2020 CTE Counselor Conference

Multiple Paths to Success: Giving Students a Competitive Advantage

Meet the Sector Experts

Hosted by:
Ebony J. Benzing
Center of Excellence for Labor Market Research

2020 CTE Counselor Conference

February 13, 2020
DoubleTree Hotel, 2001 Point West Way,
Sacramento, CA 95815

Panelists

- Carrie Peterson, Regional Director of Employer Engagement: Agriculture, Water and Environmental Technologies
- Mike Bell, Chair, SME Sacramento Valley CEO, and Founder SYNBYO
- Orion Walker, Regional Director of Employer Engagement: Energy, Construction & Utilities
- Angela Cordell, Regional Director of Employer Engagement: Business & Entrepreneurship

Agriculture, Water & Environmental Technologies

Agriculture,

Water &

Environmental Technology

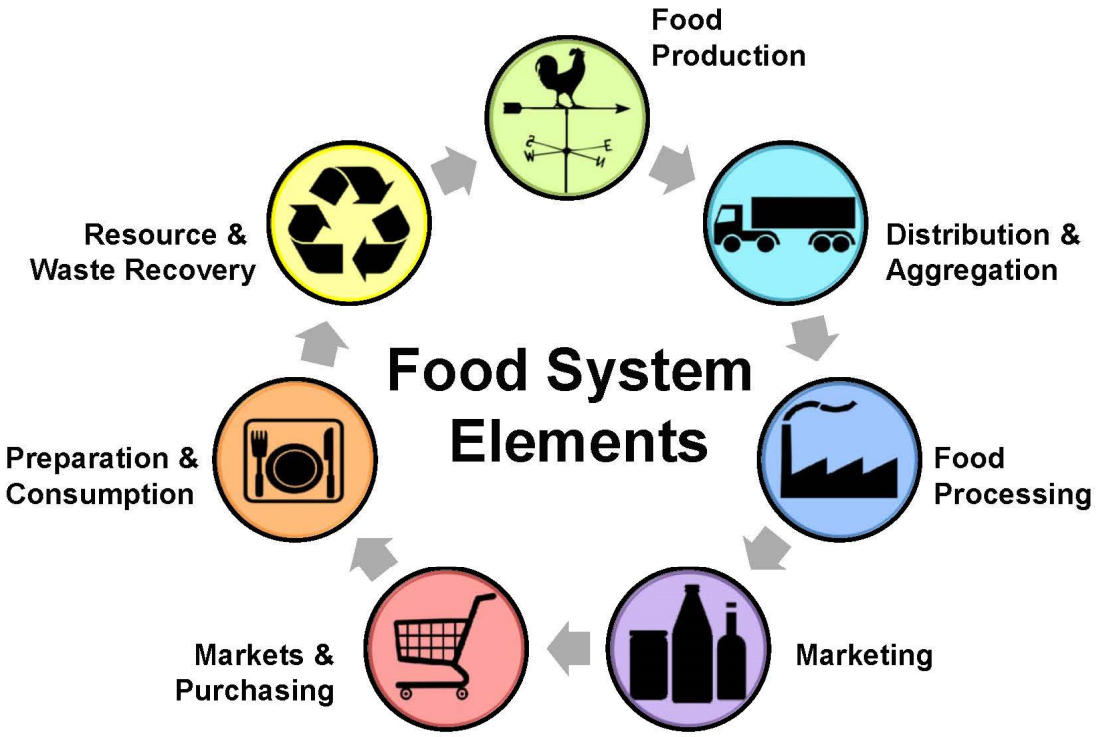
Sector

The AWET Sector also includes jobs in the fields of:

- Fishing
- Forestry
- Mining
- Outdoor Recreation
- Renewable Energy

Agriculture, Water, & Environmental Technology

We are not just farmers, ranchers, and vets!



Carrie Peterson

cpeterso@yccd.edu

530-668-2531

www.ecusector.com

- California Community Colleges AGWET: http://www.calagcc.org/
- Agriculture and Natural Resources Curriculum: http://www.agnrcurriculum.org/
- UC ANR "California's Working Landscapes" report:
  - Executive summary: https://ucanr.edu/files/315113.pdf
  - Full report: https://ucanr.edu/files/316049.pdf

Advanced Manufacturing

High Demand Occupations

- CNC Operator (Entry-level)
- CNC Machinist
- Field Service Technician
- Industrial Machine & Maintenance Mechanic/Technician
- Welder
- Production Assembler/Technician
- Office and Logistics Support

Common Employer Hiring Challenges or Best Practices

Technical

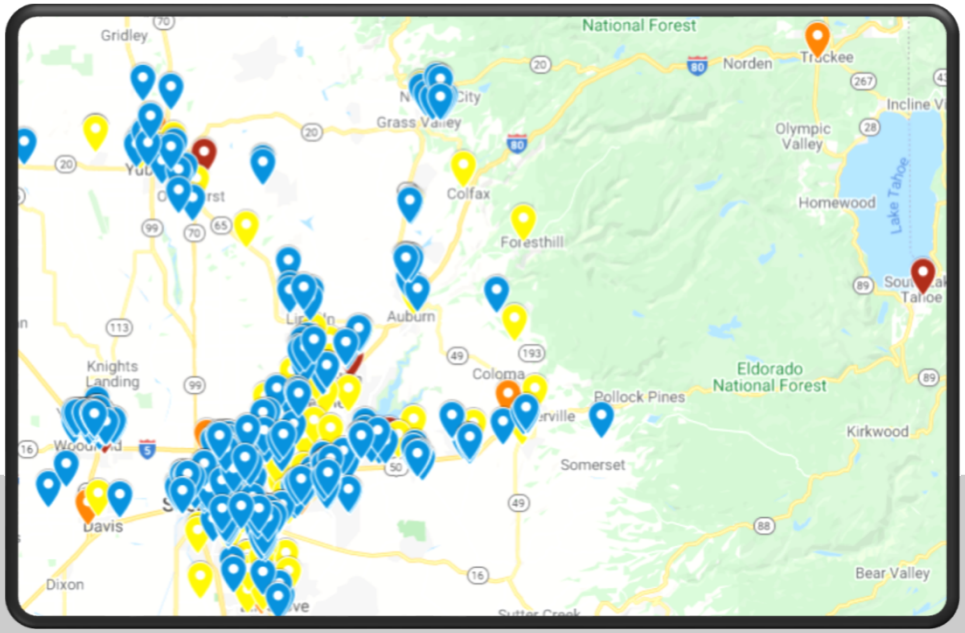
- Current practice is the company has an internal training program or methodology
- Provide a survey class where students can be exposed to a variety of manufacturing processes

Soft Skills

- Pass a drug test
- Show up to work on time
- Genuine interest to learn more about the trade (career)

EDUCATION TO MANUFACTURING
Pathways for Success

- Edu2mfg.org
  - Map of employers and schools
  - Useful links



COMMUNITY COLLEGES

College	Energy, Construction, Utilies	Design Engineering Technology or Support	Electronics or Mechatronics	Engineering	Machining (CNC)	Welding
American River		X	X	X		X
Cosumnes River	X	X		X		X
Folsom Lake				X		
Lake Tahoe						
Sacramento City	X	X	X	X	X	
Sierra	X	X	X	X	O	X
Woodland						X
Yuba			O	X	X	X
High School (by county)						
El Dorado	2	1		3	1	1
Nevada	1			2	2	1
Placer	8	6	2	11	8	6
Sacramento	8	8		23	10	3
Sutter		1		2	1	3
Yolo	2			1		1
Yuba				1		3

X = Active O = Pending

How to connect with the network

- Jeff Briggs
  - Regional Director, Advanced Manufacturing, North
  - JeffBriggs@sierracollege.edu
- John Schmidt
  - Regional Director, Advanced Manufacturing, Far North
  - joschmidt@shastacollege.edu

EDUCATION TO MANUFACTURING
Pathways for Success

Edu2mfg.org

SVMI

Sacramento Valley Manufacturing Initiative

Sacvalleymfg.org

SHASTAGMI
GROW MANUFACTURING INITIATIVE

Shastagmi.org

sme
Sacramento Valley Chapter 145

SME, Sacramento Valley Chapter

Sacvalleysme.org

State of Manufacturing Breakfast
Wed, March 25
8-11 am
Folsom Community Center

GMI

Grow Manufacturing Initiative

Growmanufacturing.com

Energy, Construction & Utilities

Where is the best growth?

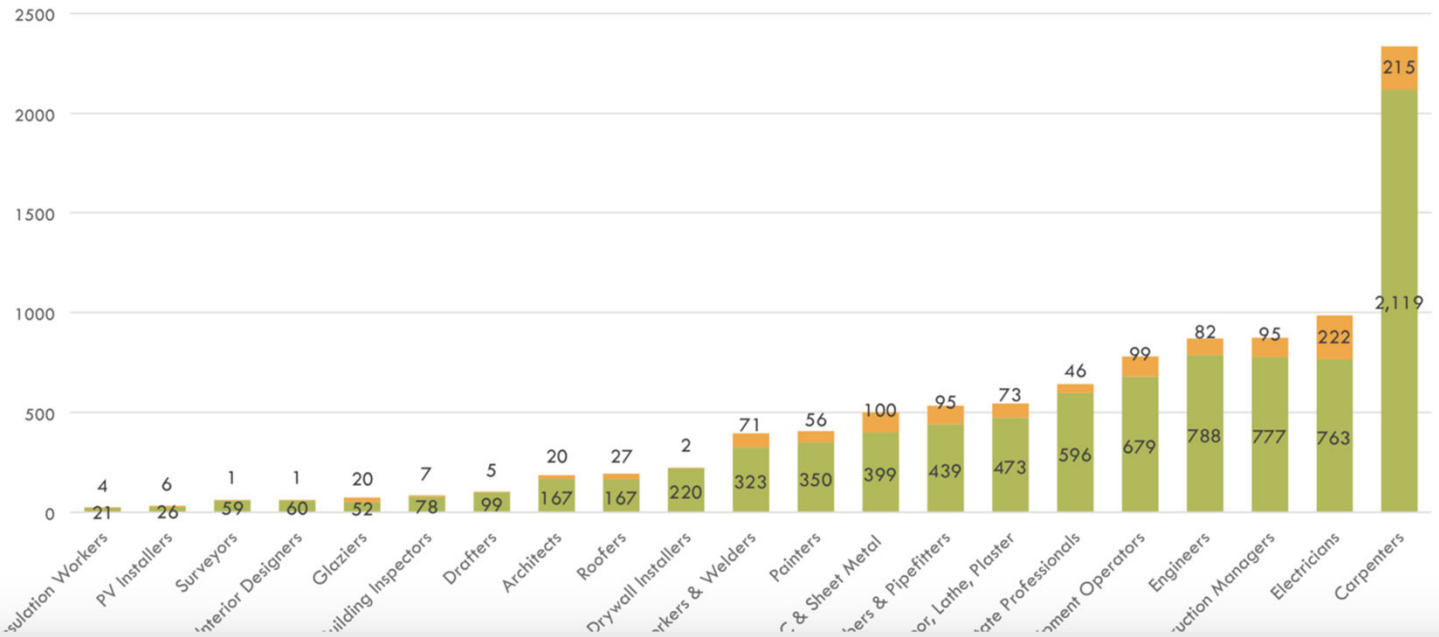
Sector	Year-over-year Growth
Construction	+5.4%
Manufacturing	+5.3%
Health Care	+5.1%
Leisure & Hospitality	+5.0%
Trade, Transportation, & Utilities (including retail)	+2.5%
Education	+2.3%
Finance Activities	+1.3%
Professional & Business Services	+0.4%

Trends

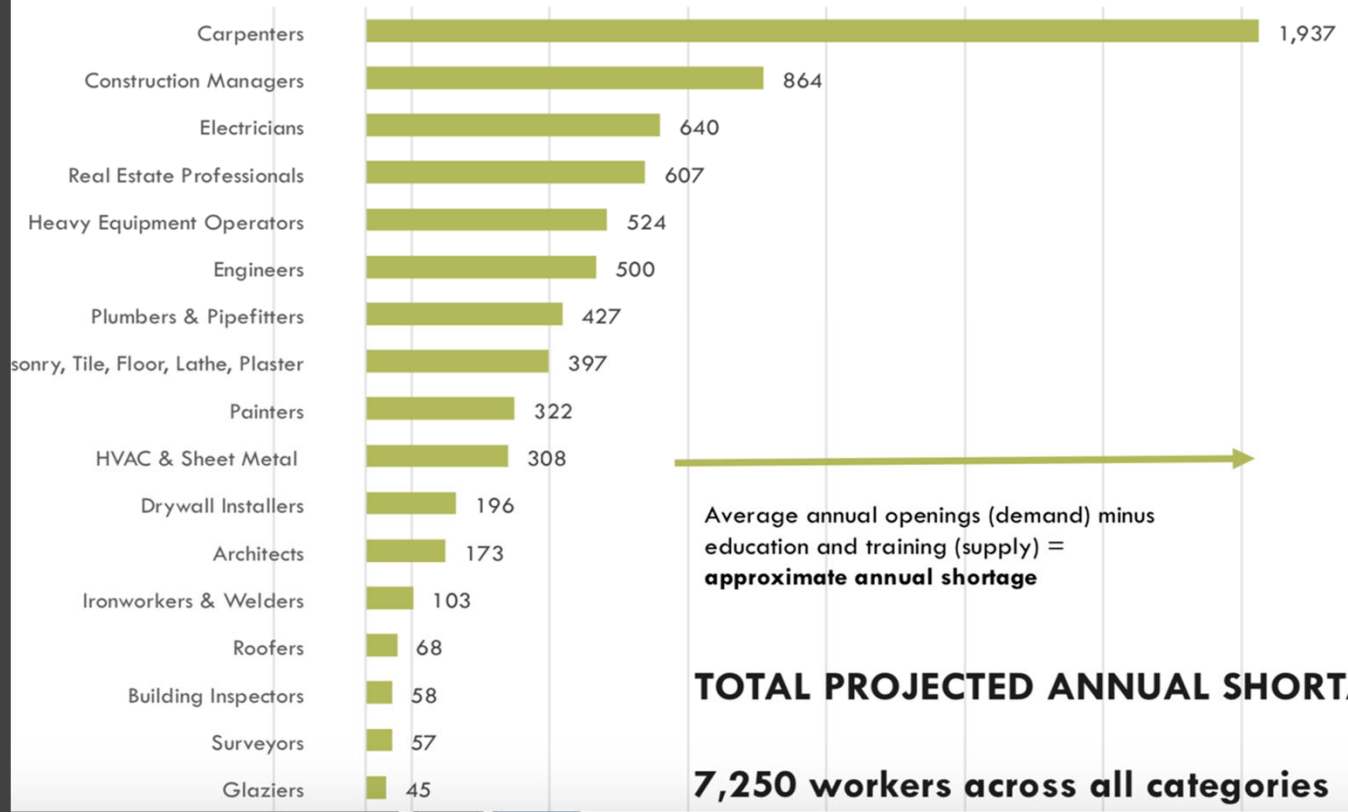
- **Buildings Are Becoming More Complex**
  - Software used in design, build, and operations
    - Current workforce needs upskilling - drones, IOT…
- **Building Trades are Insulated from Robot take over**
  - Trades workers are harder to replace than many other occupations
- **Workforce Shortages/Costs are driving shift toward Prefab**
  - Companies are looking to technology to address lack of workforce
  - Prefab is booming in all shapes and sizes and cost points
- **Everything Electric**
  - New construction is going all electric
  - Solar, EV's, micro grids, control systems
- **Solar Continues to Grow, Fast**

Annual Openings by Category

New and Replacement Jobs (2016-2021)



Demand – Supply (2016-2021)



Average annual openings (demand) minus education and training (supply) = **approximate annual shortage**

TOTAL PROJECTED ANNUAL SHORTAGE:

7,250 workers across all categories

Orion Walker

walkeror@butte.edu

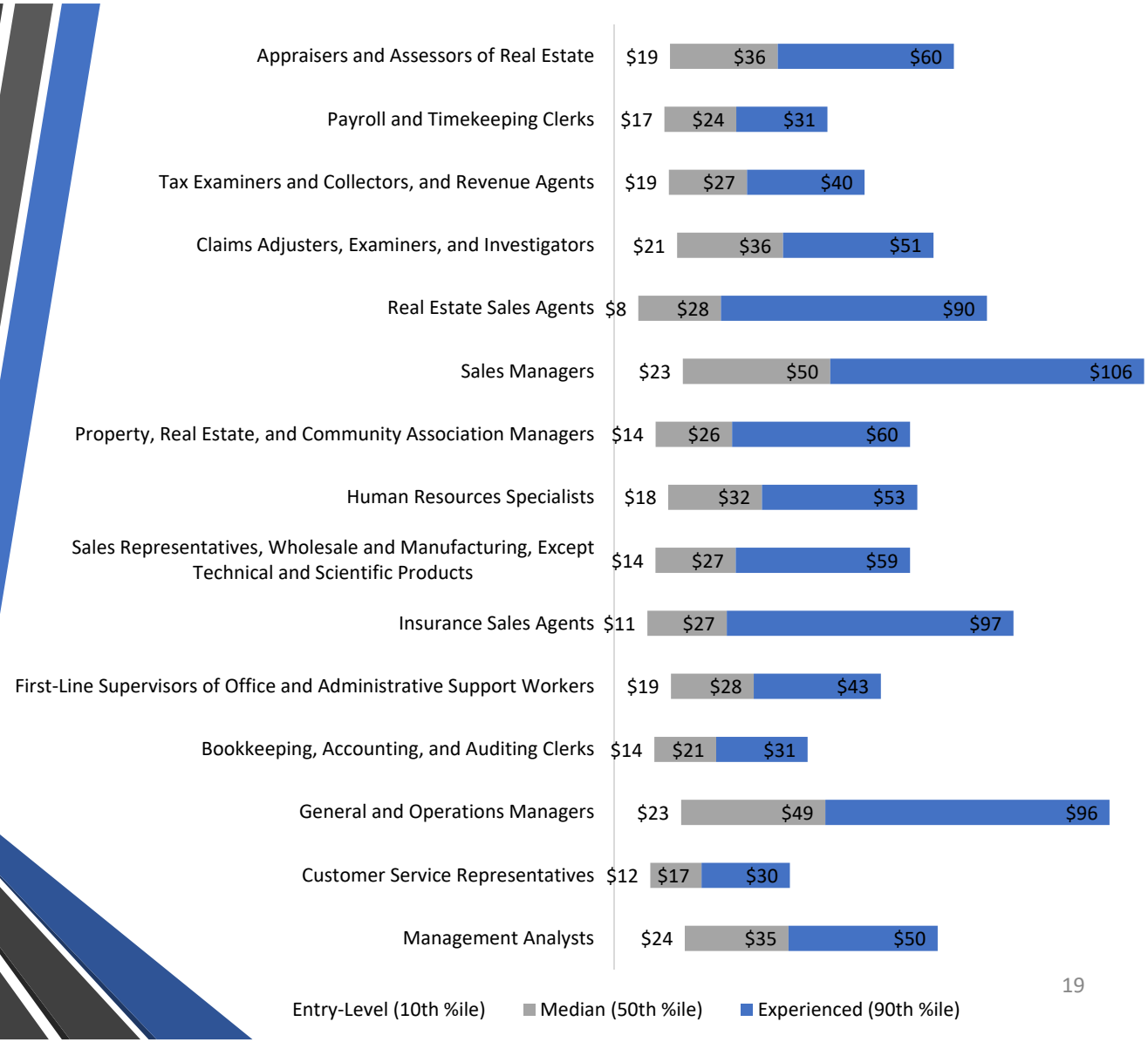
(707)-228-0986

www.ecusector.com

- Building Industry Association: https://cbia.org
- Construction & Industrial Materials Association: https://www.calcima.org
- Sac Region Builders Exchange: https://www.srbx.org
- HVAC Excellence: https://www.escogroup.org/hvac/
- Solar Energy Industry Association: https://www.seia.org

Business & Entrepreneurship

North region Business Wage Ranges



ADV MFG
ADV TRANS
AG/WET
ECU
GLOBAL TRADE
HEALTH*
ICT/DM
RETAIL
BIZ-ENTREP

Preparing Students for Business Across Industries

- Infusing Entrepreneurial Mindset
- Soft Skills Incorporation in the Classroom
- Customer Service and Communication
- Introduction to Local Entrepreneurs

Angela Cordell

acordell@shastacollege.edu

530-242-7627

- Business & Entrepreneurship sector: http://www.businessandentrepreneurship.net/
- Junior Achievement of Northern California: https://www.juniorachievement.org/web/ja-norcal/

Thank You Sponsors!

LOS RIOS COMMUNITY COLLEGE DISTRICT

2020 CTE Counselor Conference

California Community Colleges

CTE CAREER TECHNICAL EDUCATION
SACRAMENTO COUNTY OFFICE OF EDUCATION

Woodland Community College

Yuba College