

Program Endorsement Brief: 1306.30/Culinary Arts
Baking and Pastry – Basic Training
Orange County Center of Excellence, August 2020

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"/>		
Meets Living Wage: (Entry-Level, 25th)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>		
Typical Entry-Level Education:	HS Diploma or Less	Some College/ Cert./AA	Bachelor's Degree	Graduate Degree		
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Emerging Occupation(s)						
	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>		

The 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 three middle-skill occupations: Chefs and Head Cooks (35-1011), First-Line Supervisors of Food Preparation and Serving Workers (35-1012), and Bakers (51-3011). Middle-skill occupations typically require some postsecondary education, but less than a bachelor's degree.¹ 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 culinary arts occupations in the region. However, the Bureau of Labor Statistics (BLS) lists a high school diploma or less education as the typical entry-level education for these occupations, and all of the annual job openings in the region have typical entry-level wages below the living wage. **Therefore, due to some of the criteria being met, the COE endorses this proposed program.** Reasons include:

Demand:

- Over the next five years, there is projected to be **9,359 jobs available annually** in the region due to new job growth and replacements, **which is more than the 1,846 awards conferred annually** by educational institutions in the region.
 - However, the Chefs and Head Cooks (35-1011) and First-Line Supervisors of Food Preparation and Serving Workers (35-1012) SOC codes include all

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.

culinary arts occupations. Since the SOC code does not solely represent baking and pastry-related occupations, **the number of annual jobs is overstated.**

- Over the past 12 months, there were **2,582 online job postings for baking and pastry-related occupations.** The highest number of job postings were for Baker, Bakery Clerk, Pastry Cook, Chef, and Overnight Baker.
- The Bureau of Labor Statistics (BLS) lists a **high school diploma as the typical entry-level education for Chefs and Head Cooks and First-Line Supervisors of Food Preparation and Serving Workers, and no formal education for Bakers.**
 - However, the national-level educational attainment data indicates **between 29.3% and 40.6% of workers in the field have completed some college or an associate degree.**
- Within Orange County, **all of the annual job openings** for these culinary arts occupations have **entry-level wages below the county's living wage** (\$17.36).²
 - However, **experienced Head Cooks and Chefs and First-Line Supervisors of Food Preparation and Serving Workers** can expect to earn wages between \$19.44 and \$27.19, which **are higher than the living wage** estimate.
 - **Experienced Bakers earn \$14.89, which is below the county's living wage.**

Supply:

- There are **17 community colleges** in the region that issue awards related to culinary arts and/or food services, conferring an average of **905 awards annually** between 2016 and 2019.
- Between 2014 and 2017, there was an average of **941 awards conferred annually** in related training programs by non-community college institutions throughout the region.

Occupational Demand

Exhibit 1, on the following page, shows the five-year occupational demand projections for these culinary arts occupations. In Los Angeles/Orange County, the number of jobs related to these occupations is projected to increase by 9% through 2024. There will be more than 9,300 job openings per year through 2024 due to job growth and replacements. It is important to note that the Chefs and Head Cooks (35-1011) and First-Line Supervisors of Food Preparation and Serving Workers (35-1012) SOC codes includes a variety of cooking occupations and not solely baking and pastry-related occupations. Therefore, the data in Exhibit 1 is overstated for occupations related to baking and pastries.

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.

² Living wage data was pulled from California Family Needs Calculator on 7/6/2020. For more information, visit the California Family Needs Calculator website: <https://insightcced.org/2018-family-needs-calculator/>.

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	39,996	43,644	3,648	9%	6,851
Orange	14,335	15,825	1,490	10%	2,508
Total	54,331	59,469	5,138	9%	9,359

Wages

The labor market endorsement in this report considers the entry-level hourly wages for these culinary arts 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.

Orange County—All of the annual openings for these culinary arts occupations have entry-level wages below the California Family Needs Calculator hourly wage (living wage) for one adult (\$17.36 in Orange County).⁴ Typical entry-level hourly wages are in a range between \$11.41 and \$13.72. Bakers have entry-level wages of \$11.41, which is lower than California’s current minimum wage (\$12.00 for employers with 25 employees or fewer), while First-Line Supervisors of Food Preparation and Serving Workers have regional entry-level wages of \$12.17, which is lower than California’s current minimum wage for employers with 26 or more employees (\$13.00).⁵ Though these typical entry-level hourly wages are lower than both the living wage and minimum wage, it is important to note that wage 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. While experienced Head Cooks and Chefs and First-Line Supervisors of Food Preparation and Serving Workers can expect to earn wages between \$19.44 and \$27.19, which are higher than the living wage estimate, experienced Bakers earn \$14.89, which is below the county’s living wage. Orange County’s average wages are below the average statewide wage of \$18.32 for these occupations.

Los Angeles County—All of the annual openings for these culinary arts 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 \$11.40 and \$13.25. Bakers have entry-level wages of \$11.40, which is lower than California’s current minimum wage (\$12.00 for employers with 25 employees or fewer), while First-Line Supervisors of Food Preparation and Serving Workers have regional entry-level wages of \$12.88, which is lower than California’s current minimum wage for

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.

⁴ Living wage data was pulled from California Family Needs Calculator on 7/6/2020. For more information, visit the California Family Needs Calculator website: <https://insightcced.org/2018-family-needs-calculator/>.

⁵ https://www.dir.ca.gov/dlse/FAQ_MinimumWage.htm

employers with 26 or more employees (\$13.00).⁶ Though these typical entry-level hourly wages are lower than both the living wage and minimum wage, it is important to note that wage 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. While experienced Head Cooks and Chefs and First-Line Supervisors of Food Preparation and Serving Workers can expect to earn wages between \$20.73 and \$28.33, which are higher than the living wage estimate, experienced Bakers earn \$15.05, which is below the county’s living wage. Los Angeles County’s average wages are below the average statewide wage of \$18.32 for these occupations.

Job Postings—There were 2,582 online job postings for baking and pastry-related occupations listed in the past 12 months. The highest number of job postings were for Baker, Bakery Clerk, Pastry Cook, Chef, and Overnight Baker. The top skills were: cleaning, food safety, cooking, food preparation, and customer service. The top three employers, by number of job postings, in the region were: Starbucks Coffee Company, Marriott International, and Panera Bread.

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 as the typical entry-level education for Chefs and Head Cooks and First-Line Supervisors of Food Preparation and Serving Workers, and no formal education for Bakers. However, the national-level educational attainment data indicates between 29.3% and 40.6% of workers in the field have completed some college or an associate degree. Of the 24% of baking and pastry-related job postings listing a minimum education requirement in Los Angeles/Orange County, 88% (3,062) requested a high school diploma and 12% (431) requested an associate degree.

Educational Supply

Community College Supply—Exhibit 2, on the following page, shows the three-year average number of awards conferred by community colleges in the related TOP codes: Nutrition, Foods, and Culinary Arts (1306.00), Culinary Arts (1306.30), and Restaurant Services and Management (1307.10). The colleges with the most completions in the region are: LA Mission, LA Trade-Tech, and Cypress. Over the past 12 months, there were 13 other related program recommendation requests from regional community colleges.

⁶ https://www.dir.ca.gov/dlse/FAQ_MinimumWage.htm

Exhibit 2: 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
1306.00	Nutrition, Foods, and Culinary Arts	East LA	0	7	14	7
		Glendale	19	4	3	9
		LA Mission	2	3	4	3
		Long Beach	0	2	8	3
		Mt San Antonio	10	10	15	12
		Pasadena	0	0	2	1
		Santa Monica	1	5	3	3
		West LA	0	1	4	2
		LA Subtotal	32	32	53	39
		Fullerton	2	9	6	6
		Orange Coast	16	9	17	14
		Saddleback	17	23	26	22
		Santa Ana	0	3	3	2
		OC Subtotal	35	44	52	44
		Supply Subtotal/Average			67	76
1306.30	Culinary Arts	Cerritos	72	77	69	73
		Glendale	1	0	1	1
		LA Harbor	71	10	61	47
		LA Mission	143	158	146	149
		LA Trade	176	139	144	153
		Long Beach	35	35	48	39
		Mt San Antonio	11	13	16	13
		LA Subtotal	509	432	485	475
		Cypress	59	97	99	85
		Orange Coast	84	97	76	86
		Saddleback	23	26	32	27
		Santiago Canyon	12	4	89	35
		OC Subtotal	178	224	296	233
		Supply Subtotal/Average			687	656

TOP Code	Program	College	2016-2017 Awards	2017-2018 Awards	2018-2019 Awards	3-Year Award Average
1307.10	Restaurant and Food Services and Management	Cerritos	0	2	5	2
		LA Mission	41	34	26	34
		LA Trade	11	8	12	10
		Mt San Antonio	6	19	13	13
		LA Subtotal	58	63	56	59
		Cypress	31	63	59	51
		Orange Coast	5	5	2	4
		OC Subtotal	36	68	61	55
Supply Subtotal/Average			94	131	117	114
Supply Total/Average			848	863	1,003	905

Non-Community College Supply—It is important to consider the supply from four-year institutions in the region that provide training programs for culinary arts occupations. Exhibit 3 shows the annual and three-year average number of awards conferred by these institutions in the related Classification of Instructional Programs (CIP) Codes: Baking and Pastry Arts/Baker/Pastry Chef (12.0501), Culinary Arts/Chef Training (12.0503), Restaurant, Culinary, and Catering Management/Manager (12.0504), Food Preparation/Professional Cooking/Kitchen Assistant (12.0505), and Foods, Nutrition, and Wellness Studies, General (19.0501). Due to different data collection periods, the most recent three-year period of available data is from 2014 to 2017. Between 2014 and 2017, four-year colleges in the region conferred an average of 941 awards annually in related training programs.

Exhibit 3: Regional non-community college awards, 2014-2017

CIP Code	Program	College	2014-2015 Awards	2015-2016 Awards	2016-2017 Awards	3-Year Award Average
12.0501	Baking and Pastry Arts/ Baker/ Pastry Chef	Argosy University-The Art Institute of California-Hollywood	17	17	11	15
		Argosy University-The Art Institute of California-Los Angeles	28	19	11	19
		Argosy University-The Art Institute of California-Orange County	55	35	17	36
		Le Cordon Bleu College of Culinary Arts-Pasadena	183	202	181	189

CIP Code	Program	College	2014-2015 Awards	2015-2016 Awards	2016-2017 Awards	3-Year Award Average
12.0503	Culinary Arts/Chef Training	Argosy University-The Art Institute of California-Hollywood	37	26	22	28
		Argosy University-The Art Institute of California-Los Angeles	58	29	21	36
		Argosy University-The Art Institute of California-Orange County	76	43	27	49
		Hacienda La Puente Adult Education	19	22	23	21
		Le Cordon Bleu College of Culinary Arts-Pasadena	499	474	378	450
12.0504	Restaurant, Culinary, and Catering Management/Manager	Argosy University-The Art Institute of California-Hollywood	8	9	8	8
		Argosy University-The Art Institute of California-Los Angeles	8	11	5	8
		Argosy University-The Art Institute of California-Orange County	11	16	10	12
12.0505	Food Preparation/Professional Cooking/Kitchen Assistant	Baldwin Park Adult & Community Education	28	31	25	28
19.0501	Foods, Nutrition, and Wellness Studies, General	Brandman University	8	4	8	7
52.0905	Restaurant/Food Services Management	University of Southern California	33	35	34	34
Supply Total/Average			1,068	973	781	941

Appendix A: Occupational demand and wage data by county

Exhibit 4. Orange 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)
Chefs and Head Cooks (35-1011)	2,606	2,779	173	7%	387	\$13.72	\$19.75	\$27.19
First-Line Supervisors of Food Preparation and Serving Workers (35-1012)	9,591	10,776	1,185	12%	1,792	\$12.17	\$14.48	\$19.44
Bakers (51-3011)	2,138	2,271	133	6%	328	\$11.41	\$12.46	\$14.89
Total	14,335	15,825	1,490	10%	2,508			

Exhibit 5. 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)
Chefs and Head Cooks (35-1011)	7,017	7,493	476	7%	1,044	\$13.25	\$20.29	\$28.33
First-Line Supervisors of Food Preparation and Serving Workers (35-1012)	25,929	29,022	3,093	12%	4,815	\$12.88	\$15.37	\$20.73
Bakers (51-3011)	7,050	7,128	78	1%	992	\$11.40	\$12.51	\$15.05
Total	39,996	43,644	3,648	9%	6,851			

Exhibit 6. Los Angeles and Orange Counties

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings
Chefs and Head Cooks (35-1011)	9,623	10,272	649	7%	1,431
First-Line Supervisors of Food Preparation and Serving Workers (35-1012)	35,520	39,798	4,278	12%	6,608
Bakers (51-3011)	9,188	9,399	211	2%	1,320
Total	54,331	59,469	5,138	9%	9,359

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)

For more information, please contact:

Jesse Crete, Ed. D., Director
 Center of Excellence, Orange County
crete_jesse@rsccl.edu

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