Regional Strong Workforce Program (SWP) Mid-Year Meeting

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CENTERS OF EXCELLENCE
Inform Connect Advance

CALIFORNIA COMMUNITY COLLEGES
Doing What MATTERS™
FOR JOBS AND ECONOMY

Developing an Approach

Sector Profiles

Developed by Key Talent

Key Talent Leverage Regional Partners

Other Regional Reports, Online Tools

Data Driven Decision Making

Identify Key Findings in Profiles

Steering Committee, CTE Leadership, Faculty

Sector Focus Groups

Discuss Key Findings and Identify Next Steps

Faculty, Steering Committee, CTE Leadership

Regional Planning

Informs the Development of the 2020 Regional Plan

Additional Reports, Online Tools

SECTOR & COLLEGES	TOPICS DISCUSSED	SUGGESTED RECOMMENDATIONS
Life Sciences & Biotech • MiraCosta • Miramar • Southwestern	**Large demand, small supply:** Biotechnology and Biomedical Technology (TOP 043000) provides only 51 awards… **Enrollment numbers are low for existing programs:** While there is high labor market demand, few students enroll in existing Biotechnology… **Employers are filling the gap with candidates who have bachelor's degrees or higher:** This leads to high employee turnover once an overqualified individual gets his/her "foot through the door" and move on to higher positions. **Developing programs south of Interstate 8 (I-8) was challenging:** Southwestern College developed a biotechnology program in the past, but students did not want to commute north of the I-8… **There is no program in the region for Chemical Technology (095400):** 095400 can train for three LS & Biotech middle-skill jobs. The aggregate labor market demand for these three occupations is 123 annual job openings between 2017 and 2022. **Outcomes from Medical Laboratory Technology (120500) are not linked to the Life Sciences & Biotech sector:** 120500 is a Health Care TOP code at the state level, but Miramar's program is more closely related to the Life Sciences & Biotech sector.	**As a region,** we should: • Conduct a marketing campaign that: • Encourage students across the region to enroll in existing programs if they are interested in the sector **MiraCosta, Miramar, Southwestern and other colleges interested in creating a program** should: •Set a goal to reach specific enrollment numbers •Dedicate funding to market their biotechnology programs to job •seekers and high school students in their local area •Work with the LS & Biotech DSN to set a goal and increase the number of internships, placements and work-based learning opportunities with employers •Align curricula across colleges: Biomanufacturing associate degree programs can funnel into MiraCosta's biomanufacturing bachelor's degree program. However, curricula must first align to meet the bachelor's degree program's prerequisites

TOPICS DISCUSSED	SUGGESTED RECOMMENDATIONS
Virtually all top middle-skill jobs across the Priority & Emerging (P&E) Sectors have supply gaps in San Diego County.	• Increase program supply using sector strategies
It is unclear if programs are training exactly for what employers are looking for: We do not know who sits on the CTE advisory groups; we do not know the makeup of employers and/or industries on the advisory groups.	•Create an inventory of the skills and third-party credentials taught at each college across credit, noncredit and not-for-credit (fee-based) programs •Create an inventory of CTE programs and their advisory groups to confirm that a representative sample of employers across the region are providing feedback on curriculum
Several programs do not report their outcomes (supply) data to the Chancellor's Office, so their awards are not included in the demand and supply analysis: •Not-for-credit (fee-based) programs •Some noncredit programs •Adult Education •Apprenticeship programs •External/nonprofit training providers	•Develop a standardized way to track not-for-credit program outcomes at each college: If the colleges do not have a standardize method of tracking not-for-credit programs, then they will continue to not be included in the gap analysis. •Create a list of fee-based, not-for-credit programs, adult education programs, apprenticeships, and nonprofit programs: If we do not have outcomes data for these programs, then we should, at minimum, include a list of these programs in our analyses to illustrate how many programs are available.
Low retention is an issue for all P&E Sectors, except Health Care.	•Design programs to meet the needs of underrepresented students: Instructors, counselors and staff should be required to train for cultural competency. •Provide "train-the-trainer" or "how to teach" professional development: Faculty may be industry experts but not have pedagogical training, or faculty may need a refresher on how to best teach CTE-specific subjects.
There are issues in the data reporting for certificates and degrees (awards). The Center of Excellence marked the names of colleges that have program awards reported in MIS Data Mart (as of Feb 2018) but not in LaunchBoard, and vice versa in the demand and supply tables for each sector.	•Prioritize data quality and Code Alignment for our programs: If programs are coded incorrectly, then the demand and supply analysis does not show an accurate picture of labor gaps •Review the markings in the demand and supply tables and check for accuracy with internal reports

OCCUPATIONAL TITLE	AVERAGE ANNUAL OPENINGS (2017-22)	SUPPLY GAP/ OVERSUPPLY	AVERAGE ANNUAL AWARDS (2015-17)	TOP6 TITLE	TOP6 OR CIP	COLLEGE	COLLEGE SUPPLY (3-YR AVG)
Software Developers, Applications	875	Supply Gap	40	Electronic Game Design	061420	Already accounted for	0
				Computer Software Development	070700	Already accounted for	0
				Software Applications	070210	Grossmont+	2
						MiraCosta	10
						San Diego Continuing Ed+	6
						San Diego City+	0
						San Diego Miramar	2
						Southwestern	1
						Palomar*	0
				Computer Software and Media Applications, Other	CIP 11.0899	Non-community college provider	19
				Computer Programming	070710	Already accounted for	0
Software Developers, Systems Software	667	Supply Gap	20	Computer Software Development	070700	Palomar	20
						San Diego Mesa*	0
						Southwestern*	0
						San Diego City*	0
						MiraCosta*	0
				Computer Programming	070710	Already accounted for	0

ENVIRONMENTAL CONTROL TECHNOLOGY (HVAC)

OCCUPATIONS:

Heating, Air Conditioning, and Refrigeration Mechanics and Installers

488

Sheet Metal Workers

220

2016–19 Average Annual Openings

SUPPLY/DEMAND FOR SELECTED OCCUPATIONS, 2011–19:

Desert Region Course Enrollments: 1,303 · 1,184 · 1,158 · 1,180 · 1,158 · 1,124

923 · 851 · 734 · 654 · 486 · 410 · 708

Demand (Annual Job Openings)

Supply (Number of Students Who Earned an Award): 80 · 66 · 54 · 69 · 79 · 69

2011 · 2012 · 2013 · 2014 · 2015 · 2016 → 2019
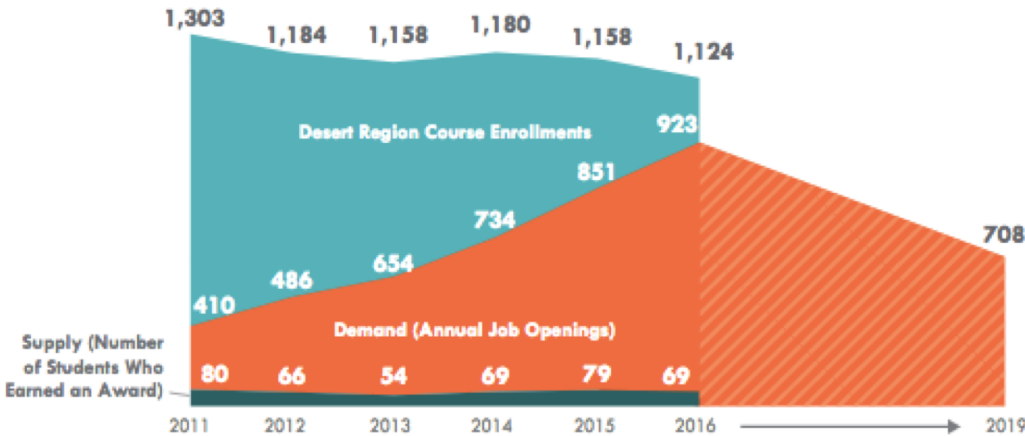
EMPLOYMENT OUTCOMES FOR ALL PROGRAM EXITERS, 2014–15:

Region	vs	CA
51%	Earning a living wage	65%
66%	Employed within six months	75%
32%	Median change in earnings	41%
$24,293	Median annual earnings	$35,146

REGIONAL COLLEGES OFFERING RELEVANT PROGRAMS:

Programs Offered in 2017–18 Course Catalog	Desert	Riverside City	San Bernadino Valley		
2015–16 Awards	3 17	3 27	4 16	Associate Program offered	
2015–16 Course Enrollments	420	381	275	Certificate Program offered	
Transfers to Four-Year Institutions 2014–15	0	0	0	Victor Valley	48 Enrollments 0 Transfers

The Sacramento Advanced Manufacturing sector

The Sacramento region has more than **2,700** manufacturing companies

0   500   1000   1500   2000   2500

Most manufacturing companies are **small businesses**.
In the Sacramento region:

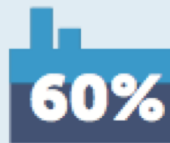**50%** have < 5 employees

94% have < 50 employees

Source: InfoGroup, Reference USA, 2018

Hiring challenges in the Advanced Manufacturing sector

Numerous reports note that U.S. manufacturing employers have enormous **challenges recruiting and hiring skilled workers.**

60%

of manufacturing employers nationwide said they have **moderate or extreme difficulty** recruiting skilled workers for advanced technology operations.

Source: PwC and Manufacturing Institute, "Upskilling Manufacturing," June 2016

Hardest-to-fill positions in the Sacramento region in the last year

Job Title
Production workers
Manufacturing machine operators
Electrical and mechanical engineers
Field service technicians
Maintenance and repair workers
Project managers
Software developers and engineers
Bookkeeping
Business management/analysts
Sales and account reps
Forklift operators
Customer service reps
Truck drivers

Source: Burning Glass, Labor Insight, 2018.4

A 2014 employer survey by Accenture revealed that 80% of U.S. manufacturing jobs are skilled or highly skilled

Unskilled **20%**

Skilled **45%**

Highly Skilled **35%**
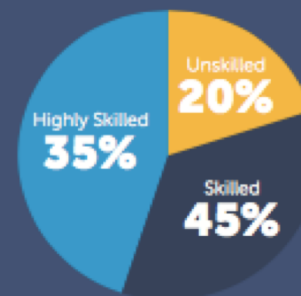
Source: Accenture 2014 Manufacturing Skills and Training Study

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Discussion Topics

1. Sector Profiles
    - Other Regional Reports or Resources

2. Data Driven Decision Making
    - Stakeholder Involvement

3. Sector Focus Groups
    - Stakeholder Involvement

4. Regional Planning
    -Additional Reports, Resources, Tools Needed

Thank You!

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