

Labor Market Analysis for: Anesthesia Technology

Inland Empire/Desert Center of Excellence, Feb 2025

Prepared by: Christopher Cruzcosa, ccruzcosa@iegocollaborative.org



Summary

Program LMI Endorsement	All LMI Criteria Met	Some LMI Criteria Met (Proceed with Caution)	LMI Criteria NOT Met
	<input type="checkbox"/>	<input type="checkbox"/>	✓

Program LMI Endorsement Criteria		
Supply Gap	Yes <input type="checkbox"/>	No ✓
	<i>Comments:</i> There is insufficient occupational data for this grouping of job titles to determine if they pass this LMI criteria.	
Living Wage	Yes <input type="checkbox"/>	No ✓
	<i>Comments:</i> There is insufficient occupational data for this grouping of job titles to determine if they pass this LMI criteria.	
Education	Yes <input type="checkbox"/>	No ✓
	<i>Comments:</i> There is insufficient occupational data for this grouping of job titles to determine if they pass this LMI criteria.	

The Inland Empire/ Desert (IE/D) Center of Excellence for Labor Market Research (IE/D COE) reviewed the following occupations to prepare this report:

- Above Middle-Skill (typically require training/education above a bachelor's degree)
 - Physician Assistant (29-1071)
 - **Note:** Only job posting data is presented in the analysis below and for this SOC (see the introduction for more information), it was further filtered to only include these job titles:
 - Certified Anesthesia Technicians
 - Anesthesia Technicians
 - Anesthesia Technologists

Summary of findings

Demand

- **Important Note:** Overall, there were insufficient job ads to provide a statistically significant population for this analysis. Therefore, all data presented below and in the report throughout is to provide insights from what regional job posting data exists but cannot be used to definitely determine if the collection of job titles pass any of the LMI criteria and should not be used as an endorsement for new program purposes.
- There were 42 online job postings from 6 employers over the past 12 months with the highest postings for certified anesthesia technicians.
- Most job postings for target occupations require a high school diploma or equivalent degree (73%), followed by an associate degree (25%), bachelor's degree (3%), and above a bachelor's degree (<1%).
- The salary information of online job ad data suggests regional employers advertise entry level wages (the 25th percentile) equal to \$27.32, which is roughly equated to an annual salary of \$56,825.

Supply

- On average, there were 0 annual awards conferred by educational institutions over the last 3 years in related fields: 0 from community colleges and 0 from other institutions (e.g., 4-year universities, private schools).

Introduction

This report aims to determine the demand for anesthesia technology jobs in the Inland Empire/Desert Region. Anesthesia technology workers assist licensed anesthesia providers with the administration of anesthesia through the preparation and maintenance of patient equipment and anesthesia delivery systems before, during, and after anesthesia care (Pasadena City College, 2023). Anesthesia technology workers clean, sterilize, disinfect, stock, order, and maintain anesthesia equipment and supplies in various clinical settings, such as operating rooms, emergency rooms, or ambulatory surgery centers.

The United States Bureau of Labor Statistics (BLS) has identified “anesthesia technicians” as under the Physician Assistant (29-1071) occupation but has not identified anesthesia technology workers specifically in their own occupation in their Standard Occupational Classification (SOC) system; therefore, to better understand the need for anesthesia technology knowledge, skills, and abilities (KSAs), this report analyzes online job advertisements (ads) from employers seeking anesthesia technology workers. Note that the job posting data for this SOC was filtered to only include the following job titles:

- Certified Anesthesia Technicians
- Anesthesia Technicians
- Anesthesia Technologists

Finally, the Taxonomy of Programs (TOP), developed by the California Community Colleges Chancellor's Office, does not contain a TOP code that directly provides anesthesia technology training.

Job Postings

The following analysis for job titles related to anesthesia technology using online job posting data.

Important note: The data produced in this section were generated by leveraging online job posting data sourced from Lightcast, which is the labor market analytics software tool COEs use to produce these briefs. The job posting data is collected from scraping online job boards such as LinkedIn, Indeed, Glassdoor and many others. The process Lightcast uses to assemble this data does have some limitations due to methods that recruitment professionals sometimes use (e.g., posting one job to fill multiple positions). For example, the number of jobs posted is not necessarily the same as the number of job vacancies.¹ While not perfect, Lightcast leverages machine learning and other AI technologies to enrich, deduplicate and aggregate this information to make it a meaningful dataset.

Exhibit 1 displays the number of job ads posted for occupations related to anesthesia technology over the last 12 months and the median posting duration. Over the previous 12 months, there were 41 unique job postings for occupations related to anesthesia technology in the region from 6 employers.

Exhibit 1. Job ads and posting duration, IE/D Region, Feb 2024 – Jan 2025

Job Title	Job Ads	Median Posting Duration
Physician Assistants	41	23 days
Total	41	

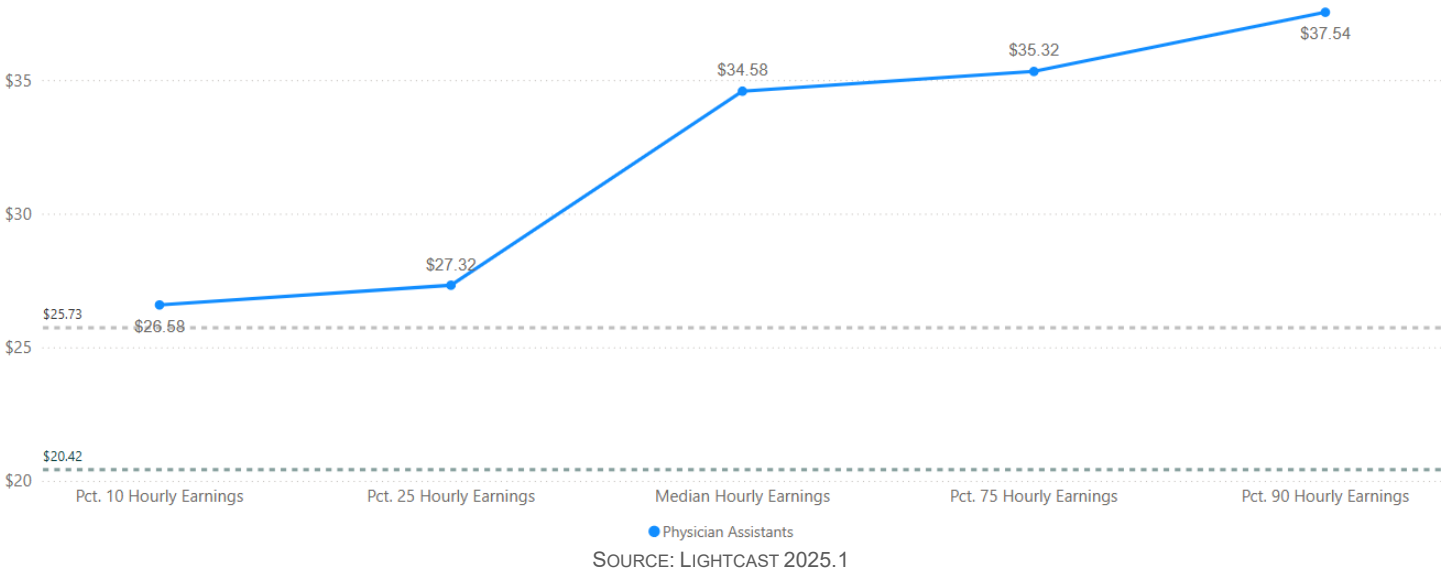
SOURCE: LIGHTCAST 2025.1

¹ "Job Posting Analytics (JPA) Methodology." Lightcast Knowledge Base, <https://kb.lightcast.io/en/articles/6957446-job-posting-analytics-jpa-methodology>

Advertised Salary from Online Job Ads

Exhibit 2 displays the regional online advertised salaries for the occupations related to anesthesia technology over the last 12 months. The salary information of online job ad data suggests regional employers advertise entry level wages (the 25th percentile) equal to \$27.32, which is roughly equated to an annual salary of \$56,825.

Exhibit 2. Hourly earnings of job postings by percentile, IE/D Region, Feb 2024 – Jan 2025



Online Job Advertisements: top job titles, skills, education & work experience.

Exhibit 3 displays the job titles most frequently used in job postings for the occupations related to anesthesia technology over the last 12 months. Assessing the top advertised job titles may provide insight into the types of positions sought by employers.






Exhibit 3. Job titles most frequently used in job ads, IE/D Region, Feb 2024 – Jan 2025

Job Title	Unique Postings
Anesthesia Technicians	21
Certified Anesthesia Technicians	21

SOURCE: LIGHTCAST 2025.1

Exhibit 4 displays the employers posting the most job ads for this occupational group during the last 12 months. Showing employer names can provide insight into where students may find employment after completing a program and may inform job development and other employer engagement targets for faculty and staff involved in related programs. Kaiser Permanente and Loma Linda University had the highest unique job posts for this occupational group in the last 12 months. Posting intensity is the ratio of total job posts to unique job posts which are deduplicated. A higher posting intensity can represent the level of effort and activity the organization is putting into hiring for that position. The following report comes directly from Lightcast’s Job Posting Analytics dashboard.

**Exhibit 4. Employers posting the most job ads,
IE/D Region, Feb 2024 – Jan 2025**

Company	Total/Unique (Feb 2024 - Jan 2025)	Posting Intensity	Median Posting Duration
Kaiser Permanente	65 / 21	3 : 1 	23 days
Loma Linda University	59 / 13	5 : 1 	42 days
Eisenhower Health	4 / 3	1 : 1 	21 days
Universal Health Services	5 / 2	3 : 1 	14 days
Infosage Systems	2 / 1	2 : 1 	n/a

SOURCE: LIGHTCAST 2025.1

Exhibit 5 displays the top common and computer skills that were included in the job postings over the last 12 months. Today's demand is an important indicator of which skills employers are looking for in the current market. Analyzing skills from a historical perspective as well as projecting the future needs of employers may provide insight into how the job posting skills demand compares to the market as a whole. Rapidly growing skills are those that are increasing in demand at a faster rate than the market as a whole. ²

Exhibit 5. Top 10 in-demand skills from employer job ads, IE/D Region, Feb 2024 – Jan 2025

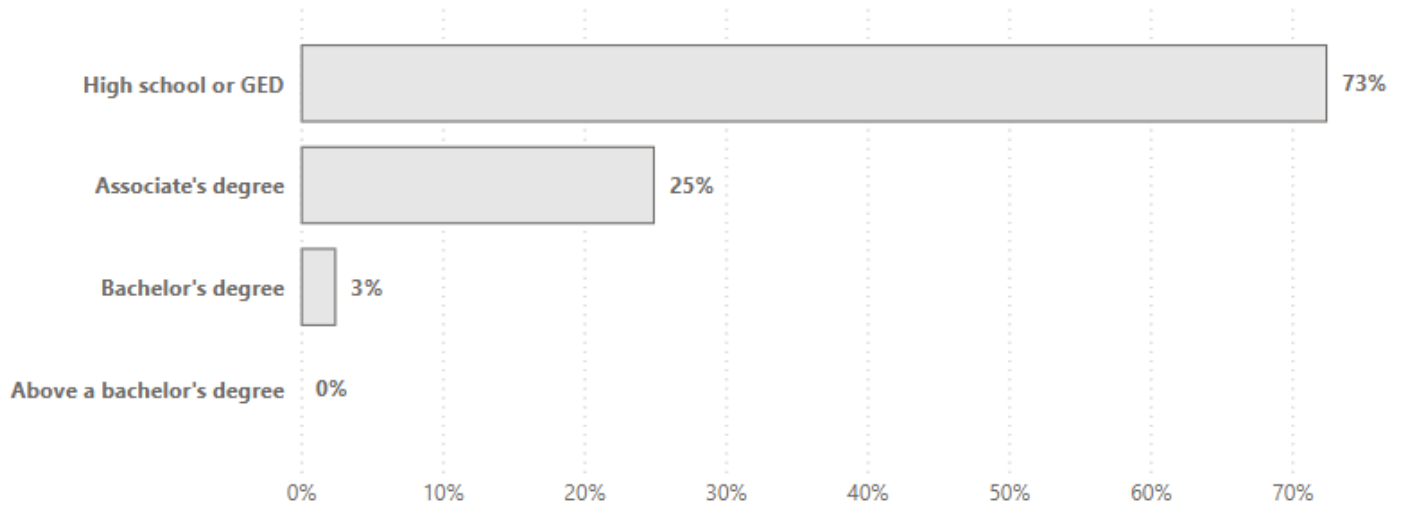
Common skills	Total Postings	Skill Growth Relative to Market
Troubleshooting (Problem Solving)	24	Growing
Customer Service	23	Stable
Management	23	Stable
Lifting Ability	21	Growing
Quality Control	18	Growing
Communication	14	Lagging
Detail Oriented	14	Stable
Fine Motor Skills	14	Growing
Assertiveness	13	Stable
Critical Thinking	13	Rapidly Growing
Specialized skills	Total Postings	Skill Growth Relative to Market
Anesthesias	41	Stable
Anesthesiology	31	Growing
Asepsis	25	Growing
Sterilization	25	Growing
Direct Patient Care	24	Growing
Invasive Monitoring	24	Stable
Operating Room (OR)	22	Stable
Arterial Catheter	21	Lagging
Cardiac Output	21	Growing
Critical Care	21	Lagging

SOURCE: LIGHTCAST 2025.1

Exhibit 6 includes the minimum educational requirements from job postings for this occupational group with a high school diploma or equivalent degree (73%), significantly greater than associate degree (25%) or bachelor's degree (3%) or above a bachelor's degree (<1%).

² "What are Lightcast Skill Projects", Lightcast Knowledge base, <https://kb.lightcast.io/en/articles/8496296-what-are-lightcast-skill-projections>

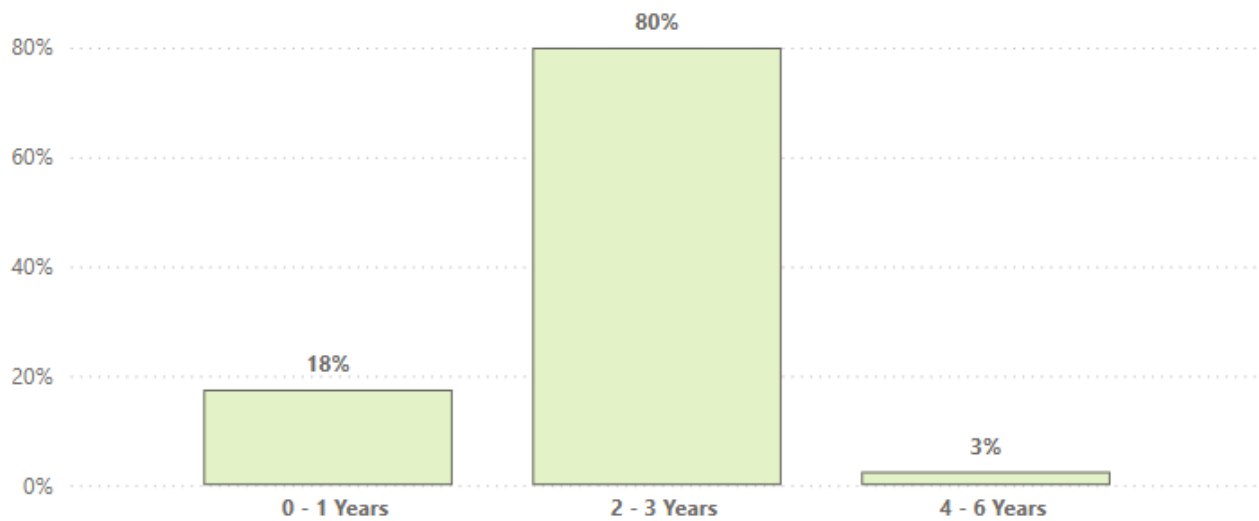
**Exhibit 6 Minimum educational requirements in job postings for this occupational group,
IE/D Region, Feb 2024 – Jan 2025**



SOURCE: LIGHTCAST 2025.1

Exhibit 7 displays the work experience typically required from employer job ads for this occupational group. The majority (80%) of employers listing minimum experience requirements sought candidates with 2-3 years of previous work experience.

**Exhibit 7 Work experience requirements,
IE/D Region, Feb 2024 – Jan 2025**



SOURCE: LIGHTCAST 2025.1

Student Completions and Program Outcomes

Community College Supply

No TOP codes appear to directly support this occupational group. Therefore, it appears that in the previous three academic years, 0 regional community colleges issued an average of 0 awards in relevant programs.

Non-Community College Supply

Similarly, no CIP codes appear to directly support this occupational group. Therefore, in the previous three academic years, 0 regional non-community college institutions issued an average of 0 awards in relevant programs.

Appendix: References

Type of Data	Source
Occupational Projections, Wages, and Job Postings	Traditional labor market information data is sourced from Lightcast, a labor market analytics firm. Lightcast occupational employment data are based on final Lightcast industry data and final Lightcast staffing patterns. Wage estimates are based on Occupational Employment. https://lightcast.io/
Living Wage (UW)	Center for Women's Welfare, University of Washington. (2024). The self-sufficiency standard for California 2024. http://www.selfsufficiencystandard.org/ This calculation measures the income necessary for an individual of family to afford basic expenses. The data assesses the cost of housing, food, childcare, health care, transportation, and taxes. The living wage for one adult in San Bernardino County is \$20.07 per hour (\$42,392 annually). The living wage for one adult in Riverside County is \$20.76 per hour (\$43,854 annually). The average living wage to represent Inland Empire/Desert is \$20.42 per hour (\$43,123 annually).
Living Wage (MIT)	The living wage is derived from MITs Living Wage Calculator, which measures the income necessary for an individual of family to afford basic expenses. The data assesses the cost of housing, food, childcare, health care, transportation, and taxes. For more information, see: https://livingwage.mit.edu/pages/methodology The living wage for one adult in San Bernardino County is \$25.17 per hour (\$52,353.60 annually). The living wage for one adult in Riverside County is \$26.30 per hour (\$54,704 annually). The average living wage to represent Inland Empire/Desert is \$25.74 per hour (53,539.20 annually)
Typical Education and Training Requirements, and Educational Attainment	The Bureau of Labor Statistics (BLS) provides information about education and training requirements for hundreds of occupations. BLS uses a system to assign categories for entry-level education, work experience in a related occupation, and typical on-the-job training to each occupation for which BLS publishes projections data. For more information, see https://www.bls.gov/emp/documentation/education/tech.htm
Educational Supply	The CCCC Data Mart provides information about students, courses, student services, outcomes and faculty and staff. For more information, see: https://datamart.cccco.edu The National Center for Education Statistics (NCES) Integrated Postsecondary Integrated Data System (IPEDS) collects data on the number of postsecondary awards earned (completions). For more information, see https://nces.ed.gov/ipeds/use-the-data/survey-components/7/completions
Student Metrics and Demographics	LaunchBoard, a statewide data system supported by the California Community Colleges Chancellor's Office and hosted by Cal-PASS Plus, provides data on progress, success, employment, and earnings outcomes for California community college students. For more information, see: https://www.calpassplus.org/LaunchBoard/Home.aspx