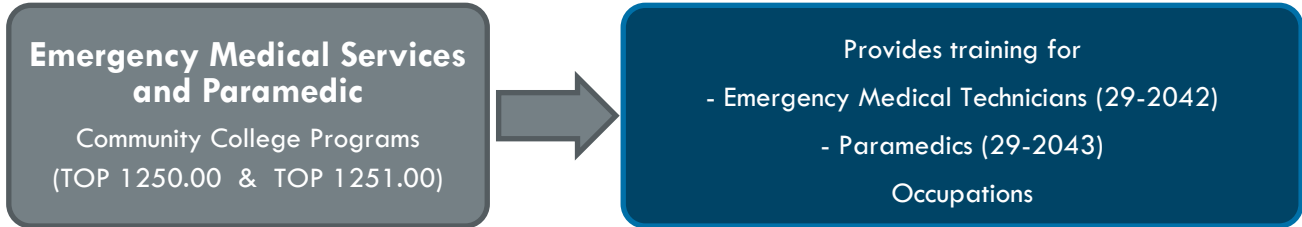


Emergency Medical Technicians and Paramedics

Inland Empire/Desert Region (Riverside and San Bernardino counties)

Summary



Over the next five years (2022-2027), employment for EMT and Paramedics is projected to:



The Inland Empire/Desert Center of Excellence
 **Recommends**
the emergency medical services and/or
paramedic program in region

Of the 870 awards conferred by community colleges, **116 were for associate degrees or certificates of 30 to fewer than 60 semester units.

Introduction

California Community College emergency medical services (TOP 1250.00) programs prepare students for employment through the instruction of pre-hospital, emergency medical diagnostic procedure, treatment, and comprehensive care in medical crises, including emergency vehicle operation and patient transportation procedures, including training specific to the certification standards for the EMT-1 or EMT-2 certifications. Paramedic (TOP 1251.00) programs provide training specific to the certification standards for EMT-P (Paramedic) – Taxonomy of Programs, 2023. The knowledge, skills, and abilities trained by emergency medical services and paramedic programs lead to employment in the Emergency Medical Technicians (EMT) and Paramedics occupational group.

- Emergency Medical Technicians (SOC 29-2042)
- Paramedics (SOC 29-2043)

Job Demand

In 2022, there were 2,464 jobs for EMT and Paramedics in the Inland Empire/Desert Region. Regional employment for these occupations is projected to increase by 3% through 2027; 187 job openings are projected annually. Exhibit 1 displays the job counts, five-year projected job growth, and job openings in the region.

Exhibit 1. Five-year projections for EMT and Paramedics, Inland Empire/Desert Region, 2022-2027

Occupation	2022 Jobs	2027 Jobs	5-Yr % Change	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)
Emergency Medical Technicians	1,669	1,686	1%	669	134
Paramedics	795	843	6%	267	53
Total	2,464	2,529	3%	936	187

Source: Lightcast 2023.3

An online job ad search for EMT and Paramedics was conducted to reveal the employers seeking these workers, including the median posting duration, earnings information, and in-demand skills. Exhibit 2 displays the number of job ads posted for these two occupations over the last 12 months and the median posting duration. Over the previous 12 months, there were 1,511 job ads for EMT and Paramedics in the region.

Exhibit 2. Job ads and posting duration, Inland Empire/Desert Region, November 2022 through October 2023

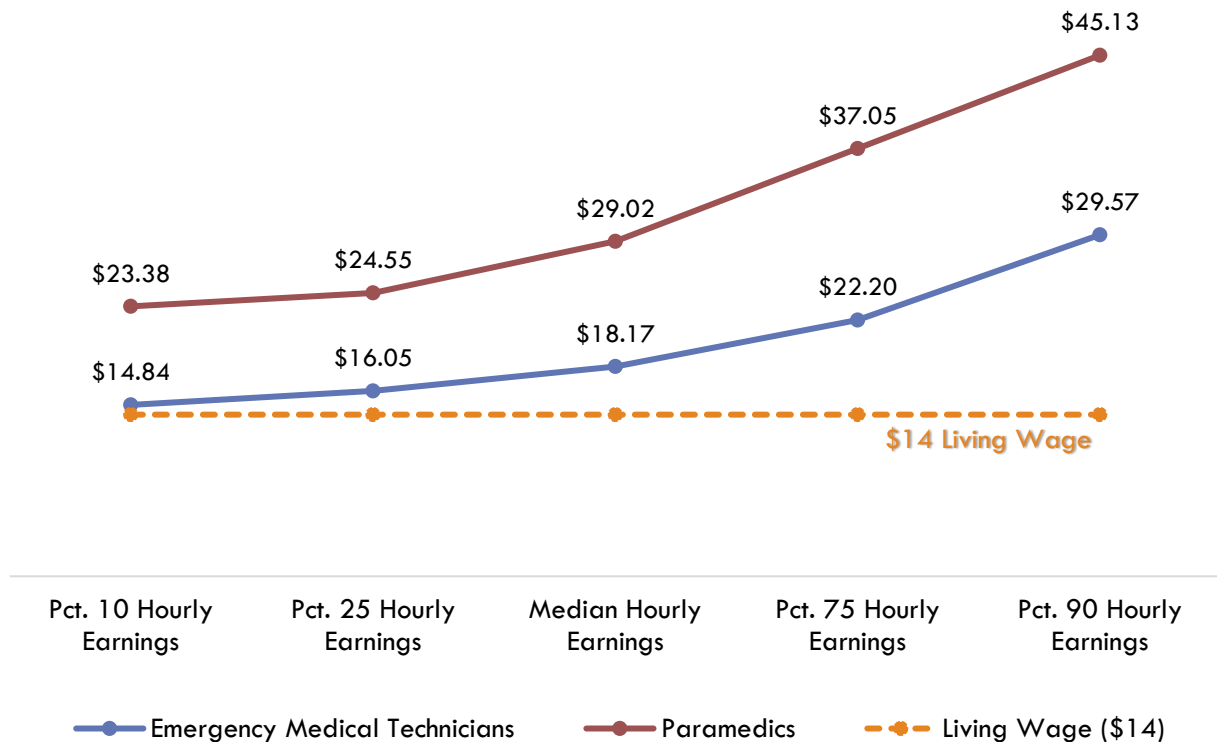
Occupation	Job Ads	Median Posting Duration (Days)
Emergency Medical Technicians	949	29
Paramedics	562	31
Total	1,511	--

Source: Lightcast 2023.3

Earnings

The living wage for one adult in the Inland Empire (Riverside and San Bernardino) is \$14 per hour or \$29,120 annually. Exhibit 3 displays the hourly earnings for EMT and Paramedics. Both occupations have hourly wages above the living wage estimate.

Exhibit 3. Hourly earnings by percentile for EMT and Paramedics, Inland Empire/Desert Region, 2022

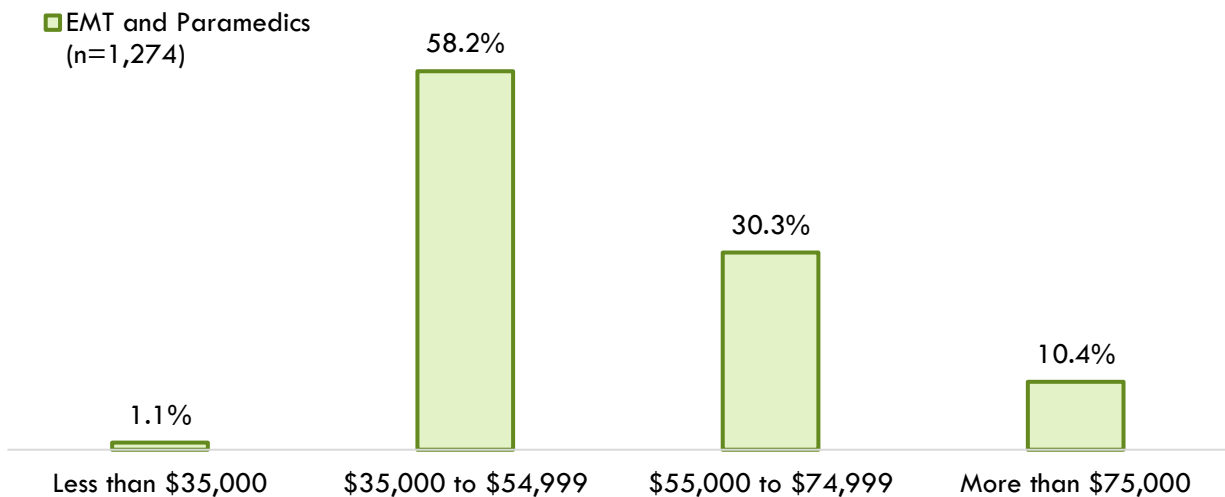


Source: Lightcast 2023.3

Advertised Salary from Online Job Ads

Exhibit 4 displays the regional online advertised salaries for EMT and Paramedics over the last 12 months. Online job ad salary information reveals that the majority (58.2%) of employers advertise an annual salary between \$35,000 and \$54,999.

Exhibit 4. Online advertised salaries for EMT and Paramedics, Inland Empire/Desert Region, November 2022 through October 2023



Source: Lightcast 2023.3

Online Job Advertisements: Job Titles, Employers, Skills, Education, & Work Experience

Exhibit 5 displays the job titles most frequently used in EMT and Paramedics job ads over the last 12 months. Displaying advertised job titles may provide insight into the types of positions sought by employers posting job ads.

Exhibit 5. Job titles most frequently used in EMT and Paramedics job ads, Inland Empire/Desert Region, November 2022 through October 2023

Job Titles	Unique Job Ads
Emergency Medical Technicians – Basic	401
Paramedics	340
Emergency Medical Technicians	314
Emergency Response Managers	270
Ambulance Drivers	23

Source: Lightcast 2023.3

Exhibit 6 displays the employers posting the most job ads for EMT and Paramedics during the last 12 months. Showing employer names provides insight into where students may find employment after completing a program. The top employer is AMR with 1,119 unique job ads.

Exhibit 6. Employers posting the most job ads for EMT and Paramedics, Inland Empire/Desert Region, November 2022 through October 2023

Top Employer	Unique Job Ads
AMR	1,119
Global Medical Response	76
Lifeguard Air Ambulance	26
Advantage Ambulance	16
Prime Healthcare Services	15
Desert Valley Hospital	14

Source: Lightcast 2023.3

Exhibit 7 lists a sample of specialized and employability skills employers seek when seeking workers to fill EMT and Paramedics positions. Specialized skills are occupation-specific skills that employers request for industry or job competency. Common skills are foundational skills that transcend industries and occupations; this category is often referred to as "soft skills." The skills requested in job ads may be utilized to guide curriculum development.

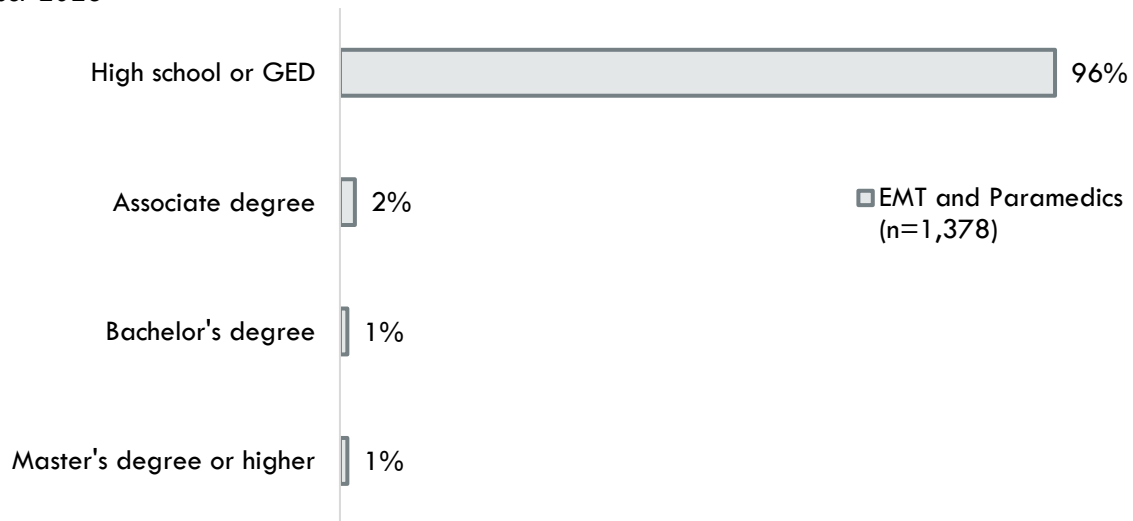
Exhibit 7. Sample of in-demand skills from employer job ads, Inland Empire/Desert Region, November 2022 through October 2023

Specialized skills	Common skills
<ul style="list-style-type: none"> • Ambulances • National Incident Management Systems • Medical Equipment • Cardiopulmonary Resuscitation (CPR) • Emergency Medical Services • Medical Assistance • Patient Rights • Defibrillation • Intravenous Hydration • Electrocardiography 	<ul style="list-style-type: none"> • Good Driving Record • Professionalism • Customer Service • Communications • Management • Quality Assurance • Operations • Cleanliness • First Aid • Physical Stamina

Source: Lightcast 2023.3

Exhibit 8 displays the minimum advertised education requirements for EMT and Paramedics. According to the Bureau of Labor Statistics, between 63% and 66% of incumbent workers in this field hold a community college-level of educational attainment; "some college, no degree," and an "associate degree." Approximately 91% of employer job ads included minimum education requirements. The majority of employer job ads (97%) sought a high school diploma or equivalent as the minimum education requirement.

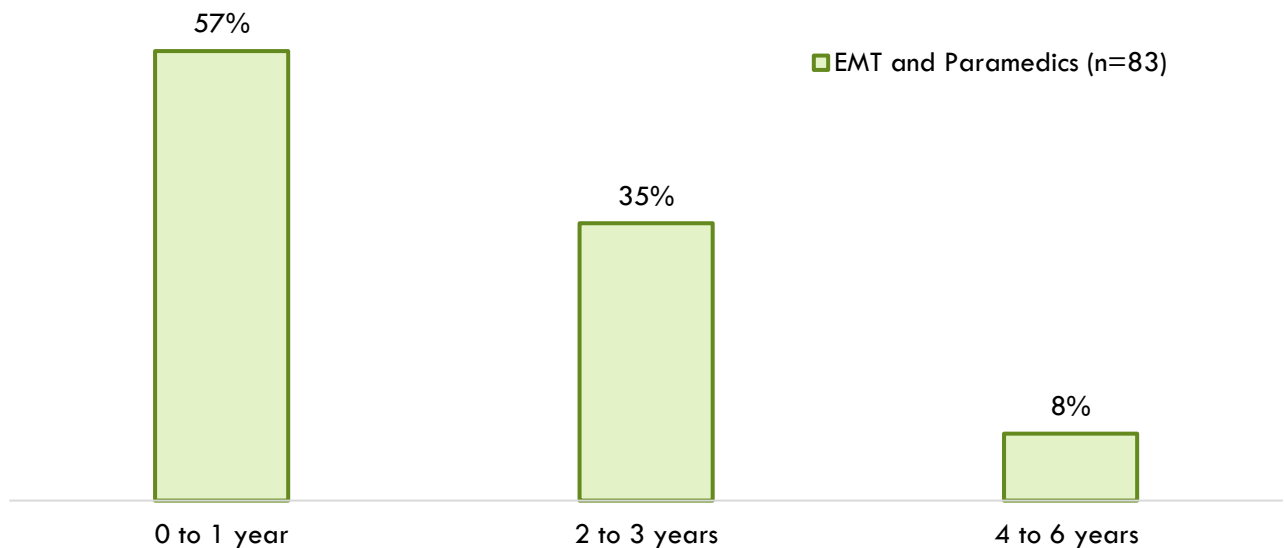
Exhibit 8. Minimum advertised education requirements, Inland Empire/Desert Region, November 2022 through October 2023



Source: Lightcast 2023.3

Exhibit 9 displays the work experience typically required from employer job ads for EMT and Paramedics. More than half of employers (57%) listing minimum experience requirements sought candidates with zero to one year of previous work experience.

Exhibit 9. Real-time work experience requirements, Inland Empire/Desert Region, November 2022 through October 2023



Source: Lightcast 2023.3

Certifications

Exhibit 10 displays the most frequently requested certifications by employers in job advertisements.

Exhibit 10: Certifications most frequently required by employers, Inland Empire/Desert Region, November 2022 through October 2023

Certification	Jobs Ads
Valid Driver's License	1,301
Emergency Medical Technician (EMT)	905
Advanced Cardiovascular Life Support (ACLS)	588
Paramedic (EMT-P)	570
Pediatric Advanced Life Support (PALS)	240
Basic Life Support (BLS)	209

Source: Lightcast 2023.3

Student Completions and Programs Outcomes

Exhibit 11 displays student completions for Emergency Medical Services (TOP 1250.00) and Paramedic (TOP 1251.00) programs over the last three academic years (2019 through 2022). In the previous three academic years, six (6) regional community colleges issued an average of 870 awards in Emergency Medical Services and Paramedic programs. Program completion and student outcome methodologies are found in the appendix. Of the 870 awards conferred by community colleges, 116 were for associate degrees or certificates of 30 to fewer than 60 semester units.

Exhibit 11. Annual average community college awards for Emergency Medical Services and Paramedic programs, Inland Empire/Desert Region, Academic Years 2019-2022

TOP Code	Program	College	2019-20 Awards	2020-21 Awards	2021-22 Awards	3-Year Award Average
1250.00	Emergency Medical Services	Barstow	-	-	2	1
		Chaffey	1	2	6	3
		Crafton Hills	229	162	146	179
		Desert	1	2	3	2
		Moreno Valley	134	80	122	112
		Victor Valley	1	271	547	273
Supply Subtotal/Average			366	517	826	570
1251.00	Paramedic	Crafton Hills	43	9	23	25
		Moreno Valley	16	29	43	29
		Victor Valley	36	261	441	246
Supply Subtotal/Average			95	299	507	300
Supply Total/Average			461	816	1,333	870

Source: MIS Data Mart

California program outcome data may provide useful insight into the likelihood of success for the proposed program(s). Community college student outcome information based on the selected TOP codes and region is provided in Exhibits 12 and 13.

Exhibit 12. TOP 1250.00 – Emergency Medical Services strong workforce program outcomes, Inland Empire/Desert Region, most recent academic year

Strong Workforce Program Metrics: 1250.00 – Emergency Medical Services	Inland Empire/Desert Region	California
Unduplicated count of enrolled students (2021-22)	1,586	14,635
Completed 9+ career education units in one year (2021-22)	37%	36%
Students who attained a noncredit workforce milestone in a year (2021-22)	83%	78%
Students who earned a degree, certificate, or attained apprenticeship (2021-22)	523	846
Job closely related to the field of study (2019-20)	65%	61%
Median annual earnings (all exiters) (2020-21)	\$39,472	\$40,544
Median change in earnings (all exiters) (2020-21)	45%	34%
Attained a living wage (completers and skills-builders) (2020-21)	67%	57%

Sources: LaunchBoard Community College Pipeline and Strong Workforce Program Metrics

Exhibit 13. TOP 1251.00 – Paramedic strong workforce program outcomes, Inland Empire/Desert Region, most recent academic year

Strong Workforce Program Metrics: 1251.00 – Paramedic	Inland Empire/Desert Region	California
Unduplicated count of enrolled students (2021-22)	387	1,777
Completed 9+ career education units in one year (2021-22)	64%	63%
Students who attained a noncredit workforce milestone in a year (2021-22)	88%	74%
Students who earned a degree, certificate, or attained apprenticeship (2021-22)	233	586
Job closely related to the field of study (2019-20)	77%	93%
Median annual earnings (all exiters) (2020-21)	\$58,130	\$60,566
Median change in earnings (all exiters) (2020-21)	44%	45%
Attained a living wage (completers and skills-builders) (2020-21)	74%	76%

Sources: LaunchBoard Community College Pipeline and Strong Workforce Program Metrics

Exhibit 14 displays awards for other postsecondary education provider(s) reported in the Emergency Medical Technology/Technician (EMT Paramedic) program. Completion data is compiled from the Integrated Postsecondary Education Data System (IPEDS) for the most recent two years. One non-community college institution issued an average of two (2) awards over the last two academic years.

Exhibit 14. Other educational providers for the Emergency Medical Technology/Technician (EMT Paramedic) program, Inland Empire/Desert Region, Academic Years 2019-2021

CIP Code	Program	Institution	2019-20 Awards	2020-21 Awards	2-Year Award Average
51.0904	Emergency Medical Technology/Technician (EMT Paramedic)	Loma Linda University	2	1	2
Supply Subtotal/Average			2	1	2
Supply Total/Average			2	1	2

Source: IPEDS

Summary of Findings & Recommendation

Over the next five years, EMT and Paramedics are projected to have 187 annual job openings and increase employment by 3% in the Inland Empire/Desert Region. Both EMT and Paramedics pay hourly wages above the living wage estimate (\$14).

Over the last three academic years, six (6) regional community colleges issued an average of 870* awards in Emergency Medical Services and Paramedic programs. One non-community college postsecondary education institution issued an average of two (2) awards in the Emergency Medical Technology/Technician (EMT Paramedic) program over the last two years. In total, regional institutions issued an average of 872 awards.

Based on the 187 annual job openings (demand) and the annual average of 872 awards conferred (supply), there appears to be an oversupply of workers in the region. The Inland Empire/Desert Region Center of Excellence does not recommend creating a new Emergency Medical Services and/or Paramedic program. However, community colleges with existing programs should partner with applicable employers to document their demand for EMT and Paramedics and the skills/certifications required for students to earn a living wage after exiting the program.

*Of the 870 awards conferred by community colleges, 116 were for associate degrees or certificates of 30 to fewer than 60 semester units.

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 January 2024

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Appendix: Methodology

Exhibit 11 displays the average annual California Community College (CCC) awards conferred during the three academic years between 2019 and 2022 from the California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart. Awards are the combined total of associate degrees and certificates issued during the timeframe, divided by three in this case to calculate an annual average. This is done to minimize the effect of atypical variations that might be present in a single year.

Community college student outcome information is from LaunchBoard and based on the selected TOP code and region. These metrics are based on records submitted to the California Community Colleges Chancellor's Office Management Information Systems (MIS) by community colleges, which come from self-reported student information from CCC Apply and the National Student Clearinghouse. Employment and earnings metrics are sourced from California's Employment Development Department's Unemployment Insurance database. When available, outcomes for completers are reported to demonstrate the impact that earning a degree or certificate can have on employment and earnings. For more information on the types of students included for each metric, please see the web link for LaunchBoard's Strong Workforce Program Metrics Data Element Dictionary in the References section (LaunchBoard, 2023a). Finally, employment in a job closely related to the field of study comes from self-reported student responses on the CTE Employment Outcomes Survey (CTEOS) administered by Santa Rosa Junior College (LaunchBoard, 2023a).

Table 1. 2022 to 2027 job growth, wages, entry-level education, training, and work experience required for EMT and Paramedics in the Inland Empire/Desert Region (Riverside and San Bernardino Counties combined)

Occupation (SOC)	2022 Jobs	5-Year Change	5-Year % Change	Annual Openings (New + Replacement Jobs)	Entry-Experienced Hourly Wage (10 th to 90 th percentile)	Median Hourly Wage (50 th percentile)	Average Annual Earnings	Entry-Level Education & On-The-Job-Training	Work Experience Required
Emergency Medical Technicians	1,669	18	1%	134	\$14.84 - \$29.57	\$18.17	\$41,600	Postsecondary nondegree award & None	None
Paramedics	795	48	6%	53	\$23.38 - \$45.13	\$29.02	\$67,800	Postsecondary nondegree award & None	None
Total	2,464	66	3%	187	-	-	-	-	-

Source: Lightcast 2023.3