APPENDIX A

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's commitment in providing nearly $1.3 billion annually for career technical education (CTE) programs for the nation's youth and adults.

Perkins V, Title I-C Basic Grant funding is allocated by formula to each District within the California Community College System and requires involvement by a diverse body of stakeholders who then inform a required comprehensive local need assessment (CLNA) and a 4-year application. Individual Colleges within each district then create a 1-year focused application.

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 CTE 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 Perkins 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)

Rancho Santiago CCD (RSCCD) Perkins Advisory Council was developed by reaching out to multiple stakeholder groups. Santa Ana College (SAC) first reached out to members of their Workforce Council. SAC's Workforce Council comprises a diverse constituency representing CTE instructional programs; CTE counselors and administrators; RSCCD and The Los Angeles/Orange County Regional Consortium (LAOCRC) economic development initiatives; Career Center; DSP&S; educational, community, and industry partners; and continuing education.

Educational, community, and industry partners were recommended by faculty based on their participation on program and community advisory councils. High school/ROP partners participate on the Workforce Council. For those who are not regular attendees of the Workforce Council, email and phone invitations were conducted. Additionally, about a year ago, a group of Santa Ana workforce development boards, local workforce agencies, one-stop delivery systems, chamber members, nonprofits, K12 representatives, SAC and RSCCD representatives began meeting to discuss how to best meet workforce needs within the community. Members from this group were invited to join the RSCCD Perkins Advisory Council. Furthermore, SAC reached out to their campus Veteran's Resource Center and was able to recruit two representatives (including a student) to join this Council. Santiago Canyon College (SCC) reached out to their faculty and administrators. Additionally, SCC contacted Vital Link to try and engage more business and industry representatives to serve on this Council; however, the timing of the training did not work with their schedules. Finally, there was a handful of representatives who had already attended the Perkins Advisory Council training of another Orange County community college district (that was also led by the same consultant RSCCD hired to complete the training), so they will also be serving on RSCCD's Perkins Advisory Council.

Consultation Members Listing

1. Representatives of CTE programs in a local educational agency or educational service agency, including teachers, administrators, career guidance and advisement professionals, and other staff

Name	Title	Perkins V Group	Company/Business	E-mail
Don Isbell	Director, CTE	K-12	Santa Ana USD	Donald.Isbell@SAUSD.US
Myra Clarke	Director, CTE	K-12	Garden Grove USD	mclarke@ggusd.us
Kathy Boyd	Director, CE, &, OC Pathways, Orange County DOE Services	Educational Institution	Orange County DOE	kboyd@ocde.us

2. representatives of CTE programs at postsecondary educational institutions, including faculty and administrators

Name	Title	Perkins V Group	Company/ Business	E-mail
Lorena Chavez	Special Programs Director for CTE	Administrator	SCE/SAC	chavez_lorena@sac.edu
Estela Cuellar	Director, Special Programs, Business & CE SCC	Administrator	SCC	cuellar_estela@sac.edu
Brad Virgoe	Director, Santa Ana College/Criminal Justice Academies	Administrator	SAC	virgoe_brad@sac.edu
Elizabeth Arteaga	Dean, Business & Career Education	CTE Dean	SCC	arteaga_elizabeth@sac.edu
Kimberly Mathews	Director, Special Programs CTE	Administrator	SAC	mathews_kimberly@sac.edu
Jonnatha n Duenas	Senior Account Clerk	CTE Staff	SAC	duenas_jonnathan@sac.edu
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Gregory Gonzales	Welding Faculty	Faculty, Welding Technology	SAC	gonzales_gregory@sac.edu
Denise Foley	Department of Biology co-chair - Biotechnology Program Coordinator	Faculty, Biology	SCC	foley_denise@sccollege.edu
Amanda Campbell	Adjunct Counseling Faculty	Faculty, Counseling	SCC	Campbell_Amanda@sccolleg e.edu
Daniel Oase	Assistant Professor & Faculty Coordinator, CE Division of Cont. Ed.	Faculty, CTE	OEC/SCC	Oase_Daniel@sccollege.edu
Sarah Mathot	Assistant Professor, Nutrition	Faculty, Nutrition	SAC	Mathot_Sarah@sac.edu
Dawn McKenn a	Occup Therapy Asst. Instructor	Faculty, OTA	SAC	McKenna_Dawn@sac.edu
Madeline Grant	Dean, Business	CTE Dean	SAC	Grant_Madeline@sac.edu
Catherine Emley	Department Chair, Medical Assisting	Faculty, Medical Assisting	SAC	Emley_Catherine@sac.edu

2. representatives of CTE programs at postsecondary educational institutions, including faculty and administrators ***(Continued)***

Title	Perkins V Group	Company/Business	E-mail	Title
Ozzie Madrigal	Office Tech/Computer App Instructor	Faculty, CTE	SCE/SAC	Madrigal_Osiel@sac.edu
Huong Nguyen	Resource Development Coordinator	District Operations Center	RSCCD	Nguyen_Huong@rsccd.edu
Suzanne Freeman	Fire Technology, Department Chair	Faculty, Fire Technology	SAC	Freeman_Suzanne@sac.edu
Charlie Malone	Associate Professor of American Sign Language	Faculty, ASL	SCC	Malone_Charlie@sccollege.edu
Carol Seitz	Assistant Professor, Medical Assistant Program	Faculty, Medical Assisting	SAC	Seitz_Carol@sac.edu
Jody Johnson	Faculty (Child Development)	Faculty, Child Development	SCC	Johnson_Jody@sccollege.edu
Alana Gates	Assistant Professor	Faculty, Real Estate	SCC	Gates_Alana@sccollege.edu
Kathleen Takahashi	Biology Instructor	Faculty, Biology	SAC	Takahashi_Kathleen@sac.edu

3. representatives of the State board or local workforce development boards and a range of local or regional businesses or industries.

Title	Perkins V Group	Company/Business	E-mail	Title
Sheila Dufresne	Regional Director-Employer Engagement, Retail . Hospitality . Tourism	Regional Director/DSN	OCC	sdufresne1@occ.cccd.edu
Jaime Gonzalez	Regional Director, Orange County, Advanced Transportation and Logistics	Regional Director/DSN	GWC	jgonzalez470@gwc.cccd.edu
Jesse Crete	Director Orange County Center of Excellence	Workforce Development	Orange County Center of Excellence	Crete_Jesse@rsccd.edu
Cathleen Greiner	Business & Entrepreneurship Sector, Regional Director, Orange County	Regional Director/DSN	RSCCD	Greiner_Cathleen@rsccd.edu
Laurie Sienkiewicz	Regional Director, Health, Health	Regional Director/DSN	GWC	lsienkiewicz@gwc.cccd.edu

	Workforce Initiative-Orange County			

3. representatives of the State board or local workforce development boards and a range of local or regional businesses or industries ***(Continued).***

Title	Perkins V Group	Company/Business	E-mail	Title
Jacob Poore	Research Analyst	Workforce Development	Orange County Center of Excellence	Poore_Jacob@rsccd.edu
Leila Mozaffari	Executive Director Institute for Workforce Development	Workforce Development	RSCCD	Mozaffari_Leila@rsccd.edu
Robert Claudio	Deputy Division Chief, Orange County Region Southern Workforce Services Division Workforce Services Branch	Workforce Development	State of California Employment Development Department	Robert.Claudio@edd.ca.gov
Ngoc Tinh Nguyen	First Vice President, Business Development Officer	Local Business	United Business Bank	nnguyen@ubb-us.com
Carlos de la Riva	City of Santa Ana	Local Agency	City of Santa Ana	cdelariva@santa-ana.org

4. parents and students

Susana Cardenas	Parent of Samueli Academy Student	Parent	SAC	Cardenas_Susana@sac.edu
Rudy Castro	Student	Veterans Resource Center	SAC	castroruddy@ymail.com

5. representatives of special populations

Christina Morones	Community Services Program Coordinator II	Community Services	SCC	Morones_Cristina@sccollege.edu
Abel Arredondo	Student Program Specialist	Veterans Resource Center	SAC	Arredondo_Abel@sac.edu

6. representatives regional or local agencies serving out-of-school youth homeless children and youth, and at-risk youth

Nancy De Leon	Case Manager at Delhi Center	Community Partner	Delhi Center	nancy@delhicenter.org

* Although they were unable to attend this meeting, these individuals are collaborative partners in several workforce development pathway projects including the Orange County Regional Consortium Strong Workforce Projects and K12 Strong Workforce Project that focus on aligning pathways from K12 to community colleges.

Training the Stakeholder Advisory/Consultation Group

Rancho Santiago CCD convened their required Perkins V consultation group for the first time on February 28, 2020. The meeting was held at Santiago Canyon College 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 Technical Education Unit working with Perkins funding).

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

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

The second half of the meeting was broken out by round table discussion groups (chosen in advance) and each table assigned a facilitator/note taker. The conversation centered around gaps each stakeholder saw within program/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 notes 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 per industry sector 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 be reviewed by each college for gaps in process.

Subject	Round Table 1	Round Table 2	Round Table 3	Round Table 4	Round Table 5	Round Table 6
ACCOUNTABILITY						
• Non-traditional recruitment by sector and/or individual program.	✓					
• Gap in procuring certifications for economically disadvantaged students. Across all programs plan designed to make it easier for students to get certifications (possibly including certifications as part of curriculum).	✓	✓				
• There is a gap in promoting non-traditional occupations. There needs to be a strategic plan to be a more conscious when promoting nontraditional occupations.				✓	✓	
ARTICULATION						
• Professional development to promote a better understanding of articulation and how it relates to student success.	✓					
• There is a gap in the way pass/no-pass is given as articulated grades from secondary to postsecondary as UC/CSU will not then accept these credits. So, the process needs to be revised with articulation being "credit by exam" with a letter grade transcripted.			✓			
• There is a gap in the number of dual and concurrent enrollment offered from secondary to postsecondary. This is limited in a lot of cases to the faculty time and effort. So, a structured process across all programs needs to be designed.			✓			
COUNSELING/OUTREACH/GUIDANCE						
• Gap in the level of CTE counselors to student ratio.					✓	
• Gaps in faculty to counselor relationships.						✓
• There are professional development gaps in giving counselors (secondary & postsecondary) an extensive understanding of CE (what each program provides, requirements for each program, the lucrative careers offered, the multiple entry and exit points allowing advancement, the wage attainment at each level and services available for special populations to help them retain and complete).	✓		✓	✓	✓	✓

Subject	Round Table 1	Round Table 2	Round Table 3	Round Table 4	Round Table 5	Round Table 6
COUNSELING/OUTREACH/GUIDANCE *(Continued)*						
• There is a gap in student follow-up with graduates counseling on degrees or certificates that they are eligible for but did not apply, possibly taking more education (multiple entry and exit point that allow for high degrees and higher pay - example Criminal Justice Academy student graduates and get POST certification but no AA degree.	✓			✓		
• Gaps in mentoring programs encouraging retention and completion for students (particularly in special populations and non-traditional careers) within Cooperative Work Experience or other courses.				✓		✓
• There is a gap in organized outreach to secondary designed to be interesting/enticing to the demographic with more and better marketing tools for: (non-traditional, across industry sectors or by program, smaller programs "such as sign language that meet in-demand and start at living wage or above," and introducing students to programs via planned activities "such as a summer career academy").	✓	✓		✓	✓	
• There is a gap in outreach to special populations (both prospective and existing students). So, a strategic plan of outreach to organizations within the community, employers in the region, and to existing students about opportunities should be pursued.				✓		
• Gap in needed career exploration opportunities on both a secondary and postsecondary level for CE programs. A structured plan around this need should be developed (everything from pathway day events, to learn and earn sessions to counselor presentations and information on CE program/jobs).				✓		
CURRICULUM DEVELOPMENT:						
• Gaps updating and developing new curriculum (nutrition).					✓	
PROFESSIONALL DEVELOPMENT						
• Gap in a mentoring program for faculty, as well as a more targeted recruitment for faculty to represent the demographics of the campus (the community of students they are instructing).				✓		

Subject	Round Table 1	Round Table 2	Round Table 3	Round Table 4	Round Table 5	Round Table 6
SERVICES/FINANCIAL AID						
• There is a gap for those families having limited time to attend school due to financial status, childcare, etc. Gap in making sure to track economically disadvantaged and offering services and gap in partnering with providers of assistance and vouchers (in reference of Delhi Center non-profit).		✓				
• While there are many services and resources available to students many do not use them (particularly a lot offered at the career center). Therefore, it needs to be determined why. Is it because students are unaware of these services, or is it because they are not offered at convenient times, etc.? This needs to be reviewed and strategies developed.			✓			✓
• Gap in K12 students attending community college using needed services (i.e. research shows that of 80% of those students using services for a disability at K-12 only 18% then use those services on a community college level). Build a strategy of working with K12 to identify special populations and do outreach as they come into the community college system.				✓		
• Gap in economically disadvantaged students being able to pay for required supplies in order to start community college programs and/or fees for state exams or licensing (this was specifically mentioned by Real Estate and nursing/health occupations) after completing a certificate or degree from the community college. Therefore, unable to get a job.				✓	✓	
TEACHING STRATEGIES						
• The ability to purchase a variety of equipment within a program area in order to certify CE students in their use and make them more marketable with industry.	✓	✓				
• In order to meet student needs, more virtual and online sections need to be developed.	✓					
• To give students more career opportunities, programs should be created that are cross-functional to allow for working in several fields (this was referenced with talking about child development).		✓				

Subject	Round Table 1	Round Table 2	Round Table 3	Round Table 4	Round Table 5	Round Table 6
WORK-BASED LEARNING/EMPLOYMENT						
• There is no infrastructure to make sure that CE students are exposed to work-based learning opportunities in order for students to get experience (very specifically mentioned welding and working with unions and LA/OC building and trades counsel for pre-apprenticeship and intern opportunities, nutrition program -- hotels and restaurants, child care facilities and English learners who can't afford the time and cost). This also applies to finding these opportunities for special population students.	✓	✓	✓		✓	✓
• Gap across all programs with work in cooperative work experience and hire job developers to get job opportunities for completing CE students.	✓					✓
• There is a gap in getting students employed and aware of the services/workshops/classes already in existence at the college to help students get jobs (building resumes, how to interview, negotiating a wage, basic SCAN skills personal qualities (displays responsibility, self-esteem, sociability, self-management, and integrity and honesty).	✓	✓	✓	✓		
• There is a gap for special populations to get jobs (economically disadvantaged students in getting jobs that require personal equipment/supplies and English Learners getting jobs without a SSN#).	✓				✓	
• Marketing/Outreach needs a strategic plan to work with business around: expectations for internships and externships; how community college students have the skills necessary to accomplish jobs where business's expectations is a 4-year degree.				✓		

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 CTE 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.

The WIOA and Perkins Act originally were scheduled to be reauthorized by the Federal Government in tandem (allowing for the possibility of joint 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 Orange County has coordinated with their local WIOA counterparts:

Doing What Matters

The Chancellor's Office of the California Community Colleges started a new campaign in 2013 titled Doing What MATTERS for Jobs and the Economy. This was a four-pronged framework that responded to the idea of closing the skills gap on a state and regional level. The framework was to give priority to in-demand industry sectors, make room within the colleges for those sectors, promoting student success, and innovation.

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 CTE. Los Angeles/Orange County Regional Consortia (LAOCRC) is one of these seven. The Doing What Matters 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 CTE throughout the state with 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 career pathway 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 technical education programs by incorporating two key tenets:

1) increased regional collaboration among colleges and across regional partners, such as K-12 education, California Adult Education Program 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 award funding to projects that meet the regional priorities for the employment needs of business and industry.

Los Angeles/Orange County Regional Consortium (LAOCRC)

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 consortiums. 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 LAOCRC 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 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 LAOCRC 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 CTE and the state's workforce development systems. Therefore, the following two activities within the LAOCRC effected the Orange County macro-consortium:

1. **LAOCRC Represented at the WIOA Advisory Group for Orange County in the development of regional plan.**

   4-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 via the State Plan 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 main 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 Workforce 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 Orange County Community Colleges mirroring in-demand industry sectors.

2. Established the 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 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 LAEDC's 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, Life Sciences & Biotechnology).

Size, Scope, and Quality

In order to use Perkins funding, in-demand industry sectors need to be identified. Districts shall use the funding to support career technical 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 will only fund programs from in-demand 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, 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; 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 partnership 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 (ccccoe.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.

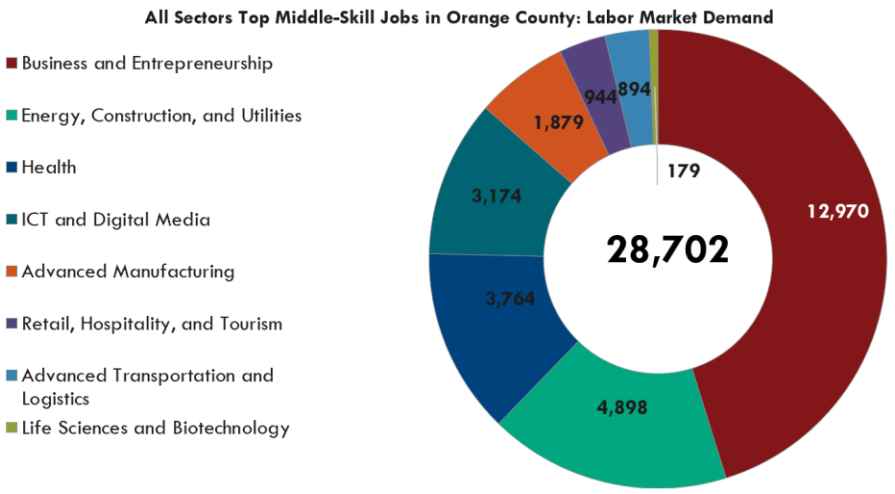
The following is a synopsis of the eight in-demand sectors and existing supply gaps examined in the study. Industry demand is represented by the number of projected annual openings for each occupation examined within sectors and supply is represented by the number of community college and non-community 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 (ccccoe.net).

ORANGE COUNTY'S PRIORITY & EMERGING SECTORS

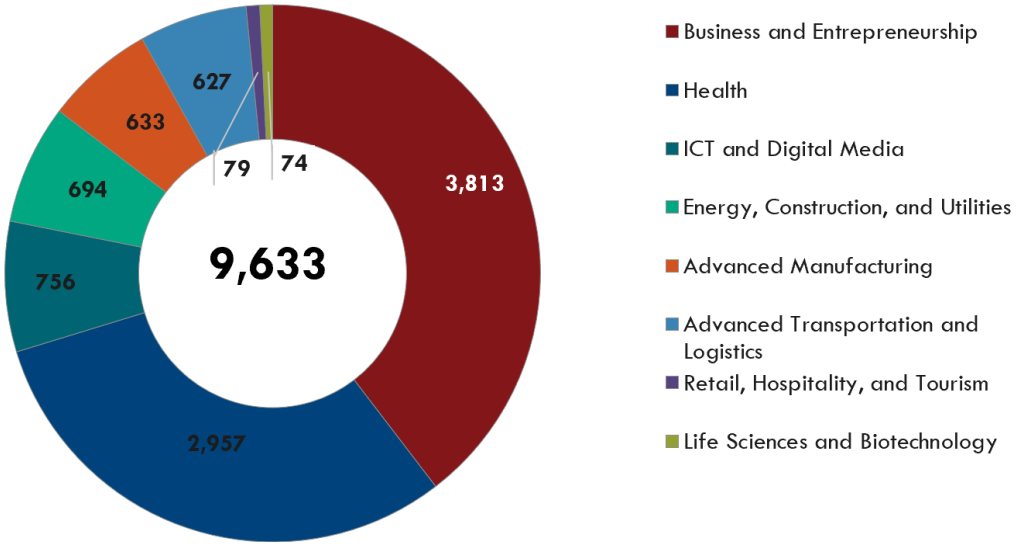
Orange County Priority & Emerging Sector Labor/Supply Gaps

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

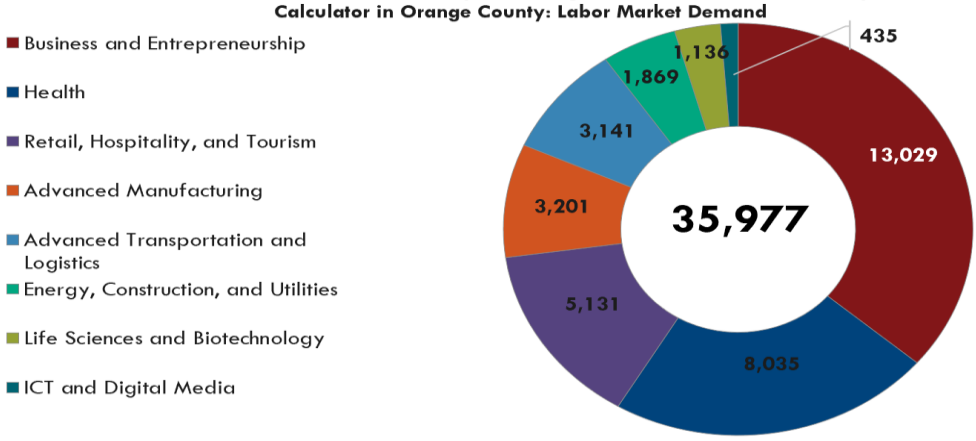


All Sectors Top Middle-Skill Jobs in Orange County: Labor Market Supply

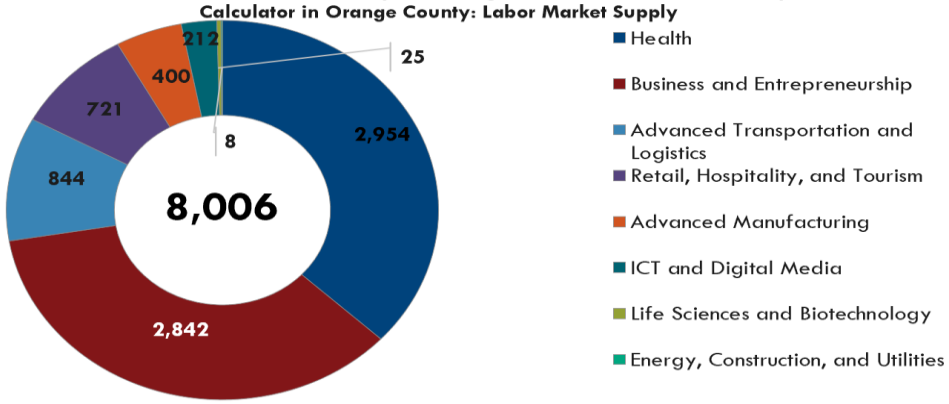


ORANGE COUNTY'S MIDDLE-SKILL JOBS WITH ENTRY-LEVEL WAGES BELOW CALIFORNIA FAMILY NEEDS CALCULATOR

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 priority 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 businesses 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 businesses 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 businesses 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 businesses 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 businesses 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 businesses 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 businesses 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, Hospitability, and Tourism emerging 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 businesses 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.