



LABOR MARKET ANALYSIS: 2199.00 OTHER PUBLIC AND PROTECTIVE SERVICES BACCALAUREATE DEGREE PROGRAM



FOR LABOR MARKET RESEARCH
INLAND EMPIRE/DESERT

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SUMMARY

The Inland Empire/Desert Center of Excellence for Labor Market Research prepared this report to provide a labor market analysis of educational supply and occupational demand for above middle-skilled careers in the San Bernardino and Riverside counties. This report aims to determine if a particular occupation is an appropriate candidate for a community college baccalaureate degree program.

Key Findings:

- The typical education level for Emergency Management Directors is a bachelor's degree and the majority of statewide job postings have bachelor's degree as the minimum education requirement (68.2%) or preferred education requirement (55.7%).
- At the statewide level, there were 547 unique job postings for this Emergency Management Directors, from 186 employers, from Nov 2023 – Oct 2024.
- Wages
 - Statewide: Entry-level hourly wages for job postings are 112% higher and median wages are 80% higher for employers that require a minimum of a bachelor's degree when compared to those that did not require a bachelor's degree.
 - Regional: Entry level wages for this occupation, \$53.12, are well above the self-sufficiency standard target, \$33.93, by almost \$20 per hour.
- Job Demand
 - Statewide: From 2023-2033, there is projected to be an average of 91 new and replacement job openings each year; this translates to a projected 10-year increase of 18%.
 - Regional: From 2023-2033, there is projected to be an average of 8 new and replacement job openings each year; this translates to a projected 10-year increase of 21%.
- Based on a projected regional supply of 10 awards, and a projected regional demand of 8 annual job openings, there is projected to be an over-supply of 2 surplus workers each year in the Inland Empire/Desert region.

INTRODUCTION

The Inland Empire/Desert (IE/D) Center of Excellence for Labor Market Research (IE/D COE) has prepared this report to support the program review process for a community college baccalaureate degree specifically, TOP 2199.00 Other Public and Protective Services. The report provides an analysis of student outcomes data, employment, and earnings to assess the level of workforce demand in support of this program. This particular TOP code¹ was selected to focus the program on emergency management, setting it apart from other programs that emphasize police/fire response and homeland security operations.

Additionally, the report assesses the occupational demand for the following position:

- Emergency Management Directors (SOC 11-9161)

The program is designed to specifically train for job titles associated with this SOC, including, but not limited to:

- Emergency Management Coordinator
- Emergency Management Director
- Emergency Manager
- Emergency Planner
- Emergency Preparedness Manager

¹ See Appendix for a discussion of how this TOP code is used by the COE.

STATE DATA ANALYSIS

The following sections analyze labor market data for Emergency Management Directors (SOC 11-9161) in California to establish the relevancy of the occupation for preparation at the baccalaureate level, to quantify the employer preference (or lack of preference) for bachelor’s degree-level workers, and to detail other characteristics employers are considering when hiring for this occupation.

To better understand the statewide job market for professionals entering the field, the report includes a 10-year historical employment and 10-year employment projections. In addition, an analysis of online job postings across California for the period November 2023 through October 2024 found 547 unique listings for Emergency Management Directors from 186 different employers.

Educational Requirements, Certifications, and Degree Alignment

In an effort to establish the preferred education and training levels for workers in this occupation, Exhibit 1 includes the typical education, work experience, and on-the-job training needed for entry level Emergency Management Directors.

EXHIBIT 1. Typical entry-level education and job requirements

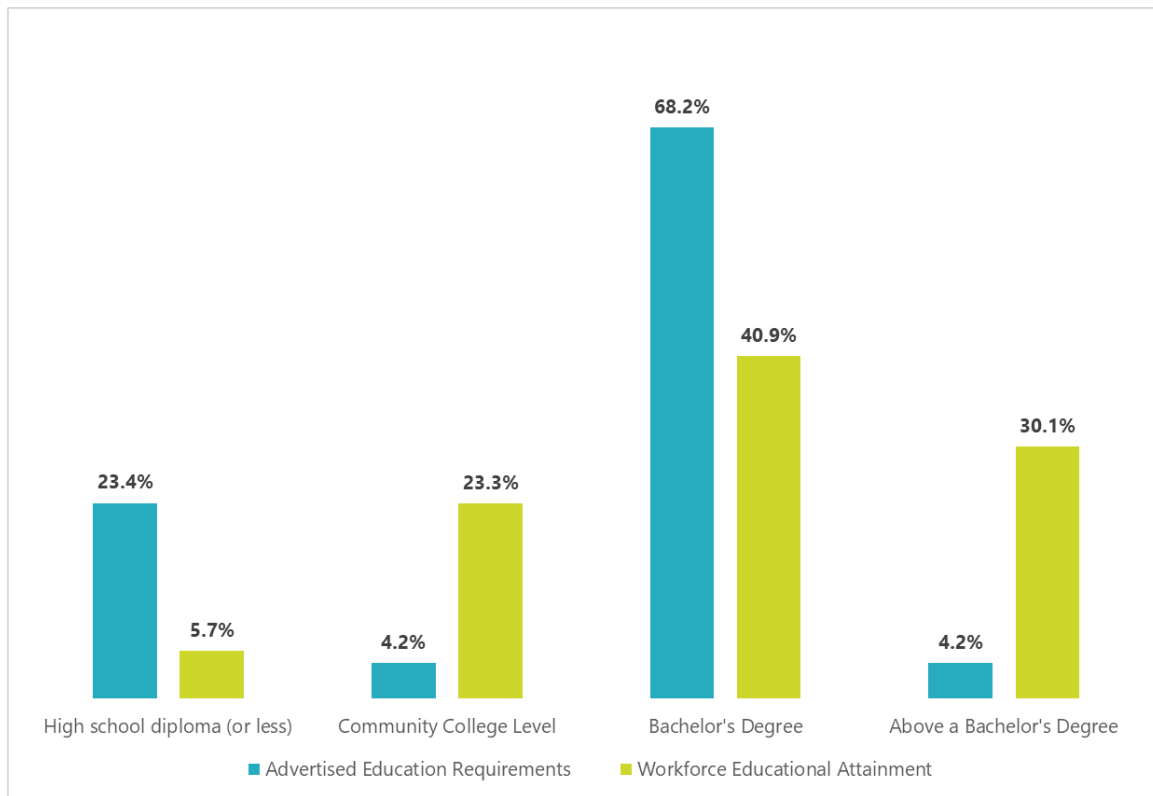
Occupation	SOC	Typical Entry Level Education	Work Experience Required	On-the-job Training Required
Emergency Management Directors	11-9161	Bachelor's degree	5 years or more	None

SOURCE: BLS TRAINING AND EDUCATION LEVELS, [HTTPS://WWW.BLS.GOV/EMP/DOCUMENTATION/EDUCATION/TECH.HTM](https://www.bls.gov/emp/documentation/education/tech.htm)

Exhibit 2 compares education attainment for the occupation — which is the highest degree or level of education attained by workers aged 25 or older in Emergency Management Director positions — against the minimum education requirements aggregated from job postings across California. The majority of workers currently in this occupation (71%) have earned a bachelor’s degree or higher, with the largest segment holding a bachelor’s degree (40.9%) and the rest (30.1%) reporting a master’s or doctorate degree. Similarly, the significant majority (68.2%) of job postings that specify a minimum education requirement list a bachelor’s degree as the minimum qualification.

EXHIBIT 2.

Workforce Education Attainment and Job Posting Minimum Education Requirements, Job Postings from Nov 2023-Oct 2024



SOURCE: LIGHTCAST 2024.3; IPUMS 2022

Our analysis indicates that licenses or certifications are not required by employers or regulatory government agencies to become an Emergency Management Director. However, O*Net Online identifies 25 national certifications associated with this occupation. Among these, 10% of job postings specify the Certified Emergency Manager (CEM) credential, issued by the International Association of Emergency Managers, as a qualification for applicants².

To supplement the data previously discussed, the faculty at Moreno Valley Community College conducted a survey of leadership staff at emergency management firms in the Inland Empire-Desert region. These respondents were either leaders who directly hire emergency management directors or those involved in the hiring of these positions, particularly government entities. The survey received 28 responses from different

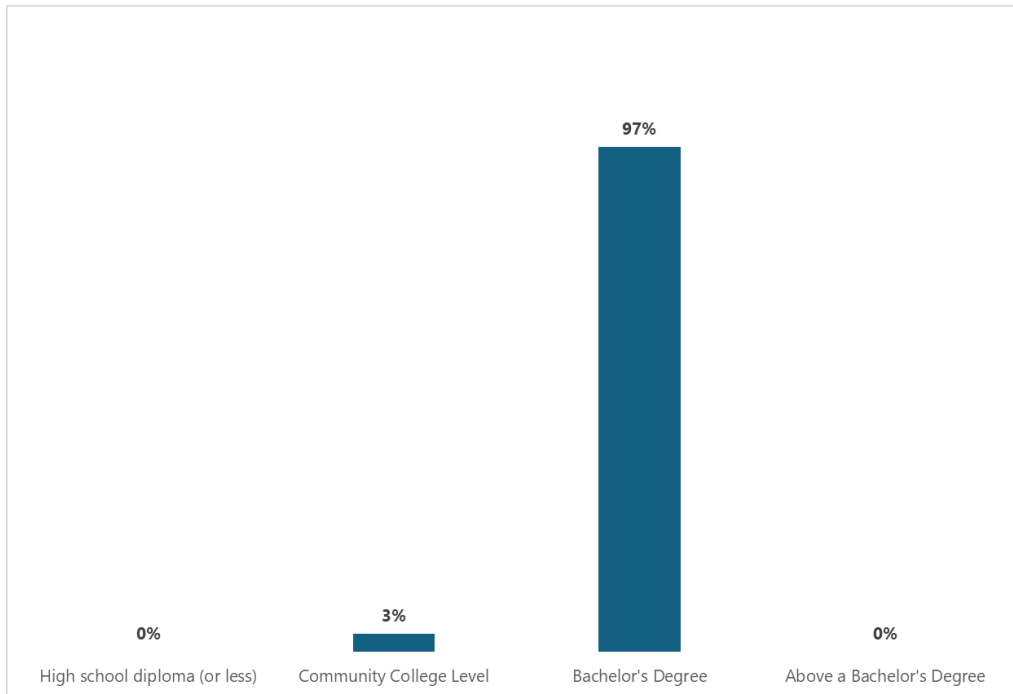
² National Center for O*NET Development. *O*NET OnLine*. Retrieved November 26, 2024, from <https://www.onetonline.org/>

individuals regarding their level of education and wage expectations for new supervisory or management workers.

As shown in Exhibit 3, when asked about the education requirements for the majority of open supervisory or management positions, 97% of respondents indicated that a Baccalaureate degree was necessary.

EXHIBIT 3.

Survey Data, Question: "What level of education is required for the majority of open supervisory or management positions at your agency," Conducted Sept-Nov 2024

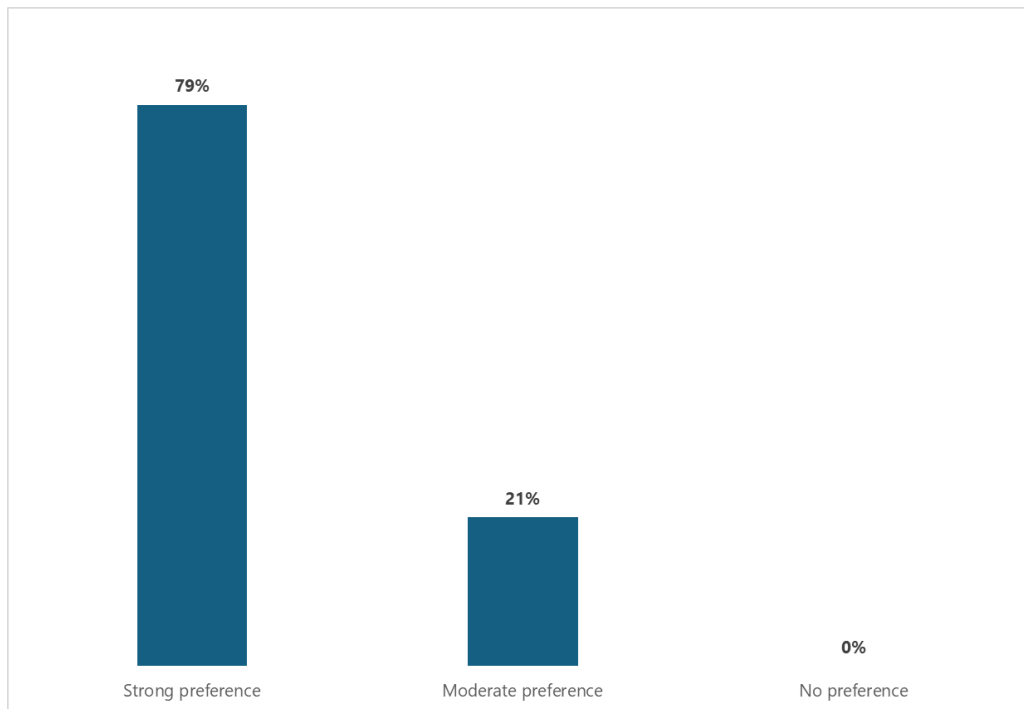


SOURCE: MORENO VALLEY COMMUNITY COLLEGE FACULTY-LED SURVEY

Additionally, Exhibit 4 shows that when questioned on the preference for supervisory or management job candidates with a baccalaureate degree, 79% of respondents selected a strong preference for candidates with a Baccalaureate degree.

EXHIBIT 4.

Survey Data, Question: "How much preference is there for supervisory or management job candidates who hold a baccalaureate degree," Conducted Sept-Nov 2024



SOURCE: MORENO VALLEY COMMUNITY COLLEGE FACULTY-LED SURVEY

Preference for Bachelor's Degree Holders

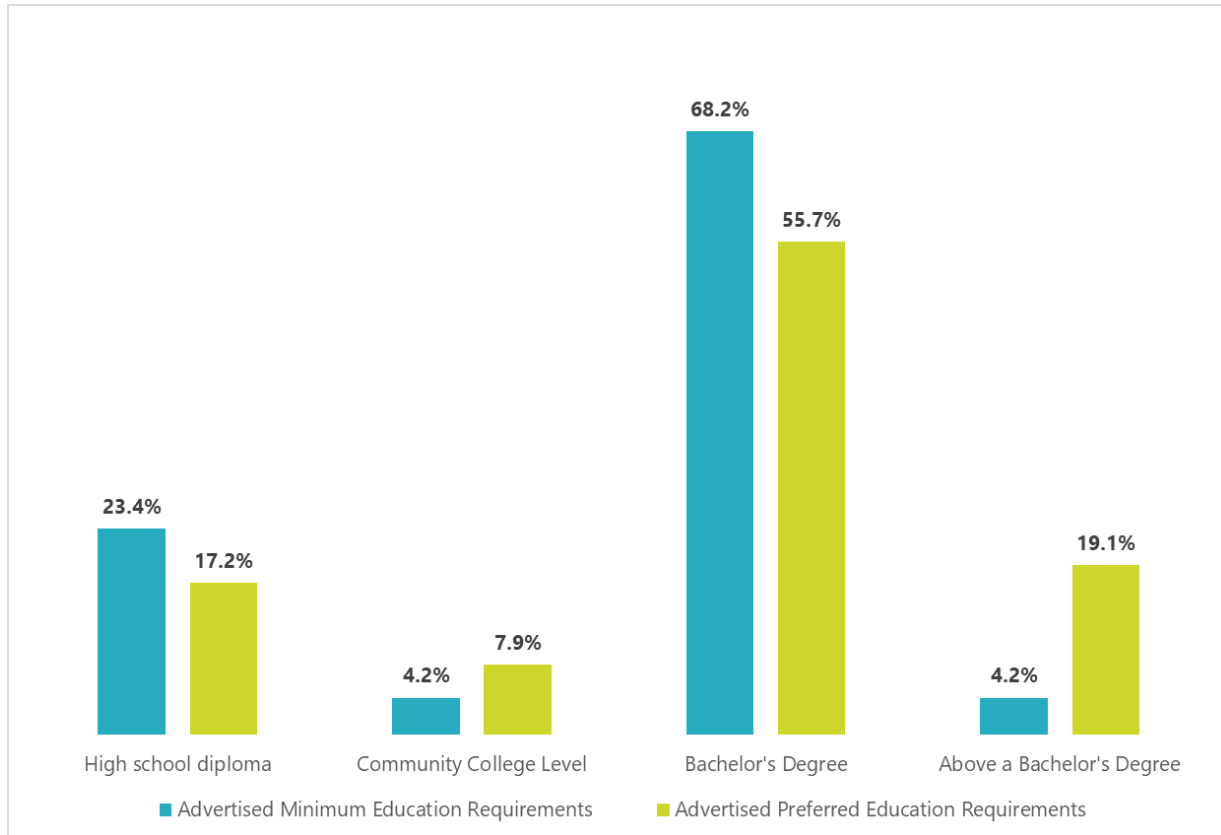
In an effort to establish evidence that employers prefer entry level workers with bachelor's degrees, Exhibit 5 shows the percentage of job postings that have both minimum education requirements and preferred education requirements for candidates for Emergency Management Director positions. The majority (68.2%) of job postings with an education requirement listed bachelor's degree as the minimum requirement for this occupation in the past 12 months. Similarly, the majority (55.7%) of job postings with an education requirement listed bachelor's degree as the preferred requirement for this occupation in the past 12 months.

Given that the typical entry-level education requirement for this occupation is a bachelor's degree (as shown in Exhibit 2) and considering that a significant majority of job postings also require at least a bachelor's degree (refer to Exhibit 5), it is evident that the intended award of a bachelor's degree for this occupation is consistent with the commonly accepted educational requirements for entry-level positions in this field. Only

a small portion (4.2%) of job postings over the past 12 months within the state demanded qualifications higher than a bachelor's degree.

EXHIBIT 5.

Job Postings, Minimum and Preferred Education Requirements, California, Nov 2023-Oct 2024



SOURCE: LIGHTCAST 2024.3

Work Experience

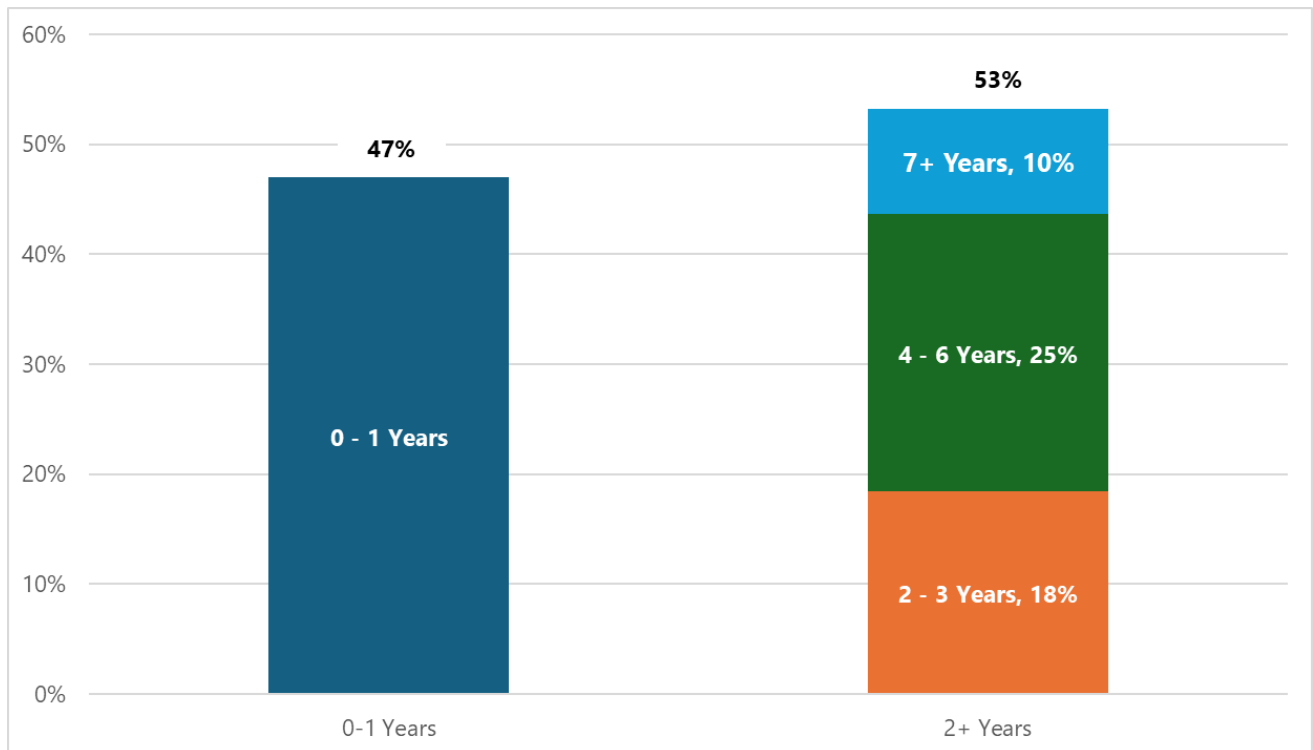
In an effort to establish evidence that employers prefer workers with a specific level of previous job experience, Exhibit 6 includes the distribution of minimum work experience requirements advertised in job postings for Emergency Management Directors across California. A slim majority (53%) of job postings for this occupation require a minimum of 2+ years of previous work experience, with the largest category in this grouping (25%) requiring 4-6 years of work experience, with most employers referring to 'related' work experience or management in the public safety sector.

While 47% of the job ads specify a requirement of 0-1 years of work experience, this figure includes ads that do not explicitly state a minimum work experience requirement. However, this absence in the job ads does not necessarily imply that the hiring firm lacks an unstated minimum work experience expectation.

Due to the preference for 2+ years of previous work experience (53%), the majority of this occupation's entry level workers have previous experience in the industry in other roles, possibly in emergency management agencies. Gathering more information from employers on what qualifies as acceptable work experience is recommended.

EXHIBIT 6.

Work Experience Required, Job Posting Data, California, Nov 2023 – Oct 2024



SOURCE: LIGHTCAST 2024.3

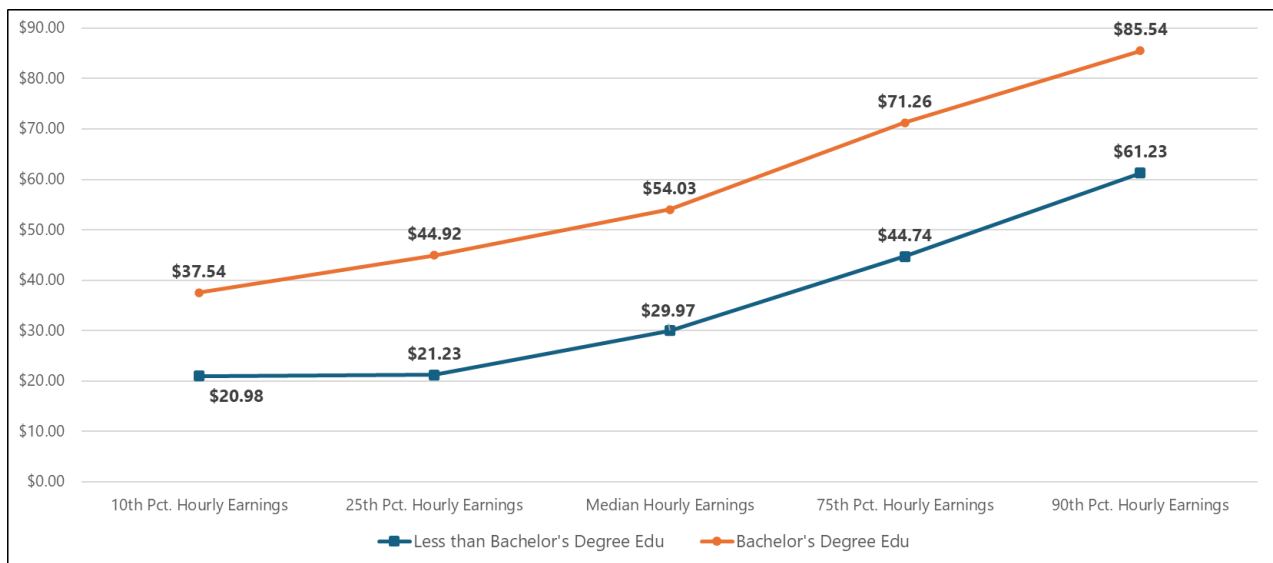
Salary Differentials

In an effort to establish evidence that employers offer higher salaries to entry-level workers with a bachelor's degree, we analyzed job posting data for Emergency Management Director ads: (a) job postings that require a minimum education

requirement of high school diploma or associate degree and (b) job postings that require a minimum education requirement of bachelor's degree. A total of 547 job ads in the state were reviewed.

Exhibit 7 displays the entry level (25th Pct.) hourly wage advertised in job postings that require a minimum education requirement of high school diploma or associate degree (\$21.23) and the advertised entry level (25th Pct.) hourly wage minimum education requirement of bachelor's degree (\$44.92) This demonstrates that the advertised entry level wages for job postings are 112% higher for job postings that require a minimum of a bachelor's degree when compared to entry level wages for job postings that advertise less than a bachelor's degree.

EXHIBIT 7. Job Posting Hourly Wages, Minimum Education Requirements, California, Nov 2023-Oct 2024



SOURCE: LIGHTCAST 2024.3

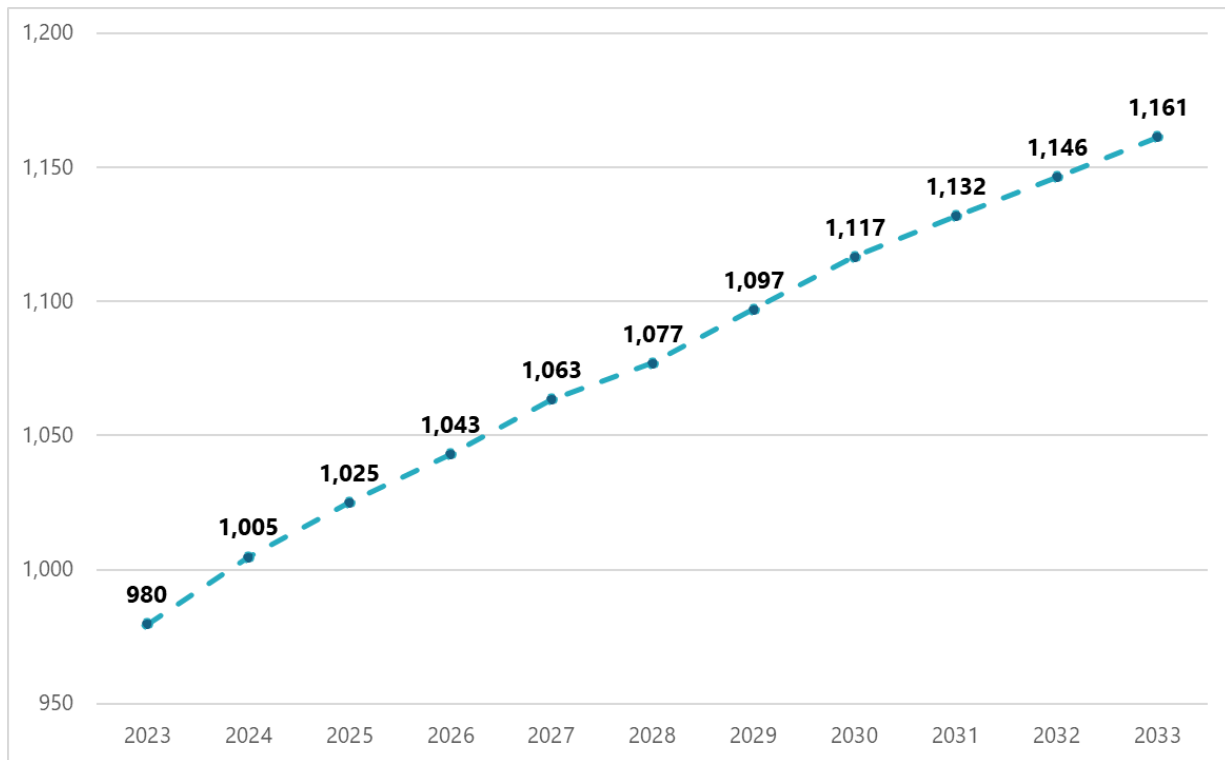
To supplement job posting wage and minimum education requirements data above, a survey was carried out by faculty at Moreno Valley Community College, targeting leadership staff at emergency management firms in the Inland Empire-Desert region. This survey collected 28 responses from different individuals about their preferences and salary expectations for new employees. In the survey, 64% of respondents stated that candidates with a baccalaureate degree earn more than those with an associate degree.

Employment Outlook

In an effort to establish evidence that this occupation has a positive employment outlook in the state, this section analyzes job demand projection data from 2023-2033. In 2023, California had 980 positions for Emergency Management Directors. Projections indicate an increase to 1,161 positions by 2033, as detailed in Exhibit 8. Annually, there is an average of 91 new and replacement job openings expected. This represents an 18% growth in the number of these roles over the next decade, as illustrated in Exhibit 9.

EXHIBIT 8.

Projected Jobs by Year, California, 2023-2033



SOURCE: LIGHTCAST 2024.3

EXHIBIT 9.

Projected Job Growth and Annual Job Openings, California, 2023-2033

Occupation	SOC	2023 Jobs	2033 Jobs	Job Growth	Avg. Annual Job Openings
Emergency Management Directors	11-9161	980	1,161	18%	91

SOURCE: LIGHTCAST 2024.3

REGIONAL DATA ANALYSIS

To compare projected demand and project supply, the following section analyzes historical employment trends over the past decade for target occupations in the region, details projected demand through 10-year forecasts and annual average job openings and examines the supply of graduates from comparable higher education programs, including projections from new programs. Additionally, it compares entry-level wages for these occupations against the living wage requirements for both single adults and single parents with one child in the region.

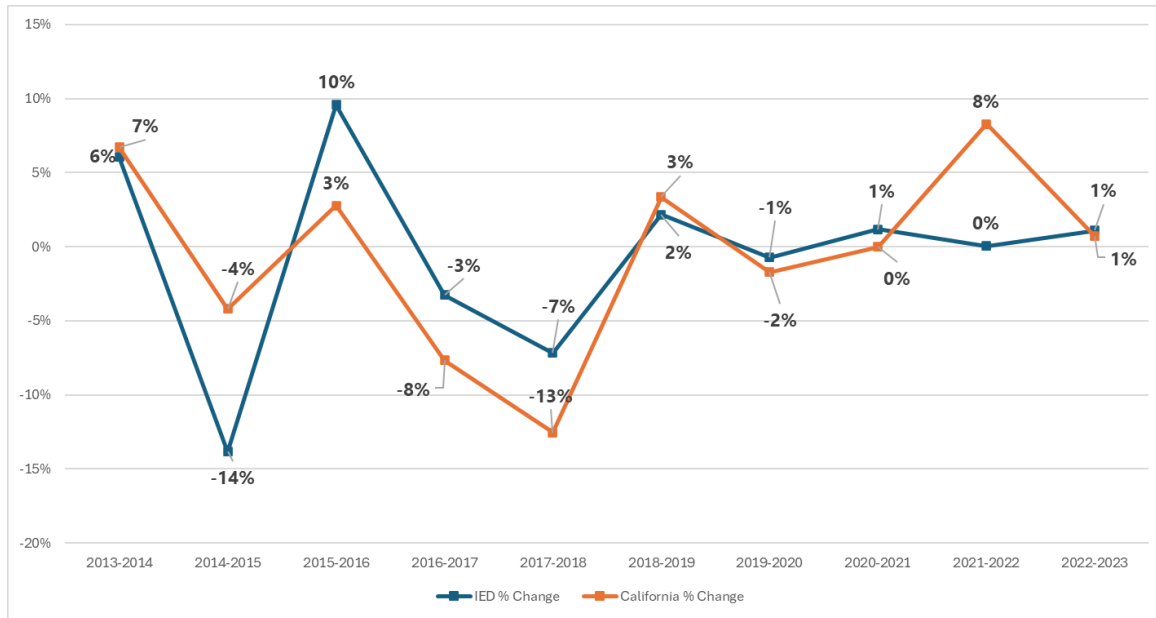
Employment Trends and Projections

In an effort to establish if this occupation has a positive employment outlook in the Inland Empire/Desert region, this section analyzes historic and projected employment from 2013-2033.

For both the Inland Empire-Desert region and California, Exhibit 10 shows the year-over-year job change for Emergency Management Directors from 2013-2023. This indicates that the growth of this occupation in both regions has been highly volatility and shifts in most years appear to generally align between the two datasets. As shown in Exhibit 11, in 2013, there were 83 jobs for Emergency Management Directors in the IED region as compared to 78 jobs in 2023. This represents a decline of 11% in the number of jobs in the region over the period, while California only saw a 6% decline. Since 2019, the total number of jobs for this occupation has maintained around 77 jobs in the region.

EXHIBIT 10.

Historical Job Percent Change by Year, Emergency Management Directors, Inland Empire-Desert Region and California, 2013-2023



SOURCE: LIGHTCAST 2024.3

EXHIBIT 11.

Historical Employment, Inland Empire-Desert Region and California, 2013-2023

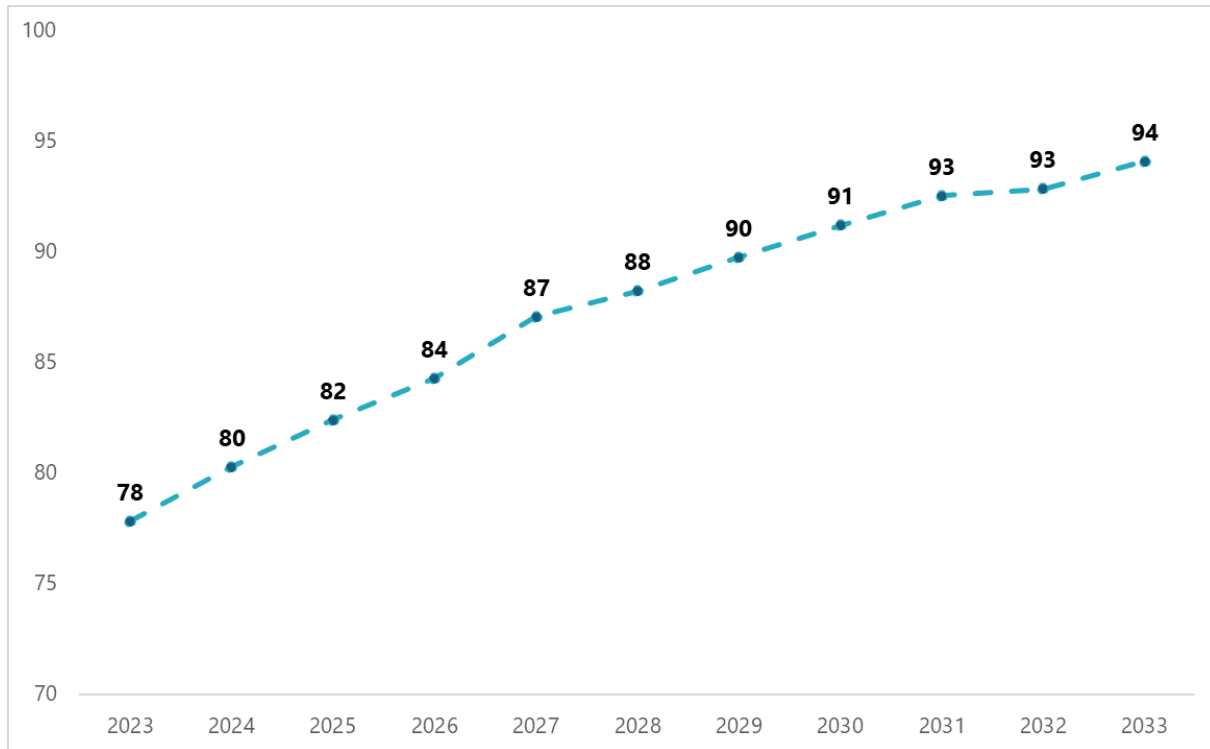
Occupation	SOC	Region	2013 Jobs	2023 Jobs	Job Growth
Emergency Management Directors	11-9161	IE/D	88	78	-11%
		CALIFORNIA	1,042	980	-6%

SOURCE: LIGHTCAST 2024.3

Exhibit 12 displays the projected job demand for this occupation in comparison to the projected supply of graduates from similar programs in the region. In 2023, there were 78 jobs for Emergency Management Directors in the region, with projections indicating an increase to 94 jobs by 2033, an addition of 16 positions, as shown in Exhibit 13.

EXHIBIT 12.

Projected Jobs by Year, Inland Empire-Desert Region, 2023-2033



SOURCE: LIGHTCAST 2024.3

EXHIBIT 13.

Projected Job Growth and Annual Job Openings, Inland Empire-Desert Region, 2023-2033

Occupation	SOC	2023 Jobs	2033 Jobs	Job Growth	Avg. Annual Job Openings
Emergency Management Directors	11-9161	78	94	21%	8

SOURCE: LIGHTCAST 2024.3

Exhibit 13 displays an expected average of 8 new and replacement job openings annually, representing a 21% increase over the next decade as compared to the statewide growth of 12% for the same timeframe.

Occupational Wages

To determine that entry level wages for this occupation meet or exceed a self-sufficiency standard in the Inland Empire/Desert region, this section compares occupation wage estimates against the regional standard. Exhibit 14 displays the hourly earnings by quartile for Emergency Management Directors and compares those to the UW Self-Sufficiency Standard for the IE/D against a variety of family-size scenarios. However, the primary benchmark is one adult and one school-age child, \$33.93³. Compare this standard against the 25th percentile hourly earnings, considered to be entry level wages for an occupation.

When compared against the self-sufficiency standard, an adult and one school-age child, the entry level wages (\$53.12) are well above the target (\$33.93) by almost \$20. This denotes that this occupation is well positioned to provide a self-sustaining wage for new entrants to the field.

EXHIBIT 14.

Occupational Wage Estimates, Inland Empire-Desert Region, 2023-2033

Occupation	25% Hourly Wages	50% Hourly Wages	Hourly Self-Sufficiency Standard				
			Adult Only	Adult + Infant	Adult + Preschool Child	Adult + School-age Child	Adult + teenager
Emergency Management Directors	\$53.11	\$62.46	\$20.42	\$39.17	\$36.00	\$33.93	\$27.23

SOURCE: LIGHTCAST 2024.3

Projected Supply

To project the supply of workers in this occupation for the Inland Empire/Desert region, this section analyzes past student award data for related programs combined with anticipated awards from proposed new programs. The CIP codes were chosen based on discussions with the faculty designing the program, focusing on emergency

³ The [UW self-sufficiency standard](#) is currently used by the CCCC and COE; the self-sufficiency standard was last updated by UW in 2024. UW estimates the living wage for an adult with one school-age child living in 2024 is \$34.35 in Riverside County and \$33.50 in San Bernadino County. Those two standards are averaged together to create a single standard, \$33.93.

management operations and not focusing on similar fields of study such as homeland security and police/fire operations.

There were no CC institutions that issued awards in this field of study from 2020-2023 in the Inland Empire-Desert region.

Similarly, no award data was available for non-CCC institutions, including both 2-year and 4-year schools, within the region for the most recent time period of 2019-2022, based on the following CIP codes and titles in related programs:

- CIP 43.0302 - Crisis/Emergency/Disaster Management
- CIP 43.0303 - Critical Infrastructure Protection

To project the number of awards that may come from programs potentially offered in the region, we include the following assumptions:

1. College(s) would continue to confer awards based on the average annual baccalaureate degree awards amount as shown in Exhibit 15.
2. The proposed program would be offered at a single community college within academic year 2025-2026.

EXHIBIT 15.

CCC Award Data, Projected Awards, Inland Empire-Desert Region, 2025-2033

TOP Code & Program Title	Program Type	Avg. Annual Awards
2199.00 - Other Public and Protective Services	Existing BA Programs	0
2199.00 - Other Public and Protective Services	Projected BA Program	10
Total:		10

Appendix: Methodology and Sources

The TOP Code used in this report, 2199.00 Other Public and Protective Services, is an “all other” code that is generally used for emerging occupations and unique programs. The final code used in each discipline is “XX99.00–Other.” In all disciplines where vocational programs are identified, the final code is shown with the phrase “Specify (includes all emerging occupations).” This phrase is included to allow the coding of new programs brought about by technological advances or other changes in the marketplace. Programs classified in the 99 “Other” categories remain in that code until that occupation becomes widely recognized enough to merit its own TOP code, and a new category is created. The “Other” code may also be used for one-of-a-kind programs that do not fit into any other category.

Exhibit 15 displays the average annual California Community College (CCC) awards conferred during the three academic years between 2020 and 2023 from the California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart. Awards are the combined total during the timeframe, divided by three in this case to calculate an annual average. This is being done to minimize the effect of atypical variations that might be present in a single year.

Type of Data	Source
Occupational Projections, Wages, and Job Postings	<p>Traditional labor market information data is sourced from Lightcast, a labor market analytics firm. Lightcast occupational employment data are based on final Lightcast industry data and final Lightcast staffing patterns. Wage estimates are based on Occupational Employment. https://lightcast.io/</p> <p>The job posting data is collected from scraping online job boards such as LinkedIn, Indeed, Glassdoor and many others. The process Lightcast uses to assemble this data does have some limitations due to methods that recruitment professionals sometimes use (e.g., posting one job to fill multiple positions). For example, the number of jobs posted is not necessarily the same as the number of job vacancies. While not perfect, Lightcast leverages machine learning and other AI technologies to enrich, deduplicate and aggregate this information to make it a meaningful dataset.</p>

Self-Sufficiency Standard	<p>Center for Women's Welfare, University of Washington. (2024). The self-sufficiency standard for California 2024. http://www.selfsufficiencystandard.org/.</p> <p>This calculation measures the income necessary for an individual of family to afford basic expenses. The data assesses the cost of housing, food, childcare, health care, transportation, and taxes. The living wage for one adult in San Bernardino County is \$20.07 per hour (\$42,392 annually). The living wage for one adult in Riverside County is \$20.76 per hour (\$43,854 annually). The average living wage to represent Inland Empire/Desert is \$20.42 per hour (\$43,123 annually).</p>
Typical Education and Training Requirements, and Educational Attainment	<p>The Bureau of Labor Statistics (BLS) provides information about education and training requirements for hundreds of occupations. BLS 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. For more information, see https://www.bls.gov/emp/documentation/education/tech.htm</p>
Educational Supply	<p>The CCCCCO Data Mart provides information about students, courses, student services, outcomes and faculty and staff. For more information, see: https://datamart.cccco.edu</p> <p>The National Center for Education Statistics (NCES) Integrated Postsecondary Integrated Data System (IPEDS) collects data on the number of postsecondary awards earned (completions). For more information, see https://nces.ed.gov/ipeds/use-the-data/survey-components/7/completions</p>
IPUMS USA	<p>Steven Ruggles, Sarah Flood, Matthew Sobek, Daniel Backman, Annie Chen, Grace Cooper, Stephanie Richards, Renae Rodgers, and Megan Schouweiler. IPUMS USA: Version 15.0 [dataset]. Minneapolis, MN: IPUMS, 2024. https://doi.org/10.18128/D010.V15.0. Available at IPUMS USA</p>