ATTENTION PARENTS!

As I’ve said on many occasions, our people are Alabama’s greatest strength, especially our young people, who hold the state’s future in their hands. As the guardians of our state’s future, students deserve every possible tool to help them—and Alabama—succeed in all areas.

To achieve this, we have created the Alabama SUCCESS Guides, which are designed to assist students in identifying resources regarding careers, postsecondary education and financial literacy. Through our students, we are positioning our state for even greater accomplishments. They will be well-equipped for careers in Alabama’s workforce which will allow them to compete—and excel—in our global economy.

This Alabama SUCCESS Guide is an excellent tool in helping our students of today become our leaders of tomorrow.

Kay Ivey, Governor of Alabama

ATTENTION PARENTS!

This guide is part of a series created to help students in Alabama learn more about high-demand careers, salaries, the steps they need to take to reach their goals, and the resources that can help them get there.

The workforce has changed since you entered it. Many of the jobs that exist today were not even created when you graduated from high school, and the pace of change is faster than ever! However, since work skills are transferable to many jobs, by helping your student connect with what they learn in the classroom to real jobs that interest them, they will graduate better equipped for life after high school.

Thank you for talking with your child about what careers interest them—and why. You can help them by sharing your own work experiences with your child. Ask people in your community who work in jobs that interest your child to share about their careers or let your child visit their workplace. And last, but not least, go with your child to meet with their school counselor or career coach to get them moving in the right direction. Help them prepare for their future...today.
WHAT EMPLOYERS WANT

AUTOMOBILE DEALERSHIP EMPLOYERS ARE LOOKING FOR PEOPLE WHO HAVE A PASSION FOR WHAT THEY DO AND FOR THOSE WHO UNDERSTAND THE IMPORTANCE OF THEIR ROLE IN ENSURING THE SAFE TRANSPORTATION OF PEOPLE AND THEIR LOVED ONES. Automobile dealers want honest, hardworking, dedicated employees who strive to better themselves by improving their skills, always desiring to move up in the organization, all the while helping others as they learn. We look for reliable people with excellent attendance records. We also like to see participation in extracurricular activities (clubs, sports, etc.) because that shows that we have employees who are going to be team players and take responsibility for their actions.

JENNIFER WHISENANT
EXECUTIVE DIRECTOR
BIRMINGHAM AUTOMOBILE DEALERS ASSOCIATION

WHAT’S INSIDE

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SAMPLE OCCUPATIONS

Aircraft Mechanic or Service Technician
Bus & Truck Mechanic and Diesel Engine Specialist
Heavy & Tractor-Trailer Truck Driver
Automotive & Watercraft Service Attendant

Aircraft Structure, Surfaces, Rigging & Systems Assembler
SREB AC Global Logistics & Supply Chain Management
Power Equipment

PATHWAYS

CLUSTER: TRANSPORTATION, DISTRIBUTION & LOGISTICS
MYTH: Automotive Technicians only turn wrenches.

FACTS: Automobiles today are equipped with sophisticated computers that assist with keeping the vehicles’ systems operating properly. A car’s dashboard used to have a handful of lights to signal major diagnostic problems such as the dreaded “check engine” light. Today, technicians use complex diagnostic software to assist their knowledge in properly diagnosing repairs. Technicians are in great demand, and students that are technology and mechanically savvy can be successful technicians.

REALITY CHECK

WHAT IT COSTS TO LIVE ON YOUR OWN IN ALABAMA
Estimated 2017-2018 monthly expenses for a 22 year-old living in Birmingham.

- Groceries: $350-$400
- Mobile Phone: $55
- Cable and Internet: $80
- Gasoline: $100 (1,000 miles @ $3.00 per gallon, 30 mpg)
- Rent and Utilities: $700-$850 (1 Bedroom)
- Car Payment: $350-$450 (Used 2016)
- Car Insurance: $60-$125 (6-Month Policy)

NOTE: Keep in mind that your paycheck will be reduced by about 30 percent to cover taxes, retirement, and insurance. What’s left is known as your “take-home pay.” Subtract 30 percent from the salaries shown on pages 5 and 6 to get a more accurate take-home amount.

Sources:
- RENT: rentbits.com/Alabama/birmingham-al
- CAR: carsdirect.com
- MOBILE PHONE: att.com, verizon.com
- GROCERIES: bestplaces.net
- CABLE AND INTERNET: birmingham.mybrighthouse.com
- CAR INSURANCE: progressive.com
- GAS: gasbuddy.com
YOU DECIDE

Does the Transportation, Distribution & Logistics Career Cluster fit you, your talents, and your dreams?
Take this quick quiz to find out.

1. Are you a NASCAR, boating, or BMX fan?
2. Are you strong and coordinated?
3. Do you like to travel?
4. Do you have strong math, science, and computer skills?
5. Are you good at operating tools and machinery?

WHY IT MATTERS:
1. An interest in and passion for automotive and off-road sports is often a sound basis for a career in Transportation, Distribution & Logistics.
2. Some of the jobs in this cluster are physically intense and are often best performed by job candidates who possess great physical strength and coordination.
3. Jobs in the Transportation, Distribution & Logistics cluster can take you all over the globe.
4. Math, science, and computers have helped to paint the landscape in which the jobs in this career cluster are performed.
5. It requires a precise set of skills to operate the machinery that makes the jobs in this career cluster possible.

If you answered “yes” to most of these questions, Transportation, Distribution & Logistics could be right for you.

CAREER IDEAS

What Job Works for YOU?

On the next two pages you will find job descriptions for this career cluster that are projected to be the “Hot Jobs” in the state of Alabama from now through the year 2024. The jobs are listed in order of projected demand.*

On pages 7 and 8 you will see short bios of people who live and work in this career cluster right here in Alabama. As you read their stories, pay attention to their pathway to the job they are in currently and the lessons they learned along the way. What can you learn from these real-life stories that might help you along your own career path? ►►►►►►►►►►►►

*This information is provided by the Alabama Department of Labor, Labor Market Information Division in cooperation with the U.S. Bureau of Labor Statistics. The wage data is based on the May 2015 Occupation Employment Survey employment and wage estimate file. The wages have been aged using the most current Employment Cost Index (ECI) factors reflecting wages as of September 2016.
AIRCRAFT MECHANIC OR SERVICE TECHNICIAN

Job Description: Diagnose, adjust, repair, or overhaul aircraft engines and assemblies, such as hydraulic and pneumatic systems. Includes helicopter and aircraft engine specialists.

Education: Postsecondary non-degree award and License

Salary Range: $47,630 – $74,488

AIRCRAFT STRUCTURE, SURFACES, RIGGING & SYSTEMS ASSEMBLER

Job Description: Assemble, fit, fasten, and install parts of airplanes, space vehicles, or missiles, such as tails, wings, fuselage, bulkheads, stabilizers, landing gear, rigging and control equipment, or heating and ventilating systems.

Education: High school diploma or equivalent

Salary Range: $34,623 – 59,365

BUS & TRUCK MECHANIC AND DIESEL ENGINE SPECIALIST

Job Description: Diagnose, adjust, repair, or overhaul buses and trucks, or maintain and repair any type of diesel engines. Includes mechanics working primarily with automobile or marine diesel engines.

Education: High school diploma or equivalent

Salary Range: $29,244 – $46,637

AUTOMATIC & WATERCRAFT SERVICE ATTENDANT

Job Description: Service automobiles, buses, trucks, boats, and other automotive or marine vehicles with fuel, lubricants, and accessories. Collect payment for services and supplies. May lubricate vehicle, change motor oil, install antifreeze, or replace lights or other accessories, such as windshield wiper blades or fan belts. May repair or replace tires.

Education: No formal educational credential

Salary Range: $17,744 – $26,465

HEAVY & TRACTOR-TRAILER TRUCK DRIVER

Job Description: Drive a tractor-trailer combination or a truck with a capacity of at least 26,000 pounds Gross Vehicle Weight (GVW). May be required to unload truck. Requires commercial drivers’ license (CDL).

Education: Postsecondary non-degree award and CDL

Salary Range: $26,849 – $48,891

AVIONIC TECHNICIAN

Job Description: Install, inspect, test, adjust, or repair avionics equipment, such as radar, radio, navigation, and missile control systems in aircraft or space vehicles.

Education: Associate’s degree

Salary Range: $47,303 – $71,159
TAXI DRIVER & CHAUFFEUR
Job Description: Drive automobiles, vans, or limousines to transport passengers. May occasionally carry cargo. Includes hearse drivers.

Education: No formal educational credential
Salary Range: $17,796 – $24,228

AUTOMOTIVE SERVICE TECHNICIAN & MECHANIC
Job Description: Diagnose, adjust, repair, or overhaul automotive vehicles.

Education: Postsecondary non-degree award
Salary Range: $25,331 – $47,241

PAINTER, TRANSPORTATION EQUIPMENT
Job Description: Operate or tend painting machines to paint surfaces of transportation equipment, such as automobiles, buses, trucks, trains, boats, and airplanes. Includes painters in auto body repair facilities.

Education: High school diploma or equivalent
Salary Range: $28,844 – $47,134

COMMERCIAL PILOT
Job Description: Pilot and navigate the flight of fixed-winged aircraft on nonscheduled air carrier routes, or helicopters. Requires Commercial Pilot certificate. Includes charter pilots with similar certification, and air ambulance and air tour pilots.

Education: High school diploma or equivalent
Salary Range: $58,535 – $104,432

INDUSTRIAL TRUCK & TRACTOR OPERATOR
Job Description: Operate industrial trucks or tractors equipped to move materials around a warehouse, storage yard, factory, construction site, or similar location.

Education: No formal educational credential
Salary Range: $22,125 – $37,538

AUTOMOTIVE BODY & RELATED REPAIRER
Job Description: Repair and refinish automotive vehicle bodies and straighten vehicle frames.

Education: High school diploma or equivalent
Salary Range: $28,394 – $48,460
DANIEL HORTON
EARTHMOVING EQUIPMENT TECHNICIAN
THOMPSON TRACTOR
Graduate of Shelby County High School
Columbiana, AL

I fix and repair Caterpillar heavy equipment through use of hands-on experience and mechanical engineering. It takes hard work and effort.

My career decision was made my senior year of high school and has not changed. I had no trouble following my career path. I was hired into Thompson Tractor Co. and went to South Georgia Technical College through a scholarship with Thompson Tractor. I studied Caterpillar Dealer Business and Caterpillar machines. The everyday hands-on experience and being able to wake up and go to work doing what I love to do is the best part of my job. There is always something new to learn in the technician field as machinery gets more advanced. A student must show dependability and integrity, which holds true for any career. Always show up to work on time and be willing to work when asked. Show career ambition and a willingness to work hard, but be able to do it safely. I’d like to be a Service Manager or Corporate Recruiter for Thompson Tractor someday. I can also see myself growing into a well-experienced technician.

“A student must show dependability and integrity, which holds true for any career.”

MIKE JOHNSON
MAINTENANCE AND TRANSPORTATION SUPERVISOR
PIKE COUNTY BOARD OF EDUCATION
Graduate of Zion Chapel High School
Jack, AL

I am responsible for our schools’ transportation team of thirty-six bus drivers, three bus aides, two mechanics, and an administrative assistant in the office. I also supervise a team of four maintenance workers who are responsible for maintaining and repairing our schools. I deal with a wide range of issues every day from internal personnel problems to teacher requests and complaints from parents.

When I got out of high school, I was a welder, a farmer, I made latex gloves, worked on aircraft, and worked for myself on rental apartments. I started with the school system in 1997 in the Maintenance Department. I then became a maintenance supervisor, and then a few years later became the Maintenance and Transportation Supervisor. Working long hours and working well with other people helped me advance in my career. Plus, having a lot of patience and willing to apologize when you know you are wrong is a good practice.

“Working long hours and working well with other people helped me advance in my career.”

TODD LANIER
HEAD OF X-PLANT TEAM OPERATIONS
AIRBUS AMERICAS
Graduate of Briarwood Christian School
Birmingham, AL

I manage the team which performs Reworks for an Aircraft Final Assembly Line. I work with the station managers to ensure that their activities are not interrupted by non-conformities or damages. I also liaise with contacts in Europe for feedback and support.

I changed my major several times while at Auburn and took classes at a community college. The greatest contributing factor for me getting this job was the experience I gained with internships I did during my time at Auburn. It prepared me to succeed with the experience necessary to begin my career at Airbus after graduation. Students need to be ready to learn. Never stop being curious and willing to ask questions. The worst thing you can do is walk into a job with the expectation that you already know everything.

My success at this job can be attributed to my curiosity and willingness to learn. I am always asking questions and trying to grasp a better understanding of our company and processes. I also work well with others and have taken advantage of their knowledge and experiences. Being flexible in my work has also helped me be successful. Manufacturing is always different with new problems to solve each day. My daily routine is never the same because of this, and I enjoy the variety. Having to solve complex problems is also very important and exciting for me.

“The worst thing you can do is walk into a job with the expectation that you already know everything.”
I am responsible for all Distribution Center activities, including controlling costs, monitoring product quality, customer service, cost efficiency, and continuous improvement for the distribution center. I also implement and enforce all environmental, health, and safety programs to ensure compliance and effectiveness.

I always had a desire to go to college because none of my family before me had ever graduated high school. Being a part of the yearbook staff at Pell City High School enabled me to see the benefits of structure and the importance of accountability in meeting deadlines. Playing sports taught me about teamwork, thinking ahead, and striving to continuously improve. These experiences played a big role in choosing a career. I began at Gadsden State in the fall of 1994, and after two years transferred to Birmingham-Southern where I majored in Business Administration with a concentration in Management. It took me five years to graduate since I went to night classes while working full time during the day, something I would NEVER change. I learned so much practical real-world experience from other night students returning to get their degrees; something I may have never received if I had gone the standard day class, no job, four-year route.

The job I held at the time I graduated college was a manufacturing job, where I actually worked on the floor building conveyor systems. I was promoted to Inventory Manager, then Purchasing Manager later on.

“I always had a desire to go to college because none of my family before me had ever graduated high school.”

As an aircraft mechanic, I install a vast array of parts and components, troubleshoot issues, and rig/adjust to ready for flight standards.

Growing up I loved taking things apart and seeing how they worked. My father was a “shade tree mechanic” working on cars, trucks, anything with an engine in his spare time at home after he finished work. As I got older, what I wanted to do when I “grew up” went from construction to a car mechanic to an underwater welder. I wasn’t sure what I wanted to do, but I knew it would be a big decision after high school. I began talking to my school counselor about how to enroll in our local trade school programs. I loved it, and by the time I graduated high school I had completed several trade programs. I then had a sampling of what these jobs may feel like to have as my career. As I was taking these classes I was asking questions to all of my teachers and some of my family members and friends about what their thoughts on this or that career was, what was the pay like, what were the work conditions like, and how steady the work was.

Aviation was brought to my attention, and after doing some quick research, I enrolled to begin working on my FAA Airframe and Powerplant License. This would end up being a two-year journey with summer classes included, thirty-five hours a week at night while I worked fifty or more hours during the day at a local rental company to pay for the school. Needless to say, I was a very busy person, so it took away some of the distractions and helped me focus on what I was working toward. Once I finished, I began working my first aviation job and loved it! I have been given the opportunity to travel and work in Europe. In the future, I hope to lead or manage an aircraft maintenance team within my company and help develop others into the role they would like to be in.

“A willingness to tackle difficult jobs and learn from every opportunity has helped me in my career. So has making sure I see every task through to the end and not relying on others to finish them for me.”

I eventually moved into the role of Materials Manager for a couple of different companies, before being promoted to Director of Operations in the Distribution environment. Now I hold the title of Distribution Center Manager, a similar role with a larger company. Each of these experiences built upon one another to make me a well-rounded manager that understands multiple sides of the business, not just distribution.

One of the biggest challenges of this type of job is it can become stressful due to the fast-paced environment. It is very important to remain even keel, knowing what is truly important in life, beginning with a strong foundation, and not losing sight of those relationships, and most importantly the order of those relationships. Give yourself time for relieving stress by running, working out, or some other healthy means to take care of yourself.
MAKE A PLAN

SIT DOWN WITH YOUR PARENTS AND COUNSELOR AND CREATE A PLAN

Map out an Alabama Education Plan (sample below) based on your interests, strengths, and possible career goals. Your plan outlines the courses and electives you’ll take in high school, plus related co-curricular organization and career preparation experiences. Your school counselor or career coach will work with you to determine the learning experiences needed for you to complete your plan, such as using distance learning or earning college credit from your local community college. Below is a sample Alabama Education Plan for you to use as a guide.

SAMPLE EDUCATION PLAN FOR THIS CAREER CLUSTER

<table>
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<tr>
<th>GRADE 9</th>
<th>GRADE 10</th>
<th>GRADE 11</th>
<th>GRADE 12</th>
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<td>JUNIOR YEAR</td>
<td>SENIOR YEAR</td>
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<td>Math Elective</td>
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<td>Science Elective</td>
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<td>United States History 10</td>
<td>United States History 11</td>
<td>US Government/Economics</td>
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*Other Required Courses

**Career & Technical Education and/or Foreign Language and/or Arts Education (3 Credits)

TRANSPORTATION, DISTRIBUTION & LOGISTICS CLUSTER COURSES

Advanced Power Equipment Technology
Airframe Systems
Aircraft Engine & Propeller Theory and Operation
Aircraft Non-Metallic Structures
Aircraft Sheet Metal Structures
Aircraft Theory of Flight and Operation
Aircraft Welding
Automotive Service Technology A
Automotive Service Technology B
Automotive Service Technology C
Automotive Service Technology D
Aviation Turbine Engine Theory and Inspections
Collision Repair-Metal Welding and Cutting
Diesel Brakes
Diesel Drive Train
Diesel Electrical and Electronic Systems I
Diesel Electrical and Electronic Systems II
Diesel Engines I
Diesel Engines II
Diesel HVAC
Diesel Hydraulics
Diesel Preventative, Maintenance, and Inspection (PMI)
Diesel Suspension and Steering
Functional Areas in Logistics
Global Logistics Management
Introduction to Logistics
Logistics and Supply Management
Maintenance and Light Repair A
Maintenance and Light Repair B
Maintenance and Light Repair C
Maintenance and Light Repair D
Master Automotive Service Technology
Mechanical and Electrical Components I
Mechanical and Electrical Components II
Nonstructural Analysis and Damage Repair I
Nonstructural Analysis and Damage Repair II
Painting and Refinishing I
Painting and Refinishing II
Painting and Refinishing III
Power Equipment Technology
Recreational Power Equipment Operation
Residential and Commercial Power Equipment
Safety and Health Regulations
Structural Analysis and Damage Repair
Transportation, Distribution, and Logistics
Two- and Four-Stroke Engines
Senior Career Pathway Project-Transportation, Distribution & Logistics
CTE Lab in Transportation, Distribution & Logistics

CO-CURRICULAR
SkillsUSA

WORK-BASED LEARNING
Job Shadowing
Career Day/Fair
Internship
Field Trips
Work Experience
Guest Speakers
The college admissions process can be stressful and a bit scary, especially if you are the first in your family to apply. Give yourself the best shot at getting into a college program that matches your goals by following these five steps:

### COLLEGE PREP: GETTING ACCEPTED

1. **MAKE THE GRADE**
   Your grade point average really does count, so do your best work on every assignment, pay attention in class, and participate in group discussions.

2. **MAKE A LIST**
   Before you can apply to college, you have to figure out what you would like to study and what matters most to you (like college location, size, or religious affiliation). Use the college guides in your local library, school library, school counselor’s or career coach’s office to start making a list of colleges that interest you. Use online tools like collegeboard.org and accs.cc to learn more about each school and take virtual campus tours.

3. **GET INVOLVED**
   Build teamwork and leadership skills by joining career technical student organizations, clubs, and teams at your school, volunteering for service projects, and participating in church or community activities.

4. **PLAN FOR TEST**
   Most colleges want scores from the ACT, SAT, or SAT II tests. See what tests the schools on your list require, sign up to take them in time to include the scores on your application, and then practice the free SAT sample questions at collegeboard.org or sample ACT tests at actstudent.org.

5. **BE NEAT AND COMPLETE**
   Before you send in a college application, double-check your spelling, make sure nothing is missing, and save a copy just in case you have to submit it again.

### PAYING YOUR WAY: FINANCIAL AID

Every Alabama student can afford to go to college. It just takes a little planning. Put your college dreams within financial reach by taking these five steps:

1. **CONSIDER A COMMUNITY COLLEGE**
   Alabama’s public and private two-year colleges offer an affordable way to earn an associate’s degree or complete enough credits to transfer into a four-year school as a junior. Learn more at accs.cc.

2. **WEIGHT YOUR OPTIONS**
   Attending one of Alabama’s four-year public or private schools cuts travel costs and other living expenses, as compared to attending schools out of state. In addition, public schools offer reduced in-state tuition, and, if there’s a college nearby, you can save even more by living at home.

3. **RISE TO THE TOP**
   Apply to a couple of schools at which your grades and accomplishments put you near the top of the typical applicant pool.

4. **DO A LITTLE DIGGING**
   More than one million local, national, and college-specific scholarships are available each year. Ask your school counselor or career coach for help finding printed scholarship resource guides. To find and apply for scholarships online, sign up for the free college scholarship search source achievealabama.org.

5. **APPLY FOR AID**
   Fill out the Free Application for Federal Student Aid (FAFSA) beginning on October 1 of your Senior year. FAFSA forms and instruction booklets are available at your school counselor’s office and online at studentaid.ed.gov. Some schools also require the CSS/Financial Aid Profile form (profileonline.collegeboard.org), and others have their own financial aid forms. Carefully read each college’s application to know what forms you need to submit and when.
### CLUSTER PATHWAYS

- Automotive Services
- Aviation Technology
- Collision Repair
- Diesel Technology
- Power Equipment
- SREB AC Global Logistics and Supply Chain Management

### POST SECONDARY LEARNING

- COMMUNITY COLLEGE
- 4-YEAR COLLEGE/UNIVERSITY
- WORK-BASED LEARNING

### CONTACT INFORMATION

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