

Registered Nurses

Inland Empire/Desert Region (Riverside and San Bernardino counties)

This workforce demand report uses state and federal job projection data developed before the economic impact of COVID-19. The COE is monitoring the situation and will provide more information as it becomes available. Please consult with local employers to understand their current employment needs.

Summary

- The community college **registered nursing** program provides the knowledge, skills, and abilities that lead to the **registered nurse occupation**. *Registered nurses* is a **community college-level occupation** and is an **essential critical infrastructure occupation**.
- The *registered nurses* occupation is projected to have **2,367 annual job openings, increasing employment by 12%** through 2024.
- The **10th percentile hourly wage** for this occupation is **\$34.04 per hour, well above the regional \$21.78 per hour self-sustainable wage standard** for a single adult with one child.
- In the region, seven community colleges conferred an annual average of **524 awards** in programs related to registered nursing over the last three academic years.
- The Centers of Excellence **recommends** creating new or expanding registered nursing programs to meet the regional need for more workers.

Introduction

California Community College registered nursing (TOP 1230.10) programs lead to licensure by the Board of Registered Nursing. These programs include nursing care in specialty areas (Taxonomy of Programs, 2012). The knowledge, skills, and abilities trained by registered nursing programs lead to registered nurse occupation. While this occupation typically requires a bachelor's degree to enter employment, it is considered a community college-level occupation since one-third (33%) of incumbent workers nationally have some college coursework or obtained a community college award the highest level of educational attainment. The Public Policy Institute of California identifies this occupation as an essential critical infrastructure occupation. This classification of occupation is vital in supporting California's basic health, safety, and economic needs or may have the ability to social distance (Bohn et al.).

Registered Nurses (29-1141)

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.

Sample job titles: Charge Nurse, Emergency Department RN (Emergency Department Registered Nurse), Oncology RN (Oncology Registered Nurse), Operating Room Registered Nurse (OR RN), Public Health Nurse (PHN), Registered Nurse (RN), School Nurse, Staff Nurse, Staff RN (Staff Registered Nurse)

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 33%

Job Opportunities

In 2019, there were 30,583 *registered nurse* jobs in the Inland Empire/Desert Region. This occupation is projected to have 2,367 annual job openings to fill new or backfill jobs that workers are permanently vacating (includes occupational transfers and retirements). This occupation is expected to increase employment by 12% through 2024, which is less than the previous five years of job growth (2014-2019) at 23%. Exhibit 1 displays five-year projected job growth for this occupation.

Exhibit 1: Registered nurses five-year projections, 2019-2024

2019 Jobs	2024 Jobs	5-Yr % Change (New Jobs)	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
30,583	34,06	12%	14,204	2,367	25%

Source: Emsi 2020.4

Job Postings

Exhibit 2 displays the number of online job ads posted over the last 12 months, along with the regional and statewide average time to fill for *registered nurse* positions. Staffing companies have been removed from this search.

On average, local employers fill online job postings for *registered nurse* positions within 39 days, the same as the statewide average, indicating that local employers face similar challenges filling open positions as other employers in California as a whole.

Exhibit 2: Job ads and time to fill

Job Ads	Regional Average Time to Fill (Days)	California Average Time to Fill (Days)
10,598	39	39

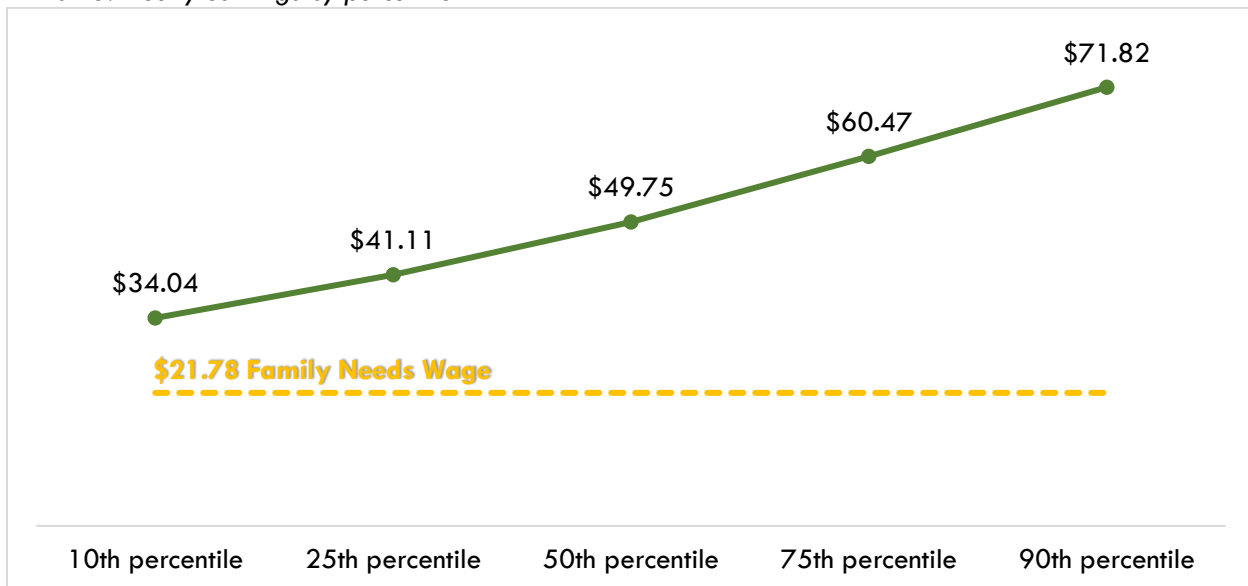
Source: Burning Glass – Labor Insights

Earnings and Benefits

Community colleges should ensure their training programs lead to employment opportunities that provide a self-sustainable income level. The Family Needs Calculator estimates that a self-sustainable wage for a single adult with one school-age child is \$21.78 per hour or \$45,992 annually in Riverside County, \$21.24 per hour or \$44,867 annually in San Bernardino County (Pearce, 2020). For this study, the higher hourly wage requirement in Riverside County is adopted as the self-sufficiency standard for the two-county region.

The 10th percentile hourly wage for *registered nurses* exceeds the Family Needs Calculator self-sustainability rate, indicating that approximately the top 90% of workers in this occupation earn self-sufficient hourly wages. Exhibit 3 displays the hourly earnings for the region.

Exhibit 3: Hourly earnings by percentile



Source: Emsi 2020.4

According to the California Labor Market Information Division's occupational guides, *registered nurses* generally receive medical, dental, and retirement benefits. Additionally, most employers provide vision, life, vacation, and sick leave to *registered nurses* that work full-time (Detailed Occupational Guides, 2020).

Job Titles

Exhibit 4 displays the job titles most frequently included in employer advertisements for *registered nurse* positions over the last 12 months. Job postings for "registered nurse – travel nurse" increased 132% between 2019 and 2020.

Exhibit 4: Job titles most frequently included in job advertisements for registered nurse positions

Job Titles	Job Ads
Staff Registered Nurse	701
Registered Nurse Intensive Care Unit	683
Registered Nurse Travel Nurse	615
Registered Nurse	509
Registered Nurse Case Manager	483
Emergency Room Registered Nurse	307
Registered Nurse Supervisor	275
Home Health Registered Nurse	263
Hospice Registered Nurse	252
Operating Room Registered Nurse	103
<i>All other job titles</i>	3,309
Total	7,500

Source: Burning Glass – Labor Insights

Employers, Skills, Education, and Work Experience

Exhibit 5 displays the employers who posted more than 100 online job advertisements for *registered nurse* positions during the last 12 months in the region.

Exhibit 5: Employers posting the most online job ads

Employers	Job Ads
Tenet Health System (Desert Regional Medical Center, JFK Memorial Hospital)	555
Prime Healthcare Services (Desert Valley Hospital, Chino Valley Medical Center, Montclair Hospital Medical Center)	435
Anthem Blue Cross	389
Kaiser Permanente	361
Universal Health Services, Inc.	347
Dignity Health (St. Bernardine Medical Center, Community Hospital of San Bernardino)	293
Loma Linda University Health	216
DaVita Incorporated	201
Bluepipes	179
Nomad Health	166
Kindred Healthcare Incorporated	139
Hospital Corporation of America (Riverside Community Hospital)	138
Doctors Hospital of Riverside	113

Employers	Job Ads
San Bernardino County Department of Public Health	111
Eisenhower Medical Center	108
All other employers	3,749
Total	7,500

Source: Burning Glass – Labor Insights

Exhibit 6 displays a sample of specialized and employability skills employers seek when looking for workers to fill *registered nurse* positions. Specialized skills are occupation-specific skills that employers request for industry or job competency. Employability skills are foundational skills that transcend industries and occupations; this category is often referred to as "soft skills." The skills requested in job postings may be utilized to guide curriculum development.

Exhibit 6: Sample of in-demand skills from employer online job ads

Specialized Skills	Employability Skills
<ul style="list-style-type: none"> • Patient Care • Advanced Cardiac Life Support (ACLS) • Acute Care • Treatment Planning • Critical Care 	<ul style="list-style-type: none"> • Planning • Communication Skills • Problem Solving • Teamwork/Collaboration • Computer Literacy

Source: Burning Glass – Labor Insights

Exhibit 7 displays the entry-level education typically required to enter employment as a *registered nurse* according to the Bureau of Labor Statistics (BLS), educational attainment for incumbent workers with "some college, no degree" and an "associate degree" according to the U.S. Census (2016-17) and the real-time minimum advertised education requirement from employer job ads for *registered nurse* positions. Job ads reveal that more than half of employers (54%) were seeking a candidate with an associate degree as a minimum education requirement.

Exhibit 7: Typical entry-level education, educational attainment, and minimum advertised education requirements

Occupation	Typical Entry-Level Education Requirement	CC-Level Educational Attainment*	Real-Time Minimum Advertised Education Requirement			
			Number of Job Ads	High school diploma or vocational training	Associate degree	Bachelor's degree or higher
Registered Nurses	Bachelor's degree	33%	7,124	4%	54%	42%

Source: Emsi 2020.4, Burning Glass – Labor Insights

*Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework

Exhibit 8 displays the work experience typically required for *registered nurses* and the real-time work experience requirements from employer job ads for *registered nurse* positions. Most employers sought a candidate with 0-2 years of work experience.

Exhibit 8: Work experience required and real-time work experience requirements

Occupation	Work Experience Typically Required	Real-Time Work Experience			
		Number of Job Ads	0 – 2 years	3 – 5 years	6+ years
Registered Nurses	None	5,339	66%	33%	1%

Source: Emsi 2020.4, Burning Glass – Labor Insights

Advertised Salary

Exhibit 9 displays advertised salary data for *registered nurse* positions over the 12 months. Advertised salary information reveals that employers are willing to pay *registered nurses* \$89,000 annually, well above the \$45,992 (\$21.78 hourly) required annually for a family of one adult with a school-age child to be self-sufficient in Riverside County (\$44,867 annually in San Bernardino County). Consider the salary information with caution since only 15% (1,149 out of 7,500) online job postings for this occupation provided salary information. The salary figures are prorated to reflect full-time, annual wage status.

Exhibit 9: Advertised salary information

Number of job postings	Real-Time Salary Information				
	Less than \$35,000	\$35,000 to \$49,999	\$50,000 to \$74,999	More than \$75,000	Average Annual Salary
1,149	17%	3%	13%	67%	\$89,000

Source: Burning Glass – Labor Insights

Student Completions and Program Outcomes

Exhibit 10 displays the annual average awards for registered nursing (TOP 1230.10) programs in the Inland Empire/Desert Region. These programs have collectively awarded an annual average of 524 associate degrees and certificates over the last three academic years.

Exhibit 10: 2016-19, Annual average community college awards for the registered nursing programs in the Inland Empire/Desert Region

1230.10 – Registered Nursing	Associate degree	Certificate requiring 60+ semester units	Total CC Annual Average Awards, Academic Years 2016-19
Chaffey	56	-	56
Copper Mountain	25	-	25

1230.10 – Registered Nursing	Associate degree	Certificate requiring 60+ semester units	Total CC Annual Average Awards, Academic Years 2016-19
Desert	48	-	48
Mt. San Jacinto	44	-	44
Riverside	177	-	177
San Bernardino	86	-	86
Victor Valley	58	30	88
Total	494	30	524

Source: MIS Data Mart

California program outcome data may provide a useful insight into the likelihood of success for the proposed program. Community college student outcome information based on the selected TOP code and region is provided in Exhibit 11. The outcome methodology is available in the appendix section of this report. Dashes indicate there were too few students to obtain program outcome information.

Exhibit 11: 1230.10 – Registered nursing strong workforce program outcomes

Strong Workforce Program Metrics: 1230.10 – Registered Nursing Academic Year 2017-18, unless noted otherwise	Inland Empire/Desert Region	California
Unduplicated count of enrolled students (2018-19)	1,708	20,080
Completed 9+ career education units in one year (2018-19)	71%	60%
Perkins Economically disadvantaged students (2018-19)	90%	85%
Students who attained a noncredit workforce milestone in a year (2018-19)	7%	27%
Students who earned a degree, certificate, or attained apprenticeship (2018-19)	507	4,839
Transferred to a four-year institution (transfers)	173	2,237
Job closely related to the field of study (2016-17)	98%	96%
Median annual earnings (all exiters)	\$59,288	\$57,956
Median change in earnings (all exiters)	107%	96%
Attained a living wage (completers and skills-builders)	86%	73%

Sources: LaunchBoard Community College Pipeline and Strong Workforce Program Metrics

Recommendation

Community college registered nursing programs provide the skills, knowledge, and abilities that lead to the *registered nurse* occupation. This occupation is projected to have 2,367 annual job openings over the next five years in the Inland Empire Desert Region. The entry-level, 10th percentile wage for *registered nurses* is \$34.04 per hour, exceeding the \$21.78 per hour self-sustainable wage estimate for a single adult with one child. Although the typical entry-level education requirement for a *registered nurse* is a bachelor's degree, one-third of workers in the field have some college or an associate degree as their highest level of educational attainment. Furthermore, 54% of online job ads sought candidates with an associate degree.

Seven (7) regional community colleges reported 524 annual average awards from registered nursing programs (TOP 1230.10) over the last three academic years.

The Centers of Excellence recommends creating new or expanding registered nursing programs to meet the regional need for more workers. Colleges considering a registered nursing program should meet with relevant employers to understand their demand for more workers and the specific skills, licensing, and certifications needed for gainful employment in these fields.

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Appendix: Program Completion and Outcome Methodology

Exhibit 10 displays the average annual California Community College (CCC) awards conferred during the three academic years between 2016 and 2019, from the California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart. Awards are the combined total of associate degrees and certificates issued during the timeframe, divided by three in this case to calculate an annual average. This is done to minimize the effect of atypical variation that might be present in a single year.

Community college student outcome information is from LaunchBoard and based on the selected TOP code and region. These metrics are based on records submitted to the California Community Colleges Chancellor's Office Management Information Systems (MIS) by community colleges, which come from self-reported student information from CCC Apply and the National Student Clearinghouse. Employment and earnings metrics are sourced from records provided by California's Employment Development Department's Unemployment Insurance database. When available, outcomes for completers are reported to demonstrate the impact that earning a degree or certificate can have on employment and earnings. For more information on the types of students included for each metric, please see the web link for LaunchBoard's Strong Workforce Program Metrics Data Element Dictionary in the References section (LaunchBoard, 2021a). Finally, employment in a job closely related to the field of study comes from self-reported student responses on the CTE Employment Outcomes Survey (CTEOS), administered by Santa Rosa Junior College (LaunchBoard, 2021a).

Job postings data is limited to the information provided by employers and the ability of artificial intelligence search engines to identify this information. Additionally, preliminary calculations by Georgetown Center on Education and the Workforce found that "just 30 to 40 percent of openings for candidates with some college or an associate degree, and only 40 to 60 percent of openings for high school diploma holders appear online" (Carnevale et al., 2014). Online job postings often do not reveal employers' hiring goals or intentions; it is unknown if employers plan to hire one or multiple workers from a single online job posting or collect resumes for future hiring needs. A closed job posting may not be the result of a hired worker.

Table 1: 2019 to 2024 job growth, wages, education, training, and work experience required, Inland Empire/Desert Region

Occupation (SOC)	2019 Jobs	5-Yr Change	5-Yr % Change	Annual Openings (New + Replacement Jobs)	Entry-Experienced Hourly Wage Range (10 th to 90 th percentile)	Median Hourly Wage (50 th percentile)	Average Annual Earnings	Typical Entry-Level Education & On-The-Job Training Required	Work Experience Required
Registered Nurses (29-1141)	30,583	3,523	12%	2,367	\$34.04 to \$71.82	\$49.75	\$105,300	Bachelor's degree & None	None

Source: Emsi 2020.4