

Program Endorsement Brief: 0514.00 – Office Technology / Office Computer Applications

Telecommuting Fundamentals, Certificate of Achievement

Los Angeles/Orange County Center of Excellence, August 2021

Summary Analysis

Program Endorsement:	Endorsed: All Criteria Met <input type="checkbox"/>	Endorsed: Some Criteria Met <input checked="" type="checkbox"/>	Not Endorsed <input type="checkbox"/>
Program Endorsement Criteria			
Supply Gap:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Living Wage: (Entry-Level, 25th)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Education:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Emerging Occupation(s)			
	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

The Los Angeles/Orange County Center of Excellence for Labor Market Research (COE) prepared this report to provide Los Angeles/Orange County regional labor market supply and demand data related to five middle-skill occupations:

- *Sales representatives, wholesale and manufacturing, except technical and scientific products (41-4012);*
- *First-line supervisors of office and administrative support workers (43-1011);*
- *Customer service representatives (43-4051);*
- *Secretaries and administrative assistants, except legal, medical, and executive (43-6014);*
- *Office clerks, general (43-9061)*

Middle-skill occupations typically require some postsecondary education, but less than a bachelor's degree.¹ According to real-time labor market information, these five middle-skill office technology occupations are often considered common partially remote or "work from home" jobs, where knowledge of and ability to telecommute are desired skills. 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 the relevant occupations.

¹ The COE classifies middle-skill jobs as the following:

- All occupations that require an educational requirement of some college, associate degree or apprenticeship;
- All occupations that require a bachelor's degree, but also have more than one-third of their existing labor force with an educational attainment of some college or associate degree; or
- All occupations that require a high school diploma or equivalent or no formal education, but also require short- to long-term on-the-job training where multiple community colleges have existing programs.

Based on the available data, there appears to be a supply gap for the five occupations of interest in the region. Although all five occupations typically require a high school diploma or equivalent, nearly one-third or more of incumbent workers have completed some type of community college training. Regarding earnings, the majority of annual openings have entry-level wages **below** the living wage in both counties. **Therefore, due to some of the criteria being met, the COE endorses this proposed program.** Detailed reasons include:

Demand:

- **Supply Gap Criteria** – Over the next five years, there is projected to be nearly **46,000 jobs available annually** in the region due to retirements and workers leaving the field, which is more than the **1,349 awards conferred annually** by educational institutions in the region.
- **Living Wage Criteria** – In Los Angeles County, the majority (52%) of annual job openings for the five occupations of interest have entry-level wages **below** the county's living wage (\$15.04/hour).²
- **Educational Criteria** – The Bureau of Labor Statistics (BLS) lists a **high school diploma** as the **typical entry-level education for all five occupations**.
 - National-level educational attainment data indicates **between 32% and 46% of workers in the field have completed some college or an associate degree.**

Supply:

- Between 2017 and 2020, **27 community colleges** in the LA/OC region issued awards in programs that have historically trained for the occupations of interest, conferring an average of **approximately 1,000 awards**.
- Between 2016 and 2019, non-community college institutions in the region conferred an average of **350 awards in programs crosswalked to the TOP of interest**.

² Living wage data was pulled from California Family Needs Calculator on 8/11/2021. For more information, visit the California Family Needs Calculator website: <https://insightcced.org/2018-family-needs-calculator/>.

Occupational Demand

Exhibit 1 shows the five-year occupational demand projections for the five occupations of interest. In Los Angeles/Orange County, the number of jobs related to these occupations is projected to decrease by 5% through 2024. However, there will be nearly 46,000 job openings per year through 2024 due to retirements and workers leaving the field.

This report includes employment projection data by Emsi which uses EDD information. Emsi's projections are modeled on recorded (historical) employment figures and incorporate several underlying assumptions, including the assumption that the economy, during the projection period, will be at approximately full employment. To the extent that a recession or labor shock, such as the economic effects of COVID-19, can cause long-term structural change, it may impact the projections. At this time, it is not possible to quantify the impact of COVID-19 on projections of industry and occupational employment. Therefore, the projections included in this report do not take the impacts of COVID-19 into account.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties³

Geography	2019 Jobs	2024 Jobs	2019-2024 Change	2019-2024 % Change	Annual Openings
Los Angeles	326,952	310,531	(16,421)	(5%)	33,011
Orange	124,686	119,453	(5,233)	(4%)	12,645
Total	451,638	429,984	(21,654)	(5%)	45,656

Wages

The labor market endorsement in this report considers the hourly wages for the five occupations of interest in Los Angeles County, as they relate to the county's living wage. Orange County wages are included below in order to provide a complete analysis of the LA/OC region. Detailed wage information, by county, is included in Appendix A.

Los Angeles County – The majority (52%) of annual openings for the five occupations have entry-level wages **below** the living wage for one adult (\$15.04 in Los Angeles County). Typical entry-level hourly wages are in a range between \$13.88 and \$22.88. Three occupations have typical entry-level hourly wages that exceed the county's living wage: *first-line supervisors of office and administrative support workers* (\$22.88), *sales representatives, wholesale and manufacturing, except technical and scientific products* (\$18.87), and *secretaries and administrative assistants, except legal, medical, and executive* (\$16.57). Experienced workers can expect to earn wages between \$22.19 and \$43.69, which are higher than the living wage estimate.

³ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

Orange County – The majority (74%) of annual openings for the five occupations have entry-level wages **below** the living wage for one adult (\$17.36 in Orange County). Typical entry-level hourly wages are in a range between \$13.82 and \$22.77. Two occupations have typical entry-level hourly wages that exceed the county’s living wage: *first-line supervisors of office and administrative support workers* (\$22.77), and *sales representatives, wholesale and manufacturing, except technical and scientific products* (\$20.63). Experienced workers can expect to earn wages between \$22.07 and \$47.66, which are higher than the living wage estimate.

Job Postings

Over the past 12 months, there have been 132,007 online job postings related to the five occupations of interest in the region. The highest number of job postings were for customer service representatives, administrative assistants, sales representatives, office assistants, and account executives. The top skills were customer service, sales, scheduling, administrative support, and customer contact. Knowledge of video conferencing, an important skill for telecommuting, was listed on 384 job postings. The top employers, by number of job postings, in the region were Anthem Blue Cross, Charter Communications, and University of California. Of the 55% of job postings listing a minimum education requirement in Los Angeles/Orange County, 60% (43,618) requested a high school diploma, 35% (25,501) requested a bachelor’s degree, and 5% (3,995) requested an associate degree.

Of these 132,007 online job postings, 5,457 were listed as “work from home” jobs. The top occupations were *sales representatives, wholesale and manufacturing, except technical and scientific products* (2,598 job postings) and *customer service representatives* (1,841 job postings). The top employers hiring were Anthem Blue Cross, UnitedHealth Group, and SetSchedule.

Over the past 12 months, there have been 214,913 middle-skill job postings in the LA/OC region that are considered partially remote jobs. At the top of these partially-remote job postings are three of the occupations studied in this report - *sales representatives, wholesale and manufacturing, except technical and scientific products* (32,607 job postings); *customer service representatives* (28,031); and *secretaries and administrative assistants, except legal, medical and executive* (15,463). The other two occupations studied in this report are also included in the top ten – *office clerks, general*, and *first-line supervisors of office and administrative support workers*.

It is important to note that the job postings data included in this section reflects online job postings listed in the past 12 months and does not yet demonstrate the impact of COVID-19. While employers have generally posted fewer online job postings since the beginning of the pandemic, the long-term effects are currently unknown.

Educational Attainment

The Bureau of Labor Statistics (BLS) lists a high school diploma or equivalent as the typical entry-level education for the five occupations of interest. National-level educational attainment data indicates between 32% and 46% of workers in the field have completed some college or an associate degree.

Educational Supply

Community College Supply — Exhibit 2 shows the annual and three-year average number of awards conferred by community colleges in programs that have historically trained for the occupations of interest. The colleges with the most completions in the region are Santa Ana, Santiago Canyon, and Mt. San Antonio. Over the past 12 months, there were 13 other TOP-related program recommendation requests from regional community colleges, but this is the first request specifically for telecommuting.

Exhibit 2: Regional community college awards (certificates and degrees), 2017-2020

TOP	Program	College	2017-18 Awards	2018-19 Awards	2019-20 Awards	3-Year Average
0509.40	Sales and Salesmanship	Santa Monica	16	13	19	16
		LA Subtotal	16	13	19	16
		Orange Coast	11	3	5	6
		Santa Ana	1	-	-	0
		OC Subtotal	12	3	5	7
Supply Subtotal/Average			28	16	24	23
0514.00	Office Technology/ Office Computer Applications	Cerritos	11	14	10	12
		Citrus	16	23	3	14
		Compton	2	-	-	1
		East LA	110	54	34	66
		El Camino	-	2	2	1
		Glendale	66	44	25	45
		LA City	4	1	6	4
		LA Harbor	7	5	11	8
		LA Mission	35	23	12	23
		LA Pierce	35	54	44	44
		LA Southwest	2	2	-	1
		LA Trade	39	31	22	31
		LA Valley	91	119	107	106
		Long Beach	27	33	57	39
		Mt San Antonio	34	75	228	112
		Pasadena	11	38	13	21
		Santa Monica	3	7	12	7
		West LA	2	1	1	1
		LA Subtotal	495	526	587	536
		Coastline	21	12	9	14
Cypress	10	17	16	14		

TOP	Program	College	2017-18 Awards	2018-19 Awards	2019-20 Awards	3-Year Average
		Golden West	3	8	1	4
		Irvine	12	18	16	15
		N. Orange Adult	97	70	33	67
		Saddleback	9	11	8	9
		Santa Ana	153	138	223	171
		Santiago Canyon	137	106	97	113
		OC Subtotal	442	380	403	408
		Supply Subtotal/Average	937	906	990	944
0514.40	Office Management	El Camino	1	-	1	1
		LA Subtotal	1	-	1	1
		Cypress	1	1	1	1
		OC Subtotal	1	1	1	1
		Supply Subtotal/Average	2	1	2	2
0518.00	Customer Service	East LA	30	17	11	19
		LA Pierce	-	-	2	1
		Santa Monica	-	3	10	4
		LA Subtotal	30	20	23	24
		Santiago Canyon	6	3	8	6
		OC Subtotal	6	3	8	6
		Supply Subtotal/Average	36	23	31	30
		Supply Total/Average	1,003	946	1,047	999

Non-Community College Supply — For a comprehensive regional supply analysis, it is also important to consider the supply from other institutions in the region that provide training programs for the five occupations of interest. Exhibit 3 shows the annual and three-year average number of awards conferred by these institutions in programs crosswalked to the TOP in Exhibit 2. Due to different data collection periods, the most recent three-year period of available data is from 2016 to 2019. Between 2016 and 2019, non-community college institutions in the region conferred an average of 350 awards annually in related training programs.

Exhibit 3: Regional non-community college awards, 2016-2019

CIP	Program	Institution	2016-17 Awards	2017-18 Awards	2018-19 Awards	3-Year Average
52.0401	Administrative Assistant and Secretarial Science, General	ABCO Technology	11	4	11	9
		GDS Institute	32	24	-	19
		Hacienda La Puente Adult Education	65	30	25	40
		InterCoast Colleges-Santa Ana	8	4	3	5
		Los Angeles ORT College-Los Angeles Campus (CLOSED)	26	23	12	20
		Pomona Unified School District Adult and Career Education	-	6	2	3
52.0407	Business/Office Automation/Technology/Data Entry	Learnet Academy	27	28	-	18
52.0408	General Office Occupations and Clerical Services	ABC Adult School	-	21	6	9
		CES College	2	6	7	5
		Hacienda La Puente Adult Education	52	48	36	45
		UEI College-Gardena	30	29	32	30
		United Education Institute-Anaheim	40	46	41	42
		United Education Institute-Encino	38	33	28	33
		United Education Institute-Huntington Park	36	42	38	39
		United Education Institute-West Covina	41	29	29	33
Supply Total/Average			408	373	270	350

Appendix A: Occupational demand and wage data by county

Exhibit 4. Los Angeles County

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (41-4012)	48,267	43,519	(4,748)	(10%)	4,089	\$18.87	\$28.04	\$43.69
Customer Service Representatives (43-4051)	57,870	55,983	(1,888)	(3%)	6,744	\$14.83	\$18.36	\$23.56
Office Clerks, General (43-9061)	97,143	93,386	(3,757)	(4%)	10,357	\$13.88	\$17.39	\$22.19
First-Line Supervisors of Office and Administrative Support Workers (43-1011)	48,622	46,541	(2,081)	(4%)	4,393	\$22.88	\$29.08	\$36.98
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive (43-6014)	75,050	71,102	(3,948)	(5%)	7,429	\$16.57	\$21.06	\$25.97
Total	326,952	310,531	(16,421)	(5%)	33,011			

Exhibit 5. Orange County

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (41-4012)	18,314	17,005	(1,309)	(7%)	1,578	\$20.63	\$30.63	\$47.66
Customer Service Representatives (43-4051)	24,381	23,845	(536)	(2%)	2,858	\$14.88	\$18.41	\$23.60
Office Clerks, General (43-9061)	36,470	35,260	(1,210)	(3%)	3,883	\$13.82	\$17.30	\$22.07
First-Line Supervisors of Office and Administrative Support Workers (43-1011)	18,600	17,871	(729)	(4%)	1,679	\$22.77	\$28.94	\$36.78
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive (43-6014)	26,921	25,472	(1,449)	(5%)	2,648	\$16.32	\$20.75	\$25.57
Total	124,686	119,453	(5,233)	(4%)	12,645			

Exhibit 6. Los Angeles and Orange Counties

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Typical Entry-Level Education
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (41-4012)	66,581	60,524	(6,057)	(9%)	5,666	HS diploma or equivalent
Customer Service Representatives (43-4051)	82,251	79,827	(2,424)	(3%)	9,602	HS diploma or equivalent
Office Clerks, General (43-9061)	133,614	128,646	(4,967)	(4%)	14,240	HS diploma or equivalent
First-Line Supervisors of Office and Administrative Support Workers (43-1011)	67,222	64,413	(2,810)	(4%)	6,072	HS diploma or equivalent
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive (43-6014)	101,971	96,574	(5,397)	(5%)	10,077	HS diploma or equivalent
Total	451,638	429,984	(21,654)	(5%)	45,656	

Appendix B: Sources

- O*NET Online
- Labor Insight/Jobs (Burning Glass)
- Economic Modeling Specialists, International (Emsi)
- Bureau of Labor Statistics (BLS)
- Employment Development Department, Labor Market Information Division, OES
- California Community Colleges Chancellor's Office Management Information Systems (MIS)
- California Family Needs Calculator, Insight Center for Community Economic Development
- Chancellor's Office Curriculum Inventory (COCI 2.0)

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