



### Workforce Development Community INTRODUCTION

In November 2023, the Quad Cities Chamber was invited to join the Advisory Committee for the ThriveQC initiative, led by the Illinois Board of Higher Education and consultants with the Center for Economic Mobility at WestEd. The Illinois Board of Higher Education (IBHE), in partnership with WestEd, released a comprehensive education and workforce analysis for the Quad Cities region, Thrive Quad Cities: An Education and Workforce Analysis Final Report. The Illinois General Assembly tasked IBHE to complete the study and provided the funding to carry out the study. The report outlines critical challenges, opportunities and actionable recommendations that will inform a regional plan to support the alignment of education pathways with workforce needs in the region. The report is reflective of data representing Illinois and Iowa communities within the Quad Cities Region.

Prior to the release of the ThriveQC Report, the Quad Cities Chamber and United Way of the

Quad Cities had been discussing the need for a local workforce study that could highlight the most in-demand industries, with the most in-demand occupations, that paid a livable wage (MIT Living Wage Calculator). In Scott County, Iowa, for one adult with no children, the livable wage is \$20.17 per hour. In Rock Island County, Illinois, for one adult with no children, the livable wage is \$19.27 per hour.

The intent of this discussion was to produce an analysis of local workforce information and prepare a High Priority Jobs Report to share with students, parents, educators and community stakeholders. The anticipated impact of this report is to educate our community members on the high demand jobs in our bi-state region and to work with schools and businesses to promote pathways into those jobs that represent a livable wage for Quad Citizens, especially for under-represented individuals.

#### **METHODOLOGY**

This report utilizes data from Lightcast, a labor market analytics company. Job categories were curated by the Council for Community and Economic Research (C2ER) within Lightcast.[1] The categories included in this report were identified by the Chamber as representing sectors of the economy that are critical to the success of the region and have a high demand for jobs that pay a living wage. The report covers the six counties of the Davenport-Moline, IA-IL Combined Statistical Area. In Illinois, the counties in the study are Henry, Mercer, and Rock Island. In Iowa, the counties in the study are Clinton, Muscatine, and Scott.

#### These categories are:

- Construction and Specialized Mechanical
- Education, Counseling and Therapy
- Engineering and Related Occupations
- Information Technology and Communications
- Legal, Clerical and Administrative
- Medical Science and Health Services
- Skilled and Semi-Skilled Labor, and Machine Operators
- Other

For the purposes of this report, the "living wage" follows the definition on the <u>web page of the MIT Living Wage Calculator</u>. A living wage is "what one full-time worker must earn on an hourly basis to help cover the cost of their family's minimum basic needs where they live while still being self-sufficient." The MIT Living Wage Calculator provides living wages based on the cost of living in each county in the United States. The living wage for a single adult with no children for the counties in the Quad Cities Chamber service area is approximately \$19 to \$20 per hour.

As this report seeks to identify high priority jobs for the Quad Cities area, we considered several key criteria for inclusion in the report. High priority jobs are those that are in high demand and pay a living wage. These jobs require various levels of education, but at a minimum require a high school diploma.

Specifically, the criteria we considered are as follows:

Requires a high school diploma or greater

AND

At least 6 average annual job openings[2] in the six-county area,

AND

Median wage greater than \$22/hour

#### AND one of the following:

- Entry level wage[3] at least \$20/hour
- Entry level wage at least \$18.80, at least 60 jobs in the six-county area in 2024, and an employment concentration index (sometimes referred to as location quotient) of at least 0.88 in 2024
- [1] Lightcast data downloaded Feb. 27, 2025.
- [2] The tables list the current and projected number of jobs, hires in 2024 and the average annual job openings. Job openings is a more conservative measure of demand as it is based on growth and replacements due to exiting the labor force rather than turnover from workers changing employers for a similar job.
- [3] The 10<sup>th</sup> percentile hourly earnings are used as a proxy for entry level wage.

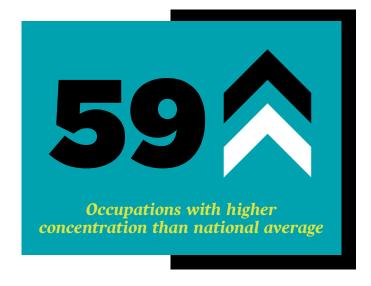


# **Top 100 HIGH-PRIORITY JOBS**

A total of 100 occupations met these criteria. There were 77 jobs that met the first three criteria and had an entry level wage of at least \$20/hour. Another 23 jobs met the first three criteria and had an entry level wage of at least \$18.80/hour, 60 jobs in the area and an employment concentration index of at least 0.88.

As these are the top jobs meeting these criteria, there is a sense in which these jobs represent the "top 100" jobs. However, it should be remembered that these are not the overall top 100 occupations in terms of wages or the numbers of workers overall. Rather, these are identified as "high-priority" in terms of this mix of criteria that prioritizes wages, number of workers and the concentration of workers in the Quad Cities market

Many of the occupations identified here have a high concentration of workers. The employment concentration index is a number that is less than one if the concentration of employees here is lower than the national average and greater than one if the concentration is greater than the national average. There are 59 of these top 100 occupations that have a concentration greater than one. There are 28 occupations that have a concentration of 1.5 or greater. That is, over ¼ of these occupations are at least 50% more concentrated here in the Quad Cities than on average in the U.S.



The appendix contains data on all 100 jobs meeting these criteria. Some additional variables that are reported here but were not used as criteria are: Lightcast's forecast for the number of jobs in 2028, the number of hires in 2024, average annual turnover, share of the workers nearing retirement age and Lightcast's "Automation Index." These variables are included in the appendix.



# Top 5 occupations in EACH INDUSTRY CATEGORY

The jobs identified using the criteria outlined above employed over 40,000 individuals in the six-county area, or nearly 20% of the number of people employed.

From these 100 jobs, we further narrowed our focus to the top 5 in terms of job openings in each of the eight categories mentioned earlier. Basic statistics for the top 5 jobs in each category are listed in the next section.

Our research finds that opportunities exist for job seekers at all levels of education. Many entry level jobs in manufacturing and skilled trades pay living wages and higher while requiring only a high school diploma. Some of these jobs have considerably higher median wages, indicating good opportunities for advancement in one's career. Associate and bachelor's degrees are generally associated with higher starting wages, although there are some exceptions.

To meet this demand, it will be vital to have an educated labor force. In the Quad Cities area, about 11% of people aged 25 and over have an associate's degree while about 18% have a bachelor's degree; 21 out of the 40 occupations identified as being in the top 5 in their industry require either an associate's or bachelor's degree. Unique to our community is the demand for highly skilled jobs whose pathways are open to high school graduates and those with on-the-job training or apprenticeship training. Notably, 16 out of the 40 occupations in this report require this level of training.



Most jobs requiring a graduate or professional degree do not meet the criteria for high priority jobs because there are relatively few openings. However, there are exceptions, mostly in education and medical fields.



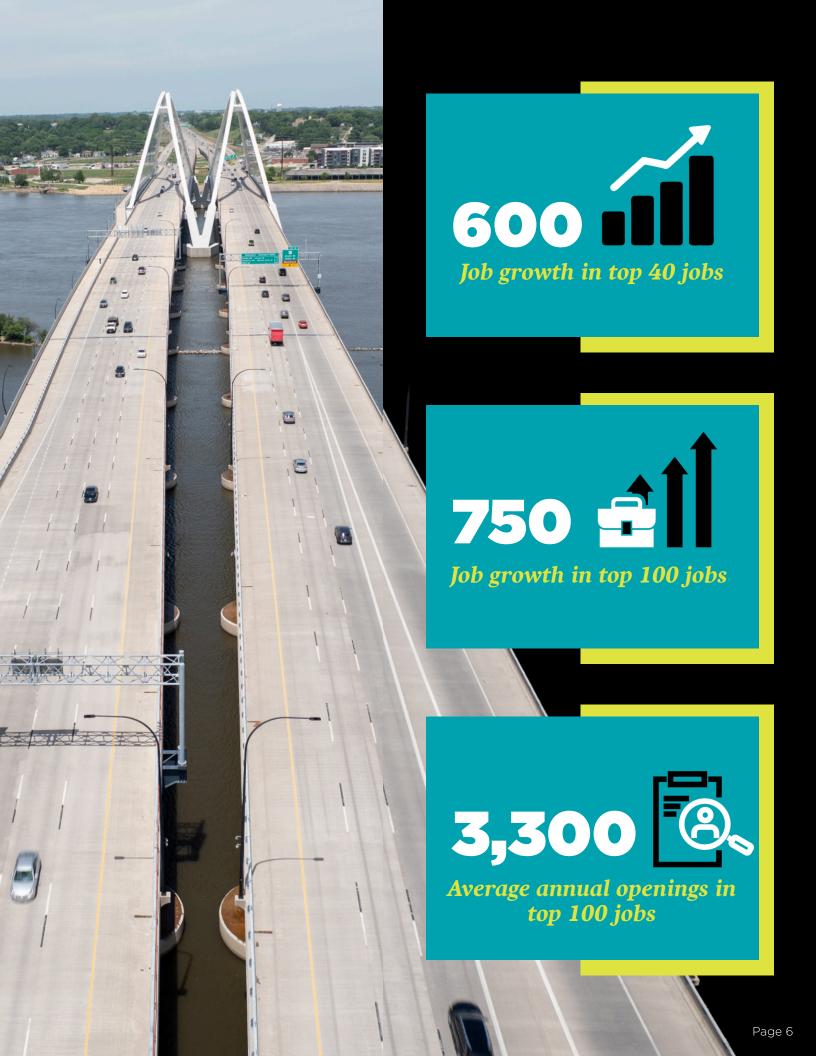
## POST-SECONDARY COMPLETIONS

The tables that follow also include 2023 post-secondary completions (degrees or certificates) that lead to each of these occupations. To connect post-secondary programs to occupations, we use the Classification of Instructional Programs (CIP) to Standard Occupational Classification (SOC) crosswalk[4] developed by the National Center for Education Statistics and the Bureau of Labor Statistics. We report the number of completions from post-secondary institutions within a 90-mile radius and a 45-mile radius of the Quad Cities. This includes 4-year public and private colleges and universities, community colleges and career training institutions in the Integrated Postsecondary Education Data System (IPEDS) database. One institution, Western Illinois University (WIU), has a campus in the Quad Cities (Moline) and a campus in Macomb, IL which is outside the 45-mile radius. In this case, degrees in programs offered at the WIU-Quad Cities campus are counted as being within the 45-mile radius.

Occupations that generally only require a high school diploma may or may not have post-secondary programs that prepare students for that field. Where such programs exist within 90 miles, they are included.

Of the 65 jobs requiring more than a high school diploma, there were 30 jobs for which the local (45-mile radius) post-secondary completions were less than the average annual job openings. In some cases, there are no institutions offering those degrees locally, but there are institutions within 90 miles. In most cases, the number of graduates within 90 miles is greater than the number of job openings. However, there still may exist a shortage of qualified people for that occupation because other urban areas are also recruiting graduates from those schools. For example, there are 103 annual openings for industrial engineers with 138 degree completions within 90 miles and 5 degree completions within 45 miles. Many of those degrees within 90 miles were awarded by the University of Iowa, whose graduates are in demand throughout the state and beyond.

One case that appears to be an outlier is the occupation "Buyers and Purchasing Agents." This occupation had the second highest number of job openings in the Legal, Clerical and Administrative category with 123 average annual openings. Yet there were only 18 degree completions within 90 miles. This is because the CIP to SOC crosswalk tries to identify specific programs that are most relevant to a particular occupation. There exist specific degree programs for buyers and purchasing agents, including some in the local area. However, there are also other programs that, while not an exact match, that may be regarded as acceptable by employers (such as a general degree in business). In reviewing the CIP to SOC crosswalk, we find that cases like this appear to be uncommon. Even so, we urge caution in interpreting the completions data for occupations that are narrowly defined.





### CONSTRUCTION AND SPECIALIZED MECHANICAL

	Entry-Level Hourly Earnings	Median Hourly Earnings	Median Annual Earnings	2024 Jobs	Avg. Annual Openings	Typical Entry Level Education	Typical On-The- Job Training
Industrial Machinery Mechanics	\$23.64	\$31.41	\$65,342	1,060	108	High school diploma or equivalent	Long-term on- the-job training
Machinists	\$19.18	\$26.95	\$56,060	794	88	High school diploma or equivalent	Long-term on- the-job training
Plumbers, Pipefitters, and Steamfitters	\$19.44	\$32.87	\$68,368	930	84	High school diploma or equivalent	Apprenticeship
Mobile Heavy Equipment Mechanics, Except Engines	\$19.15	\$29.00	\$60,325	383	40	High school diploma or equivalent	Long-term on- the-job training
Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	\$18.93	\$24.28	\$50,511	247	25	High school diploma or equivalent	Moderate-term on-the-job training

All five of the top occupations in this industry have an employment concentration greater than 1. The top occupation is "Industrial Machinery Mechanics" with median annual earnings of \$65,342 and an entry level wage of over \$23/hour. This occupation also has a low automation index, meaning that it is less likely to be automated than other jobs in the industry. Machinists are also in very high demand locally. The report indicates only a high school diploma is required, but local industry is demanding more skilled and credentialed experience which according to the data does not meet demand.

Welding is an occupation that is seeing a lot of robotic integration in the Quad Cities. We have experienced a lot of success promoting the development of this workforce pipeline, most notably with high school apprenticeships. This occupation, with an employment concentration of 3.3 shows impressive occupational density for those with a high school diploma. The manufacturing community is demanding more experienced welders with robotic integration training and demand for bachelor level weld engineering is increasing.



## EDUCATION, COUNSELING AND THERAPY

	Entry-Level Hourly Earnings	Median Hourly Earnings	Median Annual Earnings	2024 Jobs	Avg. Annual Openings	Typical Entry Level Education	Typical On- The-Job Training
Elementary School Teachers, Except Special Education	\$20.49	\$28.71	\$59,708	2,073	143	Bachelor's degree	None
Secondary School Teachers, Except Special and Career/Technical Education	\$21.21	\$29.88	\$62,151	1,476	95	Bachelor's degree	None
Middle School Teachers, Except Special and Career/Technical Education	\$18.88	\$28.88	\$60,075	936	65	Bachelor's degree	None
Instructional Coordinators	\$19.80	\$33.77	\$70,240	312	28	Master's degree	None
Physical Therapist Assistants	\$21.13	\$27.45	\$57,088	172	27	Associate's degree	None

A number of occupations in this industry category made the top 100, but the ones with the largest number of job openings were mostly K-12 teachers with a steady demand. Salaries tend to start lower with good potential for growth. Physical therapist assistants are also in high demand due to a high turnover within that occupation.

Local community colleges which offer dual credit pathways for many occupations are experiencing challenges recruiting career and technical education (CTE) teachers. If both secondary and post-secondary education systems are so strongly connected in CTE and dual credit career pathway training, the deficit of credential completions for this occupation as compared to average openings has a compounded impact on institutions at both levels.



### ENGINEERING AND RELATED OCCUPATIONS

	Entry-Level Hourly Earnings	Median Hourly Earnings	Median Annual Earnings	2024 Jobs	Avg. Annual Openings	Typical Entry Level Education	Typical On- The-Job Training
Electricians	\$19.67	\$33.18	\$69,018	1,432	163	High school diploma or equivalent	Apprenticeship
Industrial Engineers	\$32.46	\$47.02	\$97,796	1,408	103	Bachelor's degree	None
Mechanical Engineers	\$31.59	\$48.56	\$101,014	920	68	Bachelor's degree	None
Civil Engineers	\$28.96	\$42.47	\$88,344	472	30	Bachelor's degree	None
Industrial Engineering Technologists and Technicians	\$22.41	\$30.96	\$64,396	195	21	Associate's degree	None

While this category largely consists of engineers, technologists and technicians requiring some level of post-secondary education, electricians are also included here and have the highest number of average annual job openings meeting the high-priority jobs criteria in this category. Industrial, mechanical and civil engineers are also in high demand, and local degree completion is not enough to keep up with the demand. Industrial engineering technologists and technicians round out the top five with good entry level wages, good upward mobility and high concentration in the Quad Cities. An associate's degree is typically required, although bachelor's degree programs geared toward this occupation also exist in the area.



#### INFORMATION TECHNOLOGY AND COMMUNICATIONS

	Entry-Level Hourly Earnings	Median Hourly Earnings	Median Annual Earnings	2024 Jobs	Avg. Annual Openings	Typical Entry Level Education	Typical On- The-Job Training
Software Developers	\$34.45	\$53.97	\$112,255	1,190	95	Bachelor's degree	None
Architectural and Engineering Managers	\$54.01	\$76.13	\$158,347	517	38	Bachelor's degree	None
Computer and Information Systems Managers	\$41.79	\$63.46	\$132,006	423	37	Bachelor's degree	None
Computer Occupations, All Other	\$20.81	\$44.98	\$93,551	380	31	Bachelor's degree	None
Computer Systems Analysts	\$26.95	\$40.11	\$83,420	415	31	Bachelor's degree	None

Jobs in this category have a lower-than-average concentration in the Quad Cities, with the exception of Architectural and Engineering Managers. IT jobs feature good earnings with excellent growth potential. These jobs, though relatively less concentrated in the Quad Cities compared to the national average, are likely to experience more hiring in the next few years.



## LEGAL, CLERICAL AND ADMINISTRATIVE

	Entry-Level Hourly Earnings	Median Hourly Earnings	Median Annual Earnings	2024 Jobs	Avg. Annual Openings	Typical Entry Level Education	Typical On- The-Job Training
Business Operations Specialists, All Other	\$19.89	\$37.92	\$78,864	1,725	153	Bachelor's degree	None
Buyers and Purchasing Agents	\$21.87	\$35.44	\$73,718	1,360	123	Bachelor's degree	Moderate- term on- the-job training
Production, Planning, and Expediting Clerks	\$19.65	\$27.98	\$58,205	717	78	High school diploma or equivalent	Moderate- term on- the-job training
Logisticians	\$26.07	\$42.27	\$87,931	748	67	Bachelor's degree	None
Project Management Specialists	\$25.90	\$42.23	\$87,845	818	64	Bachelor's degree	None

The jobs in this industry are in high and growing demand. Most of these have higher employment concentrations. Project management specialists are an exception with an employment concentration of 0.6. However, with 3% growth in jobs expected by 2028, this is also an occupation with excellent prospects. Business operations specialists are the largest occupation in this category. A bachelor's degree is typically required, though opportunities exist for those with an associate's degree. The large number of business degree completions are currently sufficient to satisfy the demand in this area. (See earlier in this report for discussion of buyers and purchasing agents.)

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#### MEDICAL SCIENCE AND HEALTH SERVICES

	Entry-Level Hourly Earnings	Median Hourly Earnings	Median Annual Earnings	2024 Jobs	Avg. Annual Openings	Typical Entry Level Education	Typical On- The-Job Training
Registered Nurses	\$26.23	\$32.99	\$68,629	4,464	243	Bachelor's degree	None
Licensed Practical and Licensed Vocational Nurses	\$20.76	\$25.94	\$53,951	890	74	Postsecondary nondegree award	None
Nurse Practitioners	\$47.62	\$58.80	\$122,314	371	32	Master's degree	None
Dental Hygienists	\$34.59	\$40.07	\$83,338	310	22	Associate's degree	None
Radiologic Technologists and Technicians	\$21.97	\$27.37	\$56,938	297	16	Associate's degree	None

Registered nurses are the most in demand among the high-priority jobs in this category by a large margin. There is over 40% turnover in registered nurses and over 20% who are likely to be within 10 years of retirement. At the present time, local degree completions may be sufficient to satisfy the demand, but replacement of current nurses who are retiring may add to that demand. Nurse practitioners were one of the few occupations in the top five in any category that requires a master's degree. With 32 average annual openings and 15% growth anticipated by 2028, local degree completions will need to grow similarly to keep pace.



### SKILLED AND SEMI-SKILLED LABOR AND MACHINE OPERATORS

	Entry-Level Hourly Earnings	Median Hourly Earnings	Median Annual Earnings	2024 Jobs	Avg. Annual Openings	Typical Entry Level Education	Typical On-The- Job Training
Operating Engineers and Other Construction Equipment Operators	\$20.45	\$29.08	\$60,495	746	66	High school diploma or equivalent	Moderate-term on-the-job training
Chemical Equipment Operators and Tenders	\$19.13	\$27.50	\$57,202	310	31	High school diploma or equivalent	Moderate-term on-the-job training
Sheet Metal Workers	\$20.09	\$31.73	\$66,002	288	27	High school diploma or equivalent	Apprenticeship
Water and Wastewater Treatment Plant and System Operators	\$20.26	\$29.12	\$60,575	230	21	High school diploma or equivalent	Long-term on- the-job training
Cutting and Slicing Machine Setters, Operators, and Tenders	\$20.64	\$22.31	\$46,399	156	18	High school diploma or equivalent	Moderate-term on-the-job training

All the occupations in this category typically require a high school diploma with moderate to long-term on-the-job training or an apprenticeship. These jobs also have employment concentrations greater than one. Even beyond the top 5 in this category, most of these occupations feature starting wages over \$20/hour and median annual earnings over \$50,000 and some over \$60,000.

The Quad Cities has a high demand for skilled labor in the region, many occupations require a minimum of a high school diploma. Many of the skilled and semi-skilled labor occupations serve as "on-ramps" to more highly skilled journeyman or apprenticeable occupations. For example, security and alarm installers need little experience initially, but through on-the-job and incumbent worker training, these occupations can advance into more skilled and highly paid and credentialled careers. The high turnover rate for some of these roles could indicate the advancement of training and opportunity.



#### **OTHER OCCUPATIONS**

	Entry- Level Hourly	Median Hourly Earnings	Median Annual Earnings	2024 Jobs	Avg. Annual Openings	Typical Entry Level Education	Typical On- The-Job Training
Police and Sheriff's Patrol Officers	\$23.63	\$34.17	\$71,066	720	55	High school diploma or equivalent	Moderate- term on- the-job
Correctional Officers and Jailers	\$21.55	\$27.38	\$56,959	500	42	High school diploma or equivalent	Moderate- term on- the-job
Postal Service Mail Carriers	\$19.00	\$27.00	\$56,156	470	35	High school diploma or equivalent	Short-term on-the-job training
Security and Fire Alarm Systems Installers	\$19.01	\$27.46	\$57,119	107	13	High school diploma or equivalent	Moderate- term on- the-job training
Biological Scientists, All Other	\$20.93	\$34.79	\$72,360	67	6	Bachelor's degree	None

There were a few occupations outside the seven main categories that were worth noting due to high demand. Law enforcement occupations feature good starting wages with opportunities for advancement. Mail carriers have good earnings growth from entry level to the median with only short-term on-the-job training, but higher levels of automation index scores.



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Description	Entry-level Hourly Earnings	Median Hourly Earnings	Median Annual Earnings	2024 Jobs	2028 Jobs	2024 Hires	Avg. Annual Openings	2024 Turnover Rate	Typical Entry Level Education	Typical On-The-Job Training	Current Year Age 55-64 % of Occupation	Current Year Age 65+ % of Occupation	2024 Employment Concentration	Automation Index	2023 Post- Secondary Completions (90 miles)	2023 Post- Secondary Completions (45 miles)
High School Diploma or Equivalent																
Management Occupations									High school diploma or							
Transportation, Storage, and Distribution Managers	\$27.96	\$48.10	\$100,054.65	344	359	119	31	33%	equivalent	None	21%	5%	1.23	88.2	1617	263
Architecture and Engineering Occupations									High school diploma or	Moderate-term on-the-						
Surveying and Mapping Technicians  Protective Service Occupations	\$20.26	\$23.56	\$49,008.16	72	73	27	9	32%	equivalent	job training	17%	Insf. Data	0.9	94.3	36	7
·									High school diploma or	Moderate-term on-the						
Correctional Officers and Jailers	\$21.55	\$27.38	\$56,958.81	500	476	173	42	34%	equivalent High school diploma or	job training Moderate-term on-the-	12%	3%	0.97	90.5	23	0
Police and Sheriff's Patrol Officers	\$23.63	\$34.17	\$71,066.13	720	717	209	55	28%	equivalent	job training	8%	2%	0.75	94.5	59	11
Office and Administrative Support Occupations									High school diploma or	Short-term on-the-iob						
Postal Service Clerks	\$19.73	\$25.78	\$53,625.12	109	106	38	9	34%	equivalent	training	31%	12%	1.03	104.6		*
Postal Service Mail Carriers	\$19.00	\$27.00	\$56,155.53	470	456	151	35	31%	High school diploma or equivalent	Short-term on-the-job training	25%	8%	1.04	112.5		
Description Disposion and Franchistics Chales	\$19.65	\$27.98	\$58,205.22	717	736	270	78	37%	High school diploma or	Moderate-term on-the	22%	5%	1.28	94		
Production, Planning, and Expediting Clerks  Construction and Extraction Occupations	\$19.05	\$27.98	\$58,ZU5.ZZ	717	/36	2/0	/8	3/%	equivalent	job training	22%	5%	1.28	94		
Brickmasons and Blockmasons	\$21.36	\$33.78	\$70,264.59	108	110	75	10	63%	High school diploma or equivalent	Apprenticeship	14%	Insf. Data	1.34	133.5		
						,,,	.0		High school diploma or							
Electricians	\$19.67	\$33.18	\$69,017.78	1,432	1,544	778	163	46%	equivalent High school diploma or	Apprenticeship	13%	3%	1.38	110.3	26	0
Elevator and Escalator Installers and Repairers	\$23.90	\$52.38	\$108,943.84	88	94	45	9	50%	equivalent	Apprenticeship	12%	Insf. Data	2.48	118.5	118	0
Excavating and Loading Machine and Dragline Operators, Surface Mining	\$20.14	\$25.82	\$53,715.88	78	77	5.3	Ω	67%	High school diploma or equivalent	Moderate-term on-the- job training	18%	Insf. Data	1.64	116.3		
									High school diploma or							
Insulation Workers, Mechanical Operating Engineers and Other Construction	\$19.91	\$26.77	\$55,689.54	70	72	41	6	57%	equivalent High school diploma or	Apprenticeship Moderate-term on-the-	Insf. Data	Insf. Data	2.02	133.9	•	<u> </u>
Equipment Operators	\$20.45	\$29.08	\$60,495.43	746	750	551	66	69%	equivalent	job training	20%	7%	1.14	120.3		
Plumbers, Pipefitters, and Steamfitters	\$19.44	\$32.87	\$68,368.21	930	938	548	84	51%	High school diploma or equivalent	Apprenticeship	12%	3%	1.47	116.3	11	О
	\$20.09	\$31.73	\$66,002.20	288	290	152	27	47%	High school diploma or equivalent		140/	Insf. Data	1.72	117.7		
Sheet Metal Workers									High school diploma or	Apprenticeship						
Structural Iron and Steel Workers	\$24.88	\$37.42	\$77,829.29	184	187	147	17	73%	equivalent	Apprenticeship	14%	Insf. Data	1.98	132.2		
Installation, Maintenance, and Repair Occupations Control and Valve Installers and Repairers, Except									High school diploma or	Moderate-term on-the						
Mechanical Door	\$23.25	\$33.88	\$70,477.09	106	107	37	8	36%	equivalent High school diploma or	job training Long-term on-the-job	20%	Insf. Data	1.5	109.4	118	0
Electrical Power-Line Installers and Repairers	\$32.06	\$46.27	\$96,245.23	225	223	113	18	45%	equivalent	training	13%	Insf. Data	1.27	114		*
Industrial Machinery Mechanics	\$23.64	\$31.41	\$65,342.23	1,060	1.154	311	108	27%	High school diploma or equivalent	Long-term on-the-job training	26%	5%	1.75	109.8	118	0
	,				,	011	.00		High school diploma or	Long-term on-the-job						
Maintenance Workers, Machinery	\$22.77	\$29.27	\$60,877.22	122	140	33	16	26%	equivalent High school diploma or	training	21%	Insf. Data	1.45	111.5	118	0
Millwrights	\$20.35	\$26.16	\$54,406.06	166	170	68	15	40%	equivalent	Apprenticeship	23%	Insf. Data	2.96	120.3	118	0
Mobile Heavy Equipment Mechanics, Except Engines	\$19.15	\$29.00	\$60,325.06	383	413	187	40	44%	High school diploma or equivalent	Long-term on-the-job training	21%	6%	1.46	109.6	33	О
Security and Fire Alarm Systems Installers	\$19.01	\$27.46	\$57,118.65	107	114	86	13	74%	High school diploma or equivalent	Moderate-term on-the- iob training	110/	Insf. Data	0.88	113.2	26	0
Security and the Alaim Systems installers	\$15.01	\$27.40	φ37,110.03	107	114	- 50	13	7470	High school diploma or	Long-term on-the-job	1170	IIISI. Data	0.88	113.2	20	0
Telecommunications Line Installers and Repairers  Production Occupations	\$20.47	\$31.06	\$64,603.58	112	116	56	11	46%	equivalent	training	13%	Insf. Data	0.79	116.9	•	
·									High school diploma or	Moderate-term on-the-						
Chemical Equipment Operators and Tenders Crushing, Grinding, and Polishing Machine Setters,	\$19.13	\$27.50	\$57,202.15	310	310	83	31	27%	equivalent High school diploma or	job training Moderate-term on-the-	17%	Insf. Data	1.82	110.4		$\vdash$
Operators, and Tenders	\$19.71	\$23.69	\$49,273.77	100	101	19	11	18%	equivalent	job training	19%	Insf. Data	2.67	116		
Cutting and Slicing Machine Setters, Operators, and Tenders	\$20.64	\$22.31	\$46,398.52	156	158	64	18	46%	High school diploma or equivalent	Moderate-term on-the- job training	20%	Insf. Data	2.09	116.6		
			,													
Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	\$20.15	\$28.54	\$59,353.93	104	108	39	12	42%	High school diploma or equivalent	Moderate-term on-the- job training	17%	Insf. Data	1.27	117.3		i .
			\$88,818.32	84		28	0	30%	High school diploma or	Long-term on-the-job				101.1		
Gas Plant Operators	\$33.31	\$42.70			82	28	8	30%	equivalent High school diploma or	training Long-term on-the-job	20%	Insf. Data	3.42			
Machinists	\$19.18	\$26.95	\$56,059.98	794	830	201	88	27%	equivalent	training	23%	7%	1.95	115.2	47	1

Description	Entry-level Hourly Earnings	Median Hourly Earnings	Median Annual Earnings	2024 Jobs	2028 Jobs	2024 Hires	Avg. Annual Openings	2024 Turnover Rate	Typical Entry Level Education	Typical On-The-Job Training	Current Year Age 55-64 % of Occupation	Current Year Age 65+ % of Occupation	2024 Employment Concentration	Automation Index	2023 Post- Secondary Completions (90 miles)	2023 Post- Secondary Completions (45 miles)
Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	\$18.93	\$24.28	\$50,511.45	247	241	74	25	30%	High school diploma or equivalent	Moderate-term on-the- job training	22%	Insf. Data	6.6	111.7	10	1
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	\$19.69	\$23.34	\$48,553.06	137	147	67	16	45%	High school diploma or	Moderate-term on-the- job training	15%		1.77	115.3		*
Water and Wastewater Treatment Plant and System Operators	\$20.26	\$29.12	\$60.574.53	230	224	61	21	26%	High school diploma or equivalent	Long-term on-the-job training	21%	6%	1.32	104.1	4	0
Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	\$19.32	\$22.86	\$47,551.27	165	164	78	17	43%	High school diploma or equivalent	Moderate-term on-the- job training	15%	Insf. Data	3.3	119	884	247
Transportation and Material Moving Occupations	7.0.0	T	4 ,					1011		-						
Crane and Tower Operators	\$21.18	\$27.33	\$56,843.52	124	125	98	12	76%	High school diploma or equivalent	Moderate-term on-the- job training	23%	Insf. Data	1.96	121.5		٠
Postsecondary nondegree award  Healthcare Practitioners and Technical Occupations																
Licensed Practical and Licensed Vocational Nurses	\$20.76	\$25.94	\$53,950.74	890	900	651	74	71%	Postsecondary nondegree award	None	20%	6%	0.96	84.8	330	50
Paramedics	\$18.82	\$23.69	\$49,272.99	150	145	69	7	46%	Postsecondary nondegree award	None	8%	Insf. Data	1.04	83.7	182	36
Installation, Maintenance, and Repair Occupations Electrical and Electronics Repairers, Commercial and									Postsecondary	Lang tarm on the ich						
Industrial Equipment  Production Occupations	\$24.87	\$33.23	\$69,117.55	100	99	39	9	38%	nondegree award	Long-term on-the-job training	19%	Insf. Data	1.19	97.3	28	12
Computer Numerically Controlled Tool Programmers	\$22.32	\$27.85	\$57,938.08	95	106	36	12	38%	Postsecondary nondegree award	Moderate-term on-the- job training	18%	Insf. Data	2.28	101.7	43	30
Associate's Degree  Computer and Mathematical Occupations																
Computer Network Support Specialists	\$21.24	\$31.95	\$66,451.22	235	229	94	16	41%	Associate's degree	None	14%	Insf. Data	1.07	86.9	1012	123
Architecture and Engineering Occupations  Architectural and Civil Drafters	\$21.83	\$29.52	\$61,402.06	125	129	51	13	37%	Associate's degree	None	17%	Insf. Data	0.8	88.9	120	0
Civil Engineering Technologists and Technicians	\$18.90	\$30.89	\$64,248.82	86	89	26	9	26%	Associate's degree	None	20%	Insf. Data	0.93	92.4	37	37
Electrical and Electronic Engineering Technologists and Technicians	\$18.82	\$32.01	\$66,577.88	179	190	46	20	24%	Associate's degree	None	24%	7%	1.29	98.6	73	50
Engineering Technologists and Technicians, Except Drafters, All Other	\$19.64	\$33.60	\$69,889.57	190	195	64	19	34%	Associate's degree	None	22%	Insf. Data	1.96	92.1	15	2
Industrial Engineering Technologists and Technicians	\$22.41	\$30.96	\$64,396.29	195	205	58	21	28%	Associate's degree	None	22%	6%	1.87	94	135	20
Mechanical Drafters	\$22.50	\$33.15	\$68,942.84	91	91	30	8	35%	Associate's degree	None	19%	Insf. Data	1.46	84.6	123	7
Legal Occupations Legal Support Workers, All Other	\$21.17	\$25.28	\$52,575.41	55	56	21	6	43%	Associate's degree	None	20%	Insf. Data	0.82	89.1	31	0
Healthcare Practitioners and Technical Occupations Dental Hygienists	\$34.59	\$40.07	\$83,337.50	310	313	07	22	29%	Associate's degree	None	15%	70/	1.02	96.8	61	27
Radiologic Technologists and Technicians	\$34.59	\$40.07	\$56,938.43	297	293	97	22 16	29%	Associate's degree	None	18%	3% 5%	0.92	96.8	110	22
Respiratory Therapists	\$25.15	\$31.95	\$66,448.73	143	141	62	7	45%	Associate's degree	None	21%	Insf. Data	0.75	93.2	37	0
Healthcare Support Occupations	400.77	407.71	455.015.07	50	67		10	000/			. ( 0 .		0.01	07.7	70	-
Occupational Therapy Assistants Physical Therapist Assistants	\$20.33 \$21.13	\$27.31 \$27.45	\$56,815.07 \$57,087.66	59 172	63 184	54	27	88%	Associate's degree Associate's degree	None None	Insf. Data	Insf. Data Insf. Data	0.84	87.3 88.1	36 49	10
Bachelor's degree	Ψ21.15	Ψ27.43	\$57,007.00	17.2	104	100	27	30%	Associate's degree	TYORK	1170	IIISI. Data	1.11	00.1	43	15
Management Occupations																
Architectural and Engineering Managers	\$54.01	\$76.13	\$158,347.43	517	537	101	38	19%	Bachelor's degree	None	23%	5%	1.74	80.7	1313	46
Computer and Information Systems Managers  Business and Financial Operations Occupations	\$41.79	\$63.46	\$132,005.63	423	457	141	37	31%	Bachelor's degree	None	19%	3%	0.5	79.9	1336	193
Business Operations Specialists, All Other	\$19.89	\$37.92	\$78,863.55	1,725	1,657	805	153	46%	Bachelor's degree	None	20%	7%	1.07	86.8	1588	277
Buyers and Purchasing Agents	\$21.87	\$35.44	\$73,717.52	1,360	1,332	538	123	39%		Moderate-term on-the- job training	23%	8%	2.01	93.4		
Compliance Officers	\$21.45	\$34.48	\$71,712.22	300	313	113	27	36%	Bachelor's degree	Moderate-term on-the- job training	22%	7%	0.54	86.1	326	34
Financial and Investment Analysts	\$26.60	\$44.20	\$91,943.92	217	220	79	17	34%	Bachelor's degree	None	14%	Insf. Data	0.46	89	614	45
Financial Specialists, All Other	\$20.56	\$34.46	\$71,678.88	230	238	81	18		Bachelor's degree	None	20%	5%	1.27	89	637	45
Logisticians	\$26.07	\$42.27	\$87,930.99	748	761	271	67	35%	Bachelor's degree	None Long-term on-the-job	18%	5%	2.27	82.1	1585	263
Personal Financial Advisors	\$20.35	\$41.20	\$85,703.65	162	170	40	13			training	22%	13%	0.41	89.4	563	44
Project Management Specialists	\$25.90	\$42.23	\$87,844.67	818	845	431	64	49%	Bachelor's degree	None	19%	5%	0.6	86.8	1583	262

Description	Entry-level Hourly Earnings	Median Hourly Earnings	Median Annual Earnings	2024 Jobs	2028 Jobs	2024 Hires	Avg. Annual Openings	2024 Turnover Rate	Typical Entry Level Education	Typical On-The-Job	Current Year Age 55-64 % of Occupation	Current Year Age 65+ % of Occupation	2024 Employment Concentration	Automation Index	2023 Post- Secondary Completions (90 miles)	2023 Post- Secondary Completions (45 miles)
Computer and Mathematical Occupations	Larringo	Larringo	Larringo	0000	0000		ороння	rato	Ladouron	- Tunning	o oodpation	J J J J J J J J J J J J J J J J J J J	OOTIOOTIC CETOT	maox	(001111100)	(10111100)
Computer Network Architects	\$36.69	\$55.08	\$114,563.70	271	267	121	14	45%	Bachelor's degree	None	14%	Insf. Data	1,11	87.1	685	104
Computer Occupations, All Other	\$20.81	\$44.98	\$93,550,50	380	406	183	31	48%	Bachelor's degree	None	16%	4%	0.6	85.5	1014	109
Computer Systems Analysts	\$26.95	\$40.11	\$83,420.49	415	438	185	31	42%	Bachelor's degree	None	17%	4%	0.59	81.7	446	74
Information Security Analysts	\$36.19	\$56.15	\$116.788.01	118	119	63	9		Bachelor's degree	None		Insf. Data	0.46	86.4	1004	194
									_							
Network and Computer Systems Administrators	\$26.19	\$39.54	\$82,234.28	349	358	138	22		Bachelor's degree	None	15%	3%	0.78	87.2	443	44
Software Developers	\$34.45	\$53.97	\$112,254.79	1,190	1,304	613	95	49%	Bachelor's degree	None	12%	3%	0.5	80.2	1149	148
Software Quality Assurance Analysts and Testers	\$23.07	\$42.56	\$88,519.20	186	204	116	17	59%	Bachelor's degree	None	14%	Insf. Data	0.65	80.2	1399	150
Architecture and Engineering Occupations	+====	4	400,010.00													
Civil Engineers	\$28.96	\$42.47	\$88,344.47	472	480	195	30	40%	Bachelor's degree	None	18%	7%	0.99	81.7	233	3
Electrical Engineers	\$30.92	\$47.87	\$99.560.91	306	310	74	18		Bachelor's degree	None	20%	5%	1.16	84.8	103	0
Industrial Engineers	\$32.46	\$47.02	\$97,796.34	1,408	1,498	416	103	31%	Bachelor's degree	None	20%	5%	2.95	92	138	5
Mechanical Engineers	\$31.59	\$48.56	\$101,014.23	920	987	259	68	26%	Bachelor's degree	None	18%	5%	2.27	83.4	379	30
Nuclear Engineers	\$42.14	\$61.44	\$127,793.36	87	91	15	6	14%	Bachelor's degree	None	15%	Insf. Data	4.33	75.7	0	0
Life, Physical, and Social Science Occupations																
Biological Scientists, All Other	\$20.93	\$34.79	\$72,360.33	67	71	34	6	51%	Bachelor's degree	None	Insf. Data	Insf. Data	0.73	82.2	595	138
Chemists	\$28.07	\$40.58	\$84,410.83	105	109	38	8	35%		None	19%		0.87	87.3	166	24
Conservation Scientists	\$21.87	\$31.89	\$66,331.03	66	69	29	6		Bachelor's degree	None	16%		1.73	78.5	110	0
Environmental Scientists and Specialists, Including		·							_							
Health	\$25.32	\$38.08	\$79,211.17	80	83	34	7	39%	Bachelor's degree	None	19%	Insf. Data	0.66	74.6	197	31
Occupational Health and Safety Specialists	\$23.68	\$38.87	\$80,849.42	161	171	91	20	53%	Bachelor's degree	None	23%	Insf. Data	0.93	92.5	15	0
Community and Social Services Occupations																
Probation Officers and Correctional Treatment Specialists	\$22.42	\$32.96	\$68,556.09	133	132	55	10	41%	Bachelor's degree	Short-term on-the-job training	14%	Insf. Data	1.04	78.2	331	55
Education, Training, and Library Occupations	QZZ.1Z	Ψ02.50	φου,ουσ.υσ	100	102		.0	1170	Bacricior 5 acgree	C. C. I. I. I. I.	1170	mar. Data		, 0.2	001	00
Career/Technical Education Teachers, Secondary																
School	\$20.47	\$28.50	\$59,283.28	113	116	33	8	28%	Bachelor's degree	None	15%	Insf. Data	0.88	83.6	24	0
Elementary School Teachers, Except Special																
Education	\$20.49	\$28.71	\$59,707.70	2,073	2,074	616	143	29%	Bachelor's degree	None	16%	5%	1.06	82.3	575	123
Kindergarten Teachers, Except Special Education	\$19.46	\$27.25	\$56,687.59	212	214	103	23	47%	Bachelor's degree	None	12%	Insf. Data	1.29	82.5	104	8
Middle School Teachers, Except Special and																
Career/Technical Education	\$18.88	\$28.88	\$60,075.11	936	938	281	65	29%	Bachelor's degree	None	16%	5%	1.08	84.5	223	46
Secondary School Teachers, Except Special and Career/Technical Education	\$21.21	\$29.88	\$62,150.71	1,476	1,486	411	95	27%	Bachelor's degree	None	16%	6%	1.02	84.9	2409	518
Special Education Teachers, Kindergarten and									_							
Elementary School	\$21.00	\$29.69	\$61,755.46	280	281	81	20	28%	Bachelor's degree	None	16%	4%	0.95	83.7		
Special Education Teachers, Middle School	\$19.00	\$28.48	\$59,236.38	110	111	33	8	29%		None	16%	Insf. Data	0.89	84.2	34	0
			4													
Special Education Teachers, Secondary School	\$22.65	\$30.86	\$64,194.65	234	234	68	16	28%	Bachelor's degree	None	16%	Insf. Data	1.06	81.8	34	0
Arts, Design, Entertainment, Sports, and Media Occupations																
Commercial and Industrial Designers	\$24.10	\$33.46	\$69,605.42	85	84	30	7	36%	Bachelor's degree	None	18%	Insf. Data	2	81.3	32	5
Healthcare Practitioners and Technical Occupations	<del>-</del>	+==:10	7,3.12	50	3.	30		2070			1070			51.0	02	
Registered Nurses	\$26.23	\$32.99	\$68,629.11	4,464	4,359	1,907	243	43%	Bachelor's degree	None	22%	6%	0.96	85.3	1759	334
Master's degree					7			-								
Community and Social Services Occupations																
Healthcare Social Workers	\$21.85	\$29.01	\$60,344.30	186	191	96	18	50%	Master's degree	Internship/residency	19%	7%	0.68	83.5	381	55
Education, Training, and Library Occupations						- 1										
Instructional Coordinators	\$19.80	\$33.77	\$70,239.99	312	313	148	28	46%	Master's degree	None	18%	9%	1.06	88.5	15	0
Healthcare Practitioners and Technical Occupations																
Nurse Practitioners	\$47.62	\$58.80	\$122,313.63	371	427	168	32	40%	Master's degree		18%	5%	0.88	83.2	303	7
Occupational Therapists	\$31.33	\$43.38	\$90,240.80	189	195	91	12	46%	Master's degree		13%	Insf. Data	0.89	87.3	26	26
Physician Assistants	\$47.57	\$60.48	\$125,797.47	156	172	59	12	33%	Master's degree	1	10%		0.72	87.8	93	29
Speech-Language Pathologists	\$26.33	\$37.66	\$78,335.95	234	248	101	16		Master's degree	Internship/residency		Insf. Data	0.93	87.5	198	67
Doctoral or professional degree																
Legal Occupations																
									Doctoral or							
Lawyers	\$29.06	\$61.44	\$127,799.96	471	466	134	21	29%	professional degree	None	21%	16%	0.44	81.1	174	0

Description	Entry-level Hourly Earnings	Hourly	Median Annual	2024 Jobs			Avg. Annual Openings		Typical Entry Level Education	Typical On-The-Job Training	Current Year Age 55-64 % of Occupation	Age 65+ % of	Employment		Secondary Completions	2023 Post- Secondary Completions (45 miles)
Healthcare Practitioners and Technical Occupations																
Pharmacists	\$51.68	\$64.20	\$133,543.11	351	339	136	14	38%	Doctoral or professional degree	None	19%	10%	0.74	89.1	119	0
Physical Therapists	\$38.47	\$48.73	\$101,352.32	315	323	139	15	42%	Doctoral or professional degree	None	13%	4%	0.88	85.5	138	41
Physicians, All Other	\$29.17	\$83.14	\$172,926.64	448	425	137	13	30%	Doctoral or professional degree	Internship/residency	21%	14%	0.98	88.9	151	0

<sup>\*</sup> No post-secondary completions within 90 miles in programs leading to these occupations. Some jobs requiring only a high school diploma may not have a post-secondary program designed to prepare people for that job.