

# Emergency Medical Technicians and Paramedics

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

## Summary

- Employment for emergency medical technicians (EMT) and paramedics is expected to **increase by 15% between 2018 and 2023** in the Inland Empire/Desert region. A total of **288 annual job openings** will be available over the five-year timeframe.
- The entry-level wage for EMTs and paramedics is **above the Family Needs Calculator estimate of \$11.97 per hour** for a single adult living in Riverside County and \$11.63 for a single adult living in San Bernardino County.
- There are 319 credentials issued annually from regional community college emergency medical services and paramedic programs. Other educational institutions issued an annual average of 36 credentials over the last three years. Combined, these training programs provide the region with a **potential supply of 355 emergency medical technicians and paramedics**.

## Introduction

There are two training programs for EMTs and paramedics, emergency medical services (TOP 1250.00) and paramedic (TOP 1251.00). The California Community College emergency medical services program prepares students for employment as EMTs by providing knowledge 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. The paramedic program prepares students for employment as paramedics by providing training specific to the certification standards for EMT-P (Paramedic) (Taxonomy of Programs, 2012). A definition for this occupation and a sample of job titles is provided below.

## 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 award*

*Training Requirement: None*

*Work Experience Required: None*

*Incumbent workers with a Community College Award or Some Postsecondary Coursework: 65%*

## Job Opportunities

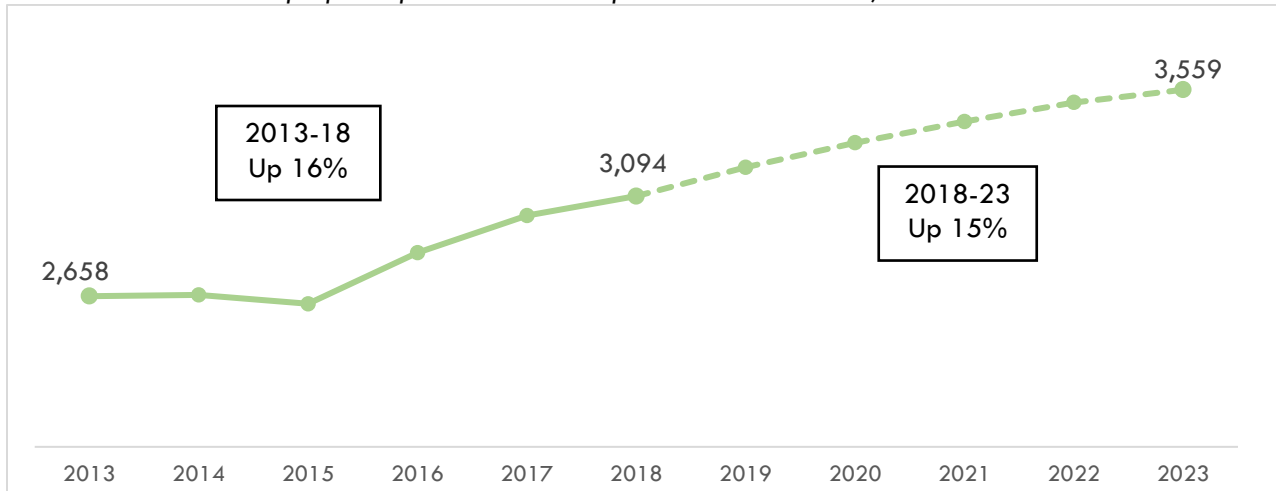
In 2018, there were 3,094 jobs employing EMTs and paramedics in the Inland Empire/Desert region (IEDR). This occupation is projected to increase employment by 15% by 2023. Employers in the region will need to hire 1,442 workers over the next five years to fill new jobs and backfill jobs that workers are permanently vacating (includes occupational transfers and retirements). Exhibit 1 displays five-year projected job growth for EMTs and paramedics. Exhibit 2 displays historical and projected jobs for EMTs and paramedics.

*Exhibit 1: Five-year projections for EMTs and paramedics*

2018 Jobs	2023 Jobs	5-Yr % Change (New Jobs)	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
3,094	3,559	15%	1,442	288	7%

Source: EMSI 2019.3

Exhibit 2: Historical and projected jobs for EMTs and paramedics in the IEDR, 2013 – 2023



Source: EMSI 2019.3

## Job Postings

Real-time labor market information from employer job advertisements is used in this report as a supplemental way to gauge demand for EMTs and paramedics. Exhibit 3 displays the number of job ads posted during the last 12 months along with the regional and statewide average time to fill for EMTs and paramedics in the IEDR. On average, local employers fill online job postings for the EMTs and paramedics within 51 days. This regional average is the same as the statewide average, indicating that both areas face similar challenges when seeking candidates to fill these positions.

Exhibit 3: Job ads and time to fill for EMTs and paramedics, Sep 2018 – Aug 2019

Occupation	Job Ads	Regional Average Time to Fill (Days)	California Average Time to Fill (Days)
Emergency Medical Technicians and Paramedics	187	51	51

Source: Burning Glass – Labor Insights

## Earnings and Benefits

The entry-level wage for EMTs and paramedics is above the Family Needs Calculator estimate of \$11.97 per hour for a single adult living in Riverside County and \$11.63 for a single adult living in San Bernardino County. The Family Needs Calculator measures the minimum income necessary to cover all of an individual or family’s basic expenses (Pearce & Manzer, 2018). The Metropolitan Policy Program at Brookings would not classify EMT and paramedic positions as “good jobs” because they do not provide a median wage that allows workers to become economically independent and secure, above \$18 per hour (\$37,440 per year), with employer-sponsored health insurance (Shearer, Shah & Gootman, 2019, pg. 25). EMTs and paramedics generally receive employer medical insurance in the IEDR, according to occupational

guides developed by the California Labor Market Information Division (“Detailed Guide,” 2019). Exhibit 4 displays earnings for EMTs and paramedics.

*Exhibit 4: Earnings for EMTs and paramedics*

Occupation	Entry to Experienced Hourly Wage Range (25 <sup>th</sup> – 75 <sup>th</sup> percentile)	Median Hourly Wage (50 <sup>th</sup> percentile)	Average Annual Earnings
Emergency Medical Technicians and Paramedics	\$12.10 to \$20.02	\$15.49	\$35,200

Source: EMSI 2019.3

An alternative way to determine what wages workers can expect to earn is by extracting wage information from online job postings. Exhibit 5 displays advertised salary data from real-time job postings for EMTs and paramedics over the last 12 months. This information should be viewed with caution, as 77% of job postings do not contain salary information. Please note that salary figures are prorated to reflect full-time, annual wage status.

*Exhibit 5: Advertised salary information for EMTs and paramedics, Sep 2018 – Aug 2019*

Occupation	Number of job postings	Real-Time Salary Information				Average Annual Earnings
		Less than \$35,000	\$35,000 to \$49,999	\$50,000 to \$74,999	More than \$75,000	
Emergency Medical Technicians and Paramedics	43	16%	26%	30%	28%	\$60,000

Source: Burning Glass – Labor Insights

## Employers, Skills, Education, and Certifications

Exhibit 6 displays the employers posting the most job ads for EMTs and paramedics during the last 12 months in the Inland Empire/Desert region. Approximately 70% of the job postings for EMTs and paramedics were posted by the following 12 employers over the previous year.

*Exhibit 6: Employers posting the most job ads for EMTs and paramedics, Sep 2018 – Aug 2019*

Occupation	Employers
Emergency Medical Technicians and Paramedics (n=161)	<ul style="list-style-type: none"> <li>• Universal Health Services, Inc.</li> <li>• Global Medical Response</li> <li>• Prime Healthcare Services</li> <li>• American Medical Response</li> <li>• Chino Valley Medical Center</li> <li>• Desert Valley Hospital</li> <li>• Dignity Health</li> <li>• Air Methods</li> <li>• Loma Linda University Health</li> <li>• San Bernardino County</li> <li>• Pechanga Resort Casino</li> <li>• Arrowhead Regional Medical Center</li> </ul>

Source: Burning Glass – Labor Insights

Exhibit 7 displays a sample of specialized and employability skills that employers are seeking when looking for workers to fill positions for EMTs and paramedics. Specialized skills are occupation-specific skills that employers are requesting for industry or job competency. Employability skills are foundational skills that transcend industries and occupations; this category is commonly referred to as “soft skills.” The skills requested in job postings may be utilized as a helpful guide for curriculum development.

*Exhibit 7: Sample of in-demand skills from employer job ads for EMTs and paramedics, Sep 2018 – Aug 2019*

Occupation	Specialized Skills	Employability Skills
Emergency Medical Technicians and Paramedics (n=136)	<ul style="list-style-type: none"> <li>• Patient Care</li> <li>• Cardiopulmonary Resuscitation (CPR)</li> <li>• Medical Triage</li> <li>• Life Support</li> </ul>	<ul style="list-style-type: none"> <li>• Physical Abilities</li> <li>• Communication Skills</li> <li>• English</li> <li>• Writing</li> <li>• Detail-Oriented</li> </ul>

Source: Burning Glass – Labor Insights

Exhibit 8 displays the entry-level education typically required to enter this occupation according to the Bureau of Labor Statistics (BLS), educational attainment for incumbent workers with “some college, no degree” and an “associate degree” according to the U.S. Census (2016-17), and the minimum advertised education requirement from employer job ads.

*Exhibit 8: Typical entry-level education, educational attainment, and minimum advertised education requirements for EMTs and paramedics, Sep 2018 – Aug 2019*

Occupation	Typical Entry-Level Education Requirement	Educational Attainment*	Minimum Advertised Education Requirement from Job Ads			
			Number of Job Ads (n=)	High school diploma or vocational training	Associate degree	Bachelor's degree or higher
Emergency Medical Technicians and Paramedics	Postsecondary nondegree award	65%	103	99%	1%	-

Source: EMSI 2019.3, Burning Glass – Labor Insights

\*Percentage of incumbent workers with a Community College Credential or Some Postsecondary Coursework

The California Emergency Services (EMS) Authority is the regulatory agency that issues emergency medical technician and paramedic certifications. Before applying for an EMT or paramedic certification, individuals must complete an EMT or paramedic training program, then pass the National Registry (NREMT) examination. After successfully passing the NREMT, individuals must contact their local EMS agency to obtain their EMT certification in California. For more information about EMT and paramedic certifications and

requirements, visit the EMSA website (Certification and Testing, 2019). Exhibit 9 displays the certifications required by employers posting job ads for EMTs and paramedics in the Inland Empire/Desert region.

*Exhibit 9: Top certifications required by employer job ads for EMTs and paramedics, Sep 2018 – Aug 2019*

Occupation	Certifications
Emergency Medical Technicians and Paramedics (n=183)	<ul style="list-style-type: none"> <li>• Certified Emergency Medical Technician (EMT)</li> <li>• Basic Life Support (BLS)</li> <li>• Advanced Cardiac Life Support (ACLS)</li> <li>• Certified Paramedic</li> </ul>

Source: Burning Glass – Labor Insights

### Student Completions and Program Outcomes

Exhibit 10 displays the average annual regional California Community College (CCC) credentials conferred during the three academic years between 2015 and 2018, from the California Community Colleges Chancellor’s Office Management Information Systems (MIS) Data Mart, along with the enrollments from the most recent year available on LaunchBoard. Credentials are the combined total of associate degrees and certificates issued during the timeframe, divided by three in this case in order to calculate an annual average. This is done to minimize the effect of atypical variation that might be present in a single year. Enrollments are the count of enrollments in courses assigned to the TOP code in the selected year. The relevant TOP code is from the Taxonomy of Programs manual, and the corresponding program titles used at each college (in *italics*) are sourced from the Chancellor’s Office Curriculum Inventory (COCI). Please note, a credential is not always equal 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.

*Exhibit 10: Annual average community college credentials and enrollments for emergency medical services programs in the Inland Empire/Desert region*

1250.00 – Emergency Medical Services	CCC Enrollments, Academic Year 2016-17	CCC Annual Average Credentials, Academic Years 2015-18
<b>Barstow</b>	238	
<b>Chaffey</b> – <i>Emergency Medical Provider</i>	241	
<b>Copper Mountain</b>	84	
<b>Crafton Hills</b>	1,099	
Certificate requiring 6 to < 18 semester units		143
<b>Desert</b> – <i>Emergency Medical Care</i>	180	
Certificate requiring 18 to < 30 semester units		1*

<b>1250.00 – Emergency Medical Services</b>	<b>CCC Enrollments, Academic Year 2016-17</b>	<b>CCC Annual Average Credentials, Academic Years 2015-18</b>
<b>Moreno Valley</b>	552	
Certificate requiring 6 to < 18 semester units		86
<b>Mt. San Jacinto</b>	137	
<b>Palo Verde</b>	52	
Certificate requiring 6 to < 18 semester units		2
<b>Victor Valley</b>	326	
<b>Total CCC Enrollments, Academic Year 2016-17</b>	<b>2,909</b>	
<b>Total Annual Average CCC Credentials, Academic Years 2015-18</b>		<b>232</b>

Source: LaunchBoard, Management Information Systems Data Mart, COCI

\*Desert issued one certificate in 2017-18.

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 records provided by 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, 2019a). 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, 2017). Data from the latest academic year for each metric is provided in Exhibit 11.

*Exhibit 11: 1250.00 – Emergency medical services strong workforce program outcomes*

<b>Strong Workforce Program Metrics: 1250.00 – Emergency Medical Services Academic Year 2015-16, unless noted otherwise</b>	<b>Inland Empire/Desert region</b>	<b>California Median</b>
Course enrollments (2016-17)	2,909	237
Completed 12+ units in one year (2016-17)	331	48
Economically disadvantaged students* (2016-17)	65%	61%
Transferred to a four-year institution* (transfers)	117	20
Employed in the fourth fiscal quarter after exit* (completers)	90%	83%
Median annual earnings* (completers)	\$96,499	\$34,808
Job closely related to the field of study (2014-15)	87%	69%
Median change in earnings* (completers)	43%	71%
Attained a living wage (completers and skills-builders)	52%	52%

Source: LaunchBoard

\*Data for these metrics is available in Community College Pipeline. All others are available in Strong Program Workforce Metrics



Exhibit 12 displays the average annual regional California Community College (CCC) credentials conferred during the three academic years between 2015 and 2018 along with the enrollments from the most recent year available on LaunchBoard for paramedic programs.

*Exhibit 12: Annual average community college credentials and enrollments for paramedic programs in the Inland Empire/Desert region*

<b>1251.00 - Paramedic</b>	<b>CCC Enrollments, Academic Year 2016-17</b>	<b>CCC Annual Average Credentials, Academic Years 2015-18</b>
<b>Crafton Hills</b>	244	
Associate of Science (A.S.) degree		6
Certificate requiring 30 to < 60 semester units		38
<b>Moreno Valley</b>	372	
Associate of Science (A.S.) degree		7
Certificate requiring 30 to < 60 semester units		18
<b>Mt. San Jacinto</b>	18	
<b>Victor Valley</b>	522	
Associate of Science (A.S.) degree		4
Certificate requiring 30 to < 60 semester units		14
<b>Total CCC Enrollments, Academic Year 2016-17</b>	<b>1,156</b>	
<b>Total Annual Average CCC Credentials, Academic Years 2015-18</b>		<b>87</b>

Source: LaunchBoard, Management Information Systems Data Mart, COCI

Exhibit 13 displays community college student outcome information from LaunchBoard for paramedic programs.

*Exhibit 13: 1251.00 - Paramedic strong workforce program outcomes*

<b>Strong Workforce Program Metrics: 1251.00 - Paramedic Academic Year 2015-16, unless noted otherwise</b>	<b>Inland Empire/Desert region</b>	<b>California Median</b>
Course enrollments (2016-17)	1,156	111
Completed 12+ units in one year (2016-17)	197	36
Economically disadvantaged students* (2016-17)	73%	64%
Employed in the fourth fiscal quarter after exit* (completers)	92%	73%
Median annual earnings* (completers)	\$71,263	\$48,665
Job closely related to the field of study (2014-15)	91%	94%
Median change in earnings* (completers)	140%	75%
Attained a living wage (completers and skills-builders)	81%	77%

Source: LaunchBoard

\*Data for these metrics is available in Community College Pipeline. All others are available in Strong Program Workforce Metrics

Credentials granted from other educational providers outside of the California Community College system are displayed in Exhibit 14 along with the relevant CIP code. This emergency medical technology/ technician (EMT Paramedic) completion data is compiled from the Integrated Postsecondary Education Data System (IPEDS) for the most recent three years available.

*Exhibit 14: Annual average other educational providers credentials awarded for emergency medical technology/technician (EMT Paramedic) programs*

<b>51.0904 – Emergency Medical Technology/Technician (EMT Paramedic)</b>	<b>Other Educational Providers Annual Average Credentials, Academic Years 2014-17</b>
<b>Riverside County Office of Education-School of Career Education</b>	
Award of less than 1 academic year	36
<b>Total Annual Average Other Credentials, Academic Years 2014-17</b>	<b>36</b>

Source: IPEDS

## Contact

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