

Directory of Licensed Occupations and Apprenticeship Program Contacts in

REFERENCE

Government Publications Texas State Documents

APR 1 2 1990

Dallas Public Library

Fifth Edition

2/1/0/

1989 02 50•5 LL 1

GOVERNMENT

BLICATIONS

R

CGP SER R	002000 Y9005722	56
331.702	N0750065 00	38
D'598		
1989 0250 •5 LL1	DIRECTORY OF LICENSED OCCUPAT	ION

DALLAS PUBLIC LIBRARY GOVERNMENT PUBLICATIONS

Directory of Licensed Occupations and

Apprenticeship Program Contacts

in

Texas

Government Publication Texas State Documents

APR 1 2 1990

Dallas Public Library

Fifth Edition

Prepared by Center for the Study of Human Resources Lyndon B. Johnson School of Public Affairs University of Texas at Austin for the Texas State Occupational Information Coordinating Committee

September 1989

Cover design and printing by the Texas Employment Commission.

N0750065 008

TEXAS STATE OCCUPATIONAL INFORMATION COORDINATING COMMITTEE

Mr. Max Arrell Commissioner Texas Rehabilitation Commission

> Dr. Kenneth Ashworth Commissioner Texas Higher Education Coordinating Board

Mr. William D. Grossenbacher Administrator Texas Employment Commission

Mr. William Taylor Executive Director Texas Department of Commerce

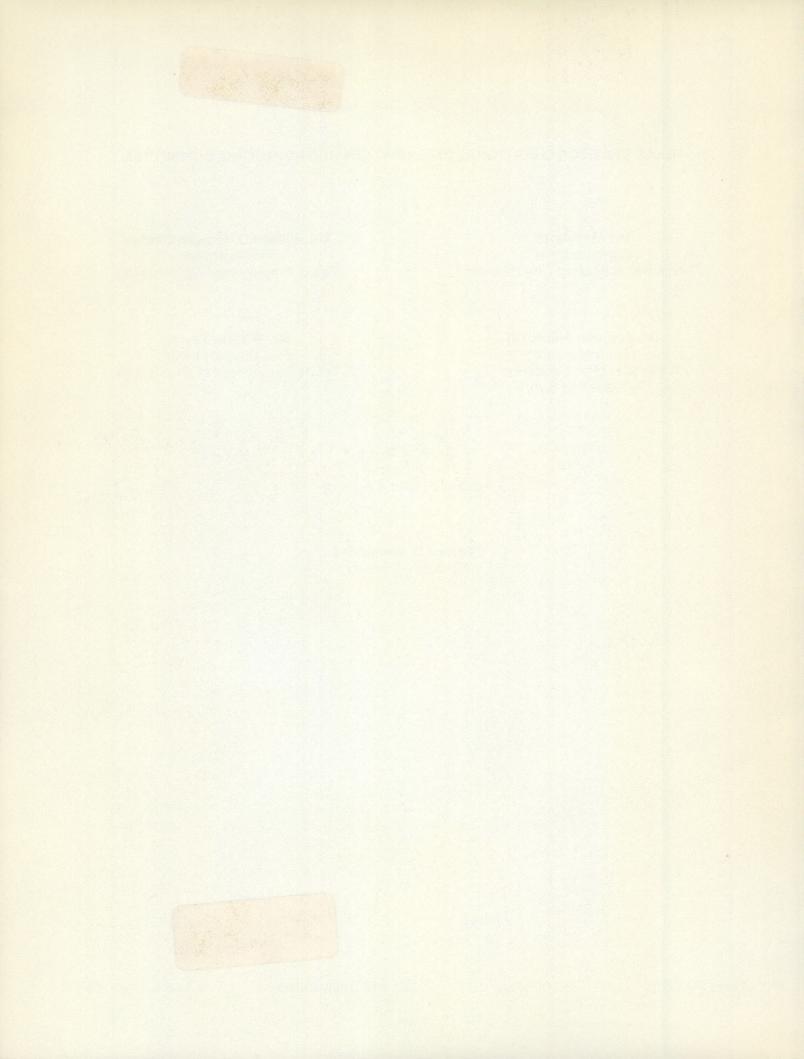
Dr. W.N. Kirby Commissioner Texas Education Agency

Michael R. Fernandez Executive Director

CGP 90057226 R 1989 0250.5 L61

12th and Trinity Streets

Austin, Texas 78778



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 fifth edition in an effort to keep the Directory as current, accurate, and useful as possible. It is the intent of the Texas State Occupational Information Coordinating Committee (SOICC) to 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.

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 71st 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 and professional or occupational association (if such exists) 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.

Employment projections, when available, were taken primarily from *Texas Jobs 1995*, published by the Texas Employment Commission. 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 1986*, compiled by the Texas SOICC. Salary information provided is for wage and salary jobs only and <u>does not</u> 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. Robert W. Glover of the Center for the Study of Human Resources and Toni Dean and Jake Woodman of the Adult Education/Employment and Training Division at the Texas Education Agency provided helpful direction, information, and commentary.

Daniel P. O'Shea of the Center for the Study of Human Resources conducted the research and prepared the revisions contained in this fifth edition of the Directory. He wishes to thank all the individuals, agencies, and associations whose cooperation helped produce this publication. Annette Gula at the Center provided invaluable conceptual, technical, and editorial assistance. Deanne Aldridge also contributed professional editorial assistance.

TABLE OF CONTENTS

Accountant, Certified Public	1
Air Conditioning and Refrigeration Contractor	3
Architect	5
Athlete Agent	7
Athletic Trainer	9
Attorney	11
Auctioneer	13
Barber	15
Boxing Promoter	17
Child Care Administrator	
Chiropractor	19
Chiropractor	21
Cosmetologist	23
Courselor, Professional	25
Court Reporter.	27
Dental Hygienist	29
Dentist	31
Dietitian	33
Engineer, Professional	35
Fire Protection Personnel / Firefighter	37
Fire Protection System Contractor	39
Fish Farmer	41
Funeral Director / Embalmer	43
Hearing Aid Dispenser	45
Home Health Aide	47
Insurance Adjuster	49
insurance Agent	51
interpreter for the Deat	53
ingalor	55
	57
Lanuscape Architect	59
Law Enforcement Oncer	61
Libranan, County	63
Massage Therapist	65
Medical Radiologic Technologist	67
Medication Aide	69
Midwite, Lav	71
Nurse, Licensed Vocational (LVN)	73
Nurse, Registered (RN)	75
Nurse Alde, Long Term Care	77
Nursing Home Administrator	79
Occupational Therapist	81
Optometrist	83
Pawnbroker	85
Pesticide Applicator	87
Pharmacist	89
Physical Therapist	91
Physician	93
Plumber	95
Podiatrist	97
Polygraph Examiner	99

Private Investigator / Security Guard	101
Psychologist	
Real Estate Broker / Agent / Inspector	
Respiratory Care Practitioner	
Sanitarian	
Securities Dealer	111
Social Worker	113
Speech-Language Pathologist / Audiologist	
Tax Professional / Appraiser / Assessor-Collector	
Teacher	119
Underground Storage Tank Installer	
Veterinarian	
Water Well Driller	125

Apprenticeship in Texas	127
Printed Sources	

ACCOUNTANT, CERTIFIED PUBLIC

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)

- United States citizenship, or maintain permanent legal residence in Texas for six months, or reside in Texas for 90 days
- at least 18 years of age
- 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

Fees Not to Exceed

- \$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

- 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
- bachelor's degree with 20 semester hours* of core accounting courses, plus four years experience in accountancy; OR
- master's degree in accounting; OR
- master's degree in business administration or equivalent professional 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 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.

The demand for accountants is expected to rise through the mid-1990's since they play key roles in the management of all types of businesses. In 1985, 76,600 accountants/auditors were employed in Texas, and employment is expected to reach 96,900 by 1995. (Please note that employment and projections data for accountants includes occupations which may or may not require certification to practice.) Total annual average job openings will be 4,554; 2,030 due to growth and 2,524 due to labor turnover. According to the Texas State Board of Public Accountancy, there were approximately 44,000 certified public accountants in 1989. The average salary of accountants in Texas ranged between \$21,100 and \$28,600 in 1986.

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? Minimum age requirement? Examination required?

Yes Yes, 18 Yes

AIR CONDITIONING & REFRIGERATION CONTRACTOR D.O.T. 637.261

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 heating capacity of 36,000 BTU or less.

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
- · separate examination for each endorsement

Restrictions on Licensing

- · dishonesty, fraud, gross negligence, or abuse of license
- conviction of a felony or any crime deemed adverse to professional performance

Fees Not to Exceed

- \$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

- 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 1985, there were 21,100 air conditioning and refrigeration mechanics in Texas. The projected employment for 1995 is 25,550. Total annual average job openings will be 895, 405 due to growth and 490 due to labor turnover. In 1989, more than 7,300 individuals in Texas held Class A or Class B licenses. Roughly one out of seven mechanics is self-employed. The average salary for air conditioning, heating, and cooling mechanics in Texas ranged between \$17,250 and \$23,300 in 1986.

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? Minimum age requirement? Examination required? Recommended Yes, 18 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 eight 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

Fees Not to Exceed

- \$ 10.00 for application
- \$350.00 for examination
- \$ 50.00 for annual renewal

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

- bachelor's degree in architecture, plus three years experience in the office of a registered architect; 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. Construction is expected to resume in Texas to meet the needs of an expanding population in forthcoming years and may be accompanied by growth in employment opportunity for architects. Employment of architects is projected to increase from 7,850 in 1985 to 9,150 in 1995. Total annual average job openings will be 362, 130 due to growth and 232 due to labor turnover.

The average salary of architects in Texas ranged between \$25,500 and \$34,500 in 1986.

For more information on a career in architecture, CONTACT :

Texas Society of Architects 1400 Norwood Towers Austin, Texas 78701 512/478-7386

AT A GLANCE . . .

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

ATHLETE AGENT

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

Fees Established

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

For more information on licensing requirements, CONTACT :

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

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 1989, there were 38 registered athlete agents in the state.

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

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

AT A GLANCE . . .

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

ATHLETIC TRAINER

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 registration law
- fraud in obtaining license

Fees Not to Exceed

- \$30.00 for examination
- \$35.00 for license
- \$25.00 for annual renewal

For more information on licensing requirements, CONTACT :

Advisory Board of Athletic Trainers 1100 West 49th Street Austin, Texas 78756 512/458-7546

- 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.

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

Southwest Athletic Trainers Association c/o James Dodson, Executive Secretary Midland High School 906 W. Illinois Midland, Texas 79701 915/682-7367

AT A GLANCE . . .

Postsecondary schooling?YesMinimum age requirement?NoExamination 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 range from legal aid counselors to judgeships. 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 (VACS 304)

- 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
- specialized education and/or training

Examination

- moral character and fitness investigation
- · criminal history investigation
- must file application to take Bar Examination

Restrictions on Licensing

- charged with any violation except Class C misdemeanor, minor traffic offense, and those dismissed, acquitted, or pardoned
- · charged with fraud in any legal proceeding
- involved in civil litigation or bankruptcy proceedings that reasonably bear on applicant's fitness to practice law

Fees Not to Exceed

- \$150.00 for examination
- \$150.00 for filing of Declaration of Intention to Study Law

For more information on licensing requirements, CONTACT :

Board of Law Examiners Post Office Box 13486 Austin, Texas 78711-3488 512/463-1621

- 90 semester hours of pre-law training with at least a "C" average
- 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 1985, employment for attorneys in Texas was 37,900. In 1995, this figure is projected to be 44,300. Total annual average job openings will be 2,353; 640 due to growth and 1,713 due to labor turnover. 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. The average salary of an attorney in Texas ranged between \$34,000 and \$46,000 in 1986.

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? Minimum age requirement? Examination required?

Yes, 5-6 years Yes, 18 Yes

AUCTIONEER

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) (22 TAC 535.18)

Auctioneer:

- United States citizen or legal alien
- at least 18 years of age
- specialized training or examination
- \$5,000 surety bond

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

Fees Not to Exceed

- \$ 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 Labor and Standards Post Office Box 12157 Austin, Texas 78711 512/463-5522

- 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.

Full-time professionals earn beginning salaries of approximately \$15,000 based on fees and commissions.

For more information on a career in auctioneering. CONTACT :

National Auctioneers Association 8800 Ballentine Overland Park, Kansas 66214 913/541-8084

AT A GLANCE . . .

Postsecondary schooling? Minimum age requirement? Examination required?

No Yes, 18 Yes

JOB DESCRIPTION

Barbers cut, style, or color hair to each customer's specifications. Other services performed include shaves, scalp treatments, 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
- health certificate
- 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
- · addiction to drugs or alcohol
- · conviction of crime related to barbering

Fees Not to Exceed

- \$10.00 for examination
- \$70.00 for license
- \$70.00 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

- 1,500 hours in not less than nine months at a barbering school
- practical experience during training
- 150 hours of instruction for manicurist
- 300 hours of instruction for wig specialist

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. The number of barbers employed in Texas was 10,300 in 1982, but employment declined to 4,400 by 1985. The projected employment figure for 1995 is 5,250. Total annual average job openings will be 676, 85 due to growth and 591 due to labor turnover.

Barbers' salaries averaged between \$11,000 and \$15,000 in Texas in 1986. 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?YesMinimum age requirement?Yes, 16Examination required?Yes

BOXING PROMOTER

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 Labor and Standards. 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)

- five letters of recommendation
- financial statement prepared by CPA or \$10,000 performance bond
- surety bond

Examination

• none

Restrictions on Licensing

violation of laws or rules and regulations related to boxing

Fees Not Less Than

- \$20.00 to \$300.00 license fee minimum, depending on size of the community
- \$300.00 to \$2,000.00 surety bond minimum, depending on size of community
- related licensing fees: manager, \$75.00; matchmaker, \$75.00; referee, \$25.00

For more information on licensing requirements, CONTACT :

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

no specified education or training

WORKING CONDITIONS

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

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Texas ranks high nationally in the number of licensed boxing promoters. In 1989, there were 42 licensed boxing promoters in the state. 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 Labor and Standards Post Office Box 12157 Austin, Texas 78711 512/463-5522

AT A GLANCE . . .

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

CHILD CARE ADMINISTRATOR

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

Fees Not to Exceed

- \$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, 550-W Post Office Box 149030 Austin, Texas 78714-9030 512/450-3255

- master's or doctoral degree in social work or related area of study, and one year experience in management or supervision of child care personnel and programs; OR
- · bachelor's degree and two years experience in child care or closely related field; OR
- associate degree from junior college and four years experience; OR
- · high school diploma or equivalent and six years experience;
- 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. Entry-level salaries for executives range from \$24,000 to \$28,000.

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

CHIROPRACTOR

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)

- · United States citizenship
- 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

Fees Not to Exceed

- \$ 75.00 for application
- \$120.00 for written and practical examination
- \$120.00 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

- 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.

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.

The national median net income of chiropractors was almost \$64,000 in 1987.

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

Texas Chiropractic Association 6448 Highway 290 East, Suite F-106 Austin, Texas 78723 512/454-4551

AT A GLANCE . . .

Postsecondary schooling? Minimum age requirement? Examination required?

Yes, 6 years Yes, 18 Yes

COSMETOLOGIST

JOB DESCRIPTION

Cosmetologists provide personalized services designed to help people look attractive. These include hairstyling, 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

Fees Not to Exceed

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

For more information on licensing requirements. CONTACT :

Texas Cosmetology Commission 1111 Rio Grande Austin, Texas 78701 512/463-5540

- 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 Texas, the number of cosmetologists employed in 1985 was 36,500; the projected employment figure for 1995 is 48,300. Total annual average job openings will be 2,940; 1,165 due to growth and 1,775 due to labor turnover.

Salaries are generally paid as commissions, but a cosmetologist may rent chair space in a salon and provide service on a semi-independent basis. In 1986, the average income for cosmetologists ranged between \$9,000 and \$12,500 in Texas. 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 5758 Balcones Drive, Suite 101 Austin, Texas 78731 512/454-2391

AT A GLANCE . . .

Postsecondary schooling? Minimum age requirement? Examination required?

Yes Yes, 16 Yes

COUNSELOR, PROFESSIONAL

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 personalsocial 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

Fees Not to Exceed

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

- 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. Most openings will result from the need to replace counselors who leave the field. 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, beginning salaries for counselors range between \$20,000 and \$30,000, depending on the setting.

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? Minimum age requirement? Examination required?

Yes Yes, 18 Yes

COURT REPORTER

JOB DESCRIPTION

Court reporters record verbatim testimony in legal proceedings. They may use written shorthand, a shorthand machine, or oral dictation 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

Fees Not To Exceed

- \$ 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

 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

The demand for competent shorthand reporters should remain strong as the state and federal court systems expand to handle the increasing number of criminal and civil cases. Earnings may vary depending on speed, education, experience, and geographic location. Earnings are generally higher in large cities than in rural areas. Average incomes in Texas ranged between \$15,400 and 20,800 in 1986.

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
Vinimum age requirement?	Yes
Examination required?	Yes

DENTAL HYGIENIST

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

Fees Not to Exceed

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

For more information on licensing requirements, CONTACT :

Texas State Board of Dental Examiners 8317 Cross Park Drive, Suite 400 Austin, Texas 78754-5124 512/834-6021

- 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.

The average annual employment for dental hygienists in Texas was 3,650 in 1985. Employment is projected to rise to 5,000 by 1995. Total annual average job openings will be 163, 135 due to growth and 28 due to labor turnover. The increased awareness of preventive dentistry and the implementation of dental care programs in schools and factories are the primary catalysts of occupational growth.

Average salaries for dental hygienists in Texas ranged between \$18,200 and \$25,600 in 1986.

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

Texas Dental Hygienists Society 3430 Turtle Village Drive, #301 San Antonio, Texas 78230

AT A GLANCE . . .

Postsecondary schooling? Minimum age requirement? Examination required?

Yes, 2-4 years Yes, 18 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 4543) (22 TAC 101)

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

Examination

- written, oral, or practical demonstration, or combination
- jurisprudence -- Texas law
- proof of graduation from dental school

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
- malpractice or gross incompetency

Fees Not to Exceed

- \$150.00 for examination
- \$ 75.00 for annual renewal

For more information on licensing requirements. CONTACT:

Texas State Board of Dental Examiners 8317 Cross Park Drive, Suite 400 Austin, Texas 78754-5124 512/834-6021

- four terms of eight months each at an accredited dental college
- two terms of dental college must be practical experience
- 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 1985, the number of dentists employed was 8,800; in 1995, it is expected to be 11,650. Total annual average job openings will be 736, 285 due to growth and 451 due to labor turnover. Growing public awareness of the benefits of preventive dentistry and the extension of dental insurance coverage contribute to growth.

Salaries for beginning dentists in Texas are usually over \$30,000. The average salaries for dentists in Texas ranged between \$29,600 and \$41,300 in 1986.

For more information on a career in dentistry. CONTACT:

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

AT A GLANCE . . .

Postsecondary schooling? Minimum age requirement? Examination required?

Yes, 6-8 years Yes, 21 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

Fees Not to Exceed

- \$30.00 for application
- \$24.00 for license
- \$24.00 for annual renewal

For more information on licensing requirements, CONTACT:

Texas State Board of Examiners of Dietitians 1100 West 49th Street Austin, Texas 78756-3183 512/458-7501

- 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.

There were 2,100 dietitians employed in Texas in 1985. By 1995, there are expected to be 2,800. Total annual average job openings will be 147, 70 due to growth and 77 due to labor turnover. 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.

Salaries for dietitians averaged between \$14,900 and \$20,100 in Texas in 1986.

For more information on a career in dietetics. CONTACT:

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

AT A GLANCE . . .

Postsecondary schooling? Minimum age requirement? Examination required?

Yes No Yes

ENGINEER, PROFESSIONAL

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, mechanical, nuclear, and petroleum 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

- written and/or oral
- 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

Fees Not to Exceed

Engineer

- \$ 50.00 for registration
- \$100.00 for examination
- \$ 45.00 for annual renewal
- 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

Engineer:

- graduation from a Board-approved curriculum in engineering, plus an additional four years or more of experience in the active practice of engineering work; OR,
- graduation from an engineering or related science curriculum, and passage of an examination, plus eight years of active practice in engineering work
- 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. The total number of engineers employed in 1985 was 101,450; the projected employment for 1995 is 131,050. Total annual average job openings will be 5,514; 2,960 due to growth and 2,554 due to labor turnover. Depending on the area of specialization, salaries for beginning engineers in Texas average from \$22,000 to \$30,000.

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? Minimum age requirement? Examination required?

Yes No 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])

- · 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

Fees Not to Exceed

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

For more information on licensing requirements, CONTACT:

Commission on Fire Protection Personnel Standards and Education 510 South Congress, Suite 406 Austin, Texas 78704 512/474-8066

 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 firefighting 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 1985 there were 12,850 firefighters employed in the state of Texas. Projections indicate there will be 16,150 firefighters by 1995. Total annual average job openings will be 486, 330 due to growth and 156 due to labor turnover. 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). Firefighting offers retirement and disability pensions, merit promotions, and relatively high earnings in some of the larger Texas cities.

Entry level salaries of firefighters in Texas currently range between \$10,000 and \$16,500. Salaries of all firefighters in Texas averaged between \$20,500 and \$27,700 in 1986.

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? Minimum age requirement? Examination required?

Yes Yes, 18 Yes

FIRE PROTECTION SYSTEM CONTRACTOR

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) (28 TAC 27.1,27.201,27.301)

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

Fees Established

Certificate of registration

Sprinkler systems

- \$ 50 application
- \$ 900 initial registration

Alarm systems \$250 initial

- \$500 biennial renewal
- \$1800 biennial renewal

License

- \$ 50 examination fee
- \$175 license, RME
- \$350 biennial renewal
- \$ 15 examination fee
- \$ 50 initial, technician
- \$100 biennial renewal
- \$ 75 initial, planning
 - superintendent
- \$150 biennial renewal

Extinguisher systems

- \$275 initial, Type A, B, PL
- \$400 biennial renewal
- \$125 initial, Type C
- \$150 biennial renewal
- \$20 examination fee
- \$40 initial, Type PL
- \$80 biennial renewal
- \$30 initial, Type A, B
- \$60 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

• 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 1989, there were 218 individuals licensed as Responsible Managing Employees (RME) for fire protection sprinkler systems; 29 planning superintendents and 936 technicians licensed for fire detection and alarm devices; and, 6 Type PL and 1,265 Type A and B individuals were licensed for fixed and portable fire extinguishers.

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 1405 South Bennett Tyler, Texas 75701 1-800/442-8261

AT A GLANCE . . .

Postsecondary schooling? Minimum age requirement? Examination required?

No No Yes

FISH FARMER

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, their operations, and cultured fish processing plants.

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)

- fish farmer license
- fish farm vehicle license (if other than the personal vehicle of fish farmer licensee)

Examination

none

Restrictions on Licensing

· violation of rules or regulations regarding fish farming

Fees Not to Exceed

- \$100.00 fee for fish farmer biennial license
- · graduated biennial license renewal fee based on sales of cultured fish
- \$100.00 fee for fish farm vehicle license

For more information on licensing requirements, CONTACT:

Texas Department of Agriculture Fish Farmer Program Post Office Box 12847 Austin, Texas 78711 512/463-7624

biology background suggested

For a listing of schools, CONTACT:

Texas Department of Agriculture/Fish Farmer Program

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.

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 2948 College Station, Texas 77841 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

FUNERAL DIRECTOR / EMBALMER

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 by injecting embalming fluids into it. They may repair disfigurations or improve the appearance by using cosmetics, cotton, or clay. 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
- practical (embalmers only)

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

Fees Not to Exceed

- \$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, B-550 Austin, Texas 78753 512/834-9992

- · 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 1985, there were 350 embalmers and 1,600 funeral directors employed in Texas. Employment projections indicate that by 1995 there will be 450 embalmers and 2,150 funeral directors employed in the state. Total annual average job openings for embalmers will be 16, 10 due to growth and 6 due to labor turnover. Total annual average job openings for funeral directors will be 222, 55 due to growth and 167 due to labor turnover.

The average salary of embalmers in Texas ranged between \$14,500 and \$19,600 in Texas in 1986. The average salary of funeral directors in Texas ranged between \$26,700 and \$36,100 in 1986 also.

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?
Minimum age requirement?
Examination required?

Yes Yes, 18 Yes

HEARING AID DISPENSER

JOB DESCRIPTION

Hearing aid dispensers measure human hearing, using an audiometer or other means, for the purpose of making selections, adaptions, 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

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 adaption 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

Fees Not to Exceed

- \$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

- · 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 1989, there were about 700 licensed 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? Minimum age requirement? Examination required?

Yes Yes, 18 Yes

HOME HEALTH AIDE

JOB DESCRIPTION

Home heath 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 license or permit 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 or license, including curricula, examinations, fees, and continuing education requirements. These requirements will be established and become effective in September, 1990.

JOB REQUIREMENTS

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

LICENSE REQUIREMENTS

(VACS 4447u) (25 TAC 115)

specialized experience or training

Examination

None

Restrictions on Licensing

None

Fees Not to Exceed

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 78756-3183 512/458-7240

- minimum of one year, full-time experience in direct patient care in an institutional setting; OR
- minimum of one year, in the last five years, full-time experience in direct patient care in a home health agency setting; OR
- completion of home health care training course approved by the Department of Health; training program must consist of a minimum of 80 hours of instruction, including at least 60 hours of classroom instruction and 20 hours of clinical instruction

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 1985, 13,500 home health aides were employed in Texas; projections indicate that in 1995 there will be 20,650. Total annual average job openings will be 1,790; 715 due to growth and 1,075 due to labor turnover.

In 1986, the average wage and salary income of a home health aide ranged between \$9,100 and \$12,300 in Texas.

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?	No

INSURANCE ADJUSTER

JOB DESCRIPTION

Insurance, or claim, adjusters act as the intermediary between the insurance carrier and the insured. They investigate claims, determine whether the insured is covered, and verify the amount of loss. Adjusters use physical evidence, testimony of witnesses, and detailed reports in their investigations. They may specialize by type of claim, such as fire, automobile, or product liability.

JOB REQUIREMENTS

- · good communication skills
- · analytic ability
- mathematical aptitude

LICENSE REQUIREMENTS

(Insurance Code 21.07-4)

- Texas residency
- at least 18 years of age
- trustworthiness
- specialized training

Examination

- written state examination; OR
- successful examination at completion of approved study
- · outline of subject materials furnished

Restrictions on Licensing

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

Fees Not to Exceed

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

For more information on licensing requirements, CONTACT:

Stale Board of Insurance Agents License Division 1110 San Jacinto Austin, Texas 78701-1998 512/322-3503

 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.

The increasing numbers of insurance claims will cause growth in the demand for adjusters. In 1985, there were 6,500 insurance adjusters employed in Texas. Projections indicate there will be 8,450 adjusters by 1995. Total annual average job openings will be 195, 108 due to growth and 303 due to labor turnover. In 1989, there were close to 22,000 insurance adjusters licensed in Texas. Therefore, employment opportunity may be limited, despite the increased demand.

Adjusters may earn a salary, plus a percentage of the insurance settlement.

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

Professional Insurance Agents of Texas, Inc. Post Office Box 3175 Austin, Texas 78764 512/474-6066 Texas Independent Insurance Adjusters Post Office Box 709 Elgin, Texas 78621 512/273-2556

AT A GLANCE . . .

Postsecondary schooling? Minimum age requirement? Examination required?

Yes Yes, 18 Yes

INSURANCE AGENT

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 2

(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

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

Fees Not to Exceed

- \$50.00 for application
- \$20.00 for examination
- \$50.00 for biennial renewal, depending on type of license

For more information on licensing requirements, CONTACT:

State Board of Insurance Agents License Division 1110 San Jacinto Austin, Texas 78701-1998 512/322-3503

- 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

For a listing of schools. CONTACT:

State Board 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. For 1995, the employment figure is 42,300, up from 34,250 in 1985. Total annual average job openings will be 2,512; 805 due to growth and 1,707 due to labor turnover. However, in 1989 there were considerably more licensed insurance agents in Texas, i.e. approximately 250,000, than there were job openings. Therefore, employment opportunity may be limited, despite the increased demand.

Salaries for insurance agents are usually paid as commissions on sales. In 1986, agents in Texas earned an average annual income between \$18,500 and \$25,000.

For more information on a career in insurance, CONTACT:

Professional Insurance Agents of Texas, Inc. Post Office Box 3175 Austin, Texas 78764 512/474-6066 Independent Insurance Agents of Texas Post Office Box 1663 Austin, Texas 78767 512/476-6281

AT A GLANCE . . .

Postsecondary schooling? Minimum age requirement? Examination required?

Yes Yes, 18 Yes

INTERPRETER FOR THE DEAF

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. Qualified interpreters may use their skills in court or formal governmental proceedings. Interpreters may translate television news and other broadcasts for hearing impaired viewers. Interpreters are also used in many other situations including health, vocational, educational, recreational and welfare activities. Interpreters act as a communication aide, but not as a counselor, personal representative, or advocate of another person's rights. Only persons designated as qualified by the Texas Commission for the Deaf may interpret in court and formal governmental proceedings under Texas law.

JOB REQUIREMENTS

- · concern for deaf individuals
- skill in sign language, both expressive and receptive
- ability to transliterate/interpret as appropriate to the situation

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

Fees Not to Exceed

- \$15.00 for examination -- Level I
- \$20.00 for examination -- Levels II, III
- \$30.00 for examination -- Levels IV, V

For more information on licensing requirements, CONTACT:

Texas Commission for the Deaf Post Office Box 12904 Austin, Texas 78711 512/469-9891

- formal postsecondary education; OR
- experience

For a list of schools and programs. CONTACT:

Texas Commission for the Deaf

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. Successful interpreters may earn between \$15,000 and \$18,000 per year. The recommended fee for interpreters for the deaf is \$25.00 for the first hour and \$20.00 for every hour thereafter.

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? Minimum age requirement? Examination required? Recommended Yes, 18 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. Licensing is required for certification of registration as an irrigator or installer. Installers 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

Restrictions on Licensing

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

Fees Not to Exceed

Irrigator

- \$100.00 for application and examination
- \$150.00 annual license renewal

Installer

- \$ 75.00 for application and examination
- \$100.00 annual license renewal

For more information on licensing requirements. CONTACT:

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

· 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 1989, there were 2,876 licensed irrigators in the state.

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? Minimum age requirement? Examination required?

No No Yes

LAND SURVEYOR

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)

- good professional character and reputation
- · 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

Fees Not to Exceed

- \$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

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 four years experience; OR
 - 32 semester hours or equivalent in subjects relating to land surveying, plus four 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.

The total number of surveyors employed in 1985 was 4,500, and the projected employment for 1995 is 5,000. Total annual average job openings will be 236, 50 due to growth and 186 due to labor turnover. The average salary of land surveyors in Texas ranged between \$27,200 and \$36,800 in 1986.

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

Texas Surveyors Association 940 East 51st Street Austin, Texas 78751 512/454-8626

AT A GLANCE . . .

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

LANDSCAPE ARCHITECT

JOB DESCRIPTION

Landscape architects are concerned with the beautification of land areas which enhance the environment as well as serve the developer's needs. They plan and design projects such as recreational facilities, roadways, schools, and housing subdivisions. Landscape architects study the special features of the site, develop preliminary drawings, and supervise construction of the project. Many landscape architects act as client representatives to the contractor and follow the project through to completion.

JOB REQUIREMENTS

- desire to work outdoors
- · creative and design ability
- understanding of business practices

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

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

Examination

 Uniform National Examination consisting of the following five parts: Professional Practice; Design; Design Application; Design Implementation; and, Grading and Drainage. Study recommendations are available from Board.

Restrictions on Licensing

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

Fees Not to Exceed

- \$ 10.00 for application, or fee prescribed by Board
- \$325.00 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 512/458-4126

- professional degree from a recognized school whose study of landscape architecture is approved; 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 parklands 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 1985, the number of landscape architects in Texas was 200; the projected employment for 1995 is 250. Total annual average job openings will be 11, 5 due to growth and 6 due to labor turnover. Beginning salaries in Texas average \$16,000 to \$18,000. The average salary of landscape architects in Texas ranged between \$25,500 and \$35,500 in 1986.

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? Minimum age requirement? Examination required?

Recommended Yes, 18 Yes

LAW ENFORCEMENT OFFICER

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 (VACS 4413 [29aa])

- 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

Fees Not to Exceed

• none

For more information on licensing requirements, CONTACT:

Commission on Law Enforcement Officer Standards and Education 1606 Headway Circle, Suite 100 Austin, Texas 78754 512/834-9222

- · 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.

Texas Employment Commission statistics indicate that in 1985, there were 44,550 law enforcement officers employed in Texas. Employment is projected to be 55,865 by 1995. Total annual average job openings will be 1,964; 1,130 due to growth and 834 due to labor turnover. According to the Commission on Law Enforcement Officer Standards and Education, there were 49,516 law enforcement officers and 10,681 county jailers licensed in Texas in 1989. Beginning salaries range from \$12,000 to \$30,000 in Texas. The average salary of a law enforcement officer ranged between \$21,100 and \$28,600 in 1986.

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

Commission on Law Enforcement Officer Standards and Education Quality Uniform Information Communications (QUIC) 1606 Headway Circle, Suite 100 Austin, Texas 78754 512/834-9222

AT A GLANCE . . .

Postsecondary schooling? Minimum age requirement? Examination required?

Yes Yes, 21 (18, Jailer) 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, librarians select materials, publicize services, perform research, and conduct programs within the community. County librarians, appointed by county commissioners' courts for two years, are in charge of county-wide networks of branch libraries and deposit stations. 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 county library system.

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

Fees Not to Exceed

• none

For more information on licensing requirements, CONTACT:

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

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 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. Salaries for beginning librarians range from \$14,000 for those with a bachelor's degree to \$18,000 for an advanced degree. In 1986, the average salary of a professional librarian in Texas ranged between \$18,700 and \$25,300.

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

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

AT A GLANCE . . .

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

MASSAGE THERAPIST

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

Fees Not to Exceed

- \$30.00 for application
- \$24.00 for annual registration
- test fee to be established by 1/1/90

For more information on licensing requirements. CONTACT:

Massage Therapy Registration Program Texas Department of Health 1100 West 49th Street Austin, Texas 78756-3183 512/458-7512

- completion of a 250-hour course of instruction at a Texas Department of Health-registered massage therapy school; OR
- completion of a 250-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

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.

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? Minimum age requirement? Examination required? Yes No Yes (1/1/90)

MEDICAL RADIOLOGIC TECHNOLOGIST

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

Fees Not to Exceed

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

For more information on licensing requirements, CONTACT:

Medical Radiologic Technologist Program 1100 West 49th Street Austin, Texas 78756-3183 512/458-7275

 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 1985, there were 7,400 radiologic technologists (and radiologic technicians, combined) in Texas; by 1995, the projected employment is expected to be 10,300. Total annual average job openings will be 560, 290 due to growth and 270 due to labor turnover.

In 1986, the average salary of a medical radiologic technologist in Texas ranged between \$16,900 and \$22,900.

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

Texas State Society for Radiologic Technologists 2502 West Jefferson Boulevard Dallas, Texas 75211

AT A GLANCE . . .

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

MEDICATION AIDE

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

Fees Not to Exceed

- \$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 512/458-7503

- · currently employed in a facility as a nurse aide or non-licensed direct care staff person; OR
- · completed a minimum of 120 hours of nurse aide training in an accredited institution, AND
- completed a state approved medication aide training program
- · 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.

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 512/458-7503

AT A GLANCE . . .

Postsecondary schooling? Minimum age requirement? Examination required?

Yes Yes, 18 Yes

MIDWIFE, LAY

JOB DESCRIPTION

Lay midwives assist in normal childbirth for compensation. They may not administer any prescription drugs without a physician's supervision, or use any surgical instruments or techniques. Lay midwives must present a disclosure form telling each client the procedures they may and may not perform; whether they have arrangements with local physicians for childbirth emergencies; and whether they have passed an optional examination given by the Lay Midwifery Board. Persons identified as lay midwives may not use any title implying they are "registered" or "certified." This law does not apply to certified nurse-midwives or other licensed health professionals working within the scope of their license, child-birth instructors who do not participate in births, or any person assisting in an emergency childbirth.

JOB REQUIREMENTS

- · mental and physical endurance
- · sense of responsibility
- strong interpersonal skills

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

- Lay midwives are required to identify themselves in December of each year to the county clerk of each county in which they practice.
- The Department of Health maintains a roster of all persons identified as practicing lay midwifery.

Examination

· optional training course, manual, and examination offered by Lay Midwifery Board

Restrictions on practice

• Violation of any laws relating to the practice of lay midwifery in Texas will be referred by the Lay Midwifery Board to the appropriate law enforcement agency

Fees Not to Exceed

\$25.00 fee for optional examination

For more information on identification requirements, CONTACT:

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

• none (practical apprenticeship and experience as a primary birth attendant encouraged)

For a listing of programs, CONTACT:

Texas Department of Health/Lay 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 nursemidwives), 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. There are more than 400 lay midwives identified by the Department of Health 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, Suite1A-202 Austin, Texas 78701 512/928-2311

AT A GLANCE . . .

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

NURSE, LICENSED VOCATIONAL (LVN)

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

Fees Not to Exceed

- \$70.00 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 PO Box 141007 Austin, Texas 78714-1007 512/835-2071

- · at least two years of high school education or 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 1985, there were 48,700 LVNs employed in Texas. An employment figure of 63,500 is projected for 1995. Total annual average job openings will be 3,892; 1,480 due to growth and 2,412 due to labor turnover. According to the Texas Board of Vocational Nurse Examiners, in 1989, approximately 72,000 LVNs were licensed in Texas.

In 1989, salaries in Texas ranged between \$13,000 and \$20,000.

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

Licensed Vocational Nurses Association of Texas Post Office Box 5943 Austin, Texas 78763 512/441-1624 Texas League of Vocational Nurses Post Office Box 769 Temple, Texas 76503

AT A GLANCE . . .

Postsecondary schooling? Minimum age requirement? Examination required?

Yes No Yes

NURSE, REGISTERED (RN)

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, outpatient 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

Fees Not to Exceed

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

For more information on licensing requirements, CONTACT:

Texas State Board of Nurse Examiners Post Office Box 140466 Austin, Texas 78714 512/835-4880

• 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. The 1985 employment figure of 68,150 is expected to increase to 103,700 in 1995. Total annual average job openings will be 5,918; 3,555 due to growth and 2,363 due to labor turnover. According to the Texas State Board of Nurse Examiners, 77,820 RNs reported being employed full- or part-time in Texas in 1989; 98,427 held licenses.

In 1989, salaries for beginning RNs ranged from \$20,000 to \$26,000.

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

Texas Nurses Association 300 Highland Mall Boulevard, Suite 300 Austin, Texas 78752 512/452-0645

AT A GLANCE . . .

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

NURSE AIDE, LONG TERM CARE

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

Fees Not to Exceed

• \$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

- satisfactory completion of nurse aide training course approved by the Department of Health consisting of a minimum of 80 hours of instruction, including at least 60 hours of classroom instruction and 20 hours of supervised clinical experience in an approved facility or skilled nursing facility
- a new training and competency evaluation program must be completed if an individual has not worked as a nurse aide for pay for a continuous 24 month period after completion of a training and competency evaluation program

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 Texas, there were 61,050 nurse aides (and orderlies) employed in 1985; projected employment for 1995 is 82,700. Total annual average job openings will be 5,579; 2,165 due to growth and 3,414 due to labor turnover.

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 nursing. In 1986, the average salary of nurse aides in Texas ranged between \$9,100 and \$12,300.

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 512/458-7229

AT A GLANCE . . .

Postsecondary schooling? Minimum age requirement? Examination required?

Yes No Yes

NURSING HOME ADMINISTRATOR

D.O.T. 187.117

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
- specialized education and/or training

Examination

- · complete application file
- written and/or oral examinations
- proof of education and/or training

Restrictions on Licensing

- · conviction of a felony, or misdemeanor involving moral turpitude
- · gross negligence
- license fraudulently obtained
- intemperate use of alcohol or drugs

Fees Not to Exceed

- \$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 355 Austin, Texas 78756 512/458-1955

- · 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
- · for renewal, 24 hours of continuing education every two years

For a listing of schools, 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.

The median salary for nursing home administrators in Texas is \$24,300, but salaries vary widely within a range from \$10,000 to \$40,000. 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? Minimum age requirement? Examination required? Yes Yes, 18 Yes

OCCUPATIONAL THERAPIST

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
- 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

Fees Not to Exceed

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 78751-2316 512/483-4072

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 1985, there were 1,350 occupational therapists in Texas; by 1995, employment is projected to be 1,900. In 1989, there were approximately 1,900 licensed occupational therapists in Texas and about 300 certified assistants. Total annual average job openings for occupational therapists will be 71, 57 due to growth and 14 due to labor turnover. Beginning salaries currently range between \$24,000 and \$25,000 in Texas. In 1989, the average salary for an occupational therapist in Texas was \$27,000. In 1986, the average salary of an assistant ranged between \$12,100 and \$16,400.

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

OPTOMETRIST

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.

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
- 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

Fees Not to Exceed

- \$ 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

- 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 1985, there were 2,300 physicians employed in Texas. The projected employment figure for 1995 is only 2,350. However, total annual average job openings will be 134, 7 due to growth and 127 due to labor turnover.

Beginning salaries for optometrists in Texas range from \$27,000 to \$29,000. Incomes may vary greatly depending on location, type of practice, and area of specialization. In 1986, the average salary of optometrists in Texas ranged between \$33,400 and \$45,200.

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

PAWNBROKER

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

Fees Not to Exceed

- \$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 Commissioner 2601 North Lamar Austin, Texas 78705 512/479-1288

no special education or training required

WORKING CONDITIONS

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

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

Pawnbroker employment remains relatively stable 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 1989, there were more than 1,200 licensed pawnbrokers in Texas.

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

Texas Pawnbrokers Association Post Office Box 40 Killeen, Texas 76541 817/699-2182

AT A GLANCE . . .

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

PESTICIDE APPLICATOR

JOB DESCRIPTION

Licensed commercial pesticide applicators use, or supervise the use of, any restricted or state limiteduse 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):

- specialized training
- must be employed by a licensed business

Examination

- written
- study materials available from the Structural Pest Control Board and Texas Agricultural Extension Service

Restrictions on Licensing

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

Fees Not to Exceed

Structural Pest Control:

- \$ 25.00 for each examination
 \$ 25.00 for applicator license
 - and annual renewal
- \$ 15.00 for technician license

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, Suite 201 Austin, Texas 78751 512/835-4066 Texas Department of Agriculture Certification and Training Post Office Box 12847 Austin, Texas 78711 512/463-7476

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 Texas, the number of pest controllers employed in 1985 was 3,900; the projected employment figure for 1995 is also 3,900. However, total annual average job openings will be 107, -3 due to growth and 110 due to labor turnover.

The average salary of pest control workers in Texas ranged between \$13,900 and \$18,800 in 1986. 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. 940 E. 51st Street Austin, Texas 78751 512/454-8626

AT A GLANCE . . .

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

JOB DESCRIPTION

Pharmacists compound and dispense drugs and medicines prescribed by physicians and dentists. 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 and how they are tested for purity and strength. 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
- specialized education and training

Examination

- National Association of Boards of Pharmacy Licensing Exam (NABPLEX)
- written
- 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

Fees Not to Exceed

- \$250.00 for examination
- \$ 85.00 for license
- \$ 85.00 for annual renewal

For more information on licensing requirements. CONTACT:

Texas State Board of Pharmacy 8505 Cross Park Drive, Suite 110 Austin, Texas 78754-4533 512/832-0661

- 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 Texas, the number of pharmacists employed in 1985 was 11,850. The projected statewide employment for 1995 is 15,050. Total annual average job openings will be 856, 319 due to growth and 537 due to labor turnover. According to the Texas State Board of Pharmacy, 15,350 pharmacists were licensed to practice in Texas in 1988; of this number approximately 13,000 were residing in the state. In 1989, the average starting salary of pharmacists in the private sector was between \$35,000 and \$38,000.

For more information on a career in pharmacy. CONTACT:

Texas Pharmaceutical Association Post Office Box 14709 Austin, Texas 78761-4709 512/836-8350 Texas Society of Hospital Pharmacists 8609 Cross Park Drive, Suite 101 Austin, Texas 78754 512/339-8120

AT A GLANCE . . .

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

PHYSICAL THERAPIST

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 cn 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

Fees Not to Exceed

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 313 East Rundberg, Suite 113 Austin, Texas 78753 512/835-1846

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 Texas, there were 3,600 physical therapists and 2,300 physical therapist assistants employed in 1985. The projected figures for 1995 are 5,150 for physical therapists and 2,900 for physical therapist assistants. Total annual average job openings for physical therapists will be 205, 156 due to growth and 49 due to labor turnover. Total annual average job openings for physical therapist assistants will be 118, 61 due to growth and 57 due to labor turnover. According to the Texas State Board of Physical Therapy Examiners, in 1989 there were approximately 4,500 physical therapists and 950 physical therapist assistants licensed to practice in Texas.

In 1989, salaries for beginning physical therapists in Texas ranged from \$25,000 to \$32,000. In 1986, the average salary for physical therapist assistants in Texas ranged between \$15,500 and \$21,000.

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

Fees Not to Exceed

- \$700.00 for application processing and examination
- \$200.00 for intern and resident permits
- \$200.00 for annual renewal

For more information on licensing requirements, CONTACT:

Texas State Board of Medical Examiners Post Office Box 13562 - Capitol Station Austin, Texas 78711 512/452-1078

- 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 Texas, 23,150 physicians were employed in 1985. The projected employment for 1995 is 28,150. According to the State Board of Medical Examiners, approximately 29,500 physicians were licensed to practice and were residing in Texas in 1989. Total annual average job openings will be 2,005; 499 due to growth and 1,506 due to labor turnover. The outlook for physicians in Texas is very good. Physicians have among the highest average annual earnings for any occupational group. In 1986, the average salary of physicians in Texas ranged between \$28,900 and \$39,100.

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 1801 North Lamar Austin, Texas 78701 512/477-6704

AT A GLANCE . . .

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

Fees Not to Exceed

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

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 Texas, 27,450 plumbers were employed in 1985; expected employment by 1995 is 31,800. Total annual average job openings will be 1,154; 434 due to growth and 720 due to labor turnover. Salaries for plumbers in Texas vary greatly and depend on the locality worked and union membership. The salary range for beginning plumbers is \$15,000 to \$19,000. In 1986, the average salary for plumbers in Texas ranged between \$24,100 and \$32,700.

For more information on a career in plumbing, CONTACT:

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

AT A GLANCE . . .

Postsecondary schooling? Minimum age requirement? Examination required?

No Yes, 17 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
- 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

Fees Not to Exceed

- \$115.00 for examination
- \$150.00 for annual renewal
- \$ 25.00 for annual continuing education fee

For more information on licensing requirements, CONTACT:

Texas State Board of Podiatry Examiners 8317 Cross Park Drive, Suite 401 Austin, Texas 78754 512/834-0558

- 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 1985, 350 podiatrists were employed in Texas; the projected 1995 figure is 400. Total annual average job openings will be 23, 4 due to growth and 19 due to labor turnover.

In 1986, the average salary for podiatrists in Texas ranged between \$27,200 and \$36,800.

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

POLYGRAPH EXAMINER

D.O.T. 199.267

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

Fees Not to Exceed

Examiner

- \$225.00 for license
- \$210.00 for annual renewal

Intern

- \$115.00 for license
- \$ 40.00 for annual renewal

For more information on licensing requirements, CONTACT:

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

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 five months of internship training; OR
- · 12 months of internship training in lieu of polygraph examiners course

For a listing of schools, CONTACT:

Board of Polygraph Examiners

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. 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

PRIVATE INVESTIGATOR / SECURITY GUARD

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
- · surety bond and 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

Fees Not to Exceed

- \$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)
- \$ 15.00 for registration and renewal of individual employed by firm as a private investigator
- \$ 30.00 for registration and renewal of individual employed by firm as a noncommissioned security officer
- \$ 15.00 for registration and renewal of individual employed by firm as a commissioned security officer

For more information on licensing requirements, CONTACT:

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

- 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.

The number of private investigators employed in Texas was 2,050 in 1985. By 1995, projections indicate there will be 2,600 persons employed in this occupation. Total annual average job openings for private investigators will be 255, 53 due to growth and 202 due to labor turnover. In 1985, there were 44,800 security guards employed in Texas. The employment projection for 1995 is 56,300. Total annual average job openings for security guards will be 5,527; 1,149 due to growth and 4,378 due to labor turnover.

In 1986, average salaries in Texas ranged between \$14,300 and \$19,300 for private investigators and between \$12,000 and \$16,300 for security guards.

For more information on a career in investigation. CONTACT:

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

AT A GLANCE . . .

Postsecondary schooling? Minimum age requirement? Examination required?

No Yes, 18 Possibly

PSYCHOLOGIST

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
- 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

Fees Established

Psychologist:

\$535.00 for examinations
Certification

- \$300.00 for application
- \$ 50.00 for annual renewal

License

- \$140.00 for application
- \$125.00 for annual renewal
- \$ 20.00 for annual renewal of health service provider certification

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

Psychological Associate: • \$235.00 for examination

Certification

- \$150.00 for application
- \$ 50.00 for annual renewal

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 Texas, there were 3,700 psychologists employed in 1985. An increase to 4,800 is expected by 1995. Total annual average job openings will be 183, 110 due to growth and 73 due to labor turnover. The average starting salaries of psychological associates ranges nationally between \$17,000 and \$22,500. Beginning salaries for practitioners with doctorate degrees averages between \$27,000 and \$32,000.

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

REAL ESTATE BROKER / AGENT / INSPECTOR

JOB DESCRIPTION

Real estate brokers are independent business people who may employ sales agents. Real estate brokers and sales agents represent property owners in selling or renting property. They obtain listings, determine the fair market value, identify potential buyers, 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. Real estate inspectors inspect improvements to real property, including structural items, equipment, and systems primarily for potential purchasers of real estate.

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 oneperson business. Many brokers have entered franchise agreements, using a nationally known company name in exchange for a fee. Inspectors must either work for existing firms or market their own services. Typically, the purchaser of real property contracts the inspector to inspect the property for defects prior to purchase or occupancy. The inspector must deliver services in a careful and professiona manner for the risk of exposure to litigation is high in this occupation.

JOB REQUIREMENTS

- maturity and honesty
- enthusiasm
- gcod communication skills
- mechanical aptitude and construction experience (inspectors only)

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

Fees Not to Exceed

Broker:

Agent:

- \$ 25.00 for examination
 \$ \$25.00 for examination
 \$ 50.00 for examination
- \$100.00 application
 \$50.00 application
- \$100.00 annual renewal
 \$50.00 annual renewal
 \$100.00 annual renewal

Inspector:

- \$150.00 application

For more information on licensing requirements, CONTACT:

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

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 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 renewal

Inspector:

90 classroom hours of acceptable courses

WORKING CONDITIONS

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

CAREER OPPORTUNITIES/EMPLOYMENT OUTLOOK

In 1985, there were 6,200 real estate brokers, 19,350 sales agents, and 3,000 building inspectors employed in Texas. Employment in these occupations in 1995 is projected to be 7,600, 23,300, and 3,500 respectively by 1995. (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.) Since there were more than 150,000 persons holding real estate licenses in Texas in 1989, competition for projected positions may be very high. Total annual average job openings for real estate brokers will be 559, 140 due to growth and 419 due to labor turnover. There will be 1,687 total annual average job openings for real estate agents, 395 due to growth and 1,292 due to labor turnover. Total annual average job openings for building inspectors will be 230, 48 due to growth and 182 due to labor turnover. Salaries of brokers and salesmen are usually paid as commission on sales. In 1986, average salaries in Texas ranged between \$20,200 and \$27,300. In 1987, there were approximately 1,200 inspectors in Texas. Beginning earnings range between \$20,000 and \$30,000 annually. Principals in larger, full-service firms can expect to earn considerably more.

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

Texas Association of Realtors	Texas Association of Real Estate Inspectors
Post Office Box 2246	Post Office Box 50153
Austin, Texas 78768	Austin, Texas 78763
512/480-8200	512/452-8570

AT A GLANCE . . .

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

RESPIRATORY CARE PRACTITIONER

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

Fees Not to Exceed

- \$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 512/458-7631

- · 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).

There were 4,300 respiratory care practitioners employed in Texas in 1985. By 1995, employment of 6,250 is projected for respiratory care practitioners. Total annual average job openings will be 228, 196 due to growth and 32 due to labor turnover.

In 1986, the average salary in Texas for respiratory care practitioners ranged between \$17,100 and \$23,100.

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 Euless Boulevard, Suite 200 Euless, Texas 76040 817/283-2835

AT A GLANCE . . .

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

Fees Not to Exceed

- \$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 512/458-7536

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 1986, the average salary in Texas ranged between \$21,800 and \$29,500.

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

Sanitarian Registration Program Texas Department of Health 1100 West 49th Street Austin, Texas 78756 512/458-7536

AT A GLANCE . . .

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

SECURITIES DEALER

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 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

Fees Not to Exceed

- \$30.00 for agent application
- \$15.00 for agent annual renewal
- \$70.00 for dealer application and \$30.00 for each officer
- \$35.00 for dealer annual renewal
- \$35.00 for application for Texas Securities Law Examination

For more information on licensing requirements. CONTACT:

State Securities Board 1800 San Jacinto Austin, Texas 78711 512/474-2233

- 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. Securities and financial services sales employed 13,200 persons in Texas in 1985. The projected employment for 1995 is 18,500. Total annual average job openings will be 1,505; 530 due to growth and 975 due to labor turnover. Salaries for agents in training may range from \$1,000 to \$1,400 per month. Earnings for licensed securities sales agents generally depend on commissions from the sale of stocks, bonds and other securities, but many firms provide a minimum salary based on expected commissions. In 1986, the average salary of securites sales agents in Texas ranged between \$26,900 and \$36,400.

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
linimum age requirement?	No
Examination required?	Yes

SOCIAL WORKER

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)

- 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

Fees Not to Exceed

- \$65.00 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 - 550W Post Office Box 149030 Austin, Texas 78714-9030 512/450-3255

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.

There were 16,850 social workers employed in Texas in 1985. The projected employment for 1995 is 21,050. Total annual average job openings will be 996, 417 due to growth and 579 due to labor turnover. Beginning salaries in Texas range between \$14,000 and \$16,000 for those with undergraduate degrees, and between \$18,000 and \$19,000 for those with graduate degrees. In 1986, the average salary of social workers in Texas ranged between \$17,600 and \$23,900.

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

SPEECH-LANGUAGE PATHOLOGIST / AUDIOLOGIST

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, then 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

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 in obtaining license
- unprofessional conduct
- · conviction of a felony, or any crime involving moral turpitude

Fees Not to Exceed

- \$75.00 for application
- \$50.00 for examination
- \$75.00 for license
- \$75.00 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 512/458-7502

- 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 Texas, 3,150 speech-language pathologists and audiologists were employed in 1985. By 1995, projected employment is expected to be 4,100. Total annual average job openings will be 121, 95 due to growth and 26 due to labor turnover. In 1989, beginning salaries range between \$18,000 and \$25,000. Experienced personnel average about \$32,000.

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? Minimum age requirement? Examination required? Yes No Yes

TAX PROFESSIONAL / APPRAISER / ASSESSOR-COLLECTOR

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 7244b) (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, professional report
- · 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

Fees Not to Exceed

- \$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 Lake High Drive, Building B, Suite 140 Austin, Texas 78746-6565 512/329-7982

Registration:

high school diploma or equivalent

Certification:

- · Assessor and Appraiser: seven to eight specified courses
- Collector: five 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 1985, the number of tax assessors, tax collectors, and (real estate) appraisers employed in Texas was 1,850, 5,300, and 2,500 respectively; by 1995, it is expected to be 2,300, 5,250, and 3,050. Total annual average job openings for tax assessors will be 105, 41 due to growth and 64 due to labor turnover. There will be 159 total annual average job openings for tax collectors, -4 due to growth and 163 due to labor turnover. Total annual average job openings for real estate appraisers will be 224, 55 due to growth and 169 due to labor turnover. Salaries for assessors vary greatly, depending upon the size of the district in which they work. In 1986, the average salary of an assesor-collector in Texas ranged between \$16,600 and \$22,500.

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

Texas Association of Assessing Officers Post Office Box 26550 Austin, Texas 78755 512/346-4803

AT A GLANCE . . .

Postsecondary schooling? Minimum age requirement? Examination required?

Yes Yes, 18 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 judgement
- · enthusiasm for working with others

LICENSE REQUIREMENTS (Education Code 13.033-046)

- · United States citizen or permanent resident
- 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

Fees Not to Exceed

- \$30.00 for certificate
- \$40.00 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

 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 Texas, the total number of preschool, primary, secondary school, special education, and vocational education teachers employed in 1985 was 230,800. This number is expected to increase to 300,550 by 1995. Total annual average job openings will be 13,227; 6,252 due to growth and 6,975 due to labor turnover. The employment outlook is good for bilingual teachers, special education teachers, and elementary and secondary school teachers. There may be a surplus of pre-kindergarten and kindergarten teachers through 1990. In 1989, beginning salaries for public school teachers in Texas ranged from \$15,200 to \$21,000 for a nine-month working year.

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? Minimum age requirement? Examination required?

Yes, 4-5 years Yes, 18 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

- · mechanical and technical aptitude
- · ability to perform manual labor
- concern for safety

LICENSE REQUIREMENTS (Hou

(House Bill 183, 71st Legislature, Regular Session)

- specialized training and experience
- at least 18 years of age
- examination

Examination

· current expert standards and practices

Restrictions on Licensing

- violation of rules and regulations
- · fraudulent procurement or abuse of permit

Fees Not to Exceed

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:

Underground Storage Tank Advisory Committee Texas Water Commission Post Office Box 13087 Austin, Texas 78711 512/463-8139

 may require up to two years experience in underground storage tank installation, underground utilities installation, or other engineering construction in Texas

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.

For more information on a career in underground storage tank installation. CONTACT:

Underground Storage Tank Advisory Committee Texas Water Commission Post Office Box 13087 Austin, Texas 78711 512/463-8139

AT A GLANCE . . .

Postsecondary schooling? Minimum age requirement? Examination required?

No Yes, 18 Yes, (2/1/90)

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 choose specialty fields such as veterinary surgery, veterinary internal medicine, or veterinary dermatology.

JOB REQUIREMENTS

- aptitude for science
- strength and stamina
- good interpersonal skills
- desire to help animals

LICENSE REQUIREMENTS (VACS 7465a) (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
- unprofessional conduct

Fees Not to Exceed

- \$100.00 for examination
- \$100.00 for annual registration

For more information on licensing requirements, CONTACT:

Texas Board of Veterinary Medical Examiners 1946 South Interregional Highway, Third Floor Austin, Texas 78704 512/447-1183

• graduation from an approved school or college of veterinary medicine

For a listing of schools, CONTACT:

Texas Board of Veterinary Medical Examiners

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.

The average annual employment of veterinarians in Texas was 3,450 in 1985. This is expected to increase to 3,500 by 1995. Total annual average job openings will be 62, 4 due to growth and 58 due to labor turnover. 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.

The average salary for beginning veterinarians is between \$19,000 and \$20,000. In 1986, the average salary of veterinarians in Texas ranged between \$27,800 and \$37,600.

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? Minimum age requirement? Examination required?

Yes Yes, 18 Yes

WATER WELL DRILLER

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. Workers must be licensed as a driller, 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

Fees Not to Exceed

- \$100.00 for examination and license registration
- \$115.00 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 13087 Austin, Texas 78711 512/463-7998

- 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.

There were approximately 1,350 licensed well drillers in Texas in 1989. Some are wage and salary workers; others are self-employed. In 1986, the average salary of drillers in Texas ranged between \$16,100 and \$21,800.

For more information on a career in water well drilling, CONTACT:

Texas Water Well Association 206 San Jacinto Building Austin, Texas 78711 512/472-7216

AT A GLANCE . . .

Postsecondary schooling? Minimum age requirement? Examination required?

No No Yes

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 craftworker 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.

The State of Texas subsidizes the cost of related instruction for most of the apprenticeship programs. Chapter 33 of the Texas Education Code states that if a program is recognized by BAT and approved by the state, "an apprentice may not be charged tuition or fees by a public school district or state postsecondary institution other than an administrative fee to cover the costs of processing his records which shall not exceed \$5 for each course in which the apprentice is enrolled."¹ Funds for apprenticeship instruction are primarily administered by the Community College and Technical Institutes Division of the Texas Higher Education Coordinating Board and the Adult Education/Employment and Training 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.²

Several occupations that are licensed by the State of Texas are also apprenticeable. Plumber, land surveyor, and embalmer 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.³

¹ Texas Education Code. Chapter 33.02 (e).

² Ray Marshall, William S. Franklin, and Robert W. Glover. 1975. Training and Entry into Union Construction. pp. 141-168.

³ Ibid., p. 145-6.

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 judgement.

For state and society, apprenticeship offers a large return in human capital for a small investment in resources. There are several inter-related benefits of apprenticeship.

- Apprenticeship promotes a highly skilled and productive workforce that enhances the national capacity to respond to the increased competition of the international marketplace.
- 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. 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.

In 1988, according to data collected by the Texas Education Agency, the average hourly wage was \$6.74 for the first year apprentice in programs receiving instructional assistance from the Agency, and fifth year apprentices averaged \$11.42 per hour. The average hourly wage for new journey workers immediately after graduation from apprenticeship in these occupations was \$13.92.

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, computer equipment operators, decorators, dental assistants, electricians, heavy equipment operators, machinists, medical laboratory technicians, opticians, painters, plumbers, tool makers, and welders. As of July, 1989, there were more than 7,000 registered apprentices in over 600 recognized 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 paricularly 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.⁴ 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.⁵ 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

⁴ Texas Employment Commission. 1988. Texas Workforce 2000. p. 25.

⁵ Ibid., pp. 2-3.

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

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 727 E. Durango , Room A505 San Antonio, Texas 78206 512/ 229-6230

Dallas

Bureau of Apprenticeship and Training U.S. Department of Labor 6300 Forest Park Road 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 Education/Employment and Training Division office at:

Adult Education/Employment and Training Division Texas Education Agency W. B. Travis Building 1701 North Congress, Room 6-115 Austin, Texas 78701-1494

- local community colleges and public school districts
- representatives of various labor organizations
- Texas State Occupational Information Coordinating Committee on the toll free hotline at 1-800-822-7526

PRINTED SOURCES

LICENSED OCCUPATIONS

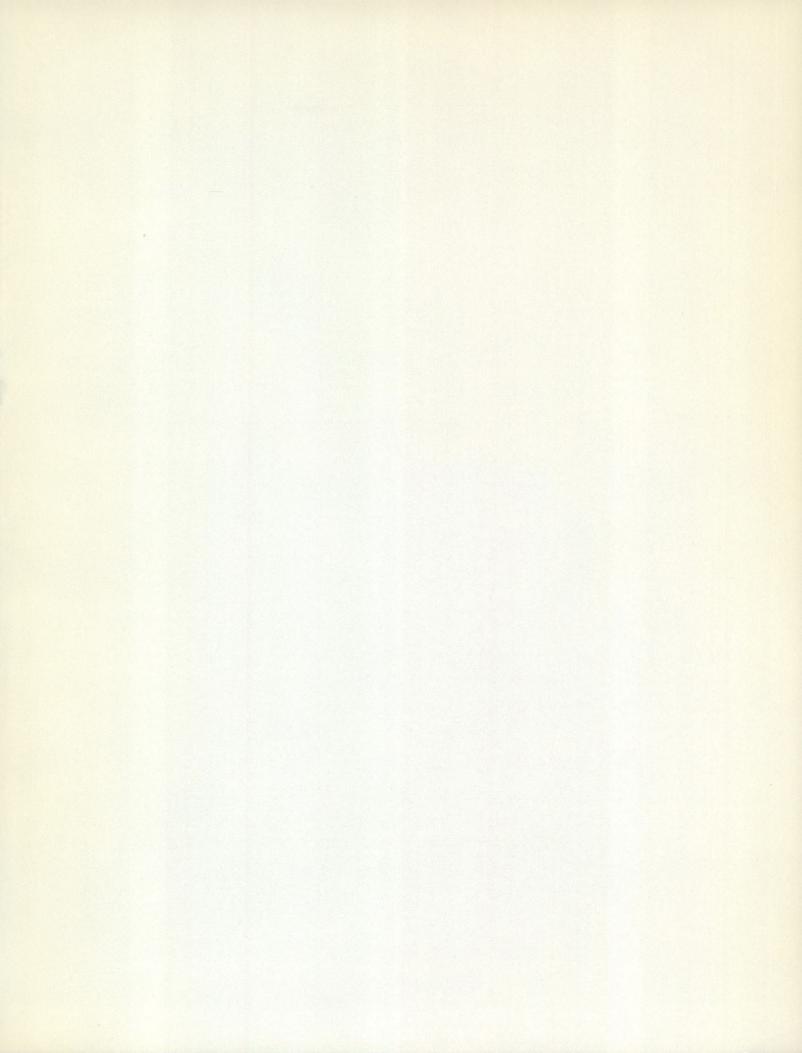
- Bureau of Business Research. 1985. Texas Trade and Professional Associations. Austin: University of Texas at Austin.
- Coopers & Lybrand. 1986. Emerging Occupations Study. Texas State Occupational Information Coordinating Committee.
- McKee, William L., and Nancy L. Harrell. 1989. *Targeting Your Labor Market*. Texas State Occupational Information Coordinating Committee.
- Texas Administrative Code. 1979-latest update. Shepard's/McGraw-Hill.
- Texas Employment Commission. 1988. Occupational Wages; Texas Job Bank Areas, 12 Months Ending March 31, 1988.
- Texas Employment Commission. 1988. Texas Jobs 1995.
- Texas Employment Commission. 1988. Texas Work Force 2000.
- Texas State Occupational Information Coordinating Committee. 1988. Texas Occupational Wage Estimates for 1986.
- U. S. Department of Labor. Bureau of Labor Statistics. 1988. Occupational Outlook Handbook. 1988-89 Edition. Government Printing Office.
- U. S. Department of Labor. Employment and Training Administration. 1977. Dictionary of Occupational Titles. 4th Edition. Government Printing Office.
- U. S. Department of Labor. Employment and Training Administration. 1985. How Workers Get Their Training. (Bulletin 2226). Government Printing Office.
- U. S. Department of Labor. Employment and Training Administration. 1986. Dictionary of Occupational Titles. 4th Edition Supplement. Government Printing Office.
- Vernon's Annotated Revised Civil Statutes of the State of Texas and Vernon's Texas Code Annotated. West Publishing Co., various dates including pocket parts.
- Wright, John W. 1987. The American Almanac of Jobs and Salaries. 1987-88 Edition. New York: Avon Books.

APPRENTICESHIP IN TEXAS

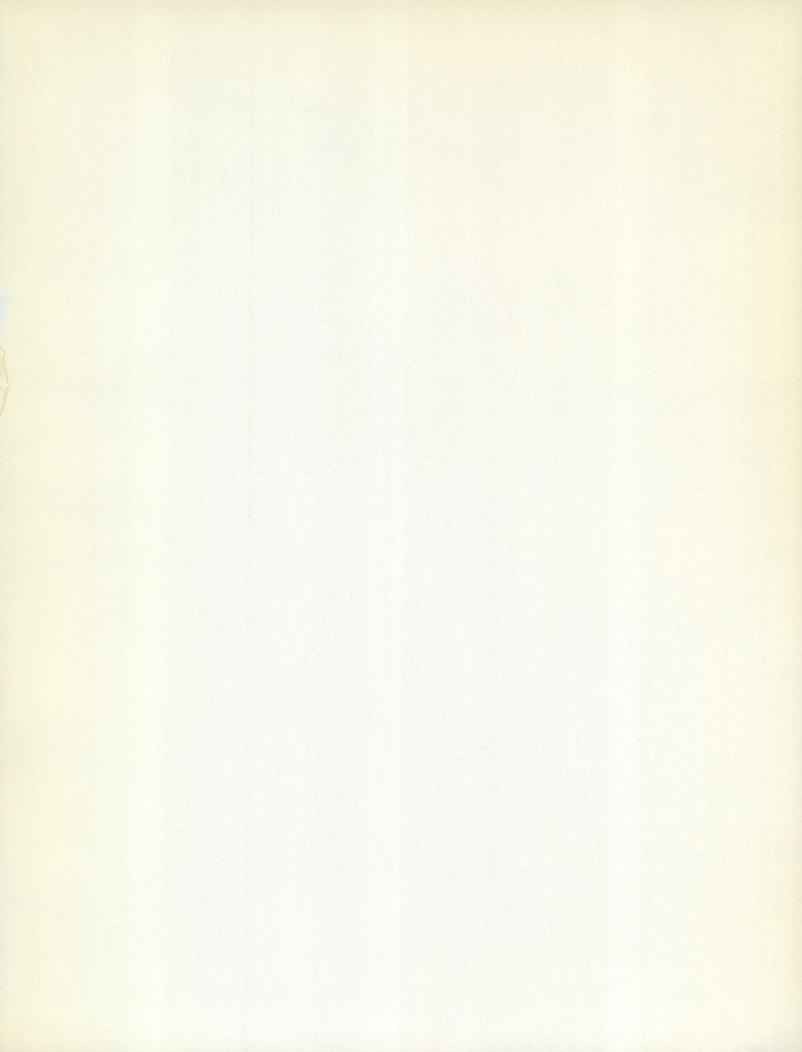
- Cook, Robert F., et al. March, 1989. Analysis of Apprenticeship Training From the National Longtitudinal Study of the High School Class of 1972. Rockville, Maryland: Westat, Inc.
- Glover, Robert W. 1986. Apprenticeship Lessons From Abroad. Columbus, Ohio: The National Center for Research in Vocational Education.
- Lyndon B. Johnson School of Public Affairs. 1980. *Coordination of State and Federal* Apprenticeship Administration. Austin: University of Texas at Austin.
- Marshall, Ray, William S. Franklin, and Robert W. Glover. 1975. *Training and Entry Into Union Construction*. U.S. Department of Labor Manpower R & D Monograph No. 39. Government Printing Office.
- Taylor, Robert E., Rosen, Howard, and Pratzner, Frank C. Editors. 1982. *Job Training for Youth.* Columbus, Ohio: The National Center for Research in Vocational Education.
- Texas Education Agency. Apprenticeship and Training Advisory Committee. 1988. Apprenticeship in Texas.
- Texas Education Agency. Apprenticeship and Training Advisory Committee. June, 1988. State Plan for Apprenticeship Training.

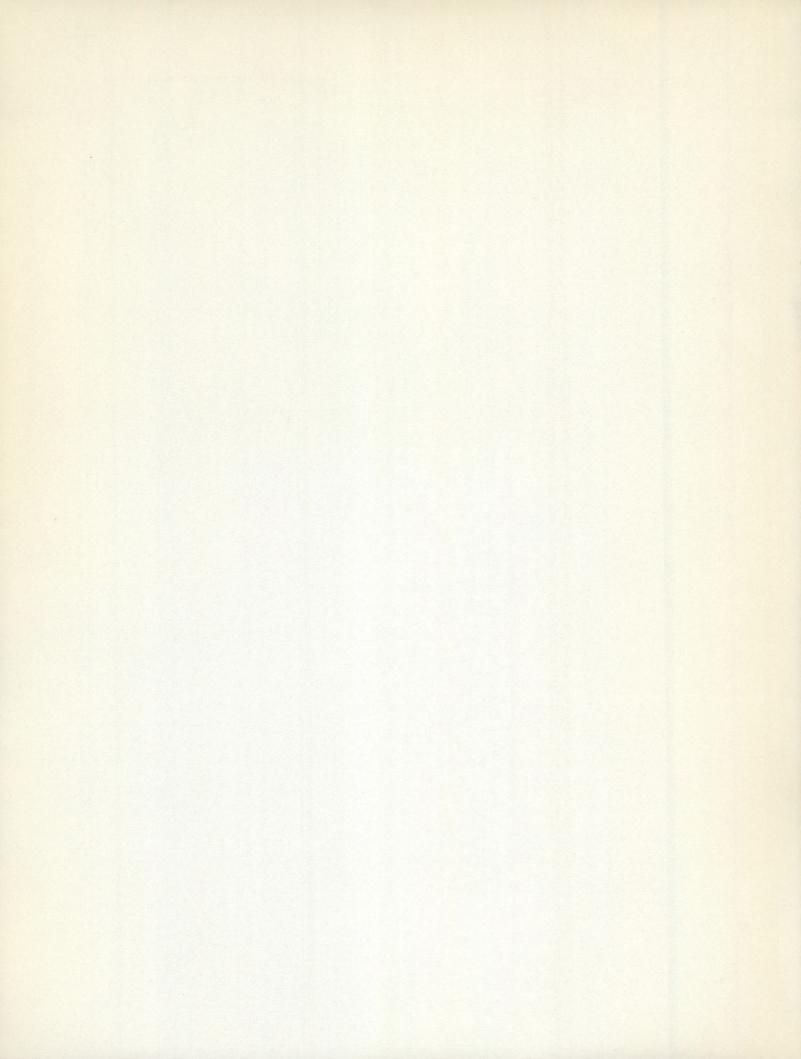
Texas Employment Commission. 1988. Texas Work Force 2000.

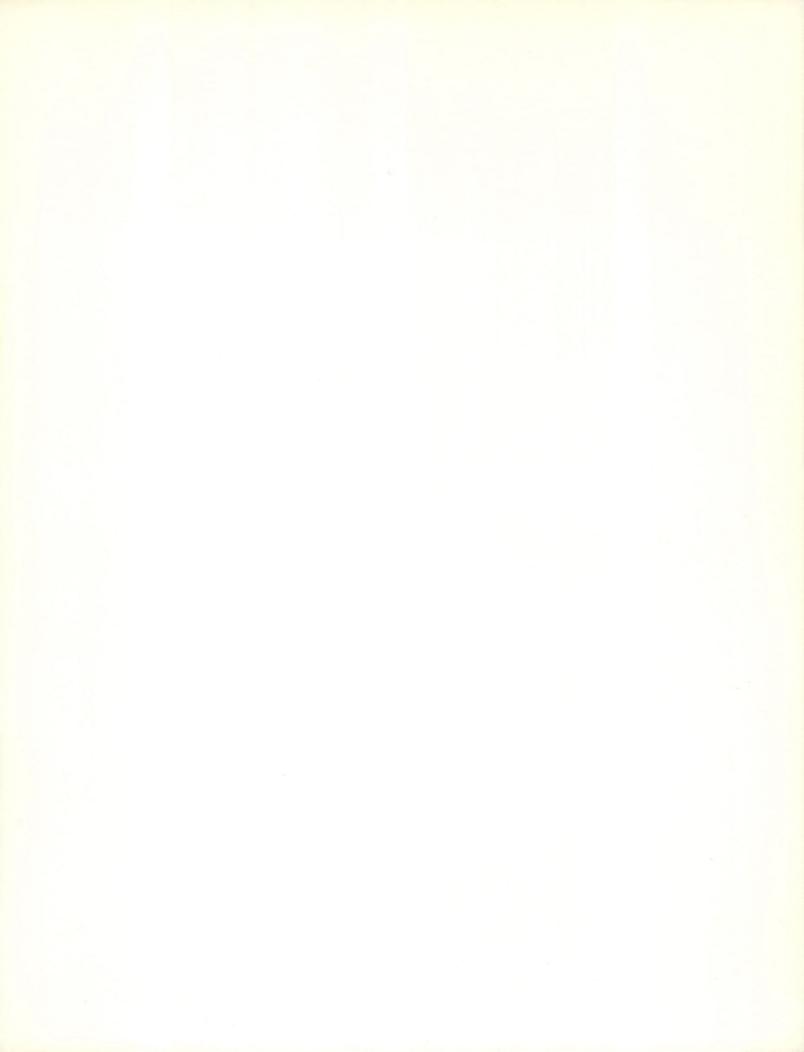
- U. S. Department of Labor. Bureau of Labor Statistics. 1978. Apprenticeship Now. Government Printing Office.
- U. S. Department of Labor. Bureau of Labor Statistics. 1980. Jobs for Which You Can Train Through Apprenticeship. Government Printing Office.
- U. S. Department of Labor. Employment and Training Administration. 1977. Apprenticeship: Past and Present. Government Printing Office.
- U. S. Department of Labor. Employment and Training Administration. 1982. The National Apprenticeship Program. Government Printing Office.
- U. S. Department of Labor. Employment and Training Administration. 1987. Apprenticeship 2000; Issue Paper and Initiative. <u>Federal Register</u>. Vol. 52, No. 231, (December 2), pp. 45904-45908.
- U. S. Department of Labor. Employment and Training Administration. 1988. Apprenticeship 2000; The Public Speaks.
- U. S. Department of Labor. Employment and Training Administration. 1988. Apprenticeship 2000 Initiative; Public Meetings. Federal Register. Vol. 53, No. 9, (January 14), pp. 961-963.
- U. S. Department of Labor. Employment and Training Administration. 1989. Apprenticeship 2000; Focus Paper on Support Activities and Linkages. Federal Register. Vol. 54, No. 15, (January 25), pp. 3756-3760.

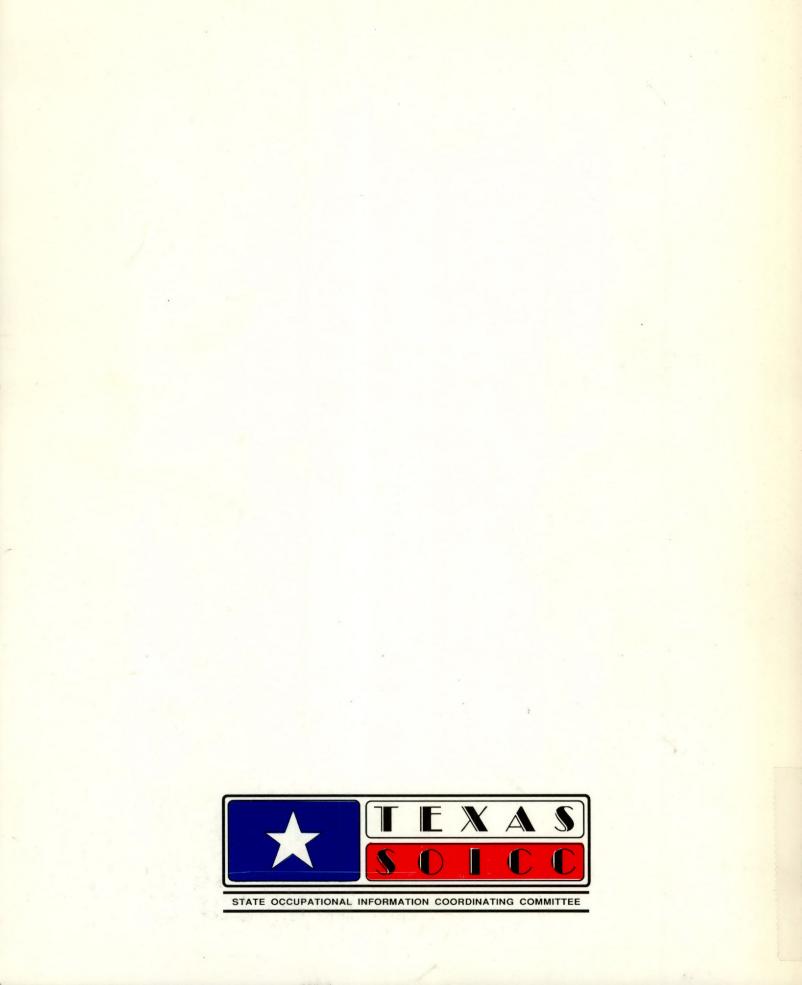












17 m

and