

Memorandum

To: Sandy Fowler, Dean of CTE & Workforce Development, Woodland Community College
From: Ebony J. Benzing, Research Manager, North/Far North Center of Excellence
Date: Tuesday, March 30, 2021
Re: Labor market data for Woodland Community College's Lake County Campus CE Programs

Background

Woodland Community College contacted the North (Greater Sacramento) Center of Excellence to request labor market information to support career education programming at its Lake County Campus. The Lake County Campus is located in Clearlake, about 90 miles (or a 1.5 hours drive) northwest of Woodland's main campus.

This memo provides an analysis of occupational demand and program supply data for several programs offered at Woodland's Lake County Campus: Welding ([Exhibit 1](#)), Human Services and Chemical Dependency ([Exhibit 2](#)), Culinary Arts ([Exhibit 3](#)), and Accounting ([Exhibit 4](#)). The requests from Woodland specifically called out the need for labor market data for these programs.

Methodology

The geography for the labor market data in this memo covers the counties that Lake county residents tend to travel to for work. The geography was determined using resident worker commute patterns from OnTheMap. This online U.S. Census tool provides mapping and reporting data to show where workers are employed and where they live. Analysis of resident worker commute patterns showed that 80% of Lake County residents commuted to five counties for work: Lake, Sonoma, Mendocino, Napa, and Sacramento.¹ Occupational demand and program supply data cover these five counties. Supply data for Woodland Community College was also included as disaggregated data for the Lake County Campus awards data was not readily available. For more information on the geography, please see the [Appendix](#) in this memo.

Findings

- Comparing occupational demand and program supply for four programs at Woodland's Lake County Campus - welding, human services, chemical dependency, culinary arts, and accounting - show an undersupply of local awards to meet occupational demand. The undersupply of awards indicates that more workers may be needed to meet occupational demand in each of the counties studied.
- Woodland's Lake County Campus offers training to individuals who live in Lake County but might commute out of the county for work. Commuting pattern data analysis shows that Lake county residents commute across multiple community college economic subregions for work - including the Northern Coastal, the North Bay, and the Greater Sacramento subregions. These subregions are part of a larger economic region, which was not included in this data analysis. As a result, awards data and the subsequent "undersupply" analysis may be underestimated.
- The North Center of Excellence recommends Woodland Community College conduct engagement sessions with Lake County employers and trade boards (i.e., chamber of commerce, local trade unions, etc.) to better understand workforce training needs, with a focus on short-term and stackable credentials.

Please contact Ebony Benzing, COE Research Manager, for further information at Ebony.Benzing@losrios.edu or 916-563-3215.

¹ U.S. Census Bureau. (2021). LEHD Origin-Destination Employment Statistics (2002-2018). <https://onthemap.ces.census.gov>.

Exhibit 1. Woodland Community College's Lake County Campus - Welding

Top6	Top6_Title	SOC Code	SOC Title	Skill Category	Typical Education
0956.50	Welding Technology	51-4121	Welders, Cutters, Solderers, and Brazers	Middle Skill	On-The-Job Training, No College Required
		51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	Middle Skill	On-The-Job Training, No College Required

Geography - The program identified specifically targets the labor market need for trained workers in...					
Region/Subregion list			County list		Notes
WCC Lake County Campus resident worker geography			Lake, Sonoma, Mendocino, Napa, Sacramento		N/a
Demand - the program(s) prepare students to work in the following occupations...			Supply - On average, how many awards (certificates and degrees) are conferred by community colleges and other postsecondary institutions in the region/county identified?		
SOC Code	Occupational Title	Annual Openings	Institution Type		# of Awards Conferred (Annual Average)
51-4121	Welders, Cutters, Solderers, and Brazers	167	Community Colleges		75
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	52	Other Postsecondary Institutions		0
			Summary of Data Entered:		
			Demand		77
			Supply		26
			Analysis:		
			It's a go! Undersupply indicated		

Community colleges with same TOP program:			Other ed programs with corresponding CIP programs:		
TOP6 - Top Title			CIP - CIP Title		
School	Average Annual Awards (2017-18 through 2019-20)		School	Average Annual Awards (2016-17 through 2018-19)	
0956.50 - Welding Technology			48.0508 - Welding Technology/Welder		
ARC		52	N/A		
CRC		10			
Napa Valley		3			
Santa Rosa		7			
Woodland		3			

Exhibit 2. Woodland Community College's Lake County Campus - Human Services and Chemical Dependency

Top6	Top6_Title	SOC Code	SOC Title	Skill Category	Typical Education
2104.00	Human Services	21-1093	Social and Human Services Assistants	Middle Skill	High School Diploma or Equivalent
2104.40	Alcohol and Controlled Substances	21-1094	Community Health Workers	Middle Skill	High School Diploma or Equivalent
		21-1099	Community and Social Service Specialists, All Other	Above Middle Skill	Bachelor's Degree

Geography - The program identified specifically targets the labor market need for trained workers in...				
Region/Subregion list			County list	Notes
WCC Lake County Campus resident worker geography			Lake, Sonoma, Mendocino, Napa, Sacramento	N/a
Demand - the program(s) prepare students to work in the following occupations...			Supply - On average, how many awards (certificates and degrees) are conferred by community colleges and other postsecondary institutions in the region/county identified?	
SOC Code	Occupational Title	Annual Openings	Institution Type	# of Awards Conferred (Annual Average)
21-1093	Social and Human Services Assistants	646	Community Colleges	177
21-1094	Community Health Workers	68	Other Post-secondary Institutions	13
21-1099	Community and Social Service Specialists, All Other	138	Summary of Data Entered:	
			Demand	852
			Supply	190
			Analysis:	
			It's a go! Undersupply indicated	

Community colleges with same TOP program:		Other ed programs with corresponding CIP programs:	
TOP6 - Top Title		CIP - Cip Title	
School	Average Annual Awards (2017-18 through 2019-20)	School	Average Annual Awards (2016-17 through 2018-19)
2104.00 - Human Services		44.0000 - Human Services, General	
ARC	24	N/A	
CRC	19		
FLC	12		
Mendocino	17		

Napa Valley	9		
SCC	5		
Santa Rosa	23		
Woodland	15		
2104.40 - Alcohol and Controlled Substances		51.1501 - Substance Abuse/Addiction Counseling	
ARC	16	InterCoast Colleges - Rancho Cordova	13
CRC	7		
Mendocino	4		
Santa Rosa	18		
Woodland	8		

Exhibit 3. Woodland Community College's Lake County Campus - Culinary Arts

Top6	Top6_Title	SOC Code	SOC Title	Skill Category	Typical Education
1306.00	Nutrition, Foods, and Culinary Arts	35-1011	Chefs and Head Cooks	Middle Skill	High School Diploma or Equivalent
1306.30	Culinary Arts	35-1012	First-Line Supervisors of Food Preparation and Serving Workers	Middle Skill	High School Diploma or Equivalent
		51-3011	Bakers*	Below Middle Skill	No formal education credential

*Although Bakers are considered below middle-skill jobs and have no formal education requirements, jobs typically require long-term on-the-job training. The community college setting may offer training related to the occupation, depending on local employer needs.

Geography - The program identified specifically targets the labor market need for trained workers in...				
Region/Subregion list			County list	Notes
WCC Lake County Campus resident worker geography			Lake, Sonoma, Mendocino, Napa, Sacramento	N/a
Demand - the program(s) prepare students to work in the following occupations...			Supply - On average, how many awards (certificates and degrees) are conferred by community colleges and other postsecondary institutions in the region/county identified?	
SOC Code	Occupational Title	Annual Openings	Institution Type	# of Awards Conferred (Annual Average)
35-1011	Chefs and Head Cooks	172	Community Colleges	120

35-1012	First-Line Supervisors of Food Preparation and Serving Workers	835	Other Post-secondary Institutions	0
51-3011	Bakers	233	Summary of Data Entered:	
			Demand	1240
			Supply	120
			Analysis:	
			It's a go! Undersupply indicated	

Community colleges with same TOP program:			Other ed programs with corresponding CIP programs:	
TOP6 - Top Title			CIP - CIP Title	
School	Average Annual Awards (2017-18 through 2019-20)		School	Average Annual Awards (2016-17 through 2018-19)
<i>1306.00 - Nutrition, Foods, and Culinary Arts</i>			<i>19.0501 - Foods, Nutrition, and Wellness Studies, General</i>	
ARC		3	N/A	
CRC		8	<i>1205.00 - Cooking and Related Culinary Arts, General</i>	
FLC		3	N/A	
SCC		1	<i>12.0501 - Baking and Pastry Arts/Baker/Pastry Chef</i>	
<i>1306.30 - Culinary Arts</i>			N/A	
ARC		25	<i>12.0503 - Culinary Arts/Chef Training</i>	
CRC		2	N/A	
Santa Rosa		70	Note: Many private postsecondary culinary arts training programs were closed in the wake of the U.S. federal financial aid system's gainful employment rule due to low wage outcomes. A private culinary arts training provider in Napa County (The Culinary Institute of America , based in New York) offers associate degrees and below-baccalaureate level certificates. Still, data cannot be disaggregated for the California branch.	
Woodland		8		

Exhibit 4. Woodland Community College's Lake County Campus - Accounting

Top6	Top6_Title	SOC Code	SOC Title	Skill Category	Typical Education
0502.00	Accounting	13-2011	Accountants and Auditors	Above Middle Skill	Bachelor's Degree
0502.10	Tax Studies	43-3011	Bill and Account Collectors	Middle Skill	High School Diploma or Equivalent
		43-3021	Billing and Posting Clerks	Below Middle Skill	High School Diploma or Equivalent
		43-3051	Payroll and Timekeeping Clerks	Middle Skill	High School Diploma or Equivalent
		43-3031	Bookkeeping, Accounting, and Auditing Clerks	Middle Skill	Some college, No Degree

Geography - The program identified specifically targets the labor market need for trained workers in...				
Region/Subregion list			County list	Notes
WCC Lake County Campus resident worker geography			Lake, Sonoma, Mendocino, Napa, Sacramento	N/a
Demand - the program(s) prepare students to work in the following occupations...			Supply - On average, how many awards (certificates and degrees) are conferred by community colleges and other postsecondary institutions in the region/county identified?	
SOC Code	Occupational Title	Annual Openings	Institution Type	# of Awards Conferred (Annual Average)
13-2011	Accountants and Auditors	1033	Community Colleges	278
43-3011	Bill and Account Collectors	124	Other Post-secondary Institutions	28
43-3021	Billing and Posting Clerks	285	Summary of Data Entered:	
43-3051	Payroll and Timekeeping Clerks	169	Demand	2811
43-3031	Bookkeeping, Accounting, and Auditing Clerks	1200	Supply	306
			Analysis:	
			It's a go! Undersupply indicated	

Community colleges with same TOP program:		Other ed programs with corresponding CIP programs:	
TOP6 - Top Title		CIP - Cip Title	
School	Average Annual Awards (2017-18 through 2019-20)	School	Average Annual Awards (2016-17 through 2018-19)
0502.00 - Accounting		52.0302 - Accounting Technology/Technician and Bookkeeping	
ARC	60	Asher College (Sacramento)	14

CRC	66	Empire College (Sonoma)	5
FLC	16	MTI College (Sacramento)	9
Mendocino	24		
Napa	11		
Redwoods	14		
SCC	26		
Santa Rosa	45		
Woodland	10		
0502.10 - Tax Studies			
ARC	4		
CRC	2		
Santa Rosa	1		

Appendix A. Geography and Data Sources

A1. Resident Commuting Patterns

Based on data analysis from On the Map, in 2018, 80% of Lake County, Ca residents were shown to have traveled to primarily five counties for work:

Work Location	Count of Workers	Share of Workers	Community Colleges Serving County
Lake County	9,906	54%	<ul style="list-style-type: none"> • Mendocino College
Sonoma County	2,015	11%	<ul style="list-style-type: none"> • Napa Valley College • Santa Rosa Junior College
Mendocino County	1,512	8%	<ul style="list-style-type: none"> • Mendocino College • College of the Redwoods
Napa County	848	5%	<ul style="list-style-type: none"> • Napa Valley College
Sacramento County	405	2%	<ul style="list-style-type: none"> • American River College • Cosumnes River College • Folsom Lake College • Sacramento City College
All other locations	3,699	20%	--
Totals	18,385	100%	--

A2. Data Sources

Emsi. <https://www.economicmodeling.com/>. EMSI occupational employment data are based on final EMSI industry data and final EMSI staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors).

Integrated Postsecondary Education Data System (IPEDS). National Center for Education Statistics. U.S. Department of Education. <https://nces.ed.gov/ipeds/>.

Management Information Systems (MIS) Data Mart. California Community Colleges Chancellor's Office. <https://datamart.cccco.edu/>.

U.S. Census Bureau. (2021). LEHD Origin-Destination Employment Statistics (2002-2018). Washington, D.C.: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program, accessed on March 29, 2021, at <https://onthemap.ces.census.gov>. LODS Version 7.5.