

# **APPENDIX A- Labor Market Information**

## **Introduction to Comprehensive Local Needs Assessment & In-Demand Industry Sectors**

### **Introduction**

The Strengthening Career and Technical Education for the 21st Century Act (Perkins V) was signed into law by President Trump on July 31, 2018. This bipartisan measure reauthorized the Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV) and continued Congress' commitment in providing nearly \$1.3 billion annually for career education (CE) programs for the nation's youth and adults.

Perkins V, Title I-C Basic Grant funding is allocated by formula to each District by the California Community Colleges, Chancellor's Office (CCCCO) and requires involvement by a diverse body of stakeholders who then inform a required comprehensive local need assessment (CLNA) and a 4-year application narrative. Individual Colleges within each district then create a 1-year focused application that is entered into NOVA (an online application system provided by CCCCCO) along with the CLNA and referenced narratives.

Section 134 of Perkins V requires eligible applicants to conduct a comprehensive local needs assessment related to career education, and include the results of the assessment in the local application. The assessment must be updated every two years. The CLNA review encompasses the following three concepts: 1) That CE programs funded with Perkins V allocations are of sufficient in size, scope, and quality to meet the needs of all students served; and aligned to State, regional, or local in-demand industry sectors or occupations identified by the State workforce development board or local workforce development board; and designed to meet local education or economic needs not identified by State boards or local workforce development boards; 2) That local performance accountability data as established by Perkin V §113 is reviewed for student performance gaps for a variety of subgroups and for special populations as defined in the Act; and 3) assess processes in place for a variety of required Perkins V concepts to determine gaps to student success from secondary to postsecondary to employment with multiple entry and exit points.

### **Stakeholder Consultation**

As specified within the introduction, in order to receive Perkins V, Title I-C Basic Grant funding, each District must involve a diverse body of stakeholders with a minimum of participants as specified in §134(d). Those participants are then given a training on Perkins V requirements in general and their role as stakeholders specifically in informing the CLNA and the 4-year application narrative as specified in §134(b) and their role in continued consultation as specified in §134(e).

### ***Convening the Stakeholder/Consultation Group §134(d)***

Utilizing the internal and external network for partners within South Orange County Community College District (SOCCCD), recruitment for the consultation group began in late 2019. After review of the required members, invitations were made through constituent groups at both campuses and the district office with special consideration given to those who have roles related to the growth and success of CE programs. Internal district and college invites included CE faculty and support staff, representatives from Counseling and Administration as well as individuals representing special populations. Information was disseminated at the CE committees at both Saddleback College and Irvine Valley College. To recruit external CE partners, invitations were provided to our local K12 partners, intermediary agencies, industry representatives and local workforce boards. Existing relationships were leveraged to recruit partners that have an understanding of career education training and the importance of strengthening career technical education programs.

Additionally, SOCCCD has been undergoing districtwide planning with updating of strategic goals whereby many members of this consultation group participated in that process.

### ***Consultation Members Listing***

<b>Representing</b>	<b>Name</b>	<b>Title/Company</b>	<b>E-mail</b>
<b>Secondary Principal</b>	Will Nedderson	Principal, Tustin USD	wneddersen@tustin.k12.ca.us
	Jennifer Harrison	Principal, Tustin USD	jharrison@tustin.k12.ca.us
<b>Secondary Leader</b>	Alita Salazar	Career Education Coordinator, Orange County Department of Education	amsalazar@ocde.us
	Anthony Russomanno	Director, Counseling Futurology, Capistrano Unified School District	ajrussomanno@capousd.org
	Kelly Shearer	Counseling Coordinator, Laguna Beach USD	kshearer@lbusd.org
	Samira Yaganeh	Counseling Coordinator, Saddleback Valley USD	samira.yaganeh@svusd.org
<b>Secondary Teacher</b>	David Ricci*	Teacher, Capistrano Valley High School	zzzDARICCI@capousd.org
<b>District/College</b>	David Yang	Assistant Director of Fiscal Services, SOCCCD	dyang@socccd.edu
	Denice Inciong	Director, Research & Planning, South Orange CCD	dinciong@socccd.edu

<b>Representing</b>	<b>Name</b>	<b>Title/Company</b>	<b>E-mail</b>
<b>District/College</b> <i>(Continued)</i>	Israel Dominguez	Director, EWD, Saddleback College	idominguez@saddleback.edu
	Loris Fagioli	Director of Research, Planning and Accreditation, Irvine Valley College	lfagioli@ivc.edu
	Medhanie Ephrem	Executive Director of Facilities & Planning, SOCCCD	mephrem@socccd.edu
	Nicole Ortega	Research & Planning Analyst, SOCCCD	Nortega@socccd.edu
	Roopa Mathur	Dean, EWD, Irvine Valley College	rmathur0@ivc.edu
	Victor Negrete	Executive Director of Public Private Partnership Development, SOCCCD	vnegrete@socccd.edu
<b>CE Counselors</b>	Rita Soultanian	Director, Career Center, Saddleback College	rsoultanian@saddleback.edu
<b>Academic Counselors</b>	Penny Skaff	Dean, Counseling, Saddleback College	pskaff@saddleback.edu
<b>CE Administrators</b>	Anthony Teng	Dean, Advanced Technology & Applied Science, Saddleback College	ateng@saddleback.edu
	Debbie Vanschoelandt	Dean of Career and Continuing Education, Irvine Valley College	dvanschoelandt@ivc.edu
	Dee Oliveri	Assistant Dean, Nursing, Saddleback College	doliveri@saddleback.edu
	Joseph Poshek	Dean of The Arts, Library and Online Education, Irvine Valley College	JPOSHEK@IVC.EDU
	John Jaramillo	Dean, EWD & Business Science, Saddleback College	jjaramillo@saddleback.edu
	Kari Irwin	Assistant Dean, Career Education, Saddleback College	kirwin@saddleback.edu
	Tram Vo-Kumamoto	Vice President of Instruction, Saddleback College	tvokumamoto@saddleback.edu
<b>Specialized Instructional Support</b>	Bruce Beardsley	Grant Program Manager, Dual Enrollment, Saddleback College	Bbeardsley@saddleback.edu

<b>Representing</b>	<b>Name</b>	<b>Title/Company</b>	<b>E-mail</b>
<b>District/College</b> <i>(Continued)</i>			
<b>Paraprofessionals</b>	Emmanuel Smith	Grants Analyst, Saddleback College	esmith94@saddleback.edu
	Rachel Manders	Grants Analyst, Irvine Valley College	rmanders@ivc.edu
	Raj Dhillon	Senior Lab Technician, Automotive Technology, Saddleback College	rdhillon@saddleback.edu
	Tiffany Nguyen	Program Specialist, Irvine Valley College	tnguyen632@ivc.edu
	Tracy McConnell	Early College Credit Program Technician, Saddleback College	tmccConnell@saddleback.edu
	Vinh Nguyen	Senior Research and Planning Analyst, Irvine Valley College	vnguyen216@ivc.edu
<b>CE Faculty</b>	Barbara Tamialis	Child Development Faculty, Saddleback College	btamialis@saddleback.edu
	Farida Gabdrakhmanova	Interior Design Faculty, Saddleback College	fgabdrakhmanova@saddleback.edu
	Hency Chu	Medical Lab Technician Faculty, Saddleback College	hchu@saddleback.edu
	John Russo	Business Faculty, Irvine Valley College	jrusso@ivc.edu
	June McLaughlin	Business Faculty, Irvine Valley College	jmclaughlin@ivc.edu
	Karen Taylor	Graphic Design Faculty, Saddleback College	Ktaylor@saddleback.edu
	Ken Lee	Horticulture Faculty, Saddleback College	klee@saddleback.edu
	Lisa Inlow	Culinary Faculty, Saddleback College	linlow@saddleback.edu
	Mike Salviani	Computer Information Management Faculty, Irvine Valley College	msalviani@ivc.edu

<b>Representing</b>	<b>Name</b>	<b>Title/Company</b>	<b>E-mail</b>
<b>District/College</b> <i>(Continued)</i>	Morgan Barrows	Environmental Studies Faculty, Saddleback College	mbarrows@saddleback.edu
	Safiah Mamoon	Health IT Faculty, Saddleback College	smamoon@saddleback.edu
	Susan White	Medical Assisting Faculty, Saddleback College	swhite16@saddleback.edu
<b>Parents</b>	Mira Manchik	Senior Administrative Secretary, Saddleback College	mmanchik@saddleback.edu
<b>Students</b>	Will recruit from student life and Associated Student Government*		
<b>Representatives of Special Populations</b>	Kathy Johnson	President, Vital Link Orange County	Kathy@vitallinkoc.org
<b>Representative of Regional or Local WIOA</b>	Carma Lacy	Orange County Workforce Development Board	Carma.Lacy@occr.ocgov.com
	Maria Tomich	Rapid Response Coordinator One Stop WDB,	Maria.tomich@oconestop.com
<b>Business or Industry Partners</b>	Erin Leffler	Herbalife	erinl@herbalife.com
	Gustavo Chamorro	Orange County Director, LAOCRC	chamorro_gustavo@rscdd.edu
	Jesse Crete	Director, Center of Excellence	crete_jesse@rscdd.edu
	Scot McConnell	Herbalife	scotm@herbalife.com
<b>Representative of Regional or Local Out of School Youth</b>	Will recruit from Bridges to Foster Student Success (BRIDGES) Program*		
<b>Representative of Regional or Local Homeless Youth</b>	Will recruit from local county representatives*		
<b>Representative of At Risk Youth</b>	Will recruit from local county representatives*		
<b>Indian Tribes or Organizations if Applicable</b>	N/A		

\* Those advisory representatives that were unable to be recruited by Spring of 2020 will be recruited to join the consultation group for continued consolation in fiscal year 2020-21.

### *Training the Stakeholder Advisory/Consultation Group*

South Orange County CCD convened their required Perkins V consultation group for the first time on January 24, 2020. The meeting was held at The Hills Hotel in Laguna Hills and was facilitated by Robin Harrington, of Harrington Education Consulting. Ms. Harrington is a 30-year veteran with the California Community Colleges Chancellor's Office (26 of which were within the Career Education Unit working with Perkins funding).

The meeting contained a training component that consisted of the following two sections:

- Overview of Perkins V (purpose of the Act, integrating Perkins funding into existing statewide CE funding such as Strong Workforce and Guided Pathways, required objectives, accountability and allowable/non-allowable expenditures); and
- Overview of the Advisory/Consultation Committees purpose (comprehensive local needs assessment, informing the 4-year application narrative and continued consultation).

The second half of the meeting was broken out by round table discussion groups and each table assigned a facilitator/note taker. The conversation centered around gaps each stakeholder's saw within programs/programs of study from (secondary to postsecondary to employment). The participants were told that this could be anything from aligning curriculum with skills required by local employment, to identification of relevant standards, curriculum, industry recognized credentials, current technology and equipment, encouraging opportunities for work-based learning, and coordinating Perkins funding with other local resources, etc.

The last portion of the agenda was a report out by each round table specifying key themes within their discussions surrounding gaps. The Advisory/Consultation Committee was then informed of next steps and the meeting was adjourned.

The note pages by round table discussion were delivered to the consultant (while at the meeting and electronically for those that wished to type their notes). The consultant then analyzed the data and formatted the gaps into three documents: 1) A listing of all gaps in document form (per round table); 2) A table (see below) by topic with similar gaps combined; and 3) A document with all gaps listed under corresponding narrative sections within §134(b) and §134(c)(2) (B-E) in order to allow Advisory/Consultation Committee gaps to be reviewed with required narrative questions that assess process gaps for all required Perkins V objectives..

Challenges/Gaps	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6	Table 7	Table 8	Table 9
<p><b><i>LMI In-demand Industry Sectors</i></b></p> <ul style="list-style-type: none"> <li>• Need crossover charts showing which programs fall under the definition of in-demand and which do not.</li> <li>• Gap in understanding region needs and responding appropriately (using data driven decisions).</li> <li>• Gap in determining possible local in-demand industry sectors.</li> <li>• Review gaps in in-demand industry sectors that are not flourishing at the college due to facilities and commitment.</li> </ul>	✓			✓					✓
<p><b><i>Comprehensive Local Needs Assessment</i></b></p> <ul style="list-style-type: none"> <li>• Gap in Perkins CLNA being effective as previous comprehensive needs assessments have been completed for the college(s)/District.</li> </ul>	✓								
<p><b><i>Workforce Innovation and opportunities Act (WIOA)</i></b></p> <ul style="list-style-type: none"> <li>• Need a better process that encourages student backed with WIOA funding and services.</li> <li>• Need a better process that takes advantage of non-credit students that can be supported through WIOA.</li> </ul>	✓								
<p><b><i>Core Indicator/Other Data Systems</i></b></p> <ul style="list-style-type: none"> <li>• Review that all economically disadvantaged students are being appropriately accounted for (as it affects allocations).</li> <li>• Gaps in lack of student data systems, seamless information where all information about the student is in one places (to determine student gaps, at risk students, special accommodations).</li> <li>• Gaps in data systems for programs that have clinical affiliated agreements.</li> <li>• Gaps in training administrators and faulty in analyzing LMI, Perkins Core Indicators/Other current systems in order to determine symptom and root cause.</li> </ul>	✓				✓	✓	✓		

Challenges/Gaps	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6	Table 7	Table 8	Table 9
<p><b><i>Special Populations</i></b></p> <ul style="list-style-type: none"> <li>• Need to build a system to accurately analyze and account for special population students.</li> <li>• Gap in having a specific outreach coordinator that focuses on special populations.</li> <li>• Gap in having an specific coordinator for placing special populations student within jobs.</li> <li>• Gap in special population support (tutoring/lab assistants) during class (including all CE students).</li> </ul>	✓								
<p><b><i>Work-based Learning/Placement/Internships etc.</i></b></p> <ul style="list-style-type: none"> <li>• Gap in having an specific coordinator for placing special populations student within jobs.</li> <li>• Gap in process that results in CE student receiving work-based learning (job-placement, career talks, internships, career explorations) needs to be part of the system.</li> <li>• Gaps in providing site visits for students.</li> <li>• Gaps in internships and apprenticeships for HS students.</li> <li>• Gaps in internships for faculty.</li> </ul>	✓		✓	✓		✓		✓	✓
<p><b><i>Need to Embed/Expand/Make Systemic</i></b></p> <ul style="list-style-type: none"> <li>• Guided Pathways.</li> <li>• Digital Badging.</li> </ul>	✓					✓			✓
<p><b><i>Programs of Study</i></b></p> <ul style="list-style-type: none"> <li>• Multiple entry and exit points that incorporate credentialing -- need to tap into under-employed population that with up skilling can advance.</li> <li>• Should be funding programs/programs of study that offer a living wage (promoting self-sufficiency).</li> </ul>		✓		✓					



Challenges/Gaps	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6	Table 7	Table 8	Table 9
<p><b><i>Counseling/Outreach/Career Guidance</i></b></p> <ul style="list-style-type: none"> <li>• Gap in number of full-time counselors per ratio of students.</li> <li>• Gap in embedding training for all counselors in CE.</li> <li>• Gap in outreach &amp; marketing In-demand Industry Sectors.</li> <li>• Gap in outreach &amp; marketing for non-traditional programs.</li> <li>• Gap in outreach happening down to 5th grade.</li> <li>• Gap in placing career guidance within curriculum.</li> <li>• Gap in offering counseling during non-traditional hours.</li> <li>• Gap in using previous "successful graduates" for outreach.</li> <li>• Gap in developing curriculum in middle school for exploration of pathways.</li> <li>• Gaps in secondary HS career pathway days, summer career exploration camps.</li> </ul>	<p>✓ ✓</p>	<p>✓ ✓ ✓</p>	<p>✓  ✓ ✓ ✓</p>			<p>✓</p>		<p>✓  ✓  ✓ ✓</p>	<p>✓</p>
<p><b><i>Individualized funding for Students</i></b></p> <ul style="list-style-type: none"> <li>• Gaps in childcare funding.</li> <li>• Gaps in funding students for professional development.</li> <li>• Provide financial assistance to students needing materials and resources for CE programs.</li> <li>• Funding non-credit specialize skill classes.</li> </ul>			<p>✓ ✓</p>					<p>✓ ✓</p>	

Challenges/Gaps	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6	Table 7	Table 8	Table 9
<p><i>Collaboration/Coordination/Advisories</i></p> <ul style="list-style-type: none"> <li>• Gaps in making strong industry partnerships.</li> <li>• Gaps in cross-collaboration between CE programs.</li> <li>• Gap in coordinator between all funding sources and segments of education (K-12 to Community College/UC CSE/Career) is important minimize duplication.</li> <li>• Coordinate professional development in better ways to engage industry partners.</li> <li>• Coordination in funding working lunch/handouts.</li> <li>• Advisory Committees need to be set up in a way that need is established first, then the idea for curriculum follows.</li> </ul>			<ul style="list-style-type: none"> <li>✓</li> <li>✓</li> </ul>				<ul style="list-style-type: none"> <li>✓</li> <li>✓</li> <li>✓</li> </ul>	<ul style="list-style-type: none"> <li>✓</li> </ul>	<ul style="list-style-type: none"> <li>✓</li> <li>✓</li> <li>✓</li> </ul>
<p><i>Apprenticeship Programs</i></p> <ul style="list-style-type: none"> <li>• Gap in that there are no apprenticeship programs at Saddleback.</li> </ul>				<ul style="list-style-type: none"> <li>✓</li> </ul>					<ul style="list-style-type: none"> <li>✓</li> </ul>

## **Planning, Alignment & Coordination Workforce Innovation and Opportunity Act (WIOA)**

Both Perkins V and WIOA have common language around articulating the state's strategic vision and goals for preparing an educated and skilled workforce and the workforce development activities in the state plan (Perkins V Sec. 122(d), (WIOA Sec. 102(b)). Perkins V also indicates that the state plan should include a strategy for coordination across CE and the state's workforce development system to achieve this strategic vision (Perkins V Sec, 122(d)(3)). This means a strategy for joint planning, alignment, coordination and leveraging between the Districts and their local WIOA counterparts is required as part of Perkins V District funding.

The WIOA and Perkins Act originally were scheduled to be reauthorized by the Federal Government in tandem (allowing for the possibility of joint state plans). WIOA however was reauthorized in 2014 and Perkins IV continued to be extended for an additional four years until reauthorized in 2018 not allowing a joint option. Therefore, the possibility of joint planning (combining funding sources) will be an option in the 6th year of Perkins V when WIOA is reauthorized. The following paragraphs are a historical view of state funding and guidance that has allowed the concept of in-demand industry sectors and middle skill jobs within in-demand regional industries to flourish and how all Orange County Community College Districts have coordinated with their local WIOA counterparts:

### ***CCC Workforce & Economic Development Division (WEDD)***

WEDD, driven by the Vision for Success goals, is focused on preparing CCC students and individuals with skills for 21<sup>st</sup> century jobs and careers, as well as an entrepreneurial mindset to be successful as an employee or entrepreneur, and for the future of work. WEDD manages a portfolio of programs and grants that support career education and entrepreneurial development programs, deployed via a regional approach.

This framework was designed with long-time existing regional consortia (funded with Perkins Title I-B, Leadership funding since the early nineties). Regional Consortia are structured in the following manner: 115 community colleges are organized into ten macro regions and seven regional consortia to optimally provide support for the coordination and improvement of CE. Los Angeles/Orange County Regional Consortia (LAOC/RC) is one of these seven. The Doing What Matter campaign's success led to the California State Legislature and Governor investing \$248 million annually in a "Strong Workforce Program."

### ***Strong Workforce Program (SWP)***

The Strong Workforce Program, was created by Assembly Bill 1602 in 2016-17 with the intent to expand and improve CE throughout the state within the 115 California Community Colleges and is now funded for \$248 million annually. The Strong Workforce Program aims to:

- Remove barriers to education completion;
- Position industry at the forefront of programs of study development;
- Commit to continuous program improvement;
- Streamline the curriculum-approval process;

- Increase the pool of qualified career education faculty;
- Enable regional coordination; and
- Establish a dedicated and sustainable funding source.

Strong Workforce Program funds mandate that colleges, college districts and regions improve and expand career education programs by incorporating two key tenets:

- 1) Increased regional collaboration among colleges and across regional partners, such as K-12 education, Adult Education Block Grant consortia, the workforce system and other economic partners focused on regional priorities; and
- 2) The use of labor-market and student outcomes data to make programmatic decisions, measure programmatic effectiveness and incentivize outcomes. To support regional-college district collaboration, annual Strong Workforce Program funding is split with 60 percent allocated to community college districts (local share), and 40 percent awarded to regional consortia (regional share), which in turn awards funding to projects that meet the regional priorities for the employment needs of business and industry.

### ***Los Angeles Orange County Regional Consortium (LAOC/RC)***

The seven regional consortia via California's Perkins V State Plan continue to be funded over the next 4 years. As stated above, the regional consortia in the state are made up of ten macro regions and seven regional consortium. Los Angeles and Orange County (two macro regions) decided to become one region when the funding was first offered and has remained as a single region to this day.

When the Strong Workforce Program "regional funding" was allocated (40% share) it was determined by the Chief Executive Officers of the region that LAOC/RC would work as two macro regions for the purposes of this funding. However, they would continue as one regional consortium for the purpose of identifying and meeting regional educational needs, providing training, sharing timely field-based information to state leaders, disseminating effective practices, recommending funding priorities, and supporting the achievement of statewide leadership policies.

With SWP funding for the region allocating over 22 million dollars it was determined that each macro region would need their own Director of this funding source in order to meet the structural and planning requirements.

### **Orange County Strong Workforce (consortium)**

The prior information shows historical context and has led to Orange County (a macro consortium of 9 colleges plus a standalone noncredit institution) working with the Strong Workforce Program and the Director of that macro consortium who is paid with Perkins V, Title I-B Leadership funding. The state has determined that there are 10 in-demand industry sectors within the state but has each SWP consortium define their own regional sector priorities consistent with regional labor market information (LMI), which drives implementation strategies in each region.

The LAOC/RC worked on two activities before determining the in-demand industry sectors they would choose. The Chancellor's Office mandated that regional consortia use validated LMI data to make programmatic decisions which would align with the state's strategic vision and goals for preparing an educated and skilled workforce. Additionally, regional workforce development activities were to be aligned with both the Workforce Innovation & Opportunities Act (WIOA) and Perkins IV, allowing for strategy and coordination across CE and the state's workforce development systems. Therefore, the following two activities within the LAOC/RC effected the Orange County macro-consortium:

- 1. LAOC/RC Represented at the WIOA Advisory Group for Orange County in the development of regional WIOA plan.**

*Four-Year Strategic Regional Workforce Plan (2017-2020)* -- Regional plans and partnerships required by WIOA function under California's State Plan as the primary mechanism for aligning educational and training provider services with regional industry sector needs in California's fourteen WIOA Regional Planning Units (RPUs). California state law requires coordination between the K-12, Community Colleges, and WIOA systems and requires the use of industry sector strategies as the operational framework for the State's workforce system. These two state mandated requirements are met by making federally required WIOA regional plans and partnerships the primary mechanism for aligning educational and training programs with regional industry sector needs. As such, the aim of regional plans is the development of "regional sector pathway" programs, including: the identification, utilization, and servicing of career pathway programs aligned with regional industry sector needs in each of the RPUs.

WIOA Orange County was identified by the state as a single economic sub-region and singular planning unit. Therefore, the three local development boards aligned for the regional plan (Santa Ana Workforce Development Board, Anaheim Workforce Development Board, and Orange County Development Board). The LMI data and regional selection of in-demand industry sectors (which WIOA refers to as regional industry sectors) aligns with the Community Colleges' Regional Report (see details below). Therefore, the Strategic Regional Workforce Plan (2017-2020) includes both WIOA and all Orange County Community College Districts mirroring in-demand industry sectors.

- 2. Center for Competitive Workforce (CCW) - Determined In-Demand and Emerging Industry Sectors**

Published in October 2017, the Center for a Competitive Workforce (CCW) was funded to produce a high-level in-demand industry review for the Los Angeles and Orange County Community Colleges. Eight in-demand industry sectors (6 priority and 2 emerging) were anticipated to undergo significant middle-skill job growth between 2016 and 2021 (via Los Angeles Economic Development Corporation - Institute for Applied Economics). Middle-skill jobs are occupations for which students would be best prepared after obtaining a community college certificate or degree. Top middle-skill jobs are defined as occupations with the most labor market demand, stable

employment growth, and entry-level wages at or above the living wage, as determined by the California Family Needs Calculator currently at \$17.36 (as of March 1, 2020).

In order to maintain regional alignment, all Orange County Community College Districts have committed to these eight in-demand industry sectors (six priority: Advanced Transportation & Logistics, Business and Entrepreneurship, Energy, Construction & Utilities, Health, Advanced Manufacturing, ICT/Digital Media; and two emerging sectors: Retail, Hospitality, & Tourism, and Life Sciences & Biotechnology).

### **Size, Scope, and Quality**

In order to use Perkins funding, in-demand industry sectors need to be identified. In addition Perkins V requires that all funding used shall support career education programs that are of sufficient size, scope, and quality to be effective. The following is how the California Perkins V State Plan defines size, scope, and quality:

- **Size** has been defined as being an in-demand industry sector, therefore this requirement is automatically met since Perkins V funding will only fund programs from in-demand industry sectors.
- **Scope** is defined as promoting equity and access, achieving system alignment, and supporting continuous improvement;
- **Quality** is everything expected of a community college in order to have student success and is paraphrased from the Perkins V state plan below:
  - Offering and engaging a delivery system, with multiple entry and exit points, that removes institutional barriers impeding programs for education and career goals;
  - Creates an environment that is fair, impartial and free from racism, promotes employment attainment, and eliminates achievement gaps for special populations;
  - Promotes access to ensure students are provided ample opportunities;
  - Strong programs of study across all systems including employment, rigorous and aligned programs with work-based learning opportunities with cross learning strategies (dual enrollment, dual credit, articulation the UC/CSU, stackable badging and credentials);
  - Providing in-class, online or work-based learning opportunities; comprehensive counseling and individualized support (guided pathways concept);
  - Decision-making through use of relevant outcome-based accountability data, strategic and intentional cross-system alignment, and promotional, outreach and communications should be consistent in its messaging across all segments;
  - Sustained investments through regional alliances and aligned by sector leading to industry-recognized credentials or certificates; and
  - Strong partnerships and industry development.

### **Additional LMI Resources for Orange County**

In 2016-17, the first year of SWP funding, the macro-consortium voted to include a \$130,000 project entitled, Regional Data Enhancement, of which the purpose was to provide enhanced LMI for Orange County which would be used for decision-making and increased responsiveness to the needs of employers, students, and faculty. In 2017-18 the macro-consortium increased their regional investment to \$340,000 annually in order to fund the creation of the Orange County Center of Excellence for Labor Market Research (COE) hosted at Rancho Santiago Community College District.

Throughout 2019, the Orange County COE conducted a primary research study, the *Orange County Sector Analysis Project*, that combined quantitative LMI data specific to Orange County and qualitative data collected via a series of focus groups in order to provide the region with validated industry sector-specific areas of need as well as regional community college challenges encountered when trying to meet said needs. Two groups of occupations were examined – those top middle-skill jobs with the highest number of annual openings and entry-level wages above the regional living wage and those with the highest number of annual openings yet the entry-level wages are below the living wage and some median wages above it thereby providing areas of opportunity for pathways to top middle-skills jobs. The primary goal of the research project was to provide the region with validated sector-specific data that would be examined and discussed by the community colleges' faculty and administrators in order to identify potential areas of opportunity and focus for limited local and regional resources (i.e., time, funding, classroom space, equipment, etc.).

The LMI data was compiled in Spring 2019 followed by 12 sector-specific focus groups comprised of faculty, administrators and counselors from all 10 community college institutions in the county as well as all the regional- and some state-directors of employer engagement occurring throughout Summer 2019. The Orange County (OC) COE reviewed all of the data and compiled a 200-plus page report along with individual sector-specific, eight-page profiles highlighting the research findings, which can be found on the statewide COE website ([cccocoe.net](http://cccocoe.net)). Following the publication of the study, the OC COE conducted a regional “road show” presenting the findings to Orange County’s Community Colleges and Districts. The results of this comprehensive research project are being used both locally by colleges and districts for their strategic planning, Perkins V and SWP local projects as well as regionally to inform SWP investments and regional priority areas.

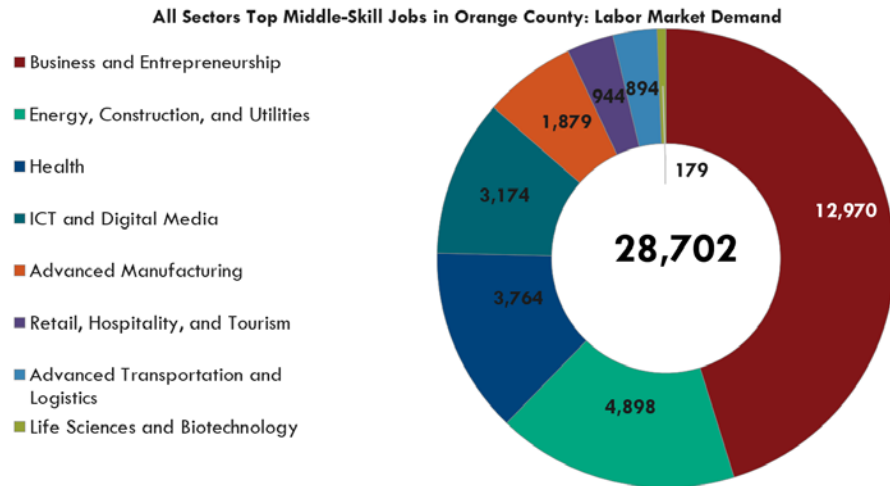
The following is a synopsis of the eight in-demand sectors and existing supply gaps examined in the study. Industry demand is represented by the number of projected annual openings for each occupation examined within sectors and supply is represented by the number of community college and non-community college 3-year average awards (degrees and certificates) conferred in Orange County. The full *Orange County Sector Analysis Project* report, profiles, and posters are available by searching using the report’s name on the statewide COE website ([cccocoe.net](http://cccocoe.net)).

# ORANGE COUNTY'S PRIORITY & EMERGING SECTORS

## Orange County Priority & Emerging Sector Labor/Supply Gaps

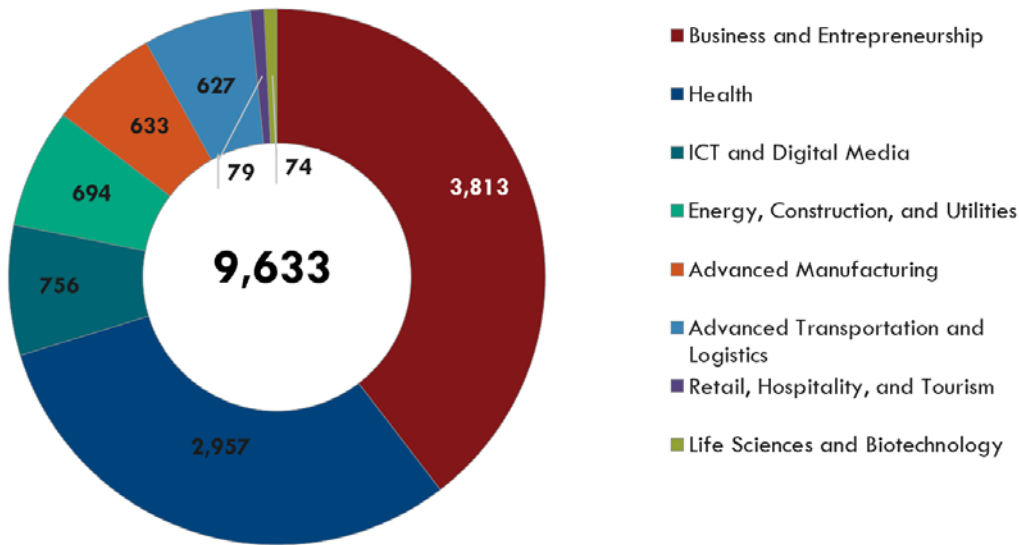
Priority (P) Emerging (E)	Sector Name	Over Supply	Supply Met	Under Supply
P	Advanced Manufacturing			✓
P	Advanced Transportation			✓
P	Business and Entrepreneurship			✓
P	Energy, Construction, and Utilities			✓
P	ICT/Digital Media			✓
P	Health			✓
E	Life Sciences and Biotechnology			✓
E	Retail, Hospitality, and Tourism			✓

## ORANGE COUNTY'S TOP MIDDLE-SKILL JOBS



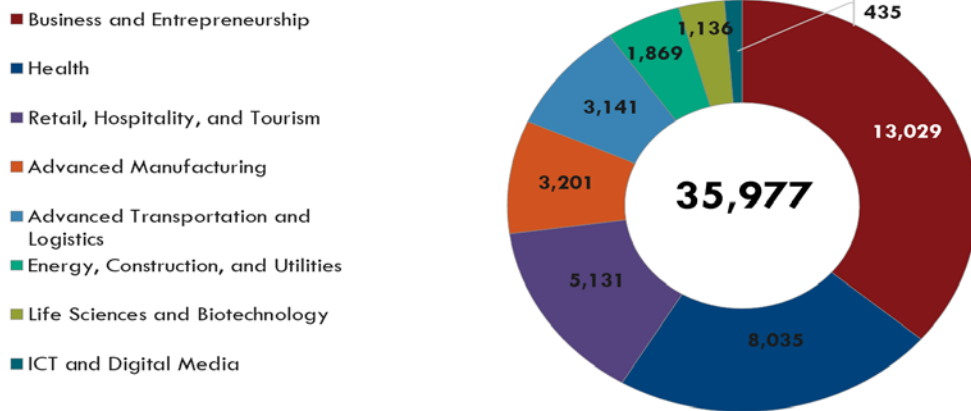


**All Sectors Top Middle-Skill Jobs in Orange County: Labor Market Supply**

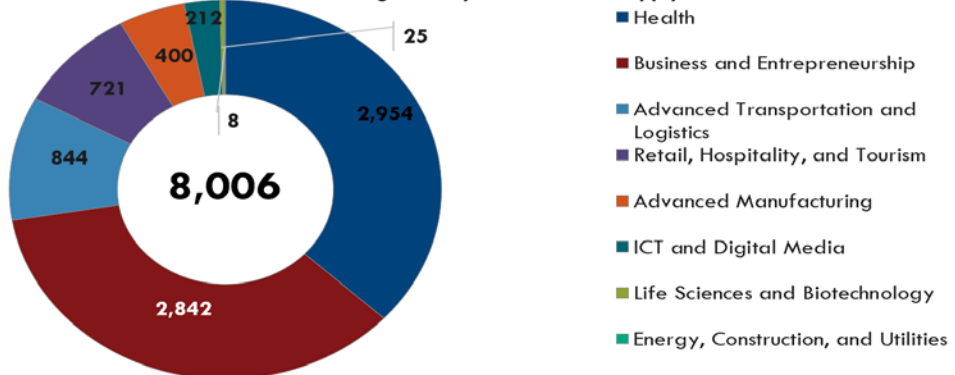


**ORANGE COUNTY'S MIDDLE-SKILL JOBS WITH ENTRY-LEVEL WAGES BELOW CALIFORNIA FAMILY NEEDS CALCULATOR**

**All Sectors Middle-Skill Jobs with Entry-Level Wages Below the California Family Needs Calculator in Orange County: Labor Market Demand**



**All Sectors Middle-Skill Jobs with Entry-Level Wages Below the California Family Needs Calculator in Orange County: Labor Market Supply**



***The Advanced Manufacturing emerging sector*** includes industries such as advanced electronics, aerospace, analytical instruments, biopharmaceuticals, communications equipment, and medical devices. Advanced Manufacturing is one of the largest industry sectors in Orange County. Orange County comprises 10.9% of all Advanced Manufacturing employment in California. Because Advanced Manufacturers are often small, specialized firms, employers invest significant resources in training their workforce and providing personnel opportunities for job growth. In 2016, 71% of students who graduated from an Advanced Manufacturing community college program in the Orange County region were employed within a year after exit. The Advanced Manufacturing sector accounts for 130,342 jobs in the Orange County region. There are approximately 39,811 individual business in the region, which makes up 11.5% of all the businesses for the sector in California. This sector is projected to decline by 6% (a loss of 8,144 jobs) in the next five years in Orange County. The average earnings per Advanced Manufacturing job are \$91,177.

***The Advanced Transportation & Logistics priority sector*** includes industries such as road, marine, air and rail transport. freight, transportation, delivery, and port operations are the largest industries within the Advanced Transportation sector in California with most jobs in Advanced Transportation concentrated in Southern California. To reduce CO2 emissions and meet transportation needs of a growing global population, public transit increasingly uses new technologies such as smart ticketing systems, electric/hybrid buses, high-speed rails, and driverless shuttles. In 2016, 49% of students who completed an Advanced Transportation and Logistics community college program in the Orange County region attained the regional living wage. The Advanced Transportation and Logistics sector accounts for 58,520 jobs in the Orange County region and 6.4% of all Advanced Transportation and Logistics jobs in California. There are approximately 3,756 individual business in the region which comprises 7.6% of all the businesses for the sector in California. This sector is projected to grow by 4% (or 2,327 jobs) in the next five years in Orange County. The average earnings per Advanced Transportation and Logistics job are \$65,963.

***The Business & Entrepreneurship priority sector*** includes specific industries for small business owners such as: professional, technical, and scientific services, followed by personal and laundry services, then specialty trade contractors. Entrepreneurs reported the following skills to be most useful when starting a business: social media, marketing, accounting, Information Technology (IT), and employee recruiting. Business owners ranked previous work experience, critical thinking, and problem solving to be the most important traits for new hires. In 2016, 55% of students who completed or exited a Business and Entrepreneurship community college program in the Orange County region were employed within six months after exit. The Business and Entrepreneurship sector accounts for 336,106 jobs in the Orange County region and 13.5% of all Business and Entrepreneurship jobs in California. There are approximately 22,925 individual business in the region, which comprises 11.7% of all the businesses for the sector in California. This sector is projected to grow by 6% (or 21,607 jobs) in the next five years in Orange County. The average earnings per Business and Entrepreneurship job are \$91,266.

***The Energy Construction & Utilities priority sector*** appeals to job seekers interested in the environment and working with their hands. For job seekers looking to become more

competitive in the sector, obtaining a professional licensure validates the skills that they possess to employers. The majority of “clean energy” companies specialize in energy efficiency for buildings and renewable energies such as solar power. In 2016, nearly 70% of students who completed or exited an Energy, Construction, and Utilities community college program in the Orange County region attained the regional living wage. The Energy, Construction, and Utilities sector accounts for 145,485 jobs in the Orange County region and 11.7% of all Energy, Construction, and Utilities jobs in California. There are approximately 10,946 individual business in the region which makes up 10.2% of all the businesses for the sector in California. This sector is projected to grow by 6% (or 9,233 jobs) in the next five years in Orange County. The average earnings per Energy, Construction, and Utilities job are \$86,964.

***The Health priority sector*** occupations are great for individuals interested in learning on the job. Health professionals need to regularly develop their technical skills as new research and technology change the field. Job seekers interested in a Health career would benefit from interning or volunteering at health care facilities. Employers prefer candidates with prior work experience and report it to be the number one reason why they have difficulty hiring qualified candidates. When selecting a Health Care training program, students should research the necessary clinical hours for the profession. Occupations such as Registered Nurses require clinical training hours for students to become fully certified. The Public Policy Institute of California estimates the state will need an additional 190,000 allied health care workers by 2024, including licensed vocational nurses, certified nursing assistants, medical assistants, imaging technologist, dental hygienist, and dental assistants. Additionally, Health is considered “recession-proof” because employment increased during the 2007-2009 recession when most sectors experienced job decline. The Health sector accounts for 158,406 jobs in the Orange County region and 8.7% of all Health jobs in California. There are approximately 10,669 individual business in the region which comprises 11.5% of all the businesses for the sector in California. This sector is projected to grow by 14% (or 21,901 jobs) in the next five years in Orange County. The average earnings per Health job are \$75,569.

***The ICT & Digital Media priority sector*** includes ICT companies ranging from small, innovative startup companies with less than 5 employees to large, global corporations with more than 1,000 employees. ICT workers develop new innovative products and services that improve productivity of firms across all industries. ICT companies include those in telecommunications, web development, data analytics, cyber security, video game development, and computer software. ICT and Digital Media employers place significant value in industry certifications and/or portfolios of previous work. Industry-based certifications are offered by the companies who developed the software, such as Microsoft, Cisco or CompTIA. Certifications are awarded based on completion of coursework and typically require a set number of instructional hours. In 2016, 65% of students who completed or exited an ICT and Digital Media community college program in the Orange County region were employed within a year after exiting. The ICT and Digital Media sector accounts for 46,524 jobs in the Orange County region and 6.1% of all ICT and Digital Media jobs in California. There are approximately 3,553 individual business in the region which comprises 8.3% of all the businesses for the sector in California. This sector is projected to

grow by 9% (or 4,038 jobs) in the next five years in Orange County. The average earnings per ICT and Digital Media job are \$130,418.

***The Life Sciences & Biotechnology emerging sector*** exists at the crossroads of innovative scientific research and the dynamic market economy. It is comprised of professional, scientific and technical industries that involve the scientific study of living organisms. Individuals who are able to obtain employment in this industry are typically rewarded with high-paying, challenging positions that provide considerable advancement opportunities. California leads the world in Life Sciences innovation and is the number one state for Life Sciences employment with over 311,000 direct jobs and 958,000 total jobs, including direct, indirect, and induced jobs. The 3,400 plus Life Sciences companies in California are mostly Biotechnology and Pharmaceutical or Medical Equipment and Device Manufacturing. Additionally, Life Sciences and Biotechnology is considered “recession-proof” because employment increased during the 2007-2009 recession when most sectors experienced job decline. The Life Sciences and Biotechnology sector accounts for 47,320 jobs in the Orange County region and 13.9% of all Life Sciences and Biotechnology jobs in California. There are approximately 1,763 individual business in the region which comprises 11.3% of all the businesses for the sector in California. This sector is projected to grow by 4% (or 2,053 jobs) in the next five years in Orange County. The average earnings per Life Sciences and Biotechnology job are \$105,674.

***The Retail, Hospitality, and Tourism priority sector is significant in Orange County.*** According to the World Atlas, Orange County is the 4th most visited place in the United States, and the most visited in California; the county attracted 48.2 million visitors in 2016, a year-over-year increase of 2%. Visitor spending in Orange County has also increased, reaching a new high of \$11.6 billion in 2016. Retail, Hospitality, and Tourism entry-level jobs can prepare job seekers for careers within the same sector or across industries. Skills developed by working in the Retail, Hospitality, and Tourism sector include problem-solving, communication and customer service and 45% of Retail, Hospitality, and Tourism employers reported that their organization frequently promotes from within. In 2016, 71% of students who completed or exited a Retail, Hospitality, and Tourism community college program in the Orange County region were employed within six months after exit. The Retail, Hospitality, and Tourism sector accounts for 364,990 jobs in the Orange County region and 9.6% of all Retail, Hospitality, and Tourism jobs in California. There are approximately 16,323 individual business in the region which comprises 8.5% of all the businesses for the sector in California. This sector is projected to grow by 5% (or 17,159 jobs) in the next five years in Orange County. The average earnings per Retail, Hospitality, and Tourism job are \$33,890.