

Registered Nurses

Labor Market Analysis: San Diego County

July 2020

Summary



The San Diego-Imperial Center of Excellence for Labor Market Research (COE) developed this brief to assist community colleges in the region with decision-making in processes such as program development. According to available labor market information, *Registered Nurses* has a labor market demand of 2,501 annual job openings, while average demand for an occupation in San Diego County is 277 annual job openings. Eleven educational institutions in San Diego County supply 1,359 awards for this occupation, which suggests that there is a supply gap in the labor market. This occupation's entry-level and median earnings are above the living wage. According to the California Community Colleges' outcomes data, 70 percent of students statewide who completed a related program (e.g., Registered Nursing) earned a living wage, compared to 52 percent of students who completed Career Education programs in general. The typical entry-level education for *Registered Nurses* is a bachelor's degree. The COE endorses a new program for this occupation because 1) a supply gap exists; 2) its entry-level and median earnings are above the living wage; and 3) a high number of annual openings exist.

Introduction

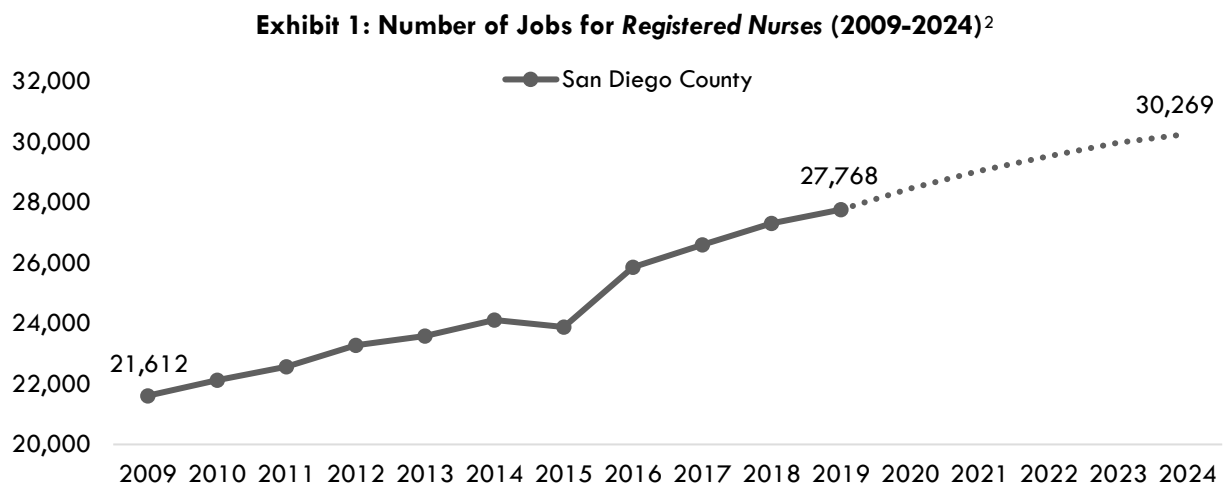
This report provides labor market information in San Diego County for the following occupational code in the Standard Occupational Classification (SOC)¹ system:

Registered Nurses (SOC 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. Includes Clinical Nurse Specialists. Sample reported job titles include:

- Public Health Nurse
- Staff Nurse
- Progressive Care Unit Registered Nurse
- Psychiatric Mental Health Nurse
- Psychiatric Clinical Nurse Specialist
- ICU Nurse (Intensive Care Unit Nurse)
- Critical Care Registered Nurse
- Clinical Nurse Specialist
- Pediatric Clinical Nurse Specialist

Projected Occupational Demand

Between 2019 and 2024, *Registered Nurses* are projected to increase by **2,501** net jobs or **nine** percent (Exhibit 1). Employers in San Diego County will need to hire **2,035** workers annually to fill new jobs and backfill jobs due to attrition caused by turnover and retirement, for example.



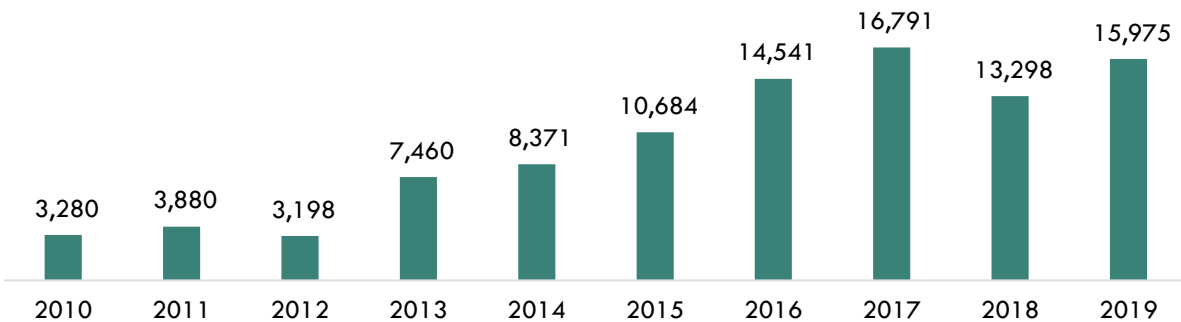
¹ The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. [bls.gov/soc](https://www.bls.gov/soc/).

² Emsi 2020.02; QCEW, Non-QCEW, Self-Employed.

Online Job Postings

This report analyzes not only historical and projected (traditional LMI) data, but also recent data from online job postings (real-time LMI). Online job postings may provide additional insight about recent changes in the labor market demand that are not captured by historical data. Between 2010 and 2019, there was an average of 9,748 online job postings per year for *Registered Nurses* in San Diego County (Exhibit 2).

Exhibit 2: Number of Online Job Postings for Registered Nurses in San Diego County (2010-2019)³



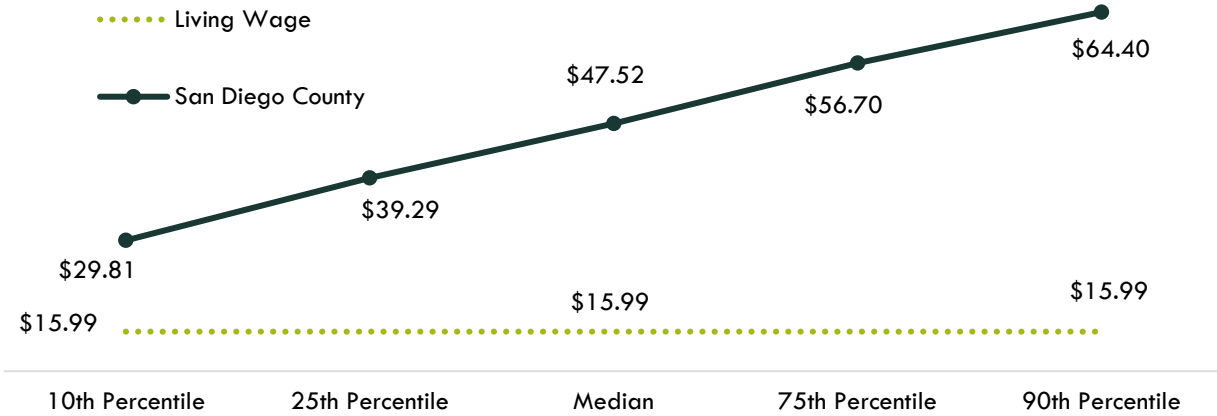
Earnings

Registered Nurses receive median hourly earnings of \$47.52; this is more than the living wage for a single adult in San Diego County, which is \$15.99 per hour (Exhibit 3).⁴

³ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2010-2019.

⁴ "California Family Needs Calculator (formerly the Self-Sufficiency Standard)," Insight: Center for Community Economic Development, last updated 2018. insightccd.org/2018-self-sufficiency-standard.

Exhibit 3: Hourly Earnings⁵ for Registered Nurses in San Diego County⁶



Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of awards in related Taxonomy of Programs (TOP) or Classification of Instructional Programs (CIP) codes.⁷ There is **one** TOP code and **one** CIP code related to *Registered Nurses* (Exhibit 4).

Exhibit 4: Related TOP and CIP Codes for Registered Nurses

<i>Registered Nurses</i>
TOP 123010: Registered Nursing
CIP 51.3801: Registered Nursing/Registered Nurse

According to TOP data, **five** community colleges supply the region with awards for this occupation: **Grossmont, MiraCosta, Palomar, San Diego City, and Southwestern**. According to CIP data, **six** other institutions supply the region with awards: **Brightwood College-San Diego, California State University-San Marcos, National University, Point Loma Nazarene University, San Diego State University, and United States University** (Exhibit 5).

⁵ 10th and 25th percentiles could be considered entry-level wages, and 75th and 90th percentiles could be considered experienced wages for individuals who may have been in the occupation longer, received more training than others, etc.

⁶ Emsi 2020.02; QCEW, Non-QCEW, Self-Employed.

⁷ TOP data comes from the California Community Colleges Chancellor's Office MIS Data Mart (datamart.cccco.edu) and CIP data comes from the Integrated Postsecondary Education Data System (nces.ed.gov/ipeds/use-the-data).

**Exhibit 5: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions
(Program Year 2014-15 through PY2018-19 Average)**

TOP6 or CIP	TOP6 or CIP Title	3-Yr Annual Average CC Awards (PY16-17 to PY18-19)	Other Educational Institutions 3-Yr Annual Average Awards (PY14-15 to PY16-17)	3-Yr Total Average Supply (PY14-15 to PY18-19)
123010	Registered Nursing	324	0	324
	• Grossmont	84	0	
	• MiraCosta	49	0	
	• Palomar	66	0	
	• San Diego City	55	0	
	• Southwestern	70	0	
51.3801	Registered Nursing/Registered Nurse	0	1,035	1,035
	• Brightwood College-San Diego	0	170	
	• California State University-San Marcos	0	250	
	• National University	0	298	
	• Point Loma Nazarene University	0	92	
	• San Diego State University	0	206	
	• United States University	0	19	
			Total	1,359

Demand vs. Supply

Comparing labor demand (annual openings) with labor supply⁸ suggests that there is a **supply gap** for this occupation in San Diego County, with **2,501** annual openings and **1,359** awards. Comparatively, there are **23,562** annual openings in California and **12,894** awards⁹ (Exhibit 6).

⁸ Labor supply can be found from two different sources: EMSI or the California Community Colleges Chancellor's Office MIS Data Mart. EMSI uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.

⁹ "Supply and Demand," Centers of Excellence Student Outcomes, coecc.net/Supply-and-Demand.aspx.

Exhibit 6: Labor Demand (Annual Openings) Compared with Labor Supply (Average Annual Awards)

Community Colleges and Other Postsecondary Educational Institutions	Demand (Annual Openings)	Supply (Total Annual Average Supply)	Supply Gap or Oversupply
San Diego	2,501	1,359	1,142
California	23,562	12,894	10,668

While “supply” in the labor market is generally measured by the number of awards in related programs, the COE understands that an individual may obtain more than award, resulting in potentially overestimated supply numbers. To address this challenge, the COE compared the number of awards with the number of unduplicated students “who earned a degree or certificate or attained apprenticeship journey status,” as defined by the California Community Colleges LaunchBoard, Strong Workforce Program.¹⁰ According to this information, the three-year average number of unduplicated students who completed Registered Nursing (123010) programs in San Diego-Imperial was 345, which suggests that a supply gap exists for this occupation. This supports the claim above. Unfortunately, the number of unduplicated students is only available for TOP data and not CIP data. Therefore, the COE uses award data in the main demand and supply (gap) analysis. The COE encourages readers to look at the trends rather than the absolute numbers in the supply gap analysis due to nuances in labor market research.

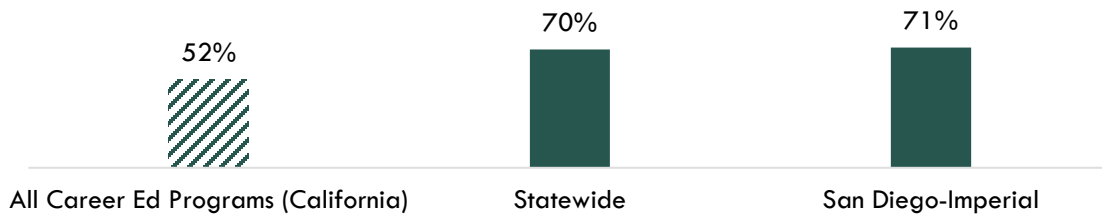
Please note: This is a basic analysis of supply and demand of labor. The data does not include workers currently in the labor force who could fill these positions or workers who are not captured by publicly available data. This data should be used to discuss the potential gaps or oversupply of workers; however, it should not be the only basis for determining whether or not a program should be developed.

¹⁰ calpassplus.org/LaunchBoard/SWP.aspx

Student Outcomes and Regional Comparisons

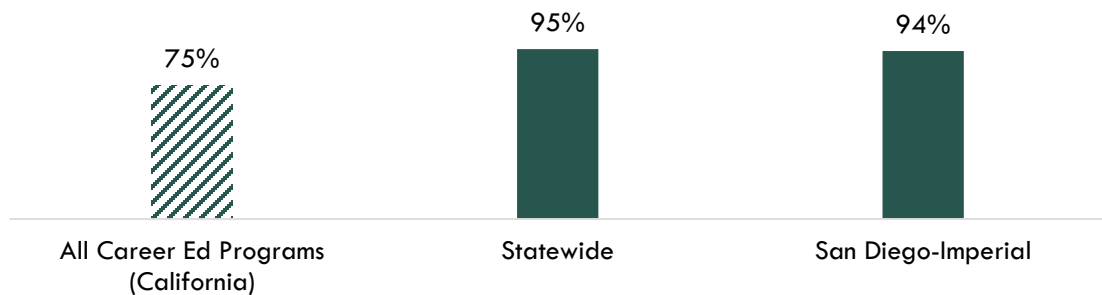
According to the California Community Colleges LaunchBoard, **71** percent of students in the San Diego-Imperial region earned a living wage after completing a Registered Nursing (TOP 123010) program, compared to **70** percent statewide and 52 percent of students in Career Education programs in general across the state (Exhibit 7a).

Exhibit 7a: Proportion of Students Who Earned a Living Wage (Registered Nursing, PY2016-17)¹¹



According to the California Community Colleges LaunchBoard, **94** percent of students in the San Diego-Imperial region obtained a job closely related to their field of study after completing Registered Nursing programs, compared to **95** percent statewide and 75 percent of students in Career Education programs in general across the state (Exhibit 7b).

Exhibit 7b: Percentage of Students in a Job Closely Related to Field of Study Registered Nursing, PY2016-17¹²



¹¹ Among completers and skills builders who exited, the proportion of students who attained a living wage. calpassplus.org/LaunchBoard/SWP.aspx

¹² Percentage of Students in a Job Closely Related to Field of Study: Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study. calpassplus.org/LaunchBoard/SWP.aspx

Top Employers and Work Locations

Between January 1, 2017 and December 31, 2019, the top five employers in San Diego County for this occupation were [Scripps Health](#); [Sharp Healthcare](#); [University of California, San Diego](#); [Kaiser Permanente](#); and [Providence Health & Services](#) (Exhibit 8).

Exhibit 8: Top Employers in San Diego County for Registered Nurses¹³

Top Employers	
<ul style="list-style-type: none"> • Scripps Health • Sharp Healthcare • University of California, San Diego • Kaiser Permanente • Providence Health & Services 	<ul style="list-style-type: none"> • Anthem Blue Cross • Palomar Health • Rady Children's Hospital • Healthcare Employment Network • Sutter Health

Skills, Education, and Certifications

Exhibit 9 indicates the educational attainment for the occupation found currently in the national labor force. There is no typical on-the-job training for this profession. The typical entry-level education is a [bachelor's degree](#).¹⁴

Exhibit 9: National Educational Attainment of Registered Nurses¹⁵

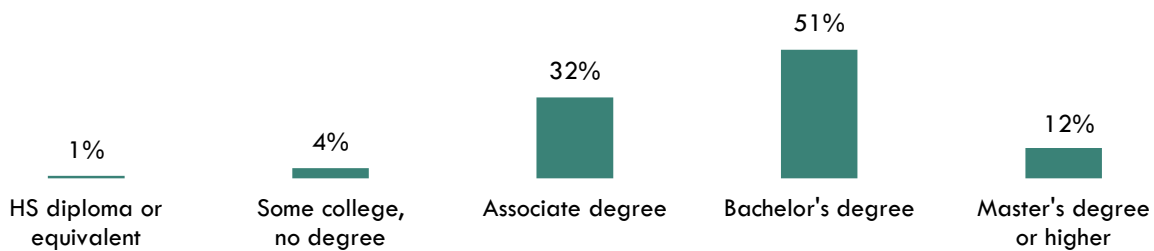


Exhibit 10 lists the top specialized, soft, and software skills that appeared in online job postings between January 1, 2017 and December 31, 2019

¹³ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2017-2019.

¹⁴ Emsi 2020.02; QCEW, Non-QCEW, Self-Employed.

¹⁵ "Educational Attainment for Workers 25 Years and Older by Detailed Occupation," Bureau of Labor Statistics, last modified September 4, 2019. [bls.gov/emp/tables/educational-attainment.htm](https://www.bls.gov/emp/tables/educational-attainment.htm).

Exhibit 10: Top Skills for Registered Nurses in San Diego County¹⁶

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"> • Patient Care • Advanced Cardiac Life Support • Acute Care • Treatment Planning • Case Management 	<ul style="list-style-type: none"> • Communication Skills • Planning • English • Teamwork / Collaboration • Computer Literacy 	<ul style="list-style-type: none"> • Microsoft Excel • Microsoft PowerPoint • Microsoft Access • Microsoft Word • Microsoft Outlook

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Important Disclaimers

All representations included in this report have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. This study examines the most recent data available at the time of the analysis; however, data sets are updated regularly and may not be consistent with previous reports. Efforts have been made to qualify and validate the accuracy of the data and the report findings; however, neither the Centers of Excellence for Labor Market Research (COE), COE host district, nor California Community Colleges Chancellor's Office are responsible for the applications or decisions made by individuals and/or organizations based on this study or its recommendations.

This workforce demand report uses state and federal job projection data that was 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.

¹⁶ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2017-2019.