

## **Emergency Medical Technicians and Paramedics**

Inland Empire/Desert Region (Riverside-San Bernardino-Ontario Metropolitan Statistical Area)

#### **Summary**

- Employment for the emergency medical technicians and paramedics occupation is expected to increase by 16% through 2022, nearly 1,300 job openings will be available in the Inland Empire/ Desert Region.
- The median hourly wage for emergency medical technicians and paramedics is above the MIT Living Wage estimate of \$12.30 per hour for a single adult living in the Inland Empire/Desert Region.
- The labor market demand for emergency medical technicians and paramedics appears to be adequately met based on the average annual number of program completers for the selected community college programs (234 total annual average credentials from community colleges, and 22 annual average credentials from other educational institutions, 256 total), and the annual job openings for this occupation (252 annual job openings).

#### Introduction

In the field of emergency medical services, emergency medical technicians (EMTs) typically represent the entry-level position for patient care while paramedics possess advanced training, which allows them to administer medications among other things.<sup>1</sup> However, the Standard Occupational Classification (SOC) system combines these into a single occupation, severely limiting analyses between the two different roles with traditional labor market information. For this reason, the traditional labor market information in this report is supplemented with real-time labor market information (i. e., reviewing job posting data), which allows us to separate the search results by job title, providing data unique to each role. For additional information on the myriad distinctions between EMTs and paramedics, please see California's Emergency Medical Services Authority for the two roles:

- EMT: <u>https://emsa.ca.gov/EMT/</u>
- Paramedic: <u>https://emsa.ca.gov/Paramedic/</u>

<sup>&</sup>lt;sup>1</sup> <u>https://www.cpc.mednet.ucla.edu/node/27</u>



The occupation detailed in this report is listed below along with its corresponding definition/description, sample job titles, education and training requirements, as well as the community college educational attainment of current workers within this occupation.

#### 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.

Sample job titles: Emergency Medical Technician (EMT); Emergency Medical Technician, Basic (EMT, B); Emergency Medical Technician/Driver (EMT/DRIVER); EMT Intermediate (Emergency Medical Technician, Intermediate); EMT, Paramedic (Emergency Medical Technician, Paramedic); EMT/Dispatcher (Emergency Medical Technician/Dispatcher); First Responder; Flight Paramedic; Multi Care Technician (Multi Care Tech); Paramedic

Entry-Level Educational Requirement: Postsecondary nondegree credential Training Requirement: None

Percentage of incumbent workers with a Community College Credential or Some Postsecondary Coursework: 67%

## **Job Opportunities**

In 2017, there were more than 2,600 EMT and paramedic jobs in the Inland Empire/Desert Region. Across the region, employment related to this occupation is expected to increase by 16% through 2022. Employers will need to hire nearly 1,300 workers over the next five years to fill new jobs and to backfill jobs that workers are leaving – including retirements. Exhibit 1 displays the projected growth for EMTs and paramedics in the region.

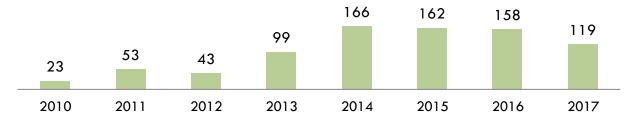
Region	2017 Jobs	5-Yr % Change (New Jobs)	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
Inland Empire/Desert	2,622	16%	1,258	252	6%
Source: EMSI 2018.3					

Exhibit 1: Five-year projections for EMTs and paramedics occupation in the Inland Empire/Desert Region



Over the last 12 months (August 2017 to July 2018), there were 137 advertisements (ads) for the EMTs and paramedics occupation in the Inland Empire/Desert Region. From 2010 to 2017, there was an annual average of 103 job ads per year (Exhibit 2).

Exhibit 2: Number of online job postings for EMTs and paramedics in the Inland Empire/Desert Region, 2010 to 2017



Source: Burning Glass – Labor Insights

The average time to fill for EMTs and paramedics in the Inland Empire/Desert Region is about five days longer than the nation as a whole. This may indicate that it is somewhat more difficult for a local employer to find qualified candidates to fill their open positions than it is nationally. Exhibit 3 shows the number of job ads posted during the last 12 months along with the regional and national average time to fill.

Exhibit 3: Employer job ads and time to fill for EMTs and paramedics in the Inland Empire/Desert Region during the last 12 months, August 2017 – July 2018

Occupation	Job Ads	Regional Average Time to Fill (Days)	National Average Time to Fill (Days)
Emergency Medical Technicians	67	51	46
Paramedics	54	51	46
Total	137*	-	-

Source: Burning Glass – Labor Insights

\*The total number of job ads reflects the combined total for the occupation of Emergency Medical Technicians and Paramedics



#### **Earnings**

The median wage for EMTs and paramedics is above the MIT Living Wage estimate of \$12.30 per hour, or \$25,584 annually for a single adult living in the Inland Empire/Desert Region. This wage is also sufficient for an adult living in a household with one other working adult and one child (\$14.50 per hour, per adult or \$30,160 annually for each adult). See Exhibit 4 for wage information.

#### Exhibit 4: Earnings for EMTs and paramedics occupation in the Inland Empire/Desert Region

Occupation	Entry to Experienced Hourly Earnings Range*	Median Wage*	Avg. Annual Earnings
Emergency Medical Technicians and Paramedics	\$11.70 to \$18.07	\$14.78	\$30,700

Source: EMSI 2018.3

\*Entry Hourly is 25th percentile wage, the median is 50th percentile wage, experienced is 75th percentile wage.

### Work Locations, Employers, Skills, Education, and Certifications

Exhibit 5 displays the top employers posting job during the last 12 months. EMTs and paramedics have been separated by job title.

Exhibit 5: The top employers posting job ads for EMTs and paramedics in the Inland Empire/Desert Region during the last 12 months, August 2017 – July 2018

Occupation	Top Employers
Emergency Medical Technicians (n=59)	<ul> <li>Dignity Health</li> <li>Universal Health Services, Inc.</li> <li>Pechanga Resort &amp; Casino</li> </ul>
Paramedics (n=23)	<ul><li>Voyig, LLC</li><li>AMR Healthcare Consulting, LLC</li><li>Air Methods</li></ul>
Source: Burning Glass – Labor Insights	

Source: Burning Glass – Labor Insights



Exhibit 6 lists the in-demand skills that employers are seeking when looking for workers to fill positions with EMTs and paramedics. EMTs and paramedics have been separated by job title. Employability skills are general abilities that employers are looking for beyond job-specific skills and work experience to help drive business activity. Employers most frequently mention the need for CPR and patient care skills.

Exhibit 6: In-demand skills from employer job ads for EMTs and paramedics in the Inland
Empire/Desert Region, August 2017 – July 2018

Occupation	Specialized skills	Employability skills	
Emergency Medical Technicians (n=49)	<ul> <li>Cardiopulmonary Resuscitation (CPR)</li> <li>Patient Care</li> <li>Trauma</li> <li>Life Support</li> <li>Acute Care</li> </ul>	<ul> <li>Writing</li> <li>English</li> <li>Troubleshooting</li> <li>Teamwork/ Collaboration</li> </ul>	
Paramedics (n=44)	<ul> <li>Cardiopulmonary Resuscitation (CPR)</li> <li>Patient Care</li> <li>Electrocardiogram (EKG/ECG)</li> <li>Advanced Cardiac Life Support (ACLS)</li> <li>Medical Triage</li> </ul>	<ul><li>Leadership</li><li>Detail-Oriented</li><li>Communication Skills</li></ul>	

Source: Burning Glass – Labor Insights



Exhibit 7 displays the entry-level education typically required to enter each occupation according to the Bureau of Labor Statistics, educational attainment for incumbent workers with "some college, no degree" and an "associate degree" according to the U.S. Census, and the minimum advertised education requirement requested by employers in online job ads. EMTs and paramedics have been separated by job title in the job posting data. Nearly all employers are looking for a high school or vocational training level of education.

Exhibit 7: Educational attainment and online job ads with minimum advertised education requirements for EMTs and paramedics in the Inland Empire/Desert Region, August 2017 – July 2018

Ossupstiens	Typical Entry- Level	Educational Attainment (Percentage of incumbent	Minimun	n Advertised I from Jo	Education Re ob Ads	equirement
Occupations	Education Requirement	workers with a Community College-level Education)*	Number of Job Postings (n=)	High school diploma or vocational training	Associate degree	Bachelor's degree or higher
Emergency Medical Technicians	Postsecondary nondegree credential	61%	34	97%	3%	-
Paramedics	Postsecondary nondegree credential	61%	27	100%	-	-

Source: EMSI 2018.3, Current Population Survey, Burning Glass – Labor Insights

\*Some college-no degree, postsecondary nondegree credential, or an associate degree.



Exhibit 8 displays the top certifications required by employers posting job ads for EMTs and paramedics in the Inland Empire/Desert Region. EMTs and paramedics have been separated by job title in job ads data.

Exhibit 8: Top certifications required for EMTs and paramedics by employers' job ads in the Inland Empire/Desert Region, August 2017 – July 2018

Occupation	Certifications
Emergency Medical Technicians (n=67)	<ul> <li>Emergency Medical Technician (EMT)</li> <li>Driver's License</li> <li>Basic Life Saving (BLS)</li> </ul>
Paramedics (n=42)	<ul> <li>Advanced Cardiac Life Support (ACLS) Certification</li> <li>Driver's License</li> <li>Paramedic Certification</li> </ul>

Source: Burning Glass – Labor Insights

## Additional Skills and Training Demand for EMT and Paramedic

According to job ads, employers are searching for job candidates with EMT and paramedic certifications, skills, or training to fill other jobs that will not work explicitly as emergency medical technicians and paramedics. Emergency room technician jobs were the most commonly requested result for employers looking for these skills, followed by registered nurses. Exhibit 9 displays the occupation title and most common employers requesting these skills.

Exhibit 9: Other occupations in which employers are requesting EMT or paramedic skills, certifications, or training for, August 2017 – July 2018

Occupation	Employer
Emergency Room Technician*	Universal Health Services, Inc.
Registered Nurses	Chino Valley Medical Center
Phlebotomist	Quest Diagnostics, Inc.
Nursing Assistants	Loma Linda University Health
Medical and Clinical Laboratory Technicians	Davita, Inc.
Licensed Practical and Licensed Vocational Nurses	Medcor, Inc.
Municipal Firefighters	City of Cathedral City
Medical Secretaries	Universal Health Services, Inc.

\*This represents the most common job title linked to the occupation, Health Technologists and Technicians, All Other (29-2099).



#### **Student Completions**

Exhibits 10 & 11 show the annual average regional community college credentials (associate degrees and certificates) conferred during the three academic years between 2014 and 2017, with the relevant TOP code as well as the program title used at each college, sourced from the Chancellor's Office Curriculum Inventory (COCI). Exhibit 12 displays credentials granted from other educational institutions from 2013 to 2016, along with the relevant CIP code. Please note, a credential is not equivalent to a single person in search of a job opening since a student may earn more than one credential, such as an associate degree in addition to a certificate. Community College student outcome information is from the CTE LaunchBoard based on the selected TOP code and region.



Exhibit 10: Annual average community college student completions for emergency medical services programs in the Inland Empire/Desert Region

1250.00 - Emergency Medical Services	Annual Community College Headcount (2016-17)	Community College Annual Average Credentials (2014-17)
Barstow – Allied Health: EMT I	147	
Chaffey – Emergency Medical Provider	181	
Copper Mountain	81	
Crafton Hills	312	
Certificate 6 to $< 18$ semester units		156
<b>Desert</b> – Emergency Medical Care	156	
Moreno Valley	267	
Certificate 6 to $< 18$ semester units		15
Mt. San Jacinto	125	
Palo Verde	52	
Certificate 6 to $< 18$ semester units		2
Victor Valley	309	
Total CC Headcount (2016-17)	1,627	
Total annual average community college credentials (2014-17)		173
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Source: LaunchBoard, IPEDS, COCI

#### 1250.00 – Emergency Medical Services program Strong Workforce outcomes in the Inland Empire/Desert Region in the academic year 2015-16 [unless noted otherwise]:

- Number of course enrollments: 2,909 (CA Median: 237) [2016-17]
- Number of students who transferred to a 4-year institution: 117 (CA: 20)
- Employed in the second fiscal quarter after exit: 77% (CA: 77%)
- Median earnings in the second fiscal quarter after exit: \$6,867 (CA: \$6,959)
- Employed in the fourth fiscal quarter after exit: 77% (CA: 74%)
- Job closely related to the field of study: 87% (CA: 78%) [2014-15]
- Median annual earnings: \$24,688 (CA: \$26,558)
- Median change in earnings: 61% (CA: 70%)
- The proportion of students who attained a living wage: 52% (CA: 48%)



Exhibit 11: Annual average community college student completions for the paramedic program in the Inland Empire/Desert Region

1251.00 — Paramedic	Annual Community College Headcount (2016-17)	Community College Annual Average Credentials (2014-17)
<b>Crafton Hills</b> – EMT-Paramedic, Emergency Medical Services	55	
Associate Degree		6
Certificate 30 to $< 60$ semester units		32
Moreno Valley - Emergency Medical Services Paramedic	77	
Associate Degree		7
Certificate 30 to $< 60$ semester units		5
Mt. San Jacinto	18	
Victor Valley – Emergency Medical Services, Paramedic	195	
Associate Degree		6
Certificate 30 to $< 60$ semester units		5
Total CC Headcount (2015-16)	339	
Total annual average community college credentials (2014-17)		61

Source: LaunchBoard, IPEDS

# 1251.00 - Paramedic program Strong Workforce outcomes in the Inland Empire/Desert Region in the academic year 2015-16 [unless noted otherwise]:

- Number of course enrollments: 1,156 (CA Median: 111) [2016-17]
- Number of students who transferred to a 4-year institution: N/A (CA: 0)
- Employed in the second fiscal quarter after exit: 87% (CA: 90%)
- Median earnings in the second fiscal quarter after exit: \$14,733 (CA: \$13,433)
- Employed in the fourth fiscal quarter after exit: 82% (CA: 88%)
- Job closely related to the field of study: 91% (CA: 100%) [2014-15]
- Median annual earnings: \$51,272 (CA: \$45,808)
- Median change in earnings: 100% (CA: 83%)
- The proportion of students who attained a living wage: 81% (CA: 90%)

Exhibit 12: Annual average other educational institutions student completions for emergency medical services programs and paramedic programs in the Inland Empire/Desert Region

51.0904 – Emergency Medical Technology/Technician (EMT Paramedic) (CIP)	Other Educational Institutions Annual Average Certificates or Other Credit Credentials (2013-16)
Riverside County Office of Education-School of Career Education	
Award < 1 academic year	22
Total annual average other credentials (2013-16)	22

Source: IPEDS



#### **Sources**

O\*Net Online Labor Insight/Jobs (Burning Glass) Economic Modeling Specialists International (EMSI) Employment Development Department, Labor Market Information Division, OES Employment Development Department, Unemployment Insurance Dataset CTE LaunchBoard Statewide CTE Outcomes Survey Living Insight Center for Community Economic Development California Community Colleges Chancellor's Office Management Information Systems (MIS)

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