

Labor Market Analysis: 1306.30/Culinary Arts
Baking & Patisserie - Associate of Arts (A.A.) degree
Los Angeles Center of Excellence, February 2024

Summary

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 Center of Excellence for Labor Market Research (LA COE) prepared this report to provide regional labor market supply and demand data related to three middle-skill 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.¹
- **First-Line Supervisors of Food Preparation and Serving Workers (35-1012)** Directly supervise and coordinate activities of workers engaged in preparing and serving food.²
- **Bakers (51-3011)** Mix and bake ingredients to produce breads, rolls, cookies, cakes, pies, pastries, or other baked goods. Pastry chefs in restaurants and hotels are included with “Chefs and Head Cooks” (35-1011).³

Middle-skill occupations typically require some postsecondary education, but less than a bachelor’s degree.⁴ 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.

Based on the available data, there appears to be a supply gap for these culinary arts 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,

¹ [Chefs and Head Cooks \(bls.gov\)](https://www.bls.gov/occupations/35-1011)

² [First-Line Supervisors of Food Preparation and Serving Workers \(bls.gov\)](https://www.bls.gov/occupations/35-1012)

³ [Bakers \(bls.gov\)](https://www.bls.gov/occupations/51-3011)

⁴ 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.

approximately one-third of current workers in the field have completed some college or an associate degree. **Therefore, due to some of the criteria being met, the LA COE endorses this proposed program.** Detailed reasons include:

Demand:

- **Supply Gap Criteria** – Over the next five years, **11,983 jobs are projected to be available annually** in the region due to new job growth and replacements, **which is more than the three-year average of 1,291 awards conferred** by educational institutions in the region.
- **Living Wage Criteria** – Within Los Angeles County, the majority (90%) of annual job openings for these culinary arts occupations have entry-level wages **below** the self-sufficiency standard hourly wage (\$18.10/hour).⁵
- **Educational Criteria** – Within the greater LA/OC region, **85% of the annual job openings** for occupations related to culinary arts typically require **a high school diploma or equivalent**.
 - However, the national-level educational attainment data indicates **between 29% and 38% of workers in the field have completed some college or an associate degree.**

Supply:

- There are **22 community colleges** in the greater LA/OC region that issue awards related to culinary arts, conferring an average of **980 awards annually** between 2019 and 2022.
- Between 2019 and 2021, there was an average of **311 awards conferred annually** in related training programs by non-community college institutions throughout the greater LA/OC region.

Occupational Demand

Exhibit 1 shows the five-year occupational demand projections for these culinary arts occupations. In the greater Los Angeles/Orange County region, the number of jobs related to these occupations is projected to increase by 12% through 2027. There will be nearly 12,000 job openings per year through 2027 due to job growth and replacements. The majority of jobs in 2022 for these culinary arts occupations (73%) were located in Los Angeles County.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties⁶

Geography	2022 Jobs	2027 Jobs	2022-2027 Change	2022-2027 % Change	Annual Openings
Los Angeles	50,365	56,382	6,017	12%	8,785
Orange	18,222	20,475	2,253	12%	3,197
Total	68,587	76,857	8,270	12%	11,983

⁵ Self-Sufficiency Standard wage data was pulled from The Self-Sufficiency Standard Tool for California. For more information, visit: <http://selfsufficiencystandard.org/california>.

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.

Wages

The labor market endorsement in this report considers the entry-level hourly wages for these 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 LA/OC region. Detailed wage information, by county, is included in Appendix A.

Los Angeles County

The majority (90%) of annual openings for these culinary arts occupations have entry-level wages below the self-sufficiency standard wage for one adult (\$18.10 in Los Angeles County). Typical entry-level hourly wages are in a range between \$16.65 and \$22.28. One occupation in this report has entry-level wages above the county's self-sufficiency wage: *chefs and head cooks* (\$22.28). Experienced workers can expect to earn wages between \$18.60 and \$39.72, which are higher than the self-sufficiency standard.

Exhibit 2: Earnings for Occupations in LA 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 (35-1011)	\$22.28	\$30.49	\$39.72	\$63,400
First-Line Supervisors of Food Preparation and Serving Workers (35-1012)	\$17.64	\$20.20	\$22.40	\$42,000
Bakers (51-3011)	\$16.65	\$17.70	\$18.60	\$36,800

*Rounded to the nearest \$100

Orange County

The majority (91%) of annual openings for these culinary arts occupations have entry-level wages below the self-sufficiency standard wage for one adult (\$20.63 in Orange County). Typical entry-level hourly wages are in a range between \$15.66 and \$22.31. One occupation in this report has entry-level wages above the county's self-sufficiency wage: *chefs and head cooks* (\$22.31). Experienced *bakers* can expect to earn \$17.42, which is less than the county's self-sufficiency standard wage. However, experienced *chefs and head cooks* and *first-line supervisors of food preparation and serving workers* can expect to earn wages between \$21.23 and \$38.19, which are higher than the self-sufficiency standard.

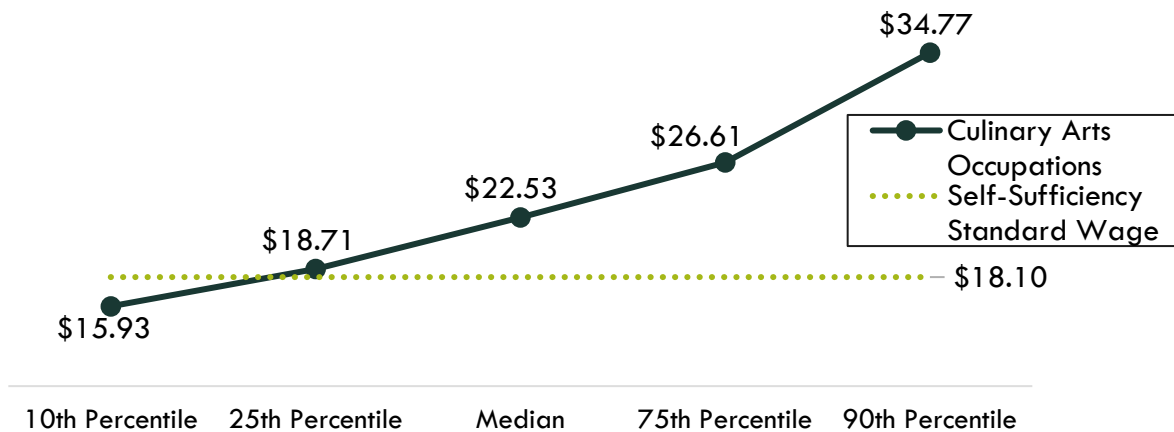
Exhibit 3: Earnings for Occupations in Orange County

Occupation	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)	Median Annual Earnings*
Chefs and Head Cooks (35-1011)	\$22.31	\$29.76	\$38.19	\$61,900
First-Line Supervisors of Food Preparation and Serving Workers (35-1012)	\$16.73	\$19.16	\$21.23	\$39,800
Bakers (51-3011)	\$15.66	\$16.60	\$17.42	\$34,500

*Rounded to the nearest \$100

On average, the entry-level earnings for the occupations in this report are \$18.71; this is above the living wage for one single adult in Los Angeles County (\$18.10). Exhibit 4 shows the average wage for the occupations in this report, from entry-level to experienced workers.

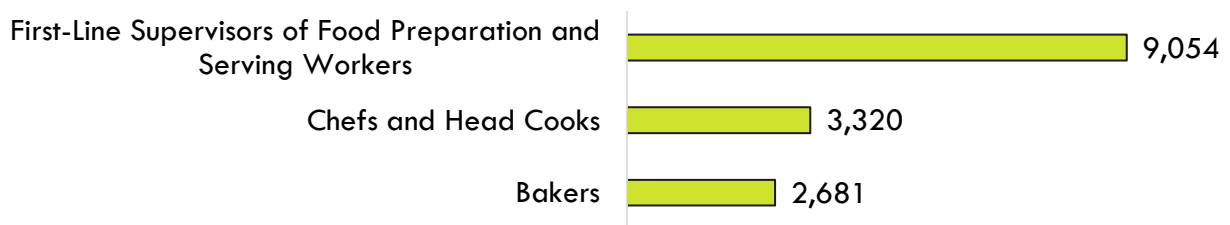
Exhibit 4: Average Hourly Earnings for Culinary Arts Occupations in LA/OC



Job Postings

There were 15,055 online job postings related to these culinary arts occupations listed in the past 12 months. Exhibit 5 displays the number of job postings by occupation. The majority of job postings (60%) were for *first-line supervisors of food preparation and serving workers*, followed by *chefs and head cooks* (22%) and *bakers* (18%). The highest number of job postings were for shift leaders, shift supervisors, bakers, sous chefs, and team leads. The top skills were restaurant operation, food safety and sanitation, cooking, food preparation, food services, and baking. The top three employers, by number of job postings, in the region were: Starbucks, El Super, and Jack in the Box.

Exhibit 5: Job postings by occupation (last 12 months)



Educational Attainment

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

- **High school diploma or equivalent:** *Chefs and head cooks; first-line supervisors of food preparation and serving workers*
- **No formal educational credential:** *Bakers*

In the greater LA/OC region, the majority of annual job openings (85%) typically require a high school diploma or equivalent. However, the national-level educational attainment data indicates between 29% and 38% of workers in the field have completed some college or an associate degree. Of the 29% of culinary arts job postings listing a minimum education requirement in the greater Los Angeles/Orange County region, 80% (3,454) requested high school or vocational training, 5% (215) requested an associate degree, and 15% (642) requested a bachelor's degree.

Educational Supply

Community College Supply

Exhibit 6 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 Mission, Cypress, and LA Trade-Tech.

Exhibit 6: Regional community college awards (certificates and degrees), 2019-2022

TOP	Program	College	2019-20 Awards	2020-21 Awards	2021-22 Awards	3-Year Average	
1306.00	Nutrition, Foods, and Culinary Arts	Citrus	-	4	6	3	
		East LA	23	18	21	21	
		Glendale	6	-	6	4	
		LA City	1	-	4	2	
		LA Harbor	-	-	3	1	
		LA Mission	4	7	4	5	
		LA Southwest	-	2	2	1	
		LA Trade-Tech	-	-	3	1	
		Long Beach	8	19	16	14	
		Mt San Antonio	15	19	25	20	
		Pasadena	2	10	3	5	
		Rio Hondo	1	3	1	2	
		Santa Monica	5	9	11	8	
		West LA	2	4	5	4	
		LA Subtotal		67	95	110	91
		Cypress	2	1	3	2	
		Fullerton	8	17	13	13	
		Orange Coast	20	17	11	16	
		Saddleback	19	24	12	18	
		Santa Ana	3	1	2	2	
OC Subtotal		52	60	41	51		
Supply Subtotal/Average			119	155	151	142	

TOP	Program	College	2019-20 Awards	2020-21 Awards	2021-22 Awards	3-Year Average
1306.30	Culinary Arts	Cerritos	86	68	54	69
		LA Harbor	14	40	83	46
		LA Mission	151	74	108	111
		LA Trade-Tech	80	71	132	94
		Long Beach	44	46	28	39
		Mt San Antonio	15	3	20	13
		Pasadena	-	-	1	0
		LA Subtotal	390	302	426	373
		Cypress	61	58	89	69
		Orange Coast	82	60	88	77
		Saddleback	23	28	18	23
		Santa Ana	-	1	5	2
		Santiago Canyon	55	67	128	83
		OC Subtotal	221	214	328	254
Supply Subtotal/Average			611	516	754	627
1307.00	Hospitality	Cerritos	-	6	7	4
		East LA	-	-	2	1
		Glendale	11	14	14	13
		LA City	-	14	8	7
		LA Pierce	-	1	3	1
		Long Beach	-	-	2	1
		Mt San Antonio	35	37	29	34
		Pasadena	10	10	12	11
		Rio Hondo	2	5	3	3
		West LA	29	10	18	19
		LA Subtotal	87	97	98	94
		Cypress	32	30	30	31
		Orange Coast	6	10	19	12
		OC Subtotal	38	40	49	42
Supply Subtotal/Average			125	137	147	136
1307.10	Restaurant and Food Services and Management	Cerritos	6	11	10	9
		LA Mission	40	15	18	24
		LA Trade-Tech	11	5	13	10
		Mt San Antonio	8	1	5	5
		LA Subtotal	65	32	46	48

TOP	Program	College	2019-20 Awards	2020-21 Awards	2021-22 Awards	3-Year Average
		Cypress	41	15	26	27
		Orange Coast	-	1	-	0
		OC Subtotal	41	16	26	28
		Supply Subtotal/Average	106	48	72	75
		Supply Total/Average	961	856	1,124	980

Non-Community College Supply

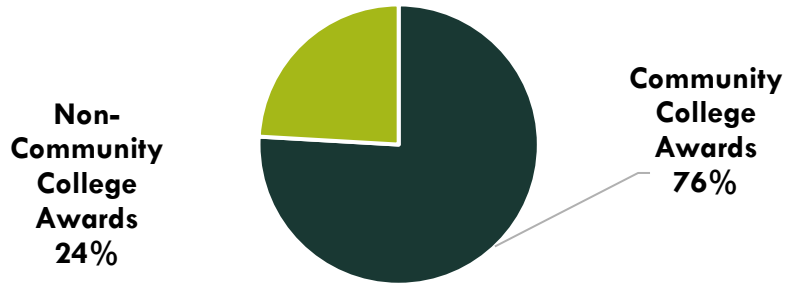
For a comprehensive regional supply analysis, it is important to consider the supply from other institutions in the region that provide training programs for culinary arts. Exhibit 7 shows the annual and three-year average number of awards conferred by these institutions in relevant programs. Due to different data collection periods, the most recent three-year period of available data is from 2019 to 2021. Between 2019 and 2021, non-community college institutions in the region conferred an average of 311 sub-baccalaureate awards. Sub-baccalaureate awards include associate degrees, postsecondary awards, and other academic awards.

Exhibit 7: Regional non-community college awards, 2019-2021

CIP	Program	Institution	2019-20 Awards	2020-21 Awards	2-Year Average
12.0501	Baking and Pastry Arts/Baker/Pastry Chef	Institute of Culinary Education	47	52	50
12.0503	Culinary Arts/Chef Training	Hacienda La Puente Adult Education	9	4	7
		Institute of Culinary Education	164	195	180
12.0504	Restaurant, Culinary, and Catering Management/Manager	Institute of Culinary Education	65	45	55
12.0505	Food Preparation/Professional Cooking/Kitchen Assistant	Baldwin Park Adult & Community Education	19	14	17
19.0501	Foods, Nutrition, and Wellness Studies, General	University of Massachusetts Global	4	4	4
Supply Total/Average			308	314	311

Exhibit 8 shows the proportion of community college awards conferred in LA/OC compared to the number of non-community college awards for the programs in this report. Three out of four awards conferred in these programs are awarded by community colleges in the LA/OC region.

Exhibit 8: Community College Awards Compared to Non-Community College Awards in LA/OC Region, 3-Year Average



Appendix A: Occupational demand and wage data by county

Exhibit 9. Los Angeles County

Occupation (SOC)	2022 Jobs	2027 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)
Chefs and Head Cooks (35-1011)	5,803	6,422	619	11%	844	\$22.28	\$30.49	\$39.72
First-Line Supervisors of Food Preparation and Serving Workers (35-1012)	36,320	40,992	4,672	13%	6,540	\$17.64	\$20.20	\$22.40
Bakers (51-3011)	8,242	8,969	726	9%	1,401	\$16.65	\$17.70	\$18.60
Total	50,365	56,382	6,017	12%	8,785	-	-	-

Exhibit 10. Orange County

Occupation (SOC)	2022 Jobs	2027 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)
Chefs and Head Cooks (35-1011)	2,001	2,228	227	11%	294	\$22.31	\$29.76	\$38.19
First-Line Supervisors of Food Preparation and Serving Workers (35-1012)	13,863	15,690	1,827	13%	2,506	\$16.73	\$19.16	\$21.23
Bakers (51-3011)	2,358	2,557	199	8%	398	\$15.66	\$16.60	\$17.42
Total	18,222	20,475	2,253	12%	3,197	-	-	-

Exhibit 11. Los Angeles and Orange Counties

Occupation (SOC)	2022 Jobs	2027 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	% Age 55 and older*	Typical Entry-Level Education
Chefs and Head Cooks (35-1011)	7,804	8,651	846	11%	1,138	22%	HS diploma or equivalent
First-Line Supervisors of Food Preparation and Serving Workers (35-1012)	50,183	56,681	6,499	13%	9,046	20%	HS diploma or equivalent
Bakers (51-3011)	10,600	11,526	926	9%	1,799	28%	No formal educational credential
Total	68,587	76,857	8,270	12%	11,983	-	-

*The average percentage of workers aged 55 and older across all occupations in the greater LA/OC region is 27%. *Bakers* have a larger share of older workers, which typically indicates greater replacements needs to offset the amount of impending retirements.

Appendix B: Sources

- 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)

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