

Unmet Workforce Demand for Dental Hygienists in LA County

Labor Market Supply and Demand for Dental Hygiene
Baccalaureate of Science (B.S.) degree at
Cerritos College

Prepared by: Los Angeles Center of Excellence for Labor Market Research
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Key Findings

Demand:

- Employment for dental hygienists has grown at a faster rate over the last 20 years (48.8%) than employment across all occupations (13.4%) in LA County.
- Over the next five years, more than 600 dental hygienist jobs are projected to be available annually in Los Angeles County.
- Average hourly wages for *dental hygienists* are \$31.25 higher than the average across all occupations at the 10th percentile, more than \$28 higher at the 25th percentile, more than \$25 higher at the median, more than \$26 higher at the 75th percentile, and more than \$19 more per hour at the 90th percentile.

Supply:

 Between 2019 and 2021, educational providers in the region conferred an average of 68 bachelor's degrees and 51 sub-baccalaureate degrees from programs training for dental hygienists

Gap Analysis:

 With 119 average annual awards issued in the county and 623 projected annual job openings for dental hygienists, the potential supply gap is 504 unfilled jobs in LA County.

Introduction

The proposed Baccalaureate Degree Program (BDP) in Dental Hygiene at Cerritos College is designed for students to become licensed *dental hygienists*. As with the other Dental Hygiene BDPs in the state, Cerritos College's program is intended to build upon its existing associate degree program by providing a more intensive and extensive experience for students looking to expand their career options and earning potential.

The focus of this report is the following occupation:

Dental Hygienists (29-1292) Administer oral hygiene care to patients. Assess patient oral
hygiene problems or needs and maintain health records. Advise patients on oral health
maintenance and disease prevention. May provide advanced care such as providing
fluoride treatment or administering topical anesthesia.¹

The purpose of this study is to determine whether there is demand in the statewide and regional labor market for *dental hygienists* that is not being met by the supply from relevant training programs. More specifically, this report addresses the labor market components of Assembly Bill 927, which require evidence of unmet workforce needs related to Cerritos College's proposed dental hygiene baccalaureate degree program.²

² AB-927 Public postsecondary education: community colleges: statewide baccalaureate degree program



¹ <u>Dental Hygienists (bls.gov)</u>

Labor Market Demand for Dental Hygienists

Historical employment in LA County

Exhibit 1 demonstrates that since 2003, employment for *dental hygienists* has grown by 48.8% while employment across all occupations has only grown by 13.4%. Furthermore, employment for *dental hygienists* bounced back at a much more rapid rate following the COVID-19 pandemic (increasing nearly 30% from 2020 to 2021) than the average across all occupations (approximately 2%).

60% 48.8% 50% 40% 28.8% 30% 20% 13.4% 10% 12.8% -1.8% 0% -2.4% -10% --- % Change since 2003 Dental Hygienists % Change since 2003 All Occupations

Exhibit 1: Percent change in employment since 2003

Source: Lightcast, Datarun 2023.4

Projected annual job openings, 2022-2027

Exhibit 2 displays detailed 2022 job counts, projected employment figures through 2027, five-year percentage change in employment, and projected annual job openings for *dental hygienists*. In Los Angeles County, there will be more than 600 annual job openings through 2027 and *dental hygienists* jobs are expected to grow by 12% through 2027. In California, more than 2,500 job openings are project to be available annually, and this occupation is expected to grow at the same rate as LA County (12%), rising to 30,100 jobs by 2027.

Exhibit 2: Dental hygienist demand in Los Angeles County

soc	Occupation	Region	2022 Jobs	2027 Jobs	5-Year % Change	Annual Openings
29-1292	Donatal Hyarianista	LA County	6,778	7,562	12%	623
	Dental Hygienists	California	26,826	30,101	12%	2,507

Source: Lightcast, Datarun 2023.4



Average hourly wages for dental hygienists

The average hourly wage for dental hygienists in Los Angeles County at the 10th, 25th, median, 75th, and 90th percentile is displayed in Exhibit 3. At the lowest percentile available (i. e., the 10th), workers employed as dental hygienists earn \$31.25 per hour more than the regional average across all occupations. The largest salary discrepancy between dental hygienists and all LA County occupations is highest for the entry-level workers; however, the lifelong benefit of being employed as a dental hygienist in Los Angeles County is that these workers earn more than the average across all occupations at every available percentile. Progressing to the 25th percentile, dental hygienists earn \$28.33 per hour more than the average worker in the region, \$25.28 more at the median level, \$26.81 more at the 75th percentile, and \$19.63 more per hour at the 90th percentile, on average. While earnings may vary depending on employer, industry, and city of employment, these represent average wages across Los Angeles County.

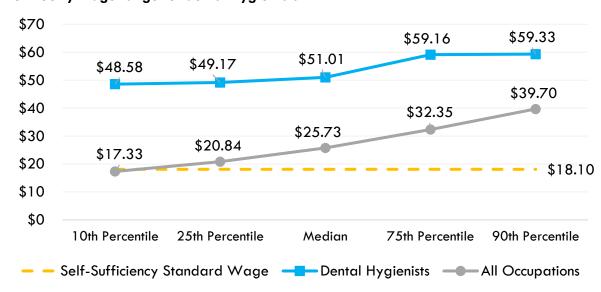


Exhibit 3: Hourly wage range for dental hygienists

Source: Lightcast, Datarun 2023.4 and the Self-Sufficiency Standard for California

Detailed median hourly and annual wages for *dental hygienists* are displayed in Exhibit 4. On average, *dental hygienists* in LA County make more than \$67,000 more than the self-sufficiency standard wage for one adult (\$38,217).

Source: Self-Sufficiency Standard for California

Exhibit 4: Median hourly and annual wages for dental hygienists

SOC Code	Description	Median Hourly Earnings	Median Annual Earnings
29-1292	Dental Hygienists	\$51.01	\$106,110

Source: Lightcast, Datarun 2023.4



Industry employment of dental hygienists

Dental hygienists are an occupation where essentially all jobs are employed in a single industry – healthcare and social assistance (NAICS 62). Exhibit 5 displays the portion of dental hygienist employment within each industry sector. Administrative and support and waste management and remediation services includes employment services (NAICS 5613), meaning that nearly 2% of dental hygienists in LA County are employed by professional employer organizations (561330), temporary help services (561320), and/or employment placement agencies (561311). Government industries include military medical establishments, as well as state-funded colleges/universities and government-run healthcare entities.

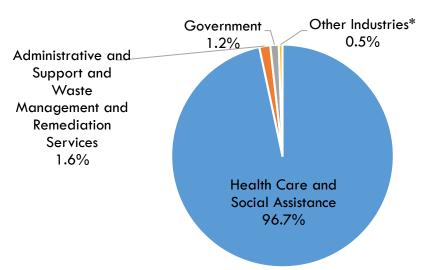


Exhibit 5: Industry concentration of dental hygienist jobs in 2022

*Other Industries include: Professional, Scientific and Technical Services (0.2%), Retail Trade (0.1%), Educational Services (0.1%).

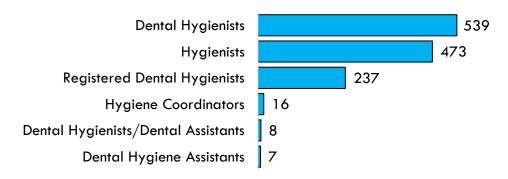
Source: Lightcast, Datarun 2023.4

Job postings for dental hygienists

Over the last 12 months (December 2022 through November 2023), there were 1,315 unique online job postings for *dental hygienists* in Los Angeles County. The number of job postings by job title appear in Exhibit 6. The most common job titles from job postings were dental hygienists, hygienists, and registered dental hygienists. The employers posting the most job ads during this timeframe were Western Dental Orthodontics, Western Dental Services, Pacific Dental Services, Smile Brands, West Coast Dental Services, and Gentle Dental. The skills sought most frequently in these job ads were related to dental and oral hygiene, dental procedures, patient education and counseling, front office work, and billing. Qualifications most frequently sought by employers were basic life support (BLS) certification and cardiovascular resuscitation (CPR).



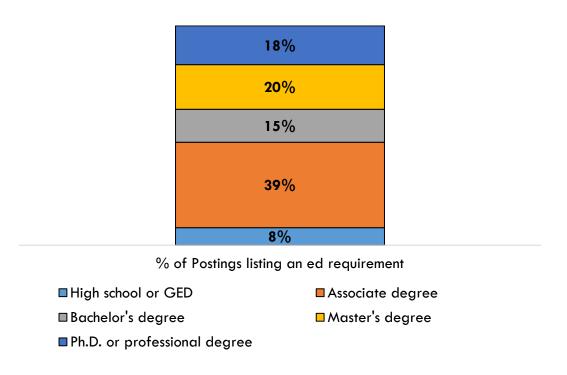
Exhibit 6: Job postings by job title (Dec 2022 - Nov 2023)



Source: Lightcast, Datarun 2023.4

Of all the job postings that listed a minimum educational requirement, nearly half of employers (47%) were seeking candidates with a high school diploma or associate degree, while 53% preferred candidates with a bachelor's degree or more education. Exhibit 7 shows a breakdown of education levels listed in job postings for dental hygienists in LA County. The majority of job postings requested a candidate with an associate degree (39% of job postings that listed an educational requirement). Interestingly, a large portion of employers sought dental hygienists with a master's degree or a professional degree, signaling that some employers prefer to hire dental hygienists with more education than even a bachelor's degree.

Exhibit 7: Education breakdown in job postings



Educational Supply: Key Training Programs for Dental Hygienists Bachelor's degrees related to dental hygiene

In Los Angeles County, bachelor's awards have been issued in two dental hygiene program codes at two different educational institutions. Between 2019 and 2021, there was an average of 68 bachelor's degrees awarded. The program with the most awards was West LA Community College, conferring nearly two-thirds of the dental hygienist bachelor's degrees in the county (43 awards).

Exhibit 8: LA County bachelor's degrees, 2019-2021

Program (CIP or TOP)	2019-20	2020-21	2-Year Average
Dental Hygienist (TOP 1240.20)	42	43	43
Dental Hygiene/Hygienist (CIP 51.0602)	21	30	26
Total	63	73	68

Source: National Center for Education Statistics' Integrated Postsecondary Education Data System

In California, bachelor's degrees for *dental hygienists* have been issued in two different program codes at seven different colleges (see Exhibit 9). Between 2019 and 2021, there was an average of 241 bachelor's degrees awarded annually. Community colleges awarded the most baccalaureate degrees in the state (131 awards) compared to non-community colleges (110 awards).

Exhibit 9: California bachelor's degrees, 2019-2021

Program (CIP or TOP)	2019-20	2020-21	2-Year Average
Dental Hygienist (TOP 1240.20)	75	186	131
Dental Hygiene/Hygienist (CIP 51.0602)	103	116	110
Total	178	302	241

Sub-baccalaureate awards related to dental hygiene

For a comprehensive regional supply analysis, it is important to consider the sub-baccalaureate supply for *dental hygienists* in LA County, especially since this occupation does not necessarily require a bachelor's degree and some employers seek candidates with an associate degree only. Currently, the only educational institutions in LA County that issue sub-baccalaureate awards for dental hygiene are community colleges. Sub-baccalaureate awards include associate degrees, certificates, and non-credit awards.

Exhibit 10: LA County sub-baccalaureate degrees, 2019-2021

Program (TOP)	2019-20	2020-21	2-Year Average
Dental Hygienist (TOP 1240.20)	39	58	51

In California, sub-baccalaureate degrees training for *dental hygienists* are awarded at community colleges (Dental Hygienist – TOP 1240.20) and non-community colleges (Dental Hygiene/Hygienist – CIP 51.0602). Between 2019 and 2021, there was an average of 468 sub-baccalaureate awards conferred annually. The majority of sub-baccalaureate awards conferred throughout the state for *dental hygienists* were from community colleges.

Exhibit 11: California sub-baccalaureate degrees, 2019-2021

Program (CIP or TOP)	2019-20	2020-21	2-Year Average
Dental Hygienist (TOP 1240.20)	110	386	248
Dental Hygiene/Hygienist (CIP 51.0602)	230	210	220
Total	340	596	468

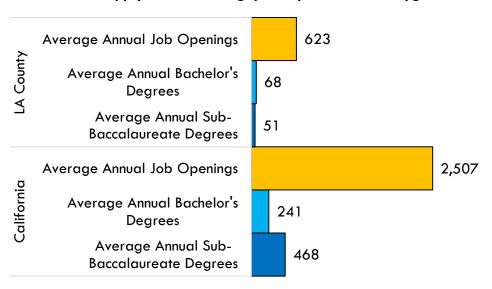
Gap Analysis

Breaking down the educational supply and occupational demand for dental hygienists in Los Angeles County yields a clear pattern (see Exhibit 12). With 68 average annual bachelor's degrees and 51 sub-baccalaureate awards issued in the county and 623 projected annual job openings, the potential supply gap is 504 unfilled jobs. This projected workforce shortage facing Los Angeles County requires the attention of all regional education and training providers.

In California as a whole, there is a more pronounced gap between the average annual job openings and the annual bachelor's degrees and sub-baccalaureate awards. While 2,507 jobs are projected to be available annually for dental hygienists in California, there are only 241 annual bachelor's awards and 468 sub-baccalaureate awards conferred in related programs.

Therefore, a statewide projected workforce shortage of 1,798 unfilled dental hygienist jobs annually is certainly a cause for conversation and planning among education and training providers.

Exhibit 12: Supply and demand gap analysis for dental hygienists



Source: Lightcast, Datarun 2023.4; California Community Colleges Chancellor's Office Management Information
Systems Data Mart; National Center for Education Statistics' Integrated Postsecondary Education Data System

Recommendations & Discussion

This report demonstrates that the demand for projected dental hygienist jobs is unmet by the talent supply from related education and training programs over the next five years, both in Los Angeles County and California as a whole. While this is a great starting point to engage in meaningful discussion about the prospects of a community college baccalaureate program helping to bridge the gap between talent supply and occupational demand in the labor market, it is not sufficient based on legislation.

Therefore, this report can be used as a launch board to validate these findings from traditional labor market information and job postings with regional employers and training providers in an effort to assess that the following are true:

- Evidence that employers are having difficulty filling positions that require a baccalaureate degree.
- Evidence that employers are willing to pay baccalaureate degree holders more than those with a related associate degree or no postsecondary degree.
- Evidence that employers prefer candidates with the proposed baccalaureate degree.
- Evidence of job placement and/or promotion opportunities for candidates with a baccalaureate degree.
- Evidence that the occupation/field the proposed baccalaureate degree is in will provide for higher-wage job opportunities.



Methodology

This report has three primary objectives:

- 1. Assess and quantify the labor market demand for *dental hygienist* jobs in Los Angeles County and California that typically require a bachelor's degree for entry.
- 2. Assess and quantify the educational supply for such jobs.
- 3. Calculate the potential unmet workforce demand for these jobs.

For the first objective, the most recent datarun (2023.4) from Lightcast was analyzed using 2022 as a base year and a five-year projection period through 2027. This five-year period approximates the time it takes for a typical community college training program to be developed, approved, and for the first cohort of students to enroll, complete the program, and enter the workforce. The average annual job openings for dental hygienists was the primary metric analyzed for this objective.

The second objective was calculated using the National Center for Education Statistics' Integrated Postsecondary Education Data System (IPEDS). This dataset was queried for the number of bachelor's degrees issued from educational institutions in Los Angeles County and California during the most recent two academic years available (2019-20 and 2020-21). Reporting in IPEDS is organized by Classification of Instructional Programs (CIP).

The third objective was achieved by calculating the difference between the sum of annual job openings for dental hygienists and the number of awards issued from related programs. This calculation determines whether there is demand in the labor market is not being met by the supply from educational programs that align with the relevant occupations.

Appendix

Table A: Los Angeles County bachelor's awards issued for dental hygiene

TOP/CIP - Program	Institution	2019-20 Awards	2020-21 Awards	3-Year Average
1240.20 – Dental Hygienist	West LA CC	42	43	43
51.0602 – Dental Hygiene/Hygienist	USC	21	30	26
	Total	63	73	68

Table B: California bachelor's awards issued for dental hygiene

TOP/CIP - Program	Institution	2019-20 Awards	2020-21 Awards	3-Year Average
1240.20 - Dental	Foothill CC	61	73	67
Hygienist	West LA CC	42	43	43
	West Coast University- Orange County	45	79	62
51.0/00 5	Loma Linda University	6	60	33
51.0602 - Dental	USC	21	30	26
Hygiene/Hygienist	San Joaquin Valley College- Visalia	-	12	6
	University of the Pacific	3	5	4
	Total	178	302	241

Table C: Los Angeles County sub-baccalaureate awards issued for dental hygiene

TOP/CIP - Program	Institution	Award Type	2019-20 Awards	2020-21 Awards	3-Year Average
	Cerritos	Associate Degree	20	1	18
1240.20 –	West LA	Noncredit award 48 < 96 hours	-	28	14
Dental Hygienist	Pasadena	Certificate 30 < 60 semester units	10	15	12
		Associate Degree	9	14	8
		Total	39	58	51

Table D: California sub-baccalaureate awards issued for dental hygiene

TOP/CIP - Program	Institution	Award Type	2019- 20 Awards	2020- 21 Awards	3-Year Average
1240.20 – Dental Hygienist	Southwestern	Associate Degree	4	59	27
	Fresno City	Associate Degree	-	54	25
	Santa Rosa	Associate Degree	-	45	23
	Pasadena	Associate Degree; Certificate 30<60 semester units	19	29	20
	Cerritos	Associate Degree	20	1	18

TOP/CIP - Program	Institution	Award Type	2019- 20 Awards	2020- 21 Awards	3-Year Average
	Taft	Associate Degree	18	20	18
	Oxnard	Associate Degree	1 <i>7</i>	1 <i>7</i>	1 <i>7</i>
	Chabot Hayward	Associate Degree	17	18	17
	Moreno Valley	Associate Degree	1	33	17
	Cypress	Associate Degree; Associate Degree; Certificate 30<60 semester units	1	15	16
	Sacramento City	Associate Degree	1	22	15
	West LA	Noncredit award 48 < 96 hours	-	28	14
	Diablo Valley	Associate Degree	1	18	12
	Shasta	Associate Degree	11	12	12
	Cabrillo	Associate Degree	-	15	8
	Carrington College- Sacramento	Associate Degree	53	29	41
	San Joaquin Valley College- Ontario	Associate Degree	21	49	35
	Concorde Career College-San Bernardino	Associate Degree	47	22	35
51.0602 - Dental Hygiene/Hygienist	Concorde Career College-San Diego	Associate Degree	45	23	34
	Carrington College-San Jose	Associate Degree	27	29	28
	San Joaquin Valley College- Visalia	Associate Degree	14	35	25
	Concorde Career College- Garden Grove	Associate Degree	23	23	23
		Subtotal/Average	340	596	468

About the Centers of Excellence for Labor Market Research



The Centers of Excellence (COE) is a statewide initiative supported by the California Community Colleges' Economic and Workforce Development program. The COE research team represents expertise in labor market analysis with a focus on research design, educational and training program mapping, and identifying skill sets for emerging occupations as well as geospatial analysis. The COE maintains strategic alliances with research organizations whose relationships and technical expertise enhance COE research efforts and with industry associations that assist in validating research findings, ensuring that the most recent industry and labor market conditions are captured. COE studies are used to inform policy discussions, industry-wide legislative efforts, and regional workforce and economic development strategies, as well as guide program and resource development efforts by the California Community Colleges. These reports can be accessed at www.coeccc.net.

