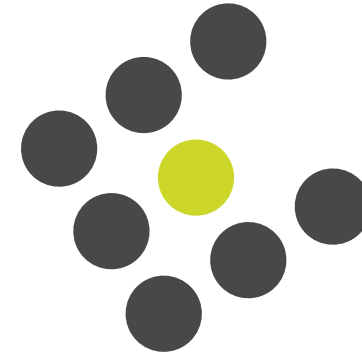


**APPLICATION  
OF COE LMI  
RESOURCES  
AND TOOLS**



**C · O · E**

**CENTERS OF EXCELLENCE  
FOR LABOR MARKET RESEARCH**

# WEBINAR INSTRUCTION (2-3:30 P.M.)

Date	Topic
Mon, May 3	Introduction to Labor Market Information
Tues, May 4	Overview of LMI Tools and Resources
<b>Wed, May 5</b>	<b>Application of LMI Tools and Resources</b>

# DAY 1 RECAP

- **Traditional vs. real-time LMI**
- **Demand vs. supply**
- **SOC, TOP, and CIP codes**
- **Supply gap analysis**

# DAY 2 RECAP

**Explored non-COE resources and tools such as:**

- **EDD LMID vs. BLS**
- **Career Coach**
- **Career Zone**
- **CalJOBS**
- **O\*NET OnLine**

# SOMETIMES YOU JUST DON'T HAVE TIME



# AGENDA - DAY 3 (MAY 5)

- **Explore scenarios that require LMI**
- **Review COE-produced products**



**C·O·E**

CENTERS OF EXCELLENCE  
FOR LABOR MARKET RESEARCH



**C·O·E**

CENTERS OF EXCELLENCE  
FOR LABOR MARKET RESEARCH

**While the Centers of Excellence for Labor Market Research (COE) serve the California community colleges and focus on Career Education or CTE, many of these examples can be applicable for LMI consumers outside of the community college system.**

# OTHER HOUSEKEEPING ITEMS

- **Please keep yourselves muted**
- **Please save your questions and ask them in the chat when it is enabled**
- **PowerPoint slides, recordings, and related documents will be posted on the website**



# SCENARIO 1

**You have been asked to research if there is a labor market need for a new training program for an occupation (e.g., *Property, Real Estate, and Community Association Managers*).**



**C·O·E**

CENTERS OF EXCELLENCE  
FOR LABOR MARKET RESEARCH

**For the San Diego and Imperial Counties  
Community Colleges, this is the first step in our  
Regional Program Recommendation Process.**

# REGIONAL PROGRAM RECOMMENDATION PROCESS



**PROGRAM IDEA/  
PROGRAM CONCEPT  
DEVELOPMENT**



**LMI REQUEST AND  
SUPPLY GAP  
CONFIRMATION**



**REGIONAL DISCUSSION  
ABOUT PROGRAM  
INTENT**



**OFFICIAL REGIONAL  
PROGRAM  
RECOMMENDATION**

[myworkforceconnection.org/workforce-development/regional-program-recommendations](https://myworkforceconnection.org/workforce-development/regional-program-recommendations)

**A business, an advisory board member, a faculty member, or other industry expert recommends that a college should develop a program.**



**PROGRAM IDEA/  
PROGRAM CONCEPT  
DEVELOPMENT**

“Pursuant to Education Code § 78015 Labor Market Information (LMI) data is specifically required for all new CTE program proposals, where available.”



## Program and Course Approval Handbook

“The proposal must include projections from LMI for the **most applicable Standard Occupational Classification (SOC) codes** and geographical regions to be served by the program.”



## Program and Course Approval Handbook

# Program and Course Approval Handbook

“Program proposals will be evaluated in light of the data regarding **expected job openings within the next five years and the number of students that will complete the program per year**, taking into account the number of completers in similar programs at other institutions within the geographical region.”

**Basically, the PCAH and the Chancellor's Office requires that new programs conduct a demand and supply analysis or a “supply gap analysis” to demonstrate need by employers in the area that the community college serves.**



# REGIONAL PROGRAM RECOMMENDATION PROCESS



**PROGRAM IDEA/  
PROGRAM CONCEPT  
DEVELOPMENT**



**LMI REQUEST AND  
SUPPLY GAP  
CONFIRMATION**



**REGIONAL DISCUSSION  
ABOUT PROGRAM  
INTENT**



**OFFICIAL REGIONAL  
PROGRAM  
RECOMMENDATION**

[myworkforceconnection.org/workforce-development/regional-program-recommendations](https://myworkforceconnection.org/workforce-development/regional-program-recommendations)

**The Career Education  
Dean submits an  
online LMI request to  
the San Diego-  
Imperial Center of  
Excellence for Labor  
Market Research  
(COE).**



**LMI REQUEST AND  
SUPPLY GAP  
CONFIRMATION**

If the requester is not a Career Education Dean, then the requester must, at minimum, notify the Career Ed Dean before submitting the online LMI request form.



**LMI REQUEST AND  
SUPPLY GAP  
CONFIRMATION**

# REQUESTERS PREPARE THE FOLLOWING

- Occupation(s) to be trained: [O\\*NET OnLine](#)
- Six-digit **TOP code** for the proposed program:
  - An asterisk (\*) indicates a vocational program in the Taxonomy of Programs (TOP) manual
- Contact information of requester
- Additional research or information that may have already been conducted or collected, respectively

# ONETONLINE.ORG



## O\*NET OnLine

Occupation Quick Search:



[Help](#)

[Find Occupations](#)

[Advanced Search](#)

[Crosswalks](#)

[Share](#)

[O\\*NET Sites](#)



## Build your future with O\*NET OnLine.

**Welcome** to your tool for career exploration and job analysis!

O\*NET OnLine has detailed descriptions of the world of work for use by job seekers, workforce development and HR professionals, students, researchers, and more!

[What is O\\*NET?](#)

### What's New?

Updated military information included in O\*NET websites



[Learn More](#)



Get O\*NET news by [email](#) or [RSS](#).

### I want to be a...

Start the career you've dreamed about, or find one you never imagined.

[Find It Now](#)



**at My Next Move**

California Community Colleges

**CALIFORNIA  
COMMUNITY  
COLLEGES  
CHANCELLOR'S  
OFFICE (CCCCO)  
TOP MANUAL**

**Taxonomy of Programs**

*February 2004  
6th Edition*

Revised: June 2012, September 2009, July and March 2007  
Corrected: July 2013, November 2004



# COE LABOR MARKET BRIEFS PAGE

## LABOR MARKET BRIEFS



### SAN DIEGO COUNTY

 **Advanced Manufacturing** +

 **Advanced Transportation & Logistics** +

 **Agriculture, Water, and Environmental Technologies** +

 **Business & Entrepreneurship** +

 **Energy, Construction, and Utilities** +

 **Global Trade** +

 **Government/ or Public Safety** +

 **Health Care** +

 **ICT and Digital Media** +

 **Life Sciences** +

 **Retail, Hospitality, and Tourism** +

**Other** +

# SAMPLE LABOR MARKET BRIEF



## Property, Real Estate, and Community Association

### Managers

Labor Market Analysis: San Diego County

February 2021

---

#### Summary

Do not Proceed

Proceed with Caution

Proceed

**PROCEED WITH  
NEW PROGRAM?**



**SUPPLY  
GAP?**



**AT OR ABOVE  
THE LIVING WAGE**



**NUMBER OF  
INSTITUTIONS THAT  
PROVIDE TRAINING**



**NUMBER OF ANNUAL  
JOB OPENINGS**



Bachelor's Degree+

Associate Degree

Some College or Certificate

High School Diploma or Equivalent

Less than a HS Diploma

Apprenticeship

**EXPECTED LEVEL  
OF EDUCATION**





## PROGRAM IDEA/ PROGRAM CONCEPT DEVELOPMENT

What if Labor Market Information (LMI) from the COE already exists for the occupation(s) or skill(s) to be trained for? +

Can any labor market research be submitted for the Regional Program Recommendation Process? +

How long are COE labor market reports valid? +



## LMI REQUEST AND SUPPLY GAP CONFIRMATION

How do I know if my request has been received? +

How long do I have to wait for a report? +

What if LMI from the COE does not show evidence of need or a labor market supply gap? +



# The Regional Program Recommendation Process provides an employer endorsement letter template that can be used for program endorsement.

To Whom It May Concern:

As a representative from [company name], I, [first and last name], endorse the program, [program name], at [college name]. I confirm that there is an unmet labor market demand in San Diego County for the occupations that this program trains for. The occupations that this program provides training for include:

- [occupation name 1]
- [occupation name 2]
- [occupation name 3]

Individuals working in these occupations can expect to earn between \$[##.##] and \$[##.##] in entry-level positions.

In the past [insert time frame (e.g., 3 years, 12 months)], I have hired [#] students from [program name] at [college name], and expect to hire more [insert occupation names] in the upcoming [insert time frame (e.g., months, years)].

This affirms that there are jobs available for program completers within the local service area of the college after taking into account the number of completers in similar programs at other institutions—as required by Education Code section 78015 and the California Community Colleges Chancellor’s Office Program and Course Approval Handbook (PCAH).

Sincerely,

[signature]

**LMI SHOULD NOT  
BE THE \*ONLY\*  
BASIS FOR  
DECISION MAKING**



**C · O · E**

**CENTERS OF EXCELLENCE  
FOR LABOR MARKET RESEARCH**

# REGIONAL PROGRAM RECOMMENDATION PROCESS



**PROGRAM IDEA/  
PROGRAM CONCEPT  
DEVELOPMENT**



**LMI REQUEST AND  
SUPPLY GAP  
CONFIRMATION**



**REGIONAL DISCUSSION  
ABOUT PROGRAM  
INTENT**



**OFFICIAL REGIONAL  
PROGRAM  
RECOMMENDATION**

[myworkforceconnection.org/workforce-development/regional-program-recommendations](https://myworkforceconnection.org/workforce-development/regional-program-recommendations)

# REGIONAL DISCUSSION MAY INCLUDE:

- **Is there a labor market supply gap for the occupation(s) to be trained?**
- **Does the occupation pay a living wage?**
- **What level of education do employers typically require for the occupation(s)?**
- **How many institutions provide related training?**
- **What employers typically hire for these positions?**
- **What certifications or soft, software, and specialized skills should we include in the training?**

**College discusses with the region's other community colleges to avoid duplication of efforts before creating a new program.**



**REGIONAL DISCUSSION  
ABOUT PROGRAM  
INTENT**

# REGIONAL PROGRAM RECOMMENDATION PROCESS



**PROGRAM IDEA/  
PROGRAM CONCEPT  
DEVELOPMENT**



**LMI REQUEST AND  
SUPPLY GAP  
CONFIRMATION**



**REGIONAL DISCUSSION  
ABOUT PROGRAM  
INTENT**



**OFFICIAL REGIONAL  
PROGRAM  
RECOMMENDATION**

[myworkforceconnection.org/workforce-development/regional-program-recommendations](https://myworkforceconnection.org/workforce-development/regional-program-recommendations)

**Regional Deans'  
Council provides an  
official  
recommendation to  
the Chancellor's  
Office for program  
approval.**



**OFFICIAL REGIONAL  
PROGRAM  
RECOMMENDATION**



**IN THE NEXT  
FIVE MINUTES...**

**TYPE YOUR  
QUESTIONS IN  
THE CHAT**



**C · O · E**

**CENTERS OF EXCELLENCE  
FOR LABOR MARKET RESEARCH**

**COE LABOR  
MARKET BRIEFS**



**REGIONAL  
PROGRAM  
RECOMMENDATION  
PROCESS**



# SCENARIO 2

**You have been asked to write up a problem statement (or statement of need) for a grant about:**

- 1. Sector(s) and occupation(s) that need your services**
2. Populations that will benefit from these services

# SECTOR RESOURCES

- [Sector Handouts](#)
- [Career Education Guide](#)
- [EDD-COE Sector Map](#)

# POPULATION RESOURCES

- [Subregional Profiles](#)
- **EDD-COE** [Geographic Distribution of \(Demographic\) Need](#)



SECTORS >

EDUCATOR RESOURCES ▾

K-12 to CC Program Finder

Counselor Resources

Counselor Conference

K14 Professional Development

MS/HS Engagement

Career Education Guide

Faculty Institute



## MIDDLE SCHOOL & HIGH SCHOOL ENGAGEMENT: PARTNER RESOURCES

[myworkforceconnection.org/educator-resources/ms-hs-engagement](https://myworkforceconnection.org/educator-resources/ms-hs-engagement)

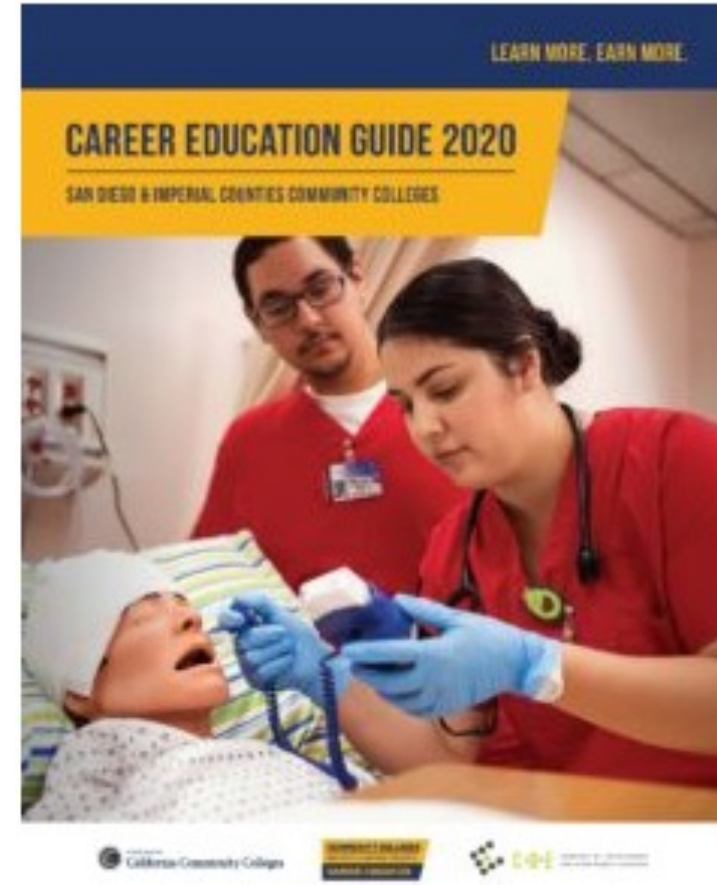
# MIDDLE SCHOOL & HIGH SCHOOL ENGAGEMENT: PARTNER RESOURCES



## 2020 PRIORITY SECTOR HANDOUTS:

**Advanced Manufacturing**  
**Advanced Transportation & Logistics**  
**Agriculture, Water, & Environmental Technologies**  
**Business & Entrepreneurship**  
**Energy, Construction, & Utilities**  
**Health**  
**ICT & Digital Media**  
**Life Sciences & Biotechnology**

## 2020 CAREER EDUCATION GUIDE:



[myworkforceconnection.org/educator-resources/ms-hs-engagement](https://myworkforceconnection.org/educator-resources/ms-hs-engagement)

# SECTOR HANDOUTS

## ENERGY, CONSTRUCTION & UTILITIES

San Diego County



### DID YOU KNOW?

Programs in this sector train you in architecture, engineering, electrical, mechanical, and construction roles. The majority of “clean energy” companies in San Diego specialize in energy efficiency for buildings and renewable energies such as solar power.



**8% (10,357)**

5-year projected  
job growth



**\$83,126**

average earnings  
per job

# SECTOR HANDOUTS

## ARE YOU INTERESTED IN...?

- Working with state-of-the-art technology and machines
- Balancing energy needs with environmental concerns
- Learning a practical trade that is transferable to any location
- Being part of a sector with a global impact
- Using math to solve community and global problems

---

## DO YOU...?

- Enjoy building things and working with tools
- Dream of creating a city skyline
- Want to build massive infrastructures that connect and support our world
- Follow directions
- Prefer working outdoors
- Work on a project until all the pieces fit together
- Work with your hands



### Sample of Local Employers

AECOM Technology Corporation

EDF Renewable Energy

Dynalectric San Diego

Flatiron Construction

San Diego Gas & Electric

Sempra Energy

Solar Turbines



# SECTOR HANDOUTS



## CAREER PATHWAYS & SALARY INFO

Minimum Education	Career Pathways	Hourly Rate (Salary)*
HS Diploma + Postsecondary Training (e.g., Certificate)	Carpenters	<b>\$16</b> (\$33K)
	Plumbers, Pipefitters, and Steamfitters	<b>\$20</b> (\$42K)
	Electricians	<b>\$20</b> (\$42K)
	Construction and Building Inspectors	<b>\$24</b> (\$50K)
Associate Degree or Higher	Civil Engineering Technicians	<b>\$18</b> (\$37K)
	Architectural and Civil Drafters	<b>\$25</b> (\$52K)
	Electrical and Electronics Drafters	<b>\$22</b> (\$46K)
	Electrical and Electronics Engineering Technicians	<b>\$26</b> (\$54K)

*\*Median hourly rates are provided here because once apprentices finish their training, they make median wages. These wages have been rounded up and salaries are provided as examples of what workers would make if they worked full-time (2080 hours a year)*

# CAREER EDUCATION GUIDE

LEARN MORE. EARN MORE.

## CAREER EDUCATION GUIDE 2020

SAN DIEGO & IMPERIAL COUNTIES COMMUNITY COLLEGES



POWERED BY  
California Community Colleges

COMMUNITY COLLEGES  
SAN DIEGO & IMPERIAL COUNTIES  
CAREER EDUCATION

C·O·E CENTERS OF EXCELLENCE  
FOR LABOR MARKET RESEARCH



# ADVANCED MANUFACTURING

The rise of automation, or “Industry 4.0,” is here, transforming factories across the globe using cutting-edge technologies, artificial intelligence, real-time data collection and collaborative robots in building a wide range of products to meet the today’s needs and tomorrow’s challenges. High-tech manufacturing (or Advanced Manufacturing) jobs continue to grow, especially in the areas of additive manufacturing, lean manufacturing, robotics and automation, industrial internet of things, digital transformation, predictive maintenance, precision machining and engineering.

Because robots and automation take care of the repetitive work, today’s manufacturing employees have more challenging and interesting job assignments. Employers in this sector look for technicians, technologists and engineers who are both at ease in the mechanical world, and looking to take on the challenge of moving into a cyber-physical world by applying scientific and technical principles to manufacturing processes. Opportunities for advancement are plentiful as technological advancements make higher-skill jobs in product design, process engineering, operations, maintenance, and lab work more prevalent.



## CAREER EDUCATION GUIDE



### FAST FACTS\*



**92,818**

people employed



**1% (654)**

5-year projected job growth



**3,075**

businesses



**\$96,114**

average earnings per job

\*Labor market data derived from EMSI 2020.02; QCEW, Non-QCEW, Self-Employed; 2019-2024 projections.

### RIASEC

**(R) Realistic**

**(I) Investigative**

Please reference page 3 for more information about RIASEC



## ADVANCED MANUFACTURING | JOBS & WAGES

The following table lists the minimum educational attainment that an individual needs to have in order to be qualified for the occupation. Wages listed for each occupation are based on 25th percentile wages, which represent wages for entry-level workers. Only occupations with median annual salaries of at least \$33,280 (i.e., living wage) and a labor market demand of at least 50 annual job openings are included in this list. Any job with “All Other” in the title is an occupation with highly specialized subsets; put differently, the title is written broadly to capture various emerging occupations.

HIGH SCHOOL DIPLOMA OR EQUIVALENT + ADDITIONAL TRAINING	Entry-level Hourly Rate (Salary)
Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	\$16 (\$33K)
Cabinetmakers and Bench Carpenters	\$16 (\$33K)
Computer-Controlled Machine Tool Operators, Metal and Plastic	\$16 (\$33K)
Cutting and Slicing Machine Setters, Operators, and Tenders	\$14 (\$29K)
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	\$15 (\$31K)
Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers	\$14 (\$29K)
First-Line Supervisors of Production and Operating Workers	\$24 (\$50K)
Industrial Machinery Mechanics	\$23 (\$48K)
Machinists	\$16 (\$33K)
Maintenance and Repair Workers, General	\$16 (\$33K)
Mixing and Blending Machine Setters, Operators, and Tenders	\$14 (\$29K)
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	\$12 (\$25K)
Printing Press Operators	\$13 (\$27K)
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	\$15 (\$31K)
Sheet Metal Workers	\$24 (\$50K)
Structural Iron and Steel Workers	\$23 (\$48K)
Structural Metal Fabricators and Fitters	\$17 (\$35K)
Welders, Cutters, Solderers, and Brazers	\$18 (\$37K)
SOME COLLEGE OR POSTSECONDARY NON-DEGREE AWARD	
Aircraft Mechanics and Service Technicians	\$27 (\$56K)
Computer, Automated Teller, and Office Machine Repairers	\$14 (\$29K)
Electrical and Electronics Repairers, Commercial and Industrial Equipment	\$27 (\$56K)
ASSOCIATE DEGREE	
Aerospace Engineering and Operations Technicians	\$26 (\$54K)
Civil Engineering Technicians	\$18 (\$37K)
Electrical and Electronics Engineering Technicians	\$26 (\$54K)
Engineering Technicians, Except Drafters, All Other	\$27 (\$56K)
Industrial Engineering Technicians	\$28 (\$58K)
Mechanical Drafters	\$25 (\$52K)
Mechanical Engineering Technicians	\$20 (\$42K)
BACHELOR'S DEGREE OR HIGHER	
Aerospace Engineers	\$39 (\$81K)
Civil Engineers	\$31 (\$64K)
Computer Hardware Engineers	\$49 (\$102K)
Electrical Engineers	\$40 (\$83K)
Electronics Engineers, Except Computer	\$50 (\$104K)
Engineers, All Other	\$41 (\$85K)
Industrial Engineers	\$37 (\$77K)
Industrial Production Managers*	\$39 (\$81K)
Mechanical Engineers	\$37 (\$77K)
Purchasing Managers*	\$49 (\$102K)

\*Nationally, 33% or more of workers currently employed in this occupation have an associate degree or less.

Select Metric

- Annual Average Employment
- Annual Average Firms
- Annual Average Wages \$

Year

2019

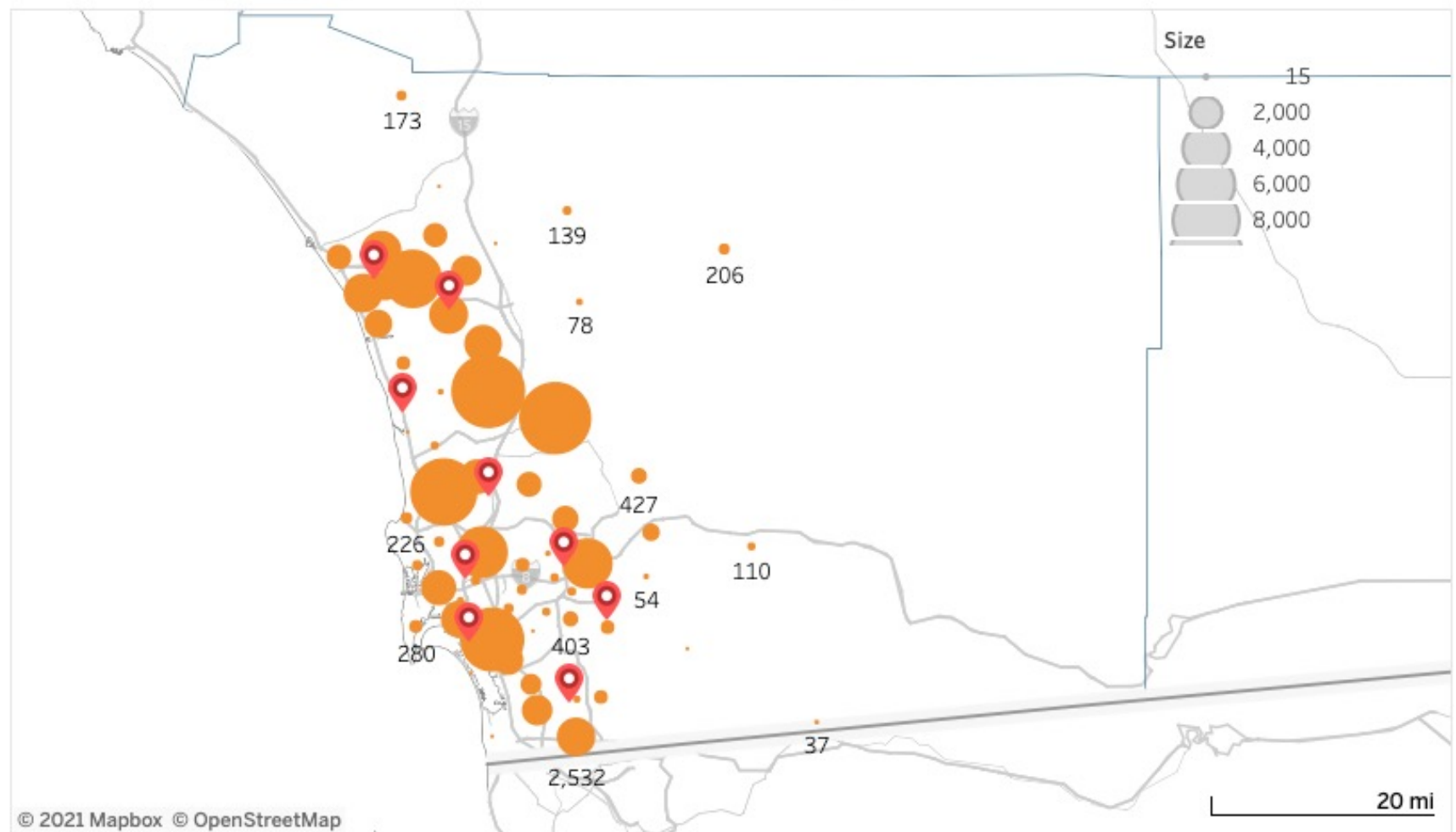
Select Sector

Advanced Manufacturing

Sector Name

Advanced Manufacturing

Annual Average Employment for Advanced Manufacturing - 2019



# EDD-COE SECTOR MAP



**Select Metric**

- Annual Average Employment
- Annual Average Firms
- Annual Average Wages \$

**Year**

**Select Sector**

**Sector Name**
■ Advanced Manufacturing

### Top Zip Codes for All Region - 2019

Rank	Zip Code -	Area	All Zips in Data	Annual Average Employment	Annual Average Firms
1.	92127	San Diego	92127, 92128, 92197, 92199	9,319	93
2.	92064	Poway, Escondido, San Di..	92025, 92064, 92074, 92198, 92199	8,897	168
3.	92121	San Diego	92121, 92191	7,706	224
4.	92113	San Diego	92102, 92113, 92170, 92136	7,026	71
5.	92081	Vista	92081	5,851	162

# WHAT QUESTIONS CAN YOU ANSWER?

- **How big is the sector?**
  - **How many companies are in San Diego County?**
  - **How many people are employed?**
- **What are the sector's top jobs? Which ones pay a living wage?**
- **What's the minimum educational attainment for these occupations?**
- **Where are employers located?**

# HOW BIG IS THE SECTOR?

## FAST FACTS\*



**92,818**

people employed



**1% (654)**

5-year projected job growth



**3,075**

businesses



**\$96,114**

average earnings per job

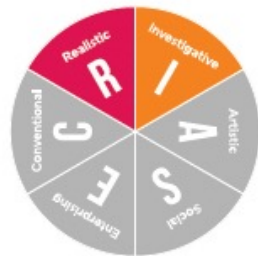
\*Labor market data derived from EMSI 2020.02; QCEW, Non-QCEW, Self-Employed; 2019-2024 projections.

## RIASEC

**(R) Realistic**

**(I) Investigative**

Please reference page 3 for more information about RIASEC



## Example:

**There were 3,075 businesses in San Diego County's Advanced Manufacturing sector, with 92,818 people employed. On average, they earned \$96,114 a year.**

# WHAT ARE THE SECTOR'S TOP JOBS?



## ADVANCED MANUFACTURING | JOBS & WAGES

The following table lists the minimum educational attainment that an individual needs to have in order to be qualified for the occupation. Wages listed for each occupation are based on 25th percentile wages, which represent wages for entry-level workers. Only occupations with median annual salaries of at least \$33,280 (i.e., living wage) and a labor market demand of at least 50 annual job openings are included in this list. Any job with "All Other" in the title is an occupation with highly specialized subsets; put differently, the title is written broadly to capture various emerging occupations.

HIGH SCHOOL DIPLOMA OR EQUIVALENT + ADDITIONAL TRAINING	Entry-level Hourly Rate (Salary)
Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	\$16 (\$33K)
Cabinetmakers and Bench Carpenters	\$16 (\$33K)
Computer-Controlled Machine Tool Operators, Metal and Plastic	\$16 (\$33K)
Cutting and Slicing Machine Setters, Operators, and Tenders	\$14 (\$29K)
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	\$15 (\$31K)
Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers	\$14 (\$29K)
First-Line Supervisors of Production and Operating Workers	\$24 (\$50K)
Industrial Machinery Mechanics	\$23 (\$48K)
Machinists	\$16 (\$33K)
Maintenance and Repair Workers, General	\$16 (\$33K)
Mixing and Blending Machine Setters, Operators, and Tenders	\$14 (\$29K)
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	\$12 (\$25K)
Printing Press Operators	\$13 (\$27K)
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	\$15 (\$31K)
Sheet Metal Workers	\$24 (\$50K)
Structural Iron and Steel Workers	\$23 (\$48K)
Structural Metal Fabricators and Fitters	\$17 (\$35K)
Welders, Cutters, Solderers, and Brazers	\$18 (\$37K)
SOME COLLEGE OR POSTSECONDARY NON-DEGREE AWARD	
Aircraft Mechanics and Service Technicians	\$27 (\$56K)
Computer, Automated Teller, and Office Machine Repairers	\$14 (\$29K)
Electrical and Electronics Repairers, Commercial and Industrial Equipment	\$27 (\$56K)
ASSOCIATE DEGREE	
Aerospace Engineering and Operations Technicians	\$26 (\$54K)
Civil Engineering Technicians	\$18 (\$37K)
Electrical and Electronics Engineering Technicians	\$26 (\$54K)
Engineering Technicians, Except Drafters, All Other	\$27 (\$56K)
Industrial Engineering Technicians	\$28 (\$58K)
Mechanical Drafters	\$25 (\$52K)

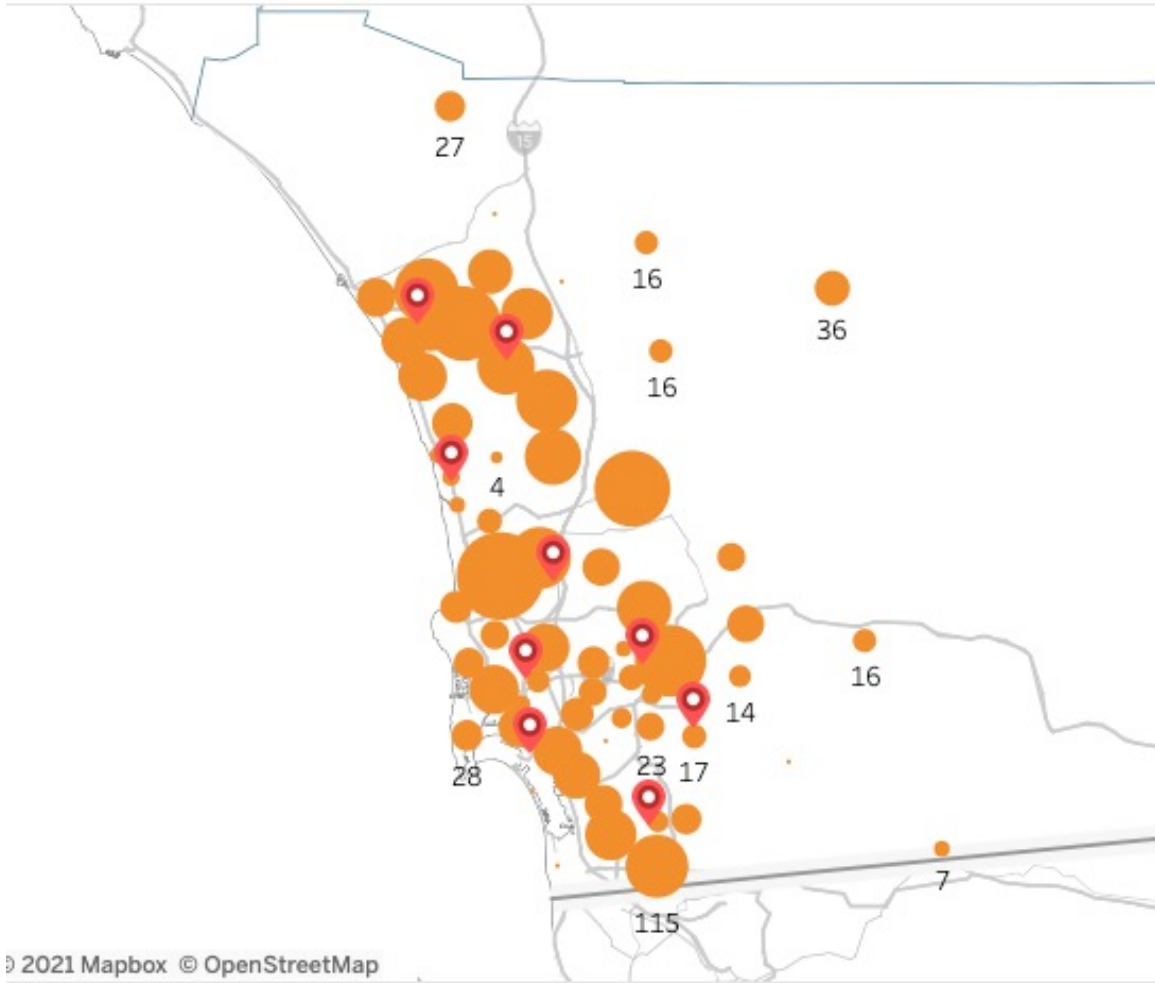
## Example:

We plan to train for Welders, Cutters, Solderers, and Brazers. They have entry-level wages at \$18 per hour and require a high school diploma + additional training.



# WHERE ARE EMPLOYERS LOCATED?

Annual Average Firms for Advanced Manufacturing - 2019



## Example:

We plan to build our program with employers in East County San Diego where a significant number of Advanced Manufacturing companies are concentrated.

# SCENARIO 2

**You have been asked to write up a problem statement (or statement of need) for a grant about:**

- 1. Sector(s) and occupation(s) that need your services**
- 2. Populations that will benefit from these services**

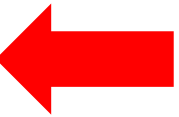
# COE SPECIAL REPORTS PAGE



FEATURED REPORT

**Pandemic-Resilient Jobs in San Diego County**

FULL REPORT



LABOR MARKET INFORMATION ▾

About the COE

Labor Market Briefs

Reports



[myworkforceconnection.org/labor-market-information/reports](https://myworkforceconnection.org/labor-market-information/reports)

# SUBREGIONAL PROFILES



**SOUTH REGION:**  
**Subregional Profile**

San Diego County

COE  
COMMUNITY COLLEGES OF IMPERIAL COUNTY

SAN DIEGO & IMPERIAL COUNTIES  
COMMUNITY COLLEGES

## Regional & Subregional Profiles

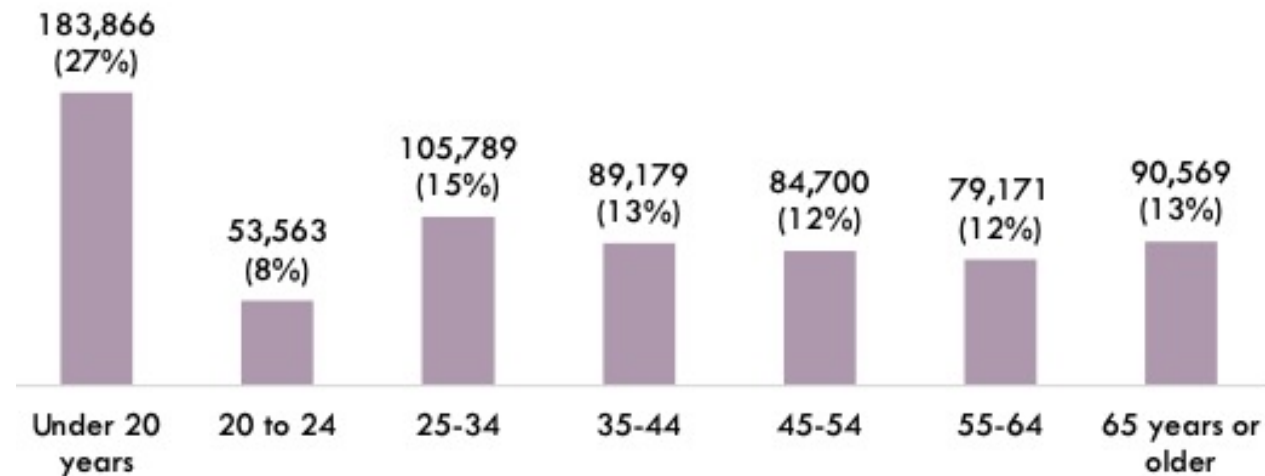
**REGIONS & COUNTIES**

# WHO WILL RECEIVE THESE SERVICES?

## Example:

We plan to serve individuals who are 24 or younger in the south region of San Diego County who make up 35% of our subregional population.

Exhibit 4: Age Breakdown in the South Region, 2018

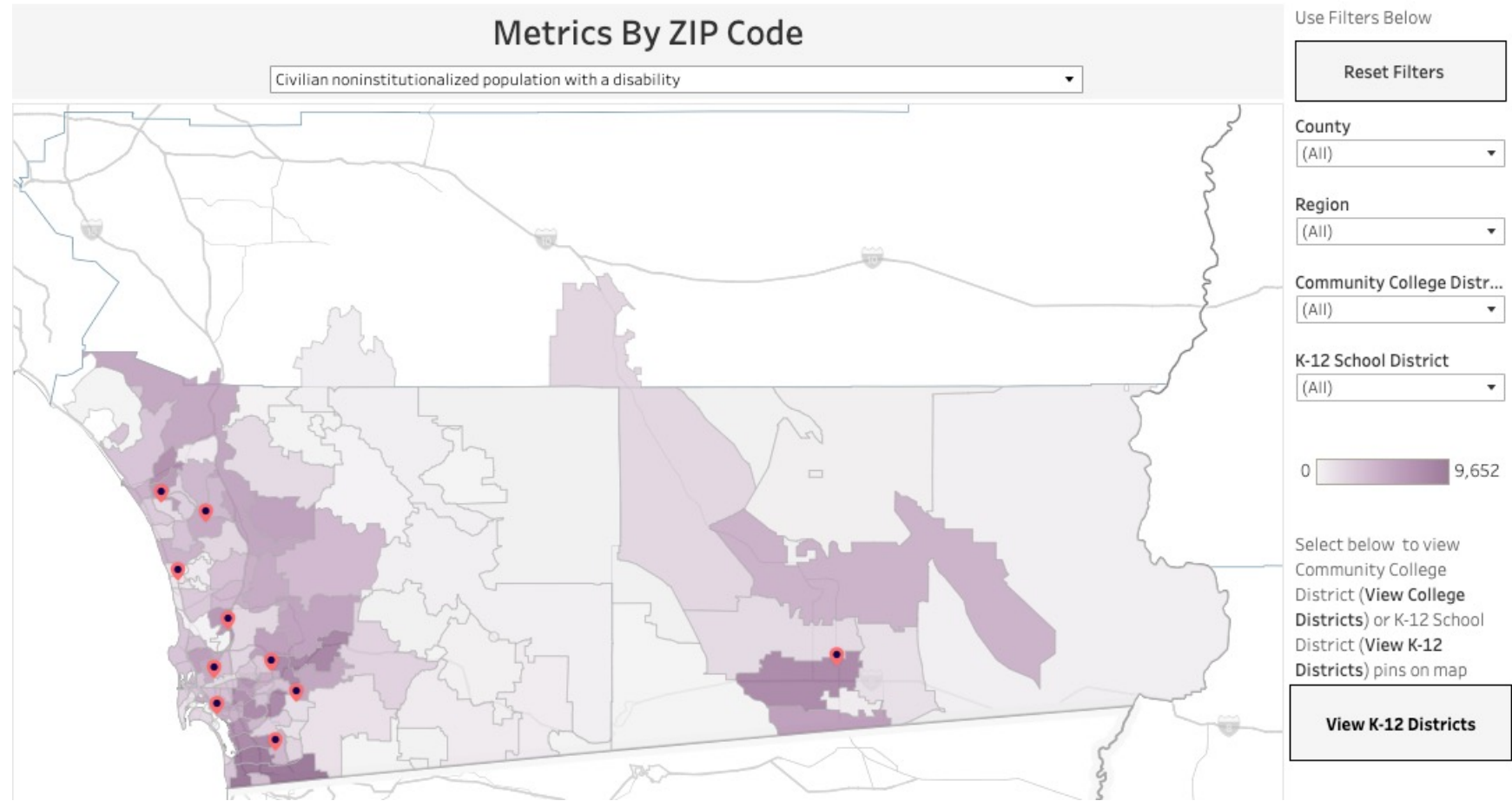


# Geographic Distribution of Demographic Need San Diego-Imperial

## EDD-COE GEOGRAPHIC DISTRIBUTION OF DEMOGRAPHIC NEED



Metrics by ZIP Code	Analysis of Need	About this Tool	Definitions and Source
---------------------	------------------	-----------------	------------------------



# Geographic Distribution of Demographic Need San Diego-Imperial

Metrics by ZIP Code

Analysis of Need

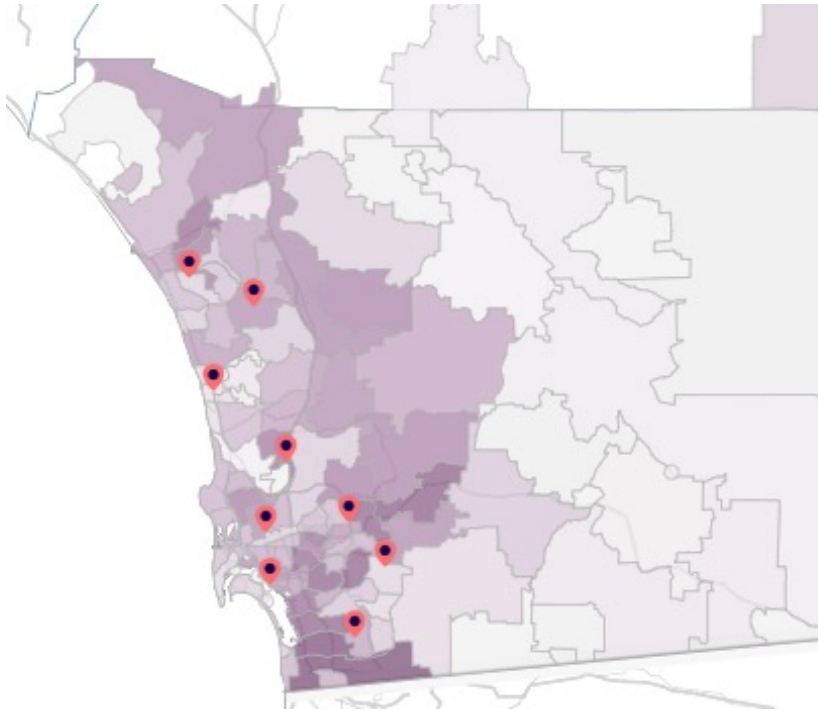
About this Tool

Definitions and Source

Civilian noninstitutionalized population with a disability  
Civilian noninstitutionalized population with a disability

Rank	ZIP Code	Region	Total	Percent
1.	92154	South	9,652	11.8%
2.	91911	South	9,350	11.1%
3.	92021	East	8,315	11.8%
4.	91977	East	8,014	12.8%
5.	91910	South	7,927	10.9%
6.	92114	Central	7,817	11.3%
7.	92243	Imperial County	7,810	15.9%
8.	92020	East	7,725	13.4%
9.	92105	Central	7,398	10.2%
10.	92057	North	7,265	12.7%
11.	91950	South	7,126	12.4%
12.	92126	Central	6,430	8.1%
13.	92056	North	6,231	11.8%
14.	92115	Central	6,106	9.4%

# WHERE ARE RECIPIENTS LOCATED?



## Example:

**We plan to serve individuals with disabilities in the top five zip codes.**

Rank	ZIP Code	Region	Civilian noninstitutionalized population with a disability	
			Total	Percent
1.	92154	South	9,652	11.8%
2.	91911	South	9,350	11.1%
3.	92021	East	8,315	11.8%
4.	91977	East	8,014	12.8%
5.	91910	South	7,927	10.9%



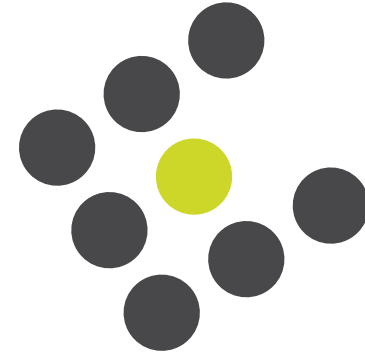
**DATA ARE UPDATED  
REGULARLY SO NOT  
ALL LMI WILL MATCH.  
SEE CITATIONS IN  
EACH RESOURCE.**



**C · O · E**

**CENTERS OF EXCELLENCE  
FOR LABOR MARKET RESEARCH**

**IN THE NEXT 10  
MINUTES...  
TYPE YOUR  
QUESTIONS IN  
THE CHAT**



**C · O · E**

**CENTERS OF EXCELLENCE  
FOR LABOR MARKET RESEARCH**

**SECTOR  
HANDOUTS  
& CAREER  
ED GUIDE**



**EDD-COE  
SECTOR  
MAP**



**SUB-  
REGIONAL  
PROFILES**



**EDD-COE  
GEO DIST  
OF NEED**



# SCENARIO 3

**After identifying in-demand jobs, you want to know...**

- 1) What (related) programs exist?**
- 2) What are the student outcomes for those programs?
  - 1) What % of students obtain a living wage?**
  - 2) What % of students get a job related to their field of study?****

# RESOURCES

- COE SOC-TOP-CIP Crosswalk
- Chancellor's Office LaunchBoard Community  
College Pipeline

# STEPS

- 1. Identify the SOC code or occupation to be trained**
2. Find the related TOP code in the SOC-TOP-CIP crosswalk
3. Review student outcomes data in the Chancellor's Office LaunchBoard Community College Pipeline

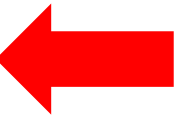
# COE SPECIAL REPORTS PAGE



FEATURED REPORT

**Pandemic-Resilient Jobs in San Diego County**

FULL REPORT



LABOR MARKET INFORMATION ▾

About the COE

Labor Market Briefs

Reports



[myworkforceconnection.org/labor-market-information/reports](https://myworkforceconnection.org/labor-market-information/reports)

# RESILIENT JOBS

Top Jobs During the Great Recession and COVID-19 Pandemic

August 2020  
San Diego County



# PANDEMIC-RESILIENT JOBS

*An update to the Resilient Jobs study released in August 2020*

March 2021  
San Diego County





## Great Recession (2007-2009)

Recession-  
Resilient Jobs

**TRADITIONAL LMI**

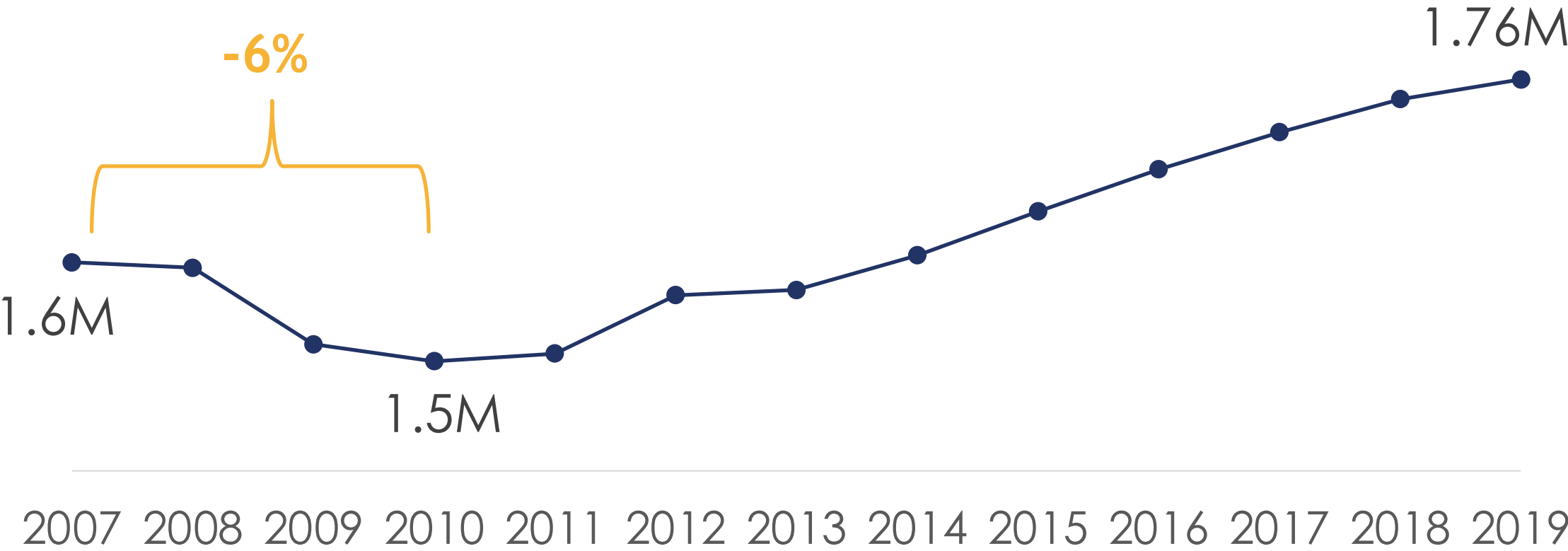
## COVID-19 (Mar-June 2020)

Pandemic-  
Resilient Jobs

**REAL-TIME LMI**

PERIODS OF ANALYSIS

# TOTAL JOBS IN SAN DIEGO COUNTY



# RECESSION-RESILIENT JOBS CRITERIA

---

- **Less than six percent employment decline between 2007 and 2010**
- **Labor market demand at or above the regional average  
(275 annual job openings)**
- **Median hourly earnings are at or above \$15.99\***

*\*This is considered the living wage for a single adult in San Diego County according to the CA Community Colleges Chancellor's Office (CCCCO)*

# RECESSION-RESILIENT JOBS CRITERIA

---

800 Occupational (SOC) Codes



64 Recession-Resilient Jobs  
(Appendix A)



36 Recession-Resilient, "Middle-Skill" Jobs  
(p. 5-6)

## Great Recession (2007-2009)

Recession-  
Resilient Jobs

**TRADITIONAL LMI**

## COVID-19 (Mar-June 2020)

Pandemic-  
Resilient Jobs

**REAL-TIME LMI**

PERIODS OF ANALYSIS

# PANDEMIC-RESILIENT JOBS DEFINITION

---

- **Top 50 jobs *per month* with the most number of online job postings between March 1 and June 30, 2020**
- **Occupations that made the top 50 jobs list *at least once* during this period was included in the exhibit**

**NOTE: The San Diego-Imperial COE is reluctant to produce reports based on online job postings data alone due to its limitations.**

## Exhibit 4: Occupations that Made the Monthly Top 50 Jobs List in San Diego County, March-June 2020

	Occupational Title	March 2020	April 2020	May 2020	June 2020	# of Months in the Top 50 Jobs
1.	Accountants and Auditors*	•	•	•	•	4
2.	Bookkeeping, Accounting, and Auditing Clerks	•	•	•	•	4
3.	Combined Food Preparation and Serving Workers, Including Fast Food	•	•	•	•	4
4.	Computer Occupations, All Other*	•	•	•	•	4
5.	Computer Systems Analysts*	•	•	•	•	4
6.	Computer User Support Specialists*	•	•	•	•	4
7.	Customer Service Representatives	•	•	•	•	4
8.	Engineering Technicians, Except Drafters, All Other	•	•	•	•	4
9.	Engineers, All Other	•	•	•	•	4
10.	Financial Managers*	•	•	•	•	4

\*also recession-resilient

# RESILIENT JOBS

Top Jobs During the Great Recession and COVID-19 Pandemic

August 2020  
San Diego County



# PANDEMIC-RESILIENT JOBS

*An update to the Resilient Jobs study released in August 2020*

March 2021  
San Diego County





# PANDEMIC-RESILIENT JOBS - UPDATE

---

- **370,000 online job postings analyzed over 10 months (Mar-Dec) to identify "pandemic-resilient jobs"**
- **74 pandemic-resilient jobs (Aug 2020 study had 66 jobs)**
- **30 occupations consistently made the top 50 jobs list each month in the 10 months analyzed**
  - **Except 2 occupations, these occupations matched the top 30 pandemic-resilient jobs in the U.S.**

**Exhibit 1: Occupations that Made the Monthly Top 50 Jobs List in San Diego County, March - December 2020**

	Occupational Title	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	# of Months in the Top 50 Jobs
1.	Accountants and Auditors*	•	•	•	•	•	•	•	•	•	•	10
2.	Bookkeeping, Accounting, and Auditing Clerks	•	•	•	•	•	•	•	•	•	•	10
3.	Combined Food Preparation and Serving Workers, Including Fast Food	•	•	•	•	•	•	•	•	•	•	10
4.	Computer Occupations, All Other*	•	•	•	•	•	•	•	•	•	•	10
5.	Computer User Support Specialists*	•	•	•	•	•	•	•	•	•	•	10
6.	Customer Service Representatives	•	•	•	•	•	•	•	•	•	•	10
7.	Engineering Technicians, Except Drafters, All Other	•	•	•	•	•	•	•	•	•	•	10
8.	Financial Managers*	•	•	•	•	•	•	•	•	•	•	10
9.	First-Line Supervisors of Retail Sales Workers	•	•	•	•	•	•	•	•	•	•	10
10.	General and Operations Managers*	•	•	•	•	•	•	•	•	•	•	10
11.	Heavy and Tractor-Trailer Truck Drivers	•	•	•	•	•	•	•	•	•	•	10
12.	Human Resources Specialists	•	•	•	•	•	•	•	•	•	•	10
13.	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	•	•	•	•	•	•	•	•	•	•	10
14.	Laborers and Freight, Stock, and Material Movers, Hand	•	•	•	•	•	•	•	•	•	•	10
15.	Licensed Practical and Licensed Vocational Nurses*	•	•	•	•	•	•	•	•	•	•	10
16.	Maintenance and Repair Workers, General*	•	•	•	•	•	•	•	•	•	•	10
17.	Management Analysts*	•	•	•	•	•	•	•	•	•	•	10
18.	Managers, All Other*	•	•	•	•	•	•	•	•	•	•	10
19.	Marketing Managers	•	•	•	•	•	•	•	•	•	•	10
20.	Medical and Health Services Managers*	•	•	•	•	•	•	•	•	•	•	10

\*also recession-resilient in the August 2020 Resilient Jobs study

# ONETONLINE.ORG



## O\*NET OnLine

Occupation Quick Search:



[Help](#)

[Find Occupations](#)

[Advanced Search](#)

[Crosswalks](#)

[Share](#)

[O\\*NET Sites](#)



## Build your future with O\*NET OnLine.

**Welcome** to your tool for career exploration and job analysis!

O\*NET OnLine has detailed descriptions of the world of work for use by job seekers, workforce development and HR professionals, students, researchers, and more!

[What is O\\*NET?](#)

### What's New?

Updated military information included in O\*NET websites



[Learn More](#)



Get O\*NET news by [email](#) or [RSS](#).

### I want to be a...

Start the career you've dreamed about, or find one you never imagined.

[Find It Now](#)

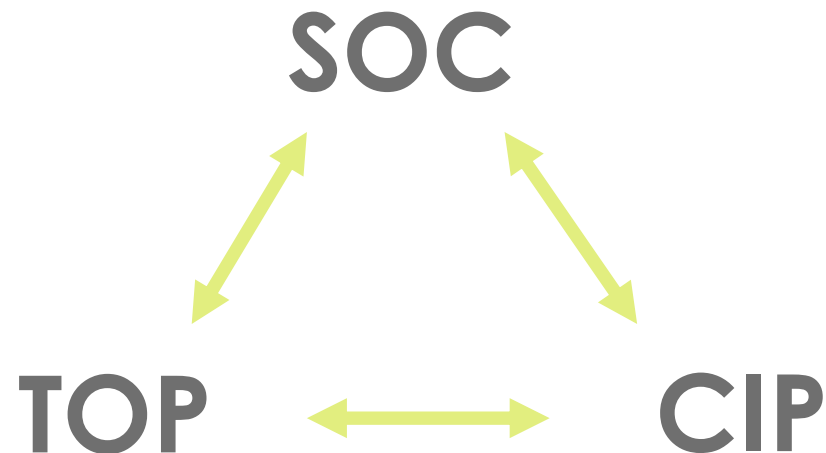
at My Next Move

# STEPS

1. Identify the SOC code or occupation to be trained
- 2. Find the related TOP code in the SOC-TOP-CIP crosswalk**
3. Review student outcomes data in the Chancellor's Office LaunchBoard Community College Pipeline

# SOC-TOP-CIP CROSSWALK

- **SOC code = occupational code**
- **TOP code = CA-community-college program code**
- **CIP code = non-CA-CC program code**





# COE

CENTERS OF EXCELLENCE  
FOR LABOR MARKET RESEARCH

[SEARCH](#)

[STUDIES BY REGION](#)

[ABOUT US](#)

[CONTACT US](#)

## TOOLS FOR YOU



### [Supply and Demand Tables](#)

The COE have developed a suite of data tools to support the community college's decision-making with labor market data. Utilize these data tools to evaluate projected occupational demand and the supply of graduates from a program(s) of study.



### [TOP-SOC Crosswalk](#)

Match California Community College TOP code programs to Standard Occupational Classification (SOC) codes and titles.



### [LMI Guides](#)

A brief overview of LMI sources, tailored to the questions that colleges commonly ask related to developing programs, curriculum, writing grants, program review, and regional planning.

Home Insert Draw Page Layout Formulas Data Review View Acrobat Tell me

Share Comments

Paste Paste

Calibri (Body) 10 A<sup>^</sup> A<sub>v</sub>

B I U

Number

Conditional Formatting Format as Table Cell Styles

Cells Editing Analyze Data Sensitivity

B11 fx 0102-

	A	B	C	D	E	F	G	H
1	CTE	top4	top6	TOP6_Title	cip2010	CIP2010_Title	soc2010	SOC2010_Title
2	yes	0101-	010100	Agriculture Technology and Sciences, General	010000	Agriculture, General.	194011	Agricultural and Food Science Technicians
3	yes	0101-	010100	Agriculture Technology and Sciences, General	010000	Agriculture, General.	191012	Food Scientists and Technologists
4	yes	0102-	010200	Animal Science	010302	Animal/Livestock Husbandry and Production.	452021	Animal Breeders
5	yes	0102-	010200	Animal Science	010302	Animal/Livestock Husbandry and Production.	119013	Farmers, Ranchers, and Other Agricultural Managers
6	yes	0102-	010200	Animal Science	010302	Animal/Livestock Husbandry and Production.	451011	First-Line Supervisors of Farming, Fishing, and Forestry Workers
7	yes	0102-	010210	Veterinary Technician (Licensed)	510808	Veterinary/Animal Health Technology/Technician and Vete	292056	Veterinary Technologists and Technicians
8	yes	0102-	010220	Artificial Inseminator (Licensed)	510808	Veterinary/Animal Health Technology/Technician and Vete	452021	Animal Breeders
9	yes	0102-	010230	Dairy Science	010306	Dairy Husbandry and Production.	452021	Animal Breeders
10	yes	0102-	010230	Dairy Science	010306	Dairy Husbandry and Production.	119013	Farmers, Ranchers, and Other Agricultural Managers
11	yes	0102-	010230	Dairy Science	010306	Dairy Husbandry and Production.	451011	First-Line Supervisors of Farming, Fishing, and Forestry Workers
12	yes	0102-	010240	Equine Science	010307	Horse Husbandry/Equine Science and Management.	452021	Animal Breeders
13	yes	0102-	010240	Equine Science	010307	Horse Husbandry/Equine Science and Management.	392011	Animal Trainers
14	yes	0102-	010240	Plant Science	010304	Crop Production.	373012	Pesticide Handlers, Sprayers, and Applicators, Vegetation
15	yes	0103-	010300	Plant Science	010304	Crop Production.	119013	Farmers, Ranchers, and Other Agricultural Managers
16	yes	0103-	010300	Plant Science	010304	Crop Production.	451011	First-Line Supervisors of Farming, Fishing, and Forestry Workers
17	yes	0103-	010310	Agricultural Pest Control Adviser and Operator (Licensed)	010399	Agricultural Production Operations, Other.	451011	First-Line Supervisors of Farming, Fishing, and Forestry Workers
18	yes	0103-	010310	Agricultural Pest Control Adviser and Operator (Licensed)	010399	Agricultural Production Operations, Other.	373012	Pesticide Handlers, Sprayers, and Applicators, Vegetation
19	yes	0104-	010400	Viticulture, Enology, and Wine Business	010309	Viticulture and Enology.	194011	Agricultural and Food Science Technicians
20	yes	0104-	010400	Viticulture, Enology, and Wine Business	010309	Viticulture and Enology.	119013	Farmers, Ranchers, and Other Agricultural Managers
21	yes	0104-	010400	Viticulture, Enology, and Wine Business	010309	Viticulture and Enology.	451011	First-Line Supervisors of Farming, Fishing, and Forestry Workers
22	yes	0104-	010400	Viticulture, Enology, and Wine Business	010309	Viticulture and Enology.	191012	Food Scientists and Technologists
23	yes	0109-	010900	Horticulture	010601	Applied Horticulture/Horticulture Operations, General.	119013	Farmers, Ranchers, and Other Agricultural Managers
24	yes	0109-	010900	Horticulture	010601	Applied Horticulture/Horticulture Operations, General.	371012	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers
25	yes	0109-	010910	Landscape Design and Maintenance	010605	Landscaping and Groundskeeping.	371012	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers
26	yes	0109-	010910	Landscape Design and Maintenance	010605	Landscaping and Groundskeeping.	373012	Pesticide Handlers, Sprayers, and Applicators, Vegetation
27	yes	0109-	010920	Floriculture /Floristry	010608	Floriculture/Floristry Operations and Management.	271023	Floral Designers
28	yes	0109-	010930	Nursery Technology	010606	Plant Nursery Operations and Management.	119013	Farmers, Ranchers, and Other Agricultural Managers
29	yes	0109-	010930	Nursery Technology	010606	Plant Nursery Operations and Management.	371012	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers
30	yes	0109-	010930	Nursery Technology	010606	Plant Nursery Operations and Management.	373012	Pesticide Handlers, Sprayers, and Applicators, Vegetation

# STEPS

1. Identify the SOC code or occupation to be trained
2. Find the related TOP code in the SOC-TOP-CIP crosswalk
- 3. Review student outcomes data in the Chancellor's Office LaunchBoard Community College Pipeline**



# Community College Pipeline: Overview

Interested in how the data is calculated?  
See the Metric Definition Dictionary

**Credit Status**  
All: Students who took either cre... ▼

Statewide  Macroregion  Microregion  
 District  College

Statewide ▼

**Program or Sector**  
All Programs ▼

**Academic Year**  
2018-2019 ▼

**VIEW**

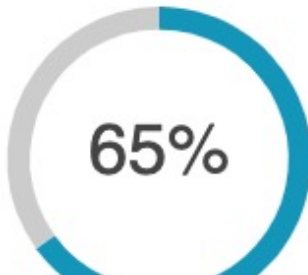
[Export Data to CSV](#)

⊕ DETAILED DATA COMPARISON

**2,008,787**  
Students Enrolled

**Offerings**  
Learn about the number of sections, enrollments, and headcount.


Economically Disadvantaged



**65%**

**Students**  
Explore student characteristics including demographics, financial aid, and course-taking patterns.

Retained Fall to Spring at Any College: 71%



**Milestones**  
Examine course success, unit loads, retention, and transfer-level course completion.

Statewide  Macroregion  Microregion

District  College

San Diego/Imperial Counties

Program or Sector

Welding Technology (095650)

Academic Year

2018-2019

VIEW

[Export Data to CSV](#)

[DETAILED DATA COMPARISON](#)

[Home](#)

[Summary](#)

[Detailed Data](#)

In your region, other colleges are offering similar topics. A total of

**753**

students took courses at 3 different colleges.

Palomar College

355

San Diego Adult

242

Imperial Valley College

156

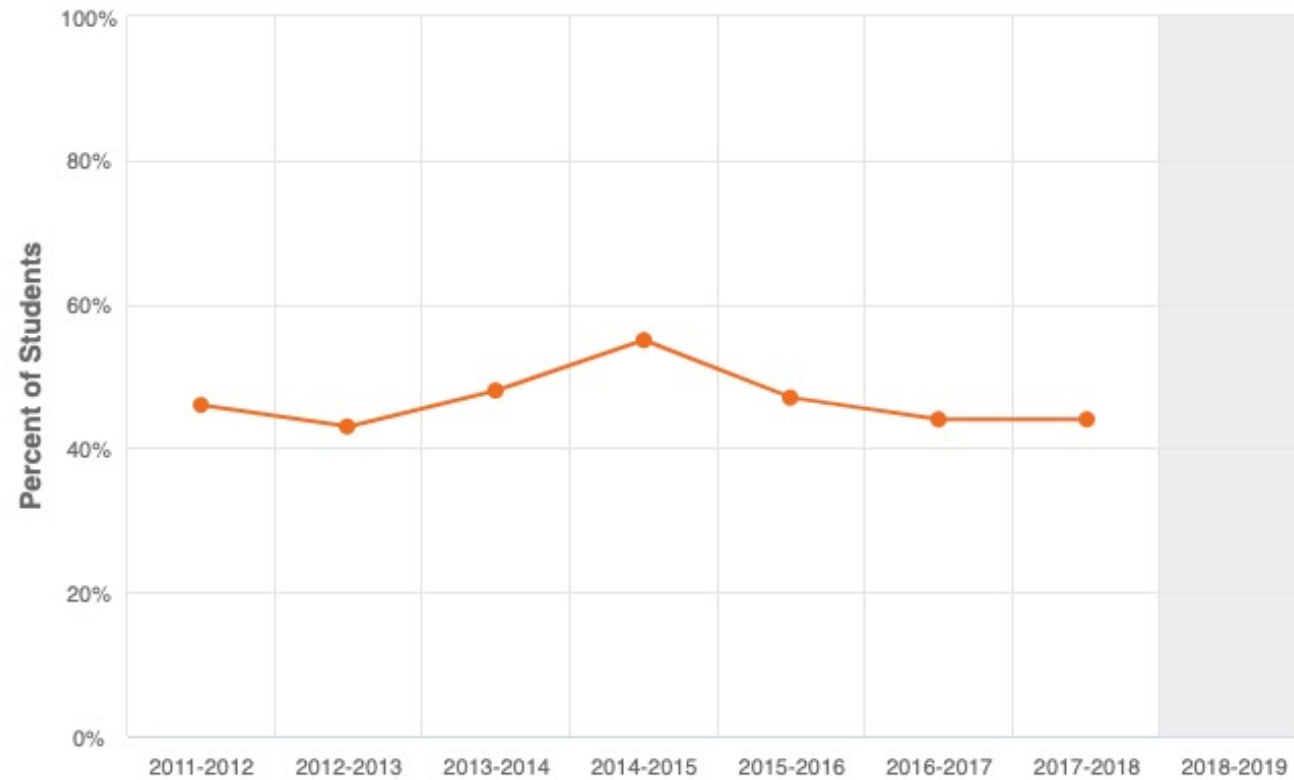
## Attained the Living Wage

Among students who exited college and did not transfer to any postsecondary institution, the proportion who attained the district county living wage for a single adult measured immediately following academic year of exit

● San Diego/Imperial Counties, Welding Technology (095650), 2018-2019

DRILL DOWN

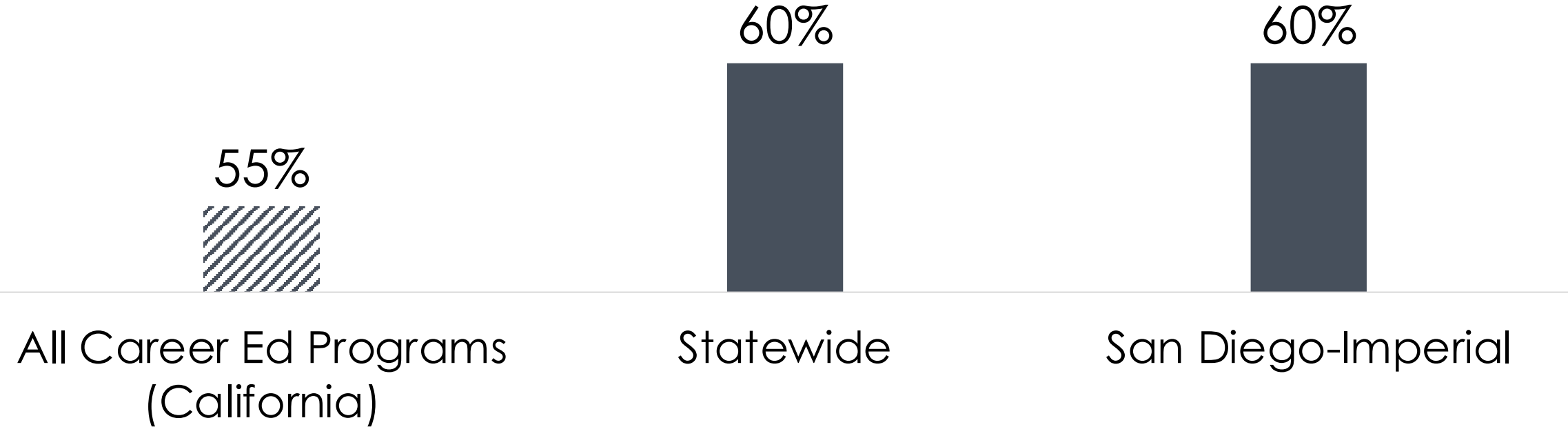
Time Trend ▼



*Source: Chancellor's Office Management Information System, Employment Development Department Unemployment Insurance Dataset, National Student Clearinghouse, CSU/UC Match, Insight Center for Community Economic Development*

# WHAT % OF STUDENTS EARNED A LIVING WAGE?

Real Estate (0511.00), PY2017-2018



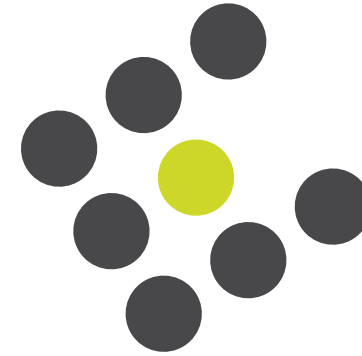
**IN THE NEXT 10  
MINUTES...  
TYPE YOUR  
QUESTIONS IN  
THE CHAT**



**C·O·E**

**CENTERS OF EXCELLENCE  
FOR LABOR MARKET RESEARCH**

WHAT OTHER  
SCENARIOS DO  
YOU  
ENCOUNTER?  
SHARE IN THE  
CHAT



C·O·E

CENTERS OF EXCELLENCE  
FOR LABOR MARKET RESEARCH

**COE  
SOC-TOP-CIP  
CROSSWALK**



**LAUNCHBOARD:  
COMMUNITY  
COLLEGE PIPELINE**





## **STRONG WORKFORCE FACULTY INSTITUTE: RETHINKING THE STUDENT EXPERIENCE FOR RETENTION AND SUCCESS**

This page is a resource for participants of the Strong Workforce Faculty Institute—a professional learning opportunity for faculty in the San Diego and Imperial Counties Community Colleges.

The goals of the Faculty Institute are to:

- Foster strong collaboration and engagement among faculty, researchers, and deans
- Encourage self-reflection, inquiry, and research-based decision-making
- Inspire teaching and learning from a culturally inclusive perspective

Faculty Institute participants are expected to attend two professional learning events and complete an online form, which has two parts:

- Investigative research and reflection (Sections I through IV)
- An action plan to implement ideas in the classroom (Section V)

### **EDUCATOR RESOURCES** ▾

[K-12 to CC Program Finder](#)

[Counselor Resources](#)

[Counselor Conference](#)

[K14 Professional Development](#)

[MS/HS Engagement](#)

[Career Education Guide](#)

[Faculty Institute](#)





# ADD-ON TRAINING SESSIONS

In partnership with the **San Diego-Imperial Center of Excellence for Labor Market Research (COE)**, the Regional Consortium also offered the following add-on training sessions for Faculty Institute participants:

## Labor Market Information (LMI) Training

Day 1: Introduction to LMI

- **Presentation Slides**
- **Webinar Recording**

Day 2: Overview of LMI Tools and Resources

- **Presentation Slides**
- **Webinar Recording**
- **LMI Resource Sheet**

Day 3: Application of LMI Tools and Resources

- **Presentation Slides**
- **Webinar Recording**

# THANK YOU TO OUR TEAM!

**Robert Chu**

**John Edwards**

**Priscilla Fernandez**

**Tina Ngo Bartel**

**Heather Cavazos**

**Monica Rosas**

**Christopher Yerkes**

**Sarah Burns**



# CHECK YOUR CALENDAR FOR REFLECTION SESSIONS TOMORROW AT 2 P.M.

- **If you have difficulty accessing the Zoom links...**
  - **Counseling faculty, contact Monica Rosas at [monica.rosas@gccd.edu](mailto:monica.rosas@gccd.edu)**
  - **Instructional faculty, contact Robert Chu at [rchu@miracosta.edu](mailto:rchu@miracosta.edu)**