

Program Endorsement Brief: 1225.00 – Radiologic Technology

Los Angeles/Orange County Center of Excellence, June 2021

| Summary | $\Delta n \alpha$ | VCIC |
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| Program Endorsement: | Endorsed: All Criteria Met | | Endorsed: Some Criteria Met | X | Not Endorsed | | |
|--|-------------------------------|-----------|--------------------------------|------|-----------------|--|--|
| | D | I = w = = | | | | | |
| | Program End | iorsen | ient Criteria | | | | |
| Supply Gap: | Yes 🗖 | | No ☑ (see comments below) | | | | |
| Living Wage: (Entry-Level, 25 th) | Yes 🗹 | No □ | | | | | |
| Education: | Yes ☑ | | | Ν | lo 🗆 | | |
| | Emerging | Occu | pation(s) | | | | |
| Yes | | | | No ☑ | | | |

The Los Angeles/Orange 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 one middle-skill occupation: radiologic technologists and technicians (29-2034). Middle-skill occupations typically require some postsecondary education, but less than a bachelor's degree. 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 occupation.

Based on the available data, there does not appear to be a supply gap for radiologic technologists and technicians in the region. However, the oversupply is within the COE's acceptable margin (25% over or under the number of annual job openings) and is therefore considered "supply met" rather than a "supply gap." In addition to radiologic technologists and technicians typically requiring an associate degree, entry-level wages exceed the living wage in Los Angeles County. Therefore, 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 372 jobs available annually in the region due to new job growth and replacements, which is less than the 409 awards conferred annually by educational institutions in the region.

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.

- The oversupply is within the COE's acceptable margin (25% over or under the number of annual job openings) and is therefore considered "supply met" rather than a "supply gap."
- Living Wage Criteria In Los Angeles County, the typical entry-level hourly wage for radiologic technologists and technicians is \$32.29, which is higher than the California Family Needs Calculator hourly wage (living wage) for one adult (\$15.04 in Los Angeles County).²
- Educational Criteria The Bureau of Labor Statistics (BLS) lists an associate degree as the typical entry-level education for radiologic technologists and technicians (29-2034).
 - National-level educational attainment data indicates 67% of workers in the field have completed some college or an associate degree.

Supply:

- Between 2017 and 2020, seven community colleges in the LA/OC region conferred an average of 262 awards in radiologic technology.
- Between 2016 and 2019, non-community college institutions in the region conferred an average of 147 awards in related training program(s).

Occupational Demand

Exhibit 1 shows the five-year occupational demand projections for radiologic technologists and technicians. In Los Angeles/Orange County, the number of jobs related to this occupation is projected to increase by 6% through 2024. There will be approximately 372 job openings per year through 2024 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 impact of COVID-19 on projections of industry and occupational employment. Therefore, the projections included in this report do not take the impacts of COVID-19 into account.

² Living wage data was pulled from California Family Needs Calculator on 7/1/2021. For more information, visit the California Family Needs Calculator website: https://insightcced.org/2018-family-needs-calculator/.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties³

| Geography | 2019 Jobs | 2024 Jobs | 2019-2024 Change | 2019-2024 % Change | Annual Openings |
|-------------|-----------|-----------|---------------------|-----------------------|--------------------|
| Los Angeles | 4,607 | 4,867 | 260 | 6% | 280 |
| Orange | 1,430 | 1,531 | 102 | 7% | 92 |
| Total | 6,036 | 6,398 | 362 | 6% | 372 |

Wages

The labor market endorsement in this report considers the hourly wages for *radiologic* technologists and technicians in Los Angeles County, as they relate to the county's living 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 – The typical entry-level hourly wage for radiologic technologists and technicians is \$32.29, which is above the living wage for one adult (\$15.04 in Los Angeles County). Experienced workers can expect to earn approximately \$48.69/hour, which is also higher than the living wage estimate.

Orange County – The typical entry-level hourly wage for radiologic technologists and technicians is \$31.86, which is above the living wage for one adult (\$17.36 in Orange County). Experienced workers can expect to earn approximately \$48.12/hour, which is also higher than the living wage estimate.

Job Postings

Over the past 12 months, there have been 1,450 online job postings for radiologic technologists and technicians. The highest number of job postings were for travel radiology technician/x-ray, mammography technician, and radiologic technician. The top skills were radiology, radiologic technology, and x-rays. The top employers, by number of job postings, in the region were Healthcare Traveler Allied Health, Radnet, and Memorial Care Health System.

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 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.

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.

Educational Attainment

The Bureau of Labor Statistics (BLS) lists an associate degree as the typical entry-level education for radiologic technologists and technicians (29-2034). Furthermore, national-level educational attainment data indicates 67% of workers in the field have completed some college or an associate degree. Of the 44% of job postings listing a minimum education requirement in Los Angeles/Orange County, 94% (604) requested an associate degree, and 6% (36) requested a bachelor's degree.

Educational Supply

Community College Supply – Exhibit 2 shows the annual and three-year average number of awards conferred in Radiologic Technology (1225.00). The colleges with the most completions in the region are Cypress, LA City, and Mt. San Antonio. Over the past 12 months, there were no other related program recommendation requests from regional community colleges.

Exhibit 2: Regional community college awards (certificates and degrees), 2017-2020

| ТОР | Program | Colleges | 2017-18 Awards | 2018-19 Awards | 2019-20 Awards | 3-Year Average |
|---------|-------------------------------|----------------|-------------------|-------------------|-------------------|-------------------|
| | El Camino | 20 | 20 | 1 | 14 | |
| | | LA City | 91 | 63 | 39 | 64 |
| | 1225.00 Radiologic Technology | Long Beach | 43 | 23 | 28 | 31 |
| | | Mt San Antonio | | 37 | 38 | 34 |
| 1225.00 | | Pasadena | 25 | 29 | 19 | 24 |
| | | LA Subtotal | 207 | 172 | 125 | 168 |
| | | Cypress | 66 | 78 | 71 | 72 |
| | | Orange Coast | | 21 | 23 | 22 |
| | | OC Subtotal | 89 | 99 | 94 | 94 |
| | Supp | 296 | 271 | 219 | 262 | |

Non-Community College Supply – It is important to consider the supply from non-community college institutions in the region that provide training programs for radiologic technology. Exhibit 3 shows the annual and three-year average number of awards conferred by these institutions in the related Classification of Instructional Programs (CIP) Code: 51.0911 – Radiologic Technology/ Science Radiographer. 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 147 awards.

Exhibit 3: Regional non-community college awards, 2016-2019

| CIP | Program | Institution | 2016-17 Awards | 2017- 18 Awards | 2018- 19 Awards | 3-Year Average |
|---------|--|---|-------------------|--------------------|--------------------|-------------------|
| | California State University- Northridge | 24 | 27 | 23 | 25 | |
| | Radiologic Technology/ Science Radiographer | Career Care Institute | 42 | 35 | 45 | 41 |
| 51.0911 | | Charles R Drew University of Medicine and Science | 43 | 18 | 28 | 30 |
| | | Modern Technology School | 50 | 42 | 64 | 52 |
| | S | upply Total/Average | 159 | 122 | 160 | 147 |

Appendix A: Occupational demand and wage data by county

Exhibit 4. Los Angeles County

| Occupation (SOC) | 2019 Jobs | 2024 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) |
|--|--------------|--------------|----------------|------------------|--------------------|---|------------------------------|---|
| Radiologic Technologists and Technicians (29-2034) | 4,607 | 4,867 | 260 | 6% | 280 | \$32.29 | \$39.56 | \$48.69 |
| Total | 4,607 | 4,867 | 260 | 6 % | 280 | | | |

Exhibit 5. Orange County

| Occupation (SOC) | 2019 Jobs | 2024 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) | 1,430 | 1,531 | 102 | 7% | 92 | \$31.86 | \$39.07 | \$48.12 |
| Total | 1,430 | 1,531 | 102 | 7% | 92 | | | |

Exhibit 6. Los Angeles and Orange Counties

| Occupation (SOC) | | 2019 Jobs | 2024 Jobs | 5-Yr Change | 5-Yr % Change | Annual Openings | Typical Entry-Level Education |
|--|-------|--------------|--------------|----------------|------------------|--------------------|----------------------------------|
| Radiologic Technologists and Technicians (29-2034) | | 6,036 | 6,398 | 362 | 6% | 372 | Associate degree |
| | Total | 6,036 | 6,398 | 362 | 6% | 372 | |

Appendix B: Sources

- O*NET Online
- Labor Insight/Jobs (Burning Glass)
- Economic Modeling Specialists, International (Emsi)
- Bureau of Labor Statistics (BLS)
- Employment Development Department, Labor Market Information Division, OES
- California Community Colleges Chancellor's Office Management Information Systems (MIS)
- California Family Needs Calculator, Insight Center for Community Economic Development
- Chancellor's Office Curriculum Inventory (COCI 2.0)

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