** Commercial Music** **Occupations**

**Labor Market Information Report**

**Diablo Valley College**

Prepared by the San Francisco Bay Center of Excellence

for Labor Market Research

November 2018

# Recommendation

Based on all available data, there appears to be an undersupply of Commercial Music workers compared to the demand for this cluster of occupations in the Bay region and in the East Bay sub-region (Alameda and Contra Costa Counties). The gap is about 1,252 students annually in the Bay region and 363 students in the East Bay sub-region.

This report also provides student outcomes data on employment and earnings for programs on TOP 1005.00 - Commercial Music in the state and region. It is recommended that this 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 Diablo Valley College and in the region.

# Introduction

This report profiles Commercial Music Occupations in the 12 county Bay region and in the East Bay sub-region for a proposed new Commercial Music - Technology and Production, Performance, Media Composition program at Diablo Valley College. EMSI uses a single aggregate code (25-1099) for “All Postsecondary Teachers, not listed separately”, therefore EMSI labor market data is not available specifically for “Art, Drama, and Music Teachers, Postsecondary”, so this occupation is not included in Tables 1 and 2. Burning Glass job postings data is available for Art, Drama, and Music Teachers, Postsecondary (25-1121.00) and is included in Tables 3, 4, 6, 9, and 10 of this report.

|  |
| --- |
| * **Musicians and Singers (SOC 27-2042):** Play one or more musical instruments or sing. May perform on stage, for on-air broadcasting, or for sound or video recording. |
| *Entry-Level Educational Requirement: No formal educational credential* |
| *Training Requirement: Long-term on-the-job training* |
| *Percentage of Community College Award Holders or Some Postsecondary Coursework: 25%* |
|  |
| * **Music Directors and Composers (SOC 27-2041):** Conduct, direct, plan, and lead instrumental or vocal performances by musical groups, such as orchestras, bands, choirs, and glee clubs. Includes arrangers, composers, choral directors, and orchestrators. |
| *Entry-Level Educational Requirement: Bachelor's degree* |
| *Training Requirement: None* |
| *Percentage of Community College Award Holders or Some Postsecondary Coursework: 25%* |
|  |
| * **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). |
| *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%* |
|  |
| * **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%* |
|  |

# Occupational Demand

**Table 1. Employment Outlook for Commercial Music Occupations in Bay Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation | 2017 Jobs | 2022 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Annual Open-ings | 10% Hourly Wage | Median Hourly Wage |
| Musicians and Singers | 6,521 | 6,647 | 127 | 2% | 3,357 | 671 | $13.14 | $18.56 |
| Music Directors and Composers | 1,722 | 1,813 | 90 | 5% | 945 | 189 | $12.91 | $19.63 |
| Audio and Video Equipment Technicians | 3,469 | 3,716 | 248 | 7% | 1,871 | 374 | $15.62 | $22.38 |
| Sound Engineering Technicians | 845 | 845 | 0 | 0% | 402 | 80 | $14.80 | $28.69 |
| **Total** | **12,556** | **13,021** | **465** | **4%** | **6,574** | **1,315** | **$14.12** | **$22.32** |

*Source: EMSI 2018.4*

**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 Commercial Music Occupations in East Bay Sub-Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation | 2017 Jobs | 2022 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Annual Open-ings | 10% Hourly Wage | Median Hourly Wage |
| Musicians and Singers | 2,053 | 2,124 | 71 | 3% | 1,079 | 216 | $12.53 | $17.77 |
| Music Directors and Composers | 591 | 622 | 31 | 5% | 322 | 64 | $13.23 | $23.63 |
| Audio and Video Equipment Technicians | 851 | 911 | 61 | 7% | 457 | 91 | $18.03 | $25.33 |
| Sound Engineering Technicians | 256 | 260 | 5 | 2% | 122 | 24 | $14.59 | $27.41 |
| **TOTAL** | **3,751** | **3,917** | **168** | **4%** | **1,980** | **395** | **$14.60** | **$23.54** |

*Source: EMSI 2018.4*

**East Bay Sub-Region** includes Alameda and Contra Costa Counties

### Job Postings in Bay Region and East Bay Sub-Region

**Table 3. Number of Job Postings by Occupation for latest 12 months (Oct 2017 - Sept 2018)**

|  |  |  |
| --- | --- | --- |
| Occupation | Bay Region | East Bay |
| Audio and Video Equipment Technicians (27-4011.00) | 531 | 91 |
| Sound Engineering Technicians (27-4014.00) | 293 | 26 |
| Art, Drama, and Music Teachers, Postsecondary (25-1121.00) | 225 | 76 |
| Musicians, Instrumental (27-2042.02) | 54 | 28 |
| Music Directors (27-2041.01) | 49 | 13 |
| Music Composers and Arrangers (27-2041.04) | 9 | 2 |
| **Total** | **1,161** | **236** |

*Source: Burning Glass*

**Table 4. Top Job Titles for Commercial Music Occupations for latest 12 months (Oct 2017 - Sept 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Common Title | Bay | East Bay | Common Title | Bay | East Bay |
| Audio Visual Technician | 201 | 30 | Music Teacher | 10 | 1 |
| Systems Engineer | 30 | 1 | Summer Instructor, Digital Arts | 10 |  |
| Adjunct Instructor | 26 | 15 | Piano Accompanist | 8 |  |
| Art Instructor | 25 | 6 | Summer Instructor, Woodshop Fundamentals | 8 | 3 |
| Musician | 20 | 16 | Technical Specialist, Audio Visual | 8 |  |
| Hardware Engineer | 18 |  | Technician | 8 | 1 |
| Video Technician | 18 | 1 | Validation Engineer | 8 |  |
| Firmware Engineer | 14 | 3 | Art Instructor -Bay | 7 | 6 |
| Android Engineer | 13 |  | Director | 7 | 4 |
| Audio Engineer | 13 |  | Engineer | 7 | 2 |
| Broadcast Engineer | 13 | 1 | Field Service Technician | 7 | 5 |
| Technical Lead, Audio Visual | 13 |  | Production Technician | 7 |  |
| Director of Event Technology | 12 | 1 | Stage Technician | 7 | 6 |
| Theater Technician | 12 | 4 | Systems Integrator | 7 |  |
| Video Production Specialist | 12 | 2 | Art Instructor Pool | 6 |  |
| Music Director | 10 | 2 | Audio Dsp Engineer | 6 |  |

*Source: Burning Glass*

# Industry Concentration

**Table 5. Industries hiring Commercial Music Workers in Bay Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Industry – 6 Digit NAICS (No. American Industry Classification) Codes | Jobs in Industry (2017) | Jobs in Industry (2022) | % Change (2017-22) | % in Industry (2017) |
| Colleges, Universities, and Professional Schools (State Government) (902612) | 16,278 | 16,421 | 1% | 31.8% |
| Colleges, Universities, and Professional Schools (611310) | 11,165 | 11,283 | 11% | 21.9% |
| Colleges, Universities, and Professional Schools (Local Government) (903612) | 8,479 | 8,444 | 5% | 16.4% |
| Independent Artists, Writers, and Performers (711510) | 2,946 | 2,942 | (0%) | 5.7% |
| Religious Organizations (813110) | 2,639 | 2,678 | 6% | 5.2% |
| Other Technical and Trade Schools (611519) | 856 | 870 | 16% | 1.7% |
| Musical Groups and Artists (711130) | 789 | 782 | (5%) | 1.5% |
| Motion Picture and Video Production (512110) | 438 | 437 | 5% | 0.8% |
| Theater Companies and Dinner Theaters (711110) | 373 | 371 | 8% | 0.7% |
| Other Spectator Sports (711219) | 288 | 293 | 7% | 0.6% |
| Professional and Management Development Training (611430) | 249 | 271 | 27% | 0.5% |
| Dance Companies (711120) | 264 | 269 | 4% | 0.5% |

*Source: EMSI 2018.4*

**Table 6. Top Employers Posting Commercial Music Occupations in Bay and East Bay Sub-Region (Oct 2017 - Sept 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Employer | Bay | Employer | Bay | Employer | East Bay |
| Psav Presentation Services | 68 | University Of California Berkeley | 13 | Chabot Las Positas Community College District | 18 |
| Apple Inc. | 56 | Contra Costa Community College District | 12 | US Army | 16 |
| Psav | 53 | Stanford University | 11 | University Of California Berkeley | 13 |
| Galileo Learning | 25 | Amazon Lab126 | 10 | Contra Costa Community College District | 12 |
| Google Inc. | 24 | California State University | 10 | Galileo Learning | 8 |
| Amazon | 20 | Young Rembrandts | 10 | Whitlock | 8 |
| Chabot Las Positas Community College District | 18 | Encore Event Technologies | 9 | Chartpak Incorporated | 7 |
| US Army | 17 | Newgig | 8 | Newgig | 7 |
| Chartpak Incorporated | 15 | Outsource | 8 | Chabot College | 6 |
| Facebook | 13 | Whitlock | 8 | Diversified | 5 |

*Source: Burning Glass*

# Educational Supply

There are six colleges in the Bay Region issuing 63 awards annually on TOP 1005.00 - Commercial Music. There are three colleges in the East Bay sub-region issuing 31 awards annually on this TOP code.

**Table 7. Awards on TOP 1005.00 - Commercial Music in the Bay Area**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| College | Sub-Region | Headcount | Associates | Certificates | Total |
| **Cabrillo** | Santa Cruz & Monterey | 75 | 1 | 5 | 6 |
| **Diablo Valley** | East Bay | 366 | 9 | 12 | 20 |
| **Foothill** | Silicon Valley | 757 | 12 | 3 | 15 |
| **Los Medanos** | East Bay | 191 | 6 | 4 | 10 |
| **Ohlone** | East Bay | n/a |  | 1 | 1 |
| **West Valley** | Silicon Valley | n/a |  | 11 | 11 |
| **Total Bay Region** | | **1,389** | **27** | **36** | **63** |
| **Total East Bay Sub-Region** | | **1,314** | **15** | **17** | **32** |

# *Source: IPEDS, Data Mart and Launchboard*

NOTE: Headcount of students who took one or more courses is for 2016-17. The annual average for awards is 2014-17 unless there are only awards in 2016-17. The annual average for other postsecondary is for 2013-16.

# Gap Analysis

Based on the data included in this report, there is a labor market gap in the Bay region with 1,315 annual openings for the Commercial Music occupational cluster and 63 annual awards for an annual undersupply of 1,252 students. In the East Bay sub-region, there is also a gap with 395 annual openings and 32 annual awards for an annual undersupply of 363 students.

# Student Outcomes

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 1005.00 - Commercial Music**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2015-16 | Bay  (All CTE Programs) | Input College (All CTE Programs) | State (TOP 1005.00) | Bay  (TOP 1005.00) | East Bay (TOP 1005.00) | Input College (TOP 1005.00) |
| % Employed Four Quarters After Exit | 75% | 68% | 62% | 63% | 67% | 67% |
| Median Quarterly Earnings Two Quarters After Exit | $13,996 | $9,805 | $4,576 | $4,867 | $4,390 | $4,686 |
| Median % Change in Earnings | 40% | 53% | 69% | 58% | 67% | 75% |
| % of Students Earning a Living Wage | 63% | 55% | 23% | 29% | 28% | n/a |

*Source: Launchboard Pipeline (version available on 10/30/18)*

# Skills and Education

**Table 9. Top Skills for Commercial Music Occupations in Bay Region (Oct 2017 - Sept 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Skill | Postings | Skill | Postings | Skill | Postings |
| Teaching | 204 | Broadcast Industry Knowledge | 82 | Consumer Electronics | 51 |
| Customer Service | 168 | Customer Contact | 76 | Digital Audio | 50 |
| Music | 165 | Technical Support | 74 | Satisfaction Failure Correction | 50 |
| Sales | 120 | Python | 70 | Wiring | 50 |
| Video Conferencing | 120 | Painting | 68 | System Design | 49 |
| Digital Signal Processing (DSP) | 118 | Digital Video | 66 | Universal Serial Bus (USB) | 49 |
| Scheduling | 117 | C++ | 64 | Budgeting | 48 |
| Repair | 110 | Fine Arts | 64 | Predictive / Preventative Maintenance | 47 |
| Equipment Operation | 108 | Painting (Art) | 63 | Dynamic Host Configuration Protocol (DHCP) | 46 |
| Audio / Visual Knowledge | 100 | Project Management | 61 | Debugging | 45 |
| Audio Systems | 88 | Linux | 59 | Troubleshooting Technical Issues | 45 |
| Audio Engineering | 87 | Video Production | 59 | MATLAB | 44 |
| Software Issue Resolution | 86 | Schematic Diagrams | 53 | Microsoft Operating Systems | 44 |
| Upselling Products and Services | 84 | Cabling | 51 | Product Development | 41 |
| Operations Management | 83 | Cisco | 51 | Adobe Photoshop | 40 |

*Source: Burning Glass*

**Table 10. Education Requirements for Commercial Music Occupations in Bay Region**

Note: 47% 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 |
| High school or vocational training | 215 (34%) |
| Associate Degree | 12 (2%) |
| Bachelor’s Degree or Higher | 398 (64%) |

*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 CCCCO 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

For more information, please contact:

* Doreen O’Donovan, Data Research Analyst, for Bay Area Community College Consortium (BACCC) and Centers of Excellence (CoE), [doreen@baccc.net](mailto:doreen@baccc.net) or (831) 479-6481
* John Carrese, Director, San Francisco Bay Center of Excellence for Labor Market Research, [jcarrese@ccsf.edu](mailto:jcarrese@ccsf.edu) or (415) 267-6544