



Labor Market Analysis: 1306.30 – Culinary Arts

Plant Based Culinary and Nutrition

Los Angeles Center of Excellence, January 2025

Program Endorsement:	Endorsed: All Criteria Met	☐	Endorsed: Some Criteria Met	☒	Not Endorsed	☐
Program Endorsement Criteria						
Supply Gap:	Yes	☒	No	☐		
Living Wage: (Entry-Level, 25th)	Yes	☐	No	☒		
Education:	Yes	☒	No	☐		
Emerging Occupation(s)						
Yes			☐	No		
				☒		

SUMMARY

This report analyzes whether local labor market demand is being met by community college programs aligned with the identified middle-skill occupations¹ or whether a shortage of workers exists. Labor market demand is measured by annual job openings while education supply is measured by the number of awards (degrees and certificates) conferred on average each year.

Based on the available data, there appears to be a supply gap for the three identified middle-skill occupations in the region. While the majority of annual openings have entry-level wages that are lower than the self-sufficiency standard wage in both Los Angeles and Orange counties, more than one-third of current workers in the field have completed an associate degree or less educational attainment.

Recommendation: Due to two of three program endorsement criteria being met, the Los Angeles Center of Excellence for Labor Market Research (LA COE) endorses this proposed program.

Key Findings

Supply Gap

- 8,751 annual job openings are projected in the region through 2028. This number is substantially greater than the three-year average of 1,103 awards conferred by educational institutions in the region.
 - Over the past 12 months, there were **8,641 online job postings related to these middle-skill culinary arts occupations and 94 specifically mentioned one or**

¹ Middle-skill occupations typically require some postsecondary education, but less than a bachelor's degree. 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.

more of the targeted keywords: *plant-based, plant based, vegetarian and/or vegan.*
The highest number of targeted job postings were for shift leaders, private chefs, chefs, personal chefs, and chefs de cuisine.

Living Wage

- 99.9% of annual job openings for these middle-skill culinary arts occupations have entry-level wages **below** Los Angeles County's self-sufficiency standard hourly wage (\$24.03/hour).²

Educational Attainment

- 99.9% of the annual job openings typically require a high school diploma or equivalent for middle-skill occupations related to culinary arts in the LA/OC region.
- 85%-94% of workers in the field have completed some college or an associate degree, according to national educational attainment data.

Community college supply

- 21 community colleges issued awards related to culinary arts in the greater LA/OC region.
- 846 awards (degrees and certificates) were conferred on average each year between 2021 and 2023.

Other postsecondary supply

- 3 educational institutions in the LA/OC region have conferred sub-baccalaureate awards in programs related to culinary arts over the past three years.
- 257 awards were conferred on average each year by other postsecondary institutions throughout the greater LA/OC region between 2020 and 2022.

TARGET OCCUPATIONS

LA COE prepared this report to provide regional labor market and postsecondary supply data related to three middle-skill occupations. [For full occupation descriptions, please see Appendix.](#)

- **Chefs and Head Cooks (35-1011)**³
- **First-Line Supervisors of Food Preparation and Serving Workers (35-1012)**⁴
- **Cooks, Private Household (35-2013)**⁵

OCCUPATIONAL DEMAND

Exhibit 1 shows the five-year occupational demand projections for these middle-skill culinary arts occupations. In the greater Los Angeles/Orange County region, the number of jobs related to these occupations is projected to increase by 9% through 2028. There will be more than 8,700 job openings per year through 2028 due to job growth and replacements. The majority of jobs in 2023 for these middle-skill culinary arts occupations (73%) were located in Los Angeles County.

² Center for Women's Welfare, University of Washington. (2024). *The self-sufficiency standard for California 2024.* <http://selfsufficiencystandard.org/California>.

³ [Chefs and Head Cooks \(bls.gov\)](#)

⁴ [First-Line Supervisors of Food Preparation and Serving Workers \(bls.gov\)](#)

⁵ [Cooks, Private Household \(bls.gov\)](#)

Exhibit 1: Current employment and occupational demand, Los Angeles and Orange counties⁶

Geography	2023 Jobs	2028 Jobs	2023-2028 Change	2023-2028 % Change	Annual Openings
Los Angeles	38,199	41,796	3,597	9%	6,349
Orange	14,387	15,780	1,393	10%	2,402
Total	52,586	57,576	4,990	9%	8,751

Detailed Occupation Data

Exhibit 2 displays the current employment and projected occupational demand for each of the target occupations in Los Angeles County. Positive scores for automation resilience⁷ reflect a lower-than-average threat of the occupation(s) being replaced by automation, while negative scores reflect a greater-than-average risk of automation. The average percentage of workers aged 55+ across all occupations in the Los Angeles/Orange County region is 26%; occupations with a larger share of workers aged 55 and older typically have greater replacement needs to offset the amount of impending retirements. On average, 81% of workers across all occupations in California are employed full-time.

Exhibit 2: Detailed employment and occupational demand, Los Angeles County⁸

Occupation	2023 Jobs	2028 Jobs	5-Yr % Change	Annual Openings	Automation Resilience	% Aged 55 and older	% Full Time Workers
Chefs and Head Cooks	8,057	8,605	7%	1,102	6.8	22%	86%
First-Line Supervisors of Food Preparation and Serving Workers	30,112	33,161	10%	5,242	(7.7)	20%	89%
Cooks, Private Household	31	31	(2%)	5	(3.3)	Insf. Data	Data Unavail.
Total	38,199	41,796	9%	6,349	-	-	-

WAGES

The labor market endorsement in this report considers the entry-level hourly wages for these middle-skill culinary arts occupations in Los Angeles County as they relate to the county's self-sufficiency standard wage. Orange County wages are included below in order to provide a complete analysis of the greater Los Angeles/Orange County region.

⁶ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

⁷ Automation risk is calculated based on the percentage of time spent on high-risk compared to low-risk work, the number of high-risk jobs in compatible occupations, and the overall industry automation risk.

⁸ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

Los Angeles County

The majority, 99.9%, of annual openings for these middle-skill culinary arts occupations have entry-level wages below the self-sufficiency standard wage for one adult (\$24.03 in Los Angeles County). Typical entry-level hourly wages are in a range between \$18.19 and \$31.60. (Exhibit 3).

One occupation has entry-level wages above the self-sufficiency standard wage:

- *Cooks, Private Household*, \$31.60

Experienced workers can expect to earn wages between \$24.99 and \$135.97, which are higher than the self-sufficiency standard.

Exhibit 3: Earnings for occupations in Los Angeles County

Occupation	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)	Median Annual Earnings*
Chefs and Head Cooks	\$21.12	\$27.39	\$38.23	\$57,000
First-Line Supervisors of Food Preparation and Serving Workers	\$18.19	\$21.28	\$24.99	\$44,300
Cooks, Private Household	\$31.60	\$63.02	\$135.97	\$131,100

*Rounded to the nearest \$100

Orange County

The majority, 99.9%, of annual openings for middle-skill culinary arts occupations have entry-level wages below the self-sufficiency standard wage for one adult (\$27.13 in Orange County). Typical entry-level hourly wages are in a range between \$17.38 and \$32.17 (Exhibit 4).

One occupation has entry-level wages above the self-sufficiency standard wage:

- *Cooks, Private Household*, \$32.17

Experienced *first-line supervisors of food preparation and serving workers* can expect to earn \$23.86, which is lower than the self-sufficiency standard. However, experienced *chefs and head cooks* and *cooks, private household* can expect to earn wages between \$36.49 and \$115.12, which are higher than the self-sufficiency standard.

Exhibit 4: Earnings for occupations in Orange County

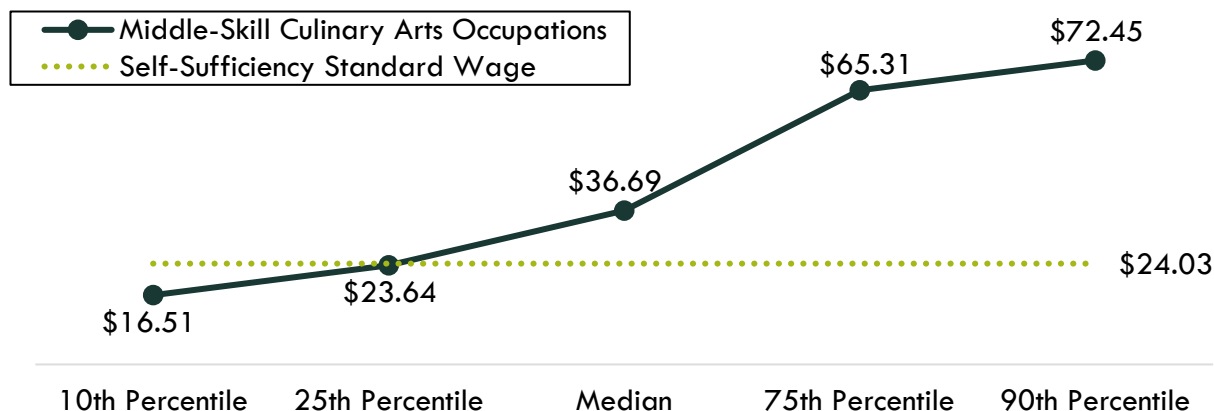
Occupation	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)	Median Annual Earnings*
Chefs and Head Cooks	\$21.02	\$26.25	\$36.49	\$54,600
First-Line Supervisors of Food Preparation and Serving Workers	\$17.38	\$20.33	\$23.86	\$42,300
Cooks, Private Household	\$32.17	\$52.93	\$115.12	\$110,100

*Rounded to the nearest \$100

Across the greater Los Angeles and Orange County region, the average entry-level hourly earnings for the occupations in this report are \$23.64; this is below the living wage for one single

adult in Los Angeles County (\$24.03). Exhibit 5 shows the average hourly wage for the occupations in this report, for entry-level to experienced workers.

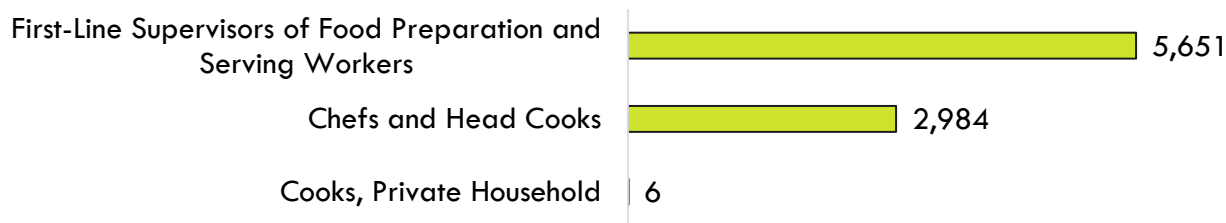
Exhibit 5: Average hourly earnings for middle-skill culinary arts occupations, Los Angeles and Orange counties



JOB POSTINGS BY OCCUPATIONS

There were 8,641 online job postings related to middle-skill culinary arts occupations listed in the past 12 months in Los Angeles and Orange counties. Exhibit 6 displays the number of job postings by occupation. The majority of job postings (65%) were for *first-line supervisors of food preparation and serving workers*, followed by *chefs and head cooks* (35%) and *cooks, private household* (.01%).

Exhibit 6: Job postings by occupation (last 12 months), Los Angeles and Orange counties



Job postings were analyzed for the most common job titles, skills, and employers associated with the target occupations in this report (Exhibit 7).

Exhibit 7: Most commonly requested job titles, skills and employers in job postings, Los Angeles and Orange counties

Top Job Titles	Top Skills	Top Employers
• Shift supervisors • Shift leaders • Sous chefs • Sushi chefs • Executive chefs • Chefs • Chefs de cuisine • Pastry chefs	• Restaurant operation • Cash handling • Food safety and sanitation • Retail operations • Collective bargaining • Cooking • Food services/preparation • Inventory management	• Starbucks • Compass Group • Taco Bell • Walgreens Boots Alliance • Marriott International • Tri Star Foods • Restaurant Depot

In the greater Los Angeles/Orange County region, 43% of the middle-skill culinary arts job postings listed a minimum educational requirement. Exhibit 8 details the number and percentage of job postings by educational level.

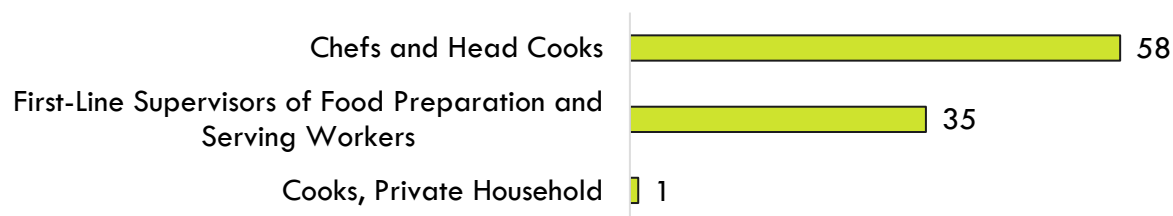
Exhibit 8: Education levels requested in job postings for middle-skill culinary arts occupations, Los Angeles and Orange counties

Education Level	Job Postings	% of Job Postings
Bachelor's degree	1,991	54%
Associate degree	120	3%
High school diploma or vocational training	1,564	43%

JOB POSTINGS BY KEYWORD

Of the 8,641 online job postings for middle-skill culinary arts occupations listed in the past 12 months in Los Angeles and Orange counties, **94 mentioned at least one of the following targeted keywords: *plant based, plant-based, vegan, and/or vegetarian***. Exhibit 9 displays the number of job postings by occupation. The majority of job postings (62%) were for *chefs and head cooks*, followed by *first-line supervisors of food preparation and serving workers* (37%) and *cooks, private household* (1%).

Exhibit 9: Job postings by occupation and keyword (last 12 months), Los Angeles and Orange counties



Job postings were analyzed for the most common job titles, skills, and employers associated with the targeted occupations and keywords in this report (Exhibit 10).

Exhibit 10: Most commonly requested job titles, skills and employers in job postings, Los Angeles and Orange counties

Top Job Titles	Top Skills	Top Employers
- Shift leaders - Private chefs - Chefs - Personal chefs - Chefs de cuisine - Executive chefs	- Restaurant operation - Cooking - Food safety and sanitation - Food services/preparation - Meal planning and preparation - Menu planning	- Jamba - Inspire Malibu - Plant Power Restaurant Group - Mint Personal Chef Services

In the greater Los Angeles/Orange County region, 19% of the targeted middle-skill culinary arts job postings listed a minimum educational requirement. Exhibit 11 details the number and percentage of job postings by educational level.

Exhibit 11: Education levels requested in job postings for targeted middle-skill culinary arts occupations, Los Angeles and Orange counties

Education Level	Job Postings	% of Job Postings
Bachelor's degree	1	6%
Associate degree	1	6%
High school diploma or vocational training	16	88%

EDUCATIONAL ATTAINMENT

In the greater Los Angeles/Orange County region, the majority of annual job openings (99.9%) typically require a high school diploma or equivalent (Exhibit 12). However, the national-level data indicates between 85% and 94% of workers in the field have completed an associate degree or less education as their highest level of educational attainment. The Bureau of Labor

Statistics (BLS) lists the following typical entry-level education levels for the occupations in this report:

Exhibit 12: Entry-level education preferred by employers nationally, Bureau of Labor Statistics

Occupation	Education Level
Chefs and Head Cooks	High school diploma or equivalent
First-Line Supervisors of Food Preparation and Serving Workers	High school diploma or equivalent
Cooks, Private Household	Postsecondary non-degree award

EDUCATIONAL SUPPLY

Community College Supply

Exhibit 13 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 LA Trade-Tech, LA Mission, and Cypress

Exhibit 13: Regional community college awards (certificates and degrees), 2021-2023

TOP Code	Program	College	2020-21 Awards	2021-22 Awards	2022-23 Awards	3-Year Average
1306.00	Nutrition, Foods, and Culinary Arts	Citrus	4	6	2	4
		East LA	18	21	16	18
		Glendale	-	6	8	5
		LA City	-	4	1	2
		LA Harbor	-	3	1	1
		LA Mission	7	4	7	6
		LA Southwest	2	2	4	3
		LA Trade-Tech	-	3	-	1
		Long Beach	19	16	20	18
		Mt San Antonio	19	25	29	24
		Pasadena	10	3	1	5
		Rio Hondo	3	1	1	2
		Santa Monica	9	11	8	9
		West LA	4	5	2	4
		LA Subtotal	95	110	100	102
		Cypress	1	3	-	1
		Fullerton	17	13	12	14
		Orange Coast	17	11	9	12
		Saddleback	24	12	12	16

TOP Code	Program	College	2020-21 Awards	2021-22 Awards	2022-23 Awards	3-Year Average
		Santa Ana	1	2	1	1
		Santiago Canyon	-	-	4	1
		OC Subtotal	60	41	38	46
		Supply Subtotal/Average	155	151	138	148
1306.30	Culinary Arts	Cerritos	68	54	55	59
		LA Harbor	40	83	49	57
		LA Mission	74	108	88	90
		LA Trade-Tech	71	132	136	113
		Long Beach	46	28	49	41
		Mt San Antonio	3	20	22	15
		Pasadena	-	1	5	2
		LA Subtotal	302	426	404	377
		Cypress	58	89	70	72
		Orange Coast	60	88	78	75
		Saddleback	28	18	33	26
		Santa Ana	1	5	21	9
		Santiago Canyon	67	128	35	77
		OC Subtotal	214	328	237	260
		Supply Subtotal/Average	516	754	641	637
1307.10	Restaurant and Food Services and Management	Cerritos	11	10	4	8
		LA Mission	15	18	28	20
		LA Trade-Tech	5	13	16	11
		Mt San Antonio	1	5	3	3
		LA Subtotal	32	46	51	43
		Cypress	15	26	10	17
		Orange Coast	1	-	2	1
		OC Subtotal	16	26	12	18
		Supply Subtotal/Average	48	72	63	61
		Supply Total/Average	719	977	842	846

Other Postsecondary Supply

For a comprehensive regional supply analysis, it is important to consider the supply from other institutions in the region that provide training programs for middle-skill culinary arts occupations. Exhibit 14 shows the number of awards conferred by these institutions in relevant programs. Due to different data collection periods, the most recent data is from 2020 to 2022. Between 2020 and 2022, other postsecondary college institutions in the region conferred an average of 257

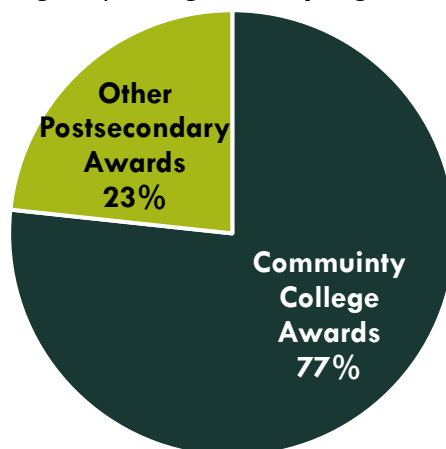
sub-baccalaureate awards. Sub-baccalaureate awards include associate degrees, postsecondary awards, and other academic awards that typically take fewer than four years to complete.

Exhibit 14: Other regional postsecondary awards, 2020-2022

CIP Code	Program	Postsecondary Institution	2019-20 Awards	2020-21 Awards	2021-22 Awards	3-Year Average
12.0503	Culinary Arts/ Chef Training	Hacienda La Puente Adult Education	9	4	4	6
		Institute of Culinary Education	164	195	208	189
12.0504	Restaurant, Culinary, and Catering Management/Manager	Institute of Culinary Education	65	45	37	49
12.0505	Food Preparation/Professional Cooking/Kitchen Assistant	Baldwin Park Adult & Community Education	19	14	8	14
Supply Total/Average			257	258	257	257

Exhibit 15 shows the proportion of community college awards conferred in the greater Los Angeles/Orange County region compared to the number of other postsecondary awards for the programs in this report. The majority of awards conferred in these programs are awarded by community colleges in the greater Los Angeles/Orange County region.

Exhibit 15: Percentage of community college awards compared to other postsecondary institution awards in the Los Angeles/Orange County region



APPENDIX: OCCUPATION DESCRIPTIONS

LA COE prepared this report to provide regional labor market supply and demand data related to these target occupations:

- **Chefs and Head Cooks (35-1011)** Direct and may participate in the preparation, seasoning, and cooking of salads, soups, fish, meats, vegetables, desserts, or other foods. May plan and price menu items, order supplies, and keep records and accounts.⁹
- **First-Line Supervisors of Food Preparation and Serving Workers (35-1012)** Directly supervise and coordinate activities of workers engaged in preparing and serving food.¹⁰
- **Cooks, Private Household (35-2013)** Prepare meals in private homes. Includes personal chefs.¹¹

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DATA SOURCES



POWERED BY



- O*NET Online
- Lightcast (formerly Emsi)
- Bureau of Labor Statistics (BLS)
- California Employment Development Department, Labor Market Information Division, OES
- California Community Colleges Chancellor's Office Management Information Systems (MIS)
- Self-Sufficiency Standard at the Center for Women's Welfare, University of Washington
- Chancellor's Office Curriculum Inventory (COCI 2.0)

Important Disclaimer: All representations included in this report have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. Efforts have been made to qualify and validate the accuracy of the data and the reported findings; however, neither the Centers of Excellence, COE host District, nor California Community Colleges Chancellor's Office are responsible for applications or decisions made by recipient community colleges or their representatives based upon components or recommendations contained in this study.

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⁹ [Chefs and Head Cooks \(bls.gov\)](#)

¹⁰ [First-Line Supervisors of Food Preparation and Serving Workers \(bls.gov\)](#)

¹¹ [Cooks, Private Household \(bls.gov\)](#)