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Sixth Edition
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Directory of Licensed Occupations
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in
Texas

Sixth Edition

Prepared by the
Texas State Occupational Information Coordinating Committee

May 1992

Cover design by the Texas Employment Commission.

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INTRODUCTION

Since the original publication of the *Directory of Licensed Occupations and Apprenticeship Programs in Texas* in 1980, numerous changes in laws and regulations have occurred. We offer this sixth edition in an effort to keep the Directory as current, accurate, and useful as possible. The Texas State Occupational Information Coordinating Committee (TSOICC) will continue to update and re-publish the Directory after each legislative session.

This Directory provides up-to-date, minimum requirements for professions and occupations licensed, registered, or certified by the State of Texas. Several occupations, recently subject to state regulation, have been added to those previously published in the Directory. These and other occupations or professions may also be licensed by counties and cities, and interested individuals should check with local authorities. Occupations which require national, but not state, certification are not included in this publication.

This Directory will be useful to students, counselors, and others who are looking for guidance in making career choices. In addition to regulatory information, the Directory contains descriptive material about the occupations or professions, including career and employment information.

Three approaches were combined to revise and update the Directory. First, all legislation regarding occupational regulation in the 72nd Texas Legislature was monitored to identify changes in current regulations and to enlist additional occupations subject to state regulation. Second, state, federal and commercial publications were consulted in order to describe and assess occupational trends and to update employment information. Third, a draft of each entry was submitted to the appropriate licensing agency or association for review prior to publication. Corrections, modifications, and additions, in accord with their unique perspectives, were solicited. This method was used to assure the timeliness and reliability of the information concerning those occupations listed in the Directory. Much appreciation is owed to those agencies, associations and individuals whose cooperation helped us produce this Directory.

At the time of printing, three occupations had been recently identified as requiring licensure or certification. These occupations, along with their respective licensing boards or committees, are listed in the Addendum.

Employment projections, when available, were provided courtesy of the Texas Employment Commission Economic Research and Analysis unit. These projections were occasionally supplemented by data supplied by professional associations. In either case, employment estimates are indicators of relative magnitude and probable direction rather than absolute values. The number of licensed individuals is included for a few occupations. This information, provided by the licensing agency, is presented to provide an indicator of occupational activity, particularly when other data was not available.

Wage and salary information was derived primarily from *Texas Occupational Wage Estimates for 1990*, compiled by the Texas SOICC. Salary information provided is for wage and salary jobs only and does not include commissions, tips or other earnings for self-employment. Professional and occupational associations also contributed information.

Apprenticeship information was derived from a review of the current literature and contact with several individuals and agencies concerned with apprenticeship. Toni M. Dean of the Adult and Community Education Division at the Texas Education Agency provided helpful direction, information, and commentary.

The 1992 version of the Directory of Licensed Occupations was researched and produced by Terri Benavides with the able assistance of Bonney Fehrenkamp. Joni Gilton and Richard Froeschle provided general guidance and technical review. The TSOICC staff welcomes any comments or suggestions regarding this or future editions of the Directory.

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JOB DESCRIPTION

Accountants compile, analyze, and prepare financial reports for individuals and businesses. They specialize in auditing, tax accounting, management consulting, or budgeting and control. General accountants may devise budget and cost systems, maintain records, and balance the books. Auditors examine bookkeeping records of clients for accuracy and completeness. Tax accountants prepare tax returns for individuals, businesses or corporations, and may analyze the effects of taxes on certain business decisions. Management consultants offer advice on a variety of matters, such as revising accounting systems and recommending data processing systems. Accountants may also serve as internal revenue agents or investigators and bank examiners.

JOB REQUIREMENTS

- mathematical and analytical skills
- familiarity with computers and related equipment
- ability to speak and write clearly and precisely

LICENSE REQUIREMENTS (VACS 41a-1) (22 TAC 515)

- good moral character
- three letters of reference
- specialized education and training
- academic transcripts

Examination

- accounting theory
- accounting practice (Parts I & II)
- commercial law
- auditing

Restrictions on Licensing

- dishonesty, fraud, or gross negligence
- conviction of a felony or any crime involving dishonesty or fraud
- fraud or deceit in obtaining certification
- non-compliance with continuing education requirements

Approximate Fees as of May 1992

- \$250.00 for examination
- \$100.00 for annual license

For more information on licensing requirements. CONTACT :

Texas State Board of Public Accountancy
1033 La Posada, Suite 340
Austin, Texas 78752-3892
512/451-0241

EDUCATION/TRAINING

- bachelor's degree with 30 semester hours* of accounting, 20 hours of which are in core accounting courses, and 20 hours of related business courses, plus two years experience in accountancy; OR
- master's degree in accounting; OR
- master's degree in business administration or equivalent professional degree or 150 semester hours of college credit, with 30 semester hours* of accounting, 20 hours of which are in core accounting courses, and 20 hours of related business courses, plus one year of experience in accountancy
- continuing education required for annual license renewal

* or quarter hour equivalent

WORKING CONDITIONS

- generally work in office environment
- occasional long hours and deadlines
- may involve travel

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

The four major career paths within the field of accountancy are public accounting, management accounting, government accounting, and internal auditing. Public accountants own or work for independent accounting firms. Management accountants handle their employer's financial records, usually in large firms. Government accountants audit government agencies, businesses, and individuals whose dealings are subject to government regulations. Internal auditors evaluate their firm's financial and management systems to protect against fraud. They also evaluate the company's operations in terms of efficiency, effectiveness, and compliance with laws and regulations. Most accountants are employed as management accountants; about 10% are self-employed. A small number are employed in business and professional schools. Most accountants work in large urban areas where major industries are located.

In 1989, 65,450 accountants were employed in Texas. The projected statewide employment figure for 2000 is 79,650. Total annual average job openings will be 2,355 -- 1,290 due to growth and 1,065 due to labor turnover. Texas statewide average hourly wage is estimated at \$13.43.

For more information on a career in accountancy. CONTACT :

Texas Society of Certified Public Accountants
1421 West Mockingbird Lane, Suite 100
Dallas, Texas 75247
214/689-6000

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

Air conditioning and refrigeration contractors usually work with environmental air conditioning, maintaining indoor air at the proper temperature, humidity, cleanliness, and circulation for human comfort; or with commercial refrigeration and process cooling and heating, including large refrigeration systems and walk-ins. Persons who design, construct, maintain, service, repair, or modify any environmental air conditioning (which includes heating), commercial refrigeration, or process cooling or heating system must be licensed. Each license must be endorsed either for environmental air conditioning, or commercial refrigeration/ process cooling and heating, or both. The Class A license allows the holder to install, repair and alter the type of equipment for which the license is endorsed of any size or capacity. The Class B licensee may install, repair, and alter equipment, for which the license is endorsed, of not more than 25 tons cooling capacity and not more than 1,500,000 BTU per hour output heating capacity. This requirement does not apply to those who work on portable or self-contained ductless air conditioning or heating units that have a cooling capacity of three tons or less, or a portable or self-contained heating unit that does not require the forced movement of air.

JOB REQUIREMENTS

- manual dexterity
- physical stamina
- mechanical aptitude

LICENSE REQUIREMENTS (VACS 8861) (16 TAC 75.1)

- at least 18 years of age
- specialized education and training
- certificate of required insurance (Class A-\$300,000; Class B-\$100,000)

Examination

- written or oral
- separate examination for each endorsement

Restrictions on Licensing

- dishonesty, fraud, gross negligence, or abuse of license
- conviction of a felony deemed adverse to the safety of person or property

Approximate Fees as of May 1992

- \$100.00 for examination (Class A or Class B)
- \$150.00 for two examinations taken during the same test period
- \$300.00 for triennial Class A license; \$150.00 triennial renewal
- \$150.00 for triennial Class B license; \$75.00 triennial renewal

For more information on licensing requirements, CONTACT :

Texas Department of Labor and Standards
Air Conditioning and Refrigeration Licensing Section
Post Office Box 12157
Austin, Texas 78711
512/463-2904

EDUCATION/TRAINING

- three years of practical experience within the last five years; OR
- degree in air conditioning engineering or mechanical engineering, and one year experience; OR
- combination of at least one year experience with technical education, at the rate of one month experience for each two months of education, to equal three years.

For a listing of schools. CONTACT:

Texas Education Agency, OR

Texas Higher Education Coordinating Board

WORKING CONDITIONS

- may work indoors or outside
- involves strenuous physical labor
- may involve travel

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Approximately half the employment in air conditioning and refrigeration involves new construction; consequently, a large portion of the occupational demand is dependent on the building of new residential, commercial, and industrial structures. Growing concern for energy conservation and management may promote the installation of new energy-saving heating and air conditioning systems in existing homes and buildings. Employment in repair and maintenance is fairly stable since people and businesses depend on their heating, cooling, and refrigeration systems.

In 1989, 12,050 air conditioning and refrigeration mechanics were employed in Texas. The projected statewide employment figure for 2000 is 15,400. Total annual average job openings will be 455 -- 305 due to growth and 150 due to labor turnover. Texas statewide average hourly wage is estimated at \$8.90.

In 1992, there were 15,000 air conditioning and refrigeration mechanics with either Class A or Class B licenses in Texas. Roughly one out of seven mechanics is self-employed.

For more information on a career in air conditioning and refrigeration. CONTACT :

Texas Air Conditioning Contractors Association
Post Office 819060
Dallas, Texas 75381
214/888-9480

National Association of Plumbing/
Heating/Cooling Contractors
940 East 51st Street
Austin, Texas 78751
512/454-8626

AT A GLANCE . . .

Postsecondary schooling?	Recommended
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

An architect provides professional services to clients for the purpose of the design and construction of a building or group of buildings. Their services include conceptual and detailed design, preparation of bidding and construction documents, and the observation and administration of the construction contract as the agent of the client. Architects are familiar with construction materials; methods of construction; principles of structural, mechanical and electrical design; and building safety systems. Typical projects range from single family dwellings to college campuses. Architects are frequently involved in land use studies, site selection, construction budgets, and the coordination of all design disciplines required to provide a completed building.

JOB REQUIREMENTS

- ability to visualize spatial relationships
- capacity for solving technical problems
- understanding of business principles
- ability to communicate effectively

LICENSE REQUIREMENTS (VACS 249a) (22 TAC 1)

- examination
- specialized education and training

Examination

- written Architect Registration Examination consisting of nine divisions: Pre-Design; Site Design; Building Design; Structural-General and Long Span; Structural-Lateral Forces; Mechanical, Plumbing, and Electrical Systems; Materials and Construction Methods; and Construction Documents and Services

Restrictions on Licensing

- misuse of title "architect" and illegal practice of architecture
- gross incompetence or recklessness in construction by architect
- Practice Act

Approximate Fees as of May 1992

- \$210.00 Application
- \$430.00 Examination
- \$250.00 Annual Renewal (resident)
- \$300.00 Annual Renewal (nonresident)

For more information on licensing requirements. CONTACT :

Texas Board of Architectural Examiners
8213 Shoal Creek Boulevard, Suite 107
Austin, Texas 78758-7589
512/458-1363

EDUCATION/TRAINING

- NAAB accredited professional degree in architecture, plus three years experience in the offices of registered architects; OR
- other combinations of eight years experience and education. (Table of equivalents for education and experience available from the Board.)

For a listing of schools, CONTACT :

Texas Board of Architectural Examiners

WORKING CONDITIONS

- generally work in office environment
- outdoor site visitations
- travel may be required
- stress, deadlines, long hours not uncommon

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Interns obtaining experience are usually employed by architectural firms as drafters; limited experience through employment by engineers, planners, developers, landscape architects, interior designers, and builders is also possible. After gaining experience, interns may also work as designers, contract administrators, or specification writers. Approximately one half of all architects are self-employed. The rest are employed by private or governmental organizations. The majority of employment opportunities are in urban areas.

The employment outlook for architects is better in areas with active construction markets. Regional economics significantly influence construction markets. In 1989, 5,550 architects were employed in Texas. The projected statewide employment figure for 2000 is 6,850. Total annual average job openings will be 225 -- 120 due to growth and 105 due to labor turnover. Texas statewide average hourly wage is estimated at \$17.38.

For more information on a career in architecture, CONTACT :

Texas Society of Architects
114 West 7th, Suite 1400
Austin, Texas 78701
512/478-7386

AT A GLANCE . . .

Postsecondary schooling?	Yes, 4-5 years
Minimum age requirement?	No
Examination required?	Yes

JOB DESCRIPTION

Athlete agents, for compensation, recruit or solicit college athletes, or former college athletes who have never signed a professional sports contract, to enter into agent contracts, professional sports services contracts, or financial services contracts. Any person who for a fee promises, procures, offers, or attempts to obtain employment with a professional sports team for an athlete presently enrolled in school, or former college athlete as described above, must register annually with the Secretary of State as an athlete agent.

JOB REQUIREMENTS

- good interpersonal skills
- knowledge of athlete agent law and rules
- tact and resourcefulness

LICENSE REQUIREMENTS (VACS 8871) (1 TAC 781)

- \$100,000 surety bond, if agent offers financial services to athlete
- information concerning business or occupation for five years preceding application
- five professional references, if requested by Secretary of State
- complete list of present and previous athlete clients for three years immediately preceding application

Examination

- none

Restrictions on Licensing

- violation of registration law or rule

Approximate Fees as of May 1992

- \$1,000.00 for registration
- \$1,000.00 for annual renewal

For more information on licensing requirements. CONTACT :

Secretary of State, Stats. Doc. 1
Athlete Agent Registration
Post Office Box 12887
Austin, Texas 78711
512/463-5558

EDUCATION/TRAINING

- all formal training, practical experience and educational background relating to applicant's professional activities as an athlete agent must be submitted

WORKING CONDITIONS

- may work irregular hours
- may involve extensive travel

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Successful athlete agents generally have strong backgrounds and experience in business and law. An agent may work for a corporation, association, partnership, or other legal entity, or work as an individual. Most agents earn a percentage of the contracts they negotiate. The high earnings of professional athletes in recent years have made a career as an athlete agent a very lucrative pursuit. The relationship between the athlete and the agent is regulated by law in Texas. In 1992, there were 60 registered athlete agents in Texas.

For more information on a career as an athlete agent. CONTACT :

Athlete Agent Registration
Secretary of State
Post Office Box 12887
Austin, Texas 78711-2887
512/463-5558

AT A GLANCE . . .

Postsecondary schooling?	No
Minimum age requirement?	No
Examination required?	No

JOB DESCRIPTION

Athletic trainers have the responsibility of maintaining the maximum physical fitness of their athletes. Under the advice and consent of a physician, athletic trainers carry out the practice of injury prevention, physical rehabilitation, and first aid. The methods they use for preventing and treating injuries may include diet, exercise, massage, heat, cold, light, sound, and electricity. Athletic trainers understand the interaction of muscles, joints, and bones within the body, and apply this knowledge to training procedures and injury treatment.

JOB REQUIREMENTS

- manual dexterity
- physical stamina
- ability to understand technical information
- tact and resourcefulness

LICENSE REQUIREMENTS (VACS 4512d) (25 TAC 313)

- specialized education and training

Examination

- written
- practical

Restrictions on Licensing

- conviction of a felony, or misdemeanor involving moral turpitude
- violation of licensure law
- fraud in obtaining license

Approximate Fees as of May 1992

- \$50.00 for examination
- \$50.00 for license
- \$40.00 for annual renewal

For more information on licensing requirements, CONTACT :

Texas Department of Health
Advisory Board of Athletic Trainers
1100 West 49th Street
Austin, Texas 78756
512/834-6615

EDUCATION/TRAINING

- college degree meeting athletic training curriculum requirements; OR
- degree or certificate in physical therapy and completion of basic athletic training course, plus a two-year apprenticeship; OR
- degree in corrective therapy with at least a minor in physical therapy or health, plus two years apprenticeship or other requirements established by Board; PLUS
- completion of a cardiopulmonary resuscitation (CPR) course
- completion of a basic Red Cross first aid course or emergency care attendant training or emergency medical technician training
- minimum of 600 hours apprenticeship per academic year for a minimum of three years
- 24 hours of continuing education required every three years

For a listing of schools, CONTACT :

Advisory Board of Athletic Trainers

WORKING CONDITIONS

- may work irregular hours
- can work indoors or outdoors

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Athletic trainers are usually employed by school districts, colleges, and universities. Some may work for private athletic clubs, organizations, or professional sports franchises; others may teach physical education or related subjects. There is a greater need for athletic trainers in larger communities or college towns than in rural districts. Beginning athletic trainers employed by school districts in Texas are usually paid about the same as beginning teachers. Salaries in colleges vary greatly. In 1992 there were 840 registered athletic trainers in Texas.

For more information on a career as an athletic trainer, CONTACT :

Texas Department of Health
Advisory Board of Athletic Trainers
1100 West 49th Street
Austin, Texas 78756
512/834-6615

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	No
Examination required?	Yes

JOB DESCRIPTION

Attorneys may be thought of as the link between the legal system and society. They interpret the laws pertaining to each client's situation. Attorneys must be well-versed in the current status, purpose, and past application of law. They must be able to speak and write clearly and concisely of their views on cases. They may write legal briefs and reports as a part of their duties. Within the legal profession, there are many specializations and career options offering a wide range of possibilities. The practice of law is sometimes a stepping stone to a career in politics.

JOB REQUIREMENTS

- ability to communicate effectively
- attention to detail
- ability to think logically

LICENSING REQUIREMENTS (Sec. 82.001 et seq., Tex. Gov. Code)

- U.S. citizen or permanent resident alien
- at least 18 years of age
- good moral character
- filing of Declaration of Intention to Study Law during first year of law school
- J.D. from ABA approved law school

Examination

- moral character and fitness investigation, including but not limited to a criminal history investigation
- must file application to take bar examination by applicable deadline
- must pass Texas Bar Examination with minimum score of 75
- must also take and pass Multistate Professional Responsibility Exam

Restrictions on Licensing

- must be found to have good present moral character and fitness
- persons with chemical dependency problems may be issued two-year probationary licenses

Approximate Fees as of May 1992

- \$125.00 to file Declaration of Intention to Study Law
- \$100.00 to file In-State Law student application to take Texas Bar Examination
- Fees vary for licensing of out-of-state/foreign attorneys, depending on circumstances

For more information on licensing requirements, CONTACT :

Board of Law Examiners
Post Office Box 13486
Austin, Texas 78711-3486
512/463-1621

EDUCATION/TRAINING

- graduation from an ABA-accredited law school

For a listing of schools, CONTACT:

Board of Law Examiners

WORKING CONDITIONS

- most work done in office, law library, and courtroom
- may work long hours under pressure
- must continually update knowledge

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Beginning attorneys may work as assistant law clerks to experienced lawyers. After a few years of experience, attorneys may wish to specialize and enter private practice. Some may enter government service and possibly develop a career in politics; others may specialize in such areas as trial work, criminal law, wills, trusts, contracts, or international law. Attorneys with a number of years of experience may become judges. The best locations for beginning attorneys starting private practice are small towns or suburban areas. Attorneys working in large corporations or government agencies usually reside in urban areas.

In 1989, 40,700 attorneys were employed in Texas. The projected statewide employment figure for 2000 is 50,300. Total annual average job openings will be 1,745 -- 875 due to growth and 870 due to labor turnover. Texas statewide average hourly wage is estimated at \$26.13.

Enrollment in law schools has increased in recent years, which is expected to have an impact on job opportunities. Employers will continue to be selective in their hiring practices. Firm size and location, as well as the prestige of the school attended, grades, and class standing all affect beginning salary and job availability.

For more information on a career in law, CONTACT:

State Bar of Texas
Post Office Box 12487
Austin, Texas 78711
512/463-1400

AT A GLANCE . . .

Postsecondary schooling?	Yes, 5-6 years
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

Auctioneers are responsible for appraising and selling merchandise to the highest bidder. They itemize merchandise according to type and value, describe it to potential buyers, and determine a starting bid. By giving information and history about the article to be sold, auctioneers stimulate members of the audience to bid, and close the sale to the highest bidder. They also may be responsible for writing an auction catalog or advertising copy.

JOB REQUIREMENTS

- good communication skills
- public speaking ability
- ability to work independently
- knowledge of business practices
- familiarity with function and value of a variety of items

LICENSE REQUIREMENTS (VACS 8700) (16 TAC 67.1)**Auctioneer:**

- United States citizen or legal alien
- at least 18 years of age
- specialized training or examination
- \$100 Education and Recovery Fee
- Sales Tax Number or exemption

Associate Auctioneer:

- United States citizen or legal alien
- employed by licensed auctioneer

Examination

- written or oral examination of knowledge of auction business and related laws
- study materials furnished

Restrictions on Licensing

- conviction of a felony or crime involving moral turpitude
- misrepresentation in license application
- violation of the Business and Commerce Code

Approximate Fees as of May 1992

- \$ 25.00 for examination
- \$100.00 for auctioneer license
- \$100.00 for annual renewal
- \$ 50.00 for associate auctioneer license

For more information on licensing requirements, CONTACT :

Texas Department of Licensing and Regulation
Post Office Box 12157
Austin, Texas 78711
512/463-5522

EDUCATION/TRAINING

- knowledge of the auction business and laws pertaining to it; OR
- apprenticeship with a licensed auctioneer for one year and participation in at least five auctions

For information on programs and schools, CONTACT :

National Association of Auctioneers

WORKING CONDITIONS

- may work odd hours
- may involve some travel

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Auctioneers sell many different commodities, such as tobacco, grain, art, furniture, and livestock. They may also auction real estate if they hold both a real estate sales license and an auctioneer's license. Auctioneers usually work independently rather than in partnerships, and may choose auctioneering as a part-time or full-time occupation. Depending on the commodity to be auctioned, work is available in almost every type of community. New auctioneers usually experience difficulty establishing business. In 1992 there were 2,250 registered auctioneers in the state.

For more information on a career in auctioneering, CONTACT :

National Auctioneers Association
8880 Ballentine
Overland Park, Kansas 66214
913/541-8084

AT A GLANCE . . .

Postsecondary schooling?	No
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

Barbers cut, style, or color hair to each customer's specifications. Other services performed include shaves, scalp treatments, manicures and facials. They are skilled in the use of equipment such as scissors, razors, clippers, curling irons, and hand dryers. Barbers must be conscious of shop cleanliness and keep all tools sterilized to prevent the spread of disease. Some barbers sell lotions, tonics, and other cosmetic supplies. A barber license authorizes its holder to practice all phases of barbering. An additional license is required for instructors. Specialty licenses are available for manicurists, wig specialists, and barber technicians.

JOB REQUIREMENTS

- good communication skills
- understanding and patience with customer
- finger dexterity
- eye to hand coordination
- physical stamina

LICENSE REQUIREMENTS (VACS 8407a) (22 TAC 51.51)

- at least 16 years of age
- specialized education and/or training
- physician's statement certifying good health

Examination

- written
- practical demonstration

Restrictions on Licensing

- gross malpractice
- practice by a person knowingly having a contagious disease
- fraudulent or deceptive advertising
- conviction of crime related to barbering

Approximate Fees as of May 1992

- \$ 10.00 for examination
- \$100.00 for license
- \$100.00 for biennial license renewal

For more information on licensing requirements. CONTACT :

State Board of Barber Examiners
9101 Burnet Road, Suite 103
Austin, Texas 78758
512/835-2040

EDUCATION/TRAINING

- 1,500 hours in not less than nine months at a barbering school or practical experience from a barber during training
- 300 hours of instruction for manicurist
- 300 hours of instruction for wig specialist
- 300 hours of instruction for barber technician
- 1,000 hours in not less than six months at a barbering school for a teacher

For a listing of schools. CONTACT:

State Board of Barber Examiners

WORKING CONDITIONS

- clean, pleasant surroundings
- may work long hours
- work requires standing

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Barbering as a career offers variety and flexibility. It is a people-oriented business and many barbers are active in community service. In recent years the demand for barbers has decreased. The shift in consumer preferences from conventional grooming techniques to more personalized styles has enormously effected the occupation in Texas.

In 1989, 4,200 barbers were employed in Texas. The projected statewide employment figure for 2000 is 4,800. Total annual average job openings will be 155 -- 55 due to growth and 100 due to labor turnover. Texas statewide average hourly wage is estimated at \$6.17.

Income depends on location, salesmanship, and personal goals. Many barbers prefer to become shop owners; others prefer the commission system without ownership of the shop. Some will elect to become instructors at barber schools.

For more information on a career in barbering. CONTACT :

State Board of Barber Examiners
9101 Burnet Road, Suite 103
Austin, Texas 78758
512/835-2040

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	Yes, 16
Examination required?	Yes

JOB DESCRIPTION

Boxing promoters arrange, advertise, or conduct boxing contests, matches, or exhibitions. Boxing promoters must strictly adhere to the rules and regulations concerning the industry in Texas, which has the most comprehensive set of safety measures affecting boxing in the United States today. Promoters, as well as boxers, managers, referees, seconds, judges, timekeepers, and matchmakers, must be licensed by the Texas Department of Licensing and Regulation. The license is valid only in the incorporated limits of the city for which it is granted.

JOB REQUIREMENTS

- communication skills
- ability to motivate people
- understanding of business practices

LICENSE REQUIREMENTS (VACS 8501-1) (16 TAC 61.1)

- \$10,000 for broker estate if person dies from injuries
- financial statement prepared by CPA or \$10,000 performance bond
- surety bond or \$5,000
- insurance coverage (minimum limit of \$10,000 for injuries)

Examination

- hearing (in Austin)

Restrictions on Licensing

- violation of laws or rules and regulations related to boxing

Approximate Fees as of May 1992

- \$500.00 minimum license fee
- \$300.00 minimum surety bond
- related licensing fees: manager-\$75.00; matchmaker-\$75.00; referee-\$25.00; seconds-\$10.00; and boxer-\$15.00

For more information on licensing requirements, CONTACT :

Texas Department of Licensing and Regulation
Post Office Box 12157
Austin, Texas 78711
512/463-5522

EDUCATION/TRAINING

- no specified education or training

WORKING CONDITIONS

- may work in office, arena, or gymnasium
- may work irregular hours

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

In 1992, there were 17 registered boxing promoters in Texas. Roughly half of these work for national management entities concerned with the promotion of closed-circuit exhibitions of boxing events. Approximately a half-dozen actively promote live boxing matches. Most of these are located in the larger urban areas of the state.

For more information on a career in boxing promotion, CONTACT :

Texas Department of Licensing and Regulation
Post Office Box 12157
Austin, Texas 78711
512/463-5522

AT A GLANCE . . .

Postsecondary schooling?	No
Minimum age requirement?	No
Examination required?	No

JOB DESCRIPTION

A child care administrator supervises and runs a 24-hour facility in which children live. The administrator is responsible for the home's program and personnel, ensuring that the children are offered appropriate activities for their development, education and/or therapy. The administrator may have an ownership interest in the facility and may share duties with other people.

JOB REQUIREMENTS

- interest in welfare of children
- patience
- flexibility
- creativity
- knowledge of business practices

LICENSE REQUIREMENTS (Human Resources Code 43.001) (40 TAC 85.5001)

- good moral character and ethical commitment
- sound physical and emotional health
- specialized education and training
- medical information, transcripts, and references

Examination

- demonstrate competency in the field of child care administration
- Texas law
- management principles

Restrictions on Licensing

- conviction of any felony, or misdemeanor involving fraud or deceit
- addiction to drugs or intemperate use of alcohol
- gross negligence

Approximate Fees as of May 1992

- \$25.00 for examination
- \$50.00 for license
- \$50.00 for biennial renewal

For more information on licensing requirements. CONTACT :

Texas Department of Human Services
Child Care Administrators' Licensing, W-403
Post Office Box 149030
Austin, Texas 78714-9030
512/450-3255

EDUCATION/TRAINING

- master's or doctoral degree in social work or related area of study, and one year experience in management/supervision of child care personnel and programs; OR
- bachelor's degree and two years experience in child care or closely related field and one year experience in management/supervision of child care personnel programs; OR
- associate degree from junior college and four years experience and at least one year experience in management/supervision of child care personnel and programs; OR
- high school diploma or equivalent and six years experience and at least one year experience in management/supervision of child care personnel and programs;
- 15 hours of acceptable continuing education required for renewal

For a listing of schools, CONTACT:

Texas Department of Human Services

WORKING CONDITIONS

- housing and maintenance sometimes provided
- may have office off campus
- flexible hours
- travel

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Child care administrators may direct a small program for a few children or a large facility with commensurate responsibilities. Employment opportunity and salary ranges vary with the setting. In general, there is low turnover and high longevity among child care administrators. In 1992 there were 918 registered child care administrators in Texas.

For more information on a career in child care, CONTACT :

Texas Executives of Homes for Children
Children's Home of Lubbock
Post Office Box 2824
Lubbock, Texas 79408
806/762-0481

Council on Social Work Education
CSWE Accreditation
1744 R Street, NW
Washington, DC 20009
202/667-2300

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	No
Examination required?	Yes

JOB DESCRIPTION

Chiropractic medicine is concerned with the proper function of the nervous system as it relates to the body as a whole. This approach to health care stresses the patient's overall health and well-being. Chiropractors encourage the use of natural, non-surgical health treatments. Postural and spinal analysis, involving correct alignment of the vertebrae, is unique to chiropractic. Treatments used may include heat, ultrasound, massage, light, diet, water, exercise, and rest; chiropractors are not permitted to prescribe drugs or use surgery to treat their patients. Chiropractors may take diagnostic X-rays as a part of their treatment methods, but Texas law prohibits the use of X-ray or radium therapy.

JOB REQUIREMENTS

- keen sense of observation
- manual dexterity
- ability to work independently

LICENSE REQUIREMENTS (VACS 4512b) (22 TAC 71)

- at least 18 years of age
- good moral character
- specialized education and training

Examination

- written, including law and Board rules
- practical
- all required and optional parts of examination given by the National Board of Chiropractic Examiners, including a written clinical competency exam

Restrictions on Licensing

- conviction of a felony, or conviction of a crime involving moral turpitude or involving the obtaining of an abortion
- grossly unprofessional conduct
- deception or fraud in practice or advertising
- intemperance or drug addiction

Approximate Fees as of May 1992

- \$125.00 for application
- \$322.00 for written and practical examination
- \$322.00 for annual renewal

For more information on licensing requirements. CONTACT :

Texas Board of Chiropractic Examiners
8716 Mopac North, Suite 301
Austin, Texas 78759
512/343-1895

EDUCATION/TRAINING

- 60 semester hours of acceptable health science college courses at the undergraduate level other than those in chiropractic school
- graduation from a bona fide, reputable chiropractic school
- classroom and practical studies required as part of training
- for renewal, at least two days per year of continuing education approved by the Board

For a listing of schools. CONTACT :

Texas Board of Chiropractic Examiners

WORKING CONDITIONS

- sanitary, pleasant office environment
- may work evenings and weekends

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

There are two areas of specialization within the field of chiropractic medicine. A Chiropractic Roentgenologist specializes in taking, processing, and interpreting diagnostic X-ray films, and a Chiropractic Orthopedist specializes in prevention of skeletal deformities. The majority of chiropractors are self-employed and establish private practices. Approximately 30% of chiropractors are in group practice. Some chiropractors return to the schools and teach or conduct research in their fields. About 60% of chiropractors work in communities with populations of less than 100,000.

In 1989, 2,100 chiropractors were employed in Texas. The projected statewide employment figure for 2000 is 3,200. Total annual average job openings will be 160 -- 100 due to growth and 60 due to labor turnover. Texas statewide average hourly wage is estimated at \$16.32.

As the practice of chiropractic medicine gains wider acceptance by the public and insurance carriers, employment may continue to be very good. However, graduates and enrollment in recent years have both been high and may contribute to competition.

For more information on a career in chiropractic medicine. CONTACT :

Texas Chiropractic Association
6448 Highway 290 East, Suite D-110
Austin, Texas 78723
512/454-4551

AT A GLANCE . . .

Postsecondary schooling?	Yes, 6 years
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

Cosmetologists provide personalized services designed to help people look attractive. These include hair styling, facials, manicures, and wig styling. They must be skilled in the use of various tools such as scissors, razors, hair dryers, and curling irons. Cosmetologists are familiar also with chemical preparations used in hair coloring, waving, and straightening. A cosmetologist should be able to advise patrons on the best hair style and treatment for them. The operator license authorizes its holder to practice all phases of cosmetology, including any specialty. An additional license is required to be an instructor. Specialty certificates are available for particular skills such as manicuring, shampooing, hair weaving, or facials.

JOB REQUIREMENTS

- finger dexterity
- sense of form and design
- physical stamina
- ability to deal with customers in a pleasant manner

LICENSE REQUIREMENTS (VACS 8451a) (22 TAC 89)

- at least 16 years of age
- specialized education and/or training
- health certificate required

Examination

- practical demonstration
- theory tests

Restrictions on Licensing

- false or misleading advertising
- fraud in obtaining license
- gross malpractice

Approximate Fees as of May 1992

- \$25.00 for examination/student permit
- \$35.00 for license
- \$35.00 for biennial renewal
- \$35.00 for limited specialty certificate

For more information on licensing requirements. CONTACT :

Texas Cosmetology Commission
Post Office Box 26700
Austin, Texas 78755-0700
512/454-4674

EDUCATION/TRAINING

- completion of 7th grade or equivalent
- 1500 hours of instruction in a licensed beauty culture school; OR
- 1000 hours of instruction in beauty culture courses and 500 hours of related high school vocational courses

For a listing of schools, CONTACT:

Texas Cosmetology Commission

WORKING CONDITIONS

- may work long hours, as well as weekends and evenings
- constant standing
- clean, pleasant surroundings

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Recent graduates of cosmetology school usually gain experience and customers by working for an established salon. As they build a clientele, many become independent salon owners or managers. About one-half of all cosmetologists operate their own businesses; about two-fifths work part-time. Some return for advanced training and become instructors in beauty schools. Cosmetologists are found in all areas of the country, with a greater concentration in the larger cities.

In 1989, 38,100 cosmetologists were employed in Texas. The projected statewide employment figure for 2000 is 42,850. Total annual average job openings will be 830 -- 430 due to growth and 400 due to labor turnover. Texas statewide average hourly wage is estimated at \$6.17.

Salaries are generally paid as commissions, but a cosmetologist may rent chair space in a salon and provide service on a semi-independent basis. Earnings depend on size and location of the salon, patrons' tipping habits, competition from other salons, and the cosmetologist's ability to attract and hold regular customers.

For more information on a career in cosmetology, CONTACT :

Texas Cosmetology Association
Post Office Box 14158, Suite 101
Fort Worth, Texas 76117
817/838-6678

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	Yes, 16
Examination required?	Yes

JOB DESCRIPTION

Counselors assist individuals or groups in understanding personal problems, defining goals, and planning actions reflecting their interests, abilities, aptitudes, and needs as they relate to personal-social concerns, educational progress, and careers. They administer and interpret tests to assess aptitudes, attitudes, interests, and personal characteristics, and provide assistance in solving current or potential problems of individuals or groups. They may refer clients to other professionals. Counselors may also be involved in research, or work in elementary and secondary schools.

JOB REQUIREMENTS

- respect and concern for the individual
- communication skills
- emotional stability

LICENSE REQUIREMENTS (VACS 4512g) (22 TAC 681)

- 18 years of age
- master's degree or equivalent
- specialized education and training

Examination

- written examination; OR
- any other examination prescribed by the Board

Restrictions on Licensing

- violation of ethics or law regarding counselors
- commitment to mental institution
- conviction of a felony, or misdemeanor if crime relates to duties and responsibilities of a professional counselor
- abuse of alcohol or drugs

Approximate Fees as of May 1992

- \$30.00 for application
- \$50.00 for examination
- \$36.00 for license
- \$30.00 for specialty designation
- \$30.00 for specialty exam
- \$40.00 for annual renewal (without specialty)
- \$60.00 for annual renewal (with specialty)

For more information on licensing requirements, CONTACT :

Texas State Board of Examiners of Professional Counselors
1100 West 49th Street
Austin, Texas 78756-3183
512/458-7511

EDUCATION/TRAINING

- a graduate degree from an accredited university
- completion of planned graduate program of 45 semester hours in counseling, including 300 clock hours of supervised practicum approved by Board
- 24 months or 2,000 hours supervised experience
- 75 clock hours of continuing education during each 3-year period required for license renewal

For a listing of schools. CONTACT :

Texas State Board of Examiners of Professional Counselors

WORKING CONDITIONS

- work space may be limited, but privacy usually assured
- may work outside of office, at home or job sites of clients
- extensive public and interpersonal contact
- hours may be irregular

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Some of the primary areas in which counselors work are private practice, state agencies, hospitals, college campus counseling centers, career planning and placement offices, rehabilitation centers, or elementary and secondary schools. Growth will be slowest among school counselors, reflecting diminished enrollments. More opportunity is expected for counselors who specialize in marital and family problems, substance abuse, and aging. Job opportunities may be best in community and social service agencies, and in the human resource and employee assistance programs in private business and industry.

In 1989, 8,750 counselors were employed in Texas. The projected statewide employment figure for 2000 is 12,100. Total annual average job openings will be 480 -- 305 due to growth and 175 due to labor turnover. Texas statewide average hourly wage is estimated at \$14.88.

For more information on a career in counseling. CONTACT :

Texas Association for Counseling and Development
316 West 12th Street, Suite 402
Austin, Texas 78701
512/472-3403

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

Court reporters record verbatim testimony in legal proceedings. They may use written shorthand, a shorthand machine, or oral stenography to record word-for-word statements in court. They then transcribe their notes, creating the official court record of a trial or other proceeding. Shorthand reporters are often employed by a court, but also may work for attorneys and state and federal agencies. Some also freelance, recording proceedings of meetings, conventions, and other private activities.

JOB REQUIREMENTS

- professional appearance
- commitment to service
- ability to deal with all kinds of people
- exceptional speed and accuracy
- adaptability to rapidly changing technology

LICENSE REQUIREMENTS (Government Code 52.001)

- specialized education and training
- certification in either written shorthand, machine shorthand, oral stenography, or any other method authorized by Supreme Court of Texas

Examination

- oral -- dictation/transcribing
- written -- grammar, punctuation, legal and medical terminology, and Texas Court Procedures

Restrictions on Licensing

- criminal offense involving moral turpitude, fraud or corruption

Approximate Fees as of May 1992

- \$ 85.00 for application
- \$ 75.00 for oral and written examination
- \$100.00 for biennial license renewal

For more information on licensing requirements, CONTACT :

Court Reporters Certification Board
Post Office Box 13131
Austin, Texas 78711-3131
512/463-1630

EDUCATION/TRAINING

- experience, education, or training sufficient to allow applicant to fulfill the responsibilities of a court reporter

For a listing of schools. CONTACT:

Court Reporters Certification Board

WORKING CONDITIONS

- office-like conditions and/or courtroom
- hours may be flexible
- may work under pressure

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

In 1989, 4,650 court reporters were employed in Texas. The projected statewide employment figure for 2000 is 4,000. Total annual average job openings will be 100 -- 0 due to growth and 100 due to labor turnover. Texas statewide average hourly wage is estimated at \$10.06.

Earnings may vary depending on speed, education, experience, and geographic location. Earnings are generally higher in large cities than in rural areas.

For more information on a career in court reporting. CONTACT :

Texas Shorthand Reporters Association
940 E. 51st Street
Austin, Texas 78751-2241
512/454-8626

AT A GLANCE . . .

Postsecondary schooling?	No
Minimum age requirement?	No
Examination required?	Yes

JOB DESCRIPTION

Dental hygienists are a part of the dental health team. They work under the supervision of a licensed dentist and duties may include cleaning and polishing teeth, taking X-rays, tending sutures, performing fluoride treatments, and administering pit and fissure sealants. Dental hygienists also instruct patients on proper oral health care and preventive dentistry. At times, the hygienist may be called upon to schedule appointments and to act as office manager.

JOB REQUIREMENTS

- manual dexterity
- ability to work with others
- personal neatness and cleanliness

LICENSE REQUIREMENTS (VACS 4551e) (22 TAC 103)

- at least 18 years of age
- graduation from an accredited high school or equivalent
- specialized education and training

Examination

- written, oral, or practical demonstration, or combination
- Texas law relating to dental hygiene

Restrictions on Licensing

- fraud in obtaining license
- conviction of a felony involving moral turpitude
- dishonest or illegal practice of dental hygiene
- habitual addiction to drugs, including alcohol
- malpractice or gross incompetence

Approximate Fees as of May 1992

- \$75.00 for examination
- \$50.00 for annual renewal

For more information on licensing requirements, CONTACT :

Texas State Board of Dental Examiners
327 Congress Avenue, Suite 500
Austin, Texas 78701
512/477-2985

EDUCATION/TRAINING

- graduation from an accredited school or college of dentistry or dental hygiene with not less than two terms of instruction, each lasting eight months
- proof of training in cardiopulmonary resuscitation (CPR), or proof that person is not physically able to complete CPR training

For a listing of schools. CONTACT:

Texas State Board of Dental Examiners

WORKING CONDITIONS

- sanitary office environment
- close contact with clients
- may have flexible hours

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Dental hygienists are most often employed in private dental offices. Many work part-time at one or more offices, similar to freelancing. In order to teach children preventive dentistry, school systems have become a major employer of hygienists. Hygienists with bachelor's or master's degrees often become researchers, teachers, administrators, or directors of dental health programs. Other possible employers are the Armed Forces, hospitals, dental clinics, or factories. Positions are usually more abundant in urban areas with a large concentration of dentists.

In 1989, 4,200 dental hygienists were employed in Texas. The projected statewide employment figure for 2000 is 6,200. Total annual average job openings will be 265 -- 180 due to growth and 85 due to labor turnover. Texas statewide average hourly wage is estimated at \$10.28.

The increased awareness of preventive dentistry and the implementation of dental care programs in schools and factories are the primary catalysts of occupational growth.

For more information on a career in dental hygiene. CONTACT:

Texas Dental Hygienists Association
Post Office Box 141282
Austin, Texas 78714
512/873-0303

AT A GLANCE . . .

Postsecondary schooling?	Yes, 2-4 years
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

Dentists diagnose and treat diseases of the teeth and mouth tissues by various methods, including extraction, replacement, and oral surgery. They may design artificial teeth, straighten existing teeth, and treat gum diseases. Dentists must be highly skilled in the use of instruments such as drills, probes, and X-ray equipment. The majority of dentists are general practitioners, providing many types of dental care. Orthodontics and oral surgery are the two most common areas of specialization within the field.

JOB REQUIREMENTS

- manual dexterity
- diagnostic ability
- understanding and sympathy in dealing with patients

LICENSE REQUIREMENTS (VACS 4545) (22 TAC 101)

- at least 21 years of age
- good moral character
- specialized education and training

Examination

- written, oral, or clinical practical demonstration, or combination
- proof of graduation from dental school
- proof of passing exam for dentists given by the National Board of Dental Examiners

Restrictions on Licensing

- qualifications fraudulently obtained
- habitual addiction to drugs, including alcohol
- dishonest or illegal practice of dentistry
- conviction of a felony involving moral turpitude

Approximate Fees as of May 1992

- \$150.00 for examination
- \$100.00 for annual renewal

For more information on licensing requirements, CONTACT:

Texas State Board of Dental Examiners
327 Congress, Suite 500
Austin, Texas 78701
512/477-2985

EDUCATION/TRAINING

- four terms of eight months each at an accredited dental college
- training in cardiopulmonary resuscitation (CPR)

For a listing of schools, CONTACT:

Texas State Board of Dental Examiners

WORKING CONDITIONS

- sanitary office environment
- close physical contact with client
- regular hours

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Nine out of ten dentists enter private practice either by purchasing an established practice or opening a new office. Some dentists begin by working in a clinic or with a group practice. There are also opportunities in hospitals and dental laboratories. Some dentists pursue teaching careers in dental colleges. The government employs dentists, specifically in the Armed Forces and Public Health Service. The need for dentists is usually greatest in urban areas; however, in small communities dentists can rapidly develop a large clientele.

In 1989, 9,300 dentists were employed in Texas. The projected statewide employment figure for 2000 is 13,100. Total annual average job openings will be 610 -- 345 due to growth and 265 due to labor turnover. Texas statewide average hourly wage is estimated at \$21.78.

Growing public awareness of the benefits of preventive dentistry and the extension of dental insurance coverage contribute to growth.

For more information on a career in dentistry, CONTACT:

Texas Dental Association
1946 South IH 35, Suite 400
Austin, Texas 78704
512/443-3675

AT A GLANCE . . .

Postsecondary schooling?	Yes, 6-8 years
Minimum age requirement?	Yes, 21
Examination required?	Yes

JOB DESCRIPTION

Dietitians apply scientific principles of nutrition to different health, social, cultural, physical, psychological, and economic conditions to help provide proper nourishment, care, and education of individuals or groups. They may develop, manage, and provide nutrition services. Dietitians may be in charge of large-scale meal planning and preparation (as in schools or prisons), or may work with doctors and other medical personnel to plan individual patients' diets and instruct them in their requirements. Dietitians also counsel individuals or groups on sound nutrition practices, teach, or conduct research.

JOB REQUIREMENTS

- scientific aptitude
- business and organizational skills
- ability to work with a variety of people

LICENSE REQUIREMENTS (VACS 4512h) (22 TAC 711)

- specialized education and training

Examination

- Board-approved competency examination administered by a national testing service

Restrictions on Licensing

- violation of licensing act
- violation of Code of Ethics

Approximate Fees as of May 1992

- \$54.00 for license (includes initial license)
- \$24.00 for annual renewal

For more information on licensing requirements, CONTACT:

Texas Department of Health
Texas State Board of Examiners of Dietitians
1100 West 49th Street
Austin, Texas 78756-3183
512/834-6601

EDUCATION/TRAINING

- bachelor's or graduate degree with major in human nutrition, food and nutrition, dietetics, or food systems management, or equivalent
- internship or preplanned professional experience approved by Board

For a listing of schools. CONTACT:

Texas State Board of Examiners of Dietitians

WORKING CONDITIONS

- vary depending on work setting (see below)

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Over half of all dietitians work in hospitals, nursing homes, and other health care facilities. Some dietitians work as consultants, while others may be employed by colleges, school systems, child care facilities, or restaurants. Other jobs can be found in settings such as public health programs, community organizations, government agencies and the Armed Forces. An experienced dietitian may advance to assistant director or director of a dietetic department. Other avenues of advancement are teaching and research.

In 1989, 2,500 dietitians were employed in Texas. The projected statewide employment figure for 2000 is 3,450. Total annual average job openings will be 145 -- 85 due to growth and 60 due to labor turnover. Texas statewide average hourly wage is estimated at \$11.35.

The positive outlook for dietitians is conditioned by the general factors that underlie the anticipated rapid growth in the health services industry, particularly the growing population of the elderly and the extended services coverage of public and private health insurance.

For more information on a career in dietetics. CONTACT:

Texas Dietetic Association
1033 La Posada, Suite 220
Austin, Texas 78752-3824
512/454-8626

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	No
Examination required?	Yes

JOB DESCRIPTION

EMTs deliver pre-hospital emergency care at the scene of an accidental injury or sudden illness. They care for patients by using basic life support skills such as CPR, bleeding control techniques, fracture care, treatment of shock and assistance in childbirth. Some EMTs are trained to provide advanced life support. EMTs use their skills under the supervision of a physician, through radio communication and written protocols.

EMTs work at different levels: 1) Emergency Care Attendants (ECA) may work on ambulances in Texas in areas where there are few EMTs, 2) Emergency Medical Technicians (EMT) provide basic life support such as CPR, bleeding control, bandaging and splinting, and oxygen, 3) Emergency Medical Technician-Intermediate (EMT-I) establishes intravenous lifelines and provides advanced airway maintenance, and 4) Emergency Medical Technician-Paramedic (EMT-P) administers advanced cardiac care and medications.

JOB REQUIREMENTS

- physical endurance
- mental alertness
- emotional stability

CERTIFICATION REQUIREMENTS (Health & Safety Code, Chapter 773) (25 TAC 157)

- at least 18 years of age
- valid driver's license, preferably with a safe driving record
- specialized education and/or training

Examination

- written
- physical

Restrictions on Licensing

- Individuals with Felony or Misdemeanor convictions are subject to evaluation to determine eligibility

Approximate Fees as of May 1992**ECA:**

- \$ 50.00 initial certification
- \$ 50.00 renewal

EMT:

- \$ 50.00 initial certification
- \$ 50.00 renewal

EMT-I:

- \$ 75.00 initial certification
- \$ 75.00 renewal

EMT-P:

- \$ 75.00 initial certification
- \$ 75.00 renewal

For more information on certification requirements, CONTACT:

Texas Department of Health
Bureau of Emergency Management
1100 West 49th Street
Austin, Texas 78756-3199
512/458-7550

EDUCATION/TRAINING

ECA:

- 40 hours classroom training

EMT:

- 100 hours classroom training
- 20 hours clinical (in hospital) training
- Field Internship - 3 supervised runs (in vehicle)

EMT-I:

- 60 hours classroom training
- 50 hours clinical (in hospital) training
- Field Internship - 50 hours (in vehicle)

EMT-P:

- 160 hours classroom training
- 140 hours clinical (in hospital) training
- Field Internship - 100 hours (in vehicle)

WORKING CONDITIONS

- evening, holiday and weekend work, full or part time
- involves being on call in case of emergencies
- shift work usual
- irregular hours

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

EMTs may work in many settings including: hospitals, industrial sites, air ambulances, private EMS providers, city fire departments, law enforcement offices, special rescue groups, or community volunteer groups.

In 1985, there were 20,055 certified EMS personnel (includes unpaid volunteers) working for Texas EMS providers. This figure is projected to reach 28,275 by 1995.

Annual salaries for the Basic EMTs range from \$15,000 to over \$20,000 nationwide. Paramedic salaries may be as high as \$30,000 after several years of experience. For career advancement, some EMTs move into training or administrative positions. Certification is available as EMS Instructor, Coordinator or Examiner. These positions are found in training programs and as training officers for EMS providers. Administrative and Management positions may include operations manager, personnel director, vehicle maintenance supervisor, field supervisor, field evaluator, director of an EMS department and more. Some of these positions will require additional training or education as well as some years of experience. Salaries may increase to \$35,000 and up for more responsible positions. Larger EMS systems usually have higher salaries and more benefits than smaller ones.

For more information on a career as an EMT, CONTACT:

National Association of EMTs
9140 Ward Park
Kansas City, Missouri 64114
816/444-3500

Texas Association of EMTs
P.O. Box 1243
Leander, Texas 78641
512/259-3682

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

Professional engineers apply scientific and mathematical principles to practical, technical problems. They design machinery, products, systems and processes for efficient and economical performance. Some of the more than 16 major branches of engineering include aeronautic, chemical, civil, electrical, industrial, mechanical, nuclear, petroleum, and structural engineering.

JOB REQUIREMENTS

- analytical mind
- creativity
- attention to detail

LICENSE REQUIREMENTS (VACS 3271a) (22 TAC 131)

- good moral character
- specialized education and/or training

Examination

- two written engineering exams
- personal references required

Restrictions on Licensing

- fraud or deceit in obtaining registration
- gross negligence, incompetence, or misconduct in practice
- violation of any provision of engineering law or regulations
- conviction for criminal offense

Approximate Fees as of May 1992**Engineer**

- \$ 50.00 for registration*
- \$100.00 for examination
- \$ 75.00 for annual renewal*
- \$ 50.00 for reciprocal registration*

*plus \$200.00 additional fee imposed by the State Legislature

Engineer-in-Training

- \$ 15.00 for certification

For more information on licensing requirements. CONTACT:

State Board of Registration for Professional Engineers
Post Office Drawer 18329
Austin, Texas 78760
512/440-7723

EDUCATION/TRAINING

Engineer:

- graduation from a four-year Board-approved curriculum in engineering and passage of two eight-hour engineering examinations, plus an additional four years or more of experience in the active practice in engineering work (effective 9-1-92); OR
- graduation from a four-year curriculum in engineering or related science and passage of the two eight-hour engineering examinations, plus an additional eight years or more of active practice in engineering work (effective 9-1-91);
- responsible charge of engineering teaching may be construed as responsible charge of engineering work

Engineer-in-Training:

- graduation from a Board-approved engineering curriculum and passage of the Board's eight-hour examination in the fundamentals of engineering, OR
- graduation from an engineering or related science curriculum and passage of the Board's eight-hour examination in the fundamentals of engineering

For a listing of schools. CONTACT:

Texas State Board of Registration for Professional Engineers

WORKING CONDITIONS

- variable working environments (office, plant, laboratory, outdoor sites)
- may work odd hours and overtime
- may be required to travel

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Engineers are employed by government agencies, construction services, and educational institutions; more than half are employed by manufacturing industries. Experienced engineers may move to administrative positions or return to college for graduate degrees in management or law. Generally, the best opportunities are found in urban areas.

Engineering is one of the fastest growing occupations. The employment outlook for engineers in Texas depends on the branch of engineering. In 1989, 102,250 engineers were employed in Texas. The projected statewide employment figure for 2000 is 127,200. Total annual average job openings will be 4,855 -- 2,285 due to growth and 2,570 due to labor turnover. Texas statewide average hourly wage is estimated at \$17.63 to \$22.25.

For more information on a career in engineering. CONTACT:

Texas Society of Professional Engineers
Post Office Box 2145
Austin, Texas 78768
512/472-9286

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	No
Examination required?	Yes

JOB DESCRIPTION

Fire protection personnel, or firefighters, are full-time, paid personnel employed by the state or by local governments. Their duties include fire suppression, inspection, arson investigation, marine fire fighting, aircraft crash and rescue, and training and education. In smaller communities an officer may have responsibility for any or all of these duties. In larger areas an officer is assigned to more specialized duties. Other activities may include rescuing victims, administering emergency medical aid, ventilating smoke-filled areas, and salvaging the contents of a building. Firefighters may also drive ambulances, operate emergency rescue vehicles, and pilot fireboats.

JOB REQUIREMENTS

- mental alertness
- physical endurance
- emotional stability
- mechanical aptitude

**LICENSE REQUIREMENTS (VACS 4413[35])
(Gov't Code 419.021 Municipal, 419.071 Volunteer)**

- at least 18 years of age
- honorable military discharge (if applicable)
- emotional and psychological health

Examination

- physical
- psychological
- background
- written

Restrictions on Licensing

- conviction of a felony
- violation of any rule or standard of the Commission
- conviction of drug dependency or any illegal drug usage

Approximate Fees as of May 1992

- \$20.00 for license
- \$20.00 for annual renewal

For more information on licensing requirements, CONTACT:

Texas Commission on Fire Protection
Post Office Box 2286
Austin, Texas 78768-2286
512/322-3550

EDUCATION/TRAINING

- satisfactory completion of basic program of training in fire protection at a school approved or operated by the Commission

For a listing of schools, SEE:

Schools Certified by the Commission on Fire Protection Personnel Standards and Education

WORKING CONDITIONS

- weekend and night duty (average 56-hour work week)
- subject to call at any time in case of emergencies
- hazardous, stressful work
- continuous mental and physical preparation

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Most new recruits are assigned to duty at a fire station. Nine out of ten firefighters work in municipal fire departments; the remainder work at county fire departments or state and federal installations, including airports. A few firefighters are employed by private companies. Three to five years experience is usually prerequisite to a promotion. A promotion to a higher level usually requires the acquisition of expertise in advanced fire fighting equipment and techniques, building construction, emergency medical techniques, writing, public speaking, management and budgeting procedures, and labor relations. Advancement is achieved through written examinations, evaluation of job performance, and seniority.

In 1989, 15,450 fire protection personnel/firefighters were employed in Texas. The projected statewide employment figure for 2000 is 17,200. Total annual average job openings will be 535 -- 160 due to growth and 375 due to labor turnover. Texas statewide average hourly wage is estimated at \$9.22 to \$14.88. Most of this growth should occur in small communities where career firefighters will replace volunteers. Little growth is indicated for large, urban fire departments.

Fire fighting is an attractive occupation because a high school education is sufficient, (although an increasing number of applicants to this field have some college education). Fire fighting offers retirement and disability pensions, merit promotions, and relatively high earnings in some of the larger Texas cities.

For more information on a career in fire protection/fighting, CONTACT:

Texas State Association of Fire Fighters
1106 Lavaca, Suite 101
Austin, Texas 78701
512/478-3798

AT A GLANCE . . .

Postsecondary schooling?	No
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

Fire protection system contractors plan, sell, lease, install, maintain, and service equipment and systems to detect, extinguish, control, or contain fires. There are separate, yet similar, rules and regulations governing three licensed areas of fire protection: fire protection sprinkler systems, fire detection and alarm devices, and fixed and portable fire extinguishers. Each individual or business contracting in any one of these areas must obtain a certificate of registration valid for that area. Moreover, each business must employ an individual licensed in the area for which the business has certification. The properly licensed employee performs and/or supervises the work on-site.

JOB REQUIREMENTS

- mechanical and technical aptitude
- concern for safety

LICENSE REQUIREMENTS (Insurance Code 5.43-1,2,3) (37 TAC 521, 531, 541)

Registration

- certificate of liability insurance (\$100,000/\$300,000)

License

- proof of registration in Texas as a professional engineer; OR
- successful completion of examination

Examination

- NICET examination at level III for RME automatic sprinkler system license and fire extinguisher license, Type PL
- NICET examination at level II for fire alarm planning superintendent license
- examination by state fire marshal on rules and regulations or technical information

Restrictions on Licensing

- fraudulent representation in obtaining or attempting to obtain license or registration
- violation of fire protection system contractor rules or articles

Approximate Fees as of May 1992

Certificate of registration

Sprinkler systems

- \$ 50 application
- \$ 900 initial registration
- \$1800 biennial renewal

Alarm systems

- \$ 500 initial
- \$1,000 biennial renewal

Extinguisher systems

- \$450 initial, Type A, B, PL
- \$600 biennial renewal
- \$250 initial, Type C
- \$300 biennial renewal

License

- \$ 50 examination fee
- \$175 license, RME
- \$350 biennial renewal

- \$ 20 examination fee
- \$100 initial, technician
- \$200 biennial renewal
- \$100 initial, planning superintendent
- \$200 biennial renewal

- \$ 20 examination fee
- \$ 50 initial, Type PL
- \$100 biennial renewal
- \$ 50 initial, Type A, B
- \$100 biennial renewal

For more information on licensing requirements, CONTACT:

Texas State Fire Marshal - Division 30
 1110 San Jacinto
 Austin, Texas 78701-1998
 512/322-3550

EDUCATION/TRAINING

- technical training provided by manufacturer of fire extinguisher systems or employer

WORKING CONDITIONS

- involves indoor and outdoor work
- generally work normal business hours
- may be subject to deadlines

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Demand for planning and installation of new fire protection systems is linked to the construction industry and fluctuates with the economic conditions. When new construction is slow, there may be work in building conversions and system upgrading, especially for fire detection and alarm devices. Maintenance and service of fire protection systems is regularly required. In 1992, there were 494 registered fire protection system contractors in Texas.

For more information on a career as a fire protection system contractor, CONTACT:

Texas Fire Sprinkler Contractors Association
Post Office Box 920952
Houston, Texas 77292
713/468-8800

Texas Fire Alarm Association
Post Office Box 7279
Tyler, Texas 75711
1-800/442-8261

AT A GLANCE . . .

Postsecondary schooling?	No
Minimum age requirement?	No
Examination required?	Yes

JOB DESCRIPTION

Fish farmers engage in the business of producing, propagating, transporting, processing, and selling farm-raised fish or shellfish. The fish crop is cultivated in a private pond, vat, or other structure capable of holding fish in confinement wholly within an enclosed, assigned parcel of property. Farmers assist the fertilization and incubation of eggs, regulate and monitor the holding tank environment, provide nutritious feeds to the fingerlings, and prepare the crop for market. The Texas Department of Agriculture licenses and regulates fish farmers and their operations.

JOB REQUIREMENTS

- aptitude for biology
- technical and mechanical aptitude
- ability to maintain accurate records
- understanding of business principles

LICENSE REQUIREMENTS (Agricultural Code Chapter 134) (31 TAC 361)

- aquaculture license

Examination

- none

Restrictions on Licensing

- violation of rules or regulations regarding fish farming

Approximate Fees as of May 1992

- \$100.00 fee for fish farmer biennial license

For more information on licensing requirements, CONTACT:

Texas Department of Agriculture
Fish Farmer Program
1700 North Congress
Austin, Texas 78711
512/463-7624

EDUCATION/TRAINING

- biology background suggested

For a listing of schools, CONTACT:

Texas Department of Agriculture/Fish Farmer Program, OR

Texas A&M University-Wildlife & Fisheries Sciences

WORKING CONDITIONS

- long hours, constant vigilance
- work both indoors and outdoors
- may require travel

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Fish farming is a recent development in agriculture that may enhance farm income, promote diversification, and assist water and soil conservation. Aquaculture and mariculture are the two areas of fish farming currently receiving attention in Texas. Crawfish and catfish farming offer encouraging prospects within aquaculture. In 1992 there were 412 registered fish farmers in Texas.

Besides regulating and licensing fish farming, the Department of Agriculture provides technical assistance, promotes fish farm products, coordinates support through schools and government entities, and solicits financial assistance from the federal government.

For more information on a career as a fish farmer, CONTACT:

Texas Aquaculture Association
Post Office Box 13285 Capital Station
Austin, Texas 78711
512/474-4600

State Crawfish Association
Post Office Box 22
Bay City, Texas 77414
409/245-0761

AT A GLANCE . . .

Postsecondary schooling?	No
Minimum age requirement?	No
Examination required?	No

JOB DESCRIPTION

Funeral directors are responsible for all details necessary for services and burial of the deceased. They arrange for the funeral service, casket choice, transportation of the body, and viewing arrangements. They usually handle the writing of obituaries for the newspapers and may make the cemetery arrangements. They work closely with the family of the deceased, offering guidance in times of stress.

Embalmers preserve the body of the deceased for sanitary and cosmetic reasons and may repair disfigurements or improve the appearance. Embalmers may also assist pathologists during autopsies.

JOB REQUIREMENTS

- tact and understanding
- physical stamina
- emotional stability

LICENSE REQUIREMENTS (VACS 4582b) (22 TAC 203)

- Texas resident
- at least 18 years of age
- graduation from an accredited high school or equivalent
- specialized education and training

Examination

- written

Restrictions on Licensing

- conviction of a felony, or misdemeanor related to the practice of embalming or funeral directing
- deceptive advertising practices
- misconduct in providing services and merchandise
- misrepresentation of credentials
- drug addiction

Approximate Fees as of May 1992

- \$30.00 for apprenticeship registration
- \$60.00 for license
- \$60.00 for biennial renewal

For more information on licensing requirements. CONTACT:

Texas Funeral Service Commission
8100 Cameron Road, Bldg. B #550
Austin, Texas 78753
512/834-9992

EDUCATION/TRAINING

- graduation from an accredited school or college of mortuary science
- apprenticeship of 12 consecutive months to a licensed funeral director or embalmer

For a listing of schools, CONTACT:

Texas Funeral Service Commission

WORKING CONDITIONS

- work indoors
- sanitary
- regular working hours

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

After the apprenticeship period, newly licensed directors or embalmers generally are employed as trainees. In the larger funeral homes, they can advance to positions such as general manager or chief embalmer. When experienced enough, some establish their own funeral businesses. Funeral supply companies also employ morticians as sales representatives. Embalmers may be employed by hospitals or morgues. Better opportunities exist in urban areas, as the smaller communities tend to have family operated funeral homes.

Employment opportunity in funeral service occupations may continue to increase with the growing population of the elderly. In 1989, 650 embalmers and 1,600 funeral directors were employed in Texas. The projected statewide employment figure for 2000 is 800 and 2,200 respectively. Total annual average job openings for embalmers will be 25 -- 15 due to growth and 10 due to labor turnover. Texas statewide average hourly wage for embalmers is estimated at \$8.62. Total annual average job openings for funeral directors will be 85 -- 55 due to growth and 30 due to labor turnover. Texas statewide average hourly wage for funeral directors is estimated at \$15.09.

For more information on a career in funeral services, CONTACT:

Texas Funeral Directors Association
1513 South IH 35
Austin, Texas 78741
512/442-2304

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

Hearing aid dispensers measure human hearing, using an audiometer or other means, for the purpose of making selections, adaptations, and/or sales of hearing instruments. They must be able to adapt the hearing instrument to the particular needs of the client. This involves recording and evaluating audiograms and taking impressions for earmolds to insure a proper fit. They may replace defective parts, and make adjustments and repairs to the instruments.

JOB REQUIREMENTS

- ability to do precision work
- understanding of business practices
- ability to work independently

LICENSE REQUIREMENTS (VACS 4566) (22 TAC 141)

- at least 18 years of age
- high school graduate or equivalent
- specialized education and training

NOTE: A temporary training permit may be granted to any person who has not yet taken the exam, or previously held a temporary permit. This person must be employed and sponsored by a licensed hearing aid dispenser. Training permits are valid for six months, with one extension of an additional six months if necessary.

Examination

- written, oral, and practicum tests encompassing the following areas: basic physics of sound; structure and function of hearing aids; measurement of human hearing; audiograms, including speech audiogram; selection and adaptation of hearing aids; testing hearing aids; and taking earmold impressions

Restrictions on Licensing

- conviction of a felony, or a misdemeanor involving moral turpitude
- fraud, deceit, or misrepresentation in practice or advertising
- refusal to accept responsibility for a trainee's acts while on the job
- inability to perform work safely due to age, illness, drunkenness, drug use, or other condition

Approximate Fees as of May 1992

- \$125.00 for examination
- \$ 75.00 for license
- \$195.00 for annual renewal
- \$ 40.00 for temporary training permit

For more information on licensing requirements, CONTACT:

Texas Board of Examiners in the Fitting and Dispensing of Hearing Aids
4800 N. Lamar, Suite 150
Austin, Texas 78756
512/459-1488

EDUCATION/TRAINING

- graduation from an accredited high school or equivalent
- 150 hours of practicum with training in specified areas, under the direct supervision of a licensed hearing aid dispenser
- ten hours of continuing education credit or re-examination required for license renewal

WORKING CONDITIONS

- work indoors in sanitary, office-like environment
- work regular hours
- soundproof testing areas

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

A person starting out as a hearing aid dispenser generally goes to work for an experienced practitioner as a temporary training permit holder. Some individuals eventually start their own businesses or purchase established practices.

Due to the improvement of the hearing instrument and the wide acceptance of its use among the growing elderly population, there should be employment opportunity for hearing aid dispensers. However, the recent entry of audiologists with master's degrees into the hearing aid dispensing field has increased competition among newcomers, especially among those without audiology degrees. In 1992, there were 972 registered dispensers in Texas; about half held at least a master's degree and almost three quarters had a college education.

Beginning hearing aid dispensers in Texas earn an average of \$16,000. Hearing aid dispensers must work in a service area with a population of at least 30,000 in order to support their business.

For more information on a career in hearing aid dispensing. CONTACT:

Texas Hearing Aid Association
222 N. Riverside Drive
Ft. Worth, Texas 76111
817/831-0592

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

Home health aides are non-professional nursing and direct care personnel who provide personal health care services in the home. They work under the supervision of registered nurses and other health-care personnel. Home health aides assist patient with bathing, grooming, elimination, feeding, and medication that is normally self-administered, as assigned. They measure and record patient's temperature, pulse, respiratory rate, and other vital signs.

Recent legislation requires a permit for a home health medication aide to administer medication to patients of home health agencies. The Texas Board of Health is authorized to establish minimum requirements for issuance, denial, renewal, or suspension of the permit including curricula, examinations, fees, and continuing education requirements. These requirements became effective in February, 1990.

JOB REQUIREMENTS

- ability to follow instructions
- sense of responsibility
- ability to maintain accurate records

LICENSE REQUIREMENTS (Health & Safety Code, Chapter 142) (25 TAC 115)

- specialized experience or training

Examination

- competency evaluation

Restrictions on Licensing

- None

Approximate Fees as of May 1992

- None currently established

For more information on licensing requirements, CONTACT:

Texas Department of Health
Health Facility Licensure and Certification Division
1100 West 49th Street
Austin, Texas 78756-3199
512/458-7240

EDUCATION/TRAINING

- nursing school dean or director vouches for individual's competence; OR
- previous work experience; OR
- completed training program prior to 8-90; OR
- satisfactorily completed training program and/or competency evaluation.

For a listing of schools, CONTACT:

Texas Department of Health/Home Health Aide Program

WORKING CONDITIONS

- work in various home settings
- may work evenings and weekends

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Home health aides work is linked to the growth in the health care industry in general. The growing ranks of the elderly and the increasing demand for home health care services should provide expanded employment opportunity for home health aides.

In 1989, 30,500 home health aides were employed in Texas. The projected statewide employment figure for 2000 is 52,550. Total annual average job openings will be 2,640 -- 2,005 due to growth and 635 due to labor turnover. Texas statewide average hourly wage is estimated at \$6.11.

For more information on a career as a home health aide . CONTACT:

Texas Department of Health
Health Facility Licensure and Certification Division
1100 West 49th Street
Austin, Texas 78756-3183
512/458-7240

AT A GLANCE . . .

Postsecondary schooling?	No
Minimum age requirement?	No
Examination required?	Yes

JOB DESCRIPTION

An adjuster is any person who, as an independent contractor, or an employee of an independent contractor, adjustment bureau, association, insurance company or corporation, local recording agent, managing general agent, or self-insured, investigates or adjusts losses on behalf of either an insurer or a self-insured, or any person who supervises the handling of claims.

JOB REQUIREMENTS

- good communication skills
- analytic ability
- mathematical aptitude

LICENSE REQUIREMENTS (Insurance Code 21.07-4, Section 7:1-6)

- Texas residency (bona fide resident)
- at least 18 years of age
- trustworthiness
- specialized training, education, and experience or special education

Examination

- written state examination; OR
- successful examination at completion of approved study

Restrictions on Licensing

- fraud in obtaining license
- conviction of a felony
- misrepresentation of insurance contract
- misappropriation of money

Approximate Fees as of May 1992

- \$50.00 for application
- \$27.00 for examination
- \$48.00 for annual renewal; OR
- \$22.50 - expired less than 90 days
- \$30.00 - expired more than 90 days but less than one year
- \$45.00 - expired more than one year but less than two years

For more information on licensing requirements, CONTACT:

Texas Department of Insurance
Agents License Division
1110 San Jacinto
Austin, Texas 78701-1998
512/322-4191

EDUCATION/TRAINING

- experience, education, or training sufficient to allow applicant to fulfill the responsibilities of an adjuster

For a listing of schools, CONTACT:

State Board of Insurance

WORKING CONDITIONS

- frequent travel
- may work irregular hours

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Beginning adjusters work under the supervision of experienced adjusters, handling small losses. With experience and more difficult assignments, adjusters may be promoted within the company to department supervisors or managers. Often they work as public adjusters, representing the insured instead of the company, or with large organizations, negotiating claims against insurance companies. Insurance adjusters most often work in large cities where home insurance offices are located.

In 1989, 11,250 insurance adjusters were employed in Texas. The projected statewide employment figure for 2000 is 14,000. Total annual average job openings will be 350 -- 250 due to growth and 100 due to labor turnover. Texas statewide average hourly wage is estimated at \$12.26. Adjusters may earn a salary, plus a percentage of the insurance settlement.

For more information on a career as an insurance adjuster, CONTACT:

Texas Independent Insurance Adjusters
Post Office Box 709
Elgin, Texas 78621
512/273-2558

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

Insurance agents sell policies to help protect individuals and businesses from financial losses. They analyze the particular needs of the client and formulate an insurance program best suited to those needs. There are three basic types of insurance: property and casualty, life, and accident and health.

JOB REQUIREMENTS

- good communication skills
- analytic ability
- ability to work independently

LICENSE REQUIREMENTS (Insurance Code 21.07, 21.07-1, 21.14)

- Texas residency
- at least 18 years of age
- good moral character and reputation
- endorsement by a qualified insurance company
- specialized education and/or training

NOTE: A temporary local recording agent's license for property and casualty insurance may be given if all the requirements are met and the examination passed, providing that the specialized training is done within a one year period after issuance of the license. A 90-day temporary license is available for life, accident and health agents.

Examination

- written
- outline of subject material furnished

Restrictions on Licensing

- conviction of a felony
- license obtained fraudulently
- misappropriation of insured's money
- misrepresentation of insurance policy

Approximate Fees as of May 1992

- \$50.00 for LRA or Group 1 application and \$60.00 for Group II
- \$27.00 or more for examination, depending on level taken
- \$48.00 for initial biennial renewal

For more information on licensing requirements. CONTACT:

Texas Department of Insurance
Applications, MC 107-1A
Post Office Box 149104
Austin, Texas 78714-9104
512/322-3503

EDUCATION/TRAINING

- 40 hours pre-licensing education for a Group 1 license
- study at an approved classroom insurance course; OR
- study with an approved company or agents association school; OR
- study with an approved correspondence course; OR
- four years of college with a major in insurance; AND
- 15 hours continuing education per year

For a listing of schools, CONTACT:

Texas Department of Insurance

WORKING CONDITIONS

- client visitation
- may travel in specified territory
- may have evening and weekend hours

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Insurance agents may prefer to work with one company or agency in the beginning. As a clientele is built and experience gained, some agents prefer to work independently and represent more than one company. An agent with both sales and leadership abilities may become a sales manager in a local office. A few agents advance to agency superintendent or executive positions. A combination real estate and insurance sales office is another possibility for advancement. Most agents specialize in life insurance, but a growing number offer both life and property-liability policies. Insurance agents may work either full- or part-time; about one agent in four is self-employed.

Because the demand for insurance is rising, the number of active sales agents is expected to increase. In 1989, 22,350 insurance agents were employed in Texas. The projected statewide employment figure for 2000 is 26,550. Total annual average job openings will be 1,005 -- 380 due to growth and 625 due to labor turnover. Texas statewide average hourly wage is estimated at \$12.83.

For more information on a career in insurance, CONTACT:

Professional Insurance Agents of Texas, Inc.
Post Office Box 3175
Austin, Texas 78764
512/462-9222

Independent Insurance Agents of Texas
Post Office Box 1663
Austin, Texas 78767
512/476-6281

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

Interpreters for the deaf translate spoken forms of communication into sign language. They also interpret sign language of deaf individuals into spoken language for hearing individuals or others not conversant in sign language. Oral interpreters assist those who use speech reading as their mode of communication. Interpreters act as a communication aide, but not as a counselor, personal representative, or advocate of another person's rights. Interpreters serve in many settings and situations. Communications situations requiring interpreters include health, vocational, educational, recreational and welfare activities. Texas Law requires a Level III or higher certification from the Texas Commission for the Deaf and Hearing Impaired before a person may interpret in court and formal governmental proceedings.

JOB REQUIREMENTS

- appropriate knowledge of interpreters ethics
- skill in sign language, both expressive and receptive
- ability to transliterate/interpret as appropriate to the situation
- certification from Texas Commission for the Deaf and Hearing Impaired (for state classification positions)

LICENSE REQUIREMENTS (Human Resources Code 81.007)

- specialized education, experience or training
- at least 18 years of age

Examination

- written examination on Interpreter Standards of Ethical Behavior
- practical demonstration (5 levels) on expressive and receptive sign language skills

Restrictions on Licensing

- none

Approximate Fees as of May 1992

- \$10.00 for all five levels
- Evaluation Fees -
 - \$20.00 Level I
 - \$40.00 Level II
 - \$40.00 Level III
 - \$50.00 Level IV
 - \$60.00 Level V
- Annual Maintenance Fee - \$25.00 (Late fee \$10.00)

For more information on licensing requirements. CONTACT:

Texas Commission for the Deaf and Hearing Impaired
Post Office Box 12904
Austin, Texas 78711
512/444-3323

EDUCATION/TRAINING

- formal postsecondary education; OR
- experience

For a list of schools and programs. CONTACT:

Texas Commission for the Deaf and Hearing Impaired

WORKING CONDITIONS

- may travel
- irregular hours

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Although many interpreters are employed by school systems as educational interpreters, most interpreters work on a freelance basis and practice their skills as a side-line to another job. Prospects for freelance employment are usually better in large metropolitan areas. Opportunities for freelance interpreters in Texas are expected to increase as the awareness of services increases among the members of the deaf community. In 1992 there were 826 registered interpreters in Texas. Interpreters may earn between \$17,000 and \$40,000 per year.

For more information on a career in interpreting for the deaf. CONTACT:

Texas Society of Interpreters for the Deaf
2500 Lipscomb Street
Fort Worth, Texas 76110-2625
817/926-5305

AT A GLANCE . . .

Postsecondary schooling?	Recommended
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

The practice of landscape irrigation as a profession is essential for the protection and conservation of water resources in Texas. Irrigators sell, design, consult, install, maintain, alter, repair, connect, or service irrigation systems which are connected to private or public, raw or potable, rural or municipal, water supply systems. Work involves irrigation system design, backflow prevention, trench digging, pipe assembling, and pump installation. Installers may only connect the irrigation system to the water supply. They are not licensed to install the irrigation system as the name implies.

JOB REQUIREMENTS

- mechanical aptitude
- technical skills
- ability to perform rigorous manual labor

LICENSE REQUIREMENTS (VACS 8751) (31 TAC 421.1)

- examination
- good moral character

Examination

- eight-hour examination for irrigator*
- ninety-minute examination for installer

* must pass each section at one sitting in order to be certified

Restrictions on Licensing

- fraudulent procurement or abuse of license
- violation of rules or regulations
- gross negligence, incompetence, or misconduct

Approximate Fees as of May 1992**Irrigator**

- \$ 75.00 for examination**
- \$ 85.00 annual license renewal

Installer

- \$ 35.00 for examination**
- \$ 50.00 annual license renewal

** Application/information packets are mailed to interested individuals at NO charge to requester.

For more information on licensing requirements, CONTACT:

Texas Board of Irrigators
Post Office Box 12337
Austin, Texas 78711
512/463-7990

EDUCATION/TRAINING

- competence, knowledge, and skill regarding currently accepted practices involving irrigation

For a list of books and programs, CONTACT:

Texas Board of Irrigators, OR

Distributors of irrigation supplies

WORKING CONDITIONS

- may travel
- outdoor work in variable conditions

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Irrigation is necessary to maximize usage of available water resources in Texas. Properly designed and installed systems and backflow prevention devices protect the water supply of the general public.

Irrigators are employed both on a wage and salary basis and as independent contractors. In 1992, there were 2,986 registered irrigators in Texas.

For more information on a career as an irrigator, CONTACT:

Texas Board of Irrigators
Post Office Box 12337
Austin, Texas 78711
512/463-7990

AT A GLANCE . . .

Postsecondary schooling?	No
Minimum age requirement?	No
Examination required?	Yes

JOB DESCRIPTION

Using elevations, lines, points, and contours, land surveyors apply special knowledge of the principles of mathematics and physical sciences to establish land, boundary, or property measurements and location. Land surveyors prepare maps and legal descriptions for documents such as deeds and leases. They are legally responsible for the accuracy of their work. Individuals in Texas pursuing a career in land surveying need certification as a surveyor-in-training, registration as a professional land surveyor, or licensure as a state surveyor. Registration as a professional land surveyor qualifies an individual for licensure as a state surveyor.

JOB REQUIREMENTS

- good physical condition
- mathematical ability
- leadership qualities
- ability to visualize abstract forms

LICENSE REQUIREMENTS (VACS 5282c) (22 TAC 661)

- specialized education and/or training

Examination

- written
- covers surveying, math, surveying law, general fitness to practice
- must have proof of training/education

Restrictions on Licensing

- fraud or deceit in obtaining a license
- gross negligence
- interest in purchasing public land, directly or indirectly

Approximate Fees as of May 1992

- \$100.00 for application
- \$100.00 for examination
- \$ 50.00 for annual renewal

For more information on licensing requirements, CONTACT:

Texas Board of Land Surveying
7701 N. Lamar, Suite 400
Austin, Texas 78752
512/452-9427

EDUCATION/TRAINING

Registration or Licensure as a Land Surveyor

- possession of valid surveyor-in-training certificate
- two years experience as surveyor-in-training

Surveyor-in-Training

- bachelor of science degree in surveying; OR
- bachelor of science degree, including 32 semester hours in subjects relating to land surveying, plus one year surveying experience; OR
- associate degree in land surveying from approved institution, plus two years experience; OR
- 32 semester hours or equivalent in subjects relating to land surveying, plus two years surveying experience; OR
- graduation from an accredited high school, plus six years surveying experience, and proof of self-education in surveying field

For a listing of schools, CONTACT:

Texas Board of Land Surveying

WORKING CONDITIONS

- may work under adverse conditions
- may travel frequently

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Surveyors-in-training usually start as instrument workers, advancing to positions of greater responsibility. Many land surveyors are employed by government agencies or work for highway departments. Others are employed by municipalities or local governing units and work on urban planning and development. Land surveyors may travel extensively and be exposed to varied living conditions. For the best opportunities, surveyors should locate in areas of rapid development or renewal.

In 1989, 2,850 land surveyors were employed in Texas. The projected statewide employment figure for 2000 is 3,300. Total annual average job openings will be 80 -- 40 due to growth and 40 due to labor turnover. Texas statewide average hourly wage is estimated at \$15.64.

For more information on a career in land surveying, CONTACT:

Texas Surveyors Association
1033 La Posada, Suite 220
Austin, Texas 78752
512/454-8626

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	No
Examination required?	Yes

JOB DESCRIPTION

Landscape architecture is a profession primarily concerned with the design of land areas where human use requires adaptation of the natural environment. Traditionally concerned with public health, safety, and welfare, the landscape architect has, in the last decade, expanded that thinking to include such contemporary problems as accessibility for the handicapped and elderly, preservation of natural resources, alternate energy sources, and energy conservation.

JOB REQUIREMENTS

- creative and design ability
- understanding of business practices

LICENSE REQUIREMENTS (VACS 249c) (22 TAC 3)

- good moral character
- specialized education and/or training
- pass a national Registration Examination

Examination

- Landscape Architect Registration Examination (LARE) test sections required:
 - legal & administrative aspects of practice
 - programming & environmental analysis
 - conceptualization & communication
 - design synthesis
 - integration of technical & design requirements
 - grading & drainage
 - implementation of design through construction process

Restrictions on Licensing

- using title of landscape architecture without registration
- misrepresentation of application data
- conviction of a felony involving moral turpitude
- gross negligence, incompetence, or misconduct in practice

Approximate Fees as of May 1992

- \$ 10.00 for application, or fee prescribed by Board
- \$445.00 for examination
- \$ 70.00 for annual renewal (resident)
- \$100.00 for annual renewal (non-resident)

For more information on licensing requirements, CONTACT:

Texas Board of Architectural Examiners
8213 Shoal Creek Boulevard, Suite 107
Austin, Texas 78758-7589
512/458-4126

EDUCATION/TRAINING

- professional degree from a recognized school whose study of landscape architecture is accredited by Landscape Architecture Accredited Programs; OR
- seven years or more of actual experience in the office of a licensed landscape architect

For a listing of schools. CONTACT:

Texas Board of Architectural Examiners

WORKING CONDITIONS

- may divide time between office and outdoor site
- may work irregular hours
- must meet deadlines

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Interns obtaining experience are generally employed by landscape architects, nursery contractors and governmental agencies. Interns work as junior drafters, eventually assuming full responsibility for a project from inception to completion. Many landscape architects specialize in one area of landscape architecture, such as park lands or urban redevelopment. They may be employed by a firm of architects or own their own businesses. Landscape architects are also employed as teachers by colleges and universities. Government agencies employ landscape architects for various projects, such as highway beautification. The best opportunities are found in more populous areas of the country, especially in temperate climates where year-round work is possible.

Increasing opportunities for landscape architects result from growing awareness of environmental issues by the public. In 1989, 250 landscape architects were employed in Texas. The projected statewide employment figure for 2000 is 350. Total annual average job openings will be 15 -- 10 due to growth and 5 due to labor turnover. Texas statewide average hourly wage is estimated at \$17.37.

For more information on a career in landscape architecture. CONTACT:

American Society of Landscape Architects, Texas Chapter
c/o Mr. Tom Woodfin
1601 Rio Grande, #440
Austin, Texas 78701
512/479-0425

AT A GLANCE . . .

Postsecondary schooling?	Recommended
Minimum age requirement?	No
Examination required?	Yes

JOB DESCRIPTION

Law enforcement officers are employed by the state, county, or city governments. Their duties range from traffic control to crime prevention and investigation. In smaller communities, an officer's duties may run the full gamut. In larger areas, an officer is assigned to more specialized duty such as communications, investigations, traffic, or technical areas including chemical analysis and fingerprint identification. Officers are expected to exercise their authority and control whether on or off duty. Personnel serving as jailers or detention workers in state, county, or city jails may also be subject to licensing requirements.

JOB REQUIREMENTS

- honesty
- good judgment
- physical fitness
- emotional stability

LICENSE REQUIREMENTS (Chapter 415 Gov. Code.)

- U.S. citizenship
- at least 21 years of age (18, Jailer)
- honorable military discharge, if applicable
- emotional and psychological health
- high school diploma or equivalent
- specialized training

Examination

- physical
- psychological
- background examination by employing agency
- written examination at conclusion of training
- demonstration of weapons proficiency

Restrictions on Licensing

- conviction of a felony
- conviction of driving while intoxicated or under the influence of drugs within the last two years
- conviction of a class A misdemeanor within the past twelve months
- conviction of a class B misdemeanor within the past six months
- violation of any rule or standard of Commission
- drug dependency or any illegal drug usage

Approximate Fees as of May 1992

- none

For more information on licensing requirements. CONTACT:

Commission on Law Enforcement Officer Standards and Education
1033 La Posada, Suite 240
Austin, Texas 78752
512/450-0188

EDUCATION/TRAINING

- high school diploma or equivalent
- completion of training operated or approved by Commission
- weapons proficiency training

For a listing of schools, CONTACT:

Commission on Law Enforcement Officer Standards and Education

WORKING CONDITIONS

- weekend and night duty
- subject to call at any time
- outdoor work
- high stress/risk of injury

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Most new recruits begin on patrol duty with other officers to become familiar with the territory and alert to unusual circumstances. Officers prepare written reports of their activities, and testify in court when arrests result in legal action. Officers usually become eligible for promotion after a specified length of service. Promotions may allow specialization in areas such as plainclothes investigation, evidence analysis, or juvenile justice. In some cases, officers may retire with a pension at a relatively young age and pursue a second career.

In 1989, 5,500 police detectives, 23,900 police patrol officers, and 6,000 police supervisors were employed in Texas. The projected statewide employment figures for 2000 are 6,050, 27,400, and 6,650, respectively. Total annual average job openings for police detectives will be 235. Total annual average job openings for police patrol officers will be 1,170. Total annual average job openings for police supervisors will be 285. Texas statewide average hourly wage is estimated at \$13.98 to \$16.13.

For more information on a career in law enforcement, CONTACT:

Commission on Law Enforcement Officer Standards and Education
Quality Uniform Information Communications (QUIC)
1033 La Posada, Suite 240
Austin, Texas 78752
512/450-0188

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	Yes, 21 (18, Jailer)
Examination required?	Yes

JOB DESCRIPTIONS

Librarians serve as a link between the information seeker and information sources. They organize the information and assist patrons in its use. In addition, public librarians select materials, publicize services, perform research, and conduct programs within the community. County librarians are either: appointed by county commissioners' courts and are in charge of county-wide networks of branch libraries and deposit stations; or directors of municipal libraries which receive county funding to provide services to all residents of the county. They formulate rules and regulations concerning the administration of the libraries. They submit an annual statistical report to the State Librarian on the operation and condition of the library.

JOB REQUIREMENTS

- interest in books and information
- ability to work with a variety of people
- initiative

LICENSE REQUIREMENTS (VACS 1683) (13 TAC 5)

- specialized education and/or training
- training required depends on population of library's service area

Examination

- none

Restrictions on Licensing

- falsification of information on application

Approximate Fees as of May 1992

- none

For more information on licensing requirements, CONTACT:

Texas State Library and Archives Commission
Library Development Division, Suite 404
Post Office Box 12927
Austin, Texas 78711
512/463-5466

EDUCATION/TRAINING

Grade III (valid for two years):

- 30 semester hours at an accredited college or university; OR
- high school diploma or equivalent and 1,000 hours of paid or voluntary work experience in a library within the past five years, or a combination of education and experience
- for renewal, three semester hours at an accredited college or university, or 20 hours of other continuing education activities

Grade II (valid for two years):

- graduation from an accredited senior college or university; OR
- 60 semester hours at an accredited college or university and 2,000 hours of paid or voluntary work experience in a library within the past five years, or a combination of education and experience
- for renewal, three semester hours at an accredited college or university, or 20 hours of other continuing education activities

Grade I (permanent):

- fifth-year or higher degree from a library school offering an American Library Association (ALA)-approved degree in library or information science

For a listing of schools, CONTACT:

Texas State Library and Archives Commission

WORKING CONDITIONS

- regular hours
- may travel within county

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

County librarians may be certified at Grade III and, through education and experience, advance through the remaining levels; or they may enter at a higher grade and advance through experience in library work. With experience, librarians may advance to an administrative position, such as director of a specific library or system. The opportunities for county librarians in Texas are best in the counties with a large library system, usually found in urban areas.

In 1989, 8,600 librarians were employed in Texas. The projected statewide employment figure for 2000 is 10,250. Total annual average job openings will be 330 -- 150 due to growth and 180 due to labor turnover. Texas statewide average hourly wage is estimated at \$13.64.

For more information on a career in library science, CONTACT:

Texas Library Association
3355 Bee Caves Road, Suite 603
Austin, Texas 78746-6763
512/328-1518

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	No
Examination required?	No

JOB DESCRIPTION

Marriage and family therapists render professional therapy services to individuals, families, or married couples, singly or in groups, and involves the professional application of family systems theories and techniques in the delivery of therapy services to those persons. The practice includes the evaluation and remediation of cognitive, affective, behavioral, or relational dysfunction within the context of marriage and family systems. They do not prescribe drugs or treat medical disorders.

JOB REQUIREMENTS

- patience and perseverance
- maturity, sensitivity, and stability
- good communication skills

LICENSE REQUIREMENTS (VACS 4512c-1) (25 TAC 128)

- at least 18 years of age
- specialized education and training

Examination

- written examination only for professional practice as a licensed marriage and family therapist

Restrictions on Licensing

- conviction of felony or a crime involving moral turpitude
- revocation of a license or certification by a licensing agency or by a certifying professional organization
- use of drugs or alcohol to an extent that it affects professional competency
- guilty of fraud or deceit in application

Approximate Fees as of May 1992

- \$30.00 for application
- \$36.00 for licensure
- \$30.00 for annual renewal
- \$60.00 for late renewal
- \$75.00 for inactive status
- \$10.00 for duplicate license
- examination fee determined by the Texas Department of Health or its designee

For more information on licensing requirements, CONTACT:

Texas State Board of Examiners of Marriage and Family Therapists
Texas Department of Health
1100 West 49th Street
Austin, Texas 78756-3183
512/834-6657

EDUCATION/TRAINING

License without Examination (until 9/1/93):

- at least three years of clinical experience in the practice of marriage and family therapy, under supervision acceptable to the board
- master's or doctorate degree from a regionally accredited institution of higher education in marriage and family therapy or a related mental health discipline
- be licensed or certified by this state in a mental health discipline
- be certified by an appropriate professional organization having appropriate certification standards

License (effective 9/1/93):

- master's or doctorate degree in marriage and family therapy or master's or doctorate in a related mental health field with coursework and training determined by the board to be substantially equivalent to a graduate degree in marriage and family therapy from a regionally accredited institution of higher education or an institution of higher education approved by the board, AND
- two years of work experience in marriage and family therapy that must include at least 1,000 hours of direct clinical services to individuals couples, or families, of which 500 hours must be direct clinical services to couples or families, and be supervised in a manner acceptable to the board, including 200 hours of supervision of the provision of direct clinical services, of which at least 100 hours must be supervised on an individual basis

WORKING CONDITIONS

- may work irregular and flexible hours
- may work in a variety of employment settings

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Most marriage and family therapists work in private practice. Others work for hospitals, schools, university counseling centers, non-profit organizations, and on a volunteer basis.

In 1992, there were 1,383 registered marriage and family therapists in Texas.

For more information on a career in marriage and family therapy. CONTACT:

Texas State Board of Examiners of Marriage and Family Therapists
Texas Department of Health
1100 West 49th Street
Austin, Texas 78756-3183
512/834-6657

AT A GLANCE. . .

Postsecondary schooling?	Yes
Minimum age requirement?	Yes, 18
Examination required?	Yes (effective 9/1/93)

JOB DESCRIPTION

Massage therapists are health care professionals who manipulate soft tissues of the body for therapeutic purposes. These manipulations include stroking, kneading, percussion, compression, vibration, friction, and nerve strokes, and are administered by hand or with mechanical or electrical apparatus. Massage therapists also use oils, salt glows, heat lamps, hot and cold packs, and tub, shower, or cabinet baths in their work. They do not diagnose or treat illness or disease.

JOB REQUIREMENTS

- manual dexterity
- physical stamina
- understanding and sympathy

LICENSE REQUIREMENTS (VACS 4512k) (25 TAC 141)

- specialized education and training

Examination

- written and practical examinations (effective 1/1/90)

Restrictions on Licensing

- conviction of felony, or misdemeanor involving crimes related to prostitution or sexual offenses
- fraudulent procurement of registration

Approximate Fees as of May 1992

- \$53.00 for application
- \$24.00 for annual registration
- examination fee determined by contract with testing agency

For more information on licensing requirements, CONTACT:

Massage Therapy Registration Program
Texas Department of Health
1100 West 49th Street
Austin, Texas 78756-3183
512/834-6616

EDUCATION/TRAINING

- completion of a 300-hour course of instruction at a Texas Department of Health-registered massage therapy school; OR
- completion of a 300-hour course of instruction by a Texas Department of Health-registered massage therapy instructor; OR
- combination of the above
- course work includes:
 - 125 hours Swedish Massage Therapy Techniques
 - 50 hours anatomy
 - 25 hours physiology
 - 15 hours hydrotherapy
 - 20 hours health and hygiene
 - 15 hours business practices and professional ethics
 - 50 hours internship

WORKING CONDITIONS

- may work irregular and flexible hours
- may work in a variety of employment settings

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Massage therapists are generally self-employed or employed by fitness centers, health spas, or chiropractors; some may work for private athletic clubs or organizations such as resorts, cruise ships, or beauty shops. Some massage therapists may receive physician referrals. Larger, urban areas currently offer a greater potential for employment, but rural areas are experiencing a growing demand for massage therapists. In 1992, there were 6,000 registered massage therapists in Texas.

For more information on a career in massage therapy. CONTACT:

American Massage Therapy Association
c/o Vera Ford
Post Office Box 300187
Arlington, Texas 76010
817/465-9394

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	No
Examination required?	Yes

JOB DESCRIPTION

Radiologic technologists use sophisticated equipment to assist physicians, dentists, or other medical practitioners with the diagnosis and treatment of patients. Although the use of X-ray to diagnose broken bones is still the most common task of a radiologic technologist, current practice also includes the use of radiation to produce images of the interior of the body and the treatment of disease. Technologists prepare and position patients to be radiographed and to receive radiation therapy, and protect patients and themselves from radiation exposure. They may prepare a solution of contrast medium, a contrast agent, or radioisotope that is given to the patient by ingestion or injection, in order that the technologist may review the functioning of a particular organ or bodily area. Radiologic technologists must have general certification (MRT) to perform dangerous and hazardous procedures in settings other than accredited or certified hospitals. Limited certification (LMRT) is also available. Radiologic technologists who do not perform dangerous or hazardous procedures must register with other licensing agencies if they are not certified by the Texas Department of Health as a MRT or LMRT.

JOB REQUIREMENTS

- attentiveness to detail
- adaptability to rapidly changing technology
- good interpersonal skills

LICENSE REQUIREMENTS (VACS 4512m) (25 TAC 143)

- specialized education and training
- high school graduate or equivalent
- at least 18 years of age

Examination

- MRT examination in radiography, nuclear medicine technology, or radiation therapy technology, depending on applicant's educational background
- LMRT examination in area specific to scope of practice

Restrictions on Licensing

- fraud in obtaining or using license
- habitual substance abuse
- conviction of a felony or crime of moral turpitude
- unprofessional conduct

Approximate Fees as of May 1992

- \$20.00 for application
- \$30.00 for certification
- \$30.00 for biennial renewal

For more information on licensing requirements, CONTACT:

Texas Medical Radiologic Technologist Program
Texas Department of Health
1100 West 49th Street
Austin, Texas 78756-3183
512/834-6617

EDUCATION/TRAINING

- successful completion of an approved course of study or program of radiologic technology, or the equivalent as determined by nationally established guidelines, or as determined by the advisory board on an individual basis

For a listing of schools. CONTACT:

Texas Medical Radiologic Technologist Program

WORKING CONDITIONS

- sanitary, clinical environment
- may work evenings, weekends, or flexible hours
- potential exposure to radioactive materials

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Although three out of four jobs are in hospitals, radiologic technologists also work in physicians' offices, health maintenance organizations, clinics, or diagnostic imaging centers. Employment opportunity is expected to remain good.

In 1989, 7,900 medical radiologic technologists (and radiologic technicians, combined) were employed in Texas. The projected statewide employment figure for 2000 is 13,050. Total annual average job openings will be 640 -- 470 due to growth and 170 due to labor turnover. Texas statewide average hourly wage is estimated at \$12.03.

For more information on a career as a radiologic technologist. CONTACT:

Texas State Society for Radiologic Technologists
2502 West Jefferson Boulevard
Dallas, Texas 75211
214/339-1753

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

Medication aides are non-licensed nursing and direct care personnel who administer medication to institutional residents and patients. They work closely with registered nurses, licensed vocational nurses, and other health care personnel. Medication aides may not administer medication by injection or other complex procedures.

JOB REQUIREMENTS

- ability to follow precise instructions
- sense of responsibility
- ability to maintain accurate records

LICENSE REQUIREMENTS (VACS 4442c) (25 TAC 145)

- ability to read, write, speak, and understand English
- must be 18 years of age
- high school diploma or equivalent

Examination

- written examination

Restrictions on Licensing

- fraudulent procurement or abuse of permit
- addiction to alcohol or drugs
- unprofessional conduct

Approximate Fees as of May 1992

- \$25.00 fee for examination and permit
- \$15.00 fee for annual permit renewal

For more information on licensing requirements, CONTACT:

Texas Department of Health
Medication Aide Training Program
1100 West 49th Street
Austin, Texas 78756-3183
512/834-6618

EDUCATION/TRAINING

- currently employed in a facility as a nurse aide or non-licensed direct care staff person; OR
- must have been employed in a facility for 90 days as a nurse aide or non-licensed direct care staff person. This employment must have been completed within the 12 month period preceding the first official day of the applicant's medication aide training program, AND
- completion of a state approved medication aide training program, AND
- continuing education required for annual renewal

For a listing of schools. CONTACT:

Texas Department of Health/Medication Aide Program

WORKING CONDITIONS

- work in various institutional settings
- may work evenings and weekends

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Medication aides work in nursing homes, custodial care homes, personal care homes, facilities serving the mentally retarded, and related institutions. Growth in the health care industry in general may increase demand for medication aides.

In 1992, there were 4,800 registered medication aides in Texas.

For more information on a career as a medication aide . CONTACT:

Texas Department of Health
Medication Aide Training Program
1100 West 49th Street
Austin, Texas 78756-3183
512/834-6618

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

The term "midwife", as of the amended Midwifery Law of 1991, now applied to all midwives previously termed lay midwives (it is also a term commonly used for certified nurse-midwives as well). By definition, midwifery means the practice by a midwife of giving care to a woman during the prenatal period, during labor and delivery and the postpartum period, as well as caring for the newborn. The midwife may not administer prescription drugs without a physician's orders, or utilize any surgical instruments. An Informed Choice and Disclosure form must be understood and signed by each client revealing procedures which are prohibited and arrangements with local physicians for the management of emergencies. Midwives may not use terms to imply/state that they are registered or certified, or are nurses or doctors. As of September of 1993, there will be mandatory requirements for education and continuing education of all midwives, and this statement will also be part of the Informed Choice and Disclosure form.

JOB REQUIREMENTS

- psychological, physical and mental commitment to midwifery
- educational and clinical experience necessary
- strong personal skills

LEGAL REQUIREMENTS (VACS 4512i) (25 TAC 37)

- annual documentation with the Midwifery Program
- current adult and infant C.P.R. certification
- newborn screening test training or agreement with a health authority
- filing a copy of documentation with the local registrar of births

Examination

- exam (optional) no longer given after September 1993

Restrictions on practice

- midwives must restrict their practice to normal/uncomplicated pregnancy, childbirth and immediate care of the normal infant

Approximate Fees as of May 1992

- \$50.00 annual documentation
- \$50.00 course through the Program or a reasonable fee with an adult education institution (not applicable after Sept. 1993)
- \$25.00 optional exam (not applicable after Sept. 1993)
- mandatory education and continuing education fees starting in September 1993 are yet to be determined

For more information on licensing requirements, CONTACT:

Texas Department of Health
Bureau of Maternal and Child Health
1100 West 49th Street
Austin, Texas 78756-3183
512/458-7700

EDUCATION/TRAINING

- mandatory education and continuing education requirements which become effective on September 1993 are yet to be developed
- optional course, exam no longer applicable after September 1993

For a listing of programs, CONTACT:

Texas Department of Health/Midwifery Program, OR

Association of Texas Midwives

WORKING CONDITIONS

- may work in various home or clinical settings
- may work evenings and weekends

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Lay midwives come from various backgrounds. Some are nurses (who are not certified nurse-midwives), child birth educators, or immigrant medical practitioners, not licensed to practice medicine in the United States. Others come from backgrounds as native healers or "granny" midwives. In 1992, there were 350 registered lay midwives in Texas. The increasing numbers of home births may indicate a growing demand for lay midwives.

The regulation and practice of lay midwifery in Texas is an issue of continuing debate.

For more information on a career as a lay midwife, CONTACT:

Association of Texas Midwives
603 West 13th Street, Suite 1A-202
Austin, Texas 78701
512/928-2311

AT A GLANCE . . .

Postsecondary schooling?	Recommended
Minimum age requirement?	No
Examination required?	No

JOB DESCRIPTION

Licensed vocational nurses are trained in a Board-approved education program to function as members of the health care team in the provision of care to the sick, in rehabilitation, and in the prevention of illness. They may administer prescribed medications, change sterile dressings, monitor vital signs, and assist clients with activities of daily living. Most LVNs care for clients with non-life-threatening conditions or illnesses.

JOB REQUIREMENTS

- emotional stability
- problem-solving ability
- concern for human welfare

LICENSE REQUIREMENTS (VACS 4528c) (22 TAC 235)

- good physical and mental health
- specialized education and/or training

Examination

- written -- National Council Licensure Examination (NCLEX)

Restrictions on Licensing

- conviction of a felony, or any crime involving moral turpitude
- fraudulent procurement of license
- intemperate use of alcohol or drugs
- unprofessional conduct
- action against license in another state/jurisdiction
- default on student loan with Texas Guaranteed Student Loan corporation
- commitment to a psychiatric institution

Approximate Fees as of May 1992

- \$80.00 for application and examination (NCLEX and State Board fee)
- \$20.00 for biennial renewal
- \$30.00 for reactivation from inactive status (plus applicable renewal fees)
- \$50.00 for endorsement from another state

For more information on licensing requirements, CONTACT:

Texas Board of Vocational Nurse Examiners
9101 Burnet Road, Suite 105
Austin, Texas 78758
512/835-2071

EDUCATION/TRAINING

- at least two years of high school education or GED equivalent, AND
- completion of a course of not less than 12 months in an approved school of vocational nursing;
OR
- at least two years of education in an approved school of professional nursing
- professional nurse graduates who have not been successful in passing the registered nurse examination are eligible to apply to take the LVN examination
- proof of continuing education required for biennial renewal (effective 9/1/91)

For a listing of schools, SEE:

Board of Vocational Nurse Examiners List of Approved Schools

WORKING CONDITIONS

- may work under stress
- may work irregular hours, including holidays and weekends
- variety of employment settings

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Licensed vocational nurses may advance through on-the-job experience and/or additional formal education. Some colleges may give credit for vocational nursing education toward associate degree nursing education. LVNs may pursue a professional nursing degree as they continue to work part-time. In addition to hospitals, LVNs can find employment in a variety of settings including nursing homes, clinics, physicians' offices, state schools, correctional institutions, and private homes.

In 1989, 53,400 LVNs were employed in Texas. The projected statewide employment figure for 2000 is 73,500. Total annual average job openings will be 2,840 -- 1,830 due to growth and 1,010 due to labor turnover. Texas statewide average hourly wage is estimated at \$9.43.

For more information on a career in vocational nursing, CONTACT:

Licensed Vocational Nurses Association of Texas
1033 La Posada, Suite 220
Austin, Texas 78752
512/454-6942

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	No
Examination required?	Yes

JOB DESCRIPTION

Registered nurses diagnose and treat patient/client responses to actual and potential health care problems. Decision-making and problem-solving abilities about patients and patients' situations may be carried out independently or in collaboration with other health care providers. Employment settings are numerous and include acute-care and long-term care hospitals/facilities, clinics, out-patient settings, schools, industrial settings, and patients' homes. Registered nurses, upon completion of advanced studies, can seek additional certification, for example, as Nurse-Practitioner, Nurse-Midwife, Nurse-Anesthetist, or Clinical Nurse Specialist. Furthermore, each of these areas (and several others) contains numerous fields of specialization and certification.

JOB REQUIREMENTS

- good health and stamina
- desire to serve people
- good judgment
- ability to make decisions

LICENSE REQUIREMENTS (VACS 4518) (22 TAC 217)

- specialized education and training

Examination

- National Council Licensure Examination for Registered Nurses (NCLEX-RN)
- verification of graduation from an accredited professional school of nursing

Restrictions on Licensing

- fraud in obtaining license
- conviction of a felony, or any crime involving moral turpitude
- unprofessional conduct
- intemperate use of alcohol or drugs
- action taken against an LVN or RN license in another state
- mental or physical illness or disability which interferes with one's ability to practice professional nursing

Approximate Fees as of May 1992

- \$200.00 for examination
- \$ 50.00 for annual renewal

For more information on licensing requirements. CONTACT:

Texas State Board of Nurse Examiners
9101 Burnet Road, Suite 104
Austin, Texas 78758
512/835-4880

EDUCATION/TRAINING

- graduation from an accredited program of professional nursing education

For a listing of schools, CONTACT:

Board of Nurse Examiners for the State of Texas

WORKING CONDITIONS

- sanitary, indoor work
- pressure and stress may accompany work
- may work irregular hours

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Registered nurses may begin as staff nurses in hospitals or other health care institutions. Experience and higher levels of education open opportunities for advancement in the following tracts: 1) clinical, 2) education, 3) administration, 4) research. Nursing opportunities are currently available in every clinical area, including specialty areas such as geriatrics and critical care. Registered nurses are also in demand in many other employment situations such as quality assurance, insurance, health care software development, and pharmaceutical sales.

The outlook for registered nurses in Texas is excellent. In 1989, 81,600 RNs were employed in Texas. The projected statewide employment figure for 2000 is 119,850. Total annual average job openings will be 4,870 -- 3,480 due to growth and 1,390 due to labor turnover. Texas statewide average hourly wage is estimated at \$14.10.

For more information on a career in professional nursing, CONTACT:

Texas Nurses Association
7600 Burnet Road, Suite 440
Austin, Texas 78757-1292
512/452-0645

AT A GLANCE . . .

Postsecondary schooling?	Yes, 2-4 years
Minimum age requirement?	No
Examination required?	Yes

JOB DESCRIPTION

Long term care nurse aides work under the general supervision of registered nurses and licensed vocational nurses in a nursing facility. Typical duties include serving meals, making beds, bathing and feeding patients, and other routine care. They may also take and record temperature, pulse, and respiration rates, and monitor food and liquid input and output. Nurse aides must be on the state registry as a nurse aide.

JOB REQUIREMENTS

- ability to work with patients
- physical stamina
- good interpersonal skills

LICENSE REQUIREMENTS (VACS 4414b) (25 TAC 151)

- specialized education or training
- examination

Examination

- State-approved competency examinations, including a skills examination and a written or oral examination

Restrictions on Licensing

- unacceptable criminal history, including abuse, neglect, or misappropriation of patient's property

Approximate Fees as of May 1992

- \$66.00 fee for examinations (Reimbursement available to employees of participating facilities)

For more information on licensing requirements, CONTACT:

Nurse Aide Registry and Training Program
Texas Department of Health
1100 West 49th Street
Austin, Texas 78756
512/458-7229

EDUCATION/TRAINING

- training course is a minimum of 75 clock hours, including 51 clock hours of classroom and skills training and 24 clock hours of clinical training under the direct supervision of a licensed nurse.
- a new training and competency evaluation program or a competency evaluation program must be completed if an individual has not worked as a nurse aide for pay for at least one day during any 24 month period after completion of a training and competency evaluation program or a competency evaluation.

For a listing of schools, CONTACT:

Nurse Aide Registry and Training Program

WORKING CONDITIONS

- work in hospital setting
- may work evenings, holidays, and weekends

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Nurse aides usually work in hospitals, nursing homes, and mental health institutions. Nurse aides work is linked to the expansion in the health care industry in general, and demand for nursing aides is expected to continue as a result of the anticipated growth in long-term care facilities and programs for people with disabilities and chronic conditions. The recent federally-mandated training, testing, and registry program will also enhance employment prospects.

In 1989, 72,650 nurse aides (and orderlies) were employed in Texas. The projected statewide employment figure for 2000 is 95,550. Total annual average job openings will be 3,175 -- 2,080 due to growth and 1,095 due to labor turnover. Texas statewide average hourly wage is estimated at \$6.27.

Salaries generally start near minimum wage but increase with experience and dependability. Career advancement may be pursued through training in other health-related occupations such as medication aide, restorative nurse aide, and licensed vocational and registered nurse.

For more information on a career as a nurse aide, CONTACT:

Nurse Aide Registry and Training Program
Texas Department of Health
1100 West 49th Street
Austin, Texas 78756-3199
512/458-7229

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	No
Examination required?	Yes

JOB DESCRIPTION

Coordination of the various functions and activities necessary for day-to-day operation of the facility is the main duty of nursing home administrators. They oversee the nursing staff, food service operations, and general management of the home. They compile and analyze reports of operational statistics for official records. Nursing home administrators may supervise in-service training in conjunction with the administrator-in-training program.

JOB REQUIREMENTS

- interest in helping the sick or aged
- ability to motivate people
- understanding of business practices
- management abilities

LICENSE REQUIREMENTS (VACS 4442d) (22 TAC 243)

- at least 18 years of age
- good moral character
- sound physical and mental health
- minimum of a Bachelor's degree

Examination

- complete application file
- minimum score of 75% must be achieved
- Texas Comprehensive Exam & Texas State Standards Exam
- official college transcript(s) evidencing Bachelor's Degree

Restrictions on Licensing

- conviction of a felony, or misdemeanor involving moral turpitude
- gross negligence
- license fraudulently obtained

Approximate Fees as of May 1992

- \$250.00 for application
- \$250.00 for license
- \$250.00 for biennial renewal

For more information on licensing requirements, CONTACT:

Texas Board of Licensure for Nursing Home Administrators
4800 North Lamar, Suite 310
Austin, Texas 78756
512/458-1955

EDUCATION/TRAINING

- bachelor's degree
- completion of a 200-hour curriculum approved by the Board in an accredited postsecondary institution
- internship of 520 hours in a licensed nursing home, completed during a minimum period of 26 weeks or equivalent college practicum served through an approved college
- for renewal, 24 hours of continuing education every two years

For a listing of schools and application, CONTACT:

Texas Board of Licensure for Nursing Home Administrators

WORKING CONDITIONS

- indoor, institutional setting
- may work extended hours

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Nursing home administrators ordinarily begin as assistants to chief administrators. Learning opportunities are usually better in smaller nursing homes, as the experience is more general. The goal for many is to become the chief nursing home administrator. Although many communities have nursing homes, better opportunities exist in larger cities. Financial opportunities are best for those who have an ownership interest in the facility they administer.

For more information on a career in nursing home administration, CONTACT:

Texas Health Care Association
Post Office Box 4554
Austin, Texas 78765
512/458-1257

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

An occupational therapist, working as part of a medical team, evaluates and treats individuals whose abilities to perform the tasks of living are impaired by developmental disorders, aging, sensory impairment, physical injury or illness, and psychological or social problems. The therapist selects activities suited to the patient's abilities and designed to develop independence, prepare the patient to return to work, develop or restore basic functions, or aid in adjustment to disabilities. He or she may also design and/or make special equipment or recommend changes in a home or work environment. Occupational therapists tend to specialize in a certain disability or age group. About three out of five work mainly with physically disabled people. Some work only with children, and others work exclusively with the elderly.

JOB REQUIREMENTS

- warm, friendly personality
- ingenuity and imagination
- patience
- ability to work with people of all kinds and ages

LICENSE REQUIREMENTS (VACS 8851) (40 TAC 361.1)

- specialized education and training

Examination

- sciences - physical & behavioral
- techniques/methods
- separate examinations for occupational therapists and assistants

Restrictions on Licensing

- fraud in obtaining license
- gross negligence
- deceptive advertising
- use of drugs or alcohol affecting professional competence

Approximate Fees as of May 1992

- Occupational Therapist
 - \$10.00 for application
 - \$70.00 for license
 - \$70.00 for annual renewal
- Occupational Therapist Assistant
 - \$10.00 for application
 - \$50.00 for license
 - \$50.00 for annual renewal

For more information on licensing requirements, CONTACT:

Texas Advisory Board of Occupational Therapy
Texas Rehabilitation Commission
4900 North Lamar Boulevard
Austin, Texas 78751-2399
512/483-4072

EDUCATION/TRAINING

Occupational Therapist:

- bachelor's or master's degree in occupational therapy or equivalent, and six months supervised field work
- continuing education required for license renewal

Occupational Therapy Assistant:

- associate degree or certificate in occupational therapy and two months supervised field work
- continuing education required for license renewal

For a listing of schools. CONTACT:

Texas Advisory Board of Occupational Therapy

WORKING CONDITIONS

- may involve some irregular hours
- work environment varies
- may involve lifting and moving patients and equipment

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

New graduates of occupational therapy programs generally begin as staff therapists. The largest numbers of jobs are in hospitals; schools and schools for handicapped children are the second largest employer of occupational therapists. Other employers include nursing homes, home health agencies, community mental health centers, and outpatient clinics. Many work part-time, and a growing number are in private practice. Advancement is usually to supervisory or administrative positions, teaching, or research. Although employment in schools and schools for the handicapped may have peaked, restructuring of the health industry will contribute to increased opportunities in private practice. The expansion of home and community-based services (such as care for the elderly and functionally disabled) and the growth of contract-based services should contribute to the expansion of private practice. Two particular areas of current opportunity in Texas are industrial injury programs and hand rehabilitation programs.

In 1989, 1,800 occupational therapists were employed in Texas. The projected statewide employment figure for 2000 is 2,850. Total annual average job openings will be 145 -- 95 due to growth and 50 due to labor turnover. Texas statewide average hourly wage is estimated at \$11.58.

For more information on a career in occupational therapy. CONTACT:

Texas Occupational Therapy Association, Inc.
111 W. Anderson Lane, Suite D-204
Austin, Texas 78752
512/454-8682

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	No
Examination required?	Yes

JOB DESCRIPTION

Optometrists are health care providers who measure the powers of vision of the human eye and prescribe lenses, prisms, contact lenses, and exercises to correct or remedy any defect or abnormal conditions of vision. They use special instruments to test for depth and color perception as well as the ability to focus and coordinate the eyes. Some optometrists supply patients with contact lenses and eyeglasses and make minor eyeglass repairs. Optometrists who are therapeutically licensed may administer or prescribe medications for the treatment of eye diseases.

JOB REQUIREMENTS

- good communication skills
- understanding of business practices
- self-discipline
- ability to do precision work

LICENSE REQUIREMENTS (VACS 4552) (22 TAC 273)

- at least 21 years of age
- good moral character
- specialized education and training

Examination

- transcript required
- written examination (national)
- practical examination

Restrictions on Licensing

- incompetence or negligence
- deceit, fraud or misrepresentation in practice or on application
- conviction of a felony, or misdemeanor involving moral turpitude
- addiction to alcohol or drugs

Approximate Fees as of May 1992

- \$ 55.00 for examination
- \$ 40.00 for license
- \$135.00 for annual renewal

For more information on licensing requirements, CONTACT:

Texas Optometry Board
9101 Burnet Road, Suite 214
Austin, Texas 78758
512/835-1938

EDUCATION/TRAINING

- graduation from high school
- graduation from a reputable college or university of optometry, acceptable to the Board, whose term of instruction shall not be less than six terms of eight months each
- twelve hours continuing education per year for renewal of license

For a listing of schools, CONTACT:

Texas Optometry Board

WORKING CONDITIONS

- may set own hours
- close physical contact with clients

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Licensed optometrists may begin practice as associates of established practitioners. Although the majority are self-employed, there is a trend towards partnership or group practices. After enough experience has been acquired, they may elect to begin their own practices or to specialize. Areas of specialization include working with children or the elderly, working with partially sighted persons, and working with contact lenses or vision therapy. With advanced education, some may enter into research or teaching positions.

The size and age structure of the population, along with other factors associated with health care industry expansion, indicate a growing demand for the services of optometrists. Recent, rapid growth in the numbers of optometrists may have limited employment opportunity.

In 1989, 1,400 optometrists were employed in Texas. The projected statewide employment figure for 2000 is 1,500. Total annual average job openings will be 45 -- 10 due to growth and 35 due to labor turnover. Texas statewide average hourly wage is estimated at \$18.88. Incomes may vary greatly depending on location, type of practice, and area of specialization.

For more information on a career in optometry, CONTACT:

Texas Optometric Association
1016 La Posada, Suite 174
Austin, Texas 78752
512/451-8476

Texas Association of Optometrists
8310 Capital of Texas Highway North, Suite 250
Austin, Texas 78731
512 /343-6644

AT A GLANCE . . .

Postsecondary schooling?	Yes, 6 years
Minimum age requirement?	Yes, 21
Examination required?	Yes

JOB DESCRIPTION

Pawnbrokers lend money on the security of pledged goods. They impose a finance charge, which must be disclosed to the consumer at the time of the transaction. If the goods are not redeemed, they may become the pawnbroker's property after a specified time. Pawnbrokers and employees of pawnshops must be licensed in Texas.

JOB REQUIREMENTS

- understanding of business practices
- familiarity with the function and value of a vast array of merchandise
- good communication skills

LICENSE REQUIREMENTS (VACS 5069-51.03) (7 TAC 85.1)

- net assets of at least \$150,000 for each shop to be operated

Examination

- none

Restrictions on Licensing

- conviction of any crime involving moral turpitude, including theft, fraud, or forgery

Approximate Fees as of May 1992

- \$500.00 for investigation
- \$100.00 for annual license
- \$ 25.00 for employee license
- \$ 10.00 for annual employee license renewal

For more information on licensing requirements, CONTACT:

Consumer Credit Commission
2601 North Lamar
Austin, Texas 78705-4207
512/479-1288

EDUCATION/TRAINING

- no special education or training required

WORKING CONDITIONS

- work normal business hours
- retail merchandise setting
- frequent public contact

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Pawnbroker employment has shown some growth in Texas, although the demand to purchase or pledge goods makes seasonal adjustments and fluctuates with the economy in general. Individuals interested in a career as a pawnbroker may work in a pawnshop for an extended period in order to develop familiarity with the valuation of assorted goods and merchandise. The development of interpersonal communication skills is also enhanced by on-the-job training.

In 1992, there were 1,452 registered pawnbrokers in Texas.

For more information on a career as a pawnbroker. CONTACT:

Texas Pawnbrokers Association
6633 Highway 290 East, Suite 203
Austin, Texas 76523
512/467-6716

AT A GLANCE . . .

Postsecondary schooling?	No
Minimum age requirement?	No
Examination required?	No

JOB DESCRIPTION

Licensed commercial pesticide applicators use, or supervise the use of, any restricted or state limited-use pesticide. Using pesticides, applicators prevent, destroy, repel or mitigate pests. An applicator licensed through the Texas Department of Agriculture (TDA) may apply pesticides to crops, forests, ornamentals, and other vegetation; treat seeds; or control aquatic pests. Applicators licensed through the Texas Structural Pest Control Board (SPCB) make inspections; identify infestations; and apply pesticides in households, railroad cars, ships, docks, airplanes, or other structures, as well as in vegetation adjacent to structures or in parks, rights of way, etc. Licensed applicators may perform and supervise commercial pest control activities. There are numerous use categories for which licensed applicators must be certified by either the TDA or the SPCB.

JOB REQUIREMENTS

- mechanical ability and manual dexterity
- mathematics and reading skills

LICENSE REQUIREMENTS (Agriculture Code 76.105) (VACS 135b-6) (22 TAC 593)

Licensed Pesticide Applicator:

- specialized education, training, or experience
- surety bond and certificate of required insurance
- must have a business license or be employed by a licensed business in order to work commercially

Technician (SPCB):

- at least 16 years of age
- specialized training
- must be employed by a licensed business

Examination

- written
- study materials available from the Texas Agricultural Extension Service

Restrictions on Licensing

- conviction of a felony involving moral turpitude in the last seven years
- pesticide recommendation or application inconsistent with the pesticide's label or other restrictions
- operating in a faulty, careless, or negligent manner

Approximate Fees as of May 1992

Structural Pest Control:

- \$30.00 per examination
- \$66.00 certified applicator license
- \$36.00 for technician license
- \$18.00 apprentice

Agricultural Pest Control:

- \$ 10.00 for examination in each use category
- \$150.00 for annual license and renewal

For more information on licensing requirements. CONTACT:

Texas Structural Pest Control Board
9101 Burnet Road, Suite 201
Austin, Texas 78758
512/835-4066

Texas Department of Agriculture
Certification and Training
Post Office Box 12847
Austin, Texas 78711
512/475-1621

EDUCATION/TRAINING

Structural Pest Control Board:

- one year experience under supervision of a licensed applicator, including at least six months experience as a licensed technician; OR
- a degree in biological sciences from an accredited college or university; OR
- technical field experience from previous occupation

For a listing of schools and educational seminars. CONTACT:

Texas Department of Agriculture, OR

Texas Structural Pest Control Board

WORKING CONDITIONS

- handle hazardous substances
- may involve travel
- outdoors as well as enclosed areas

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Pesticide applicators usually receive their training on-the-job. After several months experience under the supervision of a licensed applicator, newcomers may obtain a license and advance to supervisory positions. Applicators with job experience and sales aptitude may become pest control salespersons who contact prospective customers to inform them of their firm's services. Some may advance to owning their own businesses. Agricultural pest control workers operate in rural areas. Structural pest control workers usually operate in urban areas, as well as in suburban areas and small towns.

In 1989, 3,900 pesticide applicators were employed in Texas. The projected statewide employment figure for 2000 is 4,800. Total annual average job openings will be 170 -- 80 due to growth and 90 due to labor turnover. Texas statewide average hourly wage is estimated at \$8.47. Aerial applicators may earn considerably more. Some workers receive commissions based on a percentage of the service charge to the customer.

For more information on a career in pest control. CONTACT:

Texas Pest Control Association, Inc.
1033 La Posada, Suite 220
Austin, Texas 78752
512/454-8626

AT A GLANCE . . .

Postsecondary schooling?	No
Minimum age requirement?	16 (SPCB), No (TDA)
Examination required?	Yes

JOB DESCRIPTION

Pharmacists compound and dispense drugs and medicines prescribed by physicians and dentists and other authorized persons. They advise the public and physicians on uses and selection of prescription and nonprescription medicines. Pharmacists must understand the use, composition, and effect of drugs. They may be employed by community pharmacies, clinics, nursing homes, hospitals, or government services. Pharmacists employed in retail stores and hospitals may be responsible for managing and supervising employees in the pharmacy.

JOB REQUIREMENTS

- sense of responsibility
- ability to gain confidence of clients
- ability for detailed record keeping

LICENSE REQUIREMENTS (VACS 4542a-1) (22 TAC Part xv)

- at least 18 years of age
- good moral character
- BS in Pharmacy or Pharmacy Doctoral degree from an approved college or university

Examination

- National Association of Boards of Pharmacy Licensing Exam (NABPLEX)
- Texas jurisprudence exam

Restrictions on Licensing

- drug or alcohol dependency
- any violation of drug or pharmacy laws or regulations
- unprofessional conduct
- conviction of a felony, or misdemeanor involving moral turpitude

Approximate Fees as of May 1992

- \$250.00 for examination
- \$ 45.50 to \$119.75 initial license fee (prorated dependent on birthdate)
- \$ 86.00 for annual renewal

For more information on licensing requirements, CONTACT:

Texas State Board of Pharmacy
8505 Cross Park Suite 110
Austin, Texas 78754-4594
512/832-0661

EDUCATION/TRAINING

- graduation from an accredited college of pharmacy
- internship of 1,500 hours in Board-approved internship program
- twelve hours of Board-approved continuing education per year for annual license renewal (effective 9/1/91)

For a listing of schools, CONTACT:

Texas State Board of Pharmacy

WORKING CONDITIONS

- sanitary surroundings
- may work irregular hours
- may work in medical or business environment

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Pharmacists often begin as employees in community pharmacies. They may advance to owner or manager of the business. Those who work in hospital pharmacies may advance to director of pharmacy services. Many work as representatives for pharmaceutical companies. Some engage in research and development of new drugs. Pharmacists also write reports for technical journals or inserts for packaged drugs. Colleges of pharmacy, medicine, and nursing employ pharmacists as teachers. Government agencies employ them as inspectors, pharmacists, or narcotics control consultants. Opportunities are greatest in populous areas and communities with large medical centers.

The projected growth of the elderly population, who use twice as many drugs on the average as a younger person, and scientific advances that will make more drugs available for the treatment and prevention of disease indicate a growing demand for the services of pharmacists.

In 1989, 11,400 pharmacists were employed in Texas. The projected statewide employment figure for 2000 is 15,700. Total annual average job openings will be 705 -- 390 due to growth and 315 due to labor turnover. Texas statewide average hourly wage is estimated at \$19.86.

For more information on a career in pharmacy, CONTACT:

Texas Pharmaceutical Association
Post Office Box 14709
Austin, Texas 78762
512/836-8350

Texas Society of Hospital Pharmacists
6300 La Calma Drive, Suite 410
Austin, Texas 78752
512/339-8120

AT A GLANCE . . .

Postsecondary schooling?	Yes, 5 years
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

Using therapeutic procedures, physical therapists plan and administer treatment to persons with muscle, nerve, joint, and bone diseases or injuries. These procedures include exercise, massage, heat, cold, light, water, and electricity. Physical therapists test for muscle strength, joint integrity, respiratory and circulatory efficiency, and motor development in their patients. They may develop treatment on a team basis with physicians, nurses, occupational therapists, or speech pathologists to determine the course of treatment best suited for a particular patient. They also help disabled persons accept their handicaps and adjust to them. Specializations include pediatrics, geriatrics, orthopedics, sports injuries, neurology, and cardiopulmonary physical therapy.

JOB REQUIREMENTS

- emotional stability
- manual dexterity
- tact and patience
- physical endurance

LICENSE REQUIREMENTS (VACS 4512e) (22 TAC 329)

- specialized education and training
- participation in continuing education program required for licensees

Examination

- transcript and diploma required
- written exam

Restrictions on Licensing

- fraud in obtaining license
- use of drugs or alcohol affecting professional competence
- practice with patients not referred by a licensed health professional
- conviction of a felony

Approximate Fees as of May 1992**Physical Therapist:**

- \$ 60.00 for application
- \$100.00 for examination
- \$ 75.00 for annual renewal

Physical Therapist Assistant:

- \$ 60.00 for application
- \$ 90.00 for examination
- \$ 65.00 for annual renewal

For more information on licensing requirements, CONTACT:

Texas State Board of Physical Therapy Examiners
3001 South Lamar, Suite 101
Austin, Texas 78704
512/443-8202

EDUCATION/TRAINING

Physical Therapist:

- completion of accredited curriculum in physical therapy education and 60 semester credits from a recognized college

Physical Therapist Assistant:

- completion of an accredited physical therapist assistant program

For a listing of schools, CONTACT:

Texas State Board of Physical Therapy Examiners

WORKING CONDITIONS

- work environment may vary
- physically and emotionally demanding
- may work irregular hours

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Most physical therapists work in hospitals or out-patient clinics. Some work in public health clinics, nursing homes, rehabilitation centers, or the Armed Forces. A growing number are in private practice. Those with graduate degrees may teach in schools of physical therapy or conduct research in a particular area. With several years of experience, physical therapists may become program administrators in hospitals or clinics.

In Texas, there are employment opportunities for therapists at the baccalaureate degree level and at the graduate degree level. Advances in rehabilitation medicine and an aging population, with correspondingly greater propensity for disability, are among the factors that indicate a growing demand for physical therapists. Employment opportunities vary widely throughout the state.

In 1989, 4,400 physical therapists were employed in Texas. The projected statewide employment figure for 2000 is 6,750. Total annual average job openings will be 335 -- 215 due to growth and 120 due to labor turnover. Texas statewide average hourly wage is estimated at \$13.13.

For more information on a career in physical therapy, CONTACT:

Texas Chapter of the American Physical Therapy Association
400 West 15th Street, Suite 805
Austin, Texas 78701
512/477-1818

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	No
Examination required?	Yes

JOB DESCRIPTION

Physicians diagnose and treat disorders of the human body. They analyze test findings and reports to diagnose the patient's condition. Methods of treatment include surgery, X-rays, or drugs. Physicians promote health by advising patients on diet, hygiene, and disease prevention. There are two types of physicians: the Doctor of Medicine (M.D.) and the Doctor of Osteopathy (D.O.). M.D.'s often specialize in one aspect of medical care, such as obstetrics, psychiatry, pathology, radiology, or pediatrics. D.O.'s stress prevention and are commonly general practitioners, although they may also specialize. Most physicians are in private practice.

JOB REQUIREMENTS

- desire to serve the sick and injured
- good judgment and reasoning ability
- emotional stability

LICENSE REQUIREMENTS (VACS 4495b) (22 TAC 163)

- at least 21 years of age
- good professional and moral character
- specialized education and training

Examination

- medical -- Federation Licensing Examination (FLEX)
- jurisprudence -- Texas law
- other written or oral exams, or personal interviews may be required

Restrictions on Licensing

- fraud in obtaining license
- conviction of a felony, or any crime involving moral turpitude
- prescribing drugs which are non-therapeutic in nature
- intemperance or drug abuse endangering patients
- unprofessional or dishonorable conduct
- repeated or recurring health care liability claims

Approximate Fees as of May 1992

- \$900.00 for application processing and examination
- \$200.00 for intern and resident permits
- \$400.00 for annual renewal

For more information on licensing requirements, CONTACT:

Texas State Board of Medical Examiners
1812 Centre Creek Drive, Suite 300
Austin, Texas 78754
512/834-7728

EDUCATION/TRAINING

- 60 semester hours of premedical college courses
- graduation from an approved medical school or college
- one-year program of graduate medical training approved by Board

For a listing of schools, CONTACT:

Texas Medical Association, OR

Texas Osteopathic Medical Association

WORKING CONDITIONS

- may work long or irregular hours
- may work under stress
- close physical contact with clients

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

After the licensing examination has been passed, the medical profession requires a period of internship, lasting one to two years. Specialization in a particular field requires a period of residency, lasting one to four years. Physicians are then ready to enter private or group practice, or a branch of governmental service, such as the Armed Forces. After acquiring experience, they may teach, do research, or become administrators. Currently, medical students are being encouraged to practice in rural areas where there is a shortage of qualified medical personnel.

The growth in population and longer life expectancy have contributed to the increase in the need for physicians. In 1989, 21,450 physicians were employed in Texas. The projected statewide employment figure for 2000 is 26,650. Total annual average job openings will be 1,035 -- 475 due to growth and 560 due to labor turnover. Texas statewide average hourly wage is estimated at \$26.36. The outlook for physicians in Texas is very good. Physicians have among the highest average annual earnings for any occupational group.

For more information on a career in medicine, CONTACT:

Texas Osteopathic Medical Association
226 Bailey Avenue
Fort Worth, Texas 76107
817/336-0549

Texas Medical Association
401 West 15th Street
Austin, Texas 78701
512/370-1300

AT A GLANCE . . .

Postsecondary schooling?	Yes, 6+ years
Minimum age requirement?	Yes, 21
Examination required?	Yes

JOB DESCRIPTION

Plumbers install, alter, or repair pipe systems conducting liquids or gases such as water, steam, or air. They install plumbing fixtures, appliances, heating, and waste disposal systems. On a job, plumbers inspect the installation site; cut, thread and bend pipes to exact specifications; and join them using welds or threading. Pipefitters do essentially the same work as plumbers, differing only in job location and variety of pipes used.

JOB REQUIREMENTS

- good physical stamina
- mechanical aptitude
- ability to work well with others

LICENSE REQUIREMENTS (VACS 6243-101) (22 TAC 361)**Apprentice registration:**

- at least 14 years of age

Journeyman

- good moral character
- at least 17 years of age
- specialized training and experience

Master:

- at least 18 years of age
- possession of journeyman license for at least one year

Examination

- written
- mechanical
- information about exam and study materials available from Board

Restrictions on Licensing

- fraud in obtaining license
- conviction of felony or certain misdemeanors
- violation of municipal sanitation rules or ordinances

Approximate Fees as of May 1992**Journeyman**

- \$50.00 for examination
- \$50.00 for license
- \$50.00 for annual renewal

Master

- \$75.00 for examination
- \$75.00 for license
- \$75.00 for annual renewal

For more information on licensing requirements, CONTACT :

Texas State Board of Plumbing Examiners
Post Office Box 4200
Austin, Texas 78765
512/458-2145

EDUCATION/TRAINING

Journeyman:

- combination of work experience and/or technical training equaling 6,000 hours

Master:

- possession of journeyman's license for 12 months
- high school graduate or equivalent

For a listing of schools, CONTACT:

Texas State Board of Plumbing Examiners

WORKING CONDITIONS

- indoor/outdoor
- active and strenuous
- may be hazardous at times

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Beginning plumbers work as apprentices or plumber's helpers until they gain enough experience to become journeymen. Journeymen plumbers work under the supervision of master plumbers until the master plumbers examination is passed. Master plumbers may work for contractors, advancing to foreman, job estimator, or superintendent. If self-employed, plumbers may form their own contracting firms. Plumbers are necessary in all communities, especially in areas of increased construction and renovation.

In 1989, 22,600 plumbers were employed in Texas. The projected statewide employment figure for 2000 is 28,650. Total annual average job openings will be 1,115 -- 550 due to growth and 565 due to labor turnover. Texas statewide average hourly wage is estimated at \$14.54.

For more information on a career in plumbing, CONTACT:

Association of Plumbing and Heating Contractors of Texas
1033 La Posada, Suite 220
Austin, Texas 78752
512/454-8626

AT A GLANCE . . .

Postsecondary schooling?	No
Minimum age requirement?	Yes, 17
Examination required?	Yes

JOB DESCRIPTION

Podiatrists diagnose diseases and disorders of the feet by using X-rays or pathological tests. To treat diseases and disorders, they perform surgery; fit corrective devices; and prescribe drugs, physical therapy, and proper shoes. Common conditions treated include corns, bunions, calluses, deformed toes, and arch disabilities. They refer patients to physicians when they detect medical disorders affecting parts of the body other than the feet. Podiatrists may specialize in surgery, orthopedics (bone, muscle and joint disorders), podopediatrics (foot ailments of children), and podogeriatrics (foot ailments of the elderly).

JOB REQUIREMENTS

- scientific aptitude
- manual dexterity
- interpersonal skills

LICENSE REQUIREMENTS (VACS 4567) (22 TAC 371)

- at least 21 years of age
- good moral character
- specialized education and training

Examination

- written (National Base Exam)
- oral
- includes laws and Board rules

Restrictions on Licensing

- conviction of a felony, or any crime involving moral turpitude
- misleading or deceptive advertising
- fraud in obtaining license
- habits of intemperance or drug addiction

Approximate Fees as of May 1992

- \$500.00 for examination
- \$200.00 for annual renewal

For more information on licensing requirements, CONTACT:

Texas State Board of Podiatry Examiners
3420 Executive Center Drive, Suite 305
Austin, Texas 78731
512/794-0145

EDUCATION/TRAINING

- completion of 90 semester hours of college courses
- graduation from a bona fide reputable school of podiatry or chiropody consisting of at least four terms of eight months each
- training in cardiopulmonary resuscitation (CPR)
- any other training required by Board
- 15 hours of continuing education required for license renewal

For a listing of schools, CONTACT:

Texas State Board of Podiatry Examiners; OR

Texas Podiatric Medical Association

WORKING CONDITIONS

- indoor, office environment
- sanitary
- may set own hours

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Newly licensed podiatrists may work as associates to established practitioners or in clinics or hospitals. They may also purchase an established practice or start one of their own. Podiatrists may advance by becoming specialists in one of the several areas of podiatry. Some work in public health clinics or the Armed Forces. Those with experience and advanced training may pursue a career in teaching at a college of podiatry.

Foot disorders are among the most widespread and neglected problems, increasing the demand for podiatric services. Moreover, in the vast state of Texas, there are many small communities without a podiatrist. Some of this service demand may be absorbed by primary care physicians and orthopedists.

In 1989, 550 podiatrists were employed in Texas. The projected statewide employment figure for 2000 is 700. Total annual average job openings will be 30 -- 15 due to growth and 15 due to labor turnover. Texas statewide average hourly wage is estimated at \$17.84.

For more information on a career in podiatry, CONTACT:

Texas Podiatric Medical Association
5017 Bull Creek Road
Austin, Texas 78731
512/453-6533

AT A GLANCE . . .

Postsecondary schooling?	Yes, 7 years
Minimum age requirement?	Yes, 21
Examination required?	Yes

JOB DESCRIPTION

Using specialized equipment, polygraph examiners question individuals to ascertain the validity of their statements. They attach the equipment to the individual to record changes in respiration, blood pressure, and electrical resistance of the skin. Polygraph examiners interpret the data recorded and prepare reports on the findings. They may be employed by police departments for specific criminal cases, which can result in appearances in court.

JOB REQUIREMENTS

- ability to work well with people
- ability to interpret graphs and charts
- good judgment

LICENSE REQUIREMENTS (VACS 4413[29cc]) (22 TAC 391)

- specialized education and training
- \$5,000 surety bond or insurance policy covering activities as examiner

Examination

- legal and ethical aspects of polygraph
- psychology
- chart interpretation
- training schedule and suggested references available from the Board

Restrictions on Licensing

- conviction of a felony, or misdemeanor involving moral turpitude
- failing to inform subject of the nature of the examination
- failing to inform subject of results if so requested

Approximate Fees as of May 1992**Examiner:**

- \$500.00 for license
- \$400.00 for annual renewal

Intern:

- \$300.00 for license
- \$150.00 for annual renewal

For more information on licensing requirements, CONTACT:

Polygraph Examiners Board
Post Office Box 4087
Austin, Texas 78773
512/465-2058

EDUCATION/TRAINING

Intern Permit:

- bachelor's degree from accredited college; OR
- five consecutive years of active investigative experience; AND
- sponsorship by licensed examiner

Examiner:

- bachelor's degree from accredited college; OR
- five consecutive years of active investigative experience; AND
- graduation from approved polygraph examiners course and six months of internship training;
OR
- 12 months of internship training in lieu of polygraph examiners course

For a listing of schools, CONTACT:

Polygraph Examiners Board

WORKING CONDITIONS

- regular hours
- may travel

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Newly licensed examiners may be employed by large corporations such as factories or retail stores. Investigative agencies may also hire polygraph examiners either full-time or on contract. Examiners may form partnerships or operate their own services. Manufacturers of polygraph equipment may employ examiners as representatives. Schools that teach polygraph courses also employ examiners. The best opportunities are in larger urban areas.

As the practice becomes widespread among employers and investigative agencies, more polygraph examiners will be needed. Because much of a polygraph examiner's work is in pre-employment interviews, economic slowdowns and high unemployment affect demand for polygraph examiners. In 1992, there were 234 registered polygraph examiners in Texas. Salaries for beginning polygraph examiners average about \$18,000.

For more information on a career as a polygraph examiner, CONTACT:

Texas Association of Polygraph Examiners
Post Office Box 13481
Austin, Texas 78711
512/444-8463

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	No
Examination required?	Yes

JOB DESCRIPTION

Private investigators obtain confidential information by questioning individuals as to the nature of a crime or wrongdoing. They may investigate thefts, fires, accidents, injuries, or missing persons. They collect evidence on the case, write reports for clients, and may testify in court. Security guards observe private property to protect it against fire, vandalism, trespass, or larceny. They may protect different kinds of property, such as buildings, merchandise, equipment, or money. Security guards also protect individuals from bodily harm. Other categories of licenses include: dog trainer, burglar alarm systems installer, security sales person, alarm systems monitor, and security consultant.

JOB REQUIREMENTS

- trustworthiness
- good hearing and vision
- good personal habits

LICENSE REQUIREMENTS (VACS 4413 [29bb]) (22 TAC 429)

- at least 18 years of age
- honorable military discharge, if applicable
- specialized training and experience
- certificate of insurance on file with the Board
- any information, evidence, statements or documents required by Board

Examination

- written examination may be required

Restrictions on Licensing

- conviction of felony or any crime involving moral turpitude
- addiction to alcohol or drugs
- conviction of cruelty to animals

Approximate Fees as of May 1992

- \$225.00 for Class A license and renewal (private investigation firm)
- \$225.00 for Class B license and renewal (securities service firm)
- \$340.00 for Class C license and renewal (both private investigation and securities service firm)
- \$ 25.00 for registration and renewal of individual employed by firm as a private investigator
- \$ 50.00 for registration and renewal of individual employed by firm as a non-commissioned security officer
- \$ 40.00 for registration and renewal of individual employed by firm as a commissioned security officer
- \$ 25.00 for registration and renewal of private investigators, managers, branch office managers, and alarm systems installers
- \$ 50.00 for registration fee for noncommissioned security officer
- \$ 25.00 for registration fee for security sales person
- \$ 25.00 for registration fee for administrative security person
- \$ 25.00 for registration fee for alarm systems monitor
- \$ 25.00 for registration fee for dog trainer
- \$ 25.00 for registration fee for owner, officer, partner, or shareholder of a license
- \$ 50.00 for registration fee for security consultants
- \$ 40.00 for registration and renewal fee for security officer commission fee

For more information on licensing requirements. CONTACT:

Texas Board of Private Investigators and Private Security Agencies
Post Office Box 13509 - Capitol Station
Austin, Texas 78711
512/463-5545

EDUCATION/TRAINING

- three years consecutive experience in investigative field for private investigations firm license;
OR
- two years consecutive experience in security services field for security services firm license
- completion of approved training course consisting of at least 30 hours

For a listing of schools. CONTACT:

Texas Board of Private Investigators and Private Security Agencies

WORKING CONDITIONS

- indoor/outdoor
- may work night shift
- often work alone

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Private investigators employed by licensed firms must be registered. Private investigators or security guards who are self-employed must be licensed as agencies. Employment for security guards is available with factories, private businesses, government installations, and schools. Opportunities are generally better in highly industrialized areas.

In 1989, 3,600 private investigators and 47,950 security guards were employed in Texas. The projected statewide employment figures for 2000 are 4,750 and 62,650 respectively. Total annual average job openings for private investigators will be 200 -- 105 due to growth and 95 due to labor turnover. Texas statewide average hourly wage is estimated at \$8.73. Total annual average job openings for security guards will be 2,585 -- 1,335 due to growth and 1,250 due to labor turnover. Texas statewide average hourly wage is estimated at \$5.41.

For more information on a career in investigation. CONTACT:

Texas Board of Private Investigators and Private Security Agencies
Post Office Box 13509 - Capitol Station
Austin, Texas 78711
512/463-5545

AT A GLANCE . . .

Postsecondary schooling?	No
Minimum age requirement?	Yes, 18
Examination required?	Possibly

JOB DESCRIPTION

Psychologists attempt to understand the traits and behavior of people in order to explain their actions. Psychologists generally choose between research and applied psychology. Research areas of specialization include developmental, social, experimental, and comparative psychology. Clinical, counseling, educational, industrial, and community psychology are prominent fields of applied psychology. According to principles and perspectives of their chosen area, psychologists explore problem areas within individuals or groups and gather information through testing, observation, study of case histories, surveys, and experimentation. Those with special qualifications diagnose and treat clients through psychotherapy or other approaches. They do not prescribe drugs or treat medical disorders. A doctorate is necessary for career advancement.

JOB REQUIREMENTS

- patience and perseverance
- maturity, stability, sensitivity
- good communication skills

LICENSE REQUIREMENTS (VACS 4512c) (22 TAC 461)

Certification:

- at least 18 years of age
- specialized education and training

License:

- certification as a psychologist, oral examination
- two years experience in psychological services under the supervision of a licensed psychologist

Examination

- Examination for Professional Practice in Psychology (EPPP)
- Jurisprudence -- Texas law , rules, ethical principles
- Oral -- practical issues (doctoral level licensure only)

Restrictions on Licensing

- use of drugs or alcohol to an extent that affects competency
- fraud or deceit in application
- conviction of a felony, or any crime involving moral turpitude

Approximate Fees as of May 1992

- | | |
|--|-------------------------------|
| Psychologist: | Psychological Associate: |
| • \$535.00 for examinations | • \$235.00 for examination |
| Certification | Certification |
| • \$300.00 for application | • \$150.00 for application |
| • \$ 65.00 for annual renewal | • \$ 70.00 for annual renewal |
| License | |
| • \$140.00 for application | |
| • \$160.00 for annual renewal | |
| • \$ 20.00 for annual renewal of health service provider certification | |
| • \$200.00 professional fee added by 72nd Legislature | |

For more information on licensing requirements. CONTACT:

Texas State Board of Examiners of Psychologists
9101 Burnet Road, Suite 212
Austin, Texas 78758
512/835-2036

EDUCATION/TRAINING

Psychologist:

- doctoral degree in psychology, received on or after January 1, 1979, from a regionally accredited institution; OR
- doctoral degree in psychology, or the equivalent in both subject matter and training, received before January 1, 1979, from a regionally accredited institution

Psychological Associate:

- master's degree of 42 semester hours based on a program of primarily psychological studies
- 450 clock hours of experience under licensed psychologist

For a listing of schools, CONTACT:

Texas State Board of Examiners of Psychologists

WORKING CONDITIONS

- vary with specialization
- may work irregular hours
- may involve travel

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Approximately one-third of all psychologists work in educational institutions as counselors, researchers, or teachers. Others are employed by health facilities such as rehabilitation centers, nursing homes, and clinics. Government agencies employ psychologists to administer tests and conduct rehabilitation counseling. Some work for corporations and research firms, or as consultants. Under the supervision of a psychologist, those with master's degrees may collect and analyze data and interpret tests. With proper experience, associates also may obtain certain school counseling jobs.

In 1989, 5,500 psychologists were employed in Texas. The projected statewide employment figure for 2000 is 6,900. Total annual average job openings will be 170 -- 130 due to growth and 40 due to labor turnover. Texas statewide average hourly wage is estimated at \$13.83.

For more information on a career in psychology, CONTACT:

Texas Psychological Association
6633 Highway 290 East, Suite 305
Austin, Texas 78723
512/454-2449

AT A GLANCE . . .

Postsecondary schooling?	Yes, 6+ years
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

Real estate brokers are independent business people who may employ sales agents. Real estate brokers and sales agents represent sellers, buyers and renters of real property. They obtain listings, determine the fair market value, identify potential buyers, sellers or renters, and show the property. They may also develop building projects, manage commercial or residential property, and apply for additional certification as a real estate appraiser.

Generally, beginning sales agents work in an established office. In a small office, they will be exposed to all types of duties, whereas in a large office they may specialize. They may advance by becoming brokers, specializing in one type of property, or managing a real estate firm. Some sales agents pursue careers in appraising. Real estate brokers may employ agents or operate a one-person business. Many brokers have entered franchise agreements, using a nationally known company name in exchange for a fee.

JOB REQUIREMENTS

- maturity and honesty
- enthusiasm
- good communication skills

LICENSE REQUIREMENTS (VACS 6573a) (22 TAC 535)

- United States citizen or legal alien
- Texas resident for at least 60 days
- at least 18 years of age
- sponsorship by a broker (sales agent only)
- specialized education and/or training

Examination

- written examination
- study materials available from the Commission

Restrictions on Licensing

- fraud in obtaining license
- conviction of a felony involving fraud
- material misrepresentation of property
- dishonest dealings

Approximate Fees as of May 1992**Broker:**

- \$ 25.00 for examination
- \$100.00 application
- \$100.00 annual renewal

Agent:

- \$25.00 for examination
- \$50.00 application
- \$50.00 annual renewal

For more information on licensing requirements, CONTACT:

Texas Real Estate Commission
Post Office Box 12188
Austin, Texas 78711-2188
512/459-6544

EDUCATION/TRAINING

Agent:

- completion of 12 semester hours or equivalent classroom hours in core real estate courses from an accredited college or school
- two semester hours or 30 classroom hours required for annual renewals until a total of 18 semester hours or 270 classroom hours are attained. Thereafter 15 classroom hours of continuing education required per two year renewal period

Broker:

- at least two years active experience as a sales agent, and 60 semester hours, or equivalent classroom hours, in core real estate or acceptable courses
- completion of 15 classroom hours of acceptable continuing education per two year renewal

WORKING CONDITIONS

- evening and weekend work, full or part time
- extensive local travel

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

In 1989, 3,700 real estate brokers and 16,900 sales agents were employed in Texas. The projected statewide employment figures for 2000 are 4,450 and 19,350 respectively. Total annual average job openings for real estate brokers will be 130 -- 70 due to growth and 60 due to labor turnover. Total annual average job openings for sales agents will be 480 -- 225 due to growth and 255 due to labor turnover. Texas statewide average hourly wage for both occupations is estimated at \$12.68.

Earnings for many real estate brokers and sales agents come in the form of sales commissions based on property and home sales. Earnings can therefore be highly seasonal and sporadic, and fluctuate with changes in the local real estate market.

For more information on a career in real estate, CONTACT:

Texas Association of Realtors
Post Office Box 2246
Austin, Texas 78768
512/480-8200

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

Real estate inspectors are independent business men and women who are licensed by the Texas Real Estate Commission to perform their functions. The basic functions of an inspector are: 1) to inspect electrical wiring, plumbing, air conditioning, heating, household appliances, roofing, structures and foundations of residential and commercial buildings not exceeding 5,000 square feet in area, and 2) to report to the purchaser his/her findings. Inspectors are chosen by potential purchasers to perform these functions prior to closure of the transaction. The inspector is expected to deliver his/her services in a careful and professional manner because the risk of litigation is high in this profession. Inspectors fall into two categories: 1) unrestricted, or 2) restricted. The unrestricted inspector has the authority to sponsor apprentices and inspectors-in-training.

Individuals wanting to be inspectors for the first time after passage of the real estate inspector act of 9/1/91 must first be an apprentice, then an inspector-in-training, before qualifying for an inspectors license.

Individuals who were licensed prior to 9/1/91 must meet the following requirements for renewal: 1) 75 inspections in the preceding year, 2) 38 hours in core real estate inspection courses, and 3) 15 months experience as an inspector. Failure to meet any one of the three requirements will place the individual on a non-renewal transitional status for one year during which period the individuals are expected to satisfy the above conditions. Failure to do so means that the individual will have to begin as an apprentice.

JOB REQUIREMENTS

- mechanical aptitude and construction experience
- maturity and honesty
- implementing the provision of the real estate act

LICENSE REQUIREMENTS (Section 23, 6573a, VTCS)

- at least 18 years of age
- United States citizen or legal alien
- Texas resident for at least 60 days
- specialized education and/or training
- sponsorship by an unrestricted inspector

Examination

- written examination with a minimum of 75% correct answers

Restrictions on Licensing

- fraud in obtaining license
- conviction of a felony involving fraud
- material misrepresentation of property
- dishonest dealings

Approximate Fees as of May 1992

- \$100.00 license examination fee
- \$ 20.00 request for a change of place of business or to replace a lost or destroyed license or registration

Apprentice:

- \$ 75.00 application
- \$125.00 renewal

Inspector-in-Training:

- \$125.00 application
- \$175.00 renewal

Inspector:

- \$150.00 application
- \$200.00 renewal

For more information on licensing requirements. CONTACT:

Texas Real Estate Commission
 Post Office Box 12188
 Austin, Texas 78711-2188
 512/459-6544

EDUCATION/TRAINING

Apprentice:

- must be registered with a sponsoring inspector for 90 days
- must perform 25 inspections under direct supervision of an inspector

Inspector-in-Training:

- completion of 90 days of approved apprenticeship
- completion of 90 classroom hours in core real estate inspection courses and pass an examination
- work as an inspector-in-training for a minimum of 12 months
- perform a minimum of 175 inspections
- must have four hours core real estate inspection courses annually for license renewal

Restricted Inspector:

- must satisfy requirements of inspector-in-training, plus
- 75 additional inspections in the preceding year
- additional 38 hours core real estate inspection courses
- must have eight hours core real estate inspection courses annually for license renewal

Unrestricted Inspector:

- must satisfy requirements of restricted inspector, plus
- 125 additional inspections
- must have eight hours core real estate inspection courses annually for license renewal

WORKING CONDITIONS

- evening and weekend work, full or part time
- extensive local travel

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

In 1989, 3,700 real estate inspectors were employed in Texas. The projected statewide employment figure for 2000 is 4,350. Total annual average job openings will be 155 -- 60 due to growth and 95 due to labor turnover. (Please note that statistical data for building inspectors includes not only "fee inspectors" who must have a license to operate but also "municipal inspectors" who do not need a license to be employed.) Texas statewide average hourly wage is estimated at \$16.24. Principals in larger, full-service firms can expect to earn considerably more.

For more information on a career as a real estate inspector, CONTACT:

Texas Association of Real Estate Inspectors
Post Office Box 50153
Austin, Texas 78763
512/452-8570

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

Respiratory care is the practice of providing treatment, diagnostic evaluation, and care to patients with cardiorespiratory deficiencies and abnormalities. They act upon written orders from physicians and perform procedures such as monitoring patients on respirators, teaching patients breathing exercises to clear and inflate lungs, and providing therapy with certain gases.

JOB REQUIREMENTS

- good physical condition
- ability to work well under pressure and in critical/emergency situations
- ability to work with other health care professionals
- desire to serve people
- good judgment
- attention to detail

LICENSE REQUIREMENTS (VACS 4512I) (25 TAC 123)

- specialized training
- high school graduation or equivalent

Examination

- contact Texas Department of Health, Respiratory Care Program

Restrictions on Licensing

- must practice under medical direction

Approximate Fees as of May 1992

- \$30.00 for application
- \$30.00 for certification
- \$30.00 for annual renewal of certification

For more information on licensing requirements, CONTACT:

Respiratory Care Program
Texas Department of Health
1100 West 49th Street
Austin, Texas 78756-3183
512/834-6632

EDUCATION/TRAINING

- completion of a Board-approved respiratory care educational program
- three to twelve hours of continuing education credits per year may be required for certification renewal

For a listing of schools. CONTACT:

Joint Review Committee for Respiratory Therapy Education

WORKING CONDITIONS

- indoor, hospital environment
- sanitary
- may work irregular hours, including nights and weekends
- potential for high stress

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Respiratory care practitioners work primarily in hospitals (in departments of respiratory care, anesthesiology, or pulmonary medicine), psychiatric hospitals, long-term care facilities, outpatient clinics, and home health care agencies. They may also work for durable medical equipment providers or ambulance services.

At present, the outlook for respiratory care is very good. Due to current advances in technology impacting on respiratory care (computer-enhanced imaging, SONAR, semi-conductors, lasers, hyperbarics), as well as ongoing research in environmental and air pollution, the demand for respiratory care practitioners should continue to increase. Respiratory care practitioners are also involved in the treatment and research of Acquired Immune Deficiency Syndrome (AIDS).

In 1989, 4,050 respiratory care practitioners were employed in Texas. The projected statewide employment figure for 2000 is 6,100. Total annual average job openings will be 295 -- 185 due to growth and 110 due to labor turnover. Texas statewide average hourly wage is estimated at \$12.90.

For more information on a career in respiratory care. CONTACT:

Texas Society for Respiratory Care
Post Office Box 515239
Dallas, Texas 75251
214/239-8772

Joint Review Committee for Respiratory
Therapy Education
1701 West Eules Boulevard, Suite 200
Eules, Texas 76040
817/283-2835

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	No
Examination required?	Yes

JOB DESCRIPTION

Sanitarians apply technical knowledge to the solution of environmental health problems. They develop environmental health programs, conduct public training sessions, and investigate public health complaints. Sanitarians determine and set health and sanitation standards for communities and industries in regard to food processing, solid waste disposal, sewage treatment, and water supplies. They evaluate existing programs and recommend improvements. Related occupations include waterworks operators, bottled water operators, and waste management operators.

JOB REQUIREMENTS

- attention to detail
- ability to communicate
- concern for environment

LICENSE REQUIREMENTS (VACS 4477-3) (25 TAC 337.181)

- specialized education and training

Examination

- written exam

Restrictions on Licensing

- incompetence
- fraud in obtaining license
- unprofessional conduct

Approximate Fees as of May 1992

- \$10.00 for registration
- \$ 5.00 for sanitarian-in-training registration
- \$10.00 for annual renewal

For more information on licensing requirements, CONTACT:

Sanitarian Registration Program
Texas Department of Health
1100 West 49th Street
Austin, Texas 78756
512/834-6635

EDUCATION/TRAINING

Sanitarian:

- graduation with a B.A. or B.S. from a recognized college or university with at least 15 semester hours in basic and/or natural science
- at least one year of experience in the field

Sanitarian-in-Training:

- graduation with a B.A. or B.S. from a recognized college or university with at least 15 semester hours in basic and/or natural science

For a listing of schools, CONTACT:

Texas Department of Health

WORKING CONDITIONS

- may travel
- may instruct others
- office and field

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Newly registered sanitarians generally enter the field as sanitarians-in-training. As experience increases, opportunity for advancement to higher classified positions is available. Employment possibilities are best in health departments or large industrial corporations. Many sanitarians are employed by municipal or governmental agencies to supervise public health programs. Some actively inspect food establishments, schools, water supplies, and sewage systems. They may concentrate on the investigation of complaints or nuisances. The opportunities for sanitarians are best in areas with large populations and industries.

Nationally, the employment outlook for sanitarians is affected by the generally slow growth in government regulatory programs and in government spending. In 1992, there were 1,500 registered sanitarians in Texas.

For more information on a career as a sanitarian, CONTACT:

Sanitarian Registration Program
Texas Department of Health
1100 West 49th Street
Austin, Texas 78756
512/834-6635

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	No
Examination required?	Yes

JOB DESCRIPTION

Securities dealers represent individuals and organizations in transactions concerning stocks, bonds, or other securities. They open accounts for customers and contact the securities exchange with the buy or sell orders. They may give financial advice on securities purchases or sales, basing the advice on current market trends. Securities sales agents must continually monitor the economic and political situation, and also maintain accurate records of all transactions. They may specialize by type of customer or securities handled.

JOB REQUIREMENTS

- ambition
- ability to work independently
- analytical ability

LICENSE REQUIREMENTS (VACS 581-13) (7 TAC 115)

- character check
- financial and personal history check

Examination

- general securities knowledge
- state securities law--Texas or Uniform Securities Law Examination
- specialized examinations required for certain categories of securities

Restrictions on Licensing

- conviction of felony or misdemeanor including element of fraud
- inequitable business practice
- material misrepresentation

Approximate Fees as of May 1992

- \$235.00 for agent application
- \$220.00 for agent annual renewal
- \$275.00 for dealer application and \$235.00 for each officer application
- \$240.00 for dealer annual renewal
- \$ 35.00 for application for Texas Securities Law Examination

For more information on licensing requirements, CONTACT:

State Securities Board
Post Office Box 13167
Austin, Texas 78711
512/474-2233

EDUCATION/TRAINING

- on-the-job training
- college degree helpful

WORKING CONDITIONS

- work deals with market fluctuations
- much activity in office-like work area
- may involve stress

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

For beginning sales agents, many employers provide training programs which consist of both classroom instruction and on-the-job training. Sales agents then begin a probationary period to demonstrate their capabilities. Initially, agents spend much time developing customer contacts. Once a clientele has been established, advancement may consist of increases in the volume and size of accounts handled. Some agents may advance into managerial positions, or become partners in established firms. Most sales agents work for a small number of large companies, either in main or branch offices.

Opportunities in securities sales fluctuate with the economy. In 1989, 8,850 securities dealers were employed in Texas. The projected statewide employment figure for 2000 is 12,900. Total annual average job openings will be 485 -- 370 due to growth and 115 due to labor turnover. Texas statewide average hourly wage is estimated at \$17.68.

Earnings for licensed securities sales agents may come in the form of sales commissions and therefore fluctuate with investment activity associated with the buying and selling of securities. Many firms provide a minimum salary based on expected commissions.

For more information on a career in securities sales, CONTACT:

National Association of Securities Dealers, District 6
1999 Bryan St., Suite 1450
Dallas, Texas 75201
214/969-7050

AT A GLANCE . . .

Postsecondary schooling?	No
Minimum age requirement?	No
Examination required?	Yes

JOB DESCRIPTION

Social workers are "community troubleshooters." They help individuals, families, and groups cope with problems through counseling and/or referral to other specialists, and plan activities for various age groups from children through senior citizens. As community organizers, they may coordinate resources and groups to combat community problems. Social workers assist people whose lives are affected by poverty, alcohol, drug abuse, behavior problems, illness, or family disruption. They may find families to adopt or care for children; help needy families find the resources they require; and investigate allegations of child neglect and abuse. Specialties in the social work field include school, medical, or psychiatric social workers, probation and parole officers, and child welfare workers.

JOB REQUIREMENTS

- basic concern for people and their problems
- emotional maturity
- sensitivity

LICENSE REQUIREMENTS (Human Resources Code 50.001) (40 TAC 85.6001)

- at least 18 years of age
- worthy of public trust and confidence
- specialized education and training

Examination

- written examination

Restrictions on Licensing

- unethical conduct or conduct discrediting the profession
- fraud or deceit
- conviction of a felony

Approximate Fees as of May 1992

- \$105.00 for application and examination (all levels)
- \$ 15.00 certification (Social Work Associate); \$15.00 annual renewal
- \$ 25.00 certification (Social Worker); \$25.00 renewal
- \$ 35.00 certification (Certified Social Worker); \$35.00 renewal
- \$ 45.00 certification (Certified Social Worker with Order of Recognition as Advanced Clinical Practitioner); \$45.00 renewal

For more information on licensing requirements, CONTACT:

Texas Department of Human Services
Social Work Certification Program, W-403
Post Office Box 149030
Austin, Texas 78714-9030
512/450-3255

EDUCATION/TRAINING

Certified Social Worker:

- doctoral or master's degree in social work or social welfare from approved, accredited graduate school

Social Worker:

- bachelor's degree in social work, social welfare, or equivalent

Social Work Associate:

- bachelor's degree and experience specified by Board; OR
- associate degree and experience specified by Board; OR
- high school diploma and experience specified by Board

To renew certificate:

- 30 hours of continuing education required

For a listing of schools. CONTACT:

Texas Department of Human Services

WORKING CONDITIONS

- may require weekend or evening work
- may involve travel
- may have to handle emergencies

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Most social workers are employed in the public sector, working for state, county, or municipal government. Others work for voluntary agencies, community or religious organizations, hospitals, nursing homes, and related agencies. Industrial social workers counsel employees with emotional, alcohol-related, and other problems. A small but growing number are in private practice.

In 1989, 23,600 social workers were employed in Texas. The projected statewide employment figure for 2000 is 29,650. Total annual average job openings will be 765 -- 550 due to growth and 215 due to labor turnover. Texas statewide average hourly wage is estimated at \$11.13.

For more information on a career in social work. CONTACT:

National Association of Social Workers, Texas Chapter
810 West 11th Street
Austin, Texas 78701
512/474-1454

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	Yes, 18
Examination required?	Yes

SPEECH-LANGUAGE PATHOLOGIST / AUDIOLOGIST

D.O.T. 076.101-010; 076.107-010

JOB DESCRIPTION

Speech-language pathologists and audiologists are concerned with communication and strive to correct the speech, language, or hearing difficulties that interfere with it. Speech-language pathologists work with children and adults who have speech, language and voice disorders, while audiologists assess and treat hearing problems. Speech-language pathologists and audiologists identify and evaluate disorders, and may coordinate with health and education professionals to design and implement a program of therapy. Because speech and hearing are closely interrelated, a person must be familiar with both fields to be competent in either one.

JOB REQUIREMENTS

- concern for the needs of others
- objectivity
- good interpersonal skills

LICENSE REQUIREMENTS (VACS 4512j) (22 TAC 741)

- specialized education and training
- separate license required for speech-language pathology or audiology, but an individual may hold both licenses if qualified
- license renewal requires completion of approved continuing professional education

Examination

- written and/or oral examination
- waived for persons holding Certificate of Clinical Competence from the American Speech-Language-Hearing Association

Restrictions on Licensing

- fraud, misrepresentation, or concealment of material fact in obtaining license
- unprofessional conduct
- conviction of a felony, or any crime involving moral turpitude

Approximate Fees as of May 1992

- \$30.00 for application
- \$60.00 for examination
- \$30.00 for license
- \$30.00 for annual renewal

For more information on licensing requirements, CONTACT:

State Committee of Examiners for Speech-Language Pathology and Audiology
Texas Department of Health
1100 West 49th Street
Austin, Texas 78756-3183
512/834-6627

EDUCATION/TRAINING

- master's degree in speech-language pathology or audiology, including college transcripts showing course work in specified areas
- at least 30 hours of graduate courses, with at least six hours in speech-language pathology for audiology licensees, and six hours in audiology for speech-language pathology licensees
- 300 clock hours of supervised clinical experience within training institution or cooperating program
- nine months full-time supervised professional experience after academic and clinical experience

For a listing of schools, CONTACT:

State Committee of Examiners for Speech-Language Pathology and Audiology

WORKING CONDITIONS

- work normal hours, with few exceptions based on work setting
- clean, comfortable surroundings
- intense mental concentration

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Elementary and secondary schools and institutions of higher education employ two-thirds of all speech-language pathologists and audiologists. Speech, language, and hearing centers, hospitals, nursing homes, offices of physicians, outpatient care facilities, and private practice account for the remainder of employment. Opportunities are expected to expand due to population growth and a trend toward earlier recognition and treatment of hearing and speech problems. One half of the anticipated growth may occur in outpatient services, reflecting the growing demand for rehabilitation services and the deinstitutionalization of persons with disabilities.

In 1989, 4,550 speech-language pathologists and audiologists were employed in Texas. The projected statewide employment figure for 2000 is 5,900. Total annual average job openings will be 240 -- 125 due to growth and 115 due to labor turnover. Texas statewide average hourly wage is estimated at \$13.91.

For more information on a career in speech-language pathology or audiology, CONTACT:

Texas Speech-Language-Hearing Association
c/o Mr. Banks Miller, Executive Director
Post Office Box 610250
Austin, Texas 78761
512/452-4571

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	No
Examination required?	Yes

TAX PROFESSIONAL / APPRAISER / ASSESSOR-COLLECTOR

D.O.T. 188.167

JOB DESCRIPTION

Tax professionals in Texas may be appraisers, assessors and/or collectors. Appraisers use their judgment to place a value on a taxpayer's property. Assessors calculate tax rates and work with governing bodies to have these rates adopted. Collectors work to obtain current and delinquent property taxes. Typically, assessors are also collectors, although there are some collectors who do not assess.

JOB REQUIREMENTS

- mathematical ability
- attention to detail
- good judgment

LICENSE REQUIREMENTS (VACS 8885) (22 TAC 623)

Registration:

- must be active in property tax field for which application is made
- Texas resident
- at least 18 years of age
- good moral character

Certification:

- Appraiser: five years experience, specialized education and training, one demonstration appraisal
- Assessor: five years experience, specialized education and training
- Collector: three years experience, specialized education and training

Examination

For certification:

- Appraiser: two exams
- Assessor: two exams
- Collector: one exam

Restrictions on Licensing

- violation of the law or code of ethics
- conviction of a felony involving moral turpitude

Approximate Fees as of May 1992

- \$50.00 for application
- \$35.00 for registration
- \$35.00 for annual renewal

For more information on licensing requirements. CONTACT:

Board of Tax Professional Examiners
4301 West Bank Drive, Bldg. B, Suite 140
Austin, Texas 78746-6565
512/329-7982

EDUCATION/TRAINING

Registration:

- high school diploma or equivalent

Certification:

- Assessor and Appraiser: eight specified courses
- Collector: six specified courses

For a list of in-service training courses. CONTACT:

Board of Tax Professional Examiners

WORKING CONDITIONS

- may involve travel
- may work irregular hours

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Assessors are elected or appointed officials employed by governmental units such as counties, municipalities, or school districts. They often begin as deputy or assistant assessors to gain knowledge of the profession. A related field is appraising, which is valuation of property for taxation. Appraisers also work for private firms or corporations.

In 1989, 3,550 tax appraisers, 1,750 tax assessors and 5,350 tax collectors were employed in Texas. The projected statewide employment figure for 2000 is 4,400, 1,900 and 5,650 respectively. Total annual average job openings for tax appraisers will be 135 -- 80 due to growth and 55 due to labor turnover. Total annual average job openings for tax assessors will be 55 -- 15 due to growth and 40 due to labor turnover. Total annual average job openings for tax collectors will be 110 -- 30 due to growth and 80 due to labor turnover. Texas statewide average hourly wage is estimated at \$8.90 to \$14.20. Salaries for assessors vary greatly, depending upon the size of the district in which they work.

For more information on a career as an assessor. CONTACT:

Texas Association of Assessing Officers
7600 Burnet Road #520
Austin, Texas 78757
512/452-2515

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

Teachers help people of all ages master a specific skill or concept. Elementary school teachers play a vital role in the development of children. In addition to basic concepts, they help children learn social and behavioral skills. Secondary school teachers instruct junior or senior high school students in specific subjects. They may use various methods to present material including lectures, slides, field trips, films, and computer programs. College and university teachers present an in-depth analysis of a particular subject. As a supplement to teaching, many participate in professional activities and conduct research in their fields. Some also act as advisors, helping students with graduation requirements and career choices.

JOB REQUIREMENTS

- ability to communicate
- good judgment
- enthusiasm for working with others

LICENSE REQUIREMENTS (Education Code 13.033-046)

- at least 18 years of age
- good moral character
- willing to support and defend Texas and U.S. Constitutions
- ability to speak and understand English
- specialized education and/or training

Examination

- written competency test -- Examination for the Certification of Educators in Texas (EXCET)

Restrictions on Licensing

- violation of laws concerning teaching
- unworthiness in the instruction of youth
- abandonment of contract
- conviction of a felony, or misdemeanor related to teaching duties

Approximate Fees as of May 1992

- \$35.00 for certificate
- \$60.00 for evaluation based on out-of-state credentials

For more information on licensing requirements, CONTACT:

Texas Education Agency
1701 North Congress Avenue
Austin, Texas 78701-1494
512/463-8976

EDUCATION/TRAINING

- completion of an approved program at an approved institution of higher learning and recommendation for certification by that institution

For more information on specific certification levels and a listing of schools. CONTACT:

Texas Education Agency

WORKING CONDITIONS

- nine-month working year
- lecture plus preparation time required

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Teachers may choose the grade level they wish to teach, whether preschool, elementary, secondary, or postsecondary. A higher level of education is required for college/university teaching. Teachers may be employed by private or public schools. Some may supplement their regular teaching duties by working as camp counselors, teaching summer session courses, or coaching athletic teams. Education and experience are the basis for advancement which is usually in the form of higher salaries, although some teachers attain supervisory or administrative positions. Employment is largest in an expanding population area.

In 1989, 242,450 preschool, elementary, secondary school, special education, and vocational education teachers were employed in Texas. The projected statewide employment figure for 2000 is 310,550. Total annual average job openings will be 10,420 -- 6,190 due to growth and 4,230 due to labor turnover. Texas statewide average hourly wage is estimated at \$8.60 to \$14.73.

For more information on a career in teaching. CONTACT:

Texas State Teachers Association
316 West 12th Street
Austin, Texas 78701
512/476-5355

AT A GLANCE . . .

Postsecondary schooling?	Yes, 4-5 years
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

Underground storage tank installers install, repair, or remove underground storage tanks. Every underground storage tank contractor must have a certificate of registration to do business in Texas, and work must be performed or supervised on-site by a licensed underground storage tank installer. Rules and regulations are currently being drafted by the Texas Underground Storage Tank Advisory Committee. February 1, 1990, is the effective date.

JOB REQUIREMENTS

- working knowledge of Underground Storage Tank (UST) systems
- mechanical and technical aptitude
- ability to perform manual labor
- concern for safety

LICENSE REQUIREMENTS (House Bill 183, 71st Legislature, Regular Session)

- 24 months of applicable construction experience
- specialized training and experience
- at least 18 years of age
- examination
- applicant must present certificate of completion for UST related training and education when submitting application

Examination

- current expert standards and practices

Restrictions on Licensing

- violation of rules and regulations
- fraudulent procurement or abuse of permit

Approximate Fees as of May 1992**Certificate of Registration**

- \$ 50.00 for application fee
- \$100.00 for certification fee
- \$ 75.00 for annual renewal fee

License

- \$ 50.00 for examination fee
- \$200.00 for initial license fee, OR
- \$200.00 for combined license/examination fee
- \$175.00 for annual renewal

For more information on licensing requirements, CONTACT:

Texas Water Commission
Underground Storage Tank Division
Technical Services Section
Post Office Box 13087
Austin, Texas 78711-3087
512/371-6219

EDUCATION/TRAINING

- may require up to two years experience in underground storage tank installation, underground utilities installation, or other engineering construction in Texas
- 8 hours of continuing education per year per license held for license renewal

WORKING CONDITIONS

- work in urban and rural areas
- may work long and irregular hours outside in variable weather
- involves strenuous physical labor

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Approximately 90-95% of the underground storage tanks installed, repaired, or removed in Texas are intended for usage with petroleum substances. The remainder are intended for the containment of non-processed, hazardous substances.

Presently there is a significant amount of economic activity concerning underground storage tanks. Much of the work involves the removal and upgrading of storage tanks to meet federal Environmental Protection Agency standards, adopted in December, 1988. There is a higher density of underground storage tank contractors in urban areas, but project sites are located throughout the state.

In 1992, there were 1,142 registered underground storage tank installers in Texas.

For more information on a career in underground storage tank installation. CONTACT:

Texas Water Commission
Underground Storage Tank Division
Technical Services Section
Post Office Box 13087
Austin, Texas 78711-3087
512/371-6219

AT A GLANCE . . .

Postsecondary schooling?	No
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

Veterinarians diagnose, treat, and control diseases and injuries in animals, as well as help prevent the spread of animal disease to humans. Veterinarians also counsel and educate animal owners and livestock producers about animal health care. Many work with small animals or house pets. Others concentrate on the health and breeding of cattle, sheep, horses, swine, and poultry. Veterinarians also inspect meat and poultry as part of government health programs. Some veterinarians, after additional training and education, become American Veterinary Medical Association (AVMA) Board certified in their chosen field.

JOB REQUIREMENTS

- aptitude for science
- strength and stamina
- good interpersonal skills
- desire to help animals

LICENSE REQUIREMENTS (VACS 8890) (22 TAC 571)

- specialized education and training

Examination

- written and/or practical

Restrictions on Licensing

- fraud in obtaining license
- addiction to alcohol or drugs
- conviction of a felony

Approximate Fees as of May 1992

- \$500.00 for examination*
- \$300.00 for annual registration

* If only State Board exam is taken, the fee is \$300.00

For more information on licensing requirements. CONTACT:

Texas Board of Veterinary Medical Examiners
1946 South Interregional Highway, Suite 306
Austin, Texas 78704
512/447-1183

EDUCATION/TRAINING

- graduation from an AVMA and Board approved school or college of veterinary medicine

For a listing of schools, CONTACT:

American Veterinary Medical Association, OR

Texas Veterinary Medical Association

WORKING CONDITIONS

- much interaction with animals and people
- may travel in rural areas
- may work long and irregular hours
- may be exposed to health hazards

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Most veterinarians are in private practice, specializing in either domestic animals or livestock. Some are employed by government agencies, such as the United States Department of Agriculture or the Public Health Service, where they may work, for example, in infectious disease control or food inspection. Other employers of veterinarians are colleges of veterinary medicine, research laboratories, zoos, animal food companies, and pharmaceutical and medical products manufacturers. Usually veterinarians in urban areas specialize in small pets; those in rural areas treat farm animals; and small town veterinarians engage in general practice. With advanced training veterinarians may work as a specialist in areas including pathology, toxicology, and laboratory animal science.

In 1989, 3,050 veterinarians were employed in Texas. The projected statewide employment figure for 2000 is 3,750. Total annual average job openings will be 145 -- 65 due to growth and 80 due to labor turnover. Texas statewide average hourly wage is estimated at \$18.24.

Recent large graduation rates from veterinary programs have created a surplus of veterinarians. Employment opportunity will reside in technical services and research areas and in specialty fields, rather than the traditional areas of private practice.

For more information on a career in veterinary medicine, CONTACT:

Texas Veterinary Medical Association
6633 Highway 290 East, #201
Austin, Texas 78723
512/452-4224

AT A GLANCE . . .

Postsecondary schooling?	Yes
Minimum age requirement?	Yes, 18
Examination required?	Yes

JOB DESCRIPTION

Water well drillers engage in the drilling, coring, boring, or construction of any water well, monitoring well, dewatering well, and certain injection wells. Drillers operate portable drilling rigs, maintain drill bits and equipment, and record drilling progress and geological data. Drillers must submit copies of well logs to the Texas Water Commission. At least one person must be licensed on the drilling site at all times or be represented by a registered driller trainee, or registered as a driller trainee.

JOB REQUIREMENTS

- mechanical and technical aptitude
- ability to perform manual labor
- ability to keep accurate records

LICENSE REQUIREMENTS (VACS 7621e) (31 TAC 231)

- specialized knowledge and experience
- Texas resident for at least 90 days
- four letters of reference
- examination
- driller trainee registration requires the sponsorship of a licensed driller who is financially responsible and supervises training for a period of one year minimum

Examination

- written or oral examination encompassing drilling, plugging and completion techniques, and ground water formations

Restrictions on Licensing

- non-compliance with standards of professional conduct and ethics
- non-compliance with well driller statutes and codes

Approximate Fees as of May 1992

- \$100.00 for examination and license registration
- \$125.00 for annual license renewal
- \$ 50.00 for driller trainee registration

For more information on licensing requirements. CONTACT:

Texas Water Well Drillers Board
Texas Water Commission
Post Office Box 13085
Austin, Texas 78711
512/371-6299

EDUCATION/TRAINING

- two years experience as a water well driller under the supervision of a licensed driller; OR
- comparable well drilling experience

WORKING CONDITIONS

- travel in rural areas
- may work long and irregular hours outside in variable weather
- involves strenuous physical labor

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Well drillers initiate and restore irrigation, industrial, and domestic water wells. Employment opportunity is related to the demand for irrigation systems and the expansion of industrial and residential tracts into previously rural areas. Many drillers, formerly employed in petroleum exploration and production, compete for water well drilling employment. Increased activity surrounding monitoring wells and underground storage tanks may create employment opportunities for workers skilled in well drilling.

In 1989, 900 water well drillers were employed in Texas. The projected statewide employment figure for 2000 is 1,150. Total annual average job openings will be 45 -- 25 due to growth and 20 due to labor turnover. Texas statewide average hourly wage is estimated at \$8.54.

For more information on a career in water well drilling, CONTACT:

Texas Water Well Association
206 San Jacinto Building
Austin, Texas 78701
512/472-7216

AT A GLANCE . . .

Postsecondary schooling?	No
Minimum age requirement?	No
Examination required?	Yes

ADDENDUM

At the time of printing, the occupations listed below had been recently identified as requiring licensure or certification. Please refer to the appropriate licensing board or committee for additional information.

CODE ENFORCEMENT OFFICER

JOB DESCRIPTION

Code enforcement officers are agents of this state or a political subdivision of this state that practice the inspection, improvement, and rehabilitation of environmental hazards in public and private premises by determining the presence of fire or health hazards, nuisance violations, unsafe building conditions, and violations of any fire, health, or building regulation, statute, or ordinance.

For information on licensing requirements, CONTACT:

Code Enforcement Advisory Committee
Texas Department of Health
1100 West 49th Street
Austin, Texas 78756
512/834-6659

OPTICIAN

JOB DESCRIPTION

Dispensing opticians or ophthalmic dispensers are persons who provide or offer to provide spectacle or contact lens dispensing services or products to the public.

For information on licensing requirements, CONTACT:

Advisory Council of the Opticians' Registry
Texas Department of Health
1100 West 49th Street
Austin, Texas 78756
512/834-6661

PROFESSIONAL MEDICAL PHYSICIST

JOB DESCRIPTION

Professional medical physicists are persons licensed to practice in one or more of the following specialties: 1) Medical Health Physics -- deals with the safe use of Roentgen rays, gamma rays, electron or other charged particle beams, neutrons, radionuclides, and radiation from sealed radionuclide sources for both diagnostic and therapeutic purposes in humans and the use of equipment required to perform appropriate radiation tests and measurements, 2) Diagnostic Radiological Physics -- deals with diagnostic application of Roentgen rays, gamma rays from sealed sources, ultrasonic radiation, or radiofrequency radiation and the use of equipment associated with the production and use of the radiation, 3) Medical Nuclear Physics -- deals with the therapeutic and diagnostic application of radionuclides, except those in sealed sources for therapeutic purposes, and the use of equipment associated with the production and use of radionuclides, and 4) Therapeutic Radiologic Physics -- deals with the therapeutic application of Roentgen rays, gamma rays, electron and other charged particle beams, neutrons, or radiations from radionuclide sources and the use of equipment associated with the production and use of radiation.

For information on licensing requirements, CONTACT:

Texas Board of Licensure for Professional Medical Physicists
Texas Department of Health
1100 West 49th Street
Austin, Texas 78756-3183
512/834-6655

APPRENTICESHIP IN TEXAS

What is apprenticeship?

Apprenticeship is a structured system of industry-based training designed to prepare individuals for occupations in skilled trades and crafts. Apprentices enter a voluntary contractual employment agreement with a sponsor who makes available supervised on-the-job training and progressive work experience combined with related theoretical and practical classroom instruction in a recognized occupational skill. After completing the required amount of training, the apprentice receives nationally recognized certification from the Bureau of Apprenticeship and Training (BAT) of the U. S. Department of Labor as a skilled craft worker in the chosen occupation.

Although the minimum term of training for recognition as an apprenticeable occupation is one year (2,000 hours of on the job work experience) and may range up to six years, most apprenticeships require three to four years of training. The length of training depends on the occupation and is determined by industry adopted standards. Related instruction in occupational theory and practice normally occurs in a classroom situation outside working hours for three to six hours a week and a minimum of 144 hours per year. Examples are classes on safety, mathematics, blueprint reading, and other technical courses needed for the specific occupation.

Funds, available to subsidize the cost of related instruction for most of the apprenticeship programs, are primarily administered by the Community and Technical Colleges Division of the Texas Higher Education Coordinating Board and the Adult and Community Education Division of the Texas Education Agency. Funds are distributed on a contact hour basis, that is, the actual classroom time shared by instructor and student, and are intended to provide for the salary of the instructor and the cost of classroom supplies and materials. These agencies also provide technical assistance with apprenticeship program development.

What does apprenticeship offer?

For workers, apprenticeship offers the opportunity to earn a living while learning a skill that brings personal satisfaction as well as the promise of a high paying skilled job with opportunity for advancement. Studies show that participants in apprenticeship have more stable work records, learn skills faster, and are promoted sooner and more often than workers who have not been trained through apprenticeship programs.¹

Several occupations that are licensed by the State of Texas are also apprenticeable. Plumber and land surveyor are examples. Data collected by the Texas State Board of Plumbing Examiners indicates that individuals trained by apprenticeship have higher scores and success rates on licensing examinations than individuals who received other forms of training.²

For employers, apprenticeship provides productive, highly skilled workers who can be expected to complete complex tasks and meet unanticipated work challenges through independent action and mature judgment.

For state and society, apprenticeship offers a large return in human capital for a small investment in resources. There are several interrelated benefits of apprenticeship.

- Apprenticeship promotes a highly skilled and productive work force that enhances the national capacity to respond to the increased competition of the international marketplace.

¹ Ray Marshall, William S. Franklin, and Robert W. Glover. 1975. *Training and Entry into Union Construction*. pp. 141-168.

² *Ibid.*, p. 145-6.

- Apprenticeship generates workers who are more adaptable to rapidly changing technology. Apprenticeship creates an environment that combines theory and practice, earning while learning, and "learning by doing" and helps motivate learners who do not respond well to the classroom setting alone. Basic learning skills and motivation are essential to emerging job opportunities.
- Apprenticeship offers a bridge between education and career employment. Young workers can become productive wage earners and avoid an extended period of transition from school to suitable employment. The projected decline in the labor force, particularly the youth component, can be partially compensated by a more efficient movement of youth into the labor force through apprenticeship. Moreover, apprenticeship provides an alternative for non-college bound youth. Many new entrants into the labor force will be unqualified for the types of jobs available and will require additional training and education that apprenticeship can provide.
- Apprentices, as taxpayers, return revenues to federal, state, and local government that offset expenditures for the promotion, development, registration, and servicing of apprenticeship programs.

What are the qualifications for apprenticeship?

Qualifications for apprenticeship vary with the program. Although apprenticeship regulations specify a minimum age of sixteen years of age, many hazardous skilled job classifications in construction and other industries require applicants to be at least eighteen years old. In current practice, individuals beginning apprenticeship in the United States are generally in their early twenties. Additionally, most apprenticeship programs require a high school diploma or equivalent certificate (GED) and/or the completion of some mathematics and science courses. Some construction and manufacturing trades require considerable physical stamina, vocational educational or industrial arts courses, or related work experience.

How are apprentices selected?

Apprentices are selected on the basis of qualifications, without regard to race, color, sex, or national origin. The actual selection of the apprentice is made by a sponsoring employer, a local apprenticeship committee of several employers, or a joint apprenticeship committee comprised of management and labor representatives with considerable experience in the industry. The apprenticeship committee determines the need for apprentices and sets minimum standards of education, experience, and training that must conform substantially with the industry-wide standards of apprenticeship for the occupations that have been adopted by the BAT.

How much are apprentices paid?

Apprentices are full-time paid employees who work a regular 40-hour week. Generally, they are paid 40 to 50 percent of a journey worker's wages to start. Depending on the occupation, the starting wage for apprentices usually varies between \$5 and \$7 per hour. The employment agreement with the sponsor dictates that wages are increased at regular intervals commensurate with the increasing job skills of the apprentice. At the successful completion of the term of the apprenticeship, apprentices become certified journey workers and receive full pay for their skills.

What types of occupations can be learned through apprenticeship?

There are approximately 800 apprenticeable occupations currently recognized by the BAT. Among these are aircraft mechanics, appliance repairers, auto body repairers, auto mechanics, boilermakers, bricklayers, carpenters, chefs, pipefitters, sheet metal workers, electricians, heavy equipment operators, machinists, medical laboratory technicians, opticians, painters, plumbers, tool makers, and welders. As of January, 1992, there were approximately 10,000 registered apprentices in over 750 registered apprenticeship programs in Texas.

What are the prospects for apprenticeship in Texas?

Since apprenticeship is a system of industry based, on-the-job training, apprenticeship opportunity is dependent upon developments in the economy and employment demand. Apprenticeship requires jobs. As the national economy shifts away from goods-producing industries, job opportunities are emerging in the service-producing industries. A national dialogue has emerged concerning the expansion of apprenticeship in the service sector and the applicability of some form of the concept of apprenticeship in non-traditional areas. This dialogue is particularly relevant in Texas.

The Texas economy reflects the national trend to shift away from goods-producing industries toward service-producing sectors. Almost half of the total job growth in Texas between 1985 and 2000 is projected to occur in the service sector.³ These new jobs will require advanced skills. More than three quarters of the projected labor force entrants will be women and minorities, many of whom will lack the necessary skills for available employment.⁴ Workers already in the labor force will require additional training and skill-upgrading. An expansion of apprenticeship programs in the service sector can supply the requisite training and education needed to bridge the gap between available jobs and workers.

Health care services, repair services, and business services, especially data processing and computer services, are areas of projected growth in Texas within which there is potential for expanded apprenticeship programs in occupations such as dental assistant, laboratory technician, computer equipment operator, and appliance repairman. Emergency medical technician and firefighter are examples of recently recognized apprenticeable occupations in the service sector.

The adoption of some form of apprenticeship in non-traditional areas, such as banking, communication, retailing, and government, is also being explored nationally. The experience in Europe of apprenticeship in similar fields and the presence of apprentice-like situations in the United States, such as internships, mentorships, and informal job learning processes, suggests merit for this approach. Some formulations may emerge in the future in Texas.

For the present, the largest apprenticeship programs in Texas remain in the traditional areas of the building and construction occupations, followed by the manufacturing occupations. Although apprenticeships are limited by the present Texas economy, opportunities will emerge with the projected revitalization of the construction and manufacturing divisions of industry and the need to replace and retrain skilled workers.

For further information on apprenticeship programs in Texas. CONTACT:

- U.S. Department of Labor, Bureau of Apprenticeship and Training offices in:

Dallas

Bureau of Apprenticeship and Training
U.S. Department of Labor
Regional Office
525 Griffin Street, Room 502
Dallas, Texas 75202
214/ 767-4993

Houston

Bureau of Apprenticeship and Training
U.S. Department of Labor
State Office
2320 La Branch, Room 2102
Houston, Texas 77004
713/ 750-1696

³ Texas Employment Commission. 1988. *Texas Workforce 2000*. p. 25.

⁴ *Ibid.*, pp. 2-3.

Lubbock

Bureau of Apprenticeship and Training
U.S. Department of Labor
Federal Building
1205 Texas Avenue, Room 416 A
Lubbock, Texas 79401
806/ 743-7650

Fort Worth

Bureau of Apprenticeship and Training
U.S. Department of Labor
Federal Building
819 Taylor Street, Room 1G04
Fort Worth, Texas 76102
817/ 334-3486

San Antonio

Bureau of Apprenticeship and Training
U.S. Department of Labor
Federal Building
10127 Morocco Street, Suite 112
San Antonio, Texas 78216
512/ 229-4592

Dallas

Bureau of Apprenticeship and Training
U.S. Department of Labor
6300 Forest Park Road, Suite 224 B
Dallas, Texas 75235
214/ 655-6950

Port Arthur

Bureau of Apprenticeship and Training
U.S. Department of Labor
Federal Building
2875 75th Street, Room 114
Port Arthur, Texas 77640
409/ 724-4360

- Texas Education Agency, Adult and Community Education Division office at:

Adult and Community Education Division
Texas Education Agency
W. B. Travis Building
1701 North Congress
Austin, Texas 78701-1494
(512) 463-9294

- local community colleges and public school districts
- representatives of various labor organizations
- various trade associations
- Texas State Occupational Information Coordinating Committee on the toll free hotline at **1-800-822-7526**

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