

Health Technologists and Technicians, All Other Labor Market Analysis: San Diego County

June 2018

Summary

The following list summarizes findings from the labor market analysis below for *Health Technologists and Technicians, All Other*:

- Between 2017 and 2022, *Health Technologists and Technicians, All Other* are projected to increase by 481 jobs or 24 percent.
- Employers in San Diego County will need to hire 232 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 609 online job postings per year for *Health Technologists and Technicians, All Other* in San Diego County.
- *Health Technologists and Technicians, All Other* earn median hourly earnings of \$20.86; 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 are four Taxonomy of Programs (TOP) codes associated with this occupation: 121100: Polysomnography, 121200: Electro-Neurodiagnostic Technology, 121400: Orthopedic Assistant and 121700: Surgical Technician.
- According to the TOP data, three colleges supply the region with awards for this occupation: Grossmont College, MiraCosta College and Southwestern College.
- Comparing labor demand (annual openings) with labor supply suggests that there is a supply gap for this occupation in San Diego County, with 232 annual openings and 50 awards. Comparatively, there are 2,817 annual openings in California and 80 completions.
- Between January 1, 2015 and December 31, 2017, the top five employers in San Diego County for this occupation were Scripps Health, Sharp Healthcare, Palomar Health, Prime Healthcare Services and Laboratory Corporation of America.
- The typical entry-level education is a post-secondary non-degree award.

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

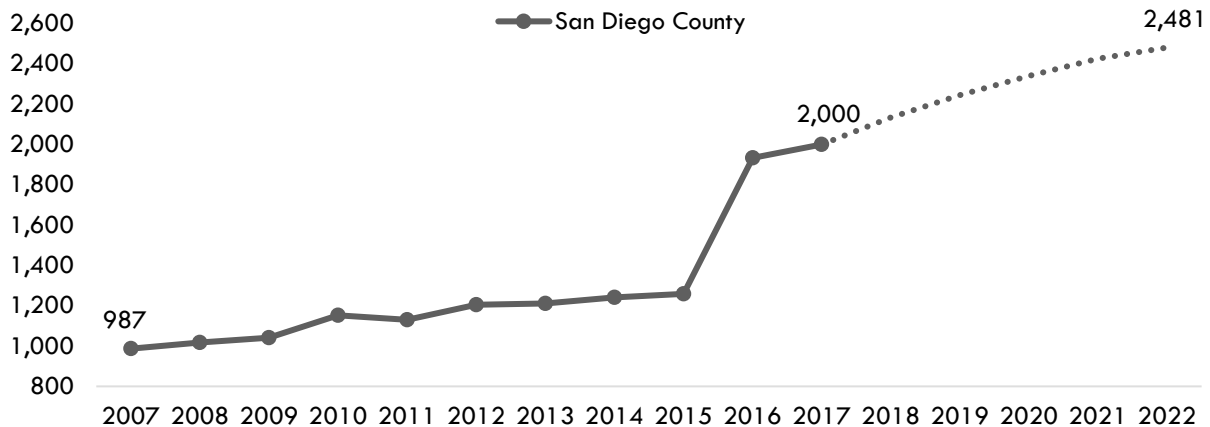
Health Technologists and Technicians, All Other (SOC 29-2099): All health technologists and technicians not listed separately. "All Other" titles represent occupations with a wide range of characteristics which do not fit into one of the detailed O*NET-SOC occupations. (O*NET OnLine was developed for the U.S. Department of Labor to collect and disseminate data on occupations.) O*NET data is not available for this type of title. Sample reported job titles include:

- Electroneurodiagnostic Technologist
- Senior Technologist
- Ophthalmic Technologist (Ophthalmic Tech)
- Ophthalmic Medical Technologist
- X-Ray Technician (X-Ray Tech)
- Radiology Technician (Radiology Tech)
- Surgical First Assistant
- Surgical Assistant

Projected Occupational Demand

Between 2017 and 2022, *Health Technologists and Technicians, All Other* are projected to increase by **481** jobs or **24** percent (Exhibit 1). Employers in San Diego County will need to hire **232** workers annually to fill new jobs and backfill jobs due to attrition such as retirement or turnover.

Exhibit 1: Number of Jobs for *Health Technologists and Technicians, All Other* (2007-2022)²



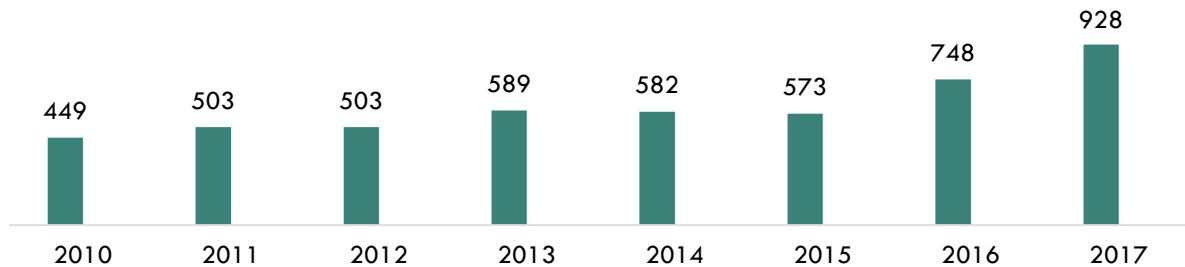
¹ The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. [bls.gov/soc](https://www.bls.gov/soc/).

² Economic Modeling Specialists, Int'l. (EMSI). San Diego (6073). 2018.02 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2007-2022.

Online Job Postings

Between 2010 and 2017, there was an average of 609 online job postings per year for *Health Technologists and Technicians, All Other* in San Diego County (Exhibit 2).

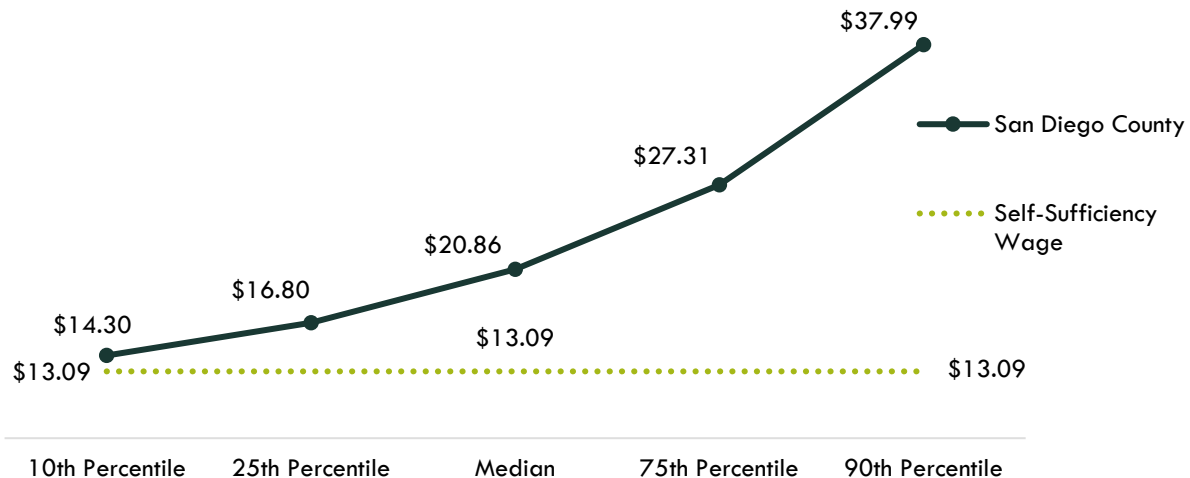
Exhibit 2: Number of Online Job Postings for *Health Technologists and Technicians, All Other* in San Diego County (2010-2017)³



Earnings

Health Technologists and Technicians, All Other earn median hourly earnings of \$20.86; 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 *Health Technologists and Technicians, All Other* in San Diego County⁵



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

⁴ The self-sufficient 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). 2018.02 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 are **four** Taxonomy of Programs (TOP) codes associated with this occupation: 121100: Polysomnography, 121200: Electro-Neurodiagnostic Technology, 121400: Orthopedic Assistant and 121700: Surgical Technician (Exhibit 4).

Exhibit 4: Related TOP Codes in San Diego County

SOC 29-2099: Health Technologists and Technicians, All Other

TOP 121100: Polysomnography

TOP 121200: Electro-Neurodiagnostic Technology

TOP 121400: Orthopedic Assistant

TOP 121700: Surgical Technician

According to the TOP data, **three** colleges supply the region with awards for this occupation: **Grossmont College, MiraCosta College and Southwestern College** (Exhibit 5).

Exhibit 5: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions by Occupation (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)
121100	Polysomnography	0	0	0
121200	Electro-Neurodiagnostic Technology	0	0	0
121400	Orthopedic Assistant	22	0	0
	• Grossmont	22	0	22
121700	Surgical Technician	28	0	28
	• MiraCosta	13	0	
	• Southwestern	15	0	
			Total	50

Demand vs. Supply

Comparing labor demand (annual openings) with labor supply⁶ suggests that there is a **supply gap** for this occupation in San Diego County, with **232** annual openings and **50** awards. Comparatively, there are **2,817** annual openings in California and **80** completions⁷ (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	232	50	182
California	2,817	80	2,737

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 the information available 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 121200: Electro-Neurodiagnostic Technology in the San Diego-Imperial Region (PY2015-16)

Metric	San Diego-Imperial	California
Number of course enrollments ⁸	N/A	201
Completed 12+ CTE Units in One Year ⁹	N/A	30
Completed 48+ CTE Contact Hours in One Year ¹⁰	N/A	0

⁶ 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.

⁷ EMSI. San Diego (6073). 2018.02 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2017-2022.

⁸ The number of enrollments in courses assigned to the TOP code in the selected year.

⁹ The number of students who completed 12 or more credit CTE units.

¹⁰ 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 ¹¹	N/A	14
Number of students who transferred ¹²	N/A	0
Employed in the second fiscal quarter after exit ¹³	N/A	92%
Employed in the fourth fiscal quarter after exit ¹⁴	N/A	92%
Job closely related to field of study ¹⁵	N/A	N/A
Median earnings in the second fiscal quarter after exit ¹⁶	N/A	\$14,902
Median change in earnings ¹⁷	N/A	352%
Attained a living wage ¹⁸	N/A	100%

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](#), [Sharp Healthcare](#), [Palomar Health](#), [Prime Healthcare Services](#) and [Laboratory Corporation of America](#) (Exhibit 8).

Exhibit 8: Top Employers in San Diego County for Health Technologists and Technicians, All Other

Top Employers	
<ul style="list-style-type: none"> • Scripps Health • Sharp Healthcare • Palomar Health • Prime Healthcare Services • Laboratory Corporation of America • Garden City Hospital • Providence Health & Services 	<ul style="list-style-type: none"> • University of California San Diego • Atria Senior Living • Kaiser Permanente • Sutter Health • Yavapia Regional Medical Center • Rady Children's Hospital

¹¹ 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.

¹² 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.

¹³ Among all exiters with a valid SSN, the percentage who were employed two quarters after exiting California Community Colleges.

¹⁴ Among exiting students with a valid SSN, the percentage who were employed four quarters after exiting California Community Colleges.

¹⁵ Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study.

¹⁶ Among exiting students, the median second-quarter earnings one year after the year in which they exited California Community Colleges.

¹⁷ Among exiting students with a valid SSN, the percentage change in earnings one year before and one year after exiting California Community Colleges.

¹⁸ 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 a **post-secondary non-degree award**.¹⁹

Exhibit 9: National Educational Attainment of Health Technologists and Technicians, All Other ²⁰

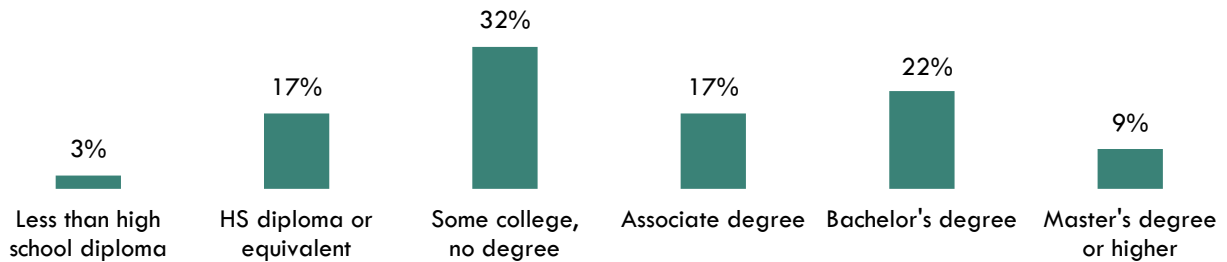


Exhibit 10 lists the top specialized and soft skills that appeared in online job postings for between January 1, 2015 and December 31, 2017.

Exhibit 10: Top Skills for Health Technologists and Technicians, All Other in San Diego County²¹

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"> • Patient Care • Radiology • Cardiopulmonary Resuscitation (CPR) • Cleaning • Life Support 	<ul style="list-style-type: none"> • Communication Skills • Computer Literacy • English • Organizational Skills • Teamwork / Collaboration 	<ul style="list-style-type: none"> • Microsoft Excel • Microsoft PowerPoint • Microsoft Access • Microsoft Word • Linux

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¹⁹ EMSI. San Diego (6073). 2018.02 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2017-2022.

²⁰ Bureau of Labor Statistics, Educational attainment for workers 25 years and older by detailed occupation. [bls.gov/emp/ep_table_111.htm](https://www.bls.gov/emp/ep_table_111.htm).

²¹ 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