



Labor Market Analysis: 1240.30 – Dental Laboratory Technician Introduction to Fixed and Removable Prosthodontics – Certificate requiring 16 to fewer than 30 semester units Los Angeles Center of Excellence, December 2024

Program Endorsement:	Endorsed: All Criteria Met <input type="checkbox"/>	Endorsed: Some Criteria Met <input checked="" type="checkbox"/>	Not Endorsed <input type="checkbox"/>
Program Endorsement Criteria			
Supply Gap:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Living Wage: (Entry-Level, 25th)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Education:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Emerging Occupation(s)			
	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

SUMMARY

This report analyzes whether local labor market demand is being met by community college programs aligned with the identified middle-skill occupation¹ or whether a shortage of workers exists. Labor market demand is measured by annual job openings while education supply is measured by the number of awards (degrees and certificates) conferred on average each year.

Based on the available data, there appears to be a supply gap for the one identified middle-skill occupation in the region. While entry-level wages are lower than the self-sufficiency standard wage in both Los Angeles and Orange counties, half of current workers in the field have completed some college or an associate degree as their highest level of educational attainment.

Recommendation: Due to two of three program endorsement criteria being met, the Los Angeles Center of Excellence for Labor Market Research (LA COE) endorses this proposed program.

Key Findings

Supply Gap

- 333 annual job openings are projected in the region through 2028. This number is greater than the three-year average of 88 awards conferred by educational institutions in the region.

¹ Middle-skill occupations typically require some postsecondary education, but less than a bachelor’s degree. 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.

Living Wage

- \$20.53 is the typical entry-level hourly wages for *dental laboratory technicians*, which is lower than Los Angeles County’s self-sufficiency standard hourly (\$24.03/hour).²

Educational Attainment

- A high school diploma or equivalent is the typical entry-level education for *dental laboratory technicians*, according to the Bureau of Labor Statistics (BLS).
- 50% of workers in the field have completed some college or an associate degree, according to national educational attainment data.

Community college supply

- 3 community colleges issued awards related to dental laboratory technology in the greater LA/OC region.
- 88 awards (degrees and certificates) were conferred on average each year between 2021 and 2023.

Other postsecondary supply

- Currently, there are no other educational institutions in the LA/OC region have conferred awards in programs related to dental laboratory technology over the past three years.

TARGET OCCUPATION

LA COE prepared this report to provide regional labor market and postsecondary supply data related to one middle-skill occupation:

- **Dental Laboratory Technicians (51-9081)** Construct and repair full or partial dentures or dental appliances.³

OCCUPATIONAL DEMAND

Exhibit 1 shows the five-year occupational demand projections for *dental laboratory technicians*. In the greater Los Angeles/Orange County region, the number of jobs related to this occupation is projected to increase by 5% through 2028. There will be more than 300 job openings per year through 2028 due to job growth and replacements. The majority of jobs in 2023 for the target occupation (67%) were located in Orange County.

Exhibit 1: Current employment and occupational demand, Los Angeles and Orange counties⁴

Geography	2023 Jobs	2028 Jobs	2023-2028 Change	2023-2028 % Change	Annual Openings
Los Angeles	825	810	(15)	(2%)	96
Orange	1,677	1,824	148	9%	236
Total	2,502	2,635	132	5%	333

² Center for Women’s Welfare, University of Washington. (2024). *The self-sufficiency standard for California 2024*. <http://selfsufficiencystandard.org/California>.

³ [Dental and Ophthalmic Laboratory Technicians \(bls.gov\)](https://www.bls.gov/occupations/dental-and-ophthalmic-laboratory-technicians)

⁴ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

Detailed Occupation Data

Exhibit 2 displays the current employment and projected occupational demand for the target occupation in Los Angeles County. Positive scores for automation resilience⁵ reflect a lower-than-average threat of the occupation(s) being replaced by automation, while negative scores reflect a greater-than-average risk of automation. The average percentage of workers aged 55+ across all occupations in the Los Angeles/Orange County region is 26%; occupations with a larger share of workers aged 55 and older typically have greater replacement needs to offset the amount of impending retirements. On average, 81% of workers across all occupations in California are employed full-time.

Exhibit 2: Detailed employment and occupational demand, Los Angeles County⁶

Occupation	2023 Jobs	2028 Jobs	5-Yr % Change	Annual Openings	Auto-mation Resilience	% Aged 55 and older	% Full Time Workers
Dental Laboratory Technicians	825	810	(15)	(2%)	(23.3)	33%	100%

WAGES

The labor market endorsement in this report considers the entry-level hourly wages for *dental laboratory technicians* in Los Angeles County as they relate to the county's self-sufficiency standard wage. Orange County wages are included below in order to provide a complete analysis of the greater Los Angeles/Orange County region.

Los Angeles County

The typical entry-level hourly wages for *dental laboratory technicians* are \$20.53, which is below the self-sufficiency standard wage for one adult (\$24.03 in Los Angeles County). Experienced workers can expect to earn wages of \$36.44, which is higher than the self-sufficiency standard (Exhibit 3).

Exhibit 3: Earnings for occupation in Los Angeles County

Occupation	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)	Median Annual Earnings*
Dental Laboratory Technicians	\$20.53	\$24.01	\$36.44	\$49,900

*Rounded to the nearest \$100

Orange County

The typical entry-level hourly wages for *dental laboratory technicians* are \$21.10, which is below the self-sufficiency standard wage for one adult (\$27.13 in Orange County). Experienced

⁵ Automation risk is calculated based on the percentage of time spent on high-risk compared to low-risk work, the number of high-risk jobs in compatible occupations, and the overall industry automation risk.

⁶ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

workers can expect to earn wages of \$36.64, which is higher than the self-sufficiency standard (Exhibit 4).

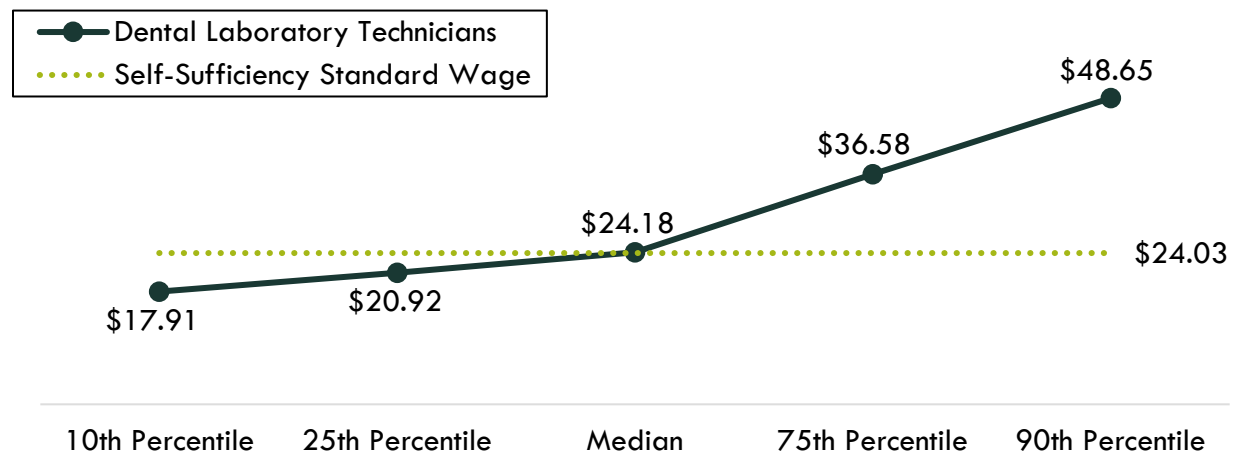
Exhibit 4: Earnings for occupation in Orange County

Occupation	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)	Median Annual Earnings*
Dental Laboratory Technicians	\$21.10	\$24.25	\$36.64	\$50,400

*Rounded to the nearest \$100

Across the greater Los Angeles and Orange County region, the average entry-level hourly earnings for the occupation in this report are \$20.92; this is below the living wage for one single adult in Los Angeles County (\$24.03). Exhibit 5 shows the average hourly wage for the occupation in this report, for entry-level to experienced workers.

Exhibit 5: Average hourly earnings for dental laboratory technicians, Los Angeles and Orange counties



JOB POSTINGS

There were 326 online job postings for *dental laboratory technicians* listed in the past 12 months in Los Angeles and Orange counties. Job postings were analyzed for the most common job titles, skills, and employers associated with the target occupation in this report (Exhibit 6).

Exhibit 6: Most commonly requested job titles, skills and employers in job postings, Los Angeles and Orange counties

Top Job Titles	Top Skills	Top Employers
<ul style="list-style-type: none"> Dental laboratory technicians Sterilization technicians Dental technicians Dental ceramists CAD/CAM technicians Technician trainers Travel x-ray techs Orthodontic technicians 	<ul style="list-style-type: none"> Sterilization Dentures Dental prosthetics fabrication Laboratory experience Infection control Dental technology Dental appliance fabrication and care 	<ul style="list-style-type: none"> G&H Dental Arts Glidewell Dental IDOC Dental Lab James R. Glidewell Dental Ceramics Shoreline Dental Studio Stefan Dostal Dental Laboratory Hiossen

In the greater Los Angeles/Orange County region, 23% of the *dental laboratory technician* job postings listed a minimum educational requirement. Exhibit 7 details the number and percentage of job postings by educational level.

Exhibit 7: Education levels requested in job postings for dental laboratory technicians, Los Angeles and Orange counties

Education Level	Job Postings	% of Job Postings
Bachelor's degree	6	8%
Associate degree	5	7%
High school diploma or vocational training	65	86%

EDUCATIONAL ATTAINMENT

The Bureau of Labor Statistics (BLS) lists a high school diploma or equivalent as the typical entry-level education for *dental laboratory technicians* (Exhibit 8). However, the national-level data indicates 50% of workers in the field have completed some college or an associate degree as their highest level of educational attainment. The Bureau of Labor Statistics (BLS) lists the following typical entry-level education levels for the occupation in this report:

Exhibit 8: Entry-level education preferred by employers nationally, Bureau of Labor Statistics

Occupation	Education Level
Dental laboratory technicians	High school diploma or equivalent

EDUCATIONAL SUPPLY

Community College Supply

Exhibit 9 shows the annual and three-year average number of awards conferred by community colleges in the related TOP codes: Dental Occupations (1240.00) and Dental Laboratory Technician (1240.30). The college with the most completion in the region is West LA. Currently, there are no other postsecondary institutions in the greater LA/OC region that have conferred awards for dental laboratory technology in the past three years.

Exhibit 9: Regional community college awards (certificates and degrees), 2021-2023

TOP Code	Program	College	2020-21 Awards	2021-22 Awards	2022-23 Awards	3-Year Average
1240.00	Dental Occupations	West LA	-	-	165	55
		LA Subtotal	-	-	165	55
		Supply Subtotal/Average	-	-	165	55
1240.30	Dental Laboratory Technician	LA City	13	21	29	21
		Pasadena	13	14	10	12
		LA Subtotal	26	35	39	33
		Supply Subtotal/Average	26	35	39	33
Supply Total/Average			26	35	204	88

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DATA SOURCES

- O*NET Online
- Lightcast (formerly Emsi)
- Bureau of Labor Statistics (BLS)
- California Employment Development Department, Labor Market Information Division, OES
- California Community Colleges Chancellor's Office Management Information Systems (MIS)
- Self-Sufficiency Standard at the Center for Women's Welfare, University of Washington
- Chancellor's Office Curriculum Inventory (COCI 2.0)



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