

Labor Market Analysis: 1225.00/Radiologic Technology *MRI Technician*

Los Angeles Center of Excellence, October 2023

Summary

Program Endorsement:	Endorsed: All Criteria Met	X	Endorsed: Some Criteria Met		Not Endorsed	
	Program Endo	rsem	ent Criteria			
Supply Gap:	Yes 🗹	713011	iem emena	N		
Living Wage:						
(Entry-Level, 25th)	Yes ☑ No □					
Education:	Yes ☑ No □					
	Emerging (Ͻϲϲυլ	oation(s)			
Yes				No ☑		

The Los Angeles Center of Excellence for Labor Market Research (LA COE) prepared this report to provide regional labor market supply and demand data related to two middle-skill occupations:

- 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.¹
- Magnetic Resonance Imaging Technologists (29-2035) Operate Magnetic Resonance Imaging (MRI) scanners. Monitor patient safety and comfort, and view images of area being scanned to ensure quality of pictures. May administer gadolinium contrast dosage intravenously. May interview patient, explain MRI procedures, and position patient on examining table. May enter into the computer data such as patient history, anatomical area to be scanned, orientation specified, and position of entry.²

Middle-skill occupations typically require some postsecondary education, but less than a bachelor's degree.³ 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 occupations.

Based on the available data, there appears to be a supply gap for these radiologic technology occupations in the region. Furthermore, entry-level wages exceed the self-sufficiency standard

¹ Radiologic and MRI Technologists (bls.gov)

² Radiologic and MRI Technologists (bls.gov)

³ 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.

wage in both Los Angeles and Orange counties, and the Bureau of Labor Statistics lists an associate degree as the typical entry-level education. **Therefore, due to all the criteria being met, the LA COE endorses this proposed program.** Detailed reasons include:

Demand:

- Supply Gap Criteria Over the next five years, 601 jobs are projected to be available annually in the region due to new job growth and replacements, which is more than the three-year average of 400 awards conferred by educational institutions in the region.
 - Over the past 12 months, there were 6,676 job postings for these radiologic technology occupations, and 766 of these job postings were specifically for MRI-related jobs. The titles listed on these job postings were MRI technologists (391 job postings), travel MRI technicians (145), MRI technicians (93), lead MRI technologists (81), and imaging MRI technicians (23).
- Living Wage Criteria Within Los Angeles County, both occupations have entry-level wages <u>above</u> the self-sufficiency standard hourly wage (\$18.10/hour).⁴
- Educational Criteria The Bureau of Labor Statistics (BLS) lists an associate degree as the typical entry-level education for both occupations in this report.
 - Furthermore, the national-level educational attainment data indicates between 48% and 68% of workers in the field have completed some college or an associate degree.

Supply:

- There are 7 community colleges in the greater LA/OC region that issue awards related to radiologic technology, conferring an average of 192 awards annually between 2019 and 2022.
- Between 2019 and 2021, there was an average of 208 awards conferred annually in related training programs by non-community college institutions throughout the greater LA/OC region.

Occupational Demand

Exhibit 1 shows the five-year occupational demand projections for radiologic technology occupations. In the greater Los Angeles/Orange County region, the number of jobs related to these occupations is projected to increase by 11% through 2026. There will be approximately 600 job openings per year through 2027 due to job growth and replacements.

⁴ Self-Sufficiency Standard wage data was pulled from The Self-Sufficiency Standard Tool for California. For more information, visit: http://selfsufficiencystandard.org/california.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties⁵

Geography	2022 Jobs	2027 Jobs	2022-2027 Change	2022-2027 % Change	Annual Openings
Los Angeles	5,676	6,202	526	9%	429
Orange	1,968	2,255	287	15%	173
Total	7,644	8,457	813	11%	601

Wages

The labor market endorsement in this report considers the entry-level hourly wages for these radiologic technology occupations 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 LA/OC region. Detailed wage information, by county, is included in Appendix A.

Los Angeles County

Both occupations have entry-level wages <u>above</u> the self-sufficiency standard wage for one adult (\$18.10 in Los Angeles County). Typical entry-level hourly wages range between \$31.10 and \$38.24. Experienced workers can expect to earn wages between \$51.13 and \$60.66.

Exhibit 2: Earnings for Occupations in LA County

Occupation	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)	Median Annual Earnings*
Radiologic Technologists and Technicians (29-2034)	\$31.10	\$42.09	\$51.13	\$8 7, 500
Magnetic Resonance Imaging Technologists (29-2035)	\$38.24	\$51.11	\$60.66	\$106,300

^{*}Rounded to the nearest \$100

Orange County

Both occupations have entry-level wages <u>above</u> the self-sufficiency standard wage for one adult (\$20.63 in Orange County). Typical entry-level hourly wages range between \$31.42 and \$40.30. Experienced workers can expect to earn wages between \$51.72 and \$63.87.

Exhibit 3: Earnings for Occupations in Orange County

Occupation	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)	Median Annual Earnings*
Radiologic Technologists and Technicians (29-2034)	\$31.42	\$42.54	\$51.72	\$88,500
Magnetic Resonance Imaging Technologists (29-2035)	\$40.30	\$53.88	\$63.87	\$112,100

^{*}Rounded to the nearest \$100

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.

On average, the entry-level earnings for the occupations in this report are \$35.05; this is above the living wage for one single adult in Los Angeles County (\$18.10). Exhibit 4 shows the average wage for the occupations in this report, from entry-level to experienced workers.

\$64.86 Radiologic \$56.39 Technology \$46.98 Occupations \$35.05 \$29.96 Self-Sufficiency \$18.10 Standard Wage 10th 25th Median 75th90th Percentile Percentile Percentile Percentile

Exhibit 4: Average Hourly Earnings for Radiologic Technology Occupations in LA/OC

Job Postings

There were 6,676 online job postings related to radiologic technology listed in the past 12 months. Exhibit 5 displays the number of job postings by occupation. The majority of job postings (71%) were for radiologic technologists and technicians, followed by magnetic resonance imaging technologists (29%). The highest number of job postings were for radiology technologists, computed tomography technologists, MRI technologists, travel radiology technicians, and lead CT technologists. The top skills were radiology, radiography, fluoroscopy, magnetic resonance imaging (MRI), and patient positioning. The top three employers, by number of job postings, in the region were Siemens Healthineers, Healthcare Employment Network, and Providence.

There were 766 job postings specifically for MRI-related jobs. The titles listed on these job postings were MRI technologists (391 job postings), travel MRI technicians (145), MRI technicians (93), lead MRI technologists (81), and imaging MRI technicians (23).

Radiologic Technologists and Technicians

4,731

Magnetic Resonance Imaging Technologists

1,945

Exhibit 5: Job postings by occupation (last 12 months)

Educational Attainment

The Bureau of Labor Statistics (BLS) lists an associate degree as the typical entry-level education for both occupations in this report. Furthermore, the national-level educational attainment data

indicates between 48% and 68% of workers in the field have completed some college or an associate degree. Of the 18% of radiologic technology job postings listing a minimum education requirement in the greater Los Angeles/Orange County region, 56% (653) requested high school or vocational training, 33% (384) requested an associate degree, and 12% (139) requested a bachelor's degree.

Educational Supply

Community College Supply

Exhibit 6 shows the annual and three-year average number of awards conferred by community colleges in programs related to TOP code: Radiologic Technology (1225.00). The colleges with the most completions in the region are Cypress, Mt. San Antonio, and Long Beach.

Exhibit 6: Regional community college awards (certificates and degrees), 2019-2022

ТОР	Program	College	2019-20 Awards	2020-21 Awards	2021-22 Awards	3-Year Average
		El Camino	1	-	19	7
		LA City	39	27	20	29
	Long Beach	28	25	45	33	
		Mt San Antonio	38	27	51	39
1225.00	Radiologic Technology	Pasadena	19	15	13	16
	reciliology	LA Subtotal	125	94	148	122
		Cypress	<i>7</i> 1	8	84	54
		Orange Coast	23	22	1	15
	OC Subtotal	94	30	85	70	
Supply Total/Average			219	124	233	192

Non-Community College Supply

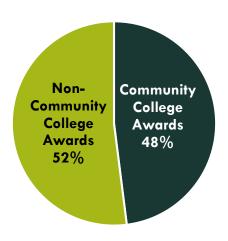
For a comprehensive regional supply analysis, it is important to consider the supply from other institutions in the region that provide training programs for radiologic technology. Exhibits 6 and 7 show the annual and three-year average number of awards conferred by these institutions in relevant programs. Due to different data collection periods, the most recent three-year period of available data is from 2019 to 2021. Between 2019 and 2021, non-community college institutions in the region conferred an average of 208 sub-baccalaureate awards. Sub-baccalaureate awards include associate degrees, postsecondary awards, and other academic awards.

Exhibit 7: Regional non-community college awards, 2019-2021

CIP	Program	Institution	2019-20 Awards	2020-21 Awards	2-Year Average
51.0907	Medical Radiologic Technology/Science - Radiation Therapist	Triad Education	74	68	<i>7</i> 1
	Radiologic Technology/Science - Radiographer	American Career College-Los Angeles	-	35	18
		Career Care Institute	52	42	47
51.0911		Charles R Drew Univ. of Medicine & Science	25	27	26
		Modern Technology School	50	43	47
		Supply Total/Average	201	215	208

Exhibit 8 shows the proportion of community college awards conferred in LA/OC compared to the number of non-community college awards for the programs in this report. About half of the awards conferred in these programs are awarded by community colleges in the LA/OC region.

Exhibit 8: Community College Awards Compared to Non-Community College Awards in LA/OC Region, 3-Year Average



Appendix A: Occupational demand and wage data by county

Exhibit 9. Los Angeles County

Occupation (SOC)	2022 Jobs	2027 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry- Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Radiologic Technologists and Technicians (29-2034)	4,972	5,424	453	9%	370	\$31.10	\$42.09	\$51.13
Magnetic Resonance Imaging Technologists (29-2035)	704	778	74	10%	58	\$38.24	\$51.11	\$60.66
Total	5,676	6,202	527	9%	428	-	-	-

Exhibit 10. Orange County

Occupation (SOC)	2022 Jobs	2027 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry- Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Radiologic Technologists and Technicians (29-2034)	1,675	1,905	230	14%	142	\$31.42	\$42.54	\$51.72
Magnetic Resonance Imaging Technologists (29-2035)	293	350	57	19%	30	\$40.30	\$53.88	\$63.87
Total	1,968	2,255	287	15%	172	-	-	-

Exhibit 11. Los Angeles and Orange Counties

Occupation (SOC)	2022 Jobs	2027 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	% Age 55 and older*	Typical Entry-Level Education
Radiologic Technologists and Technicians (29-2034)	6,647	7,330	683	10%	513	19%	Associate degree
Magnetic Resonance Imaging Technologists (29-2035)	997	1,127	130	13%	89	20%	Associate degree
Total	7,644	8,457	813	11%	601	-	-

^{*}The average percentage of workers aged 55 and older across all occupations in the greater LA/OC region is 27%. These occupations have a smaller share of older workers, which typically indicates fewer replacements needed to offset the amount of impending retirements.

Appendix B: 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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