

Labor Market Assessment: 1225.00 – Radiologic Technology

Medical Imaging (AS-T; Certificate)

Los Angeles County Center of Excellence, March 2022

Summary

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"/>	

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

- *Diagnostic medical sonographers (29-2032);*
- *Radiologic technologists and technicians (29-2034); and*
- *Magnetic resonance imaging technologists (29-2035).*

Middle-skill occupations typically require some postsecondary education, but less than a bachelor's degree.¹ 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 does not appear to be a supply gap in the region for the three occupations of interest. 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 these occupations.

¹ 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.

NOTE: 846 out of 1,211 awards (70%) were issued by non-community college institutions. With community colleges only issuing 365 awards, there may be an opportunity to attract a larger portion of prospective students to community colleges if program offerings are expanded.

In addition to all three occupations having entry-level wages that exceed the self-sufficiency standard wage in both Los Angeles and Orange counties, all three occupations have a typical entry-level education of an associate degree. **Due to some of the criteria being met, the COE endorses this proposed program.** Detailed reasons include:

Demand:

- **Supply Gap Criteria** – Over the next five years, there is projected to be **818 jobs available annually** in the region due to new job growth and replacements, **which is less than the 1,211 awards conferred annually** by educational institutions in the region.
 - **However, over the past 12 months there have been 4,402 online job postings related to the three occupations of interest.**
- **Living Wage Criteria** – In Los Angeles County, all three occupations have entry-level wages **above** the self-sufficiency standard wage (\$18.10/hour).²
- **Educational Criteria** – The Bureau of Labor Statistics (BLS) lists an associate degree as the typical entry-level education for the three occupations of interest.
 - National-level educational attainment data indicates that **between 48% and 68%** of incumbent workers have completed some college or an associate degree.

Supply:

- Between 2017 and 2020, **nine community colleges** in the LA/OC region issued awards in programs that have historically trained for the occupations of interest, conferring an average of **365 awards**.
- Between 2016 and 2019, non-community college institutions in the region conferred an average of **846 awards in relevant programs**.

² Self-Sufficiency Standard wage data was pulled from The Self-Sufficiency Standard Tool for California. For more information, visit: <http://selfsufficiencystandard.org/california>.

Occupational Demand

Exhibit 1 shows the five-year occupational demand projections for the three middle-skill occupations. In Los Angeles/Orange County, the number of jobs related to these occupations is projected to increase by 8% through 2025. There will be more than 800 job openings per year through 2025 due to job growth and replacements.

This report includes employment projection data by Emsi which uses EDD information. Emsi's projections are modeled on recorded (historical) employment figures and incorporate several underlying assumptions, including the assumption that the economy, during the projection period, will be at approximately full employment. To the extent that a recession or labor shock, such as the economic effects of COVID-19, can cause long-term structural change, it may impact the projections. At this time, it is not possible to quantify the full impact of COVID-19 on projections of industry and occupational employment. Therefore, the projections included in this report do not take the full impacts of COVID-19 into account.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties³

Geography	2020 Jobs	2025 Jobs	2020-2025 Change	2020-2025 % Change	Annual Openings
Los Angeles	6,889	7,367	477	7%	594
Orange	2,282	2,555	273	12%	224
Total	9,172	9,922	750	8%	818

Wages

The labor market endorsement in this report considers the hourly wages for the three middle-skill 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 LA/OC region. Detailed wage information, by county, is included in Appendix A.

Los Angeles County – All three occupations have entry-level wages above the self-sufficiency standard wage for one adult (\$18.10 in Los Angeles County). Typical entry-level hourly wages are in a range between \$35.01 and \$42.44, while experienced workers can expect to earn wages between \$52.32 and \$59.64.

Orange County – All three occupations have entry-level wages above the self-sufficiency standard wage for one adult (\$20.63 in Orange County). Typical entry-level hourly wages are in a range between \$34.48 and \$44.40, while experienced workers can expect to earn wages between \$51.63 and \$62.39.

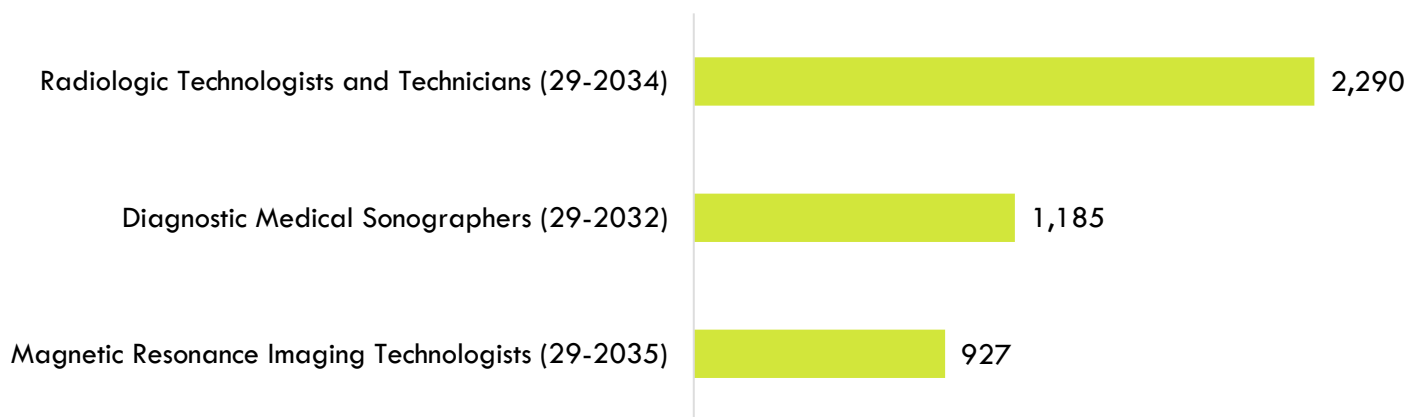
³ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

Job Postings

Over the past 12 months, there have been 4,402 online job postings related to the three occupations of interest. Exhibit 2 displays the number of job postings by occupation. The majority of job postings (52%) were for *radiologic technologists and technicians*. The highest number of job postings were for ultrasound technicians, radiologic technologists, MRI technologists, radiology technicians, and CT technicians. The top skills were radiology/radiologic technology, x-rays, ultrasound, patient care, and diagnostic imaging. The top employers, by number of job postings, in the region were RadNet, Aya Healthcare, and University of California.

It is important to note that the job postings data included in this section reflects online job postings listed in the past 12 months and does not yet demonstrate the full impact of COVID-19. While employers have generally posted fewer online job postings since the beginning of the pandemic, the long-term effects are currently unknown.

Exhibit 2: 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 the three occupations in this report. National-level educational attainment data indicates that between 48% and 68% of incumbent workers have completed some college or an associate degree.

Educational Supply

Community College Supply – Exhibit 3 shows the annual and three-year average number of awards conferred by community colleges in programs that have historically trained for the occupations of interest. The colleges with the most completions in the region are Cypress, Orange Coast, and LA City.

Exhibit 3: Regional community college awards (certificates and degrees), 2017-2020

TOP Code	Program	College	2017-18 Awards	2018-19 Awards	2019-20 Awards	3-Year Average
1212.00	Electro-Neurodiagnostic Technology	Orange Coast	20	-	22	14
		OC Subtotal	20	-	22	14
Supply Subtotal/Average			20	-	22	14
1215.00	Electro-cardiography	Glendale	-	-	42	14
		LA Pierce	-	-	43	14
		LA Subtotal	-	-	85	28
		Orange Coast	19	17	16	17
		OC Subtotal	19	17	16	17
Supply Subtotal/Average			19	17	101	46
1225.00	Radiologic Technology	El Camino	20	20	1	14
		LA City	91	63	39	64
		Long Beach	43	23	28	31
		Mt San Antonio	28	37	38	34
		Pasadena	25	29	19	24
		LA Subtotal	207	172	125	168
		Cypress	66	78	71	72
		Orange Coast	23	21	23	22
		OC Subtotal	89	99	94	94
Supply Subtotal/Average			296	271	219	262
1227.00	Diagnostic Medical Sonography	Cypress	29	23	26	26
		Orange Coast	15	20	18	18
		OC Subtotal	44	43	44	44
Supply Subtotal/Average			44	43	44	44
Supply Total/Average			379	331	386	365

Non-Community College Supply – For a comprehensive regional supply analysis, it is important to consider the supply from other institutions in the region that may provide training programs for the occupations of interest. Exhibit 4 shows 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 2016 to 2019. Between 2016 and 2019, non-community college institutions in the region conferred an average of 846 awards.

Exhibit 4: Regional non-community college awards, 2016-2019

CIP Code	Program	Institution	2016-17 Awards	2017-18 Awards	2018-19 Awards	3-Year Average
51.0907	Medical Radiologic Technology/Science - Radiation Therapist	West Coast Ultrasound Institute	94	127	124	115
51.0910	Diagnostic Medical Sonography/ Sonographer and Ultrasound Technician	American Medical Sciences Center	28	16	4	16
		ATI College-Norwalk	23	20	15	19
		Casa Loma College-Van Nuys	15	29	8	17
		CBD College	58	107	110	92
		Healthcare Career College	-	13	1	5
		Modern Technology School	31	14	23	23
		National Polytechnic College	31	17	17	22
		North-West College-Anaheim	25	24	11	20
		North-West College-Long Beach	21	29	13	21
		PCI College	25	43	24	31
		Platt College-Anaheim	-	19	80	33
		Platt College-Los Angeles	71	77	44	64
		West Coast Ultrasound Institute	248	128	130	169
51.0911	Radiologic Technology/Science - Radiographer	Career Care Institute	42	35	45	41
		Charles R Drew University of Medicine and Science	43	18	28	30
		Modern Technology School	50	42	64	52
51.0920	Magnetic Resonance Imaging (MRI) Technology/Technician	Career Networks Institute	31	27	22	27
		Casa Loma College-Van Nuys	10	51	34	32
		National Polytechnic College	19	20	20	20
Supply Total/Average			865	856	817	846

Appendix A: Occupational demand and wage data by county

Exhibit 5. Los Angeles County

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)
Diagnostic Medical Sonographers (29-2032)	1,943	2,108	165	8%	174	\$41.42	\$47.49	\$58.18
Radiologic Technologists and Technicians (29-2034)	4,122	4,394	272	7%	353	\$35.01	\$43.62	\$52.32
Magnetic Resonance Imaging Technologists (29-2035)	824	865	40	5%	67	\$42.44	\$50.80	\$59.64
Total	6,889	7,367	477	7%	594	-	-	-

Exhibit 6. Orange County

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)
Diagnostic Medical Sonographers (29-2032)	672	770	98	15%	70	\$42.21	\$48.42	\$59.34
Radiologic Technologists and Technicians (29-2034)	1,287	1,420	133	10%	122	\$34.48	\$43.01	\$51.63
Magnetic Resonance Imaging Technologists (29-2035)	323	365	42	13%	32	\$44.40	\$53.15	\$62.39
Total	2,282	2,555	273	12%	224	-	-	-

Exhibit 7. Los Angeles and Orange Counties

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Typical Entry-Level Education
Diagnostic Medical Sonographers (29-2032)	2,615	2,878	263	10%	244	Associate degree
Radiologic Technologists and Technicians (29-2034)	5,409	5,815	406	8%	474	Associate degree
Magnetic Resonance Imaging Technologists (29-2035)	1,148	1,229	81	7%	100	Associate degree
Total	9,172	9,922	750	8%	818	-

Appendix B: Sources

- O*NET Online
- Labor Insight/Jobs (Burning Glass)
- Economic Modeling Specialists, International (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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