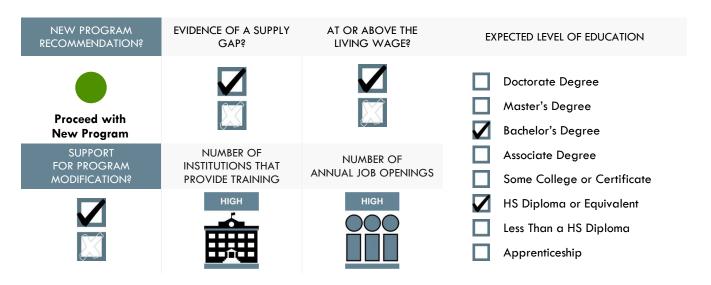
SAN DIEGO & IMPERIAL COUNTIES COMMUNITY COLLEGES

Law Enforcement Occupations

Labor Market Analysis: San Diego County

October 2024

Summary



The San Diego & Imperial Center of Excellence (COE) developed this brief to assist the region's community colleges with strategic planning and program development. Law Enforcement Occupations include "Detectives and Criminal Investigators," "Forensic Science Technicians," "Police and Sheriff's Patrol Officers," and "Private Detectives and Investigators." According to available data, Law Enforcement Occupations in San Diego County have a labor market demand of 1,001 annual job openings (while average demand for a single occupation in San Diego County is 289 annual job openings), and 12 institutions supply 433 awards for these occupations, suggesting that there is a supply gap in the labor market. Employers historically reported to the California Employment Development Department (EDD) and U.S. Bureau of Labor Statistics (BLS) that on average Law Enforcement Occupations earned entry-level earnings of \$34.76 per hour, which is above the living wage in San Diego County for all occupations except "Forensic Science Technicians." Comparatively, recent online job postings (2021-2023) also show median earnings between \$34 to \$35 per hour. This brief recommends developing a new program and supports a program modification because there is a supply gap in the region, there is a high number of annual job openings, and entry-level 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:

- Detectives and Criminal Investigators (SOC 33-3021): Conduct investigations related to suspected violations of federal, state, or local laws to prevent or solve crimes.
- Forensic Science Technicians (SOC 19-4092): Collect, identify, classify, and analyze physical evidence related to criminal investigations. Perform tests on weapons or substances, such as fiber, hair, and tissue to determine significance to investigation. May testify as expert witnesses on evidence or crime laboratory techniques. May serve as specialists in area of expertise, such as ballistics, fingerprinting, handwriting, or biochemistry.
- Police and Sheriff's Patrol Officers (SOC 33-3051): Maintain order and protect life and
 property by enforcing local, tribal, state, or federal laws and ordinances. Perform a combination
 of the following duties: patrol a specific area; direct traffic; issue traffic summonses; investigate
 accidents; apprehend and arrest suspects, or serve legal processes of courts.
- Private Detectives and Investigators (SOC 33-9021): Gather, analyze, compile and report
 information regarding individuals or organizations to clients, or detect occurrences of unlawful acts
 or infractions of rules in private establishment.

For the purpose of this report, these occupations are referred to as Law Enforcement Occupations.

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/.

Projected Occupational Demand

Between 2023 and 2028, employers in San Diego County will need to hire 1,001 workers annually to fill new jobs and backfill jobs in *Law Enforcement Occupations* due to attrition caused by turnover and retirement, for example (Exhibit 1). "Police and Sheriff's Patrol Officers" are projected to have the most labor market demand between 2023 and 2028, with 677 annual job openings.

Exhibit 1: Number of Jobs for Law Enforcement Occupations (2023-2028)2

Occupational Title	2023 Jobs	2028 Jobs	2023 – 2028 Net Jobs Change	2023 - 2028 % Net Jobs Change	Annual Job Openings (Demand)
Police and Sheriff's Patrol Officers	7,256	7,796	540	7%	677
Detectives and Criminal Investigators	3,020	3,153	133	4%	251
Private Detectives and Investigators	377	384	7	2%	37
Forensic Science Technicians	246	273	27	11%	36
Tota	10,899	11,606	707	6%	1,001

Earnings

According to traditional³ labor market information (LMI), entry-level hourly earnings for *Law Enforcement* Occupations range from \$18.84 to \$48.13 (Exhibit 2).

Exhibit 2: Hourly Earnings for Law Enforcement Occupations in San Diego County⁴

Occupational Title	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)
Police and Sheriff's Patrol Officers	\$48.13	\$55.65	\$55.90
Detectives and Criminal Investigators	\$39.78	\$52.64	\$64.58
Private Detectives and Investigators	\$32.27	\$41.62	\$57.31
Forensic Science Technicians	\$18.84	\$24.09	\$37.98

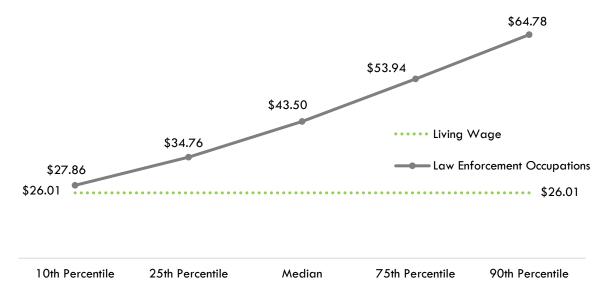
⁴ Lightcast 2024.03; QCEW, Non-QCEW, Self-Employed.

² Lightcast 2024.03; QCEW, Non-QCEW, Self-Employed.

³ Traditional LMI is generally historical data captured by the U.S. Bureau of Labor Statistics (BLS) or the California Employment Development Department (EDD). It does not account for recent technological, economic, or legislative changes that may affect labor market demand and wages.

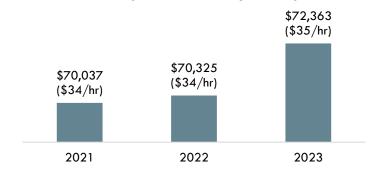
On average, the entry-level hourly earnings are \$34.76—or \$72,301 annual salary⁵; this is more than the living wage for a single adult in San Diego County, which is \$26.01 per hour (Exhibit 3).6





Between January 1, 2021 and December 30, 2023, employers advertised between \$34 to \$35 per hour in online job postings for *Law Enforcement Occupations* in San Diego County (Exhibit 4). This suggests that employers in recent years are increasing wages due to labor market forces that may not be captured by traditional LMI.

Exhibit 4: Median Advertised Salaries in Online Job Postings for Law Enforcement Occupations in San Diego County (2021-2023)*



*Hourly wages are rounded to the nearest dollar amount

⁵ Annualized salaries assume a full-time position with 2,080 hours. Multiplying the hourly wage with 2,080 yields the annual salary.

⁶ Center for Women's Welfare, University of Washington. (2024). The self-sufficiency standard for California 2024. selfsufficiencystandard.org/California.

^{7 10}th 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.

 $^{^{8}}$ Lightcast 2024.03; QCEW, Non-QCEW, Self-Employed.

⁹ Lightcast 2024.03; "Job Posting Analytics." 2021-2023.

Expected Level of Education

According to traditional LMI, Law Enforcement Occupations have a national educational attainment of a high school diploma or equivalent to a bachelor's degree. 10 (Exhibit 5).

Exhibit 5: National Educational Attainment for Law Enforcement Occupations 11

Occupational Title	Typical Entry-Level Education
Forensic Science Technicians	Bachelor's degree
Detectives and Criminal Investigators	High school diploma or equivalent
Police and Sheriff's Patrol Officers	High school diploma or equivalent
Private Detectives and Investigators	High school diploma or equivalent

Similarly, online job postings between January 1, 2021 and December 31, 2023 in San Diego County had a bachelor's degree as the most requested educational requirement for Law Enforcement Occupations; however, employers also expected the following certifications (Exhibit 6).12

Exhibit 6: Top Certifications for Law Enforcement Occupations in San Diego County in Online Job Postings (2021-2023)13

- 1. Top Secret-Sensitive Compartmented Information (TS/SCI Clearance)
- 2. Security Clearance
- 3. CDL Class C License
- 4. Cardiopulmonary Resuscitation (CPR) Certification
- 5. Top Secret Clearance
- 6. First Aid Certification
- 7. Certified Information Systems Security Professional
- 8. Automated External Defibrillator (AED) Certification

- 9. Peace Officer Standards and Training (POST) Certificate
- 10. GIAC Certifications
- 11. CompTIA Security+
- 12. Training for Intervention Procedures (TIPS) Certification
- 13. Certified Fraud Examiner
- 14. Certified Information System Auditor (CISA)
- 15. Certified Ethical Hacker

¹⁰ Lightcast 2024.03; QCEW, Non-QCEW, Self-Employed.

¹¹ Lightcast 2024.03; QCEW, Non-QCEW, Self-Employed. 12 Lightcast 2024.03; "Job Posting Analytics." 2021-2023. 13 Lightcast 2024.03; "Job Posting Analytics." 2021-2023.

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. There are three TOP codes and 11 CIP codes related to Law Enforcement Occupations (Exhibit 7). Although these TOP codes are most closely related to Law Enforcement Occupations, employers typically require completion of the Police Academy for the occupations "Police and Sheriff's Patrol Officers" and "Detectives and Criminal Investigators." Additionally, Administration of Justice (TOP 2105.00) and Criminal Justice/Safety Studies (CIP 43.0104) train for a variety of occupations; therefore, these programs are marked below (*) and are not counted in total supply.

Exhibit 7: Related TOP and CIP Codes for Law Enforcement Occupations14

TOP or CIP Code	TOP or CIP Program Title
TOP 2105.00*	Administration of Justice
TOP 2105.40	Forensics, Evidence, and Investigation
TOP 2105.50	Police Academy
CIP 43.0103	Criminal Justice/Law Enforcement Administration
CIP 43.0104*	Criminal Justice/Safety Studies
CIP 43.0106	Forensic Science and Technology
CIP 43.0107	Criminal Justice/Police Science
CIP 43.0111	Criminalistics and Criminal Science
CIP 43.0114	Law Enforcement Investigation and Interviewing
CIP 43.0115	Law Enforcement Record-Keeping and Evidence Management
CIP 43.0116	Cyber/Computer Forensics and Counterterrorism
CIP 43.0117	Financial Forensics and Fraud Investigation
CIP 43.0119	Critical Incident Response/Special Police Operations
CIP 43.0304	Terrorism and Counterterrorism Operations

*Not counted in supply because this TOP code trains for multiple occupations

¹⁴ This brief uses a conservative estimate of program supply and only calculates awards from the TOP code listed in Exhibit 7.

According to TOP data, five community colleges supply the region with awards for these occupations:

Grossmont College, MiraCosta College, Palomar College, San Diego Miramar College, and Southwestern

College. According to CIP data, seven non-community-college institutions supply the region with awards:

Alliant International University-San Diego, Ashford University, ATA College, National University, Point Loma

Nazarene University, San Diego Christian College, and San Diego State University (Exhibit 8).

Exhibit 8: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions (Program Year 2019-20 Through Program Year 2022-23 Average)

TOP6 or CIP Code	TOP6 or CIP Program Title	3-Yr Annual Average CC Awards (PY20-21 to PY22-23)	Other Educational Institutions 3-Yr Annual Average Awards (PY19-20 to PY21-22)	Total Average Supply (PY19-20 to PY22-23)
2105.00*	Administration of Justice	470	0	470*
	Grossmont	116	0	
	Associate Degree	12	0	
	Associate for Transfer	92	0	
	 Certificate 30 < 60 units 	12	0	
	MiraCosta	37	0	
	Associate Degree	4	0	
	Associate for Transfer	27	0	
	 Certificate 16 < 30 units 	6	0	
	Palomar	53	0	
	Associate Degree	17	0	
	Associate for Transfer	36	0	
	San Diego Miramar	95	0	
	Associate Degree	14	0	
	Associate for Transfer	79	0	
	• Certificate 30 < 60 units	2	0	
	Southwestern	169	0	
	Associate Degree	33	0	
	Associate for Transfer	136	0	
2105.40	Forensics, Evidence, and Investigation	60	0	60
	Grossmont	39	0	
	Associate Degree	17	0	
	• Certificate 30 < 60 units	22	0	
	Palomar	7	0	

*Not counted in supply because this TOP code trains for multiple occupations

TOP6 or CIP Code	TOP6 or CIP Program Title	3-Yr Annual Average CC Awards (PY20-21 to PY22-23)	Other Educational Institutions 3-Yr Annual Average Awards (PY19-20 to PY21-22)	Total Average Supply (PY19-20 to PY22-23)
	Associate Degree	7	0	
	San Diego Miramar	7	0	
	Associate Degree	5	0	
	 Certificate 30 < 60 units 	2	0	
	Southwestern	7	0	
	Associate Degree	6	0	
	• Certificate 30 < 60 units	1	0	
2105.50	Police Academy	84	0	84
	Palomar	7	0	
	• Certificate 30 < 60 units	7	0	
	San Diego Miramar	64	0	
	 Certificate 16 < 30 units 	64	0	
	Southwestern	13	0	
	• Certificate 16 < 30 units	13	0	
43.0103	Criminal Justice/Law Enforcement Administration	0	289	289
	Alliant International University-San Diego	0	1	
	Bachelor's degree	0	1	
	Ashford University	0	172	
	Bachelor's degree	0	172	
	National University	0	114	
	Bachelor's degree	0	112	
	• Certificates > 1 but < 2 yrs	0	2	
	San Diego Christian College	0	2	
	Bachelor's degree	0	2	
43.0104*	Criminal Justice/Safety Studies	0	713	713*
	Ashford University	0	298	
	Bachelor's degree	0	298	
	ATA College	0	6	
	Associate degree	0	6	

*Not counted in supply because this TOP code trains for multiple occupations

TOP6 or CIP Code	TOP6 or CIP Program Title	3-Yr Annual Average CC Awards (PY20-21 to PY22-23)	Other Educational Institutions 3-Yr Annual Average Awards (PY19-20 to PY21-22)	Total Average Supply (PY19-20 to PY22-23)
	Point Loma Nazarene University	0	43	
	Bachelor's degree	0	43	
	San Diego State University	0	366	
	Bachelor's degree	0	366	
			Total	433

Demand vs. Supply

Comparing labor demand (annual openings) with labor supply¹⁵ suggests that there is a supply gap for these occupations in San Diego County, with 1,001 annual openings and 433 awards. Comparatively, there are 9,136 annual openings in California and 2,636 awards, suggesting that there is a supply gap across the state¹⁶ (Exhibit 9).

Exhibit 9: Labor Demand (Annual Openings) Compared with Labor Supply (Average Annual Awards)

	Demand (Annual Openings)	Supply (Annual Awards)	Supply Gap or Oversupply
San Diego	1,001	433	568
California	9,136	2,636	6,500

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.

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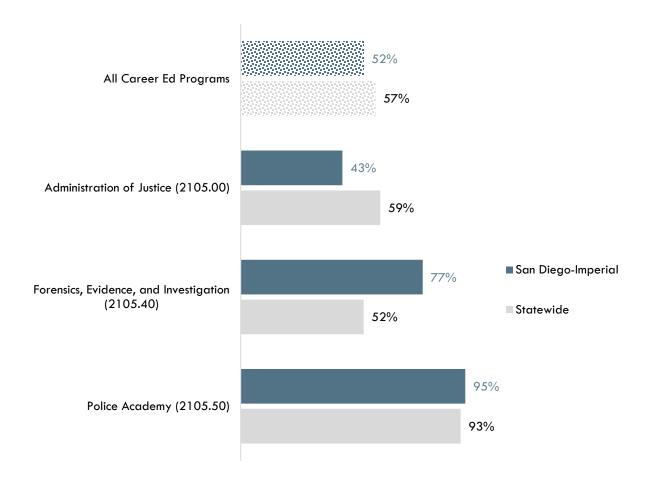
¹⁵ Labor supply can be found from two different sources: Lightcast or the California Community Colleges Chancellor's Office MIS Data Mart. Lightcast uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.

^{16 &}quot;Supply and Demand," Centers of Excellence Student Outcomes, coeccc.net/our-resources.

Student Outcomes and Regional Comparisons

According to the California Community Colleges LaunchBoard, 43 to 95 percent of students in the San Diego-Imperial region earned a living wage after completing a program related to *Law Enforcement* Occupations, compared 59 to 93 percent statewide and 57 percent of students in Career Education programs in general across the state (Exhibit 10).¹⁷

Exhibit 10: Percentage of Students Who Earned a Living Wage by Program, PY2020-2118



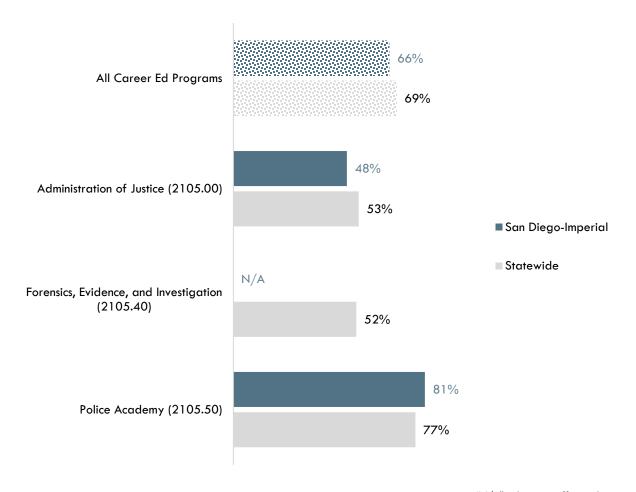
¹⁷ "California Community Colleges Strong Workforce Program," California Community Colleges, calpassplus.org/LaunchBoard/SWP.aspx.

¹⁸ Most recent year with available data is Program Year 2020-21. Among completers and skills builders who exited, the percentage of stude

¹⁸ Most recent year with available data is Program Year 2020-21. Among completers and skills builders who exited, the percentage of students who attained a living wage.

According to the California Community Colleges LaunchBoard, 48 to 81 percent of students statewide obtained a job closely related to their field of study after completing a program related to Law Enforcement Occupations, compared to 52 to 77 percent statewide and 69 percent of students in Career Education programs in general across the state (Exhibit 11).19

Exhibit 11: Percentage of Students in a Job Closely Related to Field of Study by Program, PY2019-2020



"N/A" indicates insufficient data

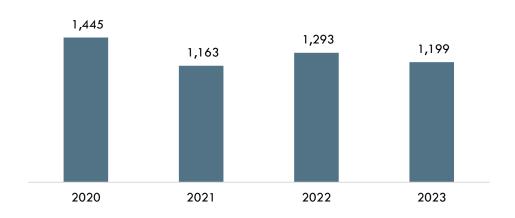
 ^{19 &}quot;California Community Colleges Strong Workforce Program," California Community Colleges, calpassplus.org/LaunchBoard/SWP.aspx.
 20 Most recent year with available data is Program Year 2019-20. Percentage of Students in a Job Closely Related to Field of Study: Among

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 2020 and 2023, there was an average of 1,275 online job postings per year for Law Enforcement Occupations in San Diego County (Exhibit 12). Please note that online job postings do not equal labor market demand; demand is represented by annual job openings (see Exhibit 1). While this brief includes online jobs postings data to help with curriculum development, the community colleges should note that this type of data is impacted by several variables: employers may post a position multiple times to increase the pool of applicants; a job posting can remain posted after a business decides not to fill a position; or an employer may use one posting to fill multiple positions, for example.

Exhibit 12: Number of Online Job Postings for Law Enforcement Occupations in San Diego County (2020-2023)²¹



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²¹ Lightcast 2024.03; "Job Posting Analytics." 2020-2023.

Employers

Between January 1, 2021 and December 31, 2023, the top five employers in San Diego County for Law Enforcement Occupations were United States Department of Homeland Security, City of San Diego, United States Secret Service, Federal Bureau of Investigation, and Digistream Investigations based on online job postings (Exhibit 13).

Exhibit 13: Top Employers for Law Enforcement Occupations in San Diego County²²

Top Employers

- United States Department of Homeland Security
- City of San Diego
- United States Secret Service
- Federal Bureau of Investigation
- Digistream Investigations

- CoreCivic
- State of California
- California State University
- SAIC
- Northrop Grumman

Skills

Exhibit 14 lists the top specialized, soft, and software skills that appeared in online job postings between January 1, 2021 and December 31, 2023.

Exhibit 14: Top Skills for Law Enforcement Occupations in San Diego County²³

Specialized Skills	Soft Skills	Software Skills
Law Enforcement	 Investigation 	Microsoft Excel
Patrolling	 Communication 	 Microsoft Office
Auditing	 Operations 	 Microsoft PowerPoint
Data Analysis	 Management 	 Microsoft Outlook
International Laws	Writing	 Microsoft Word
Crime Prevention	 Customer Service 	 Microsoft Access
Computer Science	 Research 	• Linux
Cyber Security	 English Language 	 Spreadsheets
Law Enforcement Practices	 Problem Solving 	Firewall
All-Terrain Vehicles	 Leadership 	 SQL
Misdemeanor	 Detail Oriented 	Python
Setting Appointments	Planning	 Microsoft SharePoint
Project Management	Microsoft Excel	 SAP Applications
Office Equipment	 Tactfulness 	 Business Software
Social Work	 Report Writing 	• Unix

²² Lightcast 2024.03; "Job Posting Analytics." 2021-2023.

²³ Lightcast 2024.03; "Job Posting Analytics." 2021-2023.

Prepared by:

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

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

San Diego & Imperial Center of Excellence

SAN DIEGO & IMPERIAL COUNTIES COMMUNITY COLLEGES

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