

Audio and Video Equipment Technicians Labor Market Analysis: San Diego County

March 2018

Summary

The following list summarizes findings from the labor market analysis below for *Audio and Video Equipment Technicians*:

- Between 2017 and 2022, *Audio and Video Equipment Technicians* are projected to increase by 47 jobs or five percent.
- Employers in San Diego County will need to hire 93 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 111 online job postings per year for *Audio and Video Equipment Technicians* in San Diego County.
- *Audio and Video Equipment Technicians* earn median hourly earnings of \$17.98, 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 three Taxonomy of Programs (TOP) codes associated with this occupation: TOP 060400: Radio and Television, 060420: Television (including combined TV/film/video), and 100500: Commercial Music.
- According to the TOP data, six colleges supply the region with awards for this occupation: Palomar College, San Diego City College, San Diego Miramar College, Grossmont College, Southwestern College, and MiraCosta College.
- Comparing labor demand (annual openings) with labor supply suggests that there is a supply gap for this occupation in San Diego County, with 93 annual openings and 84 awards. Comparatively, there are 2,065 annual openings in California and 1,133 completions.
- Between January 1, 2015 and December 31, 2017, the top five employers in San Diego County for this occupation were Psav Presentation Services, Westin, Freeman, Avdb Group, and Psav.
- The typical on-the-job training for this profession is short-term on-the-job training. 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:

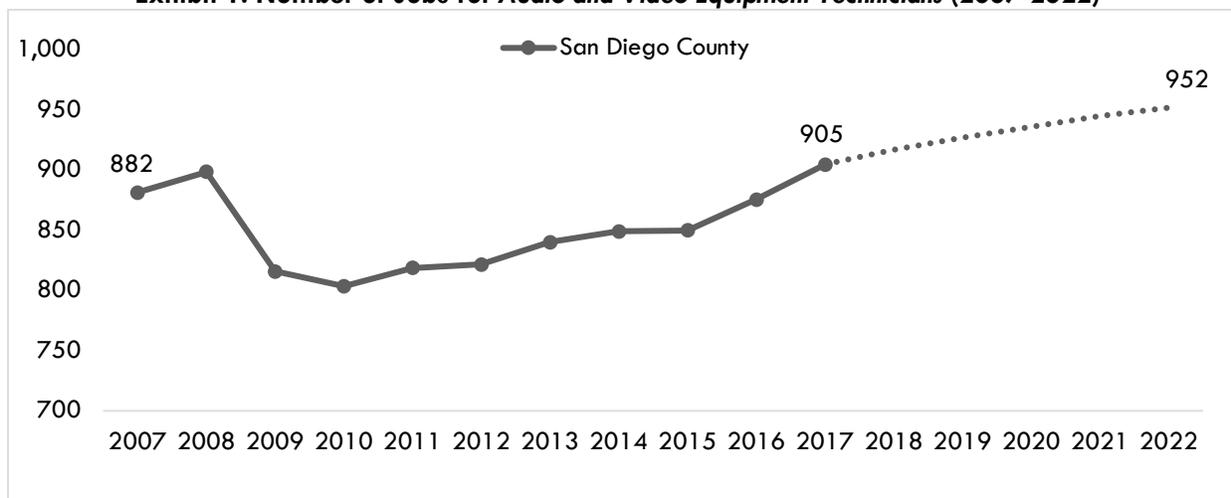
Audio and Video Equipment Technicians (SOC 27-4011): Set up, or set up and operate audio and video equipment including microphones, sound speakers, video screens, projectors, video monitors, recording equipment, connecting wires and cables, sound and mixing boards, and related electronic equipment for concerts, sports events, meetings and conventions, presentations, and news conferences. May also set up and operate associated spotlights and other custom lighting systems. Excludes "Sound Engineering Technicians" (27-4014). Sample reported job titles include:

- Audio Visual Technician
- Audio Technician
- Videographer
- Video Technician
- Video Editor
- Television Technician
- Technical Director
- Technical Assistant
- Stagehand
- Radio Producer

Projected Occupational Demand

Between 2017 and 2022, *Audio and Video Equipment Technicians* are projected to **increase** by **47** jobs or **five** percent (Exhibit 1). Employers in San Diego County will need to hire **93** workers annually to fill new jobs and backfill jobs due to attrition such as retirement or turnover.

Exhibit 1: Number of Jobs for Audio and Video Equipment Technicians (2007-2022)²



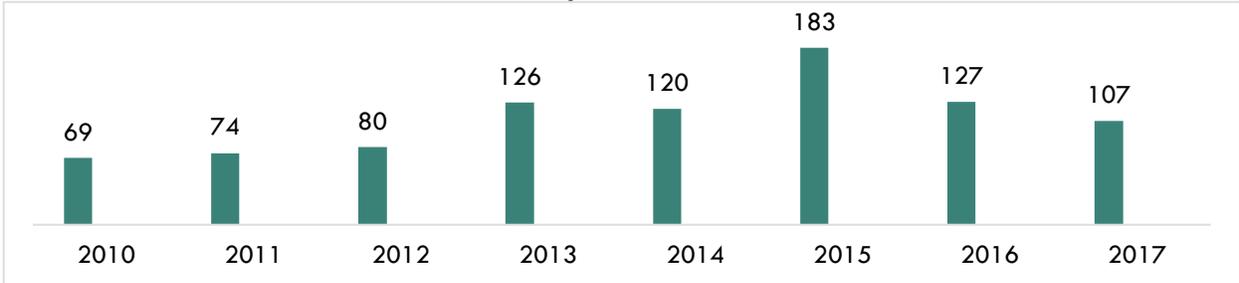
¹ The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. [bls.gov/soc](https://www.bls.gov/soc/).

² Economic Modeling Specialists, Int'l. (EMSI). San Diego (6073). 2018.01 Class of Worker. QCEW + Non-QCEW+ Self-employed. 2007-2022.

Online Job Postings

Between 2010 and 2017, there was an average of 111 online job postings per year for *Audio and Video Equipment Technicians* in San Diego County (Exhibit 3).

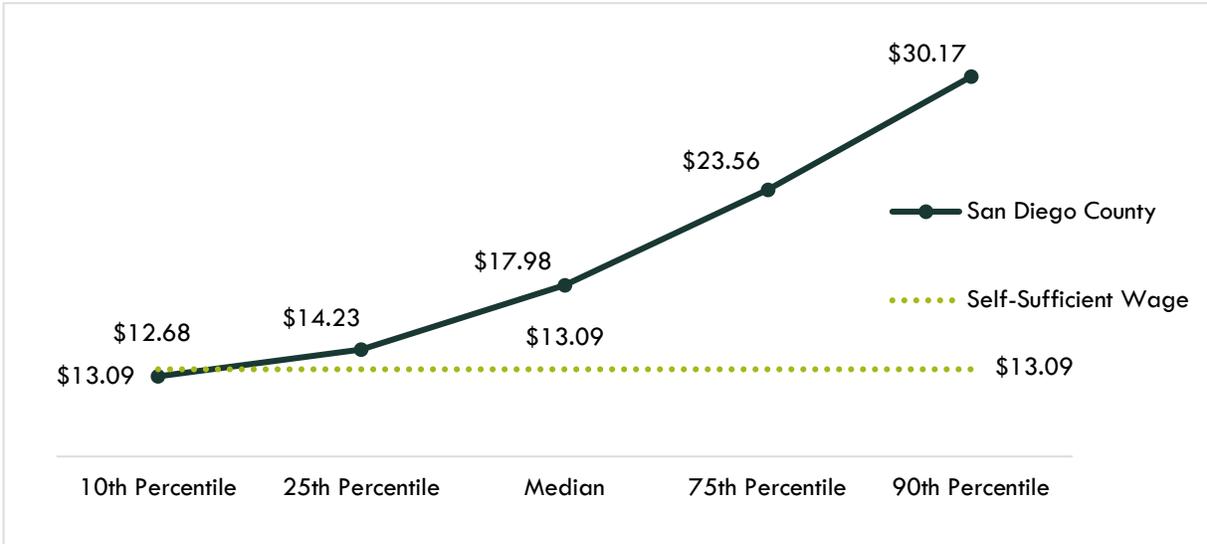
Exhibit 3: Number of Online Job Postings for Audio and Video Equipment Technicians in San Diego County (2010-2017)³



Earnings

Audio and Video Equipment Technicians earn median hourly earnings of \$17.98, more than the Self-Sufficiency Standard for a single adult in San Diego County, which is \$13.09 per hour (Exhibit 4).⁴

Exhibit 4: Hourly Earnings for Audio and Video Equipment Technicians 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 (insightccd.org/tools-metrics/self-sufficiency-standard-tool-for-california).
⁵ EMSI. San Diego (6073). 2018.01 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 **three** Taxonomy of Programs (TOP) codes associated with this occupation: TOP 060400: Radio and Television, 060420: Television (including combined TV/film/video), and 100500: Commercial Music (Exhibit 5).

Exhibit 5: Related TOP Codes in San Diego County

SOC 27-4011: Audio and Video Equipment Technicians

TOP 060400: Radio and Television

TOP 060420: Television (including combined TV/film/video)

TOP 100500: Commercial Music

According to the TOP data, **six** colleges supply the region with awards for this occupation: **Palomar College, San Diego City College, San Diego Miramar College, Grossmont College, Southwestern College, and MiraCosta College** (Exhibit 6).

Exhibit 6: 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)
060400	Radio and Television	37	0	37
	• Palomar	15	0	
	• San Diego City	12	0	
	• Southwestern	10	0	
060420	Television (including combined TV/film/video)	15	0	15
	• Grossmont	14	0	
	• Southwestern	1	0	

100500	Commercial Music	32	0	32
	• MiraCosta	20	0	
	• San Diego City	8	0	
	• San Diego Miramar	1	0	
	• Southwestern	3	0	
			Total	84

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 93 annual openings and 84 awards. Comparatively, there are 2,065 annual openings in California and 1,133 completions⁷ (Exhibit 7).

Exhibit 7: 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	93	84	9
California	2,065	1,133	932

Please note: This is a basic analysis of supply and demand of labor for these occupations. This data should be used to discuss the potential gaps or oversupply of workers for these occupations; 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 that could fill these positions or workers that 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 8).

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). 2018.01 Class of Worker. QCEW + Non-QCEW + Self-employed. 2017-2022.

**Exhibit 8: Strong Workforce Program Metrics for
TOP 100500: Commercial Music in the San Diego-Imperial Region (PY2015-16)**

Metric	San Diego-Imperial	California
Number of course enrollments ⁸	761	13,237
Number of students who got a degree or certificate ⁹	26	356
Number of students who transferred ¹⁰	28	396
Employed in the second fiscal quarter after exit ¹¹	62%	62%
Employed in the fourth fiscal quarter after exit ¹²	60%	62%
Job closely related to field of study ¹³	N/A	N/A
Median earnings in the second fiscal quarter after exit ¹⁴	\$4,902	\$4,699
Median change in earnings ¹⁵	217%	65%
Attained a living wage ¹⁶	29%	23%

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 **Psav Presentation Services, Westin, Freeman, Avdb Group, and Psav** (Exhibit 9).

**Exhibit 9: Top Employers in San Diego County for
Audio and Video Equipment Technicians**

Top Employers	
<ul style="list-style-type: none"> • Psav Presentation Services • Westin • Freeman • Avdb Group • Psav • General Dynamics • Interstate Hotels & Resorts 	<ul style="list-style-type: none"> • City Of Poway • Penn National Gaming Incorporated • Ccs Presentation Systems Incorporated • Compass Group • Education Management Corporation • Encore Event Technologies • Qualcomm

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

⁹ The number of unduplicated students who earned a locally-issued certificate, Chancellor's Office approved certificate, associate degree, and/or CCC bachelor's degree in the selected TOP code

¹⁰ Students who took non-introductory courses or completed a CCCCCO award in the selected TOP code in selected year who subsequently enrolled for the first time in a four-year institution the following year

¹¹ Among all exiters with a valid SSN, the percentage who were employed two quarters after exiting the Community college system

¹² Among Exiting students with a valid SSN, the percentage who were employed four quarters after exiting the California community college system

¹³ Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study

¹⁴ Among exiting students, the median second quarter earnings one year after the year in which they exited the California community college system

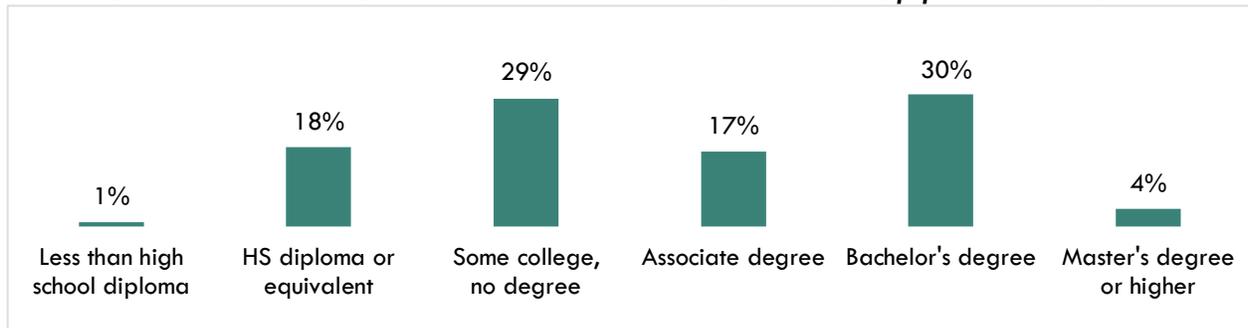
¹⁵ Among exiting students with a valid SSN, the percentage change in earnings one year before and one year after exiting the California community college system

¹⁶ Among completers and skills-builders who exited, the proportion of students who attained a living wage

Skills, Education and Certifications

Exhibit 10 indicates the educational attainment for the occupation found currently in the national labor force. The typical on-the-job training for this profession is **short-term on-the-job training**. The typical entry-level education is a **post-secondary non-degree award**.¹⁷

Exhibit 10: National Educational Attainment of Audio and Video Equipment Technicians¹⁸



*May not add to 100% due to rounding.

Exhibit 11 lists the top specialized and soft skills that appeared in online job postings for between January 1, 2015 and December 31, 2017.

Exhibit 11: Top Skills for Audio and Video Equipment Technicians in San Diego County¹⁹

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"> • Microsoft Excel • Microsoft Office • Universal Serial Bus (USB) • Dynamic Host Configuration Protocol (DHCP) • IP Address Setup • Microsoft Operating Systems 	<ul style="list-style-type: none"> • Troubleshooting • Communication Skills • Building Effective Relationships • Writing • Computer Skills • Planning 	<ul style="list-style-type: none"> • Microsoft Excel • Microsoft Office • Microsoft Operating Systems • Microsoft Windows • Microsoft Word • Microsoft Outlook

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¹⁷ EMSI. San Diego (6073). 2018.01 Class of Worker. QCEW + Non-QCEW + Self-employed. 2017-2022.

¹⁸ Bureau of Labor Statistics, Educational attainment for workers 25 years and older by detailed occupation. bls.gov/emp/ep_table_111.htm

¹⁹ Labor Insight Jobs. Burning Glass Technologies. San Diego, CA. Full years 2015-2017.