

September 2022

# Labor Market Analysis

## Child Development, Early Childhood Education



POWERED BY



Prepared by the Central Valley/Mother Lode Center of Excellence

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**COVID-19 Statement:** This report includes employment projection data by Lightcast. Lightcast’s projections are modeled on recorded (historical) employment figures and incorporate several underlying assumptions, including the assumption that the economy during the projection period will be at approximately full employment or potential output. To the extent that a recession or labor shock, such as the economic effects of COVID-19, can cause long-term structural change, they may impact the projections. At this time, it is not possible to quantify the impact of COVID-19 on projections of industry and occupational employment. Other measures such as unemployment rates and monthly industry employment estimates will reflect the most recent information on employment and jobs in the state and, in combination with input from local employers, may help validate current and future employment needs as depicted here.

*If for any reason this document is not accessible or if you have specific needs for readability, please contact us and we will do our utmost to accommodate you with a modified version. To make a request, contact Nora Seronello by phone at (209) 575-6894 or by email [seronellon@mjc.edu](mailto:seronellon@mjc.edu).*

# Summary

Please note the COVID-19 statement on page 2 when considering this report's findings.

This study conducted by the Central Valley/Mother Lode Center of Excellence examines labor market demand, wages, skills, and postsecondary supply for Child Development, Early Childhood Education. Three occupations related to Child Development, Early Childhood Education were identified for Cerro Coso College:

- 25-2011, Preschool Teachers, Except Special Education
- 25-9045, Teaching Assistants, Except Postsecondary
- 39-9011, Childcare Workers

## Key findings:

- **Occupational demand** — Nearly 12,020 workers were employed in jobs related to Child Development, Early Childhood Education in 2021 in the South Central Valley/Southern Mother Lode (SCV/SML) subregion. The largest occupation is teaching assistants, except postsecondary with 6,386 workers, a projected growth rate of 5% over the next five years, and 663 annual openings.
- **Wages** — Teaching assistants, except postsecondary earn the highest entry-level wage, \$14.32/hour in the subregion. Please note, childcare workers entry-level wage is below the average living wage.
- **Employers** — Employers with the most job postings in the subregion are Kern Community College District, Mammoth Mountain Ski Area, and Grimmway Schools.
- **Occupational titles** — The most common occupational title in job postings in the subregion is Preschool Teachers, Except Special Education. The most common job title is Dog Walker Pet Sitter.
- **Skills and certifications** — The top baseline skill is communication skills, the top specialized skill is teaching, and the top software skill is Microsoft Excel. The most in-demand certification is a First Aid Cpr Aed.
- **Education** — A high school diploma or equivalent is typically required for childcare workers. Some college, no degree is typically required for teaching assistants, except postsecondary. An associate degree is typically required for preschool teachers, except special education.
- **Supply** — Analysis of postsecondary completions shows that on average 2,196 awards were conferred in the Central Valley/Mother Lode region each year.

Based on a comparison of occupational demand and supply, there is an oversupply of 297 trained workers in the subregion and an undersupply of 2,291 workers in the region. Even though these are high-churn occupations, the Center of Excellence recommends that Cerro Coso College work with the regional directors and local industry in cautiously proceeding with any expansion of programs related to Child Development, Early Childhood Education in the subregion.

# Introduction

The Central Valley/Mother Lode Center of Excellence was asked by Cerro Coso College to provide labor market information for Child Development, Early Childhood Education. The geographical focus for this report is the South Central Valley/Southern Mother Lode (SCV/SML) subregion, but regional demand and supply data has been included for broader applicability and use. The average living wage for a single adult in the SCV/SML subregion is \$11.91/hour.<sup>1</sup> Analysis of the program and occupational data related to Child Development, Early Childhood Education resulted in the identification of applicable occupations. The Standard Occupational Classification (SOC) System codes and titles used in this report are:

- 25-2011, Preschool Teachers, Except Special Education
- 25-9045, Teaching Assistants, Except Postsecondary
- 39-9011, Childcare Workers

The occupational titles, job descriptions, sample job titles, and knowledge and skills from the Bureau of Labor Statistics and O\*NET OnLine are shown below. There was no O\*Net data available for teaching assistants, except postsecondary.

## **Preschool Teachers, Except Special Education**

**Job Description:** Instruct preschool-aged students, following curricula or lesson plans, in activities designed to promote social, physical, and intellectual growth.

**Knowledge:** Education and Training, English Language, Public Safety and Security, Customer and Personal Service, Psychology

**Skills:** Instructing, Speaking, Active Listening, Learning Strategies, Coordination aircraft general/ airframe maintenance, and aviation powerplant mechanics

## **Childcare Workers**

**Job Description:** Attend to children at schools, businesses, private households, and childcare institutions. Perform a variety of tasks, such as dressing, feeding, bathing, and overseeing play.

**Knowledge:** Customer and Personal Service, English Language, Education and Training, Public Safety and Security, Psychology

**Skills:** Monitoring, Service Orientation, Social Perceptiveness, Active Listening, Coordination

# Occupational Demand

The SCV/SML subregion employed 12,014 workers in Child Development, Early Childhood Education occupations in 2021 (Exhibit 1). The largest occupation is teaching assistants, except postsecondary with 6,386 workers in 2021. This occupation is expected to contract by 5% over the next five years while still producing 663 annual openings.

**Exhibit 1. Child Development, Early Childhood Education employment and occupational projections in the SCV/SML subregion**

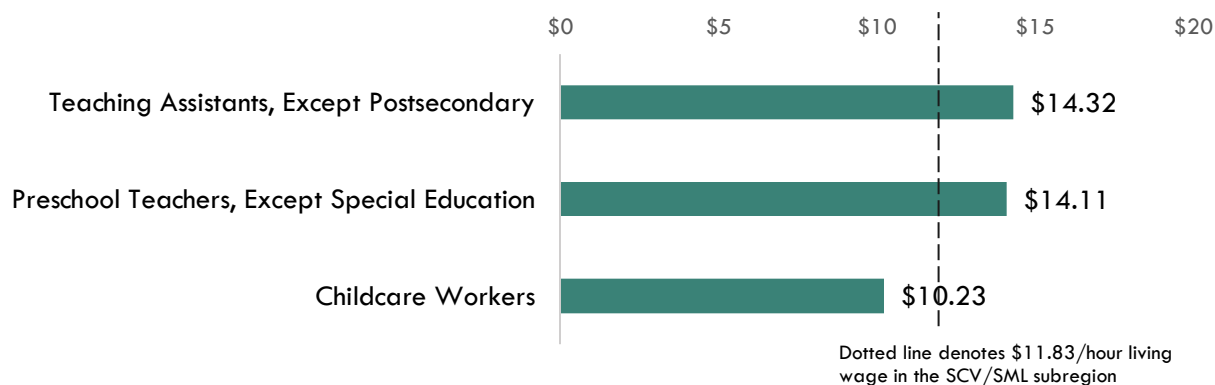
Occupation	2020 Jobs	2025 Jobs	5-Year Change	5-Year % Change	Annual Openings
Teaching Assistants, Except Postsecondary	6,386	6,727	341	5%	663
Childcare Workers	4,226	4,203	(23)	(1%)	616
Preschool Teachers, Except Special Education	1,403	1,591	188	13%	184
<b>TOTAL</b>	<b>12,014</b>	<b>12,521</b>	<b>507</b>	<b>4%</b>	<b>1,464</b>

<sup>1</sup> The term "living wage" in Center of Excellence reports is calculated by averaging the self-sufficiency wages from the Insight Center's California Family Needs Calculator for each county in the subregion: <https://insightccd.org/tools-metrics/self-sufficiency-standard-tool-for-california/>.

# Wages

Exhibit 2 shows the entry-level hourly wages of the Child Development, Early Childhood Education occupations. Teaching assistants, except postsecondary earn the highest entry-level wage, \$14.32/hour in the subregion<sup>2</sup>. Please note, childcare workers entry-level wage is below the average living wage.

**Exhibit 2. Child Development, Early Childhood Education entry-level wages in the SCV/SML subregion**



# Job Postings

There were 368 job postings for the two occupations in the SCV/SML subregion from March 2022 to August 2022.<sup>3</sup> The employers with the most job postings are listed in Exhibit 3.

**Exhibit 3. Top employers of Child Development, Early Childhood Education by number of job postings**

Employer	Job Postings	% Job Postings
Kern Community College District	13	6%
Mammoth Mountain Ski Area	10	4%
Grimmway Schools	9	4%
Petsitter	9	4%
Community Action Partnership of San Luis Obispo	8	3%
Petsitter Com	6	3%
Sitter	6	3%
Kern County Superintendent of Schools	5	2%
Cerro Coso Community College	4	2%
Community Action Partnership of Kern	4	2%

Exhibit 4 shows how job postings for the targeted occupations in the SCV/SML subregion are distributed across three O\*NET OnLine occupations. The occupational title Preschool Teachers, Except Special Education is listed in 180 job postings. Note how this occupational title dominates the job posting results. Common job titles in postings include Dog Walker Pet Sitter in 27 job postings, Pre-School Teacher in 23 job postings, and teacher in 14 job postings.

<sup>2</sup> Entry-level wages are derived from the 25<sup>th</sup> percentile.

<sup>3</sup> Other than occupation titles and job titles, the categories below can be counted one or multiple times per job posting, and across several areas in a single posting. For example, a skill can be counted in two different skill types, and an employer can indicate more than one education level.

#### Exhibit 4. Top occupational titles in job postings for Child Development, Early Childhood Education

Occupational Title	Job Postings	% of Job Postings
Preschool Teachers, Except Special Education	180	49%
Childcare Workers	153	42%
Nannies	35	10%

#### Salaries

Exhibit 5 shows the “Market Salaries” for Child Development, Early Childhood Education occupations. These are calculated by Burning Glass using a machine learning model built off of millions of job postings every year. This accounts for adjustments based on locations, industry, skills, experience, education requirements, among other variables.

#### Exhibit 5. Salaries for Child Development, Early Childhood Education occupations

Market Salary Percentile	Salary Amount
10th Percentile	\$22,754
25th Percentile	\$25,092
50th Percentile	\$28,972
75th Percentile	\$46,567
90th Percentile	\$57,050

#### Education

Of the 368 job postings, 172 listed an education level preferred for the positions being filled. Among those, 77% requested high school or vocational training, 60% requested an associate degree, and 41% requested a bachelor’s degree (Exhibit 6). A job posting can indicate more than one education level. Hence, the percentages shown in the chart below may total more than 100%.

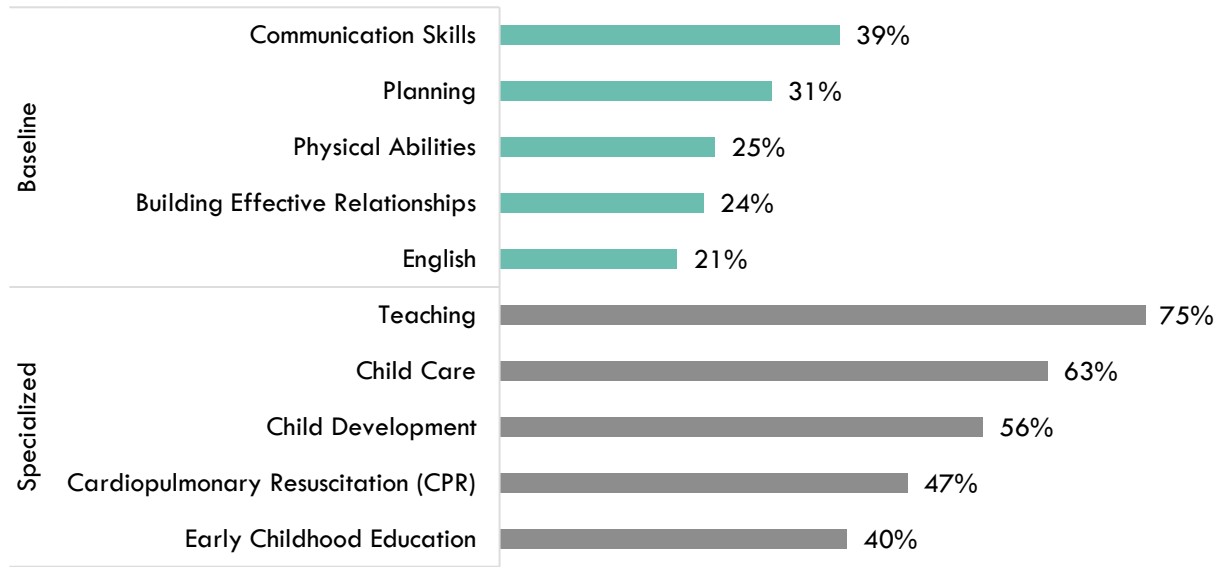
#### Exhibit 6. Education levels requested in job postings for Child Development, Early Childhood Education

Education Level	Job Postings	% of Job Postings
High school or vocational training	133	77%
Associate's degree	103	60%
Bachelor's degree	71	41%
Master's degree	5	3%

#### Baseline and Specialized Skills

Exhibit 7 depicts the top baseline and specialized skills for the targeted occupations. The three most important baseline skills are communication skills, 39% of job postings, planning, 31%, and physical abilities, 25%. The top three specialized skills are teaching, 75% of job postings, child care, 63%, and child development, 56%.

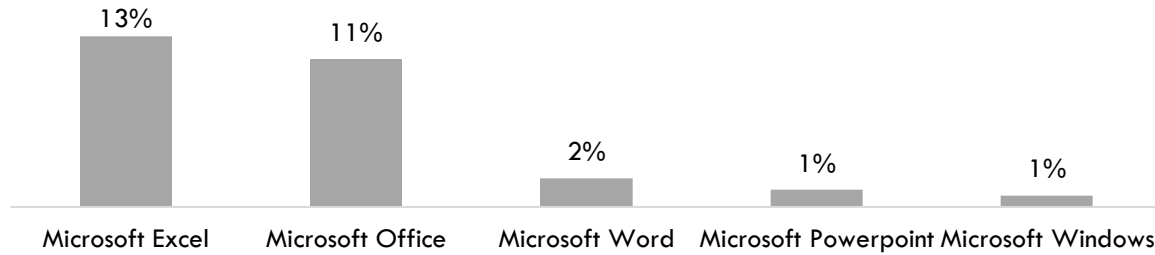
**Exhibit 7. In-demand Child Development, Early Childhood Education baseline and specialized skills**



**Software Skills**

Analysis also included the software skills most in demand by employers. Microsoft Excel and Office were the top two software skills identified in job postings (Exhibit 8).

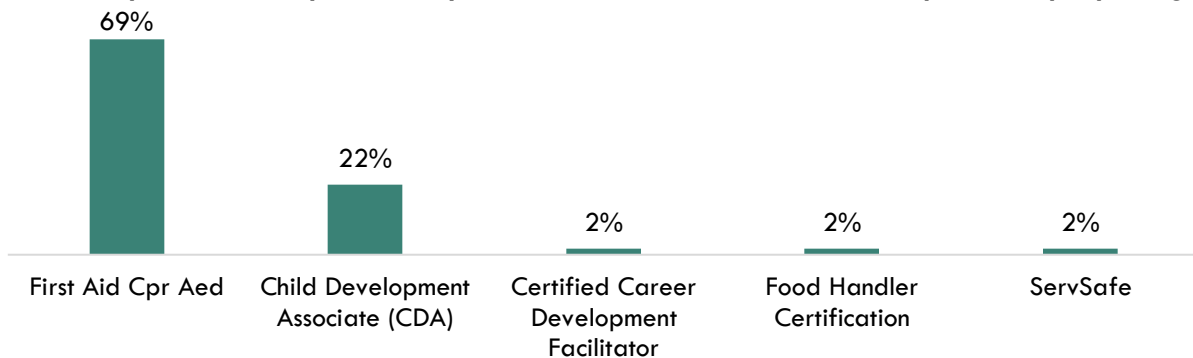
**Exhibit 8. In-demand Child Development, Early Childhood Education software skills**



**Certifications**

Of the 368 job postings, 153 contained certification data. Among those, 69% indicated a need for a First Aid Cpr Aed. The next top certifications are Child Development Associate (CDA) and certified career development facilitator (Exhibit 9). Please note 42% of job posting indicated a need for a drivers license, but it is not a certification.

**Exhibit 9. Top Child Development, Early Childhood Education certifications requested in job postings**



# Education, Work Experience & Training

A high school diploma or equivalent is typically required for childcare workers. Some college, no degree is typically required for teaching assistants, except postsecondary. An associate degree is typically required for preschool teachers, except special education (Exhibit 10).

**Exhibit 10. Education, work experience, training, and Current Population Survey results for Child Development, Early Childhood Education occupations<sup>4</sup>**

Occupation	Typical Entry-level Education	Work Experience Required	Typical On-The-Job Training	CPS
Childcare Workers	High school diploma or equivalent	None	Short-term	35.1%
Preschool Teachers, Except Special Education	Associate's degree	None	None	31.6%
Teaching Assistants, Except Postsecondary	Some college, no degree	None	None	38.6%

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<sup>4</sup> "Labor Force Statistics from the Current Population Survey," Bureau of Labor Statistics, <https://www.bls.gov/cps/>.



# Supply

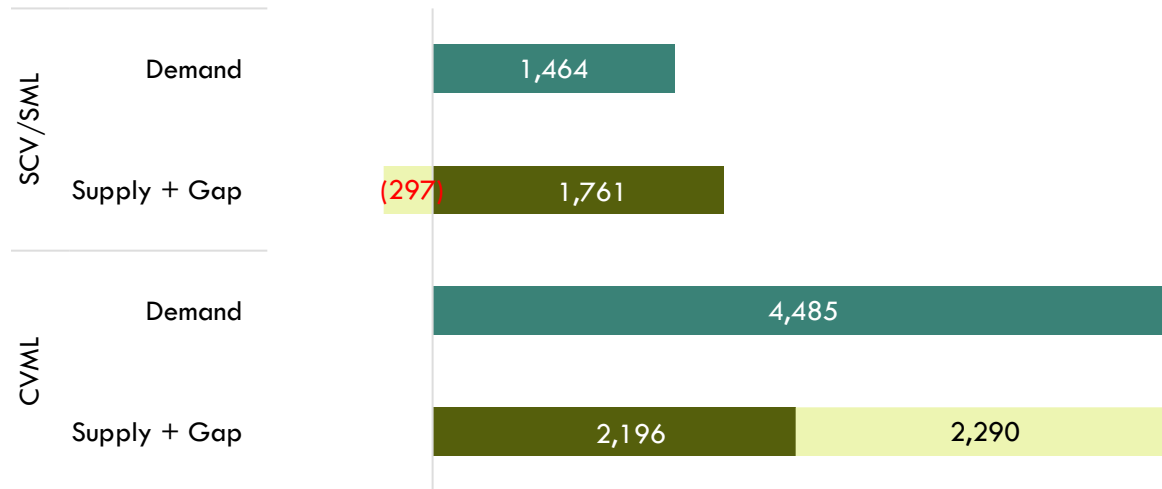
Analysis of program data from the Integrated Postsecondary Education Data System (IPEDS) included the TOP and CIP codes and titles: 080200 - Educational Aide (Teacher Assistant), 130500 - Child Development/Early Care and Education and 13.1210 - Early Childhood Education and Teaching. Analysis of the last three years of data shows that, on average, 2,196 awards were conferred in the Central Valley/Mother Lode region each year (Exhibit 11).

**Exhibit 11. Postsecondary supply for Child Development, Early Childhood Education occupations in the region**

TOP/ CIP Code- Title	College	Associate Degree	Associate for Transfer Degree	Certificate 12 < 18 Semester Units	Certificate 16 < 30 Semester Units	Certificate 18 < 30 Semester Units	Certificate 30 < 60 Semester Units	Certificate 6 < 18 Semester Units	Certificate 8 < 16 Semester Units	Subtotal
<b>080200 - Educational Aide (Teacher Assistant)</b>	Fresno City	1					1			2
	<b>13.1210 - Early Childhood Education and Teaching</b>									
	Humphreys University-Stockton and Modesto Campuses	9								9
	Bakersfield	30	89				38	272		428
	Cerro Coso	1	11		16	24	18			71
	Clovis	5	18		4	10				38
	Columbia	6	2	4	2	1			2	16
	Fresno City	16	44	10	15	71			5	162
	Merced	25	34				10			69
<b>130500 - Child Development/Early Care and Education</b>	Modesto Junior	47	36	104	13	23	16		46	284
	Porterville	31	12				22			65
	Reedley College	24	38	36	52	71			8	230
	San Joaquin Delta		4		0	41	12			57
	Sequoias	38	52		18	39		292		440
	Taft	21	17	21	8	8	1	20	11	106
	West Hills Coalinga	5	4			4		71		84
	West Hills Lemoore	19	9		2	10		95		134
<b>TOTAL</b>		<b>277</b>	<b>369</b>	<b>175</b>	<b>132</b>	<b>303</b>	<b>117</b>	<b>750</b>	<b>72</b>	<b>2196</b>

There is an oversupply of 297 Child Development, Early Childhood Education workers in the SCV/SML subregion and an undersupply of 2,290 workers in the region (Exhibit 12).

**Exhibit 12. Child Development, Early Childhood Education workforce demand (annual job openings), postsecondary supply of students (awards), and additional students needed to fill gap in the SCV/SML subregion and region**



## Student Outcomes

Exhibit 13 summarizes employment and wage outcomes from the California Community College Chancellor’s Cal-PASS Plus LaunchBoard for the TOP code related to Child Development, Early Childhood Education. Of note, 715 students received a degree or certificate or attained apprenticeship journey status; 834 students transferred; 74% of students obtained a job closely related to their field of study; 19% had a median change in earnings; and 53% of students attained a living wage.

**Exhibit 13. Regional metrics for the TOP code related to Child Development, Early Childhood Education**

Metric	Child Development/Early Care and Education 130500
Students Who Got a Degree or Certificate or Attained Apprenticeship Journey Status	715
Number of Students Who Transferred	834
Job Closely Related to Field of Study	74%
Median Change in Earnings	19%
Attained a Living Wage	53%
* denotes data not available.	

## Conclusion

The entry-level wages of the three occupations exceed the SCV/SML subregion's average living wage. There were 368 job postings in the past six months for occupations related to Child Development, Early Childhood Education in the subregion. Analysis of skills and certification requirements in job postings indicates:

- The top baseline skill is communication skills, and the top specialized skill is teaching.
- The top software skill is Microsoft Excel.
- The top certification is a First Aid Cpr Aed.

There is an oversupply of 794 trained workers in the SCV/SML subregion; however, there is a shortage of 2,290 workers across the entire region.

## Recommendation

Based on these findings, along with the fact that these are very high-churn occupations, it is recommended that Cerro Coso College work with the regional directors and local industry in cautiously proceeding with any expansion of programs related to Child Development, Early Childhood Education in the subregion.

# Appendix A: Methodology & Data Sources

## Data Sources

Labor market and educational supply data compiled in this report derive from a variety of sources. Data were drawn from external sources, including the Economic Modeling Specialists, Inc., the California Community Colleges Chancellor’s Office Management Information Systems Data Mart and the National Center for Educational Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS). Below is the summary of the data sources found in this study.

Data Type	Source
Labor Market Information/Population Estimates and Projections/Educational Attainment	Economic Modeling Specialists, Intl. (Lightcast). Lightcast occupational employment data are based on final Lightcast industry data and final Lightcast staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level Lightcast earnings by industry: economicmodeling.com.
Typical Education Level and On-the-job Training	Bureau of Labor Statistics (BLS) uses a system to assign categories for entry-level education and typical on-the-job training to each occupation for which BLS publishes projections data: <a href="https://www.bls.gov/emp/tables/educational-attainment.htm">https://www.bls.gov/emp/tables/educational-attainment.htm</a> .
Labor Force, Employment and Unemployment Estimates	California Employment Development Department, Labor Market Information Division: <a href="http://labormarketinfo.edd.ca.gov">labormarketinfo.edd.ca.gov</a> .
Job Posting and Skills Data	Burning Glass: <a href="http://burning-glass.com/">burning-glass.com/</a> .
Additional Education Requirements/ Employer Preferences	The O*NET Job Zone database includes over 900 occupations as well as information on skills, abilities, knowledge, work activities and interests associated with specific occupations: <a href="http://onetonline.org">onetonline.org</a> .

## Key Terms and Concepts

**Annual Job Openings:** Annual openings are calculated by dividing the number of years in the projection period by total job openings.

**Education Attainment Level:** The highest education attainment level of workers age 25 years or older.

**Employment Estimate:** The total number of workers currently employed.

**Employment Projections:** Projections of employment are calculated by a proprietary Economic Modeling Specialists, Intl. (Lightcast) formula that includes historical employment and economic indicators along with national, state and local trends.

**Living Wage:** The cost of living in a specific community or region for one adult and no children. The cost increases with the addition of children.

**Occupation:** An occupation is a grouping of job titles that have a similar set of activities or tasks that employees perform.

**Percent Change:** Rate of growth or decline in the occupation for the projected period; this does not factor in replacement openings.

**Replacements:** Estimate of job openings resulting from workers retiring or otherwise permanently leaving an occupation. Workers entering an occupation often need training. These replacement needs, added to job openings due to growth, may be used to assess the minimum number of workers who will need to be trained for an occupation.

**Total Job Openings (New + Replacements):** Sum of projected growth (new jobs) and replacement needs. When an occupation is expected to lose jobs, or retain the current employment level, number of openings will equal replacements.

**Typical Education Requirement:** represents the typical education level most workers need to enter an occupation.

**Typical On-The-Job Training:** indicates the typical on-the-job training needed to attain competency in the skills needed in the occupation.