

Program Endorsement Brief: 0506.40/Small Business and Entrepreneurship Entrepreneurship and Innovation Degree Entrepreneurship and Innovation Certificate of Achievement Los Angeles/Orange County Center of Excellence, June 2021

Summary Analysis

Program Endorsement:	Endorsed:		Endorsed: Some Criteria Met		Not Endorsed			
	Program End	orsen	nent Criteria					
Supply Gap:	Yes 🗹 No 🗖							
Living Wage: (Entry-Level, 25 th)	Yes 🗹			Ν	。 口			
Education:	Yes 🗹		No 🗖					
Emerging Occupation(s)								
Yes				No 🗹				

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 associated with entrepreneurship: general and operations managers (11-1021), administrative services and facilities managers (11-3011), project management specialists and business operations specialist, all other (13-1198), first-line supervisors of retail sales workers (41-1011), and first-line supervisors of non-retail sales workers (41-1012). Middle-skill occupations typically require some postsecondary education, but less than a bachelor's degree.¹ Although the occupation, general and operations managers typically requires a bachelor's degree, it is considered middle-skill because approximately one-third of workers in the field have completed some college or an associate degree. Since there is not a specific occupation in the Standard Occupational Classification System (SOC) for entrepreneurs, this report analyzes labor market supply and demand data for these five occupations because the associated skills are commonly utilized by entrepreneurs. 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.

Self-employed data is used in this report as a proxy for demand for individuals who may utilize entrepreneurial skills. Job posting information is not available for self-employed workers, as employer information does not provide insight into the requirements of self-employed individuals. The occupations included in this report were selected due to their relationship to entrepreneurial business skills, as well as their historical alignment with the small business and entrepreneurship programs at community colleges.

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.

To better understand how entrepreneurial business skills can be applied to different areas, demand and wage data for the ten occupations with the highest number of self-employed workers in the region are also included in this report. While entrepreneurial business skills are complimentary for workers in these occupations, those skills alone do not adequately train workers to enter these high self-employment occupations, which include Childcare Workers; Real Estate Sales Agents; Hairdressers, Hairstylists, and Cosmetologists; and Photographers.

Based on the available data, there appears to be a supply gap for occupations related to entrepreneurship in the region. Furthermore, the majority of annual openings for the occupations in this report exceed the living wage in both Los Angeles and Orange counties. While the Bureau of Labor Statistics (BLS) lists a bachelor's degree as the typical entry-level education for the majority of annual openings within the LA/OC region for these occupations, many workers in the field have completed an associate degree or some college. Therefore, due to all the criteria being met, the **COE endorses this proposed program.** Detailed reasons include:

Demand:

- Supply Gap Criteria Over the next five years, there are projected to be 26,505 jobs available annually in the region due to new job growth and replacements, which is more than the 12,743 awards conferred annually by educational institutions in the region.
 - However, only 2,847 of these job openings represent self-employed workers, which accounts for 11% of the annual job openings in LA/OC.
- Living Wage Criteria Within Orange County, the majority (78%) of annual job openings for these entrepreneurship occupations have entry-level wages above the county's living wage (\$17.36/hour).²
- Educational Criteria Within the LA/OC region, 71% of the annual job openings for occupations related entrepreneurship typically require a bachelor's degree.
 - However, the national-level educational attainment data indicates between 30.2% and 38.8% of workers in the field have completed some college or an associate degree.

Supply:

- There are **27 community colleges** in the LA/OC region that issue awards related to business management or small business and entrepreneurship, conferring an average of **1,179 awards annually** between 2016 and 2019.
- Between 2014 and 2017, there was an average of **11,564 awards conferred annually** in related training programs by non-community college institutions throughout the region.

Occupational Demand

Exhibit 1 shows the five-year occupational demand projections for these occupations related to entrepreneurship. In Los Angeles/Orange County, the number of jobs related to these occupations

² Living wage data was pulled from California Family Needs Calculator on 6/24/2021. For more information, visit the California Family Needs Calculator website: <u>https://insightcced.org/2018-family-needs-calculator/</u>.

is projected to increase by 2% through 2024. There will be more than 26,500 job openings per year through 2024 due to job growth and replacements. While these entrepreneurship occupations in total are projected to increase, the number of self-employed entrepreneurship workers within these occupations is projected to decrease by 3% through 2024. Despite this, there will be approximately 2,847 total job openings per year through 2024 due to replacements and workers leaving the field. Approximately 11% of the 26,505 total job openings for this occupational group are for self-employed individuals.

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.

Employment Type	Geography	2019 Jobs	2024 Jobs	2019- 2024 Change	2019-2024 % Change	Annual Openings
Self- Employed	Los Angeles	20,730	19,982	(748)	(4%)	2,158
All Workers	Los Angeles	191,247	194,863	3,616	2%	19,229
Self- Employed	Orange	6,577	6,451	(126)	(2%)	689
All Workers	Orange	72,252	73,958	1,706	2%	7,276
Self- Employed	LA/OC Region	27,307	26,433	(874)	(3%)	2,847
All Workers	LA/OC Region	263,499	268,821	5,322	2%	26,505

Exhibit 1: Occupational demand in Los Angeles and Orange Counties³

Exhibit 2 displays the 2019 job counts for self-employed and all workers in the entrepreneurship occupations within this report, as well as the percentage of self-employed workers. The rate of self-employment for *first-line supervisors* of *non-retail sales workers* and *first-line supervisors* of *retail sales workers* is higher than the middle-skill average self-employment rate of 10% in Los

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.

Angeles/Orange County across all occupations. Overall, 10% of jobs in the region for these five occupations are held by self-employed workers.

Occupation	Self- Employed 2019 Jobs	Employed and Self-Employed 2019 Jobs	% Self- Employed 2019
General and Operations Managers	1,229	96,992	1%
Administrative Services and Facilities Managers	111	16,801	1%
Project Management Specialists and Business Operations Specialists, All Other	977	76,644	1%
First-Line Supervisors of Retail Sales Workers	17,290	56,071	31%
First-Line Supervisors of Non-Retail Sales Workers	7,700	16,991	45%
Total	27,307	263,499	10%

Exhibit 2: Entrepreneurship self-employr	nent rates i	n Los Angeles/Orange	County
	Salf	Employed and	% Salf

Exhibit 3, on the following page, displays middle-skill occupations with the highest number of selfemployment workers in Los Angeles/Orange County. These occupations cover a wide variety of occupational areas, demonstrating how entrepreneurship is not solely related to traditional business occupations. It is also important to note that workers in occupations with a high number of self-employed workers may need training in a traditional field, such as childcare, cosmetology, or real estate. Additionally, six of the ten occupations in Exhibit 3 require or may require a license or certification: Childcare Workers; Hairdressers, Hairstylists, and Cosmetologists, Real Estate Sales Agents, Carpenters, Home Health and Personal Care Aides, and Heavy and Tractor-Trailer Truck Drivers.⁴ Though entrepreneurial skills are complimentary to these occupations, training in entrepreneurial skills alone will not adequately prepare students to enter these fields.

⁴ Childcare workers providing care for their own children (or those of a relative), and only one other family do not need a child care license. If a childcare worker is providing care and supervision to non-relative children from more than one family in their home or non-residential facility for periods of less than 24 hours, then they will likely need a license. For more information, see: https://www.cdss.ca.gov/inforesources/child-care-licensing/how-to-becomelicensed/do-i-need-a-license

Occupation	Self- Employed	Employed and Self-Employed	% Self- Employed
	2019 Jobs	2019 Jobs	2019
Childcare Workers	29,298	55,655	52.64%
Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other ⁵	24,895	50,505	49.29%
Hairdressers, Hairstylists, and Cosmetologists	20,492	34,058	60.17%
Real Estate Sales Agents	18,622	24,207	76.93%
First-Line Supervisors of Retail Sales Workers	17,290	56,071	30.84%
Carpenters	17,137	44,160	38.81%
Home Health and Personal Care Aides	11,724	271,962	4.31%
Heavy and Tractor-Trailer Truck Drivers	11,715	57,457	20.39%
First-Line Supervisors of Non-Retail Sales Workers	7,700	16,991	45.32%
Photographers	7,373	10,612	69.48%

Exhibit 3: Occupations with the highest self-employment rates in Los Angeles/Orange County

Wages

The labor market endorsement in this report considers the entry-level hourly wages for these entrepreneurship occupations in Orange County as they relate to the county's living wage. Los Angeles 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.

Self-employed workers have different earnings dynamics than wage and salaried workers, making direct comparisons difficult. Examples include deciphering what is a return to labor versus a return to capital, as well as showing possible negative earnings if expenses or investments exceed gross receipts.⁶ For these reasons, self-employed wage data appears low throughout the region.

Entrepreneurship Occupations

The following wage information is for entrepreneurship occupations as listed in Exhibit 2. For detailed wage information, see Appendix A (Exhibits 6, 7, and 8 for Orange County, Los Angeles, and Los Angeles/Orange County, respectively).

Orange County—The majority (78%) of annual openings for these entrepreneurship occupations have entry-level wages above the living wage for one adult (\$17.36 in Orange County). Typical entry-level hourly wages are in a range between \$14.11 and \$35.63. The only occupation with

⁵ The Bureau of Labor Statistic (BLS) groups some occupation codes into a "hybrid" SOC code as they transition from SOC 2010 to SOC 2018. Therefore, this row of data is for three occupations that have been combined. For more information, see: <u>https://www.bls.gov/oes/soc_2018.htm</u>.

⁶ https://www.brookings.edu/wp-content/uploads/2019/11/201911_Brookings-Metro_low-wage-workforce_Ross-Bateman.pdf

entry-level wages below the living wage is *first-line supervisors* of *retail sales workers* (\$14.11). Experienced workers can expect to earn wages between \$24.51 and \$87.27, which are higher than the living wage estimate. Orange County's average wages are slightly above the average statewide wage of \$46.32 for these occupations.

All of the annual openings for self-employed entrepreneurship 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 \$7.13 and \$14.63, which includes wages that are lower than the living wage as well as lower than California's current minimum wage (\$12.00/hour for employers with 25 employers or less; \$13.00/hour for employers with 26 or more employees).⁷ Experienced workers can expect to earn wages between \$27.54 and \$84.66, which are higher than the living wage estimate. Orange County's average wages are below the average statewide wage of \$46.32 for these occupations.

Los Angeles County—The majority (76%) of annual openings for these entrepreneurship occupations have entry-level wages above the living wage for one adult (\$15.04 in Los Angeles County).⁸ Typical entry-level hourly wages are in a range between \$14.56 and \$36.62. The only occupation with entry-level wages below the living wage is *first-line supervisors* of *retail sales workers* (\$14.56). Experienced workers can expect to earn wages between \$18.73 and \$53.62, which are higher than the living wage estimate. Los Angeles County's average wages are equal to the average statewide wage of \$46.32 for these occupations.

All of the annual openings for self-employed entrepreneurship 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 \$7.07 and \$14.67, which includes wages that are lower than the living wage as well as lower than California's current minimum wage (\$12.00/hour for employers with 25 employers or less; \$13.00/hour for employers with 26 or more employees). Experienced workers can expect to earn wages between \$27.32 and \$84.87, which are higher than the living wage estimate. Los Angeles County's average wages are below the average statewide wage of \$46.32 for these occupations.

Other Occupations with Highest Rates of Self-Employment

The following wage information is for middle-skill occupations with the highest number of selfemployed workers as listed in Exhibit 3. For detailed wage information, see Appendix A (Exhibit 9).

Orange County— All of the annual openings for the self-employed workers within the occupations with the highest regional rates of self-employment 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 \$5.19 and \$14.62, which includes wages that are lower than the living wage as well as lower than California's current minimum wage (\$12.00/hour for employers with 25 employers or less; \$13.00/hour for employers with 26 or more employees). Experienced workers

⁷Wage data is based on data collected over the previous three years. This historical data is a "point-in-time" estimate and does not reflect recent changes in minimum wage laws. https://www.dir.ca.gov/dlse/FAQ_MinimumWage.htm

⁸ Living wage data was pulled from California Family Needs Calculator on 6/24/2021. For more information, visit the California Family Needs Calculator website: <u>https://insightcced.org/2018-family-needs-calculator/</u>.

can expect to earn wages between \$17.18 and \$54.84, which either nearly meet or are higher than the living wage estimate.

Los Angeles County— All of the annual openings for the self-employed workers within the occupations with the highest regional rates of self-employment 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 \$5.18 and \$14.63, which includes wages that are lower than the living wage as well as lower than California's current minimum wage (\$12.00/hour for employers with 25 employers or less; \$13.00/hour for employers with 26 or more employees. Experienced workers can expect to earn wages between \$17.14 and \$54.88, which are higher than the living wage estimate.

Job Postings

Job posting information does not decipher between self-employed or employee positions; therefore, data in this section will focus on the entrepreneur occupations in this report, as these occupations may employ entrepreneurial business skills.

There were 44,808 online job postings for occupations related to entrepreneurship listed in the past 12 months. The highest number of job postings were for assistant store managers, store managers, operations managers, general managers, and key holders. The top skills were: retail industry knowledge, scheduling, customer service, budgeting and sales. The top three employers, by number of job postings, in the region were: Anthem Blue Cross, CVS Health, and Target.

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 bachelor's degree as the typical entry-level education for general and operations mangers, administrative services and facilities managers, and project management specialists and business operations specialists, and a high school diploma for first-line supervisors of retail sales workers and first-line supervisors of non-retail sales workers. In the LA/OC region, the majority of annual job openings (71%) typically require a bachelor's degree. However, the national-level educational attainment data indicates between 30.2% and 38.8% of workers in the field have completed some college or an associate degree as their highest level of educational attainment. Of the 57% of entrepreneurship job postings listing a minimum education requirement in Los Angeles/Orange County, 54% (13,729) requested a bachelor's degree, 42% (10,723) requested a high school diploma and 4% (1,108) requested an associate degree.

Educational Supply

Community College Supply—Exhibit 4 shows the three-year average number of awards conferred by community colleges in the related TOP codes: Business Management (0506.00), and Small Business and Entrepreneurship (0506.40). The colleges with the most completions in the region are Cerritos, Mt. San Antonio and Coastline. Over the past 12 months, there were eight other related program recommendation request from regional community colleges.

TOP Code	Program	College	2016- 2017 Awards	2017- 2018 Awards	2018- 2019 Awards	3-Year Award Average
		Cerritos	246	405	456	369
		Citrus	-	1	2	1
		Compton	11	2	3	5
		East LA	9	26	29	21
		El Camino	17	23	23	21
		Glendale	17	10	9	12
		LA City	19	15	18	17
		LA Mission	5	4	3	4
		LA Pierce	-	-	3	1
		LA Valley	42	30	33	35
		Long Beach	15	22	21	19
	Business	Mt San Antonio	187	161	202	183
0506.00	Management	Santa Monica	10	18	23	17
		LA Subtotal	578	717	825	707
		Coastline	175	71	84	110
		Cypress	2	6	6	5
		Fullerton	124	11	11	49
		Golden West	9	8	20	12
		Irvine	11	9	3	8
		North Orange Adult	26	24	27	26
		Orange Coast	3	51	40	31
		Santa Ana	37	81	64	61
		Santiago Canyon	3	42	17	21
		OC Subtotal	390	303	272	322
	Sup	oply Subtotal/Average	968	1,020	1,097	1,028
		Cerritos	15	21	34	23
		Citrus	-	1	2	1
		Glendale	1	2	-	1
0506.40	Small Business and	LA City	8	3	7	6
0500.40	ana Entrepreneurship	LA Pierce	-	-	4	1
		LA Trade	8	7	6	7
		Mt. San Antonio	26	18	32	25
		Pasadena	2	5	3	3

Exhibit 4: Regional community college awards (certificates and degrees), 2016-2019

TOP Code	Program	College	2016- 2017 Awards	2017- 2018 Awards	2018- 2019 Awards	3-Year Award Average
		Rio Hondo	6	15	7	9
		Santa Monica	7	10	9	9
		West LA	3	3	5	4
		LA Subtotal	76	85	109	90
		Coastline	6	10	5	7
		Cypress	5	2	4	4
		Fullerton	1	3	4	3
		Golden West	-	3	2	2
		Irvine	29	18	48	32
		Saddleback	4	10	8	7
		Santa Ana	4	4	7	5
		Santiago Canyon	2	4	-	2
	OC Subtotal		51	54	78	61
	Supply Subtotal/Average		127	139	187	151
		Supply Total/Average	1,095	1,159	1,284	1,1 79

Non-Community College Supply—It is important to consider the supply from other institutions in the region that provide training programs related to entrepreneurship. Exhibit 5 shows the annual and three-year average number of awards conferred by these institutions in the related Classification of Instructional Programs (CIP) Codes: Business Administration and Management, General (52.0201), Entrepreneurship/Entrepreneurial Studies (52.0701), and Small Business Administration/Management (52.0703). Due to different data collection periods, the most recent three-year period of available data is from 2014 to 2017. Between 2014 and 2017, non-community colleges in the region conferred an average of 11,564 awards annually in related training programs.

CIP Code	Program	College	2014- 2015 Awards	2015- 2016 Awards	2016- 2017 Awards	3-Year Award Average
		Abraham Lincoln University	-	2	-	1
	Business	Advanced College	2	-	1	1
	Administration and	Azusa Pacific University	282	178	111	190
52.0201	Management,	Bethesda University	4	6	8	6
	General	Biola University	-	-	116	39
		Brandman University	137	169	143	150
		California Intercontinental University	-	-	5	2

Exhibit 5: Regional non-community college awards, 2014-2017

CIP Code	Program	College	2014- 2015 Awards	2015- 2016 Awards	2016- 2017 Awards	3-Year Award Average
		California State Polytechnic University- Pomona	1,010	1,217	1,312	1,180
		California State University-Dominguez Hills	453	513	505	490
		California State University-Fullerton	1,902	2,120	2,155	2,059
		California State University-Long Beach	1,062	1,128	1,275	1,155
		California State University-Los Angeles	779	1,041	812	877
		California State University-Northridge	547	616	604	589
		California University of Management and Sciences	2	5	-	2
		Chapman University	297	341	381	340
		Claremont Graduate University	49	26	44	40
		Concordia University- Irvine	89	87	97	91
		DeVry University- California	303	225	192	240
		East San Gabriel Valley Regional Occupational Program	20	5	-	8
		Hope International University	31	46	20	32
		Learnet Academy	1	4	4	3
		Life Pacific College	-	3	5	3
		Los Angeles ORT College- Los Angeles Campus	13	9	32	18
		Los Angeles ORT College- Van Nuys Campus	2	4	16	7
		Marymount California University	49	59	57	55
		Mount Saint Mary's University	42	51	48	47
		Mt Sierra College	8	13	10	10
		Pacific States University	3	4	-	2
		Pepperdine University	205	182	200	196
		Platt College-Los Angeles	-	1	9	3

CIP Code	Program	College	2014- 2015 Awards	2015- 2016 Awards	2016- 2017 Awards	3-Year Award Average
		Trident University International	432	454	407	431
		University of California- Irvine	126	163	159	149
		University of La Verne	295	338	303	312
		University of Phoenix- California	1,734	1,384	1,214	1,444
		University of Southern California	985	1,055	1,023	1,021
		University of the People	-	31	41	24
		University of the West	8	4	6	6
		Vanguard University of Southern California	90	104	83	92
		Westcliff University	-	-	148	49
		Whittier College	77	79	81	79
		Woodbury University	44	41	44	43
		Loyola Marymount University	58	73	72	68
	_	Mount Saint Mary's University	3	0	0	1
50 0701	Entrepreneurship/	Mt Sierra College	7	6	3	5
52.0701	Entrepreneurial	Pitzer College	0	1	0	0
	Studies	California Intercontinental University	0	1	3	1
		University of Phoenix- California	2	0	0	1
52.0703	Small Business Administration/ Management	Pitzer College	-	1	-	0
		Total/Average	11,153	11, 79 0	11,749	11,564



Appendix A: Occupational demand and wage data by county

Exhibit 6. Orange County – Entrepreneurship Occupations									
Occupation (SOC)	Employment Type	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)
General and Operations	All Employees	27,421	28,488	1,067	4%	2,635	\$35.16	\$53.49	\$87.27
Managers (11-1021)	Self-Employed	296	305	9	3%	28	\$12.30	\$21.82	\$40.91
Administrative Services and Facilities Managers (11-3011)	All Employees	4,497	4,670	173	4%	414	\$35.63	\$50.06	\$64.87
	Self-Employed	27	29	2	7%	3	\$9.24	\$19.40	\$43.58
Project Management Specialists and Business	All Employees	21,380	22,067	687	3%	2,216	\$24.85	\$34.35	\$48.45
Operations Specialists, All Other (13-1198)	Self-Employed	262	298	36	14%	34	\$14.63	\$33.04	\$84.66
First-Line Supervisors of Retail	All Employees	14,369	14,249	(120)	(1%)	1,575	\$14.11	\$17.96	\$24.51
Sales Workers (41-1011)	Self-Employed	4,104	4,024	(80)	(2%)	448	\$7.13	\$14.65	\$27.54
First-Line Supervisors of Non- Retail Sales Workers	All Employees	4,584	4,485	(99)	(2%)	436	\$17.54	\$28.69	\$43.33
(41-1012)	Self-Employed	1,889	1,796	(93)	(5%)	177	\$9.32	\$18.33	\$37.44
Tetel	All Employees	72,252	73,958	1,706	2%	7,276			
Total	Self-Employed	6,577	6,451	(126)	(2%)	689			

Occupation (SOC)	Employment Type	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)
General and Operations	All Employees	69,570	72,069	2,499	4%	6,644	\$35.21	\$53.62	\$87.53
Managers (11-1021)	Self-Employed	933	966	33	4%	89	\$12.32	\$21.85	\$40.97
Administrative Services and Facilities Managers (11-3011)	All Employees	12,304	12,736	432	4%	1,123	\$36.62	\$51.47	\$66.70
	Self-Employed	84	91	7	8%	9	\$9.26	\$19.46	\$43.70
Project Management Specialists and Business	All Employees	55,264	57,023	1,759	3%	5,729	\$25.47	\$35.22	\$49.69
Operations Specialists, All Other (13-1198)	Self-Employed	716	825	109	15%	95	\$14.67	\$33.12	\$84.87
First-Line Supervisors of Retail	All Employees	41,702	40,918	(784)	(2%)	4,552	\$14.56	\$18.73	\$25.58
Sales Workers (41-1011)	Self-Employed	13,186	12,493	(693)	(5%)	1,416	\$7.07	\$14.53	\$27.32
First-Line Supervisors of Non-	All Employees	12,407	12,116	(291)	(2%)	1,182	\$16.50	\$27.24	\$41.93
Retail Sales Workers (41-1012)	Self-Employed	5,811	5,607	(204)	(4%)	549	\$9.41	\$18.50	\$37.79
Tatal	All Employees	191,247	194,863	3,616	2%	19,229			
Total	Self-Employed	20,730	19,982	(748)	(4%)	2,158			

Exhibit 7. Los Angeles County – Entrepreneurship Occupations

Occupation (SOC)	Employment Type	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings
General and Operations	All Employees	96,992	100,557	3,565	4%	9,278
Managers (11-1021)	Self-Employed	elf-Employed 1,229 1,271 42 3%		117		
Administrative Services and	All Employees	16,801	17,406	605	4%	1,536
Facilities Managers (11-3011)	Self-Employed	111	120	9	8%	11
Project Management Specialists and Business	All Employees	76,644	79,090	2,446	3%	7,945
Operations Specialists, All Other (13-1198)	Self-Employed	977	1,123	146	15%	129
First-Line Supervisors of Retail	All Employees	56,071	55,167	(904)	(2%)	6,127
Sales Workers (41-1011)	Self-Employed	17,290	16,517	(773)	(4%)	1,864
First-Line Supervisors of Non- Retail Sales Workers (41-1012)	All Employees	16,991	16,601	(390)	(2%)	1,618
	Self-Employed	7,700	7,403	(297)	(4%)	726
	All Employees	263,499	268,821	5,322	2 %	26,505
Total	Self-Employed	27,307	26,433	(874)	(3%)	2,847

Exhibit 8. Los Angeles and Orange Counties – Entrepreneurship Occupations

Occupation (SOC)	Geography	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)
Childcare Workers (39-9011)	OC	3,941	4,087	146	4%	627	\$5.19	\$9.77	\$17.18
	LA	25,356	24,380	(976)	(4%)	3,698	\$5.18	\$9.75	\$17.14
Home Health and Personal Care Aides (31-1128)	OC	1,905	2,102	197	10%	353	\$7.03	\$11.67	\$18.87
	LA	13,186	12,493	(693)	(5%)	1,409	\$7.07	\$14.53	\$27.32
First-Line Supervisors of Retail	OC	4,104	4,024	(80)	(2%)	447	\$7.13	\$14.65	\$27.54
Sales Workers (41-1011)	LA	9,819	10,400	582	6%	1,700	\$7.08	\$11.77	\$19.02
Hairdressers, Hairstylists, and Cosmetologists (39-5012)	OC	4,945	5,226	281	6%	692	\$9.32	\$15.53	\$24.17
	LA	15,546	16,055	508	3%	2,077	\$9.32	\$15.54	\$24.18
First-Line Supervisors of Non- Retail Sales Workers (41-1012)	OC	1,889	1,796	(93)	(5%)	176	\$9.32	\$18.33	\$37.44
	LA	5,811	5,607	(204)	(4%)	547	\$9.41	\$18.50	\$37.79
Carpenters (47-2031)	OC	3,636	3,638	2	0%	376	\$10.67	\$17.08	\$26.81
	LA	13,501	13,760	259	2%	1,451	\$10.67	\$17.07	\$26.80
Heavy and Tractor-Trailer Truck Drivers (53-3032)	ос	1,484	1,549	65	4%	186	\$10.97	\$19.12	\$34.76
	LA	10,231	10,449	218	2%	1,223	\$10.83	\$18.86	\$34.30

Exhibit 9. Other occupations with highest rates of self-employment – Los Angeles and Orange Counties

Occupation (SOC)	Geography	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)
Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other (11-9198)	OC	5,662	5,994	332	6%	509	\$11.11	\$21.96	\$38.81
	LA	19,233	20,669	1,436	7%	1,802	\$11.16	\$22.05	\$38.97
Photographers (27-4021)	OC	1,595	1,705	109	7%	185	\$11.41	\$22.82	\$45.94
	LA	5,778	6,200	422	7%	676	\$11.33	\$22.66	\$45.62
Real Estate Sales Agents (41-9022)	OC	5,067	5,122	55	1%	495	\$14.62	\$27.52	\$54.84
	LA	13,555	14,030	475	4%	1,404	\$14.63	\$27.54	\$54.88
Total	oc	34,229	35,242	1,013	3%	4,046			
	LA	132,016	134,042	2,026	2%	15,986			



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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June 2021