** Web Administrators**

**Labor Market Information Report**

**West Valley College**

Prepared by the San Francisco Bay Center of Excellence

for Labor Market Research

April 2019

# Recommendation

Based on all available data, there appears to be a significant undersupply of Web Administrators compared to the demand for this occupation in the Bay region and in the Silicon Valley sub-region (Santa Clara County.) There is a projected annual gap of about 1,784 students in the Bay region and 664 students in the Silicon Valley Sub-Region.

This report also provides student outcomes data on employment and earnings for programs on TOP 0709.00 - World Wide Web Administration 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 West Valley College and in the region.

# Introduction

This report profiles Web Administrators in the 12 county Bay region and in the Silicon Valley sub-region for a proposed new program at West Valley College. Labor market information (LMI) is not available at the eight-digit SOC Code level for Web Administrators (15-1199.03), 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 Web Administrators. Tables 3, 4, 6, 9, 10 and 11 use job postings data from Burning Glass at the eight-digit SOC Code level for Web Administrators (15-1199.03).

|  |
| --- |
| * **Computer Occupations, All Other (SOC 15-1199):** All computer occupationsnot 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 Web Administrators in Bay Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation | 2017 Jobs | 2022 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Average Annual Open-ings | 10% Hourly Wage | Median Hourly Wage |
| Computer Occupations, All Other | 19,731 | 21,972 | 2,242 | 11% | 9,101 | 1,820 | $26.99 | $53.32 |

*Source: EMSI 2019.1*

**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 Web Administrators in Silicon Valley Sub-Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation | 2017 Jobs | 2022 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Average Annual Open-ings | 10% Hourly Wage | Median Hourly Wage |
| Computer Occupations, All Other | 7,032 | 7,936 | 904 | 13% | 3,348 | 670 | $26.64 | $58.88 |

*Source: EMSI 2019.1*

**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 (March 2018 - Feb 2019)**

| Occupation | Bay Region | Silicon Valley |
| --- | --- | --- |
| Web Administrators | 381 | 130 |

*Source: Burning Glass*

**Table 4. Top Job Titles for Web Administrators for latest 12 months (March 2018 - Feb 2019)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Common Title | Bay | Silicon Valley | Common Title | Bay | Silicon Valley |
| Web Manager | 123 | 27 | Director, Services | 5 | 0 |
| Web Content Manager | 28 | 15 | Site Support | 5 | 1 |
| Webmaster | 27 | 8 | Web Producer | 5 | 0 |
| Web Administrator | 24 | 13 | Web Publisher | 5 | 0 |
| Weblogic Administrator | 13 | 5 | Coordinator, Web Content | 4 | 0 |
| Production Assistant | 12 | 3 | Site Support - Sf | 4 | 1 |
| Web Coordinator | 9 | 7 | Web Technologist | 4 | 0 |
| Web Content Coordinator | 8 | 2 | Webmethods Administrative | 4 | 4 |
| Websphere Administrative | 7 | 0 | Database Administrator | 3 | 3 |
| Weblogic Administrative | 6 | 5 | Inventory Coordinator | 3 | 0 |

*Source: Burning Glass*

# Industry Concentration

**Table 5. Industries hiring Web Administrators 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) |
| Custom Computer Programming Services (541511) | 3,897 | 3,970 | 13% | 19.8% |
| Computer Systems Design Services (541512) | 2,287 | 2,290 | 10% | 11.4% |
| Internet Publishing and Broadcasting and Web Search Portals (519130) | 1,558 | 1,632 | 34% | 8.2% |
| Federal Government, Civilian, Excluding Postal Service (901199) | 1,605 | 1,583 | (2%) | 7.9% |
| Software Publishers (511210) | 1,278 | 1,339 | 22% | 6.7% |
| Data Processing, Hosting, and Related Services (518210) | 837 | 901 | 35% | 4.5% |
| Corporate, Subsidiary, and Regional Managing Offices (551114) | 651 | 685 | 11% | 3.4% |
| Other Computer Related Services (541519) | 580 | 590 | 18% | 2.9% |
| Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology) (541715) | 299 | 312 | (4%) | 1.6% |
| Temporary Help Services (561320) | 257 | 256 | 5% | 1.3% |
| Electronic Computer Manufacturing (334111) | 238 | 242 | 3% | 1.2% |
| Administrative Management and General Management Consulting Services (541611) | 225 | 234 | 24% | 1.2% |

*Source: EMSI 2019.1*

**Table 6. Top Employers Posting Jobs for Web Administrators in Bay Region and Silicon Valley Sub-Region (March 2018 - Feb 2019)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Employer | Bay | Employer | Bay | Employer | Silicon Valley |
| Williams-Sonoma | 17 | Houzz | 3 | Ideahelix | 5 |
| Flagship Facility Services, Inc | 12 | Svmt, Inc | 3 | Red Oak Technologies | 5 |
| Ideahelix | 5 | Taosmountain | 3 | Stanford University | 4 |
| Red Oak Technologies | 5 | Techfetch Com | 3 | Google Inc. | 3 |
| Stanford University | 5 | Uber | 3 | Houzz | 3 |
| Amazon | 4 | University San Francisco | 3 | Amazon | 2 |
| Avispa Incorporated | 4 | Advantage Group | 2 | Danaher Corporation | 2 |
| DocuSign | 4 | Albertsons | 2 | Dhi Incorporated | 2 |
| Fanatics | 4 | Autodesk Incorporated | 2 | Elephant Racing Llc | 2 |
| Danaher Corporation | 3 | Bettersource | 2 | FUJITSU | 2 |
| Easterseals Bay Area | 3 | Coinbase | 2 | Fetch Robotics | 2 |
| Elephant Racing Llc | 3 | Dc Solar | 2 | Forescout | 2 |
| Ellie Mae | 3 | Dhi Incorporated | 2 | Magna Systems International | 2 |
| Google Inc. | 3 | Dropbox Incorporated | 2 | Svmt, Inc | 2 |

*Source: Burning Glass*

# Educational Supply

There are 12 community colleges in the Bay Region issuing 36 awards on average annually (last 3 years) on TOP 0709.00 - World Wide Web Administration. There are four colleges in the Silicon Valley Sub-Region issuing 6 awards on average annually (last 3 years) on this TOP code.

**Table 7. Awards on TOP 0709.00 - World Wide Web Administration in the Bay Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| College | Sub-Region | Headcount | Associates | Certificates | Total |
| Alameda | East Bay | 61 |  |  |  |
| Berkeley City | East Bay | 59 |  | 1 | 1 |
| DeAnza | Silicon Valley | 174 |  |  |  |
| Mission | Silicon Valley | n/a |  | 2 | 2 |
| San Francisco | Mid-Peninsula | 156 |  | 8 | 8 |
| San Jose City | Silicon Valley | n/a |  | 1 | 1 |
| Santa Rosa | North Bay | n/a |  | 5 | 5 |
| Solano | North Bay | n/a | 1 |  | 1 |
| Alameda | East Bay | 61 |  |  |  |
| Berkeley City | East Bay | 59 |  | 1 | 1 |
| DeAnza | Silicon Valley | 174 |  |  |  |
| Mission | Silicon Valley | n/a |  | 2 | 2 |
| San Francisco | Mid-Peninsula | 156 |  | 8 | 8 |
| San Jose City | Silicon Valley | n/a |  | 1 | 1 |
| Santa Rosa | North Bay | n/a |  | 5 | 5 |
| Solano | North Bay | n/a | 1 |  | 1 |
| **Total Bay Region** | | **900** | **2** | **34** | **36** |
| **Total Silicon Valley Sub-Region** | | **348** | **0** | **6** | **6** |

# *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 large labor market gap in the Bay region with 1,820 annual openings for Web Administrators and 36 annual (3-year average) awards for an annual undersupply of 1,784 students. In the Silicon Valley Sub-Region, there is also a gap with 670 annual openings and 6 annual (3-year average) awards for an annual undersupply of 664 students.

# Student Outcomes

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0709.00 - World Wide Web Administration**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2015-16 | Bay  (All CTE Programs) | West Valley College (All CTE Programs) | State (0709.00) | Bay (0709.00) | Silicon Valley (0709.00) | West Valley College (0709.00) |
| % Employed Four Quarters After Exit | 74% | 68% | 59% | 62% | 64% | 68% |
| Median Quarterly Earnings Two Quarters After Exit | $10,550 | $9,771 | $8,399 | $10,242 | $11,841 | $9,531 |
| Median % Change in Earnings | 46% | 41% | 48% | 47% | 50% | 41% |
| % of Students Earning a Living Wage | 63% | 57% | 63% | 59% | 65% | 53% |

*Source: Launchboard Pipeline (version available on 3/29/19)*

# Skills, Certifications and Education

**Table 9. Top Skills for Web Administrators in Bay Region (March 2018 - Feb 2019)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Skill | Postings | Skill | Postings | Skill | Postings |
| Web Site Design | 78 | A/B testing | 44 | Scheduling | 27 |
| E-Commerce | 76 | UNIX | 43 | Web Application Development | 26 |
| Web Development | 62 | Website Management | 42 | Adobe Experience Manager | 25 |
| Website Production | 61 | Content Management Systems (CMS) | 41 | Apache Tomcat | 25 |
| JavaScript | 60 | Google Analytics | 40 | Search Engine Optimization | 25 |
| Web Content Management | 59 | Digital Marketing | 39 | Database Management | 24 |
| Web Analytics | 55 | Extensible Markup Language | 34 | Middleware | 24 |
| Adobe Photoshop | 54 | Social Media | 33 | Python | 24 |
| Key Performance Indicators (KPIs) | 53 | Quality Assurance and Control | 31 | Adobe Indesign | 22 |
| Project Management | 53 | Tableau | 30 | Experiments | 22 |
| SQL | 52 | Drupal | 29 | Hypertext Preprocessor | 22 |
| Linux | 49 | Online Advertising | 28 | Adobe Acrobat | 21 |
| WebLogic | 47 | Oracle | 28 | SAS | 21 |
| Content Management | 46 | Apache Webserver | 27 | SPSS | 21 |
| Java | 46 | Product Management | 27 | Adobe Creative Suite | 20 |

*Source: Burning Glass*

**Table 10. Certifications for Web Administrators in the Bay Region (March 2018 - Feb 2019)**

Note: 51% 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 |
| Web Site Design | 78 | Extensible Markup Language (XML) | 34 |
| E-Commerce | 76 | Social Media | 33 |
| Web Development | 62 | Quality Assurance and Control | 31 |
| Website Production | 61 | Tableau | 30 |
| JavaScript | 60 | Drupal | 29 |
| Web Content Management | 59 | Online Advertising | 28 |
| Web Analytics | 55 | Oracle | 28 |
| Adobe Photoshop | 54 | Apache Webserver | 27 |
| Key Performance Indicators (KPIs) | 53 | Product Management | 27 |
| Project Management | 53 | Scheduling | 27 |
| SQL | 52 | Web Application Development | 26 |
| Linux | 49 | Adobe Experience Manager (AEM) | 25 |
| WebLogic | 47 | Apache Tomcat | 25 |
| Content Management | 46 | Search Engine Optimization (SEO) | 25 |
| Java | 46 | Database Management | 24 |
| A/B testing | 44 | Middleware | 24 |
| UNIX | 43 | Python | 24 |
| Website Management | 42 | Adobe Indesign | 22 |
| Content Management Systems (CMS) | 41 | Experiments | 22 |
| Google Analytics | 40 | Hypertext Preprocessor (PHP) | 22 |
| Digital Marketing | 39 | Adobe Acrobat | 21 |

*Source: Burning Glass*

**Table 11. Education Requirements for Web Administrators in Bay Region**

Note: 49% 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 | 16 (8%) |
| Associate Degree | 0 (0%) |
| Bachelor’s Degree or Higher | 178 (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 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