**Convergent Media Production Occupations**

**Labor Market Information Report**

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 a large undersupply of Convergent Media Production workers for the Bay region by about 7,440 and for the Mid-Peninsula sub-region by about 3,250. Although the occupations profiled in this report are above middle skill and seem to require a four-year degree in most cases, the information provided in the City College of San Francisco (CCSF) LMI application reveals this program proposes to serve incumbent Advertising and Marketing workers by providing them with new skills in electronic media, audio and video skills.

This report also provides student outcomes data on employment and earnings for Digital Media programs (TOP 0614.00). It is recommended that this data be reviewed to better understand how outcomes for students at CCSF taking courses in Digital Media compare to student outcomes in the state, region and sub-region on this TOP code as well as outcomes across all programs at CCSF and in the region.

# Introduction

This report profiles Convergent Media Production occupations in the 12 county Bay Region and the Mid-Peninsula Sub-Region (San Francisco and San Mateo counties) for a proposed change to the existing Convergent Media Production program at City College of San Francisco. As stated in the LMI application: “Students find jobs in marketing/outreach as Social Media managers, publicity and journalists/activists…The job titles fall under social media and marketing. But the skills are pure electronic media - audio and video recording and editing, content creation, creation of social media plans and concepts.” This program proposes to serve incumbent Advertising and Marketing workers by providing them with new skills in electronic media, audio and video skills.

* **Advertising and Promotions Managers (SOC 11-2011)**: Plan, direct, or coordinate advertising policies and programs or produce collateral materials, such as posters, contests, coupons, or give-aways, to create extra interest in the purchase of a product or service for a department, an entire organization, or on an account basis.

*Entry-Level Educational Requirement:* *Bachelor’s Degree*

*Training Requirement:* *None*

*Percentage of Community College Award Holders or Some Postsecondary Coursework:* 15%

* **Marketing Managers (SOC 11-2021)**: Plan, direct, or coordinate marketing policies and programs, such as determining the demand for products and services offered by a firm and its competitors, and identify potential customers. Develop pricing strategies with the goal of maximizing the firm's profits or share of the market while ensuring the firm's customers are satisfied. Oversee product development or monitor trends that indicate the need for new products and services.

*Entry-Level Educational Requirement:* *Bachelor’s Degree*

*Training Requirement:* *None*

*Percentage of Community College Award Holders or Some Postsecondary Coursework:* 23%

* **Market Research Analysts and Marketing Specialists (SOC 13-1161)**: Research market conditions in local, regional, or national areas, or gather information to determine potential sales of a product or service, or create a marketing campaign. May gather information on competitors, prices, sales, and methods of marketing and distribution.

*Entry-Level Educational Requirement:* *Bachelor’s Degree*

*Training Requirement:* *None*

*Percentage of Community College Award Holders or Some Postsecondary Coursework:* 16%

* **Public Relations Specialists (SOC 27-3031)**: Engage in promoting or creating an intended public image for individuals, groups, or organizations. May write or select material for release to various communications media.

*Entry-Level Educational Requirement:* *Bachelor’s Degree*

*Training Requirement:* *None*

*Percentage of Community College Award Holders or Some Postsecondary Coursework:* 14%

# Occupational Demand

**Table 1. Employment Outlook for Convergent Media Production Occupations in Bay Region**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation | Skill Level | 2016 Jobs | 2021 Jobs | 5-Yr Change | 5-Yr % Change | 5-year Open-ings | Annual Open-ings | 10% Hrly Wage | Median Hrly Wage |
| Advertising & Promotions Managers | Above Middle Skill | 1,209 | 1,312 | 103 | 9% | 734 | 147 | $27.38 | $47.72 |
| Marketing Managers | Above Middle Skill | 16,465 | 17,854 | 1,389 | 8% | 8,445 | 1,689 | $44.58 | $83.70 |
| Market Research Analysts & Marketing Specialists | Above Middle Skill | 36,176 | 41,234 | 5,058 | 14% | 23,179 | 4,636 | $22.88 | $40.05 |
| Public Relations Specialists | Above Middle Skill | 9,404 | 10,217 | 813 | 9% | 5,477 | 1,095 | $21.57 | $35.76 |
| **Total** | **Total** | **63,255** | **70,617** | **7,362** | **12%** | **37,834** | **7,567** | **$28.42** | **$50.92** |

*Source: EMSI 2017.4***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 Convergent Media Production Occupations in Mid-Peninsula Sub-Region**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation | Skill Level | 2016 Jobs | 2021 Jobs | 5-Yr Change | 5-Yr % Change | 5-year Open-ings | Annual Open-ings | 10% Hrly Wage | Median Hrly Wage |
| Advertising & Promotions Managers | Above Middle Skill | 717 | 780 | 63 | 9% | 437 | 87 | $28.51 | $52.90 |
| Marketing Managers | Above Middle Skill | 5,831 | 6,535 | 704 | 12% | 3,234 | 647 | $45.23 | $84.58 |
| Market Research Analysts & Marketing Specialists | Above Middle Skill | 15,297 | 17,763 | 2,466 | 16% | 10,181 | 2,036 | $23.77 | $38.85 |
| Public Relations Specialists | Above Middle Skill | 4,572 | 4,964 | 392 | 9% | 2,656 | 531 | $22.53 | $36.11 |
| **Total** | **Total** | **26,417** | **30,042** | **3,625** | **14%** | **16,508** | **3,302** | **$28.42** | **$48.85** |

***Source: EMSI 2017.4*Mid-Peninsula Sub-Region** includes San Francisco and San Mateo Counties

### Job Postings in Bay Region and Mid-Peninsula Sub-Region

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

|  |  |  |
| --- | --- | --- |
| Occupation | Bay Region | Mid-Peninsula |
| Marketing Managers (11-2021) | 21,004 | 11,591 |
| Market Research Analysts and Marketing Specialist (13-1161) | 7,830 | 3,871 |
| Public Relations Specialists (27-3031) | 2,443 | 1,342 |
| Advertising and Promotions Managers (11-2011) | 197 | 106 |
| **Total** | **31,474** | **16,910** |

*Source: Burning Glass*

**Table 4. Top Job Titles for Convergent Media Production Occupations for latest 12 months (Feb 2017 - Jan 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Common Title | Bay Region | Mid-Peninsula | Common Title | Bay Region | Mid-Peninsula |
| Marketing Manager | 4,847 | 2,756 | Social Media Manager | 257 | 149 |
| Product Marketing Manager | 1,885 | 1,055 | Email Marketing Specialist | 222 | 87 |
| Director of Marketing | 1,831 | 1,013 | Vice President of Marketing | 174 | 126 |
| Marketing Specialist | 1,018 | 425 | Technical Product Manager | 170 | 96 |
| Product Manager | 983 | 492 | Software Manager | 158 | 48 |
| Marketing Associate | 811 | 453 | Shopper - Groceries | 149 | 24 |
| Marketing Coordinator / Assistant | 758 | 374 | Marketing Coordinator | 142 | 63 |
| Senior Product Manager | 670 | 364 | Marketing Representative | 132 | 32 |
| Marketing Analyst | 507 | 315 | Communications Associate | 123 | 87 |
| Digital Marketing Manager | 435 | 273 | Communications Coordinator | 120 | 49 |
| Marketing Assistant | 378 | 125 | Social Media Specialist | 120 | 70 |
| Communications Specialist | 257 | 97 | Technical Sourcer | 117 | 86 |

*Source: Burning Glass*

# Industry Concentration

**Table 4. Industries hiring Convergent Media Production workers in Bay Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Industry – 3 Digit NAICS (No. American Industry Classification) Codes | Jobs in Industry (2016) | Jobs in Industry (2021) | % Change (2016-21) | % in Industry (2016) |
| Professional, Scientific, and Technical Services (541) | 20,145 | 22,844 | 13% | 31.8% |
| Other Information Services (519) | 4,818 | 6,196 | 29% | 7.7% |
| Computer and Electronic Product Manufacturing (334) | 4,579 | 4,751 | 4% | 7.2% |
| Management of Companies and Enterprises (551) | 4,453 | 4,754 | 7% | 7.1% |
| Publishing Industries (except Internet) (511) | 2,928 | 3,405 | 16% | 4.7% |
| Religious, Grantmaking, Civic, Professional & Similar Organizations (813) | 2,477 | 2,678 | 8% | 3.9% |
| Merchant Wholesalers, Durable Goods (423) | 1,998 | 2,077 | 4% | 3.1% |
| Administrative and Support Services (561) | 1,670 | 1,814 | 9% | 2.6% |
| Credit Intermediation and Related Activities (522) | 1,201 | 1,261 | 5% | 1.9% |
| Educational Services (611) | 1,067 | 1,181 | 11% | 1.7% |
| Real Estate (531) | 993 | 1,053 | 6% | 1.6% |
| Merchant Wholesalers, Nondurable Goods (424) | 982 | 1,044 | 6% | 1.5% |
| Local Government (903) | 968 | 1,030 | 6% | 1.5% |
| Securities, Commodity Contracts & Other Financial Investments & Related Activities (523) | 929 | 1,052 | 13% | 1.5% |
| Nonstore Retailers (454) | 893 | 1,162 | 30% | 1.4% |
| Insurance Carriers and Related Activities (524) | 913 | 970 | 6% | 1.4% |
| Social Assistance (624) | 897 | 1,020 | 14% | 1.4% |
| Data Processing, Hosting & Related Services (518) | 822 | 1,094 | 33% | 1.3% |
| Ambulatory Health Care Services (621) | 832 | 972 | 17% | 1.3% |

*Source: EMSI 2017.3*

**Table 5. Top Employers Posting Jobs in Bay Region and Mid-Peninsula for latest 12 months (Feb 2017 - Jan 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Employer** | **Bay** | **Mid-Peninsula** | **Employer** | **Bay** | **Mid-Peninsula** |
| Facebook | 676 | 676 | Accenture | 174 | 79 |
| Google Inc. | 424 | 68 | Amazon.com | 174 | 63 |
| Salesforce.Com | 319 | 312 | Walmart / Sam's | 165 | 113 |
| Wells Fargo | 289 | 241 | Linkedin Limited | 160 | 103 |
| Cisco Systems Inc | 234 | 28 | eBay | 155 | 54 |
| Apple Inc. | 228 | 0 | The Sage Group Inc | 144 | 92 |
| Intero Real Estate | 227 | 83 | Williams-Sonoma | 143 | 143 |
| Oracle | 223 | 186 | Hewlett-Packard | 126 | 0 |
| Gap Inc. | 207 | 189 | Intel Corporation | 124 | 0 |
| Intuit | 201 | 13 | Visa | 123 | 119 |
| Paypal | 196 | 29 | General Electric Company | 110 | 33 |
| Uber Technologies Inc | 196 | 193 | Servicenow | 104 | 0 |
| Instacart | 186 | 51 | Deloitte | 102 | 63 |
| Vmware | 184 | 0 | Salesforce Incorporated | 92 | 91 |
| Khosla Ventures | 182 | 141 | Workday, Inc | 90 | 8 |

*Source: Burning Glass*

# Educational Supply

On the supply side, there are six community colleges in the region issuing 79 awards annually on TOP 0614.00 – Digital Media plus one other postsecondary educational institution issuing 51 awards on CIP 50.0401- Design & Visual Communications, General, for a total of 130 annual awards in the region. Three of these colleges are in the Mid-Peninsula sub-region, issuing 101awards annually on these TOP and CIP codes.

**Table 6. Colleges with Programs on TOP 0614.00 - Digital Media or on CIP 50.0401 - Design & Visual Communications, General**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **College** | **Sub-Region** | **CC Head-count** | **Transfer Students** | **Associate Degrees** | **Certificates or Other Credit Awards** | **Total Awards** |
| Berkley City | East Bay | 429 | 13 | 0 | 0 | 0 |
| Cabrillo | SC & Monterey | 448 | 21 | 7 | 9 | 16 |
| Chabot | East Bay | 138 | 8 | 0 | 0 | 0 |
| Diablo Valley | East Bay | 783 | 47 | 0 | 0 | 0 |
| Gavilan | Silicon Valley | 15 | 0 | 1 | 1 | 2 |
| Hartnell | SC & Monterey | 174 | 6 | 0 | 0 | 0 |
| Marin | North Bay | 18 | 0 | 0 | 0 | 0 |
| Mission | Silicon Valley | 28 | 0 | 0 | 0 | 0 |
| Las Positas | East Bay | on another TOP06 | 0 | 6 | 1 | 7 |
| San Francisco | Mid-Peninsula | 194 | 5 | 0 | 20 | 20 |
| San Jose | Silicon Valley | 12 | 2 | 0 | 0 | 0 |
| San Mateo | Mid-Peninsula | 697 | 57 | 13 | 17 | 30 |
| Skyline | Mid-Peninsula | 17 | 0 | 0 | 0 | 0 |
| West Valley | Silicon Valley | 82 | 0 | 2 | 2 | 4 |
| Fashion Institute of Design & Merchandising SF (FIDM) | Mid-Peninsula | n/a | n/a | 51 | 0 | 51 |
| **Total for Bay Region** | | **3,035** | **159** | **80** | **50** | **130** |
| **Total for Mid-Peninsula** | | **858** | **62** | **13** | **37** | **50** |

# *Source: IPEDS, Data Mart and Launchboard*

NOTE: Headcount of students who took one or more courses is for 2015-16. The number of transfer students is for 2014-15. Associate degrees and Certificates for Community Colleges is the annual average for 2014-17, and for other postsecondary institutes the latest three-year average is 2013-16.

# Gap Analysis

There is a large labor market gap in the Bay Region for these occupations with annual openings of 7,567 and annual supply of 130 awards from Community Colleges and one other postsecondary institution. This represents an undersupply of about 7,440 students. In the Mid-Peninsula sub-region, there is also a labor market gap for these occupations with 3,302 annual openings and annual supply of 50 awards. Therefore, there is an annual undersupply in the sub-region of about 3,250 students.

Although it is evident from the entry-level education requirement for these SOC codes and from the online postings for these occupations that a Bachelor’s degree (or higher) is often needed, the information provided in the City College of San Francisco (CCSF) LMI application reveals this program proposes to serve incumbent Advertising and Marketing workers by providing them with new skills in electronic media, audio and video skills.

# Student Outcomes

The following is a summary of the employment and earnings data presented in Table 7:

* Students, who took courses on TOP 0614.00, at CCSF are employed at about the same percentage as students taking course on this TOP code in the region or state. However, the employment rate is below the rate for students across all programs at CCSF or at the state level.
* Median earnings two quarters after exit and median percentage change in earnings are higher for CCSF students, who took courses on TOP 0614.00, compared to students who took courses across the region or state on that same TOP codes.
* There are a significant number of transfer students on this TOP code; so, employment outcomes may be low because the transfer students into four-year programs would still be in school and not matched in the UI wage file.

**Table 7. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0614.00 - Digital Media at Bay Region Colleges and at City College of San Francisco for 2014-15**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2014-15** | **Bay Region (All Programs)** | **CCSF  (All Programs)** | **State (0614.00)** | **Bay Region (0614.00)** | **Mid-Peninsula (0614.00)** | **CCSF (0614.00)** | **Top Performing College in Bay (0614.00)** | |
| % Employed Four Quarters After Exit | 68% | 66% | 52% | 52% | 55% | 51% | Cabrillo | 62% |
| Median Earnings Two Quarters After Exit | $12,640 | $9,570 | $5,795 | $6,260 | $7,035 | $7,130 | Cabrillo | $8,630 |
| Median % Change in Earnings | 37% | 41% | 29% | 33% | 42% | 68% | Chabot | 121% |
| % of Students Earning a Living Wage | 51% | 44% | 33% | 35% | 31% | 29% | Chabot | 43% |

*Source: Launchboard*

# Skills & Certifications

**Table 8. Top Skills for Convergent Media Production Occupations in the Bay Region (Feb 2017 - Jan 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Skill** | **Postings** | **Skill** | **Postings** | **Skill** | **Postings** |
| Product Management | 10,019 | Data Analysis | 1,245 | Corporate Marketing | 723 |
| Marketing | 7,553 | Content Development | 1,204 | Tableau | 718 |
| Project Management | 6,445 | Mkting Strategy Devlpmnt | 1,185 | Marketing Analytics | 716 |
| Product Marketing | 6,023 | Content Marketing | 1,151 | Go-to-market Strategy | 709 |
| Budgeting | 4,996 | Value Proposition | 1,121 | Product Design | 695 |
| Microsoft Excel | 4,806 | Economics | 1,110 | Business Process | 693 |
| Social Media | 4,592 | Market Trend | 1,107 | Strategic Marketing | 691 |
| Product Development | 4,253 | Agile Development | 1,080 | Account Management | 685 |
| Market Strategy | 3,674 | Retail Setting | 1,079 | Branding Strategy | 676 |
| Business Development | 3,065 | Technical Writing/Editing | 1,077 | Trade Shows | 672 |
| Marketing Management | 3,049 | Business Planning | 1,065 | Web Analytics | 669 |
| Microsoft Powerpoint | 3,030 | Adobe Indesign | 1,050 | Consumer Research | 665 |
| Optimization | 2,724 | Market Analysis | 1,018 | Data Management | 657 |
| Salesforce | 2,698 | Marketing Operations | 1,000 | Data Science | 655 |
| Customer Service | 2,548 | Forecasting | 988 | LinkedIn | 648 |
| Microsoft Office | 2,487 | Experiments | 946 | Online Advertising | 644 |
| Key Performance Indicators | 2,320 | Scrum | 942 | Oracle | 635 |
| Market Research | 2,295 | Software Engineering | 907 | Brand Awareness Generation | 628 |
| Digital Marketing | 2,144 | Marketing Materials | 901 | Negotiation Skills | 602 |
| Software as a Service (SaaS) | 2,113 | Adobe Illustrator | 883 | Social Media Platforms | 588 |
| Competitive Analysis | 1,982 | Lifecycle Management | 883 | Direct Mail | 584 |
| Marketing Programs | 1,790 | Business Strategy | 863 | Business Analysis | 580 |
| SQL | 1,784 | Contract Management | 849 | Big Data | 575 |
| Facebook | 1,763 | Brand Marketing | 840 | Python | 572 |
| E-Commerce | 1,752 | Enterprise Software | 820 | Onboarding | 570 |
| Scheduling | 1,723 | Journalism | 820 | Copy Writing | 563 |
| Sales | 1,711 | Adobe Acrobat | 809 | Direct Marketing | 558 |
| Product Sales | 1,641 | Email Campaigns | 808 | Machine Learning | 554 |
| Adobe Photoshop | 1,514 | Global Marketing | 796 | Online Marketing | 552 |
| Email Marketing | 1,461 | Merchandising | 790 | Pricing Strategy | 542 |
| Content Management | 1,444 | A/B testing | 774 | Business Case Analysis | 534 |
| Market Planning | 1,433 | Newsletters | 774 | Customer Relationship (CRM) | 532 |
| Customer Contact | 1,414 | Adobe Creative Suite | 751 | Graphic Design | 532 |
| Software Development | 1,411 | Business Administration | 750 | Social Media Tools | 531 |
| Description & Demonstration of Products | 1,333 | Instagram | 744 | Digital Advertising | 526 |
| Marketo | 1,330 | Consumer Segmentation | 736 | Google AdWords | 525 |
| Google Analytics | 1,291 | Packaging | 733 | Sales Training | 515 |
| Marketing Communications | 1,278 | Staff Management | 729 | Youtube | 509 |
| Microsoft Word | 1,266 | Event Planning | 727 | Business Intelligence | 505 |

*Source: Burning Glass*

**Certifications:** Note: 97% of records have been excluded because they do not include a certification. As a result, the table has not been included in this report.

**Table 9. Education Requirements in Bay Region**

|  |  |  |
| --- | --- | --- |
| **Education (minimum advertised)** | **Latest 12 Mos. Postings** | **% of Total Postings indicating a degree level** |
| High school or vocational training | 206 | 1% |
| Associate Degree | 264 | 1% |
| Bachelor’s Degree or higher | 19,156 | 98% |

*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:

* Karen Beltramo, Data Research Analyst, for Bay Area Community College Consortium (BACCC) and Centers of Excellence (CoE), [karen@baccc.net](mailto:karen@baccc.net) or (831) 332-1253
* John Carrese, Director, San Francisco Bay Center of Excellence for Labor Market Research (hosted at City College of San Francisco), [jcarrese@ccsf.edu](mailto:jcarrese@ccsf.edu) or (415) 452-5529