



ASSOCIATE DEGREE NURSING

August 2017 Needs Assessment



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Associate Degree Nursing

SCOPE

Data compiled in this report covers San Bernardino, Riverside, Orange, and Los Angeles counties. Data were drawn from external sources, including the Employment Development Department's California Labor Market Information and the U.S. Department of Education's Integrated Postsecondary Education Data System (IPEDS), as well as Chaffey College's Colleague Administrative database.

DATA SOURCES AND CALCULATIONS

Educational Program Data

TOP Code	Program of Study
1230.10	Registered Nursing

The *Taxonomy of Programs* (TOP) is a standardized system used at the state level to classify programs and courses at California Community Colleges that are intended to achieve the same outcome.

CIP Code	Program of Study
51.1601	Nursing-Registered Nurse Training (RN, ASN, BSN, MSN)

The *Classification of Instructional Programs* (CIP) is a standardized coding system used at the federal level to facilitate accurate tracking, assessment, and reporting of fields of study and program completion at educational institutions throughout the country. This report draws on the Nursing-Registered Nurse Training CIP code, which maps to the Registered Nursing TOP code, to compare Chaffey College to other institutions and examine employment trends.

Completions Data

Degree and certificate data regarding students at Chaffey College were collected from the Colleague Administrative database. Degree and certificate data for all comparison schools were collected from the U.S. Department of Education's Integrated Postsecondary Education Data System (IPEDS). All comparison institutions included in this report are postsecondary and have provided data to IPEDS. IPEDS defines postsecondary education as a formal program designed primarily for students beyond high school age. These include academic, vocational, and continuing professional education, and exclude avocational and adult basic education programs.

Occupational Data

SOC Code	Occupational Title
29.1111	Registered Nurses

The *Standard Occupational Classification* (SOC) system is used by federal statistical agencies to classify workers into occupational categories. The Nursing-Registered Nurse Training (RN, ASN, BSN, MSN) CIP code was mapped to the SOC codes listed in the table above using the crosswalk described in the paragraph below. However, because the educational requirement for Postsecondary Nursing Instructors and Teachers is a Master's degree, labor market data for this occupation were not included in this report.

Educational Program to Occupation Crosswalk

The TOP-CIP-SOC Crosswalk (Employment Development Department, 2009) was used in this report to map TOP codes to CIP and SOC codes. This crosswalk allows the user to estimate labor market demand for California Community College program completers using SOC-based projections from the California Labor Market Information Division.

Industry Data

The North American Industry Classification System (NAICS) is used by federal statistical agencies to classify business establishments for the purpose of conducting and reporting research on the U.S. business economy. Standard Occupation Classification codes are mapped to industry data by the California Labor Market Information Division. Industry information is used to observe trends across the industries that employ the occupations identified above.

INTRODUCTION AND CONTENTS

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Purpose and Goals

Chaffey College currently offers two degree options in the Associate Degree Nursing Program: ADN and VN to RN.

The Associate of Science Degree in Nursing requires successful completion of 41.5 units. This program is approved by the California Board of Registered Nursing and accredited by the Accrediting Commission for Education in Nursing, Inc. Graduates of this program are eligible to take the National Council for Licensure Examination (NCLEX) and, upon passing, become licensed as a Registered Nurse in the state of California.

The Associate of Science Degree in VN to RN requires successful completion of 22.5 units, in addition to prior graduation from a Vocational Nursing Program with an active vocational nursing license. This program is approved by the California Board of Registered Nursing and accredited by the Accrediting Commission for Education in Nursing, Inc. Graduates of this program are eligible to take the National Council for Licensure Examination (NCLEX) and, upon passing, become licensed as a Registered Nurse in the state of California.

The purpose of this report is to integrate and analyze data from multiple sources to determine labor market needs for the Associate Degree Nursing program at Chaffey College.

Regional Definitions

Inland Empire includes the Riverside-San Bernardino-Ontario Metropolitan Statistical Area (MSA)

Los Angeles County includes the Los Angeles-Long Beach-Glendale Metropolitan Division

Orange County includes the Santa Ana-Anaheim-Irvine Metropolitan Division

Key Terms and Concepts

Replacement Jobs: Replacement jobs refer to the number of job openings due to workers leaving an occupation.

Annual Openings: Annual openings are calculated by adding the number of new jobs to the number of replacement jobs, divided by the number of years in the projection period.

Projections: Projections of employment are calculated by the Employment Development Department and are based on a mathematical formula that includes historical employment and economic indicators along with national, state, and local trends.

Occupation: Jobs are grouped into occupations using the federal Standard Occupational Classification (SOC) system.

Industry: Occupations are grouped into industries using the North American Industry Classification System (NAICS).

Wages: Hourly wages are reported in percentiles and averages. The 25th percentile is a useful proxy of entry-level wages and the 75th percentile of experienced-level wages.

BACKGROUND INFORMATION

REGISTERED NURSING

Nursing programs in California Community Colleges focus on teaching students principles and techniques for assisting the individual, sick or well, in the performance of those activities contributing to health or to recovery. Registered Nursing programs lead to licensure by the Board of Registered Nurses.¹ The description of job duties for Registered Nurses is provided by the Occupational Information Network.²

REGISTERED NURSES

Registered Nurses assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records. Individuals who work in this occupation administer nursing care to ill, injured, convalescent, or disabled patients. They may also advise patients on health maintenance and disease prevention or provide case management.

TYPICAL TASKS

- ◆ Monitor, record and report symptoms and changes in patients' conditions
- ◆ Maintain accurate, detailed reports and records
- ◆ Record patients' medical information and vital signs
- ◆ Administer medications to patients and monitor patients for reactions or side effects
- ◆ Modify patient treatment plans as indicated by patients' responses and conditions
- ◆ Direct and supervise less skilled nursing or health care personnel or supervise a particular unit

¹ California Community Colleges, Chancellor's Office, *Taxonomy of Programs, Sixth Edition (Corrected Version)*.

² O*Net Online: <http://www.onetonline.org/find/>

REGIONAL JOB OUTLOOK

PROJECTED REGIONAL JOB OUTLOOK

The table below displays 2016 employment estimates and 2026 projections for Registered Nurses. Each of the regions of interest are expected to provide a many annual job openings; however, opportunities are most numerous in Los Angeles County, followed by the Inland Empire, and then Orange County.

Table 1. Projected Occupational Growth 2016-2026; Registered Nurses

	Total Estimated 2016 Jobs	Total Projected 2026 Jobs	Projected Growth (%)	Ave. Annual New Job Openings	Ave. Annual Replacement Job Openings	Ave. Annual Total Job Openings
State of California	291,655	356,060	64,405	6,441	16,581	23,021
Inland Empire	28,505	35,899	7,394	739	1,650	2,389
Los Angeles	80,019	98,560	18,541	1,854	4,572	6,426
Orange	22,052	26,570	4,518	452	1,242	1,694

Source: Economic Modeling Specialists Inc. (EMSI) 2017.3 QCEW Employees, Non-QCEW Employees and Self-Employed

REGIONAL HOURLY WAGES

This table displays 2016 hourly wage statistics of Registered Nurses. Wages are high, with median hourly rates ranging from approximately \$42/hr to \$48/hr, and comparable across all regions of interest. No wage data were available for Orange County.

Table 2. Regional Wages for Registered Nurses

	Mean Hourly Rate	25 th Percentile	Median Hourly Rate	75 th Percentile
State of California	\$48.71	\$37.78	\$48.09	\$59.61
Inland Empire	\$46.12	\$37.67	\$45.21	\$54.41
Los Angeles CO	\$45.67	\$36.40	\$45.90	\$55.86
Orange CO	\$42.48	\$33.61	\$42.87	\$51.62

Source: Economic Modeling Specialists Inc. (EMSI) 2017.3 QCEW Employees, Non-QCEW Employees and Self-Employed

LARGEST AND FASTEST GROWING INDUSTRY EMPLOYERS

LARGEST INDUSTRY EMPLOYERS OF REGISTERED NURSES

The table below displays the 2016 staffing patterns of the ten largest industries employing Registered Nurses across the state of California. General Medical and Surgical Hospitals overwhelmingly employ the largest number of individuals in this occupation.

Industry	Jobs in Industry (2016)	Jobs in Industry (2026)	Growth	% Growth
General Medical and Surgical Hospitals	107,501	115,599	8,098	8%
Hospitals (Local Government)	21,970	23,855	1,885	9%
Home Health Care Services	21,393	29,187	7,794	36%
HMO Medical Centers	20,496	35,382	14,886	73%
Services for the Elderly and Persons with Disabilities	16,587	22,781	6,194	37%
Nursing Care Facilities (Skilled Nursing Facilities)	16,343	21,557	5,214	32%
Offices of Physicians (except Mental Health Specialists)	15,267	18,227	2,960	19%
Hospitals (State Government)	11,791	13,692	1,901	16%
Federal Government, Civilian, Excluding Postal Service	4,865	4,838	(27)	(1%)
Elementary and Secondary Schools (Local Government)	4,264	4,866	602	14%

Source: Economic Modeling Specialists Inc. (EMSI) 2017.3 QCEW Employees, Non-QCEW Employees and Self-Employed

REGIONAL GRADUATION SUMMARY

EDUCATION AND TRAINING³

There are three traditional educational pathways to becoming a registered nurse: a bachelor's of science degree in nursing (BSN), an associate's degree in nursing (ADN), and a diploma from an approved nursing program. BSN programs take about 4 years to complete, whereas ADN and diploma programs take about 2 to 3 years to complete. Before becoming a licensed Registered Nurse in the state of California, candidates must not only complete their educational program, but must also pass the National Council for Licensure Examination (NCLEX-RN). Generally, licensed graduates of any of these three programs qualify for entry-level positions as staff nurse.

REGIONAL COMPLETERS IN REGISTERED NURSING PROGRAMS

The table below displays the number of program completers in the 2015-16 academic year at regional institutions offering a Registered Nursing program. Besides Chaffey College, there are 30 institutions offering degrees or certificates below the baccalaureate level across the four county region.

Institution Name	Award Level			
	< 1 year Certificate	1 to < 2 year Certificate	Associate's Degree	2 to < 4 year Certificate
Chaffey College	--	--	57	--
Antelope Valley College	--	--	101	--
Cerritos College	--	--	84	--
Citrus College	--	--	29	--
College of the Canyons	--	--	113	--
College of the Desert	--	--	55	--
Copper Mountain Community College	--	--	25	--
Cypress College	--	--	86	--
East Los Angeles College	--	0	115	--
El Camino College – Compton Center	--	--	--	--
El Camino Community College District	--	--	79	--
Glendale Community College	--	1	69	--
Golden West College	--	0	87	0
Long Beach City College	--	2	2	76
Los Angeles City College	--	--	65	--
Los Angeles County College of Nursing and Allied Health	--	0	89	--

³ Bureau of Labor Statistics, United States Department of Labor, *Occupational Outlook Handbook, 2016-17 Edition*, on the Internet at: <http://www.bls.gov/OCO/> (visited February 8, 2016).

Los Angeles Harbor College	--	--	73	--
Los Angeles Pierce College	--	--	67	--
Los Angeles Southwest College	--	--	38	--
Los Angeles Trade Technical College	--	--	58	--
Los Angeles Valley College	--	--	72	--
Mt. San Antonio College	--	--	104	--
Mt. San Jacinto Community College District	--	--	47	--
Pasadena City College	--	136	139	--
Rio Hondo College	--	--	76	--
Riverside City College	--	--	176	--
Saddleback College	--	--	104	105
San Bernardino Valley College	--	--	72	--
Santa Ana College	--	--	91	--
Santa Monica College	--	--	59	--
Victor Valley College	--	--	62	62
Total	0	139	2,294	243

Note: "--" indicates that this type of degree is not offered. "0" indicates that this degree/certificate level is offered but no degrees or certificates were granted.

Source: National Center for Education Statistics, U.S. Department of Education, *Integrated Postsecondary Education Data System*, on the Internet at: <http://www.nces.ed.gov/collegenavigator/> (visited August 29, 2017);

CHAFFEY COLLEGE'S PERFORMANCE ON CORE INDICATORS

The Perkins IV Career and Technical Education Improvement Act of 2006 mandates that all state and local postsecondary institutions provide data on six core performance indicators for their career and technical education programs. These indicators are: 1) Technical Skill Attainment; 2) Completions; 3) Persistence and Transfer; 4) Employment; 5) Nontraditional Participation; and 6) Nontraditional Completion. Performance goals are set at the state and local levels and progress is monitored based on a comparison between the actual percentage of students who master each performance area and the negotiated levels of performance.

2014-2015 CHAFFEY COLLEGE PERFORMANCE ON CORE INDICATORS

The table below displays negotiated and actual core performance indicator levels for all Chaffey College students classified under the Registered Nursing TOP code. Chaffey performed above negotiated levels on 3 of the 6 core performance indicators, Core 1, Core 2, and Core 4.

Core Performance Indicators	Negotiated Level		Chaffey College Performance	Percent Above or Below District Negotiated Level
	State	District		
Registered Nursing				
Core 1 – Technical Skill Attainment	89.75%	89.75%	97.63%	7.9
Core 2 – Completions- Credential, Certificate, Degree, or Transfer Ready	82.00%	75.60%	100.00%	24.4
Core 3 – Persistence and Transfer	86.75%	73.73%	86.62%	2.9
Core 4 – Employment	80.85%	71.50%	73.68%	2.2
Core 5a – Non-traditional Participation	22.60%	20.92%	12.43%	-8.5
Core 5b – Non-traditional Completions	27.50%	23.06%	14.50%	-8.6

Source: CA Community Colleges Reporting Services, *Registered Nursing, College Core Indicator Information by 6-Digit TOP (2015-2016 Fiscal Year Planning)*.