



# EMT-Paramedic

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Prepared by the Los Angeles/Orange County Center of Excellence for Labor Market Research

## Occupation Codes and Descriptions

Currently, there is one occupation in the standard occupational classification (SOC) system related to emergency medical technicians (EMT) and paramedics. The occupation title and description, as well as reported job titles are included in Exhibit 1.

**Exhibit 1 – Occupations, descriptions and sample job titles**

SOC Code	Title	Description	Sample of Reported Job Titles
29-2041	Emergency Medical Technicians and Paramedics	Assess injuries, administer emergency medical care, and extricate trapped individuals. Transport injured or sick persons to medical facilities.	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

Source: O\*NET Online

## Current and Future Employment

In Los Angeles County, the number of EMT and paramedic jobs are expected to increase by 21% over the next five years. More than 400 job opportunities will be available annually for this occupation through 2021 due to new job growth and replacement need (e.g., retirements). Exhibit 2 contains detailed employment projections data for this occupation.

**Exhibit 2 – Five-year projections for EMT & Paramedics in Los Angeles County**

SOC	Occupation	2016 Jobs	2021 Jobs	2016 - 2021 Change	2016 - 2021 % Change	Annual Openings
29-2041	Emergency Medical Technicians and Paramedics	4,443	5,392	949	21%	428

Source: Economic Modeling Specialists International (EMSI)

## Earnings

In Los Angeles County, the entry-level average wage for EMT and paramedics is \$10.88 per hour, which is **below** the MIT Living Wage<sup>1</sup> estimate of \$13.08 per hour for a single adult. The average annual earnings for this occupation in the region is \$39,062 per year, assuming full-time employment.

Exhibit 3 contains hourly wages and annual average earnings for these occupations. Entry-level hourly earnings is represented by the 10<sup>th</sup> percentile of wages, median hourly earnings is represented by the 50<sup>th</sup> percentile of wages, and experienced hourly earnings is represented by the 90<sup>th</sup> percentile of wages, demonstrating various levels of employment.

**Exhibit 3 – Earnings for EMT-Paramedics in Los Angeles County, 2016-2021**

SOC	Occupation	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings	Average Annual Earnings
29-2041	Emergency Medical Technicians and Paramedics	\$10.88	\$17.22	\$29.26	\$39,062

Source: Economic Modeling Specialists International (EMSI)

## Employer Job Postings

In this research brief, real-time labor market information is used to provide a more nuanced view of the current job market, as it captures job advertisements for occupations relevant to the field of study. Employer job postings are consulted to understand who is employing EMT and paramedics, and what they are looking for in potential candidates. To identify job postings related to EMT and paramedics, the SOC code 29-2041 was used.

### *Top Occupations*

In 2016, there were 1,382 employer postings for EMT and paramedics. There were 749 job postings for the same occupation in 2015, and 318 job postings in 2014.

**Exhibit 4 – Top occupations in job postings (n=1,382)**

SOC Code	Occupation	Job Postings, Full Year 2016
29-2041	Emergency Medical Technicians and Paramedics	1,382

Source: Labor Insight/Jobs (Burning Glass)

<sup>1</sup> MIT Living Wage Calculator. <http://livingwage.mit.edu/>

### Top Titles

The top job titles for employers posting ads for EMT and paramedics are listed in Exhibit 5. EMT is mentioned as the job title in 41% of all relevant job postings (1,382 postings).

**Exhibit 5 – Job titles (n=1,382)**

<b>Title</b>	<b>Job Postings, Full Year 2016</b>
EMT	568
Emergency Medicine Physician	323
Emergency Room – Travel RN	86
Paramedic	62
Emergency Medicine Physician Assistant	45
Medical Technician	40

Source: Labor Insight/Jobs (Burning Glass)

### Top Employers

Exhibit 6 lists the major employers hiring EMT and paramedic professionals. Top employers postings job ads included Envision, the University of Southern California, Providence Health & Services, CEP America, Liberty Ambulance, and AMR. The top worksite cities in the region for these occupations were Los Angeles, Long Beach, and Glendale.

**Exhibit 6 – Top employers (n=270)**

<b>Employer</b>	<b>Job Postings, Full Year 2016</b>
Envision	33
University of Southern California	19
Providence Health & Services	16
Cep America	12
Liberty Ambulance	10
AMR	8

Source: Labor Insight/Jobs (Burning Glass)

*Certifications and Skills*

Emergency Medical Technician (EMT) is the most sought after certification for this occupation, and was included in 37% of the postings that specified a certification. Other certifications that were largely present on postings were board certified/board eligible (26% of postings) and emergency medicine (16%). Job-specific skills desired by employers are: emergency medicine, advanced cardiac life support, CPR, critical care, and patient care.

**Exhibit 7 –Job certifications (n=622) and job skills (n=403)**

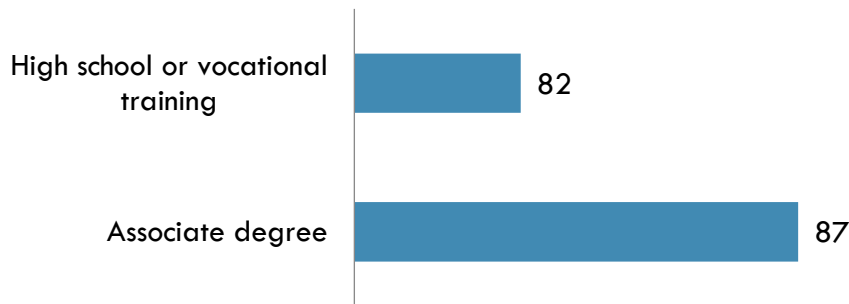
Certifications	Job Postings, Full Year 2016	Skills	Job Postings, Full Year 2016
Emergency Medical Technician (EMT)	232	Emergency Medicine	272
Board Certified/Board Eligible	159	Advanced Cardiac Life Support (ACLS)	129
Emergency Medicine	102	Cardiopulmonary Resuscitation (CPR)	86
Advanced Cardiac Life Support (ACLS) Certification	59	Critical Care	85
Nurse Practitioner	58	Patient Care	82

Source: Labor Insight/Jobs (Burning Glass)

*Advertised Education Levels*

Exhibit 8 displays the education level requested by employers in online job ads. The majority of employers were looking for a candidate with an associate degree. Approximately 88% of job postings did not specify a level of education.

**Exhibit 8 – 2016 Online job ads with minimum advertised education requirements for EMT and Paramedics (n=169)**



Source: Labor Insight/Jobs (Burning Glass)

## Industry Concentration

EMT and paramedic jobs in Los Angeles County are most often found in the ambulance services industry (59% of total jobs in the industry). Exhibit 9 shows the industries that are the largest employers of EMT and paramedics in Los Angeles County.

**Exhibit 9 – Industries with the largest number of EMT and Paramedics, 2016**

NAICS (6-Digit)	Industry	Occupation Group Jobs in Industry	% of Occupation Group in Industry
621910	Ambulance Services	2,634	59%
903999	Local Government, Excluding Education and Hospitals	1,000	22%
622110	General Medical and Surgical Hospitals	362	8%
903622	Hospitals (Local Government)	143	3%

## Education and Training

Exhibit 10 shows the typical entry-level education requirement for the occupation of interest, along with the typical on-the-job training, and percentage of workers in the field who hold a community college award or have completed some postsecondary courses. About 68% of the workforce in this occupation has completed some community college education as their highest level of education.

**Exhibit 10 – Education and training requirements 2015-2020**

SOC	Occupation	Typical entry-level education	Typical on-the-job training	% of Community College Award Holder or Some Postsecondary Coursework
29-2041	Emergency Medical Technicians and Paramedics	Postsecondary nondegree award	None	68%

Source: Economic Modeling Specialists International, Bureau of Labor Statistics Employment Projections (Educational Attainment)

Currently, there are two community colleges in Los Angeles County that train students to become EMT and paramedics. Exhibit 11 displays the headcount and annual average community college awards for each of the colleges training in this field. Headcount is the actual number of students enrolled, regardless of credit hours. It is also important to note that an award is not equivalent to a single person in search of a job opening, since a student may earn more than one award (e.g. an associate degree and a certificate).

Between 2012-2015, the total annual average community college awards conferred was 89 (10 associate degrees and 79 certificates) across one programs: Paramedic (1251.00).

### Exhibit 11 – CCC Student Awards (by TOP and College)

2012-2015 Annual Average						
TOP Code	Program	College	CCC Headcount	CCC Associate Degrees	CCC Certificates	Total Average CC Awards
1251.00	Paramedic	El Camino	184	3	36	39
		Mt San Antonio	144	7	43	50
		<b>Total</b>	<b>328</b>	<b>10</b>	<b>79</b>	<b>89</b>

Source: California Community Colleges Chancellor's Office MIS Data Mart

### Student Outcomes

The CTE LaunchBoard provides student outcome data on the effectiveness of CTE programs. The following student outcome information was collected from exiters of the Paramedic Taxonomy of Program (TOP) code (1251.00) in Los Angeles County for the 2014-15 academic year.

- The median annual wage after program completion is \$46,900
- 74% of students are earning a living wage
- 92% of students are employed within six months after completing a program

Source: CTE LaunchBoard

### Sources

O\*Net Online, Labor Insight/Jobs (Burning Glass), Economic Modeling Specialists International (EMSI), MIT Living Wage Calculator, Bureau of Labor Statistics (BLS) Education Attainment, California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart, CTE LaunchBoard, Statewide CTE Outcomes Survey, Employment Development Department Unemployment Insurance Dataset

## Notes

Data included in this analysis represents the labor market demand for positions most closely related to emergency medical technicians and paramedics. Standard occupational classification (SOC) codes were chosen based on the national education level required for employment (associate degree and postsecondary certificate) as well as the proportion of current workers who hold a community college award or have had some community college training. This selection process narrows the labor market analysis to the most relevant employment opportunities for students with community college education and/or training.

Traditional labor market information was used to show current and projected employment based on data trends, as well as annual average awards granted by regional community colleges. Real-time labor market information captures job post advertisements for occupations relevant to the field of study and should not be used to establish current job openings, because the numbers may include duplicate job postings or postings intended to gather a pool of applicants. Real-time labor market information can signal demand and show what employers are looking for in potential employees, but is not a perfect measure of the quantity of open positions.