

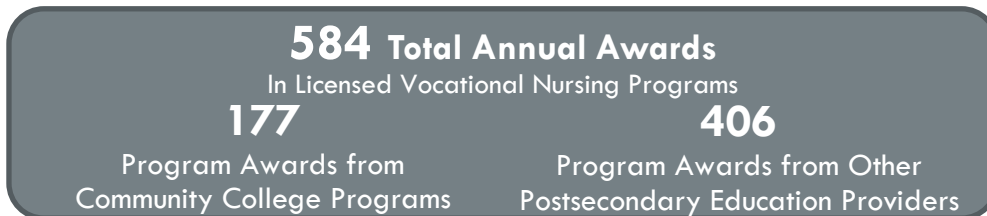
Licensed Vocational Nursing

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

Summary



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



The Inland Empire/Desert Centers of Excellence

 **Recommends**

Licensed Vocational 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 licensed vocational nursing. California Community College licensed vocational nursing (TOP 1230.10) programs lead to vocational nurse licensure by the Board of Vocational Nursing and Psychiatric Technicians. These programs include the technical and manual nursing skills practiced under the direction of a licensed vocational nurse, physician, or other medical staff specific to the scope of practice of the licensed vocational nurse (Taxonomy of Programs, 2012). The knowledge, skills, and abilities trained by licensed vocational nursing programs lead to employment as a licensed vocational nurse.

This report contains employment demand for licensed vocational nurses in the combined San Diego County and Imperial County area, further referred to as the San Diego/Imperial Region. However, this report's

recommendation concerns the educational supply and employment demand in the Inland Empire/Desert Region.

Licensed Vocational Nurses (29-2061)

Care for ill, injured, or convalescing patients or persons with disabilities in hospitals, nursing homes, clinics, private homes, group homes, and similar institutions. May work under the supervision of a licensed vocational nurse. Licensing required.

Sample job titles: Charge Nurse, Clinic Nurse, Home Health Licensed Practical Nurse (Home Health LPN), Licensed Vocational Nurse (LVN), Office Nurse, Pediatric LPN (Pediatric Licensed Practical Nurse), Private Duty Nurse, Radiation Oncology Nurse, Triage LPN (Triage Licensed Practical Nurse)

Entry-Level Educational Requirement: Postsecondary nondegree award

Training Requirement: None

Work Experience: None

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 71%

Job Counts and Projections

In 2021, there were 8,003 licensed vocational nurse jobs in the Inland Empire/Desert Region and 6,487 licensed vocational nurses in the San Diego/Imperial Region. In both regions, employment for licensed vocational nurses is projected to increase by 10% through 2026. Over the next five years, licensed vocational nurses are projected to have 834 annual job openings in the Inland Empire/Desert Region and 677 annual job openings in the San Diego/Imperial Region. 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 licensed vocational nurses, Inland Empire/Desert Region and San Diego/Imperial Region, 2021-2026

Region	2021 Jobs	2026 Jobs	5-Yr % Change	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
Inland Empire/Desert Region	8,003	8,812	10%	4,170	834	24%
San Diego/Imperial Region	6,487	7,153	10%	3,385	677	24%
Total	14,490	15,965	10%	7,555	1,511	24%

Source: Lightcast 2023.1

An online job ad search for licensed vocational 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 over the last 12 months, May 2022 through April 2023, in the Inland

Empire/Desert Region and the San Diego/Imperial Region.

On average, employers kept online job ads for licensed vocational nurses open for 25 days. The average regional online job is open for 29 days, indicating that it is slightly easier for employers to fill licensed vocational nurse jobs than other jobs.

Exhibit 2. Job ads and time to fill, Inland Empire/Desert Region and San Diego/Imperial Region, May 2022 through April 2023

Region	Job Ads	Median Posting Duration (Days)
Inland Empire/Desert Region	1,212	27
San Diego/Imperial Region	1,354	24
Total	2,566	25

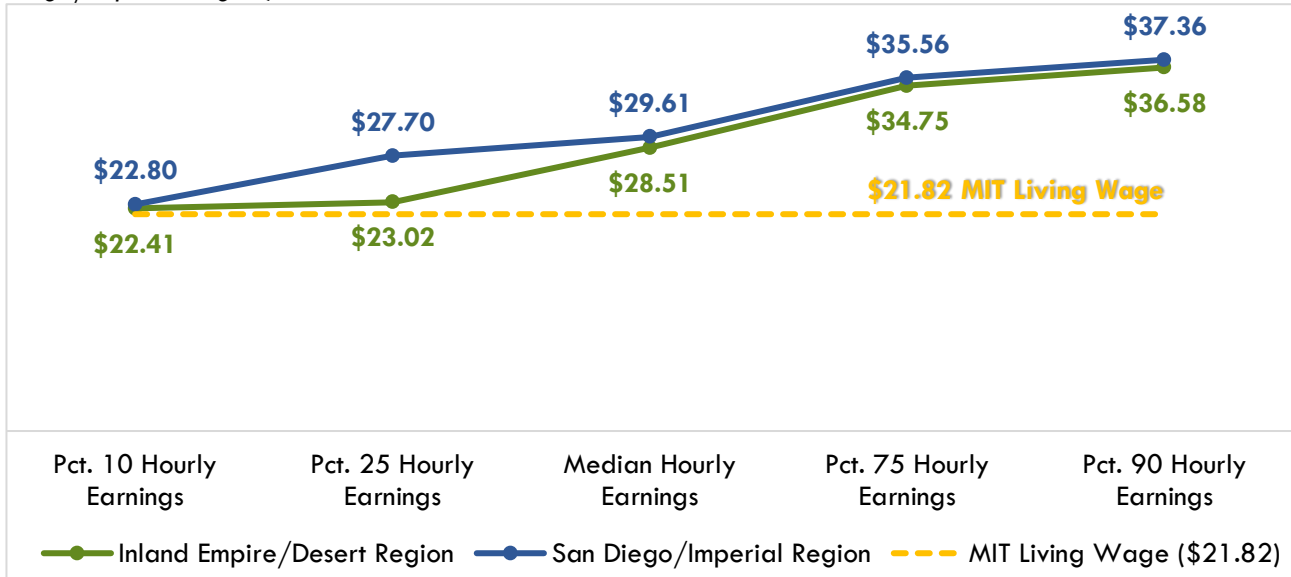
Source: Lightcast 2023.1

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 licensed vocational nurses in the Inland Empire/Desert Region and San Diego/Imperial Region. The 10th percentile hourly earnings for licensed vocational 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 licensed vocational nurses, Inland Empire/Desert Region and San Diego/Imperial Region, 2021

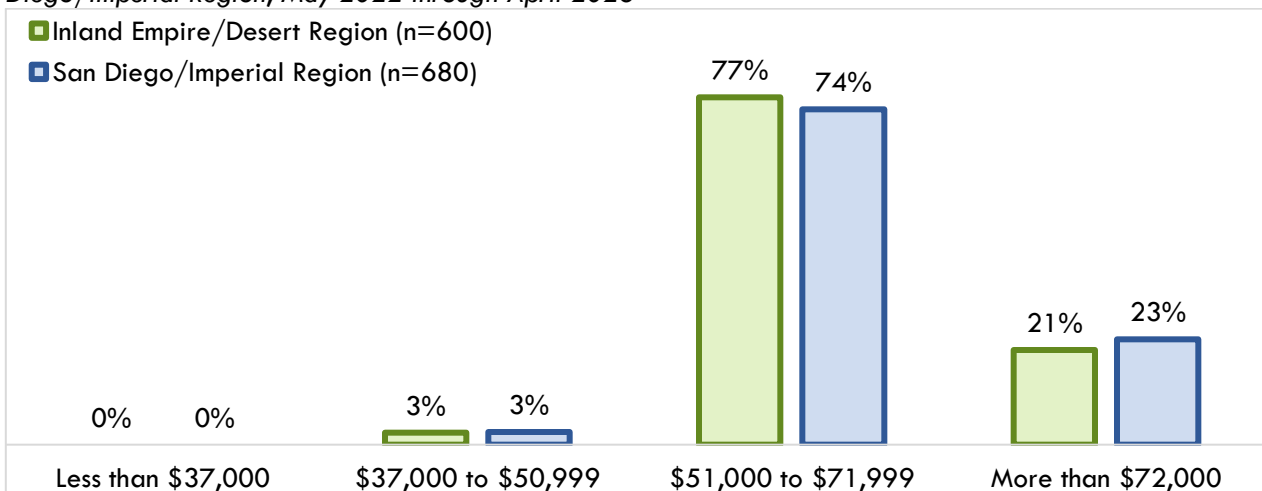


Source: Lightcast 2023.1

Advertised Salary from Online Job Ads

Exhibit 4 displays the online advertised salaries for licensed vocational nurses over the last 12 months in both regions. Online job ad salary information reveals employers are willing to pay licensed vocational nurses an annual salary between \$64,251 and \$68,869 or between \$30.89 and \$33.11 per hour, above the region's \$21.82 hourly living wage standard. Consider the salary information with caution since only 50% (1,280 of 2,566) of online job ads for this occupation provided salary information.

Exhibit 4. Online advertised salaries for licensed vocational nurses, Inland Empire/Desert Region and San Diego/Imperial Region, May 2022 through April 2023



Source: Lightcast 2023.1

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

Exhibit 5 displays the job titles most frequently used in job ads for licensed vocational nurses over the last 12 months. Displaying advertised job titles may provide insight into the types of positions sought by employers posting job ads. The most frequently requested job title in both regions was licensed vocational nurse (LVN).

Exhibit 5. Job titles most frequently used in licensed vocational nurse job ads, Inland Empire/Desert Region and San Diego/Imperial Region, May 2022 through April 2023

Inland Empire/Desert Job Titles	Unique Job Ads	San Diego/Imperial Job Titles	Unique Job Ads
Licensed Vocational Nurses (LVN)	524	Licensed Vocational Nurses (LVN)	553
Licensed Vocational Nurses/Licensed Practical Nurses (LVN/LPN)	138	Licensed Vocational Nurses/Licensed Practical Nurses (LVN/LPN)	115
Licensed Practical Nurses (LPN)	69	Correctional Licensed Vocational Nurses	77
LVN Home Health Nurse	58	Licensed Practical Nurses (LPN)	75
Licensed Vocational Nurses/Charge Nurses	40	Licensed Vocational Nurses/Charge Nurses	33
Correctional Licensed Vocational Nurses	39	Home Health Licensed Vocational Nurses	24
<i>All other job titles</i>	344	<i>All other job titles</i>	477
Total	1,212	Total	1,354

Source: Lightcast 2023.1

Exhibit 6 displays the employers posting the most job ads for licensed vocational nursing during the last 12 months. Showing employer names provides insight into where students may find employment after completing a program. ProMedica posted the most job ads for licensed vocational nurses in the Inland Empire/Desert Region. Redwood Terraces posted the most job ads for licensed vocational nurses in the San Diego/Imperial Region.

Exhibit 6. Employers posting the most job ads for licensed vocational nurses, Inland Empire/Desert Region and San Diego/Imperial, May 2022 through April 2023

Inland Empire/Desert Top Employers	Unique Job Ads	San Diego/Imperial Top Employers	Unique Job Ads
ProMedica	77	Redwood Terrace	97
UnitedHealth Group	59	AccentCare	75
Alaphia Care Home Health Services	50	Scripps Health	57
AccentCare	40	Rady Children's Hospital	53
Kindred Healthcare	40	Sunbelt	51
<i>All other employers</i>	946	<i>All other employers</i>	1,021
Total	1,212	Total	1,354

Source: Lightcast 2023.1

Exhibit 7 lists a sample of specialized and employability skills employers seek when seeking workers to fill psychiatric technician 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.

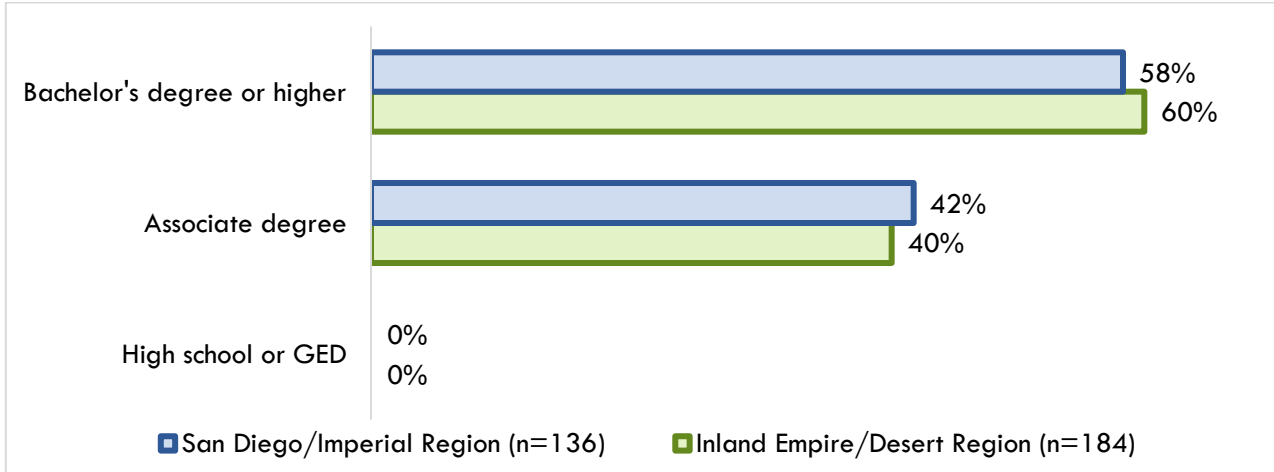
Exhibit 7. Sample of in-demand skills from employer job ads, Inland Empire/Desert Region and San Diego/Imperial Region, May 2022 through April 2023

Region	Specialized skills	Common skills
Inland Empire/Desert Region (n=1,212)	<ul style="list-style-type: none"> • Medication Administration • Home Health Care • Vital Sign Measurement • Computerized Physician Order Entry • Hospice • Direct Patient Care 	<ul style="list-style-type: none"> • Communication Skills • Coordinating • Management • Teaching • Problem-Solving • Customer Service
San Diego/Imperial Region (n=1,354)	<ul style="list-style-type: none"> • Medication Administration • Home Health Care • Vital Signs Measurement • Infection Control • Cardiopulmonary Resuscitation (CPR) • Computerized Physician Order Entry 	<ul style="list-style-type: none"> • Communication Skills • Problem-Solving • Coordinating • Management • Customer Service • Leadership

Source: Lightcast 2023.1

Exhibit 8 displays the minimum advertised education requirements for licensed vocational nurses. According to the Bureau of Labor Statistics, 71% of incumbent workers in this field hold a community college-level of educational attainment; "some college, no degree," and an "associate degree." While between 40% and 42% of employers in both regions sought candidates with an associate degree, most employers sought candidates with a bachelor's degree or higher.

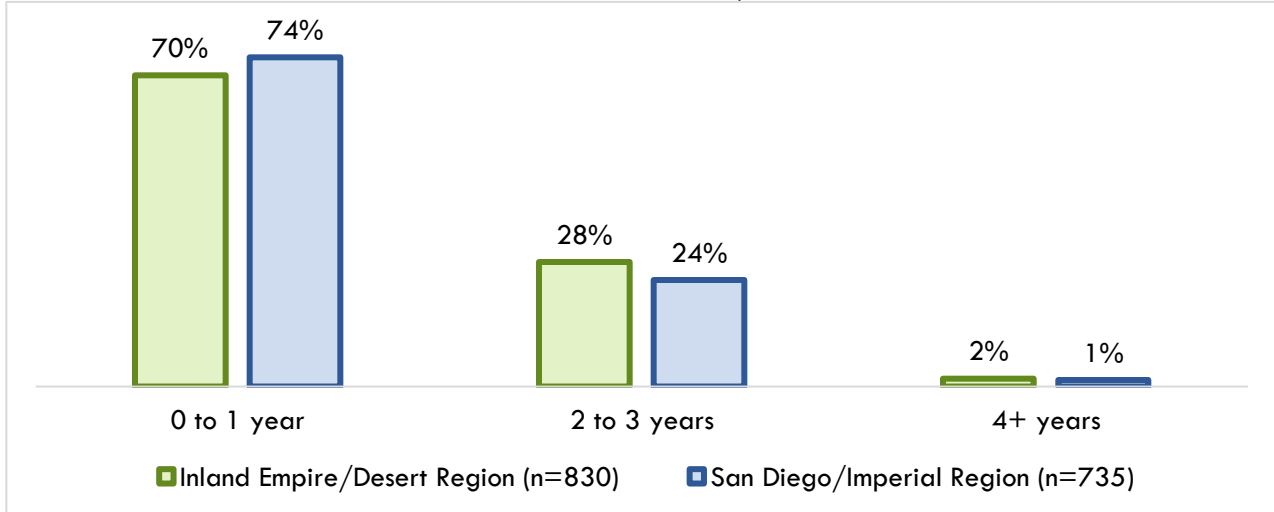
Exhibit 8. Minimum advertised education requirements, Inland Empire/Desert Region and San Diego/Imperial Region, May 2022 through April 2023



Source: Lightcast 2023.1

Exhibit 9 displays the work experience typically required from employer job ads for licensed vocational nurses. The majority of employers, 70% to 74%, sought candidates with zero to one year of previous work experience.

Exhibit 9. Real-time work experience requirements, Inland Empire/Desert Region, May 2022 through April 2023



Source: Lightcast 2023.1

Certifications

Exhibit 10 displays the most frequently requested certifications by employers in job ads. According to the California Board of Vocational Nursing and Psychiatric Technicians (BVNPT), individuals seeking LVN licensure must meet the educational requirements, pass a criminal background check, and pass the national licensing examination (BVBPT, 2023). For more information about licensed vocational nursing licensure in California, please visit the California BVBPT website.

Exhibit 10: Certifications most frequently required by employers, Inland Empire/Desert Region and San Diego/Imperial Region, May 2022 through April 2023

Inland Empire/Desert Region Certification	Jobs Ads	San Diego/Imperial Region Certification	Jobs Ads
Licensed Vocational Nurse (LVN)	1,151	Licensed Vocational Nurse (LVN)	1,270
Licensed Practical Nurse (LPN)	871	Licensed Practical Nurse (LPN)	1,027
Basic Life Support (BLS) Certification	282	Basic Life Support (BLS) Certification	264
IV (Intravenous) Certification	83	IV (Intravenous) Certification	30
Advanced Cardiovascular Life Support (ACLS) Certification	45	Advanced Cardiovascular Life Support (ACLS) Certification	22

Source: Lightcast 2023.1

Student Completions and Programs Outcomes

Exhibit 11 displays student completions for licensed vocational nursing programs (TOP 1230.20) over the last three academic years (2019-22). In the previous three academic years, regional community colleges have issued 177 awards annually in licensed vocational nursing programs. Program completion and student outcome methodologies are found in the appendix.

Exhibit 11. Annual average community college awards for licensed vocational nursing programs, Inland Empire/Desert Region, Academic Years 2019-2022

TOP 1230.20 – Licensed Vocational 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 Vocational (VN))				40
Associate Degree	27	12	23	21
Certificate 60+ semester units	5	0	0	2
Certificate 30 < 60-semester units	17	17	19	18
Copper Mountain (Vocational Nursing)				24
Associate Degree	12	11	13	12
Certificate 30 < 60-semester units	12	12	12	12
College of the Desert (Vocational Nursing)				26
Associate Degree	9	16	1	9
Certificate 30 < 60-semester units	26	25	0	17
Palo Verde (Vocational Nursing)				6
Certificate 30 < 60-semester units	11	0	7	6
Riverside City (Nursing-Vocational Nursing, Vocational Nursing)				82
Associate Degree	38	30	43	37
Certificate 30 < 60-semester units	50	38	46	45
Total	207	161	164	177

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.

Exhibit 12. 1230.20 – Licensed vocational nursing strong workforce program outcomes, Inland Empire/Desert Region, Academic Year 2019-2020 (Unless Noted)

Strong Workforce Program Metrics: 1230.20 – Licensed vocational nursing	Inland Empire/Desert Region	California
Unduplicated count of enrolled students (2020-21)	517	3,571
Completed 9+ career education units in one year (2020-21)	49%	44%
Students who attained a noncredit workforce milestone in a year (2020-21)	96%	37%
Students who earned a degree, certificate, or attained apprenticeship (2020-21)	101	659
Transferred to a four-year institution (transfers)	23	161
Job closely related to the field of study (2018-19)	100%	94%
Median annual earnings (all exiters)	\$42,664	\$37,778
Median change in earnings (all exiters)	82%	54%
Attained a living wage (completers and skills-builders)	69%	55%

Sources: LaunchBoard Community College Pipeline and Strong Workforce Program Metrics

Exhibit 13 displays awards for other postsecondary education providers reported in licensed practical/vocational nurse training (CIP 51.3901) programs. Completion data is compiled from the Integrated Postsecondary Education Data System (IPEDS) for the most recent three years. Five other regional postsecondary education providers issued 406 awards annually over the last three academic years.

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

51.3901 – Licensed Practical/Vocational Nursing Training	Academic Year 2017-18	Academic Year 2018-19	Academic Year 2019-20	Other Educational Providers Annual Average Credentials, 2017-2020
American Career College-Ontario				175
Postsecondary awards	177	153	195	175
Baldy View Regional Occupational Program				13
Postsecondary awards	18	0	20	13
Beaumont Adult School				36
Postsecondary awards	38	29	40	36
California Nurses Educational Institute				69
Postsecondary awards	71	71	64	69
North-West College-Riverside				114
Postsecondary awards	142	134	67	114
Total	446	387	386	406

Source: IPEDS

Summary of Findings

The knowledge, skills, and abilities trained by licensed vocational nursing programs (TOP 1230.20) prepare students for employment as licensed vocational nurses. Licensed vocational nurses are projected to have 834 annual job openings and increase employment by 10% over the next five years in the Inland Empire/Desert Region. The 10th percentile earnings for licensed vocational nurses is \$22.41 per hour, above the living wage standard, indicating that at least 90% of workers in this field earn a living wage.

Community college licensed vocational nursing programs issued 177 awards annually over the last three academic years (2019-2022). Other postsecondary education providers have issued 406 awards annually in programs related to licensed vocational nursing. Combined, education providers in the region have issued 584 awards annually in licensed vocational nursing programs over the last three academic years.

The Centers of Excellence recommends expanding licensed vocational nursing programs to meet the regional demand for more workers. Colleges considering this program should partner with relevant employers and



confirm their demand for licensed vocational nurses and the skills needed for students to secure work in this field shortly after exiting the program.

Contact

Michael Goss

Paul Vaccher

Centers of Excellence, Inland Empire/Desert Region

michael.goss@chaffey.edu

June 2023

References

California Board of Vocational Nursing and Psychiatric Technicians (BVNPT). (2023). *Summary of Requirements for Licensure as a Vocational Nurse*. Retrieved from [https://www.bvnpt.ca.gov/applicants/summary_vn.shtml#:~:text=Minimum%20Age%20%2D%2017%20Years,of%20Investigation%20\(FBI\)%20fingerprints.](https://www.bvnpt.ca.gov/applicants/summary_vn.shtml#:~:text=Minimum%20Age%20%2D%2017%20Years,of%20Investigation%20(FBI)%20fingerprints.)

California Community Colleges Chancellor's Office. LaunchBoard. (2023). *California Community Colleges LaunchBoard*. Retrieved from <https://www.calpassplus.org/Launchboard/Home.aspx>

California Community Colleges Chancellor's Office. LaunchBoard. (2023a). *Strong Workforce Program Metrics Data Element Dictionary*. Pg. 3. Retrieved from <https://www.calpassplus.org/MediaLibrary/calpassplus/launchboard/Documents/SWP-DED.PDF>.

California Community Colleges Chancellor's Office. (2023). *Chancellor's Office Curriculum Inventory (COCI), version 3.0*. Retrieved from <https://coci2.ccctechcenter.org/programs>

California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart. (2023). *Data Mart*. Retrieved from <https://datamart.cccco.edu/datamart.aspx>

California Community Colleges Chancellor's Office, Curriculum and Instructional Unit, Academic Affairs Division. (2012). *Taxonomy of Programs, 6th Edition, Corrected Version*. Retrieved from <https://www.cccco.edu/-/media/CCCO-Website/About-Us/Divisions/Digital-Innovation-and-Infrastructure/Research/Files/TOPmanual6200909corrected12513.ashx?la=en&hash=94C709CA83C0380828415579395A5F536736C7C1>

Carnevale, A. P., Jayasundera, T., & Repnikov, D. (n.d.). *Understanding Online Job Ads Data*. Retrieved from https://cew.georgetown.edu/wp-content/uploads/2014/11/OCLM.Tech_Web.pdf

Glasmeier, A. K. (2022). Massachusetts Institute of Technology. *Living Wage Calculator. Living Wage Calculation for California*. Retrieved from <https://livingwage.mit.edu/states/06>

Lightcast. (2023). *Datarun 2023.1*. Retrieved from <https://www.economicmodeling.com/>

National Center for O*NET Development. (2023). *O*NET OnLine*. Retrieved from <https://www.onetonline.org/>

U.S. Department of Education. Institute of Education Sciences, National Center for Education Statistics. *Integrated Postsecondary Education System (IPEDS)*. (2023). Retrieved from <https://nces.ed.gov/ipeds/use-the-data>

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, 2023a). 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, 2023a).

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 licensed vocational nurses in the Inland Empire/Desert Region (Riverside and San Bernardino Counties combined) and the San Diego/Imperial Region

Region	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
Inland Empire/Desert Region	8,003	809	10%	834	\$22.41 to \$35.58	\$28.51	\$60,200	Postsecondary nondegree award & None	None
San Diego/Imperial Region	6,487	666	10%	677	\$22.80 to \$37.36	\$29.61	\$63,400	Postsecondary nondegree award & None	None
Total	14,490	1,475	10%	1,511	-	-	-	-	-

Source: Lightcast 2023.1