

October 2023







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Important Disclaimers

All representations included in this report have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. This study examines the most recent data available at the time of the analysis; however, data sets are updated regularly and may not be consistent with previous reports. Efforts have been made to qualify and validate the accuracy of the data and the report findings; however, neither the Centers of Excellence for Labor Market Research (COE), COE host district, nor California Community Colleges Chancellor's Office are responsible for the applications or decisions made by individuals and/or organizations based on this study or its recommendations.

Introduction

This subregional profile highlights demographics, industries, and occupations in the North Region of San Diego County. The San Diego & Imperial Center of Excellence (COE) categorizes San Diego County into four major subregions: Central, East, North, and South (Exhibit 1). The purpose of this brief is to assist the San Diego & Imperial COE's stakeholders in developing strategic plans to support the occupational demand and workforce needs of employers in the North Region.

Exhibit 1: San Diego County's Four Regions

North Ceantide East Santee South United States Mexico

San Diego County

For the purpose of this report, the North Region is defined by the following zip codes (Exhibit 2). The information, exhibits, and analyses in this brief will be based on these zip codes.

Exhibit 2: San Diego County's North Region by Zip Codes

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	Zip Code
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-	
	92051 92052 92054 92055 92056 92057 92058 92059 92061 92064 92065 92066 92067 92068 92069 92070 92071 92075 92078 92079 92081 92082

¹ The backbone of ZIP-level data is Lightcast's county-level data, which is built using the U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW) dataset, the most complete source of employment data available in the United States (kb.lightcast.io/en/articles/6957501-zip-level-employment-data). Strictly speaking, ZIP codes are not geographical areas. They are a construct used by the Postal Service to define carrier routes. While many ZIP codes can be approximated using geographical boundaries, many are points on a map kb.lightcast.io/en/articles/6957501-zip-level-employment-data.

Zip Code	Area
92049	Oceanside
92086	Warner Springs
92088	Fallbrook
92091	Rancho Santa Fe
92096	San Marcos
92121	San Diego

Zip Code	Area
92085	Vista
92126	San Diego
92127	San Diego
92128	San Diego
92129	San Diego
92130	San Diego

Data Source

The data presented in this report was derived from Lightcast's Analyst program. The dataset is 2023.02.

Fast Facts About the North Region

Exhibit 3: Fast Facts About the North Region



1,400,217

Total Population (2022)

The North Region had a population of 1,400,217 in 2022, and this number is projected to decrease by eight percent over the next 10 years. The zip code with the highest projected population growth is 92030 (Escondido).



\$97,732

Avg. Earnings Per Job (2022)

In the North Region, average earnings were estimated at \$97,732 in 2022, which is higher than the national average reported across industries. National average earnings per job in 2022 were \$80,938.



789,092

Total Jobs (2022)

The North Region's total number of jobs in 2022 was 789,092, and the zip code with the most jobs was 92121 (San Diego). Comparatively, San Diego County had 1,767,478 jobs in 2022.



13%

Projected Job Growth (2022-2032)

Between 2022 and 2032, the number of jobs is projected to increase by 13 percent in the North Region. The zip code with the most annual job openings is projected to be 92121 (San Diego).

Demographics

In 2022, the North Region had a population of 1,400,217 residents (Exhibit 4). Over the next 10 years, the population is expected to decrease by 111,145 residents, or eight percent. The zip code with the highest growth rate is expected to be 92030 (Escondido) (Exhibit 5).

Exhibit 4: Total Population and Projected Percentage Change in the North Region, 2022-2032

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Total Population, 2022	Total Population, 2032	Projected % Change
1,400,217	1,289,072	-8%

Exhibit 5: Total Population and Projected Percentage Change by Zip Code in the North Region, 2022-2032

Zip Code and Area	2022 Population	2032 Population	Projected % Change
92126 San Diego	78,107	76,243	-2%
92071 Santee	56,876	51,004	-10%
92057 Oceanside	56,716	53,509	-6%
92058 Oceanside	55,208	52,747	-4%
92130 San Diego	54,856	52,608	-4%
92027 Escondido	54,371	51,902	-5%
92056 Oceanside	52,515	<i>47,</i> 571	-9%
92078 San Marcos	51,164	47,355	-7%
92127 San Diego	50,748	47,784	-6%
92129 San Diego	50,481	47,414	-6%
92026 Escondido	49,579	45,038	-9%
92025 Escondido	47,721	45,633	-4%
92084 Vista	47,333	45,417	-4%
92009 Carlsbad	46,782	41,638	-11%
92024 Encinitas	46,617	40,140	-14%
92064 Poway	45,508	39,755	-13%
92128 San Diego	45,370	40,167	-11%
92028 Fallbrook	44,256	41,208	-7%
92069 San Marcos	43,800	41,346	-6%
92040 Lakeside	43,411	38,868	-10%
92083 Vista	37,860	37,038	-2%
92065 Ramona	36,306	32,983	-9%
92054 Oceanside	35,096	32,733	-7%
92131 San Diego	34,751	31,952	-8%
92081 Vista	28,138	25,614	-9%
92008 Carlsbad	25,069	22,006	-12%
92011 Carlsbad	21,674	18,658	-14%
92082 Valley Center	20,309	18,468	-9%

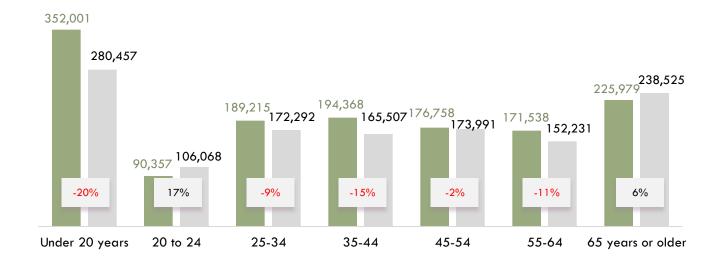
Zip Code and Area	2022 Population	2032 Population	Projected % Change
92029 Escondido	17,425	15,330	-12%
92010 Carlsbad	17,147	14,763	-14%
92014 Del Mar	12,123	9,385	-23%
92075 Solana Beach	11,645	9,736	-16%
92007 Cardiff By The Sea	10,266	8,821	-14%
92067 Rancho Santa Fe	9,564	8,516	-11%
92003 Bonsall	6,251	5,155	-18%
92061 Pauma Valley	3,748	3,514	-6%
92023 Encinitas	3,556	3,108	-13%
92121 San Diego	3,259	3,149	-3%
92085 Vista	3,196	3,053	-4%
92052 Oceanside	3,184	3,039	-5%
92036 Julian	3,107	2,369	-24%
92088 Fallbrook	2,944	2,937	0%
92051 Oceanside	2,884	2,855	-1%
92033 Escondido	2,783	2,817	1%
91916 Descanso	2,657	2,387	-10%
92046 Escondido	2,646	2,268	-14%
92030 Escondido	2,529	2,568	2%
92079 San Marcos	2,450	2,485	1%
92018 Carlsbad	2,413	2,203	-9%
92004 Borrego Springs	2,325	1,725	-26%
92086 Warner Springs	2,083	1,742	-16%
92091 Rancho Santa Fe	1,861	1,746	-6%
91962 Pine Valley	1,856	1,674	-10%
92059 Pala	1,231	1,151	-6%
92013 Carlsbad	1,097	836	-24%
92068 San Luis Rey	1,037	948	-9%
92070 Santa Ysabel	1,000	805	-20%
92049 Oceanside	754	709	-6%
92066 Ranchita	574	479	-17%
92055 Camp Pendleton	N/A	N/A	N/A
92096 San Marcos	N/A	N/A	N/A

Age

In 2022, 45 percent (631,574 residents) of the North Region's population was under 35 years old (Exhibit 6). Over the next 10 years, it is projected that the number of individuals under 35 will decrease by 12 percent. By 2032, the greatest population change expected for the North Region will be in the under 20 years age group, which is projected to decrease by 20 percent.

Exhibit 6: Age Breakdown and Projected Percentage Change in the North Region, 2022-20322





Prime-Working-Age Adults in the North Region

According to the Bureau of Labor Statistics, the "prime-working-age" is between 25 and 54 years old. In 2022, 41 percent of the North Region's population was classified as "prime-working-age" and could potentially participate in the labor force. Projection data suggests that this percentage will decrease through 2032.

Disclaimer: These numbers represent individuals who are of the "prime-working age" (25-54), and do not necessarily represent the labor force. This number does not account for individuals who do not participate in the labor force due to a variety of reasons, including personal choice, ability status, employment opportunity, and situational circumstances, for example.

² Total differs due to rounding.

Ethnicity

In 2022, 50 percent of the North Region's population was White, Non-Hispanic. By 2032, that percentage is projected to decrease to nearly 45 percent (Exhibit 7).³ Please note that the COE is aware that these ethnic and racial categories do not entirely reflect the population's increasing diversity. However, the categories below represent the information reported to the federal government through population surveys.

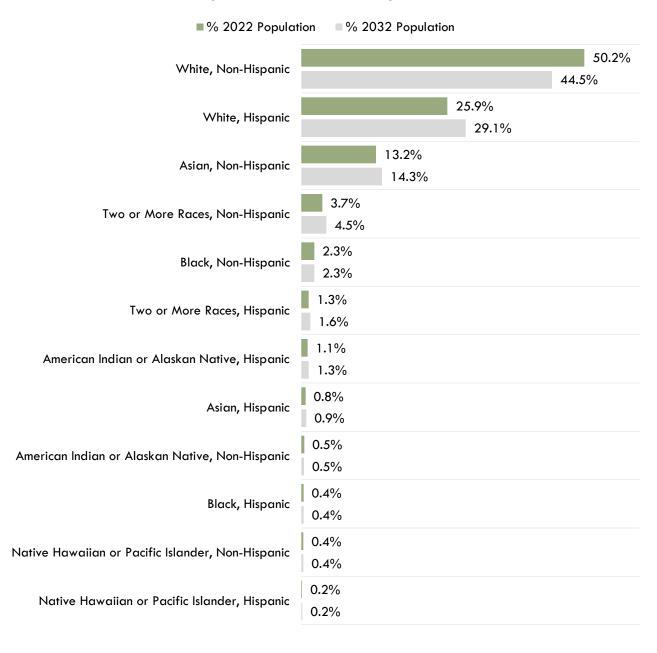


Exhibit 7: Ethnicity Breakdown in the North Region, 2022-20324

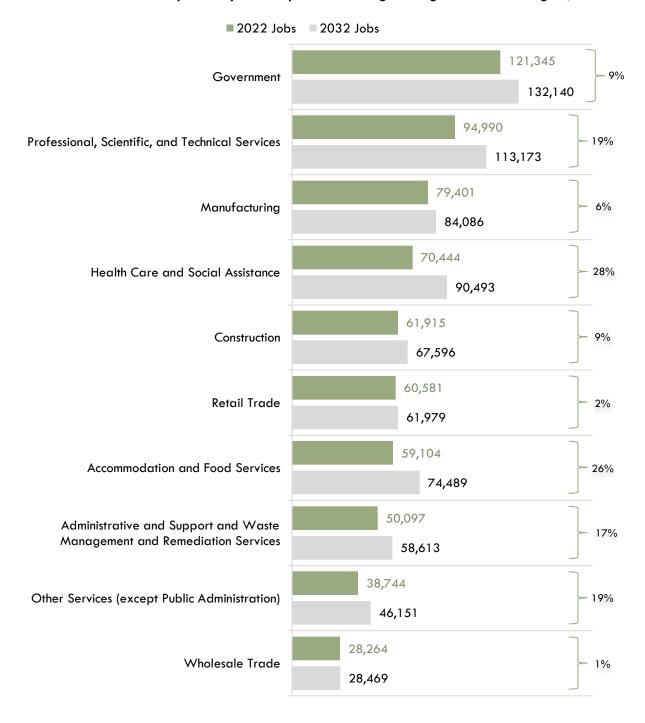
³ The federal government tracks several racial categories (e.g., White, Black or African American, Asian) but only two ethnic categories, Hispanic and Non-Hispanic. There may be some overlap between race and ethnicity unless the two characteristics are clearly separated, (e.g., White, Non-Hispanic, White, Hispanic, and Non-White Hispanic). See obamawhitehouse.archives.gov/omb/fedreg_race-ethnicity and kb.economicmodeling.com/glossary/race-and-ethnicity.

⁴ Totals may not add to 100 percent due to rounding.

Industries

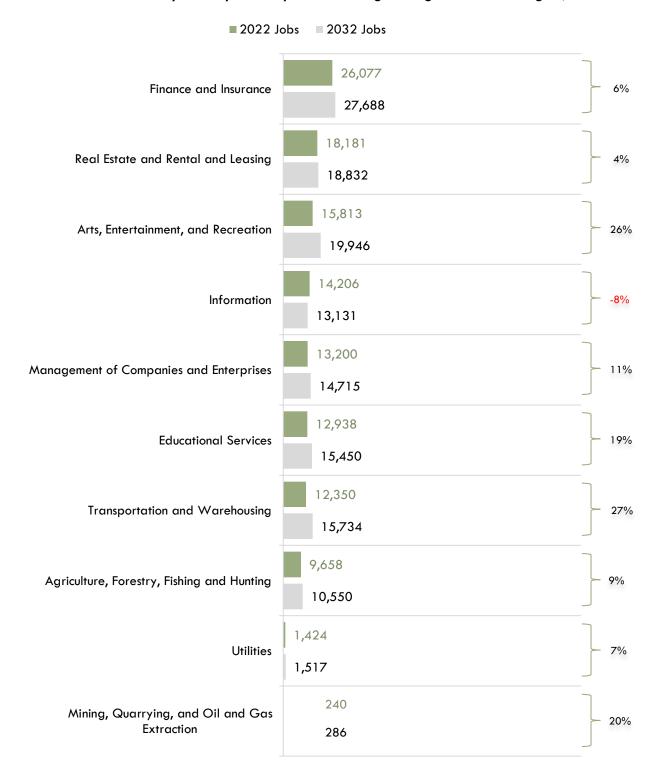
Exhibit 8 and Exhibit 9 show the number of jobs and the projected percentage change by industry in the North Region. The industries with the most jobs in 2022 were Government⁵; Professional, Scientific, and Technical Services; Manufacturing; Health Care and Social Assistance; and Construction. Between 2022 and 2032, the industries projected to have job decline are Information.

Exhibit 8: Number of Jobs by Industry and Projected Percentage Change in the North Region, 2022-2032



⁵ "Government" represents Public Administration and Educational Services, which are two separate two-digit NAICS codes.

Exhibit 9: Number of Jobs by Industry and Projected Percentage Change in the North Region, 2022-2032



Jobs

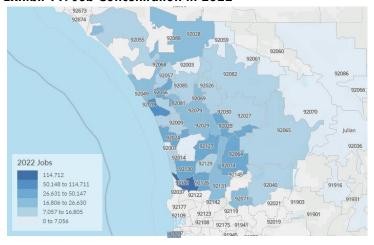
Between 2022 and 2032, the number of jobs in the North Region is expected to increase from 789,092 to 895,062, which is an increase of 105,970 jobs, or 13 percent. Comparatively, San Diego County and California are projected to grow by 240,383 jobs (14 percent) and 2,848,499 jobs (14 percent), respectively (Exhibit 10).

Exhibit 10: Number of Jobs and Projected Percentage Change by Region, 2022-2032

Region	Jobs, 2022	Jobs, 2032	Job Change, 2022-2032	Projected % Change
North Region	789,092	895,062	105,970	13%
San Diego County	1,767,478	2,007,861	240,383	14%
California	20,352,832	23,201,331	2,848,499	14%

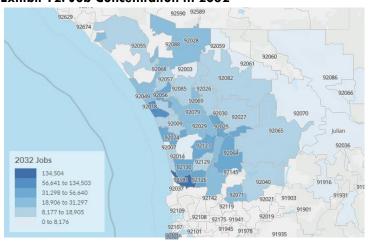
Job Concentration By Zip Code in the North Region

Exhibit 11: Job Concentration in 2022



In 2022, the most jobs were located in zip code 92121, which is San Diego (Exhibit 11).

Exhibit 12: Job Concentration in 2032



The most jobs are projected to remain in the same area in 2032 (Exhibit 12).

Between 2022 and 2032, employers in the North Region are projected to hire 107,414 workers annually (i.e., average annual job openings) (Exhibit 13). The greatest labor market demand is expected in San Diego (92121), Carlsbad (92008), and San Diego (92130) (Exhibit 14). Labor market demand is defined by the number of jobs per year that employers expect to fill (i.e., annual job openings), including new jobs and backfill jobs due to attrition caused by turnover and retirement, for example.

Exhibit 13: Average Annual Job Openings in the North Region, 2022-2032



107,414

Average Annual Job Openings (2022-2032)

92121

Zip Code with the Highest **Annual Job Openings** (2022-2032)

Exhibit 14: Average Annual Job Openings by Zip Code in the North Region, 2022-2032

Zip Code	Area	Annual Jobs Openings	Zip Code	Area	Annual Jobs Openings
92121	San Diego	14,293	92058	Oceanside	2,591
92008	Carlsbad	7,273	92028	Fallbrook	2,387
92130	San Diego	5,006	92131	San Diego	2,268
92025	Escondido	4,591	92009	Carlsbad	2,219
92024	Encinitas	4,587	92011	Carlsbad	2,044
92064	Poway	4,353	92084	Vista	2,023
92126	San Diego	4,313	92010	Carlsbad	1,813
92127	San Diego	4,125	92083	Vista	1,741
92056	Oceanside	3,797	92057	Oceanside	1,736
92069	San Marcos	3,142	92040	Lakeside	1,666
92054	Oceanside	3,011	92065	Ramona	1,457
92071	Santee	2,982	92055	Camp Pendleton	1,447
92029	Escondido	2,951	92129	San Diego	1,421
92128	San Diego	2,922	92014	Del Mar	1,385
92078	San Marcos	2,872	92075	Solana Beach	1,383
92081	Vista	2,822	92026	Escondido	1,353

Exhibit 14: Average Annual Job Openings by Zip Code in the North Region, 2022-2032

Zip Code	Area	Annual Jobs Openings
92027	Escondido	1,343
92082	Valley Center	976
92067	Rancho Santa Fe	529
92007	Cardiff By The Sea	455
92096	San Marcos	443
92003	Bonsall	241
92091	Rancho Santa Fe	235
92036	Julian	199
92004	Borrego Springs	152
92059	Pala	139
92061	Pauma Valley	122
92023	Encinitas	107
92086	Warner Springs	81
91962	Pine Valley	75
91916	Descanso	74

Zip Code	Area	Annual Jobs Openings
92070	Santa Ysabel	42
92079	San Marcos	34
92033	Escondido	30
92085	Vista	27
92030	Escondido	23
92046	Escondido	19
92052	Oceanside	15
92018	Carlsbad	14
92066	Ranchita	14
92049	Oceanside	14
92088	Fallbrook	13
92051	Oceanside	13
92013	Carlsbad	7
92068	San Luis Rey	4

Top Jobs with High Entry-Level Earnings

The following section highlights the top jobs with high earnings in the North Region. Top jobs with high earnings are defined as occupations with:



- The greatest labor market demand (highest average number of annual job openings between 2022 and 2032); and
- Entry-level hourly earnings equal to or higher than the Self-Sufficiency Standard⁶

Exhibit 15 summarizes the top jobs with high entry-level earnings by typical entry-level education. These top jobs were derived from Exhibit 16, Exhibit 17, Exhibit 18, and Exhibit 19 which separates the top jobs in the Central Region into four categories based on typical entry-level education: 1) bachelor's degree or higher; 2) associate degree; 3) some college or postsecondary education non-degree award; and 4) high school diploma or lower.

Exhibit 15: Top Jobs with the Most Annual Job Openings by Education in the North Region

Typical Entry-Level Education	Occupational Title	Annual Job Openings	Entry- Level Earnings	Median Earnings
Bachelor's Degree or Higher	General and Operations Managers	1 , 517	\$34.70	\$48.85
Associate Degree	Paralegals and Legal Assistants	222	\$23.53	\$29.86
Some College or Postsecondary Non- degree	Heavy and Tractor-Trailer Truck Drivers	596	\$18.54	\$23.48
High School Diploma or Lower	Carpenters	749	\$19.41	\$27.03

⁶ Hourly earnings are grouped into five percentiles: 10th, 25th, 50th (median), 75th, and 90th. Entry-level or 25th percentile earnings of \$18.43/hr. indicate that 75 percent of the workers in that occupation make more than \$18.43/hr. Median earnings of \$18.43/hr. mean that half of workers in that occupation make more and half make less. The Self-Sufficiency Standard in San Diego for one adult is \$18.43 (Family Needs Calculator, formerly the California Family Needs Calculator, Insight Center for Community Economic Development, last updated 2021. insightceed.org/family-needs-calculator.

Exhibit 16: Top 20 Jobs with High Earnings that Require a Bachelor's Degree or Higher in the North Region, 2022-2032

SOC	Occupational Title	Annual Job Openings	Typical On-the-Job Training (OJT)	Work Experience Required	Entry- Level Earnings	Median Earnings
11-1021	General and Operations Managers	1 , 51 <i>7</i>	None	5 years+	\$34.70	\$48.85
15-1252	Software Developers	1,054	None	None	\$49.18	\$62.88
13-1199	Business Operations Specialists, All Other	1,049	None	None	\$23.22	\$35.33
13-2011	Accountants and Auditors	769	None	None	\$29.60	\$38.24
29-1141	Registered Nurses	699	None	None	\$46.95	\$53.26
11-9199	Managers, All Other	692	None	< 5 years	\$34.61	\$55.17
25-1099	Postsecondary Teachers*	600	None	None	\$33.61	\$49.37
13-1161	Market Research Analysts and Marketing Specialists	591	None	None	\$23.36	\$30.80
13-1071	Human Resources Specialists	524	None	None	\$28.98	\$36.56
13-1082	Project Management Specialists	455	None	None	\$36.56	\$47.74
25-2021	Elementary School Teachers, Except Special Education	452	None	None	\$29.53	\$37.23
13-1111	Management Analysts	450	None	< 5 years	\$30.69	\$39.20
23-1011	Lawyers*	436	None	None	\$41.74	\$66.73
11-3031	Financial Managers	429	None	5 years+	\$48.80	\$67.08
15-1299	Computer Occupations, All Other	412	None	None	\$29.88	\$47.02
11-3021	Computer and Information Systems Managers	406	None	5 years+	\$62.93	\$79.41
11-2022	Sales Managers	378	None	< 5 years	\$37.06	\$60.23
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	360	None	None	\$31.49	\$38.36
11-9021	Construction Managers	337	Moderate-term OJT	None	\$28.43	\$40.70
13-1028	Buyers and Purchasing Agents	297	Moderate-term OJT	None	\$26.07	\$35.71

*Require a doctoral or professional degree

Exhibit 17: Top 20 Jobs with High Earnings that Require an Associate Degree in the North Region, 2022-2032

SOC	Occupational Title	Annual Job Openings	Typical On-the-Job Training (OJT)	Work Experience Required	Entry- Level Earnings	Median Earnings
23-2011	Paralegals and Legal Assistants	222	None	None	\$23.53	\$29.86
17-3023	Electrical and Electronic Engineering Technologists and Technicians	220	None	None	\$29.00	\$31.96
19-4099	Life, Physical, and Social Science Technicians, All Other	144	None	None	\$21.06	\$28.45
17-3029	Engineering Technologists and Technicians, Except Drafters, All Other	121	None	None	\$28.68	\$37.38
31-2021	Physical Therapist Assistants	100	None	None	\$29.38	\$36.96
1 <i>7</i> -3011	Architectural and Civil Drafters	91	None	None	\$29.01	\$29.69
29-1292	Dental Hygienists	88	None	None	\$47.73	\$47.80
15-1231	Computer Network Support Specialists	63	None	None	\$24.88	\$32.33
49-2091	Avionics Technicians	49	None	None	\$36.58	\$37.24
17-3027	Mechanical Engineering Technologists and Technicians	47	None	None	\$22.69	\$29.02
29-2034	Radiologic Technologists and Technicians	47	None	None	\$36.98	\$46.23
31-2011	Occupational Therapy Assistants	45	None	None	\$36.30	\$38.11
17-3022	Civil Engineering Technologists and Technicians	42	None	None	\$28.50	\$29.49
17-3026	Industrial Engineering Technologists and Technicians	41	None	None	\$23.89	\$29.62
49-9062	Medical Equipment Repairers	38	Moderate-term OJT	None	\$22.35	\$29.68
53-2021	Air Traffic Controllers	33	Long-term OJT	None	\$53.81	\$69.93
17-3013	Mechanical Drafters	23	None	None	\$23.85	\$30.26
29-1126	Respiratory Therapists	22	None	None	\$36.94	\$46.29
17-3021	Aerospace Engineering and Operations Technologists and Technicians	21	None	None	\$30.15	\$38.37
17-3012	Electrical and Electronics Drafters	20	None	None	\$23.98	\$30.05

Exhibit 18: Top 20 Jobs with High Earnings that Require Some College or Postsecondary Non-Degree Award in the North Region, 2022-2032

SOC	Occupational Title	Annual Job Openings	Typical On-the-Job Training (OJT)	Work Experience Required	Entry- Level Earnings	Median Earnings
53-3032	Heavy and Tractor-Trailer Truck Drivers	596	Short-term OJT	None	\$18.54	\$23.48
29-2061	Licensed Practical and Licensed Vocational Nurses	265	None	None	\$27.81	\$29.60
15-1232	Computer User Support Specialists*	260	None	None	\$22.82	\$29.26
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	229	Long-term OJT	None	\$21.70	\$28.43
49-3011	Aircraft Mechanics and Service Technicians	167	None	None	\$30.12	\$36.99
33-2011	Firefighters	122	Long-term OJT	None	\$23.86	\$29.39
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	113	Moderate-term OJT	None	\$23.75	\$29.67
29-2099	Health Technologists and Technicians, All Other	98	None	None	\$18.44	\$22.85
31-9097	Phlebotomists	98	None	None	\$18.51	\$22.67
27-2011	Actors*	53	Long-term OJT	None	\$23.11	\$27.91
53-5021	Captains, Mates, and Pilots of Water Vessels	40	None	< 5 years	\$21.76	\$30.38
27-4011	Audio and Video Technicians	39	Short-term OJT	None	\$22.23	\$23.50
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	39	Long-term OJT	None	\$25.81	\$32.66
29-2043	Paramedics	26	None	None	\$19.10	\$23.46
29-2055	Surgical Technologists	25	None	None	\$28.73	\$36.14
51-9162	Computer Numerically Controlled Tool Programmers	23	Moderate-term OJT	None	\$29.46	\$36.95
51-5111	Prepress Technicians and Workers	15	None	None	\$18.44	\$23.63
51-4111	Tool and Die Makers	14	Long-term OJT	None	\$23.74	\$30.36
29-9021	Health Information Technologists and Medical Registrars	13	None	None	\$22.56	\$36.60
53-5031	Ship Engineers	12	None	< 5 years	\$49.81	\$57.40

*Require some college, no degree

Exhibit 19: Top 1-20 (of 60) Jobs with High Earnings that Require a High School Diploma or Lower in the North Region, 2022-2032

				Work	Entry-	
SOC	Occupational Title	Annual Job Openings	Typical On-the-Job Training (OJT)	Experience Required	Level Earnings	Median Earnings
47-2031	Carpenters	749	Apprenticeship	None	\$19.41	\$27.03
43-1011	First-Line Supervisors of Office and Administrative Support Workers	736	None	< 5 years	\$23.44	\$29.74
47-2111	Electricians	696	Apprenticeship	None	\$22.39	\$29.20
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	690	Moderate-term OJT	None	\$22.41	\$29.96
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	620	Moderate-term OJT	None	\$22.56	\$29.54
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	467	None	5 years+	\$28.13	\$37.10
41-3021	Insurance Sales Agents	348	Moderate-term OJT	None	\$18.51	\$28.60
51-1011	First-Line Supervisors of Production and Operating Workers	331	None	< 5 years	\$23.38	\$30.45
47-2152	Plumbers, Pipefitters, and Steamfitters	328	Apprenticeship	None	\$21.76	\$28.92
43-5061	Production, Planning, and Expediting Clerks	323	Moderate-term OJT	None	\$19.37	\$23.58
41-9022	Real Estate Sales Agents	290	Moderate-term OJT	None	\$20.46	\$31.86
53-1047	First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	285	None	< 5 years	\$18.83	\$23.86
33-3051	Police and Sheriff's Patrol Officers	275	Moderate-term OJT	None	\$38.19	\$47.87
43-6011	Executive Secretaries and Executive Administrative Assistants	255	None	< 5 years	\$28.96	\$35.22
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	230	None	< 5 years	\$29.21	\$37.07
51-4121	Welders, Cutters, Solderers, and Brazers	229	Moderate-term OJT	None	\$19.16	\$23.88
11-9051	Food Service Managers	221	None	< 5 years	\$22.67	\$28.72
47-2081	Drywall and Ceiling Tile Installers*	203	Moderate-term OJT	None	\$22.19	\$28.29
43-6012	Legal Secretaries and Administrative Assistants	180	Moderate-term OJT	None	\$22.81	\$22.86
47-2073	Operating Engineers and Other Construction Equipment Operators	165	Moderate-term OJT	None	\$27.38	\$35.31

*Require no formal educational credential

Exhibit 20: Top 21-40 (of 60) Jobs with High Earnings that Require a High School Diploma or Lower in the North Region, 2022-2032

SOC	Occupational Title	Annual Job Openings	Typical On-the-Job Training (OJT)	Work Experience Required	Entry- Level Earnings	Median Earnings
35-1011	Chefs and Head Cooks	163	None	5 years+	\$22.54	\$22.55
41-9021	Real Estate Brokers	160	None	< 5 years	\$36.54	\$39.37
47-2181	Roofers*	146	Moderate-term OJT	None	\$20.99	\$29.14
49-9041	Industrial Machinery Mechanics	145	Long-term OJT	None	\$22.96	\$29.13
33-3012	Correctional Officers and Jailers	141	Moderate-term OJT	None	\$30.67	\$38.49
43-5052	Postal Service Mail Carriers	132	Short-term OJT	None	\$20.25	\$26.75
47-2211	Sheet Metal Workers	126	Apprenticeship	None	\$23.15	\$29.80
41-1012	First-Line Supervisors of Non-Retail Sales Workers	11 <i>7</i>	None	< 5 years	\$24.59	\$35.35
43-4061	Eligibility Interviewers, Government Programs	113	Moderate-term OJT	None	\$19.02	\$23.14
53-3051	Bus Drivers, School*	109	Short-term OJT	None	\$22.08	\$22.84
33-3021	Detectives and Criminal Investigators	106	Moderate-term OJT	< 5 years	\$47.88	\$50.03
43-3051	Payroll and Timekeeping Clerks	99	Moderate-term OJT	None	\$22.50	\$23.57
13-1031	Claims Adjusters, Examiners, and Investigators	90	Long-term OJT	None	\$29.38	\$37.01
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	90	Long-term OJT	None	\$23.78	\$29.49
51-9011	Chemical Equipment Operators and Tenders	88	Moderate-term OJT	None	\$18.54	\$23.10
47-2051	Cement Masons and Concrete Finishers*	87	Moderate-term OJT	None	\$22.05	\$27.53
51-2011	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	86	Moderate-term OJT	None	\$18.75	\$18.91
53-7081	Refuse and Recyclable Material Collectors*	85	Short-term OJT	None	\$21 <i>.</i> 75	\$28.97
11-3071	Transportation, Storage, and Distribution Managers	83	None	5 years+	\$36.61	\$47.61
53-3052	Bus Drivers, Transit and Intercity	83	Moderate-term OJT	None	\$18.96	\$23.38

*Require no formal educational credential

Exhibit 21: Top 41-60 (of 60) Jobs with High Earnings that Require a High School Diploma or Lower in the North Region, 2022-2032

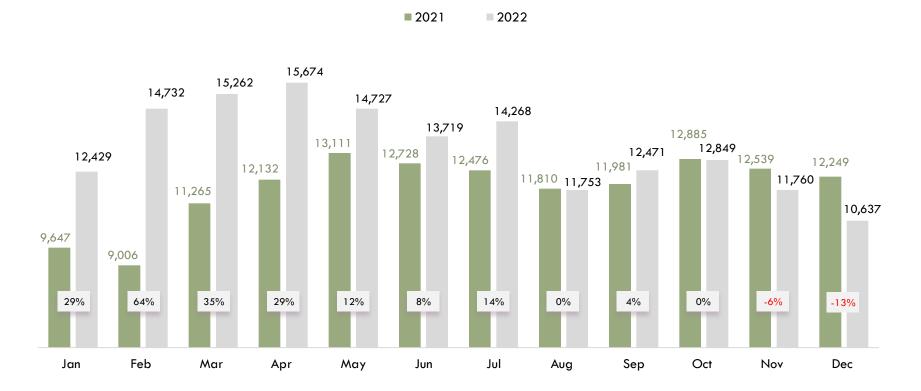
SOC	Occupational Title	Annual Job Openings	Typical On-the-Job Training (OJT)	Work Experience Required	Entry- Level Earnings	Median Earnings
37-3013	Tree Trimmers and Pruners	76	Short-term OJT	None	\$22.34	\$23.66
37-1012	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	<i>7</i> 1	None	< 5 years	\$22.14	\$28.50
47-4011	Construction and Building Inspectors	67	Moderate-term OJT	5 years+	\$29.03	\$37.46
49-2098	Security and Fire Alarm Systems Installers	66	Moderate-term OJT	None	\$22.71	\$28.89
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	63	Long-term OJT	None	\$23.54	\$29.70
47-2221	Structural Iron and Steel Workers	58	Apprenticeship	None	\$23.55	\$36.60
47-2161	Plasterers and Stucco Masons*	58	Long-term OJT	None	\$22.70	\$28.57
53-2012	Commercial Pilots	55	Moderate-term OJT	None	\$30.27	\$38.52
47-2231	Solar Photovoltaic Installers	55	Moderate-term OJT	None	\$19.50	\$23.17
47-2121	Glaziers	55	Apprenticeship	None	\$22.15	\$23.46
49-9052	Telecommunications Line Installers and Repairers	51	Long-term OJT	None	\$22.84	\$29.79
49-3021	Automotive Body and Related Repairers	48	Long-term OJT	None	\$22.77	\$28.84
43-5053	Postal Service Mail Sorters, Processors, and Processing Machine Operators	47	Short-term OJT	None	\$18.69	\$23.21
47-4041	Hazardous Materials Removal Workers	44	Moderate-term OJT	None	\$18.47	\$23.24
51-2041	Structural Metal Fabricators and Fitters	44	Moderate-term OJT	None	\$19.36	\$28.1 <i>7</i>
49-9051	Electrical Power-Line Installers and Repairers	41	Long-term OJT	None	\$38.57	\$58.84
43-4031	Court, Municipal, and License Clerks	39	Long-term OJT	None	\$20.13	\$23.76
51-8031	Water and Wastewater Treatment Plant and System Operators	38	Long-term OJT	None	\$23.21	\$29.92
33-9093	Transportation Security Screeners	37	Short-term OJT	None	\$23.88	\$24.27
39-1013	First-Line Supervisors of Gambling Services Workers	37	None	< 5 years	\$23.42	\$28.87

*Require no formal educational credential

Online Job Postings

This report analyzes not only historical and projected data (traditional labor market information or LMI), but also recent data from online job postings (real-time LMI). Online job postings may provide additional insight about recent changes in the labor market that are not captured by historical data. In 2021, there was an average of 11,819 unique online job postings⁷ in the North Region (Exhibit 22), whereas in 2022 there was an average of 13,356 unique online job postings. Please note that online job postings do not equal labor market demand; demand is represented by annual job openings. Employers may post a position multiple times across numerous months and for various reasons, such as increasing the pool of applicants, for example.

Exhibit 22: Number of Unique Online Job Postings and Percentage Change by Month in the North Region, 2021-2022



⁷ Unique online job postings represent the number of job postings after deduplicating job postings that advertise the same vacancy. It should be noted, however, that the same job may be posted across multiple months.

Businesses

Businesses in the North Region posted a total of 141,829 unique job postings between January 2021 to December 2021. During this period, businesses with the greatest number of unique online job postings in the North Region were Thermo Fisher Scientific, Aerotek, and Robert Half (Exhibit 23).

Exhibit 23: Top Businesses Ranked by Number of Unique Online Job Postings in the North Region, 2021

Rank	Company Name	Rank	Company Name
1	Thermo Fisher Scientific*	26	The Home Depot*
2	Aerotek*	27	Staffmark*
3	Robert Half*	28	Danaher*
4	Amazon*	29	CVS Health*
5	General Atomics*	30	Genmark Diagnostics
6	Viasat*	31	Club Demonstration Services
7	Allied Universal*	32	MilliporeSigma
8	Lowe's*	33	Tri City Healthcare District*
9	Randstad*	34	Jobot*
10	Palomar Health*	35	El Super
11	Hyatt*	36	California State University*
12	Sprouts Farmers Market*	37	Sunbelt Staffing
13	Scripps Health*	38	FedEx
14	GPAC*	39	Maxim Healthcare Services*
15	Marriott International*	40	Soliant Health
16	Advantage Solutions	41	Assurance
17	Tri-City Medical Center*	42	Truecare*
18	Healthcare Employment Network*	43	Whole Foods
19	Volt*	44	Leidos*
20	Omni Hotels & Resorts*	45	Welk Resort Group
21	Vista Community Clinic	46	Revature
22	Kelly Services*	47	PEAK Technical
23	Starbucks*	48	Integrated Resources
24	Adecco*	49	Sodexo
25	Palomar Medical Center	50	Raising Cane's
			*Business also ranked as a top business in 2022

*Business also ranked as a top business in 2022

Businesses in the North Region posted a total of 160,281 unique job postings between January 2022 to December 2022. During this period, businesses with the greatest number of unique online job postings in the North Region were General Atomics, Aerotek, and Robert Half (Exhibit 24).

Exhibit 24: Top Businesses Ranked by Number of Unique Online Job Postings in the North Region, 2022

Rank	Company Name	Rank	Company Name
1	General Atomics*	26	Allied Universal*
2	Aerotek*	27	California State University*
3	Robert Half*	28	Sprouts Farmers Market*
4	Thermo Fisher Scientific*	29	Gilead Sciences
5	Healthcare Employment Network*	30	Sittercity
6	VirtualVocations	31	Adecco*
7	CareInHomes	32	Securitas
8	Viasat*	33	Leidos*
9	Randstad*	34	Target
10	Palomar Health*	35	Jack in the Box
11	Marriott International*	36	Jobot*
12	Amazon*	37	Truecare*
13	Aston Carter	38	Walmart
14	Scripps Health*	39	Maxim Healthcare Services*
15	Great Clips	40	GPAC*
16	Lowe's*	41	CVS Health*
17	Hyatt*	42	Roche
18	Omni Hotels & Resorts*	43	Senior Resource Group
19	Tri-City Medical Center*	44	Hilton
20	Starbucks*	45	Caesars Entertainment
21	Actalent	46	Staffmark*
22	The Home Depot*	47	Palomar College
23	Volt*	48	MiraCosta College
24	AT&T	49	Danaher*
25	Tri City Healthcare District*	50	Kelly Services*
			*Business also ranked as a top business in 2021

Technical Skills

Businesses in the North Region posted 141,829 unique online job postings between January 2021 and December 2021. During this period, the most requested technical skill listed in online job postings was "Microsoft Excel" " (Exhibit 25).

Exhibit 25: Top Technical Skills Ranked by Number of Unique Online Job Postings in the North Region, 2021

3 Marketing* 23 Purcha 4 Merchandising* 24 New F 5 Microsoft Outlook* 25 Office 6 Project Management* 26 Good 7 Accounting* 27 Inventage 8 Auditing* 28 Cash F 9 Warehousing* 29 Billingual	low Management*
3 Marketing* 23 Purchase 4 Merchandising* 24 New F 5 Microsoft Outlook* 25 Office 6 Project Management* 26 Good 7 Accounting* 27 Inventage 8 Auditing* 28 Cash F 9 Warehousing* 29 Billingual	sing* roduct Development* Equipment* Manufacturing Practices*
4 Merchandising* 24 New F 5 Microsoft Outlook* 25 Office 6 Project Management* 26 Good 7 Accounting* 27 Invent 8 Auditing* 28 Cash F 9 Warehousing* 29 Billingu	roduct Development* Equipment* Manufacturing Practices*
5 Microsoft Outlook* 25 Office 6 Project Management* 26 Good 7 Accounting* 27 Inventor 8 Auditing* 28 Cash I 9 Warehousing* 29 Billingu	Equipment* Manufacturing Practices*
6 Project Management* 26 Good 7 Accounting* 27 Invent 8 Auditing* 28 Cash I 9 Warehousing* 29 Bilingu	Manufacturing Practices*
7 Accounting* 27 Inventor 8 Auditing* 28 Cash I 9 Warehousing* 29 Bilingu	<u> </u>
8 Auditing* 28 Cash I 9 Warehousing* 29 Bilingu	ory Management*
9 Warehousing* 29 Bilingu	
	egister*
10 Restaurant Operation* 30 Produc	al (Spanish/English)*
	t Knowledge*
11 Microsoft PowerPoint* 31 Standa	ard Operating Procedure*
12 Selling Techniques* 32 Proces	s Improvement*
13 Housekeeping* 33 Constr	uction*
14 Invoicing* 34 Careg	iving*
15 Nursing* 35 Autom	ation*
16 Data Entry* 36 Food	ervices*
17 Microsoft Word* 37 Comp	ter Science*
18 Finance* 38 Machi	nery
19 Cash Handling* 39 Forklif	· Truck
20 Customer Relationship Management* 40 Data	

*Technical skill also ranked as top skill in 2022

Businesses in the North Region posted 160,281 unique online job postings between January 2022 and December 2022. During this period, the most requested technical skill listed in online job postings was "Microsoft Excel" (Exhibit 26).

Exhibit 26: Top Technical Skills Ranked by Number of Unique Online Job Postings in the North Region, 2022

Rank	Technical Skill	Rank	Technical Skill
1	Microsoft Excel*	21	Cash Handling*
2	Microsoft Office*	22	Workflow Management*
3	Marketing*	23	Billing*
4	Merchandising*	24	Purchasing*
5	Project Management*	25	Cash Register*
6	Auditing*	26	Inventory Management*
7	Accounting*	27	New Product Development*
8	Microsoft Outlook*	28	Good Manufacturing Practices*
9	Microsoft PowerPoint*	29	Caregiving*
10	Restaurant Operation*	30	Process Improvement*
11	Selling Techniques*	31	Product Knowledge*
12	Warehousing*	32	Computer Science*
13	Invoicing*	33	Data Analysis*
14	Nursing*	34	Bilingual (Spanish/English)*
15	Finance*	35	Automation*
16	Housekeeping*	36	Construction*
17	Data Entry*	37	Standard Operating Procedure*
18	Customer Relationship Management*	38	Medical Records
19	Microsoft Word*	39	Food Services*
20	Office Equipment*	40	Food Safety And Sanitation
			*Technical skill also ranked as top skill in 2021

Soft Skills

Businesses in the North Region posted 141,829 unique online job postings between January 2021 and December 2021. During this period, the most requested soft skill listed in online job postings was "Communications" (Exhibit 27).

Exhibit 27: Top Soft Skills Ranked by Number of Unique Online Job Postings in the North Region, 2021

Rank	Soft Skill	Rank	Soft Skill
1	Communications*	21	Professionalism*
2	Customer Service*	22	Time Management*
3	Management*	23	Coordinating*
4	Sales*	24	Troubleshooting (Problem Solving)*
5	Operations*	25	Research*
6	Detail Oriented*	26	Microsoft Outlook*
7	Leadership*	27	Cleanliness*
8	Writing*	28	Positivity*
9	Problem Solving*	29	Prioritization*
10	Microsoft Excel*	30	Microsoft PowerPoint*
11	Lifting Ability*	31	Teamwork*
12	Computer Literacy*	32	Good Driving Record*
13	Multitasking*	33	Presentations*
14	Interpersonal Communications*	34	Mathematics*
15	Microsoft Office*	35	Coaching*
16	Planning*	36	Arithmetic*
17	Self-Motivation	37	Innovation*
18	Verbal Communication Skills*	38	Microsoft Word
19	Organizational Skills	39	Administrative Functions*
20	Scheduling*	40	Sanitation*
			*Soft skill also ranked as top skill in 2022

Businesses in the North Region posted 160,281 unique online job postings between January 2022 and December 2022. During this period, the most requested soft skill listed in online job postings was "Communications" (Exhibit 28).

Exhibit 28: Top Soft Skills Ranked by Number of Unique Online Job Postings in the North Region, 2022

Rank	Soft Skill	Rank	Soft Skill
1	Communications*	21	Verbal Communication Skills*
2	Customer Service*	22	Research*
3	Management*	23	Professionalism*
4	Sales*	24	Time Management*
5	Operations*	25	Troubleshooting (Problem Solving)*
6	Detail Oriented*	26	Cleanliness*
7	Leadership*	27	Microsoft Outlook*
8	Problem Solving*	28	Microsoft PowerPoint*
9	Writing*	29	Presentations*
10	Microsoft Excel*	30	Teamwork*
11	Planning*	31	Prioritization*
12	Lifting Ability*	32	Positivity*
13	Interpersonal Communications*	33	Mathematics*
14	Multitasking*	34	Coaching*
15	Computer Literacy*	35	Good Driving Record*
16	Microsoft Office*	36	Arithmetic*
17	Self-Motivation*	37	Ethical Standards And Conduct
18	Coordinating*	38	Innovation*
19	Organizational Skills*	39	Administrative Functions*
20	Scheduling*	40	Sanitation*
			*Soft skill also ranked as top skill in 2021

Certifications and Qualifications

In 2021, employers in the North Region listed "Valid Driver's License" as the top certification or qualifications in online job postings (Exhibit 29).

Exhibit 29: Top Certifications or Qualifications Ranked by Number of Unique Online Job Postings in the North Region, 2021

Rank	Certification or Qualification	Rank	Certification or Qualification
1	Valid Driver's License*	21	CDL Class A License*
2	Registered Nurse (RN)*	22	Board Certified Behavior Analyst (BCBA)*
3	Cardiopulmonary Resuscitation (CPR) Certification*	23	Nurse Practitioner (APRN-CNP)*
4	Basic Life Support (BLS) Certification*	24	Real Estate Salesperson License*
5	First Aid Certification*	25	Registered Dental Assistant*
6	Licensed Vocational Nurse (LVN)*	26	ServSafe Certification*
7	Food Handler's Card*	27	Automotive Service Excellence (ASE) Certification*
8	Security Clearance*	28	Project Management Professional Certification*
9	Advanced Cardiovascular Life Support (ACLS) Certification*	29	Certified Pharmacy Technician*
10	Certified Nursing Assistant (CNA)*	30	Licensed Marriage And Family Therapist (LMFT)*
11	Master of Business Administration (MBA)*	31	Certified Public Accountant*
12	Licensed Practical Nurse (LPN)*	32	Critical Care Registered Nurse (CCRN)
13	Commercial Driver's License (CDL)*	33	Speech-Language Pathology License
14	Automated External Defibrillator (AED) Certification*	34	English Learner Authorization
15	Secret Clearance	35	Certified Perioperative Nurse (CNOR)
16	Pediatric Advanced Life Support (PALS)*	36	CDL Class C License*
17	Forklift Certification*	37	Radiology Certification
18	Registered Behavior Technician (RBT)*	38	Certificate of Clinical Competence In Speech- Language Pathology (CCC-SLP)
19	Licensed Clinical Social Worker (LCSW)*	39	Licensed Professional Clinical Counselor*
20	Board Certified/Board Eligible*	40	Certified Medical Assistant (CMA)

In 2022, employers in the North Region listed "Valid Driver's License" as the top certification or qualifications in online job postings (Exhibit 30).

Exhibit 30:Top Certifications or Qualifications Ranked by Number of Unique Online Job Postings in the North Region, 2022

1 Valid Driver's License* 2 Registered Nurse (RN)* 2 Registered Behavior Technicic 3 Cardiopulmonary Resuscitation (CPR) Certification* 2 Registered Behavior Technicic 2 Registered Dental Assistant* 4 Basic Life Support (BLS) Certification* 24 Board Certified Behavior And 5 First Aid Certification* 25 Project Management Profession	
Cardiopulmonary Resuscitation (CPR) Certification* 23 Registered Dental Assistant* 4 Basic Life Support (BLS) Certification* 24 Board Certified Behavior And 5 First Aid Certification* 25 Project Management Profession	
Certification* 4 Basic Life Support (BLS) Certification* 24 Board Certified Behavior And 5 First Aid Certification* 25 Project Management Profession	alyst (BCBA)*
5 First Aid Certification* 25 Project Management Profession	ulyst (BCBA)*
	onal Certification*
6 Licensed Vocational Nurse (LVN)* 26 Barber License	
7 Food Handler's Card* 27 Forklift Certification*	
8 Security Clearance* 28 Licensed Marriage And Famil	y Therapist (LMFT)*
9 Licensed Practical Nurse (LPN)* 29 Real Estate Salesperson Licen	se*
10 Advanced Cardiovascular Life Support (ACLS) Certification* 30 Automotive Service Excellence	e (ASE) Certification*
11 Certified Nursing Assistant (CNA)* 31 Certified Public Accountant*	
12 Master of Business Administration (MBA)* 32 CDL Class C License*	
13 Commercial Driver's License (CDL)* 33 Pediatric Advanced Life Supp	oort (PALS)*
14 Nurse Practitioner (APRN-CNP)* 34 Certified Pharmacy Technician	n*
15 Secret Clearance* Top Secret-Sensitive Compart (TS/SCI Clearance)	mented Information
16 Board Certified/Board Eligible* 36 CDL Class B License	
17 Licensed Clinical Social Worker (LCSW)* 37 Drug Enforcement Agency (DE	EA) License
18 Basic Cardiac Life Support 38 Licensed Professional Clinical	Counselor*
Automated External Defibrillator (AED) Certification* American Red Cross (ARC) Ce	ertification
20 ServSafe Certification* 40 FINRA Series 7 (General Section Representative)	urities

 * Certification or qualification also ranked as top certification or qualification in 2021

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