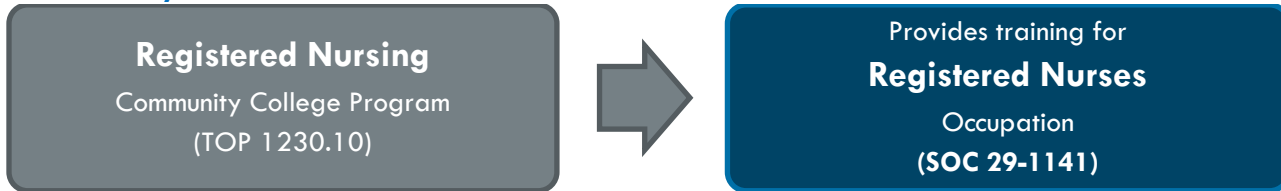


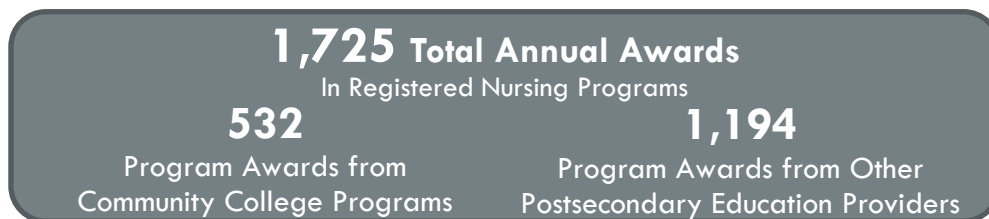
Registered Nursing

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

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 31,397 registered nurse jobs in the region. Regional employment for registered nurses is projected to increase by 10% through 2026; 2,324 job openings are projected annually. In 2021, approximately 57% of regional registered nurse jobs were in San Bernardino County, and 43% were in Riverside County. About 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+
San Bernardino County	17,875	19,354	8%	6,309	1,262	25%
Riverside County	13,522	15,119	12%	5,308	1,062	25%
Inland Empire/Desert Region	31,397	34,473	10%	11,618	2,324	25%

Source: Lightcast 2022.4

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 in 2022, January through December, in Riverside and San Bernardino counties and the median posting duration. Employer online job ads for registered nurses are nearly equally distributed between Riverside and San Bernardino counties, with Riverside County accounting for 49.9% (15,525 ads) of regional demand and San Bernardino County accounting for 49.2% (15,050 ads) of regional demand.

On average, regional employers kept online job ads for registered nurses open for 26 days. The average regional online job is open for 29 days, indicating that it is slightly easier for employers to fill jobs for registered nurses than other jobs.

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

Location	Job Ads	Median Posting Duration (Days)
Riverside County	15,525	26
San Bernardino County	15,050	26
Inland Empire/Desert Region	30,575	26 (All Jobs 29 Days)

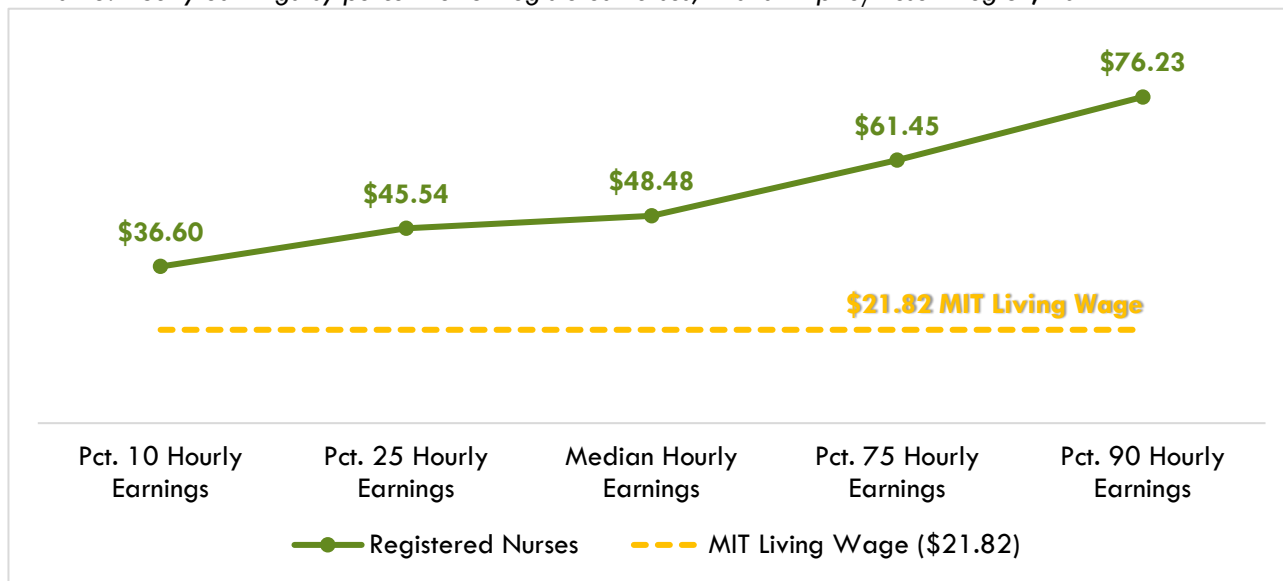
Source: Lightcast 2022.4

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 to be self-sufficient 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

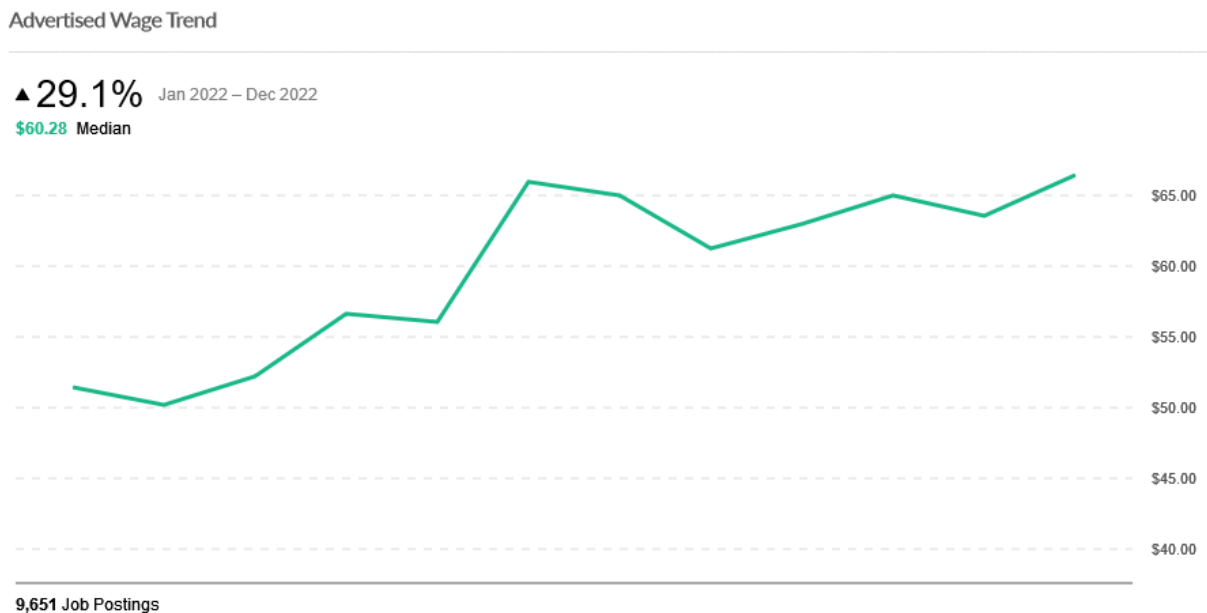


Source: Lightcast 2022.4

Advertised Salary from Online Job Ads

Exhibit 4 displays the regional online advertised hourly wage trend for registered nurses over the last 12 months. Online job ad salary information reveals that employers are willing to pay registered nurses an hourly rate of \$60.28 per hour in December 2022, above the region's \$21.82 hourly living wage standard and about \$11.80 per hour above the median hour earnings reported in traditional labor market employer surveys. The median hourly rate in January 2022 was \$51.72 per hour. This may indicate that employers are competing for talent in a tight labor market. Consider the salary information with caution since only 32% (out of 30,575) of online job ads for this occupation provided salary information.

Exhibit 4. Online Advertised Hourly Wage Trend for Registered Nurses, Inland Empire/Desert Region, January 2022 through December 2022



Source: Lightcast 2022.4

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 (ICU) registered nurse.

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

Job Titles	Unique Job Ads
Registered Nurse	2,314
ICU Registered Nurses	1,059

Job Titles	Unique Job Ads
Labor and Delivery Registered Nurses	917
NICU Registered Nurses	862
Telemetry Registered Nurses	775
Operating Room Registered Nurses	747
Emergency Room Registered Nurses	706
ICU Travel Registered Nurses	702
Telemetry Travel Registered Nurses	649
Travel Registered Nurses	625

Source: Lightcast 2022.4

Exhibit 6 displays the employers posting the most job ads for registered nurses during the last 12 months. Showing employer names provides insight into where students may find employment after completing a program. Healthcare Employment Network posted the most job ads for registered nurses in the region.

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

Top Employer	Unique Job Ads
Healthcare Employment Network	1,363
Accountable Healthcare Staffing	780
Kaiser Permanente	738
HCA Healthcare	614
All Medical Personnel	566
Aya Healthcare	557
Loma Linda University	511
Vivian Health	506
Kindred Healthcare	500
Stability Healthcare	489

Source: Lightcast 2022.4

Exhibit 7 lists a sample of specialized and employability skills employers seek when seeking workers to fill registered nurse positions. Specialized skills are occupation-specific skills that employers request for industry or job competency. Common 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, January through December 2022

Specialized skills	Common skills
<ul style="list-style-type: none"> • Nursing • Intensive Care Unit • Nursing Care • Emergency Departments • Medical Telemetry • Neonatal Intensive Care Unit • Pediatrics • Nursing Process • Medical Surgical Nursing • Acute Care 	<ul style="list-style-type: none"> • Communications • Planning • Management • Leadership • Critical Thinking • Customer Service • Problem-Solving • Teaching • Coordinating • Compassion

Source: Lightcast 2022.4

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." Most employers listing a minimum education level requested an associate degree followed by a bachelor's degree or higher. Approximately 74% of employers did not list a minimum education level.

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

Typical Entry-Level Education Requirement (National)	CC-Level Educational Attainment* (National)	Minimum Advertised Education Level			
		No Education Listed	High school or vocational training	Associate degree	Bachelor's degree or higher
Bachelor's Degree	34%	74%	3%	12%	11%

Source: Lightcast 2022.4

*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. A large share of employers, 40%, did not list a work experience requirement. About 1/3 of employers sought a candidate with at least two years of work experience.

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

Work Experience Typically Required	Real-Time Work Experience			
	No Experience Listed	0 – 1 years	2 – 3 years	4+ years
None	40%	27%	31%	2%

Source: Lightcast 2022.4

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, January through December 2022

Certification	Jobs Ads
Registered Nurse (RN)	28,174
Basic Life Support (BLS) Certification	12,141
Pediatric Advanced Life Support (PALS)	7,455
Neonatal Resuscitation Program Certification (NRP)	2,823
Licensed Vocational Nurse (LVN)	1,239
NIH Stroke Scale (NIHSS)	808
Critical Care Registered Nurse (CCRN)	667
Licensed Practical Nurse (LPN)	629

Source: Lightcast 2022.4

Student Completions and Programs Outcomes

Exhibit 11 displays student completions for registered nursing programs (TOP 1230.10) over the last three academic years (2019-22). In the previous three academic years, regional community colleges have issued 532 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 2019-2022

TOP 1230.10 – Registered Nursing (Local Program Title)	Academic Year 2019-20	Academic Year 2020-21	Academic Year 2021-22	Total CC Annual Average Awards, Academic Years 2019-22
Chaffey (Nursing: ADN, Nursing: VN to RN, Nursing: VN to RN – Non-Degree Option)				54
Associate Degree	70	36	57	54
Copper Mountain (Registered Nursing)				24
Associate Degree	29	22	21	24
College of the Desert (Registered Nursing)				56
Associate Degree	63	40	64	56
Mt. San Jacinto (Nursing)				37
Associate Degree	35	56	21	37
Palo Verde (Nursing (RN))	-	-	-	0
Riverside City (Critical Care Nurse, Registered Nursing)				165
Associate Degree	177	166	153	165
San Bernardino Valley (Nursing)				89
Associate Degree	81	99	86	89
Victor Valley (Nursing, Nursing Licensure)				106
Associate Degree	65	34	67	55
Certificate 60+ semester units	22	43	88	51
Total	542	496	557	532

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 2019-20 academic year, approximately 78% of registered nursing program completers and skills-builders students attained a living wage. The median annual earnings for all registered nursing program exiters was \$62,216 in the 2019-20 academic year.

Exhibit 12. 1230.10 – Registered nursing strong workforce program outcomes, Inland Empire/Desert Region, Academic Year 2019-2020 (Unless Noted)

Strong Workforce Program Metrics: 1230.10 – Registered Nursing	Inland Empire/Desert Region	California
Unduplicated count of enrolled students (2020-21)	1,521	18,545
Completed 9+ career education units in one year (2020-21)	71%	56%
Students who attained a noncredit workforce milestone in a year (2020-21)	99%	26%
Students who earned a degree, certificate, or attained apprenticeship (2020-21)	453	4,627
Transferred to a four-year institution (transfers)	241	2,645
Job closely related to the field of study (2018-19)	93%	96%
Median annual earnings (all exiters)	\$62,216	\$58,064
Median change in earnings (all exiters)	77%	68%
Attained a living wage (completers and skills-builders)	78%	70%

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 2,324 annual job openings and increase employment by 10% over the next five years in the Inland Empire/Desert Region. The 10th percentile earnings for registered nurses is \$36.60 per hour, above the living wage standard, indicating that at least 90% of workers in this field earn a living wage. Online job ad salary information reveals that employers are willing to pay registered nurses \$60.28 per hour.

Community college registered nursing programs have issued 532 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 1,725 awards annually in registered nursing programs over the last three academic years. Approximately 78% of registered nursing program completers and skills-builders students attained a living wage. The median annual earnings for all registered nursing program exiters was \$62,216 in the 2019-20 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.

Contact

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Appendix: Methodology

Exhibit 11 displays the average annual California Community College (CCC) awards conferred during the three academic years between 2019 and 2022 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. 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 collect 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
San Bernardino County	17,875	1,479	8%	1,262	\$36.63 to \$76.29	\$48.52	\$111,700	Bachelor's degree & None	None
Riverside County	13,522	1,597	12%	1,062	\$36.55 to \$76.15	\$48.42	\$111,500	Bachelor's degree & None	None
Inland Empire/Desert Region	31,397	3,076	10%	2,324	\$36.60 to \$76.15	\$48.48	\$111,600	Bachelor's degree & None	None

Source: Lightcast 2022.4