

Memorandum

To: Sandy Fowler, CTE Director, Yuba College

From: Ebony J. Benzing, Research Manager, Center of Excellence (COE), North-Far North region

Date: June 12, 2019

Re: Program endorsement request for Introduction to Welding Technologies

Background

Yuba College is seeking a program endorsement report from the Centers of Excellence regarding the creation of a 16-unit Introductory Welding Technologies program.

In March 2018, COE authored a program endorsement report for the College of the Siskiyous on Advanced Manufacturing. This report focused on the creation of a program that would prepare students for careers in machining, welding, computer-aided design and manufacturing (CAD/CAM), and computer numerical control (CNC). The Siskiyous Advanced Manufacturing report will serve as the basis of this memo; several key findings from the report are summarized below. The occupational data referenced includes data on Welders, Cutters, Solderers, and Brazers (SOC 51-4121.00), as well as several other manufacturing-related occupations, from 2007 to 2017, over the 22-county North Far North region¹.

Additional regional specific data follows the summary of findings from the Siskiyous report. This new data focuses on the occupation of Welders, Cutters, Solderers, and Brazers (SOC 51-4121.00) from 2008 to 2023, over the seven-county Greater Sacramento region².

The Siskiyous report on Advanced Manufacturing should accompany this memo as part of any program application package.

Summary of Key Findings – Advanced Manufacturing, College of the Siskiyous report

- While the labor market for manufacturing technology jobs in Siskiyou County was small and declining, demand for these jobs increases in the broader North/Far North region. There were 4,780 jobs as of 2017, and the industry is projected to grow by 11% between 2017 and 2022. The majority of recent job postings are in Sacramento County.
- The current annual supply of community college awards in manufacturing technology is approximately equal to the new jobs available in the North/Far North region. Ten schools have programs, and 543 awards were conferred on average each of the last three years.
- The median hourly wage varies among the occupations studied. Wages in the industry are generally at or below the Siskiyous county living wage, \$24 per hour.
- The employer base required skills, and top industries that hire workers with manufacturing technology training is diverse, indicating that core occupational skills are transferable among different types of companies.

¹ The 22-county region includes the seven counties of Greater Sacramento as well as Butte, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Modoc, Plumas, Shasta, Sierra, Siskiyou, Tehama and Trinity.

² The seven-county region of Greater Sacramento includes El Dorado, Nevada, Placer, Sacramento, Sutter, Yolo, and Yuba.

Summary of Key Findings – Greater Sacramento Welder Occupation

- Between 2008 and 2018, the Welder occupation added over 200 jobs in the Greater Sacramento region. This trend appears to continue over the next five years, with a projected growth rate of 14.4% and adding just over 216 jobs per year.
- While welder jobs North Far North region is also expected to grow over the next five year, most are projected to occur in the Greater Sacramento region. Accounting for the annual openings of Greater Sacramento within the larger North Far North region, the area will add only 81 jobs outside of Greater Sacramento.
- Median hourly wages for the welder occupation shows some variation by region. Median hourly wages were higher at the state level compared to the Greater Sacramento region. Moreover, while the median hourly wages fall below the Sacramento living wage thresholds of a one-adult, one-child household, it is significantly over the threshold for a single adult household (\$12.38 per hour).
- According to DataMart³, five community colleges in the Greater Sacramento region offer training related to the welder occupation (TOP code 0956.50 – Welding Technology) and confer, on average, 125 awards per year. The community college which offers related training includes American River, Cosumnes River, Sierra, Woodland, and Yuba.

Recommendations

- Based on a three-year average of annual awards in Welding Technologies programs in the Greater Sacramento region (125 certificates and degrees), and projected annual openings for the welder occupation (216 openings), the region appears to have some demand for programs related to the occupation.
- COE recommends that Yuba College move forward with establishing its Introductory Welding Technologies program.

³ California Community Colleges Chancellor's Office DataMart, <https://datamart.cccco.edu/>

APPENDIX A: CURRENT OCCUPATIONAL DATA

Exhibit A summarizes job trends of the welder occupation in the 7-county Greater Sacramento region, the 22-county North Far North region, and California

Exhibit A. Employment and projected occupational demand⁴

Occupation	SOC	2008 Jobs	2018 Jobs	2023 Jobs	2018-23 % Change	Annual Openings	Annual Replacements
Welders, Cutters, Solderers, and Brazers	51-4121	1,420	1,685	1,948	15.6%	216	158
GREATER SACRAMENTO	TOTALS	1,420	1,685	1,948	15.6%	216	158
Welders, Cutters, Solderers, and Brazers	51-4121	2,026	2,321	2,649	14.1%	297	221
NORTH FAR NORTH	TOTALS	2,026	2,321	2,649	14.1%	297	221
Welders, Cutters, Solderers, and Brazers	51-4121	31,011	31,259	32,840	1,581	3,699	3,085
CALIFORNIA	TOTALS	31,011	31,259	32,840	1,581	3,699	3,085

Exhibit B compares the median hourly wages of the welder occupation in the Greater Sacramento region, North Far North Region, and California to the Sacramento Metropolitan Statistical Area (MSA) living wage for a one-adult, one-child household.

Exhibit B. Wages for selected occupations⁵

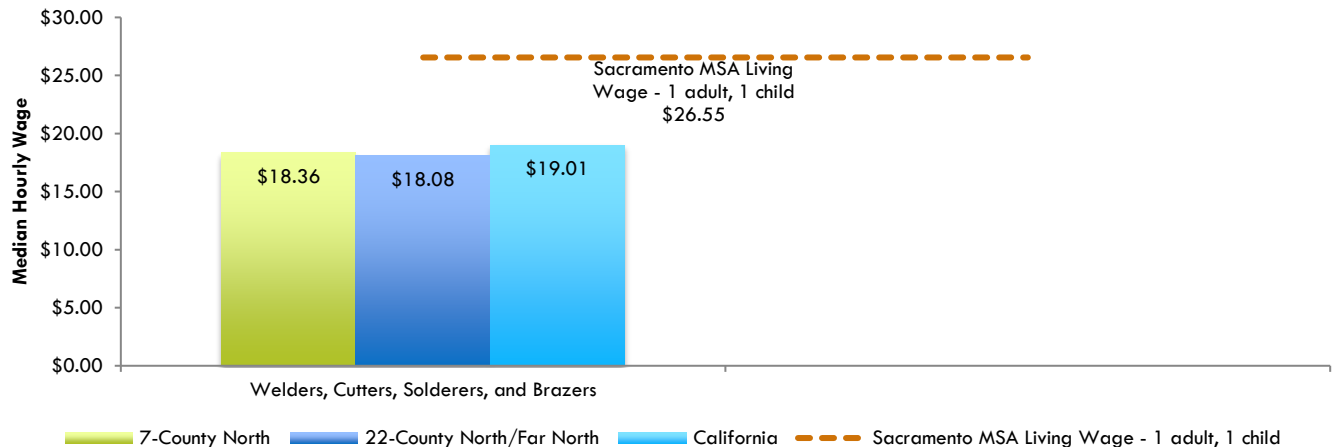
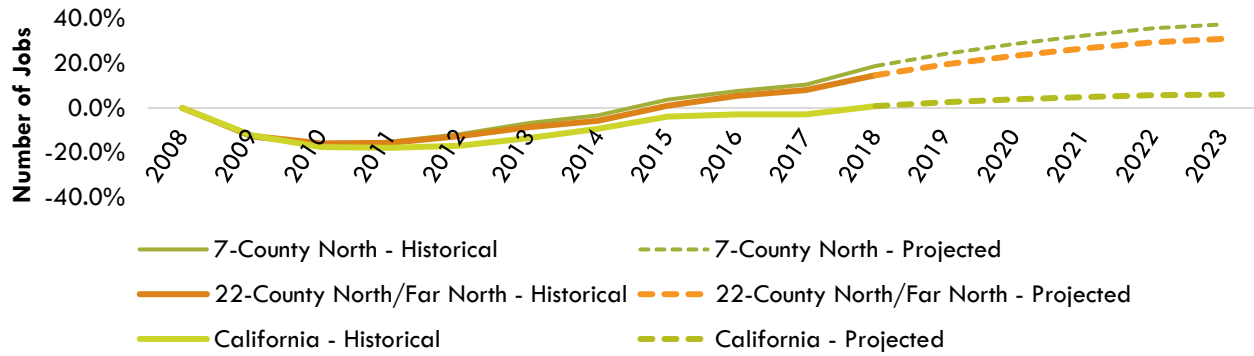


Exhibit C compares the 10-year job postings trends for the welder occupation to the median number of jobs in the Greater Sacramento region.

Exhibit C. Job postings trends

⁴ Emsi 2019.2; QCEW Employees, Non-QCEW Employees and Self-Employed.

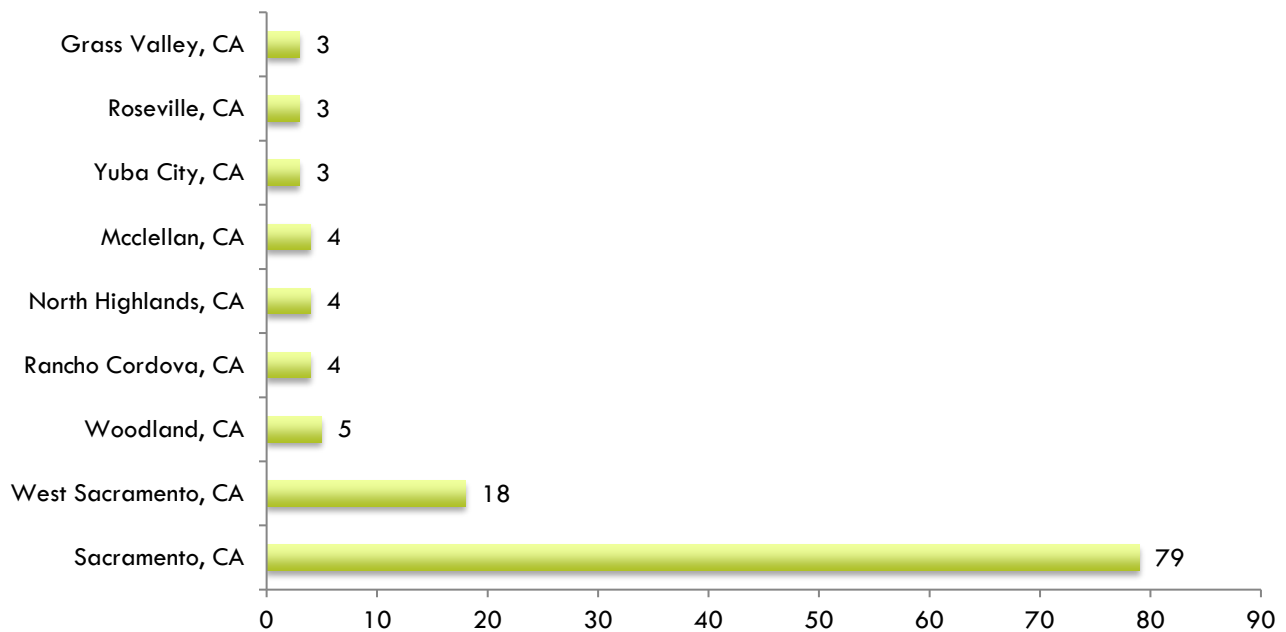
⁵ Ibid.



Burning Glass identified a pool of 132 job postings in the Greater Sacramento region for the selected occupations. This data represents job listings posted online within the last year, from June 1, 2018, through May 31, 2019.

Exhibit D shows the number of job postings for the welder occupation.

Exhibit D. Top job postings locations for Welders⁶



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

⁶ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool," <http://www.burning-glass.com>, 2019.