**Public Safety Occupations**

**Labor Market Information Report**

**City College of San Francisco**

Prepared by the San Francisco Bay Center of Excellence

for Labor Market Research

September 2020

# 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 Mid-Peninsula sub-region (San Francisco and San Mateo Counties). There is a projected annual gap of about 749 students in the Bay region and 449 students in the Mid-Peninsula Sub-Region.

This report also provides student outcomes data on employment and earnings for TOP 2105.00-Administration of Justice 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 City College of San Francisco (CCSF) and in the region.

# Introduction

This report profiles Public Safety Occupations in the 12 county Bay region and in the Mid-Peninsula sub-region for a proposed new Public Safety LGBTQ+ Awareness certificate program at CCSF. This is a new collaborative certificate between the Administration of Justice/Fire Science Department and the LGBTQ Department and will primarily be focused on upgrading the skills of incumbent workers in the Public Safety sector in San Francisco.

|  |
| --- |
| * **Police and Sheriff's 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: 48% |
|  |
| * **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: 61% |
|  |
| * **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: 66% |
|  |

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

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation  | 2019 Jobs | 2024 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Average Annual Open-ings | 25% Hourly Wage | Median Hourly Wage |
| Police and Sheriff's Patrol Officers |  17,434  |  18,316  | 883 | 5% |  7,157  |  1,431  | $46.96 | $57.66 |
| Firefighters |  8,355  |  8,780  | 426 | 5% |  3,337  |  667  | $32.29 | $45.32 |
| Emergency Medical Technicians and Paramedics |  5,563  |  5,918  | 355 | 6% |  2,398  |  480  | $14.15 | $18.28 |
| **TOTAL** |  **31,351**  |  **33,014**  | **1,663** | **5%** |  **12,893**  |  **2,578**  | **$37.23** | **$47.39** |

*Source: EMSI 2020.3*

**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 Mid-Peninsula Sub-Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation  | 2019 Jobs | 2024 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Average Annual Open-ings | 25% Hourly Wage | Median Hourly Wage |
| Police and Sheriff's Patrol Officers |  4,157  |  4,423  | 265 | 6% |  1,768  |  354  | $52.09 | $61.59 |
| Firefighters |  1,905  |  2,035  | 130 | 7% |  799  |  160  | $41.49 | $50.52 |
| Emergency Medical Technicians and Paramedics |  1,177  |  1,305  | 128 | 11% |  537  |  107  | $15.65 | $20.79 |
| **TOTAL** |  **7,239**  |  **7,763**  | **523** | **7%** |  **3,104**  |  **621**  | **$43.37** | **$52.05** |

*Source: EMSI 2020.3*

**Mid-Peninsula Sub-Region includes**: San Francisco and San Mateo Counties

**Job Postings in Bay Region and Mid-Peninsula Sub-Region**

**Table 3. Number of Job Postings by Occupation for latest 12 months (Sept 2019 - Aug 2020)**

| Occupation | Bay Region | Mid-Peninsula Sub-Region |
| --- | --- | --- |
| Police Patrol Officers | 731 | 116 |
| Emergency Medical Technicians and Paramedics | 653 | 154 |
| Municipal Firefighters | 132 | 19 |
| Sheriffs and Deputy Sheriffs | 108 | 16 |
| Forest Firefighters | 16 | 2 |
|  **TOTAL** | **1,640** | **307** |

*Source: Burning Glass*

**Table 4a. Top Job Titles for Public Safety Occupations for latest 12 months (Sept 2019 - Aug 2020) Bay Region**

|  |  |  |  |
| --- | --- | --- | --- |
| Common Title | Bay | Common Title | Bay |
| Police Officer | 105 | Firefighter | 21 |
| Police Officer Trainee | 66 | Courtesy Patrol | 18 |
| Emergency Medical Technician In | 55 | Police Officer Lateral | 17 |
| Paramedic | 49 | Paramedic Basic | 17 |
| Paramedic Basic In | 40 | Military Police | 17 |
| 68W Healthcare Specialist | 37 | Public Safety Officer | 16 |
| EMT | 34 | Police Officer Recruit | 16 |
| EMT Basic In | 31 | Community Service Officer | 15 |
| Emergency Medical Technician | 30 | Police Recruit | 14 |
| Emergency Medical Technician EMT | 26 | EMT Basic | 12 |
| Paramedic - Sign On In | 23 | EMT - Basic | 12 |

**Table 4b. Top Job Titles for Public Safety Occupations for latest 12 months (Sept 2019 - Aug 2020) Mid-Peninsula Sub-Region**

|  |  |  |  |
| --- | --- | --- | --- |
| Common Title | Mid-Peninsula | Common Title | Mid-Peninsula |
| Police Officer | 28 | Paramedic In | 3 |
| Emergency Medical Technician In | 23 | Military Police And Corrections | 3 |
| Paramedic | 17 | Lateral Firefighter | 3 |
| Paramedic Basic In | 10 | Fire Captain Paramedic | 3 |
| Paramedic Sign - On In | 8 | Entry Level Military Police Officer | 3 |
| Emergency Medical Technician | 6 | Entry Level H - Firefighter | 3 |
| Public Safety Officer | 5 | Emergency Medical Technician EMT Sign | 3 |
| Police Officer Trainee | 5 | Deputy Sheriff - Lateral | 3 |
| Paramedic Basic | 5 | Deputy Sheriff | 3 |
| Firefighter | 5 | Bilingual Emergency Medical Technician EMT | 3 |
| Federal Reserve Law Enforcement Officer | 5 | Special Response Officer | 2 |
| 68W Healthcare Specialist | 5 | Security Guard Off Duty/Retired Law Enforcement Officer | 2 |
| Field Supervisor Paramedic | 4 | Responder EMt, Aemt Or Paramedic, | 2 |
| Emergency Medical Technician EMT | 4 | Patrol | 2 |

*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 (2019) | Jobs in Industry (2024) | % Change (2019-24) | % Occupation Group in Industry (2019) |
| Local Government, Excluding Education and Hospitals (903999) | 23,203 | 24,397 | 5% | 74% |
| Ambulance Services (621910) | 3,139 | 3,309 | 5% | 10% |
| State Government, Excluding Education and Hospitals (902999) | 1,113 | 1,195 | 7% | 4% |
| Federal Government, Military (901200) | 814 | 788 | -3% | 3% |
| Colleges, Universities, and Professional Schools (State Government) (902612) | 689 | 769 | 12% | 2% |
| Colleges, Universities, and Professional Schools (611310) | 439 | 491 | 12% | 1% |
| General Medical and Surgical Hospitals (622110) | 383 | 371 | -3% | 1% |

*Source: EMSI 2020.3*

**Table 6. Top Employers Posting Public Safety Occupations in Bay Region and Mid-Peninsula Sub-Region (Sept 2019 - Aug 2020)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Employer | Bay | Employer | Bay | Employer | Mid-Peninsula |
| American Medical Response | 95 | San Francisco Public Works | 10 | American Medical Response | 14 |
| Umpqua Community College | 55 | Planned Companies Nj | 10 | American Medical Response Inc | 13 |
| Emergency Medical Services Authority | 37 | On Site Health Safety | 10 | Emergency Medical Services Authority | 11 |
| Voyig | 21 | IOSM | 10 | San Francisco Public Works | 10 |
| Global Medical Response | 20 | City Fairfield | 10 | Voyig | 7 |
| Falck Usa | 19 | Central Coast Ambulance | 10 | SFMTA | 7 |
| Royal Ambulance Service | 18 | University California | 9 | Redwood City Hall Office | 7 |
| County Santa Clara | 18 | SP Plus Incorporated | 9 | The Federal Reserve Bank of San Francisco | 5 |
| Norcal Ambulance | 16 | Mills College | 9 | Allied Universal | 5 |
| City Oakland | 15 | Global Medical Response, Inc | 9 | University California | 4 |
| Planned Companies | 14 | City Sunnyvale | 9 | United States Marie Corps | 4 |
| Stanford University | 13 | UC Berkeley | 8 | Sf State University | 4 |
| Rural Metro Corporation | 13 | United States Marie Corps | 8 | Rural Metro Corporation | 4 |
| American Medical Response Inc | 13 | National Testing Network | 8 | Norcal Ambulance | 4 |
| State of California | 12 | Mccormick Ambulance | 8 | Department of Veterans Affairs | 4 |
| Baylor Scott & White Health | 12 | Lifewest Ambulance | 8 | Carbon Health | 4 |
| California State University | 11 | County Sonoma | 8 | Baylor Scott & White Health | 4 |

*Source: Burning Glass*

# Educational Supply

There are 23 community colleges in the Bay Region issuing 1,815 awards on average annually (last 3 years ending 2018-19) on TOP 2105.00-Administration of Justice. There are three (3) colleges in the Mid-Peninsula Sub-Region issuing 172 awards on average annually (last 3 years) on this TOP code.

There are three (3) Other Educational Institutions in the Bay Region issuing 14 awards on average annually (last 3 years ending 2016-17) on TOP 2105.00-Administration of Justice. There are no Other Educational Institutions in the Mid-Peninsula Sub-Region issuing awards on this TOP code.

**Table 7a. Community College Awards on TOP 2105.00-Administration of Justice in Bay Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| College | Sub-Region | Associates | Certificate Low Unit | Noncredit | Total |
| Cabrillo | SC - Monterey | 19 |  |  | 19 |
| Chabot  | East Bay | 53 |  |  | 53 |
| Contra Costa | East Bay | 25 | 12 |  | 37 |
| De Anza | Silicon Valley | 61 |  |  | 61 |
| Diablo Valley | East Bay | 83 | 39 |  | 122 |
| Evergreen Valley | Silicon Valley | 58 |  |  | 58 |
| Gavilan | Silicon Valley | 47 | 7 |  | 54 |
| Hartnell | SC - Monterey | 84 | 22 |  | 106 |
| Las Positas | East Bay | 34 |  |  | 34 |
| Los Medanos | East Bay | 56 | 11 |  | 67 |
| Marin | North Bay | 6 | 1 |  | 7 |
| Merritt | East Bay | 36 | 6 |  | 42 |
| Mission | Silicon Valley | 8 |  |  | 8 |
| Monterey | SC - Monterey | 27 | 31 | 54 | 112 |
| Napa | North Bay | 43 | 28 |  | 71 |
| Ohlone | East Bay | 13 | 1 |  | 14 |
| San Francisco | Mid-Peninsula | 43 | 17 |  | 60 |
| San Jose City | Silicon Valley | 28 | 3 |  | 31 |
| San Mateo | Mid-Peninsula | 60 | 14 |  | 74 |
| Santa Rosa | North Bay | 61 | 54 | 533 | 648 |
| Skyline | Mid-Peninsula | 32 | 6 |  | 38 |
| Solano | North Bay | 48 | 8 |  | 56 |
| West Valley | Silicon Valley | 45 |  |  | 45 |
| **Total Bay Region** | **969** | **259** | **587** | **1,815** |
| **Total Mid-Peninsula Sub-Region** | **135** | **37** | **0** | **172** |

# Source: Data Mart

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

**Table 7b. Other Educational Institutions Awards on TOP 2105.00-Administration of Justice in Bay Region**

|  |  |  |  |
| --- | --- | --- | --- |
| **College** | **Sub-Region** | **Associate Degree** | **Total** |
| Carrington College-Pleasant Hill | East Bay | 5 | 5 |
| Carrington College-San Jose | Silicon Valley | 6 | 6 |
| Carrington College-San Leandro | East Bay | 3 | 3 |
| **Total Bay Region** |  | **14** | **14** |
| **Total Mid-Peninsula Sub-Region** |  | **0** | **0** |

# Source: Data Mart

Note: The annual average for awards is 2014-15 to 2016-17.

# Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 2,578 annual openings for the Public Safety occupational cluster and 1,829 annual (3-year average) awards for an annual undersupply of 749 students. In the Mid-Peninsula Sub-Region, there is also a gap with 621 annual openings and 172 annual (3-year average) awards for an annual undersupply of 449 students.

# Student Outcomes

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 2105.00-Administration of Justice**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **2017-18** | **Bay** All CTE Programs | **CCSF** All CTE Programs | **State** 2105.00 | **Bay** 2105.00 | **Mid-Peninsula** 2105.00 | **CCSF** 2105.00 |
| % Employed Four Quarters After Exit | 74% | 66% | 62% | 75% | 65% | 63% |
| Median Quarterly Earnings Two Quarters After Exit | $10,550 | $12,765 | $10,425 | $12,424 | $31,274 | $27,383 |
| Median % Change in Earnings | 46% | 25% | 24% | 31% | 34% | 36% |
| % of Students Earning a Living Wage | 63% | 46% | 63% | 58% | 71% | 61% |

*Source: Launchboard Pipeline (version available on (8/12/20)*

# Skills, Certifications and Education

**Table 9. Top Skills for Public Safety Occupations in Bay Region (Sept 2019 - Aug 2020)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Skill** | **Postings** | **Skill** | **Postings** | **Skill** | **Postings** |
| Cardiopulmonary Resuscitation (CPR) | 468 | Assisted Living | 129 | Chickenpox | 79 |
| Public Health and Safety | 451 | Law Enforcement or Criminal Justice Experience | 128 | Influenza | 79 |
| Patient Care | 403 | Medical Triage | 128 | Basic Trauma Life Support (BTLS) | 77 |
| Prevention of Criminal Activity | 315 | Warrants | 121 | HAZMAT | 71 |
| Advanced Cardiac Life Support (ACLS) | 245 | Surveillance | 102 | Record Keeping | 65 |
| Life Support | 189 | Hepatitis B | 100 | Witness Interviews | 65 |
| Hoisting Equipment | 181 | Measles Mumps Rubella (MMR) | 98 | Emergency Care | 63 |
| Information Systems | 165 | Criminal Justice | 92 | Fire Suppression | 60 |
| Community Relations | 155 | Scheduling | 91 | Patient Transportation and Transfer | 59 |
| Motor Vehicle Operation | 155 | Varicella | 86 | Law Enforcement | 57 |
| Customer Contact | 152 | Crowd Control | 85 | Presentation of Evidence | 56 |
| Customer Service | 146 | Vaccines | 83 | Emergency Services | 54 |
| Electrocardiogram (EKG / ECG) | 142 | Repair | 82 | Psychology | 54 |
| Patient Interviewing | 137 | Vaccination | 82 | Lifting Ability | 53 |
|  |  |  |  |  |  |

*Source: Burning Glass*

**Table 10. Certifications for Public Safety Occupations in Bay Region (Sept 2019 - Aug 2020)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Certification** | **Postings** | **Certification** | **Postings** |
| Driver's License | 885 | Fire Fighter I | 69 |
| Emergency Medical Technician (EMT) | 491 | American Heart Association Certification | 53 |
| Advanced Cardiac Life Support (ACLS) Certification | 206 | Basic Post Certificate | 25 |
| Paramedic Certification | 185 | Firefighter II | 22 |
| National Registry of Emergency Medical Technicians (NREMT) | 140 | Emergency Vehicle Operator | 17 |
| Medical Examiner's License | 140 | Security Clearance | 13 |
| First Aid Cpr Aed | 120 | Certified First Responder | 13 |
| Police Officer | 94 | Law Enforcement Certification | 11 |
| Basic Life Saving (BLS) | 83 | Phlebotomy Certification | 10 |
| Basic Cardiac Life Support Certification | 75 | HazMat Awareness | 9 |
| Certified Patient Account Technician | 72 | Security Guard Certification | 7 |
| Cdl Class C | 71 | Hazardous Materials Certification | 7 |

*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 | 932 | 94% |
| Associate Degree | 43 | 4% |
| Bachelor’s Degree or Higher | 20 | 2% |

*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/](http://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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