



## Labor Market Analysis: 1225.00 – Radiologic Technology

### Mammography – Certificate requiring 30 to <60 semester units

Los Angeles Center of Excellence, December 2024

<b>Program Endorsement:</b>	<b>Endorsed: All Criteria Met</b> <input checked="" type="checkbox"/>	<b>Endorsed: Some Criteria Met</b> <input type="checkbox"/>	<b>Not Endorsed</b> <input type="checkbox"/>
<b>Program Endorsement Criteria</b>			
<b>Supply Gap:</b>	Yes <input checked="" type="checkbox"/>	No	<input type="checkbox"/>
<b>Living Wage: (Entry-Level, 25<sup>th</sup>)</b>	Yes <input checked="" type="checkbox"/>	No	<input type="checkbox"/>
<b>Education:</b>	Yes <input checked="" type="checkbox"/>	No	<input type="checkbox"/>
<b>Emerging Occupation(s)</b>			
	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 occupation<sup>1</sup> 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 one identified middle-skill occupation in the region. Furthermore, entry-level wages exceed the self-sufficiency standard wage in both Los Angeles and Orange counties, and the Bureau of Labor Statistics (BLS) lists an associate degree as the typical entry-level education level.

**Recommendation:** Due to all 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

- 532 annual job openings are projected in the region through 2028. This number is greater than the three-year average of 386 awards conferred by educational institutions in the region.
  - Over the past 12 months, there were **576 online job postings for mammography-related occupations**. The highest number of job postings were for mammography technologists, mammography technicians, mammographers, and lead mammography technologists.

<sup>1</sup> 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**

- \$28.34 is the typical entry-level hourly wages for *radiologic technologists and technicians*, which is higher than Los Angeles County’s self-sufficiency standard hourly (\$24.03/hour).<sup>2</sup>

### **Educational Attainment**

- An associate degree is the typical entry-level education for *radiologic technologists and technicians*, according to the Bureau of Labor Statistics (BLS).
- 66% of workers in the field have completed some college or an associate degree, according to national educational attainment data.

### **Community college supply**

- Seven community colleges issued awards related to radiologic technology in the greater LA/OC region.
- 214 awards (degrees and certificates) were conferred on average each year between 2021 and 2023.

### **Other postsecondary supply**

- Six educational institutions in the LA/OC region have conferred awards in programs related to radiologic technology over the past three years.
- 172 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:

- ***Radiologic Technologists and Technicians (29-2034)*** Take x-rays and CAT scans or administer nonradioactive materials into patient's bloodstream for diagnostic or research purposes. Includes radiologic technologists and technicians who specialize in other scanning modalities.<sup>3</sup>

## **OCCUPATIONAL DEMAND**

Exhibit 1 shows the five-year occupational demand projections for *radiologic technologists and technicians*. In the greater Los Angeles/Orange County region, the number of jobs related to this occupation is projected to increase by 8% through 2028. There will be more than 500 job openings per year through 2028 due to job growth and replacements. The majority of jobs in 2023 for *radiologic technologists and technicians* (75%) were located in Los Angeles County.

---

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

<sup>3</sup> [Radiologic and MRI Technologists \(bls.gov\)](https://www.bls.gov/publications/specialreports/2023/sr3202301.pdf)

### Exhibit 1: Current employment and occupational demand, Los Angeles and Orange counties<sup>4</sup>

Geography	2023 Jobs	2028 Jobs	2023-2028 Change	2023-2028 % Change	Annual Openings
Los Angeles	5,657	6,059	402	7%	384
Orange	1,922	2,134	213	11%	148
<b>Total</b>	<b>7,579</b>	<b>8,193</b>	<b>614</b>	<b>8%</b>	<b>532</b>

### 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 resilience<sup>5</sup> 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 County<sup>6</sup>

Occupation	2023 Jobs	2028 Jobs	5-Yr % Change	Annual Openings	Auto-mation Resilience	% Aged 55 and older	% Full Time Workers
Radiologic Technologists and Technicians	5,657	6,059	7%	384	5.9	20%	100%

## WAGES

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

The typical entry-level hourly wages for *radiologic technologists and technicians* are \$28.34, 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 \$54.99 (Exhibit 3).

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

<sup>5</sup> 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.

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

### Exhibit 3: Earnings for occupation in Los Angeles County

Occupation	Entry-Level Hourly Earnings (25 <sup>th</sup> Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 <sup>th</sup> Percentile)	Median Annual Earnings*
Radiologic Technologists and Technicians	\$28.34	\$43.38	\$54.99	\$90,200

\*Rounded to the nearest \$100

### Orange County

The typical entry-level hourly wages for *radiologic technologists and technicians* are \$28.72, which is above the self-sufficiency standard wage for one adult (\$27.13 in Orange County).

Experienced workers can expect to earn wages of \$64.51 (Exhibit 4).

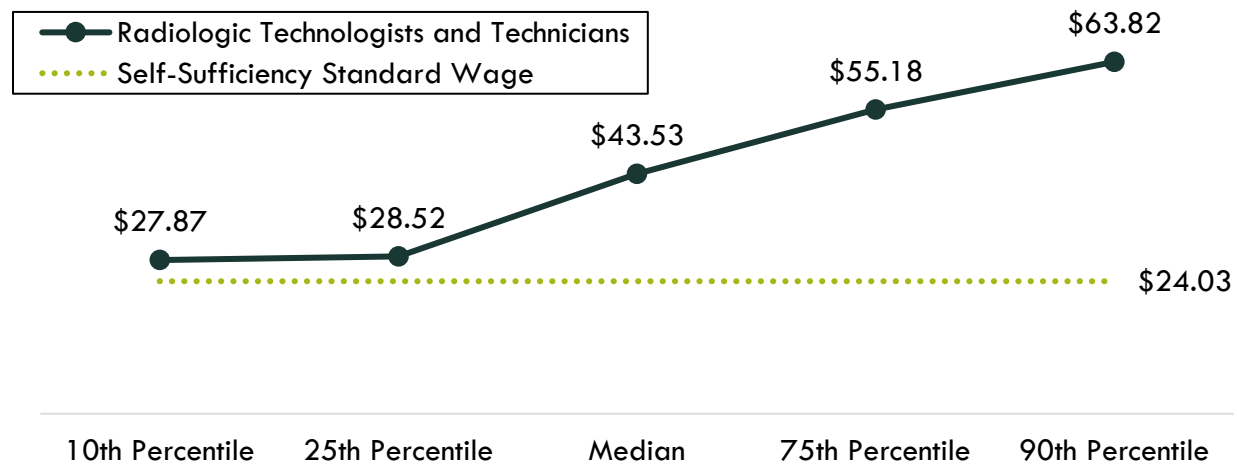
### Exhibit 4: Earnings for occupation in Orange County

Occupation	Entry-Level Hourly Earnings (25 <sup>th</sup> Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 <sup>th</sup> Percentile)	Median Annual Earnings*
Radiologic Technologists and Technicians	\$28.72	\$43.96	\$55.75	\$91,400

\*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 \$28.52; 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 occupation in this report, for entry-level to experienced workers.

### Exhibit 5: Average hourly earnings for radiologic technologists and technicians, Los Angeles and Orange counties



## JOB POSTINGS

There were 576 online job postings related to mammography 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 occupation 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"> <li>• Mammography technologists</li> <li>• Mammography technicians</li> <li>• Mammographers</li> <li>• Lead mammography Technologists</li> <li>• Radiologic Technologists/Mammographers</li> <li>• Mammography coordinators</li> </ul>	<ul style="list-style-type: none"> <li>• Mammography</li> <li>• Radiology</li> <li>• Radiography</li> <li>• Breast imaging</li> <li>• Biopsies</li> <li>• Stereotactic surgery</li> <li>• Photodetector</li> <li>• Anatomy</li> <li>• Pathology</li> </ul>	<ul style="list-style-type: none"> <li>• RadNet</li> <li>• Hoag Health System</li> <li>• Providence</li> <li>• United Medical Imaging Healthcare</li> <li>• PIH Health</li> <li>• Cedars-Sinai</li> <li>• University of California</li> </ul>

In the greater Los Angeles/Orange County region, 18% of the mammography-related 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 occupations related to mammography, Los Angeles and Orange counties**

Education Level	Job Postings	% of Job Postings
Bachelor's degree	5	5%
Associate degree	60	58%
High school diploma or vocational training	39	38%

**EDUCATIONAL ATTAINMENT**

The Bureau of Labor Statistics (BLS) lists an associate degree as the typical entry-level education for *radiologic technologists and technicians* (Exhibit 8). Furthermore, the national-level data indicates 66% 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 occupation in this report:

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

Occupation	Education Level
Radiologic technologists and technicians	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: Radiologic Technology (1225.00). The colleges with the most completions in the region are Cypress, Mt. San Antonio, and Long Beach.

**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
1225.00	Radiologic Technology	El Camino	-	19	23	14
		LA City	27	20	12	20
		Long Beach	25	45	48	39
		Mt San Antonio	27	51	43	40
		Pasadena	15	13	45	24
		<b>LA Subtotal</b>	<b>94</b>	<b>148</b>	<b>171</b>	<b>138</b>
		Cypress	8	84	75	56
		Orange Coast	22	1	39	21
		<b>OC Subtotal</b>	<b>30</b>	<b>85</b>	<b>114</b>	<b>76</b>
<b>Supply Total/Average</b>			<b>124</b>	<b>233</b>	<b>285</b>	<b>214</b>

### 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 radiologic technology. 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 172 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 10, the majority (86%) are sub-baccalaureate awards (147 awards), followed by bachelor's degrees (25 awards).

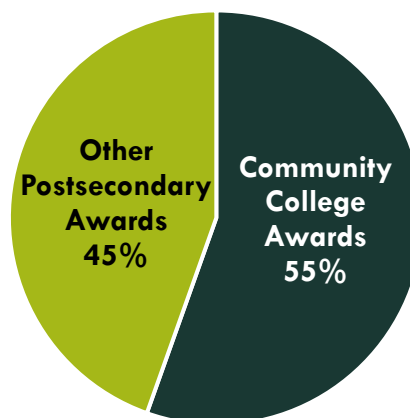
**Exhibit 10: Other regional postsecondary awards, 2020-2022**

CIP Code	Program	Postsecondary Institution	2019-20 Awards	2020-21 Awards	2021-22 Awards	3-Year Average
51.0907	Medical Radiologic Technology/ Science - Radiation Therapist	Smith Chason College	74	68	-	47

CIP Code	Program	Postsecondary Institution	2019-20 Awards	2020-21 Awards	2021-22 Awards	3-Year Average
51.0911	Radiologic Technology/ Science - Radiographer	American Career College-Anaheim	-	-	-	-
		American Career College-Los Angeles	-	35	35	23
		CSU-Northridge	24	21	23	23
		Charles R Drew University of Medicine and Science	26	33	22	27
		Modern Technology School	50	43	61	51
<b>Supply Total/Average</b>			<b>174</b>	<b>200</b>	<b>141</b>	<b>172</b>

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 community colleges 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**



**Contact information:**

Luke Meyer, Director

Los Angeles Center of Excellence

[Lmeyer7@mtsac.edu](mailto:Lmeyer7@mtsac.edu)

*If for any reason this document is not accessible or if you have specific needs for readability, please contact us and we will do our utmost to accommodate you with a modified version.*



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)

Important Disclaimer: All representations included in this report have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. Efforts have been made to qualify and validate the accuracy of the data and the reported findings; however, neither the Centers of Excellence, COE host District, nor California Community Colleges Chancellor's Office are responsible for applications or decisions made by recipient community colleges or their representatives based upon components or recommendations contained in this study.

© 2024 California Community Colleges Chancellor's Office,  
Centers of Excellence for Labor Market Research, Economic and Workforce Development Program