










# Culinary Arts Occupations

## Labor Market Analysis: San Diego County

December 2022

### Summary

NEW PROGRAM RECOMMENDATION?	EVIDENCE OF A SUPPLY GAP?	AT OR ABOVE THE LIVING WAGE?	EXPECTED EDUCATION FOR MAJORITY OF OCCUPATIONS ANALYZED
 <p><b>Proceed with Caution</b></p>	 	 	<ul style="list-style-type: none"> <li><input type="checkbox"/> Bachelor's Degree+</li> <li><input type="checkbox"/> Associate Degree</li> <li><input type="checkbox"/> Some College or Certificate</li> <li><input checked="" type="checkbox"/> HS Diploma or Equivalent</li> <li><input type="checkbox"/> Less than a HS Diploma</li> <li><input type="checkbox"/> Apprenticeship</li> </ul>
SUPPORT FOR PROGRAM MODIFICATION?	NUMBER OF INSTITUTIONS THAT PROVIDE TRAINING	NUMBER OF ANNUAL JOB OPENINGS	
 	<p>HIGH</p> 	<p>HIGH</p> 	

This brief provides labor market information about *Culinary Arts Occupations* to assist the San Diego and Imperial Counties Community Colleges with program development and strategic planning. *Culinary Arts Occupations* include “Bakers,” “Chefs and Head Cooks,” “Cooks, Private Household,” “First-Line Supervisors of Food Preparation and Serving Workers” and “Food Preparation Workers.” According to available labor market information, *Culinary Arts Occupations* in San Diego County have a labor market demand of 3,807 annual job openings (while average demand for a single occupation in San Diego County is 245 annual job openings), and nine institutions supply 690 awards for these occupations, suggesting that there is a supply gap in the labor market. On average, entry-level wages are below the living wage and median wages are above the living wage. This brief recommends to proceeding with caution when developing a new program but supports a program modification because although 1) a high number of annual job openings exist for these occupations; 2) there is a supply gap in San Diego County; and 3) on average, these occupations’ entry-level wages are below the living wage. Colleges should note that **the percentage of students who complete a related program and earn a living wage is lower than students who complete Career Education programs in general.**

## Introduction

This report provides labor market information in San Diego County for the following occupational codes in the Standard Occupational Classification (SOC)<sup>1</sup> system:

- **Bakers** (SOC 51-3011): Mix and bake ingredients to produce breads, rolls, cookies, cakes, pies, pastries, or other baked goods.
- **Chefs and Head Cooks** (SOC 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.
- **Cooks, Private Household** (SOC 35-2013): Prepare meals in private homes. Includes personal chefs.
- **First-Line Supervisors of Food Preparation and Serving Workers** (SOC 35-1012): Directly supervise and coordinate activities of workers engaged in preparing and serving food.
- **Food Preparation Workers** (SOC 35-2021): Perform a variety of food preparation duties other than cooking, such as preparing cold foods and shellfish, slicing meat, and brewing coffee or tea.

For the purpose of this report, these occupations are referred to as *Culinary Arts Occupations*.

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<sup>1</sup> The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data. [bls.gov/soc](https://www.bls.gov/soc).

## Projected Occupational Demand

Between 2021 and 2026, *Culinary Arts Occupations* are projected to increase by 608 net jobs or three percent (Exhibit 1a). Employers in San Diego County will need to hire 3,807 workers annually to fill new jobs and backfill jobs due to attrition caused by turnover and retirement, for example.

**Exhibit 1a: Number of Jobs for Culinary Arts Occupations (2011-2026)<sup>2</sup>**

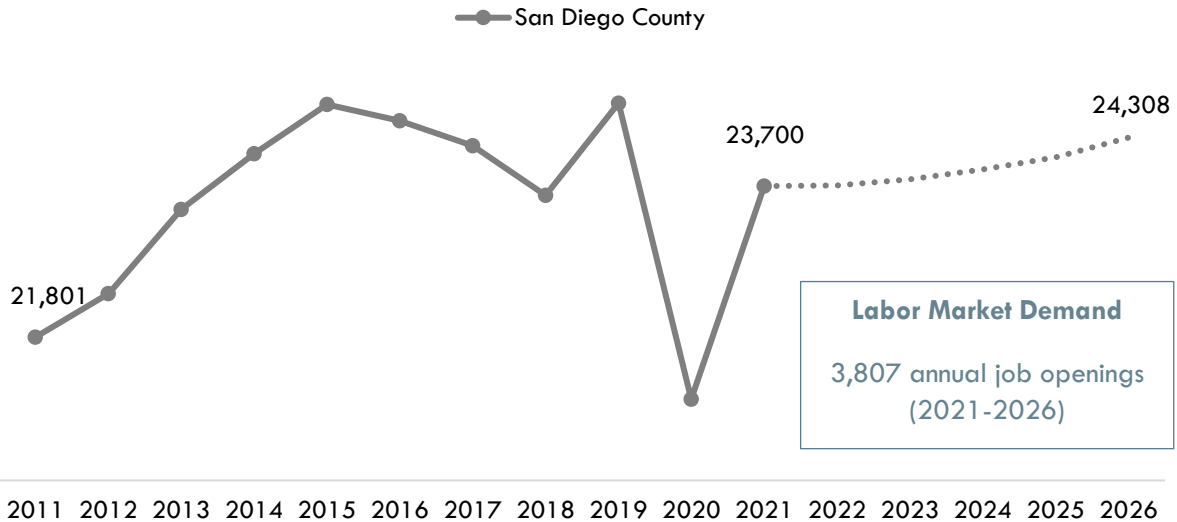


Exhibit 1b disaggregates the projected number of jobs change by occupation. “Food Preparation Workers” are projected to have the most labor market demand between 2021 and 2026, with 1,725 annual job openings.

**Exhibit 1b: Number of Jobs for Culinary Arts Occupations in San Diego County (2021-2026)<sup>3</sup>**

Occupational Title	2021 Jobs	2026 Jobs	2021 - 2026 Net Jobs Change	2021- 2026 % Net Jobs Change	Annual Job Openings (Demand)
Food Preparation Workers	10,109	10,108	-1	0%	1,725
First-Line Supervisors of Food Preparation and Serving Workers	9,263	9,870	607	7%	1,517
Chefs and Head Cooks	2,607	2,603	-4	0%	339
Bakers	1,710	1,717	7	0%	224
Cooks, Private Household	11	10	-1	-7%	2
<b>Total</b>	<b>23,700</b>	<b>24,308</b>	<b>608</b>	<b>3%</b>	<b>3,807</b>

<sup>2</sup> Lightcast 2022.03; QCEW, Non-QCEW, Self-Employed.

<sup>3</sup> Lightcast 2022.03; QCEW, Non-QCEW, Self-Employed.

## Earnings

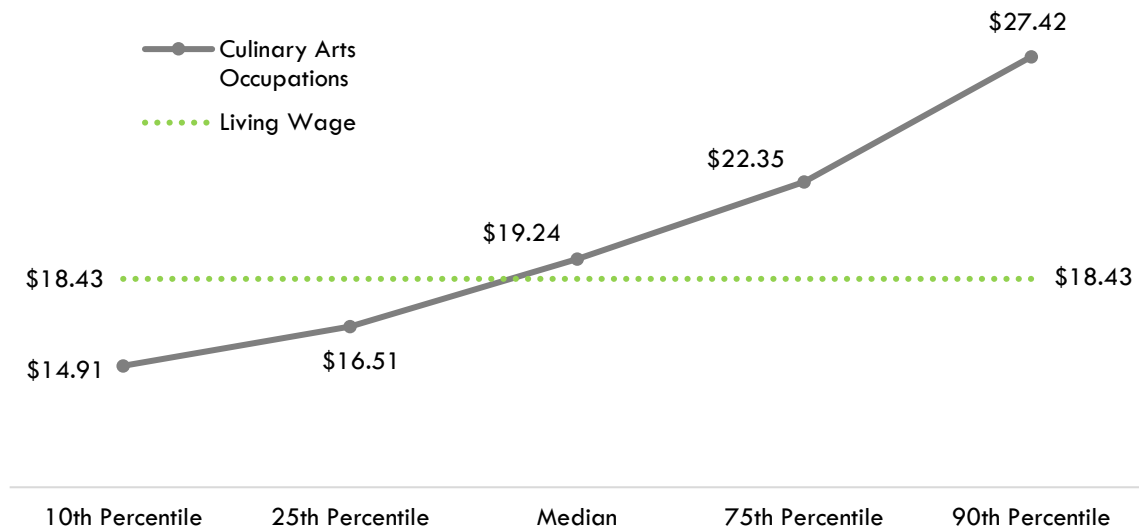
Exhibit 2a disaggregates hourly earnings by occupation. The entry-level hourly earnings for *Culinary Arts Occupations* range from \$14.19 to \$21.71.

**Exhibit 2a: Hourly Earnings for *Culinary Arts Occupations* in San Diego County<sup>4</sup>**

Occupational Title	Entry-Level Hourly Earnings (25 <sup>th</sup> Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 <sup>th</sup> Percentile)
Chefs and Head Cooks	\$21.71	\$22.55	\$28.57
First-Line Supervisors of Food Preparation and Serving Workers	\$17.21	\$18.61	\$23.54
Food Preparation Workers	\$14.77	\$15.91	\$17.96
Cooks, Private Household	\$14.65	\$22.79	\$23.65
Bakers	\$14.19	\$16.33	\$18.04

On average, the entry-level hourly earnings for *Culinary Arts Occupations* are \$16.51; this is less than the living wage for a single adult in San Diego County, which is \$18.43 per hour (Exhibit 2b).<sup>5</sup>

**Exhibit 2b: Average Hourly Earnings<sup>6</sup> for *Culinary Arts Occupations* in San Diego County<sup>7</sup>**



<sup>4</sup> Lightcast 2022.03; QCEW, Non-QCEW, Self-Employed.

<sup>5</sup> "Family Needs Calculator (formerly the California Family Needs Calculator)," Insight: Center for Community Economic Development, last updated 2021. [insightccd.org/family-needs-calculator/](https://insightccd.org/family-needs-calculator/).

<sup>6</sup> 10th and 25th percentiles could be considered entry-level wages, and 75th and 90th percentiles could be considered experienced wages for individuals who may have been in the occupation longer, received more training than others, etc.

<sup>7</sup> Lightcast 2022.03; QCEW, Non-QCEW, Self-Employed.

## Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of awards in related Taxonomy of Programs (TOP) or Classification of Instructional Programs (CIP) codes.<sup>8</sup> There are five TOP codes and 15 CIP codes related to *Culinary Arts Occupations* (Exhibit 3).

**Exhibit 3: Related TOP and CIP Codes for *Culinary Arts Occupations*<sup>9</sup>**

TOP or CIP Code	TOP or CIP Program Title
TOP 1306.00	Nutrition, Foods, and Culinary Arts
TOP 1306.20	Dietetic Services and Management
TOP 1306.30	Culinary Arts
TOP 1307.00	Hospitality
TOP 1307.10	Restaurant and Food Services and Management
CIP 12.0500	Cooking and Related Culinary Arts, General
CIP 12.0501	Baking and Pastry Arts/Baker/Pastry Chef
CIP 12.0503	Culinary Arts/Chef Training
CIP 12.0504	Restaurant, Culinary, and Catering Management/Manager
CIP 12.0505	Food Preparation/Professional Cooking/Kitchen Assistant
CIP 12.0507	Food Service, Waiter/Waitress, and Dining Room Management/Manager
CIP 12.0599	Culinary Arts and Related Services, Other
CIP 19.0501	Foods, Nutrition, and Wellness Studies, General
CIP 19.0505	Foodservice Systems Administration/Management
CIP 51.3103	Dietetic Technician
CIP 51.3104	Dietitian Assistant
CIP 52.0901	Hospitality Administration/Management, General
CIP 52.0905	Restaurant/Food Services Management
CIP 52.0907	Meeting and Event Planning
CIP 52.0909	Hotel, Motel, and Restaurant Management

<sup>8</sup> TOP data comes from the California Community Colleges Chancellor's Office MIS Data Mart ([datamart.cccco.edu](http://datamart.cccco.edu)) and CIP data comes from the Integrated Postsecondary Education Data System ([nces.ed.gov/ipeds/use-the-data](http://nces.ed.gov/ipeds/use-the-data)).

<sup>9</sup> This brief uses a conservative estimate of program supply and only calculates awards from the TOP codes in Exhibit 3.

According to TOP data, six community colleges supply the region with awards for these occupations: Grossmont College, MiraCosta College, Palomar College, San Diego College of Continuing Education, San Diego Mesa College, and Southwestern College. According to CIP data, three non-community-college institutions supply the region with awards: Point Loma Nazarene University, San Diego Culinary Institute, and San Diego State University (Exhibit 4).

**Exhibit 4: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions  
(Program Year 2017-18 through Program Year 2020-21 Average)**

TOP6 or CIP Code	TOP6 or CIP Program Title	3-Yr Annual Average CC Awards (PY18-19 to PY20-21)	Other Educational Institutions 3-Yr Annual Average Awards (PY17-18 to PY19-20)	3-Yr Total Average Supply (PY17-18 to PY20-21)
1306.00	Nutrition, Foods, and Culinary Arts	<b>42</b>	<b>0</b>	<b>42</b>
	• MiraCosta	1	0	
	• Palomar	2	0	
	• San Diego Cont Ed	21	0	
	• San Diego Mesa	18	0	
1306.20	Dietetic Services and Management	<b>1</b>	<b>0</b>	<b>1</b>
	• San Diego Mesa	1	0	
1306.30	Culinary Arts	<b>470</b>	<b>0</b>	<b>470</b>
	• Grossmont	76	0	
	• San Diego Cont Ed	346	0	
	• San Diego Mesa	21	0	
	• Southwestern	27	0	
1307.00	Hospitality	<b>43</b>	<b>0</b>	<b>43</b>
	• Grossmont	11	0	
	• MiraCosta	13	0	
	• San Diego Mesa	10	0	
	• Southwestern	9	0	

TOP6 or CIP Code	TOP6 or CIP Program Title	3-Yr Annual Average CC Awards (PY18-19 to PY20-21)	Other Educational Institutions 3-Yr Annual Average Awards (PY17-18 to PY19-20)	3-Yr Total Average Supply (PY17-18 to PY20-21)
1307.10	Restaurant and Food Services and Management	<b>6</b>	<b>0</b>	<b>6</b>
	• Grossmont	5	0	
	• MiraCosta	1	0	
12.0501	Baking and Pastry Arts/Baker/Pastry Chef	<b>0</b>	<b>9</b>	<b>9</b>
	• San Diego Culinary Institute	0	9	
12.0503	Culinary Arts/Chef Training	<b>0</b>	<b>26</b>	<b>26</b>
	• San Diego Culinary Institute	0	26	
19.0501	Foods, Nutrition, and Wellness Studies, General	<b>0</b>	<b>4</b>	<b>4</b>
	• Point Loma Nazarene University	0	4	
19.0505	Foodservice Systems Administration/Management	<b>0</b>	<b>1</b>	<b>1</b>
	• Point Loma Nazarene University	0	1	
52.0901	Hospitality Administration/Management, General	<b>0</b>	<b>88</b>	<b>88</b>
	• San Diego State University	0	88	
			<b>Total</b>	<b>690</b>

## Demand vs. Supply

Comparing labor demand (annual openings) with labor supply<sup>10</sup> suggests that there is a **supply gap** for these occupations in San Diego County, with **3,807** annual openings and **690** awards. Comparatively, there are **39,433** annual openings in California and **3,692** awards, suggesting that there is also a supply gap across the state<sup>11</sup> (Exhibit 5).

**Exhibit 5: Labor Demand (Annual Openings) Compared with Labor Supply (Average Annual Awards)**

	<b>Demand</b> (Annual Openings)	<b>Supply<sup>12</sup></b> (Total Annual Average Supply)	<b>Supply Gap or Oversupply</b>
San Diego	3,807	690	<b>3,117</b>
California	39,433	3,692	<b>35,741</b>

**Please note:** This is a basic analysis of supply and demand of labor. The data does not include workers currently in the labor force who could fill these positions or workers who are not captured by publicly available data. This data should be used to discuss the potential gaps or oversupply of workers; however, it should not be the only basis for determining whether or not a program should be developed.

<sup>10</sup> Labor supply can be found from two different sources: Lightcast or the California Community Colleges Chancellor's Office MIS Data Mart. Lightcast uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.

<sup>11</sup> "Supply and Demand," Centers of Excellence Student Outcomes, <https://coecc.net/our-resources/>.

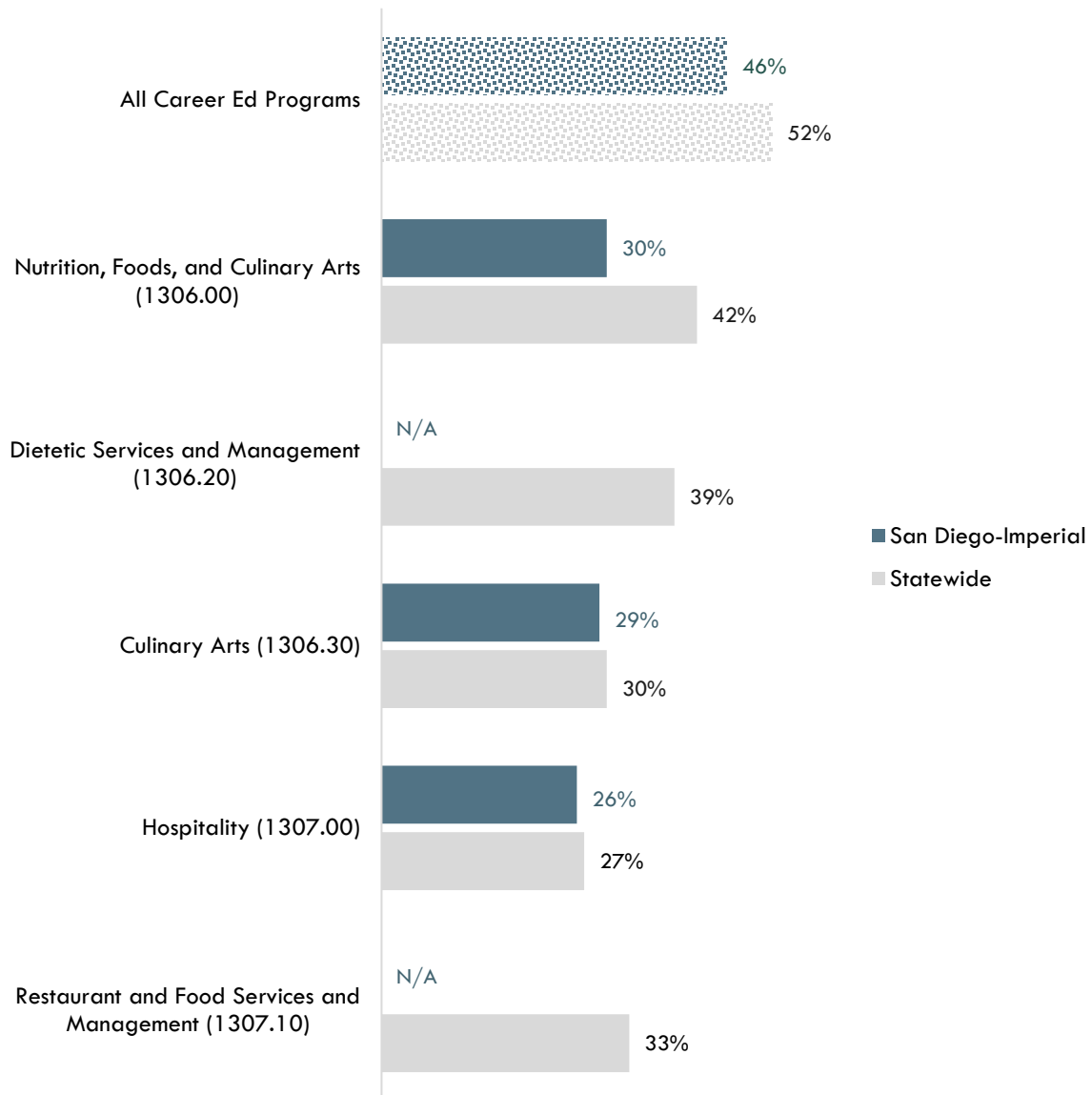
<sup>12</sup> Awards included: associate degree; award <1 year; award 1<2 years; and postsecondary awards.



## Student Outcomes and Regional Comparisons

According to the California Community Colleges LaunchBoard, 26 to 30 percent of students in the San Diego-Imperial region earned a living wage after completing a program related to *Culinary Arts Occupations*, compared 27 to 42 percent statewide and 52 percent of students in Career Education programs in general across the state (Exhibit 6a).<sup>13</sup>

**Exhibit 6a: Percentage of Students Who Earned a Living Wage by Program, PY2019-20<sup>14</sup>**



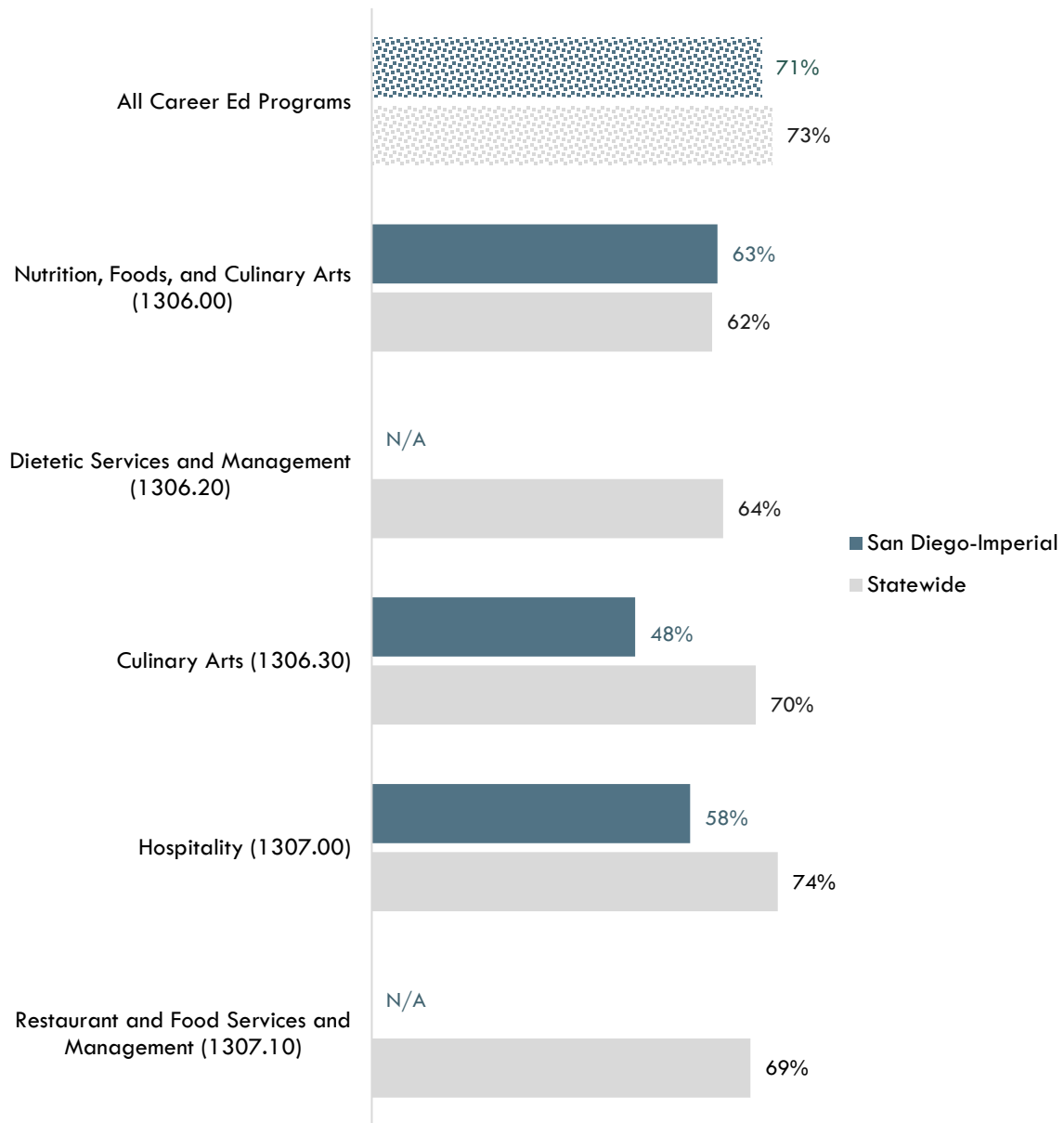
"N/A" indicates insufficient data

<sup>13</sup> "California Community Colleges Strong Workforce Program," California Community Colleges, [calpassplus.org/LaunchBoard/SWP.aspx](http://calpassplus.org/LaunchBoard/SWP.aspx).

<sup>14</sup> Most recent year with available data is Program Year 2019-20. Among completers and skills builders who exited, the percentage of students who attained a living wage.

According to the California Community Colleges LaunchBoard, 48 to 63 percent of students in the San Diego-Imperial region obtained a job closely related to their field of study after completing a program related to *Culinary Arts Occupations*, compared to 62 to 74 percent statewide and 73 percent of students in Career Education programs in general across the state (Exhibit 6b).<sup>15</sup>

**Exhibit 6b: Percentage of Students in a Job Closely Related to Field of Study by Program, PY2018-19<sup>16</sup>**



"N/A" indicates insufficient data

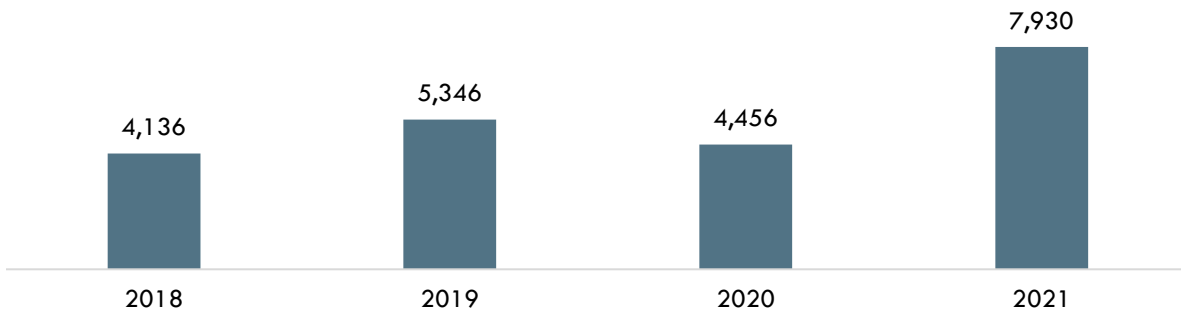
<sup>15</sup> "California Community Colleges Strong Workforce Program," California Community Colleges, [calpassplus.org/LaunchBoard/SWP.aspx](http://calpassplus.org/LaunchBoard/SWP.aspx).

<sup>16</sup> Most recent year with available data is Program Year 2018-19. Percentage of Students in a Job Closely Related to Field of Study: Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study.

## Online Job Postings

This report analyzes not only historical and projected (traditional LMI) data, but also recent data from online job postings (real-time LMI). Online job postings may provide additional insight about recent changes in the labor market that are not captured by historical data. Between 2018 and 2021, there was an average of 5,467 online job postings per year for *Culinary Arts Occupations* in San Diego County (Exhibit 7). Please note that online job postings do **not** equal labor market demand; demand is represented by annual job openings (see Exhibit 1 b). While this brief includes online jobs postings data to help with curriculum development, the community colleges should note that this type of data is impacted by several variables: employers may post a position multiple times to increase the pool of applicants; a job posting can remain posted after a business decides not to fill a position; or an employer may use one posting to fill multiple positions, for example.

**Exhibit 7: Number of Online Job Postings for *Culinary Arts Occupations* in San Diego County (2018-2021)<sup>17</sup>**



<sup>17</sup> Lightcast; "Job Posting Analytics." 2018-2021.

## Top Employers

Between January 1, 2019 and December 31, 2021, the top five employers in San Diego County for *Culinary Arts Occupations* were Starbucks, Marriott International, Panera Bread, Hilton Hotels & Resorts, and Kentucky Fried Chicken based on online job postings (Exhibit 8).

**Exhibit 8: Top Employers for Culinary Arts Occupations in San Diego County<sup>18</sup>**

Top Employers	
<ul style="list-style-type: none"><li>• Starbucks</li><li>• Marriott International</li><li>• Panera Bread</li><li>• Hilton Hotels &amp; Resorts</li><li>• Kentucky Fried Chicken</li></ul>	<ul style="list-style-type: none"><li>• Compass Group</li><li>• Hyatt</li><li>• Sprouts Farmers Market</li><li>• Rubio's Restaurants</li><li>• Panda Express</li></ul>

## Education, Skills, and Certifications

*Culinary Arts Occupations* have a national educational attainment ranging from a no formal educational credential to a postsecondary non-degree award (Exhibit 9a).

**Exhibit 9a: National Educational Attainment for Culinary Arts Occupations<sup>19</sup>**

Occupational Title	Typical Entry-Level Education
Cooks, Private Household	Postsecondary non-degree award
Chefs and Head Cooks	High school diploma or equivalent
First-Line Supervisors of Food Preparation and Serving Workers	High school diploma or equivalent
Food Preparation Workers	No formal educational credential
Bakers	No formal educational credential

<sup>18</sup> Lightcast, "Job Posting Analytics." 2019-2021.

<sup>19</sup> Lightcast 2022.03; QCEW, Non-QCEW, Self-Employed.

Based on online job postings between January 1, 2019 and December 31, 2021 in San Diego County, employers posted a **high school diploma or equivalent** as the educational requirement for *Culinary Arts Occupations* (Exhibit 9b).<sup>20</sup>

**Exhibit 9b: Educational Requirements for Culinary Arts Occupations in San Diego County<sup>21</sup>**

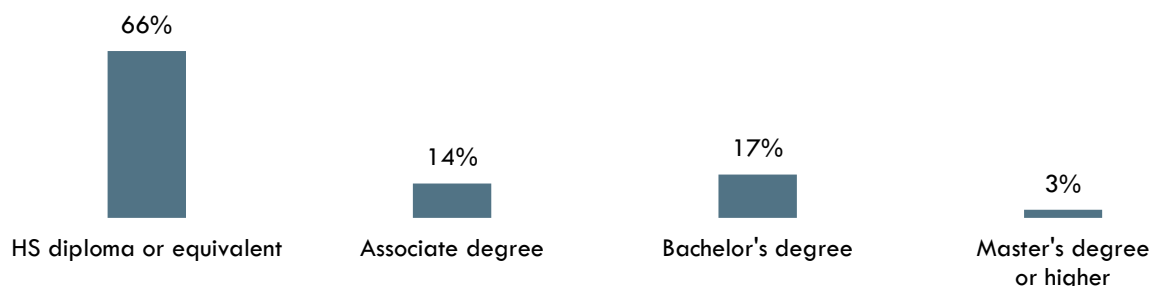


Exhibit 10 lists the top specialized, soft, and software skills that appeared in online job postings between January 1, 2019 and December 31, 2021.

**Exhibit 10: Top Skills for Culinary Arts Occupations in San Diego County<sup>22</sup>**

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"> <li>• Restaurant Operation</li> <li>• Food Safety And Sanitation</li> <li>• Food Services</li> <li>• Cooking</li> <li>• Food Preparation</li> <li>• Cash Handling</li> <li>• Recipes</li> <li>• Cash Register</li> <li>• Baking</li> <li>• Food Quality Assurance and Control</li> <li>• Retail Operations</li> <li>• Operational Excellence</li> <li>• Cash Management</li> <li>• Merchandising</li> <li>• Purchasing</li> </ul>	<ul style="list-style-type: none"> <li>• Customer Service</li> <li>• Communications</li> <li>• Management</li> <li>• Sanitation</li> <li>• Operations</li> <li>• Presentations</li> <li>• Cleanliness</li> <li>• Coaching</li> <li>• Leadership</li> <li>• Interpersonal Communications</li> <li>• Lifting Ability</li> <li>• Sales</li> <li>• Verbal Communication Skills</li> <li>• Scheduling</li> <li>• Punctuality</li> </ul>	<ul style="list-style-type: none"> <li>• Microsoft Excel</li> <li>• Microsoft Outlook</li> <li>• Microsoft Word</li> <li>• Microsoft PowerPoint</li> <li>• Microsoft Security Essentials</li> <li>• Kronos (Timekeeping Software)</li> <li>• Inventory Management System</li> <li>• Microsoft Access</li> <li>• Safari (Web Browser)</li> <li>• Operating Systems</li> <li>• Slack (Software)</li> </ul>

<sup>20</sup> Lightcast; "Job Posting Analytics." 2019-2021.

<sup>21</sup> "Educational Attainment for Workers 25 Years and Older by Detailed Occupation," Bureau of Labor Statistics, last modified April 9, 2021. [bls.gov/emp/tables/educational-attainment.htm](https://bls.gov/emp/tables/educational-attainment.htm).

<sup>22</sup> Lightcast; "Job Posting Analytics." 2019-2021.

Exhibit 11 lists the top certification that appeared in online job postings between January 1, 2019 and December 31, 2021.

**Exhibit 11: Top Certification for *Culinary Arts Occupations* in San Diego County<sup>23</sup>**

Top Certification in Online Job Postings

1. Food Handler's Card
  2. ServSafe Certification
  3. Food Safety Certification
  4. Alcohol Certification
  5. Food Protection Manager Certification
  6. Security Clearance
  7. Certified Dietary Manager (CDM)
  8. Certified Nursing Assistant
  9. American Culinary Federation Certification
  10. Certified Executive Chef
  11. Food Safety Manager Certification
  12. Registered Dietitian (RD/RDN)
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<sup>23</sup> Lightcast; "Job Posting Analytics." 2019-2021.

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### **Important Disclaimers**

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. This study examines the most recent data available at the time of the analysis; however, data sets are updated regularly and may not be consistent with previous reports. Efforts have been made to qualify and validate the accuracy of the data and the report findings; however, neither the Centers of Excellence for Labor Market Research (COE), COE host district, nor California Community Colleges Chancellor's Office are responsible for the applications or decisions made by individuals and/or organizations based on this study or its recommendations.