










# Emergency Medical Technicians and Paramedics

## Labor Market Analysis: Imperial County

May 2021

### Summary

NEW PROGRAM RECOMMENDATION?	EVIDENCE OF A SUPPLY GAP?	AT OR ABOVE THE LIVING WAGE?	EXPECTED LEVEL OF EDUCATION
 <p><b>Do Not Proceed with New Program</b></p>	 	 	<input type="checkbox"/> Bachelor's Degree <input type="checkbox"/> Associate Degree <input checked="" type="checkbox"/> Some College or Certificate
SUPPORT FOR PROGRAM MODIFICATION?	NUMBER OF INSTITUTIONS THAT PROVIDE TRAINING	NUMBER OF ANNUAL JOB OPENINGS	<input type="checkbox"/> HS Diploma or Equivalent <input type="checkbox"/> Less than a HS Diploma
 	<p><b>MEDIUM</b></p> 	<p><b>LOW</b></p> 	<input type="checkbox"/> Apprenticeship

The San Diego-Imperial Center of Excellence for Labor Market Research (COE) developed this brief to assist the region's community colleges with strategic planning and program development. According to available labor market information, *Emergency Medical Technicians and Paramedics* in Imperial County have a labor market demand of three annual job openings (while average demand for a single occupation in Imperial County is 14 annual job openings), and one educational institution in Imperial County supplies three awards for this occupation, suggesting that supply is met in the labor market. Entry-level wages and median wages for this occupation are above the living wage. This brief recommends that the colleges do not proceed with developing a **new** program for this occupation but supports a program modification because 1) there is a low number of annual job opening; and 2) supply is met by the awards from Imperial Valley College.

## Introduction

This report provides labor market information in Imperial County for the following occupational code in the Standard Occupational Classification (SOC)<sup>1</sup> system:

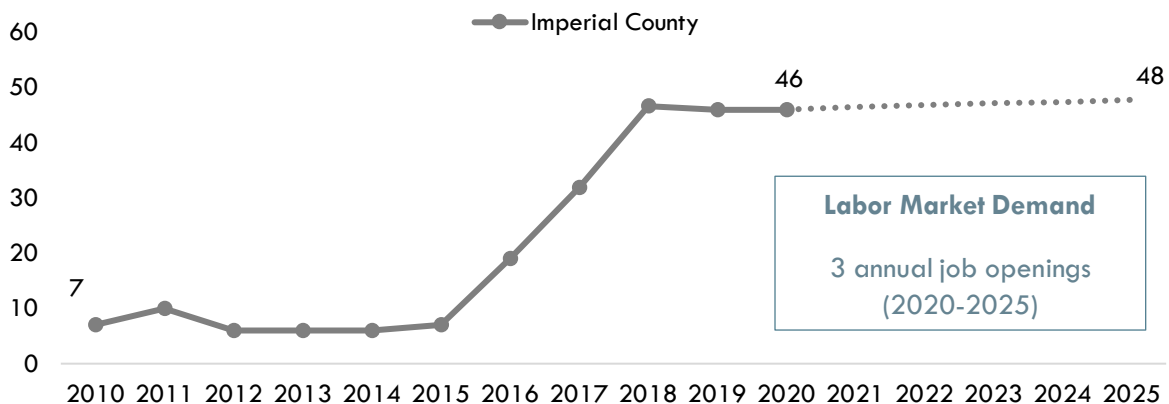
**Emergency Medical Technicians and Paramedics (SOC 29-2041):** Assess injuries and illnesses and administer basic emergency medical care. May transport injured or sick persons to medical facilities. Administer basic or advanced emergency medical care and assess injuries and illnesses. May administer medication intravenously, use equipment such as EKGs, or administer advanced life support to sick or injured individuals. Sample reported job titles include:

- Flight Paramedic
- Emergency Medical Technician, Basic
- Multi Care Technician
- First Responder
- EMT/Dispatcher
- EMT, Paramedic
- EMT Intermediate
- Emergency Medical Technician/Driver

## Projected Occupational Demand

Between 2020 and 2025, *Emergency Medical Technicians and Paramedics* are projected to increase by **two** net jobs or **four** percent (Exhibit 1). Employers in Imperial County will need to hire **three** workers annually to fill new jobs and backfill jobs due to attrition caused by turnover and retirement, for example.

**Exhibit 1: Number of Jobs for *Emergency Medical Technicians and Paramedics* (2010-2025)<sup>2</sup>**



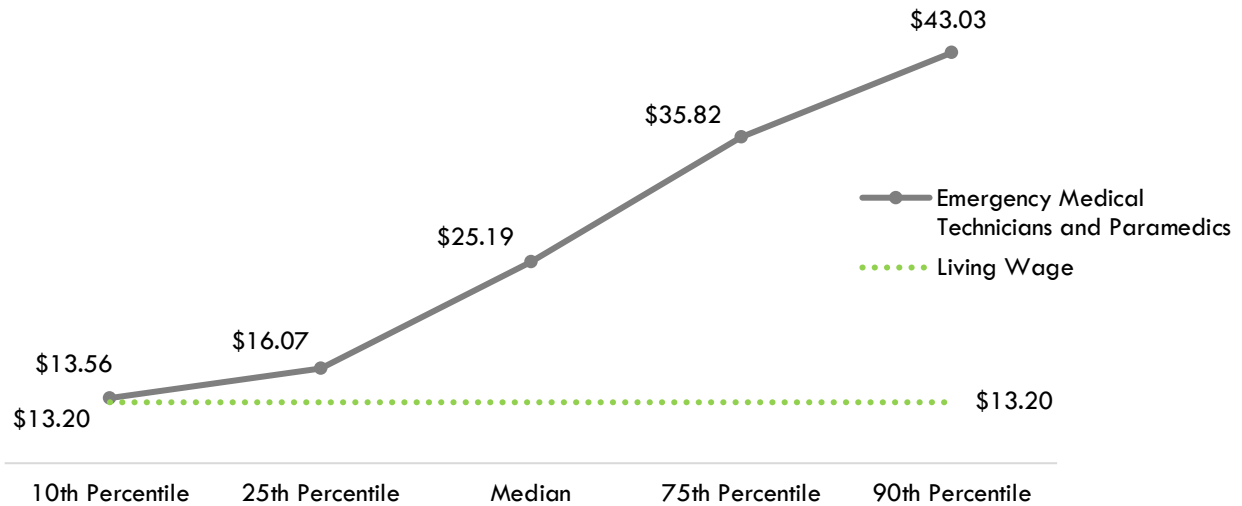
<sup>1</sup> The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. [bls.gov/soc](https://www.bls.gov/soc).

<sup>2</sup> EMSI 2021.1; QCEW, Non-QCEW, Self-Employed.

## Earnings

Emergency Medical Technicians and Paramedics receive entry-level hourly earnings of \$16.07; this is more than the living wage for a household of two adults and two school-age children in Imperial County, which is \$13.20 per hour (Exhibit 2).<sup>3</sup>

**Exhibit 2: Hourly Earnings<sup>4</sup> for Emergency Medical Technicians and Paramedics in Imperial County<sup>5</sup>**



<sup>3</sup> "California Family Needs Calculator (formerly the Self-Sufficiency Standard)," Insight: Center for Community Economic Development, last updated 2018. [insightcced.org/2018-self-sufficiency-standard](https://insightcced.org/2018-self-sufficiency-standard).

<sup>4</sup> 10th and 25th percentiles could be considered entry-level wages, and 75th and 90th percentiles could be considered experienced wages for individuals who may have been in the occupation longer, received more training than others, etc.

<sup>5</sup> EMSI 2021.1; QCEW, Non-QCEW, Self-Employed.

## Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of awards in related Taxonomy of Programs (TOP) or Classification of Instructional Programs (CIP) codes.<sup>6</sup> There are **two** TOP codes and **one** CIP code related to *Emergency Medical Technicians and Paramedics* (Exhibit 3).

**Exhibit 3: Related TOP and CIP Codes for *Emergency Medical Technicians and Paramedics***

TOP or CIP Code	TOP or CIP Program Title
TOP 1250.00	Emergency Medical Services
TOP 1251.00	Paramedic
CIP 51.0904	Emergency Medical Technology/Technician (EMT Paramedic)

According to TOP data, **one** community college supplies the region with awards for this occupation: **Imperial Valley College**. According to CIP data, **no** non-community-college institution supplies the region with awards (Exhibit 4).

**Exhibit 4: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions  
(Program Year 2014-15 through PY2018-19 Average)**

TOP or CIP Code	TOP or CIP Program Title	3-Yr Annual Average CC Awards (PY16-17 to PY18-19)	Other Educational Institutions 3-Yr Annual Average Awards (PY14-15 to PY16-17)	3-Yr Total Average Supply (PY14-15 to PY18-19)
1251.00	Paramedic	<b>3</b>	<b>0</b>	<b>3</b>
	<ul style="list-style-type: none"> <li>Imperial Valley</li> </ul>	3	0	
			<b>Total</b>	<b>3</b>

<sup>6</sup> TOP data comes from the California Community Colleges Chancellor's Office MIS Data Mart (datamart.cccco.edu) and CIP data comes from the Integrated Postsecondary Education Data System (nces.ed.gov/ipeds/use-the-data).

## Demand vs. Supply

Comparing labor demand (annual openings) with labor supply<sup>7</sup> suggests that **supply is met** for this occupation in Imperial County, with **three** annual openings and **three** awards. Comparatively, there are **1,790** annual openings in California and **3,609** awards, suggesting that there is an oversupply across the state<sup>8</sup> (Exhibit 5).

**Exhibit 5: Labor Demand (Annual Openings) Compared with Labor Supply (Average Annual Awards)**

Community Colleges and Other Postsecondary Educational Institutions	Demand (Annual Openings)	Supply (Total Annual Average Supply)	Supply Gap or Oversupply
Imperial	3	3	0
California	1,790	3,609	1,819

**Please note:** This is a basic analysis of supply and demand of labor. The data does not include workers currently in the labor force who could fill these positions or workers who are not captured by publicly available data. This data should be used to discuss the potential gaps or oversupply of workers; however, it should not be the only basis for determining whether or not a program should be developed.

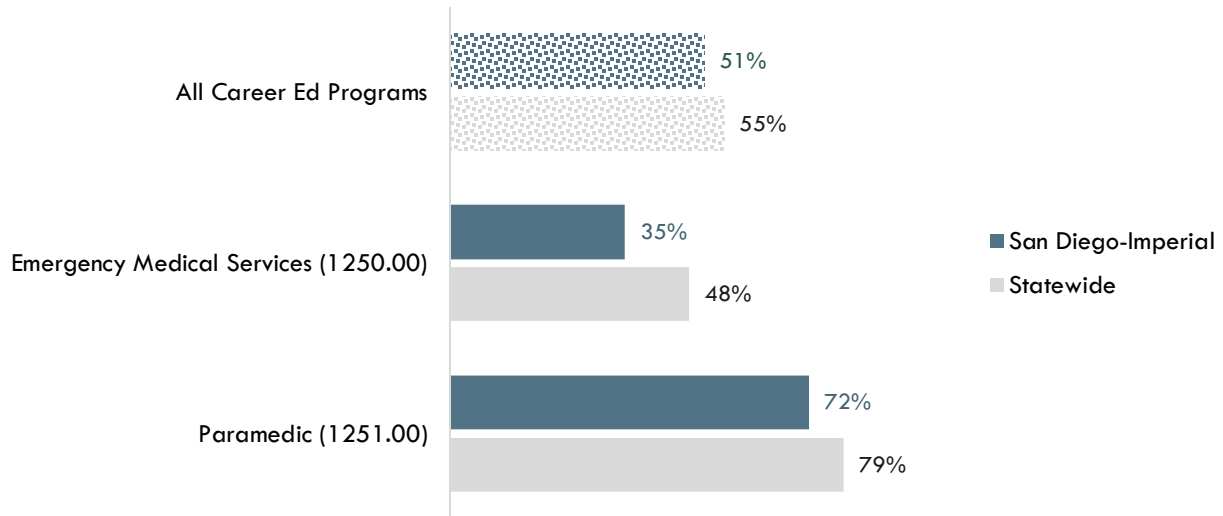
<sup>7</sup> Labor supply can be found from two different sources: EMSI or the California Community Colleges Chancellor's Office MIS Data Mart. EMSI uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.

<sup>8</sup> "Supply and Demand," Centers of Excellence Student Outcomes, [coecc.net/Supply-and-Demand.aspx](http://coecc.net/Supply-and-Demand.aspx).

## Student Outcomes and Regional Comparisons

According to the California Community Colleges LaunchBoard, 35 to 72 percent of students in the San Diego-Imperial region earned a living wage after completing a program related to *Emergency Medical Technicians and Paramedics*, compared to 48 to 79 percent statewide and 55 percent of students in Career Education programs in general across the state (Exhibit 6a).<sup>9</sup>

**Exhibit 6a: Percentage of Students Who Earned a Living Wage by Program, PY2017-18<sup>10</sup>**

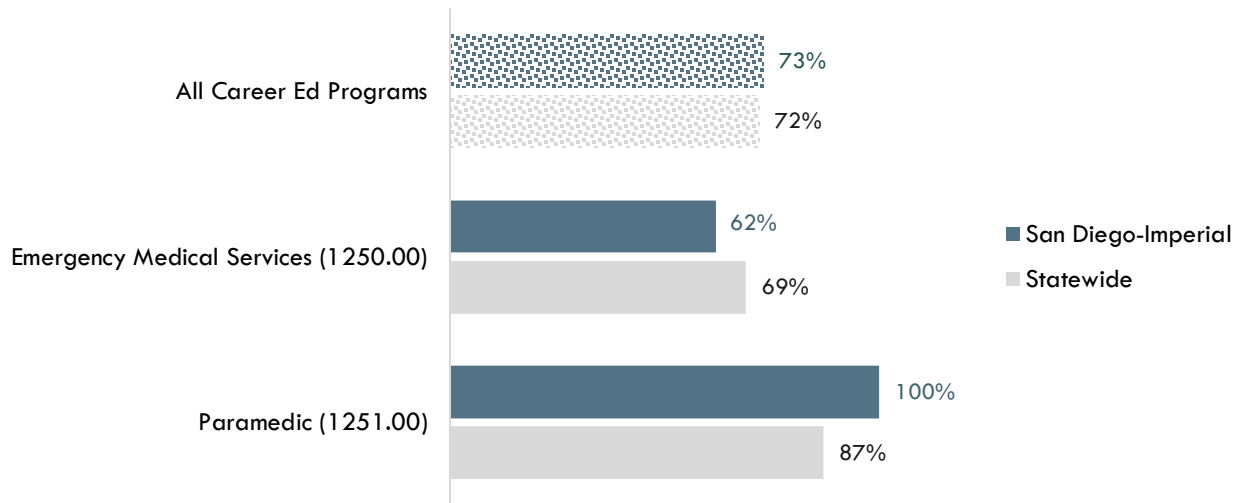


<sup>9</sup> "California Community Colleges Strong Workforce Program," California Community Colleges, [calpassplus.org/LaunchBoard/SWP.aspx](http://calpassplus.org/LaunchBoard/SWP.aspx).

<sup>10</sup> Among completers and skills builders who exited, the proportion of students who attained a living wage.

According to the California Community Colleges LaunchBoard, 62 to 100 percent of students in the San Diego-Imperial region obtained a job closely related to their field of study after completing a program related to *Emergency Medical Technicians and Paramedics*, compared to 69 to 87 percent statewide and 72 percent of students in Career Education programs in general across the state (Exhibit 6b).<sup>11</sup>

**Exhibit 6b: Percentage of Students in a Job Closely Related to Field of Study by Program, PY2016-17<sup>12</sup>**



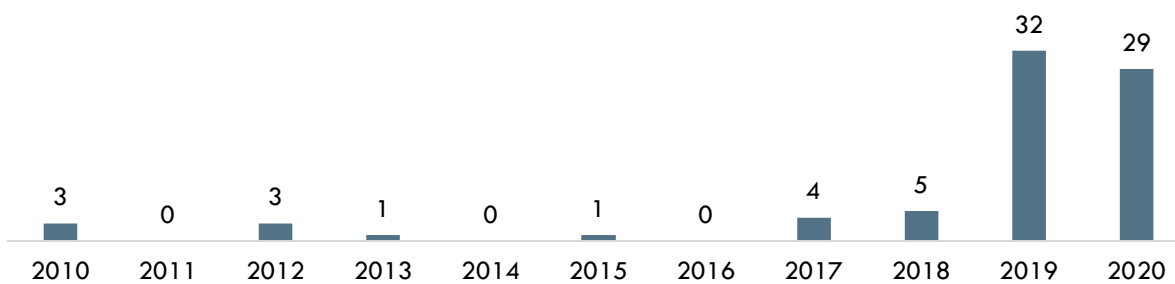
<sup>11</sup> "California Community Colleges Strong Workforce Program," California Community Colleges, [calpassplus.org/LaunchBoard/SWP.aspx](http://calpassplus.org/LaunchBoard/SWP.aspx).

<sup>12</sup> Most recent year with available data is Program Year 2016-17. Percentage of Students in a Job Closely Related to Field of Study: Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study.

## Online Job Postings

This report analyzes not only historical and projected (traditional LMI) data, but also recent data from online job postings (real-time LMI). Online job postings may provide additional insight about recent changes in the labor market that are not captured by historical data. Between 2010 and 2020, there was an average of **seven** online job postings per year for *Emergency Medical Technicians and Paramedics* in Imperial County (Exhibit 7). Please note that online job postings do **not** equal labor market demand; demand is represented by annual job openings (see Exhibit 1). Employers may post a position multiple times for various reasons, such as increasing the pool of applicants, for example.

**Exhibit 7: Number of Online Job Postings for *Emergency Medical Technicians and Paramedics* in Imperial County (2010-2020)<sup>13</sup>**



## Top Employers

Between January 1, 2018 and December 31, 2020, the top five employers in Imperial County for this occupation were *Loyal Source, Air Methods, American Medical Response, Global Medical Response, and Emergency Medical Services Authority* based on online job postings (Exhibit 8).

**Exhibit 8: Top Employers in Imperial County for *Emergency Medical Technicians and Paramedics*<sup>14</sup>**

Top Employers	
<ul style="list-style-type: none"> <li>• Loyal Source</li> <li>• Air Methods</li> <li>• American Medical Response</li> <li>• Global Medical Response, Inc.</li> <li>• Emergency Medical Services Authority</li> </ul>	<ul style="list-style-type: none"> <li>• Air Medical Group Holdings</li> <li>• Reach Medical Holdings, Llc.</li> <li>• Calexico Unified School District</li> <li>• Reach Air Medical Services</li> </ul>

<sup>13</sup> Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2010-2020.

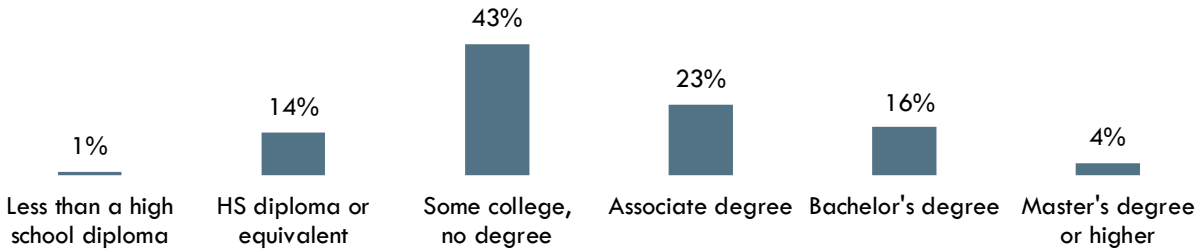
<sup>14</sup> Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2018-2020.



## Education, Skills, and Certifications

Exhibit 9 indicates the educational attainment for the occupation found currently in the national labor force. The typical entry-level education is *some college, no degree*.<sup>15</sup>

**Exhibit 9: National Educational Attainment of Emergency Medical Technicians and Paramedics<sup>16</sup>**



\*numbers may not equal to 100 percent due to rounding

Exhibit 10 lists the top specialized, soft, and software skills that appeared in online job postings between January 1, 2018 and December 31, 2020.

**Exhibit 10: Top Skills for Emergency Medical Technicians and Paramedics in Imperial County<sup>17</sup>**

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"> <li>• Cardiopulmonary Resuscitation</li> <li>• Patient Care</li> <li>• Advanced Cardiac Life Support</li> <li>• Occupational Health &amp; Safety</li> <li>• Medical Triage</li> <li>• Trauma</li> <li>• Critical Care</li> <li>• Aviation Security</li> <li>• Educational Programs</li> <li>• HIPPA</li> <li>• Patient Follow-up</li> <li>• Record Keeping</li> <li>• Repair</li> <li>• Safety Training</li> <li>• Vital Signs Measurement</li> </ul>	<ul style="list-style-type: none"> <li>• Research</li> <li>• Communication Skills</li> <li>• Bilingual</li> <li>• Building Effective Relationships</li> <li>• Computer Literacy</li> <li>• Critical Thinking</li> <li>• Multi-Tasking</li> <li>• Detail-Oriented</li> <li>• Presentation Skills</li> <li>• Prioritizing Tasks</li> <li>• Teamwork / Collaboration</li> <li>• Physical Abilities</li> <li>• Leadership</li> <li>• Typing</li> <li>• Writing</li> </ul>	<ul style="list-style-type: none"> <li>• Microsoft Excel</li> <li>• Microsoft PowerPoint</li> <li>• Microsoft Word</li> <li>• Facebook</li> </ul>

<sup>15</sup> EMSI 2021.1; QCEW, Non-QCEW, Self-Employed.

<sup>16</sup> "Educational Attainment for Workers 25 Years and Older by Detailed Occupation," Bureau of Labor Statistics, last modified September 4, 2019. [bls.gov/emp/tables/educational-attainment.htm](https://bls.gov/emp/tables/educational-attainment.htm).

<sup>17</sup> Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2018-2020.

Exhibit 11 lists the top certifications that appeared in online job postings between January 1, 2018 and December 31, 2020.

**Exhibit 11: Top Certifications for *Emergency Medical Technicians and Paramedics* in Imperial County<sup>18</sup>**

Top Certifications in Online Job Postings

1. Emergency Medical Technician (EMT)
2. Advanced Cardiac Life Support (ACLS) Certification
3. Basic Life Saving (BLS)
4. National Registry of Emergency Medical Technicians (NREMT)
5. Basic Cardiac Life Support Certification
6. Neonatal Resuscitation Program (NRP)
7. Certified Registered Nurse Practitioner
8. Paramedic Certification
9. Medical Examiner's License
10. American Heart Association Certification
11. Security Clearance

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<sup>18</sup> Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2018-2020.

### **Important Disclaimers**

All representations included in this report have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. This study examines the most recent data available at the time of the analysis; however, data sets are updated regularly and may not be consistent with previous reports. Efforts have been made to qualify and validate the accuracy of the data and the report findings; however, neither the Centers of Excellence for Labor Market Research (COE), COE host district, nor California Community Colleges Chancellor's Office are responsible for the applications or decisions made by individuals and/or organizations based on this study or its recommendations.

This workforce demand report uses state and federal job projection data that was developed before the economic impact of COVID-19. The COE is monitoring the situation and will provide more information as it becomes available. Please consult with local employers to understand their current employment needs.