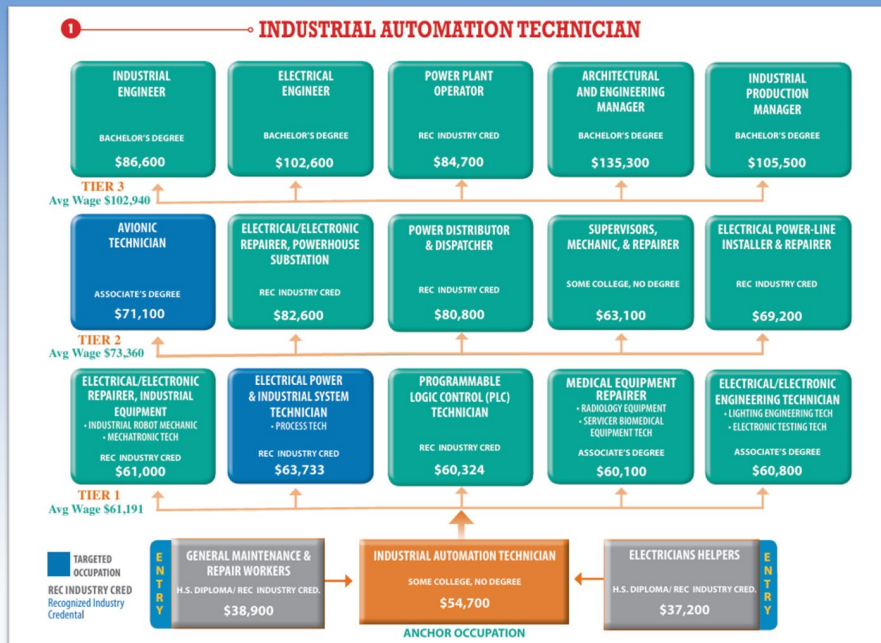


# Upskilling and Career Progressions for Workforce Solutions Heart of Texas

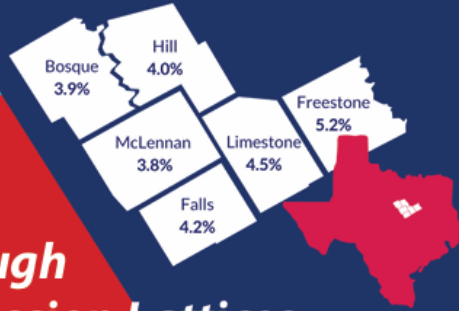


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CENTER FOR EMPLOYABILITY OUTCOMES  
 AT TEXAS STATE TECHNICAL COLLEGE

**Promoting  
Economic  
Mobility through  
Career Progression Lattices**



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# Workforce Solutions Heart of Texas Career Progressions:

1. Perform industry/occupational analysis. Revise Target Occupations list for 2025.
2. Identify Anchor Occupations
3. Build Career Lattices. Link to Target Occupations
4. Conduct Employer Interviews
5. Develop Comprehensive Target Occupation Profiles
6. Build HOT County Profiles
7. Prepare Final Report documenting activity

# Visualize the Possibilities: Career Lattices & Upward Mobility (Part 1)

An individualized career progression lattice is:

- 1) simply a graphic display of possibilities for building a career from an entry-level position.
- 2) helps a client visualize **upward career mobility**.
- 3) injects **hope & potential** into career development e.g. value to starting in an entry level job
- 4) designed to **increase a worker's earnings capacity** by aligning their skills and experience with regional job market opportunities.

# Visualize the Possibilities: Career Lattices & Upward Mobility (part 2)

*The ability to visualize a career progression beyond a lifetime of secondary labor market jobs is an important step toward creating an individual career plan that:*

- 5) gives a **realistic view of regional labor market and earnings opportunity**
- 6) indirectly stresses the **importance of formal education** to secure the highest paying jobs
- 7) provides **direction and context** for additional postsecondary **instruction**

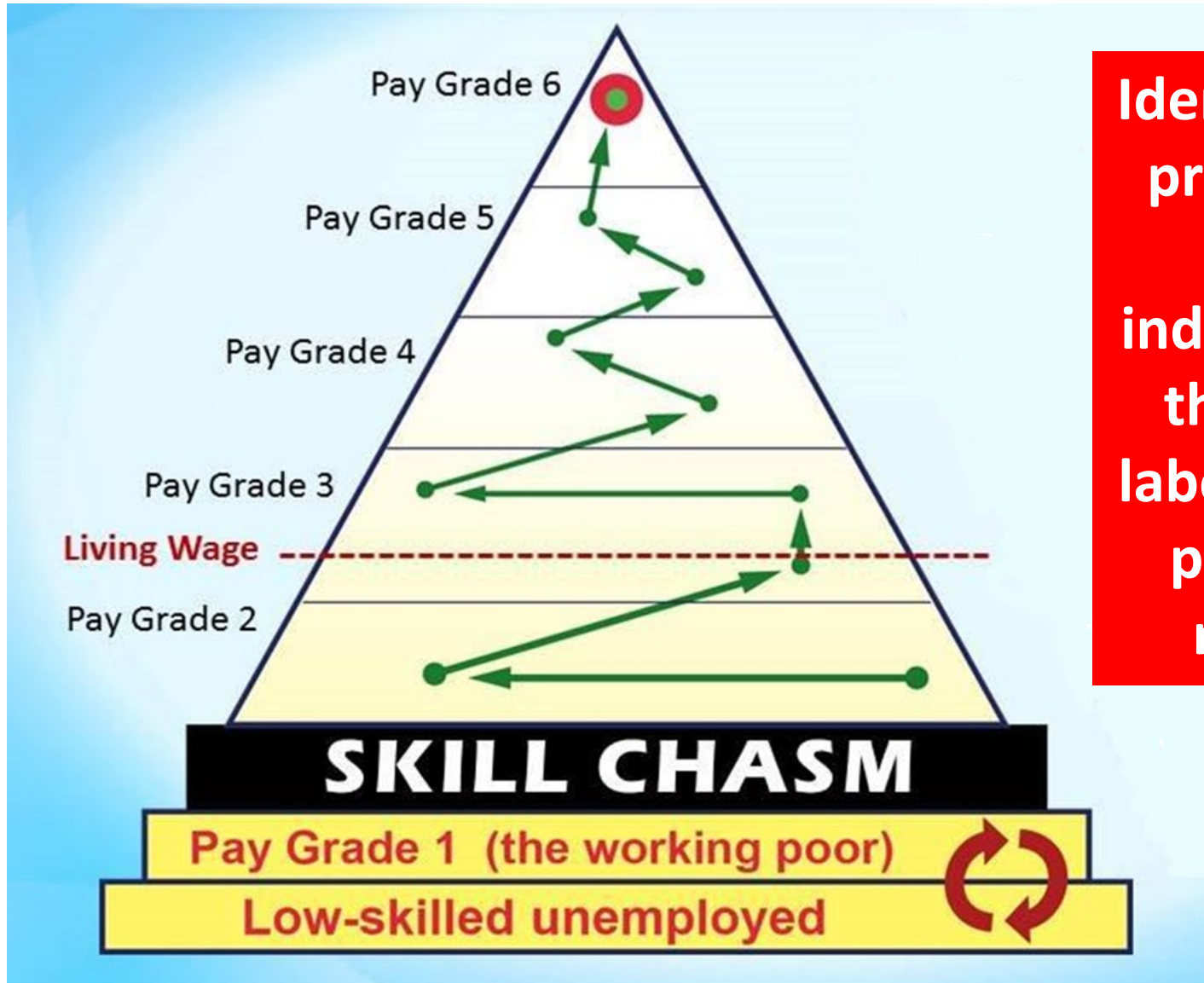
## Why Career Progressions for Workforce Development?

1. **Job Growth in Texas:** Job growth outpacing labor force expansion. Boards need to address skill shortages for regional business through **upskilling** and **better alignment with regional demand**
2. **Everyone starts somewhere:** Placing workers in entry level jobs is not enough - must include a path for **upward wage growth, wage gain metrics**
3. **Assist Target Populations:** Skill-centric approach improves job prospects and for youth, displaced workers & veterans with poor job histories. Instills hope and possibility into their career development

# Four Labor Market Dynamics Driving the Value of Career Progression Lattices

1. Historically low unemployment rates in almost every Texas labor market (including HOT) increase **value of all workers**. Raises importance of upskilling existing workforce
2. Increasing bifurcation of labor market opportunity, The **Skill Chasm** separates primary (high wage) and secondary labor market jobs with few bridges
3. **Meeting customers where they are**: Skill-based hiring facilitates upward career mobility based on **what you know and can do**, not just your credential or degree
4. Career Lattice concept of career development **replaces the outmoded Career Ladder** concept

# Breaching the 'Skill Chasm' through Career Progressions



Identifying career progressions to help move individuals out of the secondary labor market into primary labor market jobs

# Guided Pathways vs. Career Progressions

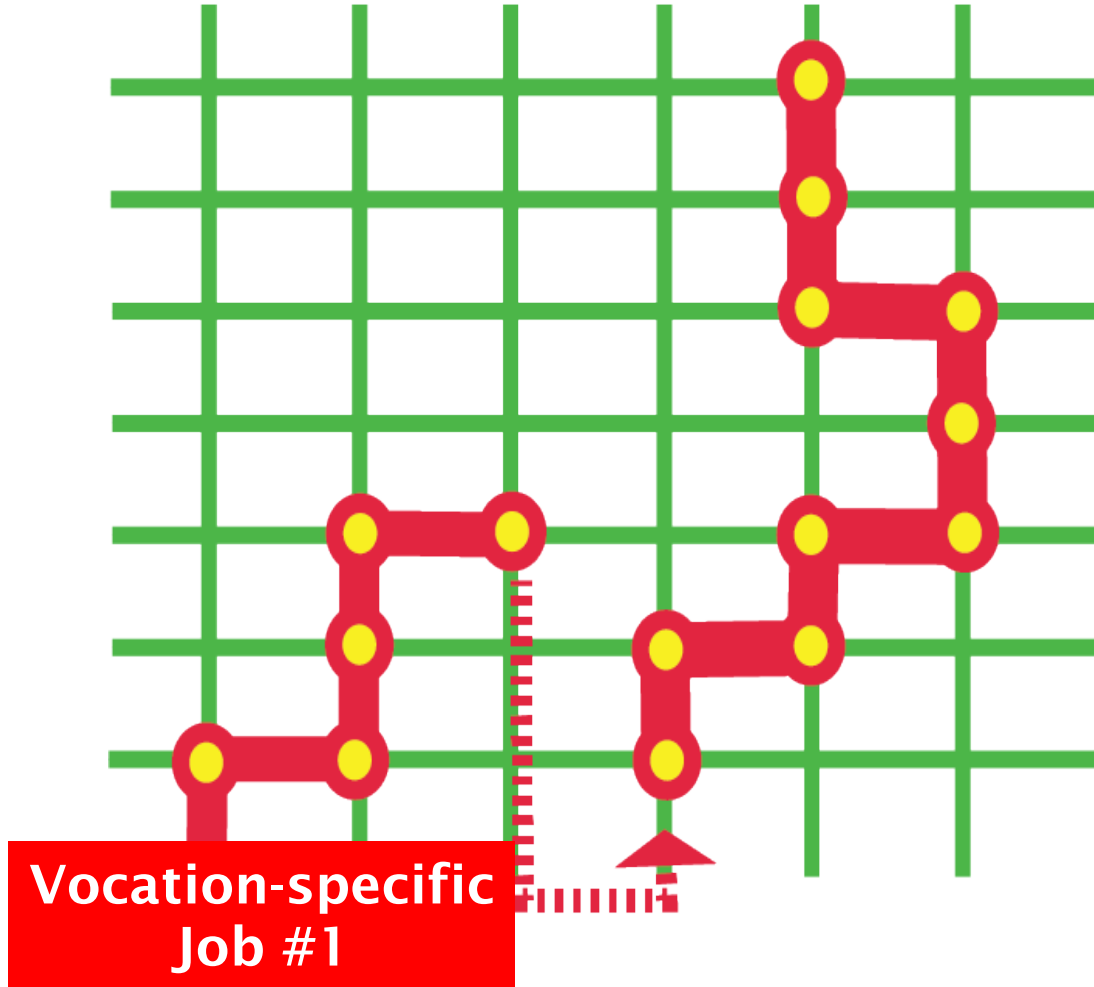
**Guided Pathway:** A series of structured, connected education programs and support services that enable students to advance over time to better jobs and higher levels of education and training. Primarily used in academia to **organize education program offerings around formal credentialing.**

**Career Progression:** A mapping of occupational opportunities with potential for upward earnings mobility based on the ability to leverage individual knowledge and skills. **Primarily designed to enable individual career development potential through skills** regardless of formal education background.

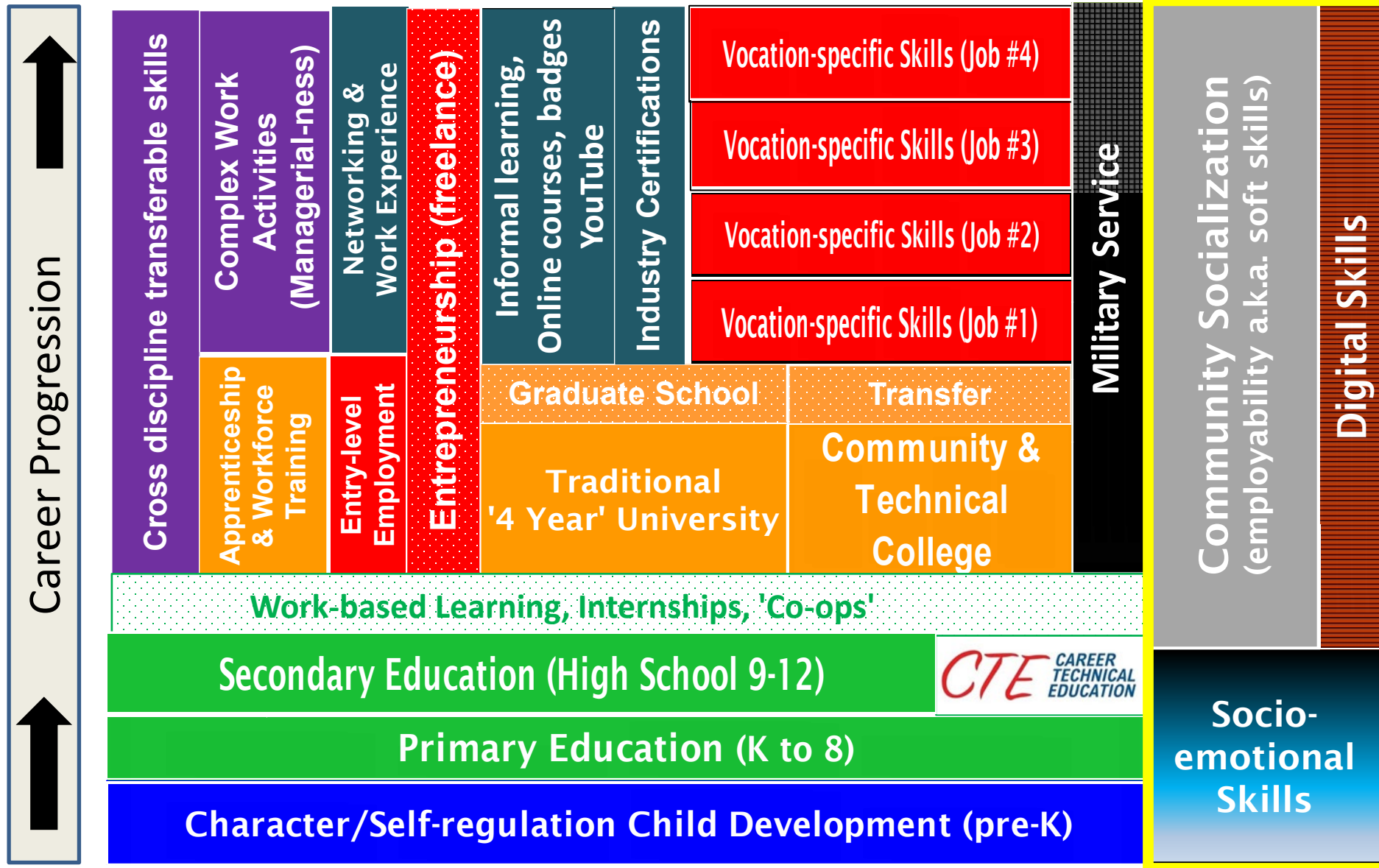


# Career Building in the 21<sup>st</sup> Century: An uneven process based on skill acquisition

## Career Lattice



# Skill Layering: Skill acquisition as a lifelong process



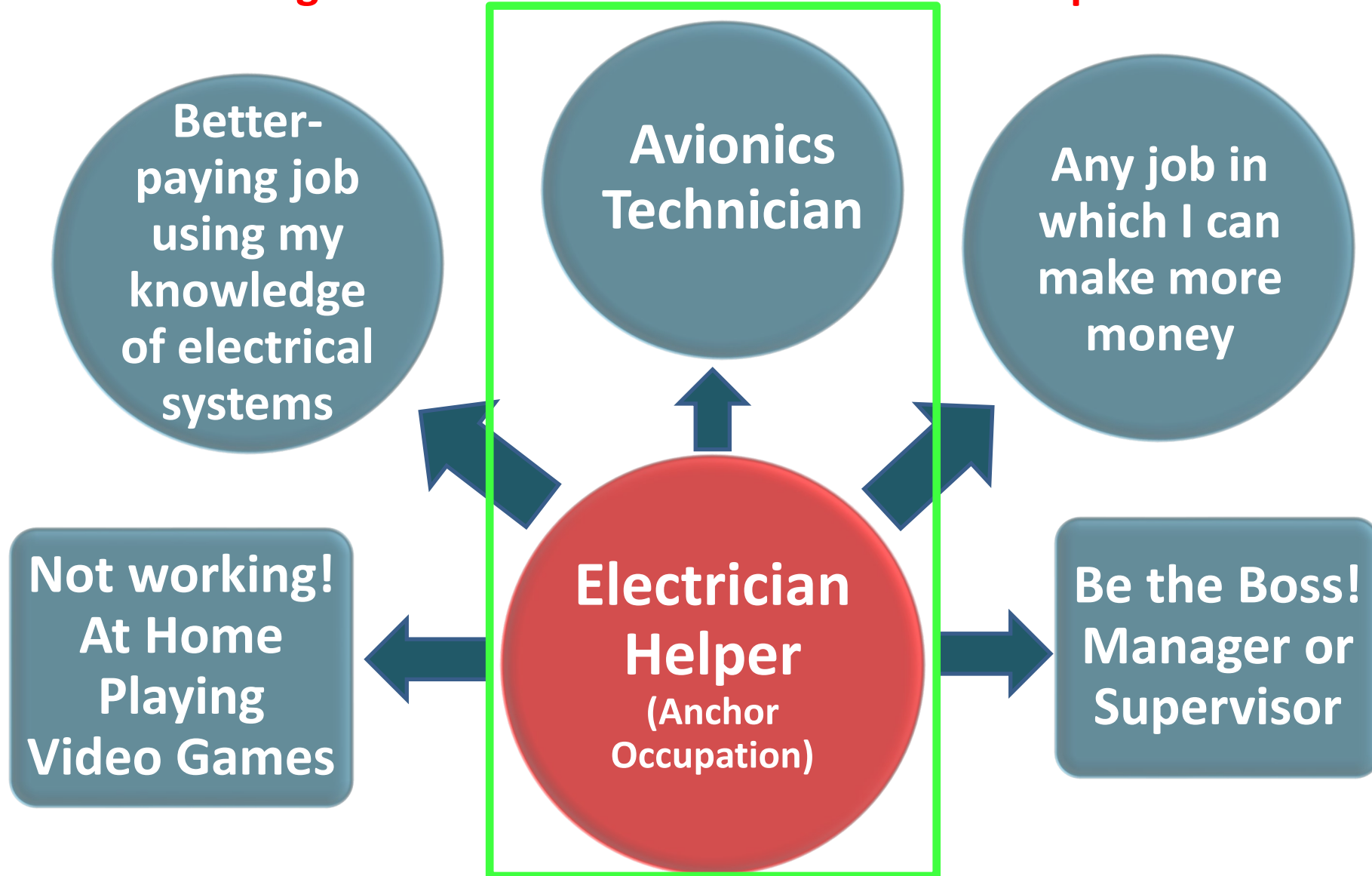
# Why Skills?

**“Occupations are bundles of tasks for which workers need a particular skill set to compete. [Thus,] **skills define jobs**. What differentiates a given occupation from the rest is the combination and importance of the skills it requires.”**

Exploring A Skills-based Approach to Occupational Mobility, Federal Reserve of Philadelphia, June 2020

# The Real World: Making a Move

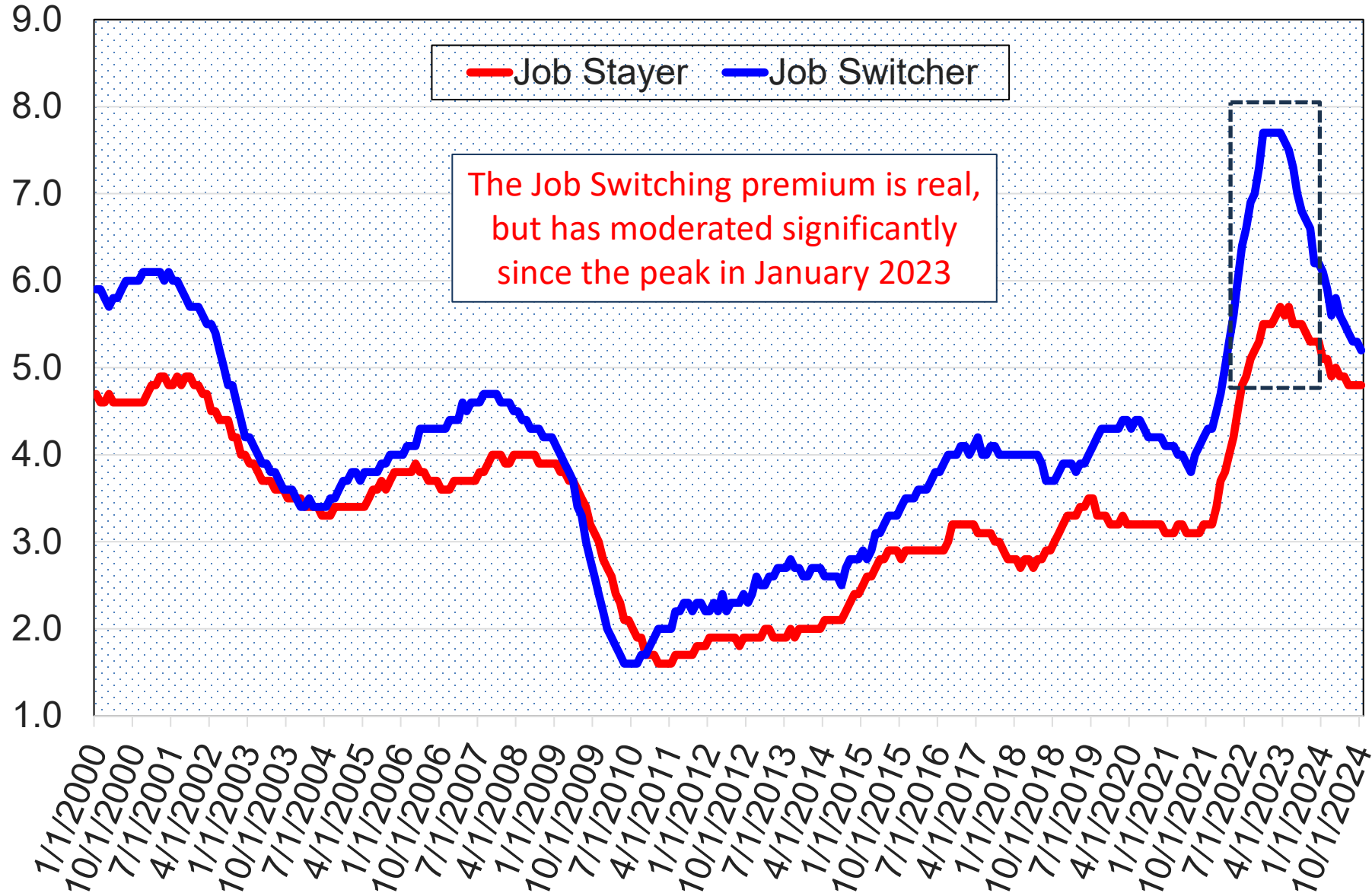
How do I get from where I am now to where I aspire to be?



# Pay Factors: Internal promotions vs. career progressions

SAMPLE: Internal Job Classification and Pay Leveling					
Job Level	Pay Mid-point	Third Quartile	Overview	Skills / Proficiency	Experience
Level 4: Senior level	\$77,064	\$87,048	Highest-level support. Performs advanced tasks.	Advanced skill set within role. Leverages skills to establish new techniques.	Typically requires 5+ years of related experience.
Level 3: Mid-level	\$70,096	\$79,144	Senior-level position. Performs complex tasks.	Fully proficient in role. Applies skills to complete a broad range of tasks.	Typically requires 3+ years of related experience.
Level 2: Intermediate level	\$63,752	\$72,020	Mid-level position. Performs general tasks and completes routine assignments.	Developing proficiency in role. Applies skills to the completion of assigned tasks.	Typically requires at least 1 year of related experience.
Level 1: Entry level	\$42,640	\$47,892	Entry-level position. Performs routine tasks as directed.	Acquiring new skills and gaining an understanding of role responsibilities.	Typically requires little to no related experience.

# Job Hopping: Median Percent Change in Hourly Wages



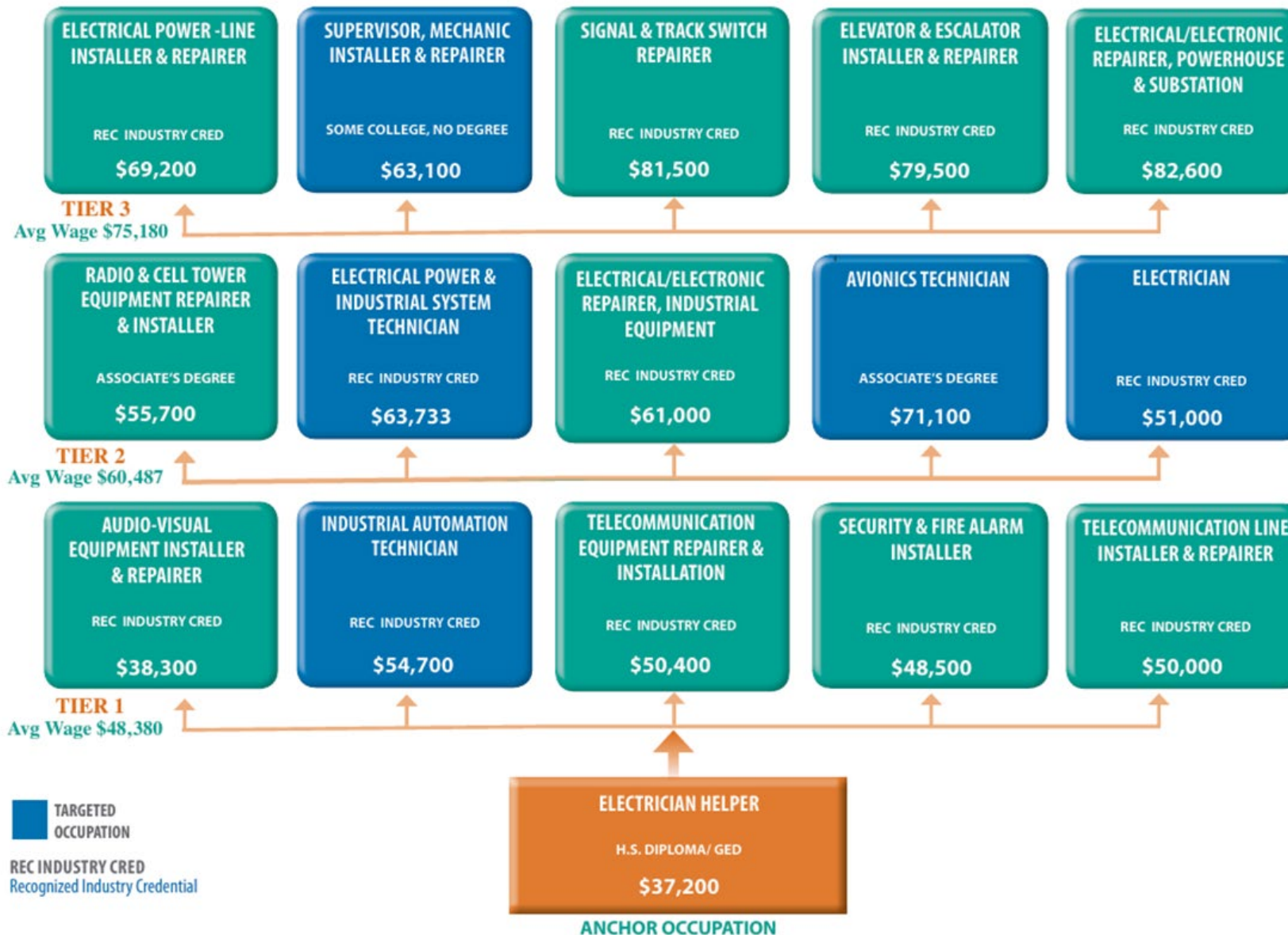
## Workforce Solutions Heart of Texas Target Occupations 2024

	SOC Code	SOC Occupational Title (source)
1	49-3011	Aircraft Mechanics and Service Technicians (local wisdom)
2	51-2011	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers (local wisdom)
3	49-3023	Automotive Service Technicians and Mechanics (Occupational analysis)
4	49-2091	Avionics Technicians (local wisdom)
5	43-3031	Bookkeeping, Accounting, and Auditing Clerks (Occupational analysis)
6	49-3031	Bus and Truck Mechanics and Diesel Engine Specialists (Occupational analysis)
7	13-1199	Business Operations Specialists, MISC (e-commerce, e-security) (OCC analysis)
8	47-2031	Carpenters (Target industry staffing)
9	15-1299	Computer Occupations, MISC (IT project mgrs., SEO, automation) (OCC analysis)
10	15-1232	Computer User Support Specialists (Occupational analysis)
11	31-9091	Dental Assistants (Occupational analysis)
12	29-1292	Dental Hygienists (Occupational analysis)
13	49-20XX	Electrical Power & Industrial Systems Technician (manufacturing hybrid)
14	47-2111	Electricians (Occupational analysis)
15	49-1011	Supervisors of Mechanics, Installers, and Repairers (Occupational analysis)
16	51-1011	Supervisors of Production and Operating Workers (Occupational analysis)
17	41-1011	Supervisors of Retail Sales Workers (Occupational analysis)

## Workforce Solutions Heart of Texas Target Occupations 2024

	SOC Code	SOC Occupational Title (source)
18	11-9051	Food Service Managers (Occupational analysis)
19	49-9021	Heating, A.C. & Refrigeration Mechanics & Installers (Occupational analysis)
20	53-3032	Heavy and Tractor-Trailer Truck Drivers (Occupational analysis)
21	17-30XX	Industrial Automation Technician (manufacturing hybrid)
22	49-9041	Industrial Machinery Mechanics (Occupational analysis)
23	29-2061	Licensed Practical and Vocational Nurses (Occupational analysis)
24	49-3042	Mobile Heavy Equipment Mechanics, Ex. Engines (Occupational analysis)
25	23-2011	Paralegals and Legal Assistants (Occupational analysis)
26	29-2052	Pharmacy Technicians (Occupational analysis)
27	31-2021	Physical Therapist Assistants (Occupational analysis)
28	33-3051	Police and Sheriffs Patrol Officers (Occupational analysis)
29	43-5061	Production, Planning, and Expediting Clerks (Occupational analysis)
30	13-1082	Project Management Specialists (Occupational analysis)
31	29-2034	Radiologic Technologists and Technicians (Occupational analysis)
32	29-1141	Registered Nurses (Occupational analysis)
33	29-1126	Respiratory Therapists (Occupational analysis)
34	15-1253	Software Quality Assurance Analysts/Testers (Target industry staffing)
35	51-4121	Welders, Cutters, Solderers, and Brazers



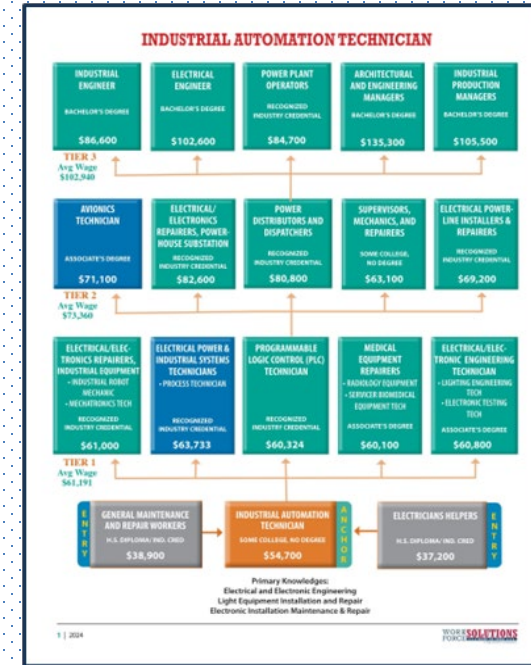


# The Process: Creating a Skill-based Career Progression Lattice

1. SkillsEngine DWA and sub-knowledge SOC Job Profiles
2. SkillsEngine/RCF Work Complexity Index
3. Regional Wages & Projections (Chmura)
4. RCFroeschle CER rating, Profiling & Matching Model



**Customized  
DWA Skill  
Profile for HOT  
Regional  
Occupational  
Universe**



**Target  
Occupations**

**'Anchor'  
Occupations**

Backward-lattice linkage:  
Identify lower wage, lower education, entry-level SOCs with high skill & knowledge commonality

Identify Tier1 SOCs using forward-lattice linkage based on **common skills, high complexity skills, sub-knowledge similarity, education, wages**

Combine characteristics from Tier 1 occupations to create options for Tiers 2 & 3

# Limitations and Realities

1. Not all occupations or jobs have **good job descriptions** making it easy to understand the skills required. Thin descriptive text makes it harder to explore the transferable skills that connect occupations
2. Some occupations may be connected **not by many similar skills** but by a **handful of very critical skills or knowledges**. Integrating high complexity, high value skills helps capture this reality
3. Job opportunities are **limited by the breadth and diversity of the labor market in which you live**. In WS HOT, 50% of all projected job openings thru 2033 are in just 35 occupational titles, 112 occupations comprise 75% of demand, and 90% are in just 257 occupations. Larger regions have more diversity than smaller regions, but these figures are almost identical to Texas statewide
4. Career mobility can come from **within a company**. This is not captured in a career lattice which presumes job AND company change

5. **Teaching and Managing** represent opportunities that are not well-captured in skill or knowledge-based analysis
6. Not all anchor occupations have the same breadth of higher-paying, similar occupations. **Some lattices are simply flatter**, with fewer high paying options
7. Getting a job and forging a Career Progression is **not always about transferable work activities** or **common knowledge**. Workers must also have appropriate academics, requisite license/certification, work experience, employability skills, and digital literacy. These **less tangible skills** are often very important but can't be placed on a career lattice
8. Navigating even a well-designed and personalized lattice **requires individual initiative and determination** on the part of the worker – and probably support from others, such as Workforce Solutions staff
9. A Career Progression model does not pretend that moving from traditional secondary labor market jobs to primary labor market jobs is an **easy endeavor**. ***“Success doesn't come to you; you go to it.”***

## Average Wage by Tier for Heart of Texas Career Progression Lattices

	Anchor Occupation Lattice	Anchor Median Wage	Tier 1 AVG Wage	Tier 2 AVG Wage	Tier 3 AVG Wage	Highest Paying Apex Occupation
	<b>Tier Averages</b>	<b>\$35,857</b>	<b>\$44,546</b>	<b>\$57,450</b>	<b>\$80,747</b>	<b>\$104,315</b>
1	Computer User Support Specialists	\$51,000	\$66,940	\$87,000	\$117,040	\$134,100
2	Nursing Assistants	\$31,100	\$41,080	\$71,360	\$110,780	\$217,500
3	Industrial Automation Technicians	\$54,700	\$61,191	\$73,360	\$102,940	\$135,300
4	Emergency Medical Technicians	\$32,500	\$46,280	\$63,360	\$92,280	\$104,000
5	Compliance Officers	\$58,100	\$60,060	\$66,500	\$92,020	\$131,400
6	Physical Therapist Aides	\$29,200	\$39,120	\$60,640	\$91,460	\$104,000
7	Customer Service Representatives	\$36,300	\$42,380	\$59,460	\$87,120	\$131,400
8	Protective Service Workers, Miscellaneous	\$40,200	\$48,400	\$58,740	\$86,680	\$130,000
9	Home Health Aides	\$22,800	\$31,500	\$56,020	\$86,460	\$118,200
10	General Maintenance & Repair Workers	\$38,900	\$49,100	\$51,860	\$83,867	\$124,000
11	General Office Clerk	\$37,400	\$40,780	\$52,120	\$82,900	\$107,600
12	Medical Equipment Preparers	\$37,600	\$42,261	\$58,460	\$81,560	\$100,300
13	Retail Salespersons	\$30,300	\$40,380	\$48,460	\$80,020	\$101,100
14	Personal Service Workers Supervisor	\$36,500	\$49,940	\$60,240	\$79,940	\$104,200
15	Team Assemblers	\$36,100	\$44,400	\$55,540	\$78,700	\$105,500
16	Security Guards	\$29,800	\$40,560	\$54,820	\$78,140	\$93,200
17	Assemblers and Fabricators, All Other	\$37,100	\$42,060	\$54,020	\$77,580	\$86,600
18	Pharmacy Aides	\$29,500	\$36,660	\$51,480	\$76,360	\$106,200
19	Motor Vehicle Operators, MISC	\$25,600	\$40,070	\$52,580	\$75,675	\$86,700
20	Electricians Helpers	\$37,200	\$48,380	\$60,487	\$75,180	\$82,600
21	Outdoor Power & Other Small Engine Mechanics	\$41,900	\$47,660	\$64,680	\$74,487	\$82,600
22	Installation, Maintenance & Repair Helpers	\$32,200	\$48,280	\$54,607	\$70,620	\$84,700
23	Stockers & Order Fillers	\$34,700	\$40,460	\$46,520	\$69,770	\$84,051
24	Multiple Machine Tool Operators	\$34,200	\$42,420	\$56,380	\$69,700	\$94,700
25	Institution & Cafeteria Cooks	\$29,000	\$32,700	\$44,380	\$69,640	\$99,300
26	Construction Laborers	\$36,200	\$42,340	\$52,860	\$68,660	\$85,600
27	Hotel, Motel, & Resort Desk Clerks	\$24,700	\$34,040	\$40,860	\$67,360	\$72,600
28	Installation, Maintenance & Repair Workers, MISC	\$39,200	\$51,380	\$60,271	\$65,700	\$71,100
29	Recreational Vehicle Service Techs	\$37,700	\$44,260	\$53,080	\$64,960	\$71,000
30	Production Workers Helpers	\$34,000	\$41,300	\$53,340	\$64,820	\$79,900
31	Tire Repairers & Changers	\$31,200	\$43,100	\$52,384	\$63,240	\$79,500

## Heart of Texas Regional Wage Impact through Career Progressions

	Anchor Occupation Lattice	HOT LWDA 2023Q3 EMP	Median Wage of Anchor	AVG Earnings Gain from Anchor to Tier 1	AVG Earnings Gain from Anchor to Tier 2	Total Earnings Increase to Tier 1	Total Earnings Increase to Tier 2
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
	<b>Total, All Anchor Occupations (10% = 2,521 clients)</b>	<b>25,212</b>	<b>\$35,650</b>	<b>\$8,587</b>	<b>\$20,060</b>	<b>\$19,758,203</b>	<b>\$50,572,136</b>
1	Installation, Maintenance & Repair Helpers	191	\$32,200	\$16,080	\$22,407	\$307,128	\$427,974
2	Computer User Support Specialists	530	\$51,000	\$15,940	\$36,000	\$844,820	\$1,908,000
3	Motor Vehicle Operators, MISC	60	\$25,600	\$14,470	\$26,980	\$86,820	\$161,880
4	Emergency Medical Technicians	145	\$32,500	\$13,780	\$30,860	\$199,810	\$447,470
5	Personal Service Workers Supervisor	183	\$36,500	\$13,440	\$23,740	\$245,952	\$434,442
6	Installation, Maintenance & Repair Workers, MISC	184	\$39,200	\$12,180	\$21,071	\$224,112	\$387,706
7	Tire Repairers & Changers	164	\$31,200	\$11,900	\$21,184	\$195,160	\$347,418
8	Electricians Helpers	100	\$37,200	\$11,180	\$23,287	\$111,800	\$232,870
9	Security Guards	848	\$29,800	\$10,760	\$25,020	\$912,448	\$2,121,696
10	General Maintenance & Repair Workers	1,785	\$38,900	\$10,200	\$12,960	\$1,820,700	\$2,313,360
11	Retail Salespersons	4,036	\$30,300	\$10,080	\$18,160	\$4,068,288	\$7,329,376
12	Nursing Assistants	1,475	\$31,100	\$9,980	\$40,260	\$1,472,050	\$5,938,350
13	Physical Therapist Aides	46	\$29,200	\$9,920	\$31,440	\$45,632	\$144,624
14	Hotel, Motel, & Resort Desk Clerks	227	\$24,700	\$9,340	\$16,160	\$212,018	\$366,832
15	Home Health Aides	915	\$22,800	\$8,700	\$33,220	\$796,050	\$3,039,630
16	Team Assemblers	1,326	\$36,100	\$8,300	\$19,440	\$1,100,580	\$2,577,744
17	Multiple Machine Tool Operators	130	\$34,200	\$8,220	\$22,180	\$106,860	\$288,340
18	Protective Service Workers, Miscellaneous	42	\$40,200	\$8,200	\$18,540	\$34,440	\$77,868
19	Production Workers Helpers	429	\$34,000	\$7,300	\$19,340	\$313,170	\$829,686
20	Pharmacy Aides	29	\$29,500	\$7,160	\$21,980	\$20,764	\$63,742
21	Recreational Vehicle Service Techs	29	\$37,700	\$6,560	\$15,380	\$19,024	\$44,602
22	Industrial Automation Technicians	273	\$54,700	\$6,491	\$18,660	\$177,204	\$509,418
23	Construction Laborers	2,193	\$36,200	\$6,140	\$16,660	\$1,346,502	\$3,653,538
24	Customer Service Representatives	3,323	\$36,300	\$6,080	\$23,160	\$2,020,384	\$7,696,068
25	Outdoor Power & Other Small Engine Mechanics	47	\$41,900	\$5,760	\$22,780	\$27,072	\$107,066
26	Stockers & Order Fillers	3,013	\$34,700	\$5,760	\$11,820	\$1,735,488	\$3,561,366
27	Assemblers and Fabricators, All Other	240	\$37,100	\$4,960	\$16,920	\$119,040	\$406,080
28	Medical Equipment Preparers	51	\$37,600	\$4,661	\$20,860	\$23,771	\$106,386
29	Institution & Cafeteria Cooks	638	\$29,000	\$3,700	\$15,380	\$236,060	\$981,244
30	General Office Clerk	2,560	\$37,400	\$3,380	\$14,720	\$865,280	\$3,768,320
31	Compliance Officers	356	\$58,100	\$1,960	\$8,400	\$69,776	\$299,040

<b>Expected Economic/Wage Impact of Upskilling Workers from Anchor Jobs to Tier 1 and Tier 2 Occupations</b>		
	<b>AVG Anchor Earnings to Tier 1</b>	<b>AVG Anchor Earnings to Tier 2</b>
<b>10% all Anchor Employment (2,301 clients)</b>	<b>\$19,758,203</b>	<b>\$50,572,136</b>
<b>20% all Anchor Employment (4,602 clients)</b>	<b>\$39,516,406</b>	<b>\$101,144,272</b>

# Job Descriptions or Job Stories?

## Standard Occupational Classification (SOC) job description:

**First-line Supervisors, Retail Sales:** Directly supervise and coordinate activities of retail sales workers in an establishment or department. Duties may include management functions, such as purchasing, budgeting, accounting, and personnel work, in addition to supervisory duties.



***Step into the vibrant role of a **First-line Retail Sales Supervisor**, where every shift spins a tale of teamwork, strategy, and customer engagement. In this bustling retail environment, your primary mission is to weave together the efforts of a spirited sales team, guiding them through the rhythms of daily retail challenges with a steady hand and an encouraging word. Your days are spent at the heart of retail action, where you strategically manage inventory, craft visually appealing product displays, and ensure the store presents itself as a welcoming haven for shoppers. As the leader of your team, you're not just overseeing operations; you're actively participating in creating a positive atmosphere that fuels sales and fosters lasting customer relationships. You coach your team, helping them exceed sales targets and grow professionally, turning each day's work into a rewarding experience for everyone involved. Your adept handling of schedules guarantees that customer service never skips a beat, even during the busiest hours. Handling the occasional customer concern becomes a chance to demonstrate the store's commitment to exceptional service, turning challenges into triumphs and complaints into compliments. Beyond the sales floor, you're also the architect of the staff's development and well-being, ensuring everyone is aligned with the store's goals and equipped to meet them. This role is an opportunity to influence a lively team, develop and demonstrate leadership skills, connect with a diverse array of customers, and leave a mark on the community.***



Heavy Truck Driver



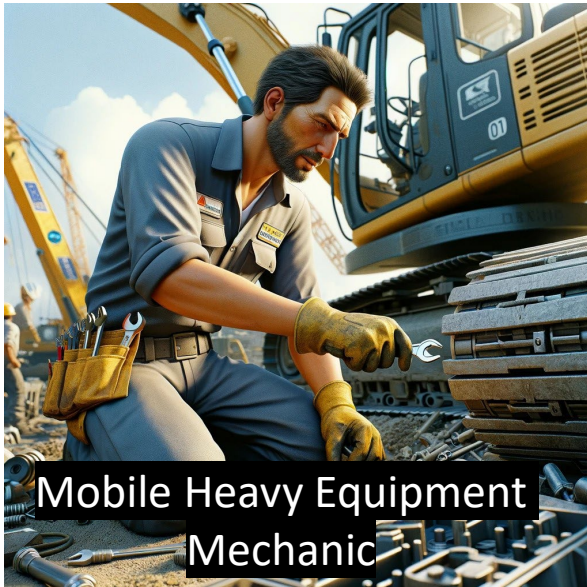
Food Service Manager



Paralegal & Legal Assistant



Licensed Vocational Nurse



Mobile Heavy Equipment Mechanic



Pharmacy Technician

## HOT Regional Employer Interviews

1. St. Anthony's Care Center (health care) Waco
2. Arete Health Systems (health care) McGregor/Mexia
3. Ascension Providence (health care) Waco
4. AbbVie (medical manufacturing) Waco
5. Fallas Automation (manufacturing) Waco
6. Howmet Aerospace (manufacturing) Waco
7. JAG Aviation (aviation) McGregor
8. Swan Hose (manufacturing) Waco
9. Packaging Corp. of America (manufacturing) Waco
10. Time Manufacturing (manufacturing) Waco
11. Johns Manville (manufacturing) Hillsboro
12. Mazanec Construction (commercial construction) Waco
13. Jim Bland Construction (residential construction) Waco
14. Local Staffing Firm - Express Employment Professional
15. *Ron Rohrbacher offers a Perspective from Home Builders*

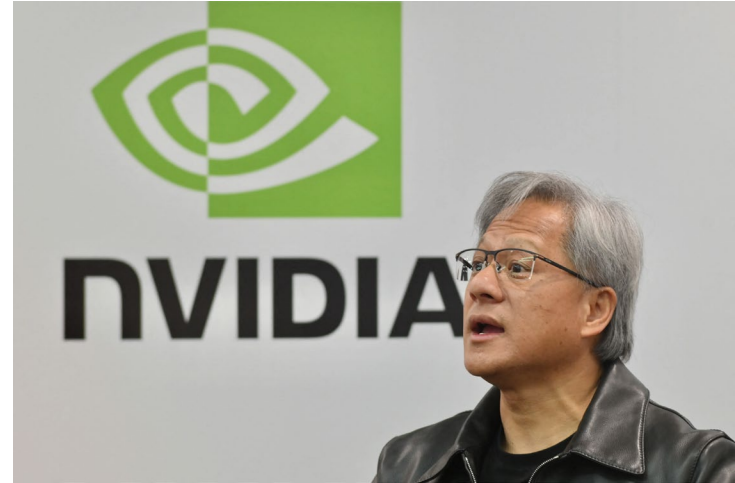
## Five Major Themes from Employer Interviews

- 1) Labor shortages have been real, and they affect business productivity and growth potential
- 2) Finding workers with job-related experience and good employability skills is a major focus for regional business hiring Attitude and work ethic is as important as technical skills
- 3) Job growth is outpacing labor force growth, creating labor shortages, especially for front-line service workers. Shortages have created wage competition for many positions
- 4) The availability and affordability of housing in the Waco area has an impact on worker recruitment, for homeowners (rising taxes & insurance rates) and renters
- 5) Business values the efforts of regional community colleges, school districts, and Workforce Solutions-backed training programs; but they need more completers from those programs

# A Final Word on Mobility: Resilience and Grit

*“People with high expectations tend to have very low resilience. And unfortunately, resilience matters to career success.”*

Jensen Huang, CEO NVIDIA



*Grit is about doing the hard work, day in and day out, without immediate reward. Grit is a combination of passion and perseverance for a long-term goal.”*

Angela Duckworth, UPENN Professor

# Thank you!

## There is much more Career Progressions story to tell, but this version is over!



# Final Target Occupations for Workforce Solutions Heart of Texas 2024

Row	SOC	Target Occupations for Career Lattice Purposes	Source for Target Occupation Designation	Competitive Education Requirement 2023
1	49-3011	Aircraft Mechanics and Service Technicians	Local Wisdom	Associate's degree
2	51-2011	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	Local Wisdom	Recognized Industry Credential
3	49-3023	Automotive Service Technicians and Mechanics	OCC Analysis (tier 3)	Recognized Industry Credential
4	49-2091	Avionics Technicians	Local Wisdom	Associate's degree
5	43-3031	Bookkeeping, Accounting, and Auditing Clerks	OCC Analysis (tier 3)	Some College, No Degree
6	49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	OCC Analysis (tier 3)	Recognized Industry Credential
7	13-1199	Business Operations Specialists, MISC (e-commerce, e-security)	OCC Analysis (tier 2)	Bachelor's/Associate
8	47-2031	Carpenters	Industry Analysis	Recognized Industry Credential
9	15-1299	Computer Occupations, MISC (IT project managers, SEO, automation)	OCC Analysis (tier 2)	Bachelor's/Associate
10	15-1232	Computer User Support Specialists	OCC Analysis (tier 1)	Recognized Industry Credential
11	31-9091	Dental Assistants	OCC Analysis (tier 2)	Recognized Industry Credential
12	29-1292	Dental Hygienists	OCC Analysis (tier 3)	Associate's degree
13	49-20XX	Electrical Power & Industrial Systems Technician <sup>2</sup>	Industry Analysis	Recognized Industry Credential
14	47-2111	Electricians	OCC Analysis (tier 1)	Recognized Industry Credential
15	49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	OCC Analysis (tier 2)	Some College, No Degree
16	51-1011	First-Line Supervisors of Production and Operating Workers	OCC Analysis (tier 2)	Some College, No Degree
17	41-1011	First-Line Supervisors of Retail Sales Workers	OCC Analysis (tier 3)	Some College, No Degree
18	11-9051	Food Service Managers	OCC Analysis (tier 1)	Some College, No Degree
19	49-9021	Heating, Air Conditioning, and Refrigeration Mechanics & Installers	OCC Analysis (tier 2)	Recognized Industry Credential
20	53-3032	Heavy and Tractor-Trailer Truck Drivers*	OCC Analysis (tier 1)	H.S Diploma/IND CRED
21	17-30XX	Industrial Automation Technician <sup>1</sup>	Industry Analysis	Recognized Industry Credential
22	49-9041	Industrial Machinery Mechanics*	OCC Analysis (tier 1)	Recognized Industry Credential
23	29-2061	Licensed Practical and Licensed Vocational Nurses	Industry Analysis	Recognized Industry Credential
24	49-3042	Mobile Heavy Equipment Mechanics, Ex. Engines	OCC Analysis (tier 2)	Recognized Industry Credential
25	23-2011	Paralegals and Legal Assistants	OCC Analysis (tier 2)	Associate's degree
26	29-2052	Pharmacy Technicians	OCC Analysis (tier 2)	Recognized Industry Credential
27	31-2021	Physical Therapist Assistants	OCC Analysis (tier 2)	Associate's degree
28	33-3051	Police and Sheriffs Patrol Officers	OCC Analysis (tier 2)	Associate's degree
29	43-5061	Production, Planning, and Expediting Clerks	OCC Analysis (tier 1)	Some College, No Degree
30	13-1082	Project Management Specialists*	OCC Analysis (tier 1)	Bachelor's/Associate
31	29-2034	Radiologic Technologists and Technicians	OCC Analysis (tier 2)	Associate's degree
32	29-1141	Registered Nurses*	OCC Analysis (tier 1)	Bachelor's/Associate
33	29-1126	Respiratory Therapists	OCC Analysis (tier 3)	Associate's degree
34	15-1253	Software Quality Assurance Analysts and Testers	Industry Analysis	Bachelor's/Associate
35	51-4121	Welders, Cutters, Solderers, and Brazers	OCC Analysis (tier 2)	Recognized Industry Credential

## HOT Career Progressions

# Heart of Texas Population Growth

## Census/ACS Resident Population Texas Counties 2018-2023

<b>Texas County</b>	<b>2018</b>	<b>2022</b>	<b>2023 (Jan)</b>	<b>ABS CHG 2018-23</b>	<b>PER CHG 2018-23</b>
<b>Texas, Statewide</b>	<b>28.628 mil</b>	<b>29.741 mil</b>	<b>30.301 mil</b>	<b>1.672 mil</b>	<b>5.8%</b>
<b>Top 10 Growth Counties</b>	<b>14.019 mil</b>	<b>14.809 mil</b>	<b>15.123 mil</b>	<b>1.103 mil</b>	<b>7.9%</b>
<b>PCT of Texas Total</b>	<b>49.0%</b>	<b>49.8%</b>	<b>49.9%</b>		
<b>Top 20 Growth</b>	<b>17.025 mil</b>	<b>18.076 mil</b>	<b>18.741 mil</b>	<b>1.716 mil</b>	<b>10.1%</b>
<b>PCT of Texas Total</b>	<b>59.5%</b>	<b>60.8%</b>	<b>61.9%</b>		
<b>Heart of Texas</b>	<b>369,353</b>	<b>374,968</b>	<b>382,403</b>	<b>13,050</b>	<b>3.5%</b>
McLennan	254,196	261,318	266,612	12,416	4.9%
Hill	36,165	36,722	38,061	1,896	5.2%
Freestone	19,789	19,853	19,918	129	0.7%
Bosque	18,629	18,315	18,689	60	0.3%
Falls	17,231	16,612	17,275	44	0.3%
Limestone	23,343	22,148	21,848	-1,495	-6.4%



## Heart of Texas Population Projections thru 2060 (migration 1.0)

	<b>HOT LWDA</b>	<b>Anderson</b>	<b>Bosque</b>	<b>Falls</b>	<b>Freestone</b>	<b>Hill</b>	<b>Limestone</b>	<b>McLennan</b>
<b>2020</b>	<b>431,159</b>	57,922	18,235	16,968	19,435	35,874	22,146	260,579
<b>2025</b>	<b>445,385</b>	58,708	18,310	16,388	19,237	36,741	21,828	274,173
<b>2030</b>	<b>458,650</b>	59,147	18,235	15,703	19,057	37,500	21,375	287,633
<b>2035</b>	<b>470,479</b>	59,292	18,070	15,016	18,875	38,128	20,855	300,243
<b>2040</b>	<b>480,753</b>	59,243	17,801	14,362	18,648	38,614	20,241	311,844
<b>2045</b>	<b>489,602</b>	59,099	17,482	13,670	18,364	38,986	19,552	322,449
<b>2050</b>	<b>497,932</b>	58,964	17,128	12,979	18,067	39,324	18,834	332,636
<b>2055</b>	<b>506,783</b>	58,819	16,798	12,261	17,754	39,681	18,100	343,370
<b>2060</b>	<b>516,324</b>	58,619	16,518	11,633	17,514	40,073	17,394	354,573
<b>CHG 2020-60</b>	<b>85,165</b>	<b>697</b>	<b>-1,717</b>	<b>-5,335</b>	<b>-1,921</b>	<b>4,199</b>	<b>-4,752</b>	<b>93,994</b>

# Career Progression Lattices: Upward Wage Mobility through Skill Acquisition

(marketing blurb)

Today's labor market is all about skills; how they are acquired, figuring out which one's have market value, and how to leverage them to achieve upward wage mobility over a career. Most students don't know how the labor market works and get little guidance after they leave high school. This session lays out a research-based vision for students as they create their path to personal career success. Session materials build on deliverables from the Heart of Texas Regional Convener initiative designed to put students on a path to upward career mobility.

## Region 11 OCC Projections Requiring Postsecondary 2022-2032

Most Projected Openings by OCC	PROJ Job Openings	TEA Statewide Program of Study
1. General & Operations Managers	45,563	Business Management
2. Heavy Truck Drivers	40,270	Diesel & Heavy Equipment Maintenance & Drivers
3. Cooks, Restaurant	36,188	Culinary Arts
4. Bookkeeping & Accounting Clerks	23,681	Not Assigned to a POS
5. Supervisors, Retail Sales Workers	22,561	Marketing and Sales
6. Supervisors, Office & Admin Support	22,070	Business Management
7. Maintenance & Repair Workers	18,713	Industrial Maintenance
8. Registered Nurses	18,476	Nursing Science
9. Software Developers	16,387	Programming and Software
10. Non-tech Sales Reps, WH & Manuf	15,383	Marketing and Sales
11. Services Sales Reps, Ex. Ins/Fin	15,212	Marketing and Sales
12. Teaching Assistants, Ex. College	15,124	Teaching and Training
13. Medical Assistants	14,480	Diagnostic/Therapeutic Services
14. Elementary School Teachers	14,457	Teaching and Training

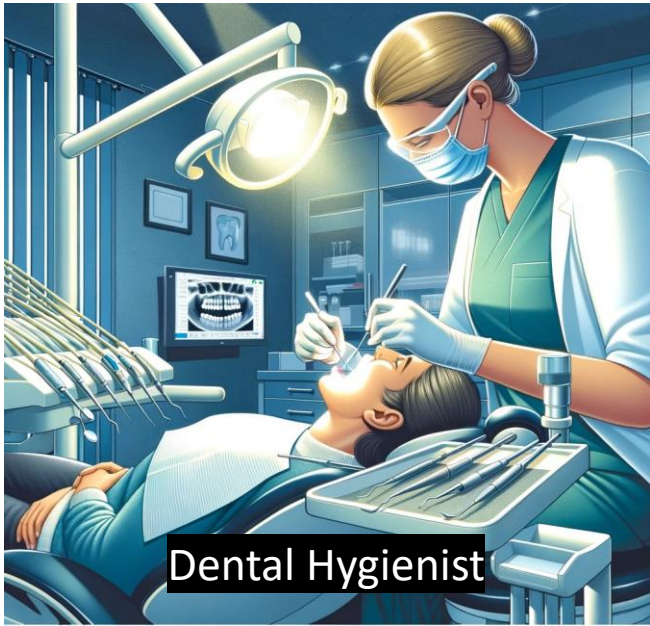
## Region 11 OCC Projections Requiring Postsecondary 2022-2032

Most Projected Openings by OCC	PROJ Job Openings	TEA Statewide Program of Study
15. Accountants and Auditors	14,196	Accounting & Financial Services
16. Business Operations Specialists, MISC	12,326	Not Assigned to a POS
17. Flight Attendants	12,011	Not Assigned to a POS
18. Supervisors, Construction Trades	11,463	Construction Management
19. Supervisors, Transportation Workers	11,029	Not Assigned to a POS
20. Project Management Specialists	10,455	Construction Management
21. H.S. Teachers, Ex. Special ED/CTE	10,419	Teaching & Training
22. Medical Secretaries/Admin Assistants	10,230	Diagnostic/Therapeutic Services
23. Electricians	9,960	Electrical
24. Auto Service Technicians/Mechanics	9,328	Automotive & Collision Repair
25. Carpenters	8,966	Carpentry
26. Substitute Teachers, Short-Term	8,776	Not Assigned to a POS
27. Supervisors, Production	8,733	Welding
28. Human Resources Specialists	8,516	Business Management

## Manufacturing Sector Wage Increases 2020 to 2023 (Q3) by Workforce Board region

LWDA	EMP 2023Q3	AWW 2023Q3	PCT CHG Total Wages	PCT AWW	Rank AWW	PCT CHG EMP
Permian Basin	10,538	\$1,730	63.36%	<b>31.5%</b>	<b>1</b>	24.3%
South Texas	994	\$951	59.55%	<b>29.0%</b>	<b>2</b>	23.6%
Capital Area	49,592	\$2,313	49.53%	<b>24.4%</b>	<b>3</b>	20.2%
Texoma	11,787	\$1,403	71.59%	<b>23.9%</b>	<b>4</b>	38.3%
Central Texas	8,686	\$1,170	35.32%	<b>22.9%</b>	<b>5</b>	10.1%
East Texas	32,989	\$1,188	27.42%	<b>19.3%</b>	<b>6</b>	6.9%
Alamo	62,871	\$1,387	47.57%	<b>18.3%</b>	<b>7</b>	24.7%
Borderplex	17,697	\$1,115	24.27%	<b>18.2%</b>	<b>8</b>	5.1%
North Texas	8,822	\$1,208	41.22%	<b>18.2%</b>	<b>9</b>	19.5%
Golden Crescent	10,007	\$1,726	22.70%	<b>16.4%</b>	<b>10</b>	5.5%
Northeast Texas	19,381	\$1,208	27.53%	<b>15.7%</b>	<b>11</b>	10.3%
Middle Rio Grande	2,815	\$820	28.39%	<b>14.8%</b>	<b>12</b>	11.8%
West Central	9,783	\$1,186	29.67%	<b>14.8%</b>	<b>13</b>	13.0%
Brazos Valley	11,586	\$1,185	28.58%	<b>14.5%</b>	<b>14</b>	12.3%
Gulf Coast	236,834	\$1,794	26.65%	<b>14.3%</b>	<b>15</b>	10.8%
Deep East Texas	12,769	\$1,220	22.81%	<b>14.1%</b>	<b>16</b>	7.6%
North Central	93,673	\$1,666	30.25%	<b>14.0%</b>	<b>17</b>	14.2%
South Plains	6,556	\$1,057	23.55%	<b>13.8%</b>	<b>18</b>	8.5%
Lower Rio Grande	6,908	\$951	19.83%	<b>13.8%</b>	<b>19</b>	5.4%
Tarrant County	91,685	\$1,669	22.72%	<b>13.6%</b>	<b>20</b>	8.0%
<b>Heart of Texas</b>	<b>18,567</b>	<b>\$1,348</b>	<b>22.03%</b>	<b>10.6%</b>	<b>21</b>	<b>10.3%</b>
Concho Valley	3,869	\$1,212	28.01%	<b>8.7%</b>	<b>22</b>	17.7%
Cameron County	7,425	\$1,076	38.94%	<b>8.1%</b>	<b>23</b>	28.4%
Dallas	123,857	\$1,642	16.99%	<b>8.1%</b>	<b>24</b>	8.2%
Panhandle	27,461	\$1,378	15.91%	<b>7.8%</b>	<b>25</b>	7.5%
Coastal Bend	12,869	\$1,674	15.28%	<b>7.0%</b>	<b>26</b>	7.8%
Southeast Texas	20,712	\$2,029	12.02%	<b>5.3%</b>	<b>27</b>	6.3%
Rural Capital	26,372	\$2,051	13.90%	<b>1.1%</b>	<b>28</b>	12.7%

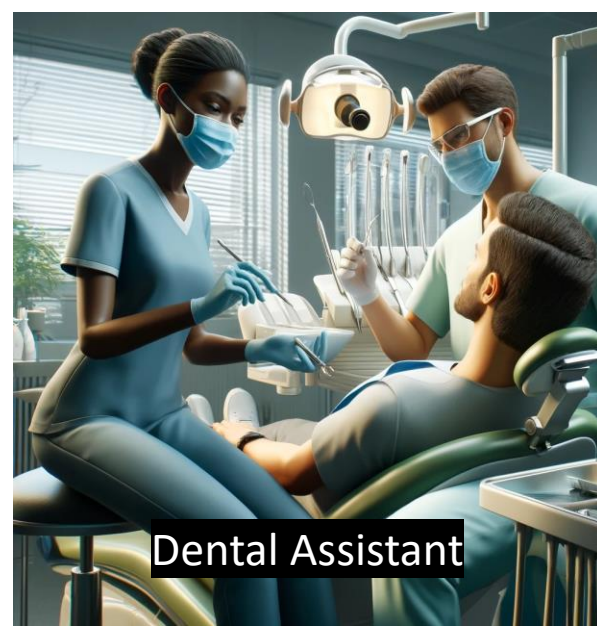
**The Heart of Texas LWDA had the 14<sup>th</sup> highest manufacturing wage but only the 21<sup>st</sup> ranked change in average weekly wage between 2020 and 2023**



Dental Hygienist



Business Operations Specialist



Dental Assistant



Computer Occupations, MISC (GIS Specialist)



Bookkeeping & Audit Clerk



Carpenter

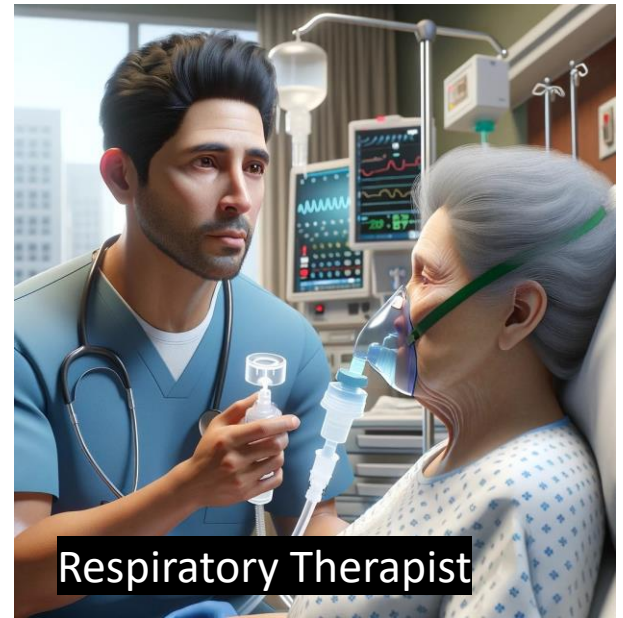
## HOT Career Progressions



Production, Planning & Expediting Clerk



Radiologic Tech



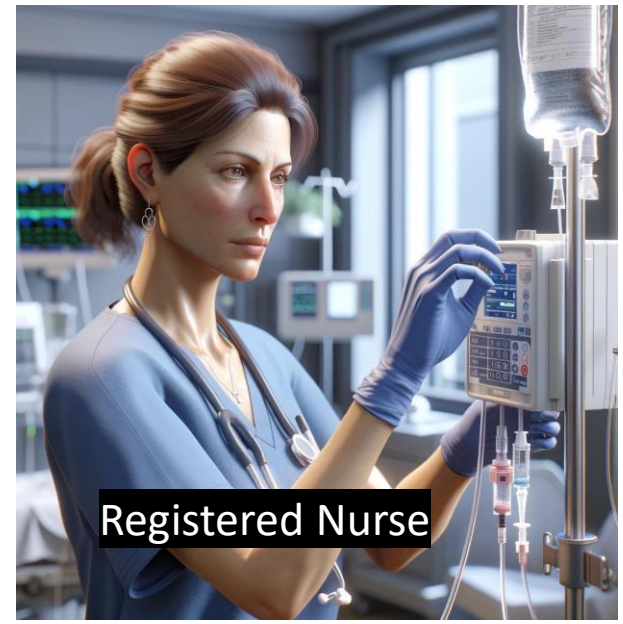
Respiratory Therapist



PLC Technician



Project Management Specialist

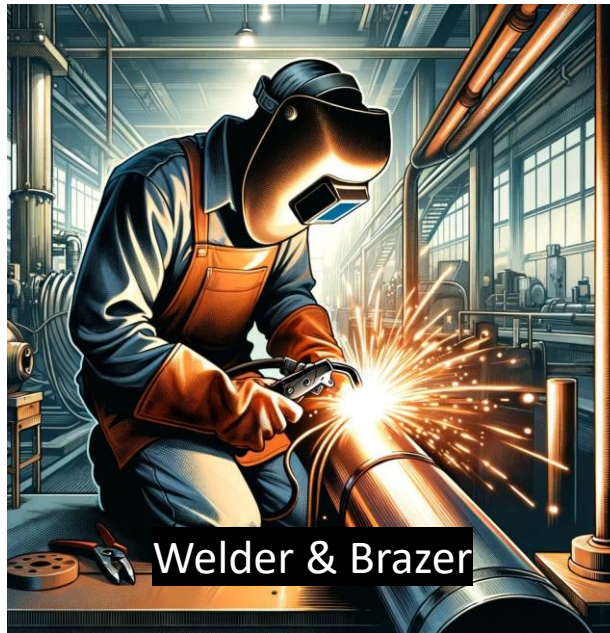


Registered Nurse

## HOT Career Progressions



Software QA Analyst



Welder & Brazier



Aircraft Structure & Surfaces Assembler



Production Supervisor



Mechanics & Repairers Supervisor



Aircraft Mechanic

## HOT Career Progressions

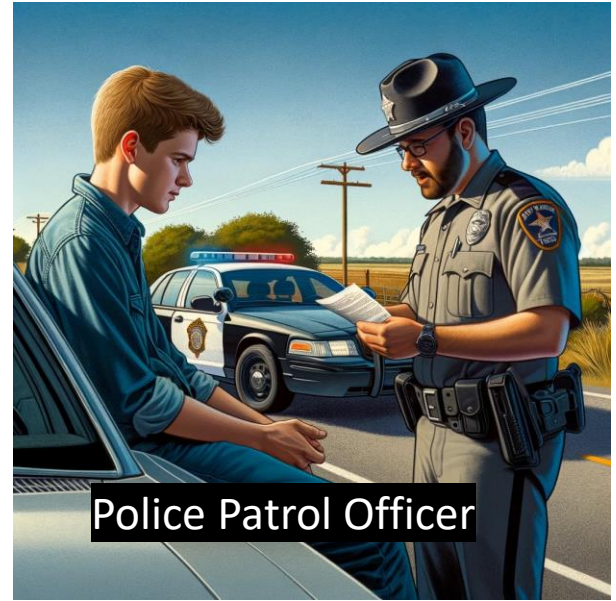




Licensed Vocational Nurse



HVAC Technician



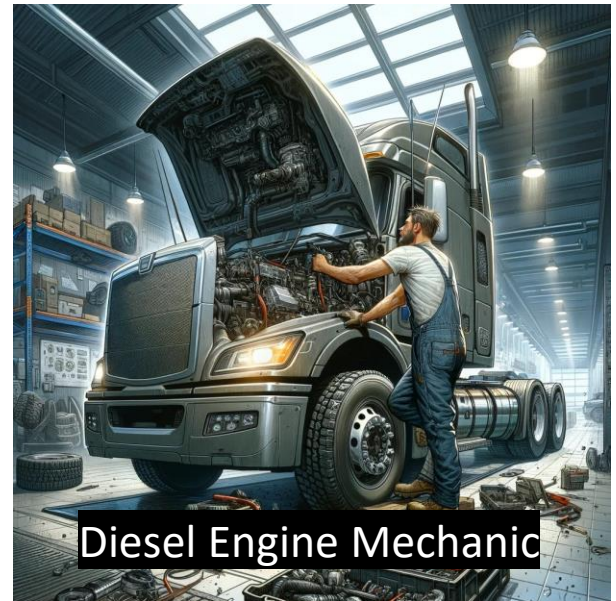
Police Patrol Officer



Retail Sales Supervisor



Physical Therapist Assistant



Diesel Engine Mechanic

# HOT Career Progressions



**Electrician**



**Industrial Automation Technician**



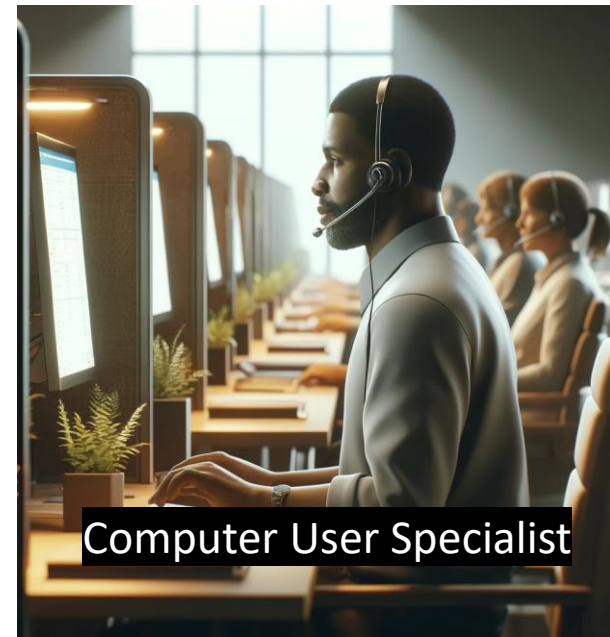
**Auto Mechanic**



**Industrial Machinery Mechanic**



**Electrical Power & Industrial Systems Tech**



**Computer User Specialist**

**HOT Career Progressions**