** Licensed Vocational Nursing Occupations**

**Labor Market Information Report**

**City College of San Francisco**

Prepared by the San Francisco Bay Center of Excellence

for Labor Market Research

February 2019

# Recommendation

Based on all available data, there appears to be a significant undersupply of Licensed Vocational Nursing workers compared to the demand for this cluster of occupations in the Bay region and in the Mid-Peninsula sub-region (San Francisco and San Mateo Counties). There is a projected annual gap of about 5,798 students in the Bay region and 1,185 students in the Mid-Peninsula Sub-Region.

This report also provides student outcomes data on employment and earnings for programs on Licensed Vocational Nursing – TOP 1230.20 in the state and region. It is recommended that these data be reviewed to better understand how outcomes for students taking courses on this TOP code compare to potentially similar programs at colleges in the state and region, as well as to outcomes across all CTE programs at City College of San Francisco and in the region.

# Introduction

This report profiles Licensed Vocational Nursing Occupations in the 12 county Bay region and in the Mid-Peninsula sub-region for the revision of an existing program at City College of San Francisco.

|  |
| --- |
| * **Licensed Practical and Licensed Vocational Nurses (SOC 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 registered nurse. Licensing required. |
| *Entry-Level Educational Requirement: Postsecondary nondegree award* |
| *Training Requirement: None* |
| *Percentage of Community College Award Holders or Some Postsecondary Coursework: 70%* |
| * **Nursing Assistants (SOC 31-1014):** Provide basic patient care under direction of nursing staff. Perform duties such as feed, bathe, dress, groom, or move patients, or change linens. May transfer or transport patients. Includes nursing care attendants, nursing aides, and nursing attendants. Excludes “Home Health Aides” (31-1011), “Orderlies” (31-1015), “Personal Care Aides” (39-9021), and “Psychiatric Aides” (31-1013). |
| *Entry-Level Educational Requirement: Postsecondary nondegree award* |
| *Training Requirement: None* |
| *Percentage of Community College Award Holders or Some Postsecondary Coursework: 41%* |
| * **Home Health Aides (SOC 31-1011):** Provide routine individualized healthcare such as changing bandages and dressing wounds, and applying topical medications to the elderly, convalescents, or persons with disabilities at the patient’s home or in a care facility. Monitor or report changes in health status. May also provide personal care such as bathing, dressing, and grooming of patient. |
| *Entry-Level Educational Requirement: High school diploma or equivalent* |
| *Training Requirement: Short-term on-the-job training* |
| *Percentage of Community College Award Holders or Some Postsecondary Coursework: 41%* |
|  |

# Occupational Demand

**Table 1. Employment Outlook for Licensed Vocational Nursing Occupations in Bay Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation | 2017 Jobs | 2022 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Average Annual Openings | 10% Hourly Wage | Median Hourly Wage |
| Licensed Practical and Licensed Vocational Nurses | 13,943 | 15,236 | 1,293 | 9% | 6,358 | 1,272 | $21.21 | $28.41 |
| Nursing Assistants | 22,381 | 24,873 | 2,492 | 11% | 15,449 | 3,090 | $12.48 | $17.11 |
| Home Health Aides | 6,738 | 10,323 | 3,586 | 53% | 8,085 | 1,617 | $10.64 | $13.14 |
| **Total** | **43,062** | **50,432** | **7,371** | **17%** | **29,892** | **5,978** | **$14.78** | **$19.55** |

*Source: EMSI 2019.1*

**Bay Region** includes Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano and Sonoma Counties

**Table 2. Employment Outlook for Licensed Vocational Nursing Occupations in Mid-Peninsula Sub-Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation | 2017 Jobs | 2022 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Average Annual Openings | 10% Hourly Wage | Median Hourly Wage |
| Licensed Practical and Licensed Vocational Nurses | 2,579 | 2,873 | 294 | 11% | 1,238 | 248 | $23.36 | $29.82 |
| Nursing Assistants | 4,368 | 4,963 | 595 | 14% | 3,151 | 630 | $15.32 | $21.82 |
| Home Health Aides | 1,258 | 2,121 | 862 | 69% | 1,746 | 349 | $10.76 | $13.32 |
| **TOTAL** | **8,206** | **9,957** | **1,751** | **21%** | **6,135** | **1,227** | **$16.48** | **$21.65** |

*Source: EMSI 2019.1*

**Mid-Peninsula Sub-Region** includes San Francisco and San Mateo Counties

### Job Postings in Bay Region and Mid-Peninsula Sub-Region

**Table 3. Number of Job Postings by Occupation for latest 12 months (Feb 2018 - Jan 2018)**

| Occupation | Bay Region | Mid-Peninsula |
| --- | --- | --- |
| Nursing Assistants (31-1014.00) | 4,478 | 1,066 |
| Licensed Practical and Licensed Vocational Nurses (29-2061.00) | 3,200 | 689 |
| Home Health Aides (31-1011.00) | 2,821 | 624 |
| **Total** | **10,499** | **2,379** |

*Source: Burning Glass*

**Table 4. Top Job Titles for Licensed Vocational Nursing Occupations for latest 12 months (Feb 2018 - Jan 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Common Title | Bay | Mid-Peninsula | Common Title | Bay | Mid-Peninsula |
| Certified Nursing Assistant | 2,547 | 659 | Home Care Aide | 87 | 14 |
| Licensed Vocational Nurse (LVN) | 2,171 | 406 | Hospice Aide | 68 | 18 |
| Home Health Aide | 1,224 | 316 | CNAS And HHAS | 116 | 38 |
| Licensed Practical Nurse (LPN) | 557 | 109 | Resident Assistant | 58 | 5 |
| Clinical Assistant | 258 | 38 | Patient Care Assistant | 55 | 27 |
| Behavior Technician | 235 | 40 | Medication Aide/Technician | 47 | 2 |
| Caregiver | 229 | 35 | Home Health | 43 | 6 |
| Nurse Assistant | 212 | 29 | Entry Behavior Technician | 41 | 10 |
| Patient Care Technician | 181 | 30 | Home Health Travel Pt | 41 | 12 |
| Resident Care Provider | 127 | 10 | Medication Technician | 41 | 2 |
| Direct Support Professional | 93 | 21 | Cnas And Hhas In | 70 | 23 |

*Source: Burning Glass*

# Industry Concentration

**Table 5. Industries hiring Licensed Vocational Nursing Workers in Bay Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Industry – 6 Digit NAICS (No. American Industry Classification) Codes | Jobs in Industry (2017) | Jobs in Industry (2022) | % Change (2017-22) | % in Industry (2017) |
| Nursing Care Facilities (Skilled Nursing Facilities) (623110) | 10,296 | 10,234 | 4% | 23.4% |
| Services for the Elderly and Persons with Disabilities (624120) | 4,910 | 5,133 | 59% | 11.7% |
| General Medical and Surgical Hospitals (622110) | 4,884 | 4,871 | (2%) | 11.1% |
| Home Health Care Services (621610) | 3,763 | 3,901 | 34% | 8.9% |
| Assisted Living Facilities for the Elderly (623312) | 3,030 | 3,077 | 19% | 7.0% |
| Hospitals (Local Government) (903622) | 2,309 | 2,335 | 9% | 5.3% |
| Continuing Care Retirement Communities (623311) | 1,952 | 1,948 | 22% | 4.5% |
| HMO Medical Centers (621491) | 1,819 | 1,853 | 31% | 4.2% |
| Offices of Physicians (except Mental Health Specialists) (621111) | 1,483 | 1,488 | 2% | 3.4% |
| Private Households (814110) | 983 | 1,037 | 1% | 2.4% |
| Temporary Help Services (561320) | 1,015 | 1,012 | 7% | 2.3% |
| Local Government, Excluding Education and Hospitals (903999) | 807 | 813 | 6% | 1.9% |
| Hospitals (State Government) (902622) | 654 | 645 | 21% | 1.5% |
| Unclassified Industry (999999) | 383 | 420 | 29% | 1.0% |

*Source: EMSI 2019.1*

**Table 6. Top Employers Posting Licensed Vocational Nursing Occupations in Bay Region and Mid-Peninsula Sub-Region (Feb 2018 - Jan 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Employer | Bay | Employer | Bay | Employer | Mid-Peninsula |
| Honor Home Care | 1,078 | Accentcare | 77 | Honor Home Care | 450 |
| Sutter Health | 256 | HCR ManorCare | 69 | Sutter Health | 75 |
| Careinhomes | 254 | The Mentor Network | 65 | Sunrise Senior Living | 58 |
| Stanford Health Care | 179 | Brightstar Care | 62 | Ro Health | 48 |
| Comforcare Health Care Holdings, Inc | 168 | Telecare Corporation | 59 | Sutter Health Sacramento Sierra | 39 |
| Brookdale Senior Living | 167 | Interim Healthcare | 56 | Careinhomes | 37 |
| Sunrise Senior Living, Inc. | 152 | Rogue Valley Manor | 56 | Kindly Care | 34 |
| Brookdale Corporation | 150 | Help Care | 50 | Sutter Medical Center | 30 |
| Gentiva Health | 143 | Covia | 48 | Home Care Assistance | 25 |
| Ro Health | 130 | Premier Healthcare | 48 | Aviva In Home Care | 22 |
| Sutter Health Sacramento Sierra Region | 110 | Rescare | 47 | Institute On Aging | 22 |
| Sutter Medical Center | 106 | Vitas Healthcare Corp | 47 | Vibra Healthcare | 22 |
| Home Care Assistance | 105 | Fresenius | 41 | Comforcare Health Care Holdings, Inc | 21 |
| Kindly Care | 103 | Uc San Diego | 40 | Mga Health Care | 20 |
| Covenant Care | 93 | Lucile Packard Childrens Hospital | 39 | Stanford Health Care | 20 |
| Department of Veterans Affairs | 92 | Vibra Healthcare | 38 | Dignity Health | 18 |
| Kaiser Permanente | 92 | Hospital Corporation of America | 37 | Gentiva Health | 18 |
| Davita Incorporated | 80 | Institute On Aging | 37 | UC San Francisco Medical Center | 18 |

*Source: Burning Glass*

# Educational Supply

There are seven community colleges in the Bay Region issuing 180 awards on average annually (last 3 years) on Licensed Vocational Nursing – TOP 1230.20. City College of San Francisco is the only college in the Mid-Peninsula Sub-Region issuing awards on this TOP code, issuing 42 awards on average annually (last 3 years).

**Table 7. Awards on Licensed Vocational Nursing – TOP 1230.20 in the Bay Region**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| College | Sub-Region | | Headcount |  | | Associates | | Certificates | | Total | |
| Gavilan | Silicon Valley | | 281 |  | | 19 | | 19 | | 38 | |
| Hartnell | Santa Cruz & Monterey | | 61 |  | |  | | 22 | | 22 | |
| Los Medanos | East Bay | | 63 |  | |  | | 6 | | 6 | |
| Mission | Silicon Valley | | 83 |  | | 15 | | 16 | | 31 | |
| Napa | North Bay | | 41 |  | | 6 | | 13 | | 18 | |
| San Francisco | Mid-Peninsula | | 120 |  | |  | | 42 | | 42 | |
| San Francisco Centers | Mid-Peninsula | | 21 |  | |  | |  | |  | |
| Santa Rosa | North Bay | | 29 |  | | 11 | | 12 | | 23 | |
| **Total Bay Region** | | **699** | | |  | **50** | **130** | | **180** | |
| **Total Mid-Peninsula Sub-Region** | | **141** | | |  | **0** | **42** | | **42** | |

# *Source: IPEDS, Data Mart and Launchboard*

NOTE: Headcount of students who took one or more courses is for 2016-17. The annual average for awards is 2014-17 unless there are only awards in 2016-17. The annual average for other postsecondary is for 2013-16.

# Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 5,978 annual openings for the Licensed Vocational Nursing occupational cluster and 180 annual (3-year average) awards for an annual undersupply of 5,798 students. In the Mid-Peninsula Sub-Region, there is also a gap with 1,227 annual openings and 42 annual (3-year average) awards for an annual undersupply of 1,185 students.

# Student Outcomes

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on Licensed Vocational Nursing – TOP 1230.20**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2015-16 | Bay  (All CTE Programs) | City College of San Francisco (All CTE Programs) | State (TOP 1230.20) | Bay  (TOP 1230.20) | Mid-Peninsula (TOP 1230.20) | City College of San Francisco (TOP 1230.20) |
| % Employed Four Quarters After Exit | 74% | 73% | 79$ | 87% | 86% | 84% |
| Median Quarterly Earnings Two Quarters After Exit | $23,396 | $22,070 | $16,842 | $18,225 | $18,762 | $16,595 |
| Median % Change in Earnings | 46% | 50% | 88% | 86% | 81% | 76% |
| % of Students Earning a Living Wage | 63% | 55% | 62% | 58% | 55% | 55% |

*Source: Launchboard Pipeline (version available on 2/8/19)*

# Skills, Certifications and Education

**Table 9. Top Skills for Licensed Vocational Nursing Occupations in Bay Region (Feb 2018 - Jan 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Skill | Postings | Skill | Postings | Skill | Postings |
| Caregiving | 2,738 | ADLs Assistance | 744 | Cleaning | 432 |
| Patient Care | 2,389 | Activities of Daily Living (ADLS) | 744 | Teaching | 406 |
| Home Care | 2,372 | Senior Care | 712 | Social Services | 397 |
| Home Health | 2,271 | Hospice | 657 | Specimen Collection | 384 |
| Bathing | 2,198 | Long-Term Care | 650 | Patient Transportation and Transfer | 382 |
| Cardiopulmonary Resuscitation (CPR) | 2,160 | Customer Service | 613 | Pediatrics | 374 |
| X-Rays | 1,743 | Infection Control | 574 | Diabetes Diagnosis / Treatment | 366 |
| Toileting | 1,678 | Acute Care | 551 | Injections | 359 |
| Chest X-Ray | 1,665 | Life Support | 551 | Interaction with Patients / Medical Personnel | 355 |
| Patient Bathing | 1,375 | Patient Assistance | 531 | Rehabilitation | 355 |
| Treatment Planning | 1,154 | Customer Contact | 511 | Blood Pressure Measurement | 339 |
| Scheduling | 1,069 | Laundry | 495 | Patient/Family Education and Instruction | 337 |
| Meal Preparation | 989 | Assisted Living | 492 | Emotional Support | 333 |
| Vital Signs Measurement | 986 | Medical Assistance | 489 | Appointment Setting | 319 |
| Medication Administration | 782 | Vital Signs Recording | 460 | Babysitting | 301 |

*Source: Burning Glass*

**Table 10. Certifications for Licensed Vocational Nursing Occupations in the Bay Region (Feb 2018 - Jan 2018)**

Note: 21% of records have been excluded because they do not include a certification. As a result, the chart below may not be representative of the full sample.

|  |  |  |  |
| --- | --- | --- | --- |
| Certification | Postings | Certification | Postings |
| Certified Nursing Assistant | 2,916 | Caregiver | 60 |
| Driver's License | 2,757 | Ca License | 59 |
| Licensed Vocational Nurse (LVN) | 2,695 | Nurse Practitioner | 52 |
| Home Health Aide | 2,536 | Direct Care | 51 |
| First Aid Cpr Aed | 1,256 | Board Certified Assistant Behavior Analyst (BCaBA) | 50 |
| Basic Life Saving (BLS) | 1,197 | Medical Technician | 48 |
| Licensed Practical Nurse (LPN) | 998 | Patient Care Technician | 29 |
| Basic Cardiac Life Support Certification | 720 | Board Certified/Board Eligible | 28 |
| Certified Medical Assistant | 320 | Food Handler Certification | 26 |
| Home Care Certificate | 300 | Personal Care Assistant (PCA) | 25 |
| IV (Intravenous) Certification | 239 | Crisis Intervention Certification | 21 |
| Emergency Medical Technician (EMT) | 198 | Certified Medical Technician | 17 |
| Registered Behavior Technician | 194 | Certified Medication Aide | 17 |
| American Heart Association Certification | 150 | Clinical Medical Assistant (CCMA) | 15 |
| Phlebotomy Certification | 150 | Acute Care Nurse Practitioner | 13 |
| Board Certified Behavior Analyst (BCBA) | 145 | AAMA Certified Medical Assistant | 12 |
| Advanced Cardiac Life Support (ACLS) Certification | 143 | Ceu's Certificate | 9 |
| Advanced Practice Nurse | 115 | Critical Care Registered Nurse (CCRN) | 9 |
| Advanced Registered Nurse Practitioner | 97 | American Occupational Therapy Association (AOTA) | 8 |
| Security Clearance | 97 | Medical Terminology Certification | 8 |
| Certified Hemodialysis Technician | 78 | Patient Care Assistant | 7 |

*Source: Burning Glass*

**Table 11. Education Requirements for Licensed Vocational Nursing Occupations in Bay Region**

Note: 77% of records have been excluded because they do not include a degree level. As a result, the chart below may not be representative of the full sample.

|  |  |
| --- | --- |
| Education (minimum advertised) | Latest 12 Mos. Postings |
| High school or vocational training | 2,375 98%) |
| Associate Degree | 43 (2%) |
| Bachelor’s Degree or Higher | 0 (0%) |

*Source: Burning Glass*

# Methodology

Occupations for this report were identified by use of skills listed in O\*Net descriptions and job descriptions in Burning Glass. Labor demand data is sourced from Economic Modeling Specialists International (EMSI) occupation data and Burning Glass job postings data. Educational supply and student outcomes data is retrieved from multiple sources, including CTE Launchboard and CCCCO Data Mart.

# Sources

O\*Net Online

Labor Insight/Jobs (Burning Glass)

Economic Modeling Specialists International (EMSI)

CTE LaunchBoard [www.calpassplus.org/Launchboard/](http://www.calpassplus.org/Launchboard/)

Statewide CTE Outcomes Survey

Employment Development Department Unemployment Insurance Dataset

Living Insight Center for Community Economic Development

Chancellor’s Office MIS system

# Contacts

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