**Wine Cellar Workers**

**Labor Market Information Report**

**Santa Rosa Junior College**

Prepared by the San Francisco Bay Center of Excellence

for Labor Market Research

May 2020

# Recommendation

Based on all available data, there appears to be an undersupply of Wine Cellar Workers compared to the demand for this cluster of occupations in the Bay region and in the North Bay sub-region (Solano, Marin, Napa, and Sonoma). There is a projected annual gap of about 1,830 students in the Bay region and 353 students in the North Bay Sub-Region.

This report also provides student outcomes data on employment and earnings for programs on TOP 0104.00 - Viticulture, Enology, and Wine Business 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 Santa Rosa Junior College and in the region.

# Introduction

This report profiles Wine Cellar Workers in the 12 county Bay region and in the North Bay sub-region for a proposed new program at Santa Rosa Junior College.

|  |
| --- |
| * **Food Scientists and Technologists (SOC 19-1012):** Use chemistry, microbiology, engineering, and other sciences to study the principles underlying the processing and deterioration of foods; analyze food content to determine levels of vitamins, fat, sugar, and protein; discover new food sources; research ways to make processed foods safe, palatable, and healthful; and apply food science knowledge to determine best ways to process, package, preserve, store, and distribute food. |
| Entry-Level Educational Requirement: Bachelor's degree |
| Training Requirement: None |
| Percentage of Community College Award Holders or Some Postsecondary Coursework: 0% |
| * **Agricultural and Food Science Technicians (SOC 19-4011):** Work withagricultural and food scientists in food, fiber, and animal research, production, and processing; and assist with animal breeding and nutrition. Conduct tests and experiments to improve yield and quality of crops or to increase the resistance of plants and animals to disease or insects. Includes technicians who assist food scientists or technologists in the research and development of production technology, quality control, packaging, processing, and use of foods. |
| Entry-Level Educational Requirement: Associate's *degree* |
| Training Requirement: Moderate-term *on-the-job training* |
| Percentage of Community College Award Holders or Some Postsecondary Coursework: 38*%* |
| * **Farmers, Ranchers, and Other Agricultural Managers (SOC 11-9013):** Plan, direct, or coordinate the management or operation of farms, ranches, greenhouses, aquacultural operations, nurseries, timber tracts, or other agricultural establishments. May hire, train, and supervise farm workers or contract for services to carry out the day-to-day activities of the managed operation. May engage in or supervise planting, cultivating, harvesting, and financial and marketing activities. Excludes “First-Line Supervisors of Farming, Fishing, and Forestry Workers” (45-1011). |
| Entry-Level Educational Requirement: High *school diploma or equivalent* |
| Training Requirement: None |
| Percentage of Community College Award Holders or Some Postsecondary Coursework: 29*%* |
|  |
| * **First-Line Supervisors of Farming, Fishing, and Forestry Workers (SOC 45-1011):** Directly supervise and coordinate the activities of agricultural, forestry, aquacultural, and related workers. Excludes “First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers" (37-1012). |
| Entry-Level Educational Requirement: High *school diploma or equivalent* |
| Training Requirement: None |
| Percentage of Community College Award Holders or Some Postsecondary Coursework: 23*%* |

# Occupational Demand

**Table 1. Employment Outlook for Wine Cellar Workers in Bay Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation | 2019 Jobs | 2024 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Average Annual Open-ings | 25% Hourly Wage | Median Hourly Wage |
| Food Scientists and Technologists | 835 | 877 | 42 | 5% | 530 | 106 | $23.65 | $31.26 |
| Agricultural and Food Science Technicians | 1,327 | 1,387 | 60 | 5% | 883 | 177 | $16.75 | $20.95 |
| Farmers, Ranchers, and Other Agricultural Managers | 11,258 | 11,232 | -26 | 0% | 5,801 | 1,160 | $16.67 | $31.89 |
| First-Line Supervisors of Farming, Fishing, and Forestry Workers | 3,103 | 3,268 | 165 | 5% | 2,542 | 508 | $16.30 | $21.82 |
| **TOTAL** | **16,523** | **16,764** | **241** | **1%** | **9,756** | **1,951** | **$16.96** | **$29.09** |

*Source: EMSI 2019.4*

**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 Wine Cellar Workers in North Bay Sub-Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation | 2019 Jobs | 2024 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Average Annual Open-ings | 25% Hourly Wage | Median Hourly Wage |
| Food Scientists and Technologists | 193 | 201 | 9 | 4% | 121 | 24 | $16.58 | $27.53 |
| Agricultural and Food Science Technicians | 304 | 310 | 7 | 2% | 195 | 39 | $17.02 | $20.24 |
| Farmers, Ranchers, and Other Agricultural Managers | 2,229 | 2,152 | -77 | -3% | 1,089 | 218 | $11.28 | $20.49 |
| First-Line Supervisors of Farming, Fishing, and Forestry Workers | 833 | 873 | 41 | 5% | 676 | 135 | $19.12 | $24.47 |
| **TOTAL** | **3,558** | **3,537** | **-21** | **-1%** | **2,081** | **416** | **$13.89** | **$21.78** |

*Source: EMSI 2019.4*

**North Bay Sub-Region** includes Solano, Marin, Napa, and Sonoma

### Job Postings in Bay Region and North Bay Sub-Region

**Table 3. Number of Job Postings by Occupation for latest 12 months (April 2019 - March 2020)**

| Occupation | Bay Region | North Bay |
| --- | --- | --- |
| Farm and Ranch Managers | 137 | 20 |
| Food Science Technicians | 133 | 9 |
| Food Scientists and Technologists | 127 | 43 |
| Nursery and Greenhouse Managers | 53 | 6 |
| Agricultural Technicians | 51 | 11 |
| Aquacultural Managers | 49 | 8 |
| First-Line Supervisors of Agricultural Crop and Horticultural Workers | 28 | 4 |
| First-Line Supervisors of Animal Husbandry and Animal Care Workers | 21 | 2 |
| First-Line Supervisors of Logging Workers | 4 | 0 |
| First-Line Supervisors of Aquacultural Workers | 4 | 1 |
| **TOTAL** | **607** | **104** |

*Source: Burning Glass*

**Table 4a. Top Job Titles for Wine Cellar Workers for latest 12 months (April 2019 - March 2020) Bay Region**

|  |  |  |  |
| --- | --- | --- | --- |
| Common Title | Bay | Common Title | Bay |
| Technician | 94 | Food Technologist | 7 |
| Enologist | 31 | Enologist, Manufacturing Industry | 7 |
| Food Safety Auditor | 17 | Coordinator | 7 |
| Shelter Monitor | 15 | R Developer | 6 |
| Manager, Agriculture Industry | 14 | Quality Technician | 6 |
| Director of Nursing | 14 | Product Development Scientist | 6 |
| Food Scientist | 12 | Laboratory Technician | 6 |
| Food Safety Sanitor 3Rd | 11 | Agricultural Technician | 6 |
| Farmer | 11 | Territory Food Safety Auditor, Information And Technology Industry | 4 |
| Viticulturist | 10 | Market Farmer/Seller | 4 |
| Senior Food Scientist | 10 | Farmer, Market | 4 |
| Growth Marketing | 10 | Cultivator | 4 |
| Assistant Manager | 9 | Test Do Not | 3 |
| Greenhouse Manager | 7 | Tank Manager, Agriculture Industry | 3 |

**Table 4b. Top Job Titles for Wine Cellar Workers for latest 12 months (April 2019 - March 2020) North Bay Sub-Region**

|  |  |  |  |
| --- | --- | --- | --- |
| Common Title | North Bay | Common Title | North Bay |
| Enologist | 31 | Wildlife Technician | 1 |
| Technician | 8 | Unique Harvest Cellar Work | 1 |
| Enologist, Manufacturing Industry | 7 | Technician, Agriculture Industry Information And Technology Industry | 1 |
| Viticulturist | 6 | Supervised Visitation Monitor | 1 |
| Coordinator | 4 | Research Technician | 1 |
| Senior Food Scientist | 3 | Product Owner | 1 |
| Planning Leader | 3 | Naturalist | 1 |
| Manager, Agriculture Industry | 3 | Manager/Viticulturist | 1 |
| Director of Nursing | 3 | Laboratory Technician | 1 |
| Dairy Manager, Agriculture Industry | 3 | Grower/Manager | 1 |
| Viticulturist/Technician | 2 | Grower, Sustainable Agriculture | 1 |
| Shelter Monitor | 2 | Greeter/Farmer, Market | 1 |
| Sensory Technician | 2 | Garden Center/Nursery | 1 |
| Fish And Wildlife Technician | 2 | Frog Docent Training | 1 |

*Source: Burning Glass*

# Industry Concentration

**Table 5. Industries hiring Wine Cellar Workers in Bay Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Industry – 6 Digit NAICS (No. American Industry Classification) Codes | Jobs in Industry (2019) | Jobs in Industry (2022) | % Change (2019-24) | % Occupation Group in Industry (2019) |
| Crop Production (111000) | 10,950 | 10,912 | 0% | 66% |
| Farm Labor Contractors and Crew Leaders (115115) | 895 | 985 | 10% | 5% |
| Animal Production (112000) | 854 | 819 | -4% | 5% |
| Postharvest Crop Activities (except Cotton Ginning) (115114) | 443 | 537 | 21% | 3% |
| Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology) (541715) | 393 | 403 | 3% | 2% |
| Wineries (312130) | 283 | 293 | 4% | 2% |
| Farm Management Services (115116) | 259 | 267 | 3% | 2% |
| Soil Preparation, Planting, and Cultivating (115112) | 158 | 176 | 11% | 1% |

*Source: EMSI 2019.4*

**Table 6. Top Employers Posting Jobs for Wine Cellar Workers in Bay Region and North Bay Sub-Region (April 2019 - March 2020)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Employer | Bay | Employer | Bay | Employer | North Bay |
| Hupp Draft Services Inc | 48 | Eurofins Scientific | 4 | Trinchero Family Estates | 4 |
| Zz Hupp Draft Services Inc | 8 | Dole Food Company | 4 | Ej Gallo | 3 |
| University California | 7 | Bayer Corporation | 4 | Chandon Incorporated | 3 |
| Scientific Certification Systems | 6 | State of California | 3 | Ace Hardware | 3 |
| Packer Sanitation Services, Inc. | 6 | Zoetis | 3 | Zz Hupp Draft Services Inc | 2 |
| Golden Gate Audubon Society | 6 | UC Berkeley | 3 | Treasurey Wine Estates | 2 |
| Farmscape | 6 | Touch Of Modern | 3 | Straus Family Creamery | 2 |
| Speedling Incorporated | 5 | Pssi | 3 | Pro Form Laboratories | 2 |
| Packers Sanitation Services Incorporated | 5 | Pacific States Marine Fisheries Commission | 3 | Pacific States Marine Fisheries Commission | 2 |
| Hupp Draft Services | 5 | Norcal Cannabis Company | 3 | Jackson Family Wines | 2 |
| Dolores Street Community Services | 5 | National Grid | 3 | Hupp Draft Services Inc | 2 |
| AFC Franchise Corp | 5 | Leadpoint Business Services | 3 | Ej Gallo Winery | 2 |
| Abode Services | 5 | Harborside | 3 | Domaine Chandon | 2 |
| Ul | 4 | General Mills | 3 | County Sonoma | 2 |
| Trinchero Family Estates | 4 | Farm Fresh To You | 3 | Constellation Brands Inc | 2 |
| SCS Global Services | 4 | Ej Gallo | 3 | Amerada Hess Corp | 2 |
| Kagome Incorporated | 4 | Crop Production Services Inc | 3 | Abode Services | 2 |

*Source: Burning Glass*

# Educational Supply

There are ten (10) community colleges in the Bay Region issuing 82 awards on average annually (last 3 years ending 2017-18) on TOP 0104.00 - Viticulture, Enology, and Wine Business. There are two colleges in the North Bay Sub-Region issuing 63 awards on average annually (last 3 years) on this TOP code.

There is one (1) other Educational Institution in the Bay Region (Silicon Valley Sub-Region) issuing 39 awards on average annually (last 3 years ending 2016-17) on TOP 0104.00 - Viticulture, Enology, and Wine Business.

**Table 7. Awards on TOP 0104.00 - Viticulture, Enology, and Wine Business in Bay Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| College | Sub-Region | Associates | Certificate 18+ Units | Total |
| Chabot Hayward | East Bay | 1 |  | 1 |
| De Anza | Silicon Valley | 1 | 1 | 2 |
| Diablo Valley | East Bay |  | 2 | 2 |
| Evergreen Valley | Silicon Valley | 4 |  | 4 |
| Las Positas | East Bay | 3 |  | 3 |
| Monterey | Santa Cruz & Monterey | 1 |  | 1 |
| Napa | North Bay | 16 | 14 | 30 |
| Ohlone | East Bay |  | 6 | 6 |
| Santa Rosa | North Bay | 21 | 12 | 33 |
| **Total Bay Region** | | **47** | **35** | **82** |
| **Total North Bay Sub-Region** | | **37** | **26** | **63** |

# Source: Data Mart

Note: The annual average for awards is 2015-16 to 2017-18.

**Table 7b. Other Educational Institution Awards on TOP 0104.00 - Viticulture, Enology, and Wine Business in Bay Region**

|  |  |  |  |
| --- | --- | --- | --- |
| **College** | **Sub-Region** | **Award < 1 academic yr** | **Total** |
| International Culinary Center-California | Silicon Valley | 39 | 39 |
| **Total Bay Region** | | **39** | **39** |
| **Total North Bay Sub-Region** | | **0** | **0** |

# Source: Data Mart

Note: The annual average for awards is 2014-15 to 2016-17.

# Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 1,951 annual openings for Wine Cellar Workers and 121 annual (3-year average) awards for an annual undersupply of 1,830 students. In the North Bay Sub-Region, there is also a gap with 416 annual openings and 63 annual (3-year average) awards for an annual undersupply of 353 students.

# Student Outcomes

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0104.00 - Viticulture, Enology, and Wine Business**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2015-16 | Bay  (All CTE Programs) | Santa Rosa Junior College (All CTE Programs) | State (0104.00) | Bay (0104.00) | North Bay (0104.00) | Santa Rosa Junior College (0104.00) |
| % Employed Four Quarters After Exit | 74% | 76% | 65% | 67% | 66% | 60% |
| Median Quarterly Earnings Two Quarters After Exit | $10,550 | $9,839 | $10,386 | $11,228 | $10,581 | $9,045 |
| Median % Change in Earnings | 46% | 50% | 37% | 46% | 49% | 62% |
| % of Students Earning a Living Wage | 63% | 62% | 69% | 66% | 64% | 55% |

*Source: Launchboard Pipeline (version available on 4/27/20)*

# Skills, Certifications and Education

**Table 9. Top Skills for Wine Cellar Workers in Bay Region (April 2019 - March 2020)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Skill | Postings | Skill | Postings | Skill | Postings |
| Cleaning | 106 | Fermentation | 38 | Data Collection | 21 |
| Food Safety | 87 | Project Management | 34 | Hazard Analysis Critical Control Point (HACCP) | 20 |
| Food Science | 71 | Spreadsheets | 34 | Farm Management | 19 |
| Quality Assurance and Control | 67 | Lifting Ability | 33 | Personal Protective Equipment (PPE) | 19 |
| Repair | 64 | Experiments | 32 | Supervisory Skills | 18 |
| Customer Service | 60 | Enology | 30 | Cardiopulmonary Resuscitation (CPR) | 17 |
| Budgeting | 59 | Record Keeping | 29 | Customer Contact | 17 |
| Scheduling | 52 | Microbiology | 27 | Data Analysis | 17 |
| Chemistry | 47 | Technical Support | 26 | Environmental Health and Safety | 17 |
| Staff Management | 46 | Fertilizers | 25 | Teaching | 17 |
| Biology | 44 | Sales | 25 | Water Quality | 17 |
| Product Development | 44 | Retail Industry Knowledge | 24 | Marketing | 16 |
| Quality Management | 42 | Legal Compliance | 23 | Food Industry Knowledge | 14 |
| Packaging | 39 | Good Manufacturing Practices (GMP) | 22 | Operations Management | 14 |
| Data Entry | 38 | Mechanical Knowledge | 22 | Social Media | 14 |

*Source: Burning Glass*

**Table 10. Certifications for Wine Cellar Workers in the Bay Region (April 2019 - March 2020)**

Note: 65% 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 |
| Driver's License | 182 | Project Management Certification | 1 |
| Registered Environmental Health Specialist | 16 | Neonatal Resuscitation Program (NRP) | 1 |
| First Aid CPR AED | 12 | Management Education | 1 |
| Certified Professional - Food Safety | 8 | Global Food Safety Initiative (GFSI) | 1 |
| Pest Control Applicator | 7 | Food Service Certification | 1 |
| ServSafe | 5 | Food Handler Certification | 1 |
| Applicators License | 3 | Contractor’s License | 1 |
| Forklift Operator Certification | 2 | Certified Sanitarian | 1 |
| Child Development Associate (CDA) | 2 | Certified Salesforce Administrator | 1 |
| CDL Class A | 2 | Certified Dental Assistant | 1 |
| Security Clearance | 1 | Certificate in School Administration | 1 |
| Project Management Professional (PMP) | 1 | American Heart Association Certification | 1 |

*Source: Burning Glass*

**Table 11. Education Requirements for Wine Cellar Workers in Bay Region**

Note: 51% 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 | Percent 12 Mos. Postings |
| High school or vocational training | 78 | 28% |
| Associate Degree | 16 | 6% |
| Bachelor’s Degree or Higher | 186 | 66% |

*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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