

Wine Industry and Hospitality

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

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

Summary

- This report provides occupational data related to 10 occupations related to viticulture, enology, and the wine business. Two of these occupations are community college-level.
- This report separates the wine industry and hospitality occupations into three occupational categories to provide an overview of the diverse employment opportunities in the industry. Furthermore, the smaller occupational groups allow for a more detailed analysis of these occupations.

Wine Industry and Hospitality

The California Community College viticulture, enology, and wine business (TOP 0104.00) programs provide instruction related to the cultivation of wine grapes and the making and marketing of wine (Taxonomy of Programs, 2012). This report captures regional demand for workers in the wine industry cluster and are collectively referred to the wine occupational group; grape farming (viticulture), wine production (enology), and wine business and hospitality. Occupations with varying levels of educational requirements are included in this report to fully capture job opportunities available to students before and after completing a community college wine program. Many of the occupations in this occupational group do not require a community college education; however, a community college viticulture, enology, and wine business training program may provide students with industry-specific knowledge that may help students find employment. The recommendation portion of this report will focus on community college-level occupations.

The report is comprised of three sections; each containing occupations relevant to each section's activity and their typical education-level requirement:

Grape Farming (Viticulture): Page 4	
Occupation (Standard Occupational Code)	Typical Education-level
Farmworkers and Laborers, Crop, Nursery, and Greenhouse (SOC 45-2092)*	No Education Required

Wine Production (Enology): Page 7

Occupation (Standard Occupational Code)	Typical Education-level
First-Line Supervisors of Production and Operating Workers (SOC 51-1011)	Community College
Food Batchmakers (51-3092)*	High School
Mixing and Blending Machine Setters, Operators, and Tenders (51-9023)	High School
Packaging and Filling Machine Operators and Tenders (51-9111)*	High School
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders (51-9012)*	High School

Wine Business and Hospitality: Page 11

Occupation (Standard Occupational Code)	Typical Education-level
Bartenders (SOC 35-3011)	No Formal Education
Merchandise Displayers and Window Trimmers (27-1026)	High School
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (41-4012)	High School
Waiters and Waitresses (35-3031)	No Formal Education

*The occupations included in the grape farming occupational group and the wine production occupational group, except for first-line supervisors of production and operating workers, are considered essential critical infrastructure occupations by the Public Policy Institute of California. This classification of occupations is vital in supporting California's basic health, safety, and economic needs or may have the ability to social distance (Bohn et al.). Occupations in the wine business and hospitality occupational group are not essential critical infrastructure occupations.

Occupational Employment

Most occupations are employed across a variety of industries. For example, waiters and waitresses are employed by wine hospitality employers and in various foodservice and hospitality industries. This section of the report demonstrates the total employment of each occupation in the region unrelated to specific industry employment. Specific wine industry employment is available later in this report.

In 2019, there were 66,232 jobs related to the winery occupational group in the Inland Empire/Desert Region. This group is projected to decrease employment by 3% over the next five years. Despite the decrease, this occupational group is projected to have 8,896 annual job openings to backfill jobs that workers

are permanently vacating (includes occupational transfers and retirements). Community college-level occupations accounted for 29% of jobs (19,102 jobs) in this group in 2019.

Exhibit 1 job counts, five-year projected job growth, job openings, and the share of incumbent workers age 55 years and greater working in the winery occupational clusters in the Inland Empire/Desert Region. Wine production jobs are expected to grow the fastest over the next five years, while the wine business and hospitality group is expected to have the most annual job openings. The appendix displays the projected job growth and earnings for each group's occupations.

Exhibit 1: Winery occupations five-year projections, 2019-2024

Occupational Group	2019 Jobs	2024 Jobs	5-Yr % Change (New Jobs)	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
Grape Farming						
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	8,556	8,155	(5%)	7,189	1,198	25%
Grape Farming Subtotal	8,556	8,155	(5%)	7,189	1,198	25%
Wine Production						
Packaging and Filling Machine Operators and Tenders	4,864	5,041	4%	3,215	536	20%
First-Line Supervisors of Production and Operating Workers	4,802	4,818	0%	2,617	436	29%
Mixing and Blending Machine Setters, Operators, and Tenders	1,255	1,252	0%	777	129	21%
Food Batchmakers	1,149	1,303	13%	1,064	177	20%
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	340	348	2%	213	35	20%
Wine Production Subtotal	12,411	12,762	20%	7,886	1,314	23%
Winery Business and Hospitality						
Waiters and Waitresses	23,888	21,959	(8%)	24,005	4,001	9%
Sales Representatives, Wholesale and Manufacturing, Ex Technical and Scientific Products	14,300	14,632	2%	8,389	1,398	29%
Bartenders	5,589	5,106	(9%)	5,019	836	12%

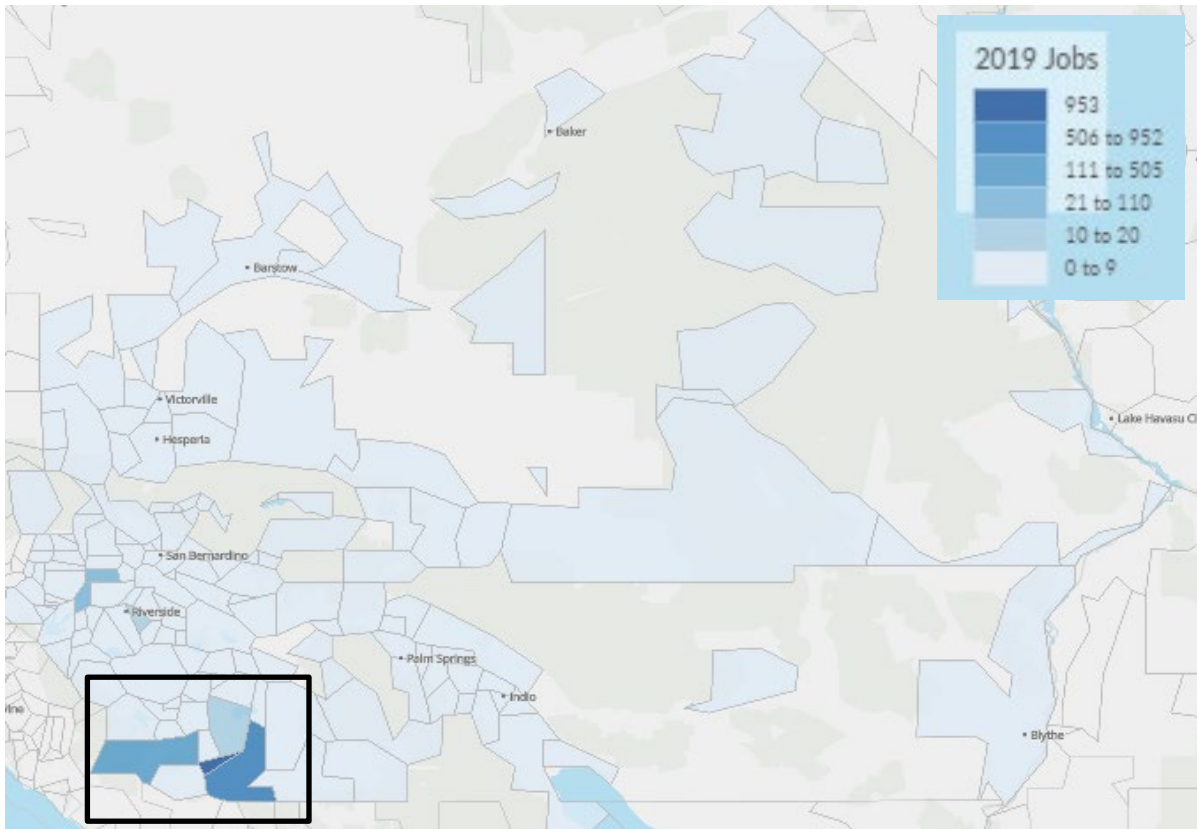
Occupational Group	2019 Jobs	2024 Jobs	5-Yr % Change (New Jobs)	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
Merchandise Displayers and Window Trimmers	1,487	1,543	4%	889	148	16%
Winery Business and Hospitality Subtotal	45,264	43,240	(4%)	38,302	6,384	16%
Total	66,232	64,157	(3%)	53,377	8,896	20%

Source: Emsi 2021.1

Winery Employment

In 2019, there were 1,670 jobs in the wineries (NAICS 31-2130) industry in the Inland Empire/Desert Region. Over the next five years, the winery industry is projected to decrease employment by 14%, shedding 240 jobs. This industry is highly concentrated in southwestern Riverside County. In 2019, the city of Temecula accounted for 89% of regional employment, while the city of Murrieta contained 7% of regional employment. The area encompassed in the box below, containing Temecula and Murrieta, accounts for 96% of regional employment for winery workers. Exhibit 2 below displays the distribution of winery workers in the Inland Empire/Desert Region.

Exhibit 2: Distribution of winery employment in the Inland Empire/Desert Region, 2019



Source: Emsi 2021.1

Workers with similar knowledge, skills, and abilities, are often employed across a broad spectrum of industries. Of the 1,670 jobs in the wineries industry, only 721 jobs (43.2%) were directly related to the training provided by the community college viticulture, enology, and wine business program. The larger share jobs in the wine industry are supporting occupations that need job-specific training to be proficient in their role; sample occupation groups include transportation and material moving and office and administrative support occupations.

Exhibit 3 displays the number of 2019 jobs for each occupation in the winery occupational group, the percentage of workers in the industry, and the total number of jobs in 2019 for each occupation. The wine production occupational group contains the greatest share of workers working in the winery industry. The occupation, separating, filtering, clarifying, precipitating, and still machine, setters, operators, and tenders, has the greatest share of workers in the winery industry, with 16.2% of workers in the industry.

Exhibit 3: Share of workers in the winery industry

Occupation	2019 Winery Employment	Percentage Employed in Winery Industry	2019 Total Jobs
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	55	0.6%	8,556
Grape Farming Subtotal	55	0.6%	8,556
Packaging and Filling Machine Operators and Tenders	228	4.7%	4,864
First-Line Supervisors of Production and Operating Workers	25	0.5%	4,802
Mixing and Blending Machine Setters, Operators, and Tenders	13	1%	1,255
Food Batchmakers	14	1.2%	1,149
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	55	16.2%	340
Wine Production Subtotal	334	2.7%	12,411
Waiters and Waitresses	79	0.3%	23,888
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	65	0.5%	14,300
Bartenders	144	2.6%	5,589
Merchandise Displayers and Window Trimmers	45	3%	1,487
Winery Business and Hospitality Subtotal	332	0.7%	45,264
Total	721	1.1%	66,232

Source: Emsi 2021.1

Winery Job Advertisements

The Temecula Valley Winegrowers Association provides a list of wineries and winegrowers in the Temecula Valley region. According to this list, there are 80 wineries and wine growers in the region (Temecula Valley Winegrowers Association, 2021). Of these 80 employers, only 13 were found in Labor Insights – Burning Glass, the job advertisement search engine used in this report, indicating that an employer-based search may not capture the total demand for wineries. See the appendix for more information about the limitations of job advertisement search engines.

The following are the winery employers posting advertisements in the region.

- Bel Vino Winery
- Bottaiia Winery
- Danza Del Sol Winery
- Europa Village
- Fazeli Cellars
- Miramonte Winery
- Mount Palomar Winery
- Oak Mountain Winery
- Ponte Family Estate Winery
- Ponte Winery
- South Coast Winery Resort Spa
- Thornton Winery
- Wilson Creek Winery Vineyards

An industry job advertisement search ensures that the information provided is specific to the wineries (NAICS 31-2130) industry. Over the last 12 months, there were 18 total advertisements posted in the wineries industry in the Inland Empire/Desert Region. As a result of the low number of winery job postings in the region, statewide job advertisement information is presented in this report. Over the last 12 months, there were 2,521 statewide job advertisements.

Grape Farming Workers

Job advertisements indicate there are few opportunities for grape farming workers in the winery industry. Winery industry job ads (39 ads) accounted for 4.2% of the 927 total ads for farmworkers and laborers, crop, nursery, and greenhouse. Exhibit 4 shows the number of job ads posted during the last 12 months and the statewide average time to fill farmworkers and laborers, crop, nursery, and greenhouse positions in the winery industry. On average, statewide employers fill online job postings for this position in 47 days.

Exhibit 4: Job ads and time to fill

Occupation	Job Ads	Statewide Average Time to Fill (Days)
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	39	47

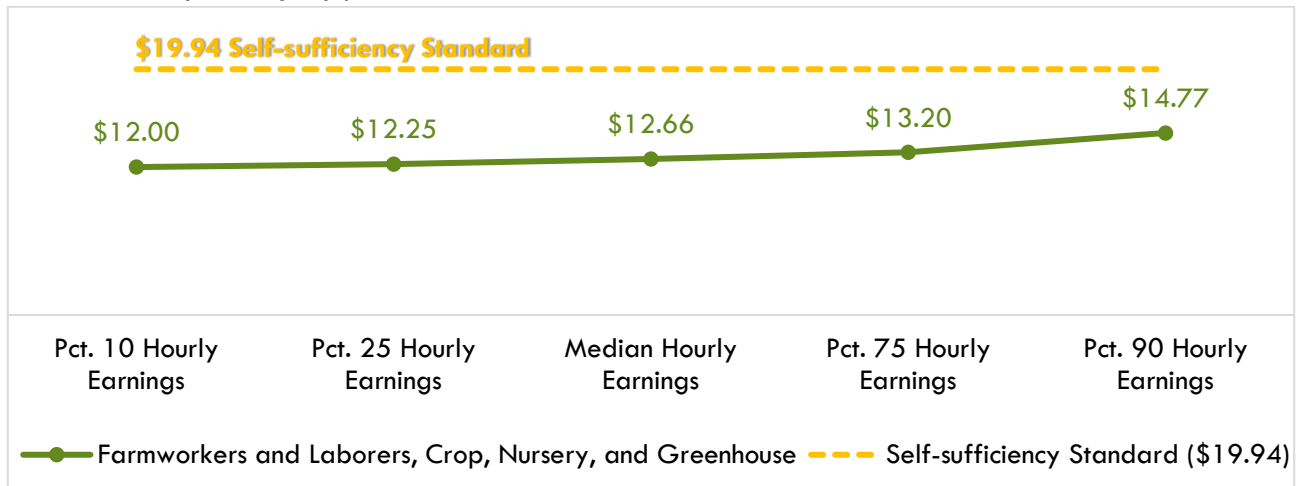
Source: Burning Glass – Labor Insights

Earnings and Benefits

Community colleges should ensure their training programs lead to employment opportunities that provide self-sustainable income. The University of Washington estimates that a self-sufficient hourly rate for a single adult with one school-age child is \$19.94 per hour or \$41,475 annually in Riverside County; \$19.49 per hour or \$40,539 annually in San Bernardino County (Pearce, 2018). For this study, the higher hourly earnings requirement in Riverside County is adopted as the self-sufficiency standard for the two-county region.

Hourly earnings for farmworkers and laborers, crop, nursery, and greenhouse do not surpass the self-sufficiency rate, indicating that workers in this occupation do not earn a self-sustainable wage. Exhibit 5 displays the hourly earnings for farmworkers and laborers, crop, nursery, and greenhouse.

Exhibit 5: Hourly earnings by percentile



Source: Emsi 2021.1

According to the occupational guides developed by the California Labor Market Information Division, it is uncommon for employers to offer benefits to farmworkers (Detailed Occupational Guides, 2020).

Wine Production Workers

Exhibit 6 shows the number of job ads posted during the last 12 months and the average time to fill each occupation statewide. Many of the occupations in the wine production occupational group do not have sufficient advertisements to obtain generalizable results. Only separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders have enough advertisements to provide reliable job advertisement information. On average, statewide employers fill online job ads for the wine production occupational group within 47 days.

Exhibit 6: Job ads for wine production occupational group

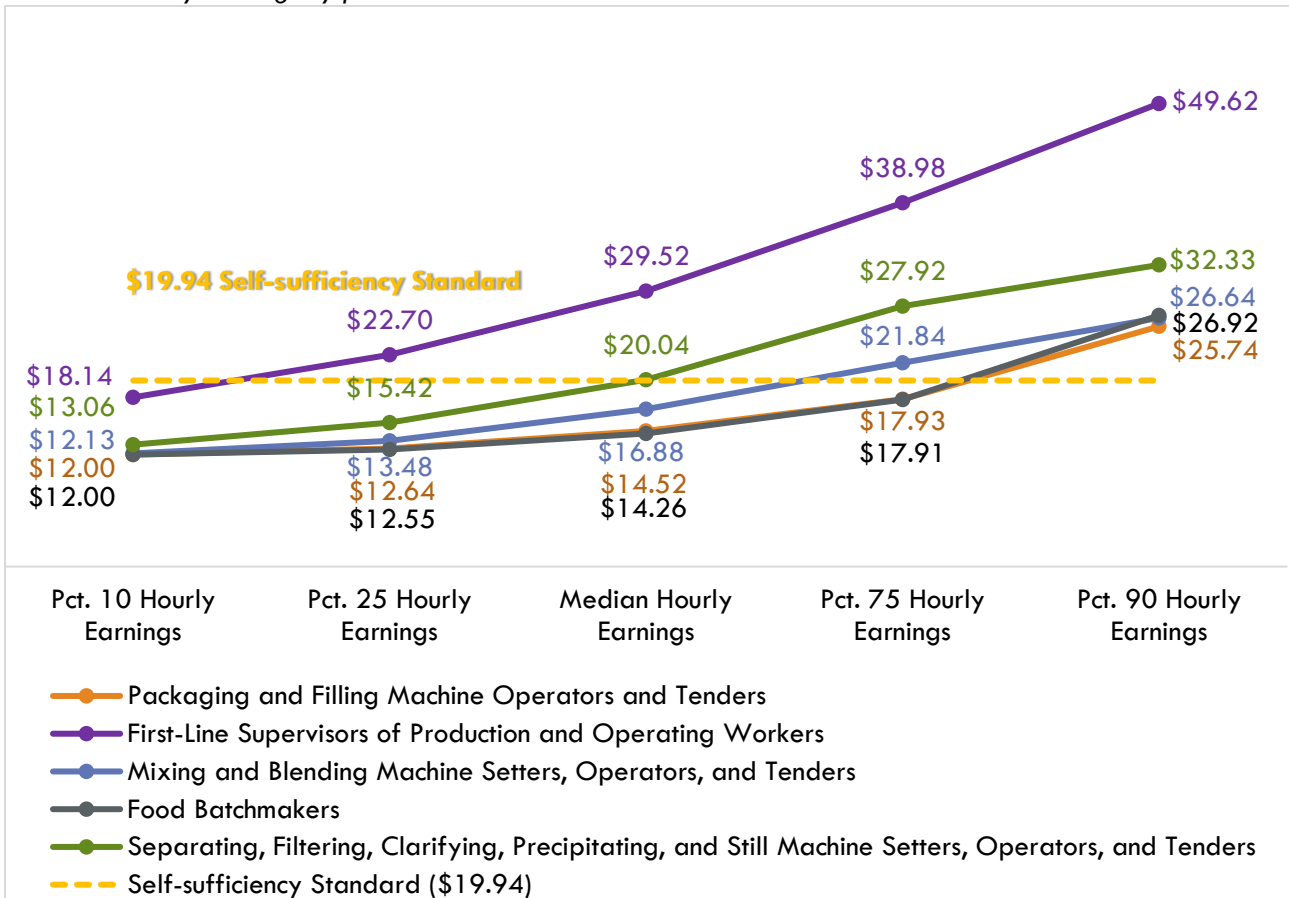
Occupation	Job Ads	Statewide Average Time to Fill (Days)
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	121	-
First-Line Supervisors of Production and Operating Workers	43	45
Packaging and Filling Machine Operators and Tenders	12	52
Mixing and Blending Machine Setters, Operators, and Tenders	0	-
Food Batchmakers	0	-
Total	176	47

Source: Burning Glass – Labor Insights

Earnings and Benefits

Exhibit 7 displays the hourly earnings for the wine production occupational group. Hourly earnings for first-line supervisors of production and operating workers surpass the self-sufficiency standard at the 25th percentile. Hourly earnings for separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders surpass the self-sufficiency standard at the 50th percentile, indicating that the top 50% of workers in the field earn a self-sustainable wage. Hourly earnings for mixing and blending machine setters, operators, and tenders exceed the self-sufficiency standard at the 75th percentile. The hourly earnings for packaging and filling machine operators and tenders and food batchmakers do not surpass the self-sufficiency standard until the 90th percentile, indicating that only the top 10% of workers earn a self-sustainable wage.

Exhibit 7: Hourly earnings by percentile



Source: Emsi 2021.1

Occupational guides developed by the California Labor Market Information Division typically provide benefits information; however, this information is not available for wine production occupations (Detailed Occupational Guides, 2020).

Advertised Salary from Online Job Ads

Exhibit 8 displays online job ad salary data for separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders over the last 12 months. Online job ad salary information reveals that employers are willing to pay this occupation \$38,000 annually, below the \$41,475 annual (\$19.94 hourly) self-sufficiency standard for the region. Consider online job ad salary with caution since only 12% (15 out of 121) of results for this occupation provided information. The salary figures are prorated to reflect full-time, annual salary status.

Exhibit 8: Advertised salary information

Occupations	Real-Time Salary Information					
	Number of job postings	Less than \$35,000	\$35,000 to \$49,999	\$50,000 to \$74,999	More than \$75,000	Average Annual Salary
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	15	40%	53%	7%	-	\$38,000

Source: Burning Glass – Labor Insights

Employers, Skills, Education, and Work Experience

Exhibit 9 displays the employers posting the most job ads for separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders during the last 12 months. Displaying employer names provides some insight into where students may find employment after completing a program. Constellation Brands, Inc. posted the most advertisements for separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders in the state, accounting for 24% of statewide jobs ads (29 ads).

Exhibit 9: Employers posting the most job ads

Occupation	Top Employers	
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders (n=121)	<ul style="list-style-type: none"> • Consetellatioin Brands, Inc. • E & J Gallo Winery • Rombauer Vineyards • The Wine Group 	<ul style="list-style-type: none"> • Trinchero Family Estates • Foley Family Wines • Wente Vineyards

Source: Burning Glass – Labor Insights

Exhibit 10 lists a sample of specialized and employability skills employers seek when looking for workers to fill separating, filtering, clarifying, precipitating, and still machine setter, operator, and tender positions. Specialized skills are occupation-specific skills that employers request for industry or job competency. Employability skills are foundational skills that transcend industries and occupations; this category is often referred to as "soft skills." The skills requested in job postings may be utilized to guide curriculum development.

Exhibit 10: Sample of in-demand skills from employer job ads

Occupation	Specialized skills	Employability skills
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders (n=120)	<ul style="list-style-type: none"> • Forklift Operation • Cleaning • Fermentation • Wine Processing • Machinery 	<ul style="list-style-type: none"> • Physical Abilities • Communication Skills • English • Teamwork/Collaboration • Detail-Oriented

Source: Burning Glass – Labor Insights

Exhibit 11 displays the entry-level education level education typically required for separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders according to the Bureau of Labor Statistics, educational attainment for incumbent workers with "some college, no degree" and an "associate degree" according to the U.S. Census, and the minimum advertised education requirement requested by employers in online job ads.

Exhibit 11: Educational attainment and online job ads with minimum advertised education requirements

Occupation	Typical Entry-Level Education Requirement	CC-Level Educational Attainment*	Number of Job Ads	Real-Time Minimum Advertised Education Requirement		
				High school or vocational training	Associate degree	Bachelor's degree or higher
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	High school diploma or equivalent	35%	73	64%	-	36%

Source: Emsi 2021.1, Burning Glass – Labor Insights

*Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework

Exhibit 12 displays the work experience typically required to enter separating, filtering, clarifying, precipitating, and still machine setter, operator, and tender positions and the real-time work experience requirements from employer job ads.

Exhibit 12: Work experience required and real-time work experience requirements

Occupation	Work Experience Typically Required	Number of job postings	Real-Time Work Experience		
			0 – 2 years	3 – 5 years	6+ years
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	None	69	48%	38%	14%

Source: Emsi 2021.1, Burning Glass – Labor Insights

Wine Business and Hospitality Workers

Exhibit 13 displays the number of job ads posted during the last 12 months and the average time to fill each occupation statewide. Bartenders and waiters and waitresses do not have sufficient advertisements from which to obtain generalizable advertisement information. However, there are sufficient advertisements for merchandise displayers and window trimmers and sales representatives, wholesale and manufacturing, except technical and scientific products to provide reliable job advertisement information. On average, statewide employers fill online job postings for the wine business and hospitality occupational group in the winery industry within 37 days.

Exhibit 13: Job ads by each of the wine industry and hospitality occupations

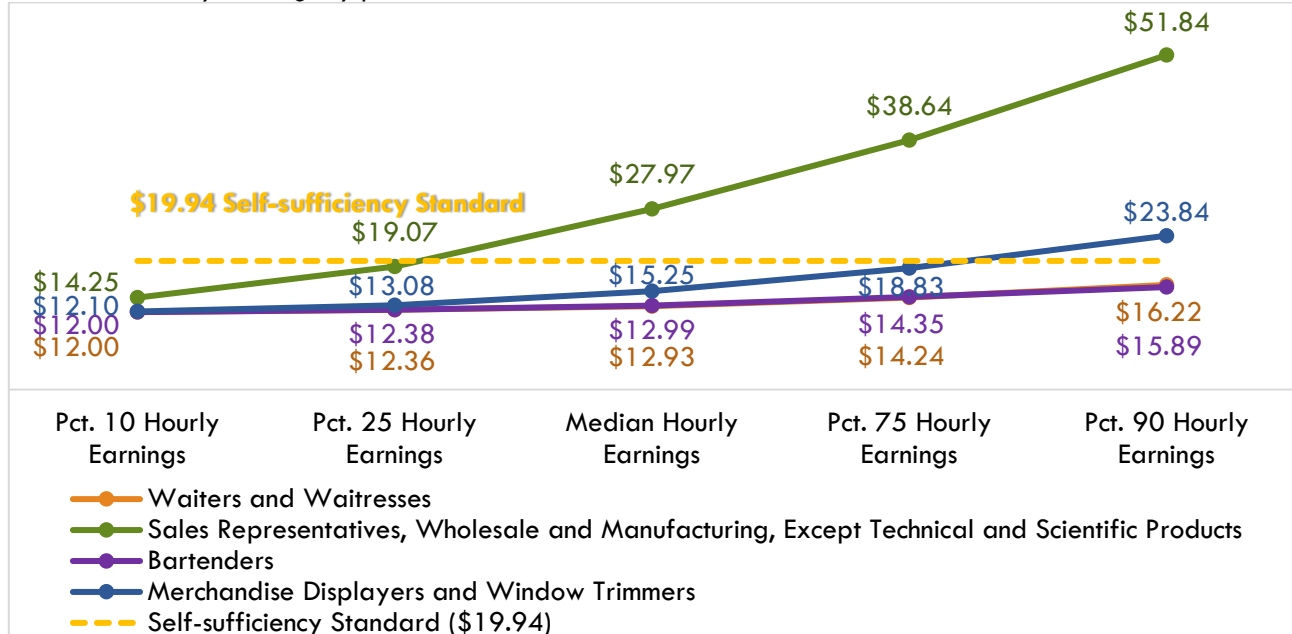
Occupation	Job Ads	Statewide Average Time to Fill (Days)
Merchandise Displayers and Window Trimmers	99	34
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	64	45
Bartenders	4	40
Waiters and Waitresses	3	39
TOTAL	174	37

Source: Burning Glass – Labor Insights

Earnings and Benefits

The median hourly earnings for sales representatives, wholesale and manufacturing, except technical and scientific products are above the self-sufficiency standard, indicating that the top 50% of workers earn a self-sustainable wage. Earnings for merchandise displayers and window trimmers do not exceed the self-sufficiency standard until the 90th percentile. Hourly earnings for bartenders and waiters and waitresses do not surpass the self-sufficiency standard, indicating that these occupations do not offer a self-sustainable wage. Exhibit 14 displays the hourly earnings for the wine business and hospitality occupational group.

Exhibit 14: Hourly earnings by percentile



Source: Emsi 2021.1

According to the occupational guides developed by the California Labor Market Information Division, sales representatives may receive medical, dental, and vacation benefits. Benefits for waiters and waitresses vary by employer but usually include vacation, sick leave, and medical insurance for full-time employees. Benefits

information is not available for bartenders and merchandise displayers and window trimmers (Detailed Occupational Guides, 2020).

Advertised Salary from Online Job Ads

Exhibit 15 displays online job ad salary data for the wine business and hospitality occupational group over the last 12 months. Online job ad salary information reveals that employers are willing to pay this occupational group between \$34,000 and \$53,000 annually. Only advertised wages for sales representatives, wholesale and manufacturing, except technical and scientific products are above the \$41,475 annual (\$19.94 hourly) self-sufficiency standard for the region. Consider online job ad salary with caution since only 19% (31 out of 163) of results for this occupational group provided information. The salary figures are prorated to reflect full-time, annual salary status.

Exhibit 15: Advertised salary information

Occupations	Real-Time Salary Information					Average Annual Salary
	Number of job postings	Less than \$35,000	\$35,000 to \$49,999	\$50,000 to \$74,999	More than \$75,000	
Merchandise Displayers and Window Trimmers	20	55%	40%	5%	-	\$34,000
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	11	-	46%	45%	9%	\$53,000

Source: Burning Glass – Labor Insights

Employers, Skills, Education, and Work Experience

Exhibit 16 displays the employers posting the most job ads for the wine business and hospitality occupations during the last 12 months. Displaying employer names provides some insight into where students may find employment after completing a program. E&J Gallo Winery is the employer posting the most advertisements in the state, accounting for 60% of ads (100 ads), followed by Bronco Wine Company (17%) and Jackson Family Wines (14%).

Exhibit 16: Employers posting the most job ads

Occupation	Top Employers
Merchandise Displayers and Window Trimmers (n=99)	<ul style="list-style-type: none"> E&J Gallo Winery Bronco Wine Company
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (n=68)	<ul style="list-style-type: none"> Jackson Family Wines E&J Gallo Winery Bronco Wine

Source: Burning Glass – Labor Insights

Exhibit 17 lists a sample of specialized and employability skills employers seek when looking for workers to fill wine business and hospitality positions. Specialized skills are occupation-specific skills that employers request for industry or job competency. Employability skills are foundational skills that transcend industries and occupations; this category is often referred to as "soft skills." The skills requested in job postings may be utilized to guide curriculum development.

Exhibit 17: Sample of in-demand skills from employer job ads

Occupation	Specialized skills	Employability skills
Merchandise Displayers and Window Trimmers (n=98)	<ul style="list-style-type: none"> • Retail Industry Knowledge • Memo Preparation • Inventory Management • Data Entry 	<ul style="list-style-type: none"> • Communication Skills • Writing • Physical Abilities • Time Management
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (n=67)	<ul style="list-style-type: none"> • Merchandising • Sales Goals • Budgeting • Direct Store Delivery (DSD) 	<ul style="list-style-type: none"> • Communication Skills • Physical Abilities • Problem Solving • Creativity

Source: Burning Glass – Labor Insights

Exhibit 18 displays the entry-level education level education typically required to enter each occupation according to the Bureau of Labor Statistics, educational attainment for incumbent workers with "some college, no degree" and an "associate degree" according to the U.S. Census, and the minimum advertised education requirement requested by employers in online job ads.

Exhibit 18: Educational attainment and online job ads with minimum advertised education requirements

Occupation	Typical Entry-Level Education Requirement	CC-Level Educational Attainment*	Number of Job Ads	Real-Time Minimum Advertised Education Requirement		
				High school or vocational training	Associate degree	Bachelor's degree or higher
Merchandise Displayers and Window Trimmers	High school diploma or equivalent	30%	85	100%	-	-
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	High school diploma or equivalent	32%	31	48%	10%	42%

Source: Emsi 2021.1, Burning Glass – Labor Insights

*Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework

Exhibit 19 displays the work experience typically required to enter each occupation and the real-time work experience requirements from employer job ads. Job ads indicate that employers are seeking wine business and hospitality workers with 0-2 years of work experience.

Exhibit 19: Work experience required and real-time work experience requirements

Occupation	Work Experience Typically Required	Real-Time Work Experience			
		Number of job postings	0 – 2 years	3 – 5 years	6+ years
Merchandise Displayers and Window Trimmers	None	64	100%	-	-
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	None	32	53%	44%	3%

Source: Emsi 2021.1, Burning Glass – Labor Insights

Student Completions and Program Outcomes

Exhibit 20 displays completion data for the California Community College viticulture, enology, and wine business (0104.00) program between 2017 and 2020. The student completion and outcome methodology are available on page 22. Mt. San Jacinto College is the only community college in the Inland Empire/Desert Region to offer a viticulture, enology, and wine business program.

Exhibit 20: 2017-20, Annual average community college awards for the viticulture, enology, and wine business programs in the Inland Empire/Desert Region

TOP 0104.00 – Viticulture, Enology, and Wine Business (Local Program Title)	Certificate requiring 6 to < 18-semester units	Total CC Annual Average Awards, Academic Years 2017-20
Mt. San Jacinto (Viticulture, Enology, and Winery Technology & Wine Hospitality and Salesmanship)	5	5
Total	5	5

Source: MIS Data Mart

California program outcome data may provide a 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 21. The outcome methodology is available in the appendix section of this report. Dashes indicate there were too few students to obtain program outcome information.

Exhibit 21: 0104.00 – Viticulture, enology, and wine business strong workforce program outcomes

Strong Workforce Program Metrics: 0104.00 – Viticulture, Enology, and Wine Business Academic Year 2017-18, unless noted otherwise	Inland Empire/Desert Region	California
Unduplicated count of enrolled students (2018-19)	67	1,146
Completed 9+ career education units in one year (2018-19)	-	23%
Perkins Economically disadvantaged students (2018-19)	21%	55%

Strong Workforce Program Metrics: 0104.00 – Viticulture, Enology, and Wine Business Academic Year 2017-18, unless noted otherwise	Inland Empire/Desert Region	California
Students who earned a degree, certificate, or attained apprenticeship (2018-19)	-	55
Transferred to a four-year institution (transfers)	-	50
Job closely related to the field of study (2016-17)	-	62%
Median annual earnings (all exiters)	\$36,904	\$50,524
Median change in earnings (all exiters)	11%	16%
Attained a living wage (completers and skills-builders)	-	73%

Sources: LaunchBoard Community College Pipeline and Strong Workforce Program Metrics

Summary and Recommendation

There were 66,232 jobs in the region related to the community college, viticulture, enology, and wine business program. This group is expected to have 8,896 annual job openings over the next five years. The median hourly earnings for community college-level occupations exceed the \$19.94 self-sufficiency standard. The wine industry itself is relatively small; about 721 winery jobs are directly related to the training provided by the community college viticulture, enology, and wine business program. Students exiting a winery program should be cross-trained in basic hospitality and retail industry skills to maximize their employability chances.

A viticulture, enology, and wine business (TOP 0104.00) program is offered at Mt. San Jacinto College, awarding an average of five certificates over the last three academic years.

The Centers of Excellence recommends expanding current viticulture, enology, and wine business programs that provide skills that lead to occupations offering a self-sustainable median hourly earnings. Colleges considering viticulture, enology, and wine business programs should partner with employers hiring these workers to ensure that students have the relevant industry-specific skills that lead to a self-sustainable income level shortly after entering employment.

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Appendix: Occupation definitions, sample job titles, five-year projections, and earnings for wine industry and hospitality occupations

Occupation Definitions (SOC code), Education and Training Requirement, Community College Education Attainment

Grape Farming

Farmworkers and Laborers, Crop, Nursery, and Greenhouse (45-2092)

Manually plant, cultivate, and harvest vegetables, fruits, nuts, horticultural specialties, and field crops. Use hand tools, such as shovels, trowels, hoes, tampers, pruning hooks, shears, and knives. Duties may include tilling soil and applying fertilizers; transplanting, weeding, thinning, or pruning crops; applying pesticides; or cleaning, grading, sorting, packing, and loading harvested products. May construct trellises, repair fences and farm buildings, or participate in irrigation activities.

Sample job titles: Farm Laborer, Field Irrigation Worker, Gardener, Greenhouse Worker, Grower, Harvester, Nursery Worker, Orchard Worker, Picker, Propagation Worker

Entry-Level Educational Requirement: No formal education credential

Training Requirement: Less than one month on-the-job training

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 15%

Wine Production

First-Line Supervisors of Production and Operating Workers (51-1011)

Directly supervise and coordinate the activities of production and operating workers, such as inspectors, precision workers, machine setters and operators, assemblers, fabricators, and plant and system operators. Excludes team or work leaders.

Sample job titles: Assembly Supervisor, Line Supervisor, Manufacturing Supervisor, Molding Supervisor, Plant Supervisor, Production Manager, Production Supervisor, Quality Assurance Supervisor (QA Supervisor)

Entry-Level Educational Requirement: High school diploma or equivalent

Training Requirement: None

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 35%

Food Batchmakers (51-3092)

Set up and operate equipment that mixes or blends ingredients used in the manufacturing of food products. Includes candy makers and cheese makers.

Sample job titles: Wine Blender, Batching Operator, Blender, Brewing Technician, Compounder, Dough Scaler and Mixer, Mixer, Process Operator, Processing Operator, Syrup Maker

Entry-Level Educational Requirement: High school diploma or equivalent

Training Requirement: Between one and twelve months on-the-job training

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 33%

Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders (51-9012)

Set up, operate, or tend continuous flow or vat-type equipment; filter presses; shaker screens; centrifuges; condenser tubes; precipitating, fermenting, or evaporating tanks; scrubbing towers; or batch stills. These machines extract, sort, or separate liquids, gases, or solids from other materials to recover a refined product. Includes dairy processing equipment operators.

Sample job titles: Blender / Cook, Brewer, Cellar Worker, Digester Cook, Machine Tender, Paper Machine Tender, Plant Operator, Pulper Operator, Winemaker, Wine Cellar Worker, Wine Master, Winery Worker

Entry-Level Educational Requirement: High school diploma or equivalent

Training Requirement: Between one and twelve months on-the-job training

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 35%

Mixing and Blending Machine Setters, Operators, and Tenders (51-9023)

Set up, operate, or tend machines to mix or blend materials, such as chemicals, tobacco, liquids, color pigments, or explosive ingredients.

Sample job titles: Blender, Blending Technician, Coater Operator, Ink Blender, Ink Maker, Issuing Operator, Machine Operator, Mixer, Mixer Operator, Stock Preparation Operator (Stock Prep Operator), Wine Fermenter

Entry-Level Educational Requirement: High school diploma or equivalent

Training Requirement: Between one and twelve months on-the-job training

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 29%

Packaging and Filling Machine Operators and Tenders (51-9111)

Operate or tend machines to prepare industrial or consumer products for storage or shipment. Includes cannery workers who pack food products.

Sample job titles: A-Operator, Bundler, Closing Machine Operator, Computer Numerical Control Machine Operator (CNC Machine Operator), Filler Operator, Machine Operator, Packaging Operator, Packing Attendant, Packing Machine Operator

Entry-Level Educational Requirement: High school diploma or equivalent

Training Requirement: Between one and twelve months on-the-job training

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 21%

Wine Business and Hospitality

Merchandise Displayers and Window Trimmers (27-1026)

Plan and erect commercial displays, such as those in windows and interiors of retail stores and at trade exhibitions.

Sample job titles: Decorator, Display Associate, Display Decorator, Display Specialist, In-Store Marketing Associate, Merchandiser, Visual Merchandiser (VM), Visual Merchandising Specialist

Entry-Level Educational Requirement: High school diploma or equivalent

Training Requirement: Less than one month on-the-job training

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 30%

Bartenders (35-3011)

Mix and serve drinks to patrons, directly or through waitstaff.

Sample job titles: Banquet Bartender, Bar Captain, Bartender, Mixologist

Entry-Level Educational Requirement: No formal education credential

Training Requirement: Less than one month on-the-job training

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 44%

Waiters and Waitresses (35-3031)

Take orders and serve food and beverages to patrons at tables in dining establishment.

Sample job titles: Banquet Server, Buffet Server, Cocktail Server, Food Runner, Food Server, Restaurant Server, Server, Waiter, Waitress, Waitstaff, Wine Steward/Stewardess

Entry-Level Educational Requirement: No formal education credential

Training Requirement: Less than one-month on-the-job training

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 37%

Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (41-4012)

Sell goods for wholesalers or manufacturers to businesses or groups of individuals. Work requires substantial knowledge of items sold.

Sample job titles: Account Representative, Customer Account Technician, Inside Sales Person, Outside Sales Representative, Route Sales Representative, Sales Consultant, Sales Professional, Sales Representative (Sales Rep), Salesman, Salesperson

Entry-Level Educational Requirement: High school diploma or equivalent

Training Requirement: Between one and twelve months on-the-job training

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 32%

Appendix: Student Completions and Program Outcome Methodology

Exhibit 20 displays the average annual California Community College (CCC) awards conferred during the three academic years between 2017 and 2020, 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 variation 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 records provided by 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, 2021 a). 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, 2021 a).

Job advertisement 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 advertisements often do not reveal the hiring intentions of employers; it is unknown if employers plan to hire one or multiple workers from a single online job ad, or if they are collecting resumes for future hiring needs. A closed job ad may not be the result of a hired worker.

Table 1. 2019 to 2024 job growth, wages, entry-level education, training, and work experience required for the grape farming occupation, Inland Empire/Desert Region

Occupation (SOC)	2019 Jobs	5-Year Change (New Jobs)	5-Year % Change (New Jobs)	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
Farmworkers and Laborers, Crop, Nursery, and Greenhouse (45-2092)	8,556	(401)	(5%)	1,198	\$12.00 to \$14.77	\$12.66	\$27,000	No formal educational credential & 1 month	None

Source: Emsi 2021.1

Table 2. 2019 to 2024 job growth, wages, entry-level education, training, and work experience required for wine production occupational group, Inland Empire/Desert Region

Occupation (SOC)	2019 Jobs	5-Year Change (New Jobs)	5-Year % Change (New Jobs)	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
Packaging and Filling Machine Operators and Tenders (51-9111)	4,864	177	4%	536	\$12.00 to \$25.74	\$14.52	\$33,800	High school diploma or equivalent & 1-12 months	None
First-Line Supervisors of Production and Operating Workers (51-1011)	4,802	15	0%	436	\$18.14 to \$49.62	\$29.52	\$66,200	High school diploma or equivalent & None	Less than 5 years
Mixing and Blending Machine Setters, Operators, and Tenders (51-9023)	1,255	(3)	(0%)	129	\$12.13 to \$26.64	\$16.88	\$38,000	High school diploma or equivalent & 1-12 months	None
Food Batchmakers (51-3092)	1,149	154	13%	177	\$12.00 to \$26.92	\$14.26	\$33,700	High school diploma or equivalent & 1-12 months	None
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders (51-9012)	340	8	2%	35	\$13.06 to \$32.33	\$20.04	\$46,300	High school diploma or equivalent & 1-12 months	None
Total	12,411	351	3%	1,314	-	-	-	-	-

Source: Emsi 2021.1

Table 3. 2019 to 2024 job growth, wages, entry-level education, training, and work experience required for the wine business and hospitality occupational group, Inland Empire/Desert Region

Occupation (SOC)	2019 Jobs	5-Year Change (New Jobs)	5-Year % Change (New Jobs)	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
Waiters and Waitresses (35-3031)	23,888	(1,929)	(8%)	4,001	\$12.00 to \$16.22	\$12.93	\$29,900	No formal educational credential & 1 month	None
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (41-4012)	14,300	331	2%	1,398	\$14.25 to \$51.84	\$27.97	\$69,000	High school diploma or equivalent & 1-12 months	None
Bartenders (35-3011)	5,589	(483)	(9%)	836	\$12.00 to \$15.89	\$12.99	\$29,500	No formal educational credential & 1 month	None
Merchandise Displayers and Window Trimmers (27-1026)	1,487	56	4%	148	\$12.10 to \$23.84	\$15.25	\$35,100	High school diploma or equivalent & 1 month	None
Total	45,264	(2,025)	(11%)	6,384	-	-	-	-	-

Source: Emsi 2021.1