

**Program Endorsement Brief: 0702.10/Software Applications
Excel and Access; Introduction to Computer Information Technology; Microcomputer
Productivity Software**

Los Angeles/Orange County Center of Excellence, February 2019

Summary:

The Los Angeles/Orange County Center of Excellence for Labor Market Research (COE) prepared this report to provide regional labor market supply and demand data for jobs that require the use and knowledge of business-related computer applications, such as Microsoft Office (including Excel and Access). This report is intended to help determine whether there is demand in the local labor market that is not being met by the supply from community college programs that align with relevant occupations.

The following summarizes key findings from this data brief:

- Jobs that require the use and knowledge of business-related computer applications such as Excel and Access are increasing by 2% over the next five years, and more than 8,300 job openings will be available annually due to new job growth and replacement need.
- Over the past 12 months, there were 3,149 online job postings requiring the use and knowledge of business-related computer applications in Los Angeles and Orange Counties.
- Six other related program recommendation requests were received during 2018 from regional community colleges.
- Fifteen colleges in the region have existing programs closely related to business-related computer applications such as Microsoft Excel and Access.
- Between 2014 and 2017, community colleges in the region conferred an average of 175 awards annually (associate degrees and certificates) in related training programs.

Occupational Demand—In Los Angeles/Orange County, the number of business-related jobs that require the use and knowledge of business-related computer applications is projected to increase by 2%. There will be more than 8,300 job openings per year through 2022 (Exhibit 1).

Exhibit 1: Occupational demand in Los Angeles and Orange Counties¹

Geography	2017 Jobs	2022 Jobs	2017-2022 Change	2017-2022 % Change	Annual Openings
Los Angeles	60,823	61,481	658	1%	5,869
Orange	24,520	25,199	681	3%	2,446
Total	85,343	86,680	1,337	2%	8,315

¹ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

Wages—Entry-level wages for these business-related computer application occupations in the region are between \$17.19 and \$29.73. Entry-level wages for these occupations are higher than the MIT Living hourly wage for one adult in the region (\$13.54 in Los Angeles County and \$15.31 in Orange County). Experienced workers earn between \$43.96 and \$83.78 per hour, which is higher than the living wage. Regional wages are below the average statewide wage for this occupation.

Job Postings—There were 3,149 online job postings the past 12 months for business/IT-related jobs that require professional knowledge of Microsoft Office, Access and/or Excel. The majority of job postings are for office manager, customer service manager, accounts payable/receivable manager, payroll manager and administrative manager. Top Microsoft software skills are: Excel, Office, Word, PowerPoint, Outlook, and Access. The top three employers, by number of job postings, in the region are: UC Irvine Health, UCLA Health, and University of California.

Educational Attainment—The BLS lists the following as the typical entry-level education for these business-related computer application occupations:

- Administrative Services Managers – Bachelor’s degree
- First-Line Supervisors of Office and Administrative Support Workers – High school diploma or equivalent

The national-level educational attainment data indicates between 41% and 42% of workers in the field have completed some college or an associate degree. In Los Angeles/Orange County, 70% of job postings request a Bachelor’s degree.

Community College Supply—Appendix A shows the three-year average number of awards conferred by community colleges in the related TOP codes: Information Technology (0701.00) and Software Applications (0702.10). The colleges with the most completions in the region are: Glendale, Mt. San Antonio and Santa Ana. During 2018, there were six other related program recommendation requests from regional community colleges.

Appendix A: Regional community college awards (certificates and degrees), 2014-2017

TOP Code	Program	College	2014-15 Awards	2015-16 Awards	2016-2017 Awards	3-Year Award Average
0701.00	Information Technology, General	Coastline	1	-	-	0
		Cypress	-	-	1	0
		East LA	-	4	8	4
		LA Mission	-	-	4	1
		LA Southwest	-	3	-	1
		Long Beach	7	10	27	15
		Mt San Antonio	104	83	61	83
		West LA	2	2	3	2
Subtotal/Average			114	102	104	107
0702.10	Software Applications	Cerritos	2	2	4	3
		Coastline	15	7	9	10

Cypress	-	2	-	1
Fullerton	-	-	1	0
Irvine	15	26	28	23
LA City	-	-	2	1
LA Mission	3	-	2	2
LA Southwest	3	1	2	2
Mt San Antonio	1	1	2	1
Pasadena	-	-	2	1
Saddleback	7	9	9	8
Santa Monica	12	21	17	17
Subtotal/Average	58	69	78	68
Total/Average	172	171	182	175

Appendix B: Occupational demand and wage data by county

Exhibit 2. Los Angeles County

Occupation (SOC)	2017 Jobs	2022 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
First-Line Supervisors of Office and Administrative Support Workers (43-1011)	50,415	50,694	279	1%	4,958	\$17.05	\$27.50	\$43.66
Administrative Services Managers (11-3011)	10,408	10,787	379	4%	911	\$28.80	\$48.40	\$82.02
Total	60,823	61,481	658	1%	5,869			

Exhibit 3. Orange County

Occupation (SOC)	2017 Jobs	2022 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
First-Line Supervisors of Office and Administrative Support Workers (43-1011)	19,199	19,685	486	3%	1,981	\$17.58	\$28.70	\$44.47
Administrative Services Managers (11-3011)	5,320	5,515	195	4%	466	\$31.81	\$55.14	\$86.84
Total	24,520	25,199	681	3%	2,446			

Exhibit 4. Los Angeles and Orange Counties

Occupation (SOC)	2017 Jobs	2022 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
First-Line Supervisors of Office and Administrative Support Workers (43-1011)	69,615	70,379	764	1%	34,694	6,939	\$17.19	\$27.83
Administrative Services Managers (11-3011)	15,728	16,301	573	4%	6,882	1,376	\$29.73	\$50.64
Total	85,343	86,680	1,337	2%	8,315			

Appendix C: Sources

- O*NET Online
- Labor Insight/Jobs (Burning Glass)
- Economic Modeling Specialists, International (EMSI)
- Employment Development Department, Labor Market Information Division, OES
- Employment Development Department, Unemployment Insurance Dataset
- Living Insight Center for Community Economic Development
- California Community Colleges Chancellor's Office Management Information Systems (MIS)
- MIT Living Wage
- Chancellor's Office Curriculum Inventory (COCI 2.0)

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