

Culinary Art Occupations

Labor Market Analysis: San Diego County

December 2020

Summary



The brief provides labor market information about *Culinary Art Occupations* to assist the San Diego and Imperial Counties Community Colleges with program development and strategic planning. *Culinary Art 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 Art Occupations* in San Diego County have a labor market demand of 4,600 annual job openings, and nine educational institutions in San Diego County supply 878 awards for these occupations, suggesting that there is a supply gap in the labor market. Entry-level wages are below the living wage for all occupations except “Chefs and Head Cooks.” While a supply gap appears to exist, this brief recommends proceeding with caution when developing a **new** program because 1) entry-level earnings are below the living wage while some median earnings are above the living wage; and 2) the percentage of students who earn a living wage is lower than students who complete Career Education programs in general. The region’s community colleges should also take note that 1) the majority of these occupations require a high school diploma or equivalent as the minimum level of educational attainment.

Introduction

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

- **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.
- **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.
- **Cooks, Private Household** (SOC 35-2013): Prepare meals in private homes. Includes personal chefs.
- **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.
- **Bakers** (SOC 51-3011): Mix and bake ingredients to produce breads, rolls, cookies, cakes, pies, pastries, or other baked goods.

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

¹ 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 2019 and 2024, *Culinary Art Occupations* are projected to increase by 1,622 net jobs or six percent (Exhibit 1a). During this period, employers in San Diego County are projected to hire 4,600 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 Art Occupations (2009-2024)²

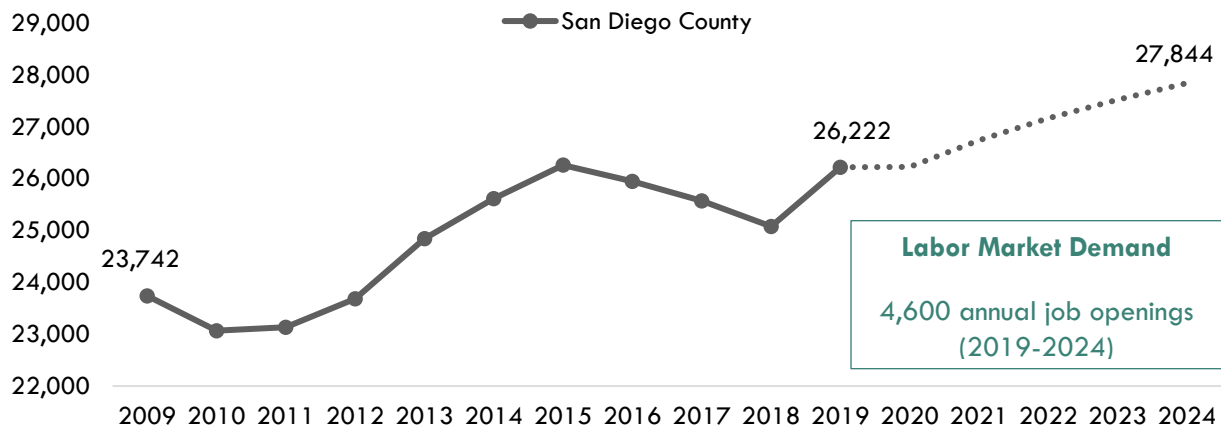


Exhibit 1b breaks down the projected number of jobs change by occupation more specifically: *First-Line Supervisors of Food Preparation and Serving Workers* are projected to increase the most by 786 total jobs between 2019 and 2024.

Exhibit 1b: Number of Jobs for Culinary Art Occupations in San Diego County (2019-2024)³

Occupational Title	2019 Jobs	2024 Jobs	2019 - 2024 Net Jobs Change	2019-2024 % Net Jobs Change	Annual Job Openings (Demand)
First-Line Supervisors of Food Preparation and Serving Workers	9,727	10,513	786	8%	1,690
Food Preparation Workers	12,266	12,954	688	6%	2,306
Chefs and Head Cooks	2,045	2,171	126	6%	299
Bakers	2,173	2,195	22	1%	303
Cooks, Private Household	11	11	0	0	2
Total	26,222	27,844	1,622	6%	4,600

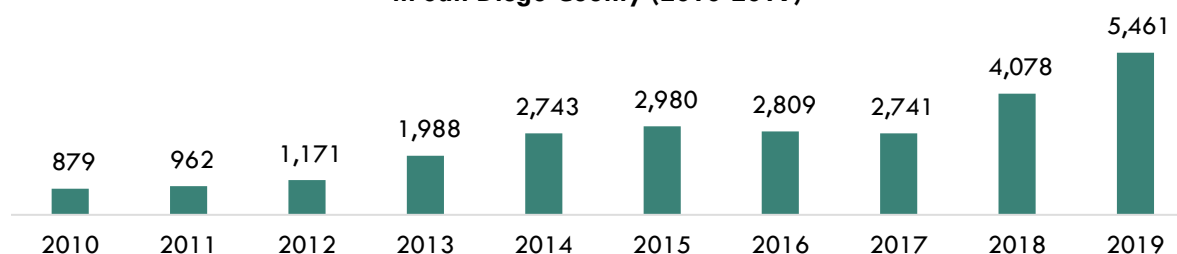
² EMSI 2020.04; QCEW, Non-QCEW, Self-Employed.

³ EMSI 2020.04; QCEW, Non-QCEW, Self-Employed.

Online Job Postings

This report analyzes not only historical and projected data (traditional labor market information or LMI), 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 2010 and 2019, there was an average of 2,581 online job postings per year in San Diego County for *Culinary Art Occupations* (Exhibit 2). Please note that online job postings do **not** equal labor market demand; demand is represented by annual job openings (Exhibit 1 b). Employers may post a position multiple times for various reasons, such as increasing the pool of applicants, for example.

Exhibit 2: Number of Online Job Postings for *Culinary Art Occupations* in San Diego County (2010-2019)⁴



Earnings

The entry-level hourly earnings for *Culinary Art Occupations* range from \$12.58 to \$36.20, not including *Cooks, Private Household* (Exhibit 3a).

Exhibit 3a: Hourly Earnings for *Culinary Art Occupations* in San Diego County⁵

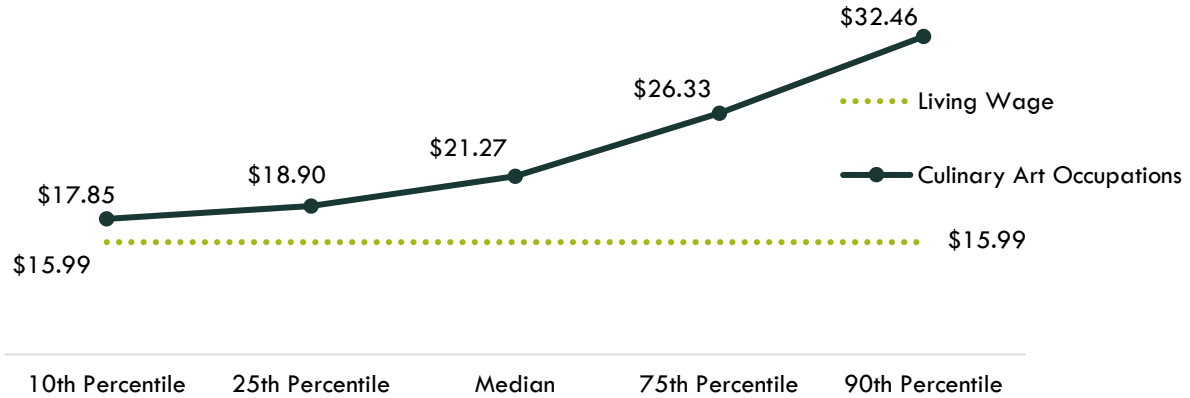
Occupational Title	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)
Chefs and Head Cooks	\$36.20	\$39.15	\$47.80
First-Line Supervisors of Food Preparation and Serving Workers	\$14.20	\$17.34	\$23.39
Food Preparation Workers	\$12.61	\$14.06	\$16.45
Bakers	\$12.58	\$14.52	\$17.68
Cooks, Private Household	Insf. Data	Insf. Data	Insf. Data

⁴ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2010-2019.

⁵ EMSI 2020.04; QCEW, Non-QCEW, Self-Employed.

On average, the entry-level hourly earnings for *Culinary Art Occupations* is **\$18.90**, not including *Cooks, Private Household*; this is more than the living wage for a single adult in San Diego County, which is **\$15.99** per hour (Exhibit 3b).⁶ As shown in Exhibit 3a, the entry-level wages for *Baker, Food Preparation Workers* and *First-Line Supervisors of Food Preparation and Serving Workers* are below the living wage.

Exhibit 3b: Average Hourly Earnings⁷ for Culinary Art Occupations in San Diego County⁸



⁶ "California Family Needs Calculator (formerly the Self-Sufficiency Standard)," Insight: Center for Community Economic Development, last updated 2018. insightccd.org/2018-self-sufficiency-standard.

⁷ 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.

⁸ EMSI 2020.04; 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.⁹ There are **five** TOP codes and **15** CIP codes related to *Culinary Art Occupations* (Exhibit 4).

Exhibit 4: Related TOP and CIP Codes for *Culinary Art Occupations*

<i>Culinary Art Occupations</i>
TOP 130600: Nutrition, Foods, and Culinary Arts
TOP 130620: Dietetic Services and Management
TOP 130630: Culinary Arts
TOP 130700: Hospitality
TOP 130710: 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

⁹ TOP data comes from the California Community Colleges Chancellor's Office MIS Data Mart (datamart.cccco.edu) and CIP data comes from the Integrated Postsecondary Education Data System (nces.ed.gov/ipeds/use-the-data).

According to TOP data, five community colleges supply the region with awards for these occupations: Grossmont, MiraCosta, San Diego Continuing Education, San Diego Mesa, and Southwestern. According to CIP data, four non-community colleges supply the region with awards: Argosy University-The Art Institute of California-San Diego, Point Loma Nazarene University, San Diego Culinary Institute, and San Diego State University (Exhibit 5).

**Exhibit 5: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions
(Program Year 2014-15 through PY2018-19 Average)**

TOP6 or CIP	TOP6 or CIP Title	3-Yr Annual Average CC Awards (PY16-17 to PY18-19)	Other Educational Institutions 3-Yr Annual Average Awards (PY14-15 to PY16-17)	3-Yr Total Average Supply (PY14-15 to PY18-19)
130600	Nutrition, Foods, and Culinary Arts	29	0	29
	• MiraCosta	0	0	
	• San Diego Cont Ed	5	0	
	• San Diego Mesa	24	0	
130620	Dietetic Services and Management	9	0	9
	• San Diego Mesa	9	0	
130630	Culinary Arts	457	0	457
	• Grossmont	92	0	
	• San Diego Cont Ed	307	0	
	• San Diego Mesa	36	0	
	• Southwestern	22	0	
130700	Hospitality	43	0	43
	• Grossmont	14	0	
	• MiraCosta	17	0	
	• San Diego Mesa	8	0	
	• Southwestern	4	0	
130710	Restaurant and Food Services and Management	11	0	11
	• Grossmont	5	0	
	• MiraCosta	5	0	
	• Southwestern	1	0	

TOP6 or CIP	TOP6 or CIP Title	3-Yr Annual Average CC Awards (PY16-17 to PY18-19)	Other Educational Institutions 3-Yr Annual Average Awards (PY14-15 to PY16-17)	3-Yr Total Average Supply (PY14-15 to PY18-19)
12.0501	Baking and Pastry Arts/Baker/Pastry Chef	0	67	67
	<ul style="list-style-type: none"> Argosy University-The Art Institute of California-San Diego 	0	48	
	<ul style="list-style-type: none"> San Diego Culinary Institute 	0	19	
12.0503	Culinary Arts/Chef Training	0	114	114
	<ul style="list-style-type: none"> Argosy University-The Art Institute of California-San Diego 	0	47	
	<ul style="list-style-type: none"> San Diego Culinary Institute 	0	67	
12.0504	Restaurant, Culinary, and Catering Management/Manager	0	53	53
	<ul style="list-style-type: none"> Argosy University-The Art Institute of California-San Diego 	0	53	
19.0501	Foods, Nutrition, and Wellness Studies, General	0	4	4
	<ul style="list-style-type: none"> Point Loma Nazarene University 	0	4	
19.0505	Foodservice Systems Administration/Management	0	1	1
	<ul style="list-style-type: none"> Point Loma Nazarene University 	0	1	
52.0901	Hospitality Administration/Management, General	0	90	90
	<ul style="list-style-type: none"> San Diego State University 	0	90	
			Total	878

Demand vs. Supply

Comparing labor demand (annual openings) with labor supply¹⁰ suggests that there is a **supply gap** for these occupations in San Diego County, with **4,600** annual openings and **878** awards. Comparatively, there are **45,911** annual openings in California and **5,072** awards, suggesting that there is a supply gap across the state¹¹ (Exhibit 6).

Exhibit 6: Labor Demand (Annual Openings) Compared with Labor Supply (Average Annual Awards)

	Demand (Annual Openings)	Supply (Total Annual Average Supply)	Supply Gap or Oversupply
San Diego	4,600	878	3,722
California	45,911	5,072	40,839

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.

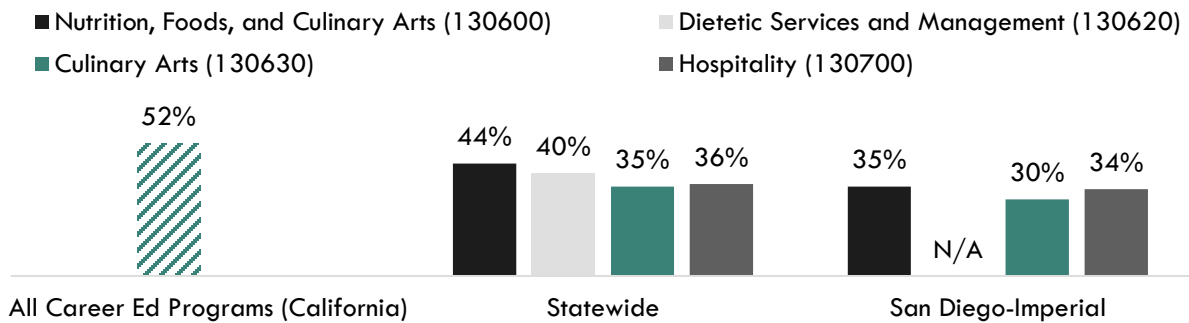
¹⁰ Labor supply can be found from two different sources: EMSI or the California Community Colleges Chancellor's Office MIS Data Mart. EMSI uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.

¹¹ "Supply and Demand," Centers of Excellence Student Outcomes, coecc.net/Supply-and-Demand.aspx.

Student Outcomes and Regional Comparisons

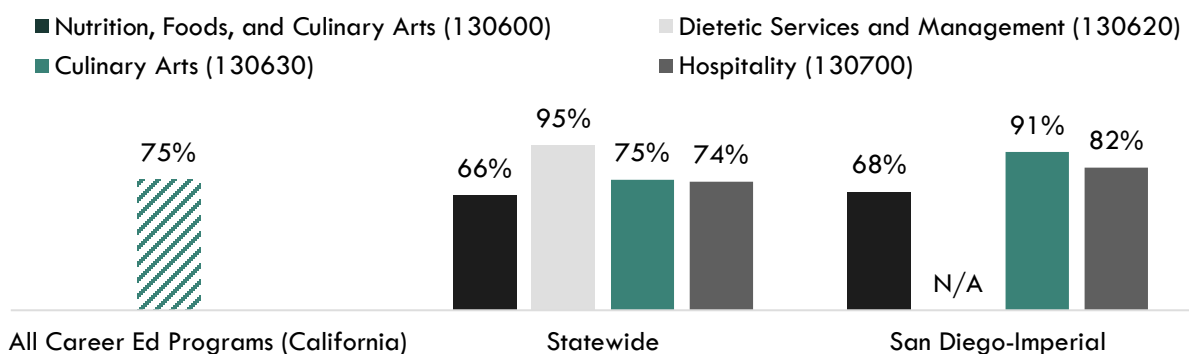
According to the California Community Colleges LaunchBoard, between 30 and 35 percent of students in the San Diego-Imperial region earned a living wage after completing a program related *Culinary Arts*, compared to 35 to 44 percent statewide and 52 percent of students in Career Education programs in general across the state (Exhibit 7a).¹²

Exhibit 7a: Proportion of Students Who Earned a Living Wage, PY2017-18¹³



According to the California Community Colleges LaunchBoard, between 68 and 91 percent of students in the San Diego-Imperial region obtained a job closely related to their field of study after completing a related program, compared to 66 to 95 percent statewide and 75 percent of students in Career Education programs in general across the state (Exhibit 7b).¹⁴

Exhibit 7b: Percentage of Students in a Job Closely Related to Field of Study, PY2016-17¹⁵



¹² "California Community Colleges Strong Workforce Program," California Community Colleges, calpassplus.org/LaunchBoard/SWP.aspx.

¹³ Among completers and skills builders who exited, the proportion of students who attained a living wage.

¹⁴ "California Community Colleges Strong Workforce Program," California Community Colleges, calpassplus.org/LaunchBoard/SWP.aspx.

¹⁵ Most recent year with available data is Program Year 2016-17. 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.

Top Employers

Between January 1, 2017 and December 31, 2019, the top five employers in San Diego County for these occupations were [Marriott International Incorporated](#), [Starbucks Coffee Company](#), [Hilton Hotel Corporation](#), [Compass Group North America](#), and [Sprouts Farmers Markets](#) (Exhibit 8).

Exhibit 8: Top Employers in San Diego County for Culinary Art Occupations¹⁶

Top Employers	
<ul style="list-style-type: none">• Marriott International Incorporated• Starbucks Coffee Company• Hilton Hotel Corporation• Compass Group North America• Sprouts Farmers Markets	<ul style="list-style-type: none">• Panda Express• Omni Hotel Corporation• Hyatt• KFC• Sodexo

Education and Skills

Culinary Art Occupations have national educational requirements ranging from a [no formal educational credential](#) to a [postsecondary non-degree award](#) (Exhibit 9a).

Exhibit 9a: National Educational Attainment for Culinary Art Occupations¹⁷

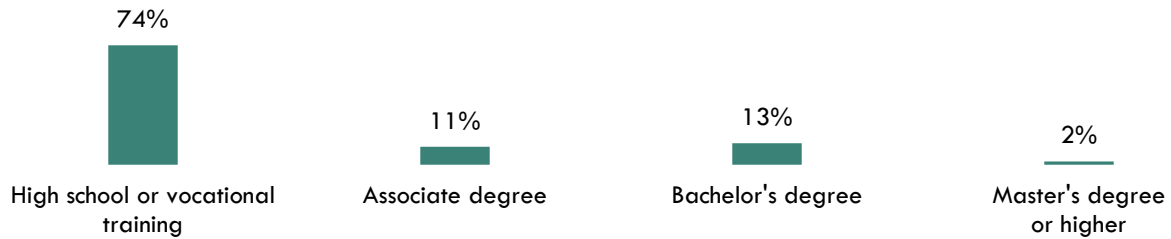
Occupational Title	Typical Entry-Level Education
Cooks, Private Household	Postsecondary non-degree award
First-Line Supervisors of Food Preparation and Serving Workers	High school diploma or equivalent
Chefs and Head Cooks	High school diploma or equivalent
Food Preparation Workers	No formal educational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

¹⁶ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2017-2019.

¹⁷ EMSI 2020.04; QCEW, Non-QCEW, Self-Employed.

Based on online job postings between January 1, 2017 and December 31, 2019 in San Diego County, the top listed educational requirement for *Culinary Art Occupations* is a **high school or vocational training** (Exhibit 9b).¹⁸

Exhibit 9b: Educational Requirements for *Culinary Art Occupations* in San Diego County¹⁹



*May not add to 100% due to rounding

Exhibit 10 lists the top specialized, soft and software skills that appeared in online job postings between January 1, 2017 and December 31, 2019.

Exhibit 10: Top Skills for *Culinary Art Occupations* in San Diego County²⁰

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"> • Cooking • Scheduling • Customer Service • Cleaning • Food Preparation 	<ul style="list-style-type: none"> • Communication Skills • Physical Abilities • Organizational Skills • English • Teamwork / Collaboration 	<ul style="list-style-type: none"> • Microsoft Excel • Microsoft Word • Microsoft PowerPoint • Word Processing • Facebook

¹⁸ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2017-2019.

¹⁹ "Educational Attainment for Workers 25 Years and Older by Detailed Occupation," Bureau of Labor Statistics, last modified September 4, 2019. bls.gov/emp/tables/educational-attainment.htm.

²⁰ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2017-2019.

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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.

This workforce demand report uses state and federal job projection data that was developed before the economic impact of COVID-19. The COE is monitoring the situation and will provide more information as it becomes available. Please consult with local employers to understand their current employment needs.