# ALABAMA 2024 ECONOMIC DEVELOPMENT GUIDE

A comprehensive resource for site selection

### INSIDE

Development Incentives
Success Stories
Economic Sectors
International Trade
Business Resources
Statewide &
Regional Economies
Economic

Development Agencies

FROM THE PUBLISHER OF



FLYING EVEN
HIGHER-

NORTH ALABAMA BUILDS THE ROCKETS FOR DEFENSE, COMMUNICATION AND EXPLORATION



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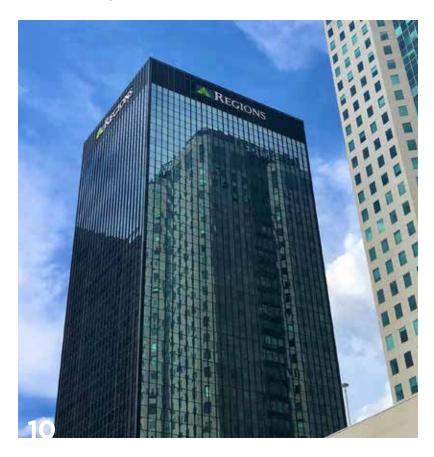


# ALABAMA TABLE OF

### 2024 ECONOMIC DEVELOPMENT GUIDE

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# CONTENTS





### STATE OF THE ECONOMY

- 10 Statewide Overview
- 14 Tennessee Valley
- 17 Central Highlands
- 20 Capital Heartland
- 23 Southeastern Wiregrass
- 25 Gulf Coast

### **ECONOMIC SECTORS AND FEATURES**

### **AUTOMOTIVE SECTOR**

27 Automakers Electrify

### HIGH TECH INDUSTRY

- 31 High Tech Overview
- 33 Aerojet: Defending the U.S.
- 38 Artemis Carries Alabama Pedigree to Space

### CONSTRUCTION

39 Building for Health Care

### HIGHER EDUCATION

- 42 Higher Ed Overview
- 43 Alabama's Colleges and Universities
- 45 Colleges Build a Workforce
- **48** Auburn Opens World-Class Hospitality Center
- 50 Learning to be Entrepreneurs

Photos: 10. Regions Financial Corp., headquartered in Birmingham. 20. Hyundai, with a plant in Montgomery, produced 332,832 vehicles last year, almost all headed for the U.S. market.

### TABLE OF CONTENTS









### **MANUFACTURING**

54 Cerrowire Expands in Hartselle

### INTERNATIONAL TRADE

- 56 Trade Goes Back on the Road
- 59 Where are Alabama Exports?
- 60 Port of Huntsville
- 62 Alabama State Port Authority
- 65 Foreign Trade Zones

### **INCENTIVES & TRANSPORTATION**

- 66 State Economic Development Incentives
- 67 Planes, Trains, Ships and Cars
- 68 Alabama Airports and Highways
- 70 Alabama Rail and Waterways

### **ECONOMIC DEVELOPMENT AGENCIES**

- 71 Alabama Department of Commerce
- 72 AIDT Industrial Training
- 73 Alabama Technology Network
- 74 Alabama Department of Economic and Community Affairs
- 75 North Alabama Industrial Development Association
- 76 Economic Development Association of Alabama
- 77 Economic Development Partnership of Alabama
- 78 Birmingham Business Alliance

ON THE COVER: A United Launch Alliance rendering of the launch of a Vulcan Centaur. Courtesy of ULA.

Photos: 31. Cummings Research Park - HudsonAlpha Institute for Biotechnology in Huntsville. 27. Mercedes reveals the EQS SUV, built in Tuscaloosa. 23. A helicopter at Fort Novosel. 48. A hotel, restaurant and spacious learning areas create the Tony & Libba Rane Center at Auburn University.



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### GOVERNOR'S LETTER



### Greetings

I am pleased to introduce the 2024 Alabama Economic Development Guide.

Having once served as the assistant director of the Alabama Development Office, now known as the Alabama Department of Commerce, I have a deep understanding of how important the work of economic development is to our state. Since day one, it's been a top priority of my administration to build on the successful track record of Alabama's economic development

team. Truly, with no stopping point in sight, Alabama's economic momentum is on the rise, as more companies, some world leaders in their industry, decide to call Alabama home.

Alabama is the location of choice for many critical sectors of the economy. Our highly skilled workforce, commitment to infrastructure development and attractive economic development incentives assure industry leaders our great state provides nothing less than business success. Alabama continues to distinguish itself as a world leader in sectors like automotive manufacturing, aerospace, biotechnology and information technology. Since 2017, when I took office, we've been able to create over 78,000 new jobs in economic development projects, bringing \$42 billion of new capital investment to the state.

As we elevate the level of collaboration between the public and private sectors, we will continue to create new opportunities for the people that call Alabama home, and we remain more than ready for other top companies to plant their roots here in Alabama.

Companies that choose Alabama know our state is a great place to live and work. They quickly recognize that our hard-working citizens are our greatest asset, and our state's natural beauty truly reflects that of our people. Alabama's unwavering economic success is a great story, and new, successful chapters are being written every day.

Sincerely

Kay Ivey

Governor of Alabama

### ALABAMA

ECONOMIC DEVELOPMENT GUIDE

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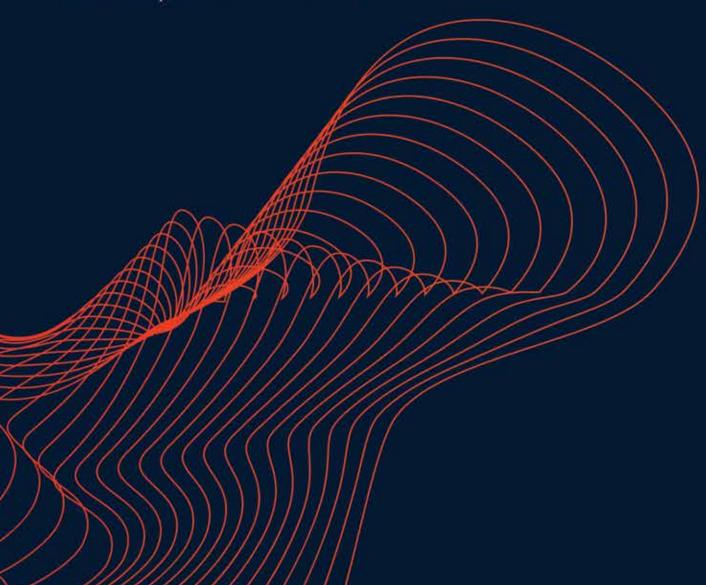
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# **STATEWIDE ECONOMIC OVERVIEW**



Alabama's economy is flourishing. Despite a pandemic, supply chain nightmares and the threat of inflation, Alabama's business life is roaring forward.

The state saw \$10 billion in new economic development in 2022, a record. Of that, \$1.7 billion landed in Montgomery, a record for that capital region.

And the wins just kept on coming. Headline grabbers in 2023 included a \$1.1 billion photovoltaic solar module plant planned for Lawrence County; a \$232 million microreactor plant in Gadsden; a \$128 million auto supplier plant in

Regions Financial Corp., headquartered in Birmingham, has reported a total revenue increase for 2022 of 12% year-over-year to a record \$7.2 billion on both a reported and adjusted basis, driven by growth in net interest income.

Auburn; and a \$125 million steel tower plant in Decatur.

Major expansions made news, too — a \$350 million oriented strand board plant expansion in Oxford; a \$290 million Hyundai plant expansion in Montgomery; a \$114 million auto supplier expansion in Auburn; and a \$100 million expansion at Cerrowire in Hartselle.

Exports set a record, the port set a record, and the only Alabama-based Fortune 500 company — Regions Financial — set a record.

With unemployment dropping back to pre-pandemic levels and new jobs springing up at major employers across the state, many firms developed creative ways to attract and train more workers.

Manufacturing boasted big numbers, but high tech played a key role, too.

The University of Alabama at Birmingham and its neighbor, Southern Research, have teamed to provide cancer drugs, relief from COVID-19 and more, while HudsonAlpha Institute for Biotechnology in Huntsville provides cutting-edge research in genetics and encourages a quick path from research to remedy.

Building on that foundation, UAB announced plans to invest \$76 million in a new biomedical research facility. Southern Research announced plans for a new biotech incubator, and Gov. Kay Ivey announced a new state initiative to train biotech workers.

The state also has new data centers to support Google and Facebook, and Gunter Annex at Maxwell Air Force Base is home to that service's information technology experts.

The state took special pride in the launch of Artemis to the moon, the first step in plans for humans to revisit the moon and go even deeper into space.

In less than 30 years, Alabama has moved to the forefront of American automobile manufacturing. Since Mercedes-Benz opted to build its first U.S. plant in Tuscaloosa in the mid-1990s, automotive work has been a highlight of Alabama's economy. The state boasts five major manufacturers — Mercedes, plus Hyundai in Montgomery, Honda in Lincoln, Mazda Toyota in Huntsville and a major Toyota engine plant, also in Huntsville. All those plants are introducing new electric models, and many have launched expansions and upgrades to



# MADE IN ALABAMA. POWERED IN BIBB COUNTY.

Mercedes-Benz has built luxury cars in Alabama for 25 years. Now, they're building an all-electric, carbon-neutral future here. Starting in a state-of-the-art battery factory in Bibb County, high-performance lithium-ion batteries are prepared for production of the EQE and EQS SUVs in Tuscaloosa. The electric evolution is coming straight from rural Alabama.

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### ECONOMIC OVERVIEW

make the new vehicles.

Alabama's contribution to the nation's ground transportation doesn't stop at cars and SUVs. We build railroad cars, buses and trucks, too.

Hankering to move cargo? We build ships, too. Mobile has been a shipbuilding hub for centuries. Today Austal USA dominates the Mobile waterfront, building aluminum-hulled ships for the U.S. Navy and just kicking off new steel ship capabilities. And our Port of Mobile is among the busiest in the nation.

Want to get there faster? We build airplanes, too. Since 2015, Mobile has been home to the only U.S. final assembly line for European aircraft giant Airbus, delivering A320 and A220 family commercial jets. Now the company is adding its third FAL, markedly increasing production and employment.

And if you need to get there really, really fast — think Huntsville and Decatur. That's where we build rockets. The workaday rockets that take most of America's payloads to space are crafted at United Launch Alliance in Decatur and the spacecraft of the future at NASA in Huntsville, with key elements coming from an array of the nation's biggest space and defense contractors — Boeing, Lockheed Martin and Raytheon — along with newcomers like Blue Origin, Beyond Gravity and Aerojet Rocketdyne.

Defense industries flex their muscle in north Alabama, clustered around Redstone Arsenal in Huntsville. The missiles to protect America from threats are designed and built there and in Pike County. Military folks also take care of land vehicles in Anniston and helicopters in Dothan.

The old Fort McClellan in Anniston now trains the nation's first responders for whatever catastrophe may arise — from an Ebola outbreak to an earthquake. And the Coast Guard trains its aviators in Mobile, ready to thwart drug smugglers, protect ports and rescue those stranded on the high seas.

For decades, Alabama's universities have built football legends, but the Alabama university system is much more than sports. Arts, law, medicine, pharmacy, business — all help today's students flourish as tomorrow's leaders. Working in partnership with the state's colleges and universities and with its industrial sector, the Alabama Community College System prepares students to pursue a higher degree or a hightech industrial career.

For all that Alabamians build, create, blast off, launch or study, the state's roots run deeper still. Crops thrive on farms rich with Black Belt soil; cotton creates a landscape of white; trees soar to the skies. Seafood thrives in the Gulf waters, And Alabama chickens feed millions here and abroad.

Beneath the surface there's coal — Alabama shipped \$2 billion worth of metallurgical coal overseas in 2018, while overall exports topped \$21 billion. Warrior Met Coal recently announced

### REGIONAL OVERVIEW



plans for a new \$500 million mine and a \$50 million barge loading facility to take that coal to market. Westwater Resources is taking initial steps to process graphite in Coosa County, anticipating the market created by automotive batteries.

All the while that manufacturing thrums, commerce hums, research expands our horizons and agriculture grows, Alabama continues to attract more and more people who just want to enjoy — staring in awe at the rockets towering overhead at the U.S. Space and Rocket Center, thrilling to the zoom of NASCAR at Talladega, fishing, hunting, hiking, canoeing, watching Shakespeare or just relaxing on the sugar white sand of Alabama's Gulf Coast beaches.





# TENNESSEE VALLEY

### Rockets roar, autos roll and North Alabama commerce rocks on

### Alabama aims for the stars.

For nearly three-quarters of a century, scientists have worked diligently in Huntsville to convert dreams of space exploration into the realities of rockets, satellites, telescopes and propulsion systems.

In the mid 1950s, the federal government brought a team of former German rocket scientists to the nearly defunct Redstone Arsenal. From that quiet start, the U.S. leaped into the space race — an effort that continues today as NASA and a host of companies, big and small, work to develop the mighty new Space Launch System. No longer aiming just for the moon but also to

the planets beyond, the Space Launch System will be bigger and faster, able once again to carry humankind beyond the known.

When Artemis 1 launched late 2022, it carried an Alabama pedigree with key elements designed and crafted by Marshall Space Flight Center, Boeing, Lockheed Martin, Dynetics, United Launch Alliance and more.

Even as they work on the newest of rockets in Huntsville, Boeing and Lockheed Martin team in a joint venture called United Launch Alliance in nearby Decatur, building the Atlas and Delta rockets that have long been the mainstays of U.S. spaceflight. ULA is doubling in size to meet the demands of the Amazon

Kuiper Project. Blue Origin is newest to the flock, chosen

to develop a new engine for those ULA rockets — one that will replace the Russian-made version. Aerojet Rocketdyne has now joined the mix.



ABOVE: The U.S. Space and Rocket Center. Photo courtesy of Huntsville-Madison County Chamber.

Judy Hood and Kevin Jackson at a console at the Muscle Shoals Sound Studio. Photo by David Higginbotham.

Always at the cutting edge, Huntsville is also working with Sierra Space as they prepare to land the firm's Dream Chaser space craft on the workaday runways at Huntsville International Airport maybe even this year.

As glamorous as its rocketry may be, the northernmost region of Alabama has many more facets. National defense goes hand in hand with Huntsville's space science. Clustered around Redstone Arsenal are firms that design and build missiles to protect the country and simulations to help soldiers learn to make the right decision in an instant. And a major FBI campus is in progress in Huntsville, too.

Cummings Research Park, one of the largest in the nation, and the newer Redstone Gateway are home to an array of defense firms like those that encircle the Pentagon. The synergy of space science and defense engineering has attracted an array of scientific minds to Alabama's northern tier — not limited to those original fields.

In fact, Huntsville and its variety of opportunities have propelled it past Birmingham as Alabama's largest city.

Automaking is a big player here. Toyota has operated a major engine plant here for the better part of 20 years and a newcomer, Mazda Toyota Manufacturing, is easing toward full operations, beginning with a new Toyota Corolla Cross and Mazda CX-50.

Suppliers continue to flock here to support the OEM firms, newest among them the specialty steel maker Madison Metal Processing, a \$40 million investment.

Facebook, which kicked off a massive data center three years ago, now says its expected \$750 million investment could well reach \$1 billion. Google's data center in Jackson County, at the northeast corner of the state, is now operational.

The Tennessee Valley is also home to some of the state's brightest lights in biotechnology.

HudsonAlpha Institute for Biotechnology focuses on encouraging biomedical researchers and entrepreneurs to work together so that new developments can come efficiently to the marketplace. The



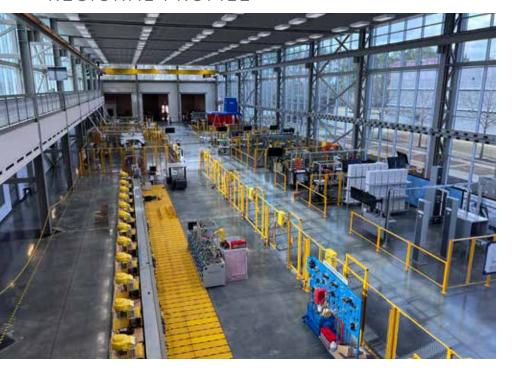
Institute is making a name for itself and for Alabama in the intricate world of genetic research.

The northern tier's other industry is as varied as your imagination. Constellium makes the sheet metal for food and beverage containers in the Shoals,

and its new furnace can recycle 20 billion aluminum cans a year. Carpenter Technologies has added a \$52 million research center in Athens, where it works on additive manufacturing technology. GE makes appliances and Ascend Performance Materials makes



### REGIONAL PROFILE



high tech plastics.

Keeping the workforce up to date, Alabama's new robotics center at Calhoun Community College trains workers in how to operate and maintain the

high-tech machines, while offering space for industry to design and test robotic components.

Agriculture is strong here, too. Marshall County leads the state in poultry

The Alabama Robotics Technology Center, in Tanner in Limestone County, includes this simulated shop floor and classrooms for students plus space where industry can develop and test robotic equipment

processing and ranks second for producing poultry.

It's not all work and no play here. The Tennessee River brings opportunities for fishing, hunting, birding, even riding a riverboat as it flows through these northern counties.

Music is nearly as fundamental to the Shoals as the water itself. This is the home of Muscle Shoals Sound and FAME Recording Studios, where some of the biggest names in pop music recorded — from Aretha Franklin to the Rolling Stones. A new amphitheater has opened in Huntsville, backed by, among others, Ben Lovett of Mumford & Sons. And every winter brings the opportunity for snow skiing up in Mentone.

And baseball joined the mix when Madison opened its new ballpark, home to the Los Angeles Angels' Double-A team, the Rocket City Trash Pandas.







# CENTRAL HIGHLANDS

### From coal and steel to the heights of high tech

Alabama's Central Highlands area is grounded in coal and steel. From that solid foundation, the region has grown and prospered in a wide-ranging economy including everything from higher education and health care to insurance and banking to biotech and info tech.

Stretching from the foothills of the Appalachians in the east to the University of Alabama in the west, the Central Highlands region also boasts two of the state's major automakers and the world-famous Talladega Superspeedway.

As data centers, biotech research and information technology flourish here, Forbes Magazine pondered whether Birmingham may earn a new moniker as "the Southern Silicon Valley."

The updated image is another tribute to the adaptability of Alabama's Central Highlands.

ABOVE LEFT: Downtown Birmingham. ABOVE RIGHT: The Quad and Denny Chimes on the University of Alabama campus. Photo Alabama Tourism Department by Chris Granger.

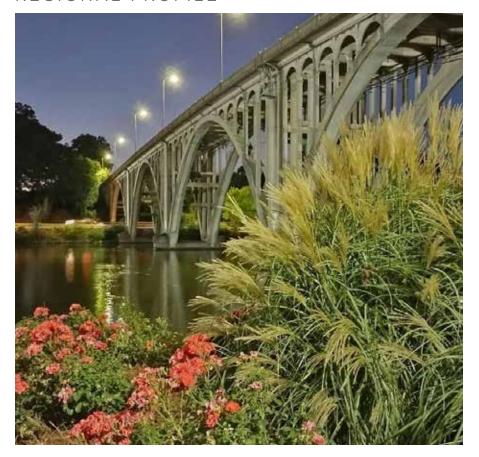


Born in the steel industry, Birmingham still counts major manufacturers like American Cast Iron Pipe Co., U.S. Pipe and Foundry, McWane Inc. and O'Neal Industries among the stalwarts of its economy. U.S. Steel has fired up a new electric arc furnace at its plant in Fairfield, modernizing this basic industry.

Banking gives Alabama its own homegrown Fortune 500 company - Regions Financial. PNC, which recently completed its \$11.6 billion acquisition of BBVA, plans a regional technol-



### REGIONAL PROFILE



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Gadsden's Broad Street Bridge area has been a focal point for development in the

ogy center here. Downtown is also home to Infinity Property & Casualty, now part of Kemper, and to ProAssurance, as well as the U.S. headquarters of Protective Life, recently purchased as a U.S. foothold for Dai-Ichi Life of Japan.

Entrepreneur Bill Smith created a grocery delivery service, Shipt, a few years back. It flourished and he sold it to Target — keeping the headquarters in Birmingham — and moved on to his next venture, a service called Landing that helps short-term residents find suitable housing in cities across the country. Now that company, too, is headquartered in Birmingham.

Biotechnology is a major player here, too. Nurtured by the University of Alabama at Birmingham and Southern Research, medical care is offered for those in need today while teams of scientists search for the causes and cures for ills still hard to treat. New medicines and medical devices are always in development. Seven current FDA-approved cancer drugs have been developed at Southern Research, while UAB is launching the state's first proton therapy option for advanced cancer care. Both have been major players in the fight to tame COVID-19. Just this year, UAB announced plans for a \$76 million biotech research facility, and Southern Research announced plans for an incubator for young biotech firms.

And, while educating its students and caring for its neighbors' health, UAB also won honors from Forbes as the nation's best place to work in 2021.

Arts, sports, entertainment and an array of eateries show Birmingham for the major city it is — among the largest in the Southeast. The city boasts seven James Beard award-winning chefs and restaurants.

Tuscaloosa is home to the University of Alabama. A highly ranked educational institution, Bama also fields one of the most recognizable football squads in the nation, repeatedly winning national championships while attracting crowds to the university city.

Moreover, the Tuscaloosa County city

of Vance boasts another claim to fame as the wellspring of Alabama's auto-making industry. About 30 years ago, Mercedes-Benz U.S. International announced plans to launch a U.S. plant, and Tuscaloosa beat out all rivals for the honors. MBUSI has grown and expanded repeatedly over the years, building popular luxury SUVs — including the \$190,000 Maybach — and in 2022 introducing its first all-electric vehicle, while making batteries in nearby Bibb County. Mercedes is Alabama's leading exporter, sending vehicles

to countries around the world.

Talladega County has a pair of autorelated success stories. Like Tuscaloosa, it's home to one of Alabama's major auto plants. Honda builds the Odyssey minivan, the Pilot SUV, the Ridgeline pickup and the Passport and Passport Trailsport models in Lincoln. And across the county, speed dominates the auto scene at the Talladega Superspeedway, famous for its sizzling speeds and challenging curves. If speed's your thing, don't miss the Barber Motorsports Museum, with hundreds of vintage motorcycles and a great view of the motorcycle and Indy races.

The Central Highlands are also home to the cities of Cullman, Anniston and Gadsden — all big contributors to the Alabama economy. Gadsden, on the Coosa River at the foot of the Appalachians, is Alabama's mountain gateway — a tourist attraction with a charming riverfront and a popular park that showcases Noccalula Falls.

A pacesetter city, Anniston was first in Alabama to be wired for electricity, in 1882, and it added telephones in 1884. Its major employer is the Anniston Army Depot, the maintenance center for tracked vehicles. Nearby McClellan, a planned community growing on the site of the former Fort McClellan, also hosts the Department of Homeland Security's Center for Domestic Preparedness, helping first responders from across the nation be prepared, whether they face Ebola or an earthquake. Like its Central Highlands neighbors, Anniston and Calhoun County are also home to automotive supplier firms that have emerged in the past 20 years.

Cullman, not too far north of Birmingham nor too far south of Huntsville along Interstate 65, has kept its agricultural roots strong. It's one of the nation's top

60 counties for agricultural income. But Cullman has taken to the highways as well. The county is also home to three relatively new Tier 1 auto suppliers and a host of smaller firms.

Over to the west, Warrior Met Coal is starting development of a new long-wall mine, tapping Alabama's abundant stores of metallurgical coal that's in demand especially for Asian steel processing. And to move that coal, it's investing \$50 million

### REGIONAL PROFILE

in a barge-loading facility near Jasper.

The region has seen its share of the state's recent economic development wins, too. The biggest was an announcement from Ultra Safe Nuclear that it planned a \$232 million plant in Gadsden to make microreactor units. Plus, Kronospan announced a \$350 million expansion at its oriented strand board plant in Oxford.





# CAPITAL HEARTLAND

### Cars, cotton and civil rights create Alabama's Capital Heartland

Cotton and catfish, cars and the Capitol, universities and history — all abound in Alabama's Capital Heartland, a rich and varied land that's both prosperous and forward thinking.

This Alabama heartland lies in the famed Black Belt and once produced cotton to clothe the world. The sounds of agriculture still fill the air, but the fields now sprout products undreamed of when plantation life was at its peak. Today you'll find catfish ponds where the farmers raise \$120 million in fish and harvest

RUSSEL MARENGO UTLER

the algae to make biodegradable plastic, and even an inland shrimp farm or two.

Down the road, former cotton fields now produce bamboo, where Resource Fibers plans a harvest of flooring materials and other household products.

Trees grow here, too, for construction, paper and more. And the leftovers — the sawdust, chips and bits and pieces from tree trimming — are processed into pellets that substitute for coal.

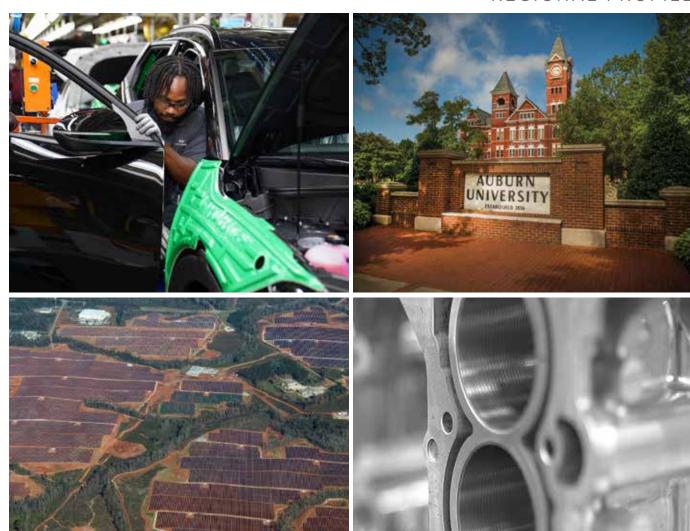
> More traditional forest products thrive here. International Paper recently invested more than \$550 million to boost productivity at its Selma mill. And Ikea Group invested in its first U.S. forest, purchasing 25,000 acres in rural Lowndes County.

Also growing here is one of the most sophisticated cyber networks in the nation, a Montgomery-based partnership among local government, the Air Force

internet experts at the Maxwell-Gunter



Montgomery, Alabama's capital city, sparkles in the twilight.



base plus education and industry.

There's another new product growing here, too — popular Elantra and Sonata sedans, Tucson and Santa Fe SUVs and Santa Cruz pickup trucks, rolling off the line at Hyundai Motor Manufacturing Alabama — which celebrated production of its 5 millionth vehicle in 2021. The \$1.7 billion, 2-million-square-foot plant opened in 2006 and today produces nearly 400,000 vehicles a year. The plant has attracted 35 Tier 1 suppliers and another 43 Tier 2, bringing an added \$650 million in industrial investment and employing another 7,000 workers. The firm announced another investment in 2023, planning to spend \$290 million to prepare for updated models.

The Heartland is also home to a new type of building product — a \$220 million James Hardie Building Products plant in Prattville.

And new warehouse and distribution centers — led by a \$100 million Amazon investment — are taking advantage of the busy transportation network.

Montgomery is a living mix of history and trendy lifestyle options. The city centers on the Capitol complex and all the myriad offices that handle the public's business. But just down the street one way is Old Alabama Town, showcasing the area's pioneer roots. Down the street another way are the remembrances of the hard times of the civil rights era. Turn yet another way and you find an array of nightspots, restaurants, riverfront parks and loft apartments.

And just for fun, the city and county have just opened Montgomery Whitewater, a \$40 million water park with a whitewater course and other attractions near the Alabama River.

Education is a cornerstone of the

TOP LEFT: Hyundai produced 332,832 vehicles last year, almost all headed for the U.S. market. TOP RIGHT: Auburn University has provided instruction, research and outreach to benefit the state of Alabama and the nation for 165 years. BOTTOM LEFT: Lafayette Solar was developed by Origis. BOTTOM RIGHT: Samkee specializes in die-cast aluminum components.

Capital Heartland. Auburn University, the state's original land grant university, lies in the eastern edge of the region. Programs in engineering, architecture and veterinary medicine are hallmarks of the school. The state's newest medical school, a branch of the Virginia-based Edward Via College of Osteopathic Medicine, is also in Auburn.

The campus region is also home to a variety of high-tech businesses, from GE Aviation's innovative 3D printing plant



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In Auburn, Shinwha recently announced plans for a \$114 millon expansion to make electric vehicle parts.

that makes jet engine components to AUBix LLC, a \$120 million data center adjacent to the university campus that opened in 2022. Auto supplier firm Shinhwa announced a \$114 million investment to support production of electric vehicle parts.

Smaller cities in the Capital Heartland are making their own headlines.

Auto supplier Samkee picked Tuskegee for a \$128 million plant to make diecast aluminum parts for Hyundai, and Trendco USA announced plans for a \$32 million nitrile glove plant there.

Craig Field in Selma was chosen for a high-tech aviation tower that lets air traffic controllers monitor multiple airfields from a single location.

Graphite deposits are attracting activity to Coosa County like iron to a magnet. Westwater Resources began work on a graphite processing plant in Kellyton, a \$602 million project, while Canadian firm South Star Battery Metals took the first steps toward reopening a graphite mine. The draw — graphite is a critical component in the high-performance batteries needed to power electric vehicles.

Bibb County celebrated the opening of the Mercedes-Benz battery plant in 2022. Sumter County is watching progress on a \$175 million biomass plant being built by Maryland firm Enviva at the Port of Epes.

Butler County is home to a new \$86 million solar farm in Greenville. Chambers County has seen two expansions at John Soules Foods in Valley, totaling more than \$60 million.

Macon County has kicked off work on the 683-acre Regional East Alabama Logistics Park.

Phenix City is now home to a worldclass whitewater course on the Chattahoochee River, a partnership with Columbus, Georgia, on the opposite bank. Phenix City is spiffing up its downtown to give those visitors a good welcome. Phenix City also announced plans for a new Sierra Pacific Window plant.

And you can get a close-up look at the history of the civil rights movement by following U.S. Highway 80 from Selma to Montgomery, traveling in the footsteps of the civil rights marchers from the Edmund Pettus Bridge to the Capitol steps.







# **SOUTHEASTERN WIREGRASS**

### Crops, choppers and front-porch living

On the ground, in the air and in between, Alabama's Wiregrass is thriving.

On the ground are crops to feed the Southeast and beyond especially if they're hankering for peanuts or chicken. Pointing skyward are the trees to feed the lumber and paper mills.

In between are new industrial plants, busy participants in the state's economic clusters of aviation, aerospace, automotive and beyond. And in the air are the aircraft — especially missiles and helicopters — that are the new face of the Wiregrass economy.

This southeastern corner of the state, nestled alongside Georgia and just north of the Florida Panhandle, is the epicenter of the nation's peanut crop. More than half the peanuts grown in the U.S. are grown within 100 miles of Dothan, which honors the tasty legume with an annual festival. It's such an important crop that the city of Enterprise has a statue honoring the boll weevil,





which forced farmers to find an alternative to cotton.

Chickens are part of the agricultural mix, too, with several plants that process broilers among the major employers. And one more crop defines the agriculture of the Wiregrass — trees. Forests feed the lumber mills and provide the raw materials for sawmills, paper and wood-products plants big and small. Rex Lumber is among the newest to the Wiregrass, but it moved in in a big way, with a \$110 million investment in a yellow pine sawmill.

In Henry County, Abbeville Fiber LLC has invested \$40 million in a new mill to provide wood for Great Southern Wood Preserving Inc. The first logs arrived in 2019, with plans to handle 80 to 90 truckloads of logs a day at full capacity.

Henry County has also seen more than \$10 million in investments in peanut processing operations, a cotton gin and other agricultural improvements.

While farmers and foresters have tended to their crops, a new realm of industry has flown into the Wiregrass in the contrail of Fort Novosel. The Army base opened in 1942 to train troops, but in less than a decade was reimagined as the Army's aviation training facility. It continues to fill that role today, training Army and Air Force helicopter pilots, as well as those from U.S. allies around the world.

LEFT: Fort Novosel. RIGHT TOP: Troy University.. RIGHT BOTTOM: Pike County Lake.







T: Boll Weevil Monument in Enterprise. TOP RIGHT: Flowers Center for the Performing Arts in Ozark. BOTTOM RIGHT: Wayne Farms Feed Mill in Ozark.

CAE USA won a major Army contract and opened a new facility in 2017, training Army aviators. A major fleet of helicopters at Fort Rucker has attracted its own cluster of supporters. Lockheed Martin, Sikorsky and Bell Helicopter all maintain a presence nearby.

Dothan had been nurturing a new MRO sector — companies that perform aircraft maintenance, repair and overhaul — when its major player abruptly moved out. In 2013, local officials lured Commercial Jet into the empty property and the sector continues to move forward.

Yulista Holdings just opened a new facility to maintain both fixed and rotarywing aircraft in Andalusia. That allows the region to take full advantage of the Alabama Aviation Center campus in nearby Ozark.

Houston County welcomed two big business announcements in 2022 a \$62 million expansion at SmartLam North America, which makes crosslaminated timber products, and a \$30 million pellet plant being built by

Peak Renewables.

The Wiregrass is an important player in Alabama's higher education scene, too, as home to Troy University. Troy has built a reputation as an international campus, welcoming overseas students and offering Troy classes abroad. Now Dothan is home to one of the state's two new medical schools, the Alabama College of Osteopathic Medicine. The school's first students completed coursework in 2017.

And before long, the region will be serving the state's military in yet one more way. Construction is underway for the state's fifth veterans home in Enterprise.

Along with the staples of agriculture, aircraft, Army and medicine, the Wiregrass is also home to several of Alabama's most unusual businesses.

Lockheed Martin maintains its Pike County facility in Troy, building missiles to protect the world. The defense powerhouse is now doubling the size of its Pike County facility with the goal of nearly doubling its output of missiles. In

mid-2022, President Joe Biden stopped at the facility to thank workers for their dedication to producing Javelin missiles that the U.S. is providing to aid Ukraine as it tries to fend off Russian invasion.

Ozark in Dale County got news of a \$25 million Ecore International plant to convert used truck tires into flooring

Fishing is big business in Eufaula. The city is home to Humminbird-Johnson Outdoors, which makes fish finders, depth sounders, marine radios and GPS systems for anglers, while a neighboring company, Strikezone Lures, makes fishing lures. Also in Eufaula, look for Southern Plastics, maker of wiggly plastic fishing worms for some of the nation's biggest retailers.

And over in Enterprise you'll find Enterprise Electronics. Lest you expect an appliance store, be assured that this is the home of a remarkable product — the Doppler weather radar used around the world to protect us all from approaching storms.



# **GULF COAST**

### Ports, planes, ships and surf



Mobile's deep-water seaport has long been Alabama's connection to the wide world. Shipbuilding and shipping have been mainstays for centuries.

That tradition continues today, but now airships thrive alongside the waterborne variety. On the waterfront are modern variations of the shipbuilding craft that has flourished here for nearly three centuries. Austal USA, making ultramodern aluminum ships for the Navy, dominates the downtown waterfront and is the largest employer by far. Now, with the backing of the U.S. Navy, it is kicking off work on steel ships, too.

Hidden farther from the public eye, along the bayous of south Mobile County, smaller shipyards rear above backcountry roads, crafting tugboats, offshore platform tenders, shrimp boats and more. Master Boat Builders has built the nation's first electric tugboat, destined for the Port of San Diego and is at work on more.

Just a few miles away, Airbus builds commercial jets from the A220 and A320 families, augmenting the fleets of U.S. and overseas carriers for six years now. In mid-2022 came news that the global firm plans a third final assembly line in Mobile — doubling the footprint and workforce and boosting production to help meet a global order backlog.

It's sometimes hard to remember that aviation was big business in Mobile before Airbus came to town a dozen years ago. One of the region's first international firms was Singapore-based Mobile Aerospace Engineering — now

ABOVE: Downtown Mobile offers a dazzling array of lights along its hardworking waterfront.

### REGIONAL PROFILE





VT MAE — repairing and overhauling planes from the world's fleets. It's still among the region's top five industrial employers. Continental Motors, another face of Mobile's aerospace cluster that predates Airbus, is at work on a \$70 million upgrade.

Baldwin County, across the bay, also boasts a major cluster of aerospace firms — UTC Aerospace, making nacelles and more, is that county's largest industrial employer and growing.

And the air over coastal counties frequently thrums with the sound of Coast Guard helicopters, taking off from their national training facility at Mobile's commercial airport, while also protecting waterborne commerce and keeping all of us safe on the water.

Meanwhile, the Alabama State Port Authority operates Alabama's gateway to the world, where ships laden with coal, steel, chickens, chemicals and wood products head for ports around the world. The port is in the midst of massive improvements — \$366 million worth — deepening the channel and extending docks, while also adding the containers, cold

TOP: Baldwin County's beautiful beaches lure locals and tourists alike. BOTTOM: Austal's new steel line is heavily automated. Photo by Mike Kittrell.

storage and cranes to move ever more goods. And a new roll on/roll off terminal is under construction, hoping to provide a new gateway for Alabama's automotive products, the state's largest export. In 2022, the port set records for cargo.

Steel, chemicals and timber are also big business along the Gulf Coast.

Just a few years ago, German-based ThyssenKrupp built a massive, \$5 billion steel mill at the Mobile-Washington County line. When the steel market nosedived and ThyssenKrupp backed away, the prospects looked bleak. But almost before you could say, "Fire up the furnace," world stainless leader Outokumpu Oyj, a Finnish company, had purchased the stainless mill. Then a partnership between the world's largest and second-largest steel producers — ArcelorMittal and Nippon Steel — had the cold rolled steel mill up and running. AM/NS Calvert, as that mill is called, is

now adding an electric arc furnace and other improvements totaling \$775 million.

Chemical plants line the riverbanks, winding inland from the Bay - making products from herbicides to sugar substitutes.

The Mitchell Cancer Institute at the University of South Alabama is a significant contributor to the state's bioscience

And now the coast is sorting out a new line of work — an Amazon sortation center and a Walmart distribution center opened within a few miles of each other, taking advantage of the interstate, port, air and rail connections. And a new \$350 million logistics park is in progress to help goods get to the port. Grocer Aldi and food service firm Imperial Dade have new distribution facilities in Baldwin County across the Bay.

Baldwin County welcomed Novelis Inc. to its industrial mega site. The Georgia-based firm plans to invest \$2.5 billion to create an aluminum plant there, part of its massive global operation recycling aluminum into re-use ready sheets.

In Escambia County, farmers and merchants have teamed on a new peanut processing plant, allowing local growers to increase their share of profits from their first-quality produce.

Clarke County announced plans for a \$464 million expansion at the Boise plant in Jackson.

And beyond news of major expansion at Austal — \$109 million as it adds steel ship building — and \$69 million at nearby steel producer SSAB, and addition of a third final assembly line at Airbus, Mobile County also welcomed news of a new \$210 million sawmill investment from Canfor in nearby Axis.

But the glory of the Gulf Coast is the beach. When Alabamians think of sprawling Baldwin County, they could be thinking of pleasant suburbs, timberland, agriculture, aircraft companies and more - but most likely they're thinking of the beach. Condos with stunning views, zoos, amusement parks - including the fabulous Owa built by the Poarch Band of Creek Indians — seafood, sports venues, fishing and fun, all stretching along some of the most beautiful beach in the world. White sand, brilliant sunshine, clear water — it's Alabama's playground.



# Alabama's industrial mainstay is electrifying

AS THE INDUSTRY PIVOTS TO ELECTRIC VEHICLES, THE VALUE OF VEHICLES BEING EXPORTED CONTINUES TO INCREASE

BY GAIL ALLYN SHORT

labama, once known for steel production and coal mining, is now home to a robust automotive manufacturing sector.

But as more and more consumers make the switch from gas-powered to electricpowered vehicles to reduce carbon emissions into the environment, some Alabama automakers and key supplier firms are stepping up their electric vehicle game.

"The Alabama auto industry is doing great," says Ron Davis, president of the Alabama Automotive Manufacturers Association.

"We have very dynamic OEM manufacturers in our state. We have suppliers that are engaging and participating in a transition to electric vehicles. We have the electric vehicle transition being planned by our OEMs. We're positioned to continue to be successful in Alabama in the automotive industry," he says.

This comes, says Davis, even as

automotive manufacturing faces hefty headwinds nationwide from rising inflation and interest rates.

Currently, the production capacity of automotive assembly plants in Alabama tops 1.3 million vehicles annually, making the state among the top five producers of cars and light trucks in the United States. Mercedes-Benz, Honda, Hyundai and Mazda Toyota craft vehicles here and Toyota maintains a significant and growing engine plant.

The state's Department of Commerce estimates these companies together have invested around \$15 billion in their Alabama assembly operations.

"For the past 25 years, the auto industry has been Alabama's main economic engine, generating massive investment

ABOVE: ADS-TEC Energy, a maker of fast electric vehicle charging stations, will open its first U.S. location, an \$8 million facility for sales, warehousing and assembly, in Auburn, creating approximately 180 jobs over the next two years.

### **HEADLINES**

Automakers grow, go electric

### **AUTOMAKERS**

- ▶ Mercedes-Benz, Vance
- ► Hyundai, Montgomery
- ▶ Honda, Talladega
- ▶ Toyota Huntsville
- ► Mazda Toyota, Huntsville
- New Flver. Anniston
- Autocar, Birminghan

### BY THE NUMBERS

- ► Capacity to produce 1.3 million cars and light trucks each year
- ► 1.5 million engines produced at Toyota, Honda and Hyundai
- ▶ 150 Tier 1 and 2 supplier firms
- ▶ 47,000 jobs

### **EXPORTS**

- ► Automotive products are Alabama's top export
- ► Alabama is the nation's third-largest auto exporter
- Exports topped \$9 billion in 2022
- ► Mercedes-Benz is Alabama's top exporter



and sustained job creation in communities throughout the state," Alabama Department of Commerce Secretary Greg Canfield says.

Already in 2023, the growth continues.

South Korean auto supplier firm Samkee Corp. announced plans in early February to invest \$128 million in a new plant in Tuskegee, where it will make die-cast aluminum components for engines, transMercedes reveals the EQS SUV, built in Tuscaloosa.

missions and electric vehicles, primarily serving nearby Hyundai.

"The industry's dynamic growth has elevated Alabama's profile on the international stage and powered a surge in vehicle exports that has extended the 'Made in Alabama' brand globally. The impact of the auto industry on Alabama has been nothing short of spectacular, and we're confident that's going to continue well into the future as the EV revolution unfolds," Canfield says.

When it comes to vehicle exports, the Alabama Department of Commerce reports that motor vehicles are Alabama's No. 1 export category; the state ranks No. 3 in the nation for vehicle exports. Final export numbers for 2022 show the vehicles reached \$8.9 billion, a key element of the state's record-setting export year.

That is up from 2021 when exports of vehicles produced in Alabama exceeded \$7.7 billion.

Alabama's exported vehicles go primarily to Germany, China, Canada, Mexico



and Australia, according to the Alabama Department of Commerce.

The growth and continued investment by the automotive manufacturing industry in Alabama was evidenced by the actions of several companies in 2022.

For example, the engine plant Toyota Motor Manufacturing, Alabama, which produces four-cylinder, V-6 and V-8 engines, announced a \$222 million expansion project last year. Once complete, Toyota's investment at the Huntsville facility will reach \$1.4 billion, with employment totaling 1,800, the Alabama Commerce Department reports.

Another plant, Honda Manufacturing of Alabama, debuted the redesigned Honda Pilot SUV for 2023.

And in Auburn, Shinhwa Auto USA Corp. is constructing a second 400,000-square-foot auto parts manufacturing plant. The new plant will be across from the current plant located at Auburn Technology Park West. The move is part of a \$78 million expansion effort by the company to increase its output for aluminum products.

The Shinhwa plant makes parts for the Hyundai Motor Manufacturing Alabama auto assembly plant in Montgomery and a Kia assembly plant in West Point, Georgia.

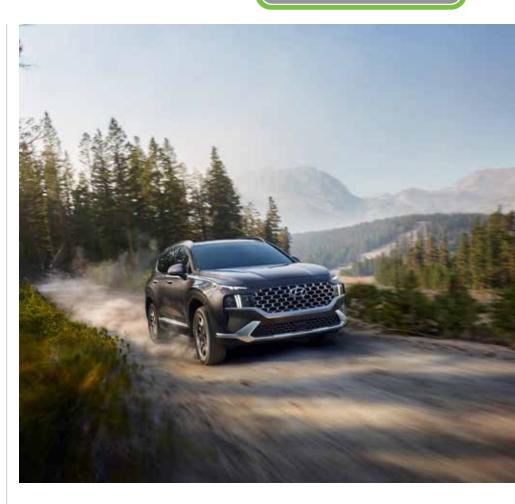
But 2022 also saw several expansion projects and announcements in Alabama directly related to the EV market.

The Mercedes-Benz assembly plant in Tuscaloosa County, for example, debuted the all-electric EQS SUV in 2022 and announced that it will also produce the all-electric EQE SUV. In addition, the company opened its new EV battery plant in Bibb County.

Another automaker, Hyundai, announced its plan to assemble a hybrid version of its Santa Fe sport utility and an electric Genesis GV70 SUV at its Montgomery factory with an investment of \$300 million.

Meanwhile, Hyundai Mobis, a supplier to Hyundai Motor Manufacturing of Alabama, revealed its intentions to build a \$205 million EV battery plant in Montgomery, creating an estimated 400 jobs. The plant is scheduled to start production in 2024.

Another automotive supplier, Li-Cycle, a lithium-ion battery recycler, opened a plant last year in Tuscaloosa.



"This facility will play an important role in the lifecycle of batteries powering electric vehicles by contributing an innovative sustainability solution," Gov. Kay Ivey said in a press statement at the time.

In Coosa County, Westwater Resources and its subsidiary, Alabama Graphite Products LLC, began construction on a \$202 million graphite processing plant. Refined graphite is a key material in EV batteries and other products.

But while Alabama is making some strides when it comes to building electrified vehicles, it still has some catching up to do when it comes to accessibility to EV charging stations, says a recent report by the Alabama Electric Vehicle Infrastructure Plan by the Alabama Department of Economic and Community Affairs (ADECA).

The document says, "Alabama needs more charging stations serving more strategic corridors, more communities, and more travel destinations to help fully realize all the benefits of transportation electrification."

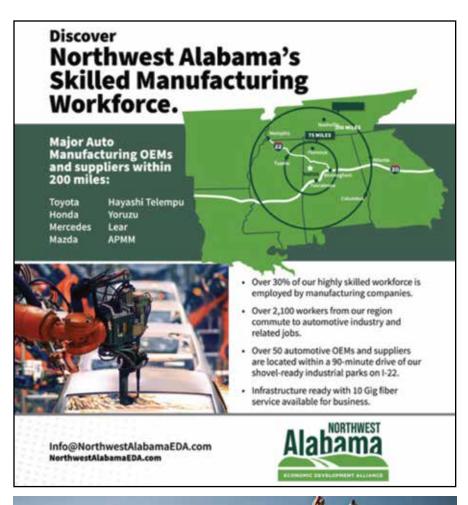
According to the report, Alabama currently has 48 unique Level 3 Direct Hyundai announced its plan to assemble a hybrid version of its Santa Fe sport utility and an electric Genesis GV70 SUV at its Montgomery factory with an investment of \$300 million.

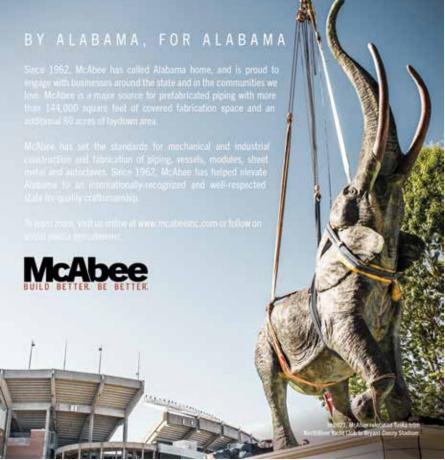
Current Fast Charger sites with 77 charging ports across the state along with 195 Level 2 charging stations with 431 publicly accessible EV ports. In addition, 16 proprietary Tesla-only DC fastcharging sites with 164 charging ports exist in Alabama. Tesla owners, however, can charge their vehicles at most DC fast-charging stations.

Grant programs by ADECA and the National Electric Vehicle Infrastructure program are designed to help boost those EV charging station numbers in Ala-

Meanwhile, interest in EVs is growing slowly across Alabama. According to the Alabama Electric Vehicle Infrastructure Plan, Alabama saw a 61% jump in the number of EVs registered in the state in

"EV registrations in Alabama have definitely skyrocketed," says Michael Staley, president of the nonprofit Alabama





Clean Fuels Coalition. The coalition has organized EV chapters and hosted special events around the state that are attended by EV drivers, Staley says.

"The best way for a consumer to learn about an EV is to talk to somebody that owns one and to see one and feel it and touch it. So those have been very successful. We organize a lot of those kinds of educational opportunities at farmers markets and other locations around the state where we encourage EV drivers to show off their vehicles and answer questions other drivers have about the technology," Staley says.

But Davis says getting most Alabamians to switch from gas-powered vehicles to EVs will take time.

"It's not like flipping a switch where we have internal gas combustion engines and then all of a sudden now we're going to have EVs. I think the marketplace is going to demand all of those products over transition time and each of the OEMs, based on what kind of vehicle they produce, what the fuel economy, what kind of mixed hybrids they have. It all fits into their strategic plan for a transition to electric vehicles," Davis says.

Gov. Ivey is, however, attempting to drive up interest in EVs through her new Drive Electric Alabama initiative.

Coordinated by ADECA, Drive Electric Alabama aims to inform and educate consumers, state and local government leaders, OEMs and others who could play a key role in bringing EV-related jobs to the state.

Last Sept. 21, under the Drive Electric umbrella, the Clean Fuels Coalition, ADECA and others even held an EV Summit meeting at the Birmingham-Jefferson Convention Center.

"I'm excited about the future of Alabama in the automotive industry," Davis says — an excitement driven by the way OEMs, state agencies, the community college system and others are working together to support Alabama's auto manufacturing industry.

"We're all working together in such a nice way. That makes us a force of energy that I think is hard to model. I don't see it in any other state."

This story originally appeared in March 2023 Business Alabama.

# Biotech grows in Alabama

BY NEDRA BLOOM



labama's role in the world of biotechnology has been growing steadily. From roots at the University of Alabama at Birmingham and its partner Southern Research have sprung seven anti-cancer drugs now in use and another dozen in various stages of the approval process.

Now UAB has invested \$76 million in a facility for biomedical research and psychology. The new facility will feature wet and dry research labs and research support space. "Interdisciplinary collaboration is a longtime strength and hallmark of UAB. State-of-the-art facilities like this advance the aims of our strategic plan, Forging the Future, make UAB more competitive globally and bring better health and quality of life to the people of Alabama and beyond," said UAB President Ray Watts.

And Southern Research is opening a business incubator designed specifically for biotech firms. "We conducted a feasibility study in 2022 that highlighted the gap between the needs of Birmingham's growing biotech scene and the availability of services and wet lab space," said Abi Kulshreshtha, chief business officer. "By offering biotech companies access to our space and our expertise, we can nurture their growth and further develop

Huntsville's HudsonAlpha Institute for Biotechnology is at the forefront of genomic research.

Birmingham's biotech corridor."

Aiding these and other biotech projects, the state has kicked off a new program to train biotech workers. "We are leaving no stone unturned in developing our workforce to meet and exceed industry demands in Alabama," said Gov. Kay Ivey. "Bioscience has grown to be one of our state's premier industries, and we have numerous firms like Hudson-Alpha and Southern Research making groundbreaking advancements daily."

Down south at the USA Health Mitchell Cancer Institute, drug discovery and patient care share one facility, reassuring patients that their illness is of concern to scientists and reminding scientists of the people who are relying

Up north is HudsonAlpha Institute for Biotechnology, at the forefront of genomic medicine and also leading the way in applying bioscience advances to the mundane world of crop production. In fact, HudsonAlpha has opened a new facility in Dothan with a special focus on agriculture issues, looking for ways "to improve plants used for food, feed, fuel and fiber."

### BIOTECH BY THE NUMBERS

- 780 bioscience companies
- ▶ 50 medical device companies
- ▶ \$7.3 billion annual economic impact
- ▶ \$385 million in NIH funding
- ▶ 18,000 bioscience workers
- ▶ 576 bioscience patents awarded 2016-2019
- ▶ 7 FDA-approved anticancer drugs discovered at Southern Research
- ▶ 12 more drugs in approval pipeline

### INFOTECH BY THE NUMBERS

- ▶ 147,000 IT employees statewide
- ▶ \$1 billion in annual revenue
- ▶ 2,500 IT professionals at Maxwell AFB Gunter Complex

### **KEY CONTRIBUTORS**

- ► Cummings Research Park in Huntsville is nation's second-largest research park
- ▶ DHS and the Secret Service operate National Computer Forensics Institute in Hoover
- ► HudsonAlpha Institute for Biotechnology in Huntsville is a national leader in genetic research
- ► Southern Research in Birmingham is a pacesetter in biotech research
- ► Alabama's universities excel in technological research



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Whether you are starting a new company or searching for your next biotech destination with hundreds of employees, HudsonAlpha can help you expand or relocate your R&D and commercial operations to our turnkey lab and office space. HudsonAlpha is located in Huntsville, Alabama, ranked the #1 place to live in the US in 2022.



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- Attract and train your workforce with our educational outreach teams
- Commercialize new products alongside nearly 50 biotech companies that call HudsonAlpha home







grow with us

To learn more about the advantages of locating your bioscience company at HudsonAlpha and how we can help you, visit hudsonalpha.org/innovate/expand



### Aerojet: Defending the U.S.

BY KATHERINE MACGILVRAY

erojet Rocketdyne is a leading developer and manufacturer of advanced propulsion and energetics systems for the aerospace and defense industry, including the U.S. Department of Defense (DoD) and NASA. It provides a full range of propulsion and power systems for launch vehicles, satellites and other space vehicles and hypersonics, as well as strategic missiles, missile defense and tactical systems and armaments.

While Aerojet Rocketdyne's liquidand solid-fueled propulsion systems have been at the heart of nearly every major U.S. space and missile program since the dawn of the Space Age, the company actually dates all the way back to 1915, when it was the General Tire & Rubber Co. based in Akron, Ohio. In addition to manufacturing tires, its early history also included owning radio and television stations, a movie production company, an airline and soft drink bottling franchises.

In 1944 General Tire bought controlling interest in Aerojet

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Engineering Corp., a rocket design and production company that it would fully acquire one year later. By the 1980s, the company fully shifted its focus to the defense and space industries, evolving into the GenCorp Inc. holding company

in 1984 and completely exiting the tire business three years later.

In 2015 it changed its name again to Aerojet Rocketdyne Holdings Inc. to better reflect the company's 70-plus years of contributions to national defense and space exploration.

Today, Aerojet Rocketdyne Holdings Inc. consists of two major subsidiaries of which Aerojet Rocketdyne is its primary focus. Aerojet Rocketdyne employs more than 5,000 people at 14 sites in 10 states and the District of Columbia.

Aerojet Rocketdyne and its heritage companies have had a continuous presence in Huntsville for more than 50 years. Due to the amount of engineering expertise in the area and its close proximity to the company's prime customers, as well as the collaborative support from local and state leaders, Huntsville became the company's Defense Business Unit headquarters in 2016. Since then, Aerojet Rocketdyne's

ABOVE: Aerojet Rocketdyne's defense headquarters in Huntsville.



Join the innovators and experts shaping Alabama's future. The Park at Auburn connects you to the tremendous talent at Auburn University and to an ecosystem of experts. Whether it's a new venture or injecting new talent into an existing enterprise, The Park is your go-to hub for scientific and business expertise.









employee footprint in the area has grown by more than 700%, and more than 800 team members currently operate out of the Huntsville headquarters.

In addition to being the company's defense headquarters, the Huntsville facility also plays a major role in developing and providing critical engineering support for the software that controls the RS-25 engines that will power NASA's Artemis Moon missions. A team of hardware engineers, software engineers, quality engineers, laboratory technicians and configuration management staff collaborate with Marshall Space Flight Center's Hardware in the Loop Laboratory, located on Redstone Arsenal, to simulate the environment for flight hardware and provide verification for engine control unit software.

"Our mission to enable national defense and space exploration is only possible because of our talented and hardworking team, many of whom reside here in Alabama," says Tyler Evans, senior vice president of Aerojet Rocketdyne's Defense Business Unit. "Our defense

Powering the nation's defense is an important mission that we take seriously. Our team is committed to providing the highest quality propulsion to help protect what we value most — our nation. our military service members and our allies."

- TYLER EVANS, SENIOR VICE PRESIDENT OF AEROJET ROCKETDYNE'S DEFENSE **BUSINESS UNIT** 

headquarters in Huntsville has better positioned us to support our customers, and we continue to see the benefits of our expanded presence in the state."

In 2019, Aerojet Rocketdyne celebrated the opening of a state-of-the-art rocket propulsion Advanced Manufacturing

Tyler Evans (right), senior vice president of Aerojet Rocketdyne's Defense Business Unit, meets with team members at the company's defense headquarters located in Huntsville's Cummings Research Park.

Facility (AMF) in Huntsville. The 136,000-square-foot AMF produces solid rocket motor cases and other hardware for the Standard Missile-3, Terminal High Altitude Area Defense (THAAD) system and other critical U.S. defense and space programs. The AMF was also designed to provide propulsion solutions for new developments, including advanced motors capable of achieving hypersonic speeds and Sentinel, the U.S. Air Force's next-generation Ground Based Strategic Deterrent (GBSD) program.

Last fall, Aerojet Rocketdyne announced plans to lease a massive 379,000-square-foot facility located in the Jetplex Industrial Park near the Huntsville International Airport that will specialize in producing and assembling inert solid rocket motor components. It will be the company's third Huntsville campus and is expected to be operational



later this year.

The acquisition is part of a strategic decision to support the growth of inert capabilities and to transition some inert components from the company's site in Camden, Arkansas, to Huntsville. The company says the expansion is in response to increased demand for the propulsion products it provides and that the decision to further expand its Huntsville footprint was a natural choice due to the area's many resources, including an abundance of local talent, space to grow, business-friendly infrastructure and a vibrant community. In February, Aerojet Rocketdyne began hiring for the new campus to fill positions for quality, operations, logistics and engineering with manufacturing experience.

In March, Lockheed Martin awarded Aerojet Rocketdyne a new contract to produce additional solid rocket motors and Divert and Attitude Control Systems (DACS) for the THAAD weapon system. The THAAD weapon system is a landbased element of the Missile Defense Agency's Missile Defense system and

is one of the country's primary defenses against short, medium and intermediaterange missiles. The THAAD solid rocket boost motor is produced at Aerojet Rocketdyne's Huntsville AMF and at the company's Solid Rocket Motor Center in Arkansas.

In April, the company announced it had entered into a \$215.6 million cooperative agreement with the Defense Department to supplement ongoing modernization efforts and increase solid rocket motor manufacturing capacity to meet increased warfighter demand for tactical missile systems used by the DoD. Through the agreement, Aerojet Rocketdyne has agreed to build additional facilities, purchase advanced equipment and automate manufacturing processes to support increased production demand mainly centered on Javelin, Stinger and the Guided Multiple Launch Rocket System (GMLRS). The company will also implement elements of digital transformation to align with DoD's Digital Modernization Strategy to give the Joint Force a competitive advantage.

Aerojet Rocketdyne's advanced manufacturing facility in Huntsville.

"Powering the nation's defense is an important mission that we take seriously," says Evans. "Our team is committed to providing the highest quality propulsion to help protect what we value most — our nation, our military service members and our allies."

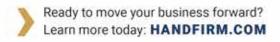
As its presence in Huntsville continues to grow, Aerojet Rocketdyne remains committed to supporting the surrounding community. The company partners with more than 70 Alabama businesses and since 2015 has sourced more than \$81 million to Alabama suppliers. Aerojet Rocketdyne also supports local school systems by sponsoring STEM events, activities and scholarships. This year, the company was recognized as a Best Place for Working Parents in the Huntsville area based on workplace flexibility, paid parental leave and other benefits.

This story originally appeared in June 2023 Business Alabama.



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### Artemis I, with Alabama-designed rocket, successfully launches

### MISSION IS PRECURSOR TO RETURNING ASTRONAUTS TO MOON

BY ALEC HARVEY

hen Artemis I lifted into space in late 2022, it carried a strong Alabama pedigree into space. NASA's Space Launch System, a Huntsville-designed rocket that the space agency calls the most powerful rocket in the world, launched from the Kennedy Space Center in Florida.

Carrying the uncrewed Orion spacecraft, the SLS lifted off in the early hours of a November morning. After liftoff, the Orion took a 40,000-mile journey around the Moon and returned to Earth December 11 on schedule.

While Artemis I was uncrewed, the Artemis II mission will once again carry people into space as NASA prepares for a return visit to the moon and exploration beyond.

"What an incredible sight to see NASA's Space Launch System rocket and Orion spacecraft launch together for the first time. This uncrewed flight test will push Orion to the limits in the rigors of deep space, helping us prepare for human exploration on the Moon and, ultimately, Mars," said NASA Administrator Bill Nelson.

Marshall Space Flight Center in Huntsville managed the SLS rocket development. In addition, Decatur's United Launch Alliance, under contract with Boeing, and Huntsville's Dynetics, among other companies, were involved in the Artemis program.

"It was an absolutely beautiful launch — visually and technically," said John Shannon, vice president and program manager of Boeing's SLS program. "This rocket controls incredible forces while speeding through the atmosphere. It performed the mission as we designed it to do, and we thank our team and partners for all their hard work in making this first launch a success."



#### BY KATHY HAGOOD

ive of the nation's 20 largest general contractors ranked by dollar volume for completed health care projects last year are based in the Birmingham metro area. Two of those contractors are at the top of the Modern Healthcare magazine ranking list — Brasfield & Gorrie at No. 1 and Robins & Morton at No. 2. The other three — Hoar, M.J. Harris and Doster — are ranked Nos. 7, 16 and 18 respectively.

Here's a look into the specialized world of health care construction and recent projects from several of Alabama's largest health care builders.

### Brasfield & Gorrie

The next Medical West replacement hospital, an affiliate of the UAB Health System, is being built by Brasfield & Gorrie and can be seen under construction off the I-459 Exit 1 in McCalla. The 35-acre campus will include a nine-story, 200-bed hospital



with a central energy plant, five-story medical office building and parking deck. The new hospital is expected to open in 2024, says Ed Hauser, Brasfield & Gorrie regional vice president and division manager.

Special techniques used by project management include online systems for a workflow that uses digital dig boards to supplement physical signage. QR codes may be accessed by employees and trade contractors "to geolocate themselves in relation to existing and proposed utility lines," Hauser says. "This

ABOVE, TOP: UAB Medical West, a project of Brasfield & Gorrie, is set to open next year

ABOVE, BOTTOM: Robins & Morton's project at Marshall Medical Center South.



process has created a safer and more productive job site."

Like other Alabama-based top 20 health care contractors, Brasfield & Gorrie has a long history in hospital construction and often partners with repeat clients. The company has built health care facilities in 29 states.

"Since our company was founded, we've completed more than 2,000 projects in Alabama," Hauser says. "Over the past decade alone, we've generated more than \$4.6 billion in revenue from nearly 500 projects across the seven-county Birmingham area."

The company's first project kicked off in 1969 when it negotiated a \$6.2 million contract for all preconstruction and construction services for a major expansion to what was then East End Memorial Hospital in Birmingham. "The success of the project led to subsequent projects, and the relationship with the client continues to this day," Hauser says. "With a collaborative team approach, we work to become an extension of the medical campus staff to foster a true partnering arrangement. Maintaining infection control, safety and uninterrupted campus operations are our primary focuses."

### **Robins & Morton**

July marked the grand opening of the two-story vertical expansion of the Marshall Medical Center South bed tower in Boaz. The project, constructed by Robins & Morton, also includes a new hospital entrance featuring an atrium and a main concourse with coffee shop and food service. The bed tower addition was particularly complicated because it was built on top of the existing, operating

hospital, says Mark Mattox, Robins & Morton vice president. "A hospital (in general) is challenging to build, but it is also very rewarding knowing that you've been part of constructing a complex building that is a vital part of the community," he says.

Robins & Morton has built 1,700 projects in 38 states, including many in Alabama. While some of the largest contractors for health care construction are diversified in the types of construction they do, 86% of Robins & Morton's revenue in 2022 was from health care projects, Mattox points out. "Health care is our main focus," he says.

The company got its start with health care during a small renovation project at Shelby Baptist, completed in 1972. "Nearly every operations team member at Robins & Morton is an expert in health care construction due to the amount of experience they have as individuals and the experience we have as a company," he says.

Robins & Morton prides itself upon its construction quality and continuous improvement initiatives, Mattox says.

"When you're coordinating 100 to 200 or more construction workers and are trying to prevent disruptions to a health care campus, it can be challenging. That's why it's critical to establish the right culture. It's important that our entire team, including our trade contractors, understand that we are guests on that campus and our actions are a direct reflection of our team."

### **Hoar Construction**

A new outpatient clinic, the Benjamin Russell Center for Advanced Care, is being built at Russell Medical in Alexander City. Construction of the

Hoar is building a new outpatient clinic at Russell Medical Center in Alexander City.

two-story, 28,000-square-foot specialty care clinic began in February and is expected to be completed by April 2024. The facility is part of a plan to expand the hospital campus to include independent and assisted living options, says Owen Moore, director of business development at Hoar. "Seniors will be able to live there and have any needed medical services nearby," he says.

Founded in 1940, Hoar completed its first major health care project, the \$6.5 million Brookwood Ambulatory Care Center, in the 1980s, Moore says. The company's Healthcare Division was established in 1991. "Since then, we've expanded our portfolio to build and renovate health care facilities big and small across the country," he says.

To be successful, hospital construction requires an intense amount of preplanning and careful scheduling and materials procurement to meet deadlines, Moore says. "For active campuses, we have to coordinate with hospital stakeholders (doctors, nurses, etc.) to ensure phasing creates as little disruption as possible and that patient safety is our top priority," he savs.

Health care construction continues to be a strong division for the highly diversified Hoar, which builds both across the country and internationally, including in civic, government, education, hospitality, retail, industrial, office and multi-family sectors. Hoar is seeing more demand for rural hospitals, freestanding emergency rooms and medical office buildings, Moore says. "Existing facilities are renovating to keep up with demand and stay on top of technological advancements," he says. "Behavioral health facilities are becoming a bigger priority as more emphasis is put on mental health."

### Doster Construction Co.

UAB Hospital Highlands in Birmingham has a new 18,000-squarefoot outpatient clinic completed by Doster in May. Phase one of a twophase interior health care renovation, the new clinic includes family medicine, imaging, geriatric and vein specialties. The second phase, a 9,000-square-foot

Doster is building a new outpatient clinic at UAB Hospital Highlands.

sports medicine section, began in July and is set for completion by October, says Manny Norrell, Doster project director. "We often build in areas with ongoing operations, which can mean work after hours, on weekends or both," he says. "Our team has to understand their surroundings and keep them in mind. In a critical environment, you could be one hallway away from sensitive work."

Doster, which builds in 33 states, including Alabama, got its start in hospital construction in the 1970s with a renovation project at Carraway Methodist Medical Center in Birmingham. The success of that project lead to projects at other regional hospitals and the company's targeting health care business, Norrell says. "Health care is our bread and butter."

Because health care construction requires special expertise, most major projects are completed by general contractors with decades of experience,



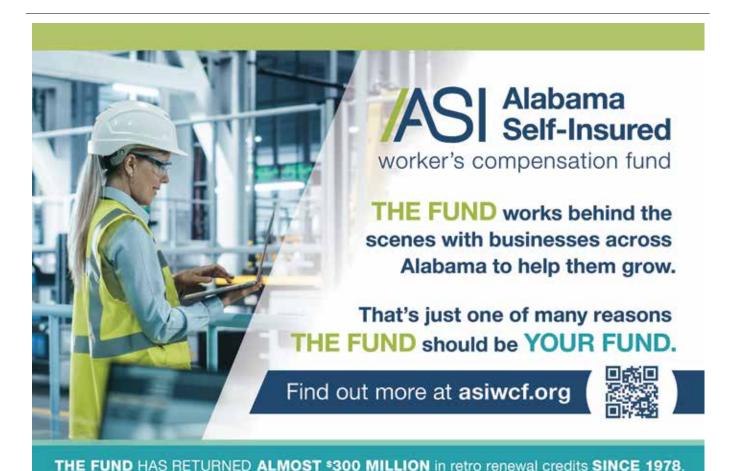
Norrell says. Numerous extra health care regulations, local, state and federal, must be followed, including those for indoor air quality, ADA regulations, life safety issues and fire safety. Other considerations include facility needs for medical gases, high power and low voltage.

"Outside the walls must be clean and nice, but behind the ceilings and walls are all sorts of ducts and conduits," he says.

Norrell and other representatives of large general contractors believe demand for health care construction will remain strong because there will always be a need for health care, especially with the nation's aging population.

"There is a shift in the industry from large traditional hospitals for new construction to small outpatient clinics closer to where patients live," he says.

This story originally appeared in September 2023 Business Alabama.



### **Higher Education**

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igher education in Alabama offers students many pathways to a successful future. The University of Alabama System is educating some 70,000 students, providing health care for some 2 million patients and is the state's largest University of Alabama at Birmingham.

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### BY THE NUMBERS

- ▶ 14 public universities
- ▶ 13 independent colleges & universities
- ▶ 24 community & technical colleges

### **BIGGEST PUBLIC INSTITUTIONS** Universities

- University of Alabama, with 39,563 students
- Auburn University, with 27,287 students
- University of Alabama at Birmingham, with 22,563

#### **Community Colleges**

- ▶ Jefferson State Community College, with 8,526 students
- Calhoun Community College, with 8,278 students
- ► Coastal Alabama Community College, with 6,653 students

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Alabama in Huntsville — are regarded as key research universities.

Auburn University is the state's original land grant institution, now offering particular expertise in pharmacy, veterinary medicine, engineering and more.

The state also has major public universities in Florence, Athens, Huntsville, Jacksonville, Normal, Livingston, Troy, Montgomery, Mobile and a specialty university in Montevallo known for its small-college feel.

Complementing the public universities are a collection of 13 private colleges and universities and 24 community and technical colleges.

Off campus, the state's highly regarded AIDT works directly with business and industry helping recruit and train workers with curriculum tailored to the company's specific needs.

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Clients Assisted

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2022 Total Client Impact

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#### BY KATHERINE MacGILVRAY

he Alabama Community
College System (ACCS) is
heavily invested in developing
apprenticeship programs, workbased training opportunities
and customized curriculum to meet the
demands of businesses and organizations who are increasingly looking to the
state's community colleges to fulfill their
workforce needs.

The ACCS Innovation Center, a \$10 million investment that offers 23 programs to rapidly train workers for the state's highest-demand industries, launched the first of several industry specific programs in February. Training includes short-term classes that students can start on a virtual platform and finish with an in-person lab at a regional ACCS location. Once they've completed their training, students are job-ready and awarded a credential and an opportunity to earn more certifications at their local community college. Industries first targeted for the Innovation Center include hospitality, butchery, commercial driver's license, recreation, heavy equipment, plumbing and facilities maintenance.

By November, the system announced that every community or technical college in the state now offers at least one apprenticeship registered through the Alabama Office of Apprenticeship. These programs, supported by hundreds of Alabama companies, help meet workforce needs in high-demand industries, including manufacturing, nursing and childcare, and allow students to work for a competitive wage in their chosen field of study while earning credit toward their certification or degree.

"It is important that as the community's colleges, we continue to work with communities, business and industry partners all over the state to make sure that we are meeting the needs of the workforce in a way that is effective," says Jimmy Baker, chancellor of the Alabama Community College System. "In many cases, success doesn't have to be within a classroom or over two years' time, but rather through rapid training within weeks or through apprenticeships. We want to ensure that every resident who is willing and able to succeed — whether in an adult education program, an academic program or a work-based learning program — can benefit from the services

ACCS Innovation Center Interim Executive Director Mara Harrison at the grand opening celebration.

of the Alabama Community College System."

Newly developed programs and industry partnerships at Gadsden State Community College, Central Alabama Community College, Coastal Alabama Community College and Drake State Community and Technical College already are stepping up to address industry workforce needs.

The Alabama Legislature approved amendments to the Nurse Practice Act in 2021 to allow nursing apprenticeships in the state. The rules took effect early in 2022 and before year's end, more than 60 health care facilities had signed up to offer nursing apprenticeships for licensed practical nurse (LPN) or registered nurse (RN) programs at 12 of Alabama's community and technical colleges.

One of those is Gadsden State, which announced the start of its apprenticeship program for registered nurses in June. Riverview Medical Center in Gadsden and Rehab Select in Albertville and Talladega, the first health care facilities



to enter into agreements with Gadsden State, have embraced the apprenticeship program, says Kenneth Kirkland, dean of health sciences at Gadsden State and former ACCS director of health programs. "They absolutely love this because they know they're cultivating and growing their own employees within their organizations." And, he adds, the students like it because they're getting paid to learn.

Students who are accepted as nurse apprentices work alongside experienced nurses in the health care facilities, earning \$15 an hour with a tiered wage schedule, so as they complete competencies their wages go up. "This really reduces a major barrier for a lot of students in health care programs," says Kirkland.

In addition to Riverview and Rehab Select, the program will be offered to all clinical agencies that work with Gadsden State and will help meet the high demand for nurses across Alabama.

"You've got to listen to the community to meet their workforce needs," says Kirkland. "Coastal Alabama started an LPN apprenticeship and I started the RN apprenticeship. Initially they were going to be run as pilots, and we just said this is too good of a workforce program; our employers need this."

In February, Central Alabama Community College (CACC) signed a partnership agreement with Intel to develop an artificial intelligence (AI) program, which, when it kicks off in January 2023 at CACC's Prattville campus, will be the first AI program in the state and one of the first in the country.

The decision to partner with Intel was critical, says CACC President Jeff Lynn, who jumped on the opportunity when it first caught his eye. "AI technology is moving so rapidly. We felt like we needed to get this on our college campuses as quickly as possible."

CACC identified key instructors to participate in Intel's AI Workforce program, which, in addition to faculty training, provides more than 225 hours of AI content to community colleges, as well as guidance on developing AI certificates, augmenting existing courses or launching full AI degree programs.

"We have a really good group of instructors who have gone through this program now, and we feel really prepared to start it. I think it's going to grow significantly," says Lynn, adding that he continues to identify companies who may want to hire students who have participated in CACC's program or even enroll their current employees.

So far, 31 schools in 18 states have joined Intel's AI Workforce program. "There's a map that shows the schools that have this relationship with Intel, and there's one dot in the center of Alabama, and that's us. We feel really good about that," says Lynn.

A partnership between Coastal Alabama Community College and Yamaha Students in the Frontiers Research Program at Drake State work on issues critical to lunar habitat design.

Motors has caused significant growth in the college's marine technology program. The career program launched in 2021 and allows students to earn industry recognized credentials through Yamaha's Introduction to Outboard Systems certification. Over the course of two semesters students learn to service outboard. inboard and inboard/outboard engines; how to test, maintain and repair steering devices and electrical systems; and how to repair metal, wood and fiberglass hulls and vessel components.

Matthew Judy, who joined the program as a full-time instructor in 2021 and has worked with the college's president and the dean of workforce development to build the program from scratch, says it's addressing a shortage of qualified marine technicians in South Alabama.

Curriculum for the program is provided through Yamaha Motor University, which students access online while Judy guides them in the classroom. "And then we walk out into the shop and we've got all these brand new Yamaha [motors] for them to take what they've learned online and apply it."

The stand-alone certificate consists of nine classes and can be completed in three semesters. Students in the program also have opportunities to earn other certificates through Yamaha and the American Boat and Yacht Council. Judy also is a certified forklift operator and can train them for forklift certification, a big plus for prospective employers.

"My vision for this program is not only building it up with more equipment for the student technicians to work with but also giving employers a chance to come into our shop regularly so they can identify technicians that would be a good fit for them," says Judy. "I have all of these students here working non-stop. I'd love to see employers regularly coming to pick out talent that they think would fit with [their operations] and building those relationships so that when students graduate with their certificates, they're ready to seamlessly slip into those workplaces."

Coastal Alabama is one of less than two dozen colleges that currently partner with Yamaha, which sells more than

300,000 boat motors annually and makes up nearly half the international market share.

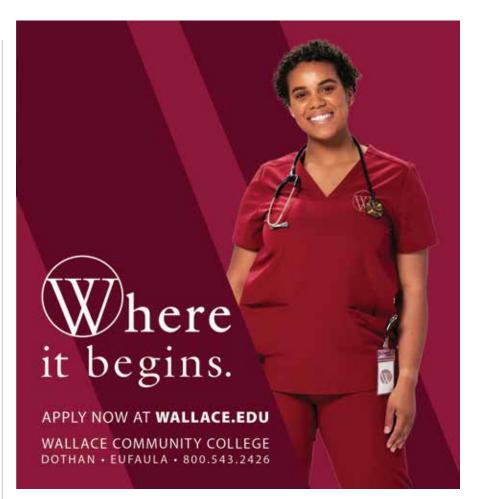
In 2020 NASA Marshall Space Flight Center awarded Drake State Community and Technical College a cooperative agreement notice to collaborate on its Moon-to-Mars Planetary Autonomous Construction Technology (MMPACT) project. The arrangement is the first of its kind to be awarded to a two-year institution and Historically Black College and University (HBCU).

With matching funds provided by NASA's Minority University Research and Education Project (MUREP), Drake State established the Frontiers Research Program where a team of faculty and student interns work on a variety of additive manufacturing projects that contribute to current NASA needs in lunar habitat design and manufacturing. That includes testing 3D printed concrete structures to develop techniques for building landing pads, roads, living spaces and other large structures using lunar based materials. Frontiers Research Program interns have also had an opportunity to work with ICON, an Austin-based 3D printing construction company that is partnering with NASA to develop a space-based construction system.

Because of the program's success, Drake State had the distinct honor of serving as the official host site for the first United Nations-designated International Moon Day, observed on July 20 to commemorate the first moon landing and raise public awareness about sustainable moon exploration. The partnership also supports NASA's efforts to engage underrepresented populations and minority institution faculty and students in its research initiatives.

"We are super excited to be participating in this project," says Drake State President Dr. Patricia Sims. "Our work with Marshall and MUREP continues to pay dividends for our college and the students we serve. It's been a very rich experience." Internships in the Frontiers Research Program are available to students who are enrolled in Drake State's advanced manufacturing program.

This story originally appeared in January 2023 Business Alabama.







aggie Mayfield is a senior studying hospitality management at Auburn University, and the past few years have been good ones for her.

Initially, she took classes in venerable Spidle Hall and learned on-the-job at The Hotel at Auburn University & Dixon Conference Center.

But in September, that experience took several leaps forward with the opening of the 142,000-square-foot, \$110 million Tony & Libba Rane Culinary Science Center, a six-story complex at the corner of Thach Avenue and South College Street comprising classrooms, the Laurel Hotel & Spa, the fine restaurant 1856, a coffee shop and more.

"It's absolutely spectacular," says Mayfield, who is from Alpharetta, Georgia.
"It's certainly improved my learning, because we're doing everything ourselves.
... We have the opportunity to work in all of the different areas."

At the center's dedication in 2022, Susan Hubbard, dean of Auburn's College of Human Sciences, called it "an academic center unlike any in the world, one offering an elevated hospitality management education to students and elevated hospitality experiences to the visitor."

Martin O'Neill, now head of Auburn's Horst Schulze School of Hospitality, says Hubbard and others were already dreaming of such a complex when he came to Auburn 20 years ago.

"Hospitality has always been booming in the state, and we noticed an astronomical growth in programs on the high-school level, but there were really not enough opportunities for them to move on post-high school," O'Neill says. "We started looking at where they were going, and too many students were going out of state for dedicated culinary programs, and we didn't have the facility."

So around 2015, O'Neill and a team began researching other programs and facilities worldwide. The group included experts like Hans van der Reijden, founder and CEO of Ithaka Hospitality Partners, which runs the business end of both the Laurel Hotel & Spa and the Hotel at Auburn University & Dixon Conference Center.

"We came back to meet with our dean, thinking it would be either/or, taking the lodging route or culinary route," O'Neill recalls. "Out of that meeting came, why not do both?"

They also approached Auburn trustee Jimmy Rane, founder and CEO of Great Southern Wood Preserving, about the project and, according to O'Neill, "He took to it immediately."

"A line that has always stuck with me is, 'There's no shortage of money, there's

A hotel, restaurant and spacious learning areas create the Tony & Libba Rane Center at Auburn University. Photo by Julie Bennett

just a shortage of good ideas," O'Neill says. "That day, he heard an idea that made good sense to him."

Rane made the lead gift of \$12 million for the center, which is named after his parents.

Construction also was a local affair, with Auburn-based Bailey-Harris Construction building the facility.

"Auburn University has been one of our most important clients for decades," says Jack Sommer, project director for Bailey-Harris, which has also worked on Auburn projects that include the Jordan-Hare Gameday Support Facility, the School of Nursing, football's indoor practice facility, the Wellness Kitchen, Mell Classroom Addition, Auburn University Medical Clinic and the Harold D. Melton Student Center.

The Rane Center faced challenges from the beginning, not only because of its complexity. The facility includes high-end hotel rooms, roof-top amenities including an event center, culinary teaching kitchens, a teaching restaurant and pool, among many other things, not to mention state-of-the-art classrooms.

"When you have so many parts and

pieces coming together into one project, challenges are endless," Sommer says. "We broke ground in March of 2020, right when the COVID pandemic exploded, creating labor shortages, supplychain nightmares and material cost escalation around every corner.

"An already complex project became almost insurmountable," he adds. "Nonetheless, thanks to incredible trade partners, creative problem-solving and sheer grit and determination, Auburn University was able to open this longawaited project on time."

Bailey-Harris employs many Auburn alumni, Sommer says.

"Many of our co-workers drive by the Rane Center on a daily basis, and I think they would agree with me that it will never be 'just another project' for us," he says. "The RCSC is a one-of-a-kind facility, and it was an honor to build. For Bailey-Harris, this project is not just quantified in dollars and square feet. ... Anytime you get to work on a project that will be around, serving the community you love, long after you're gone, it's special."

It's special for O'Neill and his cohorts at the Horst Schulze School of Hospitality Management as well. The school, named after the former Ritz Carlton president and COO who has been a big supporter of Auburn's program, offers a bachelor of science in hospitality management, with a focus on hotel and restaurant management, culinary science or event management.

"At this point, we're still the only professionally accredited hospitality management program in the state of Alabama and one of only 49 internationally that hold that designation," O'Neill says.

Though students learn on the job at the Rane Center's various businesses, those businesses are operated to make a profit.

"I'm into the educational aspect of it, so it's not money-making for me," O'Neill says. "We're all about enrollment and growing programs, but there is a commercial side to it, and that's what Ithaka handles for the university. There's a 32-key teaching hotel, 46-seat teaching restaurant, coffee shop, brewery opening in March, spa, all commercially oriented and profit-driven."

The classrooms are "all wonderful spaces" that can be rearranged and designed specific to whatever is being taught at the time.

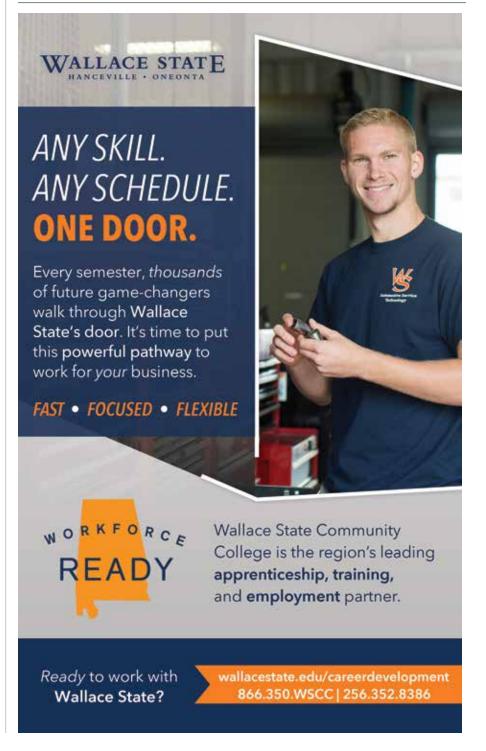
At the dedication of the Rane Center, Hubbard, who became dean of the college in 2019, called the opening "a moment born out of what first seemed like a dream."

For Mayfield, that dream come true means an unparalleled experience for her and, perhaps more importantly, for students to come.

"This new school has opened the doors for me to have a better understanding of

what it truly looks like to open a hotel, a coffee shop and a restaurant from the start to making a profit," she says. "It's a wonderful experience, and it's an honor to be, in a sense, the guinea pig. It's such an honor to be one of the first students to help all of the students who are going to be in the hospitality program for years to come."

This story originally appeared in February 2023 Business Alabama.



# Teaching ENTREPRENEURSHIP

BY KATHY HAGOOD



ntrepreneurship programs are taking center stage in higher education as more Alabama business schools hire dynamic program managers and invest in expanded offerings to cultivate budding entrepreneurs.

By cultivating entrepreneurship, higher education is fostering economic development and creating a healthier "business ecosystem" across the state, says Joshua Sahib, managing director of the Lowder Center for Family Business and Entrepreneurship at Auburn University's Harbert College of Business. "We use a pipeline model, which allows for multiple entry points, enabling us to get students from across campus excited about entrepreneurship and participate," he says.

Auburn students can take an introduc-

tory entrepreneurship course, minor in entrepreneurship and find mentors. They may participate in workshops, networking, competitions and research. They also can take advantage of ongoing business counseling and support by veteran entrepreneurs in residence at Auburn's New Venture Accelerator.

Sahib, who was hired about a year and a half ago for his new full-time position, formed and serves as an advisor to Auburn's entrepreneurs club, which is open to any interested student. "It doesn't matter if a student has a business background or if they're still at the ideation stage, we've got ways to provide support," he says.

While it was once thought that it took a certain type of person to become an entrepreneur, educators now know it's

University of Alabama student entrepreneurs.

possible for anyone, says Patrick Murphy, Ph.D., director of the J. Frank Barefield Jr. Entrepreneurship Program and Goodrich chair and professor at UAB's Collat School of Business.

Modern research has shown entrepreneurship is a function of being energized by an idea and being in an environment that spurs on one's ability to develop that idea, Murphy says. "There really is no set entrepreneurial personality," he says. "There are only traits we associate with being entrepreneurial, such as boldness, which can be motivated by an idea you feel passionately about."

Murphy has revolutionized UAB's entrepreneurship program since he came online in 2018, including developing an entrepreneurship major and transforming the university's entrepreneurship minor. He's raised millions of dollars for the program and brought tenured and adjunct faculty onboard. "We've redesigned the course work, practicing what we teach," he says. "We need to be just as enterprising as entrepreneurs looking for novel new ways of doing things. Everything we do should have inspiration, impact and ingenuity."

Innovative programming includes the Coding Academy, a competitive entry program that provides students training in various technologies. "Student entrepreneurs need to be armed to use all the tools they may need, whether it be AI (artificial intelligence) or how to work with a website designer," Murphy says.

Through the Blazer Hatchery and Hackathon, teams vie to find creative solutions to community problems such as this year's challenge "How to elevate our city," or a past contest's focus on solving two related problems, transportation and underemployment in the area. Team members work with Alabama Power

executive leaders as part of the process. The winning team receives \$5,000 to use any way they choose, Murphy says. "It's a great way to give students experience in using an entrepreneurial mind set to solve problems," he says.

One of his program's student success stories is Alex Cox, founder of Watercraft Warehouse, a jet ski purchase and sale company located in Trinity. Another is Rae'mah Henderson, recently accepted for a Goldman Sachs remote internship. She currently serves as operations coordinator for The Plug and is committee chair for the Black Innovation Alliance.

Last year UAB's entrepreneurship program was recognized as the nation's Model Emerging Program at the Excellence in Entrepreneurship Education Awards of the United States Association for Small Business and Entrepreneurship. "My goal is for the entrepreneurship program to become its own department within the school of business," says Murphy, who also serves as scholar in residence at Innovation Depot in Birmingham, one of the country's largest entrepreneurial co-working/incubation centers.

Other universities also are supporting entrepreneurship through partnering with or sponsoring incubators and accelerators. While Innovation Depot has been a part of the Birmingham business community since 1987, UA's The EDGE is relatively new as is Auburn's New Venture Accelerator. Unlike Innovation Depot, which is run by a nonprofit, UA and Auburn's facilities are managed by the universities.

The genesis of UA's state-of-the-art incubator and accelerator, open to student, faculty and community entrepreneurs, was a U.S. Economic Development Administration grant following the super tornado that hit Tuscaloosa in 2011. "The tornado caused massive destruction and loss of life. The community was devastated," says Theresa Welbourne, PhD, who serves as executive director of UA's EDUCATION Alabama Entrepreneurship Institute (AEI) and The EDGE business incubator.

Welbourne is an entrepreneurship professor in UA's Culverhouse College of Business, which currently offers an entrepreneurship minor, as well as a management major with an entrepreneurship

concentration. The school also now offers the Crimson Entrepreneurship Academy, a nine-week business program held in the summer, allowing students to create their own internship by developing an enterprise, she says. The competitive program, which provides a stipend, is sponsored by the Medical Properties Trust organization and its founder, CEO Edward Aldag Jr. "It's been a game changer for the curriculum," Welbourne says.

She explains that The EDGE was born from a strategic alliance of UA, the West Alabama Chamber of Commerce and the City of Tuscaloosa. The facility assists the mission of AEI to serve as a magnet for entrepreneurship, providing workshops, mentors, networking and workspace. "Wonderful things are happening here through partnerships," Welbourne says. "Our alumni, experts in different fields, have been generous with their time, whether through providing virtual or inperson sessions."

The AEI efforts are threefold, Welbourne says. Find entrepreneurs, help them start their business and help their



business grow.

One of the ways AEI finds entrepreneurs is through contests. The Edward K. Aldag Jr. Student Business Plan Competition, for example, provides \$100,000 in prize money plus mentoring and coaching along the way. Faculty and staff can participate in a similar competition that awards \$40,000, and there's \$30,000 in prize money for the community competition. "Money talks, helping generate new businesses," Welbourne says.

Another competition, River Pitch, awards ten \$1,000 prizes to the best 3-minute business pitches. There's also a reverse business plan competition where students are given a problem and create a plan to solve it.

Welbourne came on board in 2016 to prepare for the 2019 opening of The EDGE. With 26,300 square feet of space, the facility comprises 20 offices and co-working space. "The program was originally housed (from 2012 to 2019) in a facility provided by Regions Bank. It was called 'the incubator for the incubator'," Welbourne says.

Among the new incubator's success stories are Ambulanz, a provider of mobile medical services and transportation in 26 U.S. states and in the United Kingdom. The successful start-up went public in 2021, has ramped up to three shifts, and now is ready to move. "They are looking for the right location," Welbourne says.

Camgian, which was established in the new incubator, provides AI-enabled software platforms that drive decision automation and course of action recommendations. Having grown from two to six offices in The EDGE, it relocated to its current location in Tuscaloosa. "Businesses typically graduate from the incubator in two to five years, giving us space to house new start-ups," Welbourne says.

Auburn's New Venture Accelerator (NVA) also is relatively new, having been kicked off by an alumni endowment, says Lou Bifano, NVA director. It's early version, started in a makeshift space in 2016, has given rise to the accelerator's new 7,000-square-foot presence, opened in October 2021. The NVA is located on

the first floor of Auburn's Research and Innovation Center.

One of the special things about the NVA is its entrepreneur-in-residence program, which offers students, faculty and community members access to the expertise of successful entrepreneurs. Jennifer Nay, for example, retired early following a lucrative career and sale of her businesses. "Jennifer has a passion for our mission," Bifano says. "She's such an inspiration and a role model, particularly for our female students."

Among the NVA's other entrepreneurs in residence is Walt Swift, a marketing expert who promotes the NVA, including through its informative website, as well as assisting entrepreneurial students and startups. His five marketing student interns support new businesses with branding, social media and media campaigns. "Our interns are offering invaluable assistance and gaining job experience," Swift says.

This story originally appeared in April 2023 Business Alabama.

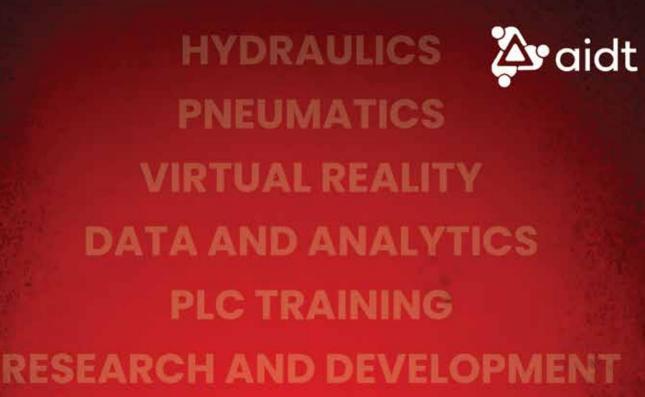


P.R.I.M.E. prepares Tuscaloosa and Bibb County high school students for future careers as electronic technicians. Students can earn up to 27 credit hours toward an Industrial Electronics Certificate and AAS degree at a high school campus.

Learn more at sheltonstate.edu.

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### CERROWIRE EXPANSION BRINGS JOBS, OPPORTUNITIES FOR NORTH ALABAMA COMMUNITY

BY JENNIFER WILLIAMS

fter almost 50 years making wire in the small North Alabama community of Hartselle, Cerrowire expanded its footprint in Morgan County this year with a new facility and purpose.

The company's new multi-million dollar, 270,000-square-foot Metal Clad (MC) Cable plant opened in mid-April, less than a year after breaking ground in the Morgan Center Business Park just off I-65. The facility expands the offerings from the company and has brought more than 100 new jobs to the area with plans for more growth.

"To go from dirt to this in 11 months is pretty astonishing," says Phil Schmidt, Cerrowire's brand manager.

And Cerrowire President Stewart Smallwood says that this is only the beginning. "The completion of this plant in North Alabama has already created 100 advanced manufacturing jobs and we know with the demand for [our] MC Cable, that number will grow...and this is just phase one of three."

The new facility currently operates at partial capacity, says Susan Labadie, Cerrowire's vice president of marketing and strategy. "But with demand being what it is, we will grow with that and expect to fill out the plant within the next two years," she says. "And as demand continues to increase as we predict it will, we plan to add additional product lines and have the potential for even more greenfield factories in North Alabama."

### Location, location

With the company's headquarters and an existing manufacturing plant just down the road in Hartselle, officials say they looked at other locations and states to build their newest facility but decided to expand in

Fakeisha Harris checks out a giant wire spool at Cerrowire in Hartselle. *Photo by David Higginbotham*.

Morgan County for several reasons.

"We found that Alabama was the most collaborative," says Labadie. "Plus, Stuart has a great relationship with the [Hartselle] mayor and local economic development board." Smallwood also served as the chairman of the Hartselle Area Chamber of Commerce until earlier this year.

In what Labadie calls a "great opportunity for the community," Cerrowire is the first major industry to locate in the Morgan Center Business Park. Local leaders are hopeful the move will open the door for other companies to locate in the area.

"We are proud to have Cerrowire's new plant in Hartselle and best of all, have a local company to be the first to call the



Morgan Center Business Park home," says Hartselle Mayor Randy Garrison. "Cerrowire has been a longtime Hartselle manufacturing facility as well as a great community supporter. When a current company chooses to locate a new business in their current locale, I believe it speaks well for the community."

Hartselle Area Chamber of Commerce President Missy Evans matched the mayor's excitement. "Cerrowire's pioneering decision to bring their new plant to the Morgan Center brings confidence to future investors to choose Hartselle," she says. "This will bring growth to our schools, strengthen our workforce, and provide new leadership to initiate community action. We look forward to seeing the rippling, positive, economic impact on our whole community their investment will make."

The biggest challenge for businesses locating in the area is housing, says Schmidt. "There's so much growth here in North Alabama...we need places for our workers to live."

Garrison says he is "thankful" for the new jobs being created by the plant but recognizes the need for his community's continued commitment to improve its infrastructure and housing choices. "Hartselle is experiencing a growth in housing development," he adds, "which I know is important for new companies locating in our area."

And while Hartselle has been home to Cerrowire for nearly 50 years, the company celebrated its 100th anniversary in 2020. Smallwood says he's proud of the growth and longevity of the company, sharing that only 0.5% of American companies are still in business after 100 years.

"Cerrowire is part of that rare group that has been producing and selling quality products for a century or more," he says. "It's one thing to say you're still in business after a hundred years. It's amazing to say that we've had a growth spurt of employees and business... contributing to a record year when we're [more than] a hundred years old!"

Smallwood says he hopes "to continue to build on the successes of the past century and inspire each other and the next generation to make a difference at work and in the community."

### Up and up and up

Cerrowire is a copper wire manufacturing company with plants in Alabama, Georgia, Indiana and Utah. The company supplies building wire and cable throughout North America for commercial, industrial and residential use. Products, including the company's new MC Cable, are available through electrical distributors, wholesalers and retailers including Home Depot and Menards.

The new MC cables being produced in Hartselle feature a unique, patented exterior coding system to help easily identify what's inside the armor. Users like the system, says Labadie, which allows for easier identification and faster installation. Bold, color-coded markings indicating the gauge, conductors inside, sequential footage and the easiest direction to pull the wires, speeds up processes as well, she adds.

Plant Manager Darrell Wright moved

Instead of the traditional ribbon-cutting, employees cut a length of Metal Clad cable to celebrate the new facility. Photo courtesy of Cerrowire.

from a competitor in Georgia to manage the new MC Cable plant. He says the plant should start producing the wires contained within the metal clad casing by September and that the entire production line should be fully operational under one roof by the end of this year — with room to grow.

"Right now, we are getting the wires from our plant just down the road and cladding it here," he says. "But having it all here on-site will make things a whole lot easier. Right now, we produce and ship about 450,000 pounds a month. This time next year, I expect we will be shipping about 1.6 million pounds per month."

By the end of 2024, Wright predicts phase two will be complete, adding more production lines that will kick up output to about 3 million pounds per month.

And Cerrowire's success has boosted other area businesses, says Schmidt. "We get all of our cable reels from Sonoco just up the road here in Hartselle," he says. "When our business was hopping during COVID, Sonoco was hopping, too, to keep up with us."

"Metal-clad cable has quickly become the product of choice for many applications — everything needs power... houses, businesses, even vehicles these days," says Schmidt. "We just see things going up and up and up."

This story originally appeared in September 2023 Business Alabama.

## Commerce takes Alabama business back on the road

BY CARY ESTES

fter enduring two years of COVID-19-related travel shutdowns and restrictions, the world has put out the "Yes, we are open" sign once again. And in September 2022, the Alabama Department of Commerce took advantage by embarking on an overseas trade mission trip for the first time since 2019.

Commerce Secretary Greg Canfield led a delegation that included representatives from five Alabama-based companies on a four-day trip through Germany. The group spent time meeting with business leaders in Munich, then traveled to Augsburg for the E.U.-U.S. Small and Medium Enterprises (SME) Best Practices Workshop.

It was an opportunity to conduct business promotion and explore partnership opportunities the old-fashioned way, by connecting in person rather than through video meetings and a seemingly endless parade of emails.

"It was a whole lot better than doing things by Zoom," Canfield says with a chuckle. "We really enjoyed the opportunity to be back on the road meeting with people face-to-face to talk trade."

Sure, business transactions and relations continued throughout much of 2020 and 2021, but Canfield says something important was missing in the process. Despite how much the world has become reliant on impersonal technology, Canfield says at some point there still is a need for that personal touch.

"When we weren't able to travel as freely internationally during Covid, a lot of virtual trade-related opportunities were created, but it's just not quite the same," Canfield says. "When you actually have boots on the ground, you're able to engage with people on a more personal level. You're able to talk through issues and have discussions in more meaningful ways.

You're just able to explore opportunities with a greater deal of depth.

"A lot of this is about building trust. And it's a lot easier to build trust when you're doing it eyeball to eyeball."

Germany was a natural choice for the state's first return to the road because Alabama has had strong ties with the country ever since Mercedes built a manufactur-

ing plant in Vance in the 1990s. Now Germany is one of Alabama's top trade partners, investing nearly \$10 billion in the state. The connection is so strong that Alabama opened a business development office in Stuttgart in 2019.

So, when the United States Trade Representative office invited the state to participate in the SME workshop in Augsburg — and in turn have Alabama host the event next fall — Canfield says it was obvious that the time had come to travel once again.

The five Alabama companies that participated in the trade mission were Adah International, an industrial engineering and project management services firm; ASHIPA Electric Limited, a company developing power microgrid management software; Bloc Global Group, a company specializing in corporate real estate and infrastructure project delivery; Domestique, an EV hospitality company creating consumable products to fight climate change; and GeneCapture, a biotech company developing portable technology for identifying infections.

"Our trade-mission strategy focuses on



Commerce Secretary Greg Canfield, middle, led a delegation representing Alabama small businesses on the first trade mission in three years. Photo courtesy of Alabama Department of Commerce.

SMEs, because large companies have the resources to build trade opportunities on their own," Canfield says. "These smaller companies don't have those resources to establish business-to-business meeting opportunities in foreign countries. So, the meetings were opportunities for these SMEs to potentially build a new customer base outside of their natural domestic market and expand their footprint globally."

ASHIPA Electric CEO Olu Ajala says his company has been interested in exploring the European market for several years, but has had no easy way to make the needed connections. He says the trip enabled him to meet with representatives from several businesses and utility companies and to gain a better understanding of the electricity needs of the region.

"It was a great thing for us, because we were able to get firsthand what the local

experiences are with energy and assess the demand for what we provide in that market," Ajala says. "We met with several businesses in Germany where there is potential for a project together. And we met companies that can be a link not just in Germany, but across the Eurozone."

GeneCapture CEO Peggy Sammon had a similar experience. Even though her company's product is still waiting FDA approval, she said the trip enabled her to receive valuable introductions with potential future partners.

"I met with some of the microbiology labs over there and saw how they were handling parts of post-Covid life," Sammon says. "Two of those have turned into email relationships, and we are discussing how our product might eventually fit into the EU market.

"It was also very interesting to hear some of the policy discussions on small business support, and how that fits into the big economic picture. It was fascinating to meet with companies in other countries that have similar challenges, but maybe different solutions."

All of which are the type of things that Samman and Ajala both say simply could not be readily obtainable without inperson visits and detailed discussions.

"For businesses like ourselves that require private developers who are familiar with the environment we're looking into, we have to do partnerships," Ajala says. "And there's no way to do partnerships without physical interaction.

"Anywhere we go, we want to understand and engage in-person with those who we potentially partner with," he adds. "We want to go in there, get to know the business community for our sector, and over one or two years build that relationship towards eventually working on a project together. So for us, this trip was just the beginning of building that relationship."

Canfield remained in Germany for a few extra days after the mission officially ended to meet with Mercedes officials in Stuttgart. He says they discussed the future of electric vehicles and the type of infrastructure that will be needed in terms of battery charging stations.

But by then, Canfield says the most important part of the trip already had been accomplished. Namely, providing both the Department of Commerce and several

Alabama companies the chance to stretch their business legs into another country.

"For Commerce, these trips give us an opportunity to engage on a personal level with the local governments and the business community in Germany," Canfield says. "It allows us to explore not only trade opportunities, but there is a business development aspect of this, too. These kinds of trips often open the door for future investment and job-creating opportunities in companies that might want to come to Alabama one day.

"And for the businesses that went, there continue to be ongoing conversations with some of the contacts they made while in Germany. That is the kind of thing you want to see take place from these trade missions, for these companies to have follow-up discussions after you come home. These trips are all about establishing new relationships, and deepening relationships that we already have."

This story appeared originally in December 2022 Business Alabama.







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TOP: The Mobile River lined by port and Austal facilities. MIDDLE: APM Terminals moves containerized cargo. BOTTOM: ACIPCO pipe ready for shipment.

### Alabama goods shipped abroad \$25.6 billion

### **Top destination**

Germany — \$4.3 billion

### 5 More Billion-Dollar Partners

- Canada
- China
- Mexico
- Japan
- ▶ Korea

### **Smallest Trade Partner**

Montserrat — \$3,270

### **Top Exports**

- Motor vehicles \$8.9 billion
- ► Chemicals \$2.7 billion
- ▶ **Minerals and ores** \$2 billion
- ▶ **Primary metals** \$1.6 billion
- ▶ Paper \$1.6 billion

# PORT OF HUNTSVILLE



untsville is experiencing rapid growth that shows no signs of slowing down, and Huntsville ■ International Airport (HSV) is keeping pace with Alabama's largest city. Fueled by a record year for passenger traffic and multi-million-dollar investment in infrastructure from air cargo facilities to commercial real estate, the airport and the rest of the Port of Huntsville are ready to accommodate even more business.

HSV celebrated 56 years of operation in 2023, and the airport is proactively looking to the future as innovators and visionaries. Since its inception in 1967, HSV has grown to 7,400 acres, making it one of the largest commercial airports in the Southeast United States. The Port of Huntsville has three main operations — the Huntsville International Airport (HSV), International Intermodal Center



The Port of Huntsville combines passenger, air cargo, rail and interstate access into a major intermodal hub for the Southeast.

and Jetplex Industrial Park — and is unique among airports and cargo ports in the U.S. for this convergence of passengers, cargo and business.

Huntsville has historically been the hub of Alabama aerospace enterprise the builders of spacecraft — but Huntsville also sets the pace for using aircraft to get products and people from one place to the other in record time. Now these two will share a common horizon as Huntsville International Airport is the first commercial airport in the United States to receive an FAA license to land a commercial space vehicle. Working with Sierra Nevada Space, HSV anticipates that the company's Dream Chaser spacecraft could be the first space vehicle

to land at a commercial airport, and that could happen right here in Alabama.

Passenger service is provided by five commercial airlines: American, Delta, United, Silver and Breeze Airways. HSV has 70 commercial passenger flights on peak days to 13 nonstop destinations. More than 1.4 million customers are served annually. The airport features two parallel runways — 12,600 feet, which is the second longest runway in the Southeast U.S., and 10,000 feet.

As of 2022, HSV ranked as the 21st largest international air cargo airport in the continental United States. Cargo carriers located at HSV are Atlas Air, Cargolux Airlines, Federal Express, DSV, Qatar Airways Cargo, UPS and Kerry Logistics Network. This high-tech air cargo market is served by domestic and international all-cargo carriers. HSV has weekly international cargo service to/ from Luxembourg, Mexico, Hong Kong, Qatar and Sao Paulo, Brazil.

The International Intermodal Center celebrated 37 years of serving the region

The Sierra Space Dream Chaser comes in for a test landing. Photo courtesy of Sierra Space.

in April and today provides a single-hub location that delivers world-class, multimodal (rail, air and highway) services and facilities. It specializes in receiving, transferring, storing and distributing international and domestic cargo via rail and highway. U.S. Customs and Border Protection port inspectors, USDA inspectors, freight forwarders and customs brokers are all located on-site. Intermodal rail service is provided by Norfolk Southern, connecting Huntsville to both East and West coast seaports, and is strategically located to serve the Tennessee Valley region and beyond.

HSV currently owns four air cargo buildings totaling more than 400,000 square feet of warehouse and office space that is adjacent to 2.1 million square feet of ramp area. HSV has 35,000 square feet of cold storage space enhancing its supply chain logistics solutions facilities. To date, Huntsville International Airport's investment for air cargo growth is more than \$229 million.

DSV operates nonstop 747 freighter international air cargo service to Europe, Asia, Qatar and South America. These markets are currently served with 5 to 7

flights weekly. They offer fully integrated and customizable supply-chain solutions at its U.S. branch in Huntsville. DSV serves many of their high-tech customers in health care and chemical industries with temperature-controlled storage and transport capabilities. Advanced warehouse services, customizable IT enhancements and direct access to its road feeder service in Huntsville allow DSV to also provide last-minute solutions for needs of all customers.

Qatar Airways Cargo began twiceweekly service to Mexico City and Doha, Qatar, in September 2023, linking HSV to the Middle East. The route is expected to open up markets in India and Africa as well.

Kerry Logistics Network established trans-Pacific air freight service connecting multiple Asian locations to the USA by locating its Americas hub at HSV in 2021. Kerry began service with flights originating in Hong Kong.

For more information, visit the Port of Huntsville website at portofhuntsville.org and the Huntsville International Airport website at flyhuntsville.com.



# ALABAMA STATE PORT AUTHORITY



he Alabama Port Authority is growing at a record pace. In addition to expansion projects that are actively underway at the container terminal expansion and the harbor deepening and widening project, the port has more than \$1.7 billion in planned investments over the next ten years. These investments include inland intermodal container facilities, constructing on-dock rail access at the container terminal, enhancing general cargo piers and modernizing McDuffie Coal Terminal.

A recent economic impact study showed that the Port of Mobile, harborwide, delivered \$85 billion in value to the State of Alabama over the calendar year 2021. In addition, economic activity at the port creates about one in seven jobs statewide, with a total of 312,896 jobs across the State of Alabama. The economic activity from the port and related businesses also provides \$2 billion in tax revenue to

the state and local governments each year.

The Alabama Port Authority serves all 67 counties in Alabama and oversees the deep-water public port facilities at the Port of Mobile. The port is directly connected to five Class I railroads and four short-line railroads, one of which is Port Authority's Terminal Railway (TASD). TASD is one of the nation's largest port authority-owned railroads and provides switching services for the port authority's terminals. TASD handles more than 165,000 revenue-producing rail cars annually and maintains more than 75 miles of track and eight locomotives. In addition to rail, the port has access to nearly 15,000 miles of inland waterways, an international airport, and two interstate systems, I-65 running north/south and I-10 running east/west.

The Alabama State Port Authority offers 31 general cargo berths, with approximately 2.4 million square feet of open yards adjacent to piers and railroad Alabama Port Authority facilities line the banks of the Mobile River where it flows into Mobile Bay.

tracks, and more than 2.6 million square feet under roof. The general cargo facilities also feature heavy-lift terminals, along with a heavy-lift crane capable of lifting cargo up to 400 tons from ship to barge, rail, truck or specialized carrier. Other facilities include a freezer terminal, a cement terminal, a grain terminal and three RO/RO berths, all of which can accommodate vessels up to 40-foot draft.

In 2020, the U.S. Army Corps of Engineers and the Alabama Port Authority began multi-phase construction on the harbor modernization and anticipate an on-time completion for the project in early 2025. The harbor modernization project will deepen the lower harbor, which serves McDuffie Coal Terminal, Pinto Steel Terminal and the container terminal, to -50 feet. This will allow larger vessels to make Mobile their first port of

call, increasing efficiency and further positioning the port for growth. In addition to added depth, the project includes a channel widener for vessel transit efficiencies in and out of the port.

Once the channel deepening and widening project is completed, the Port of Mobile will be the deepest container terminal in the Gulf of Mexico. The intermodal container transfer facility (ICTF), which will be an on-dock facility by 2025, provides access to all nine railroads that touch the port. Containerized cargo moving over Mobile can be discharged from a vessel and delivered to distribution centers around the Chicago area in just three days.

### **Container Terminal**

The Port Authority's container terminal, operated by APM Terminals, will expand its capabilities to one million TEUs upon completing the Phase IV expansion in 2025. In 2022, the container terminal handled a record 312 vessels, an increase of 75 vessels from 2021. The same year, the port posted record container shipping numbers for the calendar year, with 563,191 twenty-foot equivalent container units (TEUs) handled. These numbers reflect the ninth year the Port of Mobile posted double-digit growth since 2009. With 563,191 TEUs moved in 2022, total container volumes were 11% over 2021. Intermodal rail volumes marked record growth as well, ending the year at 142% over 2021.

APM Terminals also offers extensive capacity for cold cargo, with a state-ofthe-art, temperature-controlled, international distribution center operated by Lineage Logistics, located just outside of the terminal gates. Lineage provides shippers 12 million cubic feet and 40,000 racked pallet positions for handling refrigerated cargoes. The facility offers a comprehensive suite of services, including blast freezing, port drayage and LTL Consolidation.

### Waterways

Along Alabama's inland waterways, the Alabama Port Authority owns eight inland dock facilities that can be served by either barge or rail. The facilities are

located throughout the state's river systems in Bridgeport on the Tennessee River, Demopolis and Cordova on the Warrior River, Selma and Montgomery on the Coosa Alabama River, Columbia and Eufaula on the Chattahoochee River and Axis on the Mobile River. The State of Alabama has more inland waterways than any state in the nation, with lock and dam structures along the Tennessee-Tombigbee Waterway, Black Warrior, Coosa-Alabama and Tennessee rivers that provide access not only to Alabama's heartland but also to the Tennessee and Ohio valleys and the Great Lakes. The Port of Mobile is also accessible to the Gulf Intracoastal Waterway, providing

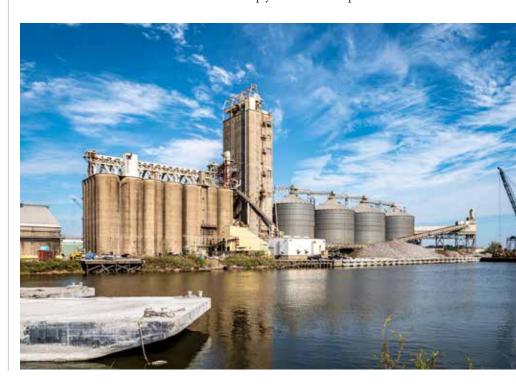
coastal connections from Texas to Florida. These waterways are critical to the movement of bulk commodities such as coal, steel, liquids and aggregates, in and out of the Port of Mobile.

### PORT FACTS ALABAMA PORT AUTHORITY TERMINALS ONLY

- **Acreage:** 4,000
- Number of Berths: 41 **Channel Depth:**
- 45 feet in the lower harbor (50 feet by 2025)
- 40 feet in the upper harbor
- Warehousing and Open Yards:
  - 4.8 million square feet
- Number of vessel calls: 1.590
- ► Tonnage: 43.3 million Containers: 563,191 TEUs
- ▶ Imports: heavy lift and oversized cargo, containerized cargoes, thermal coal, aluminum, iron, steel, copper, pig iron, wood pulp, plywood, fence posts, veneers, automotive components, frozen fish, furniture components, wind energy components, aviation components, retail goods, cement, aggregates and chemicals.
- **Exports:** metallurgical coal, heavy lift and oversized cargo, containerized cargoes, iron, carbon and stainless steel, automotive components, lumber, plywood, wood pulp, OSB, laminate, flooring, roll and cut paper, frozen poultry, grain and chemicals.

### Coal and Steel

The Alabama Port Authority's McDuffie Coal Terminal (MCT) is one of the largest coal-handling facilities in the nation and a critical piece of the supply chain for steel production worldwide.





MCT provides diverse handling capabilities — ship, barge and rail — and is the recipient of a recent \$20 million appropriation by the Alabama Legislature, which will be directly invested in state-of-theart equipment for the terminal. With Alabama's metallurgical coal exports surging to support global steel production, MCT and the port are rising to meet the demand with a \$200 million investment underway to improve terminal operations and efficiencies.

After being exported from the port as a bulk commodity, metallurgical coal can return to Mobile in the form of slab steel, Pinto Steel Terminal.

often via Pinto Steel Terminal. which has a 5-million-ton annual throughput capacity. The terminal offers a 45-foot draft, a 1,050-footlong ship berth, an automated barge-handling system and a slab storage yard. This terminal is equipped with three post-Panamax gantry cranes, the first in North

America to use magnet technology in a ship-to-shore cargo handling operation. The port also moves stainless and carbon steel coils at Alabama Steel Terminals. This is a multi-modal steel coil handling facility with four 50-ton bridge cranes, a 173,280-square-foot warehouse, and an adjacent 168,000-square-foot open yard, all supported by integrated technology that provides shippers real time cargo data and tracking.

### Roll-on, Roll-off

Steel can also be found at the port's new AutoMOBILE International

Terminal in the form of automobiles. This is a \$61 million finished automobile and automotive logistics facility, providing world-class RO/RO processing and handling. The port also handles RO/ RO operations for Airbus at a dedicated terminal, located approximately four miles from the Mobile Aeroplex at Brookley, home to Airbus' assembly lines for its A320 and A220 aircraft.

Unique to Mobile is the TASD-served rail ferry terminal that provides rail shippers twice weekly sailings into the Veracruz region of Mexico via the GC Railway. This is a joint venture of Genesee & Wyoming Inc. and SEACOR Holdings Inc. In 2022, CG Railway placed into service two new vessels, the Cherokee and the Mayan, which feature a twin-deck design for quicker loading. The ships can haul 135 rail cars per voyage without loading and unloading cargo, shaving nearly two weeks off the typical rail services into Mexico. The service provides a three-day rail service between the Ports of Mobile and Coatzacoalcos (Veracruz), Mexico.



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### FOREIGN TRADE ZONES

oreign Trade Zones offer businesses a place for international trade without the encumbrance of tariffs — a level playing field with international competitors.

The U.S. Department of Commerce designates FTZs, mostly near ports and major industrial sites. The designation allows companies within the zones to import foreign goods without paying any duty, store them, mix them with domestic parts and convert them into new products for sale here or abroad.

Until goods leave the FTZ, they technically have not been imported into the United States.

As trade wars escalate and new tariffs abound, U.S. manufacturers have looked more than usual to the potential benefits of FTZs, trade consultants say.

The National Association of Foreign

Trade Zones calculates that companies in the country's FTZs employ more than 500,000 workers. Exports from FTZs totaled \$161.9 billion in 2022.

Five of Alabama's major cities — Mobile, Huntsville, Birmingham, Montgomery and Dothan — have an FTZ. State economic development officials estimate that 12,000 workers are employed in FTZ companies, making \$1 billion worth of products that are later sold overseas. Autos, ships, oil and chemicals are among the key products.

Recent additions include sites for Airbus Americas in Mobile, MH Wirth Inc. in Theodore, Toyota Motor Manufacturing Alabama in Huntsville and Outokumpu Stainless in Calvert.

ABOVE: Austal USA benefits from its location in a Foreign Trade Zone.

### Quick facts about Alabama's five major FTZs

**Mobile:** Administered by the City of Mobile, the southernmost FTZ covers 9.848 acres in several locations with major facilities at the Alabama State Port Authority and the Aeroplex at Brookley. Major companies within the FTZ include Austal USA, Outokumpu Stainless and Airbus Americas. The Mobile zone also has four sites in Baldwin County and covers portions of several neighboring counties.

Huntsville: FTZ facilities, administered by the Huntsville-Madison County Airport Authority, are clustered on 1,700 acres around the intermodal center, plus another 1,000-acre complex at Mallard Fox Creek Industrial Park and the Port of Decatur. The FTZ covers counties across the northern region of the state.

Birmingham: Birmingham's FTZ is scattered over seven sites, including parts of Airport North/Northeast Industrial Park, ACIPCO industrial area, Shaw Warehouse facilities, Oxmoor Industrial Park, Birmingham International Airport's air cargo facility and Munger/ Valley East. Industrial giant Mercedes-Benz has its own subzone in Vance, as do ZF Industries, JVC America and NACCO Materials Handling Group Inc. Mercedes has recently applied to produce electric vehicles and batteries in addition to passenger motor vehicles.

Montgomery: Montgomery has more than 5,000 acres in four sites — near the airport and I-65, along the northern and eastern bypass, at the Airport Industrial Commercial Park and at Montgomery County Technology Park. Montgomery also has subzones for Hyundai Motor Manufacturing Alabama and Quantegy Inc.

Dothan: Dothan has six sites in its FTZ, with no industry-specific subzones. Dothan's international commerce is handled by the airport and the port of Panama City, Florida.

### Alabama Economic **Development Incentives**

"Alabama has one of the most competitive business climates in the nation," says the Alabama Department of Commerce. And the fact that tax incentives are statutory — part of the state's constitution and codes - "gives industry a stable framework for long-term investment."

Citing Alabama's tax burden as among the lowest in the nation, the Economic Development Partnership of Alabama says, "Alabama is one of a small number of states that allow a full deduction of federal taxes paid from state income tax liability."

That provision drops an actual 6.5% corporate tax rate to an effective rate of 4.5%, lower even than any of the state's Southern neighbors.

### Here's a quick look at major tax incentives and credits:

### **Jobs Act Incentives**

- ▶ Jobs Credit. Annual cash refund up to 3% of the previous year's gross payroll for up to 10 years, with enhanced benefits for companies employing veterans, locating in a targeted or jumpstart county, qualifying as a technology company or underrepresented company, or engaging in pharmaceutical, biomedical, or medical supplies or R&D activities.
- ▶ **Investment Credit.** Credit of up to 1.5% of the qualified capital investment costs for up to 10 years. Credit can be taken against the Alabama income tax, financial institution excise tax, insurance premium tax, utility tax and/or utility license tax liability.

Credit is available for up to 15 years for companies locating in a targeted or jumpstart county or qualifying as an underrepresented company.

### **Alabama Reinvestment and Abatements Act**

- ▶ New Facility and Expansion.
- 1. Abatement of non-educational portion of sales and use taxes on construction materials, and
- 2. Abatement of non-educational portion of property tax for up to 20 years.
- **Existing Facility:** Refurbishments, Upgrades or Placed Back in Service.
- 1. Abatement of non-educational sales and use taxes on construction materials and equipment
- 2. Abatement of non-educational property taxes for up to 20 years of the incremental property tax increases
- 3. Exemption from taxes for increased utility services for up to 10 years, and
- 4. AIDT worker training.
- ▶ **Property Tax Abatement.** New and expanding businesses can abate all of the state and local non-educational portion of the property taxes on all real and personal property incorporated into a qualifying project, for up to 20 years. Data processing center projects can receive an extended abatement up to 30 years, contingent on total capital investment in a project.
- ▶ Sales and Use Tax Abatements.

Companies can abate all state and the local non-educational portion of the sales and use taxes on the acquisition, construction and equipping of a qualifying project. Data processing center projects can receive an extended abatement associated with constructing and equipping a project, including refresh, for up to 30 years, contingent on total capital investment in a project.

► Full Employment Act Credit. Employers with fewer than 50 employees are eligible for a \$1,000 nonrefundable income tax or financial institution excise tax credit for each qualifying job created.

- ▶ **Heroes for Hire Credit.** Employers may also be eligible for an additional \$1,000 nonrefundable income tax or financial institution excise tax credit if the employee is a qualifying veteran.
- ▶ Net Operating Loss Carryforward. Companies may carry forward any operating losses for up to 15 years.
- ► Alabama Enterprise Zone Credit. Credits and exemptions based on numbers of employees for businesses locating in depressed areas of the state.
- ▶ Income Tax Education Credit. Allows an employer to take a tax credit for 20% of the cost of an employersponsored program to improve basic skills though high school level.

### Here's a look at financing incentives:

- ▶ Industrial Development Grants. Local governments and authorities can receive state grants to help businesses with the cost of site preparation. These grants are available to industrial, warehousing and research firms or headquarters facilities for other types of firms.
- ▶ Industrial Revenue Bonds. Taxexempt bonds up to \$10 million can be issued covering all or part of the cost of land and building acquisition, construction, furnishings and some soft costs.
- ▶ Alabama Infrastructure Grant Program. Helps finance water, sewer and road facilities.
- ► Alabama Industrial Access Road and Bridge Program. Helps finance the roads and bridges needed to connect public roads to industrial projects.
- ► Certified Capital Company Program. Provides financing for projects considered to be too risky for conventional financing options.

More Information: Alabama Department of Revenue, Alabama Department of Commerce and other state agencies.

### ON THE GO

### ALABAMA BUILDS PLANES, TRAINS, SHIPS AND CARS — AND THE INFRASTRUCTURE TO KEEP THEM MOVING

BY NEDRA BLOOM

lanes, trains, cars and ships keep
Alabama's economy moving.
And the state is constantly at
work to make each element
move faster and easier.

### **Planes**

Alabama has seven commercial airports, with five handling cargo as well as passengers. Birmingham broke ground on facilities to handle new cargo flights to and from Germany, and Mobile is moving its passenger operations into a brand-new terminal with international capabilities.

Dotted around the state in cities as big as Mobile and as small as Andalusia, specialty firms perform maintenance, repair and overhaul services — keeping planes airworthy.

Alabama builds planes, too — with two final assembly lines and a third under construction at Airbus in Mobile.

### **Trains**

Rail service is growing, too. CSX, Canadian Pacific Kansas City and Genesee & Wyoming announced plans in 2023 for a new rail interchange in Myrtlewood in Marengo County.

"This strategic acquisition will bring more shipping options to intermodal, automotive and other customers by providing a new, efficient corridor connecting expanding markets in Mexico, Texas and the U.S. Southeast," said Keith Creel, CPKC president and CEO.

"This new service is a demonstration of our commitment to creating product offerings for shippers that help them leverage the efficiency and sustainability advantages of rail to drive growth," said Joe Hinrichs, president and CEO of CSX.

And the Alabama State Port Authority is building an inland intermodal container facility in Montgomery, expected



to be complete in 2024. "This project will provide our shippers cost-competitive transportation services to and from one of the nation's fastest growth containerized cargo gateways," said John C. Driscoll, director and chief executive officer for the Alabama Port Authority.

Alabama builds trains, too, with a Progress Rail plant in Albertville building engines and infrastructure needs.

#### Cars

Most of us get where we're going by car, and Alabama is at work to make those drives safer and easier.

A new bridge across Mobile Bay at Mobile is in its early stages, aiming to decrease congestion at Interstate 10 and Causeway tunnels.

A second bridge is under construction linking the Gulf Coast beach to the nearby cities.

A West Alabama Highway is under construction to ease access to Tuscaloosa and other western cities. And work is in progress to add lanes to the state's north-south artery Interstate 65. Plus, improving rail access has the added benefit of decreasing long-haul truck traffic, officials say.

Alabama builds cars, too. Major OEM facilities include Mercedes-Benz U.S. International in Tuscaloosa County; Hyundai

An A320 begins its journey on the original Airbus Final Assembly Line in Mobile. Photo by Mike Kittrell.

Motor Manufacturing Alabama in Montgomery, Honda Alabama in Talladega; Toyota Motor Manufacturing Alabama in Huntsville and Mazda Toyota Manufacturing, also in Huntsville.

### Ships

The Alabama State Port Authority is building on back-to-back record years. The port itself is in the midst of major upgrades — deepening and widening channels to handle more and bigger ships more efficiently.

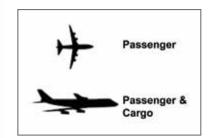
Its cargo handling partner, APM Terminals, is expanding for the fourth time since it opened in 2008, with plans to be able to handle 1 million 20-foot equivalent units by 2025.

Waterways stretch from the port to the interior of the state, with the Tennessee-Tombigbee Waterway offering connections to the Tennessee River and on into the interior of the U.S. Midwest.

Alabama builds ships, too. Austal USA in Mobile has added steel shipbuilding capabilities to its aluminum work and is at work on its first steel ships for the U.S. Navy and Coast Guard. A host of smaller companies build fishing boats, tugs and more.



### ALABAMA COMMERCIAL AIRPORTS



### MAJOR ALABAMA HIGHWAYS





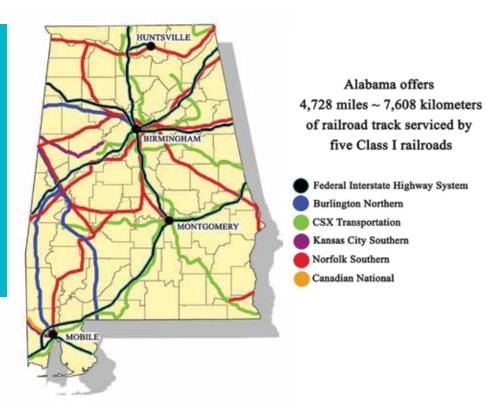
From commercial service to cargo, we are Keeping things moving in Birmingham



Get there from here.

www.flybhm.com f @ in 💆

### ALABAMA MAJOR RAIL SERVICE





### ALABAMA WATERWAY SYSTEM

### ALABAMA DEPARTMENT OF COMMERCE

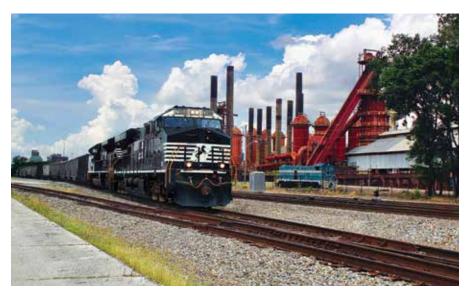
### Commerce takes lead in Alabama's economic development efforts

The Alabama Department of Commerce is at the center of the state's successful economic development strategies, which focus on creating jobs that provide career opportunities for the state's citizens and attracting investment that invigorates communities.

Commerce spearheads this effort by supporting the comprehensive efforts of its economic development allies and community partners to secure highimpact business growth projects. Under the direction of Secretary Greg Canfield, Commerce's project managers maintain a global outlook as they build business relationships and pursue potential projects that will enhance Alabama's prosperity. Commerce also plays a crucial role in the state's workforce development efforts, which ensure that businesses operating in Alabama have the highly motivated and skilled workforces they require for longterm success

Commerce and the Alabama economic development team have built a consistent track record of winning game-changing projects that introduce important new dimensions to the state's evolving economy. As a result, Alabama's economic development team has received numerous awards, and site-selection consultants routinely recognize Alabama as a top state for doing business. In recent years, the Alabama team has worked with an expansive roster of industry leaders, including Boeing, Airbus, Lockheed Martin, Facebook, Google, Amazon and global automakers such as the Mazda-Toyota partnership.

In 2022, economic development activity in Alabama generated a record \$10.1 billion in new capital investment as a steady stream of projects has flowed across a range of industries.



Projects such as the A-USA Project will help forge more robust supply channels in the state.

Alabama's strategic economic development growth plan, called Accelerate Alabama, established clear target industries for recruitment and remains the playbook for the state's economic development team. The updated 2.0 version of Accelerate elevated the priority of recruiting knowledge-based jobs in activities such as R&D, engineering and design, as well as establishing a tighter alignment with the state's seven research universities. By outlining an identified set of objectives, Accelerate Alabama created a framework for strategic economic development when it was launched in 2012. Since then, Alabama has recorded a high level of significant economic development activity, with companies announcing projects involving roughly 165,000 jobs and more than \$65 billion in new capital investment.

In addition, Commerce is closely aligned with the state's primary noneducational workforce development initiatives, which serve to streamline the process for prospects. AIDT, the state's highly regarded job-training agency, remains the central pillar of Commerce's Workforce Development Division. AIDT and other state workforce programs work to provide a comprehensive channel for worker recruitment and training as well as apprenticeships.

A critical Commerce objective is to identify prospects for partnerships that can broaden Alabama's economic base and create jobs for its citizens. Other objectives are to attract domestic and foreign investment, expand international trade and Alabama exports, facilitate small business growth and attract film and entertainment projects. Commerce has also strengthened its commitment to facilitating economic growth in rural communities, resulting in more than \$4 billion in new capital investment from projects since the beginning of 2020.

### KEY CONTACT

Greg Canfield || Alabama Department of Commerce || Alabama Center for Commerce 401 Adams Avenue || Montgomery, AL 36130 || (334) 242-0400 or (800) 248-0033 || Fax: (334) 242-5669 || www.madeinalabama.com

### A D ALABAMA'S WORKFORCE TRAINING AGENCY

### Workforce expertise from AIDT is a major incentive for businesses locating to or expanding in Alabama

Alabama has one of the strongest workforce training programs in the world in support of the state's commitment to new and expanding industries.

AIDT has long been recognized among the nation's top workforce training programs by industry observers. AIDT's pre-employment training program holds an ISO 9001:2015 certification for quality and continuous improvement.

AIDT has assisted new and expanding companies in recruiting, selecting and training over one million job seekers over the last 50-plus years. AIDT training produces a workforce that employers recognize for high performance achievement — a result of both the technical assessment and training AIDT trainees receive and the process by which they are selected.

AIDT stays at the forefront of workforce development through its innovative approaches to common issues and its ability to partner with education and industry leaders, as well as other state agencies. This includes the continuous evolution of training techniques such as e-learning through modules and webinars, virtual reality training and more traditional hands-on learning.

From automotive to aerospace, logistics, warehousing and biomedical, AIDT researches and identifies the needs of each company served and uses that information to develop a full range of technical pre-employment selection programs customized to each company.

### AIDT SERVICES INCLUDE:

► Identification of needed employee skills and knowledge, training criteria and curricula content definition, and required







AIDT programs are tailored to the needs of specific industries, from complex wiring to the elements of today's smart factory.

behavior and performance criteria the company expects of employees.

- ▶ Recruitment of trainee candidates for potential employment. AIDT interviews and enrolls applicants in training programs that are acceptable to the company.
- ▶ Program development, instructors, equipment, consumable supplies and training aids such as manuals, workbooks and videos are provided at no cost to trainees or employers.
- ▶ Pre-employment training. Job seekers who meet the selection criteria designed by AIDT and the employer are enrolled in job-specific training for detailed assessment of attitude, character, work ethic, literacy, teamwork and technical learning ability.

A division of the Alabama Department

of Commerce, AIDT also provides leadership development, on-the-job training, industrial maintenance assessments and industrial safety assessments. Leadership development conducted by AIDT is designed to develop and retain quality leaders, improve retention and create loyal and dedicated employees. Industrial maintenance and safety assessment services help identify candidates best qualified for effective and efficient operations through corrective and preventive maintenance.



### KFY CONTACT

**Ed Castile, Director** || AIDT || One Technology Court || Montgomery, AL 36116-3200 (334) 280-4400 || Fax: (334) 613-3287 || TDD: (334) 242-0298 || info@aidt.edu || www.aidt.edu

### A ALABAMA TECHNOLOGY NETWORK

### Technical experts work directly with Alabama industries to increase productivity, profitability and competitiveness





ATN sends experts into training facilities and workplaces to help businesses solve technical problems and advance competitiveness.

Focused on Alabama manufacturers, the Alabama Technology Network provides the most extensive workforce training, technical assistance and engineering services designed to improve Alabama business and industry. Experts in technical assistance and innovation work directly with Alabama's existing industry to increase productivity, profitability and competitiveness.

As part of the Alabama Community College System, the network's 19 sites are located at 15 community colleges and the state's three research universities — Auburn University, the University of Alabama and the University of Alabama in Huntsville. ATN's team of experts helps solve industry and business needs through innovative, sustainable, costeffective solutions. ATN can conduct detailed needs assessments, outline potential solutions based on the results and then provide technical assistance to help companies solve those problems or identify those who can. Services include lean enterprise, quality services training, continual improvement methods, environmental health and safety training, industrial maintenance training, sustainability in manufacturing and innovation engineering.

ATN is an affiliate of the National Institute of Standards and Technology's Manufacturing Extension Partnership, which provides hands-on assistance and training to smaller manufacturers. Since 2015 through 2022, the following are client-reported economic impacts:

- ▶ 1,181 independent client surveys completed
- ▶ 3,589 new jobs
- ▶ 14.116 retained jobs
- ▶ \$2.3B increased & retained sales
- ▶ \$441M in new client investments
- ▶ \$805M in cost savings

#### **Totals**

- ▶ 17,705 jobs
- ▶ \$3.6B client impacts

In addition to its training services, ATN partners in presenting the Alabama Manufacturer of the Year awards and powers Connex Alabama, an online platform that connects all U.S. manufacturers into one single, accurate and searchable supply chain database.

# ADECA ALABAMA DEPARTMENT OF ECONOMIC AND COMMUNITY AFFAIRS

### **ADECA connects communities with funding opportunities**

The Alabama Department of Economic and Community Affairs (ADECA) distributes hundreds of millions of dollars annually to Alabama cities, counties, non-profit organizations and others to support economic development projects, infrastructure improvements, job training, energy conservation, law enforcement, traffic safety, recreational development, high-speed internet expansion and electric vehicle infrastructure.

Since coming on board in 2017 at the beginning of Gov. Kay Ivey's administration, Director Kenneth Boswell has emphasized the importance of forming partnerships to improve Alabama communities and carry out Gov. Ivey's desire to improve commerce and create job opportunities for Alabamians.

ADECA houses numerous programs that focus available resources to address a variety of local challenges.

Several ADECA grant programs help Alabama communities with economic development projects and enhance commerce either directly or indirectly:

► Community Development Block **Grants** are funded through the U.S. Department of Housing and Urban Development and support local efforts to attract and prepare for new or expanding industries, rehabilitate neighborhoods, provide water and sewer services or fund other infrastructure improvements that support business development or enhance the quality of life. Many of the funds are awarded annually on a competitive basis, but a portion of the allocation is kept in reserve for economic development projects that help industries and businesses locate and expand in Alabama. In 2022, ADECA received about 80 competitive applications from small cities, large cities, counties and planning organizations across Alabama, and the agency awarded a total of 49 projects totaling \$19.3 million, enabling local governments to address critical infrastructure needs. Twelve grants, amounting to nearly \$4.77 million, were awarded through ADECA's economic development CDBG program. Those funds are used to supply infrastructure for new businesses and industries.

- ▶ Grants from the Appalachian Regional Commission (ARC) are awarded to encourage economic development and improve the quality of life of Alabamians living within 37 north Alabama counties considered part of the Appalachian Region. Projects that develop and improve infrastructure and support education, workforce development and community development are funded through the program. In 2022, almost \$8 million was invested in 29 projects in ARC counties, helping to create or retain 140 jobs and provide job training for 1,540 people. ARC grants were matched with \$7.3 million in local funds for a total investment in the region of \$15.3 million.
- ▶ Delta Regional Authority (DRA) is another state-federal partnership that encourages the development of new jobs and helps with basic community improvements in a rural region that includes 20 counties primarily in the Black Belt region of Alabama. In 2022, ADECA partnered with DRA to fund 10 projects totaling \$5 million creating or retaining many jobs and preparing others for jobs in new and demanding fields.
- Also coming on board to ADECA is the new **Southeast Crescent Regional Commission**. The commission will provide economic development and workforce training in 13 Alabama counties, primarily in southeast Alabama and Autauga, Baldwin, Lee, Montgomery and Mobile,

Two recreational programs are managed by ADECA, the Land and Water

that are not part of ARC or DRA.

Conservation Fund and the Recreational Trails Program, to fund parks and recreational facilities. Many of those projects help attract tourists, aid local economies and improve quality of life. In 2022, ADECA awarded \$1.64 million for eight Recreational Trail projects and \$1.8 million for nine LWCF projects.

- ▶ ADECA's Alabama Digital Expansion Division was created to take on the state task of providing high-speed internet service to unserved areas of Alabama. Under the banner of "Be Linked Alabama," several programs have been established from multiple funding sources to accomplish that task. State and federal funds have been used to provide middle- and last-mile projects to benefit households, businesses and public service operations that choose to be connected.
- ► The Electric Vehicle Charging Infrastructure Program helps provide electric vehicle charging stations along Alabama interstate and major highways. The program is design to accommodate owners of electric vehicles and support Alabama automobile manufacturers who produce electric vehicles. In 2022, more than \$2 million in state funds was allocated to install charging stations at 18 locations in Alabama. An additional \$1.2 million was awarded in 2023 to support charging stations at five locations, and funding from the National Electric Vehicle Infrastructure grant program will soon provide charging infrastructure along the interstates in Alabama.
- ▶ ADECA also helps manage the state's water resources, supports law enforcement and traffic safety efforts, and distributes state and federal surplus property.

### KEY CONTACT

Kenneth Boswell, Director || Alabama Department of Economic and Community Affairs
P.O. Box 5690 || Montgomery, AL 36103-5690 || (334) 242-5591 || Fax: (334) 242-5099 || Contact@adeca.alabama.gov

# NAIDA NORTH ALABAMA INDUSTRIAL DEVELOPMENT ASSOCIATION

### One of the first industrial development organizations in the U.S., NAIDA was formed in 1949 to assist in creating quality jobs for the 13 North Alabama counties served by TVA power

The North Alabama region is home to companies that build some of the most outstanding, complicated, and widely known products in the world — and they continue to experience great success as a result of what the area has to offer.

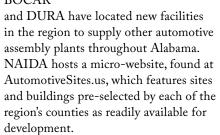
### **KEYS TO SUCCESS**

Many reasons companies in North Alabama flourish include:

- ▶ Institutions of higher education in 20 locations.
- ▶ State-of-the-art, world-class automation and employee training provided by AIDT and the Robotics Technology Park (RTP).
- ▶ An electric system powered by TVA and its distributors.
- ► Transportation access North Alabama offers various means of transportation via water, rail, highway and air to meet speed-to-market requirements. Huntsville International Airport provides direct flights to major cities and also provides air cargo service to international destinations along with on-site U.S. Customs & Border Patrol and FTZ #83. ▶ Over 2,000 acres of available land designated as Advantage Sites and over 5 million square feet of available buildings ranging from 5,000 to 2 million square feet, are available in the region.

### STRONG ECONOMIC SECTORS

The North Alabama automotive sector continues to grow with companies such as Mazda Toyota Manufacturing (MTM), Toyota Motor Manufacturing, Navistar, Polaris and Tiffin Motor Homes. The supplier base has more than 100 automotive-related companies. Toyota Boshoku, YKTA, Daikyo Nishikawa, Vuteq and others have established facilities on or near the MTM site. **BOCAR** 



The aerospace and defense sectors, featuring companies such as Boeing, Raytheon, Northrop Grumman, Lockheed Martin, Beyond Gravity and ULA, continue to grow year after year. ULA continues the tradition of building rockets in North Alabama for the Vulcan Rocket program. Locally manufactured rocket engines produced by Blue Origin and hypersonic development and integration taking place by Lockheed Martin are key to national space and defense, as is GE, producing state-ofthe-art SiC and CMC materials.

Alloys/Metalworking companies such as Carpenter Technology, Constellium, Nucor and Progress Rail are located in North Alabama.

More than 70 chemical companies operate in the region, including 3M, Daikin, Hexcel, OCI, Occidental Chemical, Toray, Ascend Performance



NAIDA created this map of potential industrial sites in the 13 counties of Northern Alabama, View it interactively at: automotivesites.us

Materials and Polyplex.

The HudsonAlpha Institute for Biotechnology and its 50 associate companies are operating in the cutting edge of the life sciences sector.

Other additions to the area's hightech economy include world-class datacenters by META, Google, DC Blox and Simple Helix.

Currently, twice as many individuals are employed in manufacturing occupations in this region compared to the national average. This current industrialization owes its roots to the 1950s, when industry began locating along the Tennessee River, and the development of the rockets that took man to the moon began taking shape in the region.

NAIDA offers confidential services to companies seeking a new or expansion site. It also offers assistance in finding suppliers and services to meet company needs. This online tool can be accessed at IndustrialServices.naida.com.

#### Brooks Kracke, President/CEO || Jason Wright, Vice President

North Alabama Industrial Development Association || 410 Johnston Street, Suite A || Decatur, AL 35601 || P.O. Box 1668 - 35602 (256) 353-9450 || bkracke@naida.com/jwright@naida.com

# EDAA ECONOMIC DEVELOPMENT ASSOCIATION OF ALABAMA

### EDAA unites professionals committed to Alabama's economic development



Economic development can have a multitude of meanings, but at its core, it is a collaborative effort among businesses, communities, organizations and government agencies. Since 1968, the Economic Development Association of Alabama (EDAA) has facilitated that collaboration to both attract new investment to the state and work to expand those companies that are already located here. EDAA provides a forum for discussion of specific issues affecting economic development and provides programming

The EDAA Leadership Institute represents a partnership between EDAA and GEDI to educate and engage elected officials, ED board members and other community leaders about key issues in economic and community development. For more information contact: EDAA (334) 676-2085

and training to cultivate expertise in Alabama's economic developers.

The EDAA membership consists of 500 individuals involved in economic development from many different areas and disciplines. EDAA members are economic development professionals, attorneys, engineers, architects, state agency personnel, utility employees, bankers, contractors, real estate agents, educators and municipal and county officials.

### **SERVICES**

A voluntary member association, EDAA conducts workshops and seminars covering the ideas, principles, practices and ethics of economic development. Most of the EDAA educational programs focus on enhancing the skills of economic development professionals by providing them with new tools to address the challenge of remaining one of the nation's top states in economic development. EDAA holds multiple networking opportunities, publishes a

Carefully crafting the new 2023 Honda Pilot and Pilot TrailSport models.

membership directory, conducts two major conferences each year and holds quarterly workshops.

EDAA is diligent in addressing state and federal legislative and regulatory issues impacting economic development in Alabama. With a full-time lobbying presence when the Alabama Legislature is in session, EDAA is a leader in forming economic development policy and legislation for its members. Legislative efforts on the state level in recent years have seen EDAA lobby for competitive and sustainable economic development incentives and adequate funding for state recruitment efforts and worker training programs. In addition to its legislative efforts in support of positive economic development policies, EDAA endeavors to defeat legislation that would pose a threat to Alabama's economic development effort and actively seeks innovative solutions to challenges that could negatively impact the state's business climate.

#### **PARTNERSHIPS**

In addition, EDAA works with other organizations in the state to improve Alabama's economic development environment. Strategic alliances with the Alabama Department of Commerce, Alabama Department of Economic and Community Affairs and the Economic Development Partnership of Alabama enable EDAA to provide its membership with substantive skills and resources. EDAA is also a partner with Auburn University's Government and Economic Development Institute (GEDI) in conducting the Economic Development Leadership Institute.

### KEY CONTACT

Jim Searcy, Executive Director || Economic Development Association of Alabama 2 North Jackson Street, Suite 302 || Montgomery, AL 36104 || (334) 676-2085 || Fax: (334) 676-208 || info@edaa.org || www.edaa.org

# EDPA ECONOMIC DEVELOPMENT PARTNERSHIP OF ALABAMA

### EDPA works to attract investment, support business expansions, encourage startups and attract and retain talent



For more than 30 years, the Economic Development Partnership of Alabama (EDPA) has been a catalyst for economic growth in the state. A private, nonprofit organization supported by Alabama's leading businesses, EDPA is uniquely positioned to partner with state, local and private allies to drive the state's economic development efforts.

### **EDPA'S FIVE PILLARS**

EDPA's program of work today is focused on five pillars:

- 1. Lead Generation: Identify and target leading companies that are good prospects to bring quality jobs and investment to the state.
- 2. Innovation and Entrepreneurship: Provide resources and support to startup companies that have high-growth potential.
- 3. Talent Attraction and Retention: Work to attract and retain the talent needed to support economic growth.
- 4. Business Intelligence and Economic Development Research: Support both lead generation and business attraction efforts through business intelligence, data and analytics.
- 5. Statewide Economic Development Policy: Promote existing policies and shape future policies key to Alabama's economic success.

Novelis Inc. broke ground on a \$2.5 billion aluminum recycling and rolling plant on the Baldwin County Mega Site in Bay Minette.

#### SITE SELECTION PROGRAM

AdvantageSite is a teamwork approach between the private sector and state and local governments geared toward having prepared product and materials ready for industrial prospects. Alabama now has 46 active AdvantageSites throughout the state.

Since the program's start in 2008, 63 economic development projects have located on AdvantageSites across the state, investing \$7.2 billion and creating 10,000 new jobs.

The program is jointly sponsored by the Alabama Department of Commerce, Spire, Alabama Power Co., the North Alabama Industrial Development Association and PowerSouth Energy Cooperative.

AdvantageSite is a voluntary industrial site preparedness program created to make the state more competitive for companies considering a location in Alabama.

#### ALABAMA LAUNCHPAD

EDPA has also been a statewide leader in encouraging innovation, commercialization and entrepreneurship. The mission of EDPA's Alabama Launchpad program is to help high-growth companies start, stay and grow in Alabama through its business pitch competition.

Alabama Launchpad is the state's most active, early-seed investor and drives innovation and job growth through three startup competitions annually, offering non-dilutive funding along with mentoring and other services. Since it started in 2006, Alabama Launchpad has awarded \$6.2+ million to 115 Alabama companies, which have created more than 1,300 jobs.

#### TALENT

With private sector engagement and strong public sector ties, EDPA leverages its relationships across industries to facilitate talent retention efforts in conjunction with local and state government, colleges and universities and companies. This collaborative effort, called Fuel Alabama (FuelAL), focuses on making sure Alabama has the competitive talent necessary for continued growth. In its first two years, EDPA has hosted two statewide conferences, conducted research alongside the Alabama Commission on Higher Education, and exposed students to various communities across the state through a summer program called FuelAL. Each of these components of Fuel Alabama connect communities, employers, and talent — the pivotal intersection that could change our state's ability to both retain and attract the talent the state needs.

EDPA also launched ALEX: The Alabama Experience — a mobile, digital outreach initiative showcasing Alabama career, education and lifestyle opportunities to residents and visitors — to pop-up throughout various communities, workforce and organizations across Alabama.

### **BUSINESS INTELLIGENCE**

The business development efforts of EDPA, the state and local communities are supported with robust insights and data. This includes proactive steps to derive insights and analysis from industries and businesses that meet Alabama's value propositions. It also provides research data on sites, labor, wages and other key indicators to support the research efforts of site consultants, corporate and community economic developers, and the Alabama Department of Commerce.

### **KEY CONTACTS**

Greg Barker, President || Steve Sewell, Executive Vice President Miller Girvin, Executive Vice President, Innovation and Entrepreneurship

Economic Development Partnership of Alabama || 1320 1st Avenue South || Birmingham, AL 35233 (205) 943-4700 | Fax: (205) 943-4703 | www.edpa.org

## BBA BIRMINGHAM BUSINESS ALLIANCE

### The BBA helps businesses start, stay and succeed in Birmingham



Birmingham is the largest metro in Alabama and a major driver of the state's economy, and the work of the Birmingham Business Alliance (BBA) helps keep the seven-county region moving forward.

As the economic development agency for the Greater Birmingham Region and the local chamber of commerce for the city of Birmingham, BBA serves as the first-stop destination for businesses currently operating or considering an operation in the area.

Through its economic and workforce development, business retention and expansion, public policy, research, regional marketing and other work, the BBA fosters a climate where business can flourish in Bibb, Blount, Chilton, Jefferson, Shelby, St. Clair and Walker counties.

#### A GROWING ECONOMY

BBA is responsible for growing quality jobs and capital investment in the region. The organization's alliance of business leaders, community members, like-minded partners and civic advocates band together every day to move Birmingham forward. Since 2017, BBA

Birmingham is the hub of the 7-county BBA region.

has supported more than 225 projects representing nearly 15,000 new jobs and \$4.6 billion in new capital investments. Recent notable successes include the retention and expansion of homegrown health care startup Pack Health after its acquisition by Quest Diagnostics and recruitment of global tech firm Tquila Automation, who chose

Birmingham over Austin, Charlotte and Nashville.

### **BIRMINGHAM HAS MORE**

BBA works to present Birmingham's strong message and to shift perceptions of the region through positive experiences. BBA uses the appeal of Birmingham's thriving events and tourism attractions to develop inbound business recruitment opportunities.

During the spring's annual Regions Tradition golf tournament, BBA hosted four of the nation's leading site selection consultants for a multi-day visit, sharing the community's advantages, visiting top employers and dining at many of the award-winning local eateries. By the end of the trip, the consultants admitted that their perception had shifted from seeing Birmingham as an older industrial city to seeing Birmingham as a viable market for small to mid-sized tech, life science and office operations.

Over the past year, BBA has been diligently deploying a campaign for "Birmingham Has More," a message that complements a new brand for the Greater Birmingham Region. Thanks to

support from community partners like the Jefferson County Commission, the brand and its message will come to life through a full website, national public relations campaign and other local activations.

### FORGING A NEW FUTURE

BBA's future is brighter than ever before thanks to a new leader at its helm. Steve Ammons became president & CEO in the summer, bringing with him a strong background in economic development, regional collaboration, advocacy and stakeholder engagement. Before joining BBA, Ammons served as a Jefferson County commissioner for District 5, where he chaired the Economic Development Committee and the Information Technology Committee. Ammons served as the county's liaison to key economic development organizations, including the BBA, where he previously worked on projects as an active member of the executive committee and board of directors.

Ammons steps into BBA with the belief that strong economies are regional economies. His commitment to building strong partnerships across municipal boundaries has been evident at every step of his career. During his time on the county commission, Ammons helped draft the Good Neighbors Pledge, a pact to combat poaching and foster long-term economic growth for the region. This initiative was eventually adopted by the entire Jefferson County Mayors Association.

Under Ammons' leadership, BBA continues a commitment to not only regional cooperation, but regional collaboration.

### KEY CONTACT

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