

Labor Market Analysis: 1250.00/Emergency Medical Services

Emergency Department Technician

Certificate requiring 16 to fewer than 30 semester units

Los Angeles Center of Excellence, May 2023

Summary

Program Endorsement:	Endorsed: All Criteria Met <input checked="" type="checkbox"/>	Endorsed: Some Criteria Met <input type="checkbox"/>	Not Endorsed <input type="checkbox"/>
Program Endorsement Criteria			
Supply Gap:	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Living Wage: (Entry-Level, 25th)	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Education:	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Emerging Occupation(s)			
	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>

The Los Angeles Center of Excellence for Labor Market Research (LA COE) prepared this report to provide regional labor market supply and demand data related to two middle-skill occupations:

- **Emergency Medical Technicians (29-2042)** Assess injuries and illnesses and administer basic emergency medical care. May transport injured or sick persons to medical facilities.¹
- **Health Technologists and Technicians, All Other (29-2099)** All health technologists and technicians not listed separately.²

According to ZipRecruiter, emergency department technicians or emergency room (ER) technicians are licensed emergency medical technicians (EMTs) that work in hospital emergency rooms. They must complete an EMT training course, basic cardiac life support (BLS) certification, and be versed in the basics of biology, emergency services, first aid, resuscitation, childbirth, medical technology, and physiology.³ Since emergency department technicians are trained as emergency medical technicians (29-2042), but perform additional job tasks that may more closely align with health technologists and technicians, all other (29-2099), data for both standard occupational classification (SOC) codes are included in this report, as well as real-time labor market data, in order to provide a more nuanced view of the regional job market.

Middle-skill occupations typically require some postsecondary education, but less than a bachelor's degree.⁴ This report is intended to help determine whether there is demand in the local

¹ [EMTs and Paramedics : Occupational Outlook Handbook: : U.S. Bureau of Labor Statistics \(bls.gov\)](#)

² [Health Technologists and Technicians, All Other \(bls.gov\)](#)

³ [Emergency Room Technician: What is it and how to become one | Ziprecruiter](#)

⁴ The COE classifies middle-skill jobs as the following:

- All occupations that require 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

labor market that is not being met by the supply from community college programs that align with the relevant occupations.

Based on the available data, there appears to be a supply gap for these occupations related to emergency department technicians in the region. The majority of annual openings in Los Angeles County have entry-level wages that exceed the self-sufficiency standard wage, and the Bureau of Labor Statistics (BLS) lists a postsecondary non-degree award as the typically required education level. **Therefore, due to all the criteria being met, the LA COE endorses this proposed program.** Detailed reasons include:

Demand:

- **Supply Gap Criteria** – Over the next five years, **1,293 jobs are projected to be available annually** in the region due to new job growth and replacements, **which is more than the three-year average of 256 awards conferred** by educational institutions in the region.
 - However, the *health technologists and technicians, all other (29-2099)* SOC code includes a variety of health roles, and not solely emergency department technicians. Therefore, **the number of annual job openings is likely overstated.**
 - Over the past 12 months, there were **232 online job postings for emergency department technicians** in LA/OC. The highest number of job postings were for emergency department technicians, emergency room technicians, emergency department managers, emergency department medical scribes, and emergency room managers.
- **Living Wage Criteria** – Within Los Angeles County, the majority (68%) of annual job openings for these occupations related to emergency department technicians have **entry-level wages above the self-sufficiency standard hourly wage** (\$18.10/hour).⁵
- **Educational Criteria** – The Bureau of Labor Statistics (BLS) lists a **postsecondary non-degree award** as the typical entry-level education for both occupations in this report.
 - Furthermore, the national-level educational attainment data indicates **between 46% and 66% of workers in the field have completed some college or an associate degree.**

Supply:

- There are **8 community colleges** in the greater LA/OC region that issue awards related to emergency medical services, conferring an average of **236 awards annually** between 2018 and 2021.
- Between 2017 and 2020, there was an average of **19 awards conferred annually** in related training programs by non-community college institutions throughout the greater LA/OC region.

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- 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.

⁵ Self-Sufficiency Standard wage data was pulled from The Self-Sufficiency Standard Tool for California. For more information, visit: <http://selfsufficiencystandard.org/california>.

Occupational Demand

Exhibit 1 shows the five-year occupational demand projections for these occupations related to emergency department technicians. In the greater Los Angeles/Orange County region, the number of jobs related to these occupations is projected to increase by 9% through 2026. There will be nearly 1,300 job openings per year through 2026 due to job growth and replacements. It is important to note that data from both related SOC codes are included in Exhibit 1 since emergency department technicians align with both SOC occupations. Since *health technologists and technicians, all other (29-2099)* includes a variety of emerging health roles and not solely emergency department technicians, the data in Exhibit 1 is likely overstated for ER technicians.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties⁶

Geography	2021 Jobs	2026 Jobs	2021-2026 Change	2021-2026 % Change	Annual Openings
Los Angeles	10,196	10,782	586	6%	888
Orange	3,460	4,102	643	19%	405
Total	13,656	14,884	1,228	9%	1,293

Wages

The labor market endorsement in this report considers the entry-level hourly wages for these occupations related to emergency department technicians in Los Angeles County as they relate to the county's self-sufficiency standard wage. Orange County wages are included below in order to provide a complete analysis of the greater LA/OC region. Detailed wage information, by county, is included in Appendix A.

Los Angeles County

The majority (68%) of annual openings for the occupations of interest have entry-level wages above the self-sufficiency standard wage for one adult (\$18.10 in Los Angeles County). Typical entry-level hourly wages are in a range between \$14.79 and \$18.56. One occupation in this report has typical entry-level wages above the county's self-sufficiency standard wage: *health technologists and technicians, all other* (\$18.56). Experienced workers can expect to earn wages between \$22.55 and \$29.25, which are higher than the self-sufficiency standard.

Exhibit 2: Earnings for Occupations in LA County

Occupation	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)	Median Annual Earnings*
Emergency Medical Technicians (29-2042)	\$14.79	\$17.76	\$22.55	\$36,900
Health Technologists and Technicians, All Other (29-2099)	\$18.56	\$23.13	\$29.25	\$48,100

*rounded to the nearest \$100

⁶ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

Orange County

Both occupations have entry-level wages below the self-sufficiency standard wage for one adult (\$20.63 in Orange County). Typical entry-level hourly wages are in a range between \$14.31 and \$17.98. Experienced workers can expect to earn wages between \$21.81 and \$28.12, which are higher than the self-sufficiency standard.

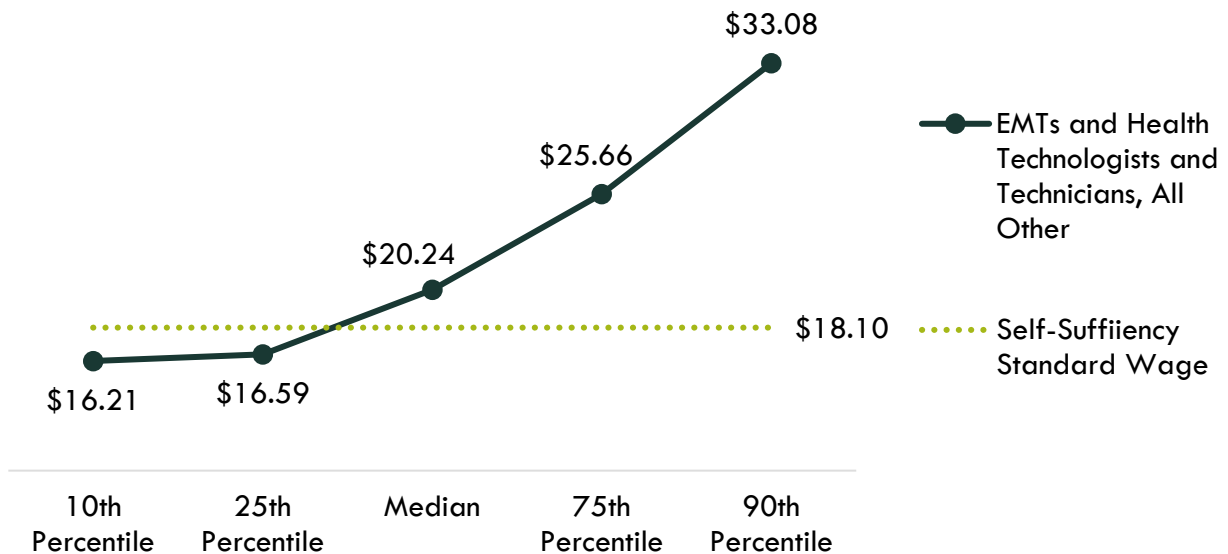
Exhibit 3: Earnings for Occupations in Orange County

Occupation	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)	Median Annual Earnings*
Emergency Medical Technicians (29-2042)	\$14.31	\$17.18	\$21.81	\$35,700
Health Technologists and Technicians, All Other (29-2099)	\$17.98	\$22.34	\$28.12	\$46,500

*rounded to the nearest \$100

On average, the entry-level earnings for the occupations in this report are \$16.59; this is below the living wage for one single adult in Los Angeles County (\$18.10). Exhibit 4 shows the average wage for the occupations in this report, from entry-level to experienced workers.

Exhibit 4: Average Hourly Earnings for Occupations related to Emergency Department Technicians in LA/OC



Job Postings

There were 232 online job postings for emergency room technicians and/or emergency department technicians listed in the past 12 months. The highest number of job postings were for emergency department technicians, emergency room technicians, emergency department managers, emergency department medical scribes, and emergency room managers. The top skills were knowledge of emergency departments, electrocardiography, medical terminology, hospital

experience, vital signs, and phlebotomy. The top three employers, by number of job postings, in the region were PIH Health, Providence, and Children’s Health Orange County.

Educational Attainment

The Bureau of Labor Statistics (BLS) lists a postsecondary non-degree award as the typical entry-level education for both occupations in this report. Furthermore, the national-level educational attainment data indicates between 46% and 66% of workers in the field have completed some college or an associate degree. Of the 45% of related job postings listing a minimum education requirement in the greater Los Angeles/Orange County region, 81% (85) requested high school or vocational training, 14% (15) requested an associate degree, and 5% (5) requested a bachelor’s degree.

Educational Supply

Community College Supply

Exhibit 5 shows the annual and three-year average number of awards conferred by community colleges in programs that have historically trained for the occupations of interest. The colleges with the most completions in the region are Saddleback, Orange Coast, and Mt. San Antonio.

Exhibit 5: Regional community college awards (certificates and degrees), 2018-2021

TOP	Program	College	2018-19 Awards	2019-20 Awards	2020-21 Awards	3-Year Average
1250.00	Emergency Medical Services	Citrus	55	-	-	18
		East LA	14	3	36	18
		Glendale	-	-	1	0
		LA Harbor	-	-	1	0
		Long Beach	-	2	2	1
		Mt San Antonio	-	35	34	23
		LA Subtotal	69	40	74	61
		Orange Coast	59	49	65	58
		Saddleback	129	150	74	118
		OC Subtotal	188	199	139	175
Supply Total/Average			257	239	213	236

Non-Community College Supply

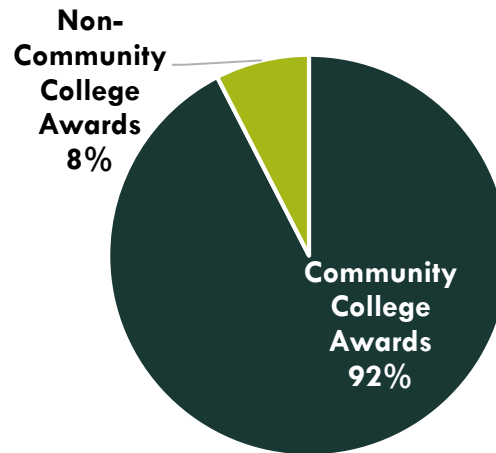
For a comprehensive regional supply analysis, it is important to consider the supply from other institutions in the region that provide training programs for emergency medical technology. Exhibit 6 shows the annual and three-year average number of awards conferred by this institution in relevant programs. Due to different data collection periods, the most recent three-year period of available data is from 2017 to 2020. Between 2017 and 2020, non-community college institutions in the region conferred an average of 19 sub-baccalaureate awards. Sub-baccalaureate awards include associate degrees, postsecondary awards, and other academic awards.

Exhibit 6: Regional non-community college awards, 2017-2020

CIP	Program	Institution	2017-18 Awards	2018-19 Awards	2019-20 Awards	3-Year Average
51.0904	Emergency Medical Technology/Technician (EMT Paramedic)	East San Gabriel Valley ROP	26	32	-	19
Supply Total/Average			26	32	-	19

Exhibit 7 shows the proportion of community college awards conferred in LA/OC compared to the number of non-community college awards for the programs in this report. More than nine out of ten awards conferred in these programs are awarded by community colleges in the LA/OC region.

Exhibit 7: Community College Awards Compared to Non-Community College Awards in LA/OC Region, 3-Year Average



Appendix A: Occupational demand and wage data by county

Exhibit 8. Los Angeles County

Occupation (SOC)	2021 Jobs	2026 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)
Emergency Medical Technicians (29-2042)	3,757	3,697	(59)	(2%)	283	\$14.79	\$17.76	\$22.55
Health Technologists and Technicians, All Other (29-2099)	6,440	7,085	645	10%	605	\$18.56	\$23.13	\$29.25
Total	10,196	10,782	586	6%	888	-	-	-

Exhibit 9. Orange County

Occupation (SOC)	2021 Jobs	2026 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Emergency Medical Technicians (29-2042)	1,647	2,104	457	28%	234	\$14.31	\$17.18	\$21.81
Health Technologists and Technicians, All Other (29-2099)	1,812	1,998	186	10%	171	\$17.98	\$22.34	\$28.12
Total	3,460	4,102	643	19%	405	-	-	-

Exhibit 10. Los Angeles and Orange Counties

Occupation (SOC)	2021 Jobs	2026 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	% Age 55 and older*	Typical Entry-Level Education
Emergency Medical Technicians (29-2042)	5,404	5,801	397	7%	518	8%	Postsecondary non-degree award
Health Technologists and Technicians, All Other (29-2099)	8,252	9,083	831	10%	775	18%	Postsecondary non-degree award
Total	13,656	14,884	1,228	9%	1,293	-	-

*The average percentage of workers age 55 and older across all occupations in the greater LA/OC region is 27%. These occupations have a smaller share of older workers, which typically indicates fewer replacements needs to offset the amount of impending retirements.

Appendix B: Sources

- O*NET Online
- Lightcast (formerly Emsi)
- Bureau of Labor Statistics (BLS)
- California Employment Development Department, Labor Market Information Division, OES
- California Community Colleges Chancellor's Office Management Information Systems (MIS)
- Self-Sufficiency Standard at the Center for Women's Welfare, University of Washington
- Chancellor's Office Curriculum Inventory (COCI 2.0)

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