

Targeted Occupations

Identified as high demand by regional employers

*Indicates critical employer need

Education time is the minimum required for entry level to highest

Wages are regional hourly entry and average hourly 2014



Agriculture, Food & Natural Resources

Veterinary Technicians/Technologists: Perform medical tests in a laboratory environment for use in the treatment and diagnosis of diseases in animals. Prepare vaccines and serums for prevention of diseases. Prepare tissue samples, take blood samples, and execute laboratory tests, such as urinalysis and blood counts. Clean and sterilize instruments and materials and maintain equipment and machines. They may assist a veterinarian during surgery. 2-4 yrs. \$11.45/14.30



Architecture & Construction

Architects: Plan and design structures, such as private residences, office buildings, theaters, factories, and other structural property. 4-10 yrs. - \$25.53/34.05

Carpenters: Build or repair structures using blueprints sketches or building plans. 2-4 yrs. - \$11.06/14.77

Auto CAD - Computer Aided Design Drafters: Prepare sketches of ideas, detailed drawings, illustrations, artwork, or blueprints, using computer-aided design technology. 2-4 yrs. - \$15.08/18.26

Electricians: Read blueprints, design, and install electrical wiring and equipment in all phases of construction. 2-5yrs. - \$15.27/20.33

General Maintenance & Repair Workers: Keep machines, mechanical equipment, and/or structure of an establishment in repair. OJT-4 yrs. - \$12.10/17.49

Heating/AC Technicians: Climate control professionals that design operate and maintain heating and cooling systems. 2-5 yrs. - \$15.84/20.78

Heavy Equipment Operators: Perform work involving the skills of two or more maintenance or craft occupations to keep machines, mechanical equipment, or the structure of an establishment in repair. Duties may involve pipe fitting; boiler making; insulating; welding; machining; carpentry; repairing electrical or mechanical equipment; installing, aligning, and balancing new equipment; and repairing buildings, floors, or stairs. OJT-4 yrs. - \$12.10/17.49

Plumbers/Pipefitters/Steamfitters: Assemble, install, alter and repair pipe systems that carry water, steam, air or other liquids or gases. 5 yrs. + OJT - \$15.18/20.66

Welders/Cutters/Solders/Brazers: Use hand-welding, flame-cutting, hand soldering, or brazing equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metal products. Certification- OJT - 2yrs. - \$12.51/22.68



Business Management & Administration

General and Operations Managers: Plan, direct, or coordinate the operations of companies or organizations. 4-10 yrs. - \$27.67/59.04

Human Resources Specialists: Plan, direct or coordinate human resources activities and staff of an organization. 4 yrs. \$18.98/32.63

Marketing Managers: Plan, direct, or coordinate marketing policies and programs, such as determining the demand for products and services offered by a firm and its competitors, and identify potential customers. Develop pricing strategies with the goal of maximizing the firm's profits or share of the market while ensuring the firm's customers are satisfied. Oversee product development or monitor trends that indicate the need for new products and services. 4 yrs. - \$36.88/57.16



Education & Training

Teachers, Elementary: Teach basic academic, social, and other formative skills. 4-10 yrs. - \$24.16/25.04

Teachers, Middle School: Teach students in one or more subjects in public or private schools at the middle, intermediate, or junior high level, which falls between elementary and senior high school as defined by applicable laws and regulations. 4-10 yrs. - \$24.63/27.09

Teachers, Secondary (HS): Teach students in one or more subjects, such as English, mathematics, or social studies at the secondary level in public or private schools. May be designated according to subject matter specialty. 4-10 yrs. - \$25.20/26.30



Finance

Accountants & Auditors: Examine, analyze, and interpret accounting records to advise and/or prepare financial and budgetary data for individuals or businesses. 4-10 yrs. - \$21.34/34.07

Bookkeeping, Accounting & Auditing Clerks: Compute, classify, and record numerical data to keep financial records complete. Perform duties to obtain primary financial data for use in maintaining accounting records. OJT-4 yrs. - \$13.16/18.41

Financial Analysts: Conduct quantitative analyses of information affecting investment programs of public or private institutions. 4-10 yrs. \$25.20/33.31



Health and Science

***Home Health Aides:** Provide routine individualized healthcare to the elderly, convalescents, or persons with disabilities at the patient's home or in a care facility. OJT - \$8.65/10.79

Medical and Clinical Health Technos.: Perform complex medical laboratory tests for diagnosis, treatment, and prevention of disease. May train or supervise staff. H.S. - 2 yrs. - \$23.47/30.06

Medical Assistants: Perform administrative and certain clinical duties under the direction of a physician. OJT-2yrs. - \$12.89/19.15

Medical Records/Health Information Technicians: Compile, process, and maintain medical records of hospital and clinic patients. 2-4 yrs. - \$11.69/15.71

Nursing Aides & Orderlies (CNA): Provide basic patient care under direction of nursing staff. Perform duties, such as feed, bathe, dress, groom, or move patients, or change linens. OJT - \$10.02/12.29

Nurses - Licensed Practical and Vocational: Care for ill, injured, convalescent, and handicapped persons in hospitals, clinics, private homes, and similar institutions. (Note: Many hospitals are moving away from LVN's and hiring RN's & BSN's.) 2 yrs. - \$17.68/22.95

Nurses - Registered Nurses/BSN: Administer care to ill or injured persons in hospitals, clinics, private homes, and similar institutions. 4-10 yrs. - \$26.47/34.05

Pharmacy Technicians: Prepare medications under the direction of a pharmacist. May measure, mix, count out, label, and record amounts and dosages of medications according to prescription orders. OJT - \$12.86/16.56

Physical Therapists: Assess, plan, organize, and participate in rehabilitative programs that improve mobility, relieve pain, increase strength, and improve or correct disabling conditions resulting from disease or injury. 5-10 yrs. - \$34.31/43.39

Physicians & Surgeons: Physicians and surgeons diagnose and treat injuries or illnesses. Physicians examine patients; take medical histories; prescribe medications; and order, perform, and interpret diagnostic tests. They counsel patients on diet, hygiene, and preventive healthcare. Surgeons operate on patients to treat injuries, such as broken bones; diseases, such as cancerous tumors; and deformities, such as cleft palates. 10+ yrs. - \$77.61/90.25

Physician's Assistants: Provide healthcare services typically performed by a physician, under the supervision of a physician. Conduct physicals, provide treatment, and counsel patients. May, in some cases, prescribe medication. 4yrs.-10 yrs. \$32.70/50.22



Hospitality and Culinary

Chefs and Head Cooks: Plan, price, direct and/or prepare foodstuffs in restaurants. 2-4 yrs. - \$15.72/23.30



Information Technology

Food Service Managers: Plan, direct, or coordinate activities of an organization or department that serves food and beverages. 2-6 yrs. \$17.63/27.41

Computer & Information Systems Mgrs.: Plan, direct, or coordinate activities in such fields as electronic data processing, information systems, systems analysis, and computer programming. 4 yrs. \$42.86/62.41

Computer Programmers: Convert project specifications and statements of problems and procedures to detailed logical flow charts for coding into computer language. Develop and write computer programs to store, locate, and retrieve specific documents, data, and information. May program web sites. 2-4 yrs. - \$24.19/37.07

Computer Software Developers, Applications: Develop, create, and modify general computer applications software or specialized utility programs. Analyze user needs and develop software solutions. 4 yrs. - \$34.34/45.30

Computer Software Developers, Systems Software: Apply principles and techniques of computer science, engineering, and mathematical analysis to research, design, develop, and test operating systems-level software, compilers, and network distribution software for medical,

industrial, military, communications, aerospace, business, scientific, and general computing applications. 4 yrs. - \$34.34/45.30

Computer Support Specialists: Provide technical assistance to computer system users. May provide assistance on the use of computer hardware, software, and operating systems. 2-4 yrs. - \$20.23/29.32

Computer Systems Analysts: Analyze science, engineering, business, and all other data processing problems for application to electronic data processing systems. 4 yrs. - \$27.76/39.74

Network & Computer Systems Administrator (Includes: IT System/Admin./Security: Analyze, design, test, and evaluate network systems, such as local area networks (LAN), wide area networks (WAN), Internet, intranet, and other data communications systems. Research and recommend network and data communications hardware and software. Include telecommunications specialists who deal with the interfacing of computer and communications equipment. May supervise computer programmers. 4 yrs. - \$26.33/39.75



Law, Public Safety, Corrections, & Security

Fire Fighters: Control and extinguish fires or respond to emergency situations where life, property, or the environment is at risk. 2-4 yrs. - \$18.17/24.77

Police & Sheriff's Patrol Officers: Maintain order, enforce laws and ordinances. Patrol, direct traffic, issue summons, investigate, apprehend, and arrest. 2-4 yrs. - \$22.24/28.48



Manufacturing

Computer Numeric Control (CNC) Operator: Use machine tools and technology to produce precision products for aerospace, automobile and, machine parts, and compressors. 1-2 yrs. - \$20.08/28.23

Machinists: Set up and operate a variety of machine tools to produce precision parts and instruments. Includes precision instrument makers who fabricate, modify, or repair mechanical instruments. May also fabricate and modify parts to make or repair machine tools or maintain industrial machines, applying knowledge of mechanics, mathematics, metal properties, layout, and machining procedures. OJT - 11.22/17.73



Marketing, Sales & Service

Marketing Managers: Plan, direct, or coordinate marketing policies and programs, such as determining the demand for products and services offered by a firm and its competitors, and identify potential customers. Develop pricing strategies with the goal of maximizing the firm's profits or share of the market while ensuring the firm's customers are satisfied. Oversee product development or monitor trends that indicate the need for new products and services. 4-10 yrs. - \$36.88/57.16



Science Technology, Engineering & Mathematics

Civil Engineers: Perform engineering duties in planning, designing, and overseeing construction and maintenance of building structures, and facilities, such as roads, railroads, airports, bridges, harbors, channels, dams, irrigation projects, pipelines, power plants, and water and sewage systems. Includes architectural, structural, traffic, ocean, and geo-technical engineers. 4-10 yrs. - \$30.62/46.73

Electrical & Electronic Engineering Technicians: Help to design, develop, test, and manufacture electrical and electronic equipment May work in product evaluation and testing. 2-4 yrs. - \$18.01/25.14

Electrical/Electronic Engineers: Research, design, develop, test, or supervise the manufacturing and installation of electrical equipment, components, or systems for commercial, industrial, military, or scientific use. 4-10 yrs. - \$30.62/46.73

Industrial Engineers: Design, develop, test, and evaluate integrated systems for managing industrial production processes, including human work factors, quality control, inventory control, logistics and material flow, cost analysis, and production coordination. 4-10 yrs. - \$29.63/43.84

Mechanical Engineers: Perform engineering duties in planning and designing tools, engines, machines, and other mechanically functioning equipment. Oversee installation, operation, maintenance, and repair of equipment such as centralized heat, gas, water, and steam systems. 4-10 yrs. - \$29.87/45.72



Automotive Body Repairer: Use special equipment and technology to restore damaged metal frames and body sections. 2- 4 yrs. - \$13.38/19.08

Automotive Service Technicians: Adjust, repair, and overhaul automotive vehicles using computer diagnostic equipment. 2-4 yrs. - \$12.36/16.14

Diesel Engine Technicians: Repair and maintain trucks, buses and heavy equipment using computer diagnostic equipment. 2-4 yrs. - \$15.50/19.89

Transportation, Distribution & Managers (Cargo/Freight): Monitor inventory levels, planning, directing distribution, and customer relations. 2-4 yrs., \$22.93/34.17

Truck Drivers, Heavy: Drives 3+ ton trucks; prepares paperwork; collects payments for goods delivered. 3-6 mos., License - \$12.85/18.11

Emerging and Evolving Occupations Projected to Offer Future Employment

****Emerging Occupations are new occupations in the workforce with new titles and new skills.**

***Evolving Occupations are traditional occupations whose knowledge, skills, and abilities have changed or evolved.**

Advanced Materials/Smart Materials Analysts/Technicians: Emerging Occupation - Work with materials having a molecular structure that responds in a particular and controlled way to influences upon it ranging from magnetically-changed materials, to "memory" molecules that return to their original form, to materials that generate an electric charge when pressed, twisted, or warped. 2-4 yrs. - \$20.50/34.41

Bioinformatics Technicians: Emerging Occupation - Assists scientists in areas such as pharmaceuticals, medical technology, biotechnology, computational biology, proteomics, computer information science, biology and medical informatics. Apply bioinformatics tools to visualize, analyze, manipulate or interpret molecular data. May build and maintain

databases for processing and analyzing genomic or other biological information. 2-4 yrs. - \$17.24/32.20

Biomedical Engineers: Evolving Occupation - Apply knowledge of engineering, biology, and biomechanical principles to the design, development, and evaluation of biological and health systems and products, such as artificial organs, prostheses, instrumentation, medical information systems, and health management and care delivery systems. 4-10 yrs. - \$21.17/30.44

Business Intelligence Analysts/Operations Research Analyst: Emerging Occupation - Formulate and apply mathematical modeling and other optimizing methods to develop and interpret information that assists management with decision making, policy formulation, or other managerial functions. May collect and analyze data and develop decision support software, service, or products. 4-10 yrs. - \$35.84

Cloud Architects: Emerging Occupation - Understand the basics of enterprise architecture, and how to configure IT assets around the needs of the business. Need an expert understanding of SOA. Must be an expert in: public, private, and hybrid cloud computing technology, including IaaS, PaaS, and SaaS. 2-4 yrs. - \$15.00/20.00

Computer Network/Wireless Network Engineers/Technicians: Evolving Occupation - Design and implement computer and information networks, such as local area networks (LAN), wide area networks (WAN), intranets, extranets, and other data communications networks. Perform network modeling, analysis, and planning. May also design network and computer security measures. May research and recommend network and data communications hardware and software. 4 yrs. - \$43.75

Computer Security Specialists: Emerging Occupation- Plan, coordinate, and implement security measures to prevent unauthorized modification, destruction, or disclosure of information. 2-4 yrs. - \$19.29/26.40

Convergence Technology Specialists/Technicians: Emerging Occupation - Combines telephony, data networking, voice over IP and hand held devices, to solve real problems. Includes Home Technology Technicians who handle the multiple technologies needed in a home or small office environment and in large businesses who are merging legacy voice and data systems with voice over IP, wireless, etc. all in a secure environment. 2-4 yrs. - \$15.00/20.00

Environmental Engineering Technicians: Emerging Occupation - Conduct research or perform investigation for the purpose of identifying, abating, or eliminating sources of pollutants or hazards that affect either the environment or the health of the population utilizing knowledge of various scientific disciplines. 4-10 yrs. - \$13.77/22.22

Forensics Science Technicians: Emerging Occupation - The science of conducting investigations related to computer crimes and abuse in a manner that is legally sound and reproducible. Using specialized hardware and software tools, computer forensics technicians gather evidence about all kinds of activity including fraud, embezzlement, child pornography, and intellectual property misappropriation. 2 yrs. - \$14.26/21.17

Fuel Cell Technicians: Emerging Occupation - Emerging Occupation - Conduct research and development from engineering drawings, assemble test products, and test those products under the direction of an engineer or scientist. Record and review all processes and testing results. 2-4 yrs. - \$25.68/37.22

Genetic Counselors - Emerging Occupation - Assess individual or family risk for a variety of inherited conditions, such as genetic disorders and birth defects. Provide information to other healthcare providers or to individuals and families concerned with the risk of

inherited conditions. Advise individuals and families to support informed decision making and coping methods for those at risk. May help conduct research related to genetic conditions or genetic counseling. 4-6 yrs. \$30.57 median hrly.

Information Security Analysts including Cyber Security: Emerging Occupation - Use information technology (IT) to advance their organization's goals. Security analysts ensure a firm's information stays safe from cyber-attacks. 4 yrs. - \$40.77/59.29

Nanotechnology Technicians/Technologists/Engineers: Emerging Occupation - Develop, operate and service microscopy equipment capable of characterizing nanostructures. Must have extensive background in materials science and optics. 2-4 yrs. \$16.07/22.52

Nurse Practitioner: Emerging Occupation - Diagnose and treat illness, independently or as part of a healthcare team. May order, perform, or interpret diagnostic tests such as lab work and x rays. May prescribe medication. - 4-10 yrs. RN's with specialized graduate education. \$22.46/36.94

Patient Care Technicians (Certified): Emerging Occupation - Provide basic patient care under direction of nursing staff. Certification OJT - \$8.64/10.38

Remote Sensing Technicians: Emerging Occupation - Apply remote sensing technologies to assist scientists in areas such as natural resources, urban planning, or homeland security. May prepare flight plans or sensor configurations for flight trips. 4 yrs. - \$21.25

Risk Management Specialists: Evolving Occupation - A structured approach to managing uncertainty through risk assessment, developing strategies to manage it, and mitigation of risk using managerial resources. 4-10 yrs. - \$28.53/44.34

Robotics Technicians/Automotive Mfg. Techs.: Emerging Occupation - Install, program, and repair robots and related equipment, such as programmable controllers, robot controllers, end-of-arm tools, and conveyors. Robot manufacturers, assist in design and configuration. 2-4 yrs. - \$16.07/22.52

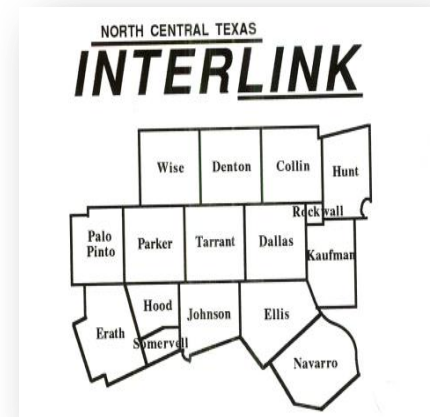
Social Media Architect/Networking Specialists: Emerging Occupation - Drives the operations responsible for creating and executing social media programs to build the brand and increase business. Oversees all content creation, including written and video, execution of custom social media marketing plans and offers social tools for public and private clouds that redefine the role of social media for business. 4-10 yrs. - \$23.44/38.28

Solar Photovoltaic (Electric) Installer: Emerging Occupation -The ideal candidate will have some construction experience, especially knowledge of basic electrical wiring with experience as a solar electric installation desirable but not required. Most likely to evolve from solar trained Electrician. 2-5 yrs. - \$10.44/15.52



The information included in this document is intended to be used as a guideline for high skill, high wage, and high demand occupational opportunities in North Central Texas as identified by regional employers. The absence of an occupation on this list does not necessarily preclude it from viable career opportunities, nor may it be applicable to other areas. Note that labor market conditions can change rapidly, therefore it is important to validate this information prior to making career choices or career program decisions.

InterLink 2015~2020 Targeted Occupations Identified by North Central Texas Employers for Employment Growth Potential



North Central Texas InterLink, Inc.
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A Texas Model Program