

Labor Market Analysis: 1217.00 – Surgical Technician

Los Angeles Center of Excellence, November 2024

Program Endorsement:	Endorsed: All Criteria Met		Endorsed: Some Criteria Met	X	Not Endorsed	
	Program En	dorsen	nent Criteria			
Supply Gap:	Yes ✓	ĺ		Ν	lo 🗆	
Living Wage: (Entry-Level, 25th)	Yes 🗆		No ☑			
Education:	Yes 🗸	ſ		Ν	lo 🗆	
	Emerging	Occu	pation(s)			
Yes				No 🗹		

SUMMARY

This report analyzes whether local labor market demand is being met by community college programs aligned with the identified middle-skill occupations 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 two identified middle-skill occupations in the region. While entry-level wages are lower than the self-sufficiency standard wage in both Los Angeles and Orange counties, the Bureau of Labor Statistics (BLS) lists a postsecondary non-degree award as the typical entry-level education for both target occupations.

<u>Recommendation:</u> 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

➤ 360 annual job openings are projected in the region through 2028. This number is greater than the three-year average of 257 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

Both occupations have entry-level wages <u>below</u> Los Angeles County's self-sufficiency standard hourly wage (\$24.03/hour).²

Educational Attainment

- A postsecondary non-degree award is the typical entry-level education for surgical technologists and surgical assistants, according to the Bureau of Labor Statistics (BLS).
- ➤ 47% of surgical technicians currently working in the field have completed some college or an associate degree, according to national educational attainment data.
- 29% of surgical assistants currently working in the field have completed an associate degree or less education, while 71% have completed a bachelor's degree or more educational attainment, according to national-level data.

Community college supply

➤ No community colleges issued awards under the Surgical Technician TOP code (1217.00) in the greater LA/OC region over the past three years.

Other postsecondary supply

- > 12 educational institutions in the LA/OC region have conferred awards in surgical technology/technologist programs over the past three years.
- > 257 sub-baccalaureate awards were conferred on average each year by other postsecondary institutions throughout the greater LA/OC region between 2020 and 2022.

TARGET OCCUPATIONS

LA COE prepared this report to provide regional labor market and postsecondary supply data related to two middle-skill occupations. For full occupation descriptions, please see Appendix.

- Surgical Technologists (29-2055)³
- Surgical Assistants (29-9093)⁴

OCCUPATIONAL DEMAND

Exhibit 1 shows the five-year occupational demand projections for *surgical technologists* and *surgical assistants*. In the greater Los Angeles/Orange County region, the number of jobs related to these target occupations is projected to increase by 9% through 2028. There will be more than 350 job openings per year through 2028 due to job growth and replacements. The majority of jobs in 2023 for these middle-skill occupations (77%) were located in Los Angeles County.



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

³ Surgical Assistants and Technologists (bls.gov)

⁴ Ibid.

Exhibit 1: Current employment and occupational demand, Los Angeles and Orange counties⁵

Geography	2023 Jobs	2028 Jobs	2023-2028 Change	2023-2028 % Change	Annual Openings
Los Angeles	3,501	3,783	282	8%	271
Orange	1,037	1,159	122	12%	89
Total	4,538	4,942	404	9%	360

Detailed Occupation Data

Exhibit 2 displays the current employment and projected occupational demand for each of the target occupations in Los Angeles County. Positive scores for automation resilience⁶ 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 County⁷

Occupation	2023 Jobs	2028 Jobs	5-Yr % Change	Annual Openings	Auto- mation Resilience	% Aged 55 and older	% Full Time Workers
Surgical Technologists	3,362	3,615	8%	256	11.0	15%	100%
Surgical Assistants	139	168	21%	15	10.4	13%	Data unavail.
Total	3,501	3,783	8%	271	-	-	-

WAGES

The labor market endorsement in this report considers the entry-level hourly wages for *surgical* technologists and surgical assistants 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

Both occupations have entry-level wages <u>below</u> the self-sufficiency standard wage for one adult (\$24.03 in Los Angeles County). Typical entry-level hourly wages are in a range between \$17.30

⁵ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

⁶ 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.

⁷ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

and \$22.55. (Exhibit 3). Experienced workers can expect to earn wages between \$32.80 and \$40.22, which are higher than the self-sufficiency standard.

Exhibit 3: Earnings for occupations in Los Angeles County

Occupation	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)	Median Annual Earnings*
Surgical Technologists	\$22.55	\$32.97	\$40.22	\$68,600
Surgical Assistants	\$1 <i>7</i> .30	\$23.28	\$32.80	\$48,400

^{*}Rounded to the nearest \$100

Orange County

Both occupations have entry-level wages <u>below</u> the self-sufficiency standard wage for one adult (\$27.13 in Orange County). Typical entry-level hourly wages are in a range between \$17.21 and \$21.96 (Exhibit 4). Experienced workers can expect to earn wages between \$32.81 and \$39.16, which are higher than the self-sufficiency standard.

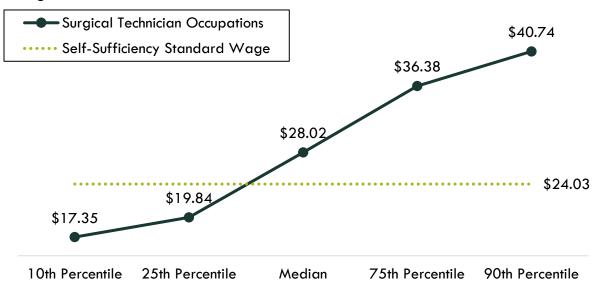
Exhibit 4: Earnings for occupations in Orange County

Occupation	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)	Median Annual Earnings*
Surgical Technologists	\$21.96	\$32.10	\$39.16	\$66,800
Surgical Assistants	\$17.21	\$23.31	\$32.81	\$48,500

^{*}Rounded to the nearest \$100

Across the greater Los Angeles and Orange County region, the average entry-level hourly earnings for the occupations in this report are \$19.84; 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 occupations in this report, for entry-level to experienced workers.

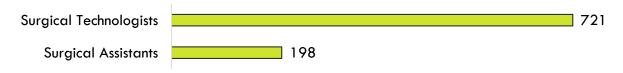
Exhibit 5: Average hourly earnings for surgical technician occupations, Los Angeles and Orange counties



JOB POSTINGS

There were 919 online job postings related to surgical technicians listed in the past 12 months in Los Angeles and Orange counties. Exhibit 6 displays the number of job postings by occupation. The majority of job postings (78%) were surgical technologists, followed by surgical assistants (22%).

Exhibit 6: Job postings by occupation (last 12 months), Los Angeles and Orange counties



Job postings were analyzed for the most common job titles, skills, and employers associated with the target occupations in this report (Exhibit 7).

Exhibit 7: Most commonly requested job titles, skills and employers in job postings, Los Angeles and Orange counties

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Top Job Titles	Top Skills	Top Employers					
 Certified surgical technologists Surgical technicians Surgical technologists Surgical assistants Surgical scrub technicians Certified surgical technicians Operating room assistants 	 Surgery Operating Room (OR) Surgical procedures Asepsis Surgical instruments Surgical technology Sterilization Surgical services Infection control 	 Healthcare Employment Network University of California Hoag Health System Adventist Health Providence Keck Medical Center of USC American Career College 					

In the greater Los Angeles/Orange County region, 32% of the target job postings listed a minimum educational requirement. Exhibit 8 details the number and percentage of job postings by educational level.

Exhibit 8: Education levels requested in job postings for surgical technician occupations, Los Angeles and Orange counties

Education Level	Job Postings	% of Job Postings
Bachelor's degree	32	3%
Associate degree	221	24%
High school diploma or vocational training	666	72%

EDUCATIONAL ATTAINMENT

The Bureau of Labor Statistics (BLS) lists a postsecondary non-degree award as the typical entry-level education for both occupations in this report (Exhibit 9). Furthermore, the national-level data indicates 47% of surgical technicians working in the field have completed some college or an associate degree. Currently, 29% of surgical assistants working in the field have completed an associate degree or less education, while 71% have completed a bachelor's degree or more educational attainment. The Bureau of Labor Statistics (BLS) lists the following typical entry-level education levels for the occupations in this report:

Exhibit 9: Entry-level education preferred by employers nationally, Bureau of Labor Statistics

Occupation	Education Level
Surgical Technologists	Postsecondary non-degree award
Surgical Assistants	Postsecondary non-degree award

EDUCATIONAL SUPPLY

Community College Supply

Currently, there are no other postsecondary institutions in the greater LA/OC region that have conferred awards under the Surgical Technician TOP Code (1217.00) in the past three years. Exhibit 10 shows the annual and three-year average number of awards conferred by community colleges throughout the state in the related TOP code: Surgical Technicians (1217.00). The region with the most completions is San Diego/Imperial.

According to COCI, Mt. San Antonio has an active non-credit program titled Surgical Technician. However, there have been no awards conferred in this program in the past three years.

Exhibit 10: California community college awards (certificates and degrees), 2021-2023

TOP Code	Program	Region	College	2020-21 Awards	2021-22 Awards	2022-23 Awards	3-Year Average
1217.00 Surgical Technician	San Diego/	Southwestern	4	7	33	15	
	Imperial	MiraCosta	2	1	-	1	
	recimician	Bay	Skyline	7	16	7	10
Supply Total/Average			13	24	40	26	

Other Postsecondary Supply

For a comprehensive regional supply analysis, it is important to consider the supply from other institutions in the region that provide training programs for surgical technicians. Exhibit 11 shows the number of awards conferred by these institutions in relevant programs. Due to different data collection periods, the most recent data is from 2020 to 2022. Between 2020 and 2022, other postsecondary college institutions in the region conferred an average of 257 sub-baccalaureate



awards. Sub-baccalaureate awards include associate degrees, postsecondary awards, and other academic awards that typically take fewer than four years to complete.

Exhibit 11: Other regional postsecondary awards, 2020-2022

CIP Code	Program	Postsecondary Institution	2019-20 Awards	2020-21 Awards	2021-22 Awards	3-Year Average
		American Career College-Anaheim	30	40	55	42
		American Career College-Los Angeles	44	31	33	36
		California Healing Arts College	10	3	-	4
		Career Networks Institute	12	14	21	16
	Surgical	CBD College	35	21	49	35
51.0909		Concorde Career College-North Hollywood	19	-	16	12
31.0707	Technology/ Technologist	Glendale Career College	64	48	23	45
		North-West College- Anaheim	5	6	10	7
		North-West College- Long Beach	19	19	11	16
		North-West College- West Covina	17	10	21	16
		Premiere Career College	26	13	35	25
		Valley College of Medical Careers	3	8	-	4
		Supply Total/Average	284	213	274	257

APPENDIX: OCCUPATION DESCRIPTIONS

LA COE prepared this report to provide regional labor market supply and demand data related to these target occupations:

Surgical Technologists (29-2055) Assist in operations, under the supervision of surgeons, registered nurses, or other surgical personnel. May help set up operating room, prepare and transport patients for surgery, adjust lights and equipment, pass instruments and other supplies to surgeons and surgeons' assistants, hold retractors, cut sutures, and help count sponges, needles, supplies, and instruments.⁸

⁸ Surgical Assistants and Technologists (bls.gov)

Surgical Assistants (29-9093) Assist in operations, under the supervision of surgeons. May, in accordance with state laws, help surgeons to make incisions and close surgical sites, manipulate or remove tissues, implant surgical devices or drains, suction the surgical site, place catheters, clamp or cauterize vessels or tissue, and apply dressings to surgical site.⁹

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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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⁹ Surgical Assistants and Technologists (bls.gov)