










Pest Control Workers

Labor Market Analysis: San Diego County

November 2021

Summary

NEW PROGRAM RECOMMENDATION?	EVIDENCE OF A SUPPLY GAP?	AT OR ABOVE THE LIVING WAGE?	EXPECTED LEVEL OF EDUCATION
 <p>Proceed with New Program</p>	 	 	<input type="checkbox"/> Bachelor's Degree+ <input type="checkbox"/> Associate Degree <input type="checkbox"/> Some College or Certificate
<p>SUPPORT FOR PROGRAM MODIFICATION?</p>  	<p>NUMBER OF INSTITUTIONS THAT PROVIDE TRAINING</p> <p>LOW</p> 	<p>NUMBER OF ANNUAL JOB OPENINGS</p> <p>MEDIUM</p> 	<input checked="" type="checkbox"/> HS Diploma or Equivalent <input type="checkbox"/> Less than a HS Diploma <input type="checkbox"/> Apprenticeship

The San Diego-Imperial Center of Excellence for Labor Market Research (COE) developed this brief to assist the region's community colleges with strategic planning and program development. According to available labor market information, *Pest Control Workers* in San Diego County have a labor market demand of 182 annual job openings (while average demand for a single occupation in San Diego County is 242 annual job openings), and three educational institutions in San Diego County supply 53 awards for this occupation, suggesting that there is a supply gap in the labor market. Entry-level wages and median wages for this occupation are above the living wage. This brief recommends proceeding with developing a new program and supports a program modification because 1) there is a supply gap; and 2) entry-level and median wages are above the living wage.

Introduction

This report provides labor market information in San Diego County for the following occupational code in the Standard Occupational Classification (SOC)¹ system:

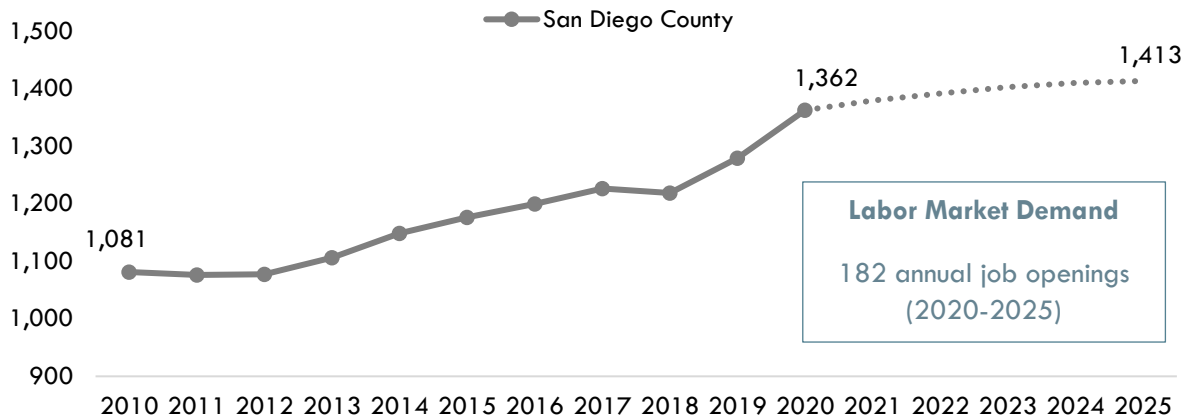
Pest Control Workers (SOC 37-2021): Apply or release chemical solutions or toxic gases and set traps to kill or remove pests and vermin that infest buildings and surrounding areas. Sample reported job titles include:

- Termite Technician
- Exterminator
- Pest Control Operator
- Pest Technician
- Pest Control Technician
- Commercial Pest Control Technician
- Technician
- Service Technician
- Residential Pest Control Technician
- Pest Control Chemical Technician

Projected Occupational Demand

Between 2020 and 2025, *Pest Control Workers* are projected to increase by **51** net jobs or **four** percent (Exhibit 1). Employers in San Diego County will need to hire **182** workers annually to fill new jobs and backfill jobs due to attrition caused by turnover and retirement, for example.

Exhibit 1: Number of Jobs for Pest Control Workers (2010-2025)²



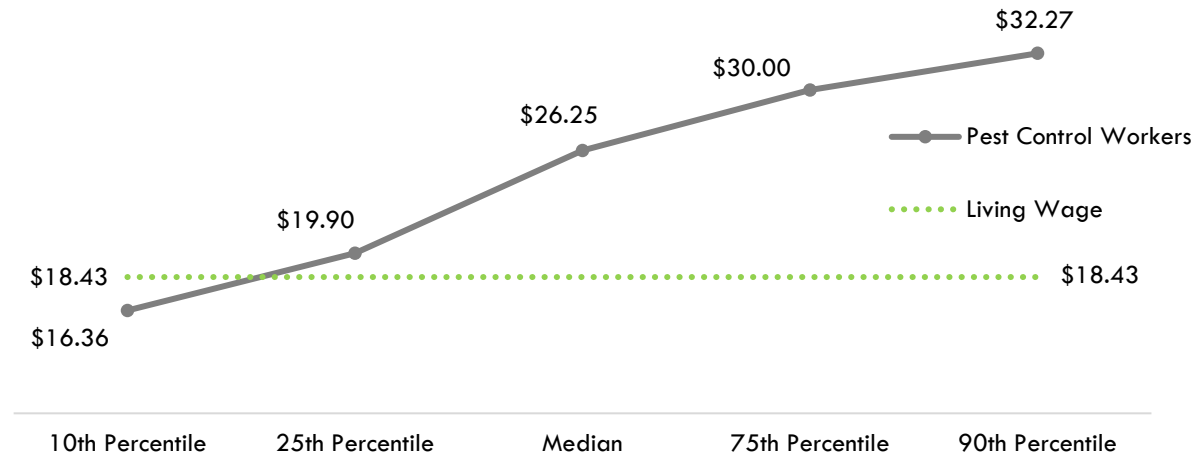
¹ The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. [bls.gov/soc](https://www.bls.gov/soc/).

² EMSI 2021.03; QCEW, Non-QCEW, Self-Employed.

Earnings

Pest Control Workers receive entry-level hourly earnings of **\$19.90**; this is more than the living wage for a single adult in San Diego County, which is **\$18.43** per hour (Exhibit 2).³

Exhibit 2: Hourly Earnings⁴ for *Pest Control Workers* in San Diego County⁵



³ "Family Needs Calculator (formerly the California Family Needs Calculator)," Insight: Center for Community Economic Development, last updated 2021. insightccd.org/family-needs-calculator/.

⁴ 10th and 25th percentiles could be considered entry-level wages, and 75th and 90th percentiles could be considered experienced wages for individuals who may have been in the occupation longer, received more training than others, etc.

⁵ EMSI 2021.03; QCEW, Non-QCEW, Self-Employed.

Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of awards in related Taxonomy of Programs (TOP) or Classification of Instructional Programs (CIP) codes.⁶ There are **three** TOP codes and **three** CIP codes related to *Pest Control Workers* (Exhibit 3).

Exhibit 3: Related TOP and CIP Codes for Pest Control Workers

TOP or CIP Code	TOP or CIP Program Title
TOP 0109.10	Landscape Design and Maintenance
TOP 0109.30	Nursery Technology
TOP 0109.40	Turfgrass Technology
CIP 01.0605	Landscaping and Groundskeeping
CIP 01.0606	Plant Nursery Operations and Management
CIP 01.0607	Turf and Turfgrass Management

According to TOP data, **three** community colleges supply the region with awards for these occupations: **Cuyamaca College**, **MiraCosta College**, and **Southwestern College**. According to CIP data, **no** non-community-college institution supplies the region with awards (Exhibit 4).

Exhibit 4: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions (Program Year 2016-17 through PY2019-20 Average)

TOP6 or CIP	TOP6 or CIP Title	3-Yr Annual Average CC Awards (PY17-18 to PY19-20)	Other Educational Institutions 3-Yr Annual Average Awards (PY16-17 to PY18-19)	3-Yr Total Average Supply (PY16-17 to PY19-20)
0109.10	Landscape Design and Maintenance	31	0	31
	• Cuyamaca	17	0	
	• MiraCosta	10	0	
	• Southwestern	4	0	
0109.30	Nursery Technology	20	0	20
	• Cuyamaca	8	0	
	• MiraCosta	11	0	
	• Southwestern	1	0	

⁶ TOP data comes from the California Community Colleges Chancellor's Office MIS Data Mart (datamart.cccco.edu) and CIP data comes from the Integrated Postsecondary Education Data System (nces.ed.gov/ipeds/use-the-data).

TOP6 or CIP	TOP6 or CIP Title	3-Yr Annual Average CC Awards (PY17-18 to PY19-20)	Other Educational Institutions 3-Yr Annual Average Awards (PY16-17 to PY18-19)	3-Yr Total Average Supply (PY16-17 to PY19-20)
0109.40	Turfgrass Technology	2	0	2
	• Cuyamaca	2	0	
			Total	53

Demand vs. Supply

Comparing labor demand (annual openings) with labor supply⁷ suggests that there is a **supply gap** for this occupation in San Diego County, with 182 annual openings and 53 awards. Comparatively, there are 1,569 annual openings in California and 320 awards, suggesting that there is a supply gap across the state⁸ (Exhibit 5).

Exhibit 5: Labor Demand (Annual Openings) Compared with Labor Supply (Average Annual Awards)

	Demand (Annual Openings)	Supply (Total Annual Average Supply)	Supply Gap or Oversupply
San Diego	182	53	129
California	1,569	320	1,249

Please note: This is a basic analysis of supply and demand of labor. The data does not include workers currently in the labor force who could fill these positions or workers who are not captured by publicly available data. This data should be used to discuss the potential gaps or oversupply of workers; however, it should not be the only basis for determining whether or not a program should be developed.

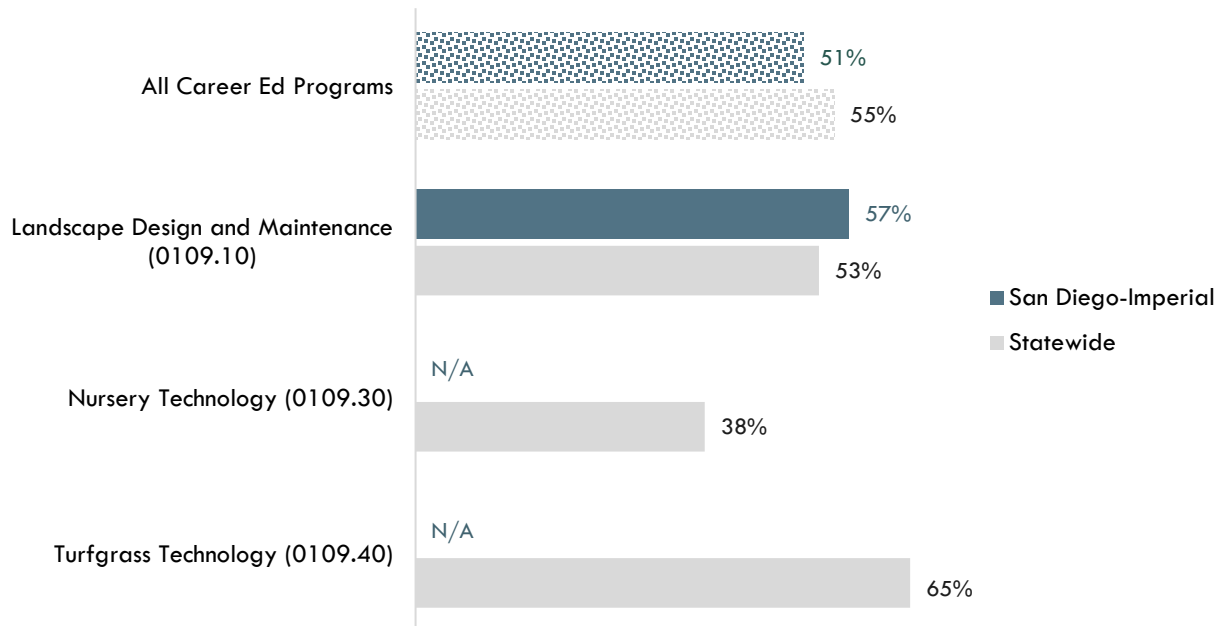
⁷ Labor supply can be found from two different sources: EMSI or the California Community Colleges Chancellor's Office MIS Data Mart. EMSI uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.

⁸ "Supply and Demand," Centers of Excellence Student Outcomes, coecc.net/Supply-and-Demand.aspx.

Student Outcomes and Regional Comparisons

According to the California Community Colleges LaunchBoard, 57 percent of students in the San Diego-Imperial region earned a living wage after completing a program related to *Pest Control Workers*, compared to 38 to 65 percent statewide and 55 percent of students in Career Education programs in general across the state (Exhibit 6a).⁹

Exhibit 6a: Percentage of Students Who Earned a Living Wage by Program (PY 2017-18)¹⁰

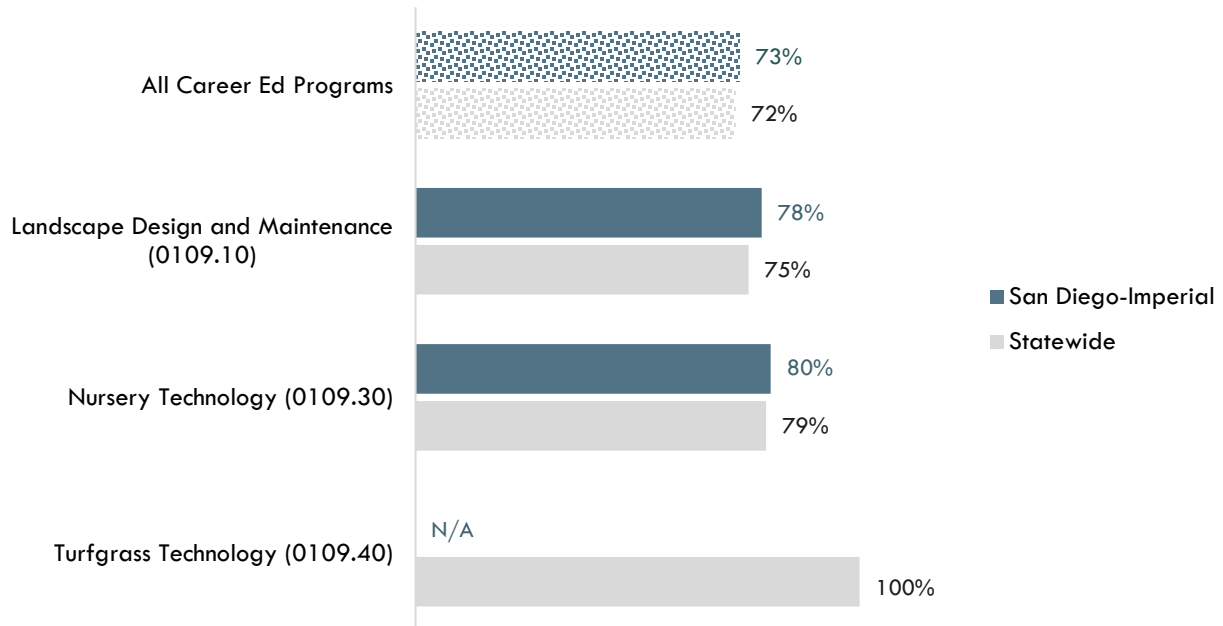


⁹ "California Community Colleges Strong Workforce Program," California Community Colleges, calpassplus.org/LaunchBoard/SWP.aspx.

¹⁰ Among completers and skills builders who exited, the proportion of students who attained a living wage.

According to the California Community Colleges LaunchBoard, 78 to 80 percent of students statewide obtained a job closely related to their field of study after completing a program related to *Pest Control Workers*, compared to 75 to 100 percent statewide and 72 percent of students in Career Education programs in general across the state (Exhibit 6b).¹¹

Exhibit 6b: Percentage of Students in a Job Closely Related to Field of Study by Program (PY 2016-17)¹²



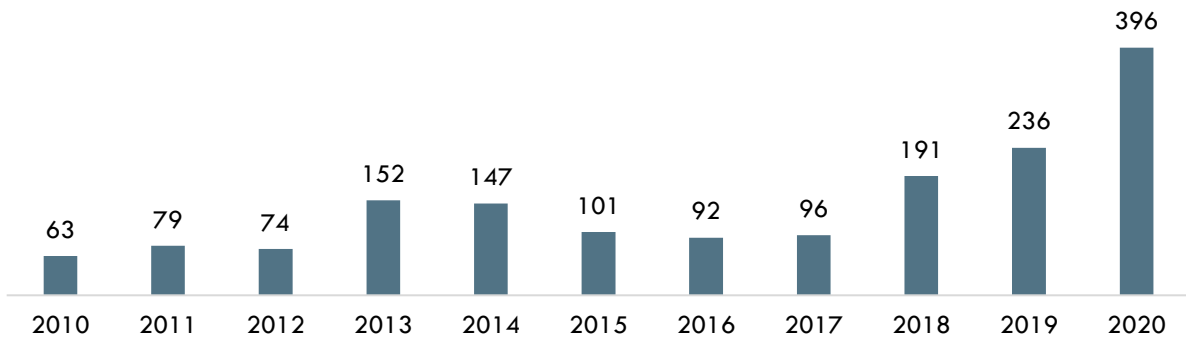
¹¹ "California Community Colleges Strong Workforce Program," California Community Colleges, calpassplus.org/LaunchBoard/SWP.aspx.

¹² Most recent year with available data is Program Year 2017-18. Percentage of Students in a Job Closely Related to Field of Study: Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study.

Online Job Postings

This report analyzes not only historical and projected (traditional LMI) data, but also recent data from online job postings (real-time LMI). Online job postings may provide additional insight about recent changes in the labor market that are not captured by historical data. Between 2010 and 2020, there was an average of 148 online job postings per year for *Pest Control Workers* in San Diego County (Exhibit 7). Please note that online job postings do **not** equal labor market demand; demand is represented by annual job openings (see Exhibit 1). Employers may post a position multiple times for various reasons, such as increasing the pool of applicants, for example.

Exhibit 7: Number of Online Job Postings for *Pest Control Workers* in San Diego County (2010-2020)¹³



¹³ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2010-2020.

Top Employers

Between January 1, 2018 and December 31, 2020, the top five employers in San Diego County for this occupation were [ServiceMaster](#), [Orkin](#), [Dewey Pest Control Company](#), [Truly Nolen](#), and [Rollins Incorporated](#) based on online job postings (Exhibit 8).

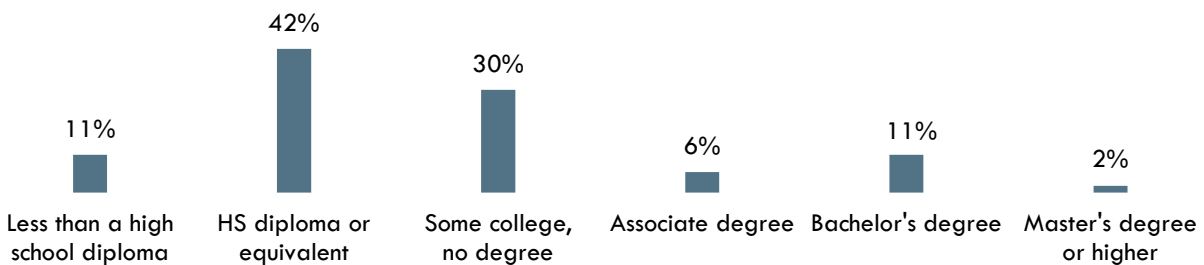
Exhibit 8: Top Employers for Pest Control Workers in San Diego County¹⁴

Top Employers	
• ServiceMaster	• Agricultural Pest Control Services
• Orkin Incorporated	• Corky's Pest Control
• Dewey Pest Control Company	• Pro Pacific Pest Control
• Truly Nolen	• University of California San Diego
• Rollins Incorporated	• Halo Termite And Pest Control

Education, Skills, and Certifications

Exhibit 9 indicates the educational attainment for this occupation found currently in the national labor force. The typical entry-level education is a [high school diploma or equivalent](#).¹⁵

Exhibit 9: National Educational Attainment of Pest Control Workers¹⁶



*may not total 100 percent due to rounding

¹⁴ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2018-2020.

¹⁵ EMSI 2021.03; QCEW, Non-QCEW, Self-Employed.

¹⁶ "Educational Attainment for Workers 25 Years and Older by Detailed Occupation," Bureau of Labor Statistics, last modified September 8th, 2021. bls.gov/emp/tables/educational-attainment.htm.

Exhibit 10 lists the top specialized, soft, and software skills that appeared in online job postings between January 1, 2018 and December 31, 2020.

Exhibit 10: Top Skills for Pest Control Workers in San Diego County¹⁷

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"> • Customer Service • Customer Contact • Product Sales • Basic Mathematics • Calculation • Repair • Sales • Scheduling • Pest Control Industry Knowledge • Hand Tools • Personal Protective Equipment • Memoranda Preparation • Biology • Training Programs • Occupational Health and Safety 	<ul style="list-style-type: none"> • Communication Skills • Physical Abilities • Detail-Oriented • Problem Solving • Writing • Teamwork / Collaboration • Organizational Skills • Listening • Time Management • English • Oral Communication • Creativity • Research • Self-Starter • Positive Disposition 	<ul style="list-style-type: none"> • Microsoft Excel • Microsoft Word • Microsoft PowerPoint • Microsoft Access • Oracle • Apache Hive • Apache Webserver • Enterprise Resource Planning (ERP) • SAP • Atlassian JIRA • C++ • Debugging • Firmware • Google Drive

¹⁷ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2018-2020.

Exhibit 11 lists the top certifications that appeared in online job postings between January 1, 2018 and December 31, 2020.

Exhibit 11: Top Certifications for Pest Control Workers in San Diego County¹⁸

Top Certifications in Online Job Postings

1. Certified Pest Control
2. Applicators License
3. Certified Applicator
4. Security Clearance
5. IPC Certification

Prepared by:

Tina Ngo Bartel, Director (tngobartel@miracosta.edu)

John Edwards, Research Analyst (jedwards@miracosta.edu)

Priscilla Fernandez, Research Analyst (pfernandez@miracosta.edu)

San Diego-Imperial Center of Excellence for Labor Market Research



¹⁸ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2018-2020.

Important Disclaimers

All representations included in this report have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. This study examines the most recent data available at the time of the analysis; 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 the report 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.

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