

Proposed Bachelor's Degree Program Brief: 1210.00 – Respiratory Care/Therapy *Bachelor of Science in Respiratory Therapy*

Los Angeles/Orange County Center of Excellence, October 2021

Summary Analysis

The Los Angeles/Orange County Center of Excellence for Labor Market Research (COE) prepared this report to provide Los Angeles/Orange County regional labor market supply and demand data related to one middle-skill occupation: *respiratory therapists* (29-1126). Middle-skill occupations typically require some postsecondary education, but less than a bachelor's degree.¹ This report is intended to help determine whether there is demand in the local labor market that is not being met by the supply from community college programs that align with the relevant occupation. This report also serves a secondary purpose, which is to aid in making a data-informed decision regarding the utility of a respiratory therapy bachelor's degree program offered at regional community colleges.

Based on the available data, there appears to be a supply gap for *respiratory therapists* in the region. In addition to entry-level wages exceeding the self-sufficiency standard wage in both Los Angeles and Orange counties, the Bureau of Labor Statistics (BLS) lists an associate degree as the typical entry-level education. **Therefore, due to all the criteria being met, the COE would endorse this community college program under the typical program recommendation process.** Detailed reasons include:

Demand:

- **Supply Gap Criteria** – Over the next five years, there is projected to be **400 jobs available annually** in the region due to new job growth and replacements, **which is more than the 314 awards conferred annually** by educational institutions in the region.
- **Living Wage Criteria** – In Los Angeles County, the **typical entry-level hourly wage** for *respiratory therapists* is **\$34.41, which is above the self-sufficiency standard hourly wage** (living wage) for one adult in the region (\$18.10 in Los Angeles County).²
- **Educational Criteria** – The Bureau of Labor Statistics (BLS) lists an **associate degree** as the **typical entry-level education for respiratory therapists**.
 - National-level educational attainment data indicates **65% of workers in the field have completed some college or an associate degree**.

¹ 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.

² Self-Sufficiency Standard wage data was pulled from The Self-Sufficiency Standard Tool for California on 10/13/2021. For more information, visit: <http://selfsufficiencystandard.org/california>.

Supply:

- Between 2017 and 2020, **seven community colleges** in the LA/OC region issued awards in respiratory care/therapy, conferring an average of **163 awards**.
- Between 2016 and 2019, non-community college institutions in the region conferred an average of **151 awards in respiratory care therapy/therapist programs**.

Occupational Demand

Exhibit 1 shows the five-year occupational demand projections for *respiratory therapists*. In Los Angeles/Orange County, the number of jobs for *respiratory therapists* is projected to increase by 10% through 2025. There will be 400 job openings per year through 2025 due to job growth and replacements.

This report includes employment projection data by Emsi which uses EDD information. Emsi’s projections are modeled on recorded (historical) employment figures and incorporate several underlying assumptions, including the assumption that the economy, during the projection period, will be at approximately full employment. To the extent that a recession or labor shock, such as the economic effects of COVID-19, can cause long-term structural change, it may impact the projections. At this time, it is not possible to quantify the full impact of COVID-19 on projections of industry and occupational employment. Therefore, the projections included in this report do not take the full impacts of COVID-19 into account.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties³

Geography	2020 Jobs	2025 Jobs	2020-2025 Change	2020-2025 % Change	Annual Openings
Los Angeles	4,727	5,225	498	11%	317
Orange	1,282	1,400	118	9%	82
Total	6,008	6,625	617	10%	400

Wages

The labor market endorsement in this report considers the hourly wages for *respiratory therapists* 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 LA/OC region. Detailed wage information, by county, is included in Appendix A.

Los Angeles County — The typical entry-level hourly wage for *respiratory therapists* is \$34.41, which is **above** the self-sufficiency standard wage for one adult (\$18.10 in Los Angeles County). Experienced workers can expect to earn approximately \$47.56, which is also above the self-sufficiency standard wage.

Orange County — The typical entry-level hourly wage for *respiratory therapists* is \$32.31, which is above the self-sufficiency standard wage for one adult (\$20.63 in Orange County).

³ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

Experienced workers can expect to earn approximately \$44.66, which is also above the self-sufficiency standard wage.

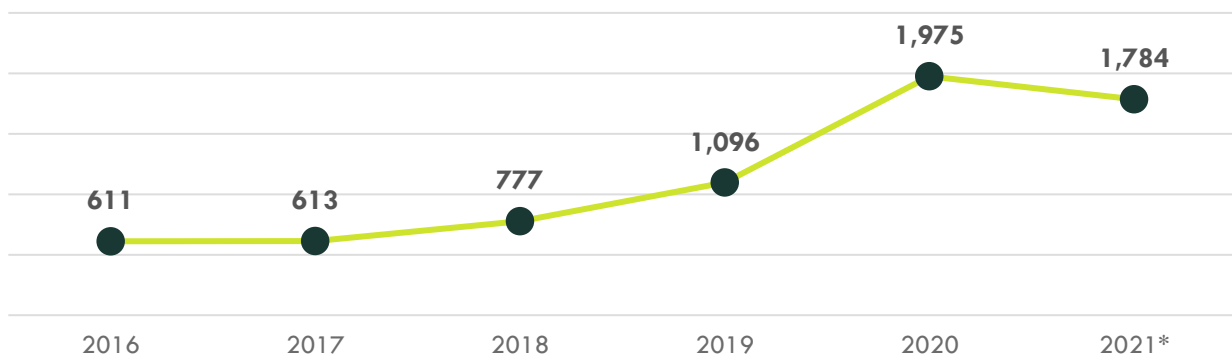
Job Postings

Over the past 12 months, there have been 1,918 online job postings related to *respiratory therapists*. The highest number of job postings were for respiratory care practitioners, respiratory therapists, registered respiratory therapists (RRT), and travel respiratory therapists. The top skills were respiratory therapy, patient care, advanced cardiac life support (ACLS), treatment planning, and neonatal intensive care unit (NICU). The top employers, by number of job postings, in the region were HealthCare Traveler, Kindred Healthcare Incorporated, and MemorialCare Health System.

To gauge employer demand for *respiratory therapists* with a bachelor’s degree, job postings from the most recent five years were also analyzed. Overall, job postings for *respiratory therapists* have risen steadily since 2016, increasing most dramatically (by 80%) from 2019 to 2020.

Exhibit 2 displays the job posting trend for each full year since 2016, as well as the job postings during 2021 thus far (January 1 through October 31, 2021), which have already surpassed the number of postings for each previous year except 2020.

Exhibit 2: Job postings for respiratory therapists in LA County, 2016-2021



*Job postings from January 1 through October 31, 2021

To gauge employer preference for candidates with a bachelor’s degree, the proportion of job postings by minimum education requirements from each year appear in Exhibit 3. Employers posting job ads for *respiratory therapists* have consistently sought candidates with a bachelor’s degree, ranging from a low 30% in 2016, to a high of 57% in 2018. Although present in the data, job postings seeking candidates with a Master’s degree account for less than 2% of postings from each year.

Exhibit 3: Occupational demand in Los Angeles and Orange Counties

Minimum Education Requirement	2016	2017	2018	2019	2020	2021*
Associate degree	70%	46%	43%	56%	56%	59%
Bachelor’s degree or higher	30%	54%	57%	44%	44%	41%

*Job postings from January 1 through October 31, 2021

It is important to note that the job postings data included in this section reflects online job postings listed in the past 12 months and does not yet demonstrate the full impact of COVID-19. While employers have generally posted fewer online job postings since the beginning of the pandemic, the long-term effects are currently unknown.

Educational Attainment

The Bureau of Labor Statistics (BLS) lists an associate degree as the typical entry-level education for *respiratory therapists*. National-level educational attainment data indicates 65% of workers in the field have completed some college or an associate degree.

Educational Supply

Community College Supply — Exhibit 4 shows the annual and three-year average number of awards conferred by community colleges in Respiratory Care/Therapy (TOP 1210.00). The community college with the most completions in the region is LA Valley. Over the past 12 months, there was one other related program recommendation request from a regional community college.

Exhibit 4: Regional community college awards (certificates and degrees), 2017-2020

TOP Code	Program	College	2017-18 Awards	2018-19 Awards	2019-20 Awards	3-Yr Average
1210.00	Respiratory Care/Therapy	Compton	-	2	-	1
		East LA	38	45	25	36
		El Camino	32	30	33	32
		LA Valley	48	50	54	51
		Mt San Antonio	24	19	13	19
		Santa Monica	3	15	14	11
		LA Subtotal	145	161	139	148
		Orange Coast	16	12	17	15
		OC Subtotal	16	12	17	15
Supply Total/Average			161	173	156	163

Non-Community College Supply — For a comprehensive regional supply analysis, it is important to consider the supply from other institutions in the region that may provide training programs for *respiratory therapists*. Exhibit 5 shows the annual and three-year average number of awards conferred by these institutions in Respiratory Care Therapy/Therapist programs (CIP 51.0908). Due to different data collection period⁵, the most recent three-year period of available data is from 2016 to 2019. Between 2016 and 2019, non-community college institutions in the LA/OC region conferred an average of 151 awards.

Exhibit 5: Regional non-community college awards, 2016-2019

CIP Code	Program	Institution	2016-17 Awards	2017-18 Awards	2018-19 Awards	3-Year Average
51.0908	Respiratory Care	American Career College-Anaheim	47	37	35	40

CIP Code	Program	Institution	2016-17 Awards	2017-18 Awards	2018-19 Awards	3-Year Average
	Therapy/Therapist	Concorde Career College-Garden Grove	32	51	39	41
		Concorde Career College-North Hollywood	36	42	47	42
		Platt College-LA	34	34	18	29
Supply Total/Average			149	164	139	151

Existing Community College Respiratory Therapy Bachelor's Degree Programs

Currently, there are two community colleges in California offering a bachelor's degree in respiratory therapy. Skyline awarded the first respiratory therapy bachelor's degrees in 2017-18, and Modesto followed in 2018-19. Bachelor's degrees awarded by each college over the last four academic years appear in Exhibit 6.

Exhibit 6: Bachelor's degrees award from community college respiratory therapy programs, 2017-2021

TOP Code	Program	College	2017-18 Awards	2018-19 Awards	2019-20 Awards	2020-21 Awards
1210.00	Respiratory Care/Therapy	Modesto	-	18	8	9
		Skyline	18	2	-	16
Supply Total			18	20	8	25

Licensing Requirements

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)."⁴ 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."⁵ Even the Bureau of Labor Statistics, the agency that determines the typical entry-level education requires 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.⁶

⁴ <https://www.aarc.org/wp-content/uploads/2014/10/respiratory-therapist-education.pdf>

⁵ <https://www.csrc.org/assets/docs/Final%20CSRC%20Position%20Statement%20Minimal%20Education%20Requirements.pdf>

⁶ <https://www.bls.gov/ooh/healthcare/respiratory-therapists.htm#tab-4>

Recommendations

Based on all of the available data, there appears to be an opportunity for community colleges to offer a bachelor's degree in respiratory therapy. Considering the recent Assembly Bill No. 927, which would extend the community college statewide baccalaureate degree pilot program indefinitely, community colleges have an extraordinary opportunity to providing training in areas requiring increasing levels of educational demand, such as respiratory therapy.⁷ Further, job posting data suggests that employers are seeking respiratory therapists with a bachelor's degree nearly as often as candidates with an associate degree, and in some years, even more frequently. This fact alone provides a strong rationale to conduct a statewide survey of employer preferences regarding *respiratory therapists*, which could help answer questions such as the following:

- Do employers prefer candidates with a bachelor's degree over those with an associate degree?
- Are employers willing to pay candidates with a bachelor's degree more than those with an associate degree?
- How do the work tasks and responsibilities differ between respiratory therapists with a bachelor's degree versus those with associate degree, if at all?
- What portion of the respiratory therapist workforce currently holds a bachelor's degree?
- Are employers willing to subsidize additional education and training for incumbent respiratory therapists with an associate degree to upskill to a bachelor's degree?

Since Modesto and Skyline have already issued bachelor's degrees in respiratory therapy, a great place to start would be surveying exiting students who earned these degrees to see how their experiences in the job market differed from those earning associate degrees (each college currently awards both).

Finally, the licensing bodies for respiratory therapy all appear to be in agreement that the field is moving towards increasing educational requirements. If the field follows the leadership and guidance of these bodies, educational institutions providing training for respiratory therapy must follow suit in order to remain relevant and competitive.

⁷ https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB927

Appendix A: Occupational demand and wage data by county

Exhibit 7: Los Angeles County

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Respiratory Therapists (29-1126)	4,727	5,225	498	11%	317	\$34.41	\$39.98	\$47.56

Exhibit 8: Orange County

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Respiratory Therapists (29-1126)	1,282	1,400	118	9%	82	\$32.31	\$37.54	\$44.66

Exhibit 9: Los Angeles and Orange Counties

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Typical Entry-Level Education
Respiratory Therapists (29-1126)	6,008	6,625	617	10%	400	Associate degree

Appendix B: Sources

- O*NET Online
- Labor Insight/Jobs (Burning Glass)
- Economic Modeling Specialists, International (Emsi)
- Bureau of Labor Statistics (BLS)
- Employment Development Department, Labor Market Information Division, OES
- California Community Colleges Chancellor's Office Management Information Systems (MIS)
- California Family Needs Calculator, Insight Center for Community Economic Development
- Chancellor's Office Curriculum Inventory (COCI 2.0)

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