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Labor Market Analysis

Licensed Vocational Nurse



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Colleges



Prepared by the Central Valley/Mother Lode Center of Excellence

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COVID-19 Statement: This report includes employment projection data by Emsi. Emsi’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.

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Summary

Please note the COVID-19 statement on page 1 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 Licensed Vocational Nurse. One occupation related to Licensed Vocational Nurse was identified for Porterville College:

- 29-2061, Licensed Practical and Licensed Vocational Nurses

Key findings:

- **Occupational demand** — There were 4,103 workers employed in jobs related to Licensed Vocational Nurse in 2021 in the South Central Valley/Southern Mother Lode (SCV/SML) subregion. Licensed practical and licensed vocational nurses had 4,103 workers, a projected growth rate of 11% over the next five years, and 411 annual openings.
- **Wages** — Licensed practical and licensed vocational nurses earn an entry-level wage, \$23.36/hour in the subregion.
- **Employers** — Employers with the most job postings in the subregion are Adventist Health, Gale Healthcare, and Wellpath.
- **Occupational titles** — The most common occupational title in job postings in the subregion is Licensed Practical and Licensed Vocational Nurses. The most common job title is Licensed Vocational Nurse.
- **Skills and certifications** — The top baseline skill is planning, the top specialized skill is patient care, and the top software skill is Microsoft Excel. The most in-demand certification is Licensed Vocational Nurse (LVN).
- **Education** — A postsecondary nondegree award is typically required for licensed practical and licensed vocational nurses.
- **Supply** — Analysis of postsecondary completions shows that on average 313 awards were conferred in the Central Valley/Mother Lode region each year.

Recommendation:

Based on a comparison of occupational demand and supply, there is an undersupply of 206 trained workers in the subregion and 348 workers in the region. The Center of Excellence recommends that Porterville College work with the regional directors, the college's advisory board, and local industry in the expansion of programs to address the shortage of Licensed Vocational Nurses in the region.

Introduction

The Central Valley/Mother Lode Center of Excellence was asked by Porterville College to provide labor market information for Licensed Vocational Nurse. 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.¹ Analysis of the program and occupational data related to Licensed Vocational Nurse resulted in the identification of applicable occupations. The Standard Occupational Classification (SOC) System codes and titles used in this report are:

- 29-2061, Licensed Practical and Licensed Vocational Nurses

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.

Licensed Practical and Licensed Vocational Nurses

Job Description: Care for ill, injured, or convalescing patients or persons with disabilities in hospitals, nursing homes, clinics, private homes, group homes, and similar institutions. May work under the supervision of a registered nurse. Licensing required.

Knowledge: Customer and Personal Service, English Language, Psychology, Medicine and Dentistry, Administration and Management

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

Occupational Demand

The SCV/SML subregion employed 4,103 Licensed Vocational Nurses in 2021 (Exhibit 1). Licensed practical and licensed vocational nurses had 4,103 workers in 2021 and is projected to grow by 11% over the next five years and has 411 projected annual openings.

Exhibit 1. Licensed Vocational Nurse employment and occupational projections in the SCV/SML subregion

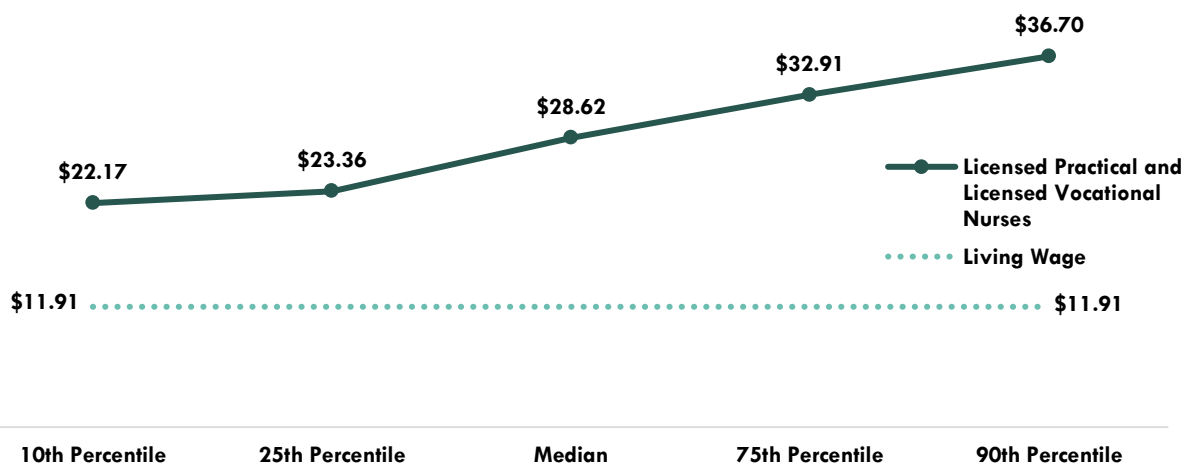
| Occupation | 2021 Jobs | 2026 Jobs | 5-Year Change | 5-Year % Change | Annual Openings |
|---|--------------|--------------|---------------|-----------------|-----------------|
| Licensed Practical and Licensed Vocational Nurses | 4,103 | 4,539 | 436 | 11% | 411 |
| TOTAL | 4,103 | 4,539 | 436 | 11% | 411 |

¹ Entry-level wages are derived from the 25th percentile.

Wages

Exhibit 2 shows the hourly wages of the Licensed Vocational Nurse occupations. Licensed practical and licensed vocational nurses earn an entry-level wage, \$23.36/hour in the subregion². The average living wage for a single adult in the SCV/SML subregion is \$11.91/hour.³ Please note 10th and 25th percentiles are considered entry-level wages while 75th and 90th are considered experienced wages, either gained by long term employment, received extra training, etc.

Exhibit 2. Licensed Vocational Nurse hourly wages in the SCV/SML subregion



Job Postings

There were 1,727 job postings for the occupation in the SCV/SML subregion from April 2022 to September 2022.⁴ The employers with the most job postings are listed in Exhibit 3.

Exhibit 3. Top employers of Licensed Vocational Nurse by number of job postings

| Employer | Job Postings | % Job Postings |
|------------------------------------|--------------|----------------|
| Adventist Health | 74 | 6% |
| Gale Healthcare | 55 | 5% |
| Wellpath | 38 | 3% |
| Community Regional Medical | 34 | 3% |
| Interim Healthcare | 32 | 3% |
| Regional West Medical Center | 25 | 2% |
| Healthcare Employment Network, Llc | 22 | 2% |
| Ro Health | 21 | 2% |
| Saint Agnes Medical Center | 21 | 2% |
| Kaiser Permanente | 20 | 2% |

² Entry-level wages are derived from the 25th percentile.

³ 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/>.

⁴ 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 shows how job postings for the targeted occupations in the SCV/SML subregion are distributed across one O*NET OnLine occupations. The occupational title Licensed Practical and Licensed Vocational Nurses is listed in 1,727 job postings. Common job titles in postings include Licensed Vocational Nurse in 287 job postings, and Licensed Practical Nurse in 86 job postings.

Exhibit 4. Top occupational titles in job postings for Licensed Vocational Nurse

| Occupational Title | Job Postings | % of Job Postings |
|---|--------------|-------------------|
| Licensed Practical and Licensed Vocational Nurses | 1,727 | 100% |

Salaries

Exhibit 5 shows the “Market Salaries” for Licensed Vocational Nurse 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 Licensed Vocational Nurse occupations

| Market Salary Percentile | Salary Amount |
|--------------------------|---------------|
| 10th Percentile | \$35,940 |
| 25th Percentile | \$41,747 |
| 50th Percentile | \$47,908 |
| 75th Percentile | \$55,169 |
| 90th Percentile | \$62,435 |

Education

Of the 1,727 job postings, 317 listed an education level preferred for the positions being filled. Among those, 88% requested a high school or vocational training and 14% requested an associate 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%.

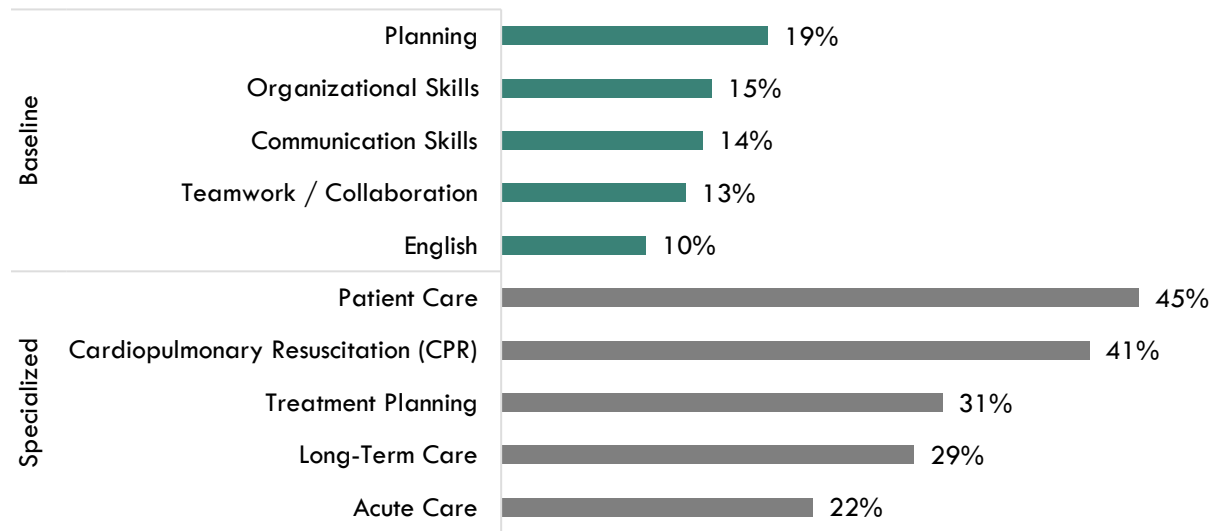
Exhibit 6. Education levels requested in job postings for Licensed Vocational Nurse

| Education Level | Job Postings | % of Job Postings |
|------------------------------------|--------------|-------------------|
| High school or vocational training | 279 | 88% |
| Associate's degree | 44 | 14% |

Baseline and Specialized Skills

Exhibit 7 depicts the top baseline and specialized skills for the targeted occupations. The three most important baseline skills are planning, 19% of job postings, organizational skills, 15%, and communication skills, 14%. The top three specialized skills are patient care, 45% of job postings, Cardiopulmonary Resuscitation (CPR), 41%, and treatment planning, 26%.

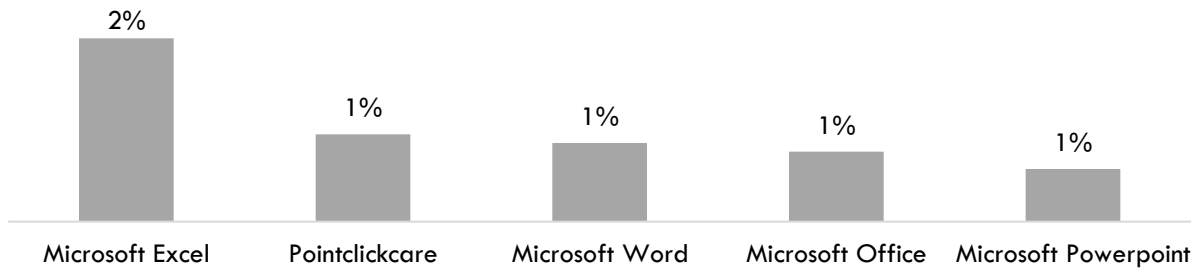
Exhibit 7. In-demand Licensed Vocational Nurse baseline and specialized skills



Software Skills

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

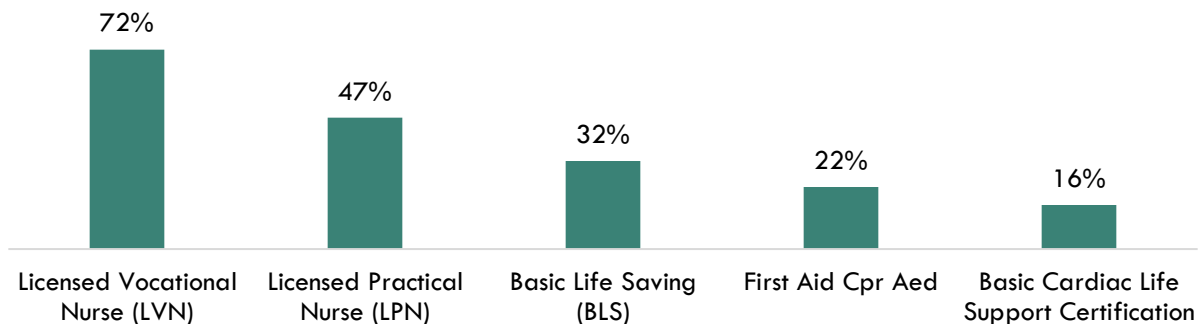
Exhibit 8. In-demand Licensed Vocational Nurse software skills



Certifications

Of the 1,727 job postings, 1,559 contained certification data. Among those, 72% indicated a need for a Licensed Vocational Nurse (LVN). The next top certifications are Licensed Practical Nurse (LPN) and Basic Life Saving (BLS) (Exhibit 9).

Exhibit 9. Top Licensed Vocational Nurse certifications requested in job postings



Education, Work Experience & Training

A postsecondary nondegree award is typically required for licensed practical and licensed vocational nurses (Exhibit 10).

Exhibit 10. Education, work experience, training, and Current Population Survey results for Licensed Vocational Nurse occupations⁵

| Occupation | Typical Entry-level Education | Work Experience Required | Typical On-The-Job Training | CPS |
|---|-------------------------------|--------------------------|-----------------------------|-------|
| Licensed Practical and Licensed Vocational Nurses | Postsecondary nondegree award | None | None | 73.3% |

Supply

Analysis of program data from the Integrated Postsecondary Education Data System (IPEDS) included the TOP and CIP codes and titles: 123020 - Licensed Vocational Nursing and 51.3901 - Licensed Practical/Vocational Nurse Training. Analysis of the last three years of data shows that, on average, 313 awards were conferred in the Central Valley/Mother Lode region each year (Exhibit 11).

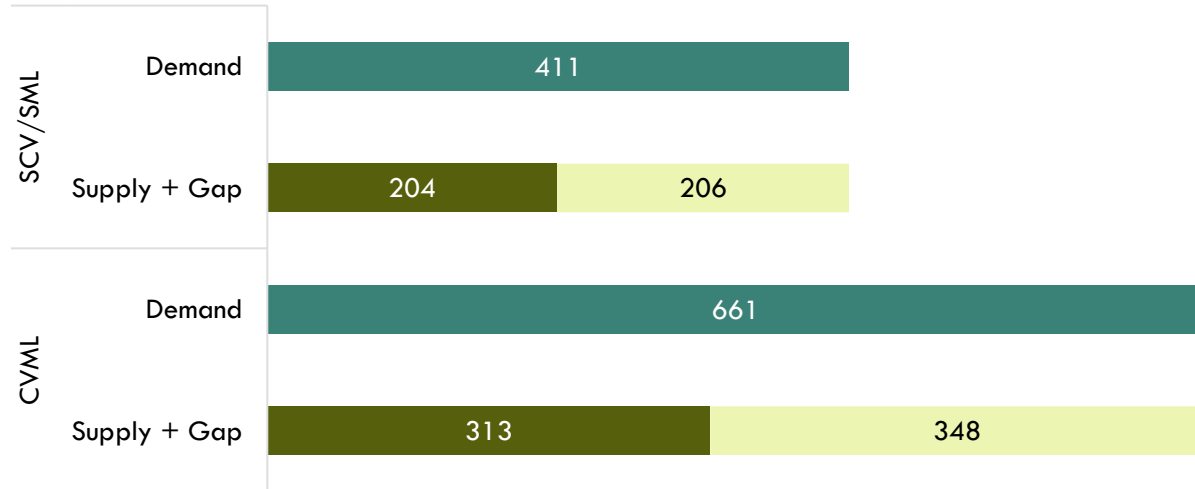
Exhibit 11. Postsecondary supply for Licensed Vocational Nurse occupations in the region

| TOP/ CIP Code- Title | College | Associate Degree | Award 1 < 2 Academic Years | Certificate 30 < 60 Semester Units | Subtotal |
|---|--|------------------|----------------------------|------------------------------------|------------|
| 123020 - Licensed Vocational Nursing | Bakersfield | | | 20 | 20 |
| | Cerro Coso | 11 | | 16 | 27 |
| | Merced | 21 | | 23 | 44 |
| | Reedley College | 9 | | 17 | 26 |
| 51.3901 - Licensed Practical/Vocational Nurse Training | Clovis Adult Education | | 54 | | 54 |
| | San Joaquin Valley College-Visalia | 37 | | | 37 |
| | Santa Barbara Business College-Bakersfield | | 41 | | 41 |
| | Xavier College School of Nursing | | 64 | | 64 |
| TOTAL | | 78 | 159 | 76 | 313 |

⁵ "Labor Force Statistics from the Current Population Survey," Bureau of Labor Statistics, <https://www.bls.gov/cps/>.

There is an undersupply of 206 Licensed Vocational Nurses in the SCV/SML subregion and 348 workers in the region (Exhibit 12).

Exhibit 12. Licensed Vocational Nurse 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 LaunchBoard⁶ for the TOP code related to Licensed Vocational Nurse. Of note, 59 students received a degree or certificate or attained apprenticeship journey status; 92% of students obtained a job closely related to their field of study; 75% had a median change in earnings; and 77% of students attained a living wage.

Exhibit 13. Regional metrics for the TOP code related to Licensed Vocational Nurse

| Metric | Licensed Vocational Nursing 123020 |
|--|---------------------------------------|
| Students Who Got a Degree or Certificate or Attained Apprenticeship Journey Status | 59 |
| Number of Students Who Transferred | * |
| Job Closely Related to Field of Study | 92% |
| Median Change in Earnings | 75% |
| Attained a Living Wage | 77% |
| * denotes data not available. | |

⁶ “California Community Colleges Strong Workforce Program,” California Community Colleges, calpassplus.org/LaunchBoard/SWP.aspx.

Conclusion

The entry-level wages of the occupation exceed the SCV/SML subregion's average living wage. There were 1,727 job postings in the past six months for occupations related to Licensed Vocational Nurse in the subregion. Analysis of skills and certification requirements in job postings indicates:

- The top baseline skill is planning, and the top specialized skill is patient care.
- The top software skill is Microsoft Excel.
- The top certification is Licensed Vocational Nurse (LVN).

There is an undersupply of trained workers, a shortage of 206 in the SCV/SML subregion and 348 in the region.

Recommendation

Based on these findings, it is recommended that Porterville College work with the regional director, the college's advisory board, and local industry in the expansion of programs to address the shortage of Licensed Vocational Nurses in the region.

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. (EMSI). EMSI occupational employment data are based on final EMSI industry data and final EMSI 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 EMSI 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: https://www.bls.gov/emp/tables/educational-attainment.htm . |
| Labor Force, Employment and Unemployment Estimates | California Employment Development Department, Labor Market Information Division: labormarketinfo.edd.ca.gov . |
| Job Posting and Skills Data | Burning Glass: burning-glass.com/ . |
| 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: onetonline.org . |

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. (EMSI) 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.