

# Audio Post Production Occupations Labor Market Information Report Foothill College

Prepared by the San Francisco Bay Center of Excellence  
for Labor Market Research  
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## Recommendation

Based on all available data, there appears to be an undersupply of Audio Post Production workers compared to the demand for this cluster of occupations in the Bay region and in the Silicon Valley sub-region (Santa Clara County). There is a projected annual gap of about 3,643 students in the Bay region and 1,334 students in the Silicon Valley Sub-Region.

This report also provides student outcomes data on employment and earnings for programs on TOP 0612.20 - Film Production in the state and region. It is recommended that these data be reviewed to better understand how outcomes for students taking courses on this TOP code compare to potentially similar programs at colleges in the state and region, as well as to outcomes across all CTE programs at Foothill College and in the region.

## Introduction

This report profiles Audio Post Production Occupations in the 12 county Bay region and in the Silicon Valley sub-region for a proposed new program at Foothill College. Labor market information (LMI) is not available at the eight-digit SOC Code level for Video Game Designers (15-1199.11), therefore, the data shown in Tables 1 and 2 is for Computer Occupations, All Other (at the six digit SOC level) and likely overstates demand for Video Game Designers. Tables 3, 4, 6, 9, 10 and 11 use job postings data from Burning Glass at the eight-digit SOC Code level for Video Game Designers (15-1199.11).

- **Sound Engineering Technicians (SOC 27-4014):** 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.  
Entry-Level Educational Requirement: Postsecondary nondegree award  
Training Requirement: Short-term *on-the-job training*  
Percentage of Community College Award Holders or Some Postsecondary Coursework: 46%
- **Film and Video Editors (SOC 27-4032):** Edit moving images on film, video, or other media. May edit or synchronize soundtracks with images. Excludes “Sound Engineering Technicians”(27-4014).  
Entry-Level Educational Requirement: Bachelor's degree  
Training Requirement: None  
Percentage of Community College Award Holders or Some Postsecondary Coursework: 27%
- **Computer Occupations, All Other (SOC 15-1199):** All computer occupations not listed separately. Excludes “Computer and Information Systems Managers” (11-3021), “Computer Hardware Engineers” (17-2061), “Electrical and Electronics Engineers” (17-2070), “Computer Science Teachers, Postsecondary” (25-1021), “Multimedia Artists and Animators” (27-1014), “Graphic Designers” (27-1024), “Computer Operators” (43-9011), and “Computer, Automated Teller, and Office Machine Repairs” (49-2011).  
Entry-Level Educational Requirement: Bachelor's degree  
Training Requirement: None  
Percentage of Community College Award Holders or Some Postsecondary Coursework: 35%

## Occupational Demand

**Table 1. Employment Outlook for Audio Post Production Occupations in Bay Region**

Occupation	2018 Jobs	2023 Jobs	5-Yr Change	5-Yr % Change	5-Yr Openings	Average Annual Openings	25% Hourly Wage	Median Hourly Wage
Sound Engineering Technicians	837	837	-1	0%	477	95	\$20.41	\$32.08
Film and Video Editors	1,597	1,742	145	9%	975	195	\$22.11	\$32.85
Computer Occupations, All Other	34,304	38,084	3,780	11%	16,918	3,384	\$40.92	\$55.80
<b>TOTAL</b>	<b>36,738</b>	<b>40,663</b>	<b>3,924</b>	<b>11%</b>	<b>18,370</b>	<b>3,674</b>	<b>\$39.63</b>	<b>\$54.26</b>

Source: EMSI 2019.4

**Bay Region** includes Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano and Sonoma Counties

**Table 2. Employment Outlook for Audio Post Production Occupations in Silicon Valley Sub-Region**

Occupation	2018 Jobs	2023 Jobs	5-Yr Change	5-Yr % Change	5-Yr Openings	Average Annual Openings	25% Hourly Wage	Median Hourly Wage
Sound Engineering Technicians	115	126	12	10%	78	16	\$30.14	\$36.44
Film and Video Editors	293	343	50	17%	205	41	\$25.50	\$39.26
Computer Occupations, All Other	12,649	14,197	1,549	12%	6,409	1,282	\$46.79	\$64.56
<b>TOTAL</b>	<b>13,056</b>	<b>14,666</b>	<b>1,610</b>	<b>12%</b>	<b>6,692</b>	<b>1,338</b>	<b>\$46.17</b>	<b>\$63.75</b>

Source: EMSI 2019.4

**Silicon Valley Sub-Region** includes Santa Clara County

### Job Postings in Bay Region and Silicon Valley Sub-Region

**Table 3. Number of Job Postings by Occupation for latest 12 months (February 2019 - January 2020)**

Occupation	Bay Region	Silicon Valley
Video Game Designers	1,146	367
Sound Engineering Technicians	389	180
Film and Video Editors	179	49
<b>TOTAL</b>	<b>1,714</b>	<b>596</b>

Source: Burning Glass

**Table 4a. Top Job Titles for Audio Post Production Occupations for latest 12 months (February 2019 - January 2020)**  
**Bay Region**

Common Title	Bay	Common Title	Bay
Video Editor	166	Sap Pm	16
Game Designer	87	Technical Pm	15
Senior Engineer	65	Developer	14
Engineer	48	Technology	13
Audio Engineer	28	Hardware Engineer	13
Theater Technician	27	Guide	12
Head, Infrastructure	27	Technology Evangelist	11
Environment Artist	25	Concept Artist	11
Lead Engineer	24	Senior Concept Artist	10
Sap Apo	23	Mechanic	10
Systems Engineer	20	Lead Environment Artist	10
Gameplay Engineer	19	Firmware Engineer	10
Content Creator	19	Director, CRM	9
Senior Environment Artist	17	Test Engineer	8

**Table 4b. Top Job Titles for Audio Post Production Occupations for latest 12 months (February 2019 - January 2020)  
Silicon Valley Sub-Region**

Common Title	Silicon Valley	Common Title	Silicon Valley
Video Editor	46	Audio Engineer	7
Sap Apo	21	Sap Gts Lead	6
Technical Pm	13	Environment Artist	6
Systems Engineer	12	Audio Dsp Engineer	6
Engineer	12	Technology	5
Theater Technician	10	Senior Engineer	5
Game Designer	10	Principal Environment Artist	5
Firmware Engineer	9	Im	5
Test Engineer	8	Applications Engineer	5
Technology Evangelist	8	User Interface (UX)/User Experience (UX) Designer	4
Staff Engineer	8	Technical Pm With Bigdata	4
Lead Engineer	8	Software Delivery Epm	4
Developer	8	Senior Environment Artist	4
Hardware Engineer	7	Sap Integration - Po, Cpi	4

Source: Burning Glass

## Industry Concentration

**Table 5. Industries Hiring Audio Post Production Workers in Bay Region**

Industry – 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2018)	Jobs in Industry (2022)	% Change (2018-22)	% in Industry (2018)
Custom Computer Programming Services (541511)	7,079	8,299	17%	20%
Computer Systems Design Services (541512)	4,212	4,634	10%	11%
Internet Publishing and Broadcasting and Web Search Portals (519130)	2,545	3,157	24%	7%
Software Publishers (511210)	2,379	3,025	27%	7%
Federal Government, Civilian, Excluding Postal Service (901199)	2,091	2,030	-3%	6%
Data Processing, Hosting, and Related Services (518210)	1,582	2,015	27%	4%
Corporate, Subsidiary, and Regional Managing Offices (551114)	1,321	1,358	3%	3%
Other Computer Related Services (541519)	1,024	1,245	22%	3%
Motion Picture and Video Production (512110)	880	941	7%	2%
Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology) (541715)	575	608	6%	2%
Temporary Help Services (561320)	509	519	2%	1%
Electronic Computer Manufacturing (334111)	483	527	9%	1%
Administrative Management and General Management Consulting Services (541611)	448	543	21%	1%
Local Government, Excluding Education and Hospitals (903999)	393	407	4%	1%
Computer and Computer Peripheral Equipment and Software Merchant Wholesalers (423430)	450	363	-19%	1%

Source: EMSI 2019.4

**Table 6. Top Employers Posting Audio Post Production Occupations in Bay Region and Silicon Valley Sub-Region (February 2019 - January 2020)**

Employer	Bay	Employer	Bay	Employer	Silicon Valley
Apple Inc.	59	IBM	8	Apple Inc.	59
Facebook	28	Quinn Company	7	Amazon	16
Activision	24	Jobot	7	Google Inc.	11
Amazon	20	Cryptic Studios Inc	7	IBM	8
Take-Two Interactive	16	Best Buy	7	Cryptic Studios Inc	7
Google Inc.	16	Bay Area Children's Theatre	7	Splunk, Inc	6
Roblox Corporation	15	Applovin	7	Machine Zone	6
Sledgehammer Games Inc	14	Time Warner	6	Best Buy	5
Pocket Gems	13	Sledgehammer Games	6	Reservation	4
Disney	12	Salesforce	6	Infoways	4
Glu Mobile Inc	10	Machine Zone	6	Comerica	4
Glu Mobile	10	Lucid Motors Inc	6	Xoriant	3
Electronic Arts Incorporated	10	Box	6	Softpath Technologies	3
Striking Distance Studios	9	Wells Fargo	5	Servicenow	3
Jam City	9	Rodan Fields Llc	5	Paypal	3
Ea	9	Patreon	5	Osmo	3
Splunk, Inc	8	Microsoft Corporation	5	Microsoft Corporation	3

Source: Burning Glass

## Educational Supply

There are five (5) community colleges in the Bay Region issuing 31 awards on average annually (last 3 years) on TOP 0612.20 - Film Production. There is one college (De Anza College) in the Silicon Valley Sub-Region issuing four (4) awards on average annually (last 3 years) on this TOP code.

**Table 7. Awards on TOP 0612.20 - Film Production in Bay Region**

College	Sub-Region	Associates	Certificate 18+ Units	Certificate Low Unit	Total
Berkeley City College	East Bay			1	1
City College of San Francisco	Mid-Peninsula	7			7
Contra Costa College	East Bay			3	3
De Anza College	Silicon Valley	4			4
Santa Rosa Junior College	North Bay	8	8		16
<b>Total Bay Region</b>		<b>19</b>	<b>8</b>	<b>4</b>	<b>31</b>
<b>Total Silicon Valley Sub-Region</b>		<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

Source: Data Mart

Note: The annual average for awards is 2015-16 to 2017-18.

## Gap Analysis

Based on the data included in this report, there is a labor market gap in the Bay region with 3,674 annual openings for the Audio Post Production occupational cluster and 31 annual (3-year average) awards for an annual undersupply of 3,643 students. In the Silicon Valley Sub-Region, there is also a gap with 1,338 annual openings and 4 annual (3-year average) awards for an annual undersupply of 1,334 students.

## Student Outcomes

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0612.20 - Film Production**

2015-16	Bay (All CTE Programs)	Foothill College (All CTE Programs)	State (0612.20)	Bay (0612.20)	Silicon Valley (0612.20)	Foothill College (0612.20)
% Employed Four Quarters After Exit	74%	77%	68%	63%	58%	n/a
Median Quarterly Earnings Two Quarters After Exit	\$10,550	\$15,301	\$9,555	\$6,796	\$5,950	n/a
Median % Change in Earnings	46%	82%	19%	32%	49%	n/a
% of Students Earning a Living Wage	63%	76%	54%	39%	49%	n/a

Source: Launchboard Pipeline (version available on 3/2/20)

## Skills, Certifications and Education

**Table 9. Top Skills for Audio Post Production Occupations in Bay Region (February 2019 - January 2020)**

Skill	Postings	Skill	Postings	Skill	Postings
C++	250	Scheduling	100	Java	74
Adobe Photoshop	218	Music	95	Linux	73
Game Development	202	Physics	93	Social Media	70
Project Management	195	Adobe Illustrator	88	Video Production	69
Video Editing	169	Quality Assurance and Control	86	Debugging	66
SAP	162	Maya	83	SQL	65
Digital Signal Processing	149	Microsoft C#	83	Zbrush	62
Python	149	Product Management	83	System Design	61
Level design	137	Adobe Indesign	80	Scrum	60
Software Engineering	132	Adobe Acrobat	77	Facebook	59
Adobe Aftereffects	125	Prototyping	77	DevOps	57
Adobe Premiere	113	MATLAB	76	EPIC Unreal Engine	57
Budgeting	113	Customer Service	75	Product Development	57
Audio Engineering	104	Adobe Creative Suite	74	Art Direction	53
Software Development	102	Broadcast Industry Knowledge	74	Repair	53

Source: Burning Glass

**Table 10. Certifications for Audio Post Production Occupations in Bay Region (February 2019 - January 2020)**

Note: 94% of records have been excluded because they do not include a certification. As a result, the chart below may not be representative of the full sample.

Certification	Postings	Certification	Postings
Driver's License	31	Securities License	2
Project Management Certification	27	SAP Certification	2
Project Management Professional (PMP)	12	Mortgage License	2
Security Clearance	11	Licensed Vocational Nurse (LVN)	2
IT Infrastructure Library (ITIL) Certification	9	Lean Six Sigma Certification	2
PMI Agile Certified Practitioner (PMI-ACP)	5	First Aid CPR AED	2
Ca License	5	Certified Information Systems Security Professional (CISSP)	2
Board Certified/Board Eligible	5	Certified Information Systems Auditor (CISA)	2
Cisco Certified Network Associate (CCNA)	4	Basic Life Saving (BLS)	2
Leadership In Energy And Environmental Design (LEED) Certified	3	Basic Cardiac Life Support Certification	2
Six Sigma Black Belt Certification	2	Automation Certification	2
Series 7	2	American Heart Association Certification	2

Source: Burning Glass

### Table 11. Education Requirements for Audio Post Production Occupations in Bay Region

Note: 52% of records have been excluded because they do not include a degree level. As a result, the chart below may not be representative of the full sample.

Education (minimum advertised)	Latest 12 Mos. Postings	Percent 12 Mos. Postings
High school or vocational training	50	6%
Associate Degree	16	2%
Bachelor's Degree or Higher	677	92%

Source: Burning Glass

## Methodology

Occupations for this report were identified by use of skills listed in O\*Net descriptions and job descriptions in Burning Glass. Labor demand data is sourced from Economic Modeling Specialists International (EMSI) occupation data and Burning Glass job postings data. Educational supply and student outcomes data is retrieved from multiple sources, including CTE Launchboard and CCCCCO Data Mart.

## Sources

O\*Net Online  
Labor Insight/Jobs (Burning Glass)  
Economic Modeling Specialists International (EMSI)  
CTE LaunchBoard [www.calpassplus.org/Launchboard/](http://www.calpassplus.org/Launchboard/)  
Statewide CTE Outcomes Survey  
Employment Development Department Unemployment Insurance Dataset  
Living Insight Center for Community Economic Development  
Chancellor's Office MIS system

## Contacts

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