



Unmet Workforce Demand for Respiratory Therapists in LA County

Labor Market Supply and Demand for Respiratory Therapy
Baccalaureate of Science (B.S.) degree at
East LA College

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

Demand:

- Employment for *respiratory therapists* has grown at a faster rate over the last 20 years (24.4%) than employment across all occupations (13.4%) in LA County.
- Over the next five years, nearly 300 *respiratory therapist* jobs are projected to be available annually in Los Angeles County.
- Average hourly wages for *respiratory therapists* are \$15.17 higher than the average across all occupations at the 10th percentile, more than \$17 higher at the 25th percentile, more than \$15 higher at the median, more than \$18 higher at the 75th percentile, and more than \$18 more per hour at the 90th percentile.

Supply:

- Between 2019 and 2021, educational providers in the region conferred an average of 6 bachelor's degrees from respiratory therapy programs.

Gap Analysis:

- With only six average annual bachelor's degrees issued in the county and 117 in California, the current baccalaureate supply is not sufficient to keep pace with the increasing educational requirements for the 296 average annual job openings for *respiratory therapists* in Los Angeles County and 1,173 in California.

Introduction

The proposed Baccalaureate Degree Program (BDP) in Respiratory Therapy at East LA College (ELAC) is designed for students to become licensed respiratory therapists. As with the other Respiratory Therapy/Care BDPs in the state, ELAC's program is intended to meet the demand of rising educational requirements for respiratory therapists in California and the rest of the nation.

Licensing organizations for respiratory therapy have all taken a stance on the typical entry-level education requirements for *respiratory therapists*. The American Association for Respiratory Care (AARC) states, "*Training and education for entry-to-practice as a respiratory therapist should be provided within programs awarding a bachelor's or master's degree in respiratory care (or equivalent degree titles) and all newly accredited respiratory care educational programs must award, as a minimum, the bachelor's degree in respiratory care (or equivalent degree title).*"¹ Further, "*The California Society for Respiratory Care endorses and supports bachelor's degree programs in respiratory care (or equivalent) for education and training as a minimum requirement for licensure beginning in 2030.*"² Even the Bureau of Labor Statistics, the agency that determines the typical entry-level education requirements for all occupations based on employer surveys, has acknowledged that respiratory therapists need at least an associate degree, but employers may prefer candidates with a bachelor's degree.³

The focus on this report is the following occupation:

- **Respiratory Therapists (29-1126)** Assess, treat, and care for patients with breathing disorders. Assume primary responsibility for all respiratory care modalities, including the supervision of respiratory therapy technicians. Initiate and conduct therapeutic procedures; maintain patient records; and select, assemble, check, and operate equipment.⁴

The purpose of this study is to determine whether there is demand in the statewide and regional labor market for *respiratory therapist* jobs 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 ELAC's proposed respiratory therapy baccalaureate degree program.⁵

¹ [Respiratory Therapist Education \(aarc.org\)](https://www.aarc.org/education/entry-to-practice)

² [Final CSRC Position Statement Minimal Education Requirements.pdf](#)

³ [Respiratory Therapists: Occupational Outlook Handbook: U.S. Bureau of Labor Statistics \(bls.gov\)](https://www.bls.gov/occupational-outlook-handbook/)

⁴ [Respiratory Therapists \(bls.gov\)](https://www.bls.gov/occupational-outlook-handbook/)

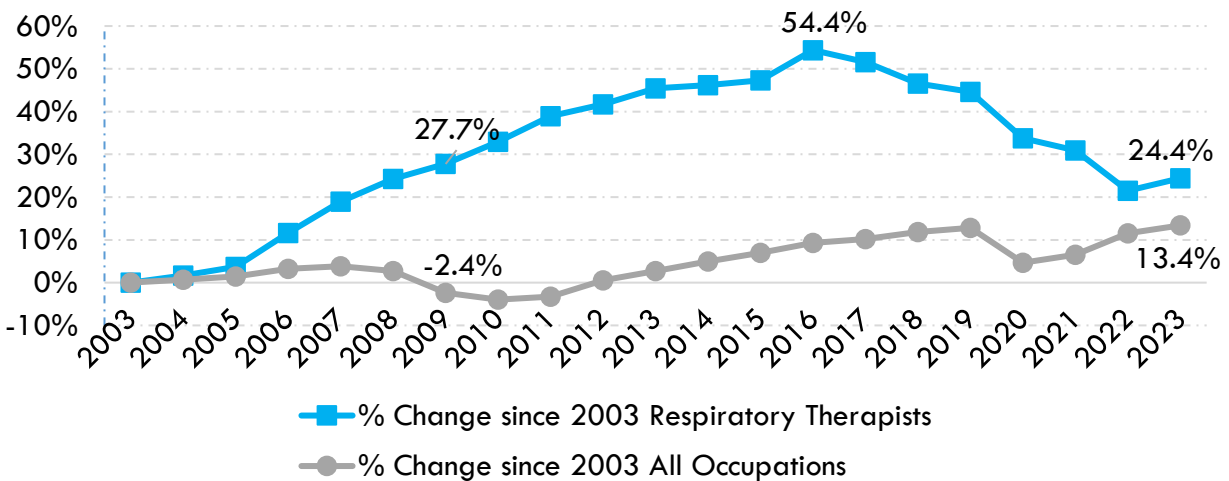
⁵ [AB-927 Public postsecondary education: community colleges: statewide baccalaureate degree program](#)

Labor Market Demand for Respiratory Therapists

Historical employment in LA County

Exhibit 1 demonstrates that since 2003, employment for *respiratory therapists* has grown by 24.4% while employment across all occupations has only grown by 13.4%. *Respiratory therapists* experienced a faster growth rate than all occupations since 2003, and these jobs were seemingly unaffected by the Great Recession (2007-2009) as *respiratory therapy* jobs continued to grow through 2016. *Respiratory therapy* job growth has steadily decreased since 2016, losing over 1,000 jobs between 2016 and 2022. However, these jobs rebounded in 2023 and have still increased at a higher rate over the past 20 years than the average of all occupations in LA County (13.4%).

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 *respiratory therapists*. In Los Angeles County, there will be nearly 300 annual job openings through 2027. These jobs are expected to grow by 11% over the next five years. In California, nearly 1,200 job openings are projected to be available annually. *Respiratory therapists* are expected to grow at a similar rate statewide (11%), nearing 18,000 jobs by 2027.

Exhibit 2: Respiratory therapist demand in Los Angeles County and California

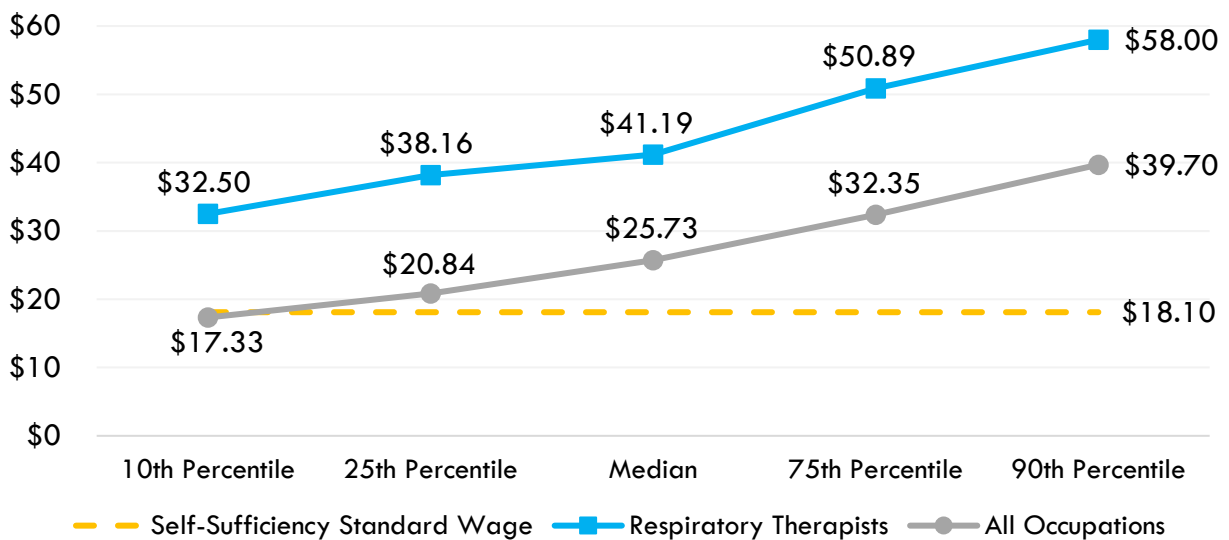
SOC	Occupation	Region	2022 Jobs	2027 Jobs	5-Year % Change	Annual Openings
29-1126	Respiratory Therapists	LA County	4,121	4,548	11%	296
		California	15,876	17,627	11%	1,173

Source: Lightcast, Datarun 2023.4

Average hourly wages for respiratory therapists

The average hourly wage for *respiratory therapists* 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 *respiratory therapists* earn \$15.17 per hour more than the regional average across all occupations. This is welcome news by itself; however, the lifelong benefit of being employed as a *respiratory therapist* in Los Angeles County is that this gap widens among higher earners in a mostly linear fashion. Progressing to the 25th percentile, *respiratory therapists* earn \$17.32 per hour more than the average worker in the region, \$15.46 more at the median level, \$18.54 more at the 75th percentile, and \$18.30 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 respiratory therapists in LA County



Source: Lightcast, Datarun 2023.4 and the [Self-Sufficiency Standard for California](#)

Detailed annual earnings for *respiratory therapists* are displayed in Exhibit 4, rounded to the nearest \$100. At the median level (\$85,700), *respiratory therapists* in LA County make approximately \$47,000 more than the self-sufficiency standard wage for one adult (\$38,217).

Exhibit 4: Median hourly and annual wages for respiratory therapists

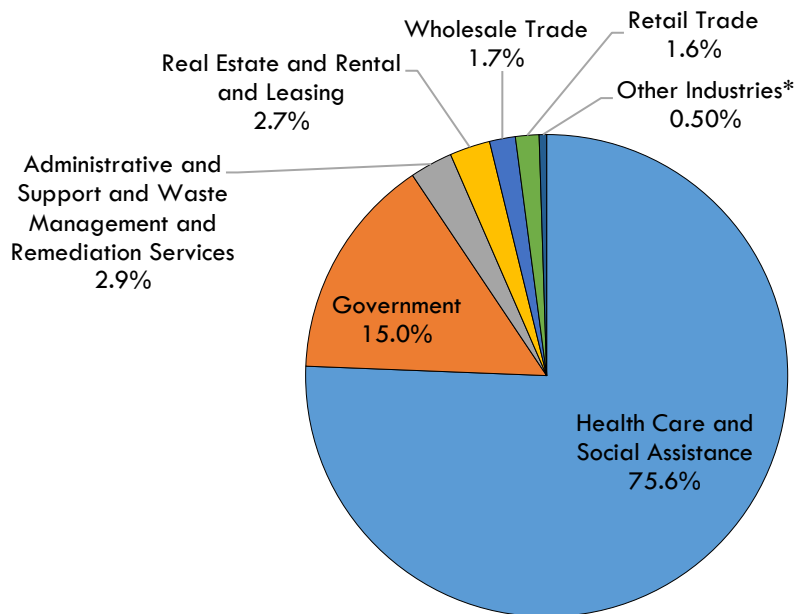
SOC Code	Description	25 th Percentile Annual Earnings	Median Annual Earnings	75 th Percentile Annual Earnings
29-1126	Respiratory Therapists	\$79,400	\$85,700	\$105,900

Source: Lightcast, Datarun 2023.4

Industry employment for respiratory therapists

Respiratory therapists are an occupation where the vast majority of jobs are employed in a single industry – healthcare and social assistance (NAICS 62). Exhibit 5 displays the portion of respiratory therapist employment within each industry sector. Government industries include military medical establishments, as well as government-run healthcare entities. Administrative and support and waste management and remediation services includes employment services (NAICS 5613), meaning that nearly 3% of respiratory therapists in LA are employed by temporary help services (561320), and/or employment placement agencies (561311).

Exhibit 5: Industry concentration of respiratory therapists in 2022



*Other Industries include: Professional, Scientific and Technical Services (0.2%), Other Services (except Public Administration) (0.2%), Management of Companies and Enterprises (0.1%), and Arts, Entertainment, and Recreation (0.1%).

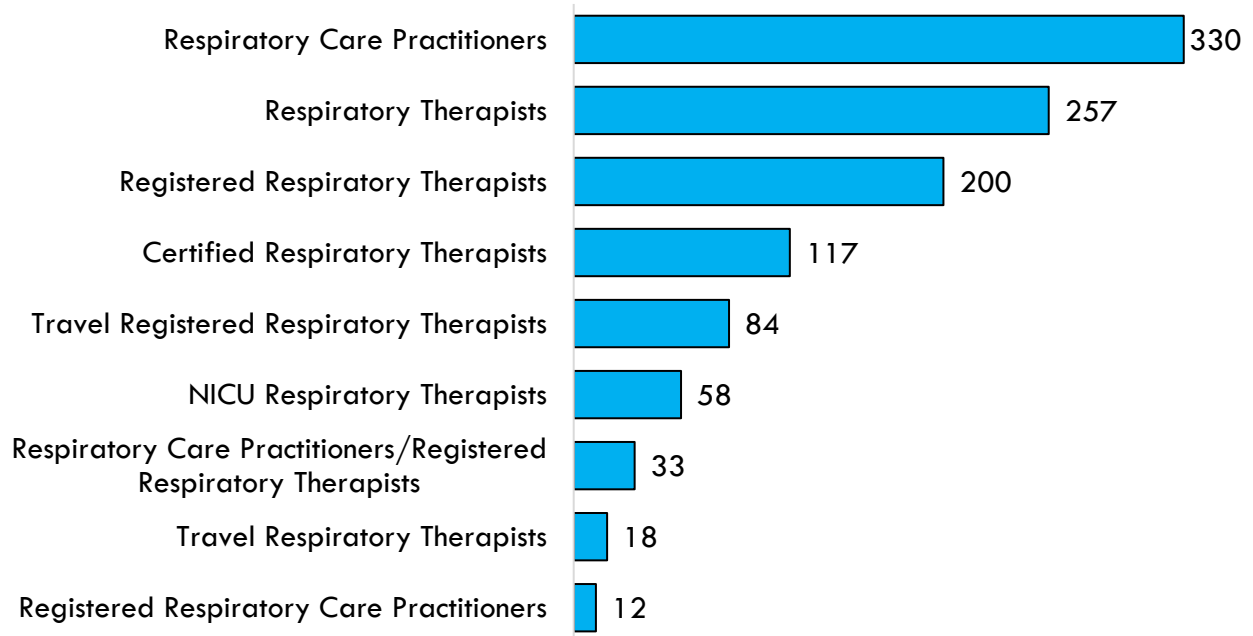
Source: Lightcast, Datarun 2023.4

Job postings for respiratory therapists

Over the last 12 months (December 2022 through November 2023), there were 1,147 unique online job postings for respiratory therapists 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 respiratory care practitioners, respiratory therapists, and registered respiratory therapists. The employers posting the most job ads during this timeframe were Healthcare Employment Network, PIH Health, Prime Healthcare Services, Providence, and Cedars-Sinai. The skills sought most frequently in these job ads were related to respiratory therapy, respiratory care, pulmonology, patient treatment, pediatrics, medical ventilators, circulatory system, and arterial blood gas analysis. Qualifications most frequently sought by employers were registered respiratory therapist (RRT), respiratory care practitioner, basic life support (BLS) verification, advanced cardiovascular life support (ACLS)

certification, pediatric advanced life support (PALS), certified respiratory therapists (CRT) and neonatal resuscitation program certification (NRP).

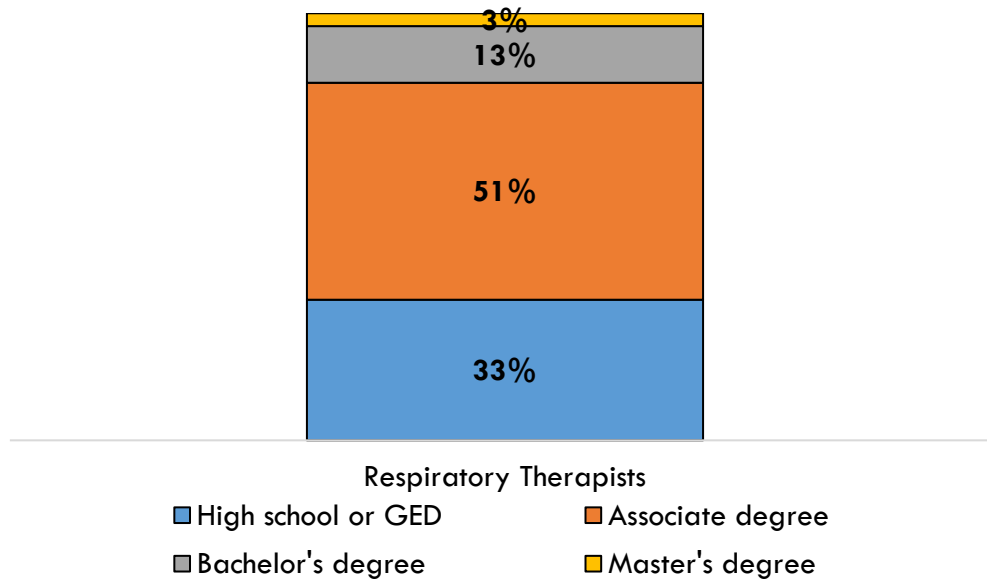
Exhibit 6: Job postings by job title (Dec 2022 – Nov 2023)



Source: Lightcast, Datarun 2023.4

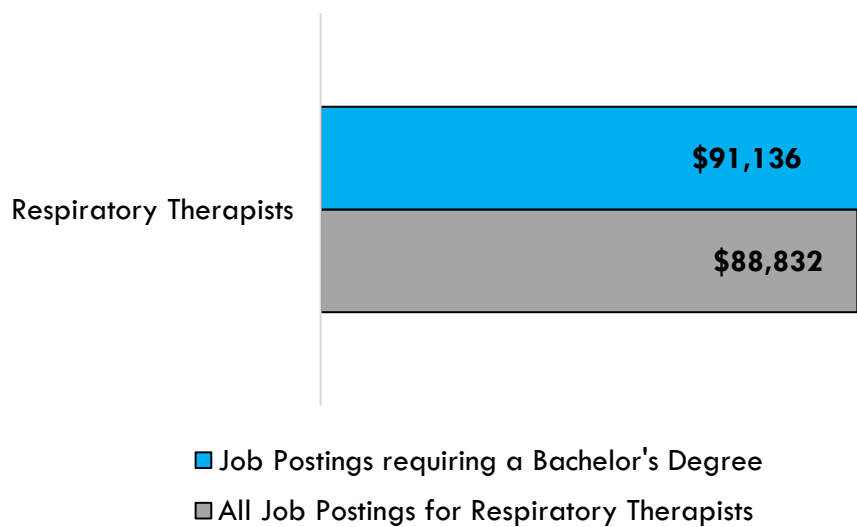
Of all the job postings that listed a minimum educational requirement, the vast majority of employers were seeking candidates with a high school diploma or associate degree (84% of total). Exhibit 7 shows a breakdown of education levels listed in job postings for *respiratory therapists*. The majority of job postings requested a candidate with an associate degree (51% of job postings that listed an educational requirement). However, nearly one in five employers sought *respiratory therapists* with a bachelor's or master's degree, signaling that some employers prefer to hire *respiratory therapists* with more education than an associate degree.

Exhibit 7: Education breakdown in job postings by occupation



Taking a closer look at the job postings that listed a bachelor’s degree as the required level of education versus all job postings for *respiratory therapists* in Los Angeles County, employers seeking candidates with a bachelor’s degree are advertising annual salaries that are \$2,300 higher per year than the advertised median salary across all *respiratory therapy* job ads. Exhibit 8 demonstrates that regional employers seeking *respiratory therapists* with a bachelor’s degree and willing to pay slightly more than the average annual advertised median salary.

Exhibit 8: Annual median advertised salary by education level



Source: Lightcast, Datarun 2023.4

Educational Supply: Key Training Programs for Respiratory Therapists

Bachelor's degrees related to respiratory therapy

In Los Angeles County, bachelor's degrees have been issued at one educational institution. Between 2019 and 2021, there was an average of 6 bachelor's degrees awarded.

Exhibit 9: LA County bachelor's degrees, 2019-2021

Program (CIP or TOP)	2019-20	2020-21	2-Year Average
Respiratory Care Therapy/Therapist (51.0908)	6	6	6

Source: [National Center for Education Statistics' Integrated Postsecondary Education Data System](#)

In California, bachelor's degrees have been issued in two different program codes at six different colleges (see Exhibit 10). Between 2019 and 2021, there was an average of 117 bachelor's degrees awarded annually. Non-community colleges awarded the most baccalaureate degrees in the state (101 awards) compared to community colleges (17 awards).

Exhibit 10: California bachelor's degrees, 2019-2021

Program (CIP or TOP)	2019-20	2020-21	2-Year Average
Respiratory Care/Therapy (TOP 1210.00)	8	25	17
Respiratory Care Therapy/Therapist (CIP 51.0908)	119	82	101
Total	127	107	117

Sub-baccalaureate awards related to respiratory therapy

For a comprehensive regional supply analysis, it is important to consider the sub-baccalaureate supply for *respiratory therapists* in LA County, especially since this occupation does not necessarily require a bachelor's degree at this time and some employers seek candidates with an associate degree only. Currently, there are ten educational institutions in LA County that issue sub-baccalaureate awards for respiratory therapy. Sub-baccalaureate awards include associate degrees, certificates, and non-credit awards that take fewer than four years to complete.

Exhibit 11: LA County sub-baccalaureate degrees, 2019-2021

Program (CIP or TOP)	2019-20	2020-21	2-Year Average
Respiratory Care/Therapy (TOP 1210.00)	156	175	166
Respiratory Care Therapy/Therapist (CIP 51.0908)	195	211	203
Total	351	386	369

In California, sub-baccalaureate degrees for *respiratory therapists* are awarded at community colleges (Respiratory Care/Therapy – TOP 1210.00) and non-community colleges (Respiratory Care Therapy/Therapist – CIP 51.0908). Between 2019 and 2021, there was an average of 1,128 sub-baccalaureate awards conferred annually. The majority of sub-baccalaureate awards conferred throughout the state for *respiratory therapists* were from non-community colleges.

Exhibit 12: California sub-baccalaureate degrees, 2019-2021

Program (CIP or TOP)	2019-20	2020-21	2-Year Average
Respiratory Care/Therapy (TOP 1210.00)	445	520	483
Respiratory Care Therapy/Therapist (CIP 51.0908)	636	654	645
Total	1,081	1,174	1,128

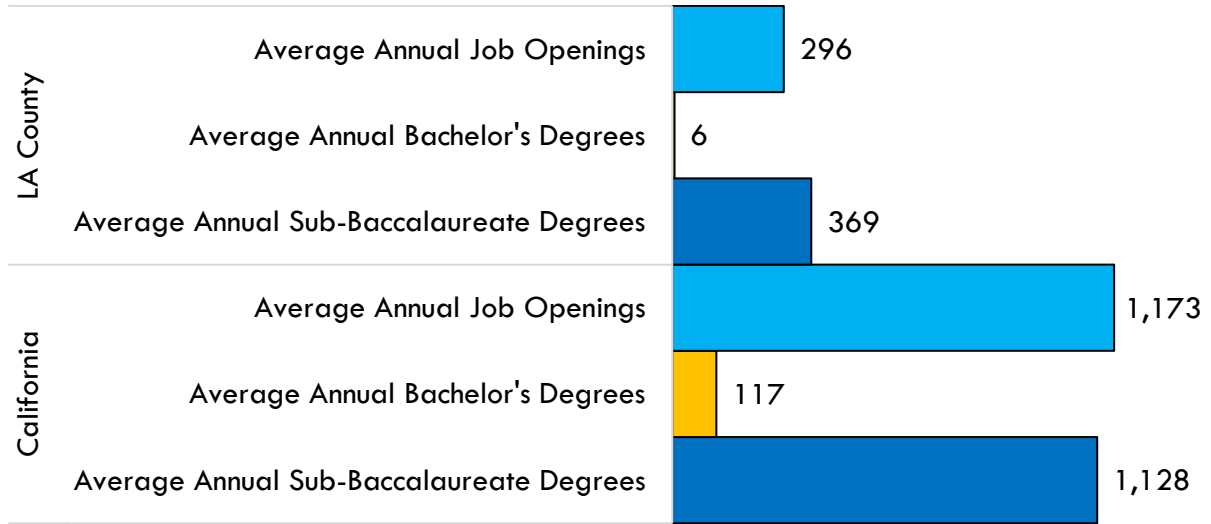
Gap Analysis

Exhibit 13 shows a breakdown of the educational supply and occupational demand for *respiratory therapists* in Los Angeles County and statewide. When only considering bachelor’s degrees in *respiratory therapy*, there is a clear supply shortage – only 6 average annual bachelor’s degrees and 296 average annual job openings. However, it is important to consider the sub-baccalaureate degrees awarded in Los Angeles County (369) and consider that these students are also entering jobs as *respiratory therapists* in LA County.

The same can be said for California as a whole. While there is a large supply gap when only considering bachelor’s degrees (117) and annual job openings (1,173), the large number of sub-baccalaureate degrees conferred throughout the state tips the balance into an “over-supply” for trained *respiratory therapists* in California.

For the time being, this may be an acceptable ratio of respiratory therapy awards by educational level compared to job openings, but as 2030 approaches and employers increasingly prefer candidates with a bachelor’s degree, this ratio will not suffice. In order to be sufficiently prepared for this shift to higher education requirements for *respiratory therapists*, community colleges with accredited programs such as ELAC’s must be prepared to transition their existing respiratory therapy associate degree program to the baccalaureate level.

Exhibit 13: Supply and demand gap analysis for respiratory therapists



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 projected labor market demand for *respiratory therapists* is unmet by the current baccalaureate 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 *respiratory therapist* jobs in Los Angeles County and California that may 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 *respiratory therapists* that typically requires a bachelor's degree for entry 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 *respiratory therapists* 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 respiratory therapy

TOP/CIP - Program	Institution	2019-20 Awards	2020-21 Awards	3-Year Average
51.0908 – Respiratory Care Therapy/Therapist	Platt College – Los Angeles	6	6	6
	Total	6	6	6

Table B: California bachelor's awards issued for respiratory therapy

TOP/CIP - Program	Institution	2019-20 Awards	2020-21 Awards	3-Year Average
1210.00 – Respiratory Care/Therapy	Modesto CC	8	9	8
	Skyline CC	-	16	8
51.0908 – Respiratory Care Therapy/Therapist	California College San Diego	2	-	1
	Loma Linda University	15	11	13
	Platt College-Los Angeles	6	6	6
	San Joaquin Valley College-Visalia	96	65	81
	Total	119	82	101

Table C: Los Angeles County sub-baccalaureate awards issued for respiratory therapy

TOP/CIP - Program	Institution	Award Type	2019-20 Awards	2020-21 Awards	3-Year Average
1210.00 – Respiratory Care/Therapy	East LA	Associate Degree	19	25	22
		Certificate 60+ semester units	6	15	11
	El Camino	Associate Degree	16	19	18
		Certificate 30 < 60 semester units	17	19	18
	LA Valley	Associate Degree	27	22	25
		Certificate 60+ semester units	27	24	26
	Mt San Antonio	Associate Degree	13	21	17
Orange Coast	Associate Degree	17	18	18	
Santa Monica	Associate Degree	14	12	13	
51.0908 – Respiratory Care Therapy/Therapist	American Career College-Anaheim	Associate Degree	51	55	53
	Concorde Career College-	Associate Degree	51	68	60

TOP/CIP - Program	Institution	Award Type	2019-20 Awards	2020-21 Awards	3-Year Average
	Garden Grove				
	Concorde Career College-North Hollywood	Associate degree	43	45	44
	Platt College-Los Angeles	Associate degree	50	43	47
		Total	351	386	369

Table D: California sub-baccalaureate awards issued for respiratory therapy

TOP/CIP - Program	Institution	Award Type	2019-20 Awards	2020-21 Awards	3-Year Average
1210.00 – Respiratory Care/Therapy	American River	Associate Degree	16	16	16
	Antelope Valley	Associate Degree	16	10	13
	Butte	Associate Degree	29	27	28
		Certificate 60+ semester units	29	27	28
	Crafton Hills	Associate Degree	32	28	30
	East LA	Associate Degree	19	25	22
	East LA	Certificate 60+ semester units	6	15	11
	El Camino	Associate Degree	16	19	18
		Certificate 30 < 60 semester units	17	19	18
	Foothill	Associate Degree	23	24	24
		Certificate 8 < 16 semester units	-	9	5
	Fresno City	Associate Degree	19	20	20
	Grossmont	Associate Degree	28	23	26
	Hartnell	Associate Degree	10	21	16
	LA Valley	Associate Degree	27	22	25
		Certificate 60+ semester units	27	24	26
	Modesto	Associate Degree	22	21	22
	Mt San Antonio	Associate Degree	13	21	17
	Napa	Associate Degree	22	24	23
	Ohlone	Associate Degree	9	24	17
Orange Coast	Associate Degree	17	18	18	
Santa Monica	Associate Degree	14	12	13	
Skyline	Associate Degree	18	19	19	
Victor Valley	Associate Degree	16	20	18	
	Certificate 60+ semester units	-	32	16	

TOP/CIP - Program	Institution	Award Type	2019-20 Awards	2020-21 Awards	3-Year Average
51.0908 – Respiratory Care Therapy/Therapist	American Career College-Anaheim	Associate Degree	51	55	53
	American Career College-Ontario	Associate Degree	54	38	46
	California College San Diego	Associate Degree	42	-	21
	Concorde Career College-Garden Grove	Associate Degree	51	68	60
	Concorde Career College-North Hollywood	Associate Degree	43	45	44
	Concorde Career College-San Bernardino	Associate Degree	32	31	32
	Pima Medical Institute-San Marcos	Associate Degree	25	32	29
	Platt College-Los Angeles	Associate degree	50	43	47
	Platt College-Ontario	Associate degree	28	37	33
	San Joaquin Valley College-Bakersfield	Associate degree	42	66	54
	San Joaquin Valley College-Ontario	Associate degree	58	61	60
	San Joaquin Valley College-Rancho Cordova	Associate degree	85	77	81
	San Joaquin Valley College-Temecula	Associate degree	34	36	35
	San Joaquin Valley College-Visalia	Associate degree	41	65	53
	Subtotal/Average			340	596

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.coecc.net.