Regional Labor Market Analysis Importance of Aligning Programs to Regional Labor Market Conditions



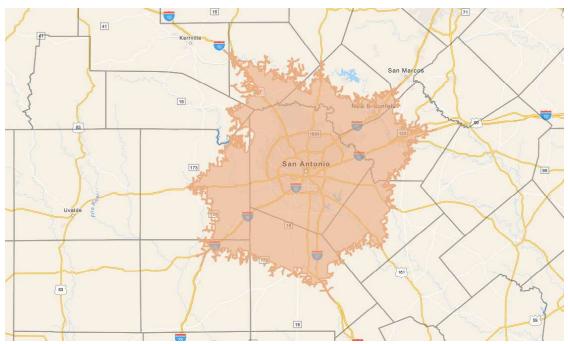
Image Credit: Brunner, J., 2021. Finding the Plough to Polaris: Predictive Validity for College, Career, and Military Readiness Indicators.

The Texas Tri-Agency Initiative consists of representatives from the Texas Education Agency (TEA), the Texas Higher Education Coordinating Board (THECB), and the Texas Workforce Commission (TWC). Tri-Agency members have established a specific priority regarding establishing pathways for Texans to earn credentials and ultimately become employed in a high-skill, high-demand industry or occupation. Aligning school districts' Career and Technical Education Programs of Study to regional workforce conditions is an important aspect of this work.

A recent study from researchers at the U.S. Census Bureau and Harvard University says nearly 60% of young adults – the study measured people at age 26 – live within 10 miles of where they grew up. Eighty percent live within 100 miles. With this in mind, it is imperative that schools develop and offer programs aligned to local labor market conditions. Preparing students for the jobs that exist in their communities is important to the local and regional economy.

Overview

Using software from Chmura Economics (JobsEQ), CareerCraft reviewed several labor market information reports to surface key industry sectors and occupations in the defined regional labor shed. The region was defined as a 45-minute drive time from the San Antonio ISD central office location. Data from ZIP codes within this defined region were utilized for all reports as part of this project.



Key findings and highlights are stated below. Original reports are hyperlinked at the end of this section for reference.

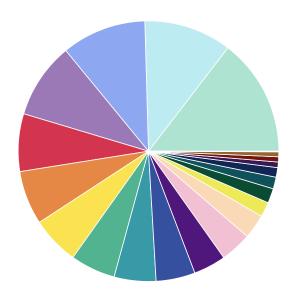
Industry Sector Overview

The largest sector in the San Antonio ISD Labor Shed (45-Minute Drive Time) is Health Care and Social Assistance, employing 181,230 workers. The next-largest sectors in the region are Retail Trade (135,209 workers) and Accommodation and Food Services (130,763 workers). High location quotients (LQs) indicate sectors in which a region has high concentrations of employment compared to the national average. The sectors with the largest LQs in the region are Mining, Quarrying, and Oil and Gas Extraction (LQ = 1.74), Finance and Insurance (1.41), and Utilities (1.33).

Sectors in the San Antonio ISD Labor Shed (45-Minute Drive Time) with the highest average wages per worker are Management of Management of Companies and Enterprises (\$136,041), Mining, Quarrying, and Oil and Gas Extraction (\$103,348), and Finance and Insurance (\$97,138). Regional sectors with the best job growth (or most

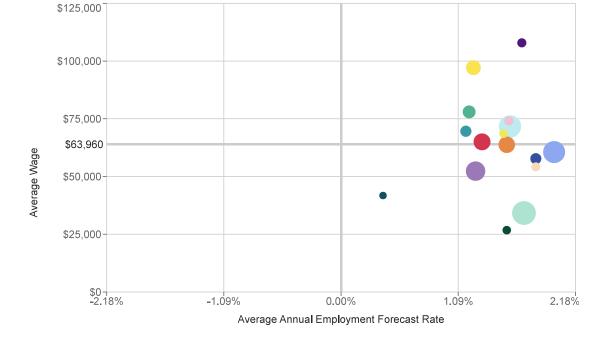
moderate job losses) over the last 10 years are Health Care and Social Assistance (+32,921 jobs), Transportation and Warehousing (+29,004), and Construction (+26,430).

Over the next 10 years, employment in the San Antonio ISD Labor Shed (45-Minute Drive Time) is projected to expand by 202,346 jobs. The fastest growing sector in the region is expected to be Transportation and Warehousing with a 2.3% year-over-year rate of growth. The strongest forecast by number of jobs over this period is expected for Health Care and Social Assistance (+39,162 jobs), Accommodation and Food Services (+19,679), and Retail Trade (+15,157).



Sector	Current Employment	Percent %
 Agriculture, Forestry, Fishing and Hunting 	7,581	0.6%
 Mining, Quarrying, and Oil and Gas Extraction 	7,912	0.6%
Utilities	8,488	0.7%
Construction	88,944	7.2%
Manufacturing	64,517	5.2%
Wholesale Trade	37,413	3.0%
Retail Trade	135,209	10.9%
 Transportation and Warehousing 	60,201	4.8%
Information	17,980	1.4%
Finance and Insurance	69,675	5.6%
 Real Estate Rental and Leasing 	22,903	1.8%
Professional, Scientific, and Technical Services	74,014	6.0%
 Management of Companies and Enterprises 	14,865	1.2%
Administrative and Support and Waste Management and Remediation Services	83,396	6.7%
Educational Services	116,904	9.4%
Health Care and Social Assistance	181,230	14.6%
Arts, Entertainment, and Recreation	22,669	1.8%
Accommodation and Food Services	130,763	10.5%
Other Services (except Public Administration)	50,114	4.0%
Public Administration	48,116	3.9%
Unclassified	979	0.1%

Source: JobsEQ® as of 2023Q4



Average Annual **Employment Industry Group Forecast Rate Average Wages Employment** Consumer Svc. 1.7% \$34,194 214,713 Professional Svc. Edison P-TECH/Sam Houston P-TECH 1.57% \$71,665 187,063 Health Fox Tech H-TECH 1.98% \$60.599 181.230 Education 1.25% \$52,328 136,895 Retail 1.31% \$65,020 98,502 Construction Lanier P-TECH 1.54% \$63,771 92,807 Financial Svc. 1.23% \$97,141 69,744 **Edison P-TECH** Public Admin. 1.19% \$77,998 48,116 Auto/Auto-related 1.16% \$69,608 30,889 Freight Tran. 1.81% \$57,741 29,220 Coal/Oil/Power 1.68% \$107,890 13,001 Highlands P-TECH Machinery Mfg. 1.56% \$74,073 12,589 Food Mfg. Highlands P-TECH 1.81% \$54,200 11,217 Utilities 1.51% \$68,569 8,902 Agricultural 1.54% \$26,781 8,652 Textile/Leather 0.39% \$41,775 1,611

Source: JobsEQ® as of 2023Q4

Occupational Snapshot

The largest major occupation group in the San Antonio ISD Labor Shed (45-Minute Drive Time) is Office and Administrative Support Occupations, employing 160,524 workers. The next-largest occupation groups in the region are Food Preparation and Serving Related Occupations (119,002 workers) and Sales and Related Occupations (113,564). High location quotients (LQs) indicate occupation groups in which a region has high concentrations of employment compared to the national average. The major groups with the largest LQs in the region are Food Preparation and Serving Related Occupations (LQ = 1.18), Education Instruction and Library Occupations (1.13), and Construction and Extraction Occupations (1.11).

Occupation groups in the San Antonio ISD Labor Shed (45-Minute Drive Time) with the highest average wages per worker are Management Occupations (\$117,200), Legal Occupations (\$116,400), and Healthcare Practitioners and Technical Occupations (\$103,100). The unemployment rate in the region varied among the major groups from 1.1% among Legal Occupations to 6.4% among Farming, Fishing, and Forestry Occupations.

Over the next 10 years, the fastest growing occupation group in the San Antonio ISD Labor Shed (45-Minute Drive Time) is expected to be Computer and Mathematical Occupations with a 2.4% year-over-year rate of growth. The strongest forecast by number of jobs over this period is expected for Transportation and Material Moving Occupations (+23,464 jobs) and Management Occupations (+19,775). Over the same period, the highest separation demand (occupation demand due to retirements and workers moving from one occupation to another) is expected in Food Preparation and Serving Related Occupations (241,631 jobs) and Office and Administrative Support Occupations (187,917).

There are over 800 defined occupations at the SOC detailed level. Among those occupations that support a living wage, the following occupations are expected to add the most jobs over the next 10 years in the defined region.

	soc	Occupation	Employment	Median Annual Wages	Projected 10 Year Growth	Annual Percentage Growth
Edison	11-1021.00	General and Operations Managers	34,266	\$88,900	6,280	1.7%
Highlands	53-7065.00	Stockers and Order Fillers	25,493	\$37,500	5,837	2.1%
Highlands/Lanier	53-7062.00	Laborers and Freight, Stock, and Material Movers, Hand	18,990	\$36,100	4,308	2.1%
Fox Tech	29-1141.00	Registered Nurses	23,853	\$85,000	4,014	1.6%
	53-3032.00	Heavy and Tractor-Trailer Truck Drivers	16,315	\$48,700	3,466	1.9%
Sam Houston	15-1252.00	Software Developers	8,082	\$119,300	3,109	3.3%
Lanier	47-2061.00	Construction Laborers	13,970	\$38,600	2,786	1.8%
Highlands	49-9071.00	Maintenance and Repair Workers, General	11,526	\$40,200	2,189	1.8%
	35-1012.00	First-Line Supervisors of Food Preparation and Serving Workers	11,356	\$36,900	2,099	1.7%
	53-3033.00	Light Truck Drivers	7,624	\$41,600	2,051	2.4%

Source: JobsEQ® as of 2023Q4

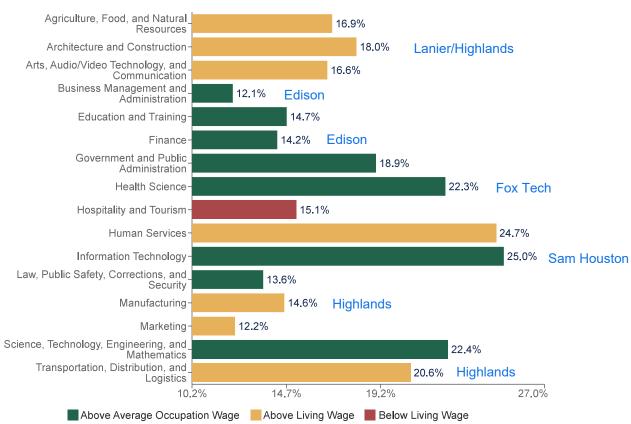
Of occupations supporting a living wage, the following occupations are projected to have the largest decline in employment over the next 10 years.

soc	Occupation	Employment	Median Annual Wages	Projected 10 Year Decline	Annual Percentage Growth
43-6011.00	Executive Secretaries and Executive Administrative Assistants	3,145	\$67,300	-352	-1.2%
43-3071.00	Tellers	3,939	\$38,500	-264	-0.7%
41-9041.00	Telemarketers	1,735	\$37,500	-184	-1.1%
43-6012.00	Legal Secretaries and Administrative Assistants	993	\$50,900	-130	-1.4%
43-3051.00	Payroll and Timekeeping Clerks	1,220	\$48,000	-66	-0.6%
43-4141.00	New Accounts Clerks	590	\$42,900	-39	-0.7%
43-4071.00	File Clerks	701	\$37,800	-34	-0.5%
27-3011.00	Broadcast Announcers and Radio Disc Jockeys	195	\$52,300	-16	-0.8%
43-9022.00	Word Processors and Typists	36	\$47,800	- 12	-3.8%

soc	Occupation	Employment	Median Annual Wages	Projected 10 Year Decline	Annual Percentage Growth
51-2011.00	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	278	\$69,900	-12	-0.5%

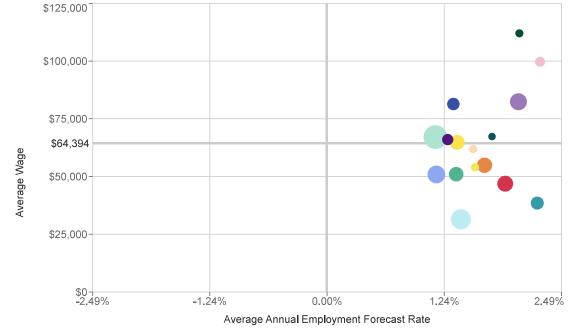
Source: JobsEQ® as of 2023Q4

Career Cluster Growth Forecast



Of those career clusters, the following pay more than the average occupation wage in the region (\$64,393.75).

Cluster	Average Wage
Science, Technology, Engineering, and Mathematics	\$112,000
□ Information Technology	\$99,700
☐ Health Science	\$82,400
€ Finance	\$81,400
	\$67,300
∠ Business Management and Administration	\$67,100
₱ Law, Public Safety, Corrections, and Security	\$66,000
☐ Education and Training	\$64,800



Average Annual
Employment

CTE Cluster	Employment Forecast Rate	Average Wages	Employment
 Business Management and Administration 	1.15%	\$67,100	240,095
Hospitality and Tourism	1.42%	\$31,500	165,316
Marketing	1.16%	\$50,900	126,847
Health Science	2.03%	\$82,400	114,207
Transportation, Distribution, and Logistics	1.89%	\$46,900	98,619
Architecture and Construction	1.67%	\$54,900	91,000
Education and Training	1.38%	\$64,800	85,403
Manufacturing	1.37%	\$51,000	79,996
Human Services	2.23%	\$38,500	61,468
Finance	1.34%	\$81,400	54,290
● Law, Public Safety, Corrections, and Security	1.28%	\$66,000	41,580
Information Technology	2.26%	\$99,700	30,685
Arts, Audio/Video Technology, and Communication	1.55%	\$61,900	15,401
Ogriculture, Food, and Natural Resources	1.57%	\$54,000	15,400
Science, Technology, Engineering, and Mathematics	2.04%	\$112,000	13,905
Government and Public Administration	1.75%	\$67,300	9,655

Real-Time Intelligence Findings

On June 26, 2024, real-time intelligence (job postings active during the last 12 months) reports were analyzed for the defined region. 281,560 job postings were active from 33,402 employers. Analysis of the job postings surfaced lists of the top 20 hard skills/technical skills, the top 20 soft skills/employability skills, and the top 20 certifications sought in the active postings.

"Hard Skills" (Technical Skills) Sought by Regional Employers

•	 0	,	9 1	,		
				Mediar	n Wage	
Skill Name			Median Wage	"r	า''	Active Job Ads
Microsoft Office			\$41,60	00	7,150	29,434
Microsoft Excel			\$42,80	00	6,703	27,645
Spanish			\$38,50	00	4,212	12,135
Microsoft Outlook			\$42,00	00	3,027	12,118
Microsoft Word			\$39,70	00	2,593	11,123

_		Median Wage	
Skill Name	Median Wage	"n"	Active Job Ads
Microsoft PowerPoint	\$48,800	2,116	10,006
Sales	\$41,000	2,124	9,381
Personal Computers (PC)	\$45,600	2,849	8,841
Teaching/Training, School	\$38,400	2,084	8,127
Mathematics	\$42,400	1,366	5,671
Teaching/Training, Job	\$49,000	1,183	5,416
Customer Relationship Management (CRM)	\$50,000	1,119	5,020
Presentation	\$55,300	863	4,906
Plumbing	\$42,300	1,539	4,628
Finance	\$59,300	775	4,464
Manufacturing	\$41,600	1,340	4,432
Word Processing	\$42,300	1,108	4,173
Agile	\$99,900	395	3,791
Marketing	\$45,600	846	3,677
Structured Query Language (SQL)	\$88,600	446	3,568

"Soft Skills" (Employability Skills) Sought by Regional Employers

Skill Name	Median Wage	Median Wage	Active Job Ads
Communication (Verbal and written skills)	\$39,500	35,733	145,121
Cooperative/Team Player	\$40,100	17,106	76,844
Organization	\$37,700	12,533	46,006
Detail Oriented/Meticulous	\$37,500	11,107	35,992
Interpersonal Relationships/Maintain Relationships	\$42,600	7,485	34,213
Problem Solving	\$41,200	8,154	33,177
Self-Motivated/Ability to Work Independently/Self Leadership	\$39,900	8,203	31,789
Supervision/Management	\$50,600	6,368	30,806
Prioritize	\$40,400	4,508	19,213
Time Management/Time Utilization	\$38,700	4,861	17,492
Multi-Task	\$36,100	5,032	17,452
Analytical	\$54,200	2,998	16,768
Leadership	\$52,900	2,518	14,465
Good Judgment	\$42,400	3,016	14,121
Punctual	\$37,000	4,175	14,001
Project Management	\$67,400	2,250	13,697
Initiative	\$36,900	3,549	13,674
Listening	\$37,600	3,118	11,581
Confidentiality/Information Sensitivity	\$39,300	3,170	11,397
Coachable/Willingness to Learn	\$37,600	3,525	10,675

Certifications Sought by Regional Employers

	Median Wage			
Certificate / Certification name	Median Wage	"n"	Active Job Ads	
Driver's License	\$37,600	5,612	12,824	

	Median Wage		
Certificate / Certification name	Median Wage	"n"	Active Job Ads
Basic Life Support (BLS)	\$62,400	895	7,611
Certification in Cardiopulmonary Resuscitation (CPR)	\$37,400	1,510	6,054
Registered Nurse (RN)	\$68,300	954	6,025
Advanced Cardiac Life Support Certification (ACLS)	\$101,900	215	2,820
Secret Clearance	\$83,200	255	2,118
Commercial Driver's License (CDL)	\$46,200	439	1,477
Certified Public Accountant (CPA)	\$72,800	197	1,402
Licensed Practical Nurse (LPN)	\$54,000	330	1,165
Pediatric Advanced Life Support (PALS)	\$94,800	90	942
The American Registry of Radiologic Technologists (ARRT) Certification	\$72,800	48	827
Project Management Professional (PMP)	\$100,500	139	811
Licensed Clinical Social Worker (LCSW)	\$74,900	196	621
Certified Information Systems Security Professional (CISSP)	\$110,300	53	596
Licensed Professional Counselor (LPC)	\$68,400	192	553
Class A Commercial Driver's License (CDL-A)	\$51,200	134	529
Cisco Certified Network Associate (CCNA)	\$67,900	75	456
Licensed Master Social Worker (LMSW)	\$62,100	88	367
Emergency Medical Technician (EMT)	\$39,500	88	350
Licensed Professional Engineer	\$107,000	47	340

Resource Files

- Economic Overview Report
- Perkins V Report
- · Occupational Snapshot Report
- Real Time Intelligence (Active Job Postings Report)

Career and Technical Education Program Audit

CareerCraft staff reviewed San Antonio ISD's Career and Technical Education (CTE) programs and compared the current course sequencing for each program of study to TEA's program of study reference guides. Outlined below are findings and considerations for each program of study offered to students in San Antonio ISD.

1,481

Average Employment
(Per Occupation)



\$65,218

Average Annual Salary (Of All Occupations)

At or Above Average

Below Average

Below Living Wage (\$36,000)

1.5%

Average Annual Projected Growth
(Of All Occupations)



Plant Science

Endorsement(s) Earned (if following §74,13 and TEA Program of Study guidance)

Successful completion of the Plant Science program of study will fulfill the requirements of the Business and Industry endorsement or STEM endorsement if the math and science requirements are met.

Career Cluster (as defined by TEA)

Agriculture, Food, and Natural Resources

Alignment to Regional Career Cluster Growth Forecast

According to the Perkins V Career Cluster Growth Forecast Report, jobs in Agriculture, Food, and Natural Resources are expected to grow (16.9%) over the next decade. Currently, this cluster employs 15,400 workers and offers living wages (\$54,000).

Alignment to Regional In-Demand Occupations