

A stylized, multi-pointed star or compass rose logo in a lighter shade of brown, located in the bottom left corner of the slide.

Welcome!

We will start at 12:00pm CDT.

This Zoom meeting is set up in a webinar format, so attendee videos and microphones are disabled.

Please type questions for our speakers using the Chat or Q&A functions.

Guest Speaker



Dr. Kristina Flores

Director of Research & Evaluation
Texas Success Center

Key Occupations in Texas:

A Labor-Market Informed
Applied Research Project



Kristina Flores, Ph.D.

Director of Research and Evaluation

Texas Success Center

Agenda

- Guiding Principle: Knowledge Development Objective
- Applied Research Partnership
 - TACC and Lightcast
- Phase 1: Key Occupations and Career Pathways in Texas
 - Impact of Phase 1
- Phase 2: Regional Key Occupations and Career Pathways
 - A look under the hood!





Knowledge Development: Objective

The Knowledge Development objective is to **conduct research that creates actionable knowledge** to support the redesign of the student experience at all community colleges in Texas.

The Center, with guidance from the Knowledge Development Steering Committee designs, commissions, and conducts research studies and related activities to:

- **build the knowledge base** concerning Texas Pathways reform efforts,
- **enhance the impact** of community colleges' Texas Pathways strategies, and
- **increase Texas community college research capacities.**

Research Partnership



**Texas Association of
Community Colleges**



Lightcast's mission in education is to provide data and analytics that help educators:

- **optimize** program offerings,
- **connect** students to programs and careers, and
- **communicate** outcomes and impact.

State Labor Market Insights



Texas Association of
Community Colleges

Profile: Statewide

Key Occupation: Cardiovascular Technologists and Technicians*



Texas Association of
Community Colleges

4,197
Job Postings

Dec 1, 2019 - Nov 30, 2020



\$52,560

Median Salary

*Based on BLS data for
Texas*

16%

Projected Growth

*Estimated growth in
employment, 2020-2030*

85%

Entry Level

*Percent of job postings calling for
0-2 years of experience*

10%

BA+ Level

*Percent of job postings
calling for a BA or higher*

23% (Low)

Automation Risk

*Based on Osborn and Frey's
methodology*

Top 5 Specialized Skills

1. Cardiopulmonary Resuscitation
2. Patient Care
3. Electrocardiogram
4. Cardiology
5. Catherization Laboratory (Cath Lab)

Top 5 Certifications

1. First Aid CPR AED
2. Basic Life Saving (BLS)
3. Advanced Cardiac Life Support Certification
4. Basic Cardiac Life Support Certification
5. American Registry of Radiologic Technologists Certification

Top 5 Employers

1. Hospital Corporation of America
2. Christus Health
3. Baylor Scott & White Health
4. Texas Health Resources
5. Houston Methodist

**This occupation is
important to the
following industries:**

Health Care and Social Assistance
Professional, Scientific, and Technical Services
Other Services (except Public Administration)

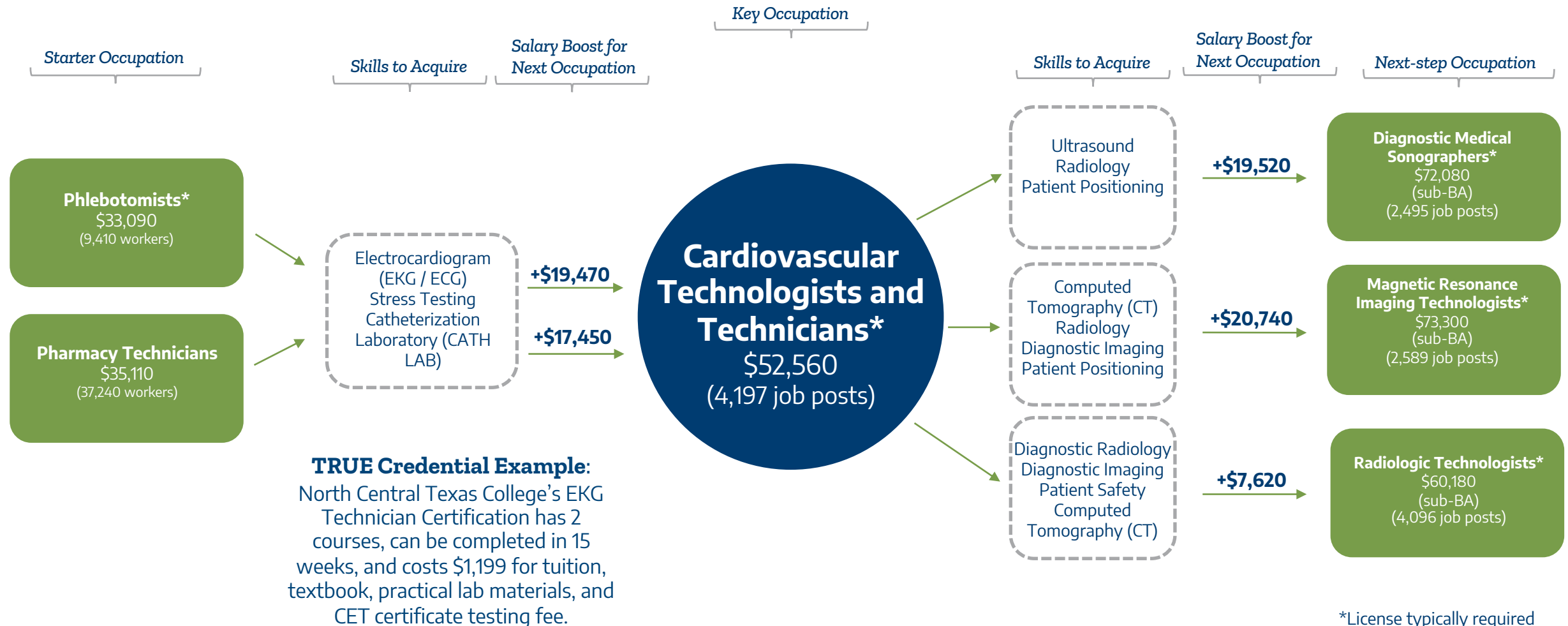
**License typically required*

TRUE Pathways Map

Industry Area of Study: Health Sciences



Texas Association of
Community Colleges



Profile: Statewide

Key Occupation: Heating, Air Conditioning, and Refrigeration Mechanics and Installers*+



Texas Association of
Community Colleges

9,235
Job Postings
Dec 1, 2019 - Nov 30, 2020



\$45,510
Median Salary
*Based on BLS data for
Texas*

16%
Projected Growth
*Estimated growth in
employment, 2020-2030*

38%
Entry Level
*Percent of job postings calling for 0-2
years of experience*

0%
BA+ Level
*Percent of job postings
calling for a BA or higher*

65% (Med)
Automation Risk
*Based on Osborn and Frey's
methodology*

Top 5 Specialized Skills

- 1. HVAC
- 2. Repair
- 3. Plumbing
- 4. Ventilation
- 5. Predictive/Preventative Maintenance

Top 5 Certifications

- 1. Drivers License
- 2. Environmental Protection Agency Certification
- 3. EPA/CFC/HCFC Certification
- 4. North American Technician Excellence (NATE)
- 5. Occupational Safety and Health Administration Certification

Top 5 Employers

- 1. Sears
- 2. TDindustries
- 3. Lochridge Priest Industries
- 4. Johnson Controls Incorporated
- 5. Cxc Talent Solutions



**This occupation is
important to the
following industries:**

Construction
Manufacturing
Retail Trade

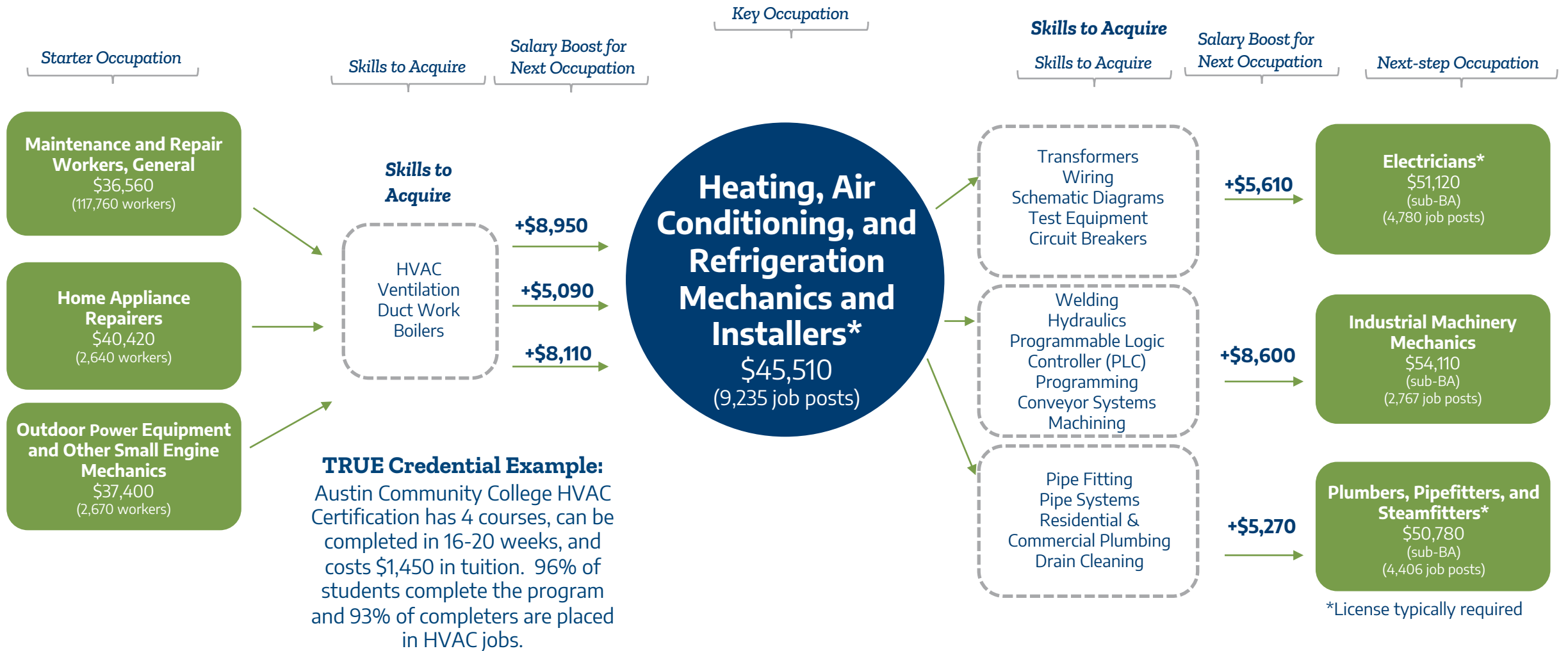
*License typically required
+Texas Workforce Commission
Target Occupation

TRUE Pathways Map

Industry Area of Study: Design, Manufacturing, Construction & Applied Technologies



Texas Association of
Community Colleges

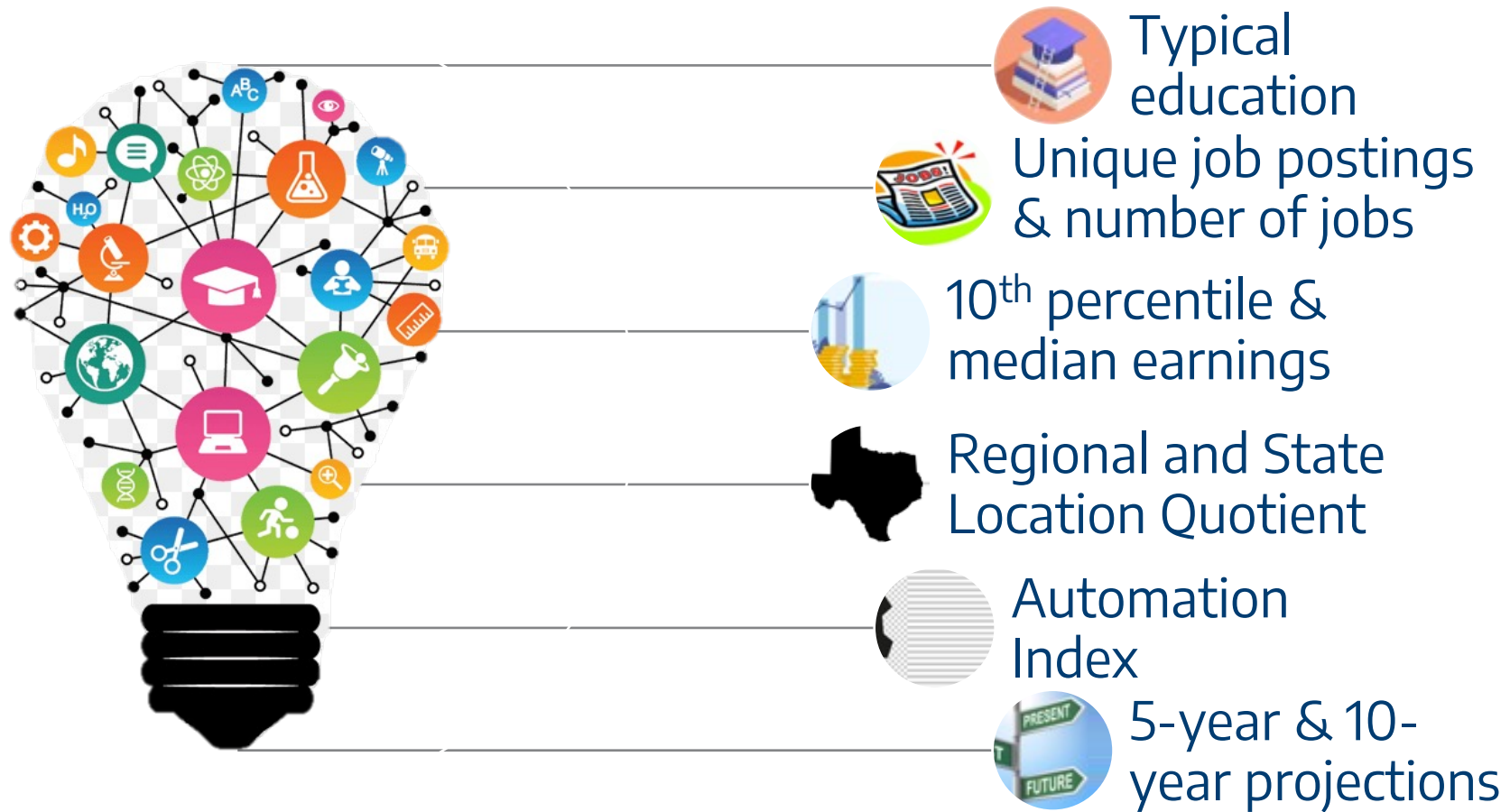


Regional Labor Market Insights



Texas Association of
Community Colleges

Identifying Key Occupations: Target Index



Considerations for Identifying Key Occupations:

Detailed information about Target Index factors:

- Typical Education Requirements: Less than a bachelor's degree but at least some college
- Job Growth Projection: Positive 5-year and 10-year job growth projections
- Earnings:
 - Entry-level earnings (10th percentile) meets or exceeds the region's living wage
 - Median earnings exceeds the region's living wage
- Automation Risk: Automation index around or below average (not likely for a computer to do the job)
- Relative Demand: Location quotient at or above average
- Regional Importance: Job identified by Texas Workforce Commission or other regional entity
- Demand: Positive and growing unique job postings

Several of the Target Index factors are displayed on the key occupation snapshot slides.



Texas Association of
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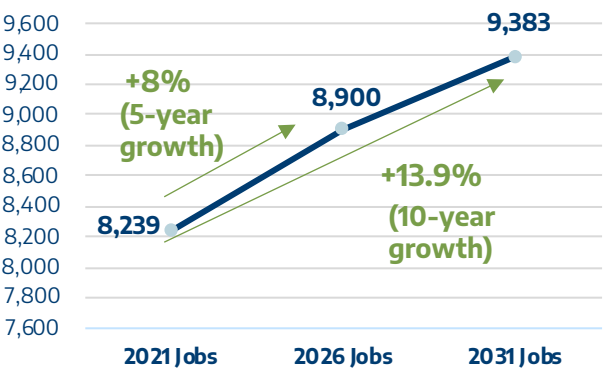


Key Occupation: EXAMPLE

Region:

Unique Job Postings:

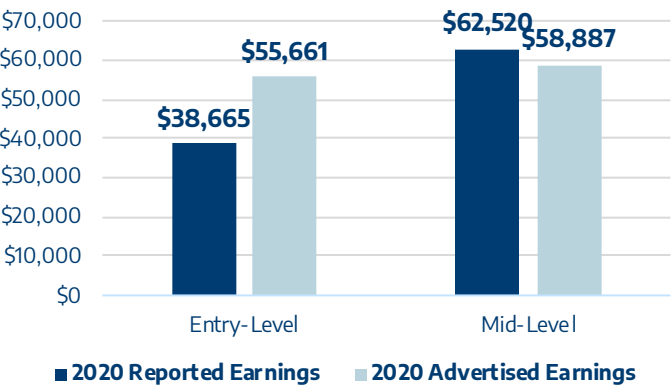
Job Growth Projections



Job Growth Projections show:

- The number of jobs in 2021
- Projected number of jobs in 2026
- Projected number of jobs in 2031
- The 5-year projected growth rate
- The 10-year projected growth rate

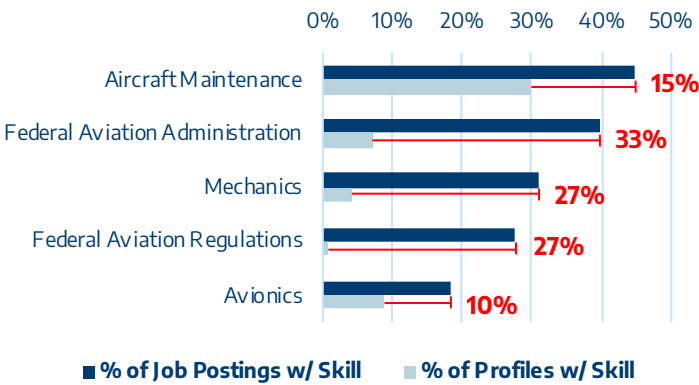
Annual Earnings



Annual Earnings show:

- Reported Earnings for the occupation from government sources, primarily the BLS’s OES dataset
- Advertised Earnings for salary information provided by the company or entity advertising a position through a job posting

Top Skills Gaps



Top Skills Gaps show:

- % Job Postings with Skill: the proportion of job postings with the skill requested by companies (skills in demand)
- % Profiles with Skill: the skills workers post on social media profiles and resumes, such as LinkedIn (skills in supply)
- Skills Gap: the difference in company-demanded skills and worker-supplied skills. A skills gap indicates a potential shortage for the skill in the region.



Key Occupation: EXAMPLE

Region:

Unique Job Postings:

Common Qualifications show:
the most common and in-demand
skills found in job postings



Common Qualifications

- Security Clearance
- Secret Clearance
- Security Identification Display Area (SIDA) Badge
- Airport Security Clearance
- Top Secret-Sensitive Compartmented Information (TS/SCI Clearance)

Top Industry Sectors show:
the industries most associated
with job postings



Top Industry Sectors

- Transportation and Warehousing
- Manufacturing
- Public Administration
- Health Care and Social Assistance
- Professional, Scientific, and Technical Services

Top Employers show:
the employers posting the
highest number of jobs



Top Employers

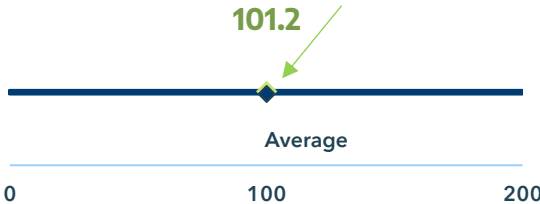
- State of Texas
- Global Medical Response
- Airbus
- Gulfstream Aerospace
- Textron

Automation Risk shows:
an occupation’s risk of being affected by use of
computers using the following:

- % of time spent on high-risk work
- % of time spent on low-risk work
- # of high-risk jobs in compatible occupations
- Overall industry automation risk



Automation Risk



Career Maps: Similarity Model

- **First Step:** Key Occupations are matched to Starter & Advancer Occupations by analysis of common skills & gaps.



- **Next Step:** Skills Gap Analysis
- **Final Step:** Career Map Development

Regional Labor Market Snapshots



Central

Computer User Support Specialists
Industrial Engineering Technologists and Technicians
Telecommunications Equipment Installers and Repairers
Computer Network Support Specialists
Licensed Practical and Vocational Nurses



East

Electrical and Electronics Repairers
Physical Therapy Assistants
Surgical Technologists
Dental Hygienists
Industrial Engineering Technologists and Technicians

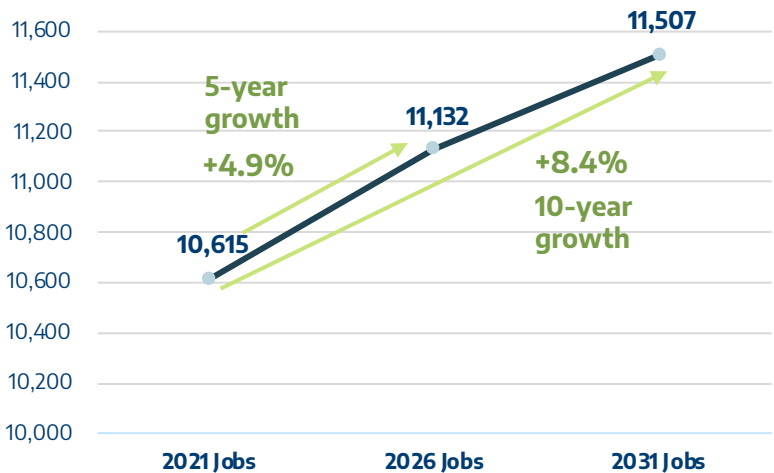


Key Occupation: Licensed Practical and Licensed Vocational Nurses

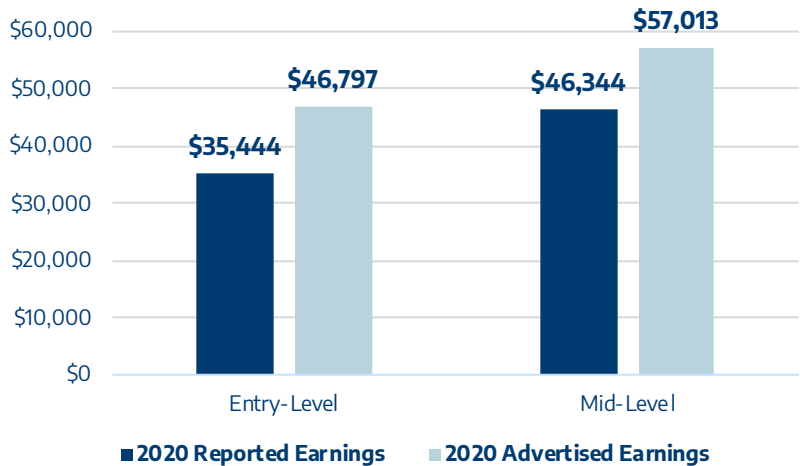
Region: Central Texas

Unique Job Postings: 6,810

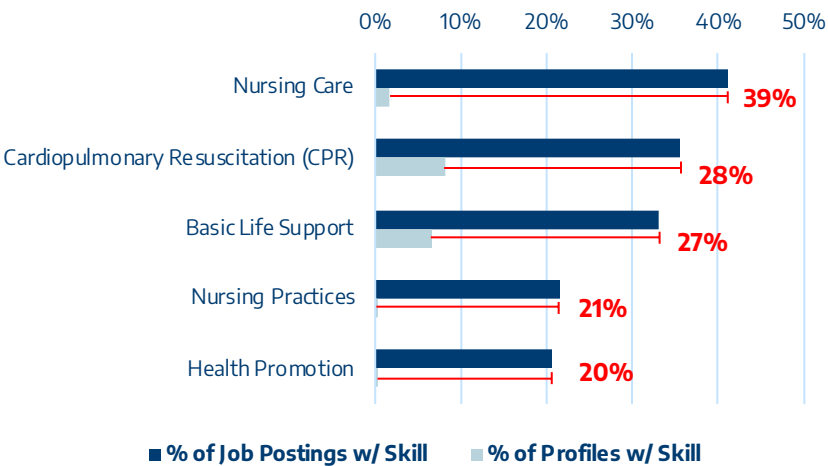
Job Growth Projections



Annual Earnings



Top Skills Gaps



Common Qualifications

- Licensed Vocational Nurses
- Licensed Practical Nurse
- Certified Nursing Assistant
- IV (Intravenous) Certification
- Associate Degree in Nursing

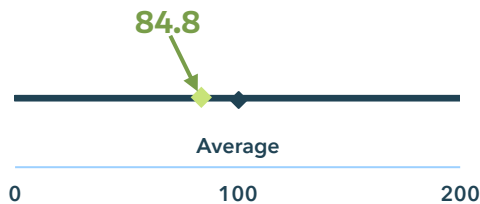
Top Industry Sectors

- Health Care and Social Assistance
- Professional, Scientific, and Technical Services

Top Employers

- Baylor Scott & White Health
- Thrive Skilled Pediatric Care
- Aveanna Healthcare
- AccentCare
- Austin Regional Clinic

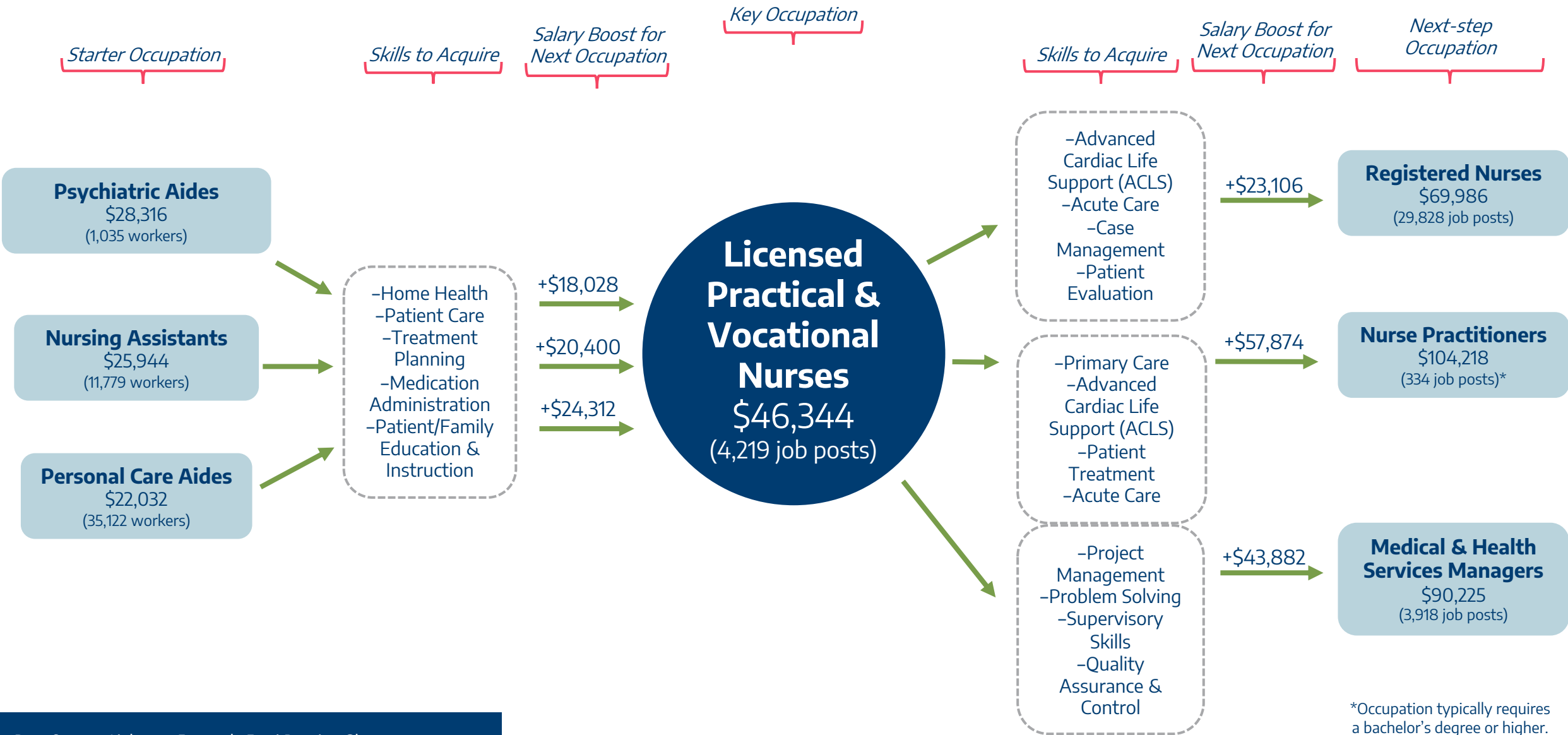
Automation Risk





Key Occupation: Licensed Practical & Licensed Vocational Nurses

Region: Central Texas



*Occupation typically requires a bachelor's degree or higher.

Key Occupation: Industrial Engineering Technologists and Technicians

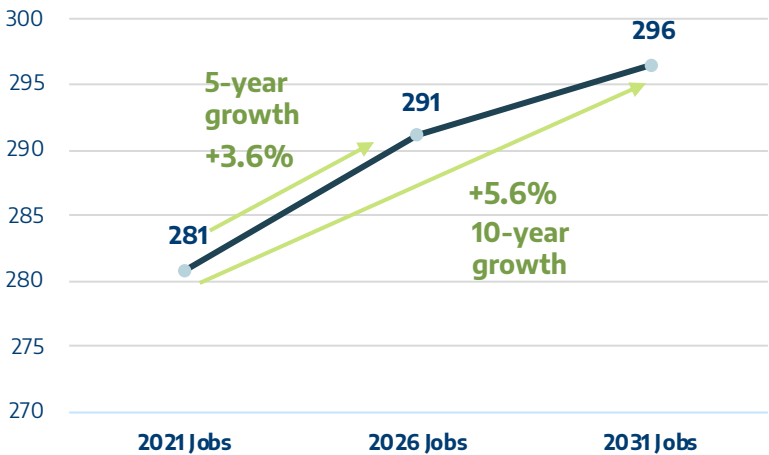
Region: East Texas

Unique Job Postings: 231

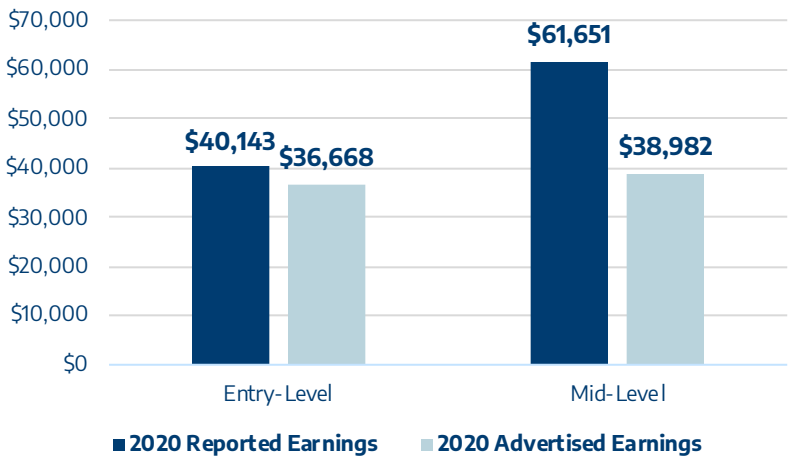


Texas Association of Community Colleges

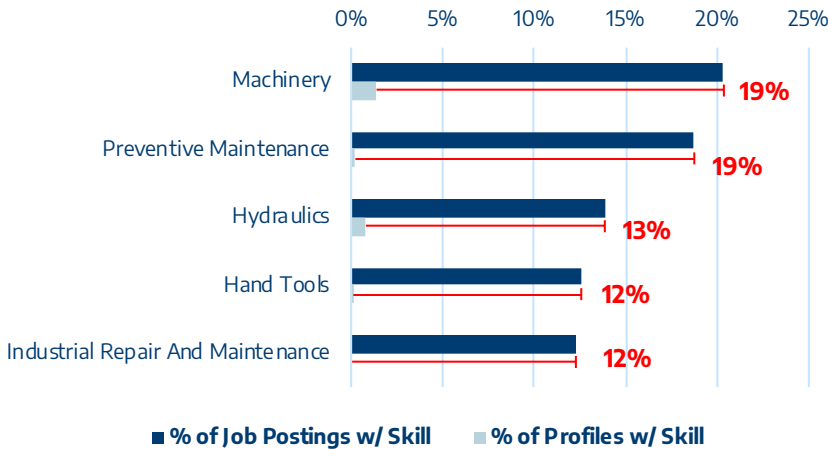
Job Growth Projections



Annual Earnings



Top Skills Gaps



Common Qualifications

- Commercial Driver's License (CDL)
- American Welding Society Certification
- Automotive Service Excellence (ASE) Certification
- CDL Class B License
- Tanker Endorsement

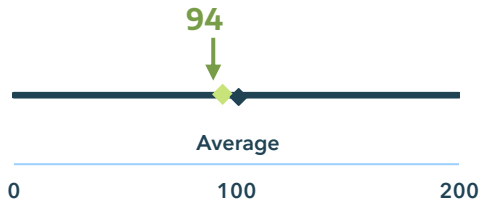
Top Industry Sectors

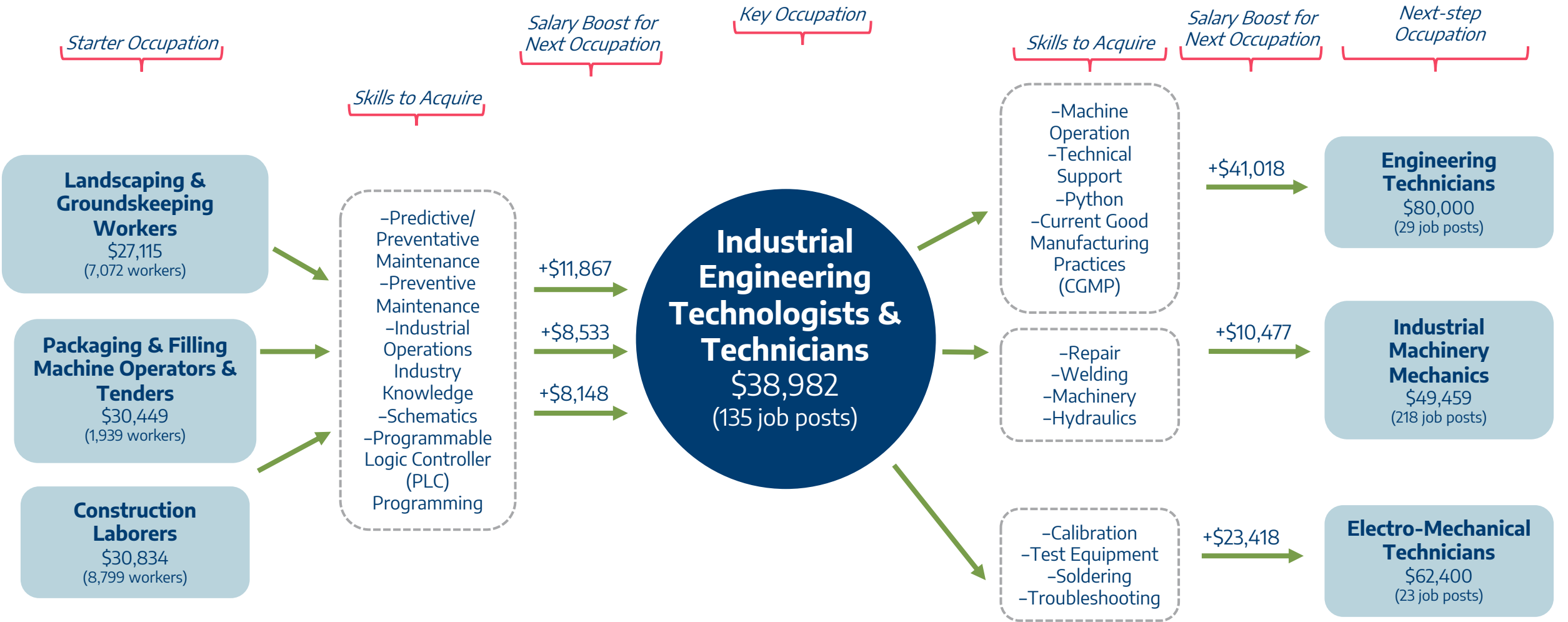
- Manufacturing
- Retail Trade
- Wholesale Trade
- Administrative and Support
- Public Administration

Top Employers

- Amerada Hess Corporation
- Bridgestone Corporation
- Plastipak
- Spectrum
- Rockwell Automation

Automation Risk





Regional Labor Market Snapshots



North

Aircraft Mechanics and Service Technicians
Insurance Appraisers, Auto Damage
Dental Hygienists
Architecture and Civil Drafters
Paralegals and Legal Assistants



South

Web Developers
Fire Inspectors and Investigators
Occupational Therapy Assistants
Licensed Practical and Vocational Nurses
Computer Network Support Specialists

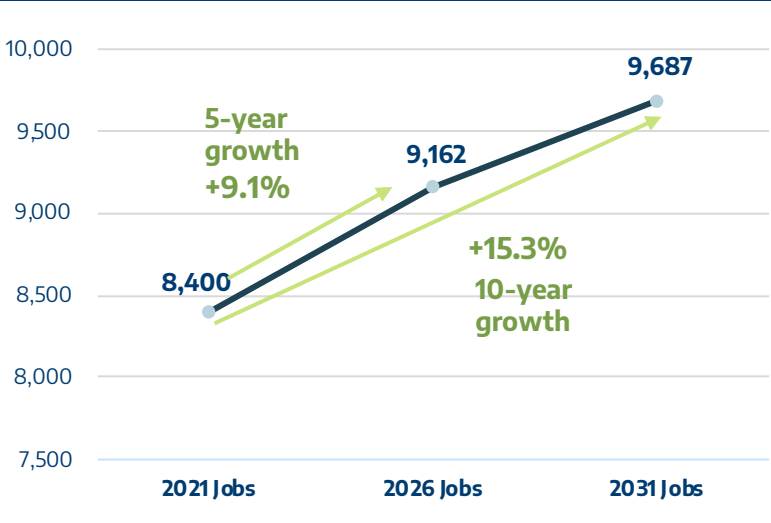


Key Occupation: Paralegals and Legal Assistants

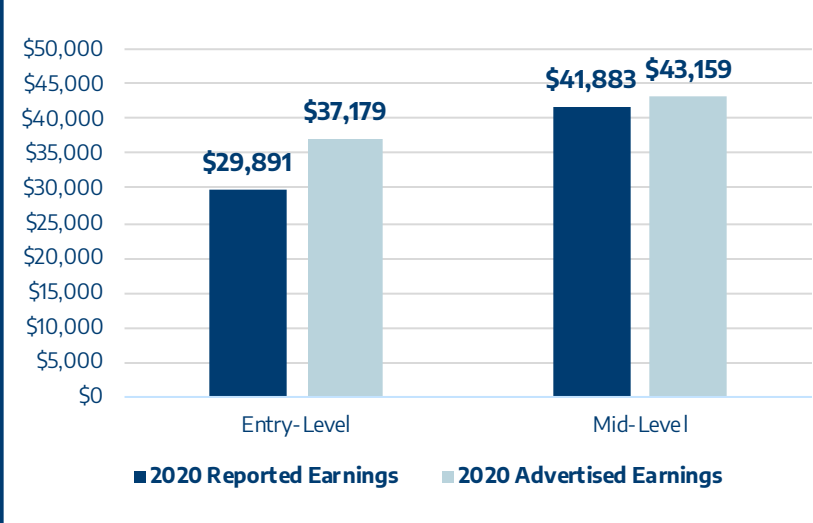
Region: North Texas

Unique Job Postings: 3,768

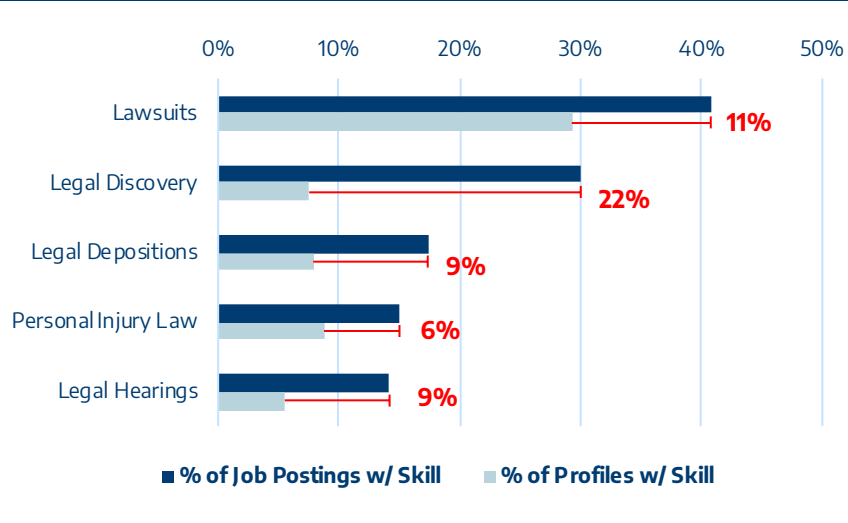
Job Growth Projections



Annual Earnings



Top Skills Gaps



Common Qualifications

- Security Clearance
- Certified Legal Assistant

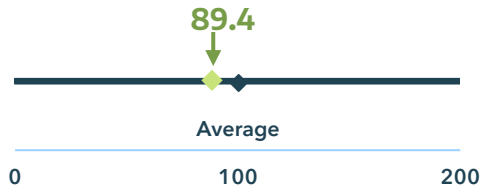
Top Industry Sectors

- Professional, Scientific, and Technical Services
- Finance and Insurance
- Administrative and Support
- Public Administration
- Real Estate and Rental and Leasing

Top Employers

- The Willis Law Group, PLLC
- State of Texas
- Bailey & Galyen Attorneys at Law
- Berry Appleman & Leiden LLP
- Legal Aid Northwest Texas

Automation Risk



Key Occupation: Paralegals & Legal Assistants

Region: North Texas



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Community Colleges



*Occupation typically requires a bachelor's degree or higher.

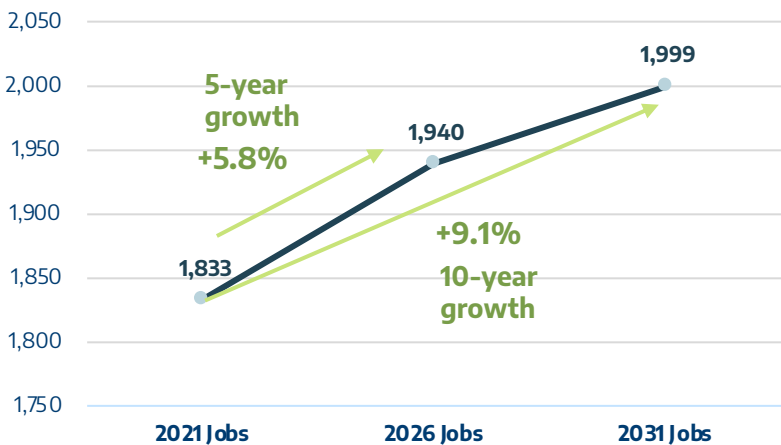


Key Occupation: Computer Network Support Specialists

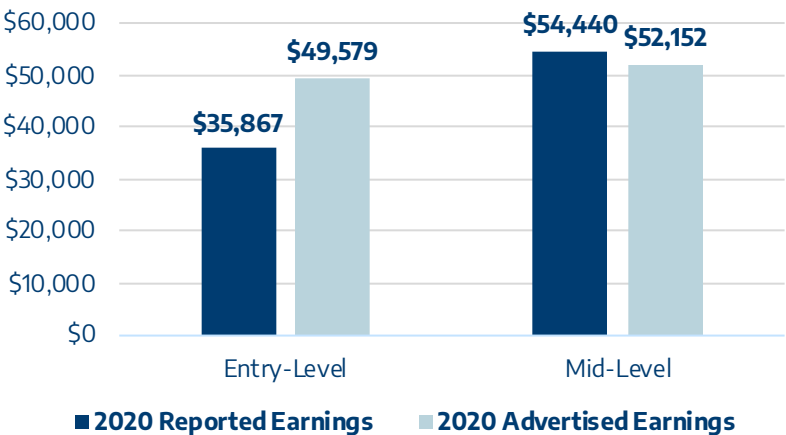
Region: South Texas

Unique Job Postings: 134

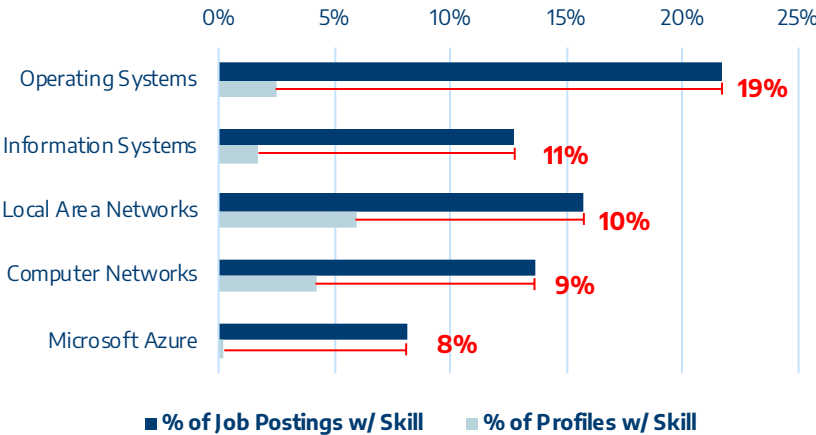
Job Growth Projections



Annual Earnings



Top Skills Gaps



Common Qualifications

- Cisco Certified Network Associate
- IAT Level II Certification
- CompTIA Security+
- Certified Information Systems Security Professional
- CompTIA Network+

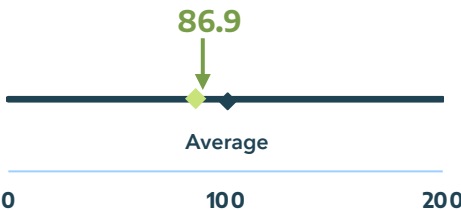
Top Industry Sectors

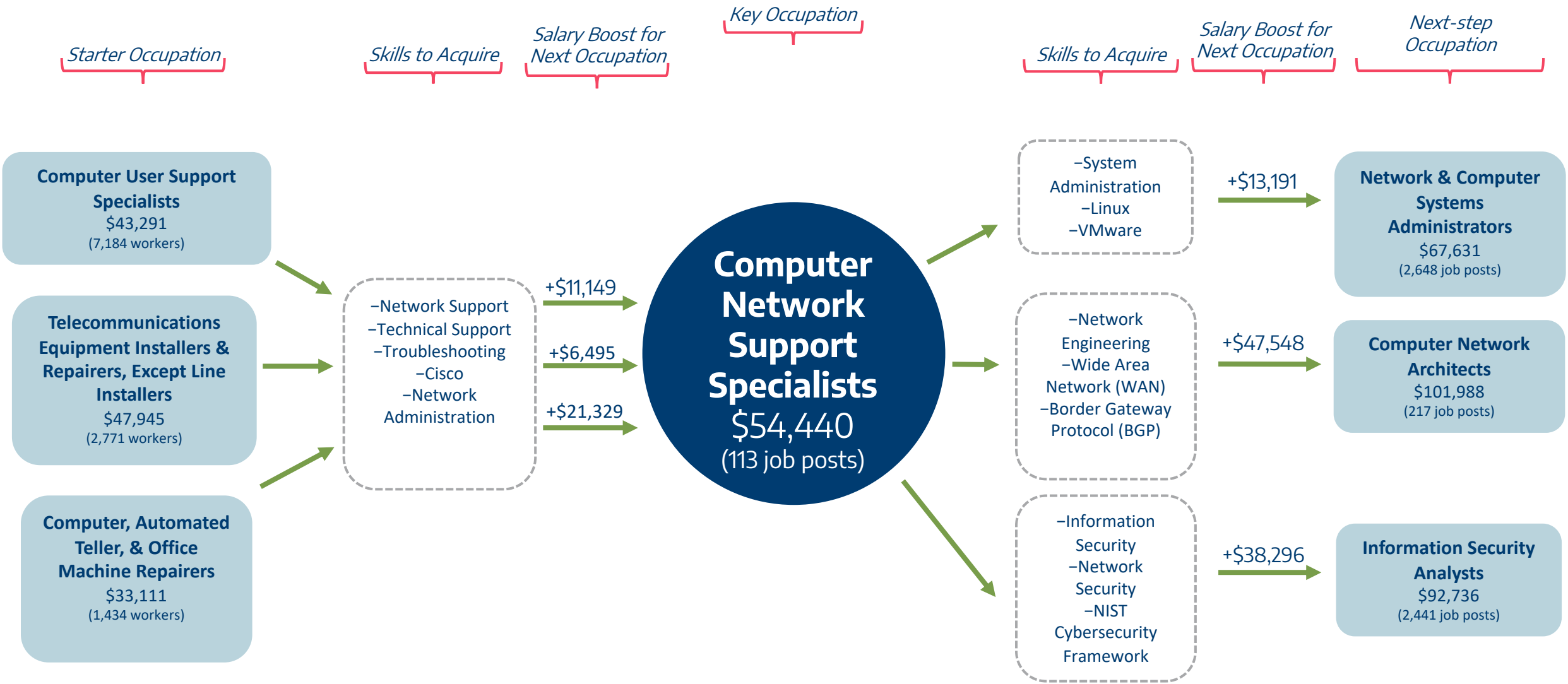
- Professional, Scientific, & Technical Services
- Information
- Finance & Insurance
- Manufacturing
- Wholesale Trade

Top Employers

- Microsoft
- UnitedHealth Group
- Oasis Systems
- Anthem Blue Cross
- Valero Energy

Automation Risk





Regional Labor Market Snapshots



Southeast

Cardiovascular Technologists and Technicians

Dental Assistants

Diagnostic Medical Sonographers

Calibration Technologists and Technicians

Computer Network Support Specialists



West

Heavy and Tractor-Trailer Truck Drivers

Radiologic Technologists and Technicians

Health Information Technologists

Electrical and Electronic Engineering Technologists

Respiratory Therapists

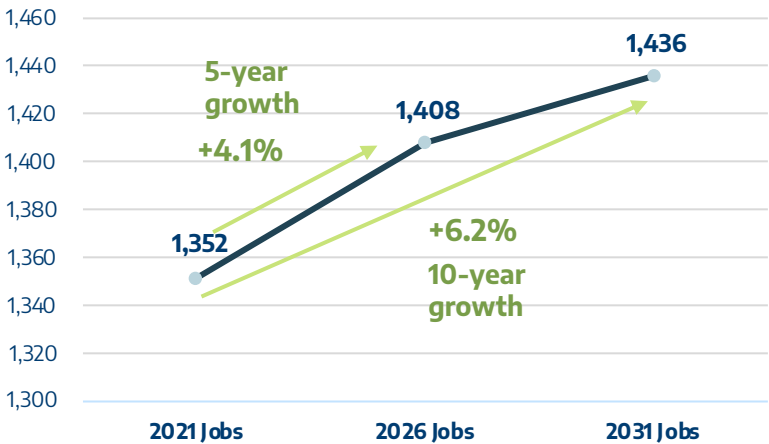


Key Occupation: Cardiovascular Technologists and Technicians

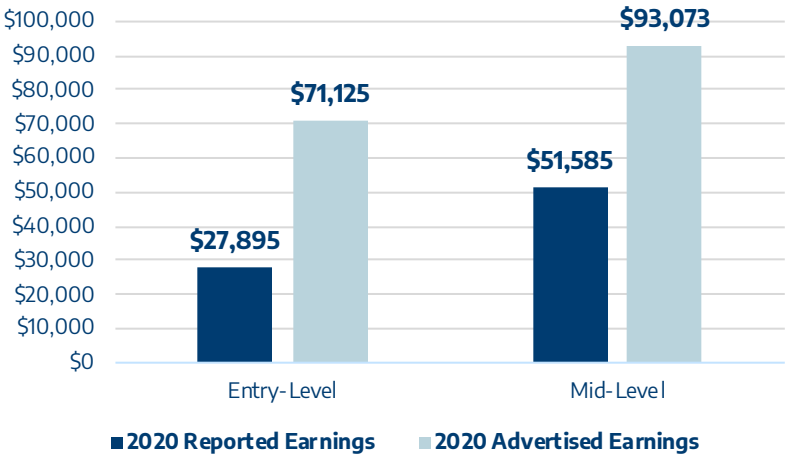
Region: Southeast Texas

Unique Job Postings: 1,347

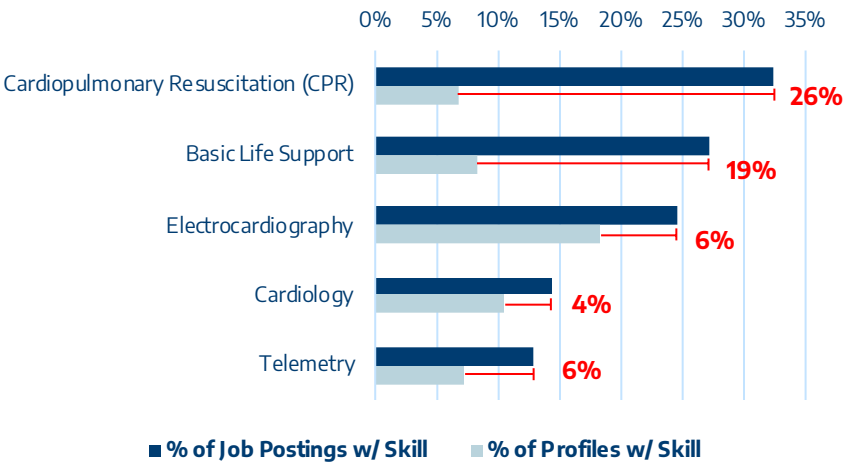
Job Growth Projections



Annual Earnings



Top Skills Gaps



Common Qualifications

- Board Certified Behavior Analyst
- Registered Vascular Technologist
- American Registry of Radiologic Technologists (ARRT) Certified
- Certified Cardiographic Technician
- Registered Diagnostic Cardiac Sonographer

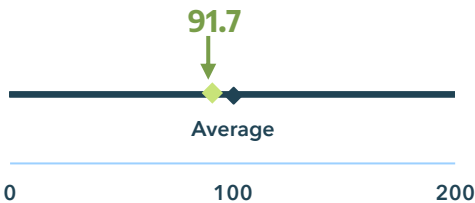
Top Industry Sectors

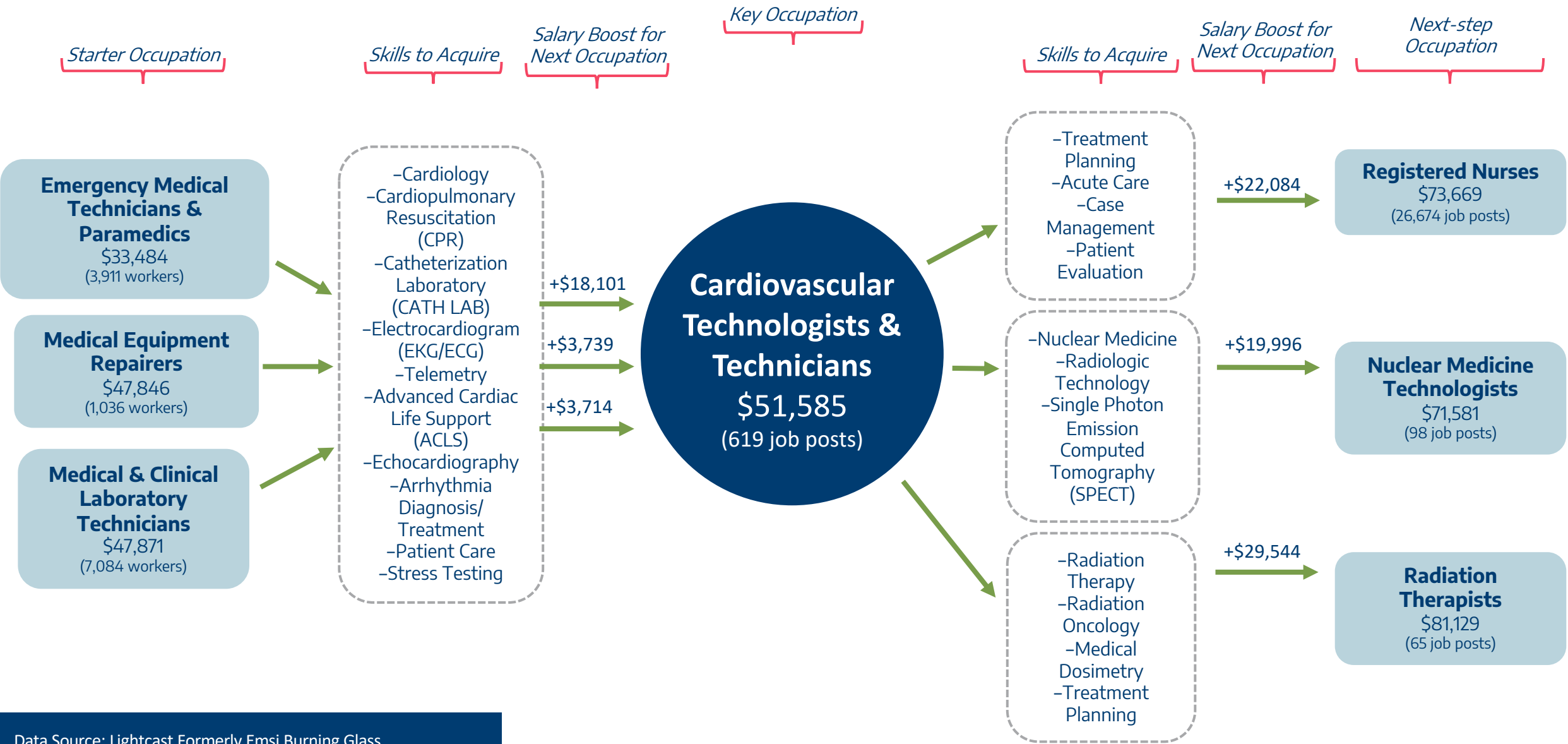
- Health Care and Social Assistance

Top Employers

- Texana Center
- HCA Healthcare
- Cleveland Clinic
- Houston Methodist
- Houston Healthcare

Automation Risk





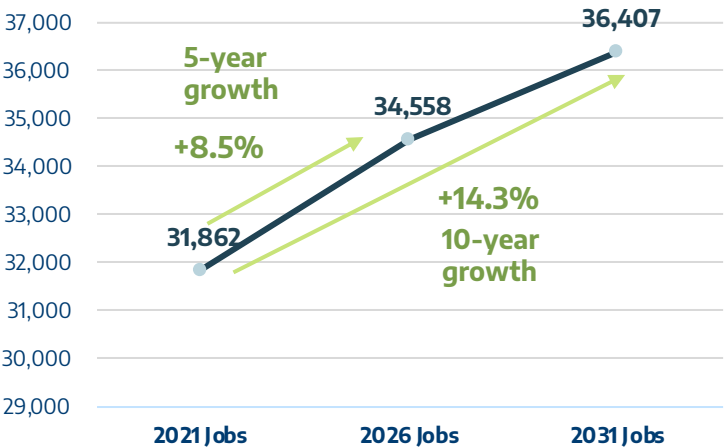


Key Occupation: Heavy and Tractor-Trailer Truck Drivers

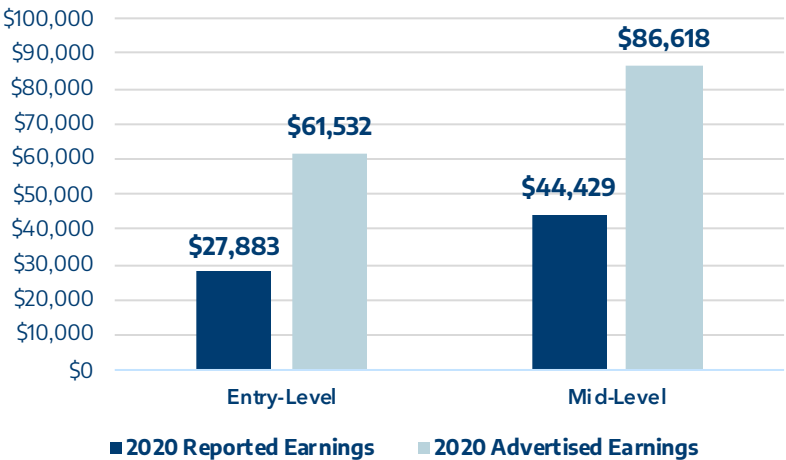
Region: West Texas

Unique Job Postings: 38,084

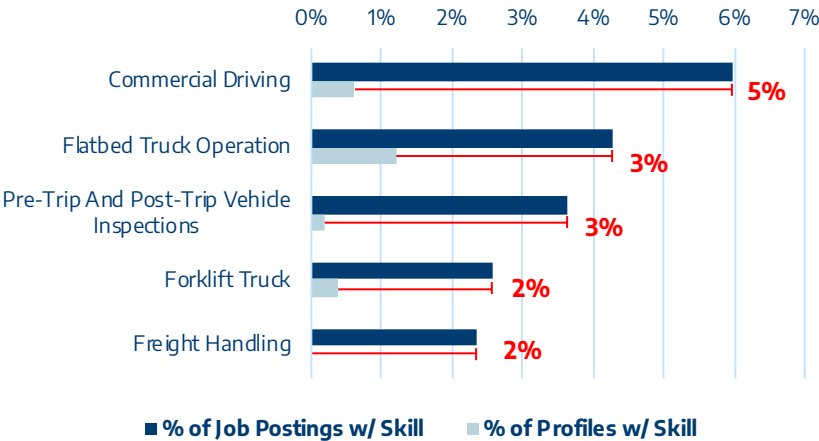
Job Growth Projections



Annual Earnings



Top Skills Gaps



Common Qualifications

- Commercial Driver's License (CDL)
- Tanker Endorsement
- Hazmat Endorsement
- Doubles Endorsement
- Triples Endorsement

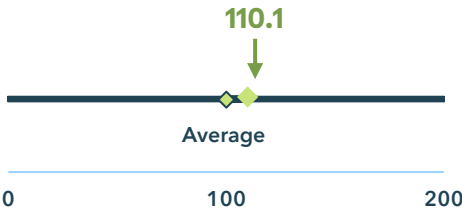
Top Industry Sectors

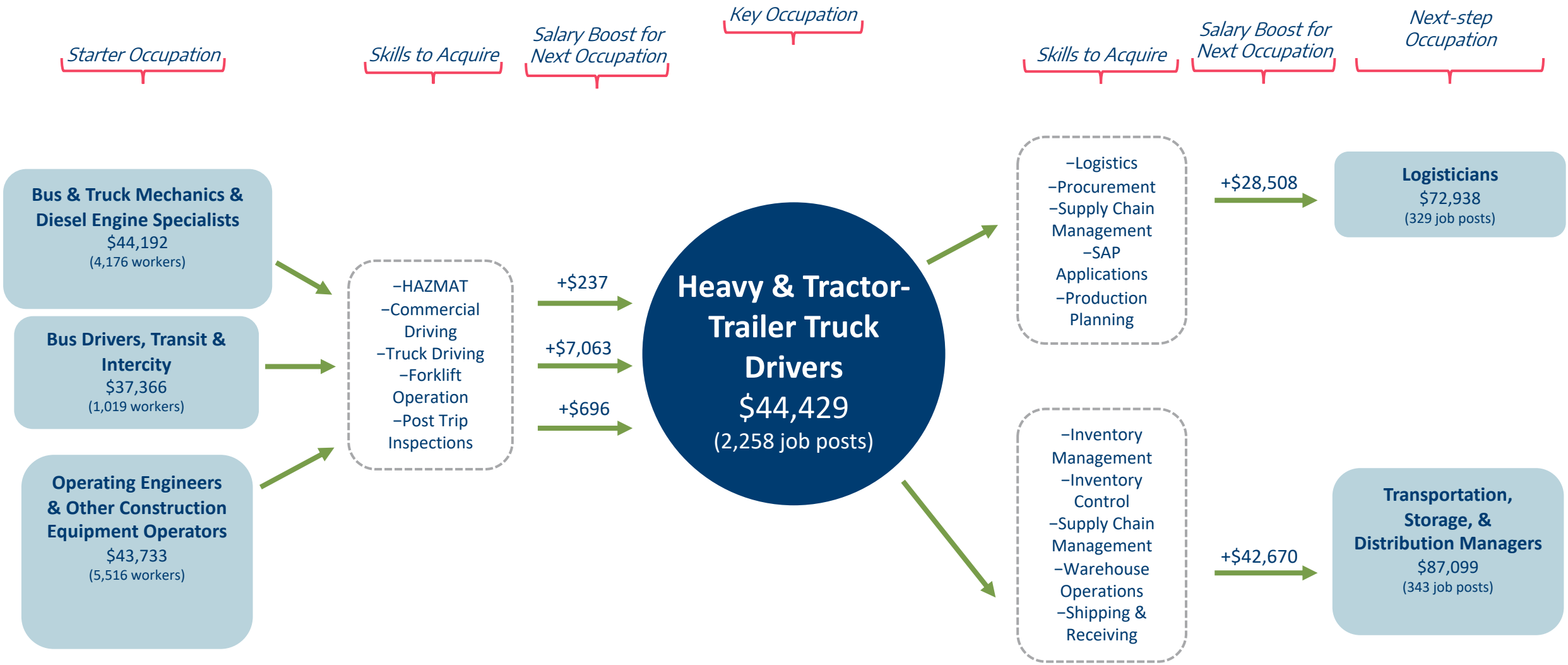
- Transportation & Warehousing
- Retail Trade
- Wholesale Trade
- Mining, Quarrying, & Oil & Gas Extraction
- Manufacturing

Top Employers

- Chalk Mountain Services
- Active USA
- US Xpress
- Schneider National
- Ryder

Automation Risk





Thank you!



Kristina Flores, Ph.D.
kflores@tacc.org



Texas Association of Community Colleges
<https://tacc.org/>



Texas Success Center
<https://tacc.org/tsc>



Texas Success Center

Texas Commission on Community College Finance



Inaugural Meeting – November 15, 2021

Last Meeting – October 18, 2022

November 2022 – Final Report Due

**Texas Legislative Session starts
January 10, 2023**

Register today for November 18th!

Trustee Leadership Seminar

hosted in-person at

Tyler Junior College

10:00am – 4:00pm CT



Congratulations Trustee Benavidez!



Rose Benavidez
Board Chair, South Texas
College

Please join CCATT at the
ACCT Incoming Chair's Reception

Marriott Marquis Times Square, NY
Friday, October 28
5:30 – 6:30pm



Community College
Association of Texas Trustees

SAVE the **DATE**

CCATT Annual Conference 2023

September 14 – September 16

Fort Worth, TX