

Diagnostic Medical Sonographers Labor Market Analysis: San Diego County

September 2018

Summary

According to available labor market information, there is a small demand for more Diagnostic Medical Sonographers. This occupation has less labor market demand in San Diego County than the average occupation. The average regional demand for an occupation is 275 annual job openings. *Diagnostic Medical Sonographers* has a labor market demand of 53 annual job openings. However, this occupation's entry-level wages and median earnings are higher than the Self-Sufficiency Standard, suggesting that students who successfully complete a program and obtain employment will earn living wages. With only one related training program found in California, the San Diego region could benefit from a small cohort program for Diagnostic Medical Sonography (122700).

The following list summarizes findings from the labor market analysis for *Diagnostic Medical Sonographers*:

- Between 2017 and 2022, *Diagnostic Medical Sonographers* are projected to increase by 113 jobs or 21 percent.
- Employers in San Diego County will need to hire 53 workers annually to fill new jobs and backfill jobs due to attrition such as retirement or turnover.
- Between 2010 and 2017, there was an average of 157 online job postings per year for *Diagnostic Medical Sonographers* in San Diego County.
- *Diagnostic Medical Sonographers* earn median hourly earnings of \$45.75; this is more than the Self-Sufficiency Standard for a single adult in San Diego County, which is \$13.09 per hour.
- According to the California Community Colleges Chancellor's Office Management Information System (MIS) Data Mart, there is one Taxonomy of Programs (TOP) code associated with this occupation: Diagnostic Medical Sonography (122700).
- According to TOP data, no colleges supply the region with awards for this occupation. The University of California San Diego (UCSD) has a Diagnostic Sonography program. San Diego Mesa College is expected to start a Diagnostic Medical Sonography program in 2019.
- Comparing labor demand (annual openings) with labor supply suggests that there is a supply gap for this occupation in San Diego County, with 53 annual openings and no awards. Comparatively, there are 553 annual openings in California and 87 completions.

- Between January 1, 2015 and December 31, 2017, the top five employers in San Diego County for this occupation were Scripps Health, Providence Health & Services, Sharp Healthcare, Kaiser Permanente and University of California.
- The typical entry-level education is an associate degree.

This report provides labor market information in San Diego County for the following occupational code in the Standard Occupational Classification (SOC)¹ system:

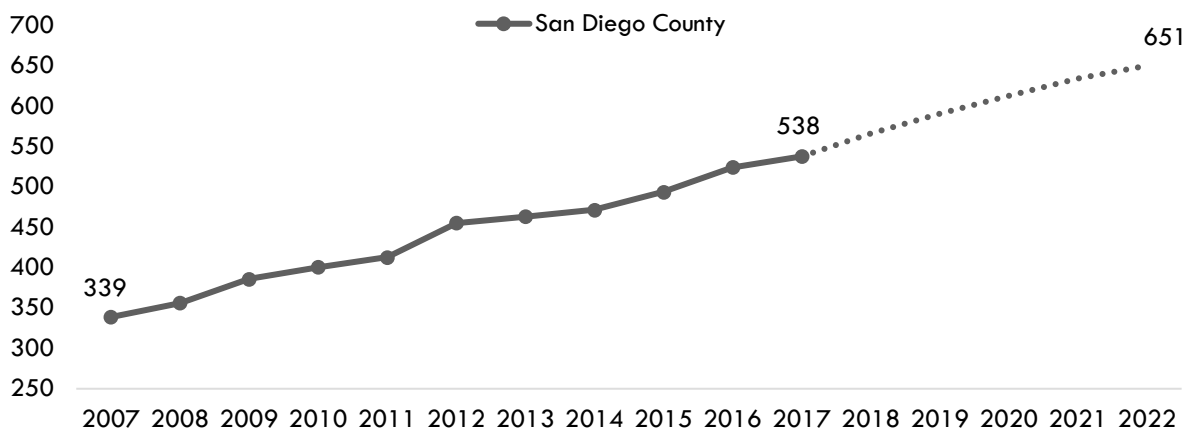
Diagnostic Medical Sonographers (SOC 29-2032): Produce ultrasonic recordings of internal organs for use by physicians. Sample reported job titles include:

- | | |
|--|---|
| • Ultrasound Technologist | • Diagnostic Medical Sonographer |
| • Sonographer | • Cardiac/Vascular Sonographer |
| • Ultrasound Technician | • Vascular Sonographer |
| • Ultrasonographer | • Staff Sonographer |
| • Registered Diagnostic Medical Sonographer (RDMS) | • Registered Diagnostic Cardiac Sonographer |

Projected Occupational Demand

Between 2017 and 2022, *Diagnostic Medical Sonographers* are projected to increase by 113 jobs or 21 percent (Exhibit 1). Employers in San Diego County will need to hire 53 workers annually to fill new jobs and backfill jobs due to attrition such as retirement or turnover.

Exhibit 1: Number of Jobs for *Diagnostic Medical Sonographers* (2007-2022)²



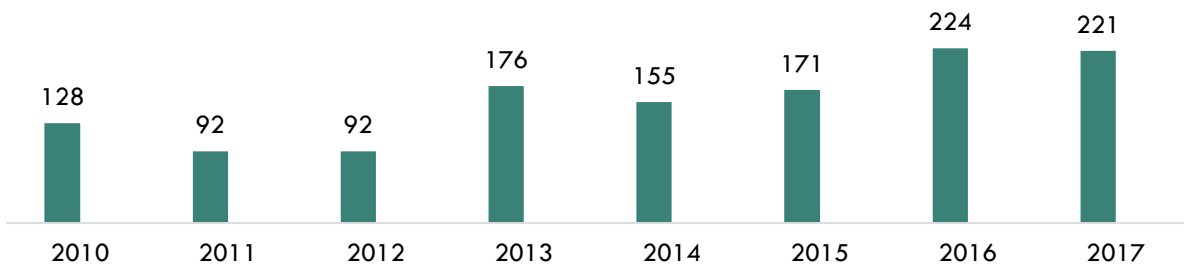
¹ The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. bls.gov/soc.

² Economic Modeling Specialists, Int'l. (EMSI). San Diego (6073). 2018.03 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2007-2022.

Online Job Postings

Between 2010 and 2017, there was an average of 157 online job postings per year for *Diagnostic Medical Sonographers* in San Diego County (Exhibit 2).

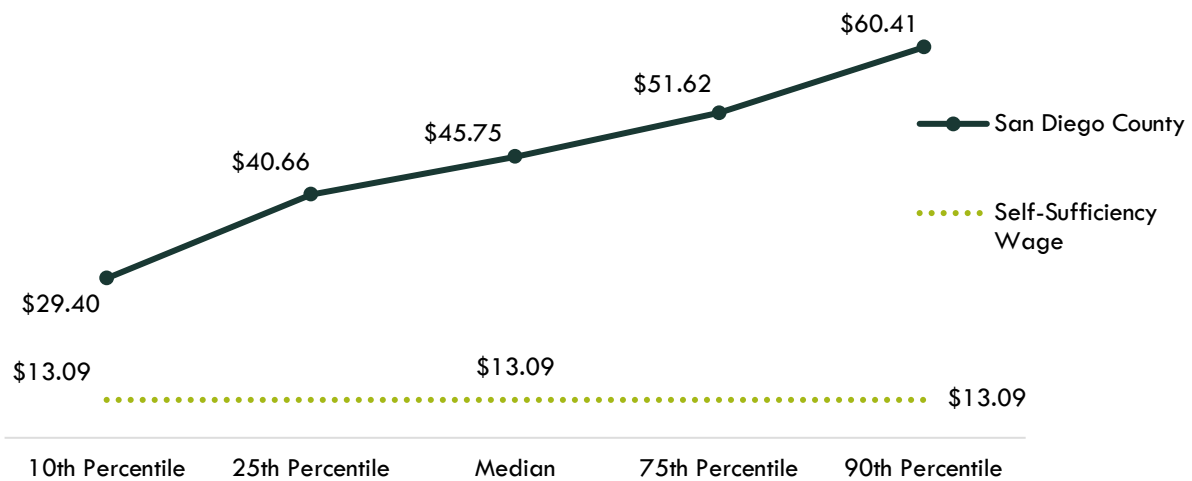
Exhibit 2: Number of Online Job Postings for *Diagnostic Medical Sonographers* in San Diego County (2010-2017)³



Earnings

Diagnostic Medical Sonographers earn median hourly earnings of \$45.75; this is more than the Self-Sufficiency Standard for a single adult in San Diego County, which is \$13.09 per hour (Exhibit 3).⁴

Exhibit 3: Hourly Earnings for *Diagnostic Medical Sonographers* in San Diego County⁵



³ Labor Insight Jobs. Burning Glass Technologies. San Diego, CA. Full years 2010-2017.

⁴ The self-sufficiency wage in San Diego for one adult is \$13.09 (insightcced.org/tools-metrics/self-sufficiency-standard-tool-for-california).

⁵ EMSI. San Diego (6073). 2018.03 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2017-2022.

Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of related program completers/graduates/awards in San Diego County. According to the California Community Colleges Chancellor's Office Management Information System (MIS) Data Mart, there is **one** Taxonomy of Programs (TOP) code associated with this occupation: 122700: Diagnostic Medical Sonography (Exhibit 4).

Exhibit 4: Related TOP Code in San Diego County

SOC 29-2032: Diagnostic Medical Sonographers

TOP 122700: Diagnostic Medical Sonography

According to TOP data, no colleges supply the region with awards for this occupation (Exhibit 5). The University of California San Diego (UCSD) has a Diagnostic Sonography program, but no awards were reported.⁶ San Diego Mesa College is expected to start a Diagnostic Medical Sonography program in 2019.⁷

Exhibit 5: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions (Program Year 2013-14 through PY2016-17 Average)

TOP6	TOP6 Title	3-Yr Annual Average CC Awards (PY14-15 to PY16-17)	Other Educational Institutions 3-Yr Annual Average Awards (PY13-14 to PY15-16)	3-Yr Total Average Supply (PY13-14 to PY16-17)
122700	Diagnostic Medical Sonography	0	0	0
			Total	0

⁶ University of California San Diego Diagnostic Medical Sonography Program. radtech.ucsd.edu/Rad2/Ultra.htm

⁷ San Diego Mesa College Diagnostic Medical Sonography Program. sdmesa.edu/academics/schools-departments/diagnostic-medical-sonography/index.shtml.

Demand vs. Supply

Comparing labor demand (annual openings) with labor supply⁸ suggests that there is a **supply gap** for this occupation in San Diego County, with **53** annual openings and no awards. Comparatively, there are **553** annual openings in California and **87** completions⁹ (Exhibit 6).

Exhibit 6: Labor Demand (Annual Openings) Compared to Labor Supply (Average Annual Awards)

Community Colleges and Other Postsecondary Educational Institutions	Demand (Annual Openings)	Supply (Total Annual Average Supply)	Supply Gap or Oversupply
San Diego	53	0	53
California	553	87	466

Please note: This is a basic analysis of supply and demand of labor. This data should be used to discuss the potential gaps or oversupply of workers; however, it should not be the only basis for determining whether or not a program should be developed. Additionally, the data does not include workers who are currently in the labor force who could fill these positions or workers who are not captured by publicly available data.

Student Outcomes

Based on information in the CTE LaunchBoard, students who took courses in the related TOP codes exhibited the following outcomes (Exhibit 7).

Exhibit 7: Strong Workforce Program Metrics for TOP 122700: Diagnostic Medical Sonographers in the San Diego-Imperial Region (PY2015-16)

Metric	San Diego-Imperial	California
Number of course enrollments ¹⁰	N/A	1,416
Completed 12+ CTE Units in One Year ¹¹	N/A	168
Completed 48+ CTE Contact Hours in One Year ¹²	N/A	0

⁸ Labor supply can be found from two different sources: EMSI or the California Community Colleges Chancellor's Office MIS Data Mart. EMSI uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.

⁹ EMSI. San Diego (6073). 2018.03 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2017-2022.

¹⁰ The number of enrollments in courses assigned to the TOP code in the selected year.

¹¹ The number of students who completed 12 or more credit CTE units.

¹² The number of students who completed 48 or more noncredit CTE instructional contact hours.

Metric	San Diego-Imperial	California
Number of students who got a degree or certificate ¹³	N/A	78
Number of students who transferred ¹⁴	N/A	N/A
Employed in the second fiscal quarter after exit ¹⁵	N/A	89%
Employed in the fourth fiscal quarter after exit ¹⁶	N/A	87%
Job closely related to field of study ¹⁷	N/A	N/A
Median earnings in the second fiscal quarter after exit ¹⁸	N/A	\$19,149
Median change in earnings ¹⁹	N/A	206%
Attained a living wage ²⁰	N/A	84%

Top Employers and Work Locations

Between January 1, 2015 and December 31, 2017, the top five employers in San Diego County for this occupation were [Scripps Health](#), [Providence Health & Services](#), [Sharp Healthcare](#), [Kaiser Permanente](#) and [University of California](#) (Exhibit 8).

Exhibit 8: Top Employers in San Diego County for *Diagnostic Medical Sonographers*

Top Employers	
<ul style="list-style-type: none"> • Scripps Health • Providence Health & Services • Sharp Healthcare • Kaiser Permanente • University of California 	<ul style="list-style-type: none"> • Sutter Health • UC San Diego Health System • Rady Children's Hospital • Graybill Medical Group • Tri City Medical Center

¹³ The number of unduplicated students who earned a locally-issued certificate, Chancellor's Office approved certificate, associate degree, and/or California Community Colleges bachelor's degree in the selected TOP code.

¹⁴ Students who took non-introductory courses or completed a California Community Colleges Chancellor's Office award in the selected TOP code in selected year who subsequently enrolled for the first time in a four-year institution the following year.

¹⁵ Among all exiters with a valid SSN, the percentage who were employed two quarters after exiting California Community Colleges.

¹⁶ Among exiting students with a valid SSN, the percentage who were employed four quarters after exiting California Community Colleges.

¹⁷ Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study.

¹⁸ Among exiting students, the median second-quarter earnings one year after the year in which they exited California Community Colleges.

¹⁹ Among exiting students with a valid SSN, the percentage change in earnings one year before and one year after exiting California Community Colleges.

²⁰ Among completers and skills builders who exited, the proportion of students who attained a living wage.

Skills, Education and Certifications

Exhibit 9 indicates the educational attainment for the occupation found currently in the national labor force. There is no typical on-the-job training for this profession. The typical entry-level education is an [associate degree](#).²¹

Exhibit 9: National Educational Attainment of *Diagnostic Medical Sonographers* ²²

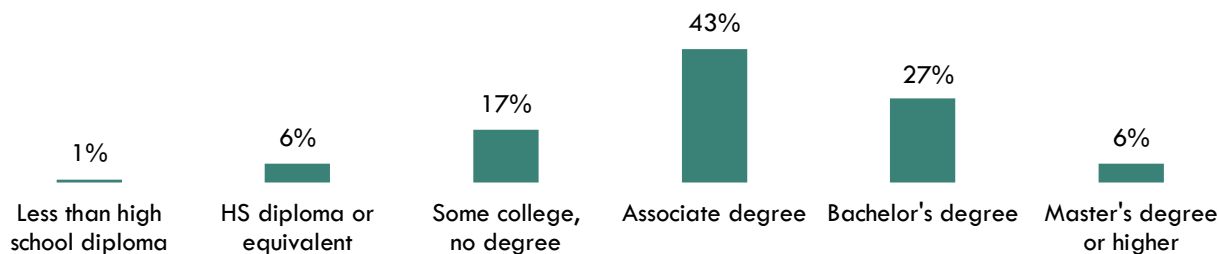


Exhibit 10 lists the top specialized, soft and software skills that appeared in online job postings between January 1, 2015 and December 31, 2017.

Exhibit 10: Top Skills for *Diagnostic Medical Sonographers* in San Diego County²³

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"> • Ultrasound • Radiology • Obstetrics/Gynecology • Patient Care • Customer Contact 	<ul style="list-style-type: none"> • Communication Skills • Computer Literacy • English • Typing • Teamwork / Collaboration 	<ul style="list-style-type: none"> • Microsoft Excel • Microsoft Access • Microsoft PowerPoint • Microsoft Windows • Microsoft Word

Tina Ngo Bartel, Director

John Edwards, Research Analyst

San Diego-Imperial Center of Excellence

tngobartel@miracosta.edu

jedwards@miracosta.edu



²¹ EMSI. San Diego (6073). 2018.03 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2017-2022.

²² Bureau of Labor Statistics, Educational attainment for workers 25 years and older by detailed occupation. bls.gov/emp/ep_table_111.htm.

²³ Labor Insight Jobs. Burning Glass Technologies. San Diego, CA. Full years 2015-2017.

Important Disclaimers

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. This study examines the most recent data available at the time of the analysis; however, data sets are updated regularly and may not be consistent with previous reports. Efforts have been made to qualify and validate the accuracy of the data and the report findings; however, neither the Centers of Excellence for Labor Market Research (COE), COE host district, nor California Community Colleges Chancellor's Office are responsible for the applications or decisions made by individuals and/or organizations based on this study or its recommendations.