

Texas Workforce Commission

Report on Texas Growth Occupations - 2024

LMI

12-14-2024

2 **Contents**

3	Contents.....	1
4	I. Introduction	2
5	II. Growth Occupations by Industry.....	3
6	A. Construction	5
7	B. Manufacturing.....	12
8	C. Agriculture and Forestry	20
9	D. Health Care and Social Assistance.....	21
10	E. Educational Services	32
11	F. Transportation and Warehousing	43
12	G. Mining, Quarrying, and Oil and Gas Extraction.....	52
13	H. Utilities	56
14	I. Wholesale Trade	58
15	J. Retail Trade	67
16	K. Finance and Insurance	71
17	L. Professional, Scientific, and Technical Services	79
18	M. Accommodation and Food Services	95
19	III. Conclusion	98
20	IV. Methodology	99

I. Introduction

21

22 House Bill 2478 requires the Texas Workforce Commission (TWC) to gather and study
23 information relating to existing and projected shortages in high-wage, high-demand
24 occupations in this state on an annual basis. HB 2478 (83rd Legislature, Regular
25 Session, Section 302.019) also directed TWC to include information on existing and
26 projected shortages in high-wage, high-demand occupations in selected industries.

27 Data included in this report was the most recent data available as of the end of fiscal
28 year 2024. Thus, Quarterly Census of Employment and Wages (QCEW) data covers
29 the period through the first quarter of 2024. The Current Employment Statistics (CES)
30 data covers the period through the August 2024 estimates.

31 This report also considers TWC’s latest projections for employment growth for Texas,
32 released in July 2024 with a base year of 2022 and covering the period of 2022 to
33 2032. Industry projection models weigh long-term industry trends dating back to
34 1990. The next employment projections, covering the period of 2024 to 2034, will be
35 released in Summer 2026.

36 Since no official definition of a high-wage occupation exists, for purposes of this
37 report, TWC focuses on growing occupations that pay more than the Texas median
38 annual wage of \$45,972.

39 For each list of occupations by industry, a table is provided to show annual average
40 employment in the base and end years, the difference in jobs between the two, the
41 growth in percentage, the 2023 industry median annual wage, and the location
42 quotient (LQ) which is a measure of occupational concentration versus the national
43 level.

44 To segment Texas occupations by sector, TWC follows statistical data standards set by
45 the agency’s contracts with the U.S. Bureau of Labor Statistics and the Employment
46 and Training Administration division of the U.S. Department of Labor. TWC examined
47 nearly 800 occupations in Texas in making the occupational projections and
48 segmenting those occupations for specific industries. Those growth occupations within
49 industries are listed by industry sector in Section II.

50

51 **II. Growth Occupations by Industry**

52 Texas achieved new record employment highs 32 times in the 35 months from
53 October 2021 through August 2024 based on establishment survey estimates,
54 reaching a level of over 14.2 million positions. Residential survey estimates indicated
55 that the state’s civilian labor force set new record highs in 45 of the 47 months from
56 October 2020 through August 2024 to reach a level of nearly 15.4 million Texans. The
57 expanding economy in Texas continues to demand workers. That increased demand
58 for labor is focused on key occupations where local supply has at times struggled to
59 keep up with demand.

60 Predicting the occupations most in demand in an evolving labor market is part of the
61 mission of TWC. While this report shows the most in-demand occupations in Texas for
62 the 2022 through 2032 period, it is important to remember that each employer needs
63 a unique combination of technical skills, education, work experience, and even soft
64 skills for each of these jobs at each of their workplaces.

65 This section identifies occupations within major industries as defined in House Bill
66 2478. Industries are categorized by the North American Industry Classification System
67 (NAICS) with charts displaying staffing and wage information for a specific occupation
68 within these major industries. Each industry listed in this report includes only
69 occupations with wages above the Texas median annual wage and a projected
70 employment increase of 400 or more jobs. These *high-wage, high-demand*
71 *occupations* are then identified throughout this document to aid policy makers.

72 Overall, high-wage high-demand occupations are expected to grow by 738,674 jobs
73 by 2032. These professions are not equally dispersed across industries, with
74 Professional, Scientific, and Technical Services having the most occupations with 78,
75 followed by Health Care and Social Assistance with 45. Of those industries having less
76 than 10 qualifying occupations, Retail Trade, Accommodation and Food Services, and
77 Utilities combined for 14. Despite its importance to the Texas economy, Agriculture,
78 Forestry, Fishing and Hunting did not have any occupations meet high-wage high-
79 demand criteria.

80 It may seem intuitive that the number of occupations and employment level always
81 correspond accordingly, but at times the number of occupations may not parallel with
82 expected employment. Educational Services and Transportation & Warehousing rank
83 as having the third and fourth most high-wage, high-demand occupations, but
84 Transportation & Warehousing is expected to add 18,130 more jobs than the former.
85 Mainly due to the need for Heavy and Tractor-Trailer Truck Drivers in this industry,
86 this profession is expected to increase by 28,195 jobs by 2032. Heavy truck drivers
87 rank as third for projected growth among all industries.

88 In terms of pay, the Health Care and Social Assistance industry has the top five of ten
89 highest paying professions. Not surprising, all these occupations are medical
90 practitioners. Various management occupations occupy four of the last five
91 occupations with Petroleum Engineers being the only non-medical or management
92 profession in the top ten. All of these occupations require a bachelor’s degree or
93 higher.

94 Overall, high-wage high-demand occupations are diverse in terms of educational
95 requirements. These can vary greatly between industries, with some industries
96 dominated by a certain educational award. In terms of entry being high school
97 diploma or equivalent, the Construction industry is dominated by this award with 68.0
98 percent of occupations in this industry requiring this credential while almost equally
99 making up 67.8 percent of the 51,470 jobs to be added by 2032. In terms of four-
100 year degrees, the Finance and Insurance industry is heavily dominated by jobs
101 requiring a bachelor's degree with 83.3 percent of occupations requiring this but
102 representing 92.0 percent of the 54,224 jobs being added in the future.

103 The fast-growing Health Care and Social Assistance industry offers more balanced
104 requirements for entry with bachelor's degree and above requirements, but this
105 industry also has the most high-wage, high-demand professions that require an
106 associate's degree of any industry. Eight occupations require such an award
107 representing 17.8 percent of occupations and 12.1 percent of jobs or 15,048 added in
108 the future.

109

110 **A. Construction**

111 In 2024, the Construction industry surpassed all previous first quarter employment
112 levels and maintained annual increases in establishments for ten successive first
113 quarter periods.

114 During the first quarter of 2024, QCEW Construction employment reached 870,263
115 jobs, which represented 6.3 percent of total employment in Texas. First quarter 2024
116 comparisons of average employment to previous years show an increase of 3.9
117 percent over one year and an increase of 10.5 percent over five years.

118 According to CES data, Texas' seasonally adjusted Construction employment increased
119 by 10.5 percent since August 2019, adding 81,800 positions to reach a series high of
120 860,900 by August 2024. The industry has experienced annual employment growth
121 for 41 consecutive months beginning April 2021.

122 The not seasonally adjusted Producer Price Index measuring net input costs for
123 Construction goods decreased over the year in August 2024 following eight
124 consecutive months of annual increases.

125 The unadjusted U.S. January to August average for Building Permits peaked in 2005
126 with a value of almost 184,000 housing unit permits compared to this year's average
127 of nearly 126,000 permits. This year's activity ranked fourteenth in the series dating
128 back to 1988. In Texas, for the same timeframe, new housing units remained steady
129 and historically elevated in 2024 as the Building Permit average ranked fourth in
130 series history at roughly 19,200. Texas led all states in calendar year 2023 with over
131 232,200 privately owned housing unit permits.

132 Similarly, labor demand over the past five years from Help Wanted OnLine (HWOL)
133 job ads in Texas' construction industry peaked three years ago with an average of
134 roughly 19,500 ads from January to August 2021. An average of about 17,100 job ads
135 over the same months was recorded this year, an increase of 9.8 percent from a year
136 ago.

137 The Texas Workforce Commission projects an average 1.0 percent increase in
138 construction employment each year between 2022 to 2032. This equates to an
139 increase of 81,976 jobs, or a 10.7 percent growth over the ten-year period. The
140 largest gain in employment among Construction's subsectors is an expected 47,042
141 jobs within the Specialty Trade Contractors industry.

142 Of the 189 unique occupations in the Construction industry, 118 (or 62.4 percent) pay
143 a wage greater than the Texas annual median wage of \$45,972. Among these, 25
144 occupations are projected to add over 400 jobs each by 2032, contributing a
145 combined growth of 51,470 jobs and representing over 62.0 percent of the industry's
146 projected growth. Of these, 18 occupations require technical education or training
147 beyond high school, but not a four-year degree, and are expected to add more than
148 33,200 jobs by 2032.

149

150 Listed below are occupations that pay above the state annual median wage and are
 151 projected to add at least 400 jobs from 2022 to 2032.

152 **Table 1. Employment Characteristics of High-Wage, High-Demand**
 153 **Occupations in Construction**

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Electricians	47,821	57,543	9,722	20.3	\$51,920	1.11
First-Line Supervisors of Construction Trades and Extraction Workers	60,706	68,091	7,385	12.2	\$65,520	1.25
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	21,239	25,340	4,101	19.3	\$48,188	0.90
Plumbers, Pipefitters, and Steamfitters	30,458	34,558	4,100	13.5	\$58,126	1.08
Operating Engineers and Other Construction Equipment Operators	26,043	30,119	4,076	15.7	\$47,676	1.22
Construction Managers	26,585	30,112	3,527	13.3	\$95,052	1.56
General and Operations Managers	33,561	36,595	3,034	9.0	\$99,640	1.43
Heavy and Tractor-Trailer Truck Drivers	13,162	15,148	1,986	15.1	\$47,743	1.17

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Carpenters	26,400	28,308	1,908	7.2	\$48,111	0.56
Project Management Specialists	23,181	25,011	1,830	7.9	\$82,414	1.38
Welders, Cutters, Solderers, and Brazers	10,218	11,533	1,315	12.9	\$58,442	1.40
First-Line Supervisors of Mechanics, Installers, and Repairers	9,222	10,412	1,190	12.9	\$74,268	1.27
Electrical Power-Line Installers and Repairers	4,942	5,780	838	17.0	\$64,390	1.28
Wind Turbine Service Technicians	1,083	1,921	838	77.4	\$58,494	4.07
Occupational Health and Safety Specialists	3,629	4,457	828	22.8	\$77,199	1.53
Mobile Heavy Equipment Mechanics, Except Engines	4,842	5,446	604	12.5	\$50,502	1.24
Solar Photovoltaic Installers	1,097	1,632	535	48.8	\$47,079	1.58

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	5,587	6,117	530	9.5	\$72,865	1.09
Crane and Tower Operators	4,384	4,883	499	11.4	\$73,530	2.02
Structural Iron and Steel Workers	5,335	5,805	470	8.8	\$48,594	1.47
Excavating and Loading Machine and Dragline Operators, Surface Mining	3,525	3,990	465	13.2	\$48,651	1.63
Accountants and Auditors	5,025	5,468	443	8.8	\$79,844	0.87
Insulation Workers, Mechanical	4,631	5,056	425	9.2	\$49,302	2.20
Sheet Metal Workers	5,553	5,973	420	7.6	\$51,607	0.91
Reinforcing Iron and Rebar Workers	3,512	3,913	401	11.4	\$48,878	2.96

154 Source: Occupational Projections 2022 to 2032, NAICS 23. Occupational Employment and
155 Wage Statistics 2023.

156

157 Below are the educational and training requirements for high-wage, high-demand
 158 occupations in this industry. Apprenticeship occupations are designated with a
 159 superscripted letter "A". These occupations are approved for apprenticeship by the
 160 United States Department of Labor Office of Apprenticeship.

161 **Table 2. Education, Training, and Experience Requirements for High-Wage,**
 162 **High-Demand Occupations in Construction**

Occupation Title	Education	Training	Experience	STEM
Electricians ^A	High school diploma or equivalent	Apprenticeship	None	No
First-Line Supervisors of Construction Trades and Extraction Workers	High school diploma or equivalent	None	5 years or more	No
Heating, Air Conditioning, and Refrigeration Mechanics and Installers ^A	Postsecondary nondegree award	Long-term on-the-job training	None	No
Plumbers, Pipefitters, and Steamfitters ^A	High school diploma or equivalent	Apprenticeship	None	No
Operating Engineers and Other Construction Equipment Operators ^A	High school diploma or equivalent	Moderate-term on-the-job training	None	No
Construction Managers	Bachelor's degree	Moderate-term on-the-job training	None	No
General and Operations Managers ^A	Bachelor's degree	None	5 years or more	No
Heavy and Tractor-Trailer Truck Drivers ^A	Postsecondary nondegree award	Short-term on-the-job training	None	No
Carpenters ^A	High school diploma or equivalent	Apprenticeship	None	No

Occupation Title	Education	Training	Experience	STEM
Project Management Specialists ^A	Bachelor's degree	None	None	No
Welders, Cutters, Solderers, and Brazers ^A	High school diploma or equivalent	Moderate-term on-the-job training	None	No
First-Line Supervisors of Mechanics, Installers, and Repairers ^A	High school diploma or equivalent	None	Less than 5 years	No
Electrical Power-Line Installers and Repairers ^A	High school diploma or equivalent	Long-term on-the-job training	None	No
Wind Turbine Service Technicians ^A	Postsecondary nondegree award	Long-term on-the-job training	None	Yes
Occupational Health and Safety Specialists ^A	Bachelor's degree	None	None	No
Mobile Heavy Equipment Mechanics, Except Engines ^A	High school diploma or equivalent	Long-term on-the-job training	None	No
Solar Photovoltaic Installers	High school diploma or equivalent	Moderate-term on-the-job training	None	No
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	High school diploma or equivalent	Moderate-term on-the-job training	None	No
Crane and Tower Operators ^A	High school diploma or equivalent	Moderate-term on-the-job training	Less than 5 years	No
Structural Iron and Steel Workers ^A	High school diploma or equivalent	Apprenticeship	None	No

Occupation Title	Education	Training	Experience	STEM
Excavating and Loading Machine and Dragline Operators, Surface Mining ^A	High school diploma or equivalent	Moderate-term on-the-job training	Less than 5 years	No
Accountants and Auditors ^A	Bachelor's degree	None	None	No
Insulation Workers, Mechanical ^A	High school diploma or equivalent	Apprenticeship	None	No
Sheet Metal Workers ^A	High school diploma or equivalent	Apprenticeship	None	No
Reinforcing Iron and Rebar Workers ^A	High school diploma or equivalent	Apprenticeship	None	No

163 Source: Occupational Employment and Wage Statistics 2023, Texas Labor Analysis.

164 The table below lists top certifications within HWOL job advertisements for the 25
 165 high-wage, high-demand occupations in this sector.

166 **Table 3. In-Demand Certifications for High-Wage, High-Demand Construction**
 167 **Occupations**

Certification	August 2019	August 2024
Valid Driver's License	35.0%	37.8%
Commercial Driver's License (CDL)	13.6%	6.0%
30-Hour OSHA General Industry Card	2.1%	4.8%
EPA 608 Technician Certification	2.9%	4.2%
National Center For Construction Education & Research (NCCER) Certification	1.6%	3.4%

168 Source: Lightcast™, 2024.

169

170 **B. Manufacturing**

171 The Manufacturing industry’s average employment in first quarter 2024 was 969,428,
172 representing a five-year increase of 67,097 jobs (7.4 percent) from the same quarter
173 in 2019. The second, third, and fourth quarters of 2020 all saw COVID-related year-
174 over-year employment declines in Manufacturing. The industry achieved thirteen
175 consecutive quarters of five-year employment growth as of first quarter 2024, which
176 was the longest stretch of uninterrupted increases since the period from first quarter
177 1995 (the first recorded five-year change) through second quarter 2001.

178 On a year-over-year basis, employment in Manufacturing increased by 21,136, the
179 twelfth consecutive quarter of annual growth.

180 According to seasonally adjusted CES data, from August 2019 to August 2024,
181 manufacturing employment in Texas rose by 71,300 jobs for a 7.8 percent overall
182 increase—while the other 49 states and the District of Columbia combined for a
183 decline of 19,400 manufacturing jobs. Durable goods manufacturing employment in
184 Texas grew over that span by 46,400 for a 7.9 percent increase. The other 49 states
185 and the District of Columbia during that period combined for a loss of 93,600 durable
186 goods jobs. Texas added 24,900 jobs in nondurable goods manufacturing for 7.7
187 percent expansion, more than one of every four among all states and DC.

188 Texas has the second largest manufacturing job count in the United States. Employing
189 982,500 positions, the industry is at the highest level since December 2001. Most
190 recently, the major industry added more jobs on a monthly basis in August 2024 in
191 Texas than in any other state—both in raw numbers adding 6,700 and percentagewise
192 increasing 0.7 percent.

193 Hours and Earnings data indicates demand for these jobs remains strong.
194 Manufacturing production worker average hourly earnings have grown by 43.8 percent
195 over the last five years. It reached \$30.39 in August after setting a series high at
196 \$31.14 in July. Durable Goods positions reported \$32.33 per hour, having peaked at
197 \$32.87 in July. Non-Durable Goods positions registered \$27.27 per hour, having
198 peaked at \$28.27 in July.

199 There are 29 occupations in the Manufacturing industry that meet the high-wage,
200 high-demand criteria. These occupations are expected to account for almost 60.0
201 percent of the industry’s projected growth, with an addition of 34,521 jobs. Those
202 occupations requiring at least a bachelor’s degree are expected to add 16,865 jobs.
203 The occupation projected to grow the fastest from 2022 to 2032 is Industrial
204 Machinery Mechanics at 33.5 percent. The growth occupation with the highest annual
205 salary is Computer and Information Systems Managers, paying \$170,883, followed
206 closely by Architectural and Engineering Managers with a salary of \$170,323.

207 Table 6 lists the top five certifications in demand for the 29 high-wage, high-demand
208 occupations in the Manufacturing industry, shown as a ratio of mentions to
209 approximately 5,700 unique job ads as of August 2024. This is compared with the
210 same based on 5,434 unique job ads in August 2019. For example, in August 2024
211 21.8 percent of manufacturing job ads in Texas called for applicants to possess a valid
212 driver’s license, compared to 23.7 percent in August 2019.

213 Listed below are occupations that pay above the state annual median wage and are
 214 projected to add at least 400 jobs from 2022 to 2032.

215 **Table 4. Employment Characteristics of High-Wage, High-Demand**
 216 **Occupations in Manufacturing**

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Industrial Machinery Mechanics	15,136	20,201	5,065	33.5	\$61,611	1.34
First-Line Supervisors of Production and Operating Workers	39,617	42,798	3,181	8.0	\$63,153	1.00
Software Developers	11,443	14,053	2,610	22.8	\$132,822	0.94
Industrial Engineers	13,708	16,312	2,604	19.0	\$100,621	0.82
General and Operations Managers	23,775	25,933	2,158	9.1	\$115,396	1.43
Welders, Cutters, Solderers, and Brazers	25,300	27,330	2,030	8.0	\$47,342	1.40
Machinists	13,749	15,312	1,563	11.4	\$48,909	0.73
Mechanical Engineers	8,148	9,425	1,277	15.7	\$102,235	0.78
Maintenance Workers, Machinery	6,720	7,898	1,178	17.5	\$55,101	1.88

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	14,209	15,324	1,115	7.8	\$67,278	0.85
Maintenance and Repair Workers, General	11,389	12,385	996	8.7	\$49,961	1.02
Industrial Production Managers	11,445	12,437	992	8.7	\$118,137	1.00
Logisticians	4,264	5,218	954	22.4	\$78,571	1.05
Heavy and Tractor-Trailer Truck Drivers	15,888	16,768	880	5.5	\$49,288	1.17
Production, Planning, and Expediting Clerks	9,696	10,489	793	8.2	\$47,405	0.87
Electronics Engineers, Except Computer	3,532	4,253	721	20.4	\$132,506	1.03
Financial Managers	3,323	4,013	690	20.8	\$159,994	0.91
Electrical Engineers	4,345	4,934	589	13.6	\$109,358	0.88
Architectural and Engineering Managers	5,254	5,813	559	10.6	\$170,323	1.00
Sales Managers	6,696	7,196	500	7.5	\$134,893	1.54

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Accountants and Auditors	5,758	6,254	496	8.6	\$79,972	0.87
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	6,125	6,612	487	8.0	\$93,225	1.96
Computer and Information Systems Managers	2,957	3,417	460	15.6	\$170,883	1.18
Project Management Specialists	6,292	6,748	456	7.2	\$100,210	1.38
Chemical Engineers	2,039	2,489	450	22.1	\$133,218	1.74
Industrial Engineering Technologists and Technicians	3,037	3,482	445	14.7	\$58,855	0.80
Materials Engineers	1,844	2,286	442	24.0	\$106,395	1.10
Occupational Health and Safety Specialists	2,218	2,638	420	18.9	\$85,661	1.53
First-Line Supervisors of Mechanics, Installers, and Repairers ^A	5,689	6,099	410	7.2	\$92,145	1.27

217 **SOURCE:** Occupational Projections 2022 to 2032, NAICS 31-33. Occupational Employment and
 218 Wage Statistics 2023.

219 Below are the educational and training requirements for high-wage, high-demand
 220 occupations in this industry. Apprenticeable occupations are designated with a
 221 superscripted letter "A". These occupations are approved for apprenticeship by the
 222 United States Department of Labor Office of Apprenticeship.

223 **Table 5. Education, Training, and Experience Requirements for High-Wage,**
 224 **High-Demand Occupations in Manufacturing**

Occupation Title	Education	Training	Experience	STEM
Industrial Machinery Mechanics ^A	High school diploma or equivalent	Long-term on-the-job training	None	Yes
First-Line Supervisors of Production and Operating Workers	High school diploma or equivalent	None	Less than 5 years	No
Software Developers ^A	Bachelor's degree	None	None	Yes
Industrial Engineers ^A	Bachelor's degree	None	None	Yes
General and Operations Managers ^A	Bachelor's degree	None	5 years or more	No
Welders, Cutters, Solderers, and Brazers ^A	High school diploma or equivalent	Moderate-term on-the-job training	None	No
Machinists ^A	High school diploma or equivalent	Long-term on-the-job training	None	Yes
Mechanical Engineers ^A	Bachelor's degree	None	None	Yes
Maintenance Workers, Machinery ^A	High school diploma or equivalent	Long-term on-the-job training	None	No

Occupation Title	Education	Training	Experience	STEM
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	High school diploma or equivalent	Moderate-term on-the-job training	None	No
Maintenance and Repair Workers, General ^A	High school diploma or equivalent	Moderate-term on-the-job training	None	No
Industrial Production Managers ^A	Bachelor's degree	None	5 years or more	No
Logisticians ^A	Bachelor's degree	None	None	No
Heavy and Tractor-Trailer Truck Drivers ^A	Postsecondary nondegree award	Short-term on-the-job training	None	No
Production, Planning, and Expediting Clerks ^A	High school diploma or equivalent	Moderate-term on-the-job training	None	No
Electronics Engineers, Except Computer	Bachelor's degree	None	None	Yes
Financial Managers ^A	Bachelor's degree	None	5 years or more	No
Electrical Engineers	Bachelor's degree	None	None	Yes
Architectural and Engineering Managers	Bachelor's degree	None	5 years or more	Yes
Sales Managers	Bachelor's degree	None	Less than 5 years	No
Accountants and Auditors ^A	Bachelor's degree	None	None	No

Occupation Title	Education	Training	Experience	STEM
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products ^A	Bachelor's degree	Moderate-term on-the-job training	None	No
Computer and Information Systems Managers	Bachelor's degree	None	5 years or more	Yes
Project Management Specialists ^A	Bachelor's degree	None	None	No
Chemical Engineers	Bachelor's degree	None	None	Yes
Industrial Engineering Technologists and Technicians ^A	Associate's degree	None	None	Yes
Materials Engineers ^A	Bachelor's degree	None	None	Yes
Occupational Health and Safety Specialists ^A	Bachelor's degree	None	None	No
First-Line Supervisors of Mechanics, Installers, and Repairers ^A	High school diploma or equivalent	None	Less than 5 years	No

225 **SOURCE:** Occupational Employment and Wage Statistics 2023, Texas Labor Analysis.

226

227 The table below lists top certifications within HWOL job advertisements for the 29
228 high-wage, high-demand occupations in this sector.

229 **Table 6. In-Demand Certifications for High-Wage, High-Demand**
230 **Manufacturing Occupations**

Certification	August 2019	August 2024
Valid Driver's License	23.7%	21.8%
Security Clearance	8.0%	15.7%
Master Of Business Administration (MBA)	7.0%	4.8%
Secret Clearance	5.9%	4.8%
Commercial Driver's License (CDL)	5.9%	3.8%

231 Source: Lightcast™, 2024.

232

233 **C. Agriculture and Forestry**

234 In the last five years, demand for Agriculture and Forestry workers remained relatively
235 stagnant, according to QCEW data. In the first quarter of 2024, Texas had 57,740
236 workers in jobs covered by unemployment insurance within the Agriculture and
237 Forestry industry, a 1.9 percent decrease from the same quarter in 2019, when
238 58,837 jobs were reported.

239 The Agriculture and Forestry industry in Texas had been using fewer workers in recent
240 decades as farming methods have become more efficient. Traditional labor market
241 information may not completely capture the agriculture sector, since many Bureau of
242 Labor Statistics programs are non-agricultural and a significant amount of agricultural
243 labor is not covered by the unemployment tax system. None of the occupations in this
244 industry are projected to grow more than 400 jobs in the TWC 2022-32 labor market
245 projections. Therefore, no occupations met the criteria required for inclusion in this
246 report (paying above the state median wage and growing at or above 400 jobs in the
247 most recent TWC long-term labor market projection). This lack of occupations meeting
248 the criteria is due both the federal rules for collecting the data referenced above and
249 the current economic conditions in the industry.

250 Data from outside the Labor Market Information system shows that agriculture is both
251 a major contributor of jobs and economic output for Texas, but the wage structure of
252 the industry does not lend itself to the criteria examined for this specific report.
253 According to the Farm Labor Survey from the National Agricultural Statistical Service,
254 there were an average of 53,500 field and livestock workers employed in the Southern
255 Plains Region (Texas and Oklahoma) during the four quarters of Calendar Year 2023.
256 These workers made an average wage of \$16.36 per hour. This hourly wage is below
257 the Texas median hourly wage of \$22.10 (the criteria of a job for inclusion in this
258 report). The Farm Labor Survey does not disaggregate by Standard Occupational
259 Classification.

260 According to the Bureau of Economic Analysis, the Agriculture, forestry, fishing and
261 hunting Industry contributed \$10.6 billion to gross state product in Calendar Year
262 2023. The National Agriculture Statistical Service estimates total farm production
263 expenditures of \$30.6 billion in Calendar Year 2023. Of that amount, labor accounted
264 for \$1.64 billion.

265

266 **D. Health Care and Social Assistance**

267 According to QCEW data Healthcare and Social Assistance has added over 15,000
268 establishments from 2018 to 2023. This sector is faced with training challenges as
269 employers are demanding higher educated workers due to market demands and
270 industry expectations.

271 According to CES Seasonally Adjusted data August 2024 total employment is currently
272 over 1.7 million for the Health Care and Social Assistance industry. Certain
273 occupations in the healthcare industry are still struggling to meet demand. Registered
274 Nurses for example still have shortages of available employees to meet current
275 demand in the workforce. According to Help Wanted OnLine data, this occupation has
276 ranked number one in total job ads every month since February 2019.

277 The Health Care and Social Assistance industry has become one of the dominant
278 industries for employment in Texas - and the United States - in the last decade.
279 Demand for health care workers in Texas is expected to continue to increase as the
280 state has growing populations of both old and young people, who are the primary
281 customers of the Health Care and Social Assistance industry. This demand is
282 highlighted by the fact that the Health Care and Social Assistance industry is projected
283 to add the most jobs from 2022 to 2032 of all industry sectors.

284 Healthcare and Social Assistance is expected to grow over 17.0 percent by the year
285 2032, resulting in employment exceeding 1.9 million, an increase of over 290,000
286 jobs compared to 2022. This industry contains three of the top ten high-wage, high-
287 demand occupations projected to add the most jobs by 2032: Registered Nurses,
288 Medical and Health Services Managers and Nurse Practitioners. Registered nurses
289 make up the largest occupation by employment in this industry and has a projected
290 employment of over 227,000 by 2032 an increase of 14.8 percent. The fastest
291 growing high-demand occupation in this industry is Nurse Practitioners which is
292 projected to grow at a rate of 66.6% by 2032 while adding over 11K jobs.

293 Within the Health Care and Social Assistance industry, the Ambulatory Health Care
294 Services subsector is projected to add the most jobs from 2022 to 2032, with
295 projected growth exceeding over 147,000 jobs, accounting for over 50 percent of all
296 jobs in the industry.

297 Within the Health Care and Social Assistance industry, there are 45 occupations that
298 meet the high-wage, high-demand criteria. These occupations are expected to account
299 for 42.1 percent of the industry's projected growth, totaling an addition of 123,979
300 jobs. Of these, 32 occupations require at least a bachelor's degree, collectively
301 contributing 95,451 jobs to the expected growth.

302

303 Listed below are occupations that pay above the state annual median wage and are
 304 projected to add at least 400 jobs from 2022 to 2032.

305 **Table 7. Employment Characteristics of High-Wage, High-Demand**
 306 **Occupations in Health Care and Social Assistance**

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Registered Nurses	197,925	227,261	29,336	14.8	\$84,415	0.89
Medical and Health Services Managers	38,076	53,505	15,429	40.5	\$104,172	1.11
Nurse Practitioners	16,620	27,689	11,069	66.6	\$126,595	0.81
Licensed Practical and Licensed Vocational Nurses	52,545	59,367	6,822	13.0	\$57,102	1.05
Substance Abuse, Behavioral Disorder, and Mental Health Counselors	12,624	16,352	3,728	29.5	\$48,312	0.53
Speech-Language Pathologists	9,303	12,719	3,416	36.7	\$100,668	1.22
Radiologic Technologists and Technicians	17,107	20,494	3,387	19.8	\$74,675	1.00
Physical Therapists	15,562	18,878	3,316	21.3	\$104,490	0.80
Physician Assistants	7,593	10,784	3,191	42.0	\$131,082	0.66

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
General and Operations Managers	15,609	18,591	2,982	19.1	\$81,440	1.43
Physicians, All Other	17,720	20,537	2,817	15.9	\$214,388	1.04
First-Line Supervisors of Office and Administrative Support Workers	32,680	35,359	2,679	8.2	\$58,165	1.27
Physical Therapist Assistants	8,236	10,902	2,666	32.4	\$75,957	1.09
Respiratory Therapists	10,304	12,772	2,468	24.0	\$76,267	1.00
Dental Hygienists	10,742	12,997	2,255	21.0	\$89,609	0.61
Diagnostic Medical Sonographers	6,311	8,165	1,854	29.4	\$81,614	1.00
Dentists, General	8,875	10,692	1,817	20.5	\$172,194	1.00
Pharmacists	6,491	8,193	1,702	26.2	\$144,335	0.84
Child, Family, and School Social Workers	7,897	9,594	1,697	21.5	\$46,395	0.67
Occupational Therapists	7,584	9,200	1,616	21.3	\$101,461	0.82
Paramedics	5,736	7,297	1,561	27.2	\$48,633	1.04

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Healthcare Social Workers	9,521	10,931	1,410	14.8	\$64,151	0.70
Family Medicine Physicians	8,604	9,977	1,373	16.0	\$192,421	0.59
Surgical Technologists	8,855	10,223	1,368	15.4	\$59,676	0.96
Occupational Therapy Assistants	4,064	5,379	1,315	32.4	\$76,314	1.48
Social and Community Service Managers	5,548	6,754	1,206	21.7	\$65,795	0.64
Pharmacy Technicians	7,000	8,050	1,050	15.0	\$47,240	0.95
Human Resources Specialists	6,145	6,987	842	13.7	\$56,920	1.01
Financial Managers	2,768	3,603	835	30.2	\$127,197	0.91
Public Relations Specialists	4,553	5,304	751	16.5	\$54,458	1.07
Accountants and Auditors	3,869	4,599	730	18.9	\$73,008	0.87
Market Research Analysts and Marketing Specialists	2,480	3,132	652	26.3	\$51,263	0.69

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Business Operations Specialists, All Other	3,468	4,089	621	17.9	\$65,989	0.79
Health Information Technologists and Medical Registrars	2,320	2,939	619	26.7	\$79,864	1.04
Nurse Anesthetists	2,773	3,344	571	20.6	\$195,707	1.26
Education and Childcare Administrators, Preschool and Daycare	4,149	4,697	548	13.2	\$47,622	1.13
Training and Development Specialists	2,551	3,089	538	21.1	\$49,730	1.18
Medical Scientists, Except Epidemiologists	3,391	3,907	516	15.2	\$74,246	0.90
Chiropractors	2,265	2,768	503	22.2	\$77,148	0.92
Magnetic Resonance Imaging Technologists	2,339	2,823	484	20.7	\$85,700	0.67
Clinical and Counseling Psychologists	2,122	2,579	457	21.5	\$75,137	0.66

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Project Management Specialists	2,802	3,255	453	16.2	\$67,808	1.38
Counselors, All Other	1,660	2,109	449	27.0	\$46,663	1.24
Optometrists	2,401	2,850	449	18.7	\$130,133	0.78
General Internal Medicine Physicians	2,921	3,352	431	14.8	\$225,523	0.45

307 Source: Occupational Projections 2022 to 2032, NAICS 62. Occupational Employment and
308 Wage Statistics 2023.

309 Below are the educational and training requirements for high-wage, high-demand
310 occupations in this industry. Apprenticeship occupations are designated with a
311 superscripted letter "A". These occupations are approved for apprenticeship by the
312 United States Department of Labor Office of Apprenticeship.

313 **Table 8. Education, Training, and Experience Requirements for High-Wage,**
314 **High-Demand Occupations in Health Care and Social Assistance**

Occupation Title	Education	Training	Experience	STEM
Registered Nurses ^A	Bachelor's degree	None	None	Yes
Medical and Health Services Managers ^A	Bachelor's degree	None	Less than 5 years	Yes
Nurse Practitioners	Master's degree	None	None	Yes
Licensed Practical and Licensed Vocational Nurses ^A	Postsecondary nondegree award	None	None	No

Occupation Title	Education	Training	Experience	STEM
Substance Abuse, Behavioral Disorder, and Mental Health Counselors	Bachelor's degree	None	None	No
Speech-Language Pathologists	Master's degree	Internship/residency	None	Yes
Radiologic Technologists and Technicians ^A	Associate's degree	None	None	Yes
Physical Therapists	Doctoral or professional degree	None	None	Yes
Physician Assistants	Master's degree	None	None	Yes
General and Operations Managers ^A	Bachelor's degree	None	5 years or more	No
Physicians, All Other	Doctoral or professional degree	Internship/residency	None	Yes
First-Line Supervisors of Office and Administrative Support Workers	High school diploma or equivalent	None	Less than 5 years	No
Physical Therapist Assistants ^A	Associate's degree	None	None	No
Respiratory Therapists	Associate's degree	None	None	Yes
Dental Hygienists	Associate's degree	None	None	No
Diagnostic Medical Sonographers	Associate's degree	None	None	Yes

Occupation Title	Education	Training	Experience	STEM
Dentists, General	Doctoral or professional degree	None	None	Yes
Pharmacists	Doctoral or professional degree	None	None	No
Child, Family, and School Social Workers	Bachelor's degree	None	None	No
Occupational Therapists	Master's degree	None	None	Yes
Paramedics ^A	Postsecondary nondegree award	None	Less than 5 years	No
Healthcare Social Workers	Master's degree	Internship/residency	None	No
Family Medicine Physicians	Doctoral or professional degree	Internship/residency	None	Yes
Surgical Technologists ^A	Postsecondary nondegree award	None	None	No
Occupational Therapy Assistants	Associate's degree	None	None	Yes
Social and Community Service Managers	Bachelor's degree	None	Less than 5 years	No
Pharmacy Technicians ^A	High school diploma or equivalent	Moderate-term on-the-job training	None	No

Occupation Title	Education	Training	Experience	STEM
Human Resources Specialists ^A	Bachelor's degree	None	None	No
Financial Managers ^A	Bachelor's degree	None	5 years or more	No
Public Relations Specialists ^A	Bachelor's degree	None	None	No
Accountants and Auditors ^A	Bachelor's degree	None	None	No
Market Research Analysts and Marketing Specialists ^A	Bachelor's degree	None	None	No
Business Operations Specialists, All Other	Bachelor's degree	None	None	No
Health Information Technologists and Medical Registrars ^A	Associate's degree	None	None	No
Nurse Anesthetists	Master's degree	None	None	Yes
Education and Childcare Administrators, Preschool and Daycare	Bachelor's degree	None	Less than 5 years	No
Training and Development Specialists ^A	Bachelor's degree	None	Less than 5 years	No
Medical Scientists, Except Epidemiologists	Doctoral or professional degree	None	None	Yes

Occupation Title	Education	Training	Experience	STEM
Chiropractors	Doctoral or professional degree	None	None	Yes
Magnetic Resonance Imaging Technologists ^A	Associate's degree	None	Less than 5 years	No
Clinical and Counseling Psychologists	Doctoral or professional degree	Internship/residency	None	No
Project Management Specialists ^A	Bachelor's degree	None	None	No
Counselors, All Other	Master's degree	None	None	No
Optometrists	Doctoral or professional degree	None	None	Yes
General Internal Medicine Physicians	Doctoral or professional degree	Internship/residency	None	Yes

315 Source: Occupational Employment and Wage Statistics 2023, Texas Labor Analysis

316

317 The table below lists top certifications within HWOL job advertisements for the 45
318 high-wage, high-demand occupations in this sector.

319 **Table 9. In-Demand Certifications for High-Wage, High-Demand Health Care**
320 **and Social Assistance Occupations**

Certification	August 2019	August 2024
Registered Nurse (RN)	25.6%	21.5%
Basic Life Support (BLS) Certification	14.7%	14.3%
Advanced Cardiovascular Life Support (ACLS) Certification	7.1%	5.4%
Licensed Vocational Nurse (LVN)	4.3%	5.2%
Valid Driver's License	3.3%	3.1%

321 Source: Lightcast™, 2024.

322

323 **E. Educational Services**

324 In the last five years, demand for Educational Services workers in Texas grew at a
325 steady pace, according to QCEW.

326 In the first quarter of 2024, employment in Educational Services in Texas was about
327 1.3 million, representing nearly 10.0 percent of the state's total. This marks an 8.0
328 percent increase, with over 99,000 jobs added since the same quarter in 2019.

329 Compared to the first quarter of 2014, employment in this sector has risen by 17.3
330 percent, adding 196,631 jobs.

331 According to seasonally adjusted CES data, which pertains only to private employers
332 in this category, the industry job count showed a 14.5 percent increase over the five-
333 year period and a 1.3 percent increase over the year ending in August 2024.

334 According to the Help Wanted OnLine program, there was a continued increase in the
335 number of unique job postings for Education Services industry since December 2023
336 reaching a peak in July 2024 with over 36,000 unique postings. Over the five-year
337 period from August 2019 to August 2024, there was a 6.1 percent increase in job ads.

338 The Education Services industry is projected to grow by 11.4 percent by 2032, adding
339 150,232 jobs. Out of 288 occupations in this industry, 70 percent offer wages above
340 the Texas median. Among these, 41 occupations are projected to add more than 400
341 jobs each by 2032, collectively contributing 77,795 jobs and accounting for over 51
342 percent of the industry's anticipated growth. The occupations that are concentrated
343 relatively higher in Texas than in the nation are Career/Technical Education Teachers,
344 Secondary School and Instructional Coordinators.

345 The Elementary School Teachers, Except Special Education occupation has the largest
346 projected job gain from 2022 to 2032 with a projected growth of 17,013 jobs.
347 Secondary School Teachers, Except Special and Career/Technical Education are
348 projected to add 13,150 positions but no others are projected to add more than
349 6,000. Overall, Medical and Health Services Managers are expected to grow the
350 fastest at 32.0 percent. This occupation will add 532 jobs in the Colleges, Universities
351 and Professional Schools industry by 2032. Software Developers follows at 26.3
352 percent with Health Specialties Teachers, Postsecondary growing at 25.0 percent.

353 There is a mix of educational and training requirements associated with the 41
354 occupations listed in Table 11. Sixty-one percent (25 of 41 occupations) require no
355 more than a bachelor's degree, 87.8 percent of the jobs require none to less than 5
356 years of experience, and only 2 occupations needing moderate-term on-the-job or
357 internship/ residency training. The highest paying occupations in Educational Services
358 include Health Specialties Teachers, Postsecondary, Computer and Information
359 Systems Managers, Financial Managers, Engineering Teachers, Postsecondary as well
360 as Medical and Health Services Managers each have median wages exceeding
361 \$100,000.

362

363 Listed below are occupations that pay above the state annual median wage and are
 364 projected to add at least 400 jobs from 2022 to 2032.

365 **Table 10. Employment Characteristics of High-Wage, High-Demand**
 366 **Occupations for Educational Services**

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Elementary School Teachers, Except Special Education	141,795	158,808	17,013	12.0	\$63,672	1.08
Secondary School Teachers, Except Special and Career/Technical Education	106,399	119,549	13,150	12.4	\$63,980	1.15
Health Specialties Teachers, Postsecondary	22,457	28,080	5,623	25.0	\$131,809	1.27
Educational, Guidance, and Career Counselors and Advisors	28,816	32,968	4,152	14.4	\$65,198	1.08
Education Administrators, Kindergarten through Secondary	31,901	35,955	4,054	12.7	\$86,315	1.30
Instructional Coordinators	26,051	29,472	3,421	13.1	\$72,066	1.74

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Preschool Teachers, Except Special Education	12,156	13,970	1,814	14.9	\$62,436	1.00
Special Education Teachers, Kindergarten and Elementary School	15,701	17,496	1,795	11.4	\$63,297	1.26
Kindergarten Teachers, Except Special Education	14,105	15,839	1,734	12.3	\$63,884	1.24
Nursing Instructors and Teachers, Postsecondary	6,436	7,982	1,546	24.0	\$94,885	1.08
Career/Technical Education Teachers, Secondary School	12,924	14,366	1,442	11.2	\$63,696	2.13
Registered Nurses	12,767	14,204	1,437	11.3	\$79,285	0.89
Speech-Language Pathologists	5,810	7,212	1,402	24.1	\$74,819	1.22
Special Education Teachers, Secondary School	11,281	12,600	1,319	11.7	\$64,331	0.89

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
General and Operations Managers	8,484	9,776	1,292	15.2	\$98,117	1.43
Education Administrators, Postsecondary	13,942	15,174	1,232	8.8	\$98,414	0.98
Teachers and Instructors, All Other	7,504	8,624	1,120	14.9	\$56,408	0.98
Special Education Teachers, Middle School	7,388	8,234	846	11.5	\$63,593	1.07
Art, Drama, and Music Teachers, Postsecondary	7,232	7,999	767	10.6	\$76,999	0.75
Librarians and Media Collections Specialists	6,859	7,626	767	11.2	\$68,566	0.78
Special Education Teachers, All Other	5,898	6,657	759	12.9	\$65,505	1.32
Software Developers	2,853	3,604	751	26.3	\$94,477	0.94
Career/Technical Education Teachers, Postsecondary	14,575	15,304	729	5.0	\$64,992	1.30
Business Teachers, Postsecondary	5,755	6,477	722	12.5	\$99,607	0.77

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Business Operations Specialists, All Other	5,872	6,571	699	11.9	\$65,446	0.79
Training and Development Specialists	4,647	5,279	632	13.6	\$58,380	1.18
Medical and Health Services Managers	1,895	2,501	606	32.0	\$105,817	1.11
Biological Science Teachers, Postsecondary	4,061	4,659	598	14.7	\$83,196	0.77
Financial Managers	2,552	3,144	592	23.2	\$118,432	0.91
Education Administrators, All Other	3,882	4,448	566	14.6	\$82,542	0.97
Computer User Support Specialists	8,000	8,555	555	6.9	\$49,110	1.18
Postsecondary Teachers, All Other	5,764	6,300	536	9.3	\$73,104	0.26
Public Relations Specialists	3,654	4,176	522	14.3	\$58,311	1.07
Medical Scientists, Except Epidemiologists	2,514	3,031	517	20.6	\$64,264	0.90

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Education Teachers, Postsecondary	5,209	5,683	474	9.1	\$73,023	0.79
Computer and Information Systems Managers	2,337	2,797	460	19.7	\$124,149	1.18
Engineering Teachers, Postsecondary	2,996	3,444	448	15.0	\$112,024	0.92
Licensed Practical and Licensed Vocational Nurses	4,128	4,571	443	10.7	\$51,962	1.05
Accountants and Auditors	3,971	4,406	435	11.0	\$67,188	0.87
Human Resources Specialists	4,070	4,487	417	10.2	\$58,088	1.01
Mathematical Science Teachers, Postsecondary	4,276	4,684	408	9.5	\$79,477	0.95

367 Source: Occupational Projections 2022 to 2032, NAICS 61. Occupational Employment and
368 Wage Statistics 2023.

369

370 Below are the educational and training requirements for high-wage, high-demand
 371 occupations in this industry. Apprenticesable occupations are designated with a
 372 superscripted letter "A". These occupations are approved for apprenticeship by the
 373 United States Department of Labor Office of Apprenticeship.

374 **Table 11. Education, Training, and Experience Requirements for High-Wage,**
 375 **High-Demand Occupations in Educational Services**

Occupation Title	Education	Training	Experience	STEM
Elementary School Teachers, Except Special Education ^A	Bachelor's degree	None	None	No
Secondary School Teachers, Except Special and Career/Technical Education	Bachelor's degree	None	None	No
Health Specialties Teachers, Postsecondary	Doctoral or professional degree	None	Less than 5 years	No
Educational, Guidance, and Career Counselors and Advisors	Master's degree	None	None	No
Education Administrators, Kindergarten through Secondary ^A	Master's degree	None	5 years or more	No
Instructional Coordinators	Master's degree	None	5 years or more	No
Preschool Teachers, Except Special Education ^A	Associate's degree	None	None	No
Special Education Teachers, Kindergarten and Elementary School	Bachelor's degree	None	None	No

Occupation Title	Education	Training	Experience	STEM
Kindergarten Teachers, Except Special Education	Bachelor's degree	None	None	No
Nursing Instructors and Teachers, Postsecondary	Doctoral or professional degree	None	Less than 5 years	No
Career/Technical Education Teachers, Secondary School ^A	Bachelor's degree	None	Less than 5 years	No
Registered Nurses ^A	Bachelor's degree	None	None	Yes
Speech-Language Pathologists	Master's degree	Internship/residency	None	Yes
Special Education Teachers, Secondary School	Bachelor's degree	None	None	No
General and Operations Managers ^A	Bachelor's degree	None	5 years or more	No
Education Administrators, Postsecondary	Master's degree	None	Less than 5 years	No
Teachers and Instructors, All Other ^A	Bachelor's degree	None	None	No
Special Education Teachers, Middle School	Bachelor's degree	None	None	No
Art, Drama, and Music Teachers, Postsecondary	Master's degree	None	None	No
Librarians and Media Collections Specialists	Master's degree	None	None	No

Occupation Title	Education	Training	Experience	STEM
Special Education Teachers, All Other	Bachelor's degree	None	None	No
Software Developers ^A	Bachelor's degree	None	None	Yes
Career/Technical Education Teachers, Postsecondary	Bachelor's degree	None	Less than 5 years	No
Business Teachers, Postsecondary	Doctoral or professional degree	None	None	No
Business Operations Specialists, All Other	Bachelor's degree	None	None	No
Training and Development Specialists ^A	Bachelor's degree	None	Less than 5 years	No
Medical and Health Services Managers ^A	Bachelor's degree	None	Less than 5 years	Yes
Biological Science Teachers, Postsecondary	Doctoral or professional degree	None	None	No
Financial Managers ^A	Bachelor's degree	None	5 years or more	No
Education Administrators, All Other	Bachelor's degree	None	Less than 5 years	No
Computer User Support Specialists ^A	Some college, no degree	Moderate-term on-the-job training	None	No
Postsecondary Teachers, All Other	Doctoral or professional degree	None	None	No
Public Relations Specialists ^A	Bachelor's degree	None	None	No

Occupation Title	Education	Training	Experience	STEM
Medical Scientists, Except Epidemiologists	Doctoral or professional degree	None	None	Yes
Education Teachers, Postsecondary	Doctoral or professional degree	None	Less than 5 years	No
Computer and Information Systems Managers	Bachelor's degree	None	5 years or more	Yes
Engineering Teachers, Postsecondary	Doctoral or professional degree	None	None	No
Licensed Practical and Licensed Vocational Nurses ^A	Postsecondary nondegree award	None	None	No
Accountants and Auditors ^A	Bachelor's degree	None	None	No
Human Resources Specialists ^A	Bachelor's degree	None	None	No
Mathematical Science Teachers, Postsecondary	Doctoral or professional degree	None	None	No

376 Source: Occupational Employment and Wage Statistics 2023, Texas Labor Analysis.

377

378 The following table shows the specialized skills and certifications associated with the
379 41 high-wage, high-demand Educational Services occupations.

380 **Table 12. In-Demand Certifications for High-Wage, High-Demand Educational**
381 **Services Occupations**

Certification	August 2019	August 2024
Teaching Certificate	36.7%	34.5%
Registered Nurse (RN)	8.8%	10.7%
Valid Driver's License	7.3%	8.9%
Cardiopulmonary Resuscitation (CPR) Certification	4.9%	5.3%
Board Certified/Board Eligible	1.5%	2.1%

382 Source: Lightcast™, 2024.

383

384 **F. Transportation and Warehousing**

385 In the past five years, demand for Transportation and Warehousing workers in Texas
386 has increased significantly, according to QCEW.

387 In the first quarter of 2024 employment in the Transportation and Warehousing
388 industry in Texas was 695,871, up 23.4 percent from the same quarter in 2019.
389 Average weekly wages have also grown compared to five years ago, increasing by
390 \$260 to reach \$1,546.

391 Not seasonally adjusted CES data indicate that the sector grew by 1.7 percent (10,500
392 jobs) over-the-year to reach 644,000 positions as of August 2024. Transportation and
393 Warehousing employment has risen by 20.7 percent (110,300 positions) since August
394 2019, a compound annual growth rate over that period of 3.8 percent. The annual
395 growth rate for the sector reached a recent peak of 12.0 percent in April 2022.

396 According to the U.S. Census Bureau's Retail Trade Survey, seasonally adjusted e-
397 commerce sales in the U.S. made up 15.8 percent of total retail sales in the first
398 quarter of 2024. Quarterly retail sales in e-commerce have increased for 19 of the
399 past 20 quarters, registering a series-high growth rate of 33.0 percent during the
400 second quarter of 2020.

401 Industry job numbers will likely remain robust as the popularity of e-commerce
402 warehousing and deliveries continues to grow and the state continues to invest in
403 transportation infrastructure. Long term projections indicate that Transportation and
404 Warehousing employment is expected to expand by 25.2 percent to approximately
405 833,562 positions from 2022 to 2032 resulting in 167,600 jobs added. Heavy and
406 Tractor-Trailer Truck Drivers are projected to make the largest occupational gains
407 through 2032 to reach an estimated employment of 143,802 jobs.

408 There are 31 occupations within Transportation and Warehousing that meet the high-
409 wage, high-demand criteria. It is notable that 23 of these 31 occupations require no
410 more than a high school diploma or equivalent and will add over 59,000 jobs by 2032
411 representing 35.4 percent of employment expansion within the industry.

412 Not listed in the tables is the occupation of Airline Pilots, Copilots, and Flight
413 Engineers, because although it is estimated to add 1,300 positions within
414 Transportation and Warehousing from 2022 to 2032, the median annual wage for that
415 occupation is not available for publication for that industry. The median annual wage
416 for Airline Pilots, Copilots, and Flight Engineers across all industries in Texas is
417 \$227,380.

418

419 Listed below are occupations that pay above the state annual median wage and are
 420 projected to add at least 400 jobs from 2022 to 2032.

421 **Table 13. Employment Characteristics of High-Wage, High-Demand**
 422 **Occupations in Transportation and Warehousing**

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Heavy and Tractor-Trailer Truck Drivers	115,607	143,802	28,195	24.4	\$53,147	1.17
Industrial Truck and Tractor Operators	42,793	58,522	15,729	36.8	\$46,338	1.21
Light Truck Drivers	39,115	52,974	13,859	35.4	\$47,550	0.81
First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	16,496	21,235	4,739	28.7	\$62,863	1.05
General and Operations Managers	14,827	18,333	3,506	23.6	\$88,726	1.43
Postal Service Mail Carriers	25,588	28,643	3,055	11.9	\$56,326	0.91
Flight Attendants	12,198	15,039	2,841	23.3	\$65,043	1.19
First-Line Supervisors of Office and Administrative Support Workers	13,036	15,597	2,561	19.6	\$74,545	1.27

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Maintenance and Repair Workers, General	5,062	7,207	2,145	42.4	\$59,841	1.02
Reservation and Transportation Ticket Agents and Travel Clerks	17,091	18,979	1,888	11.0	\$48,172	1.69
Aircraft Mechanics and Service Technicians	9,912	11,635	1,723	17.4	\$79,151	1.33
Transportation, Storage, and Distribution Managers	4,621	6,313	1,692	36.6	\$91,051	1.48
Packers and Packagers, Hand	5,354	6,926	1,572	29.4	\$48,180	1.05
Production, Planning, and Expediting Clerks	3,739	5,205	1,466	39.2	\$50,273	0.87
Bus and Truck Mechanics and Diesel Engine Specialists	8,373	9,728	1,355	16.2	\$54,618	1.12
Logisticians	1,645	2,673	1,028	62.5	\$52,125	1.05
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	1,998	2,896	898	44.9	\$49,914	1.09

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
First-Line Supervisors of Mechanics, Installers, and Repairers	4,012	4,907	895	22.3	\$87,679	1.27
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	3,740	4,525	785	21.0	\$64,667	1.09
Training and Development Specialists	1,736	2,488	752	43.3	\$59,375	1.18
Postal Service Clerks A	4,873	5,453	580	11.9	\$60,590	0.73
Software Developers	811	1,368	557	68.7	\$126,437	0.94
Machine Feeders and Offbearers	829	1,353	524	63.2	\$49,130	0.75
First-Line Supervisors of Production and Operating Workers	1,248	1,734	486	38.9	\$100,452	1.00
Rail Car Repairers	2,172	2,646	474	21.8	\$50,840	1.05

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Postal Service Mail Sorters, Processors, and Processing Machine Operators	7,232	7,690	458	6.3	\$54,454	0.72
Railroad Conductors and Yardmasters	4,159	4,601	442	10.6	\$64,774	1.03
Accountants and Auditors	2,153	2,587	434	20.2	\$78,169	0.87
Pump Operators, Except Wellhead Pumpers	1,234	1,668	434	35.2	\$46,812	3.92
Occupational Health and Safety Specialists	1,194	1,626	432	36.2	\$74,919	1.53
Petroleum Pump System Operators, Refinery Operators, and Gagers	3,053	3,473	420	13.8	\$100,632	3.71

423 Source: Occupational Projections 2022 to 2032, NAICS 48-49. Occupational Employment and
424 Wage Statistics 2023.

425

426 Below are the educational and training requirements for high-wage, high-demand
 427 occupations in this industry. Apprenticesable occupations are designated with a
 428 superscripted letter "A". These occupations are approved for apprenticeship by the
 429 United States Department of Labor Office of Apprenticeship.

430 **Table 14. Education, Training, and Experience Requirements for High-Wage,**
 431 **High-Demand Occupations in Transportation and Warehousing**

Occupation Title	Education	Training	Experience	STEM
Heavy and Tractor-Trailer Truck Drivers ^A	Postsecondary nondegree award	Short-term on-the-job training	None	No
Industrial Truck and Tractor Operators	No formal educational credential	Short-term on-the-job training	None	No
Light Truck Drivers	High school diploma or equivalent	Short-term on-the-job training	None	No
First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	High school diploma or equivalent	None	Less than 5 years	No
General and Operations Managers ^A	Bachelor's degree	None	5 years or more	No
Postal Service Mail Carriers	No formal educational credential	Short-term on-the-job training	None	No
Flight Attendants	High school diploma or equivalent	Moderate-term on-the-job training	Less than 5 years	No
First-Line Supervisors of Office and Administrative Support Workers	High school diploma or equivalent	None	Less than 5 years	No
Maintenance and Repair Workers, General ^A	High school diploma or equivalent	Moderate-term on-the-job training	None	No

Occupation Title	Education	Training	Experience	STEM
Reservation and Transportation Ticket Agents and Travel Clerks	High school diploma or equivalent	Short-term on-the-job training	None	No
Aircraft Mechanics and Service Technicians ^A	Postsecondary nondegree award	None	None	No
Transportation, Storage, and Distribution Managers ^A	High school diploma or equivalent	None	5 years or more	No
Packers and Packagers, Hand	No formal educational credential	Short-term on-the-job training	None	No
Production, Planning, and Expediting Clerks ^A	High school diploma or equivalent	Moderate-term on-the-job training	None	No
Bus and Truck Mechanics and Diesel Engine Specialists ^A	High school diploma or equivalent	Long-term on-the-job training	None	No
Logisticians ^A	Bachelor's degree	None	None	No
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	High school diploma or equivalent	Short-term on-the-job training	None	No
First-Line Supervisors of Mechanics, Installers, and Repairers ^A	High school diploma or equivalent	None	Less than 5 years	No
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	High school diploma or equivalent	Moderate-term on-the-job training	None	No
Training and Development Specialists ^A	Bachelor's degree	None	Less than 5 years	No

Occupation Title	Education	Training	Experience	STEM
Postal Service Clerks ^A	No formal educational credential	Short-term on-the-job training	None	No
Software Developers ^A	Bachelor's degree	None	None	Yes
Machine Feeders and Offbearers	No formal educational credential	Short-term on-the-job training	None	No
First-Line Supervisors of Production and Operating Workers	High school diploma or equivalent	None	Less than 5 years	No
Rail Car Repairers ^A	High school diploma or equivalent	Long-term on-the-job training	None	No
Postal Service Mail Sorters, Processors, and Processing Machine Operators	No formal educational credential	Short-term on-the-job training	None	No
Railroad Conductors and Yardmasters ^A	High school diploma or equivalent	Moderate-term on-the-job training	None	No
Accountants and Auditors ^A	Bachelor's degree	None	None	No
Pump Operators, Except Wellhead Pumpers	High school diploma or equivalent	Moderate-term on-the-job training	None	No
Occupational Health and Safety Specialists ^A	Bachelor's degree	None	None	No
Petroleum Pump System Operators, Refinery Operators, and Gagers ^A	High school diploma or equivalent	Moderate-term on-the-job training	None	No

432 Source: Occupational Employment and Wage Statistics 2023, Texas Labor Analysis.

433 The table below lists top certifications within HWOL job advertisements for the 31
434 high-wage, high-demand occupations in this sector.

435 **Table 15. In-Demand Certifications for High-Wage, High-Demand Occupations**
436 **for Transportation and Warehousing**

Certification	August 2019	August 2024
Commercial Driver's License (CDL)	24.4%	25.9%
Valid Driver's License	15.4%	18.0%
Hazmat Endorsement	3.3%	2.5%
Automotive Service Excellence (ASE) Certification	1.2%	2.3%
Forklift Certification	1.3%	2.2%

437 Source: Lightcast™ 2024

438

439 **G. Mining, Quarrying, and Oil and Gas**
440 **Extraction**

441 In the last five years, demand for Mining, Quarrying, and Oil and Gas Extraction
442 industry workers in Texas has varied year-to-year, based on data from QCEW.
443 Compared to the first quarter of 2019, average employment in the industry during the
444 same quarter of 2024 has declined by 14.0 percent. The Mining, Quarrying, and Oil
445 and Gas Extraction industry made up 2.0 percent of all jobs across the state five years
446 ago, but more current data reveals that number declined by 0.4 percentage points to
447 1.6 percent in the first quarter of 2024.

448 First-quarter average employment in the industry dropped by 8.2 percent in 2020 and
449 25.5 percent in 2021. And the CES program indicates within the past decade, the not
450 seasonally adjusted number of positions in the industry reached an August low of
451 169,500 in 2020.

452 However, in the first quarter of the past three years (2022, 2023, and 2024), QCEW
453 numbers show the average number of jobs in the industry has increased from the
454 previous year. CES also show job counts have grown annually in recent years at 12.3
455 percent in August 2022 and 4.8 percent in August the following year, and only most
456 recently declined slightly by 1.9 percent in August 2024.

457 The total number of jobs in the Mining, Quarrying, and Oil and Gas Extraction industry
458 is expected to grow over the next decade, increasing from 191,413 to 214,686 in
459 2032. Among the detailed occupations, 10.1 percent meet the high-wage, high-
460 demand criteria. These occupations account for more than 43.0 percent of the
461 industry's projected growth, contributing 10,190 jobs.

462 There is a mix of educational and training requirements associated with the top
463 occupations in Mining, Quarrying, and Oil and Gas Extraction. Of the 10 occupations
464 highlighted within this report, three require a bachelor's degree with zero training nor
465 experience needed except for General and Operations Managers, where five or more
466 years of experience is a must. For positions where no formal education credential is a
467 requisite, a mix of short- and moderate-term on-the-job training is mandatory with no
468 experience needed.

469 Table 18 lists the top five certifications as of August 2024 for the 10 high-wage, high-
470 demand occupations in the Mining, Quarrying, and Oil and Gas Extraction industry as
471 a ratio of mentions to approximately 530 total unique certification listings in job ads,
472 compared with the same to approximately 923 total unique certification listings in job
473 ads in August 2019. For example, in August 2024, 27.5 percent of certification listings
474 in job ads in Mining, Quarrying, and Oil and Gas Extraction for the top high-wage,
475 high-demand occupations in Texas called for applicants to possess a Commercial
476 Driver's License (CDL), compared to 22.1 percent in August 2019.

477

478 Listed below are occupations that pay above the state annual median wage and are
 479 projected to add at least 400 jobs from 2022 to 2032.

480 **Table 16. Employment Characteristics of High-Wage, High-Demand**
 481 **Occupations in Mining, Quarrying, and Oil and Gas Extraction**

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Wellhead Pumpers	8,306	10,022	1,716	20.7	\$75,069	7.10
Roustabouts, Oil and Gas	15,792	17,224	1,432	9.1	\$46,106	5.13
General and Operations Managers	8,747	10,103	1,356	15.5	\$147,793	1.43
First-Line Supervisors of Construction Trades and Extraction Workers	10,587	11,844	1,257	11.9	\$82,396	1.25
Petroleum Engineers	5,433	6,549	1,116	20.5	\$137,283	6.52
Service Unit Operators, Oil and Gas	13,008	13,849	841	6.5	\$50,113	4.75
Accountants and Auditors	3,275	4,046	771	23.5	\$100,367	0.87
Heavy and Tractor-Trailer Truck Drivers	8,636	9,340	704	8.2	\$48,899	1.17
Derrick Operators, Oil and Gas	6,517	7,080	563	8.6	\$54,558	6.22

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Rotary Drill Operators, Oil and Gas	6,200	6,634	434	7.0	\$61,649	5.08

482 Source: Occupational Projections 2022 to 2032, NAICS 21. Occupational Employment and
483 Wage Statistics 2023.

484 Below are the educational and training requirements for high-wage, high-demand
485 occupations in this industry. Apprenticeship occupations are designated with a
486 superscripted letter "A". These occupations are approved for apprenticeship by the
487 United States Department of Labor Office of Apprenticeship.

488 **Table 17. Education, Training, and Experience Requirements for High-Wage,**
489 **High-Demand Occupations in Mining, Quarrying, and Oil and Gas Extraction**

Occupation Title	Education	Training	Experience	STEM
Wellhead Pumpers	High school diploma or equivalent	Moderate-term on-the-job training	Less than 5 years	No
Roustabouts, Oil and Gas	No formal educational credential	Moderate-term on-the-job training	None	No
General and Operations Managers ^A	Bachelor's degree	None	5 years or more	No
First-Line Supervisors of Construction Trades and Extraction Workers	High school diploma or equivalent	None	5 years or more	No
Petroleum Engineers	Bachelor's degree	None	None	Yes
Service Unit Operators, Oil and Gas	No formal educational credential	Moderate-term on-the-job training	None	No
Accountants and Auditors ^A	Bachelor's degree	None	None	No

Occupation Title	Education	Training	Experience	STEM
Heavy and Tractor-Trailer Truck Drivers ^A	Postsecondary nondegree award	Short-term on-the-job training	None	No
Derrick Operators, Oil and Gas	No formal educational credential	Short-term on-the-job training	None	No
Rotary Drill Operators, Oil and Gas ^A	No formal educational credential	Moderate-term on-the-job training	None	No

490 Source: Occupational Employment and Wage Statistics 2023, Texas Labor Analysis.

491 The table below lists top certifications within HWOL job advertisements for the 10
492 high-wage, high-demand occupations in this sector.

493 **Table 18. In-Demand Certifications for High-Wage, High-Demand Occupations**
494 **in Mining, Quarrying, and Oil and Gas Extraction**

Certification	August 2019	August 2024
Valid Driver's License	26.9%	28.5%
Commercial Driver's License (CDL)	22.1%	27.5%
Tanker And Hazmat Combo X Endorsement	2.5%	6.0%
Forklift Certification	0.2%	1.1%
Certified Public Accountant	2.8%	0.9%

495 Source: Lightcast™, 2024.

496

H. Utilities

497 Employment in the Utilities industry has continued to grow, recording an increase in
 498 employment for 15 consecutive quarters dating back to the third quarter of 2020. In
 499 the first quarter of 2024, the number of workers employed in the Utilities industry
 500 reached a series high of 98,362, adding 14,701 employees, or a 17.6 percent
 501 increase, since the first quarter of 2019.

502 When looking at not seasonally adjusted CES data the industry shows a 22.8 percent
 503 increase in Utilities jobs in the last five years ending August 2024, as employment sits
 504 at a series high of 64,200.

505 Annual median wages for detail occupations in the Utilities industry range from
 506 \$35,206 to \$227,383, with 89.2 percent of occupations paying a wage greater than
 507 the state annual median of \$45,972. Just over half of these occupations have a typical
 508 education of an associate’s degree or less.

509 The Utilities industry is projected to add 4,321 jobs from 2022 to 2032, increasing
 510 employment in the industry by 7.9 percent. As of 2022, 41.7 percent of detail
 511 occupations in the industry have a typical worker education level of bachelor’s degree,
 512 however these occupations employ only 26.8 percent of detail occupation workers in
 513 the industry; 38.1 percent of detail occupations have a typical education level of high
 514 school diploma or equivalent, but these occupations employ 63.2 percent of detail
 515 occupation workers in the industry.

516 Listed below is the occupation that pays above the state median wage and is
 517 projected to add at least 400 jobs from 2022 to 2032. Although only one occupation
 518 meets these criteria, this is not indicative of an industry in decline or lacking in
 519 growth, but rather a function of the criteria and low base employment in the industry.
 520 In 2022, fewer than 2,000 people were employed in 79 of 84 detail occupations, so an
 521 increase of at least 400 jobs would have required an extremely high growth rate for
 522 most of these occupations.

523 **Table 19. Employment Characteristics of High-Wage, High-Demand**
 524 **Occupation in Utilities**

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Electrical Power-Line Installers and Repairers	5,514	6,167	653	11.8	\$77,464	1.28

525 SOURCE: Occupational Projections 2022 to 2032, NAICS 22. Occupational Employment and
 526 Wage Statistics 2023.

527 Below are the educational and training requirements for the high-wage, high-demand
 528 occupation in this industry. Apprenticeshipable occupations are designated with a
 529 superscripted letter "A". These occupations are approved for apprenticeship by the
 530 United States Department of Labor Office of Apprenticeship.

531 **Table 20. Education, Training, and Experience Requirements for High-Wage,**
 532 **High-Demand Occupations in Mining, Quarrying, and Oil and Gas Extraction**

Occupation Title	Education	Training	Experience	STEM
Electrical Power-Line Installers and Repairers ^A	High school diploma or equivalent	Long-term on-the-job training	None	No

533 SOURCE: Occupational Employment and Wage Statistics 2023, Texas Labor Analysis.

534 The table below lists top certifications within HWOL job advertisements for the high-
 535 wage, high-demand occupation in this sector.

536 **Table 21. In-Demand Certifications for High-Wage, High-Demand Occupations**
 537 **in Utilities**

Certification	August 2019	August 2024
Valid Driver's License	24.2%	24.7%
Commercial Driver's License (CDL)	8.1%	20.6%
Journeyman Lineman	12.9%	15.5%
Certified First Responder (CFR)	0.0%	2.1%
Petroleum Engineering Certification	0.0%	1.0%

538 Source: Lightcast™ 2024.

539

540 **I. Wholesale Trade**

541 In the last five years, demand for Wholesale Trade industry workers in Texas rose,
542 according to the QCEW program.

543 Wholesale Trade experienced an employment decrease (0.3 percent) over the year in
544 the first quarter 2024, but the industry has shown modest growth of 7.8 percent over
545 the five-year period. In fact, the industry's U.S. private employment highest annual
546 average five-year growth was 7.5 percent in 2015. Average five-year growth based on
547 annual averages from 2013-2023 in Texas (8.7 percent) exceeds that of the U.S. (1.8
548 percent) by 6.9 percentage points.

549 While firms, establishments, and employment represent a slightly smaller portion of
550 Texas' diverse industry composition compared to five years ago, this is due to the
551 rapid growth in other industries taking a larger share. The industry share of
552 employment fell 0.1 percentage point to 4.7 percent contributing 650,308 positions of
553 13.8 million. Wages remain timely as Average weekly wage increased each of the last
554 five years, and increased 30.4 percent from 2019 to 2024 – relative to Dallas-Fort
555 Worth-Arlington or Houston-The Woodlands-Sugarland CPI increases which remained
556 below that threshold.

557 As of 2022, the 28 high-wage, high-demand occupations in the Wholesale Trade
558 industry employed 263,420 people. By 2032, these occupations are projected to add
559 another 47,094 jobs, accounting for 56.9 percent of the industry's projected growth.

560 Among high-wage, high-demand occupations, Industrial Machinery Mechanics,
561 Software Developers, Computer and Information Systems Managers, are STEM
562 occupations with significant demand, employing a collective total of more than 14,000
563 workers as of 2022. These occupations pay substantially more than the 2023 Texas
564 median average wage and are expected to grow by over 27.0 percent each by
565 2032. Of the industries with more than 20 high-wage, high-demand occupations,
566 Wholesale Trade ranked second in percentage terms with 82.1 percent (23 of 28
567 professions) having greater employment concentrations than the nation with Market
568 Research Analysts and Marketing Specialists reporting the lowest LQ at 0.69.

569

570 Listed below are occupations that pay above the state annual median wage and are
 571 projected to add at least 400 jobs from 2022 to 2032.

572 **Table 22. Employment Characteristics of High-Wage, High-Demand**
 573 **Occupations in Wholesale Trade**

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	61,276	71,238	9,962	16.3	\$61,071	0.85
General and Operations Managers	32,614	37,865	5,251	16.1	\$99,426	1.43
Heavy and Tractor-Trailer Truck Drivers	33,409	38,141	4,732	14.2	\$50,424	1.17
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	17,420	20,718	3,298	18.9	\$87,090	1.96
Mobile Heavy Equipment Mechanics, Except Engines	7,182	9,809	2,627	36.6	\$64,876	1.24
Sales Managers	14,848	17,369	2,521	17.0	\$139,339	1.54
Industrial Machinery Mechanics	6,479	8,557	2,078	32.1	\$59,072	1.34

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Software Developers	5,357	7,398	2,041	38.1	\$126,590	0.94
Medical Equipment Repairers	3,249	4,729	1,480	45.6	\$49,991	1.36
First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	9,195	10,608	1,413	15.4	\$57,327	1.05
Project Management Specialists	5,381	6,404	1,023	19.0	\$96,511	1.38
Market Research Analysts and Marketing Specialists	3,680	4,565	885	24.0	\$77,743	0.69
First-Line Supervisors of Non-Retail Sales Workers	5,131	5,976	845	16.5	\$78,240	1.04
Financial Managers	2,741	3,523	782	28.5	\$139,315	0.91

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	4,679	5,416	737	15.8	\$73,948	1.09
Computer and Information Systems Managers	2,561	3,268	707	27.6	\$165,668	1.18
First-Line Supervisors of Mechanics, Installers, and Repairers	4,589	5,278	689	15.0	\$79,327	1.27
Transportation, Storage, and Distribution Managers	3,728	4,391	663	17.8	\$89,627	1.48
Welders, Cutters, Solderers, and Brazers	4,426	5,072	646	14.6	\$46,698	1.40
Maintenance and Repair Workers, General	4,440	5,065	625	14.1	\$47,375	1.02
Computer User Support Specialists	4,145	4,751	606	14.6	\$58,396	1.18

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Bus and Truck Mechanics and Diesel Engine Specialists	4,406	5,005	599	13.6	\$60,035	1.12
First-Line Supervisors of Production and Operating Workers	3,731	4,315	584	15.7	\$58,262	1.00
Logisticians	1,859	2,388	529	28.5	\$71,466	1.05
Computer Occupations, All Other	2,655	3,138	483	18.2	\$98,949	1.52
First-Line Supervisors of Office and Administrative Support Workers	8,863	9,313	450	5.1	\$61,949	1.27
Business Operations Specialists, All Other	2,651	3,085	434	16.4	\$77,893	0.79
Human Resources Specialists	2,725	3,129	404	14.8	\$77,461	1.01

574 Source: Occupational Projections 2022 to 2032, NAICS 42. Occupational Employment and
575 Wage Statistics 2023.

576

577 Below are the educational and training requirements for high-growth occupations in
 578 this industry. Apprenticeable occupations are designated with a superscripted letter
 579 "A". These occupations are approved for apprenticeship by the United States
 580 Department of Labor Office of Apprenticeship.

581 **Table 23. Education, Training, and Experience Requirements for High-Wage,**
 582 **High-Demand Occupations in Wholesale Trade**

Occupation Title	Education	Training	Experience	STEM
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	High school diploma or equivalent	Moderate-term on-the-job training	None	No
General and Operations Managers ^A	Bachelor's degree	None	5 years or more	No
Heavy and Tractor-Trailer Truck Drivers ^A	Postsecondary nondegree award	Short-term on-the-job training	None	No
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products ^A	Bachelor's degree	Moderate-term on-the-job training	None	No
Mobile Heavy Equipment Mechanics, Except Engines ^A	High school diploma or equivalent	Long-term on-the-job training	None	No
Sales Managers	Bachelor's degree	None	Less than 5 years	No
Industrial Machinery Mechanics ^A	High school diploma or equivalent	Long-term on-the-job training	None	Yes
Software Developers ^A	Bachelor's degree	None	None	Yes
Medical Equipment Repairers ^A	Associate's degree	Moderate-term on-the-job training	None	No

Occupation Title	Education	Training	Experience	STEM
First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	High school diploma or equivalent	None	Less than 5 years	No
Project Management Specialists ^A	Bachelor's degree	None	None	No
Market Research Analysts and Marketing Specialists ^A	Bachelor's degree	None	None	No
First-Line Supervisors of Non-Retail Sales Workers	High school diploma or equivalent	None	Less than 5 years	No
Financial Managers ^A	Bachelor's degree	None	5 years or more	No
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	High school diploma or equivalent	Moderate-term on-the-job training	None	No
Computer and Information Systems Managers	Bachelor's degree	None	5 years or more	Yes
First-Line Supervisors of Mechanics, Installers, and Repairers ^A	High school diploma or equivalent	None	Less than 5 years	No
Transportation, Storage, and Distribution Managers ^A	High school diploma or equivalent	None	5 years or more	No
Welders, Cutters, Solderers, and Brazers ^A	High school diploma or equivalent	Moderate-term on-the-job training	None	No
Maintenance and Repair Workers, General ^A	High school diploma or equivalent	Moderate-term on-the-job training	None	No

Occupation Title	Education	Training	Experience	STEM
Computer User Support Specialists ^A	Some college, no degree	Moderate-term on-the-job training	None	No
Bus and Truck Mechanics and Diesel Engine Specialists ^A	High school diploma or equivalent	Long-term on-the-job training	None	No
First-Line Supervisors of Production and Operating Workers	High school diploma or equivalent	None	Less than 5 years	No
Logisticians ^A	Bachelor's degree	None	None	No
Computer Occupations, All Other ^A	Bachelor's degree	None	None	No
First-Line Supervisors of Office and Administrative Support Workers	High school diploma or equivalent	None	Less than 5 years	No
Business Operations Specialists, All Other	Bachelor's degree	None	None	No
Human Resources Specialists ^A	Bachelor's degree	None	None	No

583 Source: Occupational Employment and Wage Statistics 2023, Texas Labor Analysis.

584 The table below lists top certifications within HWOL job advertisements for the 28
585 high-wage, high-demand occupations in this sector.

586 **Table 24. In-Demand Certifications for High-Wage, High-Demand Occupations**
587 **in Wholesale Trade**

Certification	August 2019	August 2024
Valid Driver's License	37.9%	40.3%
Commercial Driver's License (CDL)	11.8%	11.0%
Master Of Business Administration (MBA)	3.6%	2.7%
Forklift Certification	4.0%	2.4%

Certification	August 2019	August 2024
Automotive Service Excellence (ASE) Certification	0.8%	1.9%

588 Source: Lightcast™, 2024.

589

590 **J. Retail Trade**

591 In the last five years, demand for Retail Trade workers in Texas has experienced slow
592 and steady growth, according to the QCEW program. From first quarter 2019 to first
593 quarter 2024, the number of establishments increased by 7.9 percent, a modest
594 increase when compared to 18.4 percent for Total, All Industries. Firms in Retail Trade
595 experienced more favorable growth during this period, 10.5 percent over the same
596 period when compared to 19.2 percent growth of all industries. Average Employment
597 data shows a slower growth in Retail Trade at 5.6 percent when compared to Total, All
598 Industries at 10.9 percent, nearly twice the rate for the same period. Average Weekly
599 data indicates more parity between growth in Retail and Total, All Industries over the
600 last five years. Average Weekly Wages grew 26.0 percent and 27.9 percent for Retail
601 Trade and Total, All Industries respectively.

602 Seasonally adjusted CES data tells a story of growth as well. Unlike the unadjusted
603 QCEW data set, the five-year employment growth ending in August 2024 for Retail
604 jobs was 6.9 percent, much closer to that of Total Nonfarm's 10.7 percent.
605 Additionally, Retail Trade jobs are outpacing national growth for this industry which
606 was only 0.8 percent. Recently, Retail Trade jobs hit a series high of 1,411,000 jobs in
607 December 2023 going back to 1990. Although not growing as aggressively as other
608 industries, Retail Trade is still going strong.

609 According to projections data, average annual employment in the Retail Trade sector
610 is expected to grow by 12.1 percent over the next 10 years, reaching 1,520,518 jobs,
611 a gain of 164,181 jobs.

612 Out of 163 unique occupations in the Retail Trade industry 39.3 percent offer wages
613 higher than the Texas annual median wage, a considerably lower percentage when
614 compared to 62.3 percent for all industries.

615 Among the occupations that offer wages above the median, 60.9 percent required an
616 associate's degree or higher. These include a lot of Management Occupations as well
617 as Business and Financial Occupations and Computer and Mathematical Occupations.
618 By comparison, 39.1 percent of these higher paying jobs do not require a college
619 degree.

620 Within the Retail industry there are only eight occupations that meet the high-wage,
621 high-demand criteria. Half of these occupations only require a high school diploma or
622 equivalent while the other four required a bachelor's degree or higher. In terms of
623 employment, those jobs that require a high school diploma or equivalent will grow by
624 2,846 positions by 2032 and represent 24.1 percent of the 11,796 high-wage, high-
625 demand jobs.

626

627 Listed below are occupations that pay above the state annual median wage and are
 628 projected to add at least 400 jobs from 2022 to 2032.

629 **Table 25. Employment Characteristics of High-Wage, High-Demand**
 630 **Occupations in Retail Trade**

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
General and Operations Managers	48,168	54,212	6,044	12.5	\$70,329	1.43
Pharmacists	13,131	14,619	1,488	11.3	\$131,582	0.84
Sales Managers	11,179	12,149	970	8.7	\$76,428	1.54
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	10,372	11,246	874	8.4	\$47,984	1.09
First-Line Supervisors of Office and Administrative Support Workers	11,566	12,371	805	7.0	\$57,351	1.27
First-Line Supervisors of Mechanics, Installers, and Repairers	5,462	6,192	730	13.4	\$58,998	1.27
Market Research Analysts and Marketing Specialists	2,422	2,870	448	18.5	\$57,481	0.69

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	3,703	4,140	437	11.8	\$59,238	0.85

631 Source: Occupational Projections 2022 to 2032, NAICS 44-45. Occupational Employment and
632 Wage Statistics 2023.

633 Below are the educational and training requirements for high-wage, high-demand
634 occupations in this industry. Apprenticeshipable occupations are designated with a
635 superscripted letter "A". These occupations are approved for apprenticeship by the
636 United States Department of Labor Office of Apprenticeship.

637 **Table 26. Education, Training, and Experience Requirements for High-Wage,**
638 **High-Demand Occupations in Retail Trade**

Occupation Title	Education	Training	Experience	STEM
General and Operations Managers ^A	Bachelor's degree	None	5 years or more	No
Pharmacists	Doctoral or professional degree	None	None	No
Sales Managers	Bachelor's degree	None	Less than 5 years	No
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	High school diploma or equivalent	Moderate-term on-the-job training	None	No
First-Line Supervisors of Office and Administrative Support Workers	High school diploma or equivalent	None	Less than 5 years	No

Occupation Title	Education	Training	Experience	STEM
First-Line Supervisors of Mechanics, Installers, and Repairers ^A	High school diploma or equivalent	None	Less than 5 years	No
Market Research Analysts and Marketing Specialists ^A	Bachelor's degree	None	None	No
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	High school diploma or equivalent	Moderate-term on-the-job training	None	No

639 Source: Occupational Employment and Wage Statistics 2023, Texas Labor Analysis.

640 The table below lists top certifications within HWOL job advertisements for the eight
641 high-wage, high-demand occupations in this sector.

642 **Table 27. In-Demand Certifications for High-Wage, High-Demand Occupations**
643 **in Retail Trade**

Skill or Qualification	August 2019	August 2024
Valid Driver's License	42.2%	26.4%
Registered Pharmacist (RPh)	13.0%	25.2%
Automotive Service Excellence (ASE) Certification	6.1%	12.6%
Immunization Certification	10.3%	10.7%
Food Safety Certification	1.5%	4.9%

644 **SOURCE:** Lightcast™, 2024.

645 **K. Finance and Insurance**

646 In the last five years, demand for Finance and Insurance industry workers in Texas
647 rose, according to QCEW data.

648 In the first quarter of 2024, employment in the Finance and Insurance industry was
649 644,968, up 18.9 percent from the same quarter in 2019, an increase of 102,531
650 workers. This industry represents approximately 4.7 percent of all employment,
651 increasing from 4.4 percent in 2019.

652 In addition to increased employment, the average weekly wage for this industry has
653 also increased from \$2,199 to \$2,860 from first quarter 2019 to 2024. In 2019, this
654 average weekly wage was 82.6 percent higher than the average weekly wage across
655 all industries, and in 2024, this has increased to 85.7 percent, or \$1,320. This
656 increase in both wages and employment shows clear growth and demand for this
657 industry.

658 In this industry, 93.9 percent of occupations are projected to experience positive
659 growth from 2022 to 2032, with over half expected to grow by more than 20 percent.
660 Additionally, 76.5 percent of occupations offer wages above the Texas median of
661 \$45,972. Comparatively, according to long-term projections data, all the occupations
662 across all industries in Texas have a projected percent change of 14.7 percent from
663 2022 to 2032.

664 By 2032, high-wage, high-demand occupations in the Finance and Insurance industry
665 are projected to add 54,224 jobs, contributing 57.0 percent of the industry's total
666 growth. While roughly half of all jobs in this industry require a bachelor's degree or
667 higher, 86.7 percent of the 30 high-wage, high-demand occupations specifically
668 require this level of education.

669 Out of all occupations in this industry, 9.8 percent are considered STEM, 52.4 percent
670 are apprenticeable and 34.1 percent are considered middle skill occupations.

671

672 Listed below are occupations that pay above the state annual median wage and are
 673 projected to add at least 400 jobs from 2022 to 2032.

674 **Table 28. Employment Characteristics of High-Wage, High-Demand**
 675 **Occupations in Finance and Insurance**

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
General and Operations Managers	41,727	51,290	9,563	22.9	\$116,322	1.43
Personal Financial Advisors	19,647	26,476	6,829	34.8	\$81,658	0.77
Financial Managers	15,423	20,971	5,548	36.0	\$143,322	0.91
Software Developers	13,767	19,226	5,459	39.7	\$133,488	0.94
Financial and Investment Analysts	9,307	11,825	2,518	27.1	\$90,436	0.86
Computer and Information Systems Managers	6,064	7,989	1,925	31.7	\$163,464	1.18
Accountants and Auditors	6,559	8,113	1,554	23.7	\$78,868	0.87
Management Analysts	7,403	8,831	1,428	19.3	\$81,330	0.68
Managers, All Other	6,359	7,715	1,356	21.3	\$139,790	0.87

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
First-Line Supervisors of Office and Administrative Support Workers	20,882	22,234	1,352	6.5	\$65,316	1.27
Financial Examiners	3,098	4,389	1,291	41.7	\$62,303	0.76
Market Research Analysts and Marketing Specialists	4,150	5,436	1,286	31.0	\$64,256	0.69
Information Security Analysts	3,007	4,282	1,275	42.4	\$123,269	0.95
Bookkeeping, Accounting, and Auditing Clerks	12,870	14,131	1,261	9.8	\$49,671	1.05
Sales Managers	5,758	6,984	1,226	21.3	\$129,155	1.54
Compliance Officers	4,673	5,673	1,000	21.4	\$70,079	1.13
Business Operations Specialists, All Other	4,587	5,579	992	21.6	\$78,003	0.79
Computer Systems Analysts	4,493	5,476	983	21.9	\$111,135	1.14

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Software Quality Assurance Analysts and Testers	2,698	3,629	931	34.5	\$103,412	1.22
Financial Specialists, All Other	3,382	4,080	698	20.6	\$64,059	1.18
Insurance Underwriters	8,892	9,581	689	7.7	\$75,799	1.04
Training and Development Specialists	3,163	3,815	652	20.6	\$65,785	1.18
Human Resources Specialists	3,121	3,747	626	20.1	\$80,163	1.01
First-Line Supervisors of Non-Retail Sales Workers	3,049	3,673	624	20.5	\$83,867	1.04
Computer User Support Specialists	3,898	4,520	622	16.0	\$59,265	1.18
Project Management Specialists	2,762	3,332	570	20.6	\$102,893	1.38
Marketing Managers	2,460	3,015	555	22.6	\$135,082	1.12
Computer Occupations, All Other	2,232	2,737	505	22.6	\$103,563	1.52

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Lawyers	1,754	2,220	466	26.6	\$165,438	0.70
Compensation, Benefits, and Job Analysis Specialists	1,790	2,230	440	24.6	\$82,881	1.00

676 **SOURCE:** Occupational Projections 2022-2032, NAICS 52. Occupational Employment and
677 Wage Statistics 2023.

678 Below are the educational and training requirements for high-wage, high-demand
679 occupations in this industry. Apprenticeship occupations are designated with a
680 superscripted letter "A". These occupations are approved for apprenticeship by the
681 United States Department of Labor Office of Apprenticeship.

682 **Table 29. Education, Training, and Experience Requirements for High-Wage,**
683 **High-Demand Occupations in Finance and Insurance**

Occupation Title	Education	Training	Experience	STEM
General and Operations Managers ^A	Bachelor's degree	None	5 years or more	No
Personal Financial Advisors	Bachelor's degree	Long-term on-the-job training	None	No
Financial Managers ^A	Bachelor's degree	None	5 years or more	No
Software Developers ^A	Bachelor's degree	None	None	Yes
Financial and Investment Analysts	Bachelor's degree	None	None	No
Computer and Information Systems Managers	Bachelor's degree	None	5 years or more	Yes
Accountants and Auditors ^A	Bachelor's degree	None	None	No

Occupation Title	Education	Training	Experience	STEM
Management Analysts ^A	Bachelor's degree	None	Less than 5 years	No
Managers, All Other ^A	Bachelor's degree	None	Less than 5 years	No
First-Line Supervisors of Office and Administrative Support Workers	High school diploma or equivalent	None	Less than 5 years	No
Financial Examiners	Bachelor's degree	Long-term on-the-job training	None	No
Market Research Analysts and Marketing Specialists ^A	Bachelor's degree	None	None	No
Information Security Analysts ^A	Bachelor's degree	None	Less than 5 years	Yes
Bookkeeping, Accounting, and Auditing Clerks ^A	Some college, no degree	Moderate-term on-the-job training	None	No
Sales Managers	Bachelor's degree	None	Less than 5 years	No
Compliance Officers ^A	Bachelor's degree	Moderate-term on-the-job training	None	No
Business Operations Specialists, All Other	Bachelor's degree	None	None	No
Computer Systems Analysts ^A	Bachelor's degree	None	None	Yes
Software Quality Assurance Analysts and Testers	Bachelor's degree	None	None	Yes
Financial Specialists, All Other ^A	Bachelor's degree	None	None	No

Occupation Title	Education	Training	Experience	STEM
Insurance Underwriters	Bachelor's degree	Moderate-term on-the-job training	None	No
Training and Development Specialists ^A	Bachelor's degree	None	Less than 5 years	No
Human Resources Specialists ^A	Bachelor's degree	None	None	No
First-Line Supervisors of Non-Retail Sales Workers	High school diploma or equivalent	None	Less than 5 years	No
Computer User Support Specialists ^A	Some college, no degree	Moderate-term on-the-job training	None	No
Project Management Specialists ^A	Bachelor's degree	None	None	No
Marketing Managers	Bachelor's degree	None	5 years or more	No
Computer Occupations, All Other ^A	Bachelor's degree	None	None	No
Lawyers	Doctoral or professional degree	None	None	No
Compensation, Benefits, and Job Analysis Specialists	Bachelor's degree	None	Less than 5 years	No

684 **SOURCE:** Occupational Employment and Wage Statistics 2023, Texas Labor Analysis.

685

686 The table below lists top certifications within HWOL job advertisements for the 30
687 high-wage, high-demand occupations in this sector.

688 **Table 30. In-Demand Certifications for High-Wage, High-Demand Occupations**
689 **in Finance and Insurance**

Certification	August 2019	August 2024
FINRA Series 7 (General Securities Representative)	6.3%	7.9%
Master Of Business Administration (MBA)	10.2%	6.8%
Valid Driver's License	4.3%	5.2%
Certified Public Accountant	4.9%	5.1%
FINRA Series 66 (Uniform Combined State Law)	2.9%	4.8%

690 **SOURCE:** Lightcast™, 2024.

691 **L. Professional, Scientific, and Technical** 692 **Services**

693 According to QCEW data, the Professional, Scientific, and Technical Services industry
694 recorded an average employment of 1,041,376 jobs in the first quarter of 2024,
695 making it the fifth largest industry in Texas. The industry accounted for 7.6 percent of
696 total Texas employment.

697 The Professional, Scientific, and Technical Services industry had the largest number of
698 establishments and firms compared to all other industries with 131,413
699 establishments and 116,933 firms. Computer Systems Design and Related Services
700 was this industry's largest subgroup, accounting for 27.1 percent of jobs in this
701 industry and was also the group with the highest average weekly wage.

702 In August 2024, employment in Professional, Scientific, and Technical Services hit a
703 series high at 1,055,200 jobs based on data from the CES program. This reflected a
704 1.5 percent increase from August 2023, while the number of Texas total nonfarm jobs
705 increased by 2.2 percent over the same period. Despite the industry's comparatively
706 slower over the year growth, the industry grew by 27.0 percent over five years
707 starting August 2019, much faster than the 10.7 percent increase for total nonfarm
708 jobs.

709 Looking at the most recently available CES annual averages, the industry experienced
710 a 4.3 percent annual job increase in 2023. This followed the industry's largest annual
711 increase in series history, going back to 1990, with 98,400 jobs added and a growth
712 rate of 11.0 percent. 2023 also marked the thirteenth consecutive year of series high
713 industry employment.

714 According to long-term projections data, Texas employment for total occupations
715 across industries is expected to increase by 14.7 percent from 2022 to 2032. The
716 growth for the Professional, Scientific, and Technical Services industry is expected to
717 be over twice this rate with a projected employment increase of 32.2 percent, adding
718 288,294 jobs. From this industry, the sub-group that is projected to grow the fastest
719 is Computer systems design and related services with a growth rate of 51.3 percent.

720 In the Professional, Scientific, and Technical Services industry, 76.2 percent of
721 occupations pay wages above the Texas median annual salary of \$45,972, surpassing
722 the 62.3 percent seen across all industries. Of these high-wage occupations, 78 are
723 projected to grow by 400 or more jobs by 2032, collectively adding 223,906 jobs,
724 accounting for nearly 78.0 percent of the industry's total projected growth. Among
725 these high-wage, high-demand occupations, 76.9 percent require a bachelor's degree
726 or higher.

727

728 Listed below are occupations that pay above the state annual median wage and are
 729 projected to add at least 400 jobs from 2022 to 2032.

730 **Table 31. Employment Characteristics of High-Wage, High-Demand**
 731 **Occupations in Professional, Scientific, and Technical Services**

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Software Developers	45,657	75,319	29,662	65.0	\$109,536	0.94
General and Operations Managers	48,865	65,777	16,912	34.6	\$125,863	1.43
Computer User Support Specialists	20,701	30,726	10,025	48.4	\$49,134	1.18
Project Management Specialists	25,456	34,991	9,535	37.5	\$99,030	1.38
Computer Occupations, All Other	22,553	31,979	9,426	41.8	\$98,820	1.52
Computer Systems Analysts	19,170	28,449	9,279	48.4	\$111,929	1.14
Accountants and Auditors	36,129	45,292	9,163	25.4	\$78,189	0.87
Computer and Information Systems Managers	16,973	25,776	8,803	51.9	\$165,771	1.18

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	19,953	27,817	7,864	39.4	\$75,569	1.09
Market Research Analysts and Marketing Specialists	14,048	20,624	6,576	46.8	\$60,801	0.69
Human Resources Specialists	11,729	17,327	5,598	47.7	\$65,961	1.01
Sales Managers	11,655	16,173	4,518	38.8	\$132,454	1.54
Business Operations Specialists, All Other	11,118	15,319	4,201	37.8	\$75,976	0.79
Paralegals and Legal Assistants	19,901	24,009	4,108	20.6	\$51,004	0.89
Software Quality Assurance Analysts and Testers	7,271	11,364	4,093	56.3	\$98,569	1.22
Network and Computer Systems Administrators	9,048	12,650	3,602	39.8	\$90,812	1.17
Management Analysts	9,870	13,397	3,527	35.7	\$97,687	0.68

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Marketing Managers	8,915	12,427	3,512	39.4	\$133,328	1.12
Financial Managers	7,537	10,874	3,337	44.3	\$167,963	0.91
Information Security Analysts	4,523	7,644	3,121	69.0	\$107,637	0.95
Data Scientists	4,944	8,007	3,063	62.0	\$97,490	1.20
Bookkeeping, Accounting, and Auditing Clerks	18,299	21,155	2,856	15.6	\$47,227	1.05
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	6,281	9,026	2,745	43.7	\$76,939	1.96
Civil Engineers	14,847	17,543	2,696	18.2	\$94,755	1.01
First-Line Supervisors of Office and Administrative Support Workers	15,727	18,384	2,657	16.9	\$70,862	1.27
Tax Preparers	9,476	11,701	2,225	23.5	\$47,801	1.25
Operations Research Analysts	3,409	5,609	2,200	64.5	\$102,966	1.11
Veterinarians	4,897	6,781	1,884	38.5	\$125,356	0.81

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Training and Development Specialists	4,096	5,884	1,788	43.7	\$76,496	1.18
Managers, All Other	4,585	6,245	1,660	36.2	\$137,125	0.87
Sales Engineers	3,685	5,242	1,557	42.3	\$139,245	1.53
Architectural and Engineering Managers	7,213	8,769	1,556	21.6	\$155,194	1.00
Electrical Engineers	5,211	6,758	1,547	29.7	\$91,973	0.88
Architectural and Civil Drafters	10,809	12,295	1,486	13.7	\$57,255	1.46
Computer Network Architects	3,798	5,260	1,462	38.5	\$140,427	0.94
Database Architects	3,120	4,505	1,385	44.4	\$158,505	1.10
Inspectors, Testers, Sorters, Samplers, and Weighers	8,090	9,453	1,363	16.8	\$47,191	1.00
Surveying and Mapping Technicians	6,270	7,589	1,319	21.0	\$46,667	1.53
Computer Network Support Specialists	2,775	4,089	1,314	47.4	\$52,512	0.91
Mechanical Engineers	5,361	6,670	1,309	24.4	\$106,010	0.78

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Architects, Except Landscape and Naval	6,150	7,430	1,280	20.8	\$80,813	0.82
Engineering Technologists and Technicians, Except Drafters, All Other	4,756	6,011	1,255	26.4	\$51,993	1.54
Occupational Health and Safety Specialists	2,264	3,433	1,169	51.6	\$66,746	1.53
Logisticians	2,003	3,159	1,156	57.7	\$71,990	1.05
Financial and Investment Analysts	3,117	4,271	1,154	37.0	\$97,275	0.86
Civil Engineering Technologists and Technicians	5,936	7,029	1,093	18.4	\$61,598	1.26
Web Developers	2,093	3,174	1,081	51.6	\$93,184	0.80
Industrial Engineers	3,696	4,772	1,076	29.1	\$100,723	0.82
Graphic Designers	4,075	5,123	1,048	25.7	\$59,918	0.72
Public Relations Specialists	3,361	4,344	983	29.2	\$73,637	1.07
Web and Digital Interface Designers	1,951	2,928	977	50.1	\$145,600	0.85

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Administrative Services Managers	3,487	4,442	955	27.4	\$111,718	1.02
Human Resources Managers	2,591	3,546	955	36.9	\$148,874	1.00
Computer and Information Research Scientists	1,553	2,505	952	61.3	\$142,252	0.50
Construction and Building Inspectors	5,746	6,644	898	15.6	\$64,987	1.39
Real Estate Sales Agents	2,050	2,915	865	42.2	\$88,380	1.35
Medical and Health Services Managers	1,175	1,934	759	64.6	\$144,688	1.11
Aerospace Engineers	1,968	2,725	757	38.5	\$120,126	1.05
Natural Sciences Managers	2,104	2,800	696	33.1	\$104,618	0.78
Surveyors	3,812	4,500	688	18.0	\$57,706	1.20
Construction Managers	2,455	3,105	650	26.5	\$109,814	1.56
Database Administrators	1,512	2,143	631	41.7	\$124,713	1.02
Engineers, All Other	2,187	2,791	604	27.6	\$105,672	0.61

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Computer Programmers	3,890	4,475	585	15.0	\$105,166	0.70
Environmental Scientists and Specialists, Including Health	1,764	2,349	585	33.2	\$79,139	0.49
Interior Designers	2,884	3,435	551	19.1	\$63,771	0.80
Geoscientists, Except Hydrologists and Geographers	2,178	2,713	535	24.6	\$91,493	1.83
Compliance Officers	1,718	2,250	532	31.0	\$65,826	1.13
Art Directors	2,084	2,613	529	25.4	\$79,997	0.68
Environmental Science and Protection Technicians, Including Health	1,478	1,973	495	33.5	\$46,660	1.02
First-Line Supervisors of Non-Retail Sales Workers	1,312	1,774	462	35.2	\$76,075	1.04
Production, Planning, and Expediting Clerks	1,405	1,866	461	32.8	\$54,640	0.87
Electronics Engineers, Except Computer	1,329	1,783	454	34.2	\$97,934	1.03
Loan Officers	1,640	2,080	440	26.8	\$61,135	0.99

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Electricians	1,991	2,421	430	21.6	\$67,075	1.11
Computer Hardware Engineers	1,411	1,823	412	29.2	\$108,935	0.49
Petroleum Engineers	2,076	2,486	410	19.7	\$170,242	6.52
Technical Writers	1,047	1,456	409	39.1	\$78,499	0.82

732 SOURCE: Occupational Projections 2022 to 2032, NAICS 54. Occupational Employment and
733 Wage Statistics 2023.

734 Below are the educational and training requirements for high-wage, high-demand
735 occupations in this industry. Apprenticeable occupations are designated with a
736 superscripted letter "A". These occupations are approved for apprenticeship by the
737 United States Department of Labor Office of Apprenticeship.

738 **Table 32. Education, Training, and Experience Requirements for High-Wage,**
739 **High-Demand Occupations in Professional, Scientific, and Technical Services**

Occupation Title	Education	Training	Experience	STEM
Software Developers ^A	Bachelor's degree	None	None	Yes
General and Operations Managers ^A	Bachelor's degree	None	5 years or more	No
Computer User Support Specialists ^A	Some college, no degree	Moderate-term on-the-job training	None	No
Project Management Specialists ^A	Bachelor's degree	None	None	No
Computer Occupations, All Other ^A	Bachelor's degree	None	None	No

Occupation Title	Education	Training	Experience	STEM
Computer Systems Analysts ^A	Bachelor's degree	None	None	Yes
Accountants and Auditors ^A	Bachelor's degree	None	None	No
Computer and Information Systems Managers	Bachelor's degree	None	5 years or more	Yes
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	High school diploma or equivalent	Moderate-term on-the-job training	None	No
Market Research Analysts and Marketing Specialists ^A	Bachelor's degree	None	None	No
Human Resources Specialists ^A	Bachelor's degree	None	None	No
Sales Managers	Bachelor's degree	None	Less than 5 years	No
Business Operations Specialists, All Other	Bachelor's degree	None	None	No
Paralegals and Legal Assistants ^A	Associate's degree	None	None	No
Software Quality Assurance Analysts and Testers	Bachelor's degree	None	None	Yes
Network and Computer Systems Administrators ^A	Bachelor's degree	None	None	Yes
Management Analysts ^A	Bachelor's degree	None	Less than 5 years	No

Occupation Title	Education	Training	Experience	STEM
Marketing Managers	Bachelor's degree	None	5 years or more	No
Financial Managers ^A	Bachelor's degree	None	5 years or more	No
Information Security Analysts ^A	Bachelor's degree	None	Less than 5 years	Yes
Data Scientists ^A	Bachelor's degree	None	None	Yes
Bookkeeping, Accounting, and Auditing Clerks ^A	Some college, no degree	Moderate-term on-the-job training	None	No
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products ^A	Bachelor's degree	Moderate-term on-the-job training	None	No
Civil Engineers	Bachelor's degree	None	None	Yes
First-Line Supervisors of Office and Administrative Support Workers	High school diploma or equivalent	None	Less than 5 years	No
Tax Preparers ^A	High school diploma or equivalent	Moderate-term on-the-job training	None	No
Operations Research Analysts	Bachelor's degree	None	None	Yes
Veterinarians	Doctoral or professional degree	None	None	Yes

Occupation Title	Education	Training	Experience	STEM
Training and Development Specialists ^A	Bachelor's degree	None	Less than 5 years	No
Managers, All Other ^A	Bachelor's degree	None	Less than 5 years	No
Sales Engineers	Bachelor's degree	Moderate-term on-the-job training	None	No
Architectural and Engineering Managers	Bachelor's degree	None	5 years or more	Yes
Electrical Engineers	Bachelor's degree	None	None	Yes
Architectural and Civil Drafters ^A	Associate's degree	None	None	Yes
Computer Network Architects ^A	Bachelor's degree	None	5 years or more	Yes
Database Architects	Bachelor's degree	None	Less than 5 years	Yes
Inspectors, Testers, Sorters, Samplers, and Weighers ^A	High school diploma or equivalent	Moderate-term on-the-job training	None	No
Surveying and Mapping Technicians ^A	High school diploma or equivalent	Moderate-term on-the-job training	None	No
Computer Network Support Specialists ^A	Associate's degree	Moderate-term on-the-job training	None	No
Mechanical Engineers ^A	Bachelor's degree	None	None	Yes
Architects, Except Landscape and Naval	Bachelor's degree	Internship/residency	None	Yes

Occupation Title	Education	Training	Experience	STEM
Engineering Technologists and Technicians, Except Drafters, All Other ^A	Associate's degree	None	None	Yes
Occupational Health and Safety Specialists ^A	Bachelor's degree	None	None	No
Logisticians ^A	Bachelor's degree	None	None	No
Financial and Investment Analysts	Bachelor's degree	None	None	No
Civil Engineering Technologists and Technicians	Associate's degree	None	None	Yes
Web Developers	Bachelor's degree	None	None	Yes
Industrial Engineers ^A	Bachelor's degree	None	None	Yes
Graphic Designers ^A	Bachelor's degree	None	None	No
Public Relations Specialists ^A	Bachelor's degree	None	None	No
Web and Digital Interface Designers ^A	Bachelor's degree	None	None	Yes
Administrative Services Managers	Bachelor's degree	None	Less than 5 years	No
Human Resources Managers	Bachelor's degree	None	5 years or more	No
Computer and Information Research Scientists	Master's degree	None	None	Yes

Occupation Title	Education	Training	Experience	STEM
Construction and Building Inspectors ^A	High school diploma or equivalent	Moderate-term on-the-job training	5 years or more	No
Real Estate Sales Agents ^A	High school diploma or equivalent	Moderate-term on-the-job training	None	No
Medical and Health Services Managers ^A	Bachelor's degree	None	Less than 5 years	Yes
Aerospace Engineers ^A	Bachelor's degree	None	None	Yes
Natural Sciences Managers	Bachelor's degree	None	5 years or more	No
Surveyors	Bachelor's degree	Internship/residency	None	No
Construction Managers	Bachelor's degree	Moderate-term on-the-job training	None	No
Database Administrators ^A	Bachelor's degree	None	None	Yes
Engineers, All Other	Bachelor's degree	None	None	Yes
Computer Programmers ^A	Bachelor's degree	None	None	Yes
Environmental Scientists and Specialists, Including Health ^A	Bachelor's degree	None	None	Yes
Interior Designers ^A	Bachelor's degree	None	None	No
Geoscientists, Except Hydrologists and Geographers	Bachelor's degree	None	None	Yes

Occupation Title	Education	Training	Experience	STEM
Compliance Officers ^A	Bachelor's degree	Moderate-term on-the-job training	None	No
Art Directors	Bachelor's degree	None	5 years or more	No
Environmental Science and Protection Technicians, Including Health ^A	Associate's degree	None	None	No
First-Line Supervisors of Non-Retail Sales Workers	High school diploma or equivalent	None	Less than 5 years	No
Production, Planning, and Expediting Clerks ^A	High school diploma or equivalent	Moderate-term on-the-job training	None	No
Electronics Engineers, Except Computer	Bachelor's degree	None	None	Yes
Loan Officers	Bachelor's degree	Moderate-term on-the-job training	Less than 5 years	No
Electricians ^A	High school diploma or equivalent	Apprenticeship	None	No
Computer Hardware Engineers ^A	Bachelor's degree	None	None	Yes
Petroleum Engineers	Bachelor's degree	None	None	Yes
Technical Writers ^A	Bachelor's degree	Short-term on-the-job training	Less than 5 years	No

740 SOURCE: Occupational Employment and Wage Statistics 2023, Texas Labor Analysis.

741

742 The table below lists top certifications within HWOL job advertisements for the 78
743 high-wage, high-demand occupations in this sector.

744 **Table 33. In-Demand Certifications for High-Wage, High-Demand Occupations**
745 **in Professional, Scientific, and Technical Services**

Certification	August 2019	August 2024
Valid Driver's License	8.0%	12.3%
Professional Engineer (PE) License	3.1%	7.3%
Project Management Professional Certification	4.0%	4.3%
Master Of Business Administration (MBA)	5.0%	3.8%
Security Clearance	7.3%	3.6%

746 **SOURCE:** Lightcast™, 2024.

747

748 **M. Accommodation and Food Services**

749 In the last five years, demand for Accommodation and Food Services workers in Texas
750 has grown, according to QCEW data. In the first quarter of 2024, employment in the
751 Accommodation and Food Services industry was just over 1.315 million, up 8.0
752 percent from the same quarter in 2019 when almost 1.218 million workers were
753 employed.

754 Employment growth in Accommodation and Food Services in Texas has slowed over
755 the past year but remains positive. In the seasonally adjusted CES data,
756 Accommodation and Food Services employment reached a level of over 1.36 million
757 jobs in August 2024. This marked a gain of 37,100 positions over the year for an
758 annual growth rate of 2.8 percent. Over the five-year period dating to August 2019,
759 the industry added 111,700 jobs for a growth rate of 8.9 percent over that period, or
760 a compound annualized growth rate of 1.7 percent.

761 All 71 occupations in the industry have positive projected growth from 2022 to 2032,
762 and 57.7 percent of the occupations have a projected percent change of over 20.0
763 percent over that time period. Comparatively, all occupations across all industries in
764 Texas collectively are projected to grow by 14.7 percent from 2022 to 2032.

765 There are five occupations within the Accommodation and Food Services industry that
766 meet the high-wage, high-demand criteria. These professions are expected to add a
767 total of 7,121 jobs over the next ten years with 5,540 of these jobs being Chefs and
768 Head Cooks or Food Service Managers.

769 Among all the occupations adding jobs in this industry, 78.9 percent have a typical
770 education level not greater than an associate's degree. These equated to a majority of
771 the positions being filled in 2032 at 98.6 percent. Out of the five high-wage, high-
772 demand occupations, all require at least a high school diploma or equivalent, with
773 additional on the job training and/or prior experience required to meet the varying
774 needs of employers.

775 As is common in many occupations, Driver's License is the most requested
776 certification in this industry. Table 36 lists the top five certifications or licenses desired
777 in the Accommodation and Food Services industry as of August 2024 by the ratio of
778 times mentioned to the total number of job ads, compared with the same ratio in
779 August 2019 job ads.

780

781 Listed below are occupations that pay above the state annual median wage and are
 782 projected to add at least 400 jobs from 2022 to 2032. Location quotients for some
 783 occupations have a value of NA because the Texas 2023 OEWS estimate is not
 784 available for calculation.

785 **Table 34. Employment Characteristics of High-Wage, High-Demand**
 786 **Occupations in Accommodation and Food Services**

Occupation Title	Annual Average Employment 2022	Annual Average Employment 2032	Number Change 2022-2032	Percent Change 2022-2032	2023 OEWS Annual Median Wage	LQ
Food Service Managers	12,952	15,943	2,991	23.1	\$61,128	NA
Chefs and Head Cooks	11,421	13,970	2,549	22.3	\$47,964	0.89
Lodging Managers	2,900	3,544	644	22.2	\$56,542	1.00
Meeting, Convention, and Event Planners	2,263	2,765	502	22.2	\$46,194	0.95
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	2,117	2,552	435	20.5	\$49,695	1.09

787 Source: Occupational Projections 2022 to 2032, NAICS 72. Occupational Employment and
 788 Wage Statistics 2023.

789 Below are the educational and training requirements for high-wage, high-demand
 790 occupations in this industry. Apprenticeable occupations are designated with a
 791 superscripted letter "A". These occupations are approved for apprenticeship by the
 792 United States Department of Labor Office of Apprenticeship.

793

794 **Table 35. Education, Training, and Experience Requirements for High-Wage,**
 795 **High-Demand Occupations in Accommodation and Food Services**

Occupation Title	Education	Training	Experience	STEM
Food Service Managers ^A	High school diploma or equivalent	Short-term on-the-job training	Less than 5 years	No
Chefs and Head Cooks ^A	High school diploma or equivalent	None	5 years or more	No
Lodging Managers ^A	High school diploma or equivalent	None	Less than 5 years	No
Meeting, Convention, and Event Planners	Bachelor's degree	None	None	No
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	High school diploma or equivalent	Moderate-term on-the-job training	None	No

796 Source: Occupational Employment and Wage Statistics 2023, Texas Labor Analysis.

797 The table below lists top certifications within HWOL job advertisements for the five
 798 high-wage, high-demand occupations in this sector.

799 **Table 36. In-Demand Certifications for High-Wage, High-Demand Occupations**
 800 **in Accommodation and Food Services**

Certification	August 2019	August 2024
Valid Driver's License	46.0%	38.1%
ServSafe Certification	30.6%	30.3%
Functional Skills Qualification	0.4%	6.8%
Food Handler's Card	12.3%	6.3%
Food Safety Certification	1.6%	4.8%

801 Source: Lightcast™ 2024.

III. Conclusion

802

803 TWC reviewed the top growth occupations across the key industries for this report as
804 required by statute. The state has experienced substantial growth in employment in
805 recent years. According to the Bureau of Labor Statistics, total non-farm employment
806 has increased by 681,500 jobs (from 13.6 to 14.3 million) between August 2022 to
807 August 2024, an increase of 5.0 percent (seasonally adjusted). There were 676,000
808 jobs openings in Texas in August 2024, compared with 464,000 Texans hired in the
809 same month, according to the Bureau of Labor Statistics. Clearly, there are many
810 available jobs for those Texans seeking employment, so much so that filling open
811 positions remains a challenge for many Texas employers.

812 Because of this employment growth, job seekers continue to flock to Texas. Texas is
813 expected to have one of the fastest growing labor forces in the nation at 14.7 percent
814 by 2032 according to estimates determined by the Projections Management
815 Partnership. This increase will far outperform the overall expected increase for the
816 nation of 3.7 percent and is only exceeded by Utah.

817 But those seeking employment, whether long-time or new Texans, may not always
818 have the right skills for available openings. As this report demonstrates, the number
819 of high-demand occupations with wages above the state median varies significantly by
820 industry sector.

821 To assist the market, TWC tracks approximately 800 different occupations and
822 employment is projected to increase in nearly all those occupations based on the 2022
823 to 2032 projections. TWC's projections spreadsheet, and this report, mentions the
824 typical education, training and experience levels required in these occupations.
825 Economic changes can impact employment in all industries in Texas. Demand across
826 occupations varies depending on the need of employers in different industries and in
827 different locations.

828 Hiring managers are looking for more workers while also demanding workers with
829 more technical skills, more work experience, and more education than in the past.
830 Such trends lead to rising demand for two kinds of workers in the high-wage, high-
831 demand fields: a) Jobs requiring a bachelor's degree and specific technical skill
832 training. b) Jobs requiring some form of post-secondary education, specific technical
833 skill training, and additional on-the-job training. Like the job market, these trends
834 show no signs of slowing down in Texas.

835 By examining the market trends published in this report and other TWC data products,
836 workforce professionals, job seekers, and educators can continue to improve the
837 alignment between worker training and the needs of the rapidly-growing Texas
838 market.

IV. Methodology

839

840 The Texas Workforce Commission collects data and makes projections on employment
841 by industry as part of its contracts with the U.S. Bureau of Labor Statistics (BLS) and
842 the Employment and Training Division of the U.S. Department of Labor (DOL). In
843 accordance with the statistical methodology established by the DOL and the federal
844 Office of Management and Budget, the TWC calculated employment data for
845 approximately 800 occupations to analyze pay ranges and growth trends for these
846 different occupations.

847 TWC measures many aspects of the Texas labor market. The number of workers
848 employed, and wages paid by industry are tracked through the Quarterly Census of
849 Employment and Wages (QCEW). This program utilizes data from TWC's
850 Unemployment Insurance program and is updated every three months. Wage
851 information for specific occupations is gathered from surveys sent to sampled
852 employers in the Occupational Employment and Wage Statistics (OEWS) program,
853 which updates annually.

854 Employers supply the data for both of these programs, and TWC analyzed the
855 employment and wage data from both the QCEW and OEWS programs. This data is
856 further supplemented by monthly employment data from the Current Employment
857 Statistics (CES) program surveys of employers in Texas. All of these programs serve
858 to validate each other in identifying staffing trends with employers.

859 TWC then examines the number of workers by industry as the basis for producing
860 industry employment projections. TWC produces these industry employment
861 projections and corresponding occupational employment projections to help job
862 seekers, students, parents, policy makers, and company hiring managers better
863 understand their regional labor market. Occupational employment growth is based on
864 industry growth and other variables, which include population growth and changing
865 skill requirements by employers.

866 The current long-term projections were completed in July 2024 for the period of 2022
867 to 2032. This report also includes industry employment level comparisons from QCEW
868 data over the most recent five years to provide context.

869 This report focuses on occupations with high demand or significant job growth and
870 high pay rates as required by statute. While not all occupations are specific to a single
871 industry, the occupational listings in this report are generated within each industry by
872 use of TWC's staffing patterns.

873 The location quotient (LQ) is a comparison ratio of employment for that occupation in
874 Texas to the United States. A LQ higher than one means an occupation is more
875 concentrated in Texas than in the nation, while a LQ less than one means an
876 occupation is less concentrated in Texas than in the nation. LQ data is obtained from
877 the Bureau of Labor Statistics' Occupational Employment and Wage Statistics 2023
878 data.

879 For determination of industry certifications, TWC used data from Lightcast for August
880 2019 and August 2024. The job listings data captured by Lightcast is from online ads
881 from a broad and comprehensive set of job boards.

882 For topics regarding occupational education, training, and experience requirements,
883 TWC considered the 2022 educational attainment identified by the Bureau of Labor
884 Statistics.

885 For identifying occupations heavily involved with science, technology, engineering, and
886 math (STEM), TWC used Labor Market and Career Information's web application,
887 Texas Labor Analysis as determined by the Texas Education Agency.

888 For identifying which occupations are considered apprenticeable in Texas, TWC used
889 the list of occupations approved for apprenticeship published by the United States
890 Department of Labor Office of Apprenticeship.

891 In this report, a firm refers to a business entity recognized as a single employer
892 covered under Texas Unemployment Insurance which may operate across multiple
893 locations or sites. Each distinct location where business activities occur is termed an
894 establishment. While a firm is the overarching organization that hires and manages
895 employees, establishments are the individual physical locations under that firm where
896 operations take place.

897 There is no official definition of a "high-wage" job and the term may be interpreted
898 differently by individuals depending on their age, work history, education level,
899 geographic setting, ability to stay at a job for the long-term, and even their personal
900 expectations in life. The median pay across all occupations in Texas is \$45,972 a year,
901 according to the 2023 OEWS estimates of Texas employers which represents the most
902 recent data for the time of this publication. For the purposes of this report, TWC only
903 looked at occupations where the industry annual median pay was estimated to be
904 higher than the statewide median, \$45,972 a year, and with a long-term projected
905 employment change greater than or equal to 400. All occupations meeting these
906 requirements are listed per industry.