

Commercial Music

Inland Empire/Desert Region (Riverside and San Bernardino counties)

This workforce demand report uses state and federal job projection data developed before the economic impact of COVID-19. The COE is monitoring the situation and will provide more information as it becomes available. Please consult with local employers to understand their current employment needs.

Summary

- The community college commercial music program provides the knowledge, skills, and abilities that lead to two community college-level occupations.
- This group is projected to have 86 combined annual job openings through 2024, increasing employment by 3%.
- The 50th percentile hourly earnings for this group are between \$22.92 and \$29.51 per hour, above the regional \$19.94 per hour self-sustainable wage standard for a single adult with one child in the Inland Empire/Desert Region.
- Four community colleges conferred an annual average of 45 awards in commercial music programs over the last three academic years in the region. Other postsecondary institutions in the region issued 34 awards annually over the previous three academic years in related training programs.

Introduction

California Community College commercial music (TOP 1005.00) programs prepare students for employment through instruction related to the performance of music in public venues under contract and related business skills and services (Taxonomy of Programs, 2012). This report explores technical, commercial music job opportunities available to program completers outside of musical performance. The knowledge, skills, and abilities trained by commercial music programs lead to the following non-musician occupations:

- Audio and Video Technicians (SOC 27-4011)
- Sound Engineering Technicians (27-4014)

The COVID-19 pandemic devastated live music performers and support crew jobs over the last year. As one of the "hardest hit" industries, Live Nation established a Crew Nation fund, raising \$18 million to aid "approximately 15,000 crew members in over 40 counties and across 50 states (Variety, March 2021). Governor Gavin Newsom announced that California might fully reopen on June 15, 2021, if infection rates remain low. Some venues will need to cap their capacity, and mask requirements may remain for indoor facilities (Rolling Stone, April 2021). Music venues are starting to lay the groundwork for booking clubs, theaters, and outdoor spaces, but large-scale shows may not come back until 2022. J. Mascis of Dinosaur Jr. took steps towards normalcy by announcing fall 2021 tour dates, noting that having shows on the books

"makes things a bit more hopeful." Mascis also stated, "we are not naïve; we know we might have to reschedule" (New York Times, March 2021).

Job Counts and Projections

In 2019, there were 787 non-musician commercial music jobs in the Inland Empire/Desert Region. Employment in this group is expected to increase by 3% over the next five years. Employers are expected to have 86 combined annual job openings for commercial music occupations over the next five years to fill new jobs and backfill jobs that workers are permanently vacating (includes retirements). Audio and video technicians will have the most annual job openings, 72, accounting for 84% of annual job openings in this occupational group. Exhibit 1 displays job counts, five-year projected job growth, job openings, and the share of incumbent workers age 55 years and greater working in this group.

Exhibit 1: Commercial music five-year projections, 2019-2024

Occupation	2019 Jobs	2024 Jobs	5-Yr % Change (New Jobs)	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
Audio and Video Technicians	678	690	2%	435	72	16%
Sound Engineering Technicians	109	120	10%	83	14	20%
Total	787	809	3%	518	86	17%

Source: Emsi 2021.1

Exhibit 2 shows the number of job ads posted during the last 12 months and the statewide average time to fill for each occupation. There were only 53 combined job advertisements for commercial music occupations listed in the region. To ensure generalizable results the job advertisement search was expanded to include all advertisements in California. Regional advertisements accounted for 5% of the 1,153 total statewide commercial music job advertisements. On average, California employers fill online job advertisements for the commercial music group within 54 days.

Exhibit 2: Job ads and time to fill

Occupation	Job Ads	Statewide Average Time to Fill (Days)
Audio and Video Equipment Technicians	777	56
Sound Engineering Technicians	376	52
TOTAL	1,153	54

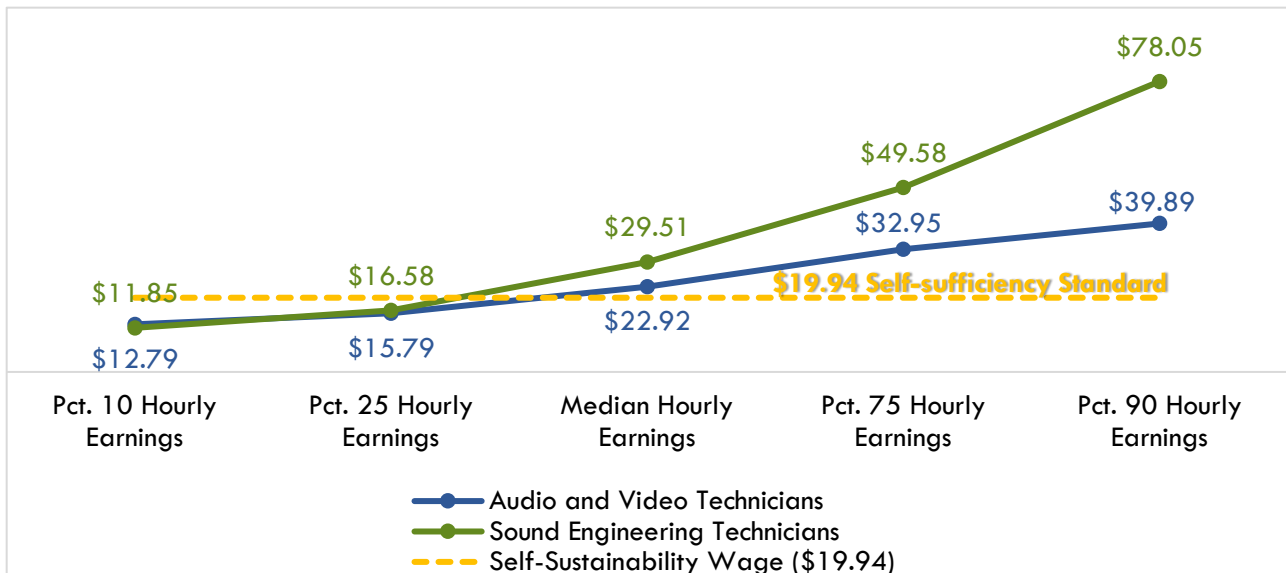
Source: Burning Glass – Labor Insights

Earnings and Benefits

Community colleges should ensure their training programs lead to employment opportunities that provide self-sustainable income. The University of Washington estimates that a self-sufficient hourly rate for a single adult with one school-age child is \$19.94 per hour or \$41,475 annually in Riverside County; \$19.49 per hour or \$40,539 annually in San Bernardino County (Pearce, 2018). For this study, the higher hourly earnings requirement in Riverside County is adopted as the self-sufficiency standard for the two-county region.

The 50th percentile hourly earnings for the commercial music group is above the self-sufficiency rate, indicating that the top 50% of workers in this group earn a self-sustainable wage. Exhibit 3 displays the hourly earnings.

Exhibit 3: Hourly earnings by percentile



Source: Emsi 2021.1

Benefits information, typically provided in the occupational guides developed by the California Labor Market Information Division, is not available for the commercial music occupations (Detailed Occupational Guides, 2020).

Advertised Salary from Online Job Ads

Exhibit 4 displays online job ad salary data for the commercial music group over the last 12 months. Online job ad salary information reveals that employers in the state are willing to pay the commercial music group between \$60,000 and \$68,000 annually. Advertised wages are above the \$41,475 annual (\$19.94 hourly) self-sufficiency standard for the region. Consider online job ad salary with caution since only 43% (494 out of 1,153) of results for these occupations provided information. The salary figures are prorated to reflect full-

time, annual salary status.

Exhibit 4: Advertised salary information

Occupations	Real-Time Salary Information					Average Annual Salary
	Number of job postings	Less than \$35,000	\$35,000 to \$49,999	\$50,000 to \$74,999	More than \$75,000	
Audio and Video Equipment Technicians	426	7%	32%	42%	19%	\$60,000
Sound Engineering Technicians	68	10%	25%	27%	38%	\$68,000

Source: Burning Glass – Labor Insights

Employers, Skills, Education, and Work Experience

Exhibit 5 displays the employers posting the most job ads during the last 12 months. Displaying employer names provides some insight into where students may find employment after completing a program.

Approximately 38% (435 ads) of statewide commercial music job advertisements were posted in the Los Angeles-Long Beach-Anaheim Metropolitan Statistical Area, Los Angeles and Orange counties combined, indicating demand for Inland Empire/Desert Region residents willing to commute to neighboring counties for work.

Exhibit 5: Employers posting the most job ads for the commercial music group

Occupation	Top Employers	
Audio and Video Equipment Technicians (<i>n</i> =777)	<ul style="list-style-type: none"> • AV Hero, Inc. • HS Audio Visual • Live Nation Worldwide 	
Sound Engineering Technicians (<i>n</i> =376)	<ul style="list-style-type: none"> • Sony Electronics, Inc. • Tribune Company • Blizzard Entertainment 	<ul style="list-style-type: none"> • Facebook • Amazon • Activision

Source: Burning Glass – Labor Insights

Exhibit 6 lists a sample of specialized and employability skills employers seek when looking for workers to fill commercial music positions. Specialized skills are occupation-specific skills that employers request for industry or job competency. Employability skills are foundational skills that transcend industries and occupations; this category is often referred to as "soft skills." The skills requested in job postings may be utilized to guide curriculum development.

Exhibit 6: Sample of in-demand skills from employer job ads

Occupation	Specialized skills	Employability skills
Audio and Video Equipment Technicians (n=620)	<ul style="list-style-type: none"> • Repair • Customer Service • Wiring • Scheduling • Video Conferencing 	<ul style="list-style-type: none"> • Troubleshooting • Communication Skills • Detail-Oriented • Teamwork/Collaboration • Organizational Skills
Sound Engineering Technicians (n=334)	<ul style="list-style-type: none"> • Broadcast Industry Knowledge • Audio Engineering • Music • Sound Design • Digital Signal Processing (DSP) 	<ul style="list-style-type: none"> • Communication Skills • Teamwork/Collaboration • Troubleshooting • Creativity • Editing

Source: Burning Glass – Labor Insights

According to the Bureau of Labor Statistics, more than a third (37%) of incumbent workers in this field hold a community college-level of educational attainment; "some college, no degree" and an "associate degree." Online job ads indicate that the minimum advertised education requirement requested by employers seeking audio and video equipment technicians is a high school diploma or vocational training (62%). However, the minimum advertised education requirement requested by employers seeking sound engineering technicians is a bachelor's degree or higher (73%). Exhibit 7 displays the typical entry-level education requirements for commercial music occupations and the minimum advertised educational requirements included in employer online job advertisements for these occupations.

Exhibit 7: Typical entry-level education, educational attainment, and minimum advertised education requirements

Occupation	Typical Entry-Level Education Requirement	CC-Level Educational Attainment*	Real-Time Minimum Advertised Education Requirement			
			Number of Job Ads	High school or vocational training	Associate degree	Bachelor's degree or higher
Audio and Video Equipment Technicians	Postsecondary nondegree award	37%	383	62%	10%	38%
Sound Engineering Technicians	Postsecondary nondegree award	37%	204	17%	10%	73%

Source: Emsi 2021.1, Burning Glass – Labor Insights

*Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework

Exhibit 8 displays the work experience typically required to enter each occupation and the real-time work experience requirements from employer job ads. Job ads indicate that most employers seek commercial music workers with zero and five years of work experience.

Exhibit 8: Work experience required and real-time work experience requirements

Occupation	Work Experience Typically Required	Real-Time Work Experience			
		Number of job postings	0 – 2 years	3 – 5 years	6+ years
Audio and Video Equipment Technicians	None	389	46%	46%	8%
Sound Engineering Technicians	None	264	21%	58%	21%

Source: Emsi 2021.1, Burning Glass – Labor Insights

Student Completions for Commercial Music Programs

Exhibit 9 displays completion data for California Community College commercial music (TOP 1005.00) programs between 2017 and 2020. These programs have collectively awarded an annual average of 45 associate degrees and certificates over the last three academic years. The student completion and outcome methodology are available on page 10.

Exhibit 9: 2017-20, Annual average community college awards for the commercial music programs in the Inland Empire/Desert Region

TOP 1005.00 – Commercial Music (Local Program Title)	Associate degree	Certificate requiring 30 to <60 semester units	Certificate requiring 16 to <30 semester units	Total CC Annual Average Awards, Academic Years 2017-20
Chaffey (Commercial Music, Recording Arts Technician)	3	-	0	3
College of the Desert (Basic Commercial Music, Advanced Commercial Music)	-	-	-	0
Mt. San Jacinto (Advanced Audio Technology, Audio Technology)	18	16	5	39
Norco (Music Industry Studies: Performance)	2	1	-	3
Total	23	17	5	45

Source: MIS Data Mart

California program outcome data may provide a useful insight into the likelihood of success for the proposed program. Community college student outcome information based on the selected TOP code and region is provided in Exhibit 10. The outcome methodology is available in the appendix section of this report.

Exhibit 10: 1005.00 – Commercial music strong workforce program outcomes

Strong Workforce Program Metrics: 1005.00 – Commercial music Academic Year 2017-18, unless noted otherwise	Inland Empire/Desert Region	California
Unduplicated count of enrolled students (2018-19)	501	8,469
Completed 9+ career education units in one year (2018-19)	21%	18%
Perkins Economically disadvantaged students (2018-19)	81%	73%
Students who attained a noncredit workforce milestone in a year (2018-19)	-	5%
Students who earned a degree, certificate, or attained apprenticeship (2018-19)	22	228
Transferred to a four-year institution (transfers)	13	414
Job closely related to the field of study (2016-17)	-	44%
Median annual earnings (all exiters)	\$21,030	\$21,112
Median change in earnings (all exiters)	36%	56%
Attained a living wage (completers and skills-builders)	35%	26%

Sources: LaunchBoard Community College Pipeline and Strong Workforce Program Metrics

Exhibit 11 displays awards conferred outside the community college system. Completion data is compiled from the Integrated Postsecondary Education Data System (IPEDS) for the most recent three years available. Due to IPEDS reporting limitations, it is assumed that each award represents a qualified worker since it is unknown if students are earning multiple awards from this program. While the Argosy University-The Art Institute of California-Inland Empire has historically conferred awards related to recording arts, this institution closed in December 2018 and is no longer supply the region with commercial music program completers.

Exhibit 11: Annual average other educational program student completions for recording arts technology/technician programs in the Inland Empire/Desert Region

10.0203 – Recording Arts Technology/Technician (CIP Program)	Associate Degree	Other Educational Institutions Annual Average Certificates or Other Credit Awards (2014-17)
Argosy University – The Art Institute of California – Inland Empire (CLOSED)	34	34
Total annual average other awards	34	34

Source: IPEDS

Recommendation for Commercial Music Programs

Non-musician commercial music occupations are expected to have 86 combined annual job openings over the next five years, growing by 3%. Audio and video technicians will have the most annual job openings, 72, accounting for 84% of annual job openings in this occupational group. Sound engineering technicians are

expected to have only 14 annual job openings in the region. The median hourly earnings for this group are between \$22.92 and \$29.51 per hour, above the regional \$19.94 per hour self-sustainable wage standard for a single adult with one child.

Community college commercial music (TOP 1005.00) programs are offered at four colleges. These programs have collectively awarded an annual average of 45 associate degrees and certificates over the last three academic years. Argosy University-The Art Institute of California-Inland Empire conferred an average of 34 awards annually between 2014-2017. However, this institution closed in December 2018 and is no longer training students.

The Centers of Excellence recommends expanding commercial music programs to meet the demand for more audio and video technicians due to the number of projected annual job openings and median hourly earnings exceed the self-sustainability standard. **The COE does not recommend training that leads to sound engineering technicians** due to the region's low number of annual openings. Students may find opportunities in neighboring Los Angeles and Orange counties but will be competing for jobs with local job seekers. Colleges should partner with relevant employers and concentrate on the skills that lead to the commercial music group and ensure students earn a self-sustainable income shortly after exiting these programs.

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Appendix: Occupation definitions, sample job titles, five-year projections, and earnings for commercial music occupations

Occupation Definitions (SOC code), Education and Training Requirement, Community College Education Attainment

Audio and Video Technicians (27-4011)

Set up, maintain, and dismantle audio and video equipment, such as microphones, sound speakers, connecting wires and cables, sound and mixing boards, video cameras, video monitors and servers, and related electronic equipment for live or recorded events, such as concerts, meetings, conventions, presentations, podcasts, news conferences, and sporting events.

Sample job titles: Audio Technician, Audio Visual Specialist (AV Specialist), Audio Visual Technician (AV Technician), Media Technician, Operations Technician, Stagehand, Video Technician

Entry-Level Educational Requirement: Postsecondary nondegree award

Training Requirement: Less than one month on-the-job training

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 37%

Sound Engineering Technicians (27-4014)

Assemble and operate equipment to record, synchronize, mix, edit, or reproduce sound, including music, voices, or sound effects, for theater, video, film, television, podcasts, sporting events, and other productions.

Sample job titles: Audio Engineer, Audio Operator, Mastering Engineer, Mixer, Mixing Engineer, Recording Engineer, Sound Editor, Sound Engineer, Sound Technician, Studio Engineer

Entry-Level Educational Requirement: Postsecondary nondegree award

Training Requirement: Less than one month on-the-job training

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 37%

Appendix: Student Completions and Program Outcome Methodology

Exhibit 9 displays the average annual California Community College (CCC) awards conferred during the three academic years between 2017 and 2020, from the California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart. Awards are the combined total of associate degrees and certificates issued during the timeframe, divided by three in this case to calculate an annual average. This is done to minimize the effect of atypical variation that might be present in a single year.

Community college student outcome information is from LaunchBoard and based on the selected TOP code and region. These metrics are based on records submitted to the California Community Colleges Chancellor's Office Management Information Systems (MIS) by community colleges, which come from self-reported student information from CCC Apply and the National Student Clearinghouse. Employment and earnings metrics are sourced from records provided by California's Employment Development Department's Unemployment Insurance database. When available, outcomes for completers are reported to demonstrate the impact that earning a degree or certificate can have on employment and earnings. For more information on the types of students included for each metric, please see the web link for LaunchBoard's Strong Workforce Program Metrics Data Element Dictionary in the References section (LaunchBoard, 2021 a). Finally, employment in a job closely related to the field of study comes from self-reported student responses on the CTE Employment Outcomes Survey (CTEOS), administered by Santa Rosa Junior College (LaunchBoard, 2021 a).

Job advertisement data is limited to the information provided by employers and the ability of artificial intelligence search engines to identify this information. Additionally, preliminary calculations by Georgetown Center on Education and the Workforce found that "just 30 to 40 percent of openings for candidates with some college or an associate degree, and only 40 to 60 percent of openings for high school diploma holders appear online" (Carnevale et al., 2014). Online job advertisements often do not reveal employers' hiring intentions; it is unknown if employers plan to hire one or multiple workers from a single online job ad or collect resumes for future hiring needs. A closed job ad may not be the result of a hired worker.

Table 1. 2019 to 2024 job growth, wages, entry-level education, training, and work experience required for the commercial music group

Occupation (SOC)	2019 Jobs	5-Year Change (New Jobs)	5-Year % Change (New Jobs)	Annual Openings (New + Replacement Jobs)	Entry-Experienced Hourly Wage (10 th to 90 th percentile)	Median Hourly Wage (50 th percentile)	Average Annual Earnings	Entry-Level Education & On-The-Job-Training	Work Experience Required
Audio and Video Technicians (27-4011)	678	11	2%	72	\$12.79 to \$39.89	\$22.92	\$53,600	Postsecondary nondegree award & 1 month	None
Sound Engineering Technicians (27-4014)	109	11	10%	14	\$11.85 to \$78.05	\$29.51	\$85,700	Postsecondary nondegree award & 1 month	None
Total	787	22	3%	86	-	-	-	-	-

Source: Emsi 2021.1