** Business Office Technology Occupations**

**Labor Market Information Report**

**Hartnell 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 Business Office Technology workers compared to the demand for this cluster of occupations in the Bay region and in the SC-Monterey sub-region (Monterey, San Benito, and Santa Cruz Counties). The gap is about 19,163 students annually in the Bay region and 2,732 students annually in the SC-Monterey Sub-Region.

This report also provides student outcomes data on employment and earnings for programs on TOP 0514.00 - Office Technology/Office Computer Applications 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 Hartnell College and in the region.

# Introduction

This report profiles Business Office Technology Occupations in the 12 county Bay region and in the SC-Monterey sub-region for a proposed new program at Hartnell College.

|  |
| --- |
| * **Secretaries and Administrative Assistants, Except Legal, Medical, and** **Executive (SOC 43-6014):** Perform routine clerical and administrative functions such as drafting correspondence, scheduling appointments, organizing and maintaining paper and electronic files, or providing information to callers. Excludes legal, medical, and executive secretaries (43-6011 through 43-6013).
 |
| *Entry-Level Educational Requirement: High school diploma or equivalent* |
| *Training Requirement: Short-term on-the-job training* |
| *Percentage of Community College Award Holders or Some Postsecondary Coursework: 47%* |
|  |
| * **Billing and Posting Clerks (SOC 43-3021):** Compile, compute, and record billing, accounting, statistical, and other numerical data for billing purposes. Prepare billing invoices for services rendered or for delivery or shipment of goods.
 |
| *Entry-Level Educational Requirement: High school diploma or equivalent* |
| *Training Requirement: Moderate-term on-the-job training* |
| *Percentage of Community College Award Holders or Some Postsecondary Coursework: 49%* |
|  |
| * **File Clerks (SOC 43-4071):** File correspondence, cards, invoices, receipts, and other records in alphabetical or numerical order or according to the filing system used. Locate and remove material from file when requested.
 |
| *Entry-Level Educational Requirement: High school diploma or equivalent* |
| *Training Requirement: Short-term on-the-job training* |
| *Percentage of Community College Award Holders or Some Postsecondary Coursework: 44%* |
|  |
| * **Customer Service Representatives (SOC 43-4051):** Interact with customers to provide information in response to inquiries about products and services and to handle and resolve complaints. Excludes individuals whose duties are primarily installation, sales, or repair.
 |
| *Entry-Level Educational Requirement: High school diploma or equivalent* |
| *Training Requirement: Short-term on-the-job training* |
| *Percentage of Community College Award Holders or Some Postsecondary Coursework: 43%* |
|  |
| * **Executive Secretaries and Executive Administrative Assistants (SOC 43-6011**): Provide high-level administrative support by conducting research, preparing statistical reports, handling information requests, and performing clerical functions such as preparing correspondence, receiving visitors, arranging conference calls, and scheduling meetings. May also train and supervise lower-level clerical staff. Excludes "Secretaries" (43-6012 through 43-6014).
 |
| *Entry-Level Educational Requirement: High school diploma or equivalent* |
| *Training Requirement: None* |
| *Percentage of Community College Award Holders or Some Postsecondary Coursework: 47%* |

# Occupational Demand

**Table 1. Employment Outlook for Business Office Technology 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 |
| Secretaries and Administrative Assistants, Except Legal, Medical, and Executive | 67,055 | 67,510 | 455  | 1% | 36,802 | 7,360 | $14.40  | $21.89  |
| Billing and Posting Clerks | 12,434 | 13,573 | 1,138  | 9% | 7,446 | 1,489 | $14.28  | $22.75  |
| File Clerks | 3,404 | 3,361 | (44) |  (1%) | 2,088 | 418 | $10.75  | $15.55  |
| Customer Service Representatives | 50,420 | 55,492 | 5,072  | 10% | 38,062 | 7,612 | $13.52  | $20.98  |
| Executive Secretaries and Executive Administrative Assistants | 24,898 | 23,281 | (1,617) |  (6%) | 12,786 | 2,557 | $23.01  | $34.87  |
| **Total** | **158,211** | **163,217** | **5,005** | **3%** | **97,183** | **19,437** | **$15.39**  | **$23.57**  |

*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 Business Office Technology Occupations in SC-Monterey 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 |
| Secretaries and Administrative Assistants, Except Legal, Medical, and Executive | 9,405 | 9,398 | (6) |  (0%) | 5,109 | 1,022 | $14.56  | $21.22  |
| Billing and Posting Clerks | 1,788 | 1,947 | 160  | 9% | 1,066 | 213 | $14.21  | $21.80  |
| File Clerks | 540 | 529 | (11) |  (2%) | 329 | 66 | $10.64  | $14.31  |
| Customer Service Representatives | 7,296 | 8,039 | 744  | 10% | 5,525 | 1,105 | $14.30  | $21.56  |
| Executive Secretaries and Executive Administrative Assistants | 3,685 | 3,485 | (201) |  (5%) | 1,899 | 380 | $22.35  | $34.11  |
| **TOTAL** | **22,714** | **23,399** | **685**  | **3%** | **13,928** | **2,786** | **$15.62**  | **$23.30**  |

*Source: EMSI 2018.4*

**SC-Monterey Sub-Region** includes Monterey, San Benito, and Santa Cruz Counties

### Job Postings in Bay Region and SC-Monterey Sub-Region

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

|  |  |  |
| --- | --- | --- |
| Occupation | Bay Region | SC-Monterey |
| Secretaries and Administrative Assistants, Except Legal, Medical, and Executive (43-6014.00) | 18,996 | 565 |
| Customer Service Representatives (43-4051.00) | 18,567 | 542 |
| Executive Secretaries and Executive Administrative Assistants (43-6011.00) | 5,287 | 70 |
| Billing, Cost, and Rate Clerks (43-3021.02) | 1,036 | 28 |
| File Clerks (43-4071.00) | 565 | 13 |
| Statement Clerks (43-3021.01) | 2 |  |
| **Total** | **44,453** | **1,218** |

*Source: Burning Glass*

**Table 4. Top Job Titles for Business Office Technology Occupations for latest 12 months (Nov 2017 - Oct 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Common Title | Bay | SC-Monterey | Common Title | Bay | SC-Monterey |
| Administrative Assistant | 10,782 | 253 | Client Service Representative | 537 | 31 |
| Customer Service Representative | 5,776 | 187 | Customer Service | 477 | 9 |
| Executive Assistant | 4,131 | 55 | Customer Service Agent | 454 | 7 |
| Customer Service Associate | 1,261 | 49 | Secretary | 427 | 19 |
| Customer Service Specialist | 1,114 | 31 | Service Representative | 374 | 4 |
| Administrative Coordinator | 736 | 35 | Administrative Specialist | 361 | 21 |
| Front Desk Coordinator | 684 |  | Administrative Associate | 340 | 6 |
| Office Coordinator | 607 | 14 | Executive Administrative Assistant | 337 | 3 |

*Source: Burning Glass*

# Industry Concentration

**Table 5. Industries hiring Business Office Technology 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 (611310) | 5,522 | 5,572 | 4% | 5.9% |
| Colleges, Universities, and Professional Schools (State Government) (902612) | 4,904 | 5,016 | 6% | 5.3% |
| Local Government, Excluding Education and Hospitals (903999) | 4,477 | 4,441 |  (1%) | 4.7% |
| Elementary and Secondary Schools (Local Government) (903611) | 3,367 | 3,319 |  (1%) | 3.5% |
| Corporate, Subsidiary, and Regional Managing Offices (551114) | 2,679 | 2,734 | 2% | 2.9% |
| Religious Organizations (813110) | 2,566 | 2,563 |  (2%) | 2.7% |
| Offices of Physicians (except Mental Health Specialists) (621111) | 2,437 | 2,418 |  (2%) | 2.6% |
| Offices of Lawyers (541110) | 1,908 | 1,891 |  (4%) | 2.0% |
| Temporary Help Services (561320) | 1,800 | 1,771 | 0% | 1.9% |
| Offices of Certified Public Accountants (541211) | 1,763 | 1,750 | 6% | 1.9% |
| General Medical and Surgical Hospitals (622110) | 1,741 | 1,722 |  (5%) | 1.8% |
| Colleges, Universities, and Professional Schools (Local Government) (903612) | 1,713 | 1,617 |  (18%) | 1.7% |
| Services for the Elderly and Persons with Disabilities (624120) | 1,496 | 1,462 | 12% | 1.6% |
| Office Administrative Services (561110) | 1,514 | 1,416 |  (8%) | 1.5% |

*Source: EMSI 2018.4*

**Table 6. Top Employers Posting Business Office Technology Occupations in Bay and SC-Monterey Sub-Region (Nov 2017 - Oct 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Employer | Bay | Employer | Bay | Employer | SC-Monterey |
| 24 Hour Fitness | 357 | California State University | 137 | US Army | 37 |
| FedEx | 322 | Public Storage Incorporated | 124 | University California | 33 |
| Bank of America | 218 | Stanford University | 120 | California State University | 30 |
| Walgreens Boots Alliance Inc | 184 | Chevron | 118 | University Of California Santa Cruz | 27 |
| University California | 183 | Morgan Stanley | 114 | FedEx | 20 |
| Best Buy | 182 | Sherwin Williams | 109 | Best Buy | 18 |
| Marriott International Incorporated | 181 | Postmates | 99 | Walgreens Boots Alliance Inc | 18 |
| State Farm Insurance Companies | 173 | Whole Foods Market, Inc. | 90 | Prestige Marketing Solutions | 17 |
| Wells Fargo | 147 | University Of California Berkeley | 89 | US Navy | 17 |
| Uc San Diego | 146 | Cintas | 87 | Department Army | 15 |

*Source: Burning Glass*

# Educational Supply

There are 24 community colleges in the Bay Region issuing 274 awards annually on TOP 0514.00 - Office Technology/Office Computer Applications. There are three colleges in the SC-Monterey sub-region issuing 54 awards annually on this TOP code.

**Table 7. Awards on TOP 0514.00 - Office Technology/Office Computer Applications in the Bay Region**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| College | Sub-Region | Headcount | Associates | Certificates | Noncredit | Total |
| **Berkeley City** | East Bay | n/a | 1 | 1 |  | 2 |
| **Cabrillo** | Santa Cruz & Monterey | 365 | 6 | 28 |  | 34 |
| **Canada** | Mid-Peninsula | 609 | 2 | 4 |  | 6 |
| **Chabot**  | East Bay | 122 | 3 | 5 |  | 8 |
| **Contra Costa** | East Bay | 212 | 4 | 5 |  | 9 |
| **Diablo Valley** | East Bay | 111 |  | 3 |  | 3 |
| **Evergreen Valley** | Silicon Valley | 246 | 2 |  |  | 2 |
| **Gavilan** | Silicon Valley | 484 | 1 | 2 |  | 3 |
| **Hartnell** | Santa Cruz & Monterey | 321 | 6 | 13 |  | 19 |
| **Laney** | East Bay | 384 | 2 | 1 |  | 3 |
| **Las Positas** | East Bay | 11 | 1 | 3 |  | 4 |
| **Los Medanos** | East Bay | 657 | 7 | 6 |  | 13 |
| **Merritt** | East Bay | n/a | 0 | 0 |  | 1 |
| **Mission** | Silicon Valley | 371 | 1 | 1 |  | 2 |
| **Monterey** | Santa Cruz & Monterey | 170 | 1 | 0 |  | 1 |
| **Napa** | North Bay | 103 | 1 | 0 |  | 1 |
| **Ohlone** | East Bay | 262 | 0 | 2 |  | 2 |
| **San Francisco** | Mid-Peninsula | 889 | 2 | 8 |  | 10 |
| **San Francisco Ctrs** | Mid-Peninsula | 2,076 |  |  | 76 | 76 |
| **San Jose City** | Silicon Valley | 256 |  | 2 |  | 2 |
| **San Mateo** | Mid-Peninsula | 467 | 1 | 5 |  | 6 |
| **Santa Rosa** | North Bay | 1,137 | 4 | 45 |  | 49 |
| **Skyline** | Mid-Peninsula | 555 | 4 | 7 |  | 11 |
| **Solano** | North Bay |  | 3 | 3 |  | 6 |
| **West Valley** | Silicon Valley | 113 |  | 2 |  | 2 |
| **Total Bay Region** |  **9,921**  |  **52**  |  **146**  |  **76**  |  **274**  |
| **Total SC-Monterey Sub-Region** |  **856**  |  **13**  |  **41**  |  **-**  |  **54**  |

# *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 19,437 annual openings for the Business Office Technology occupational cluster and 274 annual awards for an annual undersupply of 19,163. In the SC-Monterey Sub-Region, there is also a gap with 2,786 annual openings and 54 annual awards for an annual undersupply of 2,732.

# Student Outcomes

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0514.00 - Office Technology/Office Computer Applications**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2015-16 | Bay (All CTE Programs) | Hartnell College (All CTE Programs) | State (TOP 0514.00) | Bay (TOP0514.00) | SC-Monterey (TOP 0514.00) | Hartnell College (TOP 0514.00) |
| % Employed Four Quarters After Exit | 75% | 81% | 66% | 72% | 70% | 89% |
| Median Quarterly Earnings Two Quarters After Exit | $13,996 | $19,867 | $6,933 | $9,124 | $6,841 | $8,164 |
| Median % Change in Earnings | 40% | 23% | 44% | 37% | 33% | 48% |
| % of Students Earning a Living Wage | 63% | 77% | 47% | 59% | 50% | 59% |

*Source: Launchboard Pipeline (version available on 11/15/18)*

# Skills, Certifications and Education

**Table 9. Top Skills for Business Office Technology Occupations in Bay Region (Nov 2017 - Oct 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Skill | Postings | Skill | Postings | Skill | Postings |
| Customer Service | 21,052 | Customer Billing | 3,337 | Repair | 1,683 |
| Administrative Support | 20,165 | General Office Duties | 2,602 | Product Sales | 1,649 |
| Scheduling | 11,102 | Project Management | 2,561 | Event Planning | 1,625 |
| Data Entry | 5,426 | Mailing | 2,552 | Filing | 1,572 |
| Travel Arrangements | 5,212 | Staff Management | 2,483 | Onboarding | 1,502 |
| Customer Contact | 5,129 | Retail Industry Knowledge | 2,446 | Cash Handling | 1,484 |
| Expense Reports | 4,953 | Record Keeping | 2,150 | Customer Checkout | 1,458 |
| Spreadsheets | 3,887 | Copying | 2,110 | Invoice Processing | 1,371 |
| Appointment Setting | 3,799 | Accounting | 2,015 | Salesforce | 1,362 |
| Sales | 3,776 | Office Management | 1,930 | Calendar Management | 1,309 |
| Administrative Functions | 3,543 | Secretarial Skills | 1,754 | Prepare Presentations | 1,249 |
| Budgeting | 3,344 | Office Supply Ordering | 1,695 | Purchasing | 1,205 |

*Source: Burning Glass*

**Table 10. Certifications for Business Office Technology Occupations in the Bay Region (Nov 2017 - Oct 2018)**

Note: 89% 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 | 2,978 | Automotive Service Excellence (ASE) Certification | 65 |
| Series 7 | 247 | Certified Financial Planner (CFP) | 63 |
| First Aid Cpr Aed | 207 | ITIL Certification | 50 |
| Security Clearance | 177 | Investment Advisor | 48 |
| Property and Casualty License | 171 | Department of Transportation (DOT) Medical Certification | 46 |
| Typing Certification | 142 | Project Management Certification | 44 |
| IT Infrastructure Library (ITIL) Certification | 94 | Forklift Operator Certification | 37 |
| Real Estate Certification | 83 | Series 65 | 36 |
| Insurance Agent Certification | 79 | Food Handler Certification | 35 |
| Insurance License | 79 | Series 63 | 33 |

*Source: Burning Glass*

**Table 11. Education Requirements for Business Office Technology Occupations in Bay Region**

Note: 50% 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 | 12,221 (55%) |
| Associate Degree | 1,727 (8%) |
| Bachelor’s Degree or Higher | 8,126 (37%) |

*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:

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