

#  Public Safety Occupations

# Labor Market Information Report

# College of Marin

## Prepared by the San Francisco Bay Center of Excellence for Labor Market Research

**November 2021**

## Recommendation

Based on all available data, there appears to be an “undersupply” of Public Safety workers compared to the demand for this cluster of occupations in the Bay region and in the North Bay sub-region (Marin, Napa, Solano, Sonoma counties). There is a projected annual gap of about 2,730 students in the Bay region and 475 students in the North Bay Sub-Region.

## Introduction

This report provides student outcomes data on employment and earnings for TOP 2199.00 Other Public and Protective Services programs in the state and region. It is recommended that these data be reviewed to better understand how outcomes for students taking courses on this TOP code compare to potentially similar programs at colleges in the state and region, as well as to outcomes across all CTE programs at College of Marin College and in the region.

This report profiles Public Safety Occupations in the 12 county Bay region and in the North Bay sub-region for a proposed new program at College of Marin College.

* **Emergency Medical Technicians and Paramedics (29-2041):** Assess injuries, administer emergency medical care, and extricate trapped individuals. Transport injured or sick persons to medical facilities.
  Entry-Level Educational Requirement: Postsecondary nondegree award
  Training Requirement: None
  Percentage of Community College Award Holders or Some Postsecondary Coursework: NA%
* **Firefighters (33-2011):** Control and extinguish fires or respond to emergency situations where life, property, or the environment is at risk. Duties may include fire prevention, emergency medical service, hazardous material response, search and rescue, and disaster assistance.
  Entry-Level Educational Requirement: Postsecondary nondegree award
  Training Requirement: Long-term on-the-job training
  Percentage of Community College Award Holders or Some Postsecondary Coursework: 60%
* **Police and Sheriffs Patrol Officers (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.
  Entry-Level Educational Requirement: High school diploma or equivalent
  Training Requirement: Moderate-term on-the-job training
  Percentage of Community College Award Holders or Some Postsecondary Coursework: 49%

## Occupational Demand

**Table 1. Employment Outlook for Public Safety Occupations in Bay Region**

| **Occupation** | **2020 Jobs** | **2025 Jobs** | **5-yr Change** | **5-yr % Change** | **5-yr Total Openings** | **Annual Openings** | **25% Hourly Earning** | **Median Hourly Wage** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Emergency Medical Technicians and Paramedics | 6,107 | 6,561 | 454 | 7% | 2,825 | 565 | $14 | $44 |
| Firefighters | 6,936 | 7,322 | 386 | 6% | 3,206 | 641 | $41 | $76 |
| Police and Sheriffs Patrol Officers | 16,532 | 17,376 | 844 | 5% | 7,846 | 1,569 | $52 | $85 |
| **Total** | **29,575** | **31,259** | **1,684** | **6%** | **13,877** | **2,775** |  |  |
| Source: EMSI 2021.3 |

**Bay Region includes:** Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano and Sonoma Counties

**Table 2. Employment Outlook for Public Safety Occupations in North Bay Sub-region**

| **Occupation** | **2020 Jobs** | **2025 Jobs** | **5-yr Change** | **5-yr % Change** | **5-yr Total Openings** | **Annual Openings** | **25% Hourly Earning** | **Median Hourly Wage** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Emergency Medical Technicians and Paramedics | 1,690 | 1,728 | 38 | 2% | 674 | 135 | $12 | $39 |
| Firefighters | 1,120 | 1,181 | 61 | 5% | 516 | 103 | $35 | $68 |
| Police and Sheriffs Patrol Officers | 2,524 | 2,642 | 117 | 5% | 1,184 | 237 | $52 | $83 |
| **Total** | **5,334** | **5,551** | **217** | **4%** | **2,374** | **475** |  |  |
| Source: EMSI 2021.3 |

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

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

**Table 3. Number of Job Postings by Occupation for latest 12 months (Oct 2020 - Sep 2021)**

| **Occupation** | **Bay Region** | **North Bay** |
| --- | --- | --- |
| Emergency Medical Technicians and Paramedics | 833 | 133 |
| Police Patrol Officers | 708 | 91 |
| Municipal Firefighters | 150 | 43 |
| Sheriffs and Deputy Sheriffs | 89 | 20 |
| Forest Firefighters | 8 | 2 |
| Source: Burning Glass |

**Table 4a. Top Job Titles for Public Safety Occupations for latest 12 months (Oct 2020 - Sep 2021) Bay Region**

| **Title** | **Bay** | **Title** | **Bay** |
| --- | --- | --- | --- |
| Emergency Medical Technician | 283 | Firefighter | 31 |
| Police Officer | 54 | Mobile Officer | 29 |
| Paramedic | 52 | EMT Basic | 20 |
| Paramedic Basic  | 42 | Community Service Officer | 17 |
| Police Officer Trainee | 36 | Public Safety Officer | 16 |
| Police Officer Lateral | 30 | Courtesy Patrol | 27 |
| Source: Burning Glass |

**Table 4b. Top Job Titles for Public Safety Occupations for latest 12 months (Oct 2020 - Sep 2021) North Bay Sub-Region**

| **Title** | **North Bay** | **Title** | **North Bay** |
| --- | --- | --- | --- |
| Emergency Medical Technician | 49 | Firefighter | 7 |
| Police Officer | 13 | Former Law Enforcement/CJ Professionals | 7 |
| Police Officer Trainee | 11 | Paramedic Basic  | 13 |
| Emt Basic In | 10 | Police Officer - Lateral | 5 |
| Paramedic | 9 | Deputy Sheriff Trainee | 3 |
| Emergency Medical Responder | 8 | Firefighter/Paramedic | 3 |
| Firefighter/First Responder | 8 | Police Cadet | 3 |
|  |  | Police Officer - Graduate | 3 |
| Source: Burning Glass |

## Industry Concentration

**Table 5. Industries hiring Public Safety Workers in Bay Region**

| **Industry – 6 Digit NAICS (No. American Industry Classification) Codes** | **Jobs in Industry (2020)** | **Jobs in Industry (2025)** | **% Change (2020-25)** | **% Occupation Group in Industry (2020)** |
| --- | --- | --- | --- | --- |
| Local Government, Excluding Education and Hospitals | 21,292 | 22,424 | 5% | 73% |
| Ambulance Services | 3,241 | 3,517 | 9% | 11% |
| State Government, Excluding Education and Hospitals | 1,107 | 1,188 | 7% | 4% |
| Federal Government, Military | 896 | 909 | 1% | 3% |
| General Medical and Surgical Hospitals | 423 | 414 | -2% | 1% |
| Colleges, Universities, and Professional Schools (State Government) | 343 | 350 | 2% | 1% |
| Hospitals (Local Government) | 283 | 313 | 11% | 1% |
| Federal Government, Civilian, Excluding Postal Service | 262 | 267 | 2% | 1% |
| Colleges, Universities, and Professional Schools | 236 | 254 | 8% | 1% |
| Colleges, Universities, and Professional Schools (Local Government) | 196 | 201 | 2% | 1% |
| Source: EMSI 2021.3 |

**Table 6. Top Employers Posting Public Safety Occupations in Bay Region and North Bay Sub-Region (Oct 2020 - Sep 2021)**

| **Employer** | **Bay** | **Employer** | **North Bay** |
| --- | --- | --- | --- |
| Global Medical Response | 90 | Lifewest Ambulance | 23 |
| Covid Clinic | 79 | Covid Clinic | 21 |
| Global Medical Response, Inc | 61 | Global Medical Response | 14 |
| Securitas | 50 | County Sonoma | 11 |
| AMR | 41 | Global Medical Response, Inc | 9 |
| Norcal Ambulance | 31 | City San Rafael | 9 |
| Lifewest Ambulance | 28 | Medic Ambulance Service Incorporated | 8 |
| University Of California | 23 | Ethos Veterinary Health | 7 |
| American Medical Response | 21 | County Marin | 7 |
| Falcon Critical Care Transport | 20 | Norcal Ambulance | 6 |
| Source: Burning Glass |

## Educational Supply

There is one (1) community college in the Bay Region issuing 9 awards on average annually (last 3 years ending 2018-19) on TOP 2199.00 Other Public and Protective Services. In the North Bay Sub-Region, there are no community colleges that issued awards on average annually (last 3 years) on this TOP code.

There are three (3) other CTE educational institutions in the Bay Region issuing 36 awards on average annually (last 3 years ending 2016-17) on TOP 2199.00 Other Public and Protective Services. There is 0 other CTE educational institution in the North Bay Sub-Region issuing 0 awards on average annually (last 3 years) on this TOP code.

**Table 7a. Community College Awards on TOP 2199.00 Other Public and Protective Services in Bay Region**

| **College** | **Subregion** | **Certificate Low** | **Total** |
| --- | --- | --- | --- |
| De Anza | Silicon Valley | 9 | 9 |
| **Total** |  | **9** | **9** |
| Source: Data Mart |

*Note: The annual average for awards is 2016-17 to 2018-19.*

**Table 7b. Other CTE Institutons Awards on TOP 2199.00 Other Public and Protective Services in Bay Region**

| **College** | **Subregion** | **Associate Degree** | **Award 1 < 2 academic yrs** | **Total** |
| --- | --- | --- | --- | --- |
| Carrington College-Pleasant Hill | East Bay | 7 | 5 | 12 |
| Carrington College-San Jose | Silicon Valley | 11 | 6 | 17 |
| Carrington College-San Leandro | East Bay | 4 | 3 | 7 |
| **Total** |  | **22** | **14** | **36** |
| Source: Data Mart |

*Note: The annual average for awards is 2016-17 to 2018-19.*

## Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 2,775 annual openings for the Public Safety occupational cluster and 45 annual (3-year average) awards for an annual undersupply of 2,730 students. In the North Bay Sub-Region, there is also a gap with 475 annual openings and no annual (3-year average) awards for an annual undersupply of 475 students.

## Student Outcomes

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 2199.00 Other Public and Protective Services**

| **Metric Outcomes** | **Bay All CTE Program** | **College of Marin All CTE Program** | **State 2199.00** | **Bay 2199.00** | **North Bay 2199.00** | **College of Marin 2199.00** |
| --- | --- | --- | --- | --- | --- | --- |
| Students with a Job Closely Related to Their Field of Study | 73% | 80% | 56% | N/A | N/A | N/A |
| Median Annual Earnings for SWP Exiting Students | $44,575 | $40,290 | $30,277 | N/A | N/A | N/A |
| Median Change in Earnings for SWP Exiting Students | 30% | 31% | 22% | N/A | N/A | N/A |
| Exiting Students Who Attained the Living Wage | 53% | 50% | 42% | N/A | N/A | N/A |
| Source: Launchboard Strong Workforce Program Median of 2016-18. |

## Skills, Certifications and Education

**Table 9. Top Skills for Public Safety Occupations in Bay Region (Oct 2020 - Sep 2021)**

| **Skill** | **Posting** | **Skill** | **Posting** |
| --- | --- | --- | --- |
| Cardiopulmonary Resuscitation (CPR) | 536 | Medical Triage | 125 |
| Public Health and Safety | 479 | Vaccines | 123 |
| Patient Care | 374 | Motor Vehicle Operation | 120 |
| Prevention of Criminal Activity | 266 | Scheduling | 117 |
| Advanced Cardiac Life Support (ACLS) | 220 | Hoisting Equipment | 116 |
| Cleaning | 211 | Critical Care | 107 |
| Customer Service | 189 | Surveillance | 107 |
| Customer Billing | 180 | Warrants | 105 |
| Personal Protective Equipment (PPE) | 161 | Patient Interviewing | 100 |
| Community Relations | 155 | Assisted Living | 98 |
| Information Systems | 137 | Life Support | 91 |
| Law Enforcement or Criminal Justice Experience | 136 | Basic Trauma Life Support (BTLS) | 87 |
| Customer Contact | 133 | Repair | 86 |
| Electrocardiogram (EKG / ECG) | 133 | Security Operations | 86 |
| Source: Burning Glass |

**Table 10. Certifications for Public Safety Occupations in Bay Region (Oct 2020 - Sep 2021)**

| **Certification** | **Posting** | **Certification** | **Posting** |
| --- | --- | --- | --- |
| Driver's License | 893 | National Registry of Emergency Medical Technicians (NREMT) | 67 |
| Emergency Medical Technician (EMT) | 704 | Cdl Class C | 60 |
| Basic Life Saving (BLS) | 283 | Fire Fighter I | 55 |
| Basic Cardiac Life Support Certification | 204 | Certified Patient Account Technician | 42 |
| Advanced Cardiac Life Support (ACLS) Certification | 180 | Basic Post Certificate | 22 |
| Paramedic Certification | 159 | Law Enforcement Certification | 16 |
| First Aid Cpr Aed | 141 | Firefighter | 12 |
| Medical Examiner's License | 99 | Emergency Vehicle Operator | 11 |
| American Heart Association Certification | 88 | Polygraph | 9 |
| Police Officer | 87 | Firefighter II | 9 |
| Source: Burning Glass |

**Table 11. Education Requirements for Public Safety Occupations in Bay Region**

| **Education (minimum advertised)** | **Latest 12 Mos. Postings** | **Percent 12 Mos. Postings** |
| --- | --- | --- |
| High school or vocational training | 1,005 | 92% |
| Associate's degree | 44 | 4% |
| Bachelor's degree and higher | 47 | 4% |
| Source: Burning Glass |

## Methodology

Occupations for this report were identified by use of skills listed in O\*Net descriptions and job descriptions in Burning Glass. Labor demand data is sourced from Economic Modeling Specialists International (EMSI) occupation data and Burning Glass job postings data. Educational supply and student outcomes data is retrieved from multiple sources, including CTE Launchboard and CCCCO Data Mart.

## Sources

O\*Net Online
Labor Insight/Jobs (Burning Glass)
Economic Modeling Specialists International (EMSI)
CTE LaunchBoard www.calpassplus.org/Launchboard/
Statewide CTE Outcomes Survey
Employment Development Department Unemployment Insurance Dataset
Living Insight Center for Community Economic Development
Chancellor’s Office MIS system

## Contacts

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