

## Program Endorsement Brief: 1250.00/Emergency Medical Services

Orange County Center of Excellence, August 2020

### Summary Analysis

<b>Program Endorsement:</b>	<b>Endorsed: All Criteria Met</b>	<input type="checkbox"/>	<b>Endorsed: Some Criteria Met</b>	<input checked="" type="checkbox"/>	<b>Not Endorsed</b>	<input type="checkbox"/>
<b>Program Endorsement Criteria</b>						
<b>Supply Gap:</b>	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>		
<b>Meets Living Wage: (Entry-Level, 25<sup>th</sup>)</b>	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>		
<b>Typical Entry-Level Education:</b>	HS Diploma or Less	<input type="checkbox"/>	Some College/ Cert./AA	<input checked="" type="checkbox"/>	Bachelor's Degree	<input type="checkbox"/>
					Graduate Degree	<input type="checkbox"/>
<b>Emerging Occupation(s)</b>						
	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>		

The 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.<sup>1</sup> 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 occupation.

Based on the available data, there appears to be a supply gap for emergency medical technicians and paramedics in the region. However, entry-level and median wages for this occupation are below the living wage in both Los Angeles and Orange Counties, and entry-level wages are below California's current minimum wage for employers with 26 or more employees.<sup>2</sup> **Therefore, due to some of the criteria being met, the COE cautiously endorses this proposed program.** Reasons include:

#### Demand:

- Over the next five years, there is projected to be **497 jobs available annually** in the LA/OC region due to new job growth and replacements, **which is more than the 243 awards conferred annually** by educational institutions in the region.

<sup>1</sup> 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.

<sup>2</sup> Wage estimates are based on data collected over the last three years and are considered "point-in-time" estimates. For more information, see: <https://www.labormarketinfo.edd.ca.gov/data/oes-wages-about-the-data.html>

- 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 **65.4% of workers in the field have completed some college or an associate degree.**
- **Typical entry-level and median hourly wages** for emergency medical technicians and paramedics in Orange County are **\$12.29 and \$14.43**, respectively, **which are lower than the California Family Needs Calculator** hourly wage (living wage) for one adult in the region (\$15.04 in Los Angeles County and \$17.36 in Orange County).<sup>3</sup>

**Supply:**

- There are **6 community colleges** in the region that issue awards related to emergency medical services, conferring an average of **184 awards annually** between 2016 and 2019.
- Between 2014 and 2017, there was an average of **59 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 2024. There will be nearly 500 job openings per year through 2024 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 impact of COVID-19 on projections of industry and occupational employment. Therefore, the projections included in this report do not take the impacts of COVID-19 into account.*

**Exhibit 1: Occupational demand in Los Angeles and Orange Counties<sup>4</sup>**

Geography	2019 Jobs	2024 Jobs	2019-2024 Change	2019-2024 % Change	Annual Openings
Los Angeles	4,742	4,795	53	1%	326
Orange	1,816	2,038	222	12%	172
<b>Total</b>	<b>6,558</b>	<b>6,833</b>	<b>275</b>	<b>4%</b>	<b>497</b>

<sup>3</sup> Living wage data was pulled from California Family Needs Calculator on 7/13/20. For more information, visit the California Family Needs Calculator website: <https://insightcced.org/2018-family-needs-calculator/>.

<sup>4</sup> 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 emergency medical technicians and paramedics in Orange County as they relate to the county's living wage. Los Angeles 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.

**Orange County**— Typical entry-level and median hourly wages for emergency medical technicians and paramedics are \$12.29 and \$14.43, respectively.<sup>5</sup> Entry-level wages for this occupation are lower than the California Family Needs Calculator hourly wage (living wage) for one adult in Orange County (\$17.36).<sup>6</sup> Experienced workers can expect to earn wages of \$18.71, which is higher than the living wage estimate. Orange County's average wages are below the average statewide wage of \$18.92 for emergency medical technicians and paramedics.

**Los Angeles County**— Typical entry-level and median hourly wages for emergency medical technician and paramedics are \$12.16 and \$14.28, respectively. Entry-level wages for this occupation are lower than the living wage for one adult in Los Angeles County (\$15.04). Experienced workers can expect to earn wages of \$18.52, which is higher than the living wage estimate. Los Angeles County's average wages are below the average statewide wage of \$18.92 for emergency medical technician and paramedics.

**Job Postings**—There were 829 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, emergency medicine workers, regional technicians and officers – emergency medical technician. The top skills were: patient care, advanced cardiac life support (ACLS), cardiopulmonary resuscitation (CPR), trauma, and life support. The top three employers, by number of job postings, in the region were: American Medical Response, Prime Healthcare, and LifeLine Ambulance.

*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 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 award as the typical entry-level education for emergency medical technicians and paramedics. The national-level educational attainment data indicates 65.4% of workers in the field have completed some college or an associate degree. Of the 55% of emergency medical technician and paramedic job postings listing a minimum education requirement in Los Angeles/Orange County, 98% (445) requested a high school diploma and 2% (10) requested an associate degree.

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<sup>5</sup> Entry-level wage is defined as the twenty-fifth percentile hourly wage. Wages for experienced workers are defined as the seventy-fifth percentile hourly wage.

<sup>6</sup> Living wage data was pulled from California Family Needs Calculator on 7/6/2020. For more information, visit the California Family Needs Calculator website: <https://insightcced.org/2018-family-needs-calculator/>.

## 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 (1250.00) and Paramedic (1251.00). The colleges with the most completions in the region are: Saddleback, El Camino, Citrus, and Mt San Antonio. Over the past 12 months, there were no other related program recommendation requests from regional community colleges.

**Exhibit 2: Regional community college awards (certificates and degrees), 2016-2019**

TOP Code	Program	College	2016-2017 Awards	2017-2018 Awards	2018-2019 Awards	3-Year Award Average
1250.00	Emergency Medical Services	Citrus	36	59	55	50
		East LA	40	58	14	37
		Long Beach	-	1	-	0
		Mt San Antonio	-	74	-	25
		<b>LA Subtotal</b>	<b>76</b>	<b>192</b>	<b>69</b>	<b>112</b>
		Orange Coast	-	-	59	20
		Saddleback	15	13	129	52
		<b>OC Subtotal</b>	<b>15</b>	<b>13</b>	<b>188</b>	<b>72</b>
<b>Supply Subtotal/Average</b>			<b>91</b>	<b>205</b>	<b>257</b>	<b>184</b>
1251.00	Paramedic	El Camino	72	89	76	79
		Mt San Antonio	42	10	23	25
		<b>LA Subtotal</b>	<b>114</b>	<b>99</b>	<b>99</b>	<b>104</b>
		Saddleback	20	56	49	42
		<b>OC Subtotal</b>	<b>20</b>	<b>56</b>	<b>49</b>	<b>42</b>
<b>Supply Subtotal/Average</b>			<b>134</b>	<b>155</b>	<b>148</b>	<b>146</b>
<b>Supply Total/Average</b>			<b>225</b>	<b>360</b>	<b>405</b>	<b>330</b>

**Non-Community College Supply**—It is 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 one 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 2014 to 2017. Between 2014 and 2017, four-year colleges in the region conferred an average of 59 awards annually in related training programs.

**Exhibit 3: Regional non-community college awards, 2014-2017**

CIP Code	Program	College	2014-2015 Awards	2015-2016 Awards	2016-2017 Awards	3-Year Award Average
51.0904	Emergency Medical Technology/Technician (EMT Paramedic)	East San Gabriel Valley Regional Occupational Program	98	46	32	59
<b>Supply Total/Average</b>			<b>98</b>	<b>46</b>	<b>32</b>	<b>59</b>

**Appendix A: Occupational demand and wage data by county**

**Exhibit 4. Orange County**

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25 <sup>th</sup> Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 <sup>th</sup> Percentile)
Emergency Medical Technicians and Paramedics (29-2041)	1,816	2,038	222	12%	172	\$12.29	\$14.43	\$18.71

**Exhibit 5. Los Angeles County**

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25 <sup>th</sup> Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 <sup>th</sup> Percentile)
Emergency Medical Technicians and Paramedics (29-2041)	4,742	4,795	53	1%	326	\$12.16	\$14.28	\$18.52

**Exhibit 6. Los Angeles and Orange Counties**

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings
Emergency Medical Technicians and Paramedics (29-2041)	6,558	6,833	275	4%	497

## 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)

For more information, please contact:

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