Office Occupations
Labor Market Information Report
Cabrillo College

Prepared by the San Francisco Bay Center of Excellence
for Labor Market Research
August 2020

Recommendation

Based on all available data, there appears to be an undersupply of Office 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). There is a projected annual gap of about 11,084 students in the Bay region and 704 students in the SC-Monterey Sub-Region.

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

Introduction

This report profiles Office Occupations in the 12 county Bay region and in the SC-Monterey sub-region for an existing Office Software low unit, local certificate(s) at Cabrillo College for state chaptering.

- **Procurement Clerks (43-3061):** Compile information and records to draw up purchase orders for procurement of materials and services.
  - 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: 34%

- **Data Entry Keyers (43-9021):** Operate data entry device, such as keyboard or photo composing perforator. Duties may include verifying data and preparing materials for printing. Excludes "Word Processors and Typists" (43-9022).
  - 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: 46%

- **Word Processors and Typists (43-9022):** Use word processor, computer or typewriter to type letters, reports, forms, or other material from rough draft, corrected copy, or voice recording. May perform other clerical duties as assigned. Excludes "Data Entry Keyers" (43-9021), "Secretaries and Administrative Assistants" (43-6011 through 43-6014), "Court Reporters" (23-2091), and "Medical Transcriptionists" (31-9094).
  - 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: 46%

- **Office Clerks, General (43-9061):** Perform duties too varied and diverse to be classified in any specific office clerical occupation, requiring knowledge of office systems and procedures. Clerical duties may be assigned in accordance with the office procedures of individual establishments and may include a combination of answering telephones, bookkeeping, typing or word processing, stenography, office machine operation, and filing.
  - 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%

- **Statistical Assistants (43-9111):** Compile and compute data according to statistical formulas for use in statistical studies. May perform actuarial computations and compile charts and graphs for use by actuaries. Includes actuarial clerks.
  - Entry-Level Educational Requirement: Bachelor's degree
  - Training Requirement: None
  - Percentage of Community College Award Holders or Some Postsecondary Coursework: 37%

Occupational Demand

Table 1. Employment Outlook for Office Occupations in Bay Region

Occupation	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	5-Yr Open-ings	Average Annual Open-ings	25% Hourly Wage	Median Hourly Wage
Procurement Clerks	1,354	1,395	41	3%	769	154	$19.42	$23.42
Data Entry Keyers	4,390	4,397	7	0%	2,731	546	$15.19	$18.32
Word Processors and Typists	1,413	1,260	-153	-11%	824	165	$18.66	$26.06
Office Clerks, General	81,325	83,887	2,562	3%	52,621	10,524	$16.11	$20.90
Statistical Assistants	358	403	45	13%	281	56	$19.84	$26.54
TOTAL	**88,839**	**91,341**	**2,502**	**3%**	**57,226**	**11,445**	**$16.17**	**$20.92**

Source: EMSI 2020.3
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 Office Software Occupations in SC-Monterey Sub-Region

Occupation	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	5-Yr Open-ings	Average Annual Open-ings	25% Hourly Wage	Median Hourly Wage
Procurement Clerks	135	135	0	0%	73	15	$18.86	$23.55
Data Entry Keyers	533	484	-49	-9%	297	59	$14.01	$16.97
Word Processors and Typists	86	76	-11	-12%	50	10	$15.75	$19.94
Office Clerks, General	5,700	5,852	152	3%	3,652	730	$15.07	$18.36
Statistical Assistants	<10	<10			<10	Insf. Data	Insf. Data	Insf. Data
TOTAL	**6,454**	**6,547**	**93**	**1%**	**4,072**	**814**	**$15.07**	**$18.38**

Source: EMSI 2020.3
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 (July 2019 - June 2020)

Occupation	Bay Region	4-County Region	SC-Monterey Sub-Region
Office Clerks, General	7,802	2,131	339
Data Entry Keyers	3,195	843	121
Procurement Clerks	433	138	31
Word Processors and Typists	400	106	59
Bioinformatics Technicians	38	14	6
Statistical Assistants	9	4	3
TOTAL	**11,877**	**3,236**	**559**

Source: Burning Glass

Table 4a. Top Job Titles for Office Occupations for latest 12 months (July 2019 - June 2020) Bay Region

Common Title	Bay	Common Title	Bay

Office Assistant	2,696	Desk Clerk	161
Office Administrator	1,263	Typist	153
Data Entry Clerk	958	Entry	136
Office Clerk	554	Office Coordinator	107
Data Entry	493	Clerical Assistant	107
Data Entry Specialist	406	Data Entry Operator	87
Office Associate	289	Property Assistant	83
Student Assistant	287	Purchasing Assistant	80
Real Estate Assistant	263	Assistant Office Manager	76
Intern	246	General Clerk	75
Administrative Clerk	243	Purchasing Specialist	64
Clerk	182	Purchasing Clerk	59
Data Collector	165	Data Entry Compiler	58
Office Technician	163	Clinical Assistant	55

Table 4b. Top Job Titles for Office Occupations for latest 12 months (July 2019 - June 2020) 4-County Region (Santa Cruz, San Benito, Monterey and Santa Clara Counties)

Common Title	Bay	Common Title	Bay
Office Assistant	722	Typist	35
Office Administrator	405	Clerk	33
Data Entry Clerk	252	Assistant Office Manager	30
Office Clerk	138	Property Assistant	29
Data Entry	128	General Clerk	29
Data Entry Specialist	118	Office Coordinator	28
Intern	94	Purchasing Clerk	27
Real Estate Assistant	69	Purchasing Assistant	21
Administrative Clerk	69	Data Entry Compiler	18
Data Collector	61	Desk Clerk	17
Office Associate	59	Administrative Assistant	17
Student Assistant	46	Data Entry Operator	16
Clerical Assistant	45	Purchasing Specialist	14
Office Technician	43	Data Entry Support	12

Table 4c. Top Job Titles for Office Occupations for latest 12 months (July 2019 - June 2020) SC-Monterey Sub-Region

Common Title	SC-Monterey	Common Title	SC-Monterey
Office Assistant	159	Data Entry Compiler	8
Office Administrator	40	Real Estate Assistant	7
Data Entry Clerk	40	Office Staff	7
Office Technician	33	Clerical Assistant	7
Office Clerk	21	Do Others	6
Data Collector	16	Administrative Clerk	6
Typist	15	Expeditor	5
Student Assistant	15	Administrative Assistant	5
Data Entry	15	Technician	4
Purchasing Clerk	13	Purchasing Specialist	4
General Clerk	12	Data Collector, Retail Industry	4
Data Entry Specialist	12	Scheduling Data Entry Representative	3
Clerk	11	Office Associate	3
Intern	8	Microsoft Word Processing Operator	3

Source: Burning Glass

Industry Concentration

Table 5. Industries hiring Office Workers in Bay Region

Industry – 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2019)	Jobs in Industry (2024)	% Change (2019-24)	% Occupation Group in Industry (2019)
Colleges, Universities, and Professional Schools (State Government) (902612)	6,189	6,546	6%	7%
Local Government, Excluding Education and Hospitals (903999)	4,829	4,791	-1%	5%
Colleges, Universities, and Professional Schools (611310)	4,728	4,965	5%	5%
Temporary Help Services (561320)	2,541	2,476	-3%	3%
Colleges, Universities, and Professional Schools (Local Government) (903612)	1,907	1,480	-22%	2%
Internet Publishing and Broadcasting and Web Search Portals (519130)	1,787	2,138	20%	2%
Services for the Elderly and Persons with Disabilities (624120)	1,606	1,936	21%	2%
Plumbing, Heating, and Air-Conditioning Contractors (238220)	1,598	1,732	8%	2%
Elementary and Secondary Schools (Local Government) (903611)	1,591	1,555	-2%	2%
Custom Computer Programming Services (541511)	1,370	1,588	16%	2%
Religious Organizations (813110)	1,333	1,296	-3%	2%
Corporate, Subsidiary, and Regional Managing Offices (551114)	1,195	1,179	-1%	1%
Data Processing, Hosting, and Related Services (518210)	1,164	1,485	28%	1%
Offices of Dentists (621210)	1,087	1,121	3%	1%
Offices of Lawyers (541110)	1,032	1,007	-2%	1%
Offices of Physicians (except Mental Health Specialists) (621111)	1,028	980	-5%	1%
Electrical Contractors and Other Wiring Installation Contractors (238210)	992	1,041	5%	1%
State Government, Excluding Education and Hospitals (902999)	969	964	-1%	1%
Residential Property Managers (531311)	912	951	4%	1%

Source: EMSI 2020.3

Table 6. Top Employers Posting Office Occupations in Bay Region and SC-Monterey Sub-Region (July 2019 - June 2020)

Employer	Bay	Employer	Bay	Employer	SC-Monterey
C.R. England, Inc.	109	Lucile Packard Children's Hospital	29	Salinas City Elementary	11
University San Francisco	96	Morani Enterprise	25	State of California	9
Morani Enterprise	94	Retail Data Llc	21	University Of California Santa Cruz	8
State of California	52	Stanford University	18	Santa Cruz City Schools	7
Retail Data Llc	48	Russian School Mathematics	17	Employnet	7
Retaildata, Llc	43	State of California	13	Retail Data Llc	6
Carmax	43	Retaildata, Llc	13	PAE Inc.	6
Coe Inc.	39	Compass Group North America	12	Morani Enterprise	6
Nelson	36	San Jose Unified School District	11	Chenega Corporation	6
Tenderloin Neighborhood Development	33	Salinas City Elementary	11	University California	5
Lucile Packard Children's Hospital	33	PAE Inc.	11	Retaildata, Llc	5
Russian School Mathematics	32	Intel Corporation	11	Monterey County California	5
John Stewart Company	30	In House Vacancy Internal Candidates Only	11	Greenfield Union School District County	5
US Marine Corps	27	Cogswell College	11	Conners Appliance	5

Boys & Girls Clubs Of America	27	Akima Management Services	11	Pajaro Valley Unified School District	4
Laica De La Raza Inc.	26	Stanford Health Care	10	Living Healthy	4
Chinatown Community Development Center	26	San Jose State University Research Foundation	10	California State University	4

Source: Burning Glass

Educational Supply

There are 21 community colleges in the Bay Region issuing 209 awards on average annually (last 3 years ending 2018-19) on TOP 0514.00-Office Technology/Office Computer Applications. There are two colleges in the SC-Monterey Sub-Region issuing 49 awards on average annually (last 3 years) on this TOP code.

There are six (6) Other Educational Institutions in the Bay Region issuing 152 awards on average annually (last 3 years ending 2016-17) on TOP 0514.00-Office Technology/Office Computer Applications. There are two Other Educational Institutions in the SC-Monterey Sub-Region issuing 61 awards on average annually (last 3 years) on this TOP code.

Table 7a. Community College Awards on TOP 0514.00-Office Technology/Office Computer Applications in Bay Region

College	Sub-Region	Associates	Certificate Low Unit	Noncredit	Total
Cabrillo	SC - Monterey	4	28		32
Canada	Mid-Peninsula	1	2		3
Chabot	East Bay	6	5		11
Contra Costa	East Bay	5	5		10
Diablo Valley	East Bay		2		2
Evergreen Valley	Silicon Valley	1			1
Gavilan	Silicon Valley	1	1		2
Hartnell	SC - Monterey	8	8		16
Laney	East Bay	3	1		4
Las Positas	East Bay		1		1
Los Medanos	East Bay	4	3		7
Mission	Silicon Valley	1	2		3
Napa	North Bay	1			1
Ohlone	East Bay		1		1
San Francisco	Mid-Peninsula	3	4		7
San Francisco Ctrs	Mid-Peninsula		1	19	20
San Jose City	Silicon Valley		2		2
San Mateo	Mid-Peninsula	1	5		6
Santa Rosa	North Bay	9	34	20	63
Skyline	Mid-Peninsula	2	3		5
Solano	North Bay	5	6		11
West Valley	Silicon Valley		1		1
Total Bay Region		**56**	**114**	**39**	**209**
Total SC-Monterey Sub-Region		**13**	**36**	**0**	**49**

Source: Data Mart

Note: The annual average for awards is 2016-17 to 2018-19.

Table 7b. Other Educational Institutions Awards on TOP 0514.00-Office Technology/Office Computer Applications in Bay Region

College	Sub-Region	Associate Degree	Award < 1 academic yr.	Award 1 < 2 academic yrs.	Award 2 < 4 academic yrs.	Total
Central Coast College	SC - Monterey		19			19
CET-Salinas	SC - Monterey			42		42
CET-Sobrato	Silicon Valley		28	14		42
Empire College	North Bay	10	6	14		30
Golden State College of Court Reporting	East Bay				6	6
Mt. Diablo Adult Education-Mt. Diablo USD	East Bay		13			13
Total Bay Region		**10**	**66**	**70**	**6**	**152**
Total SC-Monterey Sub-Region		**0**	**19**	**42**	**0**	**61**

Source: Data Mart

Note: The annual average for awards is 2014-15 to 2016-17.

Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 11,445 annual openings for the Office occupational cluster and 361 annual (3-year average) awards from community colleges and Other Educational Institutions for an annual undersupply of 11,084 students. In the SC-Monterey Sub-Region, there is also a gap with 814 annual openings and 110 annual (3-year average) awards from community colleges and Other Educational Institutions for an annual undersupply of 704 students.

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	Cabrillo College All CTE Programs	State (0514.00)	Bay (0514.00)	SC-Monterey (0514.00)	Cabrillo College (0514.00)
% Employed Four Quarters After Exit	74%	70%	66%	71%	71%	70%
Median Quarterly Earnings Two Quarters After Exit	$10,550	$8,510	$6,765	$8,568	$6,993	$8,036
Median % Change in Earnings	46%	58%	46%	40%	36%	43%
% of Students Earning a Living Wage	63%	54%	47%	56%	51%	52%

Source: Launchboard Pipeline (version available on (8/11/20)

Skills, Certifications and Education

Table 9. Top Skills for Office Occupations in Bay Region (July 2019 - June 2020)

Skill	Postings	Skill	Postings	Skill	Postings
Data Entry	4,680	Scheduling	2,202	Mail Sorting	751
Customer Service	3,209	Customer Billing	751	Purchasing	735
Scheduling	2,202	Mail Sorting	751	Customer Checkout	481
Administrative Support	2,174	Purchasing	735	Customer Contact	476
Spreadsheets	1,767	Sorting	735	Staff Management	437
General Office Duties	1,504	Filing	702	Expense Reports	409
Office Management	1,088	Record Keeping	662	Repair	397
Administrative Functions	1,080	Clerical Duties	557	Project Management	388
Mailing	942	Office Supply Ordering	555	Social Media	388
Appointment Setting	914	Quickbooks	555	Bookkeeping	372
Accounting	791	Front Office	526	Travel Arrangements	363
Copying	783	Budgeting	521	Database Management	352
Data Entry	4,680	Office Administration	485	Procurement	318
Customer Service	3,209	Customer Billing	751	Onboarding	315

Table 10. Certifications for Office Occupations in Bay Region (July 2019 - June 2020)

Note: 87% 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	868	Branch Manager Certificate	10
Typing Certification	243	Basic Life Saving (BLS)	10
Real Estate Certification	128	Life and Health Insurance License	9
CDL Class A	126	Registered Dietitian	8
First Aid CPR AED	53	Property and Casualty License	8
Security Clearance	33	Office Technician	7
Contractors License	14	Certified Coding Specialist	7
45 Words Per Minute	14	CDL Class C	7
ServSafe	13	Security Guard Certification	5
Certified Shorthand Reporter	13	Registered Health Information Administrator	5
Mbe Certified	12	Food Handler Certification	5
Business Education	11	Certified Veterinary Technician	5

Source: Burning Glass

Table 11. Education Requirements for Office Occupations in Bay Region

Note: 44% 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	Percent 12 Mos. Postings
High school or vocational training	3,628	70%
Associate Degree	337	6%
Bachelor's Degree or Higher	1,201	24%

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/
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, Research Analyst, for Bay Area Community College Consortium (BACCC) and Centers of Excellence (CoE), doreen@baccc.net or (831) 479-6481
- John Carrese, Director, San Francisco Bay Center of Excellence for Labor Market Research, jcarrese@ccsf.edu or (415) 267-6544