

# Coating, Painting, and Spraying Machine Setters, Operators, and Tenders

## Labor Market Analysis: San Diego County

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January 2018

### Summary

The following list summarizes findings from the labor market analysis below for *Coating, Painting, and Spraying Machine Setters, Operators, and Tenders*:

- Between 2016 and 2021, *Coating, Painting, and Spraying Machine Setters, Operators, and Tenders* are projected to increase by 18 jobs (or five percent) in San Diego County.
- Employers in San Diego County will need to hire 44 workers annually to fill new jobs and to backfill jobs due to attrition such as retirement or turnover.
- Between 2010 and 2017, there was an average of eight online job postings per year for *Coating, Painting, and Spraying Machine Setters, Operators, and Tenders* in San Diego County.
- *Coating, Painting, and Spraying Machine Setters, Operators, and Tenders* earn median hourly earnings of \$16.74, more than the self-sufficiency wage (\$13.09 per hour) for a single adult in San Diego County.
- According to the California Community Colleges Chancellor's Office Management Information System (MIS) Data Mart, no colleges supply the region with awards for this occupation. This may be due to the fact that this occupation's typical entry-level education is no formal educational credential. If an occupation does not require any formal training there may be no need for an institution to provide education or training to meet labor demand.
- Comparing labor market demand against labor supply, there is a supply gap for this occupation in San Diego County, with 44 annual openings and zero awards. Comparatively, there are 770 annual openings in California and zero awards. The typical entry-level educational requirement for this occupation is a high school diploma or equivalent. Local educational institutions may not need to develop training programs for this occupation.
- Between January 1, 2015 and December 31, 2017, the top five employers in San Diego County for this occupation were Elite Craftsman, Surge Force, Solar Turbines, Provide Commerce and International Marine and Industrial Appliances.
- The typical on-the-job training for this profession is moderate. The typical entry-level education is a high school diploma or equivalent.

## Introduction

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

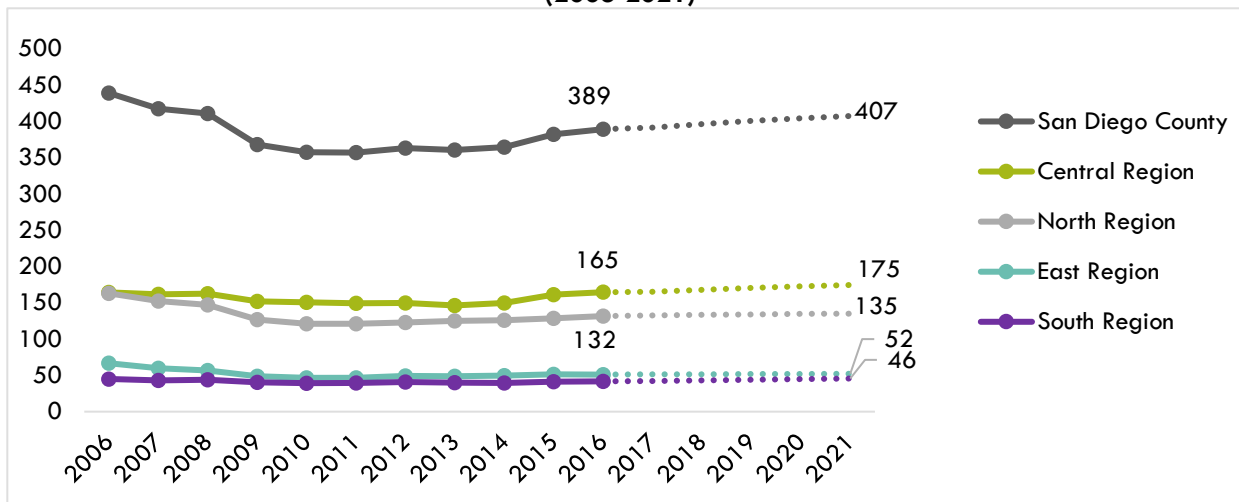
**Coating, Painting, and Spraying Machine Setters, Operators, and Tenders (SOC 51-9121):** Set up, operate or tend machines to coat or paint any of a wide variety of products including glassware, cloth, ceramics, metal, plastic, paper or wood, with lacquer, silver, copper, rubber, varnish, glaze, enamel, oil or rust-proofing materials. Excludes "Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic" (51-4193) and "Painters, Transportation Equipment" (51-9122). Sample reported job titles include:

- Powder Coater
- Painter
- Industrial Painter
- Spray Painter
- Silk Screen Operator
- Paint Technician
- Machine Operator
- Hand Sprayer
- Coater Operator
- Press Operator

## Projected Occupational Demand

Between 2016 and 2021, *Coating, Painting, and Spraying Machine Setters, Operators, and Tenders* are projected to increase by 18 jobs (or five percent) in San Diego County (Exhibit 1a and Exhibit 1b).<sup>2</sup>

**Exhibit 1a: Number of Jobs for Coating, Painting, and Spraying Machine Setters, Operators, and Tenders (2006-2021)<sup>3</sup>**

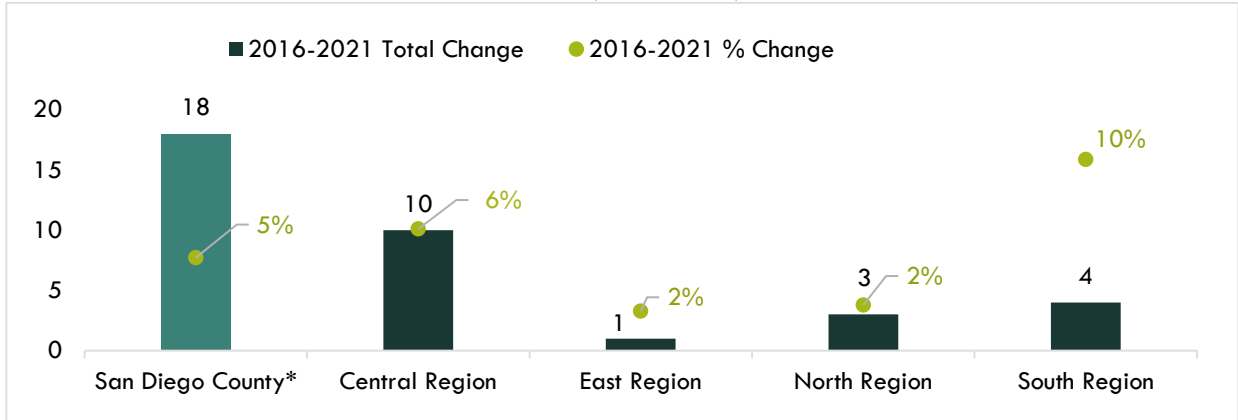


<sup>1</sup> The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. [bls.gov/soc](https://www.bls.gov/soc/).

<sup>2</sup> South, East, Central and North Regions' ZIP codes in this report are defined by the local Workforce Development Board, the San Diego Workforce Partnership.

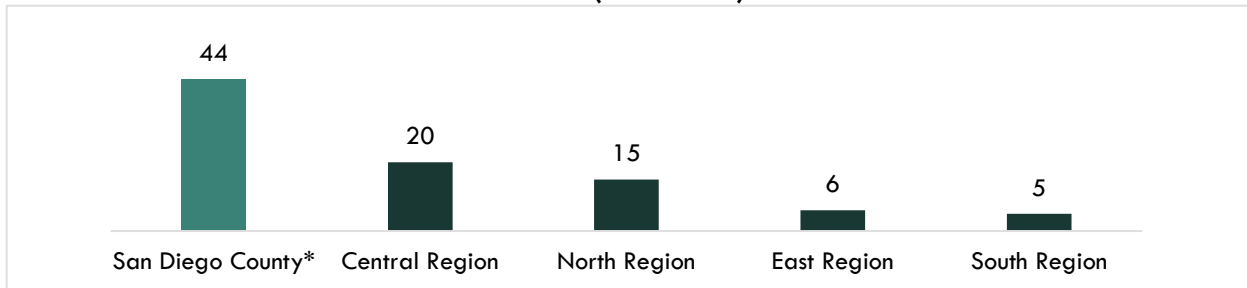
<sup>3</sup> Economic Modeling Specialists, Int'l. (EMS). San Diego County (6073). 2017.03 Class of Worker. QCEW + Non-QCEW+ Self-Employed. 2006-2021.

**Exhibit 1b: Five-Year Projections for Coating, Painting, and Spraying Machine Setters, Operators, and Tenders (2016-2021)<sup>4</sup>**



Employers in San Diego County will need to hire 44 workers annually to fill new jobs and backfill jobs due to attrition such as retirement or turnover (Exhibit 2).

**Exhibit 2: Projected Annual Openings for Coating, Painting, and Spraying Machine Setters, Operators, and Tenders (2016-2021)<sup>5</sup>**



\*Total annual openings for the subregions in San Diego County may not add up exactly due to rounding.

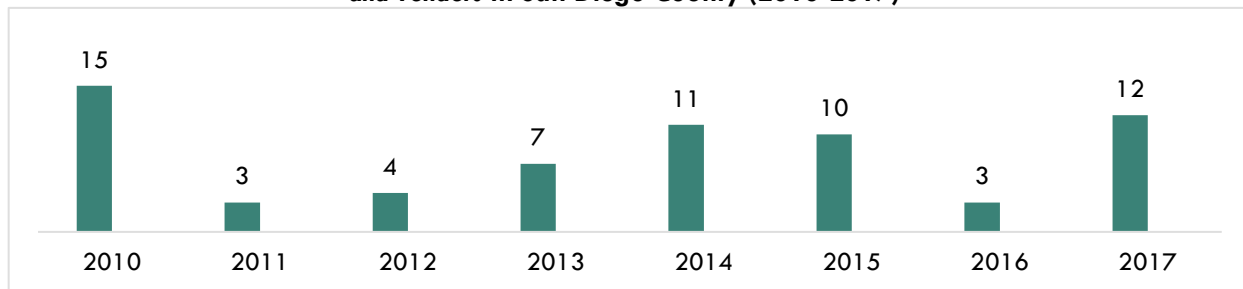
### Online Job Postings

Between 2010 and 2017, there was an average of eight online job postings per year for Coating, Painting, and Spraying Machine Setters, Operators, and Tenders in San Diego County (Exhibit 3).

<sup>4</sup> EMSI. San Diego County (6073). 2017.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2016-2021.

<sup>5</sup> EMSI. San Diego County (6073). 2017.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2016-2021.

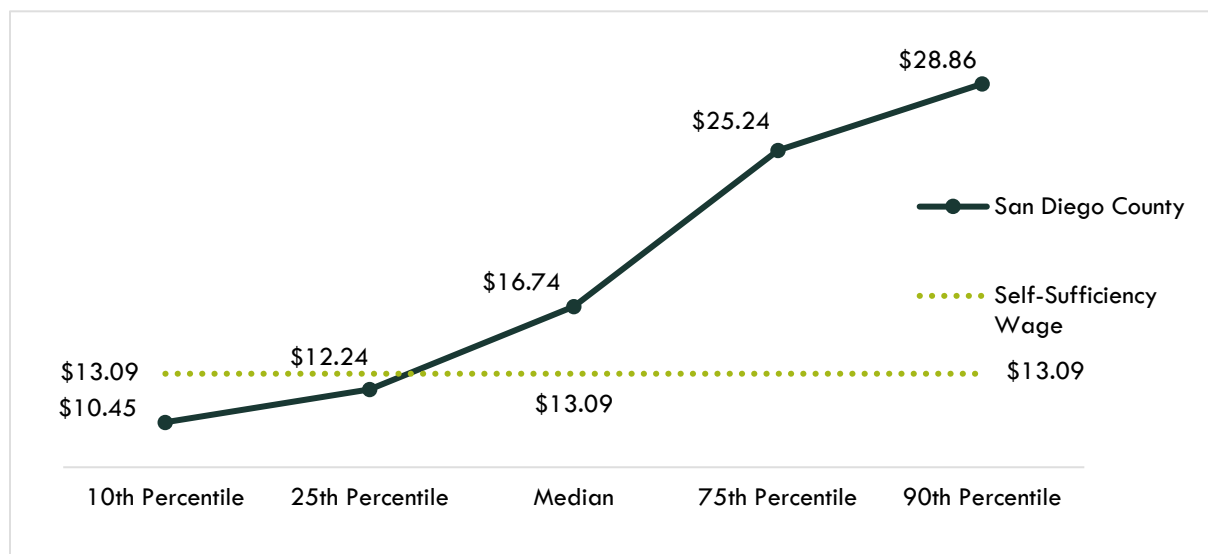
**Exhibit 3: Number of Online Job Postings for Coating, Painting, and Spraying Machine Setters, Operators, and Tenders in San Diego County (2010-2017)<sup>6</sup>**



## Earnings

Coating, Painting, and Spraying Machine Setters, Operators, and Tenders earn median hourly earnings of **\$16.74**, more than the self-sufficiency wage (\$13.09 per hour)<sup>7</sup> for a single adult in San Diego County (Exhibit 4).

**Exhibit 4: Hourly Earnings for Coating, Painting, and Spraying Machine Setters, Operators, and Tenders in San Diego County<sup>8</sup>**



## Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of related program completers/graduates/awards in San Diego County. To determine what programs are available, Exhibit 5 lists the Taxonomy of Programs (TOP) code(s) related to the SOC code analyzed.

<sup>6</sup> Labor Insight Jobs. Burning Glass Technologies. San Diego, CA. Full years 2010, 2011, 2012, 2013, 2014, 2015, 2016, and 2017.

<sup>7</sup> The self-sufficiency wage in San Diego for one adult is \$13.09 ([insightccd.org/tools-metrics/self-sufficiency-standard-tool-for-california](https://insightccd.org/tools-metrics/self-sufficiency-standard-tool-for-california)).

<sup>8</sup> EMSI. San Diego County (6073). 2017.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2016-2021.

### Exhibit 5: Related TOP Codes in San Diego County

#### SOC 51-9121: Coating, Painting, and Spraying Machine Setters, Operators, and Tenders

N/A

According to the California Community Colleges Chancellor's Office Management Information System (MIS) Data Mart, no colleges supply the region with awards for this occupation (Exhibit 6). This may be due to the fact that this occupation's typical entry-level education is no formal educational credential. If an occupation does not require any formal training there may be no need for an institution to provide education or training to meet labor demand.

Exhibit 6 shows the annual average regional community college awards (associate degrees and certificates) conferred during the three academic years between 2013 and 2016, as well as other awards granted outside the California Community Colleges from 2012 to 2015 with the relevant TOP code.

**Please note:** An award is not equivalent to a single person in search of a job opening because a student may earn more than one award, such as an associate degree in addition to a certificate.

#### Exhibit 6: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions by Occupation (Program Year 2012-13 through PY2015-16 Average)

TOP06	TOP06 Title	3-Yr Annual Average Supply (PY13-14 to PY15-16)	3-Yr Annual Average CC Awards (PY13-14 to PY15-16)	Other Educational Institutions 3-Yr Annual Average Awards (PY12-13 to PY14-15)
N/A	N/A	0	0	0

### Demand vs. Supply

Comparing the labor demand (annual openings) with labor supply<sup>9</sup> from the region's colleges, there is a supply gap for this occupation in San Diego County, with 44 annual openings and zero awards.

Comparatively, there are 770 annual openings in California and zero completions.<sup>10</sup> The typical entry-level educational requirement for this occupation is a high school diploma or equivalent. Local educational institutions may not need to develop training programs for this occupation.

<sup>9</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>10</sup> EMSI. San Diego County (6073). 2017.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2016-2021.

**Exhibit 7: Labor Demand (Annual Openings) Compared to Labor Supply (Average Annual Awards)**

Community Colleges and Other Postsecondary Educational Institutions	Demand (Annual Openings)	Supply (Total Annual Average Supply)	Supply Gap or Oversupply
San Diego County	44	0	44
California	770	0	770

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

**Student Outcomes**

Because there are no programs in the state that train workers for Coating, Painting, and Spraying Machine Setters, Operators, and Tenders, student outcome data is not available in the CTE LaunchBoard.<sup>11</sup>

**Top Employers and Work Locations**

Between January 1, 2015 and December 31, 2017, the top five employers in San Diego County for this occupation were *Elite Craftsmen, Surge Force, Solar Turbines, Provide Commerce and International Marine and Industrial Applicators* (Exhibit 8).

**Exhibit 8: Top Employers in San Diego County for Coating, Painting, and Spraying Machine Setters, Operators, and Tenders**

Top Employers	
<ul style="list-style-type: none"><li>• Elite Craftsmen Inc.</li><li>• Surge Force, LLC</li><li>• Solar Turbines Inc.</li><li>• Provide Commerce, Inc.</li></ul>	<ul style="list-style-type: none"><li>• International Marine and Industrial Applicators, LLC</li><li>• Hughes Circuits, Inc.</li></ul>

<sup>11</sup> [calpassplus.org/LaunchBoard/SWP.aspx](http://calpassplus.org/LaunchBoard/SWP.aspx)

## Skills, Education and Certifications

Exhibit 9 indicates the educational attainment for the occupation found currently in the national labor force. The typical on-the-job training for this occupation is moderate-term on-the-job training. The typical entry-level education is a high school diploma or equivalent.<sup>12</sup>

**Exhibit 9: National Educational Attainment of Coating, Painting, and Spraying Machine Setters, Operators, and Tenders**

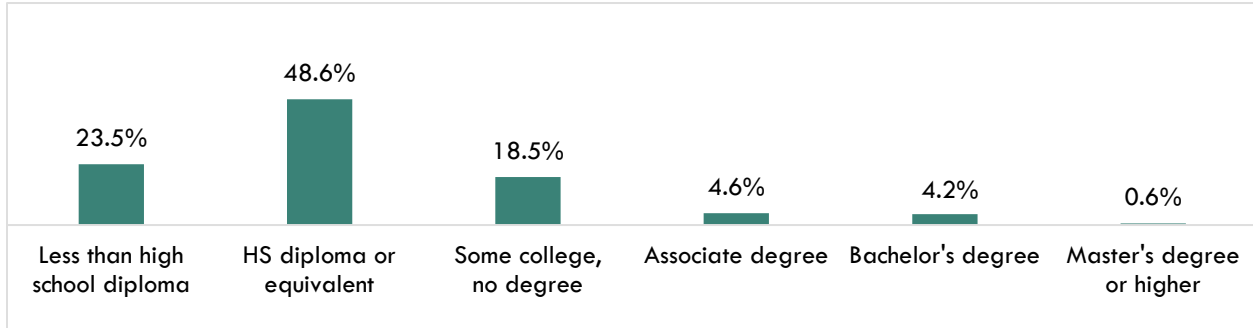


Exhibit 10 lists the top specialized, soft and software skills that appeared in online job postings between January 1, 2015 and December 31, 2017.

**Exhibit 10: Top Skills for Coating, Painting, and Spraying Machine Setters, Operators, and Tenders in San Diego County<sup>13</sup>**

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"> <li>• Painting</li> <li>• Inspection</li> <li>• Cleaning</li> <li>• Lean Manufacturing/Lean Six Sigma</li> <li>• Machining</li> </ul>	<ul style="list-style-type: none"> <li>• Physical Demand</li> <li>• Computer Skills</li> <li>• English</li> <li>• Communication Skills</li> <li>• Preventive Maintenance</li> </ul>	<ul style="list-style-type: none"> <li>• Microsoft Office</li> </ul>

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<sup>12</sup> EMSI. San Diego County (6073). 2017.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2016-2021.

<sup>13</sup> Labor Insight Jobs. Burning Glass Technologies. San Diego, CA. Full years 2015, 2016, and 2017.