



Labor Market Analysis: 1227.00 – Diagnostic Medical Sonography

Los Angeles Center of Excellence, November 2024

Program Endorsement:	Endorsed: All Criteria Met <input type="checkbox"/>	Endorsed: Some Criteria Met <input checked="" type="checkbox"/>	Not Endorsed <input type="checkbox"/>
Program Endorsement Criteria			
Supply Gap:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/> (See comments below)	
Living Wage: (Entry-Level, 25 th)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Education:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Emerging Occupation(s)			
Yes <input type="checkbox"/>		No <input checked="" type="checkbox"/>	

SUMMARY

This report analyzes whether local labor market demand is being met by community college programs aligned with the identified middle-skill occupation¹ 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 does not appear to be a supply gap for *diagnostic medical sonographers* in the region. While this program does not meet the traditional supply/demand endorsement criteria, there may be demand for these workers from local employers that is not reflected in traditional labor market data. For this reason, real-time labor market data is included in this report as well – to provide a more nuanced view of the regional job market for *diagnostic medical sonographers*. Furthermore, 645 out of the 676 awards (95%) included in the supply/demand analysis were issued by proprietary institutions. With community colleges only issuing 31 related awards and no current programs at Los Angeles County community colleges, there may be an opportunity to attract a larger portion of prospective students to the community colleges if program offerings are expanded or created. In addition to this occupation’s entry-level wage exceeds the self-sufficiency standard wage in both Los Angeles and Orange counties, and workers typically need an associate degree according to the Bureau of Labor Statistics (BLS).

Recommendation: 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.

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.

Key Findings

Supply Gap

- 235 annual job openings are projected in the region through 2028. This number is less than the three-year average of 676 awards conferred by educational institutions in the region.
 - However, over the past 12 months, there were **1,362 online job postings for diagnostic medical sonographers**. The highest number of job postings were for ultrasound technicians, travel ultrasound technologists, ultrasound technologists, sonographers, and lead ultrasound technologists.

Living Wage

- \$39.99 is the typical entry-level hourly wages for *diagnostic medical sonographers*, which is higher than Los Angeles County's self-sufficiency standard hourly (\$24.03/hour).²

Educational Attainment

- An associate degree is the typical entry-level education for *diagnostic medical sonographers*, according to the Bureau of Labor Statistics (BLS).
- 46% of workers in the field have completed some college or an associate degree, according to national educational attainment data.

Community college supply

- 2 community colleges issued awards related to diagnostic medical sonography in the greater LA/OC region.
- 31 awards (degrees and certificates) were conferred on average each year between 2021 and 2023.

Other postsecondary supply

- 13 educational institutions in the LA/OC region have conferred awards in programs related to diagnostic medical sonography over the past three years.
- 645 awards were conferred on average each year by other postsecondary institutions throughout the greater LA/OC region between 2020 and 2022.

TARGET OCCUPATION

LA COE prepared this report to provide regional labor market and postsecondary supply data related to one middle-skill occupation.

- **Diagnostic Medical Sonographers (29-2032)** Produce ultrasonic recordings of internal organs for use by physicians. Includes vascular technologists.³

OCCUPATIONAL DEMAND

Exhibit 1 shows the five-year occupational demand projections for *diagnostic medical sonographers*. In the greater Los Angeles/Orange County region, the number of jobs related to this occupation is projected to increase by 10% through 2028. There will be more than 200 job

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

³ [Diagnostic Medical Sonographers \(bls.gov\)](https://www.bls.gov/occupations/29-2032)

openings per year through 2028 due to job growth and replacements. The majority of jobs in 2023 for *diagnostic medical sonographers* (73%) were located in Los Angeles County.

Exhibit 1: Current employment and occupational demand, Los Angeles and Orange counties⁴

Geography	2023 Jobs	2028 Jobs	2023-2028 Change	2023-2028 % Change	Annual Openings
Los Angeles	2,333	2,537	204	9%	164
Orange	876	993	116	13%	71
Total	3,209	3,530	320	10%	235

Detailed Occupation Data

Exhibit 2 displays the current employment and projected occupational demand for the target occupation in Los Angeles County. Positive scores for automation resilience⁵ 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. Occupations with a lower-than-average percentage of full-time workers may have less employment security but may see increased activity in the gig economy.

Exhibit 2: Detailed employment and occupational demand, Los Angeles County⁶

Occupation	2023 Jobs	2028 Jobs	5-Yr % Change	Annual Openings	Auto-mation Resilience	% Aged 55 and older	% Full Time Workers
Diagnostic Medical Sonographers	2,333	2,537	9%	164	6.7	20%	75%

WAGES

The labor market endorsement in this report considers the entry-level hourly wages for *diagnostic medical sonographers* 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.

⁴ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

⁵ 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.

⁶ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

Los Angeles County

The typical entry-level hourly wages for *diagnostic medical sonographers* are \$39.99, which is above the self-sufficiency standard wage for one adult (\$24.03 in Los Angeles County). Experienced workers can expect to earn wages of \$63.34.

Exhibit 3: Earnings for occupation in Los Angeles County

Occupation	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)	Median Annual Earnings*
Diagnostic Medical Sonographers	\$39.99	\$49.87	\$63.34	\$103,700

*Rounded to the nearest \$100

Orange County

The typical entry-level hourly wages for *diagnostic medical sonographers* are \$41.23, which is above the self-sufficiency standard wage for one adult (\$27.13 in Orange County). Experienced workers can expect to earn wages of \$65.29.

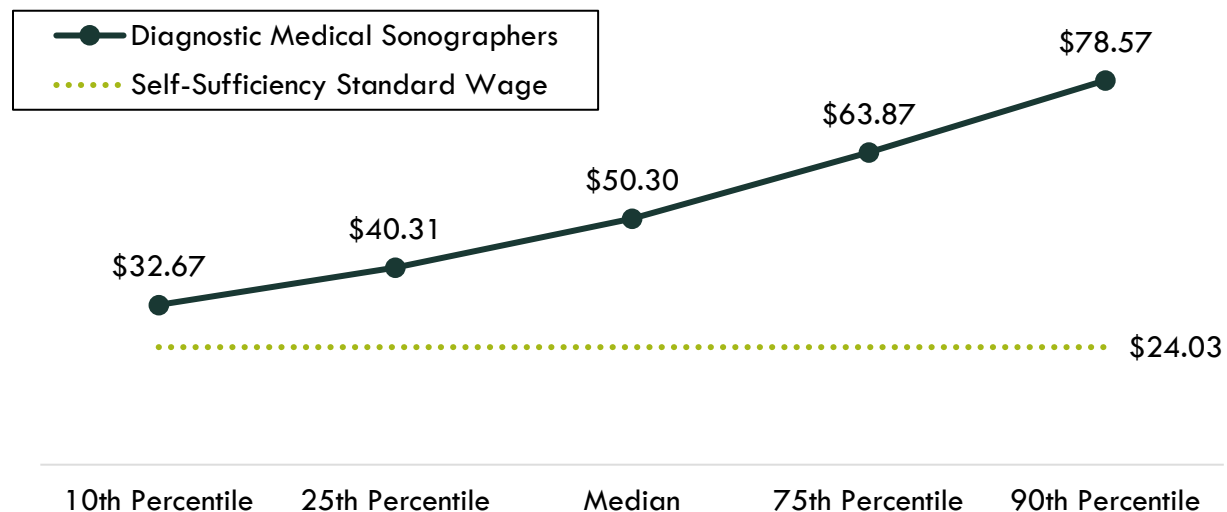
Exhibit 4: Earnings for occupation in Orange County

Occupation	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)	Median Annual Earnings*
Diagnostic Medical Sonographers	\$41.23	\$51.41	\$65.29	\$106,900

*Rounded to the nearest \$100

Across the greater Los Angeles and Orange County region, the average entry-level hourly earnings for the occupation in this report are \$40.31; this is above 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 diagnostic medical sonographers, Los Angeles and Orange counties



JOB POSTINGS

There were 1,362 online job postings related to *diagnostic medical sonographers* listed in the past 12 months in 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 6).

Exhibit 6: Most commonly requested job titles, skills and employers in job postings, Los Angeles and Orange counties

Top Job Titles	Top Skills	Top Employers
<ul style="list-style-type: none"> • Ultrasound technicians • Travel ultrasound technologists • Ultrasound technologists • Sonographers • Lead ultrasound technologists • Vascular ultrasound technicians 	<ul style="list-style-type: none"> • Medical ultrasonography • Radiology • Obstetrics and gynecology • Anatomy • Pathology • Biopsies • Pediatrics • Acute care 	<ul style="list-style-type: none"> • University of California • Healthcare Employment Network • Vetted Health • RadNet • Providence • Hoag Health System • KPG Healthcare • PIH Health

In the greater Los Angeles/Orange County region, 20% of the *diagnostic medical sonographer* job postings listed a minimum educational requirement. Exhibit 7 details the number and percentage of job postings by educational level.

Exhibit 7: Education levels requested in job postings for diagnostic medical sonographers, Los Angeles and Orange counties

Education Level	Job Postings	% of Job Postings
Bachelor's degree	30	11%
Associate degree	130	48%
High school diploma or vocational training	112	41%

EDUCATIONAL ATTAINMENT

The Bureau of Labor Statistics (BLS) lists an associate degree as the typical entry-level education for *diagnostic medical sonographers* (Exhibit 8). Furthermore, the national-level data indicates 46% of workers in the field have completed some college or an associate degree as their highest level of educational attainment. The Bureau of Labor Statistics (BLS) lists the following typical entry-level education levels for the occupations in this report:

Exhibit 8: Entry-level education preferred by employers nationally, Bureau of Labor Statistics

Occupation	Education Level
Diagnostic medical sonographers	Associate degree

EDUCATIONAL SUPPLY

Community College Supply

Exhibit 9 shows the annual and three-year average number of awards conferred by community colleges in the related TOP code: Diagnostic Medical Sonography (1227.00). The only two colleges with completions in the region over the last three years are located in Orange County.

Exhibit 9: Regional community college awards (certificates and degrees), 2021-2023

TOP Code	Program	College	2020-21 Awards	2021-22 Awards	2022-23 Awards	3-Year Average
1227.00	Diagnostic Medical Sonography	Cypress	14	14	19	16
		Orange Coast	16	17	14	16
		OC Subtotal	30	31	33	31
Supply Total/Average			30	31	33	31

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 *diagnostic medical sonographers*. Exhibit 10 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 645 bachelor's and sub-baccalaureate awards. Sub-baccalaureate awards include associate degrees, postsecondary awards, and other academic awards that typically take fewer than four years to complete. Of the awards in Exhibit 11, 89% are associate degrees and certificates (573 awards), and 11% are bachelor's degrees (72 awards).

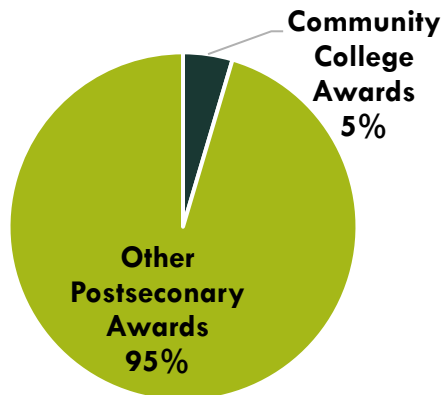
Exhibit 10: Other regional postsecondary awards, 2020-2022

CIP Code	Program	Postsecondary Institution	2019-20 Awards	2020-21 Awards	2021-22 Awards	3-Year Average
51.0910	Diagnostic Medical Sonography/Sonographer and Ultrasound Technician	American Medical Sciences Center	16	24	32	24
		ATI College-Whittier	10	9	34	18
		Casa Loma College-LA	33	32	28	31
		CBD College	130	101	145	125
		Healthcare Career College	13	26	20	20

CIP Code	Program	Postsecondary Institution	2019-20 Awards	2020-21 Awards	2021-22 Awards	3-Year Average
		Modern Technology School	23	19	21	21
		National Polytechnic College	11	17	21	16
		North-West College-Anaheim	15	16	17	16
		North-West College-Long Beach	19	24	19	21
		PCI College	33	41	46	40
		Platt College-Anaheim	94	93	68	85
		Platt College-LA	74	56	68	66
		Smith Chason College	141	144	203	163
Supply Total/Average			612	602	722	645

Exhibit 11 shows the proportion of community college awards conferred in the greater Los Angeles/Orange County region compared to the number of other postsecondary awards for the programs in this report. The majority of awards conferred in these programs are awarded by other institutions in the greater Los Angeles/Orange County region.

Exhibit 11: Percentage of community college awards compared to other postsecondary institution awards in the Los Angeles/Orange County region



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POWERED BY

**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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