

September 2022

Labor Market Analysis

Emergency Medical Technician



POWERED BY



Prepared by the Central Valley/Mother Lode Center of Excellence

Table of Contents

Summary.....	2
Key findings	2
Introduction	3
Occupational Demand	3
Wages.....	3
Job Postings	4
Salaries	5
Education.....	5
Baseline and Specialized Skills.....	5
Software Skills.....	6
Certifications	6
Education, Work Experience & Training	6
Supply	6
Student Outcomes	7
Conclusion.....	8
Recommendation	8
Appendix A: Methodology & Data Sources	9

COVID-19 Statement: This report includes employment projection data by Lightcast. Lightcast's projections are modeled on recorded (historical) employment figures and incorporate several underlying assumptions, including the assumption that the economy during the projection period will be at approximately full employment or potential output. To the extent that a recession or labor shock, such as the economic effects of COVID-19, can cause long-term structural change, they may impact the projections. At this time, it is not possible to quantify the impact of COVID-19 on projections of industry and occupational employment. Other measures such as unemployment rates and monthly industry employment estimates will reflect the most recent information on employment and jobs in the state and, in combination with input from local employers, may help validate current and future employment needs as depicted here.

If for any reason this document is not accessible or if you have specific needs for readability, please contact us and we will do our utmost to accommodate you with a modified version. To make a request, contact Nora Seronello by phone at (209) 575-6894 or by email seronellon@mjc.edu.

Summary

Please note the **COVID-19** statement on page 2 when considering this report's findings.

This study conducted by the Central Valley/Mother Lode Center of Excellence examines labor market demand, wages, skills, and postsecondary supply for Emergency Medical Technician. One occupation related to Emergency Medical Technician was identified for Porterville College:

- 29-2040, Emergency Medical Technicians and Paramedics

Key findings:

- **Occupational demand** — There were 1,495 workers employed in jobs related to Emergency Medical Technician in 2021 in the South Central Valley/Southern Mother Lode (SCV/SML) subregion. Emergency medical technicians and paramedics have 1,495 workers, a projected growth rate of 6% over the next five years, and 128 annual openings.
- **Wages** — Emergency medical technicians and paramedics earn an entry-level wage, \$14.55/hour in the subregion.
- **Employers** — Employers with the most job postings in the subregion are Adventist Health, Kern Community College District, and Air Methods Corporation.
- **Occupational titles** — The most common occupational title in job postings in the subregion is Emergency Medical Technicians and Paramedics. The most common job title is Emergency Medicine.
- **Skills and certifications** — The top baseline skill is physical abilities, the top specialized skill is patient care, and the top software skill is Microsoft Office. The most in-demand certification is a Emergency Medical Technician (EMT).
- **Education** — There was no education data available for Emergency Medical Technicians and Paramedics.
- **Supply** — Analysis of postsecondary completions shows that on average 332 awards were conferred in the Central Valley/Mother Lode region each year.

Based on a comparison of occupational demand and supply, there is an oversupply of 141 trained workers in the subregion and 113 workers in the region. Even with an oversupply of workers at the regional level, these programs remain in need to support the college's Firefighter program. Additionally, this is a high-churn occupation. Therefore, the Center of Excellence recommends that Porterville College proceed with caution with the expansion of programs related to Emergency Medical Technician workers in the region.

Introduction

The Central Valley/Mother Lode Center of Excellence was asked by Porterville College to provide labor market information for Emergency Medical Technician. The geographical focus for this report is the South Central Valley/Southern Mother Lode (SCV/SML) subregion, but regional demand and supply data has been included for broader applicability and use. The average living wage for a single adult in the SCV/SML subregion is \$11.91/hour.¹ Analysis of the program and occupational data related to Emergency Medical Technician resulted in the identification of applicable occupations. The Standard Occupational Classification (SOC) System codes and titles used in this report are:

- 29-2040, Emergency Medical Technicians and Paramedics

The occupational titles, job descriptions, sample job titles, and knowledge and skills from the Bureau of Labor Statistics and O*NET OnLine are shown below.

Emergency Medical Technicians and Paramedics

Job Description: Assess injuries and illnesses and administer basic emergency medical care. May transport injured or sick persons to medical facilities.

Knowledge: N/A

Skills: N/A

Occupational Demand

The SCV/SML subregion employed 1,495 workers in Emergency Medical Technician occupations in 2021 (Exhibit 1). Emergency medical technicians and paramedics has 1,495 workers and is projected to grow by 6% over the next five years with 128 annual openings.

Exhibit 1. Emergency Medical Technician employment and occupational projections in the SCV/SML subregion

Occupation	2021 Jobs	2026 Jobs	5-Year Change	5-Year % Change	Annual Openings
Emergency Medical Technicians and Paramedics	1,495	1,591	96	6%	128
TOTAL	1,495	1,591	96	6%	128

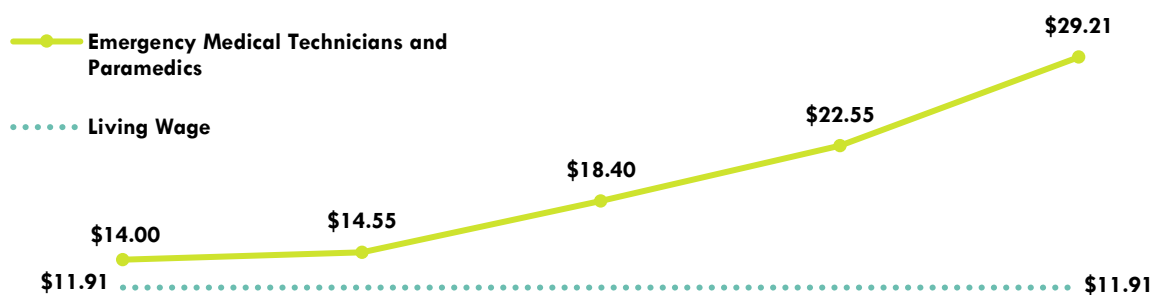
Wages

Exhibit 2 shows the hourly wages of the Emergency Medical Technician occupations. Emergency medical technicians and paramedics earn an entry-level wage, \$14.55/hour, which exceed the living wage in the subregion². Please note 10th and 25th percentiles are considered entry-level wages while 75th and 90th are considered experienced wages, either gained by long term employment, received extra training, etc.

¹ The term "living wage" in Center of Excellence reports is calculated by averaging the self-sufficiency wages from the Insight Center's California Family Needs Calculator for each county in the subregion: <https://insightccd.org/tools-metrics/self-sufficiency-standard-tool-for-california/>.

² Entry-level wages are derived from the 25th percentile.

Exhibit 2. Emergency Medical Technician average hourly wages in the SCV/SML subregion



10th Percentile

25th Percentile

Median

75th Percentile

90th Percentile

Job Postings

There were 185 job postings for the occupation in the SCV/SML subregion from March 2022 to August 2022.³ The employers with the most job postings are listed in Exhibit 3.

Exhibit 3. Top employers of Emergency Medical Technician by number of job postings

Employer	Job Postings	% Job Postings
Adventist Health	16	10%
Kern Community College District	12	7%
Air Methods Corporation	11	7%
Regional West Medical Center	10	6%
Concentra	9	6%
Valley Children & X27 S Healthcare	7	4%
Air Methods	6	4%
Caterpillar Incorporated	6	4%
Quinn Company	6	4%
Securitas	6	4%

Exhibit 4 shows how job postings for the targeted occupations in the SCV/SML subregion are distributed across one O*NET Online occupations. The occupational title Emergency Medical Technicians and Paramedics is listed in 185 job postings. Note how this occupational title dominates the job posting results. Common job titles in postings include Emergency Medicine in 15 job postings, Flight Paramedic in 14 job postings, and Advanced Lift Technician in 10 job postings.

Exhibit 4. Top occupational titles in job postings for Emergency Medical Technician

Occupational Title	Job Postings	% of Job Postings
Emergency Medical Technicians and Paramedics	185	100%

³ Other than occupation titles and job titles, the categories below can be counted one or multiple times per job posting, and across several areas in a single posting. For example, a skill can be counted in two different skill types, and an employer can indicate more than one education level.

Salaries

Exhibit 5 shows the “Market Salaries” for Emergency Medical Technician occupations. These are calculated by Burning Glass using a machine learning model built off of millions of job postings every year. This accounts for adjustments based on locations, industry, skills, experience, education requirements, among other variables.

Exhibit 5. Salaries for Emergency Medical Technician occupations

Market Salary Percentile	Salary Amount
10th Percentile	\$28,691
25th Percentile	\$30,495
50th Percentile	\$34,101
75th Percentile	\$40,381
90th Percentile	\$54,645

Education

Of the 185 job postings, 107 listed an education level preferred for the positions being filled. Among those, 78% requested high school or vocational training, and 46% requested an associate degree (Exhibit 6). A job posting can indicate more than one education level. Hence, the percentages shown in the chart below may total more than 100%.

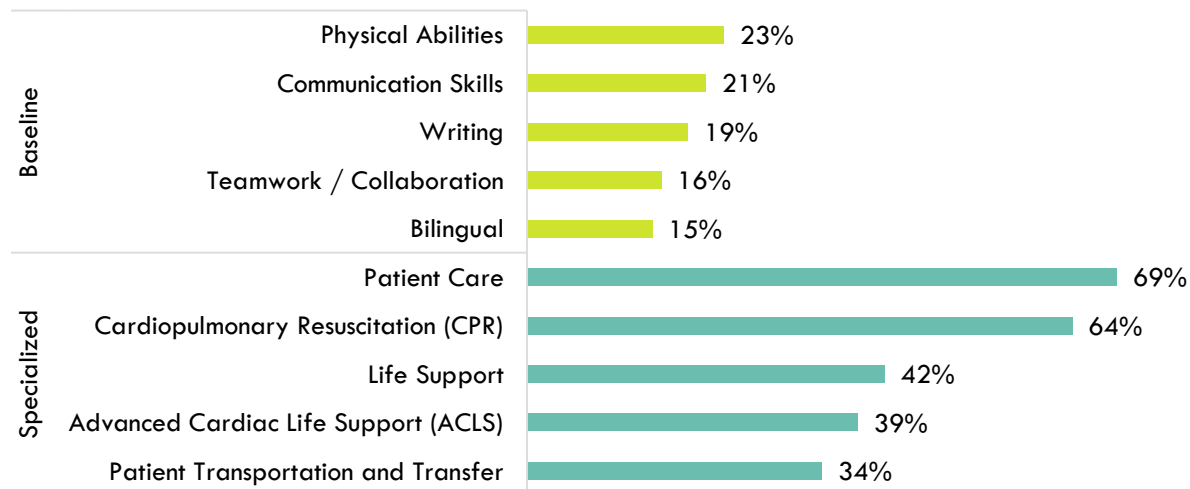
Exhibit 6. Education levels requested in job postings for Emergency Medical Technician

Education Level	Job Postings	% of Job Postings
High school or vocational training	83	78%
Associate's degree	49	46%

Baseline and Specialized Skills

Exhibit 7 depicts the top baseline and specialized skills for the targeted occupations. The three most important baseline skills are physical abilities, 23% of job postings, communication skills, 21%, and writing, 19%. The top three specialized skills are patient care, 69% of job postings, Cardiopulmonary Resuscitation (CPR), 64%, and life support, 42%.

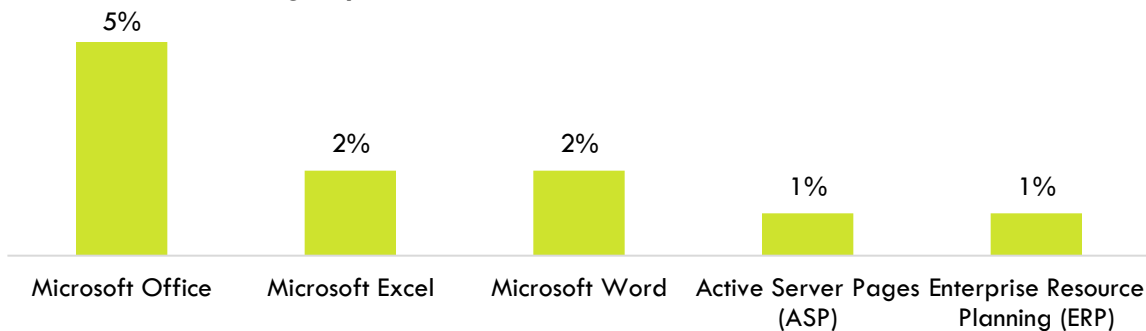
Exhibit 7. In-demand Emergency Medical Technician baseline and specialized skills



Software Skills

Analysis also included the software skills most in demand by employers. Microsoft Office and Excel were the top two software skills identified in job postings (Exhibit 8).

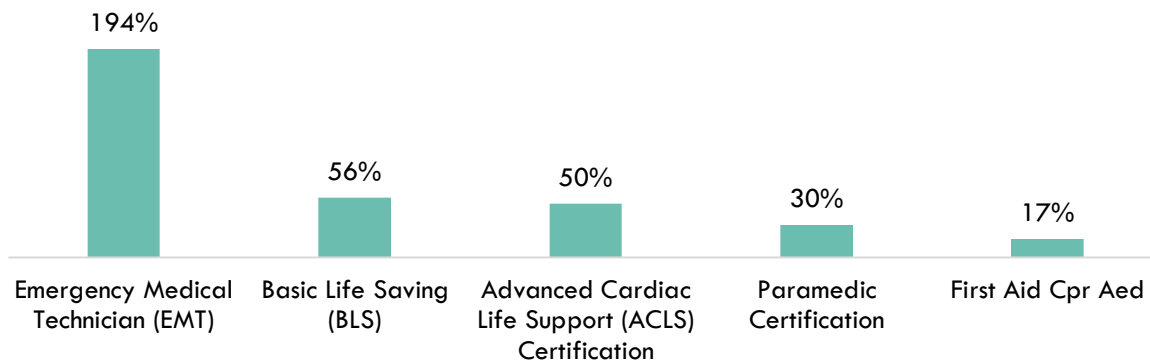
Exhibit 8. In-demand Emergency Medical Technician software skills



Certifications

Of the 185 job postings, 70 contained certification data. Among those, 194% indicated a need for a Emergency Medical Technician (EMT). The next top certifications are Basic Life Saving (BLS) and Advanced Cardiac Life Support (ACLS). Please note 74% of job posting indicated a need for a driver's license, but it is not a certification.

Exhibit 9. Top Emergency Medical Technician certifications requested in job postings



Education, Work Experience & Training

There was no education data available for emergency medical technicians and paramedics.

Supply

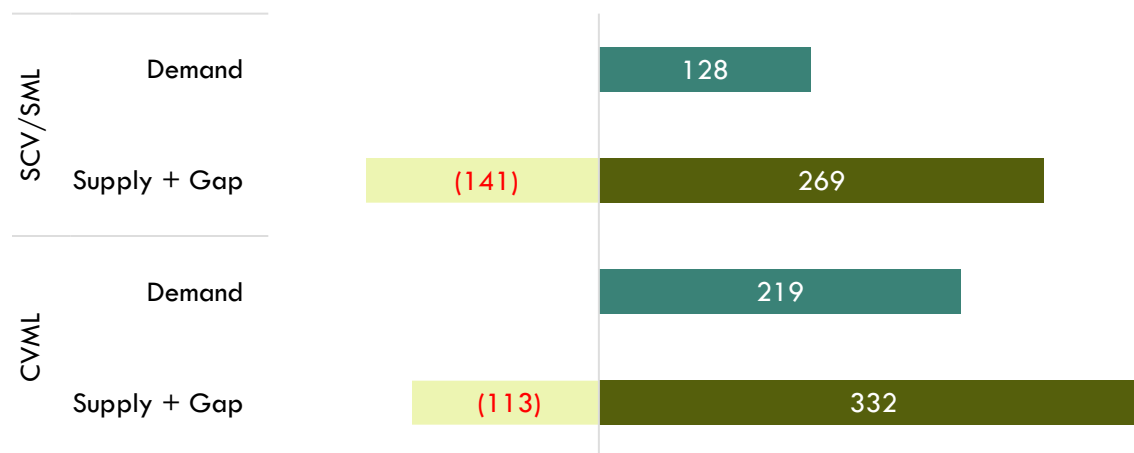
Analysis of program data from the Integrated Postsecondary Education Data System (IPEDS) included the TOP code and title: 125000 - Emergency Medical Services. Analysis of the last three years of data shows that, on average, 332 awards were conferred in the Central Valley/Mother Lode region each year (Exhibit 10).

Exhibit 10. Postsecondary supply for Emergency Medical Technician occupations in the region

TOP/ CIP Code- Title	College	Associate Degree	Certificate 18 < 30 Semester Units	Certificate 6 < 18 Semester Units	Credit Award, < 6 Semester Units	Subtotal
125000 - Emergency Medical Services	Bakersfield			129		129
	Cerro Coso			15		15
	Columbia	0	0	1	1	3
	Merced			28		28
	Modesto Junior			33		33
	Porterville			63		63
	Sequoias			42	20	62
TOTAL		0	0	310	21	332

There is an oversupply of 141 Emergency Medical Technician workers in the SCV/SML subregion and 113 workers in the region (Exhibit 11).

Exhibit 11. Emergency Medical Technician workforce demand (annual job openings), postsecondary supply of students (awards), and additional students needed to fill gap in the SCV/SML subregion and region



Student Outcomes

Exhibit 12 summarizes employment and wage outcomes from the California Community College Chancellor's Cal-PASS Plus LaunchBoard for the TOP code related to Emergency Medical Technician. Of note, 42 students transferred; 74% of students obtained a job closely related to their field of study; 40% had a median change in earnings; and 67% of students attained a living wage.

Exhibit 12. Regional metrics for the TOP code related to Emergency Medical Technician

Metric	Emergency Medical Services 125000
Students Who Got a Degree or Certificate or Attained Apprenticeship Journey Status	*
Number of Students Who Transferred	42
Job Closely Related to Field of Study	74%
Median Change in Earnings	40%
Attained a Living Wage	67%
* denotes data not available.	

Conclusion

The entry-level wages of the occupation exceed the SCV/SML subregion's average living wage. There were 185 job postings in the past six months for occupations related to Emergency Medical Technician in the subregion. Analysis of skills and certification requirements in job postings indicates:

- The top baseline skill is physical abilities, and the top specialized skill is patient care.
- The top software skill is Microsoft Office.
- The top certification is an Emergency Medical Technician (EMT).

There is an oversupply of trained workers, a surplus of 141 in the SCV/SML subregion and 113 in the region.

Recommendation

Based on these findings, it is recommended that Porterville College proceed with caution with the expansion of programs related to Emergency Medical Technician workers in the region.

Appendix A: Methodology & Data Sources

Data Sources

Labor market and educational supply data compiled in this report derive from a variety of sources. Data were drawn from external sources, including the Economic Modeling Specialists, Inc., the California Community Colleges Chancellor's Office Management Information Systems Data Mart and the National Center for Educational Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS). Below is the summary of the data sources found in this study.

Data Type	Source
Labor Market Information/Population Estimates and Projections/Educational Attainment	Economic Modeling Specialists, Intl. (Lightcast). Lightcast occupational employment data are based on final Lightcast industry data and final Lightcast staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level Lightcast earnings by industry: economicmodeling.com .
Typical Education Level and On-the-job Training	Bureau of Labor Statistics (BLS) uses a system to assign categories for entry-level education and typical on-the-job training to each occupation for which BLS publishes projections data: https://www.bls.gov/emp/tables/educational-attainment.htm .
Labor Force, Employment and Unemployment Estimates	California Employment Development Department, Labor Market Information Division: labormarketinfo.edd.ca.gov .
Job Posting and Skills Data	Burning Glass: burning-glass.com/ .
Additional Education Requirements/Employer Preferences	The O*NET Job Zone database includes over 900 occupations as well as information on skills, abilities, knowledge, work activities and interests associated with specific occupations: onetonline.org .

Key Terms and Concepts

Annual Job Openings: Annual openings are calculated by dividing the number of years in the projection period by total job openings.

Education Attainment Level: The highest education attainment level of workers age 25 years or older.

Employment Estimate: The total number of workers currently employed.

Employment Projections: Projections of employment are calculated by a proprietary Economic Modeling Specialists, Intl. (Lightcast) formula that includes historical employment and economic indicators along with national, state and local trends.

Living Wage: The cost of living in a specific community or region for one adult and no children. The cost increases with the addition of children.

Occupation: An occupation is a grouping of job titles that have a similar set of activities or tasks that employees perform.

Percent Change: Rate of growth or decline in the occupation for the projected period; this does not factor in replacement openings.

Replacements: Estimate of job openings resulting from workers retiring or otherwise permanently leaving an occupation. Workers entering an occupation often need training. These replacement needs, added to job openings due to growth, may be used to assess the minimum number of workers who will need to be trained for an occupation.

Total Job Openings (New + Replacements): Sum of projected growth (new jobs) and replacement needs. When an occupation is expected to lose jobs, or retain the current employment level, number of openings will equal replacements.

Typical Education Requirement: represents the typical education level most workers need to enter an occupation.

Typical On-The-Job Training: indicates the typical on-the-job training needed to attain competency in the skills needed in the occupation.