Registered Nursing

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

- Community college registered nursing programs provide the knowledge, skills, and abilities that lead to the community college-level occupation, registered nurses.

- Employment is expected to increase by 12% through 2025, with 2,311 job openings available annually over this period.

- This occupation's 10th percentile hourly earnings are $34.72 per hour, above the regional $24.36 per hour self-sustainable earnings standard for a single adult with one child.

- Regional community colleges have issued 519 awards annually in registered nursing programs over the last three academic years. Other postsecondary education providers in the region have issued 928 awards annually in programs related to registered nursing.

- The Centers of Excellence recommends expanding registered nurse programs to meet the regional demand for registered nurses. For more information, see the recommendation section.

Introduction

California Community College registered nurse (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 the registered nurse occupation.

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: Certified Operating Room Nurse (CNOR), Charge Nurse, Emergency Department RN (Emergency Department Registered Nurse), Oncology RN (Oncology Registered Nurse), Operating Room Registered Nurse (OR RN), Psychiatric RN (Psychiatric Registered Nurse), Relief Charge Nurse, School Nurse, Staff Nurse, Staff RN (Staff Registered Nurse)

Entry-Level Educational Requirement: Bachelor's degree

Work Experience Required: None

Training Requirement: None

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 34%

While registered nurses typically require a bachelor's degree, it is a consider community college-level occupation because over one-third of incumbent workers possess a community college-level of educational attainment; "some college, no degree" and an "associate degree."

Job Counts and Projections

In 2020, there were 30,955 registered nurse jobs in the Inland Empire/Desert Region. Employment for this occupation is expected to grow by 12% through 2025. Over this period, there are 2,311 annual job openings projected for registered nurses. Exhibit 1 displays the job counts, five-year projected job growth, job openings, and the share of incumbent workers age 55 years and greater in the region.

Exhibit 1: Five-year projections, 2020-2025

2020 Jobs	2025 Jobs	5-Yr % Change (New Jobs)	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
30,955	34,663	12%	11,557	2,311	25%

Source: Emsi 2021.3

A search of online job advertisements over the last 12 months for registered nurses was conducted to reveal the details about the employers seeking these workers, including the time it takes to fill positions, earnings information, and in-demand skills. Over the previous 12 months, 8,603 job advertisements for registered nurses were posted in the Inland Empire/Desert Region. Please note that all job ads included in this analysis required a registered nurse certification.

Exhibit 2 shows the number of job ads posted during the last 12 months in the region and the regional and statewide average time to fill this job. On average, regional employers spent 30 days filling online job advertisements, while employers throughout the state spent 31 days filling online job advertisements. Time to fill information reveals that regional employers likely face similar challenges filling open positions as other employers in California.

Exhibit 2: Job ads and time to fill

| Job Ads	Regional Average Time to Fill (Days)	Statewide Average Time to Fill (Days)
8,603	30	31

Source: Burning Glass – Labor Insights

Earnings and Benefits

Community colleges should ensure their training programs lead to employment opportunities that provide self-sustainable income. The University of Washington estimates that a self-sufficient hourly rate for a single adult with one school-age child is $24.36 per hour or $51,452 annually in Riverside County; $23.73 per hour or $50,119 annually in San Bernardino County (Pearce, 2021). For this study, the higher hourly earnings requirement in Riverside County is adopted as the self-sufficiency standard for the two-county region.

The hourly earnings for registered nurses surpass the self-sustainability rate, indicating that registered nurses earn a self-sustainable wage. Exhibit 3 displays the hourly earnings for registered nurses.

Exhibit 3: Hourly earnings by percentile
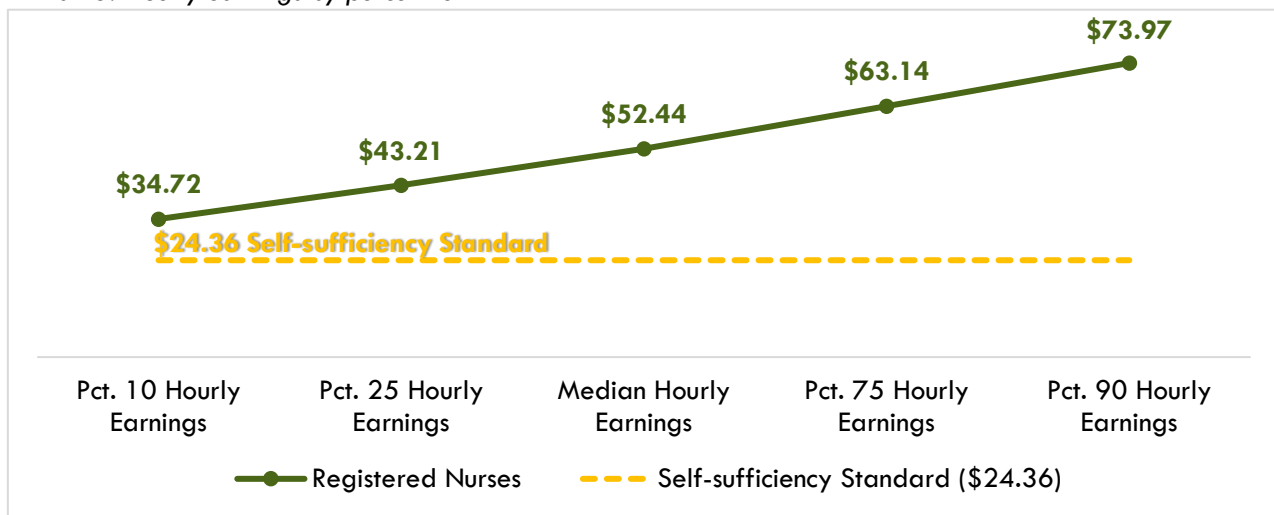
Source: Emsi 2021.3

According to the occupational guides developed by the California Labor Market Information Division, benefits for registered nurses generally include medical, dental, vision, and life insurance, as well as sick leave, vacation, and retirement benefits (Detailed Occupational Guides, 2021).

Advertised Salary from Online Job Ads

Exhibit 4 displays online job ad salary data for registered nurses over the last 12 months. Online job ad salary information reveals that employers are willing to pay registered nurses a median annual salary of $90,000, above the region's $51,452 annual ($24.36 hourly) self-sufficiency standard. Consider the salary information with caution since only 24% (2,032 out of 8,603) of online job advertisements for this occupation provided salary information. The salary figures are prorated to reflect full-time, annual earnings status.

Exhibit 4: Advertised salary information

Real-Time Salary Information					
Number of job ads	Less than $35,000	$35,000 to $49,999	$50,000 to $74,999	More than $75,000	Median Annual Salary
2,032	7%	4%	9%	80%	$90,000

Source: Burning Glass – Labor Insights

Employers, Skills, Education, and Work Experience

Exhibit 5 displays the employers that posted 100 or more job ads for registered nurses in the region over the last 12 months. Showing employer names provides some insight into where students may find employment after completing a program. Anthem Blue Cross posted the most job advertisements for registered nurses over the last 12 months.

Exhibit 5: Employers posting the most job ads for registered nurses

Top Employers	Job Ads
Anthem Blue Cross	386
Kaiser Permanente	370
Desert Regional Medical Center	290
Loma Linda University Health	226
Riverside Community Hospital	209
DaVita Incorporated	200
Aya Healthcare	193
Nomad Health	186
Kindred Healthcare Incorporated	133
Community Hospital of San Bernardino	129
John F. Kennedy Memorial Hospital	129
Temecula Valley Hospital	127
Hi Desert Medical Center	110
St. Bernardine Medical Center	109
Montclair Hospital Medical Center	107
Eisenhower Medical Center	104
All other employers	*5,595*
Total	**8,603**

Source: Burning Glass – Labor Insights

Exhibit 6 lists 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 ads may be utilized to guide curriculum development.

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

Specialized skills (n=7,387)	Employability skills
• Patient Care	• Planning
• Advanced Cardiac Life Support (ACLS)	• Communication Skills
• Treatment Planning	• Teamwork/Collaboration
• Acute Care	• Problem Solving
• Case Management	• Computer Literacy
• Cardiopulmonary Resuscitation (CPR)	• Writing

Source: Burning Glass – Labor Insights

According to the Bureau of Labor Statistics, approximately 34% of incumbent workers in this field hold a community college-level of educational attainment; "some college, no degree" and an "associate degree." The majority (59%) of the job advertisements for registered nurses sought candidates with an associate degree. Exhibit 7 displays the typical entry-level education, educational attainment, and minimum advertised education requirements for registered nurses.

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

Typical Entry-Level Education Requirement	CC-Level Educational Attainment*	Real-Time Minimum Advertised Education Requirement		
		Number of Job Ads	High school or vocational training	Associate degree	Bachelor's degree or higher
Bachelor's degree	34%	8,235	3%	59%	38%

Source: Emsi 2021.3, 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 and the real-time work experience requirements from employer job ads for registered nurses.

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

Work Experience Typically Required	Real-Time Work Experience			
	Number of job ads	0 – 2 years	3 – 5 years	6+ years
None	6,033	67%	32%	1%

Source: Emsi 2021.3, Burning Glass – Labor Insights

Student Completions and Programs Outcomes

Exhibit 9 displays completion data for registered nursing (1230.10) programs in the Inland Empire/Desert Region. Over the last three academic years, from 2017 to 2020, regional colleges have issued 519 awards annually. The student completion and outcome methodology are available on page 10.

Exhibit 9: 2017-20, Annual average community college awards for registered nursing programs in the Inland Empire/Desert Region

TOP 1230.10 – Registered Nursing	Associate Degree	Certificate requiring 60+ semester units	Total CC Annual Average Awards, Academic Years 2017-20
Chaffey	60	-	60
Copper Mountain	26	-	26
College of the Desert	50	-	50
Mt. San Jacinto	41	-	41
Riverside	183	-	183
San Bernardino	82	-	82
Victor Valley	59	18	77
Total	**501**	**18**	**519**

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 10. Among the students exiting registered nursing programs in the region, 96% of students reported working in a job closely related to their field of study, the median annual earnings were $61,448, and 81% attained a living wage. The outcome methodology is available in the appendix section of this report.

Exhibit 10: 1230.10 – Registered nursing strong workforce program outcomes

Strong Workforce Program Metrics: 1230.10 – Registered Nursing Academic Year 2018-19, unless noted otherwise	Inland Empire/Desert Region	California
Unduplicated count of enrolled students (2019-20)	1,798	20,011
Completed 9+ career education units in one year (2019-20)	66%	57%
Perkins Economically disadvantaged students	90%	85%
Students who attained a noncredit workforce milestone in a year (2019-20)	92%	34%
Students who earned a degree, certificate, or attained apprenticeship (2019-20)	520	4,736

Strong Workforce Program Metrics: 1230.10 – Registered Nursing Academic Year 2018-19, unless noted otherwise	Inland Empire/Desert Region	California
Transferred to a four-year institution (transfers)	206	2,568
Job closely related to the field of study (2017-18)	96%	95%
Median annual earnings (all exiters)	$61,448	$57,526
Median change in earnings (all exiters)	52%	54%
Attained a living wage (completers and skills-builders)	81%	71%

Sources: LaunchBoard Community College Pipeline and Strong Workforce Program Metrics

Exhibit 11 displays awards reported by other postsecondary education providers in registered nursing/registered nurse (CIP 51.3801) programs. Completion data is compiled from the Integrated Postsecondary Education Data System (IPEDS) for the most recent three years available. On average, four other postsecondary education institutions in the region have issued 928 awards annually over the last three academic years from regional providers.

Exhibit 11: Other educational provider registered nursing/registered nurse training programs, three-year annual average credentials in the Inland Empire/Desert Region

51.3801 – Registered Nursing/Registered Nurse	Bachelor's Degree	Master's Degree	Other Educational Providers Annual Average Credentials, Academic Years 2016-19
California Baptist University	164	74	238
California State University-San Bernardino	112	13	125
Loma Linda University	180	24	205
West Coast University-Ontario	360	-	360
Total	**817**	**111**	**928**

Source: IPEDS

Recommendation

Community college registered nursing programs provide the knowledge, skills, and abilities that lead to the community college-level occupation, registered nurses. Employment for registered nurses is expected to increase by 12% through 2025, with 2,311 job openings expected annually. The 10th percentile hourly earnings for registered nurses surpass the self-sustainability rate, indicating that nearly all workers in this occupation earn a self-sustainable wage. While this occupation typically requires a bachelor's degree, approximately 34% of incumbent workers have a community college-level education as the highest level of

educational attainment. Furthermore, job advertisements reveal that 59% of employers seeking registered nurses sought candidates with an associate degree.

Regional community colleges have issued 519 awards in registered nursing (TOP 1230.10) programs over the last three academic years. Among the students exiting registered nursing programs in the region, 96% of students reported working in a job closely related to their field of study, the median annual earnings were $61,448, and 81% attained a living wage. Other postsecondary education providers in the region have issued 928 awards annually over the last three academic years.

The Centers of Excellence recommends expanding registered nursing programs due to the high demand and strong earnings associated with this occupation.

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Appendix: Methodology

Exhibit 9 displays the average annual California Community College (CCC) awards conferred during the three academic years between 2017 and 2020 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 advertisement 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 advertisements often do not reveal employers' hiring intentions; it is unknown if employers plan to hire one or multiple workers from a single online job ad or if they are collecting resumes for future hiring needs. A closed job ad may not be the result of a hired worker.

Table 1. 2020 to 2025 job growth, wages, entry-level education, training, and work experience required for registered nurses in the Inland Empire/Desert Region (Riverside and San Bernardino counties combined)

Occupation (SOC)	2020 Jobs	5-Year Change (New Jobs)	5-Year % Change (New Jobs)	Annual Openings (New + Replacement Jobs)	Entry-Experienced Hourly Wage (10th to 90th percentile)	Median Hourly Wage (50th percentile)	Average Annual Earnings	Entry-Level Education & On-The-Job-Training	Work Experience Required
Registered Nurses (29-1141)	30,955	3,708	12%	2,311	$34.72 to $73.97	$52.44	$109,600	Bachelor's degree & None	None

Source: Emsi 2021.3