** Sound and Communication Installer Occupations**

**Labor Market Information Report**

**Foothill College**

Prepared by the San Francisco Bay Center of Excellence

for Labor Market Research

March 2020

# Recommendation

Based on all available data, there appears to be an undersupply of Sound and Communication Installer 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 1,203 students in the Bay region and 231 students in the Silicon Valley Sub-Region.

This report also provides student outcomes data on employment and earnings for programs on TOP 0952.20 - Electrical 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 Sound and Communication Installer Occupations in the 12 county Bay region and in the Silicon Valley sub-region for a program modification at Foothill College.

|  |
| --- |
| * **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% |
| * **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%* |
| * **Telecommunications Equipment Installers and Repairers, Except Line Installers (SOC 49-2022):** Install, set-up, rearrange, or remove switching, distribution, routing, and dialing equipment used in central offices or headends. Service or repair telephone, cable television, Internet, and other communications equipment on customers' property. May install communications equipment or communications wiring in buildings. Excludes “Telecommunications Line Installers and Repairers” (49-9052). |
| Entry-Level *Educational Requirement: Postsecondary nondegree award* |
| Training Requirement: Moderate-term *on-the-job training* |
| Percentage of Community College Award Holders or Some *Postsecondary Coursework: 52%* |

# Occupational Demand

**Table 1. Employment Outlook for Sound and Communication Installer** **Occupations in Bay Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation | 2018 Jobs | 2023 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Average Annual Open-ings | 25% Hourly Wage | Median Hourly Wage |
| Sound Engineering Technicians | 837 | 837 | -1 | 0% | 477 | 95 | $20.41 | $32.08 |
| Audio and Video Equipment Technicians | 3,468 | 3,783 | 315 | 9% | 2,264 | 453 | $19.00 | $25.72 |
| Telecommunications Equipment Installers and Repairers, Except Line Installers | 6,841 | 6,733 | -107 | -2% | 4,024 | 805 | $22.07 | $29.23 |
| **Total** | **11,147** | **11,353** | **206** | **2%** | **6,765** | **1,353** | **$20.99** | **$28.35** |

*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 Sound and Communication Installer** **Occupations in Silicon Valley Sub-Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation | 2018 Jobs | 2023 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Average Annual Open-ings | 25% Hourly Wage | Median Hourly Wage |
| Sound Engineering Technicians | 115 | 126 | 12 | 10% | 78 | 16 | $30.14 | $36.44 |
| Audio and Video Equipment Technicians | 643 | 720 | 77 | 12% | 439 | 88 | $18.45 | $24.25 |
| Telecommunications Equipment Installers and Repairers, Except Line Installers | 2,310 | 2,324 | 15 | 1% | 1,346 | 269 | $21.02 | $27.14 |
| **TOTAL** | **3,067** | **3,171** | **104** | **3%** | **1,863** | **373** | **$20.82** | **$26.88** |

*Source: EMSI 2019.4*

Silicon Valley Sub-Region includes Santa Clara County

# Educational Supply

There are three colleges in the Bay Region issuing 150 awards on average annually (last 3 years) on TOP 0952.20 – Electrical. There is one college (Foothill College) in the Silicon Valley Sub-Region issuing 142 awards on average annually (last 3 years) on this TOP code.

**Table 7. Awards on TOP 0952.20 - Electrical in Bay Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| College | Sub-Region | Associates | Certificate 18+ Units | Certificate Low Unit | Total |
| City College of San Francisco | Mid-Peninsula |  |  | 3 | 3 |
| College of San Mateo | Mid-Peninsula |  | 5 |  | 5 |
| Foothill College | Silicon Valley | 2 | 89 | 51 | 142 |
| **Total Bay Region** | | **2** | **94** | **54** | **150** |
| **Total Silicon Valley Sub-Region** | | **2** | **89** | **51** | **142** |

# *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 1,353 annual openings for the Sound and Communication Installer occupational cluster and 150 annual (3-year average) awards for an annual undersupply of 1,203 students. In the Silicon Valley Sub-Region, there is also a gap with 373 annual openings and 142 annual (3-year average) awards for an annual undersupply of 231students.

# Student Outcomes

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0952.20 - Electrical**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2015-16 | Bay  (All CTE Programs) | Foothill College (All CTE Programs) | State (0952.20) | Bay (0952.20) | Silicon Valley (0952.20) | Foothill College (0952.20) |
| % Employed Four Quarters After Exit | 74% | 77% | 79% | 82% | 83% | 89% |
| Median Quarterly Earnings Two Quarters After Exit | $10,550 | $15,301 | $13,572 | $21,301 | $23,136 | $26,048 |
| Median % Change in Earnings | 46% | 82% | 72% | 83% | 88% | 89% |
| % of Students Earning a Living Wage | 63% | 76% | 74% | 83% | 85% | 89% |

*Source: Launchboard Pipeline (version available on 3/9/20)*

# 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:

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