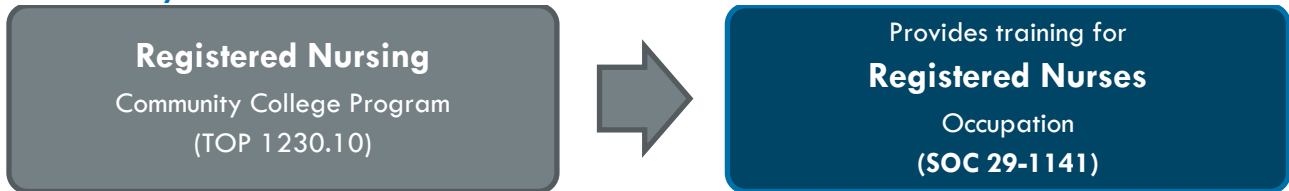


Registered Nursing

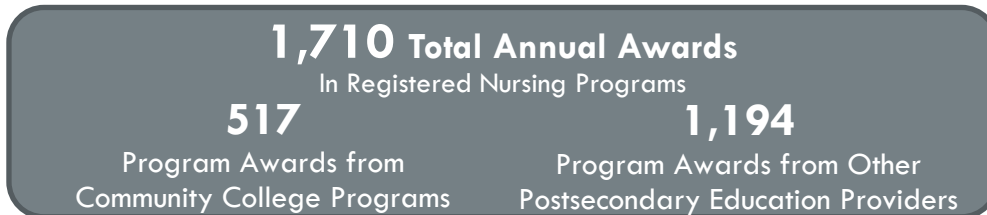
Inland Empire/Desert Region (Riverside and San Bernardino counties)

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 verify their current employment needs.

Summary



Over the next five years (2021-2026), employment for registered nurses is projected to



The Inland Empire/Desert Centers of Excellence

 **Recommends**

Registered Nursing Program Expansion
to meet the need for more workers in the region

Introduction

This report provides labor market occupational demand and wage research and postsecondary program outcomes related to registered nursing. County-level labor market information is included in this report to provide greater insight into the distribution of demand for registered nurses in the region. California Community College registered nursing programs (TOP 1230.10) 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 employment as registered nurses.

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 is 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

Training Requirement: None

Work Experience: None

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

In 2021, there were 31,332 registered nurse jobs in the region. Regional employment for registered nurses is projected to increase by 11% through 2026; 2,373 job openings are projected annually. In 2021, approximately 57% of regional registered nurse jobs were in San Bernardino County, and 43% of jobs were in Riverside County. Approximately 46% of projected annual job openings in the region will occur in Riverside County, and 54% are projected in San Bernardino County. Exhibit 1 displays the job counts, five-year projected job growth, job openings, and the share of incumbent workers aged 55 years and greater in the region.

Exhibit 1. Five-year projections for registered nurses, Inland Empire/Desert Region, 2021-2026

Location	2021 Jobs	2026 Jobs	5-Yr % Change	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
Riverside County	13,591	15,315	13%	5,468	1,094	26%
San Bernardino County	17,741	19,331	9%	6,396	1,279	24%
Inland Empire/Desert Region	31,332	34,646	11%	11,864	2,373	25%

Source: Lightcast 2022.2

An online job ad search for registered nursing jobs was conducted to reveal the employers seeking these workers, including the time it takes to fill positions, earnings information, and in-demand skills. Exhibit 2 shows the number of job ads posted during the last 12 months, August 2021 through July 2022, and the regional and statewide average time to fill these jobs. Employer online job ads for registered nurses are nearly equally distributed between Riverside and San Bernardino Counties, with Riverside County accounting for

49.3% (5,222 ads) of regional demand and San Bernardino County accounting for 50.7% (5,372 ads) of regional demand.

On average, employers in the local region fill online job ads for registered nurses in 34 days, one day shorter than the statewide average time to fill. Time to fill information indicates that employers in the region likely face similar challenges filling open positions as other employers in California.

Exhibit 2. Job ads and time to fill, Inland Empire/Desert Region, August 2021 through July 2022

Location	Job Ads	Regional Average Time to Fill (Days)	Statewide Average Time to Fill (Days)
Riverside County	5,222	34	35
San Bernardino County	5,372	34	35
Inland Empire/Desert Region	10,594	34	35

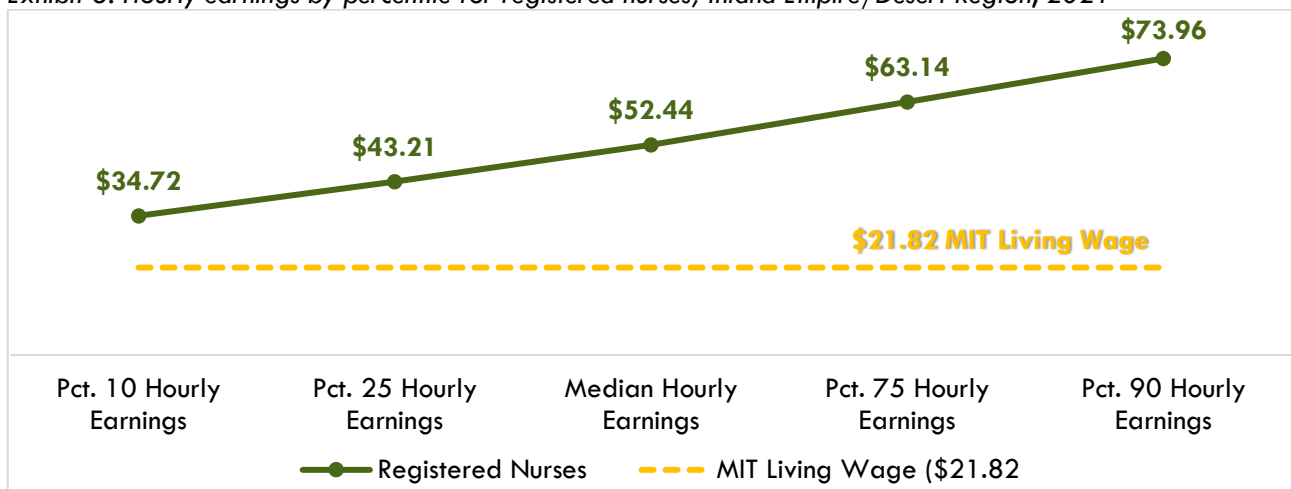
Source: Burning Glass – Labor Insights

Earnings and Benefits

Community colleges should ensure their training programs lead to employment opportunities that provide a living wage. The MIT living wage calculator estimates that an individual must earn \$21.82 per hour or \$45,386 annually in California (Glasmeier, 2022).

Exhibit 3 displays the hourly earnings for registered nurses. The 10th percentile hourly earnings for registered nurses are above the living wage standard, indicating that at least 90% of workers earn a living wage.

Exhibit 3. Hourly earnings by percentile for registered nurses, Inland Empire/Desert Region, 2021



Source: Lightcast 2022.2

Benefits information, provided in the occupational guides developed by the California Labor Market Information Division, reveals that benefit packages for registered nurses vary among employers. Generally,

registered nurses receive medical, dental, and retirement benefits. In addition, most employers provide vision, life, vacation, and sick leave to registered nurses that work full time (Detailed Occupational Guides, 2022).

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 an average annual salary of \$102,000, well above the region's \$45,386 annual (\$21.82 hourly) MIT living wage standard. Consider the salary information with caution since only 29% (3,112 out of 10,594) of online job ads for this occupation provided salary information. The salary figures are prorated to reflect full-time, annual earnings status.

Exhibit 4. Advertised salary information, Inland Empire/Desert Region, August 2021 through July 2022

Number of job ads	Less than \$35,000	\$35,000 to \$49,999	\$50,000 to \$74,999	More than \$75,000	Average Annual Salary
3,112	9%	5%	7%	79%	\$102,000

Source: Burning Glass – Labor Insights

Job Titles, Employers, Skills, Education, and Work Experience

Exhibit 5 displays the job titles most frequently used in job ads for registered nurses during the last 12 months. Displaying advertised job titles may provide insight into the types of positions sought by employers posting ads. The most frequently requested job title in the region, aside from registered nurse, was intensive care unit registered nurse.

Exhibit 5. Job titles most frequently used in registered nurse job ads, Inland Empire/Desert Region, August 2021 through July 2022

Job Titles	Job Ads
Registered Nurse	1,156
Intensive Care Unit Registered Nurse	757
Travel Registered Nurse	686
Registered Case Manager	615
Home Health Registered Nurse	519
Registered Nurse Supervisor	456
Hospice Registered Nurse	332
All other job titles	6,073
Total	10,594

Source: Burning Glass – Labor Insights

Exhibit 6 displays the employers that posted more than 50 job ads for registered nurses during the last 12 months. Displaying employer names provides insight into where students may find employment after completing a program. Kaiser Permanente posted the most job ads for registered nurses in San Bernardino County and in the region overall. Riverside Community Hospital posted the most job ads for registered nurses in Riverside County over the last twelve months.

Exhibit 6. Employers posting the most job ads for registered nurses, Inland Empire/Desert Region, August 2021 through July 2022

Top Employer	Job Ads
Kaiser Permanente	761
Loma Linda University Health	584
Kindred Health Incorporated	416
Riverside Community Hospital	361
St. Mary Medical Center	350
Aya Healthcare	305
Desert Regional Medical Center	252
DaVita Incorporated	206
Anthem Blue Cross	187
St. Bernardine Medical Center	169
Eisenhower Medical Center	161
Riverside University Health System	149
Inland Valley Medical Center	141
Temecula Valley Hospital	135
AccentCare	133
Hi-Desert Medical Center	132
John F Kennedy Memorial Hospital	131
Community Hospital of San Bernardino	116
Parkview Community Hospital Medical Center	115
Healthcare Employment Network	99
Corona Regional Medical Center	91
San Antonio Regional Hospital	71
HCR ManorCare	71
Temecula Valley Day Surgery and Pain Therapy Center	70
Desert Valley Hospital	63
<i>All other employers</i>	5,325
Total	10,594

Source: Burning Glass – Labor Insights

Exhibit 7 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 7. Sample of in-demand skills from employer job ads, Inland Empire/Desert Region, August 2021 through July 2022

Specialized skills (n=9,448)	Employability skills
<ul style="list-style-type: none"> • Patient Care • Treatment Planning • Acute Care • Discharge Planning • Teaching • Case Management 	<ul style="list-style-type: none"> • Communication Skills • Teamwork/Collaboration • Problem Solving • Computer Literacy • Critical Thinking • Building Effective Relationships

Source: Burning Glass – Labor Insights

Exhibit 8 displays the typical entry-level education, educational attainment, and minimum advertised education requirements for registered nurses. According to the Bureau of Labor Statistics, 34% of incumbent workers in this field hold a community college-level of educational attainment; "some college, no degree," and an "associate degree." Approximately 64% of job ads for registered nurses sought candidates with at least an associate degree.

Exhibit 8. Typical entry-level education, educational attainment, and minimum advertised education requirements, Inland Empire/Desert Region, August 2021 through July 2022

Typical Entry-Level Education Requirement (National)	CC-Level Educational Attainment* (National)	Number of Job Ads	Real-Time Minimum Advertised Education Requirement		
			High school or vocational training	Associate degree	Bachelor's degree or higher
Bachelor's Degree	34%	10,592	2%	64%	34%

Source: Lightcast 2022.2, Burning Glass – Labor Insights

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

Exhibit 9 displays the work experience typically required for registered nurses and the real-time work experience requirements from employer job ads. Approximately 76% of employers sought registered nurses with zero to two years of previous work experience.

Exhibit 9. Work experience required and real-time work experience requirements, Inland Empire/Desert Region, August 2021 through July 2022

Work Experience Typically Required	Real-Time Work Experience			
	Number of job ads	0 – 2 years	3 – 5 years	6+ years
None	8,063	76%	23%	1%

Source: Lightcast 2022.2, Burning Glass – Labor Insights

Certifications

Exhibit 10 displays the most frequently requested certifications by employers in job ads. All of the job ads included in this search required that candidates possess a registered nurse (RN) certification. According to the California Board of Registered Nursing (BRN), individuals seeking an RN license must meet the educational requirements, pass a criminal background check, and pass the national licensing examination. In California, registered nurses may fulfill the educational requirement with an Associate Degree in Nursing (ADN), Bachelor of Science in Nursing (BSN), Entry Level Master’s Program in Nursing (ELM), LVN 30 Unit Option, or Military Corpsmen (California BRN, 2022). For more information about registered nursing licensure in California, please visit the California BRN website.

Exhibit 10: Certifications most frequently required by employers, Inland Empire/Desert Region, August 2021 through July 2022

Certification (n=10,594)	Jobs Ads
Registered Nurse Certification	10,594
Basic Life Support (BLS)	7,646
Advanced Cardiac Life Support (ACLS)	4,000
First Aid CPR AED	1,259
Driver’s License	1,087
Pediatric Advanced Life Support (PALS)	571
Neonatal Resuscitation Program (NRP)	497

Source: Burning Glass – Labor Insights

Student Completions and Programs Outcomes

Exhibit 11 displays student completions for registered nursing programs (TOP 1230.10) over the last three academic years (2018-21). In the previous three academic years, regional community colleges have issued 517 awards annually in registered nursing programs. Program completion and student outcome methodologies are found in the appendix.

Exhibit 11. Annual average community college awards for registered nursing programs, Inland Empire/Desert Region, Academic Years 2018-2021

TOP 1230.10 – Registered Nursing (Local Program Title)	Academic Year 2018-19	Academic Year 2019-20	Academic Year 2021-21	Total CC Annual Average Awards, Academic Years 2018-21
Chaffey (Nursing: ADN, Nursing: VN to RN, Nursing: VN to RN – Non-Degree Option)				55
Associate Degree	58	70	36	55
Copper Mountain (Registered Nursing)				24
Associate Degree	22	29	22	24
Desert (Registered Nursing)				49
Associate Degree	45	63	40	49
Mt. San Jacinto (Nursing)				45
Associate Degree	45	35	56	45
Palo Verde (Nursing (RN))	-	-	-	0
Riverside (Registered Nursing)				179
Associate Degree	194	177	166	179
San Bernardino (Nursing)				88
Associate Degree	84	81	99	88
Victor Valley (Nursing, Nursing Licensure)				76
Associate Degree	61	65	34	53
Certificate 60+ semester units	3	22	43	23
Total	512	542	496	517

Source: MIS Data Mart, COCI

California program outcome data may provide 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 12. In the 2018-19 academic year, approximately 81% of registered nursing program completers and skills-builders students attained a living wage. The median annual earnings for all registered nursing program exiters was \$61,448 in the 2018-19 academic year.

Exhibit 12. 1230.10 – Registered nursing strong workforce program outcomes, Inland Empire/Desert Region, Academic Year 2018-2019 (Unless Noted)

Strong Workforce Program Metrics: 1230.10 – Registered Nursing	Inland Empire/Desert Region	California Region
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 (2019-20)	89%	86%
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
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	\$57,518
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 13 displays awards for other postsecondary education providers reported in registered nursing/registered nurse programs (CIP 51.3801). Completion data is compiled from the Integrated Postsecondary Education Data System (IPEDS) for the most recent three years. Six other regional postsecondary education providers issued 1,194 awards annually over the last three academic years.

Exhibit 13. Other educational providers registered nursing/registered nurse programs, three-year annual average credentials, Inland Empire/Desert Region, Academic Years 2017-2020

51.3801 – Registered Nursing/Registered Nurse	Associate Degree	Bachelor’s Degree	Master’s Degree	Doctor’s Degree	Other Educational Providers Annual Average Credentials, 2017-2020
California Baptist University	-	160	68	-	228
California State University – San Bernardino	-	108	12	-	120
Loma Linda University	0	196	17	5	218
San Joaquin Valley College	12	-	-	-	12
University of Phoenix	-	201	-	-	201
West Coast University – Ontario	-	416	-	-	416
Total	12	1,080	97	5	1,194

Source: IPEDS

Summary of Findings

The knowledge, skills, and abilities trained by registered nursing programs (TOP 1230.10) prepare students for employment as registered nurses. Registered nurses are projected to have 2,373 annual job openings and increase employment by 11% over the next five years in the Inland Empire/Desert Region. The 10th percentile hourly earnings for registered nurses are above the living wage standard, indicating that at least 90% of workers earn a living wage. Online job ad salary information reveals that employers are willing to pay registered nurses an average annual salary of \$102,000, well above the region's \$45,386 annual (\$21.82 hourly) MIT living wage standard. Approximately 64% of the 10,594 job ads for registered nurses posted over the last twelve months sought candidates with at least an associate degree.

Community college registered nursing programs have issued 517 awards annually over the last three academic years. Other postsecondary education providers have issued 1,194 awards annually in programs related to registered nursing. Combined, education providers in the region have issued 1,710 awards annually in registered nursing programs over the last three academic years. Approximately 81% of registered nursing program completers and skills-builders students attained a living wage. The median annual earnings for all registered nursing program exiters was \$61,448 in the 2018-19 academic year.

The Centers of Excellence recommends expanding registered nursing programs to meet the regional demand for more workers. Colleges considering this program should partner with relevant employers and confirm their demand for registered nurses and the skills needed for students to secure work in this field shortly after exiting the program.

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Appendix: Methodology

Exhibit 11 displays the average annual California Community College (CCC) awards conferred during the three academic years between 2018 and 2021 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 variations 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 California's Employment Development Department's Unemployment Insurance database records. 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, 2022a). 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, 2022a).

Job ad 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 ads 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 collecting resumes for future hiring needs. A closed job ad may not be the result of a hired worker.

Table 1. 2021 to 2026 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)

Location	2021 Jobs	5-Year Change	5-Year % Change	Annual Openings (New + Replacement Jobs)	Entry-Experienced Hourly Wage (10 th to 90 th percentile)	Median Hourly Wage (50 th percentile)	Average Annual Earnings	Entry-Level Education & On-The-Job-Training	Work Experience Required
Riverside County	13,591	1,724	13%	1,094	\$34.53 to \$73.69	\$52.21	\$109,100	Bachelor's degree & None	None
San Bernardino County	17,741	1,590	9%	1,279	\$34.88 to \$74.17	\$52.61	\$109,900	Bachelor's degree & None	None
Inland Empire/Desert Region	31,332	3,313	11%	2,373	\$34.72 to \$73.96	\$52.44	\$109,600	Bachelor's degree & None	None

Source: Lightcast 2022.2