

Audio Technology (Commercial Music TOP: 1005.00)

July 2019

Prepared by the South Central Coast Center of Excellence for Labor Market Research



Program Recommendation

This report was compiled by the South Central Coast¹ Center of Excellence to provide regional labor market data for the program recommendation – Audio Technology. This report can help determine whether there is demand in the local labor market that is not being met by the supply from programs of study (CCC and non-CCC) that align with this occupation group.

Key Findings

- In the South Central Coast region, the number of jobs related to Commercial Music are expected to remain steady, over the next five years, for Audio and Video Equipment Technicians and Sound Engineering Technicians, while a decline is projected in the number of jobs for Broadcast Technicians.
- Sound Engineering Technicians and Broadcast Technicians are expected to experience a low risk of automation, while Audio and Video Equipment Technicians are at a medium risk of automation.
- In 2017 there were 117 regional completions in programs related to the occupations identified as related to Commercial Music and 97 openings, indicating an oversupply.
- Typical entry-level education ranges from a postsecondary nondegree award for Sound Engineering Technicians and Audio and Video Equipment Technicians to an Associate's degree for Broadcast Technicians.
- Completers of regional Commercial Music programs (TOP 1005) from the 2015-2016 academic year had a median annual wage upon completion of \$11,126.
- 61% of students are employed within a year of completing a program.
- Starting salary in the region for Audio and Video Equipment Technicians \$43,118.
- Starting salary in the region for Sound Engineering Technicians \$60,466.

¹ The South Central Coast Region consists of San Luis Obispo County, Santa Barbara County, Ventura County, and the following cities from North Los Angeles County: Canyon Country, Castaic, Lake Hughes, Lancaster, Littlerock, Llano, Newhall, Palmdale, Pearblossom, Santa Clarita, Stevenson Ranch, and Valencia.

Occupation Codes and Descriptions

Currently, there are three occupations in the standard occupational classification (SOC) system that are identified as related to Commercial Music. The occupation titles and descriptions, as well as reported job titles, are included in Exhibit 1.

Exhibit 1 – Occupation, description, and sample job titles

SOC Code	Title	Description	Sample of Reported Job Titles
27-4011	Audio and Video Equipment Technicians	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.	Audio Technician, Audio Visual Specialist, Audio Visual Technician, Master Control Operator (MCO), Media Specialist, Media Technician, Multimedia Educational Specialist, Operations Technician, Stagehand, Video Technician
27-4012	Broadcast Technicians	Set up, operate, and maintain the electronic equipment used to transmit radio and television programs. Control audio equipment to regulate volume level and quality of sound during radio and television broadcasts. Operate transmitter to broadcast radio or television programs.	Audio Engineer, Board Operator, Broadcast Engineer, Broadcast Maintenance Engineer, Broadcast Operations Engineer, Broadcast Technician, Engineer, Master Control Operator (MCO), Master Control Supervisor, Production Assistant
27-4014	Sound Engineering Technicians	Operate machines and equipment to record, synchronize, mix, or reproduce music, voices, or sound effects in sporting arenas, theater productions, recording studios, or movie and video productions.	Audio Engineer, Audio Operator, Broadcast Engineer, Broadcast Technician, Master Control Operator, Mixer, Recording Engineer, Sound Engineer, Sound Technician, Studio Engineer

Source: O*NET Online

Current and Future Employment

In the South Central Coast region, the number of jobs related to Commercial Music are expected to remain steady, over the next five years, for Audio and Video Equipment Technicians and Sound Engineering Technicians, while a decline is projected in the number of jobs for Broadcast Technicians. Exhibit 2 contains detailed employment projections data for these occupations.

Exhibit 2 – Five-year projections for Commercial Music in the South Central Coast region

SOC	Occupation	2018 Jobs	2023 Jobs	2018-2023 Change	2018-2023 % Change
27-4011	Audio and Video Equipment Technicians	493	518	25	5%
27-4012	Broadcast Technicians	119	108	-11	-9%
27-4014	Sound Engineering Technicians	120	123	3	3%

Source: Economic Modeling Specialists International (EMSI)

Earnings

In the South Central Coast region, the average wage for the listed occupations is \$18.33 per hour.

Exhibit 3 contains hourly wages and annual average earnings for this occupation. Entry-level hourly earnings is represented by the 25th percentile of wages, median hourly earnings is represented by the 50th percentile of wages, and experienced hourly earnings is represented by the 75th percentile of wages, demonstrating various levels of employment.

Exhibit 3 – Earnings for Commercial Music in the South Central Coast region

SOC	Occupation	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
27-4011	Audio and Video Equipment Technicians	\$12.60	\$18.05	\$28.51
27-4012	Broadcast Technicians	\$11.62	\$13.89	\$19.48
27-4014	Sound Engineering Technicians	\$17.99	\$32.27	\$54.11

Source: Economic Modeling Specialists International (EMSI)

Employer Job Postings

In this research brief, real-time labor market information is used to provide a more nuanced view of the current job market, as it captures job advertisements for occupations relevant to the field of study. Employer job postings are consulted to understand who is employing audio technicians, and what they are looking for in potential candidates. To identify job postings related to Commercial Music, the following standard occupational classifications were used:

27-4011	Audio and Video Equipment Technicians
27-4012	Broadcast Technicians
27-4014	Sound Engineering Technicians

Top Occupations

In 2018, there were 57 employer postings for occupations related to Commercial Music.

Exhibit 4 – Top occupations in job postings and risk of automation tables

SOC Code	Occupation	Job Postings, Full Year 2018
27-4011	Audio and Video Equipment Technicians	35
27-4012	Broadcast Technicians	12
27-4014	Sound Engineering Technicians	10

Source: Labor Insight/Jobs (Burning Glass)

SOC Code	Occupation	Risk of Automation
27-4011	Audio and Video Equipment Technicians	Low
27-4012	Broadcast Technicians	Low
27-4014	Sound Engineering Technicians	Medium

Source: Labor Insight/Jobs (Burning Glass)

Top Titles

The top job titles for employers posting ads for jobs related to Commercial Music are listed in Exhibit 5. Audio Visual Technician is mentioned as the job title in 28% of all relevant job postings (16 postings).

Exhibit 5 –Job titles

Title	Job Postings, Full Year 2018
Audio Visual Technician	16
Stage Technician	6
Sound Mixer	4
Child Development Program Clerk	3
Engineering Assistant, Traffic	3
Technical Lead, Audio Visual	3
Field Technician	2

Source: Labor Insight/Jobs (Burning Glass)

Top Employers

Exhibit 6 lists the major employers hiring professionals in the Commercial Music field. The top employer posting job ads was Psav Presentation Services. The top worksite cities in the region for these occupations were Santa Barbara, Santa Clarita, Westlake Village, San Luis Obispo, and Lancaster.

Exhibit 6 – Top employers (n=45)

Employer	Job Postings, Full Year 2018
Psav Presentation Services	18
California State University	3
Six Flags Incorporated	3
US Air Force	3
Associated Students Incorporated	2

Source: Labor Insight/Jobs (Burning Glass)

Skills

Operations Management is the most sought after skill for employers hiring for jobs related to Commercial Music.

Exhibit 7 –Job skills (n=40)

Skills	Job Postings, Full Year 2018
Operations Management	19
Sales	19
Equipment Operation	17
Satisfaction Failure Correction	17
Software Issue Resolution	17

Source: Labor Insight/Jobs (Burning Glass)

Industry Concentration

Exhibit 9 shows the industries where most audio technicians are employed in the South Central Coast region.

Note: 40% of records have been excluded because they do not include an industry. As a result, the chart below may not be representative of the full sample.

Exhibit 9 – Industries employing the most audio technicians, 2018

Industry	Occupation Group Jobs in Industry	% of Occupation Group in Industry
Construction	11	32%
Educational Services	7	21%
Public Administration	5	15%
Manufacturing	4	12%
Arts, Entertainment, and Recreation	3	9%

Source: Labor Insight/Jobs (Burning Glass)

Education and Training

Exhibit 10 shows the typical entry-level education requirement for the occupations of interest, along with the typical on-the-job training needed to attain competency in the occupation.

Exhibit 10 – Education and training requirements

SOC	Occupation	Typical entry-level education	Typical on-the-job training
27-4011	Audio and Video Equipment Technicians	Postsecondary nondegree award	Short-term on-the-job training
27-4012	Broadcast Technicians	Associate's degree	Short-term on-the-job training
27-4014	Sound Engineering Technicians	Postsecondary nondegree award	Short-term on-the-job training

Source: Bureau of Labor Statistics Employment Projections (Educational Attainment)

Regional Completions and Openings

There were 117 regional completions (2017) and 97 regional openings (2017) in the South Central Coast region in programs related to the occupations identified as related to Commercial Music.

Exhibit 11 – Completions and Openings

5 Regional Institutions had Related Programs (2017)	117 Regional Completions (2017)	97 Annual Openings (2017)
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Source: Economic Modeling Specialists International (EMSI)

Related Programs

CIP Code	Program	Completions (2017)
01.0802	Agricultural Communication/Journalism	42
10.0201	Photographic and Film/Video Technology/Technician and Assistant	41
09.0702	Digital Communication and Media/Multimedia	14
50.0913	Music Technology	14
10.0203	Recording Arts Technology/Technician	6

Source: Economic Modeling Specialists International (EMSI)

Student Outcomes

The CTE LaunchBoard provides student outcome data on the effectiveness of CTE programs. The following student outcome information was collected from exiters of the Commercial Music program (TOP Code: 1005) in the South Central Coast region for the 2015-16 academic year.

- The median annual wage for students after exiting is \$11,125
- Starting salary in the region for Audio and Video Equipment Technicians \$43,118
- Starting salary in the region for Sound Engineering Technicians \$60,466
- 61% of students are employed within a year after completing a program

Source: CTE LaunchBoard

Sources

O*Net Online, Labor Insight/Jobs (Burning Glass), Economic Modeling Specialists International (EMSI), MIT Living Wage Calculator, Bureau of Labor Statistics (BLS) Education Attainment, California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart, CTE LaunchBoard, Statewide CTE Outcomes Survey, Employment Development Department Unemployment Insurance Dataset

Notes

Data included in this analysis represents the labor market demand for positions most closely related to commercial music. Traditional labor market information was used to show current and projected employment based on data trends, as well as annual average awards granted by regional community colleges. Real-time labor market information captures job post advertisements for occupations relevant to the field of study and should not be used to establish current job openings, because the numbers may include duplicate job postings or postings intended to gather a pool of applicants. Real-time labor market information can signal demand and show what employers are looking for in potential employees, but is not a perfect measure of the quantity of open positions.