

# Dental Laboratory Technicians

## Labor Market Analysis: San Diego County

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March 2018

### Summary

The following list summarizes findings from the labor market analysis below for *Dental Laboratory Technicians*:

- Between 2017 and 2022, *Dental Laboratory Technicians* are projected to increase by 32 jobs or six percent.
- Employers in San Diego County will need to hire 70 workers annually to fill new jobs and backfill jobs due to attrition such as retirement or turnover.
- Between 2010 and 2017, there was an average of 19 online job postings per year for *Dental Laboratory Technicians* in San Diego County.
- *Dental Laboratory Technicians* earn median hourly earnings of \$17.43, more than the Self-Sufficiency Standard for a single adult in San Diego County, which is \$13.09 per hour.
- According to the California Community Colleges Chancellor's Office Management Information System (MIS) Data Mart, there are two Taxonomy of Programs (TOP) codes associated with this occupation: TOP 124000: Dental Occupations and 124030: Dental Laboratory Technician. No colleges supply the region with awards for this occupation
- Comparing labor demand (annual openings) with labor supply suggests that there is a supply gap for this occupation in San Diego County, with 70 annual openings and zero awards. Comparatively, there are 697 annual openings in California and 35 completions.
- Between January 1, 2015 and December 31, 2017, the top five employers in San Diego County for this occupation were Argen, Affordable Dentures, Western Dental, Glidewell Laboratories and Palomar Health.
- The typical on-the-job training for this profession is moderate-term on-the-job training. The typical entry-level education is a high school diploma or equivalent.

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:

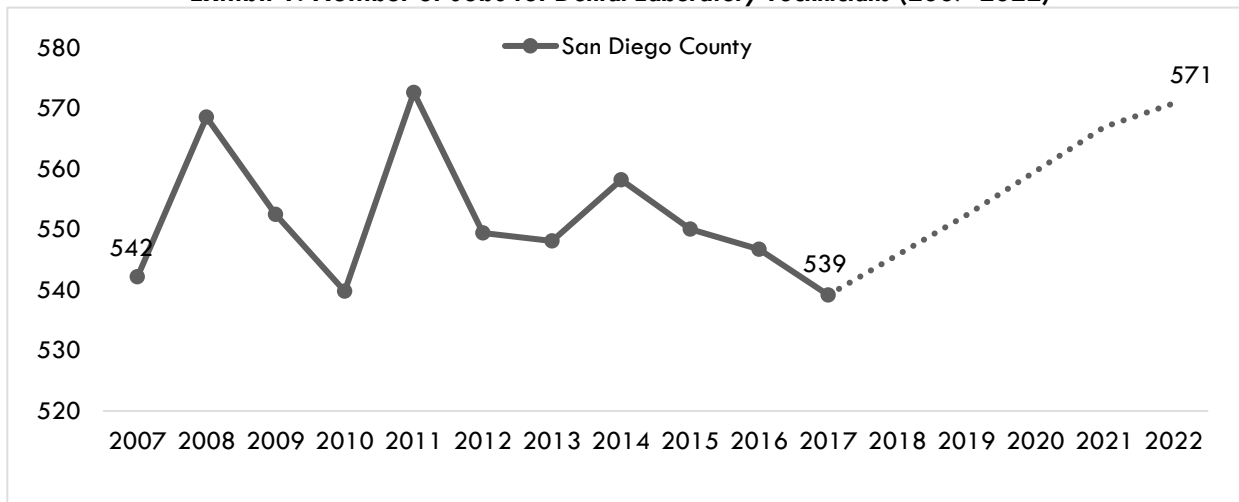
**Dental Laboratory Technicians (SOC 51-9081):** Construct and repair full or partial dentures or dental appliances. Excludes “Dental Assistants” (31-9091). Sample reported job titles include:

- Dental Ceramist
- Ceramist
- Crown and Bridge Technician
- Dental Technician (Dental Tech)
- Crown and Bridge Dental Lab Technician
- Waxer
- Porcelain Technician
- Porcelain Finisher
- Orthodontic Laboratory Technician (Orthodontic Lab Technician)
- Model Technician

## Projected Occupational Demand

Between 2017 and 2022, *Dental Laboratory Technicians* are projected to increase by **32 jobs** or **six** percent (Exhibit 1). Employers in San Diego County will need to hire **70** workers annually to fill new jobs and backfill jobs due to attrition such as retirement or turnover.

**Exhibit 1: Number of Jobs for *Dental Laboratory Technicians* (2007-2022)<sup>2</sup>**



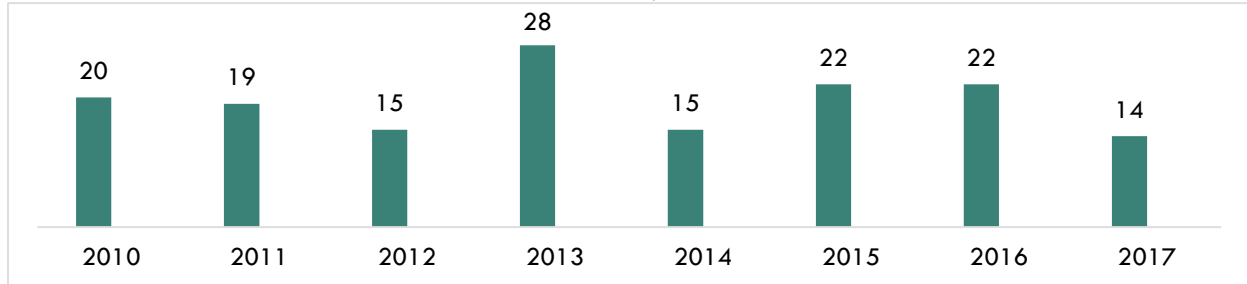
<sup>1</sup> The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. [bls.gov/soc](https://www.bls.gov/soc/).

<sup>2</sup> Economic Modeling Specialists, Int'l. (EMSI). San Diego (6073). 2018.01 Class of Worker. QCEW + Non-QCEW+ Self-Employed. 2007-2022.

## Online Job Postings

Between 2010 and 2017, there was an average of 19 online job postings per year for *Dental Laboratory Technicians* in San Diego County (Exhibit 3).

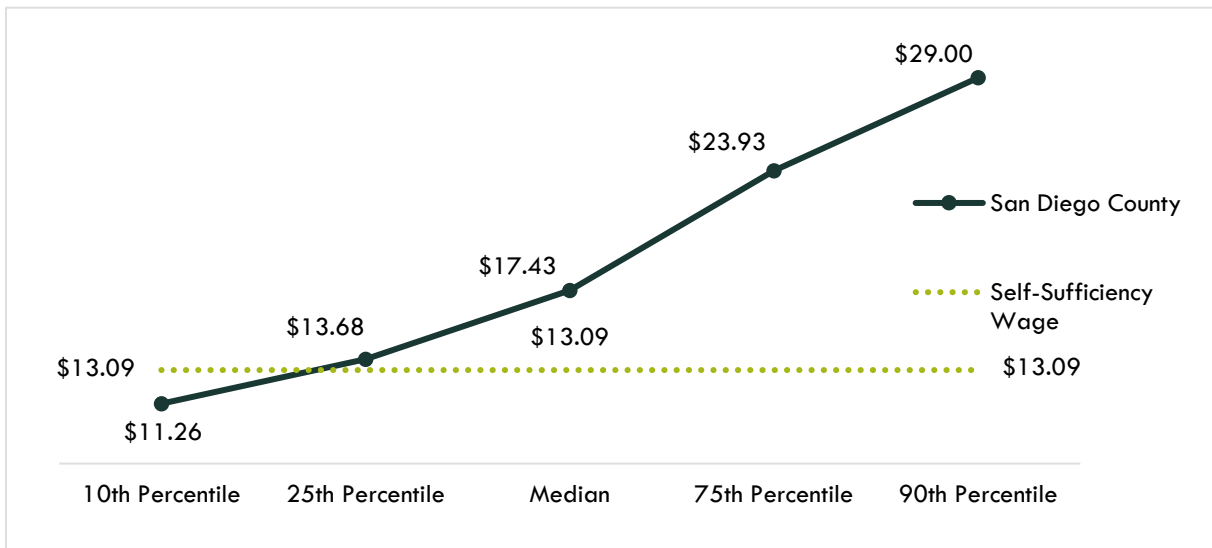
**Exhibit 3: Number of Online Job Postings for *Dental Laboratory Technicians* in San Diego County (2010-2017)<sup>3</sup>**



## Earnings

*Dental Laboratory Technicians* earn median hourly earnings of \$17.43, more than the Self-Sufficiency Standard for a single adult in San Diego County, which is \$13.09 per hour (Exhibit 4).<sup>4</sup>

**Exhibit 4: Hourly Earnings for *Dental Laboratory Technicians* in San Diego County<sup>5</sup>**



<sup>3</sup> Labor Insight Jobs. Burning Glass Technologies. Imperial, CA. San Diego, CA. Full years 2010-2017.

<sup>4</sup> The self-sufficient wage in San Diego for one adult is \$13.09 ([insightcced.org/tools-metrics/self-sufficiency-standard-tool-for-california](https://insightcced.org/tools-metrics/self-sufficiency-standard-tool-for-california)).

<sup>5</sup> EMSI. San Diego (6073). 2018.01 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2017-2022.

## Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of related program completers/graduates/awards in San Diego County. According to the California Community Colleges Chancellor's Office Management Information System (MIS) Data Mart, there are **two** Taxonomy of Programs (TOP) codes associated with this occupation: TOP 124000: Dental Occupations and 124030: Dental Laboratory Technician (Exhibit 5).

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

#### SOC 51-9081: Dental Laboratory Technicians

TOP 124000: Dental Occupations

TOP 124030: Dental Laboratory Technician

According to the TOP data, **no** colleges supply the region with awards for this occupation (Exhibit 6).

### Exhibit 6: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions by Occupation (Program Year 2013-14 through PY2016-17 Average)

TOP6	TOP6 Title	3-Yr Annual Average CC Awards (PY14-15 to PY16-17)	Other Educational Institutions 3-Yr Annual Average Awards (PY13-14 to PY15-16)	3-Yr Total Average Supply (PY13-14 to PY16-17)
124000	Dental Occupations	0	0	0
124010	Dental Laboratory Technician	0	0	0
			Total	0

## Demand vs. Supply

Comparing labor demand (annual openings) with labor supply<sup>6</sup> suggests that there is a **supply gap** for this occupation in San Diego County, with **70** annual openings and **zero** awards. Comparatively, there are **697** annual openings in California and **35** completions<sup>7</sup> (Exhibit 7).

### 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	70	0	<b>70</b>
California	697	35	<b>662</b>

**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

Based on the information available in the CTE LaunchBoard, students who took courses in the related TOP codes exhibited the following outcomes (Exhibit 8).

### Exhibit 8: Strong Workforce Program Metrics for TOP 124030: Dental Laboratory Technician in the San Diego-Imperial Region (PY2015-16)

Metric	San Diego-Imperial	California
Number of course enrollments <sup>8</sup>	N/A	757
Number of students who got a degree or certificate <sup>9</sup>	N/A	26
Number of students who transferred <sup>10</sup>	N/A	N/A

<sup>6</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>7</sup> EMSI. San Diego (6073). 2018.01 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2017-2022.

<sup>8</sup> The number of enrollments in courses assigned to the TOP code in the selected year.

<sup>9</sup> The number of unduplicated students who earned a locally-issued certificate, Chancellor's Office approved certificate, associate degree, and/or California Community Colleges bachelor's degree in the selected TOP code.

<sup>10</sup> Students who took non-introductory courses or completed a California Community Colleges Chancellor's Office award in the selected TOP code in selected year who subsequently enrolled for the first time in a four-year institution the following year.

Metric	San Diego-Imperial	California
Employed in the second fiscal quarter after exit <sup>11</sup>	N/A	63%
Employed in the fourth fiscal quarter after exit <sup>12</sup>	N/A	60%
Job closely related to field of study <sup>13</sup>	N/A	N/A
Median earnings in the second fiscal quarter after exit <sup>14</sup>	N/A	\$6,420
Median change in earnings <sup>15</sup>	N/A	78%
Attained a living wage <sup>16</sup>	N/A	29%

## 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 [Argen](#), [Affordable Dentures](#), [Western Dental](#), [Glidewell Laboratories](#) and [Palomar Health](#) (Exhibit 9).

### Exhibit 9: Top Employers in San Diego County for Dental Laboratory Technicians

Top Employers	
<ul style="list-style-type: none"> <li>• Argen</li> <li>• Affordable Dentures</li> <li>• Western Dental</li> <li>• Glidewell Laboratories</li> <li>• Palomar Health</li> <li>• Patterson Company Incorporated</li> <li>• Rady Children's Hospital</li> </ul>	<ul style="list-style-type: none"> <li>• Sharp Healthcare</li> <li>• Aspen Dental</li> <li>• C Dental Ray</li> <li>• Clearchoice Dental Implants</li> <li>• Cox Communications</li> <li>• Danso Dental Lab</li> <li>• Digital Dental Fever</li> </ul>

## Skills, Education and Certifications

Exhibit 10 indicates the educational attainment for the occupation found currently in the national labor force. The typical on-the-job training for this profession is [moderate-term on-the-job training](#). The typical entry-level education is a [high school diploma or equivalent](#).<sup>17</sup>

<sup>11</sup> Among all exiters with a valid SSN, the percentage who were employed two quarters after exiting California Community Colleges.

<sup>12</sup> Among exiting students with a valid SSN, the percentage who were employed four quarters after exiting California Community Colleges.

<sup>13</sup> Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study.

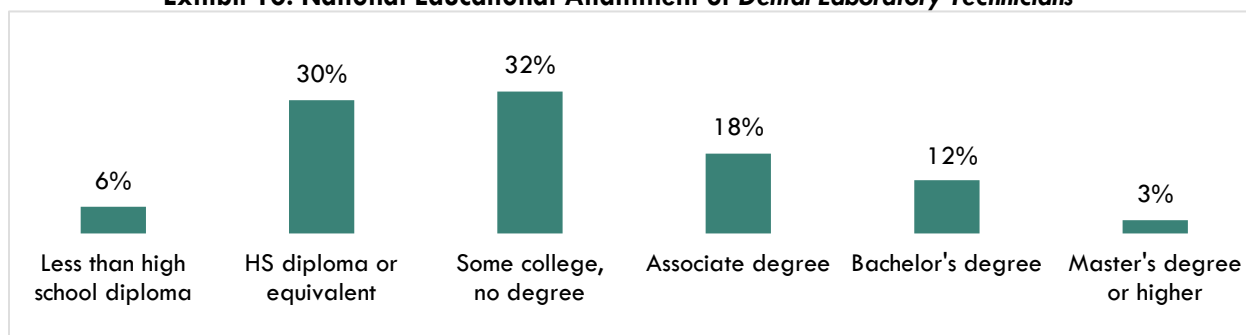
<sup>14</sup> Among exiting students, the median second-quarter earnings one year after the year in which they exited California Community Colleges.

<sup>15</sup> Among exiting students with a valid SSN, the percentage change in earnings one year before and one year after exiting California Community Colleges.

<sup>16</sup> Among completers and skills builders who exited, the proportion of students who attained a living wage.

<sup>17</sup> EMSI. San Diego (6073). 2018.01 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2017-2022.

**Exhibit 10: National Educational Attainment of Dental Laboratory Technicians<sup>18</sup>**



\*May not add to 100% due to rounding.

Exhibit 11 lists the top specialized and soft skills that appeared in online job postings for between January 1, 2015 and December 31, 2017.

**Exhibit 11: Top Skills for Dental Laboratory Technicians in San Diego County<sup>19</sup>**

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"> <li>• Repair</li> <li>• Dentures</li> <li>• Anatomy</li> <li>• Inspection</li> <li>• CAD/CAM</li> <li>• Dentistry</li> </ul>	<ul style="list-style-type: none"> <li>• Detail-Oriented</li> <li>• Physical Demand</li> <li>• Critical Thinking</li> <li>• English</li> <li>• Communication Skills</li> <li>• Troubleshooting</li> </ul>	<ul style="list-style-type: none"> <li>• CAD/CAM</li> <li>• Microsoft Windows</li> <li>• Microsoft Excel</li> <li>• Microsoft Powerpoint</li> <li>• Microsoft Access</li> <li>• Microsoft Vista</li> </ul>

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<sup>18</sup> Bureau of Labor Statistics, Educational attainment for workers 25 years and older by detailed occupation. [bls.gov/emp/ep\\_table\\_111.htm](http://bls.gov/emp/ep_table_111.htm).

<sup>19</sup> Labor Insight Jobs. Burning Glass Technologies. San Diego, CA. Full years 2015-2017.