



Entrepreneurial Studies

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Prepared by the Los Angeles/Orange County Center of Excellence for Labor Market Research

Framing and Definition

The focus for small business and entrepreneurship in community colleges is to prepare students to become successful entrepreneurs/small business owners.

Entrepreneurs	Generate new ideas and bring their ideas to the marketplace
Small Business Owners	Start a business and grow the business large enough to support themselves and their families

EMSI's self-employed dataset includes all people who consider self-employment a significant part of their income and/or taking a significant part of their time.

Looking at the share of reported self-employment by occupation compared to traditional employment in the same occupation is one way of understanding how students might approach the job market or entrepreneurship opportunities post-graduation.

Current and Future Employment

In Los Angeles County, there are nearly 232,000 self-employed workers in community college relevant occupations. The occupation with the largest number of self-employed workers in 2016 was childcare workers, with nearly 28,500 total workers in the county. The second-highest occupation was hairdressers, hairstylists, and cosmetologists, with over 15,600 self-employed workers in 2016. Self-employed workers in this occupation are expected to grow by nearly 1,300 workers due to creating new jobs and replacement needs (ex. retirements) in the next five years, which is an eight percent increase. Exhibit 1 contains detailed employment projections data for these occupations.

Exhibit 1 – Top 10 occupations by number of self-employed workers in Los Angeles County

SOC	Occupation	# of Self-Employed (2016)	# of Self-Employed (2021)	2016 - 2021 Change	2016 - 2021 % Change	Annual Openings
39-9011	Childcare Workers	28,480	28,436	(44)	(0%)	840
39-5012	Hairdressers, Hairstylists, and Cosmetologists	15,612	16,901	1,289	8%	675
47-2031	Carpenters	13,404	13,068	(336)	(3%)	152
41-1011	First-Line Supervisors of Retail Sales Workers	12,321	11,013	(1,308)	(11%)	262

41-9022	Real Estate Sales Agents	11,941	11,829	(112)	(1%)	83
53-3032	Heavy and Tractor-Trailer Truck Drivers	10,400	10,675	275	3%	234
27-4021	Photographers	5,932	6,574	642	11%	281
41-1012	First-Line Supervisors of Non-Retail Sales Workers	5,771	5,488	(283)	(5%)	65
11-9051	Food Service Managers	5,765	5,871	106	2%	138
49-3023	Automotive Service Technicians and Mechanics	5,720	5,699	(21)	(0%)	153

Source: Economic Modeling Specialists International (EMSI),

Barber is the occupation in Los Angeles County with the largest percentage of self-employed workers. Nearly 83% of barbers in this region are self-employed. The next largest occupations are fallers (82% of workers are self-employed), watch repairers (77%) and real estate sales agents (73%).

Exhibit 2 – Top 10 occupations with the highest percentage of self-employed workers in Los Angeles County

SOC	Occupation	% of Self-Employed (2016)	# of Self-Employed Jobs (2016)
39-5011	Barbers	82.89%	2,161
45-4021	Fallers	81.53%	28
49-9064	Watch Repairers	77.29%	128
41-9022	Real Estate Sales Agents	72.94%	11,941
27-3012	Public Address System and Other Announcers	69.73%	877
27-4021	Photographers	69.31%	5,932
51-7031	Model Makers, Wood	67.89%	38
39-5012	Hairdressers, Hairstylists, and Cosmetologists	67.23%	15,612
47-4091	Segmental Pavers	67.19%	13
41-9021	Real Estate Brokers	66.80%	3,421

Source: Economic Modeling Specialists International (EMSI)

Exhibit 3 displays the number and percentage of self-employed workers who work in community college relevant occupations by major occupational group within the region. Highlighted in green are occupations that constitute the top ten occupations with the greatest number of self-employed workers across occupational groups. Occupations with fewer than 50 self-employed workers or with a self-employment share of less than 5% were excluded from this list.

Exhibit 3 – Number and Percentage of Self-Employed Workers in Middle-Skill Occupations by Major Occupational Group in Los Angeles County

SOC	Description	Number of Self-Employed Workers (2016)	% of Self-Employed Workers in Total Jobs (2016)
11 Management Occupations			
11-9051	Food Service Managers	5,765	35.5%
11-9141	Property, Real Estate, and Community Association Managers	4,389	34.9%
11-9013	Farmers, Ranchers, and Other Agricultural Managers	429	56.1%
11-9081	Lodging Managers	357	30.4%
13 Business and Financial Operations Occupations			
13-2082	Tax Preparers	1,249	30.6%
15 Computer and Mathematical Occupations			
15-1134	Web Developers	1,504	20.9%
17 Architectural and Engineering Occupations			
17-3011	Architectural and Civil Drafters	280	7.5%
17-3031	Surveying and Mapping Technicians	190	23.1%
17-3013	Mechanical Drafters	92	8.7%
17-3012	Electrical and Electronics Drafters	64	7.4%
19 Life, Physical, and Social Science Occupations			
19-4099	Life, Physical, and Social Science Technicians, All Other	102	5.4%
19-4091	Environmental Science and Protection Technicians, Including Health	73	10.0%
23 Legal Occupations			
23-2011	Paralegals and Legal Assistants	656	7.1%
23-2091	Court Reporters	539	60.8%
23-2093	Title Examiners, Abstractors, and Searchers	394	19.9%
23-2099	Legal Support Workers, All Other	196	6.5%
25 Education, Training, and Library Occupations			
25-3021	Self-Enrichment Education Teachers	5,154	39.4%
27 Art, Design, Media, Entertainment, and Sports Occupations			
27-4021	Photographers	5,932	69.3%
27-2011	Actors	2,001	10.8%
27-4011	Audio and Video Equipment Technicians	924	9.3%
27-3012	Public Address System and Other Announcers	877	69.7%
27-4014	Sound Engineering Technicians	730	17.3%
27-1023	Floral Designers	541	46.6%
27-1026	Merchandise Displayers and Window Trimmers	463	18.5%
27-4099	Media and Communication Equipment Workers, All Other	356	5.3%
27-2023	Umpires, Referees, and Other Sports Officials	249	49.2%
27-4012	Broadcast Technicians	162	6.6%
27-2032	Choreographers	83	28.7%
31 Health Support Occupations			
31-9011	Massage Therapists	3,330	43.8%
31-9094	Medical Transcriptionists	507	31.6%
31-1015	Orderlies	82	6.0%

SOC	Description	Number of Self-Employed Workers (2016)	% of Self-Employed Workers in Total Jobs (2016)
33 Protective Service Occupations			
33-9021	Private Detectives and Investigators	493	32.1%
35 Food Preparation and Serving Occupations			
35-1011	Chefs and Head Cooks	987	15.0%
37 Building and Grounds Cleaning and Maintenance Occupations			
37-1011	First-Line Supervisors of Housekeeping and Janitorial Workers	1,933	30.7%
37-1012	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	1,921	47.4%
37-3013	Tree Trimmers and Pruners	1,023	52.3%
37-2021	Pest Control Workers	356	15.6%
37-3012	Pesticide Handlers, Sprayers, and Applicators, Vegetation	293	62.2%
39 Personal Care and Service Occupations			
39-9011	Childcare Workers	28,480	56.4%
39-5012	Hairdressers, Hairstylists, and Cosmetologists	15,612	67.2%
39-2021	Nonfarm Animal Caretakers	2,853	40.6%
39-5092	Manicurists and Pedicurists	2,313	38.5%
39-9031	Fitness Trainers and Aerobics Instructors	2,167	23.4%
39-5011	Barbers	2,161	82.9%
39-9099	Personal Care and Service Workers, All Other	1,825	60.9%
39-1021	First-Line Supervisors of Personal Service Workers	1,007	14.2%
39-5094	Skincare Specialists	941	42.6%
39-2011	Animal Trainers	571	52.2%
39-7011	Tour Guides and Escorts	372	29.2%
39-5091	Makeup Artists, Theatrical and Performance	243	17.1%
39-3092	Costume Attendants	83	6.7%
39-7012	Travel Guides	50	45.6%
41 Sales and Related Occupations			
41-1011	First-Line Supervisors of Retail Sales Workers	12,321	27.8%
41-9022	Real Estate Sales Agents	11,941	72.9%
41-1012	First-Line Supervisors of Non-Retail Sales Workers	5,771	40.6%
41-3021	Insurance Sales Agents	3,551	22.9%
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	3,500	7.1%
41-9021	Real Estate Brokers	3,421	66.8%
41-3099	Sales Representatives, Services, All Other	1,747	5.1%
41-9099	Sales and Related Workers, All Other	1,052	23.4%
41-3041	Travel Agents	868	17.5%
41-3011	Advertising Sales Agents	727	7.9%
41-9011	Demonstrators and Product Promoters	536	9.6%
43 Office and Administrative Support Occupations			
43-3031	Bookkeeping, Accounting, and Auditing Clerks	3,107	5.2%
43-5021	Couriers and Messengers	849	15.4%
43-9022	Word Processors and Typists	724	6.7%
43-9021	Data Entry Keyers	435	5.2%
43-4031	Court, Municipal, and License Clerks	150	9.4%
43-9011	Computer Operators	90	6.3%

SOC	Description	Number of Self-Employed Workers (2016)	% of Self-Employed Workers in Total Jobs (2016)
43-9031	Desktop Publishers	74	13.9%
45 Farming, Fishing, and Forestry Occupations			
45-4022	Logging Equipment Operators	57	63.8%
47 Construction and Extraction Occupations			
47-2031	Carpenters	13,404	44.8%
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	3,310	26.0%
47-2111	Electricians	2,210	14.6%
47-2152	Plumbers, Pipefitters, and Steamfitters	1,887	17.4%
47-2021	Brickmasons and Blockmasons	658	45.3%
47-2073	Operating Engineers and Other Construction Equipment Operators	517	11.9%
47-4011	Construction and Building Inspectors	376	15.5%
47-2211	Sheet Metal Workers	273	10.5%
47-4099	Construction and Related Workers, All Other	228	46.5%
47-2171	Reinforcing Iron and Rebar Workers	210	23.4%
47-2022	Stonemasons	135	34.7%
47-2121	Glaziers	130	11.3%
47-4051	Highway Maintenance Workers	122	13.6%
47-5021	Earth Drillers, Except Oil and Gas	62	19.1%
47-2231	Solar Photovoltaic Installers	61	16.0%
49 Installation, Maintenance, and Repair Occupations			
49-3023	Automotive Service Technicians and Mechanics	5,720	26.4%
49-9099	Installation, Maintenance, and Repair Workers, All Other	1,703	27.0%
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	1,191	15.4%
49-2011	Computer, Automated Teller, and Office Machine Repairers	1,062	26.4%
49-3021	Automotive Body and Related Repairers	965	19.5%
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	572	9.4%
49-9094	Locksmiths and Safe Repairers	453	43.0%
49-9031	Home Appliance Repairers	370	37.0%
49-2097	Electronic Home Entertainment Equipment Installers and Repairers	276	30.7%
49-9052	Telecommunications Line Installers and Repairers	232	8.4%
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	221	7.3%
49-2098	Security and Fire Alarm Systems Installers	186	7.6%
49-3051	Motorboat Mechanics and Service Technicians	175	37.4%
49-9063	Musical Instrument Repairers and Tuners	172	52.2%
49-9091	Coin, Vending, and Amusement Machine Servicers and Repairers	137	29.1%
49-3053	Outdoor Power Equipment and Other Small Engine Mechanics	129	21.7%
49-9064	Watch Repairers	128	77.3%
49-3093	Tire Repairers and Changers	123	6.8%
49-3022	Automotive Glass Installers and Repairers	115	33.6%
49-3052	Motorcycle Mechanics	63	20.7%
49-9081	Wind Turbine Service Technicians	59	57.1%

SOC	Description	Number of Self-Employed Workers (2016)	% of Self-Employed Workers in Total Jobs (2016)
51 Production Occupations			
51-4121	Welders, Cutters, Solderers, and Brazers	726	9.3%
51-9071	Jewelers and Precious Stone and Metal Workers	710	35.9%
51-7011	Cabinetmakers and Bench Carpenters	574	19.0%
51-9199	Production Workers, All Other	516	7.4%
51-5112	Printing Press Operators	426	7.0%
51-6093	Upholsterers	396	18.8%
51-9122	Painters, Transportation Equipment	286	11.6%
51-9195	Molders, Shapers, and Casters, Except Metal and Plastic	240	15.9%
51-7099	Woodworkers, All Other	224	59.5%
51-9081	Dental Laboratory Technicians	196	15.7%
51-6041	Shoe and Leather Workers and Repairers	133	25.5%
51-7021	Furniture Finishers	108	14.6%
51-9083	Ophthalmic Laboratory Technicians	50	13.1%
53 Transportation and Material Moving Occupations			
53-3032	Heavy and Tractor-Trailer Truck Drivers	10,400	25.1%
53-3033	Light Truck or Delivery Services Drivers	1,706	5.9%
53-7032	Excavating and Loading Machine and Dragline Operators	202	53.6%
53-5021	Captains, Mates, and Pilots of Water Vessels	86	11.6%

Source: Economic Modeling Specialists International (EMSI)

Industry Concentration

Exhibit 4 shows the industries that employ the largest number of self-employed workers in Los Angeles County, as well as the percentage of self-employed workers that work in each industry.

Exhibit 4 – Industries with the largest number of Self-Employed Workers, 2016

NAICS (6-Digit)	Industry	# of Self-Employed Jobs in Industry	% of Self-Employed Jobs in Industry
814110	Private Households	42,630	8.3%
711510	Independent Artists, Writers, and Performers	27,672	5.4%
561730	Landscaping Services	19,080	3.7%
624410	Child Day Care Services	18,032	3.5%
812112	Beauty Salons	16,882	3.3%
512110	Motion Picture and Video Production	13,536	2.6%
561720	Janitorial Services	13,435	2.6%

541110	Offices of Lawyers	12,440	2.4%
236118	Residential Remodelers	11,600	2.3%
238990	All Other Specialty Trade Contractors	7,017	1.4%

Education

Currently, there are 12 community colleges in Los Angeles County that train students for programs related to small business and entrepreneurship. Exhibit 5 displays the headcount and annual average community college awards for each of the colleges training in this field. Headcount is the actual number of students enrolled, regardless of credit hours. It is also important to note that an award is not equivalent to a single person in search of a job opening, since a student may earn more than one award (e.g. an associate degree and a certificate).

Between 2012-2015, the total annual average community college awards conferred was 58 (14 associate degrees and 44 certificates) across 1 program: Small Business and Entrepreneurship (0506.40).

Exhibit 5 – CCC Student Awards (by TOP and College)

TOP Code	Program	College	2012 – 2015 Annual Average			Total Average CC Awards
			CCC Headcount	CCC Associate Degrees	CCC Certificates	
0506.40	Small Business and Entrepreneurship	Cerritos	n/a	3	5	8
		Citrus	76	-	-	-
		Compton	35	-	-	-
		El Camino	145	-	-	-
		Glendale	29	1	1	2
		LA City	n/a	0	5	5
		LA Trade-Tech	n/a	n/a	3	3
		Mt. San Antonio	n/a	6	18	25
		Pasadena	n/a	1	5	6
		Rio Hondo	91	2	1	3
		Santa Monica	n/a	n/a	5	5
		West LA	111	0	1	1
TOTAL			488	14	44	58

Source: California Community Colleges Chancellor's Office MIS Data Mart

Regional supply data shows that there is a supply of students who have completed a related program(s) in non-California community college institutions. The following institution has awarded the following:

Mount St. Mary's University: 3 Average Annual Certificates

Student Outcomes

The CTE LaunchBoard provides student outcome data on the effectiveness of CTE programs. The following student outcome information was collected from exiters of the Small Business and Entrepreneurship Taxonomy of Program (TOP) code (0506.40) in Los Angeles County for the 2013-14 academic year.

- The median annual wage after program completion is \$17,131
- 28% of students are earning a living wage
- 58% of students are employed within six months after completing a program

Source: CTE LaunchBoard

Program Recommendation

This report was compiled by the Los Angeles/Orange County Center of Excellence to provide regional labor market data for the program recommendation of Entrepreneurial Studies. This report is to help determine whether there is demand in the local labor market that is not being met by the supply from programs of study (CCC and non-CCC) that align with this occupation group.

Based on the data, the COE has mixed findings regarding the Entrepreneurial Studies program in the Los Angeles region. Reasons include:

- There are nearly 232,000 self-employed workers in Los Angeles County, and there are expected to be 1,300 self-employed jobs added to the workforce by 2021
- On average, there are about 60 community college awards (public and private) conferred each year, which may signal that entrepreneurs do not need awards or degrees to successfully start a business
- The median annual wage after completing the Entrepreneurship program was \$17,131 per year and only 28% of exiters reported earning a living wage.

Sources

O*Net Online, Labor Insight/Jobs (Burning Glass), Economic Modeling Specialists International (EMSI), MIT Living Wage Calculator, Bureau of Labor Statistics (BLS) Education Attainment, California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart, CTE LaunchBoard, Statewide CTE Outcomes Survey, Employment Development Department Unemployment Insurance Dataset

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Notes

Data included in this analysis represents the labor market demand for positions most closely {occupation group or original wording on data request}. Standard occupational classification (SOC) codes were chosen based on the national education level required for employment (associate degree and postsecondary certificate) as well as the proportion of current workers who hold a community college award or have had some community college training. This selection process narrows the labor market analysis to the most relevant employment opportunities for students with community college education and/or training.

Traditional labor market information was used to show current and projected employment based on data trends, as well as annual average awards granted by regional community colleges. Real-time labor market information captures job post advertisements for occupations relevant to the field of study and should not be used to establish current job openings, because the numbers may include duplicate job postings or postings intended to gather a pool of applicants. Real-time labor market information can signal demand and show what employers are looking for in potential employees, but is not a perfect measure of the quantity of open positions.