Labor Market Analysis for Program Recommendation: 1251.00/Paramedic

CIP: 51.0904/Emergency Medical Technology/Technician (EMT Paramedic)



(Paramedic, Certificate of Achievement) (Paramedic, Associate Degree)

Orange County Center of Excellence, September 2025

☑ Endorsed: All Criteria Met						
	Program LMI En	dorsement Criteria				
	Met 🗹	Partially Met \square	Not Met □			
Supply Gap:	There are projected to be 177 annual job openings throughout Los Angeles and Orange counties for <i>paramedics</i> , which is more than the 89 awards conferred by educational institutions .					
Self-Sufficiency Standard Living Wage ¹ :	Met 🗹	Partially Met \square	Not Met □			
	The typical entry-level wage for <i>paramedics</i> is \$29.49 , which is above the OC living wage of \$27.13 .					
	Met 🗹	Partially Met 🛮	Not Met □			
Education:	postsecondary non-deg	for paramedics typically recree award, and 66% of work college or an associate de ion.	kers in the field			

Summary

The Orange County Center of Excellence for Labor Market Research (OC COE) prepared this report to determine whether there is a supply gap in the Los Angeles and Orange counties regional labor market related to one middle-skill occupation:

• Paramedics (29-2043)

Based on the available data, there appears to be a supply gap for *paramedics*, typical education requirements for this occupation align with a community college education, and the majority of annual job openings have entry-level wages above the Self-Sufficiency Standard living wage. **Therefore, due to all the regional labor market criteria being met, the COE endorses this proposed program.**

¹ The living wage endorsement criteria in this report uses the University of Washington's Center for Women's Welfare Self-Sufficiency Standard, which the COE refers to as a living wage; Orange County's living wage of \$27.13, was last updated in March 2024.

Exhibit 1 lists the occupational demand, supply, typical entry-level education, and educational attainment for the middle-skill occupation included in this report.

Exhibit 1: Labor Market Endorsement Summary

Occupation (SOC)	Demand (Annual Openings)	Supply (CC and Non-CC)	Entry-Level Hourly Earnings (25th Percentile)	Typical Entry-Level Education	Community College Educational Attainment
Paramedics	LA: 64	LA: 62		Post- secondary	
(29-2043)	OC: 53	OC: 27	OC: \$29.49	non-degree award	66%
Total	117	89	N/A	N/A	N/A

Demand

- In Los Angeles and Orange counties, the number of jobs related to *paramedics* is projected to increase 10% through 2029, equating to 117 annual job openings.
- Hourly entry-level wages for *paramedics* are \$29.49 in Orange County; all annual openings have entry-level wages above the Self-Sufficiency Standard living wage.
- There were 463 online job postings for *paramedics* over the past 12 months. The highest number of postings were for paramedics, certified paramedic technicians, and mobile paramedics.
- The typical entry-level education for *paramedics* is a postsecondary non-degree award.
- Approximately 66% of workers in the field have completed some college or an associate degree as their highest level of educational attainment.

Supply

- Between 2021 to 2024, an average of 67 awards were conferred by 4 community colleges for this middle-skill occupation in Los Angeles and Orange counties.
- From 2020 to 2023, non-community college institutions conferred an average of 22 awards for this middle-skill occupation.
- In the 2022-23 academic year, Orange County community college students that exited paramedic programs had a median annual wage of \$128,652 (\$61.85 per hour) post-exit, and 94% attained the regional living wage. (Note: generally, paramedics work a significant amount of overtime, which impacts their reported wages.)
- Due to a low number of students, there is no outcome data available for students employed in jobs closely related to their field of study.

Licensure

To become a licensed paramedic in California, students first must earn a high school diploma or a GED, and then complete a paramedic program accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP)². The paramedic program must consist of 450 hours of didactic and skills lab instruction, 160 hours of hospital clinical training, and 480 hours of field internship, during which students must complete at least 40 advanced life support (ALS) patient contacts that each contain one ALS skill (excluding CPR and cardiac monitoring alone).

Following this training, students must pass written and practical exams administered by the National Registry of Emergency Medical Technicians (NREMT). The practical exam may be taken following the completion of classroom and hospital clinicals. The written exam must be completed only after finishing the program. Paramedic licensure must be renewed every two years.

Demand

Occupational Projections

Exhibit 2 shows the annual percentage change in jobs for *paramedics* from 2019 through 2029. Between 2019 and 2020, employment levels across Los Angeles and Orange counties declined sharply due to the broader economic impacts of the COVID-19 pandemic. From 2021 to 2023, Orange County saw growth for *paramedics* whereas Los Angeles saw a decline in 2022 followed by a slight increase in 2023. Beginning in 2024, job levels are projected to grow at a faster rate in Orange County, and at similar rates in Los Angeles when compared to all occupations through 2029.

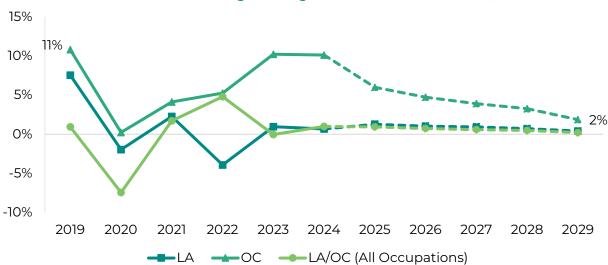


Exhibit 2: Annual Percentage Change in Jobs for Paramedics, 2019-2029

Exhibit 3 shows the five-year occupational demand projections for the middle-skill occupation *paramedics*. In Los Angeles and Orange counties, the number of jobs related to this occupation is projected to increase by 10% through 2029. There is projected to be 117 jobs available annually.

² https://www.healthcarepathway.com/become-a-paramedic/california-paramedic/#education

Exhibit 3: Middle-Skill Occupational Demand in Los Angeles and Orange Counties³

Geography	2024 Jobs	2029 Jobs	2024-2029 Change	2024-2029 % Change	Annual Openings
Los Angeles	1,134	1,185	50	4%	64
Orange	568	689	121	21%	53
Total	1,702	1,874	172	10%	117

Wages

The labor market endorsement in this report considers the entry-level hourly wages for *Paramedics* in Orange County as they relate to the county's living wage. Los Angeles County wages are included below to provide a complete analysis of the LA/OC region.

In addition to the Self Sufficiency Standard living wage, data for the MIT Living Wage (updated on February 10, 2025) is provided as a reference. Currently, the MIT Living Wage in Orange County is \$32.20. Both figures account for geographic-specific costs of necessities such as housing, food, health care, and transportation to assess the cost of living, and are notated in the exhibits below.

In Orange County, the typical entry-level wage for *paramedics* is \$29.49, which is above the Self-Sufficiency living wage of \$27.13 for a single adult. Exhibit 4 shows the wage range for *paramedics* in Orange County and how it compares to the regional living wage.

Exhibit 4: Wages by Occupation in Orange County



In Los Angeles County, the typical entry-level wage for *paramedics* is \$29.02, which is above the Self-Sufficiency living wage of \$24.03 for a single adult. Exhibit 5 shows the wage range for *paramedics* in Los Angeles County and how it compares to the regional living wage.

Exhibit 5: Wages by Occupation in Los Angeles County



³ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

Resilient Jobs and U.S. News & World Report Best Jobs

Exhibit 6 shows if each occupation is considered an Orange County Great Recession-Resilient, COVID-19 Pandemic Recession-Resilient Job, or a 2025 U.S. News & World Report (USN&WR) Best Job⁴. *Paramedics* did not meet the criteria to be designated as a Pandemic Recession-Resilient Job, Great Recession-Resilient Job, or USN&WR Best Job.

Exhibit 6: Resilient Jobs and USN&WR Best Jobs Designations

Occupation	Great Recession- Resilient Job	COVID-19 Pandemic Recession- Resilient Job	2025 USN&WR Best Job
Paramedics			

Job Postings

Important Job Postings Data Note: There are limitations when analyzing job postings. A single job posting may not represent a single job opening for a variety of reasons.

There were 463 online job postings related to *paramedics* listed in the past 12 months. Exhibit 7 shows the number of job postings by occupation.

Exhibit 7: Number of Job Postings by Occupation (n=463)

Occupation	Job Postings	Percentage of Job Postings
Paramedics	463	100%
Total Postings	463	100%

Job Postings for Middle Skill Occupation

The top job titles for *paramedics* in the region, by number of job postings, are shown in Exhibit 8.

Exhibit 8: Top Job Titles by Number of Job Postings for the Middle-Skill Occupation (n=463)

Job Titles	Job Postings	Percentage
Paramedics	350	76%
Emergency Response Managers	50	11%
Monitors	7	2%
Relocation Assistants	5	1%
Sales Directors	5	1%
Emergency Medical Technicians	4	1%
Flight Paramedics	4	1%
Respiratory Care Practitioners	4	1%
Technologist Assistants	4	1%
Emergency Medical Technician Paramedics	3 1%	

⁴ "100 Best Jobs," U.S. News & World Report, accessed January 28, 2025, https://money.usnews.com/careers/best-jobs/rankings/the-100-best-jobs.

The top employers for *paramedics* in the region, by number of job postings, are shown in Exhibit 9.

Exhibit 9: Top Employers by Number of Job Postings for the Middle-Skill Occupation (n=463)

Employer	Job Postings	Percentage of Job Postings
AMR	388	84%
Global Medical Response	12	3%
Joyous Ventures	7	2%
Southern California Permanente Medical Group	6	1%
Comprehensive Health Services	3	1%
Cutiscare	3	1%
PIH Health	3	1%
Acuity	2	<1%
Classic Air Care	2	<1%
Community Hospital of Huntington Park	2	<1%

The top specialized, soft, and computer skills for the middle-skill occupation *paramedics* listed by those most frequently mentioned in job postings (denoted in parentheses) are shown in Exhibit 10.

Exhibit 10: Top Skills by Number of Job Postings for the Middle-Skill Occupation (n=463)

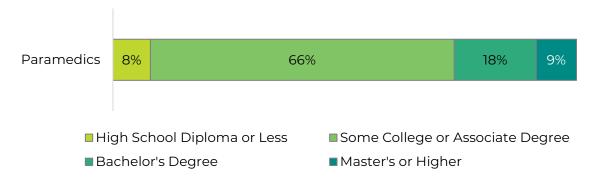
Top Specialized Skills	Top Soft Skills	Top Computer Skills
Electrocardiography (399)	Management (390)	Okta (127)
Ambulances (393)	Professionalism (317)	FORscene (7)
Defibrillation (349)	Good Driving Record (307)	Virtual Camera Systems (6)
Intravenous Hydration (347)	Compassion (57)	Microsoft Excel (3)
Cardiopulmonary Resuscitation (CPR) (335)	Customer Service (49)	Microsoft PowerPoint (3)
Medical Equipment (228)	Communication (42)	Microsoft Office (2)
National Incident Management Systems (224)	Operations (15)	Microsoft Outlook (2)
Patient Communication (209)	Computer Literacy (13)	Microsoft Windows (2)
Community Relations (200)	Lifting Ability (13)	Adobe Connect (1)
Okta (127)	Critical Thinking (12)	Communications Protocols (1)

Educational Attainment

The Bureau of Labor Statistics (BLS) lists a postsecondary non-degree award for as the typical entry-level education for *paramedics*.

The national-level educational attainment data indicates 66% of workers in the field have completed some college or an associate degree as their highest level of education. Exhibit 11 shows the educational attainment for this occupation.

Exhibit 11: National-level Educational Attainment for Occupations



Requested Minimum Education Requirement

In Los Angeles and Orange Counties, 90 (419) of job postings for *paramedics* included a stated minimum education requirement:

- 99% (415) requested a high school diploma or associate degree.
- 1% (4) requested a bachelor's degree.

Educational Supply

The following supply tables display the total supply for *paramedics* that align with these TOP and CIP codes and program needs.

Community College Supply

Exhibit 12 shows the three-year average number of awards conferred by community colleges in the related TOP code:

• Paramedic (1251.00)

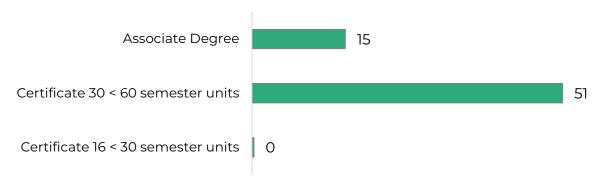
The colleges with the most completions in the region are Mt San Antonio (32), then Saddleback (27), and El Camino (6). Over the past 12 months, there were no other related program recommendation requests from regional community colleges.

Exhibit 12: Regional Community College Awards (Certificates and Degrees), 2021-2024

TOP Code	Program	College	2021- 2022 Awards	2022- 2023 Awards	2023- 2024 Awards	3-Year Award Average
		El Camino	6	4	7	6
	Mt San Antonio	34	23	39	32	
1251.00	Paramedic	West LA	1	3	3	2
		LA Subtotal	41	30	49	40
		Saddleback	39	13	28	27
		OC Subtotal	39	13	28	27
Supply Total/Average		80	43	77	67	

Exhibit 13 shows the annual average community college awards by type from 2021-22 to 2023-24. The plurality of the awards are for certificates between 30 and less than 60 semester units, followed by associate degrees. There was one certificate between 16 and less than 30 semester units awarded in 2023-24, but none for the two years prior.

Exhibit 13: Annual Average Community College Awards by Type, 2021-2024



Community College Student Outcomes

Exhibit 14 shows the Strong Workforce Program (SWP) metrics for paramedic programs in the Coast Community College District (CCCD), the Orange County Region, and California. Due to low student enrollment, student outcomes data is available only at statewide and regional levels. (Note: generally, paramedics work a significant amount of overtime, which impacts their reported wages.)

Exhibit 14: Paramedic (1251.00) Strong Workforce Program Metrics, 2021-245

SWP Metric	CCCD	OC Region	California
SWP Students	N/A	70	2,341
SWP Students Who Earned 9 or More Career Education Units in the District in a Single Year	N/A	93%	67%
SWP Students Who Completed a Noncredit CTE or Workforce Preparation Course	N/A	Insufficient Data	31%
SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status	N/A	16	553
SWP Students Who Transferred to a Four-Year Postsecondary Institution (2022-23)	N/A	Ο	37
SWP Students with a Job Closely Related to Their Field of Study (2021-22)	N/A	Insufficient Data	92%
Median Annual Earnings for SWP Exiting Students (2022-23)	N/A	\$128,652 (\$61.85)	\$77,744 (\$37.38)
Median Change in Earnings for SWP Exiting Students (2022-23)	N/A	52%	62%
SWP Exiting Students Who Attained the Living Wage (2022-23)	N/A	94%	76%

Non-Community College Supply

To comprehensively analyze the regional supply, it is crucial to include data from other institutions offering paramedic programs. Exhibit 15 displays the annual and three-year average awards granted by these institutions under the related Classification of Instructional Programs (CIP) code:

• Emergency Medical Technology/Technician (EMT Paramedic) (51.0904)

The available data covers 2020 to 2023. During this period, non-community college institutions in the region conferred an average of 22 awards annually in related program.

Exhibit 15: Regional Non-Community College Awards, 2020-2023

CIP Code	Program	College	2020- 2021 Awards	2021- 2022 Awards	2022- 2023 Awards	3-Year Award Average
51.0904	Emergency Medical Technology/Technician (EMT Paramedic)	University of Antelope Valley	11	38	17	22
	Supply Total/Average			38	17	22

⁵ All SWP metrics are for 2023-24 unless otherwise noted.

Regional Demographics

The following section presents occupational, community college program, and population demographic data for Orange County. This comparison can help identify possible equity gaps between the local workforce and the student pipeline who are preparing for this occupation. These insights can inform program development, outreach, and support strategies to better align community college programs with current labor market needs.

Ethnicity

Exhibit 16 compares the ethnicity of Orange County community college students enrolled in paramedic programs, the overall Orange County population, and occupation-specific data for *paramedics* included in this report.

White workers are overrepresented in the field, comprising 67% of *paramedics* compared to 51% of paramedic students. In contrast, Hispanic or Latino individuals make up just 11% of the workforce but account for over 30% of program enrollment. Asian individuals represent 18% of *paramedics*, but are absent from paramedic programs, while Black individuals are notably absent from both the workforce and training pipeline. These trends suggest a potential disconnect between training programs and employment outcomes.

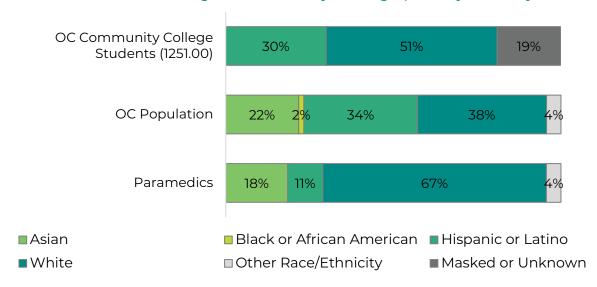


Exhibit 16: Program and County Demographics by Ethnicity

Age

Exhibit 17 compares the age of Orange County community college students enrolled in Paramedic programs, the overall Orange County population, and occupation-specific data for paramedics.

Nearly three-quarters of students enrolled in paramedic programs were between the ages of 25 to 34 years old (72%), compared to the workforce, which is more evenly distributed across age groups: 33% are 25 to 34, 26% are 35 to 49, and 31% are 50 and older. These patterns could indicate an emerging generational shift, with younger students poised to replace an aging paramedic workforce over time.



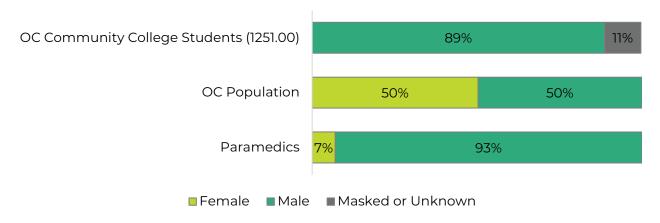
Exhibit 17: Program and County Demographics by Age

Sex

Exhibit 18 compares the sex of Orange County community college students enrolled in paramedic programs, the overall Orange County population, and occupation-specific data for *paramedics*.

Although the gender distribution in the general population is relatively balanced, the paramedic workforce is overwhelmingly male, with men comprising 93% of all workers. This imbalance is mirrored in paramedic programs, where men represent 89% of enrolled students.

Exhibit 18: Program and County Demographics by Sex



Appendix A: Methodology

OC COE prepared this report by analyzing occupational and educational program data. Occupational data comes from Lightcast, a labor market analytics firm which compiles information from the California Employment Development Department (EDD), U.S. Bureau of Labor Statistics (BLS), and other agencies. Analysis of emerging occupations is predicated on online job postings data combined with Occupational Information Network (O*NET) profile descriptions. Program supply data was sourced from the California Community Colleges Chancellor's Office Data Mart (MIS Data Mart) (datamart.cccco.edu) and the Integrated Postsecondary Education Data System (nces.ed.gov/ipeds/use-the-data), also known as IPEDS, which was integrated into the COE's Supply Table. (IPEDS).

Using a TOP-SOC crosswalk, the OC COE identified middle-skill jobs for which programs within these TOP codes train. Middle-skill jobs include:

- All occupations that have an educational requirement of some college, associate degree or apprenticeship;
- All occupations that require a bachelor's degree, but also have more than one-third of their existing labor force with an educational attainment of some college or associate degree; or
- All occupations that require a high school diploma or equivalent or no formal education, but also require short- to long-term on-the-job training where multiple community colleges have existing programs.

The OC COE determined labor market supply for each occupation (SOC code) by analyzing the number of 3-year average program completers or awards in related TOP and CIP codes. TOP code data comes from MIS Data Mart and CIP code data comes from the IPEDS. The TOP is a system of numerical codes used at the state level to collect and report information on California community college programs and courses throughout the state that have similar outcomes. CIP codes are a taxonomy of academic disciplines at institutions of higher education throughout the United States and Canada. The California Community Colleges are the only system that use TOP codes.

The analysis reflects labor market demand for occupations closely related to the proposed program as expressed by the requesting college in consultation with the OC COE. assess current and projected employment based on data trends for detailed occupations, as well as annual average awards granted by regional postsecondary educational institutions. Real-time labor market information (online job postings) assesses employer preferences but cannot be used to measure the quantity of open positions, number of jobs, or annual openings.

All findings are based on the most current available data and a combination of primary and secondary sources. While care was taken to ensure accuracy, the OC COE, its host district, and the California Community Colleges Chancellor's Office are not responsible for individual decisions made based on this report.

Appendix B: Data Sources

Data Type	Source
Occupational Projections, Wages, and Job Postings	Traditional and real-time labor market information are captured using data from <u>Lightcast</u> (v.2025.3), a labor market analytics firm.
Living Wage	Per the CCCCO's this report's endorsement criteria uses the University of Washington's Center for Women's Welfare Self-Sufficiency Standard last updated in March 2024, which is \$27.13 per hour (\$57,294 annually) in Orange County. The MIT Living Wage, updated on February 10, 2025, is a nationally recognized living wage metric and is provided for reference. The current MIT Living Wage in Orange County is \$32.20.
Typical Education and Training Requirements, and Educational Attainment	The <u>Bureau of Labor Statistics (BLS)</u> uses a system to assign categories for entry-level education, work experience in a related occupation, and typical on-the-job training to each occupation for which BLS publishes projections data.
Emerging Occupation Descriptions, Additional Education Requirements, and Employer Preferences	The O*NET database includes information on skills, abilities, knowledges, work activities, and interests associated with occupations.
Educational Supply	The CCCCO Data Mart provides information about students, courses, student services, outcomes and faculty and staff. The National Center for Education Statistics (NCES) Integrated Postsecondary Integrated Data System (IPEDS) collects data on the number of postsecondary awards earned (completions).
Student Metrics and Demographics	Data Vista (v.2.0), a statewide data system supported by the California Community Colleges Chancellor's Office provides data on progress, success, employment, and earnings outcomes for California community college students.
Population and Occupation Demographics	The <u>Census Bureau's American Community Survey (ACS)</u> is the premier source for detailed population and housing information. Data is sourced from <u>IPUMS USA</u> , a database providing access to ACS and other Census Bureau data products.

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FOR LABOR MARKET RESEARCH
ORANGE COUNTY

September 2025