

Program Endorsement Brief: 1251.00/Paramedic

Los Angeles/Orange County Center of Excellence, November 2021

Summary Analysis

Program Endorsement:	Endorsed: All Criteria Met <input type="checkbox"/>	Endorsed: Some Criteria Met <input checked="" 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 type="checkbox"/>		No <input checked="" type="checkbox"/>
Education:	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
Emerging Occupation(s)			
	Yes <input type="checkbox"/>		No <input checked="" type="checkbox"/>

The Los Angeles/Orange County Center of Excellence for Labor Market Research (COE) prepared this report to provide Los Angeles/Orange County regional labor market supply and demand data related to one middle-skill occupation: *emergency medical technicians and paramedics* (29-2041). Middle-skill occupations typically require some postsecondary education, but less than a bachelor's degree.¹ This report is intended to help determine whether there is demand in the local 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 *emergency medical technician and paramedics* in the region. While the Bureau of Labor Statistics (BLS) lists a postsecondary non-degree award as the typical entry-level education for *emergency medical technicians and paramedics*, entry-level wages are lower than the self-sufficiency standard wage in both Los Angeles and Orange counties. **Therefore, due to some of the criteria being met, the COE endorses this proposed program.** Detailed reasons include:

Demand:

- **Supply Gap Criteria** – Over the next five years, there is projected to be **441 jobs available annually** in the region due to new job growth and replacements, **which is more than the 424 awards conferred annually** by educational institutions in the region.
 - Over the past 12 months, there were **1,633 online job postings for emergency medical technicians and paramedics occupations**. The highest number of job postings were for emergency medical technicians, paramedics, special event EMTs, firefighter EMTs, and special event paramedics.

¹ 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
- 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.

- **Living Wage Criteria** – Within Los Angeles County, **typical entry-level hourly wages** for *emergency medical technician and paramedics* are **\$17.40, which is lower than the self-sufficiency standard** hourly wage (living wage) for one adult in the region (\$18.10 in Los Angeles County).²
- **Educational Criteria** – The Bureau of Labor Statistics (BLS) lists a **postsecondary non-degree award as the typical entry-level education** for *emergency medical technicians and paramedics*.
 - Furthermore, the national-level educational attainment data indicates **66.1% of workers in the field have completed some college or an associate degree**.

Supply:

- There are **8 community colleges** in the LA/OC region that issue awards related to emergency medical services and paramedics, conferring an average of **394 awards annually** between 2017 and 2020.
- Between 2016 and 2019, there was an average of **30 awards conferred annually** in related training programs by non-community college institutions throughout the region.

Occupational Demand

Exhibit 1 shows the five-year occupational demand projections for *emergency medical technicians and paramedics*. In Los Angeles/Orange County, the number of jobs related to these occupations is projected to increase by 4% through 2025. There will be more than 440 job openings per year through 2025 due to job growth and replacements.

This report includes employment projection data by Emsi which uses EDD information. Emsi’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. To the extent that a recession or labor shock, such as the economic effects of COVID-19, can cause long-term structural change, it may impact the projections. At this time, it is not possible to quantify the full impact of COVID-19 on projections of industry and occupational employment. Therefore, the projections included in this report do not take the full impacts of COVID-19 into account.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties³

Geography	2020 Jobs	2025 Jobs	2020-2025 Change	2020-2025 % Change	Annual Openings
Los Angeles	4,546	4,555	9	0%	273
Orange	1,887	2,129	242	13%	167
Total	6,433	6,684	251	4%	441

² Self-Sufficiency Standard wage data was pulled from The Self-Sufficiency Standard Tool for California on 11/2/2021. For more information, visit: <http://selfsufficiencystandard.org/california>.

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.

Wages

The labor market endorsement in this report considers the entry-level hourly wages for *emergency medical technicians and paramedics* 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 LA/OC region. Detailed wage information, by county, is included in Appendix A.

Los Angeles County— The typical entry-level hourly wages for *emergency medical technicians and paramedics* are \$17.40, which is below the self-sufficiency standard wage for one adult (\$18.10 in Los Angeles County).⁴ Experienced workers can expect to earn wages of \$29.56, which is higher than the self-sufficiency standard.

Orange County— The typical entry-level hourly wages for *emergency medical technicians and paramedics* are \$17.97, which is below the self-sufficiency standard wage for one adult (\$20.63 in Orange County).⁵ Experienced workers can expect to earn wages of \$30.55, which is higher than the self-sufficiency standard.

Job Postings

There were 1,633 online job postings related to *emergency medical technicians and paramedics* listed in the past 12 months. The highest number of job postings were for emergency medical technicians, paramedics, special event EMTs, firefighter EMTs, and special event paramedics. The top skills were: cardiopulmonary resuscitation (CPR), patient care, advanced cardiac life support (ACLS), life support, and customer billing. The top three employers, by number of job postings, in the region were: Lifeline Ambulance, Premier Ambulance, and Covid Clinic.

It is important to note that the job postings data included in this section reflects online job postings listed in the past 12 months and does not yet demonstrate the full impact of COVID-19. While employers have generally posted fewer online job postings since the beginning of the pandemic, the long-term effects are currently unknown.

Educational Attainment

The Bureau of Labor Statistics (BLS) lists a postsecondary non-degree as the typical entry-level education for *emergency medical technicians and paramedics*. Furthermore, the national-level educational attainment data indicates 66.1% of workers in the field have completed some college or an associate degree. Of the 54% of *emergency medical technician and paramedic* job postings listing a minimum education requirement in Los Angeles/Orange County, 97% (865) requested a high school diploma and 3% (24) requested an associate degree.

Educational Supply

Community College Supply—Exhibit 2 shows the three-year average number of awards conferred by community colleges in the related TOP codes: Emergency Medical Services (1 250.00), and Paramedic (1 251.00). The colleges with the most completions in the region are:

⁴ Self-Sufficiency Standard wage data was pulled from The Self-Sufficiency Standard Tool for California on 11/2/2021. For more information, visit: <http://selfsufficiencystandard.org/california>.

⁵ Ibid.

Saddleback, El Camino, and Mt. San Antonio. Over the past 12 months, there were two other related program recommendation requests from regional community colleges.

Exhibit 2: Regional community college awards (certificates and degrees), 2017-2020

TOP Code	Program	College	2017-2018 Awards	2018-2019 Awards	2019-2020 Awards	3-Year Award Average
1250.00	Emergency Medical Services	Citrus	59	55	-	38
		East LA	58	14	3	25
		Long Beach	1	-	2	1
		Mt San Antonio	74	-	35	36
		LA Subtotal	192	69	40	100
		Orange Coast	-	59	49	36
		Saddleback	13	129	150	97
		OC Subtotal	13	188	199	133
Supply Subtotal/Average			205	257	239	234
1251.00	Paramedic	El Camino	89	76	97	87
		Mt San Antonio	10	23	22	18
		West LA	-	-	22	7
		LA Subtotal	99	99	141	113
		Saddleback	56	49	38	48
		OC Subtotal	56	49	38	48
Supply Subtotal/Average			155	148	179	161
Supply Total/Average			360	405	418	394

Non-Community College Supply—For a comprehensive regional supply analysis, it is also important to consider the supply from other institutions in the region that provide training programs for *emergency medical technicians and paramedics*. Exhibit 3 shows the annual and three-year average number of awards conferred by this institution in the related Classification of Instructional Programs (CIP) Code: Emergency Medical Technology/Technician (EMT Paramedic) (51.0904). Due to different data collection periods, the most recent three-year period of available data is from 2016 to 2019. Between 2016 and 2019, four-year colleges in the region conferred an average of 30 awards annually in related training programs.

Exhibit 3: Regional non-community college awards, 2016-2019

CIP Code	Program	College	2016-2017 Awards	2017-2018 Awards	2018-2019 Awards	3-Year Award Average
51.0904	Emergency Medical Technology/Technician (EMT Paramedic)	East San Gabriel Valley ROP	32	26	32	30
Supply Total/Average			32	26	32	30

Appendix A: Occupational demand and wage data by county

Exhibit 4. Los Angeles County

Occupation (SOC)	2020 Jobs	2025 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 and Paramedics (29-2041)	4,546	4,555	9	0%	273	\$17.40	\$22.25	\$29.56

Exhibit 5. Orange County

Occupation (SOC)	2020 Jobs	2025 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 and Paramedics (29-2041)	1,887	2,129	242	13%	167	\$17.97	\$22.99	\$30.55

Exhibit 6. Los Angeles and Orange Counties

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Typical Entry-Level Education
Emergency Medical Technicians and Paramedics (29-2041)	6,433	6,684	251	4%	441	Postsecondary non-degree award

Appendix B: Sources

- O*NET Online
- Labor Insight/Jobs (Burning Glass)
- Economic Modeling Specialists, International (Emsi)
- Bureau of Labor Statistics (BLS)
- Employment Development Department, Labor Market Information Division, OES
- California Community Colleges Chancellor's Office Management Information Systems (MIS)
- California Family Needs Calculator, Insight Center for Community Economic Development
- Chancellor's Office Curriculum Inventory (COCI 2.0)

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