligning with the institution's mission and values. Moreover, recruiting critical administrators, such as the head of the school, marketing professionals, deans, and administrative and secretarial support, should commence two years before the school's opening. This extended timeframe allows for comprehensive searches to identify individuals who can provide effective leadership and administrative support from the outset.

Another recommendation is to provide great flexibility regarding compensation. Rather than adhering to a rigid, fixed salary scale, institutions are encouraged to adopt a compensation "lanes" or ranges system. This approach enables schools to tailor compensation packages to their staff members' unique skills,

qualifications, and experience. It fosters an environment where educators and administrators feel valued, and it can be a powerful tool for attracting and retaining top talent in the competitive field of education. By implementing these recommendations, schools can establish a strong foundation for their staffing needs, ensuring a successful and sustainable educational environment.

### A health science high school can recruit students from all parts of Alabama.

Healthcare workforce shortages are an issue throughout Alabama, particularly in rural areas. Attracting students from communities throughout the state to a health science high school is essential. Nearly half of respondents to the parent survey, representing counties throughout Alabama, indicated that they know a child who might benefit from attending a residential health science high school. Potential students in all 67 counties have family members and friends engaged in the healthcare industry, one of the top three employers in every county.

The complexity of student recruitment emphasized the importance of initiating these efforts early and casting a broad net to ensure a consistent flow of interested applicants. Furthermore, administrators acknowledged the reality of student attrition, particularly during the first year of enrollment. This recognition underscored the need for robust retention strategies and support mechanisms to keep students engaged and committed to their educational journey.

A review of Alabama's three existing state-supported specialty high schools<sup>4</sup> indicates that these schools attract students throughout the state. Data from the existing schools shows that the three existing schools enroll an average of 312 high school students, with approximately 40 percent of all students being commuters. The percentage of commuter students ranges from 66% in Huntsville to 15% in Mobile. (Table 1)

Table 1: Projected number of high school students at existing and proposed specialty schools in Alabama.

Alabama Specialty Schools	Total Students	Number on Campus	Number Commuter	Percent Commuter
Alabama School of Cyber Technology and Engineering, Huntsville	334	112	222	66%
Alabama School of Math and Science, Mobile	253	215	38	15%
Alabama School of Fine Arts, Birmingham	350	228	123	35%
<b>Average of Three</b>	<b>312</b>	<b>185</b>	<b>128</b>	<b>41%</b>

Note: The number of commuter students from the Alabama School of Math and Science and the Alabama School of Fine Arts were estimates.

### Financial feasibility assumptions of health sciences high school

<sup>4</sup> Alabama School of Cyber Technology and Engineering, Huntsville, Alabama School of Math and Science, Mobile, and Alabama School of Fine Arts, Birmingham.

The consulting team evaluated the financial feasibility of a proposed residential health science high school. It concluded that if the current magnet school funding model continues, with \$10 million annually provided, there will be ample funding for a residential school with as many as 325 students. Even if the state decides to reduce the allocation based on enrollment and other factors, the health science high school would be financially viable, assuming that private and philanthropic funds can be raised to maintain operations.

All three Alabama-based, state-supported magnet schools raise additional funds through philanthropy, but this funding is optional for the general operation of the schools. In this respect, the ASHS would be like any other public high school: they would raise money based on wants and needs, which are difficult to determine. All three locations described philanthropic opportunities within their communities; however, Demopolis has already secured \$26.4 for a new school, which indicates that there will be significant community support for philanthropic funding for the health science high school in the future, regardless of location.

**A health science residential high school can maintain an enrollment of 325 Alabama students.**

The consulting team believes 325 students should enroll in a specialty health science high school in a rural Alabama community. Based on 2023 data, approximately 230,000 high school students are enrolled in Alabama's 718 high schools. Therefore, approximately one out of every 700 Alabama high school students should enroll in a health science high school to meet these enrollment projections. Since healthcare is one of Alabama's leading and fastest growing industries, the consultants believe that a specialty health science high school with proper marketing can achieve a steady state of 325 students. Since the existing schools are all located in metropolitan areas, the consulting team anticipates that only 10% of students will be commuters if a rural area is selected for the health science school. (Table 2).

Table 2: Projected number of Alabama students to be Enrolled at a Health Science High School

Alabama School	Total Students	Number on Campus	Number Commuter	Percent Commuter
Alabama Health Science High School Projections	325	292	33	10%

Source: Consulting Team

The location of a school in a rural, remote area presents a concern, particularly in recruiting and retaining students and teachers. The primary question revolves around whether individuals, especially students and educators, would be willing to work or attend school in a secluded setting and whether parents would be comfortable sending their children there. To address these concerns, a set of comprehensive recommendations is proposed.

One of the key recommendations from the consulting team is to prioritize creating an exceedingly safe and secure learning and living environment. This includes having multiple school resource officers, securing the campus with fencing and gating, implementing around-the-clock dorm supervision, and

ensuring continuous access to mental health support and an on-site registered nurse. Building a world-class teaching, learning, and living campus is crucial to attracting and retaining students and staff. Offering multiple opportunities for prospective students and their families to visit the campus, including providing transportation and lodging, can help alleviate concerns about the remote location.

Furthermore, an aggressive and widespread student and staff recruitment process should focus on students' genuine interest and enthusiasm rather than solely on grades or test scores. Implementing a rigorous yet proactive student discipline plan with a "zero tolerance" policy for drugs, weapons, sexual and physical assault, hate speech, and bullying can contribute to a safe and inclusive atmosphere. Consistent and frequent communication with parents and a "community parent" program, which connects students with local hosts, can help foster a sense of belonging in the community.

Establishing a well-staffed and adequately funded marketing and recruitment office at least a year before the school's opening is recommended to address recruitment concerns. This office should tailor its efforts to reflect the unique nature of the target population, particularly students from underserved and disadvantaged communities. Building strong relationships with school divisions across the state, particularly with guidance counselors who play a crucial role in students' educational decisions, is also imperative. By implementing these recommendations, schools in rural and remote areas can work towards ensuring the recruitment and retention of both students and staff, creating a thriving educational environment.

### Financial analysis

The consulting team performed an in-depth fiscal analysis to determine construction, startup, and operating costs for the new school and developed a 5-year sustainability plan considering the startup costs of the state's other specialty secondary schools.

A primary consideration and one that cannot be underestimated relates to the level of enthusiasm demonstrated by each community. A common concern shared by many influential individuals who will serve as ultimate decision-makers relates to staffing and student enrollment. Specifically, the consulting team believes that a residential school in a rural, non-central, and economically challenged community can attract and retain a "second-to-none" teaching staff and diverse student population, provided that the level of initial and sustained positive and enthusiastic motivation continues as the driving force behind its formation and ongoing operations. (Appendix D)

All educational programs require significant investment in facilities and startup expenses. The consulting team believes it will cost a minimum of \$32.0 million to build and equip facilities, develop a curriculum, and hire teachers and staff two years before the school opens. (Table 3).

Table 3: Startup Costs/Interim Year

	Cost
Building Construction	\$22,000,000
Furniture and Equipment	\$5,500,000
Curriculum Development	\$500,000
Interim Year	\$1,500,000
Teacher and Student Resources	\$2,500,000
<b>Total</b>	<b>\$32,000,000</b>

Source: Project Team

This analysis in Table 4 includes operations-related expenses and other ongoing expenditures unrelated to the initial construction phase. By assessing these interim-year costs, organizations can gain a comprehensive understanding of the long-term financial implications of a project beyond its initial implementation.

Table 4: Interim Year (non-construction costs)

Staff (one FTE per all 12 months)	Cost
Executive Director	\$125,000
Dean of Students	\$110,000
Finance Director	\$100,000
Administrative Assistant	\$70,000
Marketing and Communications Director	\$100,000
Marketing and Communications Staff	\$70,000
<b>Operations</b>	
Rent/leased space and utilities	\$150,000
Equipment	\$50,000
Marketing and Recruitment	\$150,000
Other	\$75,000
<b>Student learning</b>	
Curriculum Development	\$500,000
<b>Total</b>	<b>\$1,500,000</b>

Note: Funding for curriculum development will most likely carry over multiple years.

The funding model for a state magnet school notably differs from the traditional "per pupil" state funding allocation. Instead, the funding practice among the other three residential magnet schools involves a fixed allocation of \$10 million for each school, with any additional funding acquired through

philanthropic sources, grants, and foundational organizations. Philanthropic allocations represent a substantial portion, half to be precise, of the proposed startup and construction costs, amounting to \$62.0 million. It is currently understood that the Alabama School of Health Sciences (ASHS) would receive a comparable allocation to the other three magnet schools.

However, the consulting team expresses concern regarding the proposed student-to-teacher ratio in the state's model, which stands at 20:1. This ratio appears high, particularly when considering the specialized course offerings related to health sciences and the smaller student-to-teacher ratios typically observed at other residential magnet schools. Smaller classes are essential for student safety and provide a more personalized and effective instructional approach in laboratory settings where hands-on learning is crucial. This discrepancy in student-to-teacher ratios emphasizes the need for a tailored approach considering health sciences education's unique demands and safety requirements.

Table 5: Estimated Budget Recommendations and Anticipated Costs for 325 Students (Academic Years 1-4)

Yearly Budget Staff	FTEs	Length of Contract (months)	Salary and Benefits
<b>Administration</b>			
Executive Director	1	12	\$125,000
Dean of Students	1	12	\$110,000
Student Life/Activities Director	1	12	\$100,000
Finance Director	1	12	\$100,000
Administrative Assistant	2	12	\$140,000
Guidance Director	1	12	\$100,000
<b>Subtotal</b>	<b>7</b>		<b>\$675,000</b>
<b>Administrative Services</b>			
Facilities Supervisor	1	12	\$100,000
Residential Supervisor	1	11	\$90,000
IT Supervisor	1	11	\$90,000
Marketing and Communications	2	12	\$200,000
<b>Subtotal</b>	<b>5</b>		<b>\$480,000</b>
<b>Student Counseling</b>			
College and Career Counselor	1	11	\$90,000
Guidance Counselors	2	11	\$220,000
<b>Subtotal</b>	<b>3</b>		<b>\$310,000</b>
<b>Teaching Staff</b>			
English	3	10	\$210,000
Math	3	10	\$210,000
History/Social Studies	3	10	\$210,000
Science	3	10	\$210,000
Physical Education	1	10	\$70,000

Yearly Budget Staff	FTEs	Length of Contract (months)	Salary and Benefits
Elective	2	10	\$140,000
World Language	2	10	\$140,000
ASHS Core	8	10	560,000
<b>Subtotal</b>	<b>25</b>		<b>\$1,750,000</b>
<b>Support Staff</b>			
Security	2	11,12	\$100,000
Custodial	4	12	\$120,000
Nurse	2	11	\$120,000
Residential Assistant	2	11	\$60,000
Bookkeeper	1	12	\$50,000
Maintenance	1	12	\$50,000
IT	1	12	\$50,000
Nutrition	4	10	\$120,000
Secretarial support	5	11,12	\$200,000
<b>Subtotal</b>	<b>22</b>		<b>\$870,000</b>
<b>Total Cost All Staff</b>			<b>\$4,085,000</b>

Source: Consulting Team

Table 6: Non-Staff Operating Costs

Operations, Supplies, and Equipment	Cost
Student materials and technology	\$540,000
Classroom/ Teacher Technology	\$33,000
College-level and specialized healthcare tuition and fees	\$408,000
Licensing and professional certification fees	\$10,000
Work-based learning transportation costs	\$7,000
Food Costs	\$2,500,000
Other Transportation costs	\$15,000
Maintenance of facilities	\$53,000
Other Operational Cost	\$540,000
Support Through Fundraising	\$500,000
<b>Total Operations, Supplies, and Equipment</b>	<b>\$4,606,000</b>
<b>Total Yearly Budget (All staff and enrollment):</b>	<b>\$8,691,000</b>

Source: Consulting Team

### 3. Demopolis, Pell City, and Dothan represent the most optimal locations in Alabama for a health science high school.

After serious consideration through the review of existing data, primary surveys, site visits, interviews, and regular internal planning sessions, the consulting team recommends the following Alabama communities for the Alabama legislature to consider for financial support in developing a residential health science high school: Demopolis, Pell City, and Dothan.

Our consulting team believes that each of these three communities, ranked in order by the points they received, can successfully host a residential health science high school as they include high interest from hospitals and other healthcare organizations, higher education institutions, and community organizations in funding and sustaining the high school program.

All three communities present themselves as outstanding candidates, each with its distinctive advantages and opportunities for students. However, Demopolis City stands out due to its exceptional enthusiasm, unwavering motivation, secured funding, strategically chosen site location, potential for a comprehensive hospital partnership, and alignment with the vision outlined in the funding bill.



## Community: Demopolis

Overview: Demopolis is the largest city in Marengo County in west-central Alabama. The population was 7,162 at the time of the 2020 United States census, down from 7,483 at the 2010 census. The city lies at the confluence of the Black Warrior River and Tombigbee River. It is situated atop a cliff composed of the Demopolis Chalk Formation, known locally as White Bluff, on the east bank of the Tombigbee. It is at the center of Alabama's Canebrake region and within the Black Belt region. The name, "the People's City" or "City of the People" in Greek, honored the democratic ideals behind the community's founding.

Table 7: Strengths and Weaknesses of Demopolis (Morongo County)

Strengths	Challenges
<ul style="list-style-type: none"> <li>• Area High School Support</li> <li>• Community Support/Secured a Grant Donation</li> <li>• Favorability</li> <li>• Higher Education Partnerships</li> <li>• Local Public School System Quality</li> <li>• Local School Division Support</li> <li>• Lower Health Status</li> <li>• Proximity to Medical Facilities</li> <li>• Readiness</li> <li>• Recreational and Cultural Opportunities</li> <li>• Safety</li> <li>• School Division Diversity</li> <li>• School Division Quality</li> <li>• Site Proximity to Comprehensive Hospital (e.g., walking distance)</li> <li>• State Support from Colleges and Universities ) Particularly UAB)</li> <li>• Sufficient Size</li> <li>• Support by Hospital Leadership</li> <li>• Technology Infrastructure</li> <li>• The Existence of a Comprehensive Community Hospital</li> <li>• Walkability</li> </ul>	<ul style="list-style-type: none"> <li>• Distance from town</li> <li>• Lack of Community Resources for Students</li> <li>• Remote Location (community)</li> </ul>
<p><b>Total Score: 69</b></p>	

Source: Consulting Team

**Community: Pell City**

Overview: Pell City is in one of the county seats of St. Clair County, Alabama, United States, the other seat being Ashville. At the 2020 census, the population was 12,939. The central Alabama community is located along Interstate 20, 35 miles east of Birmingham. It was home to Avondale Mills and its legacy in the Avondale Mill Historic District. Pell City was founded in 1890 by railroad investors and named after George Pell of the Pell City Iron and Land Company, one of its financial backers.

Table 8: Strengths and Weaknesses of Pell City (St. Clair County)

Strengths	Challenges
<ul style="list-style-type: none"> <li>• Area High School Support</li> <li>• Community Resources for Students</li> <li>• Community Support</li> <li>• Favorability</li> <li>• Higher Education Partnerships</li> <li>• Local public school system quality</li> <li>• Proximity to Medical Facilities</li> <li>• Proximity to Urban Area (Birmingham)</li> <li>• Readiness</li> <li>• Recreational and Cultural Opportunities</li> <li>• Safety</li> <li>• School Division Diversity</li> <li>• School Division Quality</li> <li>• Sufficient Size</li> <li>• Support by Hospital Leadership</li> <li>• Technology Infrastructure</li> <li>• The existence of a comprehensive community hospital</li> </ul>	<ul style="list-style-type: none"> <li>• High Health Needs</li> <li>• School Division Diversity</li> <li>• Small underserved/uninsured population</li> <li>• Walkability</li> </ul>
<p><b>Total Score: 64</b></p>	

Source: Consulting Team

**Community: Dothan**

Overview: Dothan is a city in and the county seat of Houston County in the U.S. state of Alabama. It had a population of 71,072 at the 2020 census, making it Alabama's eighth-largest city by population and the 5th largest in Alabama by total area. It is near the state's southeastern corner, about 20 miles west of Georgia and 16 miles north of Florida. Since approximately one-fourth of the U.S. peanut crop is produced nearby, much of it processed in the city, Dothan is known as "The Peanut Capital of the World."

Table 9: Strengths and Weaknesses of Dothan (Houston County)

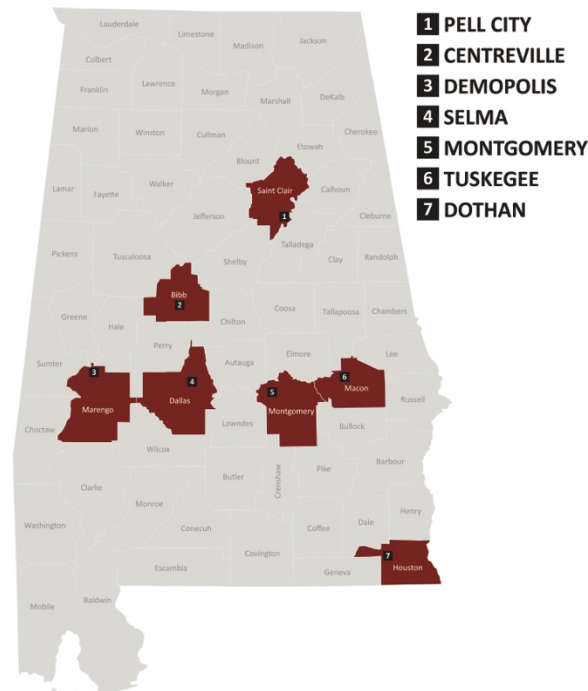
Strengths	Challenges
<ul style="list-style-type: none"> <li>• Area High School Support</li> <li>• Community Resources for Students</li> <li>• Community Support</li> <li>• Favorability</li> <li>• Higher Education Partnerships</li> <li>• Local Public School System Quality</li> <li>• Readiness</li> <li>• Recreational and Cultural Opportunities</li> <li>• Safety</li> <li>• School Division Quality</li> <li>• Sufficient Size</li> <li>• Support by Hospital Leadership</li> <li>• Technology Infrastructure</li> <li>• The existence of a comprehensive community hospital</li> </ul>	<ul style="list-style-type: none"> <li>• Health Status</li> <li>• Walkability</li> <li>• Small underserved/underinsured population</li> <li>• Site Proximity to Medical Facilities</li> <li>• Not an Underserved Area (Medical)</li> </ul>
<p><b>Total Score: 59</b></p>	

Source: Consulting Team

## Locations considered by the consulting team

The consulting team developed the following methodology to determine the optimal location in Alabama for a residential healthcare and science school. First, the team selected seven Alabama communities for consideration based on input from the consulting team and the LSA. Second, the team visited each community to tour facilities and meet with key stakeholders. These seven locations are outside communities with an existing state-supported specialty high school. They are primarily located in rural areas in south central Alabama, except Dothan, in the southeast corner of Alabama.

Map 1: Consideration Locations



## Site location considerations

The consulting team developed a set of site selection parameters with input from the LSA. The team collected data required to provide a side-by-side comparison for seven communities and selected three viable sites using various site criteria parameters approved by the LSA. The team believes that the optimal location for a residential health science high school will be in a rural, underserved area of the state, where health needs are highest and healthcare workforce development is most challenging.

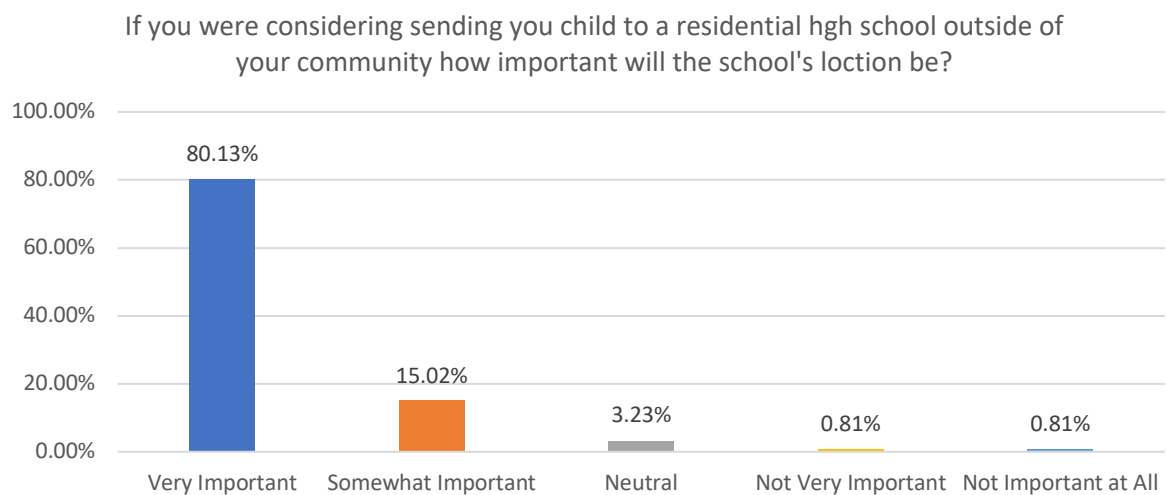
To accomplish this task, the Tripp Umbach team conducted on-site analysis in Alabama for 16 person days throughout the project, engaged with 150 community representatives, and held work sessions with LSA staff to identify and score viable locations. The community location decision criteria were based on the following: (See Appendix C and D for matrix and scoring for all seven locations)



**A) Parent interest in sending children to a specific community**

The consultants consider the interest and comfort of parents sending their children to a residential health science high school as the most important success factor. Respondents to the parent survey listed the school's location as an important criterion, with 496 (80.1%) (Figure 2) identifying the school's location as the most important factor. (Figure 3)

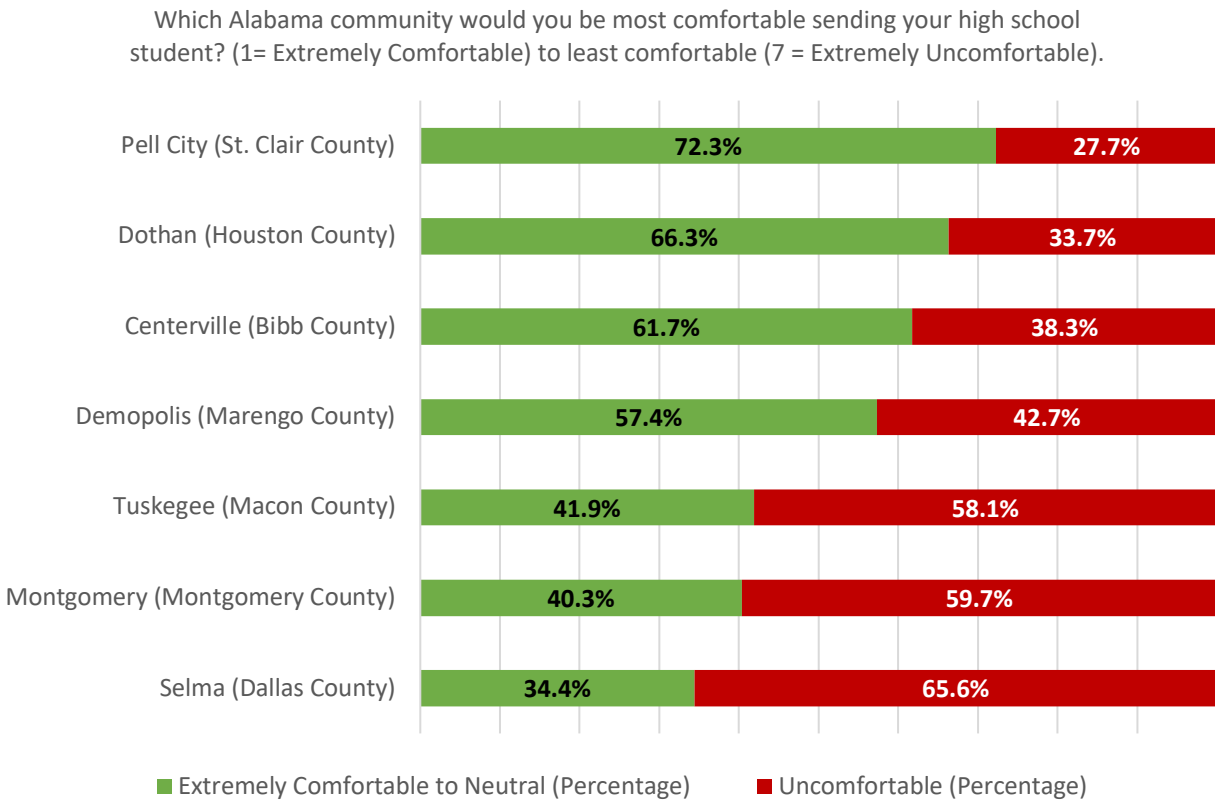
Figure 2: Importance of School's Location



Source: Project Survey

Parents ranked Pell City and Dothan as the "most favorable" locations for the health science high school. Centreville and Demopolis ranked the middle of seven communities above Montgomery, Tuskegee, and Selma. Centerville and Demopolis are seen as "more favorable" rather than "less favorable." Respondents rank Montgomery, Tuskegee, and Selma as "less favorable" places parents would send their children.

Figure 3: Most Favorable Locations to Parents



Source: Project Survey

### B) The existence of a healthcare training ecosystem

The most successful health science high schools partner closely with local hospitals, clinics, and other medical facilities. Students have opportunities for internships, job shadowing, and other practical experiences, as well as close interaction with professionals in the field that help students create early professional connections, which can be beneficial when seeking college admissions, scholarships, or jobs right out of high school. Healthcare high schools established in underserved communities provide opportunities for students who might not otherwise be exposed to the needs of the underserved. Support by hospital leadership is essential to success.

Consultant interviews and analysis of healthcare delivery systems and capacity for healthcare education ranges from high levels of teaching capacity in Montgomery and Dothan, adequate healthcare training sites in Centerville, Demopolis, and Pell City, and lower levels of healthcare training capacity in Tuskegee (although the V.A. has a large residential treatment facility) and Selma. Healthcare facilities, including hospitals, nursing homes, physician offices, and public health clinics in six of the seven communities, expressed a high degree of interest in active collaboration with a potential health science high school.

### C) Hospital Patient Satisfaction Score

The consultants believe high school students should receive training in high-quality healthcare environments to better position them for future careers. One quality measure is patient satisfaction, which also serves the dual purpose of indicating the potential willingness of patients to interact with younger learners. Therefore, Tripp Umbach reviewed standardized patient satisfaction scores for hospitals in the seven communities. Except for Vaughn Regional Medical Center in Selma, every hospital had a patient satisfaction score higher than 67%, a threshold the consulting team set as adequate for student training. (Table 7)

Table 10: Patient satisfaction scores for hospitals in target communities (2022)

Location	Health System	Patients that would recommend hospital
Centreville	<a href="#">Bibb Medical Center</a>	67%
Demopolis	<a href="#">Whitfield Regional Hospital</a>	67%
Dothan	<a href="#">Flowers Hospital</a>	70%
Dothan	<a href="#">Southeast Health Medical Center</a>	72%
Montgomery	<a href="#">Baptist Medical Center East</a>	77%
Montgomery	<a href="#">Baptist Medical Center South</a>	71%
Montgomery	<a href="#">Jackson Hospital</a>	69%
Pell City	<a href="#">Ascension Saint Vincent's St. Clair</a>	71%
Selma	<a href="#">Vaughan Regional Medical Center</a>	45%

Source: [Health Grades](#)

### D) Community Health Needs

Three rural underserved communities were included among the seven potential communities: Tuskegee, Selma, and Demopolis. Because these "black belt" communities have more significant healthcare needs, access to care issues, and workforce development challenges than the other four communities, they received more points in our scoring. Health needs in Centreville are also higher and were awarded the same points as the rural black belt communities. Pell City, a wealthier suburban location, and Dothan, a more prosperous city, received fewer points, as students would not be exposed to healthcare challenges in poorer rural communities. Montgomery, the only metropolitan area in the black belt, serves a more urban and suburban population, having a less pronounced shortage of physicians and other healthcare professionals and, therefore, better health status. (Table 8)

Table 11: County Health Rankings, 2022

	Health Outcomes	Health Factors	Length of Life	Quality of Life	Health Behaviors	Clinical Care	Social & Economic Factors	Physical Environment
<b>Bibb County</b>	32	51	31	32	41	56	51	51
<b>Dallas County</b>	61	60	61	60	59	29	62	56
<b>Houston County</b>	14	12	11	25	21	9	16	10
<b>Macon County</b>	59	57	58	58	48	37	61	47
<b>Marengo County</b>	58	41	62	48	28	27	48	64
<b>Montgomery County</b>	27	17	19	39	23	5	27	28
<b>St. Clair County</b>	9	11	12	10	10	24	12	49

Source: [County Health Rankings](#)

The rankings in Table 11 are based on how Alabama counties rank in comparison, with 1 being the healthiest county in the state and 67 being the least healthy. Rural counties in the "black belt" ranked significantly lower on health outcomes and behaviors.

### E) Crime and Safety

Crime and safety represent parents' concerns when sending their children to a residential high school. Violent crime is an issue throughout Alabama, as violent crimes statewide are 18 percent higher than the U.S. average. Violent crime rates are higher than the U.S. average in six of the seven communities and higher than Alabama in five of the seven communities considered in our study, with only Bibb County being lower than the state and nation. Two counties, Dallas County (Selma), and Macon County (Tuskegee), are significantly more violent than the communities considered in the study.

Table 12: Violent Crimes by County

County	Total Population	Violent Crimes, 3-year Total	Violent Crimes, Annual Rate (Per 100,000 Pop.)
<b>Bibb County</b>	23,383	128	<b>182.4</b>
<b>Dallas County</b>	40,345	1,103	<b>911.2</b>
<b>Houston County</b>	107,130	1,808	<b>562.5</b>
<b>Macon County</b>	18,769	403	<b>715.7</b>
<b>Marengo County</b>	19,926	340	<b>568.7</b>
<b>Montgomery County</b>	225,332	3,787	<b>560.2</b>

County	Total Population	Violent Crimes, 3-year Total	Violent Crimes, Annual Rate (Per 100,000 Pop.)
St. Clair County	85,357	1,084	423.3
Alabama	4,888,271	74,016	504.7
United States	366,886,849	4,579,031	416

Source: [Community Commons](#)

**F) Technology Infrastructure: high-speed internet and other technology infrastructures are essential for modern education.**

High-speed internet access is essential in healthcare and science education as the high school is anticipated to have remote classes and labs with other higher education partners. Broadband service is generally good throughout the communities studied, except for Bibb County, where only one in five households has strong enough access to support the learning platforms anticipated in the high school.

Table 13: Internet Access by County

County	Total Number of Broadband Serviceable Locations	Access to DL Speeds >= 25MBPS and UL Speeds >= 3 MBPS	Access to DL Speeds >= 100MBPS and UL Speeds >= 20 MBPS
Bibb County	8,836	21.84%	13.51%
Dallas County	18,815	74.27%	72.76%
Houston County	48,161	91.28%	84.07%
Macon County	9,609	70.23%	69.30%
Marengo County	9,941	70.44%	68.95%
Montgomery County	88,639	97.84%	97.20%
St. Clair County	40,586	92.01%	88.10%
Alabama	2,176,002	86.38%	82.78%
United States	115,342,228	93.82%	91.18%

Source: [Community Commons](#)

**G) Higher education is interested in partnership opportunities.**

Health science high schools can benefit greatly from close collaboration with colleges and universities. Colleges and universities often have faculty members who are experts in various health science fields, including medicine, nursing, public health, and biomedical research. Collaborating with these institutions allows high school students and teachers to access the latest knowledge, research, and best practices in the field. Colleges and universities typically have state-of-the-art laboratories, equipment, and facilities that high schools may not have access to. Collaborating with these institutions can provide students

with hands-on experiences and exposure to advanced technology and resources. Collaboration can create pathways for high school students to take college-level courses, earn credits, or participate in dual enrollment programs. This can help students get a head start on their college education and reduce the time and cost of earning a degree in health sciences.

Students can also benefit from interactions with college professors, researchers, and healthcare professionals, gaining valuable insights and guidance for their future careers. Networking opportunities can also help students connect with potential mentors and employers in the health science field. Colleges and universities often have diverse student populations and faculty members from various backgrounds. This exposure can broaden high school students' perspectives and help them better understand the diverse nature of the healthcare field. Finally, high school students participating in collaborative programs with colleges and universities may have an advantage in college admissions.

The consulting team found a high interest in collaboration from colleges and universities throughout the state. UAB, the state's largest academic medical center, is interested in joint programs in Demopolis, where the organization has a hospital facility. Nearby University of Western Alabama also expressed great interest in partnering if the high school was in Demopolis. Tuskegee University is very interested in participation and co-location opportunities if the high school is in Tuskegee. The Alabama College of Osteopathic Medicine and Troy State University in Dothan were interested in training partnerships and perhaps co-location. Jefferson State Community College in Pell City also showed high interest in collaboration and co-location if the high school was in St. Clair County. The University of Montevallo, approximately 30 minutes from Centreville, also showed high interest in the high school in Centreville. The consultants reached out on multiple occasions to interview higher education institutions in Montgomery without success.

The top three locations recommended by the consultants (Demopolis, Pell City, and Dothan) currently maintain many dual enrollment opportunities available through several colleges and universities, including, but not limited to, the University of Western Alabama, Wallace Community, Auburn University, UAB, and the University of South Alabama. The UAB dual enrollment opportunity is unique because the UAB Medical School and Hospital are nationally recognized. They have greatly supported the ASHS and would serve as a popular drawing card for potential students.

Demopolis is fortunate to enjoy robust support from colleges and universities, notably the University of Alabama at Birmingham (UAB), renowned for its nationally respected medical school.<sup>5</sup> This strong partnership holds immense significance in facilitating various educational opportunities. Collaborative efforts between Demopolis City and UAB promise to offer students various benefits, including opportunities for dual enrollment, internships, job shadowing experiences, and access to guest speakers and instructors from the medical field. The strategic advantage of Demopolis City's location lies in its convenient proximity and walkability to a comprehensive hospital. This accessibility is paramount when

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<sup>5</sup> Sample of medical science programs and courses offered by Alabama colleges and universities: Biology, Cell and Molecular Biology, Chemistry, Conservation and Field Biology, Diagnostic Services, Emergency Medical Services, Exercise Science, General Science, Health Science, Nursing, Pharmacology, Physical Therapy, Pre-medicine, and Psychology.

arranging visits, establishing internships, hosting guest speakers, and fostering a "campus" environment that can enhance the learning experience for students and staff alike.

#### **H) Partnerships with a high-quality, racially balanced public school system**

Collaborating with high-quality public schools provides opportunities for joint programs, resource sharing, and cooperative initiatives. This can lead to more robust and comprehensive health science programs and curricula. Partnering with a strong racial balance with high schools is important, as racially equitable public schools foster a more inclusive learning environment. A partnership with a high-quality, racially equitable public high school sends a strong message about inclusivity and social responsibility. It demonstrates a commitment to providing educational opportunities to all students, regardless of their racial or ethnic background.

Partnering with high-quality, community-oriented public high schools can facilitate community engagement, leading to mentorship opportunities, internships, and support for health science programs. This engagement can benefit the state-sponsored health science and local high schools. Partnering with racially equitable public high schools exposes health science high school students to a more diverse peer group, helping them develop cultural competence and a deeper understanding of the diverse patient populations they will encounter in their future careers. Finally, partnering with a racially equitable local high school can prepare students to understand and address the root causes of health disparities, contributing to better healthcare outcomes for underserved communities.

The consulting team analyzed high school quality scores and racial profiles and determined that Demopolis and Dothan offered the best balance of quality and equity in the student population among the seven communities evaluated. Selma was considered the poorest quality and least racially integrated school district among the target communities.

All three top-ranked locations displayed a keen interest in establishing a partnership with ASHS within their respective communities. Representatives from the local school systems actively participated in meetings, readily addressed inquiries, and demonstrated a strong willingness to collaborate by sharing resources. Remarkably, these school systems have yet to express concerns about potential competition for teachers or apprehensions regarding the possibility of losing educators to a new local school.

The top three potential locations have the following ethnic composition, reflected in the school populations.

Table 14: Ethnic Composition of Demopolis

Demopolis		
Race	Number	Percent
White (non-Hispanic)	2,900	40.49%
Black or African American (non-Hispanic)	3,869	54.02%
Native American	1	0.01%
Asian	46	0.64%
Pacific Islander	1	0.01%
Other/Mixed	140	1.95%
Hispanic or Latino	205	2.86%
	<b>7,162</b>	

Source: [U.S. Census Bureau](#)

Table 15: Ethnic Composition of Dothan

Dothan		
Race	Number	Percent
White (non-Hispanic)	39,834	56.05%
Black or African American (non-Hispanic)	23,755	33.42%
Native American	180	0.25%
Asian	1,124	1.58%
Pacific Islander	44	0.06%
Other/Mixed	3,004	4.23%
Hispanic or Latino	3,131	4.41%
	<b>71,072</b>	

Source: [U.S. Census Bureau](#)

Table 16: Ethnic Composition of Pell City

Pell City		
Race	Number	Percent
White (non-Hispanic)	9,954	76.93%
Black or African American (non-Hispanic)	2,017	15.59%
Native American	26	0.20%
Asian	140	1.08%
Pacific Islander	1	0.01%
Other/Mixed	495	3.83%
Hispanic or Latino	306	2.36%
	<b>12,939</b>	

Source: [U.S. Census Bureau](#)

## l) Community interest and readiness

To turn the idea of a health science high school into action and impact, the "four Ps" are needed for success: People, Place, Purpose, and Passion. Six of the seven places studied have people who see the purpose of a health science high school and would work to make the project happen if their community was selected. Despite multiple efforts, interviews with stakeholders in Montgomery, aside from the state senator's office, were unsuccessful. Based on visits to the seven communities, the consulting team believes Demopolis is most passionate about developing the health science high school. However, passion for the project was also demonstrated in Centreville, Pell City, Tuskegee, Selma, and Dothan. Regarding readiness, Demopolis appears to the consulting team to be the most prepared, having secured \$24.0 million in grant donations from Bloomberg Philanthropies. However, the consultants believe that Pell City and Dothan leaders can also raise the funds needed if the state selects their communities.



## Site Selection Criteria

The selection of the actual site within the top-rated communities will be based on the following criteria.

### **Proximity to healthcare facilities.**

One of the driving forces of a successful, intensive, authentic instructional program is the ability to gain access to local healthcare facilities, a wide variety of related scenarios, and willing professionals. The program for the proposed school envisions students observing in practice what they study in classrooms, shadowing professionals, and being momentarily immersed in their chosen disciplines. To do so effectively, they will need ready access to all the above (healthcare facilities, scenarios, and professionals). Potential sites were scored based on the availability and relative proximity of facilities and professionals to the proposed site for the new school. Communities with greater availability and proximity scored higher than locations with less availability and greater distances.

Demopolis has an available site adjacent to and accessible from a full-service hospital, so it scored highest on this criterion.

### **Proximity to institutions of postsecondary and higher education.**

In addition to healthcare-related access, students will benefit from access to experienced, professional educators willing, able, and available to supplement their instruction and provide access to opportunities beyond the classroom. The program for the proposed health science high school intends for students to complete certification programs and acquire college credit through dual enrollment, so the availability and willingness of local faculty to support this is essential. Communities with institutions of higher education scored higher than those without or with institutions further afield.

Dothan and Pell City have higher education institutions in their communities (Troy University and Jefferson State University, respectively), so they scored highest on this criterion.

### **Proximity to public education.**

Partnerships with the local school district are essential for, among other things, the availability of student extracurriculars. The ability to supplement their education with more traditional high school activities like performing arts, athletics, and clubs will be a consideration for parents and students considering the proposed school. Communities with a high reputation for their public schools proximate to the proposed site scored higher than those with lower-performing schools that were further away from the proposed site.

While all three school systems are highly rated, Demopolis Middle School is immediately adjacent to the proposed site. Demopolis High School is less than 2 miles away, so Demopolis scored highest on this criterion.

### **Proximity to recreation and civic amenities.**

Healthcare providers are vital and engaged members of their communities, so instilling that responsibility in students and providing them with the opportunity to be engaged members of a vibrant community was also a factor. Communities with a discernable and accessible downtown, multiple accessible, inviting civic amenities, and multiple accessible, interesting recreational opportunities scored higher than communities that either did not offer such or, if they did, had amenities far away from the proposed site.

While all three communities offered several opportunities for recreation (from lakes, rivers, and parks to ball fields, performing arts centers, and arcades), those in Demopolis were relatively closer to the proposed site, as was the downtown (less than a mile).

### **Walkability of community/site relative to partner institutions/facilities.**

Recognizing that many (if not most) of the students attending the proposed new school won't have access to a car or the ability to drive, communities with proposed sites that were safe and walkable to healthcare facilities, institutions of higher education, local public education, and recreational and civic amenities scored higher than those without this advantage.

None of the three communities is considered walkable in the urban sense, but of the three locations, the proposed site in Demopolis, located in a neighborhood less than a mile from downtown, was considered the most walkable by comparison.

### **Suitability of site to accommodate proposed facility(s).**

To the extent that communities had designated a site (e.g., the available parcel of land immediately behind the hospital in Demopolis), that site was evaluated to determine whether or not the size was sufficient to accommodate a residential health science high school for 300-500 students. To the extent that a site had not been designated, a site was identified based on available land proximate to a major healthcare center or institution of higher education, and that site was evaluated along similar lines on a speculative basis. Suitable sites scored higher than those that were less suitable. Those who provided land surveys, geotechnical studies, and environmental assessments also scored higher (to the extent that said surveys, studies, and assessments were favorable).

Demopolis pledged an available site adjacent to a full-service hospital that is large enough to accommodate a residential high school for 300-500 and has the bona fides insofar as favorable land surveys, geotechnical surveys, and environmental assessments, so it scored highest on this criterion.

## Conclusion

Alabama desperately needs a state-sponsored residential health science high school to meet current and future healthcare workforce challenges. There is no one perfect community that meets all the requirements for success. After investing three months traveling to seven communities and interviewing more than one hundred community leaders in healthcare, high education, industry, and economic development, we are confident that any of the three recommended communities, namely Demopolis, Pell City, or Dothan can successfully host, co-design, and co-create a successful and sustainable health science high school.

Communities that were not finalists, Centreville, Tuskegee, Selma, and Montgomery, also have strengths and assets that can help the success of the health science high school, regardless of the selected community. Health centers and residency programs in Centreville, the V.A. in Montgomery and Tuskegee, Tuskegee University, and the community hospital in Selma showed great interest and support, as did elected officials and community leaders. We hope that assets in all Alabama communities can be used to strengthen the health science high school regardless of where the state decides it to be located. Finally, we thank Othni Latham, Director of the Legislative Services Agency, and his staff for their assistance and encouragement as we completed this assignment.





# APPENDICES



## Appendix A: Alabama Parent and Guardian Survey

Tripp Umbach, in partnership with the Alabama Legislative Services Agency, conducted a survey as part of the feasibility study. The survey aimed to gather insights from parents regarding the most suitable location and viability of the Alabama School of Healthcare Sciences. The survey was accessible electronically and was available in English. Over 100,000 Alabama parents were invited to participate via email.

The data collection period ran from January 8 – 26, 2024. The survey received 620 responses.

Table 17: Comfortable level with sending your child/children to a residential health science high school?

How comfortable are you with sending your child/children to a residential health science high school?		
	Responses	
<b>Very Comfortable</b>	25.85%	160
<b>Somewhat Comfortable</b>	28.59%	177
<b>Neutral</b>	26.49%	164
<b>Not Very Comfortable</b>	12.28%	76
<b>Not Comfortable at All</b>	6.79%	42

Table 18: Importance of the school's location

If you were considering sending your child to a residential high school outside your community, how important would the school's location be?		
	Responses	
<b>Very Important</b>	80.13%	496
<b>Somewhat Important</b>	15.02%	93
<b>Neutral</b>	3.23%	20
<b>Not Very Important</b>	0.81%	5
<b>Not Important at All</b>	0.81%	5

Table 19: Why is location Important?

If the location of the school is important, why?		
	Responses	
<b>Safety</b>	43.60%	269
<b>Quality of School</b>	14.59%	90
<b>Learning Environment</b>	11.67%	72
<b>Quality of Surrounding Resources</b>	10.53%	65

If the location of the school is important, why?		
Familiarity	6.00%	37
Quality of Life	5.67%	35
Reputation	2.92%	18
Other (please specify)	5.02%	31

Table 20: Factors most important when choosing a high school location

What factors do you consider most important when choosing a high school location for your child?		
	Responses	
Safety of the community	64.6%	400
Quality of local public school system	50.7%	314
Proximity to resources related to the curriculum (for example, opportunities for internships, job shadowing, and applied research).	40.4%	250
Access to extracurricular activities	35.1%	217
Proximity to local public high school (the closer, the better for extracurricular activities, varsity sports, intramurals, and clubs).	30.9%	191
Availability of public transportation	18.3%	113
Proximity to civic amenities (the closer, the better for civic and cultural events, shopping, and recreation)	14.7%	91
Other (please specify)	3.6%	22

Table 21: Parent or Guardian

Are you a parent/guardian?		
	Responses	
Yes	85.62%	530
No	14.38%	89

Table 22: Which of the following Alabama communities would you be most comfortable sending your high school student?

	Extremely Comfortable to Neutral (Percentage)	Extremely Comfortable to Neutral (Numbers)	Uncomfortable (Percentage)	Uncomfortable (Numbers)
Pell City (St. Clair County)	72.3%	417	27.7%	160

	Extremely Comfortable to Neutral (Percentage)	Extremely Comfortable to Neutral (Numbers)	Uncomfortable (Percentage)	Uncomfortable (Numbers)
<b>Dothan (Houston County)</b>	66.3%	385	33.7%	196
<b>Centerville (Bibb County)</b>	61.7%	355	38.3%	220
<b>Demopolis (Marengo County)</b>	57.4%	328	42.7%	244
<b>Tuskegee (Macon County)</b>	41.9%	240	58.1%	333
<b>Montgomery (Montgomery County)</b>	40.3%	232	59.7%	343
<b>Selma (Dallas County)</b>	34.4%	199	65.6%	379

Table 23: Do you know someone who would be interested in or could benefit from a public residential high school dedicated to teaching the broad spectrum of healthcare-related fields/careers as part of their high school experience?

<b>Do you know someone who would be interested in or could benefit from a public residential high school dedicated to teaching the broad spectrum of healthcare-related fields/careers as part of their high school experience?</b>		
	Responses	
<b>Yes</b>	46.8%	288
<b>No</b>	53.2%	327

Table 24: Describing the community.

<b>How would you describe the community where you live?</b>		
	Responses	
<b>A suburban area next to a large city</b>	42.97%	266
<b>Rural / Small Town</b>	42.33%	262
<b>Urban / Large City</b>	14.70%	91

## Appendix B: Healthcare Professional Survey

Tripp Umbach, in partnership with the Alabama Legislative Services Agency, conducted a survey as part of the feasibility study. The survey aimed to gather insights from healthcare professionals and related occupations aged 30 to 70 regarding their interest in teaching as a second career for the health science high school.

The survey was accessible electronically and was available in English. 5,711 Alabama Healthcare professionals and persons in related occupations were invited to participate. The data collection period ran from November - December 2023. The survey received 80 responses.

Table 25: Working or starting to work again at some point after retirement?

Do you plan to continue working or to start working again at some point after retirement?		
	Responses	
Yes	63.8%	51
No	12.5%	10
Don't Know	23.8%	19

Table 26: Pursuing a second career teaching healthcare-related subject?

If you are currently employed in a healthcare-related field, would you be interested in pursuing a second career teaching healthcare-related subjects?		
	Responses	
Yes	68.8%	55
No	15.0%	12
Don't Know	16.3%	13

Table 27-What type of position would you be interested in teaching?

What type of position would you be interested in teaching?		
	Responses	
Full time	15.0%	12
Part-time	26.3%	21
Guest lectures and workshops only	25.0%	20
Virtual Lectures/Instructions	7.5%	6
Not sure	26.3%	21

Table 28: What is your teaching or mentoring experience in healthcare or related fields?

Have you had teaching or mentoring experience in healthcare or related fields?		
	Responses	
Yes	85.0%	68
No	15.0%	12

Table 29: Preference for teaching in a classroom, online, or clinical setting?

If you were interested in teaching, would you prefer teaching in a classroom, online, or clinical setting?		
	Responses	
Classroom	37.50%	30
Clinical	32.50%	26
Online	30.00%	24

Table 30: What type of position would you be interested in teaching?

If you were interested in teaching, would you be open to pursuing further education or certifications related to enhancing your skills?		
	Responses	
Yes	68.75%	55
No	8.75%	7
Don't Know	22.50%	18

Table 31: What type of position would you be interested in teaching?

What would motivate you to pursue teaching as a second career if you were interested?		
	Responses	
Mentoring and Guiding Future Professionals	72.5%	58
Sharing Knowledge and Experience	67.5%	54
Making a Positive Impact	51.3%	41
Contributing to the Community	47.5%	38
Supporting the Next Generation	35.0%	28
Enjoyment of Teaching	27.5%	22
Continuing to Learn	25.0%	20
Filling a Need	23.8%	19
Passing on Ethical Values	20.0%	16

What would motivate you to pursue teaching as a second career if you were interested?		
Career Transition	17.5%	14
Personal Fulfillment	17.5%	14
Educational System Improvement	16.3%	13
Bridging the Generational Gap	12.5%	10
Intellectual Stimulation	11.3%	9
Leaving a Legacy	8.8%	7
Other	2.5%	2

Table 32: Healthcare topics or subjects would you be most interested in teaching??

If you were interested in teaching, what healthcare topics or subjects would you be most interested in teaching?		
	Responses	
Anatomy and Physiology	27.5%	22
Healthcare Management	26.3%	21
Clinical Medicine	25.0%	20
Health Education and Promotion	25.0%	20
Pharmacology	23.8%	19
Nursing Skills	13.8%	11
Medical Ethics	12.5%	10
Mental Health and Psychology	12.5%	10
Therapeutic Services (i.e., Physical Therapy, Occupational Therapy)	12.5%	10
Other	11.3%	9
Public Health	11.3%	9
Alternative and Complementary Medicine	10.0%	8
Cultural Competence	8.8%	7
Infectious Diseases	8.8%	7
Healthcare Research	6.3%	5
Healthcare Technology	6.3%	5
Gerontology	5.0%	4
Healthcare Policy and Advocacy	5.0%	4
Pediatric Care	3.8%	3
Global Health	1.3%	1

Table 33: Expectations regarding compensation and benefits for your teaching role?

<b>What are your expectations regarding compensation and benefits for your teaching role?</b>		
	Responses	
<b>Flexible Work Schedule</b>	63.8%	51
<b>Competitive Salary</b>	57.5%	46
<b>Adequate Support Staff</b>	21.3%	17
<b>Health Insurance</b>	20.0%	16
<b>Teaching Resources</b>	17.5%	14
<b>Mentorship Opportunities</b>	15.0%	12
<b>Professional Development Opportunities</b>	13.8%	11
<b>Travel Allowance</b>	12.5%	10
<b>Retirement Benefits</b>	11.3%	9
<b>Access to Facilities</b>	7.5%	6
<b>Travel and Conference Funding</b>	7.5%	6
<b>Cultural and Diversity Initiatives</b>	6.3%	5
<b>Faculty Development Programs</b>	6.3%	5
<b>Performance-Based Bonuses</b>	6.3%	5
<b>Opportunities for Advancement</b>	3.8%	3
<b>Collaborative Research Opportunities</b>	.5%	2
<b>Tuition Assistance</b>	2.5%	2
<b>Research and Publication Support</b>	1.3%	1
<b>Sabbatical Opportunities</b>	1.3%	1
<b>Recognition and Awards</b>	0.0%	0
<b>Other</b>	2.5%	2

Table 34: What type of position would you be interested in teaching?

<b>If you were interested in teaching, what kind of community setting would most appeal to you?</b>		
	Responses	
<b>Suburban Setting</b>	47.5%	38
<b>Rural Setting</b>	35.0%	28
<b>Urban Setting</b>	17.5%	14

Table 35: What type of position would you be interested in teaching?

Of the following communities in the Black Belt, which community would be the most successful in hosting a health science high school? (Select one)		
	Responses	
Montgomery	66.3%	53
Demopolis	13.8%	11
Tuskegee	12.5%	10
Selma	7.5%	6

Table 36: What type of position would you be interested in teaching?

How many years of experience in healthcare do you have? (Select one)		
	Responses	
1-5 years	8.75%	7
6-10 years	6.25%	5
10-15 years	13.75%	11
15+ years	71.25%	57

## Appendix C: Overview of Health Science High Schools

Healthcare-focused high schools, often called health science academies, are institutions designed to provide students with a foundation in healthcare-related fields from a young age. These schools integrate the usual high school curriculum with specialized courses and experiences geared toward healthcare. Beyond medicine, successful health science high schools offer specialized tracks in healthcare I.T., biomedical engineering, health policy, or global health. Given the interconnected nature of health, successful health science high schools integrate lessons in environmental science, sociology, and economics to provide a comprehensive view of health and well-being. Students gain early insights into the various healthcare professions, encouraging more students to choose healthcare as a future career path. The healthcare field demands a solid scientific foundation, and these high schools offer advanced biology, chemistry, and anatomy coursework. Apart from the hard sciences, these high schools offer insights into healthcare management, policy, and technology, giving students a more rounded industry perspective.

The most successful health science high schools partner closely with local hospitals, clinics, and other medical facilities. Students have opportunities for internships, job shadowing, and other practical experiences, as well as close interaction with professionals in the field can help students create early professional connections, which can be beneficial when seeking college admissions, scholarships, or jobs right out of high school. Healthcare-focused high schools emphasize developing soft skills such as communication, empathy, and teamwork – critical skills in the healthcare sector. Health science high schools also integrate bioethics, healthcare equity, and quality discussions. This awareness prepares students to be more thoughtful and ethical professionals. Healthcare-focused high schools established in underserved communities provide opportunities for students who might not otherwise be exposed to the needs of the underserved.

For students who are passionate about healthcare, a focused environment can boost their motivation and engagement in school. Cultivating an early interest in healthcare leads to a more skilled and prepared workforce, which benefits the economy, especially given the increasing demand for healthcare professionals in rural areas that also need economic development.

With the rise of A.I., telemedicine, and other technological advances, the curriculum of healthcare high schools incorporates these elements to ensure students are well-equipped for the modern healthcare landscape. As medical technologies and treatments evolve, so do ethical dilemmas. There is a growing need for in-depth training on biomedicine ethics, data privacy, genetic engineering, and health equality. There is also a growing realization of the importance of mental health, nutrition, and holistic approaches to medicine. Given the complex and interdisciplinary nature of healthcare challenges, successful health science high schools emphasize collaborative projects and problem-based learning to mimic real-world scenarios.

## Appendix D: Community Selection Scorecard

Table 37: Site Selection Matrix

Location		Centerville (Bibb Co.)	Demopolis (Marengo Co.)	Dothan (Houston Co.)	Montgomery (Montgomery Co.)	Pell City (St. Clair Co.)	Selma (Dallas Co.)	Tuskegee (Macon Co.)
<b>Population 2022</b>		<b>22,005</b>	<b>18,745</b>	<b>175,278</b>	<b>385,460</b>	<b>234,148</b>	<b>44,802</b>	<b>209,491</b>
<b>Type of Visit</b>		<b>in-person visit</b>	<b>in-person visit</b>	<b>in-person visit</b>	<b>in-person visit</b>	<b>in-person visit</b>	<b>in-person visit</b>	<b>in-person</b>
<b>Existence of a comprehensive community hospital</b>	Yes (5 points) No (0 points)	5	5	5	5	5	5	0
<b>Support by Hospital Leadership (Hospital Administration Support from interviews)</b>	Greater support; the higher number	5	5	4	0	5	3	3
Favorability (Parents feeling comfortable sending kids to location)	5 = Very favorable 1 = Not at all favorable	3	3	4	2	5	1	2
<b>Community Health Needs:</b> To meet the project's objectives, the chosen site will be in an underserved area with lower health status and access to medical and other health services.	Poorer health status = higher number 1-5 points	4	4	1	2	1	5	5
<b>Proximity to Medical Facilities:</b> Being close to hospitals, clinics, or other medical facilities provides students with opportunities for internships, practical training, and real- world experience. The proximity also allows for professional guest lectures and	Distance from School site to Hospital 0-5 points	5	5	3	0	4	2	5

Location		Centerville (Bibb Co.)	Demopolis (Marengo Co.)	Dothan (Houston Co.)	Montgomery (Montgomery Co.)	Pell City (St. Clair Co.)	Selma (Dallas Co.)	Tuskegee (Macon Co.)
the ability to engage in real-world healthcare settings.								
<b>Hospital Patient Satisfaction Score:</b> Hospital scores are based on patient experience.	Higher Quality Patient Scores = higher number 0-5 points	No data	3	3	3	4	2	N/A
<b>Higher Education Partnerships (Distance from School Site to Higher Education Centers/Interest from Educational Partner):</b> Proximity and relationships with educational institutions can extend the curriculum through shared labs, classrooms, and student amenities. Consider the presence of other educational institutions nearby. Collaborations can lead to shared resources, academic partnerships, and a richer educational experience.	Closer to Higher Education Campus = higher number 0-5 points	2	4	5	5	4	1	4
<b>Area High School Support (Interview Findings):</b> Local school districts must welcome and support the new residential health science high school. Joint programming opportunities for athletics, arts, and culture may also be beneficial to the success of the	Stronger Support = higher number 0-5 points	3	5	4	0	4	0	2

Location		Centerville (Bibb Co.)	Demopolis (Marengo Co.)	Dothan (Houston Co.)	Montgomery (Montgomery Co.)	Pell City (St. Clair Co.)	Selma (Dallas Co.)	Tuskegee (Macon Co.)
residential health science high school. - Letters of Support								
<b>Local public school system quality (School district composite ratings):</b> The ideal community values public education and a diverse student body.  Priority – High Performing High School Partner in Racially Balanced School System (The racial breakdown of the public school population)	Higher Scores = higher number Greater Diversity Balance = higher number 0-5 points	4	5	5	4	4	4	3
<b>Community Walkability:</b> The location should be easily accessible to students, staff, and visitors. Services like grocery stores, cafés, restaurants, pharmacies, and other essential businesses should be accessible to students on foot.	Higher Walkability = higher number 0-5 points	3	4	2	0	3	1	2
<b>Technology Infrastructure:</b> Ensure the location has the capacity for high-speed internet and other technology infrastructures essential for modern education.	Higher internet speed = higher number 0-5 points	1	4	5	5	5	4	4

Location		Centerville (Bibb Co.)	Demopolis (Marengo Co.)	Dothan (Houston Co.)	Montgomery (Montgomery Co.)	Pell City (St. Clair Co.)	Selma (Dallas Co.)	Tuskegee (Macon Co.)
<p><b>Safety/Crime Rate:</b> Choosing a location in a safe community or neighborhood within a larger city is essential to ensure the well-being of the students. It will also make the school more attractive to parents. A peaceful, quiet environment conducive to learning is ideal. Avoid locations near industrial areas or noisy highways. Additionally, natural settings with greenery can boost student well-being and provide spaces for relaxation.</p>	Lower Crime Rate = higher number 0-5 points	4	4	3	3	4	1	3
<p><b>Sufficient Size (availability, suitability, size):</b> The site should have ample space for classrooms, labs, residential accommodations, recreational areas, and administrative offices. The presence of existing infrastructure or the feasibility of developing new infrastructure should be considered.: Consider the potential for future growth. Is there room to expand at the selected location? Can additional buildings or facilities be added in the future?</p>	Available Site = 5 No available site = 1	3	4	4	0	4	3	2

Location		Centerville (Bibb Co.)	Demopolis (Marengo Co.)	Dothan (Houston Co.)	Montgomery (Montgomery Co.)	Pell City (St. Clair Co.)	Selma (Dallas Co.)	Tuskegee (Macon Co.)
<b>Recreational and Cultural Opportunities (Distance from School Site to parks and recreation):</b> Students need outlets for relaxation and rejuvenation. Proximity to parks, sports facilities, or cultural centers can be beneficial. Proximity to cultural events, theaters, museums, or other places of interest can add value to the student's overall experience.	Closer distance = higher number 0-5 points	2	4	3	3	4	2	2
<b>Community Support (Active engagement in the planning process by community leaders):</b> Being part of a community that supports and welcomes the institution is crucial. Community involvement can offer students service, outreach, and network-building opportunities.	Greater Participation = higher number 0-5 points	4	5	4	0	4	0	5
<b>Readiness (Community's ability to build, fund, and open the school in three years):</b> The ideal community will have a plan for moving the project forward without delay.	Plan = 5 No Plan = 1	3	5	4	0	4	1	1
<b>TOTAL (TOTAL NUMBER)</b>		<b>51.0</b>	<b>69.0</b>	<b>59.0</b>	<b>32.0</b>	<b>64.0</b>	<b>35.0</b>	<b>43.0</b>
<b>Recommendations</b>			<b>1</b>	<b>3</b>		<b>2</b>		

## Appendix D: Resources and Informational Sources Considered

In our pursuit of establishing a transformative residential health sciences high school in Alabama, we recognize the importance of a comprehensive and well-informed approach. The consulting team meticulously examined a wide-range of resources to lay the groundwork for this ambitious educational endeavor. Through this extensive exploration, the consulting team was poised to make a well-informed decision and bring this transformative vision to life in an underserved, high-poverty community, ensuring equitable access to quality education and promising opportunities for future generations.

- Alabama state legislative proposal for a new residential Health Sciences High School to be preferably located in an underserved, high-poverty community.
- Review of the proposed budget developed by the State of Alabama.
- Site visits included targeted meetings with key stakeholders within several communities being considered for this project.
- Study of the demographic characteristics of each community.
- The level of enthusiasm demonstrated by each community.
- Review of similar schools (specifically health science-oriented schools) within the United States
- Review of the three existing residential magnet schools in Alabama.
- Conversations with leadership teams at the three residential magnet schools in Alabama.
- Conversations with key legislative and executive officials in Alabama.

## Appendix E: Health Sciences Curriculum Recommendations

The five health science career pathways encompass a wide range of professions and opportunities for individuals interested in healthcare. These pathways, along with sample occupations within each, are as follows:

### 1. Diagnostic Services

- EKG technician
- Phlebotomist
- Radiology technician
- Ultrasound technician
- Dental laboratory technician

### 2. Therapeutic Services

- Athletic Trainer
- Physical Therapist
- Certified Nurse Assistant (CNA)
- Pharmacist
- Occupational therapist
- Paramedic
- Respiratory Therapist

### 3. Health Informatics

- Hospital Administrator
- Medical administrative assistant
- Health information technician
- Nurse manager
- Medical transcriptionist
- Health care administrator

### 4. Support Services

- Dietary technician
- Biomedical equipment technician
- Medical librarian
- Hospital maintenance engineer
- Central services technician

### 5. Biotechnology Research & Development

- Crime Scene Investigator
- Toxicologist
- Biomedical engineer
- Forensic science technician
- Cytotechnologist
- Epidemiologist

## Recommendations

The consulting team recommends the following:

1. Consolidate these broad pathways into four specific curricular areas:
  - Education Pathways
  - Patient Care
  - Mental and Behavioral Health
  - Emergency Response
2. Designing a specific health sciences curriculum that incorporates these four areas: Viable and popular curricular offerings will be key in generating student interest. Students must be able to attach meaning and connection to the program(s) being offered. Career and Technical Education programs like masonry, HVAC, and childcare are drying up, while emergency medicine (e.g., EMT) and nursing programs continue to expand.
3. Develop strong and meaningful medical facility and staff partnerships: students must have easy and convenient access to medical facilities and staff. Walkability is critically important. Constant student transportation to and from facilities should be avoided as it wastes time, delays transitions, and distracts students.
4. Include in all strands: Public speaking, written communication specific to health occupations that include common medical terminology, and the integration of soft skills training (appropriate workplace behavior, interviewing skills, hygiene, etc.)

Many students will be preparing for jobs that do not currently exist. As a result, adaptability and "soft skills" are critically important components of any career training and career exploration curriculum.

## Appendix E: Health Sciences and Occupations

Students often seek insight into prospective occupations and their associated salaries when considering their career paths. Fortunately, the outlook is exceptionally promising for those considering a career in the health science field. As per the U.S. Department of Labor, the majority of the fastest-growing jobs projected until 2030 are closely aligned with the field of health sciences, presenting students with a plethora of opportunities and a bright future in terms of career prospects and income potential.

Table 38: Occupation and Salaries

Occupation	Salary
Physician assistants	\$115,390
Nurse practitioners	\$111,680
Medical and health services managers	\$104,280
Health specialties teachers, postsecondary	\$99,090
Genetic counselors	\$85,700
Speech-language pathologists	\$80,480
Nursing instructors and teachers, postsecondary	\$75,470
Epidemiologists	\$74,560
Respiratory therapists	\$62,810
Physical therapist assistants	\$59,770
Athletic trainers	\$49,860
Substance abuse, behavioral disorder, and mental health counselors	\$47,660
Phlebotomists	\$36,320
Home health and personal care aides	\$27,080

## Appendix F: Enrollment and Admissions

It is recommended that student admissions lean towards a lottery system, where special consideration is granted to underrepresented student groups. After thoroughly examining the student demographics in existing magnet schools, it's evident that diversity is lacking. Furthermore, guidance from the Alabama legislature emphasizes the importance of locating the school within an underserved, economically disadvantaged community. Considering these criteria, Alabama's "Black Belt" region is exceptionally well-suited.

Table 39: Current Alabama Residential Magnet Schools

School	Grades
Alabama School of Fine Arts (ASPA) (Birmingham)	7-12
The Alabama School of Mathematics and Science (ASMS) (Mobile)	10-12
The Alabama School of Cyber Technology and Engineering (ASCTE) (Huntsville)	9-12

### Offer admissions to students in grades 9-12

Traditional thinking suggests that if students are restricted from enrolling until the 10th grade, a significant number of students would have already formed friendships, become involved in student clubs and activities, and developed strong connections with faculty and staff to the point where they may be reluctant to depart from their familiar "home" campus.

Table 40: Enrollment Projections

Enrollment Year	Grade	Student Population Goal
Year One	9-10	175
Year Two	9-11	250
Year Three	9-12	325

Note: The attrition estimate is reflected in the year-to-year enrollments.

### Student Learning

According to the "Boarding School USA" website, there are twenty-three public boarding high schools across the United States. Remarkably, despite the presence of boarding schools with science-related concentrations, none prioritize "health sciences" as their primary focus. In this context, Health Sciences High and Middle College (HSHMC) in San Diego, California, stands out as a fully accredited public charter school. The curriculum it provides serves as an exemplary model for consideration by health science high schools. HSHMC offers a dual curriculum approach, featuring the conventional state-mandated curriculum aligned with California's graduation requirements and a specialized health sciences curriculum.

## Sample Curriculum Framework

Table 41: [Alabama State Graduation Requirements](#)

Course	Credits
English	4
Math	4
Social Studies	4
Career Technical/Fine Arts/World Languages	3
Health/Physical Education	1.5
*Science	4 credits (2 credits must be from lab-based courses)
**Career Preparation	1
**Additional courses	2.5
*Some of the science courses could potentially substitute state-required courses depending on the amount of flexibility the state grants	
**Career Technical, Career Preparation, and "Additional Courses" are easily incorporated into a health science high school's specific curriculum	

Table 42 depicts a typical health science high school academic schedule. The courses and program offerings begin with broad introductory courses and become more specialized.

Table 42: Typical ASHS Students Academic Schedule

Grade	Semester	Course
9 <sup>th</sup> Grade	Semester One	English
		Math
		Introduction to Health Sciences
		Anatomy and Physiology (fulfill science requirement)
	Semester Two	Social Studies
		World Language
		Exploration of H.S. Occupations
		First Aid/Emergency Response/CPR (fulfill science requirement)
10 <sup>th</sup> grade	Semester One	English
		Math
		Pathway Specific Course
		Pathway Specific Course
	Semester Two	Social Studies
		English

Grade	Semester	Course
		Pathway Specific Course
		Pathway Specific Course
Grade	Semester	Course
11 <sup>th</sup> Grade	Semester One	Math
		Social Studies
		Pathway Specific Course
		Short-Term Internship Rotation
	Semester Two	Social Studies
		World Language
		Pathway Specific Course
		Short-Term Internship Rotation
12 <sup>th</sup> Grade	Semester One	Math
		English
		Pathway Specific Course
		Pathway Specific Course
	Semester Two	Social Studies
		Public Speaking
		Advanced Internship (two blocks)

Note: Following the 9th Grade year, students choose a career pathway—examples include Education, Patient Care, Mental and Behavioral Health, and Emergency Response.

**Many and varied internship experiences**

Students should be offered along with courses dedicated to career exploration and pathways. Proximity to comprehensive medical facilities is critical.

**Extra and Co-Curricular Opportunities for Students**

Students should be eligible to participate in extra and Co-curricular activities at neighboring high schools, specifically, the school or schools located within the corresponding attendance zone. Allowing students to participate in extracurriculars outside the corresponding attendance zone conflicts with Alabama High School Athletic Association requirements.

Alabama has no law granting homeschooled students the right to participate in public school classes and activities; thus, individual schools and school districts can decide whether to allow homeschooler participation. Policies vary from district to district, according to the AHSAA website.

Any magnet school student who meets the division and/or AHSAA requirements would be eligible if the district allows homeschool participation. Alabama's other three magnet schools are a mixed bag in terms of athletics and extracurriculars. One provides an exhaustive in-school athletics and extracurricular

program; the other two do not. Providing a similar and independent school-based program within a small community would be expensive and unnecessary.

### Assessment of Learning

A nontraditional assessment model is recommended, specifically one that focuses on mastery learning. It is not a stretch to assume that many health science high school graduates will make difficult decisions. It is important to establish expectations of students that will follow them into postsecondary training, including higher education. Some may even begin working with patients upon graduation.

Conventional approaches to instructing lower-division STEM courses frequently emphasize achieving high scores in high-stakes exams, often utilizing norm-referenced (curved) grading. Introducing mastery learning into the design of STEM courses can promote the development of students' growth mindset and significantly enrich their educational journey.<sup>6</sup>

Mastery learning is an educational philosophy prioritizing comprehensive understanding and competency over the traditional, time-based progression through curriculum. This approach encourages students to work independently, ensuring they thoroughly grasp each concept before moving on to the next. Regular assessments and feedback play a pivotal role, allowing students to identify areas where they need improvement and providing opportunities for remediation until mastery is achieved. Mastery learning fosters a deeper and more enduring understanding of the material, promoting greater academic success and the ability to apply knowledge effectively in real-world contexts.

Figure 4: Mastery Learning



Leah Boone, 2020

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<sup>6</sup> [University of Irvine: Teaching Experiment Academy](#)


## Recommendations

The consulting team recommends a standards-based model with the expectation of 90% mastery. Standards-based assessment ensures that students master specific subject area strands and skills just as they would if they were receiving on-the-job training.

1. Students should understand the task and the procedures needed to complete the task.
2. There should be specific objectives for the task to be learned.
3. The subjects should be broken down into smaller sections, and students should be assessed after each lesson.
4. Teachers should provide students with feedback after each assessment.
5. Teachers should give students additional time to learn the lesson when needed.
6. Teachers could provide alternative learning opportunities if necessary.
7. It is recommended for students to work in groups for more than an hour, focusing on reviewing test results to increase student effort."


If the educational approach aims to prepare students for immediate career prospects, including opportunities right after high school, the primary objective should be mastery of subject matter across various settings such as labs, job shadowing experiences, and traditional classrooms. The standard should involve nontraditional assessments, formative assessments designed to mimic industry-recognized licensure evaluations, and authentic assessments conducted in laboratory and classroom environments. The prevalent culture of high-stakes standardized testing in American classrooms, characterized by fragmented learning, standardized multiple-choice exams, and subsequent knowledge detachment, should be diligently avoided. Instead, the focus should be on authentic assessment methods that empower students to effectively showcase their practical understanding of the material learned, highlighting a significant advantage of incorporating standards-based learning in multiple lab settings.

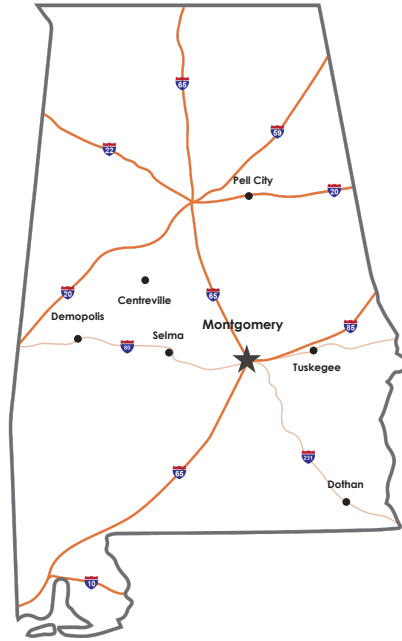
# Appendix G: Potential Site Locations



**Locations Under Consideration**

1. Demopolis
2. Centreville
3. Selma
4. Montgomery
5. Pell City
6. Tuskegee
7. Dothan






**Potential Site**

**Address:**  
Cedar St S, Demopolis, AL 36732

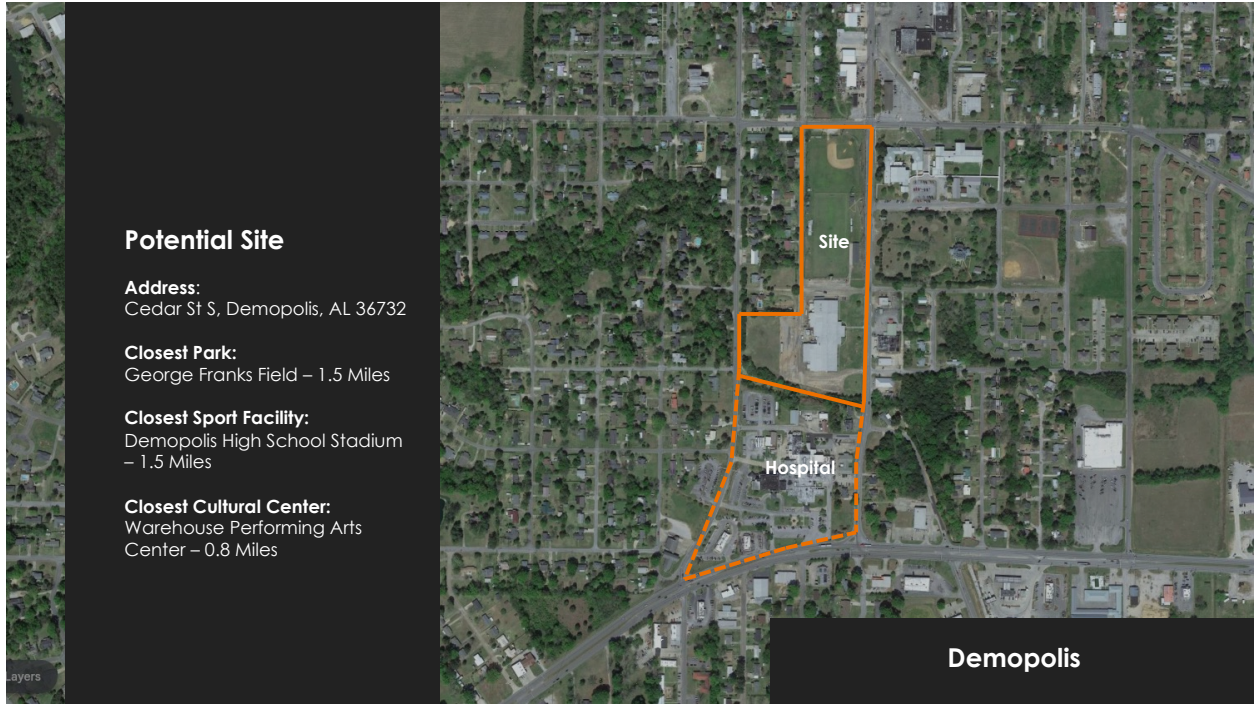
**Size:**  
10 Acres

**Owner:**  
City of Demopolis

**Proximity to medical Facility:**  
Adjacent (5), borders on Whitfield Regional Hospital at southern end



**Demopolis**



**Potential Site**

**Address:**  
Cedar St S, Demopolis, AL 36732

**Closest Park:**  
George Franks Field – 1.5 Miles

**Closest Sport Facility:**  
Demopolis High School Stadium  
– 1.5 Miles

**Closest Cultural Center:**  
Warehouse Performing Arts  
Center – 0.8 Miles

**Demopolis**



**Potential Site**

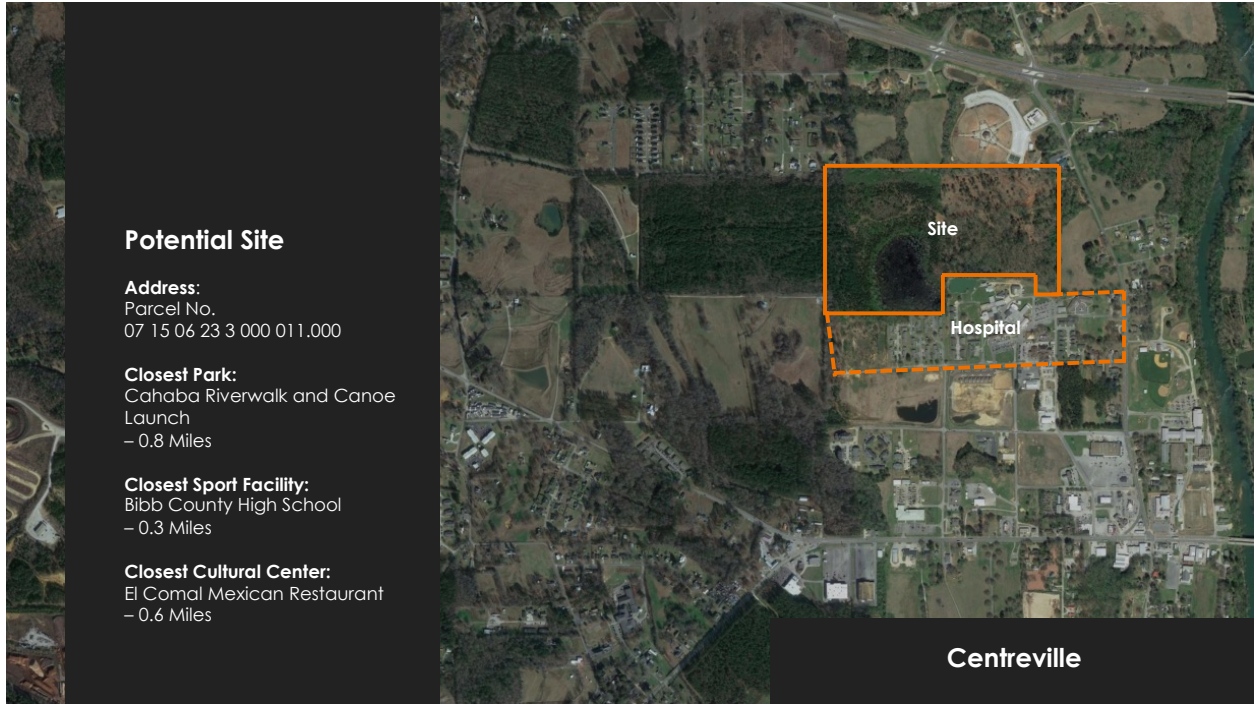
**Address:**  
Parcel No.  
07 15 06 23 3 000 011.000

**Size:**  
75 Acres

**Owner:**  
Cahaba Medical Care  
Foundation

**Proximity to medical Facility:**  
Adjacent (5), borders on Bibb  
Medical Center

**Centreville**



**Potential Site**

**Address:**  
Parcel No.  
07 15 06 23 3 000 011.000

**Closest Park:**  
Cahaba Riverwalk and Canoe  
Launch  
- 0.8 Miles

**Closest Sport Facility:**  
Bibb County High School  
- 0.3 Miles

**Closest Cultural Center:**  
El Comal Mexican Restaurant  
- 0.6 Miles

**Centreville**



**Potential Site**

**Address:**  
Parcel No.  
27 11 05 21 0 000 003.000

**Size:**  
56 Acres

**Owner:**  
City of Selma

**Proximity to medical Facility:**  
<5 Mile (2), Vaughan Regional  
Medical Center

**Selma**



**Potential Site**

**Address:**  
Parcel No.  
27 11 05 21 0 000 003.000

**Closest Park:**  
Bloch Park  
- 3.6 Miles

**Closest Sport Facility:**  
Selma Softball Complex  
- 0 Miles

**Closest Cultural Center:**  
MADD Esports Gaming Arena  
- 4 Miles

**Selma**



**Potential Site**

**Address:**  
NA

**Size:**  
NA

**Owner:**  
NA

**Proximity to medical Facility:**  
NA

*Not enough data for a potential site selection*

**Montgomery**



**Potential Site**

**Address:**  
NA

**Size:**  
NA

**Owner:**  
NA

**Proximity to medical Facility:**  
NA

**Montgomery**



**Potential Site**

**Address:**  
308 Martin St N, STE 110,  
Pell City, AL 35128

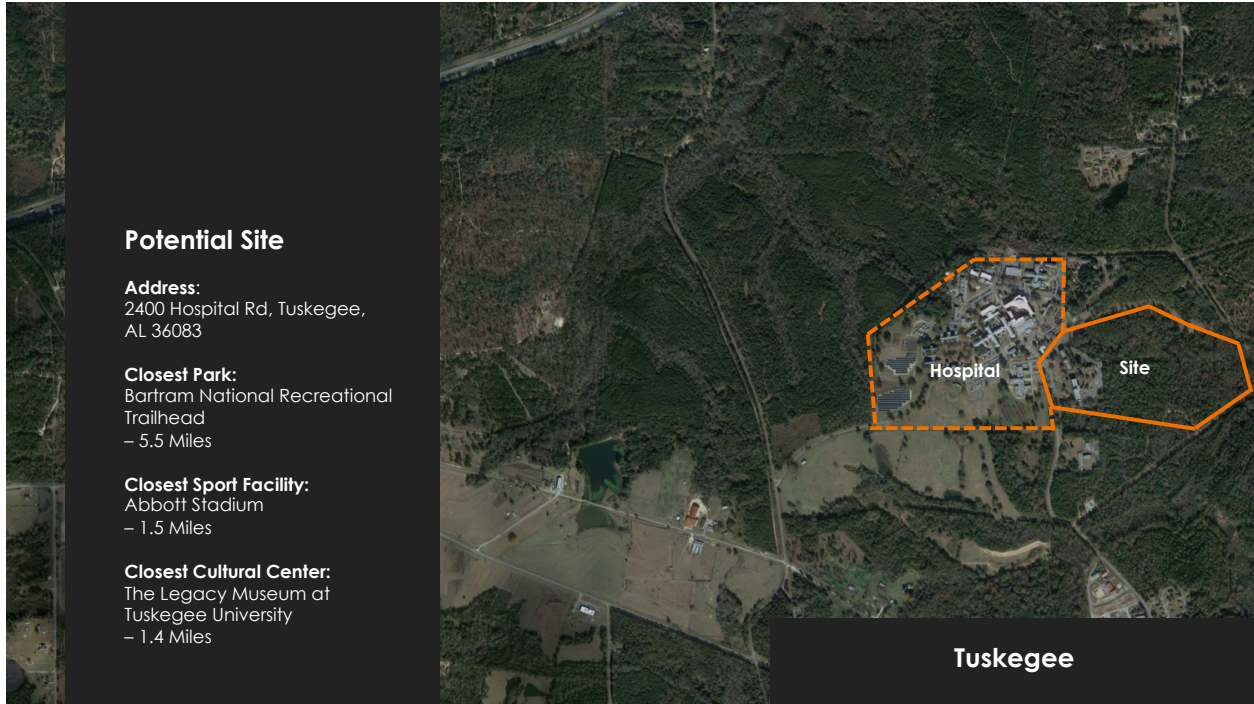
**Size:**  
51 Acres

**Owner:**  
The St. Clair County Economic  
Development Council

**Proximity to medical Facility:**  
< 1/4 Mile (4) to St. Vincent St.  
Clair Hospital

**Pell City**





**Potential Site**

**Address:**  
2400 Hospital Rd, Tuskegee,  
AL 36083

**Closest Park:**  
Bartram National Recreational  
Trailhead  
– 5.5 Miles

**Closest Sport Facility:**  
Abbott Stadium  
– 1.5 Miles

**Closest Cultural Center:**  
The Legacy Museum at  
Tuskegee University  
– 1.4 Miles

**Tuskegee**



**Potential Site**

**Address:**  
Parcel No.  
09 04 17 00 0 000 5000

**Size:**  
28 Acres

**Owner:**  
Houston County Health Care  
Authority

**Proximity to medical Facility:**  
<1 Mile (3), to Flowers Hospital

**Dothan (at Flowers Hospital)**



**Potential Site**

**Address:**  
Parcel No.  
09 04 17 00 0 000 5000

**Closest Park:**  
Dothan Trail Park Forever  
Wild Tract  
- 1.7 Miles

**Closest Sport Facility:**  
Westgate Softball Complex  
- 2.2 Miles

**Closest Cultural Center:**  
Adventureland Theme Park  
- 1 Mile

**Dothan (at Flowers Hospital)**



**Potential Site**

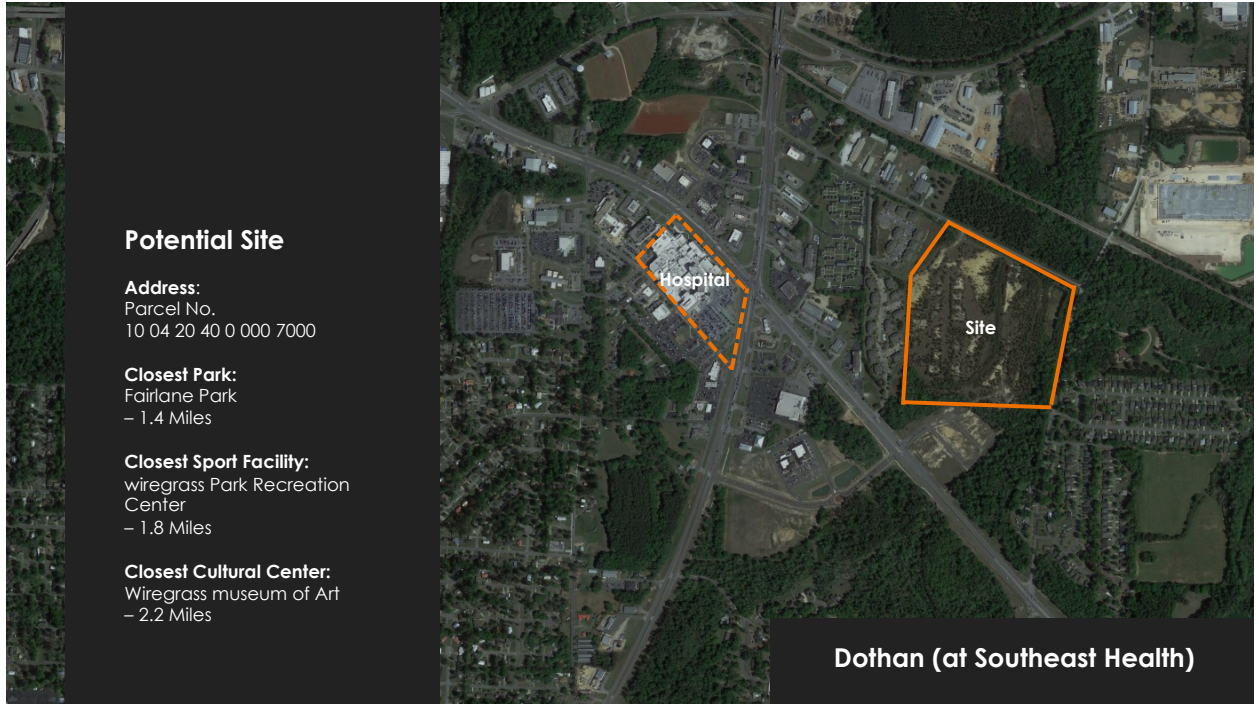
**Address:**  
Parcel No.  
10 04 20 40 0 000 7000

**Size:**  
50 Acres

**Owner:**  
Houston County Health Care  
Authority

**Proximity to medical Facility:**  
<1 Mile (3), to Southeast Health

**Dothan (at Southeast Health)**



**Potential Site**

**Address:**  
Parcel No.  
10 04 20 40 0 000 7000

**Closest Park:**  
Fairlane Park  
- 1.4 Miles

**Closest Sport Facility:**  
wiregrass Park Recreation  
Center  
- 1.8 Miles

**Closest Cultural Center:**  
Wiregrass museum of Art  
- 2.2 Miles

**Dothan (at Southeast Health)**

## Appendix J: Site Visit Photos

### Centerville



### Demopolis



Dothan



Montgomery



Pell City



Selma



