



# Labor Market Analysis for Program Recommendation

## Paramedic Occupations

### Merritt College

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

September 2023

#### Recommendation

Based on all available data, there appears to be an “undersupply” of Paramedic workers compared to the demand for this cluster of occupations in the Bay region and in the East Bay sub-region (Alameda, Contra Costa counties). There is a projected annual gap of about 601 students in the Bay region and 218 students in the East Bay Sub-Region.

#### Introduction

This report provides student outcomes data on employment and earnings for TOP 1251.00 - Paramedic 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 Merritt College and in the region.

This report profiles Paramedic Occupations in the 12 county Bay region and in the East Bay sub-region for a proposed new program at Merritt College.

- **Emergency Medical Technicians (29-2042):** Assess injuries and illnesses and administer basic emergency medical care. May 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: 62%
  
- **Paramedics (29-2043):** Administer basic or advanced emergency medical care and assess injuries and illnesses. May administer medication intravenously, use equipment such as EKGs, or administer advanced life support to sick or injured individuals.  
 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 Paramedic Occupations in Bay Region**

Occupation	2021 Jobs	2026 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Emergency Medical Technicians	4,888	5,327	439	9%	2,457	491	\$17	\$20
Paramedics	2,285	2,537	252	11%	902	180	\$21	\$25
<b>Total</b>	<b>7,173</b>	<b>7,864</b>	<b>691</b>	<b>10%</b>	<b>3,359</b>	<b>671</b>		

Occupation	2021 Jobs	2026 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
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Source: Lightcast 2022.3

**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 Paramedic Occupations in East Bay Sub-region**

Occupation	2021 Jobs	2026 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Emergency Medical Technicians	1,968	2,119	152	8%	926	185	\$16	\$19
Paramedics	450	516	66	15%	193	39	\$25	\$28
<b>Total</b>	<b>2,417</b>	<b>2,635</b>	<b>218</b>	<b>9%</b>	<b>1,119</b>	<b>224</b>		

Source: Lightcast 2022.3

**East Bay Sub-Region includes:** Alameda, Contra Costa Counties

**Job Postings in Bay Region and East Bay Sub-Region**

**Table 3. Number of Job Postings by Occupation for latest 12 months (Sept. 2022 - Aug. 2023)**

Occupation	Bay Region	East Bay
Paramedics	1,343	444
Emergency Medical Technicians	1,318	540

Source: Lightcast

**Table 4a. Top Job Titles for Paramedic Occupations for latest 12 months (Sept. 2022 - Aug. 2023) - Bay Region**

Title	Bay	Title	Bay
Paramedics	775	F-15 Crew Chiefs	13
Emergency Medical Technicians - Basic	496	Emergency Medical Technician/Paramedics	10
Emergency Medical Technicians	419	Emergency Department Technicians	9
AMR Emergency Medical Technicians	146	First Aid Responders	9
Emergency Response Managers	112	Critical Care/ICU/PICU/NICU Nurse Practitioners	8
Gamers	109	Emergency Medical Technician Instructors	8
Paramedic Specialists	91	First Aid Sales Representatives	8
Cisco Engineers	20	Emergency Medical Technician Security Officers	7
Emergency Medical Responders	18	Emergency Veterinary Technicians	7

Source: Lightcast

**Table 4b. Top Job Titles for Paramedic Occupations for latest 12 months (Sept. 2022 - Aug. 2023) - East Bay Sub-Region**

Title	East Bay	Title	East Bay
Paramedics	335	Non-Commissioned Officers	4
Emergency Medical Technicians - Basic	253	Regional Technicians	4
Emergency Medical Technicians	151	Response Specialists	4
AMR Emergency Medical Technicians	69	Welcome Coordinators	4
Emergency Response Managers	31	911 Coordinators	3
Gamers	29	Emergency Department Technicians	3
Critical Care/ICU/PICU/NICU Nurse Practitioners	8	Set Up Technicians	3
Emergency Medical Technician Paramedics	5	Critical Care Paramedics	2
Emergency Response Coordinators	4	Emergency Medical Responders	2

Source: Lightcast

## Industry Concentration

**Table 5. Industries hiring Paramedic Workers in Bay Region**

Industry - 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2021)	Jobs in Industry (2026)	% Change (2021-26)	% Occupation Group in Industry (2022)
Ambulance Services	3,263	3,720	14%	52%
Local Government, Excluding Education and Hospitals	1,517	1,674	10%	24%
General Medical and Surgical Hospitals	416	437	5%	7%
Hospitals (Local Government)	276	370	34%	5%
Federal Government, Military	270	278	3%	4%
HMO Medical Centers	205	176	-14%	2%
Hospitals (State Government)	43	64	49%	1%

Source: Lightcast 2022.3

**Table 6. Top Employers Posting Paramedic Occupations in Bay Region and East Bay Sub-Region (Sept. 2022 - Aug. 2023)**

Employer	Bay	Employer	East Bay
AMR	1,733	AMR	710
Global Medical Response	101	Norcal Ambulance	23
Lifestart Ambulance Services	64	Protransport-1	21
Norcal Ambulance	59	Falck Northern California	18

Employer	Bay	Employer	East Bay
Protransport-1	58	Global Medical Response	16
Pro-Transport	40	Pro-Transport	15

Source: Lightcast

## Educational Supply

There are six (6) community colleges in the Bay Region issuing 66 awards on average annually (last 3 years ending 2021-22) on TOP 1251.00 Paramedic. In the East Bay Sub-Region, there are two (2) community colleges that issued six (6) awards on average annually (last 3 years) on this TOP code.

There is one (1) other CTE educational institution in the Bay Region issuing four (4) awards on average annually (last 3 years ending 2021-22) on CIP 51.0904 - Emergency Medical Technology/Technician (EMT Paramedic). There are no other CTE educational institution in the East Bay Sub-Region issuing awards on average annually (last 3 years) on this CIP code.

**Table 7a. Community College Awards on TOP 1251.00 Paramedic in Bay Region**

College	Subregion	Associate Degree	High unit Certificate	Low unit Certificate	Total
Contra Costa	East Bay	0	1	0	1
Foothill	Silicon Valley	19	2	0	21
Las Positas	East Bay	3	1	1	5
Napa	North Bay	3	0	0	3
San Francisco	Mid-Peninsula	6	8	0	14
Santa Rosa	North Bay	5	17	0	22
<b>Total</b>		<b>36</b>	<b>29</b>	<b>1</b>	<b>66</b>

Source: Data Mart

Note: The annual average for awards is 2019-20 to 2021-22.

**Table 7b. Other CTE Institutions Awards on CIP 51.0904 - Emergency Medical Technology/Technician (EMT Paramedic) in Bay Region**

College	Subregion	Associate degree	Total
Pacific Union College	North Bay	4	4
<b>Total</b>		<b>4</b>	<b>4</b>

## Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 671 annual openings for the Paramedic occupational cluster and 70 annual (3-year average) awards for an annual undersupply of 601 students. In the East Bay Sub-Region, there is also a gap with 224 annual openings and six (6) annual (3-year average) awards for an annual undersupply of 218 students.

## Student Outcomes

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 1251.00 - Paramedic**

Metric Outcomes	Bay All CTE Programs	Merritt College All CTE Programs	State 1251.00	Bay 1251.00	East Bay 1251.00	Merritt College 1251.00
Students with a Job Closely Related to Their Field of Study	74%	66%	93%	94%	100%	N/A
Median Annual Earnings for SWP Exiting Students	\$53,090	\$46,924	\$59,828	\$62,004	\$66,878	N/A
Median Change in Earnings for SWP Exiting Students	24%	8%	51%	53%	94%	N/A
Exiting Students Who Attained the Living Wage	54%	54%	77%	63%	70%	N/A

Source: Launchboard Strong Workforce Program Median of 2018 to 2021.

## Skills, Certifications and Education

**Table 9. Top Skills for Paramedic Occupations in Bay Region (Sept. 2022 - Aug. 2023)**

Skill	Posting	Skill	Posting
Ambulances	2,054	National Incident Management Systems	344
Medical Equipment	1,784	Emergency Response	339
Electrocardiography	1,230	Billing	288
Defibrillation	1,229	Prescription Labeling	284
Intravenous Hydration	1,221	Hoisting	271
Emergency Medical Services	999	Hepatitis B	246
Cardiopulmonary Resuscitation (CPR)	878	Tuberculosis	241
Medical Assistance	677	Healthcare Industry Knowledge	226
Office Equipment	560	Medical Direction	187
Patient Rights	560	Triage	184

Source: Lightcast

**Table 10. Certifications for Paramedic Occupations in Bay Region (Sept. 2022 - Aug. 2023)**

Certification	Posting	Certification	Posting
Basic Life Support (BLS) Certification	2,013	Cardiopulmonary Resuscitation (CPR) Certification	72
Valid Driver's License	1,978	Certified Cardiographic Technician (CCT)	58

Certification	Posting	Certification	Posting
Advanced Cardiovascular Life Support (ACLS) Certification	1,294	Basic Cardiac Life Support	57
Emergency Medical Technician (EMT)	1,237	Registered Nurse (RN)	47
Pediatric Advanced Life Support (PALS)	1,236	First Aid Certification	29
Paramedic (EMT-P)	998	Certified First Responder (CFR)	29
Basic Trauma Life Support (BTLS)	867	Automated External Defibrillator (AED) Certification	26
Emergency Medical Technician - Basic (EMT-B)	358	American Red Cross (ARC) Certification	19
Nationally Registered Emergency Medical Technician (NREMT)	163	Emergency Medical Responder (EMR)	19
Advanced Life Support	149	CPR/AED For The Professional Rescuer	18

Source: Lightcast

**Table 11. Education Requirements for Paramedic Occupations in Bay Region**

Education Level	Job Postings	% of Total
High school or GED	2,198	96%
Associate degree	27	1%
Bachelor's degree & higher	60	3%

Source: Lightcast

Note: 16% of records have been excluded because they do not include a degree level. As a result, the chart above may not be representative of the full sample.

## Methodology

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

## Sources

O\*Net Online  
 Lightcast  
 CTE LaunchBoard [www.calpassplus.org](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

For more information, please contact:

- Leila Jamoosian, Research Analyst, for Bay Area Community College Consortium (BACCC) and Centers of Excellence (COE), [leila@baccc.net](mailto:leila@baccc.net)

- John Carrese, Director, San Francisco Bay Center of Excellence for Labor Market Research, [icarrese@ccsf.edu](mailto:icarrese@ccsf.edu) or (415) 267-6544