



Labor Market Analysis for Program Recommendation Paramedicine Occupations Chabot College

Prepared by Bay Regions Center of Excellence for Labor Market Research

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Recommendation

Based on all available data, there appears to be a small “undersupply” of Paramedicine workers compared to the demand for this cluster of occupations in the Bay region and in the East Bay sub-region (Alameda and Contra Costa counties). There is a projected annual gap of about 74 students in the Bay region and 40 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 Chabot College and in the region.

This report profiles Paramedicine Occupations in the 12 county Bay region and in the East Bay sub-region for Regional program recommendation at Chabot College.

- **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 Paramedicine Occupations in Bay Region

Occupation	2022 Jobs	2027 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Paramedics	1,580	1,862	282	18%	672	134	\$28	\$32
Total	1,580	1,862	282	18%	672	134	\$28	\$32

Source: Lightcast 2024.1

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 Paramedicine Occupations in East Bay Sub-region

Occupation	2022 Jobs	2027 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Paramedics	409	523	114	28%	219	44	\$27	\$32
Total	409	523	114	28%	219	44	\$27	\$32

Source: Lightcast 2024.1

East Bay Sub-Region includes: Alameda and 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 (Jul. 2023 - Jun. 2024)

Occupation	Bay Region	East Bay
Paramedics	1,166	390

Source: Lightcast

Table 4a. Top Job Titles for Paramedicine Occupations for latest 12 months (Jul. 2023 - Jun. 2024) Bay Region

Title	Bay	Title	Bay
Paramedics	837	Operations Support Specialists	4
Emergency Response Managers	145	First Responders	2
Paramedic Specialists	88	Reimbursement Managers	2
Gamers	23	Skillbridge Interns	2
Flight Paramedics	8	City Employees	1
Paramedic Instructors	8	Client Care Representatives	1
Critical Care Paramedics	7	Critical Care Flight Paramedics	1
Emergency Response Technicians	5	Disability Services Specialists	1
Medic Emergency Medical Technicians	4	Emergency Response Coordinators	1

Source: Lightcast

Table 4b. Top Job Titles for Paramedicine Occupations for latest 12 months (Jul. 2023 - Jun. 2024) East Bay Sub-Region

Title	East Bay	Title	East Bay
Paramedics	315	Disability Services Specialists	1
Emergency Response Managers	44	Emergency Response Coordinators	1
Emergency Response Technicians	5	Field Leaders	1
Critical Care Paramedics	3	First Responders	1
Gamers	3	Flight Paramedics	1

Title	East Bay	Title	East Bay
Paramedic Instructors	3	Non-Commissioned Officers	1
Medic Emergency Medical Technicians	2	Oil Technicians	1
Skillbridge Interns	2	Operations Support Specialists	1
Critical Care Flight Paramedics	1	Paramedic Specialists	1

Source: Lightcast

Industry Concentration

Table 5. Industries hiring Paramedicine Workers in Bay Region

Industry - 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2022)	Jobs in Industry (2027)	% Change (2022-27)	% Occupation Group in Industry (2023)
Ambulance Services	541	728	35%	42%
Local Government, Excluding Education and Hospitals	402	415	3%	27%
Federal Government, Military	257	265	3%	18%
General Medical and Surgical Hospitals	74	77	5%	5%
Hospitals (Local Government)	59	82	39%	4%
HMO Medical Centers	18	17	-7%	1%

Source: Lightcast 2024.1

Table 6. Top Employers Posting Paramedicine Occupations in Bay Region and East Bay Sub-Region (Jul. 2023 - Jun. 2024)

Employer	Bay	Employer	East Bay
AMR	931	AMR	320
Global Medical Response	54	Global Medical Response	6
Marine Spill Response Corporation	6	Marine Spill Response Corporation	6
Reach Air Medical Services	5	Reach Air Medical Services	2
Protransport-1	3	Williamson Health Rehabilitation Limited	2
Azure Acres Recovery Center	2	Care Ambulance Services	1

Source: Lightcast

Educational Supply

There are six community colleges in the Bay Region issuing 56 awards on average annually (last 3 years ending 2021-23) on TOP 1251.00 - Paramedic. In the East Bay Sub-Region, there are two community colleges that issued 4 awards on average annually (last 3 years) on this TOP code.

There is one other CTE educational institution in the Bay Region issuing 4 awards on average annually (last 3 years ending 2020-22) on CIP 51.0904- Emergency Medical Technology/Technician (EMT Paramedic). There are no other CTE educational institution in the East Bay Sub-Region issuing no 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	16	3	0	19
Las Positas	East Bay	3	0	1	4
Napa	North Bay	4	0	0	4
San Francisco	Mid-Peninsula	6	6	0	12
Santa Rosa	North Bay	3	13	0	16
Total	-	32	23	1	56

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
Total	-	4	4

Gap Analysis

Based on the data included in this report, there is a labor market gap in the Bay region with 134 annual openings for the Paramedicine occupational cluster and 60 annual (3-year average) awards for an annual undersupply of 74 students. In the East Bay Sub-Region, there is also a gap with 44 annual openings and 4 annual (3-year average) awards for an annual undersupply of 40 students.

Student Outcomes

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

Metric Outcomes	Bay All CTE Program	Chabot College All CTE Program	State 1251.00	Bay 1251.00	East Bay 1251.00	Chabot College 1251.00
Students with a Job Closely Related to Their Field of Study	74%	75%	93%	94%	100%	NA
Median Annual Earnings for SWP Exiting Students	\$53,090	\$48,800	\$59,828	\$62,004	\$66,878	NA

Metric Outcomes	Bay All CTE Program	Chabot College All CTE Program	State 1251.00	Bay 1251.00	East Bay 1251.00	Chabot College 1251.00
Median Change in Earnings for SWP Exiting Students	24%	34%	51%	53%	94%	NA
Exiting Students Who Attained the Living Wage	54%	56%	77%	63%	70%	NA

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

Skills, Certifications and Education

Table 9. Job Postings Top Skills for Paramedicine Occupations in Bay Region (Jul. 2023 - Jun. 2024)

Skill	Posting	Skill	Posting
Ambulances	1,123	Tuberculosis	103
Electrocardiography	1,103	Cardiopulmonary Resuscitation (CPR)	64
Defibrillation	1,099	Emergency Medical Services	40
Intravenous Hydration	1,098	Automated External Defibrillator	29
Medical Equipment	950	Trauma Care	27
Emergency Response	152	Critical Care	21
National Incident Management Systems	150	Safety Standards	11
Healthcare Industry Knowledge	143	Blood Pressure	10
Hoisting	143	Federal Emergency Management Agency (FEMA)	9
Hepatitis B	104	Medical Direction	9

Source: Lightcast

Table 10. Job Postings Certifications for Paramedicine Occupations in Bay Region (Jul. 2023 - Jun. 2024)

Certification	Posting	Certification	Posting
Advanced Cardiovascular Life Support (ACLS) Certification	1,124	Emergency Medical Technician (EMT)	9
Basic Life Support (BLS) Certification	1,110	Cardiopulmonary Resuscitation (CPR) Certification	9
Paramedic (EMT-P)	900	Basic Cardiac Life Support	8
Basic Trauma Life Support (BTLS)	663	Certified Cardiographic Technician (CCT)	8
Advanced Life Support	40	Nationally Registered Paramedic (NRP)	6
Nationally Registered Emergency Medical Technician (NREMT)	16	Certified First Responder (CFR)	4

Certification	Posting	Certification	Posting
Neonatal Resuscitation Program Certification (NRP)	16	First Aid Certification	2

Source: Lightcast

Table 11. Education Requirements for Paramedicine Occupations in Bay Region

Education Level	Job Postings	% of Total
High school or GED	1,127	99%
other	3	0%
Bachelor's degree & higher	8	1%

Source: Lightcast

Note: 3% 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

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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