

## Summary

Program LMI Endorsement	Endorsed: All LMI Criteria Met <input type="checkbox"/>	Endorsed: Some LMI Criteria Met <input checked="" type="checkbox"/>	Not LMI Endorsed <input type="checkbox"/>
<b>Program LMI Endorsement Criteria</b>			
Supply Gap:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
	<i>Comments:</i> there is projected to be <b>1,453 annual job openings</b> in the South Central Coast (SCC) Region for these middle-skill agricultural pest control adviser occupations, which <b>is more than the 103 awards conferred by educational institutions.</b>		
Self-Sufficiency Standard Living Wage <sup>1</sup> :	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
	<i>Comments:</i> <b>All (100%) annual job openings</b> for these middle-skill agricultural pest control adviser occupations <b>have entry-level hourly wages below the Ventura County living wage of \$24.03.</b>		
Education:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
	<i>Comments:</i> though <b>the majority (98%) of annual job openings</b> for these middle-skill agricultural pest control adviser occupations typically require a <b>high school diploma or equivalent, between 27% and 36% of workers in the field have completed some college or an associate degree as their highest level of education.</b>		
<b>Additional Considerations</b>			
Emerging Occupation(s):	Yes <input type="checkbox"/>	Some <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	<i>Comments:</i> N/A		

The South Central Coast Center of Excellence for Labor Market Research (SCC COE) prepared this report to determine whether there is a supply gap in the SCC regional labor market related to three middle-skill occupations and one above middle-skill occupation:

- Middle-Skill
  - *Pesticide Handlers, Sprayers, and Applicators, Vegetation (37-3012)*
  - *Agricultural Technicians (19-4012)*
  - *Farmers, Ranchers, and Other Agricultural Managers (11-9013)*
- Above Middle-Skill
  - *Soil and Plant Scientists (19-1013)*

Based on the available data there appears to be a supply gap for these middle-skill agricultural pest control adviser occupations and typical education requirements for these occupations align with a community college education. However, the majority of annual job openings have entry-level wages below the Self-Sufficiency Standard living wage. **Therefore,**

<sup>1</sup> The living wage endorsement criteria in this report uses the University of Washington's Center for Women's Welfare Self-Sufficiency Standard, which the COE refers to as a living wage; the living wage for Los Angeles, San Luis Obispo, Santa Barbara, and Ventura counties, last updated in March 2024.

**due to some of the regional labor market criteria being met, the COE endorses this proposed program.**

Exhibit 1 lists the occupational demand, supply, typical entry-level education, and educational attainment for the occupations included in this report.

**Exhibit 1: Labor Market Endorsement Summary**

Occupation (SOC)	Demand (Annual Openings)	Supply (CC and Non-CC)	Entry-Level Hourly Earnings (25 <sup>th</sup> Percentile)	Typical Entry-Level Education	Community College Educational Attainment
Pesticide Handlers, Sprayers, and Applicators, Vegetation (37-3012)	37	Accounted for below	Ventura: \$17.45	High school diploma or equivalent	27%
Agricultural Technicians (19-4012)	35	Accounted for below	Ventura: \$18.37	Associate degree	36%
Farmers, Ranchers, and Other Agricultural Managers (11-9013)	1,382	103	Ventura: \$16.00	High school diploma or equivalent	31%
<b>Middle-Skill Subtotal</b>	<b>1,453</b>	<b>103</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
Soil and Plant Scientists (19-1013)	24	Accounted for above	Ventura: \$28.21	Bachelor's degree	0%
<b>Above Middle-Skill Subtotal</b>	<b>24</b>	<b>Accounted for above</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
<b>Total</b>	<b>1,477</b>	<b>103</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>

**Demand:**

- The number of jobs related to these middle-skill agricultural pest control adviser occupations is projected to increase 10% through 2029 in the SCC region. There is projected to be 1,453 middle-skill annual job openings due to new job creation and replacements.
- Hourly entry-level wages for these middle-skill agricultural pest control adviser occupations Ventura County range from \$16.00 to \$18.37; All (100%) annual job openings have entry-level wages below the Self-Sufficiency Standard living wage (\$24.53 for Ventura County).
- There were 271 online job postings for these agricultural pest control adviser occupations over the past 12 months. The highest number of postings were for seed technicians, food service technicians, and project biologists.
- The typical entry-level education for these middle-skill agricultural pest control adviser occupations ranges from a high school diploma or equivalent to an associate degree.
- Between 27% and 36% of workers in these middle-skill occupations have completed some college or an associate degree as their highest level of education.

## Supply:

- There was an average of 103 awards conferred by five community colleges in the SCC Region from 2021 to 2024.
- Non-community college institutions did not confer any related awards from 2020 to 2023.
- Due to the low number of students across the SCC Region in Agricultural Pest Control Advisors and Operator (Licensed) (0103.10) programs, data was unavailable for nearly all student outcomes, including:
  - Median annual earnings after exiting.
  - The percentage of students that attained the living wage.
  - The percentage of students that exited their program in 2021-22 and reported that they are working in a job closely related to their field of study.

## Demand

### Occupational Projections:

Exhibit 2 compares historical and projected changes in employment for these occupations compared to the number of jobs in 2019. Notably, employment for these agricultural pest control adviser occupations in Santa Barbara County grew 29% from 2019 to 2024, which is significantly higher when compared to employment for these occupations in the SCC Region, and all other counties in the SCC region. From 2024 to 2029, employment for these agricultural pest control adviser occupations is projected to grow in Santa Barbara and Ventura counties while remaining flat in Northern Los Angeles and San Luis Obispo counties.

Exhibit 2: Historical and Projected Employment for Agricultural Pest Control Adviser Occupations in the SCC Region, 2019-2029

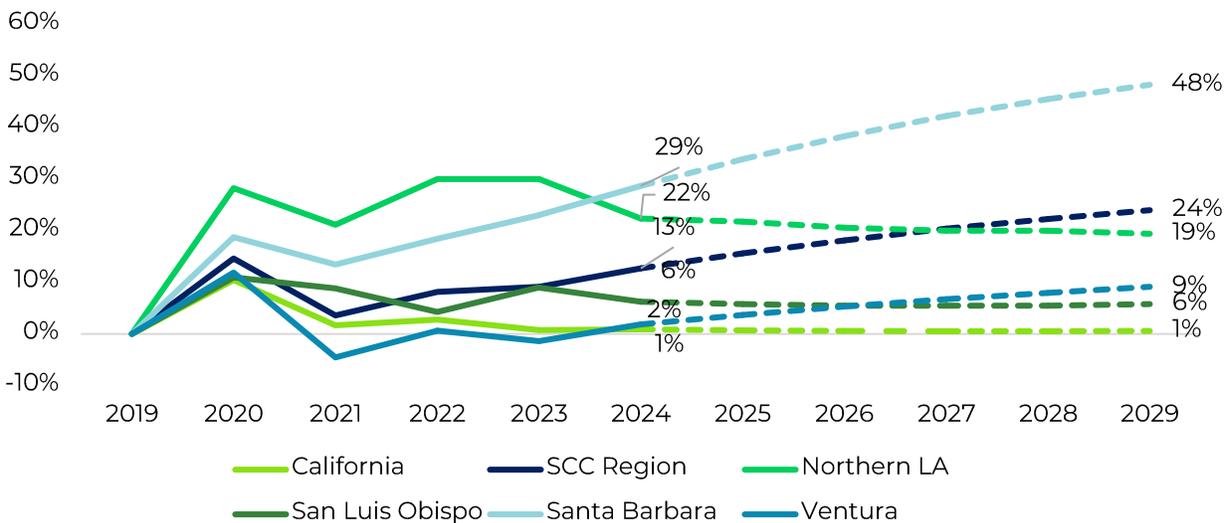


Exhibit 3 shows the five-year occupational demand projections for these agricultural pest control adviser occupations. In the SCC Region, the number of jobs related to these middle-skill occupations is projected to increase 10% through 2029. There are projected to be 1,454 middle-skill jobs available annually. Ventura County has the highest number of middle-skill jobs, but Santa Barbara County has the highest number of middle-skill annual openings.

Exhibit 3: Occupational Demand in the SCC Region<sup>2</sup>

Skill-Level	Geography	2024 Jobs	2029 Jobs	2024-2029 Change	2024-2029 % Change	Annual Openings
Middle-Skill	Northern LA	196	191	(5)	(2%)	22
	San Luis Obispo	656	650	(6)	(1%)	73
	Santa Barbara	4,759	5,485	726	15%	691
	Ventura	5,331	5,713	381	7%	666
<b>Middle-Skill Subtotal</b>		<b>10,939</b>	<b>12,035</b>	<b>1,096</b>	<b>10%</b>	<b>1,454</b>
Above Middle-Skill	Northern LA	13	13	0	1%	1
	San Luis Obispo	41	44	3	7%	4
	Santa Barbara	92	106	14	15%	10
	Ventura	97	104	24	7%	9
<b>Above Middle-Skill Subtotal</b>		<b>244</b>	<b>267</b>	<b>24</b>	<b>10%</b>	<b>24</b>
<b>SCC Region</b>		<b>11,182</b>	<b>12,302</b>	<b>1,120</b>	<b>10%</b>	<b>1,477</b>

### Wages:

The labor market endorsement in this report considers the entry-level hourly wages for these middle-skill agricultural pest control adviser occupations in relation to the living wage of the county where the requesting community college is located. This report was requested by Ventura College, which is in Ventura County. Wages for other counties are included below to provide a complete analysis of the SCC Region.

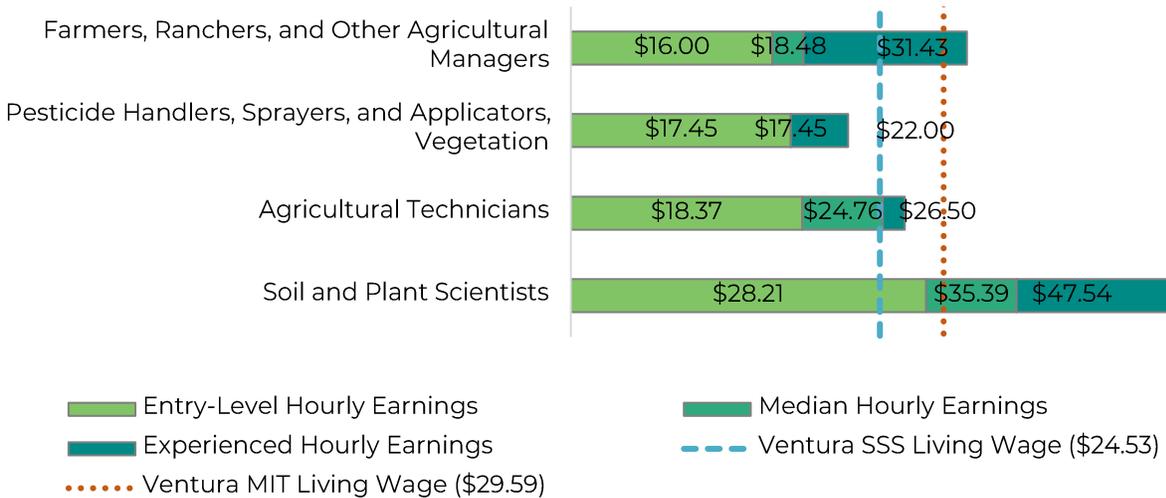
In addition to the Self Sufficiency Standard living wage, data for the MIT Living Wage, updated on February 10, 2025, is provided as a reference. Currently, the MIT Living Wage in Ventura County is \$29.59. Both figures account for geographic-specific costs of necessities such as housing, food, health care, and transportation to assess the cost of living, and are notated in the exhibits below.

<sup>2</sup> Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

## Ventura

All (100%) of annual openings for these middle- skill agricultural pest control adviser occupations have entry-level wages below the Self-Sufficiency Standard living wage for one adult (\$24.53 in Ventura County). Typical entry-level hourly wages range between \$16.00 and \$28.21. Notably, wages for *Pesticide Handlers, Sprayers and Applicators, Vegetation (37-3012)* do not exceed the living wage at any level. Exhibit 4 **Error! Reference source not found.** shows the wage range for each of these occupations in Ventura County and how they compare to the regional living wage, sorted from lowest to highest entry-level wage.

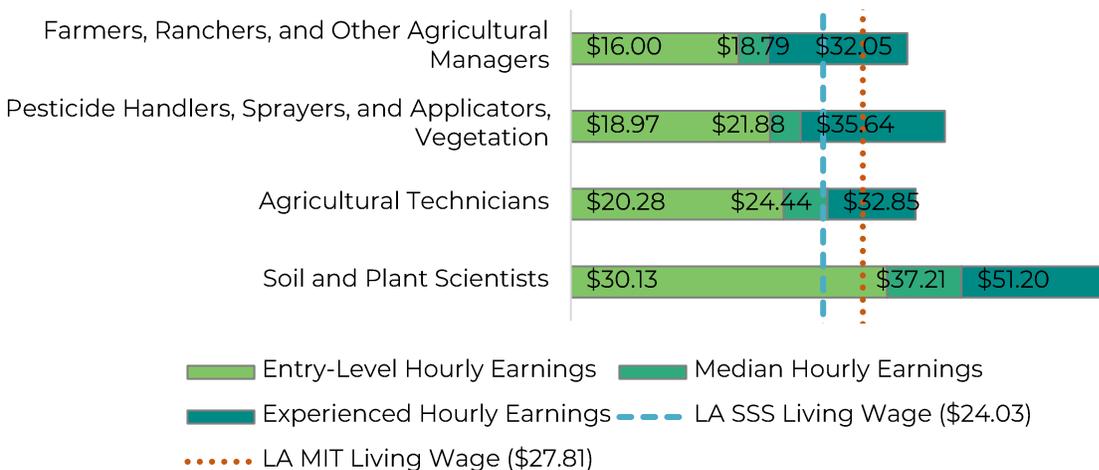
Exhibit 4: Wages by Occupation in Ventura County



## Northern Los Angeles

All (100%) annual openings for these middle-skill agricultural pest control adviser occupations have entry-level wages below the Self-Sufficiency Standard living wage for one adult (\$24.03 in Los Angeles County). Typical entry-level hourly wages range between \$16.00 and \$30.13. Experienced hourly earnings for these agricultural pest control adviser occupations in Northern Los Angeles County are above the living wage. Exhibit 5 shows the wage range for each of these agricultural pest control adviser occupations in Northern Los Angeles and how they compare to the regional living wage, sorted from lowest to highest entry-level wage.

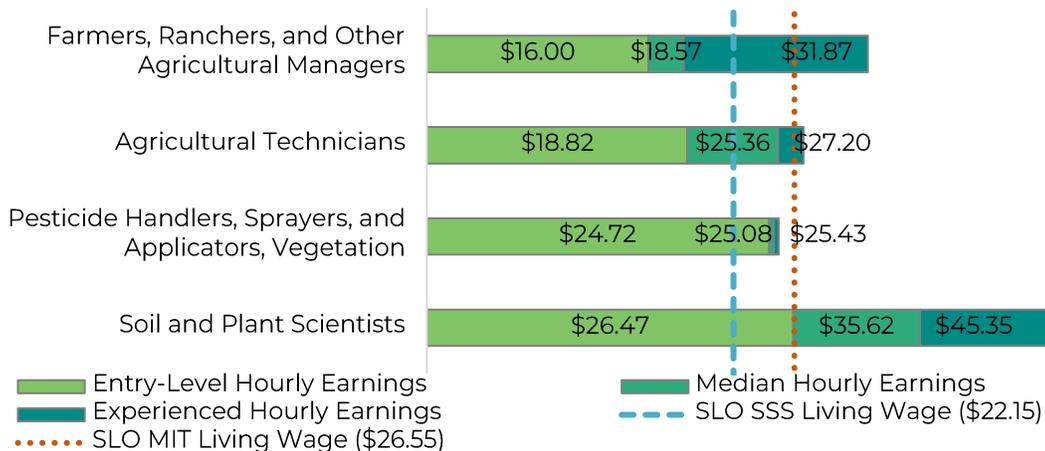
Exhibit 5: Wages by Occupation in Northern Los Angeles County



## San Luis Obispo

The majority (86%) of annual openings for these middle-skill agricultural pest control adviser occupations have entry-level wages below the Self-Sufficiency Standard living wage for one adult (\$22.15 in San Luis Obispo County). Typical entry-level hourly wages range between \$16.00 and \$26.47. Exhibit 6 shows the wage range for each of these agricultural pest control adviser occupations in San Luis Obispo County and how they compare to the regional living wage, sorted from lowest to highest entry-level wage.

Exhibit 6: Wages by Occupation in San Luis Obispo County

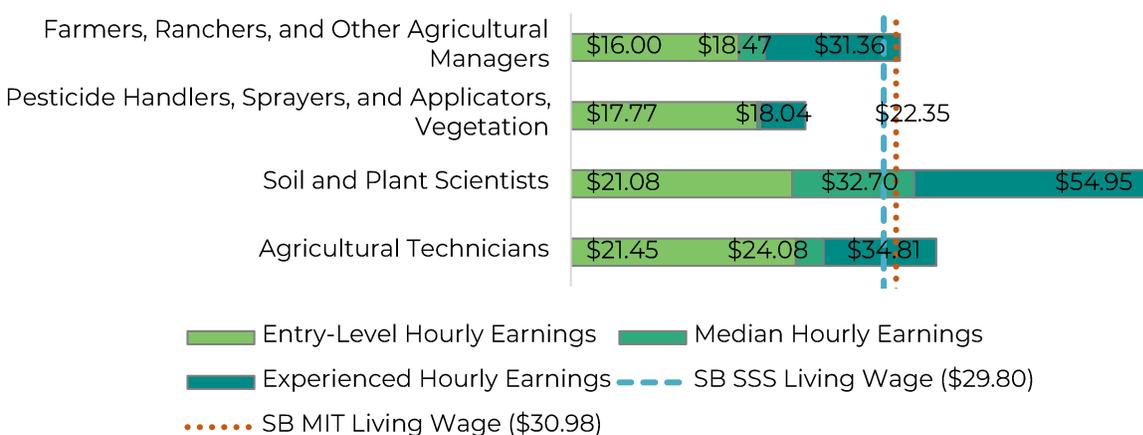


## Santa Barbara

All (100%) annual openings for these middle-skill agricultural pest control adviser occupations have entry-level wages below the Self-Sufficiency Standard living wage for one adult (\$29.80 in Santa Barbara County). Typical entry-level hourly wages range between \$16.00 and \$21.45. Experienced level wages are above the living wage for *Farmers, Ranchers, and Other Agricultural Managers (11-9013)* and *Agricultural Technicians (19-4012)*. Notably, wages for *Pesticide Handlers, Sprayers and Applicators, Vegetation (37-3012)* do not exceed the living wage at any level.

Exhibit 7 shows the wage range for each of these occupations in Santa Barbara County and how they compare to the regional living wage, sorted from lowest to highest entry-level wage.

Exhibit 7: Wages by Occupation in Santa Barbara County



## Job Postings:

There were 271 online job postings related to these agricultural pest control adviser occupations listed in the past 12 months in the SCC Region. Exhibit 8 shows the number of job postings by county. Approximately 42% of job postings were in Ventura County.

Exhibit 8: Number of Job Postings by County (n=271)

County	Job Postings	Percentage of Job Postings
Ventura	115	42%
Santa Barbara	73	27%
San Luis Obispo	67	25%
Northern Los Angeles	16	6%
<b>Total Postings</b>	<b>271</b>	<b>100%</b>

Of the 271 postings, the majority (39%) were for *Agricultural Technicians (19-4012)*, followed by *Farmers, Ranchers, and Other Agricultural Managers (11-9013)*, as shown in Exhibit 9.

Exhibit 9: Number of Job Postings by Occupation (n=271)

Occupation	Job Postings	Percentage of Job Postings
Agricultural Technicians	105	39%
Farmers, Ranchers, and Other Agricultural Managers	96	35%
Soil and Plant Scientists	44	16%
Pesticide Handlers, Sprayers, and Applicators, Vegetation	26	10%
<b>Total Postings</b>	<b>271</b>	<b>100%</b>

The top employers in the region, by number of job postings, are shown in Exhibit 10.

Exhibit 10: Top Employers by Number of Job Postings (n=271)

Employer	Job Postings	Percentage of Job Postings
State of California	14	5%
Actalent	11	4%
Stantec	11	4%
Department Of State Hospitals	7	3%
Vangst	6	2%
University of California-Santa Barbara	5	2%
Ventura County Community College District	5	2%
Bayer	5	2%
ManpowerGroup	5	2%
Lincoln Industrial	4	1%

The top specialized, soft, and computer skills listed by those most frequently mentioned in job postings (denoted in parentheses) are shown in Exhibit 11.

Exhibit 11: Top Skills by Number of Job Postings (n=271)

Top Specialized Skills	Top Soft Skills	Top Computer Skills
Lifting Ability (59)	Communication (137)	Microsoft Excel (37)
Agriculture (55)	Management (80)	Microsoft Office (30)
Irrigation (Landscaping And Agriculture) (47)	Operations (76)	Spreadsheets (23)
Food Safety And Sanitation (46)	Leadership (50)	Microsoft Word (21)
Biology (33)	Detail Oriented (48)	Microsoft PowerPoint (13)
Packaging And Labeling (28)	Customer Service (46)	Microsoft Teams (13)
Plant Science (27)	Coordinating (39)	Microsoft Project (11)
Sanitation (27)	Research (39)	Microsoft Outlook (10)
Good Driving Record (25)	Microsoft Excel (37)	Productivity Software (8)
Fertilizers (24)	Planning (37)	SAP Applications (7)

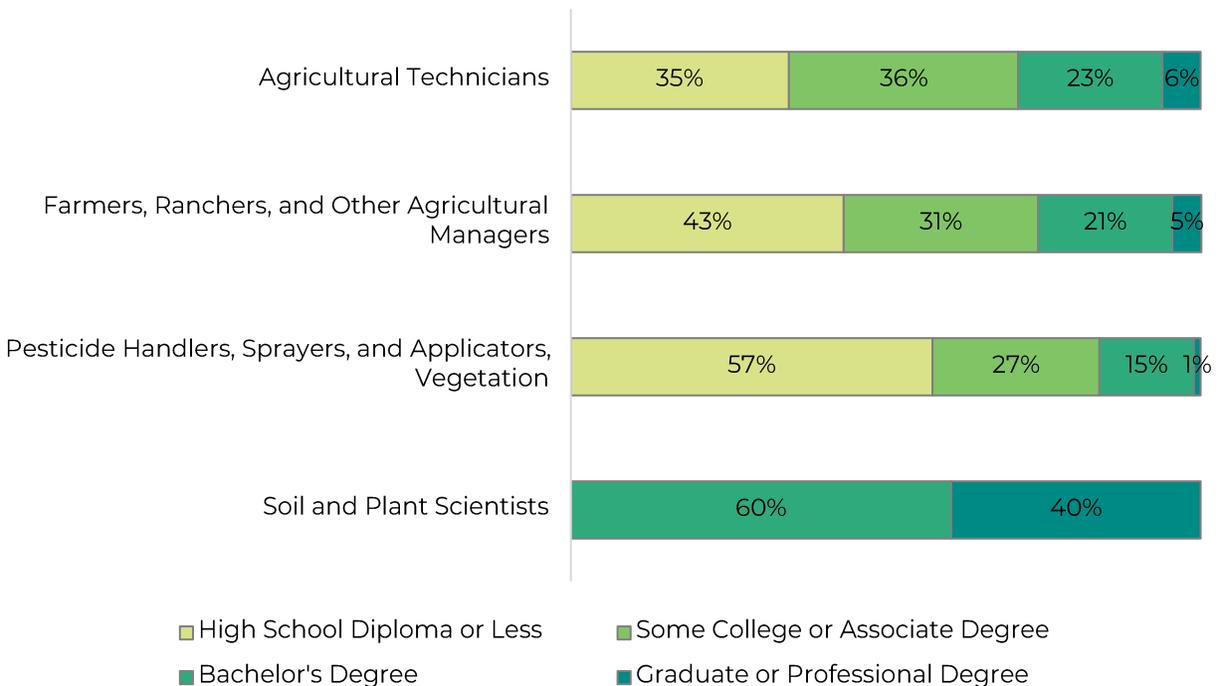
## Educational Attainment:

The Bureau of Labor Statistics (BLS) lists the following as the typical entry-level education for these agricultural pest control adviser occupations:

- High School Diploma or Equivalent
  - *Farmers, Rancher, and Other Agricultural Managers (11-9013)*
  - *Pesticide Handlers, Sprayers, and Applicators, Vegetation (37-3012)*
- Associate degree
  - *Agricultural Technicians (19-4012)*
- Bachelor's Degree
  - *Soil and Plant Scientists (19-1013)*

The national-level educational attainment data indicates between 27% and 36% of workers in these middle-skill occupations have completed some college or an associate degree as their highest level of education. Exhibit 12 shows the educational attainment for each occupation, sorted by highest community college educational attainment to lowest.

Exhibit 12: National-level Educational Attainment for Occupations



Of the 51% of the cumulative job postings for these agricultural pest control adviser occupations that listed a minimum education requirement in the SCC Region, 55% (76) requested a high school diploma or an associate degree, 40% (55) requested a bachelor's degree, and 4% (6) requested a graduate or professional degree.

## Educational Supply

### Community College Supply:

Exhibit 13 shows the three-year average number of awards conferred by community colleges in the related TOP codes:

- Agriculture Technology and Sciences, General (0101.00)
- Agricultural Pest Control Adviser and Operator (Licensed) (0103.10)
- Viticulture, Enology, and Wine Business (0101.00)
- Horticulture (0109.00)
- Landscape Design and Maintenance (0109.10)
- Nursery Technology (0109.30)

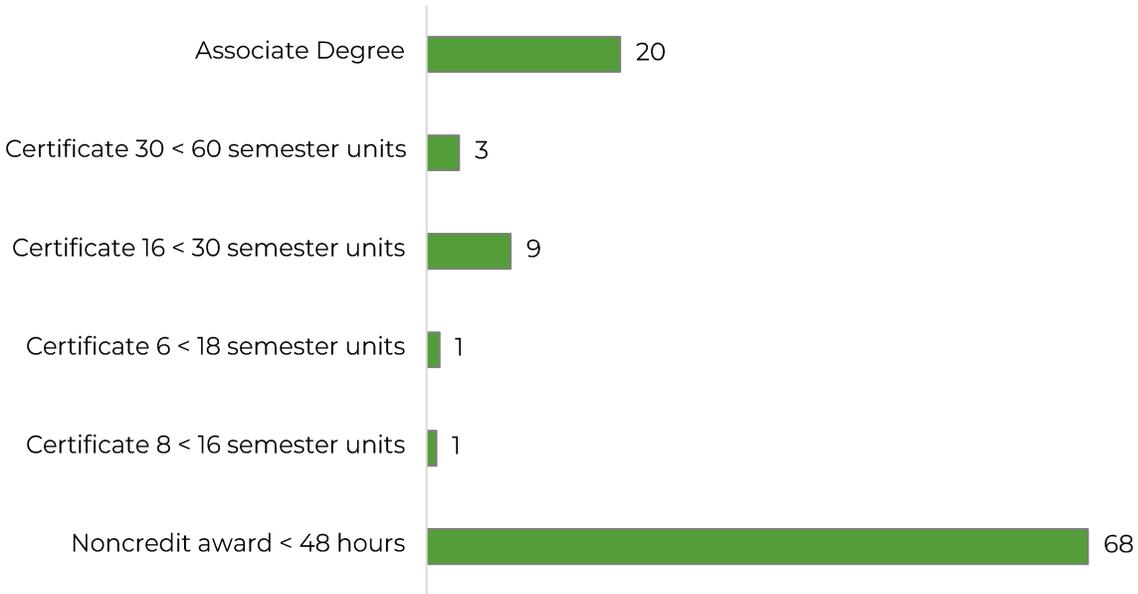
The colleges with the most completions in the region are Santa Barbara (68), followed by Allan Hancock (21), and College of the Canyons (8).

Exhibit 13: Regional Community College Awards (Certificates and Degrees), 2021-2024

TOP Code	Program	College	2021-2022 Awards	2022-2023 Awards	2023-2024 Awards	3-Year Award Average
0101.00	Agriculture Technology and Science, General	Allan Hancock	6	7	21	11
<b>Supply Subtotal/Average</b>			<b>6</b>	<b>7</b>	<b>21</b>	<b>11</b>
0103.10	Agriculture Pest Control Adviser and Operator (Licensed)	Allan Hancock	0	3	3	2
<b>Supply Subtotal/Average</b>			<b>0</b>	<b>3</b>	<b>3</b>	<b>2</b>
0104.00	Viticulture, Enology, and Wine Business	Allan Hancock	12	4	8	8
		Canyons	1	1	2	1
		Cuesta	0	1	3	1
<b>Supply Subtotal/Average</b>			<b>13</b>	<b>6</b>	<b>13</b>	<b>11</b>
0109.00	Horticulture	Antelope Valley	1	7	1	3
		Canyons	7	14	0	7
		Santa Barbara	3	3	3	3
<b>Supply Subtotal/Average</b>			<b>11</b>	<b>24</b>	<b>4</b>	<b>13</b>
0109.10	Landscape Design and Maintenance	Antelope Valley	1	2	0	1
		Santa Barbara	71	44	76	64
<b>Supply Subtotal/Average</b>			<b>72</b>	<b>46</b>	<b>76</b>	<b>65</b>
0109.30	Nursery Technology	Santa Barbara	0	0	4	1
<b>Supply Subtotal/Average</b>			<b>0</b>	<b>0</b>	<b>4</b>	<b>1</b>
<b>Supply Total/Average</b>			<b>102</b>	<b>86</b>	<b>121</b>	<b>103</b>

Exhibit 14 shows the annual average community college awards by type from 2021-22 to 2023-24. The plurality of the awards are for noncredit awards of less than 48 hours, followed by associate degrees.

## Exhibit 14: Annual Average Community College Awards by Type, 2021-2024



### Community College Student Outcomes:

Exhibit 15 shows the Strong Workforce Program (SWP) metrics for Agricultural Pest Control Adviser and Operator (Licensed) (0103.10) programs at Ventura County Community College District (VCCCD), the SCC Region, and California

A review of data available in the Chancellor's Office Curriculum Inventory (COCI) shows that Ventura and Allan Hancock are the only two colleges that offer programs under the Agricultural Pest Control Adviser and Operator (0103.10) TOP code. However, data for the 2023-24 academic year is not available, likely due to a small number of students. Therefore, all metrics are unavailable for the SCC Region.

There were 265 Agricultural Pest Control Adviser and Operator (0103.10) students throughout the state in the 2023-24 academic year. California students that exited Agricultural Pest Control Adviser and Operator (0103.10) programs in the 2022-23 academic year had median annual earnings of \$61,452 (or 29.54 per hour). Approximately 79% of students attained a living wage

### Exhibit 15: Agricultural Pest Control Adviser and Operator (0103.10) Strong Workforce Program Metrics, 2023-24<sup>34</sup>

SWP Metric	VCCCD	SCC Region	California
SWP Students	Data Unavailable	Data Unavailable	265

<sup>3</sup> All SWP metrics are for 2023-24 unless otherwise noted. Metrics data is sourced from DataVista.

<sup>4</sup> Data that is not available in DataVista is denoted in Exhibit 15 shows the Strong Workforce Program (SWP) metrics for Agricultural Pest Control Adviser and Operator (Licensed) (0103.10) programs at Ventura County Community College District (VCCCD), the SCC Region, and California

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SWP Metric	VCCCD	SCC Region	California
SWP Students Who Earned 9 or More Career Education Units in the District in a Single Year	Data Unavailable	Data Unavailable	43%
SWP Students Who Completed a Noncredit CTE or Workforce Preparation Course	Data Unavailable	Data Unavailable	Data Unavailable
SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status	Data Unavailable	Data Unavailable	Data Unavailable
SWP Students Who Transferred to a Four-Year Postsecondary Institution (2022-23)	Data Unavailable	Data Unavailable	Data Unavailable
SWP Students with a Job Closely Related to Their Field of Study (2021-22)	Data Unavailable	Data Unavailable	Data Unavailable
Median Annual Earnings for SWP Exiting Students (2022-23)	Data Unavailable	Data Unavailable	\$61,452 (\$29.54)
Median Change in Earnings for SWP Exiting Students (2022-23)	Data Unavailable	Data Unavailable	32%
SWP Exiting Students Who Attained the Living Wage (2022-23)	Data Unavailable	Data Unavailable	79%

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Exhibit 15 as "data unavailable." Data may not be available for various reasons, including cases where data is masked to protect personally identifiable information.

# Regional Demographics

This section examines demographic data for SCC community college students in Agricultural Pest Control Adviser and Operator (0103.10) programs compared to the SCC labor force, along with occupational data, to identify potential diversity and equity issues addressable by community college programs.

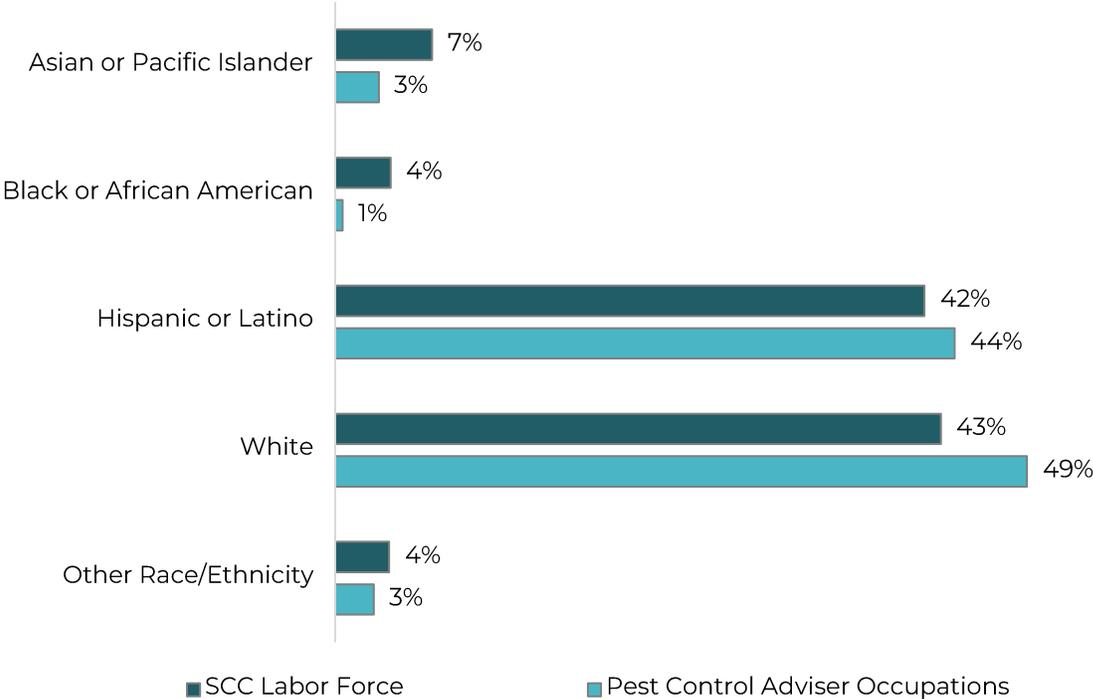
As noted in the Strong Workforce Program Metrics section, though SCC Region community colleges offer Agricultural Pest Control Adviser and Operator (0103.10) programs, student data is unavailable due to a low number of students. Therefore, there is no student demographic data. For these reasons, this section focuses only on demographic data for the SCC Labor Force and these agricultural pest control adviser occupations.

## Ethnicity:

Exhibit 16 compares the ethnicity of the overall SCC labor force, and occupation-specific data for the four pest control adviser occupations included in this report.

Notably, 49% of workers employed in these pest control adviser occupations are white, which is higher than the labor force (43%). Conversely, 44% of the workers in these occupations are Hispanic or Latino, which is similar to the labor force (42%).

Exhibit 16: Program and County Demographics by Ethnicity

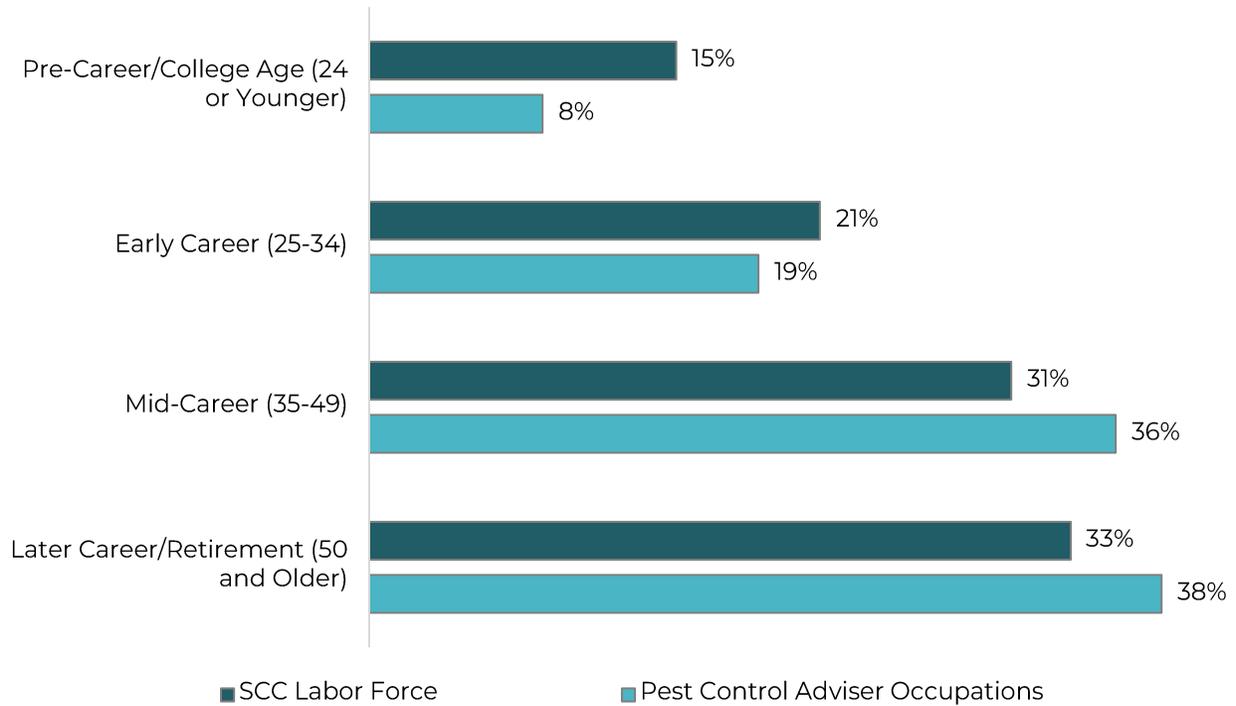


## Age:

Exhibit 17 compares the age of the overall SCC labor force and occupation-specific data for the four pest control adviser occupations included in this report.

Notably, 38% of workers in these pest control adviser occupations are Later Career/Retirement (50 and Older) age, which is slightly higher than the labor force (33%).

Exhibit 17: Program and County Demographics by Age



**Sex:**

Exhibit 18 compares the sex of the overall SCC labor force, and occupation-specific data for these pest control adviser occupations.

There is a significant majority of male workers (68%) in these occupations, which is higher when compared to the SCC labor force (54% male).

Exhibit 18: Program and County Demographics by Sex



## Appendix A: Methodology

### Traditional Labor Market Data

The SCC COE prepared this report by analyzing data from occupations and education programs. Occupational data is derived from Lightcast, a labor market analytics firm that consolidates data from the California Employment Development Department (EDD), U.S. Bureau of Labor Statistics (BLS) and other government agencies.

Data included in this analysis represents the labor market demand for relevant positions most closely related to the proposed program as expressed by the requesting college in consultation with the SCC COE. Traditional labor market information was used to show current and projected employment based on data trends, as well as annual average awards granted by regional community colleges.

Program supply data is drawn from two systems: Taxonomy of Programs (TOP) and Classification of Instructional Programs (CIP).

Using a TOP-SOC crosswalk, the SCC COE identified middle-skill jobs for which programs within these TOP codes train. Middle-skill jobs include:

- All occupations that require an educational requirement of some college, associate degree or apprenticeship;
- All occupations that require a bachelor's degree, but also have more than one-third of their existing labor force with an educational attainment of some college or associate degree; or
- All occupations that require a high school diploma or equivalent or no formal education, but also require short- to long-term on-the-job training where multiple community colleges have existing programs.

The SCC COE determined labor market supply for an occupation or SOC code by analyzing the number of program completers or awards in a related TOP or CIP code. The COE developed a "supply table" with this information, which is the source of the program supply data for this report. TOP code data comes from the California Community Colleges Chancellor's Office MIS Data Mart ([datamart.cccco.edu](http://datamart.cccco.edu)) and CIP code data comes from the Integrated Postsecondary Education Data System ([nces.ed.gov/ipeds/use-the-data](http://nces.ed.gov/ipeds/use-the-data)), also known as IPEDS.

TOP is a system of numerical codes used at the state level to collect and report information on California community college programs and courses throughout the state that have similar outcomes. CIP codes are a taxonomy of academic disciplines at institutions of higher education in the United States and Canada. Institutions outside of the California Community College system do not use TOP codes in their reporting systems.

### Online Job Postings Data

Online job postings data, also known as real-time labor market information, captures job post advertisements for occupations relevant to the field of study which can signal demand and show what employers are looking for in potential employees but is not a perfect measure of the quantity of open positions. Online job postings data is sourced from Lightcast, a labor market analytics firm that scrapes, collects, and organizes data from online job boards such as LinkedIn, Indeed, Glassdoor, Monster, GovernmentJobs.com, and thousands more.

There are several limitations when analyzing job postings. A single job posting may not represent a single job opening, as employers may be creating a pool of candidates for future openings or hiring for multiple positions with a single posting. Additionally, not all jobs are posted online, and jobs may be filled through other methods such as internal promotion, word-of-mouth advertising, physical job boards, or a variety of other channels.

Additionally, Lightcast uses natural language processing (NLP) to determine the related company, industry, occupation, and other information for each job posting. However, NLP has limitations that include understanding contextual words of phrases; determining differences in words that can be used as nouns, verbs, and/or adjectives; and misspellings or grammatical errors.<sup>5</sup> For these reasons, job postings could be assigned to the wrong employer, industry, or occupation within Lightcast’s database.

## Geography

The South Central Coast region encompasses San Luis Obispo, Santa Barbara, and Ventura counties, as well as parts of Northern Los Angeles County. Exhibit 19 shows the 34 ZIP codes used to define Northern Los Angeles County.

Exhibit 19: Northern Los Angeles ZIP Codes

ZIP Code	Primary City	ZIP Code	Primary City
91310	Castaic	93532	Lake Hughes
91321	Newhall	93534	Lancaster
91322	Newhall	93535	Lancaster
91350	Santa Clarita	93536	Lancaster
91351	Canyon Country	93539	Lancaster
91354	Valencia	93543	Little Rock
91355	Valencia	93544	Llano
91380	Santa Clarita	93550	Palmdale
91381	Stevenson Ranch	93551	Palmdale
91382	Santa Clarita	93552	Palmdale
91383	Santa Clarita	93553	Pearblossom
91384	Castaic	93563	Valyermo
91385	Valencia	93584	Lancaster
91386	Canyon Country	93586	Lancaster
91387	Canyon Country	93590	Palmdale
91390	Santa Clarita	93591	Palmdale
93510	Acton	93599	Palmdale

Though traditional labor market information is available at the ZIP code level, it does not always add up to data reported at the county level for multiple reasons:

- ZIP codes are not official geographically bounded areas, unlike states and counties.
- ZIP codes may cross county lines, such as ZIP code 93461, which is primarily in San Luis Obispo County, but also crosses into Kern County.

For these reasons, the number of jobs and average annual openings for each county may not add up to the total for the SCC Region. However, considering jobseekers may cross county lines for opportunities, the traditional labor market data is reflective of opportunities available to jobseekers in the SCC Region.

Additionally, job postings data is available only at the city or county level. To analyze job postings for the entire SCC region, the SCC COE developed a list of cities available in Lightcast for analysis. Additionally, demographic data is not available at the ZIP code level but is available at the Census Bureau’s Public Use Microdata Area (PUMA) level. Demographic data was sourced via IPUMS and analyzed by the SCC COE.

<sup>5</sup> K. R. Chowdhary, *Fundamentals of Artificial Intelligence* (Basingstoke: Springer Nature, 2020), <https://link.springer.com/book/10.1007/978-81-322-3972-7>.

## Appendix B: Data Sources

Data Type	Source
Occupational Projections, Wages, and Job Postings	Traditional and real-time labor market information are captured using data from <a href="#">Lightcast</a> , a labor market analytics firm.
Living Wage	Per the CCCCO, this report's endorsement criteria uses the <a href="#">University of Washington's Center for Women's Welfare Self-Sufficiency Standard</a> last updated in March 2024.  The <a href="#">MIT Living Wage</a> , updated on February 10, 2025, is a nationally recognized living wage metric and is provided for reference.
Typical Education and Training Requirements, and Educational Attainment	The <a href="#">Bureau of Labor Statistics (BLS)</a> uses a system to assign categories for entry-level education, work experience in a related occupation, and typical on-the-job training to each occupation for which BLS publishes projections data.
Emerging Occupation Descriptions, Additional Education Requirements, and Employer Preferences	The <a href="#">O*NET</a> database includes information on skills, abilities, knowledges, work activities, and interests associated with occupations.
Educational Supply	The <a href="#">CCCCO Data Mart</a> provides information about students, courses, student services, outcomes and faculty and staff.  The <a href="#">National Center for Education Statistics (NCES) Integrated Postsecondary Integrated Data System (IPEDS)</a> collects data on the number of postsecondary awards earned (completions).
Student Metrics and Demographics	<a href="#">Data Vista</a> , a statewide data system supported by the California Community Colleges Chancellor's Office provides data on progress, success, employment, and earnings outcomes for California community college students.
Population and Occupation Demographics	The <a href="#">Census Bureau's American Community Survey (ACS)</a> is the premier source for detailed population and housing information.  Data is sourced from <a href="#">IPUMS USA</a> , a database providing access to ACS and other Census Bureau data products.

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

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