TRANSPORTATION, DISTRIBUTION & LOGISTICS

Get On the Fast Track

Your guide to careers in TRANSPORTATION, DISTRIBUTION & LOGISTICS

Great Career Ideas • Creating Your Plan • College Resources

Non-discrimination Statement

No person shall be denied employment, be excluded from participation in, be denied the benefits of, or be subjected to discrimination in any program or activity on the basis of disability, sex, race, national origin, color, or age.

Ref: Sec. 1983, Civil Rights Act, 42 U.S.C.; Title VI and VII, Civil Rights Act of 1964; Rehabilitation Act of 1973; Sec. 504; Age Discrimination in Employment Act; Equal Pay Act of 1963; Title IX of the Education Amendment of 1972; Title IX Coordinator, P.O. Box 302101, Montgomery, Alabama 36130-2101 or call (334) 242-8444.
A message from . . .

Robert Bentley,
Governor of Alabama

The investments we make in our students today will help shape their futures for years to come. Our students are destined to become high-performing professionals in all sectors of the workforce.

Alabama SUCCESS is an initiative designed to help students access valuable information about current careers, postsecondary learning, and financial literacy resources.

Our goal is to give students the opportunities they need to prepare themselves for success. We want our students to be well-equipped for top careers in Alabama’s workforce – which has a growing influence on the global marketplace.

This Alabama SUCCESS guide is a great resource to assist in preparing for a bright and successful future.

Dr. Thomas R. Bice,
Alabama State Superintendent of Education

Alabama SUCCESS is an invaluable resource designed specifically for students. By learning about actual career fields and the education and experience required for specific jobs, you will be better able to figure out what you want to do after high school and what you need to do to achieve your goals.

This guide is part of a series created to help students in Alabama learn more about careers, salaries, and the steps they need to take to reach their goals. By connecting what they learn in the classroom to real jobs that interest them, Alabama students will graduate better prepared for life and work. You can help your child use this guide by:

◆ Talking to your child about what careers interest him or her—and why
◆ Sharing your work experiences—pro and con—with your child
◆ Asking people in your community who work in jobs that interest your child to talk about their careers or to let your child visit their workplace.

ATTENTION, PARENTS
At the Alabama State Port Authority, we look for reliable people with good attendance records at work and school. We also like to see participation in extracurricular activities such as clubs and sports, because that shows us that we have someone who is going to be there when we need them.

Since the September 11 terrorist attacks of 2001, everyone who works in the port has had to pass a federal background check. And although not all jobs in Transportation, Distribution & Logistics are as sensitive as the ones available at the port, almost any job involving the movement of goods and materials is going to require job candidates to have a clean police and driving record.

Employers in this field are also looking for team players. In terms of education, job candidates with a strong background in mathematics tend to be more likely to succeed in this field. Math skills not only demonstrate the ability to reason, but also come in handy in many of the entry-level positions in this cluster.
Transportation, Distribution & Logistics

How do people and products get where they need to go?
Transportation, Distribution & Logistics professionals map out the routes; plan the schedules; and operate the cars, planes, trains, ships, buses, trucks, and other vehicles that deliver cargo to its proper destination. This fast-moving career cluster also prepares people for a variety of jobs at warehouses and distribution centers, at seaports and airports, and in all branches of the military.

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?
   WHY IT MATTERS: An interest in and passion for automotive and off-road sports is often a sound basis for a career in Transportation, Distribution & Logistics.

2. Are you strong and coordinated?
   WHY IT MATTERS: 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. Do you like to travel?
   WHY IT MATTERS: Jobs in the Transportation, Distribution & Logistics cluster can take you all over the globe.

4. Do you have strong math, science, and computer skills?
   WHY IT MATTERS: Math, science, and computers have helped to paint the landscape in which the jobs in this career cluster are performed.

5. Are you good at operating tools and machinery?
   WHY IT MATTERS: 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.

NAME: Joseph Holland
EDUCATION: Southside High School, Gadsden; University of Alabama, Tuscaloosa—Aerospace, Working toward Bachelor of Science Degree

While earning an advanced high school diploma at Gadsden’s Southside High School, Joseph Holland gained some of the most valuable educational experience of his academic career through a calculus course.

“If your high school offers calculus, and you want to go into any transportation career, then get on it,” Holland says. “Everything we do is calculus based. Getting that experience in high school puts you so much further along when you get to college.”

Holland, now an aerospace major at the University of Alabama, credits his calculus training at Southside High with vaulting him into a career in Transportation, Distribution & Logistics. However, he also says that it does not hurt to have some of the leading facilities in aerospace and aeronautics right in your backyard.

“Huntsville is amazingly ideal for our profession,” says Holland, who interned at NASA during his junior year at Alabama. “I wouldn’t trade that experience for the world.”

LEARN MORE
To find out more about jobs in the Transportation, Distribution & Logistics career cluster in Alabama, visit the website of the Alabama State Port Authority.
Sit down with your parents and counselor and create a plan.

Map out an Alabama Education Plan (sample at right) based on your interests, strengths, and possible career goals. Your plan outlines the courses and electives you’ll take in high school, plus related clubs and career preparation. Your counselor 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.

Here’s a sample Alabama Education Plan for you to use as a guide.

**ARTICULATION AGREEMENT**

is a fancy term for a simple education agreement that can streamline your road to a successful career.

Statewide articulation agreements link all high schools and two-year colleges in Alabama. They provide credit at two-year colleges for coursework mastered at the high school level.

Articulation agreements can take you down your career pathway as well. In many cases, students transferring from two-year to four-year colleges and universities can complete four-year general studies core course requirements before they transfer.
Need-to-know facts and figures about real Alabama jobs, salaries, and education options in Transportation, Distribution & Logistics.

The 12 careers highlighted on the next page are a sampling of occupations in the Transportation, Distribution & Logistics cluster in Alabama. The charts include occupation name, description, plus wages for workers just starting out in the profession, average wages for those in the occupation, and the wages earned by experienced workers in the job (see “How to Read Job Charts”). The bar below the occupation’s name contains the Standard Occupational Code (SOC); use the SOC to look up more information about the career in online databases such as O*NET (see below). The bars are also color-coded to indicate the minimum level of education required for each profession.

For further information on occupations in all career clusters, go to the O*NET database.
Aerospace Engineering and Operations Technician
SOC: 53-2021
Operate, install, calibrate, and maintain instruments and equipment to launch, track, and position air and space vehicles.

Logistician
SOC: 13-1081
Oversee all of a company’s or organization’s operational processes in order to ensure it operates efficiently.

Truck Driver, Heavy and Tractor-Trailer
SOC: 53-3032
Drive, load, and unload trucks and tractor-trailers used to transport products and materials.

Captain, Mate, and Pilot of Water Vessels
SOC: 53-5021
Command and supervise operations of ships and water vessels, such as tugboats and ferryboats.

Railroad Conductor and Yardmaster
SOC: 53-4031
Coordinate the activities of the crews aboard passenger and freight trains, as well as in rail yards.

Ship Engineer
SOC: 53-5031
Oversee the work of crews of ships, which includes maintenance of all the ship’s equipment.

Aerospace Engineering and Operations Technician
SOC: 17-3021
Operate, install, calibrate, and maintain instruments and equipment to launch, track, and position air and space vehicles.

Bus & Truck Mechanic & Diesel Engine Specialist
SOC: 49-3031
Repair buses, trucks, and all types of diesel engines.

Transportation and Material-Moving Machine Operator
SOC: 53-1031
Oversee the work of the operators of transportation and material-moving machinery.

Electronic Equipment Installer and Repairer (Motor Vehicles)
SOC: 49-2096
Install and repair the communications, sound, and navigation equipment in motor vehicles.

Motorcycle Mechanic
SOC: 49-3052
Build and repair motorcycles.
Now is the time to take a fresh look at Transportation, Distribution & Logistics careers you may not have considered before.

**MYTH:** Transportation, Distribution & Logistics jobs lack creativity.

**FACTS:** A whole world of creative job opportunities exist within the Transportation, Distribution & Logistics career cluster. Consider the public transportation arena, for example. Customers are actually buying a service, and many professionals in the transportation industry are involved in selling that service to tourists, travelers, and shippers. Students interested in marketing should not rule out the opportunities available in this field. As more of the world turns to public transportation, more transportation-related companies are going to be looking for creative individuals who can reach potential customers through marketing efforts.

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**Reality Check**

What It Costs to Live on Your Own in Alabama

- **Groceries:** $200–$250
- **Rent and utilities:** $700–$800 (1-bedroom)
- **Gasoline:** $124 (1,000 miles @ $3.10 per gallon 25 MPG)
- **Cell phone:** $70
- **Cable and Internet:** $90
- **Car insurance:** $30–$95 (6-month policy)
- **Car payment:** $350–$450 (Used 2010/2011 4-door)

**Monthly total:** $1,310–$1,654
**Yearly total:** $15,742–$19,851

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 page 5 to get a more accurate take-home amount.
Check It OUT

Most Alabama schools offer these student organizations related to the Transportation, Distribution & Logistics career cluster:

SkillsUSA • www.skillsusa.org
SkillsUSA is a partnership of students, teachers, and industry working to ensure American has a skilled workforce. Programs include student competitions and employer-driven training in all career and technical education areas.

Technology Student Association (TSA)
TSA prepares students to meet the challenges of a high-tech world by promoting technological literacy, leadership, and problem-solving skills. Members have opportunities to develop and showcase their technology skills through individual and team competitions.

Future Business Leaders of America
FBLA is a great opportunity for Alabama students to learn about various business relationships in the state. The organization gives students in this cluster a first glance at basic business operations, as well as a great opportunity to network with other students and professionals in the field.

Take It to the Next Level

In Alabama, the learning doesn’t stop with high school graduation. Here is a list of public postsecondary (after high school) institutions that may offer programs related to this cluster.

**Two-Year Institutions Offering Certificates or Associate’s Degrees**
- Alabama Southern Community College, Monroeville
- Bevill State Community College, Sumiton
- Bishop State Community College, Mobile
- Cullman Community College, Decatur
- Central Alabama Community College, Alexander City
- Gadsden State Community College, Gadsden
- Faulkner State Community College, Bay Minette
- Gadsden State Community College, Gadsden
- H. Councill Trenholm State Technical College, Montgomery
- Jefferson Davis Community College, Brewton
- Jefferson State Community College, Birmingham
- J.F. Drake State Community College, Huntsville
- J.F. Ingram State Technical College, Deatsville
- Lawson State Community College, Birmingham
- Lurleen B. Wallace Community College, Andalusia
- Marion Military Institute, Marion
- Northeast Alabama Community College, Rainsville
- Northwest-Shoals Community College, Muscle Shoals
- Reid State Technical College, Evergreen
- Shelton State Community College, Tuscaloosa
- Snead State Community College, Boaz
- Southern Union State Community College, Wedowee
- Wallace Community College (Selma), Selma
- Wallace State Community College (Dothan), Dothan
- Wallace State Community College (Hanceville), Hanceville

**Four-Year Institutions Offering Bachelor’s, Master’s, Doctoral, or First Professional Degrees**
- Alabama A&M University, Normal
- Alabama State University, Montgomery
- Athens State University, Athens
- Auburn University, Auburn
- Auburn University at Montgomery, Montgomery
- Jacksonville State University, Jacksonville
- Troy University, Troy
- Troy University-Dothan, Dothan
- Troy University (Montgomery), Montgomery
- University of Alabama at Birmingham, Birmingham
- University of Alabama in Huntsville, Huntsville
- The University of Alabama, Tuscaloosa
- University of Montevallo, Montevallo
- University of North Alabama, Florence
- University of South Alabama, Mobile
- University of West Alabama, Livingston

**Certifications**
While attending high school and postsecondary institutions, all Alabama students should consider getting certifications related to their career cluster of interest. These certifications can improve a student’s skill set, as well as increase the student’s overall chance of gaining employment in the field.
**GETTING READY**

**GRADE 9 FRESHMAN YEAR**

- Research your career options based on your interests, talents, and goals.
- Choose a career cluster.
- Create an Alabama Education Plan (see page 3).
- Do your best work in all your classes.
- Course selection and grades really do count when you are applying to colleges and training programs.
- Keep a folder or portfolio of your activities, awards, accomplishments, and work experience, and add to it during your high school career.

**GRADE 10 SOPHOMORE YEAR**

- Continue building the strongest possible academic record.
- Consider taking the PLAN (pre-ACT) if you plan to apply to a two-year college or university in the future.
- Consider taking the PSAT (preliminary SAT/National Merit Scholarship Test) if you plan to apply to a two-year college or university in the future.
- Use the information in your portfolio to create a resume.
- Apply for summer jobs, internships, or volunteer activities related to your career cluster.

**GRADE 11 JUNIOR YEAR**

- Take the PSAT/NMSQT.
- Use resources available at your school (books, online tools, college fairs, etc.) to research postsecondary education options related to your career goals.
- Register to take either the ACT or the SAT I and SAT II Subject Tests. There are testing dates every month from January through June. Registration deadlines are approximately four weeks before each testing date.
- Apply for summer jobs, internships, and volunteer activities related to your career goals.

**GRADE 12 SENIOR YEAR**

- In the fall, apply to postsecondary programs and retake any standardized college admissions tests if you would like to improve your score.
- Beginning in November, complete college financial aid forms. Deadlines and required data differ from school to school, so read the instructions carefully.
- In the spring, choose your postsecondary program on the basis of where you have been accepted, costs, etc.
- Continue doing your best work. Most schools require a final transcript before making your acceptance official.

**COLLEGE PREP: Getting Accepted**

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:

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. **Get Involved**
   - Build teamwork and leadership skills by joining clubs and teams at your school, volunteering for service projects, and participating in church or community activities.

3. **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 location, size, or religious affiliation). Use the college guides in your local library, school library, or counselor’s office to start making a list of colleges that interest you.

4. **Plan for Tests**
   - 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.

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.

2. **Weigh 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. Since your application will stand out, you’ll be more likely to qualify for scholarships and other merit aid.

4. **Do a Little Digging**
   - More than one million local, national, and college-specific scholarships are available each year. Ask your school librarian and counselor for help finding printed scholarship resource guides. To find and apply for scholarships online, sign up for the free college scholarship search source FastWeb.

5. **Apply for Aid**
   - Fill out the Free Application for Federal Student Aid (FAFSA) as soon as possible after January 1 of the year you’ll be starting college. FAFSA forms and instruction booklets are available in your guidance counselor’s office and online. Some schools also require the CSS/Financial Aid Profile form and others have their own financial aid forms. Carefully read each college’s application to figure out what forms you need to submit and when.
Articulation agreements: formal agreements between or among educational organizations (high schools, community colleges, and universities) that allow students to receive college credit for courses taken in high school.

Associate’s degree: a two-year degree awarded by a community college.

Bachelor’s degree: a four-year degree awarded by a college or university.

Career and technical student organizations (CTSOs): co-curricular organizations for students that offer activities and competitions related to particular careers.

Career Clusters: identifies pathways from high schools to two- and four-year colleges, technical schools, graduate schools, apprenticeship programs, and workplace so that learners can recognize the relationship between what they learn in school and what they can do in the future.

Career Pathways: pathways are sub-groupings of occupations/career specialties. Occupations/Career specialties are grouped into Pathways based on the fact that they require a set of common knowledge and skills for career success.

Doctoral degree: a degree awarded by universities for study beyond a master’s degree. May also be called a Ph.D. or a first professional degree.

Dual enrollment: a program between Alabama public colleges and universities and local boards of education that allows high school students to enroll in certain approved college-level courses to receive both high school and college credit.

ECEP (Early College Enrollment Program): a program that allows juniors and seniors to have full-time enrollment at an Alabama public college or university while still graduating with their class and staying involved with high school activities.

Extended learning experiences: participation in career and technical student organizations, co-curricular activities, job shadowing, internships, or community service.

Internship: an extended learning experience that gives students an opportunity to work temporarily at an entry-level job in a career that interests them.

Job shadowing: an extended learning experience in which students observe professionals in particular careers as they go through a day on the job.

Master’s degree: a degree awarded by universities for study beyond a bachelor’s degree.

Postsecondary education: education beyond high school. Middle and high school are referred to as secondary education, so postsecondary means after high school.

STARS (State Transfer & Articulation Reporting System): STARS System allows public two-year students in Alabama to obtain a Transfer Guide/Agreement for the major of their choice. This guide/agreement, if used correctly, guides the student through their first two years of coursework and prevents loss of credit hours upon transfer to the appropriate public four-year university in Alabama.

Resource Shelf
Use these websites and other resources available from your school counselor to learn more about careers, career clusters, and educational and job opportunities in high school and beyond.

ACCESS
ACCESS (Alabama Connecting Classrooms, Educators, and Students Statewide) Distance Learning provides opportunities and options for Alabama public high school students to engage in advanced placement (AP), elective, and other courses to which they may not otherwise have access.

Alabama Career Information Network
This new Web portal increases Alabama students’ and families’ access to valuable career exploration activities and college financial aid information.

Alabama Commission on Higher Education
Click on “Colleges & Universities” within this website for a list of four-year institutions in Alabama.

The Alabama Community College System
Learn all about the public and private two-year colleges in Alabama. Connect directly to each school’s website to see the courses, majors, degrees, and scholarships it offers to Alabama students.

Alabama Tech Prep
This booklet is sponsored by Alabama Tech Prep. The goal of Tech Prep is to create a smooth transition from high school to college and to a career.

Alabama Virtual Library
This Alabama Legislature–funded site provides all students, teachers, and citizens of the State of Alabama with online access to essential library and information resources.

America’s Career InfoNet
Use this site to search for occupational information, industry information, and state-specific labor market information.

Career Voyages
This career planning resource helps students, parents, career changers, and career advisors.

O*NET (Occupational Information Network)
O*NET provides full information on occupations, including state-by-state salary data, employment prospects, and skill matching for students.

U.S. Department of Labor Occupational Outlook Handbook
A valuable resource for both counselors and students, this federal website offers updated information on careers, job responsibilities and working conditions, salaries, and what jobs will be available in the future.
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