



TEXAS CTE *In Action*

A College and Career Planning Guide

GO Public

YOUR GUIDE
to CAREERS in
GOVERNMENT & PUBLIC
ADMINISTRATION

- Showcasing 25 Careers
- High School Personal Graduation Plans
- Inside College Admissions



Dear Texas Student,

You are probably tired of people asking, “What do you want to be when you grow up?” Some students know exactly what they want to do, but most haven’t got a clue. The idea of choosing a career is intimidating, and it feels like it’s far in the future. There’s little time in the commotion of classes, activities, sports, work, and fun to think about what career you want to pursue after graduation from high school or college.

It pays, though, to take the time to think about your future career. The truth is that you’ll save a lot of time and money if you have a direction in life, as opposed to just finishing high school and worrying about it later. It’s really a matter of dollars and sense. If you choose a career direction now, you can select classes and activities that will make you highly marketable—and highly paid—when you look for work. And it only makes sense to have an idea of what you want to do rather than just wandering aimlessly through school.

Nobody wants that. Not your parents. Not your teachers. Not your friends. They want you to be somebody.

They want you to use your talents, follow your interests, and pursue your ambitions to become great at what you love to do in life. That’s what you should want, too.

So the time is right to take charge of your life and think about the future. You need a plan of action for how to get from where you are today to where you want to be in a few years: starting out on a personally and professionally rewarding career.

**YOU’VE HEARD
THAT ‘INFORMATION
IS POWER.’ WELL,
THIS GUIDE IS
POWER. IT PUTS YOU
IN CHARGE OF YOUR
FUTURE.**

That’s what Texas CTE is all about. The guide you are holding is one of 16 guides to different career clusters. It is designed to help you make smarter decisions about your education and career options.

You’ve heard the phrase, “Information is power.” Well, this guide is power. It puts you squarely in charge of your future, from creating High School Personal Graduation Plans (see page 5) to choosing college or some other form of education or training after high school. Work with your parents, teachers, and counselors to make decisions, but remind everyone that it is your future at stake and that you are taking charge of it.

Get information. Get a plan. Get a clue about your career direction. It’s alright if that direction changes; choosing a direction now is better than having no direction at all. Just promise yourself that you’ll make smart choices about where to focus your time, energy, and passion.

We’re proud that you are taking steps to plan your career direction, and we pledge that your school, teachers, and counselors will do all they can to help you make wise choices on your plans for success. We wish you the best of luck on your journey.



Pillars of Society

GOVERNMENT & PUBLIC ADMINISTRATION TOUCH EVERY MEMBER OF SOCIETY **EVERY DAY**. People in public service do the work that keeps society running smoothly, from building bridges to passing laws. They collect taxes and spend public funds on projects and programs designed to benefit citizens of a town, city, state, or nation. They operate public services such as schools, parks, hospitals, airports, water and power utilities, and more. Elected officials represent the voters in government and civil servants enforce rules and regulations so that society operates equitably and safely. If you want to serve your community, run for public office someday, or protect our rights and freedoms, then Government & Public Administration may be the right cluster for you.



HOT Career Areas

Texas has launched a strategic plan that targets state efforts on six industry clusters that economists say will be the engines of economic growth in Texas. As you plan your future, think about a career in one of these new and emerging sectors.

- Advanced Technologies & Manufacturing
 - Molecular technologist
 - Sensor/robotics engineer
- Aerospace & Defense
 - Aerospace engineer
 - Unmanned autonomous vehicle engineer
- Biotechnology & Life Sciences
 - Bioinformatics specialist
 - Biocontainment technician
- Information & Computer Technology
 - System integrator
 - Computer game developer
- Petroleum Refining & Chemical Products
 - Petrochemical engineer
 - Refinery process design engineer
- Energy
 - Wind/solar energy engineer
 - Geophysical (oil and gas) prospector

THE FIRST STEP
toward success
is making smart
decisions about
your education and
career options.

Plan for Success

When I was in high school," says Sheryl Kovach, Human Resources director of Environmental Services at Phillips Services Corporation in Houston, "the only job that I even knew about was receptionist work. I didn't aspire to be a manager or entrepreneur because I really didn't know about those disciplines. I was just looking forward to graduating. That was it. I really didn't know what it was I wanted to do."

Sound familiar? You, too, may not have a clue about what to do with your life.

Don't worry, though. Help is right here in your hands. It's one of 16 career cluster guides published by Texas CTE (www.txcte.org). It's one of 16 career cluster guides published by Texas CTE, Texas's college and career initiative. This edition is all about Government & Public Administration.

Let's start with some basic steps you

should take to get organized, plan for the future, and start on the road to success.

Assess Your Talents and Abilities

First, you need to figure out some things about yourself. This step can be as simple as writing down a list of your interests (like video games or rock climbing), your hopes and dreams (like helping others), your talents (like writing or math ability), and your weaknesses (if you're squeamish at the sight of blood, for example, you might not want to be a doctor).

Follow up on this informal exercise by taking some formal assessments to determine your interests and abilities. Common assessments include Texas Genuine (www.texasgenuine.org) and CareerTech (www.careertech.org). Ask your principal or counselor about career assessments available at your school.

Research Your Career Options

Once you've learned about yourself, learn more about your career options. There are thousands of occupations out there of which you may never have heard, and others that do not yet exist because the technologies have not been developed. Fortunately, there are plenty of resources (see inside back cover) for you, and they are as close as the nearest computer.

One of the most helpful is the Texas Career Check from the Texas Workforce Commission. It is a vast database of information about hundreds of professions. You can find Texas Career Check at www.texascareercheck.com. Another good place to start is O*NET (www.onetcenter.org).

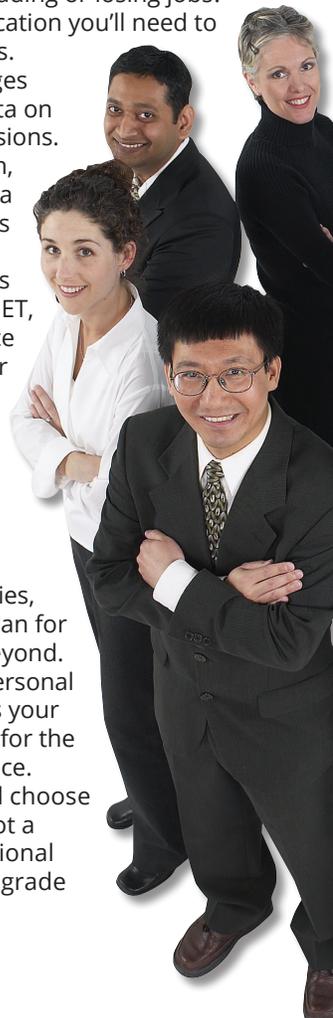
Gather information about what you can earn in the careers in which you are interested. Find out whether the careers you are considering have a promising future—are they adding or losing jobs? Check out the education you'll need to enter those careers.

The chart on pages 10–11 presents data on 25 possible professions. Remember, though, that these are just a sampling of careers available in the cluster. Go to Texas Career Check, O*NET, or another resource to investigate other careers.

Create Your High School Graduation Plan

Once you have a better idea of your interests and abilities, you are ready to plan for high school and beyond. The High School Personal Graduation Plan, is your plan for preparing for the career of your choice.

First, you should choose a career cluster, not a particular occupational goal. In the eighth grade



TEXAS HAS
MORE THAN 1.4 MILLION
STATE AND LOCAL GOVERNMENT
EMPLOYEES, ABOUT ONE FOR EVERY 17
TEXANS.

WWW.WORKINTEXAS.COM

LETS JOB SEEKERS FIND JOBS AVAILABLE IN TEXAS STATE GOVERNMENT, COMPLETE RESUMES AND STATE APPLICATIONS FOR EMPLOYMENT, AND SUBMIT THOSE APPLICATIONS ONLINE.

you might choose Government courses and then later become interested in a narrower field such as homeland security or urban planning. The program of study you choose—your plan— does not stop with graduation from high school. You could then pursue a four-year degree as a tax examiner or a city manager.

You should set up a High School Personal Graduation Plan that takes you through career preparation after high school, revising your blueprint as needed as you go along. If your career plans include college study, ask your counselor about tests required for admission to college, such as the PSAT, SAT, or ACT.

Seek Out Special Programs

Many Texas schools offer innovative programs to prepare students for specific career areas. These include career and technical education (CTE) programs, academies, and magnet schools. Once you've decided on a career direction, ask your counselor about special programs in your area that may provide related experiences in your chosen career.

Samuel Odamah enrolled in the architecture program at the University of Texas at Arlington, having found his career calling at Dallas's Skyline Career Development Center, a high school with career programs in a number of different fields.

Townview Magnet in Dallas is working on using courses from the Government and Public Administration Career Cluster this fall.

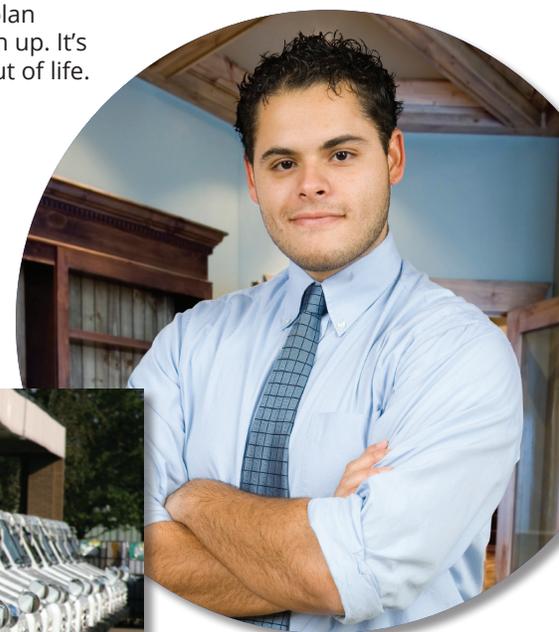
"Skyline is one of the few schools in the country that offer programs in architecture," Odamah says. "In some careers, Skyline students could even get professional certifications or licenses right in high school. It was a great place because you could find out whether you really wanted to enter a career."

Odamah says that the career cluster system at Skyline taught him the value of planning for his career and his life. "We learned about planning ahead," he says. "Those who plan things ahead of time don't have to catch up. It's just a matter of what a person wants out of life. Planning gives you a better platform for success."

Government & Public Administration CTSOs

One of the best ways to acquire experience in your chosen career is by joining a career and technical student organization (CTSO). In Government & Public Administration, the most helpful CTSOs are:

- Business Professionals of America (BPA)
www.texasbpa.com
- Future Business Leaders of America (FBLA)
www.fblatx.org
- SkillsUSA
www.skillsusatx.org





WHAT ARE

Career Clusters & Programs of Study

In Texas, High School Personal Graduation Plans will guide students' high school and college experiences (see next page). As part of this process, students focus their studies within a chosen career cluster and program of study that lead to an endorsement.

A career cluster is a group of occupations and broad industries that share certain features. The Government and Public Administration cluster, for example, includes military officer and tax examiner. Texas has adopted 16 Career Clusters (see back cover), the same ones designated and developed by the U.S. Department of Education.

As the graphic below shows, within each cluster are programs of study, which are more specific groupings of similar occupations. Think of a program of study as being like a college major. In Government and Public Administration, you might choose to focus on Governance or National Security in high school and college.

Related Occupations

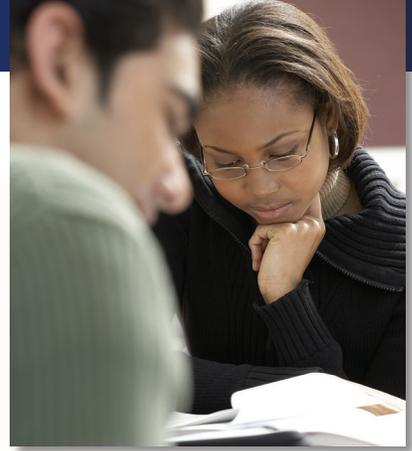
Each career pathway in a particular cluster includes a range of related occupations; legislator is an example of an occupation that falls within Governance.

Choosing a career cluster and career pathway will help you acquire the knowledge and skills you'll need to enter your chosen career. It will allow you to follow a seamless course of study from high school into college or other postsecondary education or training. The electives you choose can complement your core academic classes to prepare you for the challenges of the real world of work

Review Your High School Personal Graduation Plan Each Year

Don't get locked into a cluster and program of study you don't like. You should reexamine your 4-year plan at least once a year and change programs or clusters if your interests have changed. Choosing a cluster and program of study, even if it changes later, means that you'll have a direction in life. The idea is to be aware of what's going on in your life and take control of your future. When you know where your education is going and why, your classes will become more meaningful. You'll make contact with students, teachers, and employers who share your interest in a particular career area. You'll have experiences that are fun and exciting. You'll be on your way to success in school, in a career, and in life.





WHAT IS A High School Personal Graduation Plan ?

It's a smart idea to create a High School Personal Graduation Plan, or 4-year plan, to guide your studies through high school and into college or other postsecondary education or training. Your 4-year plan represents your chance to take control of your education and career choices. Working with your parents/guardians and guidance counselor, you can pick the cluster on which you want to focus your studies as well as your career and

postsecondary education goals. Don't worry. You aren't locked into your choices. You should revisit your 4-year plan at least once a year to update it. You can change clusters, programs of study, and career and postsecondary goals as your interests and ambitions change. Having a plan—even if it changes—is smarter than having no idea of what you want to do and why you are attending school. Here's how to fill out your 4-year plan.

CHOOSE a career cluster on which to focus your high school and college or postsecondary studies. The idea is to offer you a seamless route to follow from high school, through college or other postsecondary education, and into a career. Not all Texas schools offer all clusters, so ask your guidance counselor which clusters are available at your school.

LIST basic information such as your name and school.

PICK a program of study within the cluster. There are seven programs within the Government and Public Administration cluster (see page 12).

CHOOSE one or more occupations for which you would like to prepare. Use resources such as Texas Career Check (www.texascareercheck.com) to research your options.

PLAN for what you want to do after high school. Your goal may be to attend a four-year university or two-year college, join the military, or enter an apprenticeship program. Your postsecondary goal should influence the classes you take in high school; for example, you will need certain course credits to qualify for admission to a college.

SKETCH out your schedule of classes for your high school years. You will spend time completing requirement for the Foundation High School Program including electives to earn your endorsement in Public Services (26 credits). Planning your 4-year plan will help you get the education and experience you need to start your postsecondary and career goals.

PICK extended learning activities that complement your classes (see page 14). Work on community service projects. Plan for paid and unpaid career learning experiences, such as job shadowing and internships. All these extracurricular activities can give you experience that will help you get into college or land a job.

High School Personal Graduation Plan

Name: Taylor Jones, West High School
 Endorsement: Public Services
 Cluster: Government & Public Administration
 Program of Study: Public Management & Administration
 Career Goal: City Manager
 Postsecondary Goal: Bachelor's Degree in Management

Foundation High School Program Requirements (22 Credits)	Public Services Endorsement Requirements (26 Credits)
<ul style="list-style-type: none"> English Language Arts (4 Credits) <ul style="list-style-type: none"> • English I • English II • English III • Advanced English Course Mathematics (3 Credits) <ul style="list-style-type: none"> • Algebra I • Geometry • Advanced Mathematics Course Science (3 Credits) <ul style="list-style-type: none"> • Biology • IPC or Advanced Science Course • Advanced Science Course Social Studies (3 Credits) <ul style="list-style-type: none"> • U.S. History • U.S. Government (one-half credit) • Economics (one-half credit) • World Geography or World History Physical Education (1 Credit) Languages Other Than English (2 Credits in same language) Fine Arts (1 Credit) Career Related Electives (5 Credits) Proficiency in Speech (Determined locally) 	<ul style="list-style-type: none"> Math (1 Additional Credit) Science (1 Additional Credit) Career Related Electives (2 Additional Credits) <div style="background-color: #e1f5fe; padding: 5px; text-align: center; font-weight: bold;">EXAMPLE CAREER RELATED ELECTIVES</div> <ul style="list-style-type: none"> Principles of Government and Public Administration Business Information Management I Public Management and Administration Planning & Governance Revenue, Taxation, and Regulation Business Law Accounting I Accounting II Entrepreneurship Practicum in Local, State, and Federal Government <div style="background-color: #e1f5fe; padding: 5px; text-align: center; font-weight: bold;">DISTINGUISHED LEVEL OF ACHIEVEMENT</div> <p>4 Credits in Mathematics (Must complete Algebra I) 4 Credits in Science Requirements for at least the Public Services Endorsement Remaining requirements</p> <div style="background-color: #e1f5fe; padding: 5px; text-align: center; font-weight: bold;">PERFORMANCE ACKNOWLEDGEMENT</div> <ul style="list-style-type: none"> Outstanding performance <ul style="list-style-type: none"> • in a dual credit course • in bilingualism and biliteracy • on an AP test or IB exam • on the PSAT, the ACT-Plan, the SAT, or the ACT Earning a nationally or internationally recognized business or industry certification

Curricular Experiences: Business Leaders of America, Future Business Leaders of America
 Extracurricular Experiences: Community Service Organizations, Student Council
 Career Learning Experiences: Career Preparation—Paid and Unpaid, Job Shadowing
 Service Learning Experiences: Community Service, Peer Mentoring, Peer Tutoring

A CAREER PORTFOLIO (see page 15) is a good way to organize information about your educational experiences, record results of career interest and abilities assessments, and hold examples of your best work. Include a 4-year plan in your portfolio.

A World of Career Choices



Government & Public Administration offers SOLID OPPORTUNITIES across a full spectrum of professions.

Careers in this program run the gamut,” says Janie Headrick, state coordinator for the Texas Heritage Trails Program. The program partners the Texas Historical Commission in Austin with the State’s tourism efforts to publicize scenic drives for travelers interested in Texas history.

This program represents the wide range of professions that make up the

Government & Public Administration career cluster.

“In some ways, our employees need to be generalists,” Headrick says, “but with specific knowledge as well. Obviously, a degree in history is great, but so is English or journalism because we do so much writing. And a marketing degree helps, because we are selling the state to tourists. We have people who specialize in human resources and someone else whose specialty is working with nonprofit organizations”—groups that often help to get the word out about Texas travel.

If you think of Government & Public Administration as politicians and bureaucrats, think again. Federal, state, and local government offers careers in more areas than almost any other cluster: accounting and astronautics, tourism and transportation, law enforcement and legislation, and more.

Texas Workforce Commission, Texas state agencies employed an additional 310,959 people, and 1.1 million more people worked for local governments.

The federal government is projected to lose more than one-third of its permanent, full-time workforce to retirement and attrition within the next five years, which means there will be many opportunities for employment. Texas state and local governments are expected to hire additional people due to the growing economy in these industries (construction, oil and gas, education, manufacturing, energy, and health services).

Steady Employment

Beyond the wide variety of jobs available, there are a number of good reasons to consider a career in Government & Public Administration. Most public-sector positions offer excellent benefits, 8-to-5 work hours, liberal leave time, and reasonably steady employment (you generally don’t have to worry about your employer going bankrupt, as many employees in the private sector do).

“The government is also a career builder,” says Tim McManus, vice president of education and outreach for the Partnership for Public Service in Washington, D.C. “Employees have opportunities early on that, at entry level, they won’t get anywhere else. For example, in a private-practice law firm, it may be years before a lawyer gets courtroom experience. As an attorney for the federal government, it may be simply a matter of months.”

The Biggest Employer

Government is by far the biggest employer in the U.S. The federal government alone had nearly 4.2 million employees in 2013, according to the Partnership for Public Service, a nonprofit organization dedicated to revitalizing federal government service. According to the

10 Fast-Growing Careers

Occupation	Growth Rate (2012–2022)	Avg. Annual Openings (2012–2022)
Political Scientists	32%	15
Economists	31%	50
Healthcare Social Workers	31%	460
Transportation Inspectors	29%	165
Eligibility Interviewers, Government Programs	26%	490
Accountants & Auditors	24%	5,685
Surveying & Mapping Technicians	24%	335
Construction & Building Inspectors	23%	345
Court, Municipal & License Clerks	23%	305
Occupational Health & Safety Specialists	22%	355

This is a projection of 10 fast-growing careers in Government & Public Administration in Texas from the year 2012 to 2022 and the number of average annual openings in each occupation. Note that while the percentage of growth in jobs may be high, the actual number of jobs created may be low. Source: Texas Workforce Commission.

Loans and Locations

McManus also points out that the federal student loan repayment program allows public agencies to repay up to \$10,000 per year of student loans for college education, provided that employees sign a three-year agreement with an agency. But aren't all those federal jobs a long way from Texas, in Washington, D.C.? No way.

"Eighty-four percent of all federal jobs are located outside the Washington area," reports McManus. "There are jobs all over the U.S. and the world. In fact, Texas is one of the top states in terms of concentration of federal employees."

Making a Difference

A great reason to pursue Government & Public Administration is the chance to improve lives.

"I find that a lot of students want to do something that serves the greater good," says Matthew Upton, director of student services for the Bush School of Government and Public Service at Texas A&M University.

"For example, I'll hear students say, 'I'm interested in education and I want to help change policies for the better.' While the salaries in Government & Public Administration are certainly decent, students often are looking for more than just a paycheck."

McManus agrees. "As an employee of the government, you're really making a difference in the lives of Americans," he says.

A Range of Pay

Because government hires people from almost every profession, salaries for Government & Public Administration positions vary widely depending on occupation and experience.

The Texas Workforce Commission says the average wage for substance abuse and behavioral disorders counselors is \$18.38 an hour, while the average social and

10 Top-Paying Careers

Occupation	Average Wage	Entry-Level Wage	Experienced Wage
Manager, All Other	\$56.66	\$34.40	\$67.79
Economist	\$49.10	\$23.50	\$61.90
Administrative Service Manager	\$46.01	\$27.67	\$55.18
Financial Examiner	\$39.68	\$23.12	\$47.95
Accountant & Auditor	\$35.39	\$20.55	\$42.80
Political Science Teacher, Postsecondary	\$34.00	\$17.05	\$42.48
Occupational Health & Safety Specialist	\$33.90	\$21.82	\$39.95
Political Scientist	\$33.39	\$17.15	\$41.51
Emergency Management Director	\$32.89	\$19.32	\$39.68
Postmaster & Mail Superintendent	\$32.38	\$23.98	\$36.58

This is a chart of hourly wages for 10 of the top-paying careers in the Government & Public Administration cluster in Texas. Note how entry-level wages are often much lower than pay for the average worker and experienced workers in each profession. Source: Texas Workforce Commission.

community service manager earns \$31.48 an hour. For those interested in volunteer service coordination, salaries begin at \$41,001 for entry-level workers, with \$77,720 possible for experienced employees.

"Starting salary for students graduating with a master's degree ranges from \$35,000 to \$45,000 depending on work experience," adds Upton. "Students with three years of work experience—those who worked while in school—tend toward the \$45,000 level."

Expanding Careers

The government's not going anywhere, so there will continue to be jobs available in every field, but some are expanding more quickly than others.

McManus lists business functions

(especially accounting), security and protection, scientific research and engineering, and medicine and public health as some of the fastest-growing areas of public employment.

"If you look at these areas," he says, "the demand is not much different than in the private sector. The government has to compete for the same talent as



QUIZ

Is Government & Public Administration the right cluster for you? Take this quiz to find out. Answer "yes" or "no" to the following questions.

1. Do you like to help people with their problems?
2. Do you like organizing and playing team sports?
3. Do you have a flawless police record?
4. Do you pay attention to the news and current events?
5. Do you believe it's important to be honest?
6. Does the idea of public service appeal to you?
7. Are you active in student government?
8. Do you take part in student organizations and clubs?
9. Is job security important to you?
10. Have you ever done volunteer work?

If you answered "yes" to five or more of the above questions, Government & Public Administration may be the right cluster for you. To get a more specific and scientific measurement of your attitudes and abilities, ask your guidance counselor or teacher about taking a career assessment test or interest inventory.

What Employers Want

EXCELLENT SKILLS

"In general, most government employers are looking for strong academic skills," says Cindy Miller, former CTE Coordinator for Frenship ISD. "That means good grades in science, engineering, and math courses, as well as strong written and oral communications. Classes in government are an obvious choice."

"Students should consider career and technical education courses," adds Miller. "They give students both the academics and a broad variety of authentic experiences useful for entering government service."

TEAMWORK

"In government, employees must work well with teams—they must be flexible and get along with others," says Mike Reissig, associate deputy comptroller for the Texas Comptroller's office, the state's bookkeeper and tax collection agency. "Employees must see the big picture, because things may not turn out the way they would like."

"The policies of a government agency also can change," he adds, pointing out that elections often bring in new leadership. "Those who have longevity in government are the people who are flexible enough to work with new people with different ideas."

CONFIDENCE

"I need people who are confident in their abilities," says Bryan Kelly, guidance and propulsion systems manager for United Space Alliance, a major contractor working with NASA's space program. During space shuttle missions, decisions have to be made quickly.

"There's a one-in-200 chance of catastrophic engine failure and a one-in-270 chance of the ship being hit by space debris," he says, "every time the spacecraft launches. We have to be able to make a decision under immense pressure to keep the crew safe."




Service Careers

OPPORTUNITIES ABOUND in Government & Public Administration.

While working his way through college at the University of Texas in Austin as a Volvo mechanic, Bryan Kelly kept his eyes on his ultimate goal.

"I want to be a rocket scientist," he would tell friends bluntly, wiping engine grease from his hands. One year after receiving his bachelor's degree in aerospace engineering in 1994, Kelly was contracted as an attitude and pointing officer with the National Aeronautics and Space Administration (NASA), sitting at a console at the Johnson Space Center in Houston telling astronauts where to fly the space shuttle.

Working as a Team

Kelly's job was just one of the many opportunities available in Government & Public Administration, which includes diverse fields from astronautics to zoology. As with many positions in government, his job requires a lot of teamwork.

"I planned the whole position of the ship from eight minutes after launch

to landing," he explains. "So most days, about 20 percent of the time, I was in meetings to hear about what tasks needed to be accomplished and how the ship's orientation would affect them. A third of the day I would be in the lab, developing mathematical models [to ensure that the ship would be in the correct position at the correct time], reading over a coworker's plan, or having him or her double-check my work. Another third of the day, I'd do simulations on the console—lots of practice—to make sure I had it right."

Improving Efficiency

Other Government & Public Administration careers involve strong communication skills. When Bill Kuntz, with degrees in finance and business administration, began his career, he expected to be a "number cruncher," but he finds management and marketing communications skills are more important as executive director of the Texas Department of Licensing and Regulation in Austin, which regulates licensing for dozens of professions, including electrician and cosmetology.

"My position is providing vision and leadership to the agency," says Kuntz enthusiastically. "Sometimes I wake up at 2 in the morning thinking of new ways to improve efficiency."

"By changing a procedure, we can save money for the agency and the licensee," he points out. "Most people don't think about the state actually reducing costs,

but in 2004, we were able to reduce fees for 29 license types.”

Kuntz also spends a considerable amount of time working with business people from the community. “Currently, the legislature is considering a bill that would amend the way tow trucks are regulated. It would affect a lot of people—storage lots, the American Automobile Association, and the tow truck operators. At the request of the bill sponsor, we met with about 50 business people to explain how we could enforce the new regulations if the bill passes.”

Informing the Media

As public information program manager for Austin-Bergstrom International Airport (owned by the City of Austin), Jim Halbrook anticipates what the media will want to know and informs the public about air travel, disseminating information such as passenger statistics or new airline routes.

Crisis management is another

important responsibility—for example, on September 11, 2001, when airports closed all over the country.

“I was going to work,” he remembers, “and I got a page from the local CBS affiliate saying, ‘Jim, we’ve got film showing a plane flying into the Twin Towers. What’s going on?’ When I got to the airport, we began evacuating it and assembling the media.

“There were a lot of rumors to deal with. We got one media call about a fifth plane that never landed in Dallas and was supposedly headed here. We knew that the skies had been cleared, so our job was getting the facts straight and laying unfounded rumors to rest.”

Doing What You Love

Perhaps the best part of working in Government & Public Administration is the opportunity to find the career that’s perfect for you.

For Halbrook, part of the fun is hosting an event. “When we hosted the Airports

Council International Conference, we threw a party at the Bob Bullock Texas State History Museum, took executives out to eat, and held informational and educational workshops,” he remembers.

For Kuntz, the challenge is finding new ways to improve his agency. “I love my job,” he says. “I’m really having too much fun to retire.”

For Kelly, it’s the drama of space travel. “The decisions I make play out before the world’s eyes in a matter of minutes. Where else would I find a job like that?”



5 Cool Careers

CHECK OUT THESE EXCITING CAREERS IN GOVERNMENT & PUBLIC ADMINISTRATION.

1.

**FOREIGN SERVICE
DIPLOMATIC COURIER**
Want to see the world and get paid for it? Diplomatic couriers carry diplomatic pouches containing classified and sensitive material for the federal government, assuring that they arrive safely at their destinations. Diplomatic couriers often live and work overseas, and travel constantly, so they see more of the world than most people can even imagine.

2.

COMPUTER PROGRAMMER
“The cool thing about being a programmer is that it’s completely creative,” says Marty Mitchell of the Lower Colorado River Authority in Austin, which supplies electricity and manages water supply in Central Texas. “I like to use my problem-solving skills to create useful applications, like developing systems for monitoring energy flow through the grid.” As a government programmer, you can set up systems in electric power supply, highway traffic control, space travel, and more.

3.

CITY PLANNER
Ever wanted to design your own city? City planners help prepare towns, cities, and counties for future growth by determining what land will be developed and how buildings and other structures will be designed. Planning a city takes creativity—you must place utilities so that homes have access to electricity and clean water, and design roads that efficiently get people to work, home, and school.

4.

**HOMELAND SECURITY
INTELLIGENCE RESEARCH
SPECIALIST**
Intelligence research specialists for the Department of Homeland Security protect the U.S. from terrorists and tools of terrorism that could threaten our citizens and nation. These professionals assess current and future threats and present information to case agents, attorneys, grand juries, and others for use in criminal prosecutions. They also evaluate intelligence programs to detect deficiencies, intelligence gaps, or other serious problems in the country’s national defense.

5.

AIR TRAFFIC CONTROLLER
Air traffic controllers coordinate the movement of aircraft to make certain that planes stay a safe distance apart. Their main concern is safety, but controllers also direct planes efficiently to minimize delays. Some regulate air traffic, guiding planes through designated airspace; others coordinate airport arrivals and departures. Either way, controllers’ precision expertise is critical to the efficiency and safety of air travel.

25

Government & Public Administration

Listed below are 25 careers you might consider in the Government & Public Administration cluster. These are not all the levels. Turn to the "Online Info" on the inside back cover to research all career options in the cluster of your choice and

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● **SOC:** Stands for Standard Occupational Code, which organizations like the U.S. Department of Labor use to categorize career information. Sometimes you can find data on a career faster by searching for its SOC.

● **GROWTH:** This is the projected annual growth in Texas for the career between 2012 and 2022. Fast-growing occupations may offer greater career opportunities for young adults.

● **OPENINGS:** This is the projected number of job openings for the career in Texas each year. Even though a career may be fast growing, there may not be a lot of positions available. Careers with more openings will give an entry-level worker a better chance of getting a job and greater job security.

● **WAGES:** This is the amount the average person in the career earns in Texas per year. Naturally, entry-level wages are lower than the average, and those for workers with years of experience are generally higher.

SOC	Occupation	Growth	Openings	Wages	Education
19-3051	Urban and Regional Planner	18%	110	\$63,057	Master's degree
19-3011	Economist	31%	50	\$102,127	Master's degree
21-1011	Substance Abuse and Behavioral Disorders Counselor	30%	210	\$38,239	Master's degree
11-1031	Legislator	N/A	N/A	\$29,321	Bachelor's plus experience
23-1023	Judge, Magistrate Judge, and Magistrate	13%	65	\$76,129	Bachelor's plus experience
23-1022	Arbitrator, Mediator, and Conciliator	14%	10	\$59,962	Bachelor's plus experience
23-1021	Administrative Law Judge and Hearing Officer	11%	35	\$90,589	Bachelor's plus experience
11-3011	Administrative Services Manager	21%	965	\$95,700	Bachelor's plus experience
21-1022	Healthcare Social Workers	31%	460	\$55,307	Bachelor's degree
11-9151	Social and Community Services Manager	22%	235	\$65,481	Bachelor's degree
13-2081	Tax Examiner, Collector, and Revenue Agent	8%	185	\$54,233	Bachelor's degree
17-3022	Civil Engineering Technician	5%	280	\$50,329	Associate degree
13-1061	Emergency Management Director	20%	25	\$68,421	Work experience in a related occupation
45-2011	Agricultural Inspector	9%	30	\$52,820	Work experience in a related occupation
47-4011	Construction and Building Inspector	23%	345	\$55,035	Work experience in a related occupation
13-1041	Compliance Officer	16%	755	\$66,539	Long-term on-the-job training
33-3031	Fish and Game Warden	11%	20	\$57,876	Long-term on-the-job training
47-4041	Hazardous Materials Removal Worker	18%	140	\$37,460	Long-term on-the-job training
51-8031	Water & Liquid Waste Treatment System Operator	18%	480	\$40,560	Long-term on-the-job training
33-9011	Animal Control Worker	18%	60	\$33,950	Moderate-term on-the-job training
53-3021	Bus Driver, Transit	15%	355	\$39,194	Moderate-term on-the-job training
47-4051	Highway Maintenance Worker	18%	175	\$36,963	Moderate-term on-the-job training
43-4031	Court, Municipal, and License Clerk	23%	305	\$31,032	Short-term on-the-job training
43-5052	Postal Service Mail Carrier	-7%	730	\$50,912	Short-term on-the-job training
53-7081	Refuse and Recyclable Material Collector	15%	250	\$32,175	Short-term on-the-job training

Source: Texas Workforce Commission (TWC)

Note: This chart is a sampling of careers in the cluster, not recommendations from TWC or any other agency or organization. Always do thorough research and consult with your parents/guardians before making a career choice.

ration

the career options in the cluster—they are just a sampling showing the variety of occupations available to you at different education levels. Decide on the ones that best fit your talents and ambitions. Here's an explanation of the kind of information presented in each column.

- EDUCATION:** This is the minimum preferred level of educational attainment for people working in the career in the United States. This can range from short-term on-the-job training to a doctoral degree taking several years of college.
- EDUCATION LEVELS:** The color bars show the mix of education levels attained by people actually working in the profession in Texas (see bars at right). If a bar features mostly one color, that means that level of education is likely the one you'll need to reach to work in the profession. Look at urban and regional planner, for example, and you'll see that virtually everyone in the field has a college degree or better. If the three colors in the bar are roughly equal in size, that means that there are opportunities in the profession for people of all education levels. For example, about 37 percent of the people working as agricultural inspectors have a high school diploma, while 31 percent have some college, and 32 percent have four-year degrees or better.
- JOB DESCRIPTION:** These are brief descriptions of each career from O*NET Online (www.onetcenter.org).

High School	Some College	College or Better
Percentage of people in the occupation who have at most high school diplomas	Percentage of people in the occupation who have some college	Percentage of people in the profession who have a four-year college degree or better

Education Levels	Job Description
	Develop comprehensive plans and programs for use of land and physical facilities of local jurisdictions, such as towns, cities, counties, and metropolitan areas.
	Conduct research, prepare reports, or formulate plans to aid in solution of economic problems arising from production and distribution of goods and services. May collect and process economic and statistical data using econometric and sampling techniques.
	Counsel and advise individuals with alcohol, tobacco, drug, or other problems, such as gambling and eating disorders. May counsel individuals, families, or groups or engage in prevention programs.
	Develop laws and statutes at the federal, state, or local level.
	Arbitrate, advise, adjudicate, or administer justice in a court of law. May sentence defendant in criminal cases according to government statutes. May determine liability of defendant in civil cases. May issue marriage licenses and perform wedding ceremonies.
	Facilitate negotiation and conflict resolution through dialogue. Resolve conflicts outside the court system by mutual consent of parties involved.
	Conduct hearings to decide or recommend decisions on claims concerning government programs or other government-related matters, and prepare decisions. Determine penalties or the existence and the amount of liability, or recommend the acceptance or rejection of claims or compromise settlements.
	Plan, direct, or coordinate supportive services of an organization, such as recordkeeping, mail distribution, telephone operator/receptionist, and other office support services. May oversee facilities planning and maintenance and custodial operations.
	Provide persons, families, or vulnerable populations with the psychosocial support needed to cope with chronic, acute, or terminal illnesses, such as Alzheimer's disease, cancer, or AIDS. Services include advising family caregivers, providing patient education and counseling, and making necessary referrals for other social services.
	Plan, organize, or coordinate the activities of a social services program or community outreach organization. Oversee the program or organization's budget and policies regarding participant involvement, program requirements, and benefits. Work may involve directing social workers, counselors, or probation officers.
	Determine tax liability or collect taxes from individuals or business firms according to prescribed laws and regulations.
	Apply theory and principles of civil engineering in planning, designing, and overseeing construction and maintenance of structures and facilities under the direction of engineering staff or physical scientists.
	Coordinate disaster response or crisis management activities, provide disaster preparedness training, and prepare emergency plans and procedures for natural (e.g., hurricanes, floods, earthquakes), wartime, or technological (e.g., nuclear power plant emergencies, hazardous materials spills) disasters or hostage situations.
	Inspect agricultural commodities, processing equipment, and facilities, and fish and logging operations, to ensure compliance with regulations and laws governing health, quality, and safety.
	Inspect structures using engineering skills to determine structural soundness and compliance with specifications, building codes, and other regulations. Inspections may be general in nature or may be limited to a specific area, such as electrical systems or plumbing.
	Examine, evaluate, and investigate eligibility for or conformity with laws and regulations governing contract compliance of licenses and permits, and other compliance and enforcement inspection activities not classified elsewhere.
	Patrol assigned area to prevent fish and game law violations. Investigate reports of damage to crops or property by wildlife. Compile biological data.
	Identify, remove, pack, transport, or dispose of hazardous materials, including asbestos, lead-based paint, waste oil, fuel, transmission fluid, radioactive materials, and contaminated soil.
	Operate or control an entire process or system of machines, often through the use of control boards, to transfer or treat water or liquid waste.
	Handle animals for the purpose of investigations of mistreatment; control abandoned, dangerous, or unattended animals.
	Drive bus or motor coach on regular route. May assist passengers with baggage. May collect fares or tickets.
	Maintain highways, municipal and rural roads, airport runways, and rights-of-way. Duties include patching broken or eroded pavement and repairing guardrails, highway markers, and snow fences. May also mow or clear brush from along road or plow snow from roadway.
	Perform clerical duties in courts of law, municipalities, and governmental licensing agencies and bureaus. May prepare docket of cases to be called; secure information for judges and court; prepare draft agendas or bylaws for town or city council; answer official correspondence; keep fiscal records and accounts; issue licenses or permits; and record data, administer tests, or collect fees.
	Sort mail for delivery. Deliver mail on established route by vehicle or on foot.
	Collect and dump refuse or recyclable materials from containers into truck. May drive truck.



HERE ARE the programs of study available within the Government & Public Administration cluster in Texas high schools.* The State has created descriptions of each of these programs of study. These documents detail high school classes you might take, extended learning opportunities, and postsecondary programs.

FOREIGN SERVICE

Professionals in this field serve in foreign embassies and consulates, direct diplomatic missions, and advise government leaders on foreign affairs.

GOVERNANCE

Employees in this field include elected or appointed federal officials, state legislators, local elected officials, and staff members of these officials.

NATIONAL SECURITY

National Security professionals, including officers and enlisted men and women of the armed forces, Coast Guard, and National Guard, provide our national defense.

PLANNING

Urban and regional planners develop plans and designs for use of land. They design residential developments and prepare for the growth of communities.

PUBLIC MANAGEMENT AND ADMINISTRATION

Employees in this field work in government to implement the plans and programs developed by elected officials.

REGULATION

Government regulators enforce standards set by law in areas such as immigration, food and drug quality, sales of stock, and banking.

REVENUE AND TAXATION

Professionals in this area collect taxes levied to fund the activities of national, state, and local governments.

* Not all schools offer all programs of study or clusters. Ask your counselor which programs are available at your school.



BEGIN YOUR Government & Public Administration career with classes in high school.

Imagine attending a U.S. Supreme Court session in Washington, D.C. Could a high school student understand the public policy issues and legal cases the justices discuss?

Sonia Ramirez did. "I understood everything. It blew my mind," says the high school senior at the Magnet Center for Public Service: Government, Law, and Law Enforcement at the Yvonne A. Ewell Townview Center in Dallas (see "Living Laboratory," page 13).

Ramirez's elective hours at the magnet school were spent studying government and law. As part of that program, she had researched the very issue the U.S. Supreme Court justices were discussing the day she visited the court.

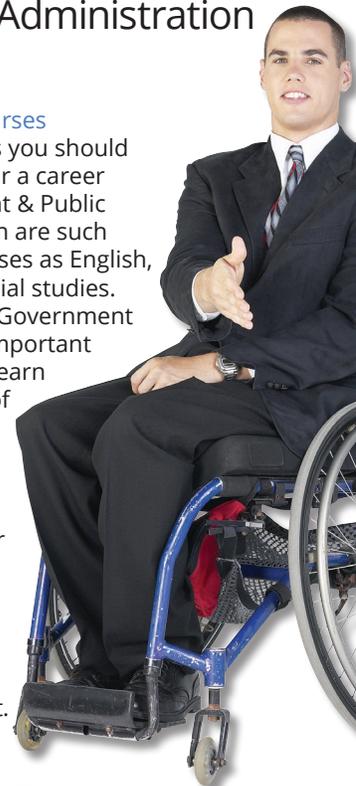
It was that day in the U.S. Supreme Court that Ramirez knew she could achieve her dream of being a politician or Supreme Court justice. "It let me know I could do this; this is something I can make my life's work."

Students don't have to attend a special magnet school to start preparing for a career in Government & Public Administration. There are courses and activities in every high school that can prepare students for work in the cluster.

Academic Courses

The courses you should first master for a career in Government & Public Administration are such academic classes as English, math, and social studies. A class called Government is especially important because you learn "the process of local, state, and federal government," says Daniel Reyes, teacher specialist for social studies with the San Antonio Independent School District.

Economics is another important course because you learn "how the public and private sectors interact and affect one another," adds Reyes, who has a master's degree in public administration. Before going into education as a career, Reyes worked elsewhere in the Government & Public Administration cluster, first in city



MORE TEXAS GOVERNORS
 HAVE BEEN TRAINED IN LAW
 THAN IN ANY OTHER OCCUPATION.

management and then in budget planning for the U.S. Air Force.

English courses are also essential because most careers in the cluster require the ability to communicate in written form, observes Reyes. "At the higher levels, you have to be able to explain things in such a way that the public will understand, whether it is a budget or a public works program."

Reyes also recommends history courses because they provide a good foundation in how governments were formed. Math is important, as well; it gives you the background to understand "how government budgets work," he says.

Program of Study Electives

Like Ramirez, students can take elective courses to prepare for a career in Government & Public Administration. One elective recommended for all programs of study in this cluster (see "Program Profiles" at left) is Business Law. "No matter what area of government you're interested in, you're going to deal with laws," says Karen French, guidance counselor at Georgetown High School in Georgetown.

Students should choose other electives based on which of the seven programs of study they might like to pursue. For example, if a student is interested in a career in Revenue & Taxation, Regulation, or Public Management & Administration, business courses such as Revenue, Taxation, and Regulation and Business Law, or Accounting should be high on the list. Careers in taxation involve business principles as they apply to the government's assessment and collection of taxes, says Janet Bray, human resources manager for the Texas Comptroller's office in Austin.

In the Regulation program of study, many careers involve the investigation of business and financial records to ensure that government rules are being followed.

Careers in Public Management & Administration, focus on running the business of government. Employees in these careers use management practices similar to those employed by for-profit businesses.

Securing the Homeland

The National Security program of study often leads to military service in a branch of the armed forces. Junior Reserve Officers' Training Corps (ROTC) can prepare students for service, says Reyes. "It allows students to test the waters to see if that type of rigor and discipline is something that fits them," he says. Junior ROTC is also suggested as an elective for the Governance, Foreign Service, and Public Management & Administration programs of study. "It gives students a sense of civic responsibility and

duty" that should be the foundation of these careers, says Reyes.

Communication Classes

Speech and Debate are other electives suggested by most experts in Government & Public Administration. These classes help students develop strong communication skills and keep up with current events. Most people in Government & Public Administration careers have contact with the public. They have to be able to effectively communicate and articulate information and ideas.

SPOTLIGHT

LIVING LABORATORY

The Center for Public Service: Government, Law, and Law Enforcement

The governments of Dallas County and the city of Dallas are the 'living laboratories' where students do experiments in governmental process," says Robert L. Giesler, principal of the Magnet Center for Public Service: Government, Law, and Law Enforcement in Dallas.

This college-preparatory magnet school is part of the Dallas Independent School District's Yvonne A. Ewell Townview Center, a collection of six separate magnet programs under one roof. Students from the different programs take their academic courses together. Elective hours are spent in the various magnet schools.

The program for public service, government, and law focuses on real-life experience, what Giesler calls "exposure and practice." In addition to the city and county governments, its laboratories include courts, law firms, and state and federal government offices.

As freshmen, students spend their elective hours in Introduction to Public Service. One day a week, they visit federal, district, county, and city courts. Afterward, Giesler says, "students write legal briefs on the court cases they've observed" using the Texas Penal Code and research they conduct with Lexis/Nexis, the database used by real law firms.

During the other four days, students explore topics including international studies and legislative processes. Five weeks is spent conducting a mock legislature. "Students write their bills, argue the pros and cons, get

them out of committee, and present them to the 'legislature,'" says Giesler.

As sophomores, students take a class called Law. They visit many government offices, interview people working at various levels of government, and conduct research at the law library of Southern Methodist University.

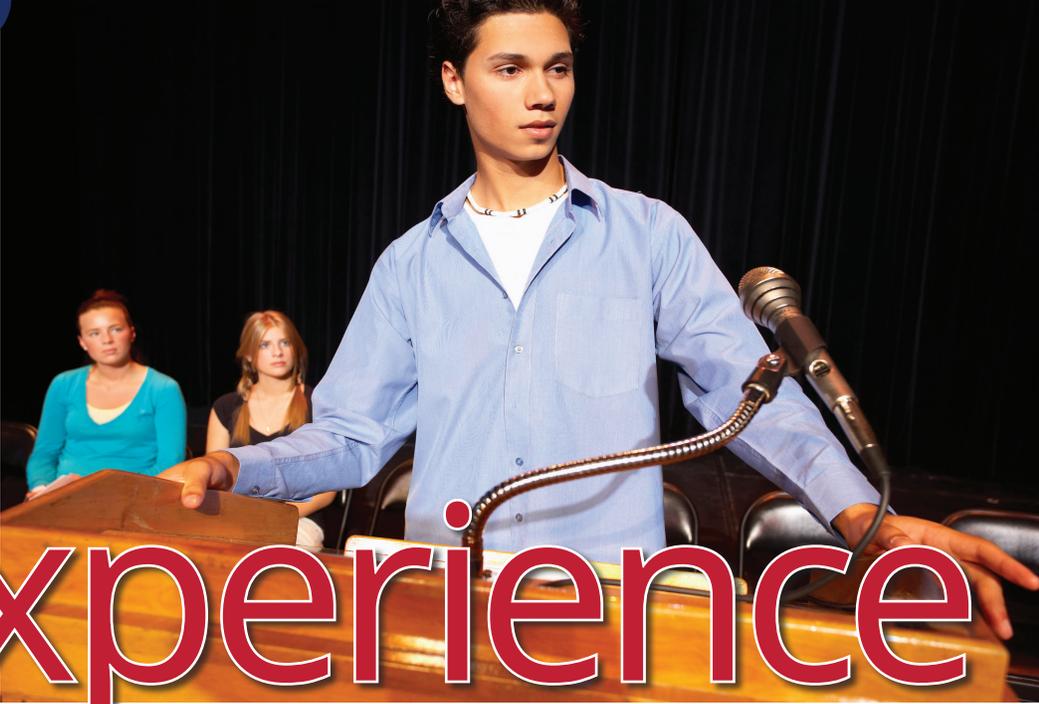
An unpaid internship with a government office, judge, or law firm is the focus of the program's junior year. "Every three weeks the students have seminars where they present what they have learned to each other," says Giesler.

Seniors spend their elective hours in paid internships. Most of the internships are at law firms "because they're the ones who can most afford to pay interns," says Giesler, although he notes there are some positions in government offices.



**BUILD YOUR
Government & Public
Administration
skills with extended
learning.**

Extra Experience



At age 31, Diana Palacios is already a political leader. She has served as a delegate to the state Republican convention, as precinct chair for the Republican Party in the city of Denton, and as vice chair for the College Republicans at the University of North Texas in Denton.

She didn't start out as a leader, though, describing herself as a "shy" ninth grader. What made the difference? "Student council," she says.

"Student council really prepared me

TEXAS HAS 254 COUNTIES AND 1,208 INCORPORATED CITIES, ALL OF WHICH OFFER CAREER OPPORTUNITIES IN PUBLIC ADMINISTRATION.

in terms of leadership, how to talk to people, and how to be professional," says Palacios, who will soon graduate from the University of North Texas with bachelor's degrees in both political science and economics.

In student council at Andress High School in El Paso, Palacios learned leadership skills by serving as chairperson for committees and attending leadership workshops offered by the Texas Association of Student Councils.

Student council is just one of the many clubs, programs, and extended learning opportunities that can help students prepare for a career in Government & Public Administration.

School Clubs and Organizations

Student council and other community service organizations are great preparation for this cluster, says Daniel Reyes, teacher specialist for social studies at the San Antonio Independent School District. "They give students a sense of being in service to the public and the opportunity to develop leadership and teamwork skills." Community service clubs include the Key Club, the Leo Club, and the National Honor Society.

Business Professionals of America (BPA) and Future Business Leaders of America (FBLA) are also recommended for all the programs of study in this cluster. These organizations help students grow professionally and develop leadership skills.

Debate and speech clubs prepare students for the many jobs in this cluster that "require you to quickly analyze and speak about issues," says Robert L. Giesler, principal at the Magnet Center for Public Service: Government, Law, and Law Enforcement. (See "Living Laboratory" on page 13 and "Communication Competition" at right.)

For the Foreign Service program of study, language clubs are a good choice, says Karen French, guidance counselor at Georgetown High School.

For the Planning, National Security, and Regulation programs of study, the Explorer Program is recommended.

It provides members with training sessions and volunteer experience in law enforcement activities.

Mock Government

It might not be possible to be a senator or government planner in high school, but students can certainly act like one. The American Legion sponsors both a Boys State and a Girls State, during which students role-play operating city, county, and state governments. "Students can read information in books, but these programs give a true taste of what it's like to be in the political arena," says Connie Bridges, executive director for the American Legion Auxiliary Texas Girls State.

The YMCA Youth and Government Program offers students another opportunity to participate in a model legislature as well as role-play as lobbyists, government planners, news reporters, and those in judicial and executive jobs. Model U.N. allows students interested in Foreign Service to attend a mock United Nations session as a representative of a country and debate



THE HIGHEST-PAID POSITIONS IN TEXAS STATE GOVERNMENT IN 2014 WERE INVESTMENT FUNDS MANAGERIAL POSITIONS TOPPING OUT AT \$1 MILLION A YEAR.



pertinent issues from the perspective of their country's foreign policy.

Get Involved in Real Government

One of the most important things a student can do is actually "get involved in the governmental process," says Giesler. This can be done in a number of ways, including job shadowing, internships, and volunteer work.

In job shadowing, students follow a professional in the workplace for a day to see firsthand what the job is like. Attending events such as campaign rallies

or school board meetings is another way to gain exposure to Government & Public Administration. Actively volunteering is even better, says Reyes. "Contact a city council member and ask about ways to become involved." For example, students can work on a neighborhood improvement project, he says.

Students might also volunteer in a political campaign, says Sally Burt, outreach representative for U.S. Congresswoman Kay Granger. "It will give students the flavor of the political side of public service."

SPOTLIGHT

COMMUNICATION COMPETITION The Texas Forensic Association Teaches Debate Skills

People in Government & Public Administration careers need to communicate intelligently about issues such as our nations' military policies, the next presidential race, or the United Nation's report on global warming. One of the best ways to learn how to do this is to participate in high school debate and speech competitions, says Aaron Timmons, president of the Texas Forensic Association and debate coach at Greenhill High School in Addison.

"Debaters are more knowledgeable than the average high school student and, many would argue, more than most college students about the topics they debate," he says. "The level of research and preparation of the students is incredible."

The Texas Forensic Association (TFA) sanctions more than 100 high school speech and debate tournaments across the state each year, including the largest state tournament in the nation.

Students prepare for competitions

either as part of their Debate or Speech classes or through student debate clubs.

Events include: Cross Examination Debate, in which teams of two face off; Lincoln-Douglas Debate, in which individuals debate one another on a value topic; Student Congress, in which participants debate legislation; and Extemporaneous Speaking, in which speakers have only 30 minutes to prepare for a topic.

Debate and speech competitions help students develop skills important for many of the careers in Government & Public Administration, says Timmons. These skills include research, articulation, negotiation, time management, teamwork, and organization of thoughts. "I can't think of another activity that prepares students as well for these particular careers," he says.

Debate is also fun, adds Timmons. Students research and prepare for competitions as a group. Many teams also get to travel extensively to various tournaments. "Students make friends from across the state and across the country," he says.

Participation in debate and speech can also help with college admissions and scholarships. Similar to athletes, debaters can earn partial or full scholarships for agreeing to join the debate team at a college or university.



CREATE a Career PORTFOLIO

One valuable tool that can help you get ready for college and beyond is a career portfolio—a collection of items that document your achievements both in and out of school, assembled in one convenient package.

A career portfolio is not simply a resume, although it can certainly include one. So what should go in a career portfolio? A variety of things, depending on your own personal experiences. It could include transcripts and grades; writing samples; letters of recommendation from teachers, mentors, or employers; awards you've received; and items that document other activities, such as internships and job shadowing experiences.

"You need to be specific—dates, how many years, any awards, what they meant, and who you received them from," says Grace Brauchle, who helps students put their portfolios together as the career center coordinator for Lehman High School in Kyle.

Brauchle says portfolios come in handy when students apply for jobs or admission to college. "First impressions are a very big thing," she says, "and you want to be the one whose papers get passed around the office. You want to be the one where the admissions counselors say, 'Wow, look at this one!'"



After high school,
MANY ROADS LEAD
 to careers in Government &
 Public Administration.

Choose Success

If a career in Government & Public Administration were a destination, it would have many different roads leading to it.

“Preparing for a career in Government & Public Administration is not straight-forward like getting ready for an engineering or an accounting career,” says Jo Anne Huber, senior academic advisor for the department of government at the University of Texas at Austin. Postsecondary education and training for careers in this cluster varies widely depending on students’ goals.

Trouper Krueger, for example, got his bachelor’s degree in business at Texas A&M University before entering the master’s degree program in international relations at the George Bush School of Government. “I am interested in working in the intelligence community,” he says. The National Geospatial-Intelligence Agency (NGA) is his first choice for employment. The NGA gathers intelligence from satellites, analyzes it, and disseminates it to the other intelligence agencies.

Training and Certifications

Although many professional and managerial jobs in Government & Public Administration require a master’s degree such as the one Krueger is pursuing, there are many jobs that require less education.

Clerks, clerical assistants, enlisted military personnel, and some inspectors require a high school diploma and training provided by the employer. “Clerical assistants are needed in all areas of government,” says Kate Brooks, director of liberal arts career services for the University of Texas at Austin. For enlisted military personnel, training is provided by the military, first in basic training and then in advanced individualized training, where a specific profession is learned.

In the Regulation program of study, training for inspector positions varies by type of inspector and government entity. For example, cargo and freight inspectors require a high school diploma and on-the-job training, whereas many building code inspector jobs require previous construction experience and certification.

Two-Year Degrees or Technical Training

A two-year associate’s degree or technical training is necessary or helpful in certain Government & Public Administration careers. Such jobs include property tax assessor, city planning aide, and some Homeland Security positions.

“A two-year degree can also be substituted for job experience” for tax account examiners, taxpayer enforcement officers, and others whose jobs require a high school diploma plus experience, says Janet Bray, human resources manager for the Texas Comptroller’s office, the agency in charge of the State’s taxes and finances.

Bachelor’s Degree Programs

For many jobs in the Government & Public Administration cluster, “a bachelor’s degree is pretty much required,” says Brooks. The major course of study and the level of degree required depend on the job, she says. “Employers in each area are really looking for different skills and experience.”

Foreign Service officers usually

TEXAS STATE UNIVERSITY’S CERTIFIED PUBLIC MANAGER PROGRAM,

OFFERED IN COOPERATION WITH UT AUSTIN, UT ARLINGTON, AUSTIN
 STATE UNIVERSITY, AND SAM HOUSTON STATE UNIVERSITY, IS
 DEDICATED TO IMPROVING THE PERFORMANCE OF PUBLIC MANAGERS.

TEXAS HAS
36 REPRESENTATIVES
 IN THE U.S. HOUSE
 OF REPRESENTATIVES.

have bachelor's degrees in liberal arts or business. They must also pass the Foreign Service exam, says Brian Collins, director of the public administration program at Texas Tech University. "To pass the Foreign Service exam, students must be experts in world history."

In the National Security program of study, students must have a bachelor's degree to become a commissioned officer in the military. The majority of commissioned officers come from Reserve Officers' Training Corps (ROTC) at colleges and universities. "The ROTC program provides the discipline and leadership training" for commissioned officers, says Lieutenant Colonel Kevin Smith, who is in charge of admissions and enrollment for the U.S. Army ROTC program at the University of Texas at Arlington.

Master's Degree Programs

For jobs in Planning, employers look at majors in architecture, geography, geology, landscape architecture, civil engineering, or government, says Brooks. Most planners have an advanced degree, however, says planner Vanessa Sarria, executive director of Community Action Network in Austin. "When it comes to analysis of issues and really getting involved with data, people usually have a master's degree."

Advanced degrees are also the standard in the Public Administration & Management program of study. "Most people going into public administration enter with either a master's in public administration or a master's in public policy," says Matthew Upton, director of student services at the George Bush School of Government at Texas A&M University.

Texas has some of the best public affairs graduate schools in the nation, as rated by U.S. News & World Report. In 2012, the year public affairs programs were last ranked, the University of Texas at Austin was 11th for public-policy analysis, 14th for public management administration, and 16th for public finance and budgeting.

For city management and urban policy, the University of North Texas in Denton ranked eighth, while the University of Texas at Arlington ranked 26th.

Networking Matters

Some careers require preparation in addition to college. "If you want to be a lobbyist or work in the State Legislature or Congress," says Collins, "it's all about networks." He suggests volunteering for political campaigns as a way of breaking into these careers.



Get the CREDIT You Deserve

Dual credit in Texas is a great way to earn college credits toward a postsecondary degree while you're still in high school. Dual credit programs center on "articulation agreements," contracts between the student, his or her high school, and postsecondary institutions the student would like to attend. While most students take basic core courses such as English, history, math, science, and social science, coursework may include areas in Career and Technical Education.

Dual credit courses cover the same material as the equivalent college course, allowing the student to receive credit toward the college degree. It's like a bank account. The credit is banked for you at the college, and you withdraw it when you enroll.

Ask your counselor about advanced placement, dual credit, or articulated courses and other opportunities to earn college credit.



ACCEPTED!

SIX THINGS Texas students should know about getting into college

Applying to college is a lot like looking for a job or trying out for a team. You choose something that interests you, and then try your best to convince whoever is in charge that you have what it takes to be part of their organization. But whereas there might be only a few spots open on your high school's varsity football squad, there are thousands of places available in hundreds of colleges each year. Whether you are the first in your family to apply to college or both of your parents have advanced degrees, going through the admissions process can be stressful. Fortunately, there are plenty of free resources available for Texas college-bound students. The best is College for All Texans (www.collegeforalltexas.com), which features a list of all the state's colleges and universities, a checklist for selecting a school, and a link to the online Texas Common Application. To help you get started on your own college search process, here are six steps you should take.

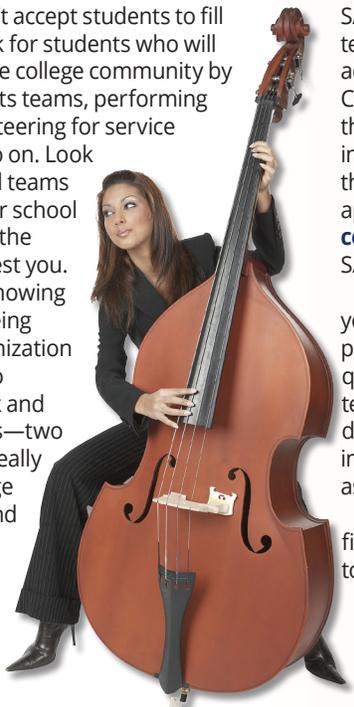
1. Make School Your Job

The first thing college admissions officers look for on your application is your grade point average. It's simple—you have to make the grades in high school to earn your spot in a college. The easiest way to do that is to think of school as your job, starting in your first year. If you show up late for work, slack off, and talk back to the manager, you'll get fired faster than you can say, "Do you want fries with that?" But if you always arrive on time, work really hard, and try to learn from management, then pretty soon you'll probably get a raise or a promotion.

What works on the job works in the classroom, too. Take challenging courses. Turn in all your work on time. Pay attention in class. Contribute to discussions. Ask for help when you don't understand something. By treating school as a career, you'll have a better shot at earning the grades and teacher recommendations that you need to move to the next level.

2. Get Involved in Activities

Colleges don't accept students to fill seats. They look for students who will add to the entire college community by playing on sports teams, performing on stage, volunteering for service projects, and so on. Look at the clubs and teams available at your school and sign up for the ones that interest you. In addition to showing school spirit, being part of an organization is a great way to build teamwork and leadership skills—two traits that can really help your college application stand out from the pack.



3. Build a Resume Portfolio

What if you had to take a final exam on the last three years of a subject and didn't have any notes to study? Well, that's exactly what it's like trying to complete a college application if you haven't kept an ongoing file of all your activities, honors, and employment.

Start your first year and build a career portfolio (see page 15). It's also smart to create a computer file called "college resume" and add to it each time you participate in a service project, win an award, get a new job, and so on. Use technology to create a resume format or ask your parents or guidance counselor for help. When you sit down to complete your college applications, review your career portfolio and call up the resume—all the information you need will be right at your fingertips.

4. Prep for Tests

Most colleges use scores from the SAT, SAT II, or ACT tests in making their admissions decisions. Check which tests the schools you're interested in require and sign up to take them in time to include the scores in your application. College for All Texans (www.collegeforalltexas.com) also has a free ACT, SAT, and GRE prep course.

Spend time preparing for the tests before you walk into the room with your No. 2 pencils and calculator. Go through sample SAT questions at www.collegeboard.org or ACT tests at www.actstudent.org. There are also dozens of test-prep books you can buy, some including software that tracks your progress as you go through sample exams.

Remember: If you don't do well on a test the first time, you usually can take it again and try to improve your score.



Inside College Admissions

5. Make a List of Colleges

Do you want to stay in Texas for college or see another part of the country? Would you be more comfortable at a big university or a small college?

Think about what you would like to study and what matters most to you (like location, size, or religious affiliation), and then start developing a list of colleges that fit your criteria.

Use online tools like www.collegeforalltexas.com or www.collegeboard.com to learn more about each school and take online campus tours. Buy or borrow from the library some of the many college guides available. If possible, schedule visits to the schools you are interested in, or, through the school's admissions office, arrange an interview with a recent grad who lives in your area so you can ask questions about courses, faculty, or anything else.

By the fall of your senior year, narrow the list down to the top five or six choices. While some online applications are free, it can cost up to \$70 per school to apply, so be realistic about how much you can spend on applications.

6. Submit Polished Applications

Once you send in an application to a college there's no taking it back, so make sure you get it right the first time. Double-check your spelling. If you use the same essay for multiple schools, remember to change the name of the school to fit each application. Make sure you have any required standardized test results (ACT, SAT, SAT II) sent to each school.

Be neat and complete, and meet every deadline. Make copies of each application before you hit the send button or pop it in the mail. If you don't receive an email or postcard confirming that your application was received, contact the college to make sure it arrived. Items can get lost or misdirected, especially when thousands of students are sending in applications at the same time. By having copies, you can easily submit again.

EVEN IF you get accepted to college, you'll never be able to pay the bill, right? Wrong! There's financial aid available if you know where to look.



Financial Aid

BASICS

College isn't cheap. With tuition and room and board at private schools often topping \$40,000, and even in-state, public schools costing several thousand dollars a year, you may wonder why you should even apply.

Well, don't worry. Every Texas student can afford to go to college.

"Access and affordability of higher education can be intimidating to students and parents; however, there are numerous resources available to walk you through the process and into an exciting future," says Heather V. Crowson, vice president for enrollment management at Sam Houston State University.

The secret to getting the aid you need to go to school is in filling out the necessary forms, getting good grades, and applying to schools that offer generous financial aid packages. (A financial aid package consists of need- or merit-based scholarships and grants plus work-study jobs and low-interest student loans.)

Here's a quick overview of steps you can take to get the financial aid you need to continue your studies after high school. For more information about the aid available at a specific college or university, go to the school's website and click on the "Admissions and Financial Aid" link. Many schools provide an online form you and your parents can fill out that will give you the estimated financial aid package you might receive if accepted to that school.

Apply: You definitely won't get any financial aid if you don't apply. To figure out how much grant money (which you don't pay back) and loans (which you do pay back) you'll need to afford school, colleges use a formula that factors in your parents' income and investments, your income, the number of kids in the family who will be in college at the same time, and other financial information. Families of all income levels may receive aid, so fill out the forms.

All schools require the Free Application for Federal Student Aid (FAFSA), which determines eligibility for federal aid, such as work-study, Pell grants, and the Stafford loan program; and for college grants and, sometimes, merit scholarships. Complete the application as soon as possible at the beginning of October your junior year. FAFSA forms and instruction booklets are available in your guidance counselor's office, or you can complete the form online at www.fafsa.ed.gov.

Most private schools also require applicants to complete a school financial aid application and, in some cases, the CSS/Financial Aid Profile form (<https://student.collegeboard.org/css-financial-aid-profile>) which is used to award nonfederal student aid funds. Carefully read each college's application to determine financial aid deadlines and what forms you will need to submit.

Study In-state: Whether you choose a public or a private school, staying in-state for college will cut your costs considerably. Plus, since Texas covers 267,339 square miles, you can "go away" to college without ever leaving the state.

To help ensure that qualified Texas high school graduates with financial need can go to college, the State Legislature established the TEXAS (Towards Excellence, Access, and Success) Grant Program. Grants can be used to study at any public college or university in the state and are equal to the student's tuition and required fees. In 2012-2013, approximately 33,100 students received TEXAS Grants. To apply, fill out the FAFSA.

Another way to score some serious state aid is to get good grades in high school. Texas students who are in the top 10 percent of their graduating class are eligible for automatic admission to any public university in the state. With that automatic admission comes the opportunity to apply for merit scholarships and special programs available at each school.

Take Two at a Community College: The first two years of many college programs are filled with core courses that could easily be taken at a local community college for a lot less money. If you fill out all the forms, do the math, and still can't afford a four-year school, enroll in a community college for the first two years, then transfer to a four-year school.

By living at home, working part-time, and getting required courses out of the way, you could save tens of thousands of dollars in tuition and room and board, and be able to afford to attend the college of your choice for junior and senior years. For a complete list of the state's community colleges, go to the Texas Association of Community Colleges website at www.tacc.org.

Target Your Search: Applying to a couple of colleges where your grades and talents put you near the top of the typical talent pool makes it more likely you'll qualify for merit aid and other special school scholarships and grants. Do a little research on college websites to find schools where your standardized test scores and grade point average rank you in the top 25 percent or so of the most recently accepted first-year class. Colleges want to attract the best and brightest students available, and often will offer attractive scholarship/grant/loan packages to convince those students to come to their school.

There are also more than 1 million local, national, and college-specific scholarships available each year. The trick is to find and apply for scholarships that best fit your strengths and talents. FastWeb (www.fastweb.com) is a free college scholarship search source. Register online and you will start receiving email notices about scholarships, internships, and other opportunities that fit the profile information you submit.



LOOK IT UP! Here are key words and phrases used in this guide that you may not already know.

What does that mean?

Articulation agreements: formal agreements between or among educational organizations (high schools, community colleges, and universities) that align courses and majors in a way that allows students to transition from one institution to another without loss of course credit or time.

Associate's degree: a two-year degree awarded by a community or technical college.

Bachelor's degree: a four-year degree awarded by a university.

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

Career cluster: a way of organizing curricula, instruction, and assessment around specific occupational groups (for example, Information Technology or Health Science) that offers students core academics, coursework related to specific occupations, and extended learning experiences.

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

Career guidance: structured developmental experiences presented systematically from kindergarten through 12th grade that help students analyze and evaluate abilities, skills, and interests.

Career portfolio: a collection of student work indicating progress made in subjects, activities, or programs. In career cluster systems, portfolios are often used to assess student performance in extended learning experiences.

Doctoral degree: a degree awarded by universities for study beyond a master's degree. Also referred to as a Ph.D. or professional degree.

Dual credit: credit given in both high school and college for college-level courses taken while in high school.

Extended learning experiences: participation in career and technical student organizations, extracurricular activities, job shadowing, internships, or service learning.

Financial aid: scholarships, grants, loans, and work-study funds awarded to students to pay for college expenses.

Internship: an extended learning experience in which students work temporarily at entry-level jobs in careers that interest them.

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

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

Program of study: a way of organizing the curricula and educational activities within a career cluster related to a student's specific academic and career goal.

Service learning: an extended learning experience in which students do volunteer work related to their career goals.

Targeted industry clusters: six industry clusters that have been identified by Texas as high-demand, high-growth sectors paying high wages. As they are developed by the State, these may be hot areas in which to build a rewarding career.

Program of Study: an education plan suggesting the high school courses a student should take to prepare successfully for graduation and transition into postsecondary education. The vision for Texas CTE is that eighth graders, in consultation with their parents/guardians, counselors, and teachers, will select a program of study and create a plan. Plans are to be reviewed and revised at least once each school year.





Online Info

Explore these Internet resources for more about your education and career options.

America's Career InfoNet www.acinet.org/acinet

This is the place to search for occupational information, industry information, and state-specific labor market information.

College for All Texans www.collegeforalltexans.com

Here is everything a Texan needs to know about preparing for, applying for, and paying for college or technical school. And it's all in one up-to-date, easy-to-navigate mega-site almost as big as the state itself. Remember: \$4 billion is available every year to help Texans attend college.

Employability Skills Framework <http://cte.ed.gov/employabilityskills/>

Employability skills are general skills that are necessary for success in the labor market at all employment levels in all sectors. The Employability Skills Framework is a one-stop resource for information and tools to inform the instruction and assessment of employability skills.

My Next Move www.mynextmove.org/

This is a career planning resource for students, parents, career changers, and career advisors.

TEXAS CAREER CHECK

The State of Texas has created a special website for students and others researching careers. It's called Texas Career Check. Texas Career Check lets you explore higher education options by looking at detailed information by school and program of study, AND you can explore careers, occupational information, and postsecondary education options. You'll find a wealth of information about hundreds of career choices. To explore Texas Career Check, go to www.texascareercheck.com.

O*NET (Occupational Information Network) online.onetcenter.org

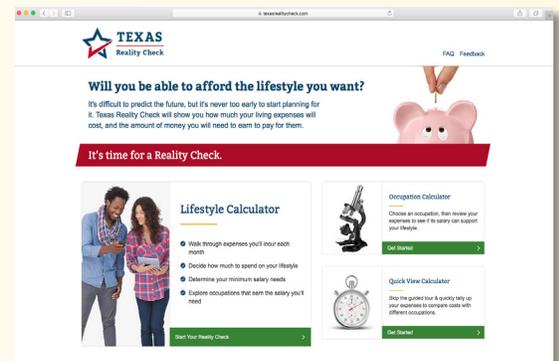
Also available in schools and libraries, O*NET provides full information on occupations, including compensation, employment prospects, and skill matching for students. Information on compensation is available on a state-by-state basis.

U.S. Department of Labor Occupational Outlook Handbook www.bls.gov/home.htm

This nationally recognized resource offers information on job responsibilities, earnings, working conditions, and job prospects for the future.

Take a Reality Check

The Texas Workforce Commission has created an online resource called Reality Check to help you understand how much money you'll need to live on your own after high school or college and how you can earn it. There are three ways to explore careers, expenses, and earnings. For the first option, which is called "Get a Reality Check," you choose an area you'd like to live in, such as Austin. You then go through a series of screens with real-world costs for items such as housing, clothing, transportation, health care, and personal expenses. The site automatically adds up your estimated monthly expenses, then uses salary information for Texas to show you careers that will make you that much money. The second option, called "Future Salary," starts with the wages you expect to earn, what education you plan to pursue, and the career cluster that interests you. Then it generates a list of careers in which you can make that amount of money. The third option, "Occupation Direct," begins with your occupational choice and the area where you want to live, then shows how your estimated expenses subtract from the salary for your chosen job. The site, which is at www.careerwise.mnscu.edu/careers/realitycheck.html, is a great way to play "what if" when it comes to mixing your job, earnings, and expense options.



The results of Reality Check show you how expenses add up quickly when you are living on your own.

Texas CTE Career Clusters



**Agriculture,
Food &
Natural
Resources**

Processing, production, distribution, and development of agricultural commodities and natural resources



**Architecture &
Construction**

Designing, managing, building, and maintaining the built environment



**Arts, A/V
Technology &
Communications**

Creating, exhibiting, performing, and publishing multimedia content



**Business
Management &
Administration**

Organizing, directing, and evaluating functions essential to productive business operations



**Education &
Training**

Providing education and training services, and related learning support services



Finance

Financial and investment planning, banking, insurance, and business financial management



**Government
& Public
Administration**

Executing governmental functions at the local, state, and federal levels



Health Science

Providing diagnostic and therapeutic services, health informatics, support services, and biotechnology research



**Hospitality
& Tourism**

Managing restaurants and other food services, lodging, attractions, recreation events, and travel-related services



**Human
Services**

Providing for families and serving human needs



**Information
Technology**

Designing, supporting, and managing hardware, software, multimedia, and systems integration



**Law,
Public Safety,
Corrections
& Security**

Providing legal, public safety, protective, and homeland security services



Manufacturing

Processing materials into intermediate or final products



Marketing

Performing marketing activities to reach organizational objectives



**Science,
Technology,
Engineering &
Mathematics**

Performing scientific research and professional and technical services



**Transportation,
Distribution
& Logistics**

Managing movement of people, materials, and goods by road, pipeline, air, rail, and water

About Texas CTE

You may have seen the name Texas CTE on the cover of this magazine. What exactly is that?

Texas CTE is the name of Texas' college and career education initiative. The idea behind it is simple: Planning for the future so that students achieve lifelong success. As Texas CTE grows, you'll see how subjects such as English, math, science, and social studies are relevant to your personal goals and ambitions. You'll get the chance to begin a plan that gets you where you want to go in life. You'll have the opportunity to take courses and engage in extended learning experiences that give you marketable skills. Best of all, you'll be in control of your future. Read all 16 editions of Texas CTE in Action (available through your counselor) to explore Texas' career clusters and start on the road to success.