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Labor Market Analysis

Registered Nurses



Prepared by **Central Valley/Mother Lode Center of Excellence**



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Summary

The Central Valley/Mother Lode Center of Excellence developed this report for Bakersfield College to determine whether there is demand in the local labor market that is not being met by the supply from postsecondary programs. This report summarizes labor market demand, wages, skills, and postsecondary supply for the following occupation:

- Registered Nurses (29-1141)

Key Findings

- **Occupational Demand** — There were 19,029 *registered nurses* in the South Central Valley/Southern Mother Lode (SCV/SML) subregion. Between 2022 and 2027, *registered nurses* are projected to have 1,511 annual job openings.
- **Wages** — The average entry-level wage for *registered nurses* is \$47.71/hour, which is higher than the living wage in the SCV/SML subregion.¹
- **Employers** — Employers in the SCV/SML subregion include Community Regional Medical Center, Adventist Health, and Healthcare Employment Network.
- **Skills** — The top baseline skill is communication; the top specialized skill is nursing; and the top software skill is HealthStream.
- **Education** — A bachelor's degree is typically required for *registered nurses*.
- **Supply and Demand Analysis** — Based on 1,511 annual openings (i.e., demand) and 878 postsecondary degrees awarded (i.e., supply), an analysis of supply and demand suggests there is an undersupply of 633 workers in the SCV/SML subregion. In the CVML region, 1,311 awards were conferred suggesting an undersupply of 913 workers (based on 2,224 annual openings in the CVML region).

Recommendation

Based on a comparison of demand and supply, there is an undersupply of trained workers in the SCV/SML subregion and the CVML region. The Center of Excellence recommends that Bakersfield College work with the regional directors, the college's advisory board, and local industry in the expansion of programs to address the shortage of *registered nurses*.

¹ 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/>.

Introduction

The Central Valley/Mother Lode Center of Excellence developed this report to provide Bakersfield College with labor market information for *registered nurses*. 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. Analysis of the program and occupational data related to *registered nurses* is included in the report. The Standard Occupational Classification (SOC) System code and occupational title used in this report are from the Bureau of Labor Statistics and O*NET OnLine.

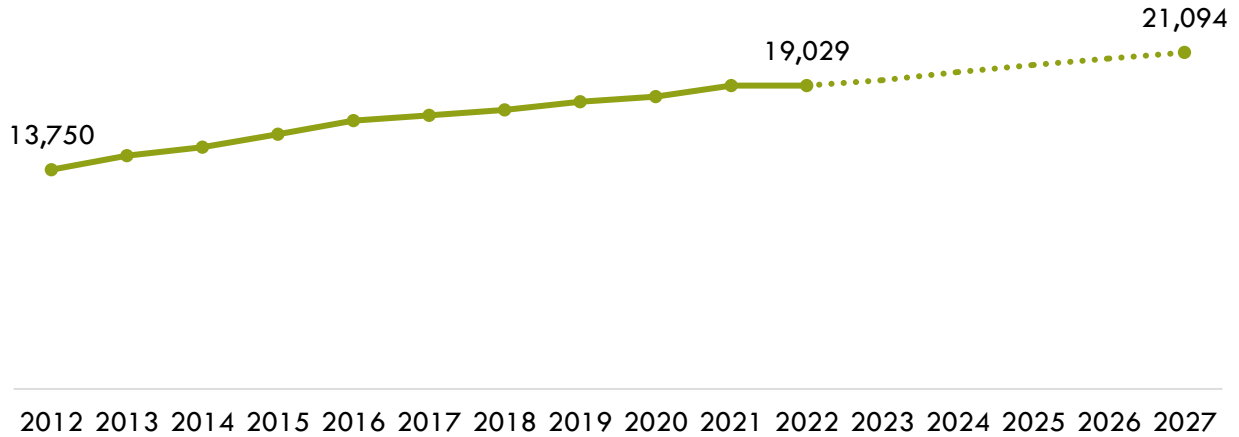
Registered Nurses (SOC 29-1141)

- **Job Description:** Assess patient health problems and needs, develop, and implement nursing care plans, and maintain medical records. Administer nursing care to ill, injured, convalescent, or disabled patients. May advise patients on health maintenance and disease prevention or provide case management. Licensing or registration required.
- **Knowledge:** Psychology, Customer and Personal Service, Administrative, Medicine and Dentistry
- **Skills:** Social Perceptiveness, Coordination, Service Orientation, Critical Thinking, Active Listening

Employment

Exhibit 1a shows employment trends for *registered nurses* in the SCV/SML subregion. Between 2022 to 2027, the number of jobs for *registered nurses* is projected to increase by 2,065, growing by 11%.

Exhibit 1a. Historical employment and projected occupational demand for registered nurses in the SCV/SML subregion, 2012-2027



There were 19,029 *registered nurses* in the SCV/SML subregion in 2022 (Exhibit 1b). *Registered Nurses* are projected to have 1,511 annual job openings.

Exhibit 1b. Current employment and projected occupational demand for registered nurses in the SCV/SML subregion, 2022-2027

Occupation	2022 Jobs	2027 Jobs	5-Year Change	5-Year % Change	Annual Openings
Registered Nurses	19,029	21,094	2,065	11%	1,511
TOTAL	19,029	21,094	2,065	11%	1,511

Wages

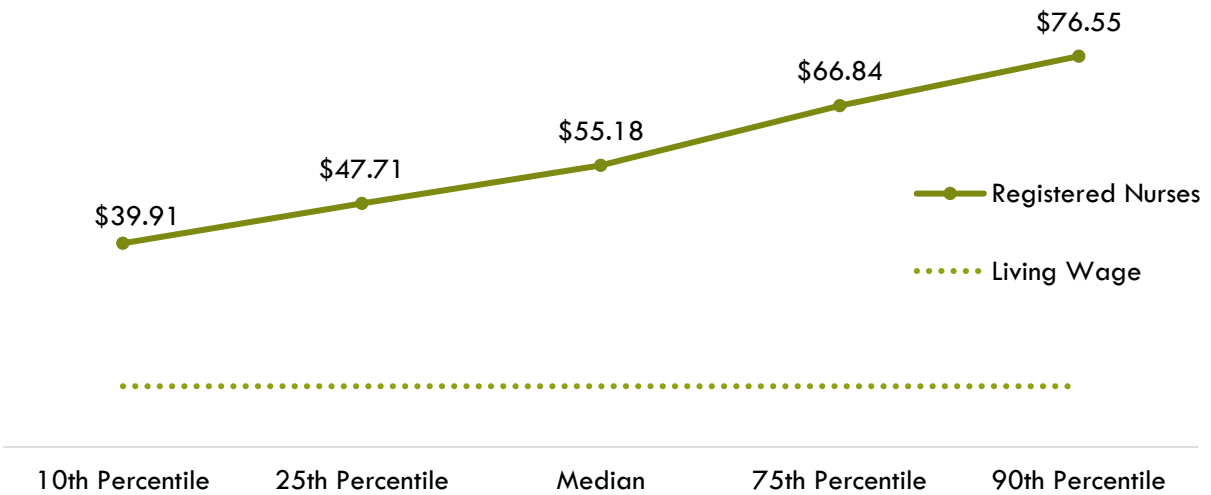
Exhibit 2a shows the hourly wages for *registered nurses*.²

Exhibit 2a. Hourly wages for registered nurses in the SCV/SML subregion

Occupation	25 th Percentile Hourly Earnings	Median Hourly Earnings	75 th Percentile Hourly Earnings
Registered Nurses	\$47.71	\$55.18	\$66.84

Exhibit 2b shows the average hourly wages for *registered nurses*; all five average wages shown below are higher than the living wage for the SCV/SML subregion.

Exhibit 2b. Average hourly wages for registered nurses in the SCV/SML subregion



² Note: 10th and 25th percentiles are considered entry-level wages while 75th and 90th are considered experienced wages, which may be obtained through long-term employment or extra training, etc.

Job Postings

There were 15,650 unique job postings for *registered nurses* in the SCV/SML subregion from September 2023 to August 2024.³

Top Employers

The employers with the most job postings are listed in Exhibit 3. The top employers in online job postings were Community Regional Medical Center, Adventist Health, and Healthcare Employment Network.

Exhibit 3. Top employers

Employer
Community Regional Medical Center
Adventist Health
Healthcare Employment Network
Kern County Hospital Authority
Nomad Health
Saint Agnes Medical Center
Stability Healthcare
Kaweah Health
Medical Solutions
AMN Healthcare

Top Job Titles

Exhibit 4 shows the top job titles for *registered nurses* in the SCV/SML subregion. Of the 15,650 job postings, 1,670 include “perinatal” or “neonatal” in the job description.

Exhibit 4. Top job titles

Job Title
Registered Nurses
Travel Registered Nurses
Labor and Delivery Registered Nurses
ICU Registered Nurses
Emergency Room Registered Nurses
Operating Room Registered Nurses
Medical Surgical Registered Nurses
PACU Registered Nurses
Telemetry Registered Nurses
NICU Registered Nurses

³ Other than occupational 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.

Salaries

Exhibit 5 shows the “Market Salaries” for *registered nurses*. These are calculated by Lightcast using a machine learning model built from millions of job postings every year. This accounts for adjustments based on location, industry, skills, experience, education, among other variables.

Exhibit 5. Market salaries for registered nurses

Market Salary	Job Postings
\$55,000-\$66,999	150
\$67,000-\$78,999	290
\$79,000-\$90,999	558
\$91,000-\$102,999	930
\$103,000-\$114,999	2,509
\$115,000-\$126,999	1,348
\$127,000-\$138,999	1,807
\$139,000+	2,702

Education

Of the 15,650 unique job postings, 7,080 listed a preferred or minimum educational requirement for the position being filled. Among those, 54% requested a bachelor’s degree (Exhibit 6).

Exhibit 6. Education levels requested in job postings for registered nurses

Education Level	Job Postings	% of Job Postings
High school or GED	900	13%
Associate degree	1,625	23%
Bachelor's degree	3,854	54%
Master's degree or higher	701	10%

Baseline, Specialized, and Software Skills

Exhibit 7 depicts the top baseline, specialized, and software skills in job postings. The most common baseline skill is communication. The most common specialized skill is nursing. The most common software skill is HealthStream.

Exhibit 7. In-demand baseline, specialized, and software skills for registered nurses

Baseline Skills	Specialized Skills	Software Skills
Communication	Nursing	HealthStream
Planning	Nursing Care	Epic EMR
Leadership	Nursing Process	Microsoft Outlook
Critical Thinking	Intensive Care Unit	Microsoft Word
Management	Cardiopulmonary Resuscitation (CPR)	Microsoft Excel

Education, Work Experience, & Training

A bachelor's degree is typically required for *registered nurses* (Exhibit 8).

Exhibit 8. Education, work experience, training, for registered nurses

Occupation	Typical Entry-level Education	Work Experience Required	Typical On-The-Job Training
Registered Nurses	Bachelor's degree	None	None

Supply

An analysis of program data from the Integrated Postsecondary Education Data System (IPEDS) for the last three program years shows that, on average, 878 awards were conferred in the SCV/SML subregion (Exhibit 9 and 10).

Exhibit 9. TOP and CIP codes

TOP Titles	CIP Titles
1230.10 – Registered Nursing	51.3801 – Registered Nursing/Registered Nurse

Exhibit 10. Regional Community College Awards, 2020-2023

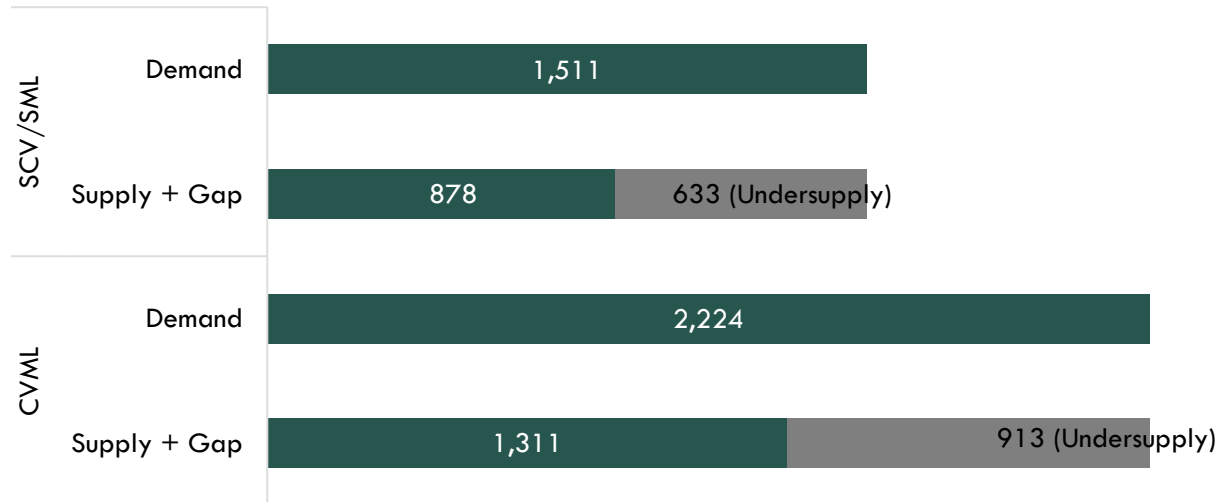
TOP Code	Program	College	2020-2021 Awards	2021-2022 Awards	2022-2023 Awards	3-Year Award Average
1230.10	Registered Nursing	Merced	58	53	54	55
		Modesto	112	102	82	99
		San Joaquin Delta	123	122	126	124
		NCV/NML Subtotal	293	277	262	277
		Bakersfield	134	127	148	136
		Fresno City	204	220	216	213
		Madera	12	11	12	12
		Porterville	20	19	18	19
		Sequoias	90	91	86	89
		West Hills Lemoore	39	38	29	35
		SCV/SML Subtotal	499	506	509	505
		CVML Subtotal		792	783	771

Exhibit 11. Regional Non-Community College Awards, 2019-2022

CIP Code	Program	Institution	2019-2020 Awards	2020-2021 Awards	2021-2022 Awards	3-Year Award Average
51.3801	Registered Nursing/ Registered Nurse	California State University-Stanislaus	156	140	142	146
		Xavier College School of Nursing	-	-	29	10
		NCV/NML Subtotal	156	140	171	156
		California State University-Bakersfield	121	123	120	121
		California State University-Fresno	208	155	188	184
		Fresno Pacific University	10	14	7	10
		San Joaquin Valley College-Visalia	59	57	57	58
		SCV/SML Subtotal	398	349	372	373
		Program Total/Average	554	489	543	529

There is an undersupply of 633 *registered nurses* in the SCV/SML subregion and an undersupply of 913 workers in the region (Exhibit 12).

Exhibit 12. Workforce demand (annual job openings), postsecondary awards (supply), and additional students needed to fill gap in the SCV/SML subregion and region



Recommendation

This report suggests there is a shortage of 633 registered nurses in the SCV/SML subregion and a shortage of 913 workers in the CVML region. Based on these findings, it is recommended that Bakersfield College work with the regional directors, the college’s advisory board, and local industry in the expansion of programs to address the shortage of *registered nurses* in the region.

Appendix: 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: https://www.bls.gov/emp/tables/educational-attainment.htm .
LaunchBoard	Chancellor’s LaunchBoard. https://www.calpassplus.org/LaunchBoard/SWP.aspx
Labor Force, Employment and Unemployment Estimates	California Employment Development Department, Labor Market Information Division: labormarketinfo.edd.ca.gov .
Job Posting and Skills Data	Lightcast. https://lightcast.io/ .
Additional Education Requirements/ Employer Preferences	The O*NET Job Zone database includes over 900 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. (LIGHTCAST) formula that includes historical employment and economic indicators along with national, state, and local trends.

LaunchBoard (Attained the Living Wage): Among SWP students who exited college and did not transfer to any postsecondary institution, the proportion who attained the district county living wage for a single adult measured immediately following academic year of exit.

LaunchBoard (Median Annual Earnings): Among SWP students who exited the community college system and who did not transfer to any postsecondary institution, median earnings following the academic year of exit.

LaunchBoard (Median Change in Earnings): Among SWP students who exited and who did not transfer to any postsecondary institution, median change in earnings between the second quarter prior to the beginning of the academic year of entry and the second quarter after the end of the academic year of exit from the last college attended.

LaunchBoard (Job Closely Related to Field of Study): Among SWP students who responded to the CTE Outcomes Survey and did not transfer to any postsecondary institution, the proportion who reported that they are working in a job very closely or closely related to their field of study.

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.