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CALIFORNIA COMMUNITY COLLEGES

Doing What MATTERS™

FOR JOBS AND ECONOMY

Orange County Strong Workforce Program Regional Plan

Introduction

The Orange County Regional Planning Team, along with regional Doing What Matters Key Talent, conducted a series of meetings and conference calls throughout 2016 and into 2017 to design a planning framework in response to the Strong Workforce Program (SWP). The primary goal of regional planning was to engage required stakeholders in discussion and assessment of regional labor market gaps, and to develop strategies to address the gaps. This dialogue and assessment has informed the development of the Region's formal SWP Plan and 2016-2017 40% budget for presentation and review of the Los Angeles/Orange County Regional Consortium's CEO Executive Committee. The final Regional Plan will be modified based on the recommendations of the CEO Executive Committee, with final approval by the CEO Council prior to January 31, 2017.

LAOCRC'S COMMUNITY COLLEGE DISTRICTS & COLLEGES (OC)

Coast Community College District

Coastline Community College
Golden West College
Orange Coast College

North Orange County Community College District

Cypress College
Fullerton College

Rancho Santiago Community College District

Santa Ana College
Santiago Canyon College

South Orange County Community College District

Irvine Valley College
Saddleback College

Orange County Strong Workforce Program Regional Plan (2016 – 2020)

1. Who Engaged and How?

A. Meeting Participants

Approximately 240 individuals attended three large region-wide SWP sessions, a Compression Planning session, a regional CTE Dean meeting, and a virtual regional session via conference call. Participants included Adult Education Block Grant (AEBG) representatives, business and industry representatives, K-12, Workforce Development Board (WDB) representatives, and community college administrators and staff.

B. Planning Meetings

The first Orange County Regional Planning Meeting took place on August 31, 2016. This was a regional meeting of CTE Deans, who gathered to discuss the Strong Workforce Program, as well as develop the key priorities for the region. A regional template was developed to start collecting some preliminary ideas of regional projects, in essence a project inventory list.

The second Regional Planning Meeting took place on October 12, 2016. At this meeting, the project inventory list was discussed, including detailed descriptions from those who had proposed projects, and the six priorities for the region were finalized:

1. Improving the use data to make decisions and measure outcomes at the regional level to improve Local Data Accountability
2. Enhance Job/Career Readiness –opportunities for students including jobs, apprenticeships, internships, professional development for faculty, alumni development, and creating a Regional Job Career Developer
3. Aligning regional community colleges with other initiatives such as the Orange County Workforce Development Board, Chambers of Commerce and employer groups in order to leverage current resources
4. Develop more efficient pathways from High School to College to Careers
5. Align “Vertical Sectors” in addition to “Horizontal Community College” approach led by community college champion
6. Establishing and implementing protocols on improving collaboration between all regional stakeholders

The third Orange County Regional Planning Meeting took place on November 4, 2016, and it included an in-depth discussion of the 31 regional proposals that had been submitted up to that point. Although all 31 proposals had a level of merit and

importance, there was a need to narrow them down to not just a smaller number, but also to areas that would most benefit the region and the students it served.

The fourth Regional Planning meeting took place on November 14, 2016; this was an all-day Compression Planning session, which narrowed the projects from 31 proposed projects to 8.

The fifth Regional Planning meeting took place on December 15, 2016. Project rankings from the Compression Planning session were revisited and four additional projects were added, bringing the total of regional projects to 12.

The sixth and last Regional Planning session took place on January 12, 2017. Timelines for completion of written plan and online project template were discussed, as well as alignment with WIOA plan, and the assignment of leaders for vertical sector projects.

Stakeholders and Partners in Planning

1. Workforce Development Boards (LWDBS)
2. Adult Education
3. Local Educational Agencies
4. Interested Public Four Universities
5. Economic Development Organizations
6. Industry and Employer Leaders and Organizations
7. Chambers of Commerce
8. Governmental Representatives including Legislative and Policy Makers
9. California Community College Association for Adult And Occupational Education
10. California Community College Chancellor's Office

Alignment with Mandated Partner

The sector priorities and projects proposed for 2016-2017 40% funding are “informed by, aligned with, and expand upon the activities of existing workforce and education regional partnerships.” Specifically, the following sectors continue to be identified by the Orange County Workforce Development Boards (WDBs) as WIOA priority sectors for high-demand living-wage jobs. Many of these WDB sectors and related occupations overlap with sectors included in the Orange County Regional SWP plan and budget.

These priority sectors include:

- Health Care
- Information Technology
- Retail, Hospitality and Tourism

- Manufacturing Technology

The Region's SWP sectors and proposed projects also align with pathways and strategies identified by multiple regional adult education consortia in their three year plans (2015-2018); K-12 pathways and initiatives, like California Partnership Academies (CPAs), Linked Learning initiatives, and regional California Career Pathways Trust grants (CCPT); and regional workforce and education partnerships.

2. Data Analysis for the Region

At the beginning of 2016, Orange County's unemployment rate dropped to four percent and remained near this level for the first quarter, hitting an interim low unemployment rate of 3.6 percent in May. After starting in June 2016, nearly all California counties experienced a jump in unemployment rates, largely due to an influx of jobseekers re-entering the labor market and seasonal job losses in government and education. As of August 2016, Orange County's unemployment rate stood at 4.4 percent, approximately 1.2 percent and 0.6 percent below state and national unemployment rates, respectively.

When compared to its peers, Orange County remains the stand-out performer in the region, growing 39,000 jobs in the last 12 months and registering the lowest unemployment rate out of all Southern California counties. Since August 2016, the strongest job growth has stemmed from Professional and Business Services (+11,400), Construction (+10,200), Educational and Health Services (+7,400) and Leisure and Hospitality (+6,700).

Since 2010, the strongest employment growth has occurred in the Construction industry, which added 35,300 jobs for a growth rate of 51.9 percent. Other high-growth industries include Professional and Business Services, Leisure and Hospitality, and Educational and Health Services, with employment growth of 53,900, 45,200 and 36,400, respectively.

During this period of steady growth, nondurable goods manufacturing—which includes products like food, beverages and clothing—was the only industry to shrink, likely a result of cost of living and regulatory climate factors, which make it challenging to stay competitive. While advanced manufacturing jobs in the durable goods sector have grown, nondurable goods manufacturing may not be able to remain competitive in Orange County compared to lower cost regions. Only investments in maintaining and growing an increasingly highly-skilled, trained manufacturing workforce will reverse the downward trend in this sector.

According to California State University, Fullerton's (CSUF) most recent economic forecast, total nonfarm employment is expected to increase 2.5 percent, from 1,536,100

in 2015 to 1,573,800 in 2016. It is projected to further increase by 2.4 percent in 2017 to 1,610,800 jobs. While this nonfarm employment growth is slightly subdued compared to growth experienced in recent years, CSUF's forecast demonstrates that the region currently, and in the near future, continues to generate solid job creation.

The most important factor moving forward will be to ensure Orange County creates a higher proportion of high-skill, high-wage positions that provide above-average multiplier effects. Having high-quality employment positions will not only benefit the workers in the region by providing access to valuable employment positions but will serve to attract more qualified workers to the area.

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Orange County's position as an engine for economic growth and development in Southern California was made possible due to the clustering of several high-value industries in the region. Industries such as Advanced Electronics, Biotechnology, Information Technology, Advanced Manufacturing, Medical Device, and Healthcare represent key drivers of the Orange County economy, providing high-skill, high-wage occupations that support many county residents. Occupations within these high-growth industries also boast high-multiplier effects, creating additional supportive occupations or economic benefits that ripple across the county.

The Medical Device and Tourism/Theme Park industries are prime examples of Orange County's own world-class industry clusters.

Driven by a continually recovering economy, the Tourism cluster in Orange County added the most jobs between 2014 and 2015, increasing by 4.8 percent or 9,220 jobs. Increasing demand for housing and corresponding home construction, the Construction industry experienced the second highest increase in jobs — up 9.7 percent, an addition of 7,906 jobs. The Healthcare sector ranked third with a 4.9 percent increase, an addition of 7,843 jobs likely resulting from the growing need for healthcare services by an aging population, as well as, from the implementation of the Affordable Care Act (ACA).

The Information Technology and the Biotechnology sectors, which represent the technological base of the county, saw an overall increase in employment of 1,208 and 2,650 jobs, respectively; a significant improvement over employment trends experienced the year before, which registered drops in employment for both of these industries. This increase represents the improving standing and competitiveness of Orange County as an innovation and research center.

Overall, the average salary for all major industry clusters in Orange County experienced considerable increases in 2015. The overall average salary for cluster employment in Orange County in 2015 was \$66,962, an increase of 6.2 percent compared to 2014 salary averages. The highest increase in average percent salary over the past year occurred in Biotechnology, which increased significantly by 28.9 percent, largely driven by wage growth in one particular sub-industry group, Physical, Engineering and Biological Research. The second highest percent increase in cluster salaries was in the Transportation industry cluster, which increased by 9.1 percent, followed by Logistics and Transportation which increased by 7.6 percent, and followed by Information Technology which increased by 6.2 percent.

Orange County's employment growth in recent years is encouraging, but upon deeper inspection, creating enough high skill, high wage jobs is a challenge that the county is starting to face. A large portion of that employment growth has come from low-skill, low-wage sectors that provide lower overall multiplier effects to the economy. Additionally, as older generations remain in the workforce longer, many high-skill, high-wage occupations that should have become available due to retirements remain filled; stalling vertical career movements and progression for younger generations. This is especially relevant in areas which have a high number of older residents and where the cost of living is high, as older workers, especially those hard-hit by the recession, attempt to recover the savings and investments lost during the recession by working well past the traditional date of retirement.

According to Wanted Analytics, a data analytics firm that tracks real-time employment information, Orange County currently has 42,490 current job openings. The largest source of openings is in customer service representative positions where there are currently 3,773 openings, followed by administrative assistants with 3,679 openings, and project managers with 2,852 current openings.

According to Wanted Analytics, the most in-demand hard skills for job openings in the county were quality assurance (QA), bilingual fluency, usually in Spanish, and structured query language (SQL). The majority of the most in-demand hard skills seem to be primarily related to information technology occupations, yet the occupations that are the most highly demanded do not directly fit this profile.

While many of the occupations with the most number of job openings are entry-level positions, which do not require significant training or educational backgrounds, the need for skills such as SQL and bilingual capability is still high. The composition of the labor market for entry-level work is moving towards a new reality where a handful of hard-skills are required, and most young people who are leaving college with a degree that emphasizes soft skills are unprepared for this reality. This disconnect has created significant limitations upon supply for these skills, which directly impacts the potential opportunity for businesses to capitalize on these new technologies and expand economic activity.

Although sustained employment growth is a welcomed sign of increasing economic activity in the region, it is also important to understand the occupational breakdown of this growth, so as to better understand the quality of jobs being created. While most peer regions also have an abundance of low-skill, low-wage employment, these positions create a unique problem for Orange County.

Many of these positions, especially entry-level positions, will have trouble being filled, as applicants may not be able to afford the high cost-of-living in the region. There seem to be three possible ways to remedy this disconnect: employers may have to increase their compensation packages; workers will have to find ways to increase earnings by improving valuable skills or perhaps additional income from new “sharing economy” gigs, or cost of living relief brought about primarily by increased housing supply in key areas leading to greater affordability. Absent a serious effort to address this problem, many individuals may calculate that living outside of the county is more optimal for their lifestyle than facing a long commute or spending a larger portion of their income on housing related expenses.

However, this future is not set in stone, as EDD projections do not always accurately predict the future. For example, between 2012 and 2022 customer service occupations were expected to grow by 5,480; yet, as of Q2 2015 the number of customer service occupations decreased by 1,270. A similar trend formed for retail salespersons, which the EDD expected to expand by 8,050 between 2012 and 2022; and, as of Q2 2015, actually contracted by a small amount.

These trends are likely the result of increased automation in these industries, especially customer service representatives, where businesses are using automated message services instead of actual people to handle customer questions and complaints. As automation technologies continue to improve and evolve, they will be increasingly implemented throughout a number of industries. Many entry-level, low-skill occupations are highly replaceable by automated solutions, further complicating the job market for the low-skill, low- wage labor market that often includes many of the entry-level positions.

In terms of absolute job growth, EDD projects that service-based occupations such as Retail Salespersons, Waiters/Waitresses and Food Preparation and Serving Workers will be the biggest job generators between 2012 and 2022. Despite these occupations providing a significant number of job openings, wage levels lag other occupational categories. Excluding General and Operations Managers, the majority of these occupations pay near the \$20,000 level, well below the average Orange County salary. Despite increased salaries within these occupations that will come about due to rising minimum wage levels, it bears mentioning these occupations are often entry- level jobs typically filled by younger individuals who have just entered the workforce or who are currently enrolled in educational or training programs.

While the majority of the occupations with the most projected job openings provide salaries below \$40,000, General and Operations Managers occupations, which are expected to provide 10,420 job openings, provide annual wages of approximately \$114,000. Unlike the majority of the other occupations, though, General and Operations Managers occupations require significant work experience, skills, and expertise, as well as higher educational requirements.

Primary Occupations by Job Openings in Orange County Regional Sectors

Health

- Registered Nurses
- Nursing Assistants
- Home Health Aides
- Medical Assistants
- Licensed Practical and Licensed Vocational Nurses
- Medical Secretaries
- Dental Assistants
- Dental Hygienists

Retail, Hospitality and Tourism

- Customer Service Representatives
- First-Line Supervisors of Food Preparation and Serving Workers
- Sales Representatives, Services, All Other
- First-Line Supervisors of Retail Sales Workers
- Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products
- Insurance Sales Agents
- Food Service Managers
- Massage Therapists
- Recreation Workers
- Fitness Trainers and Aerobics Instructors

Information and Communications Technology/Digital Media

- Computer User Support Specialists
- Network and Computer Systems Administrators
- Maintenance and Repair Workers, General
- Secretaries and Administrative Assistants, Except Legal, Medical, and Executive
- First-Line Supervisors of Office and Administrative Support
- Billing and Posting Clerks

- Bookkeeping, Accounting, and Auditing Clerks
- Paralegals and Legal Assistants
- Insurance Claims and Policy Processing Clerks
- Production, Planning, and Expediting Clerks
- Administrative Services Managers
- Graphic Designers
- Executive Secretaries and Executive Administrative Assistants

Advanced Manufacturing

- Machinists
- First-Line Supervisors of Mechanics, Installers, and Repairers

Energy, Construction and Utilities

- Carpenters
- Electricians
- Plumbers, Pipefitters, and Steamfitters
- First-Line Supervisors of Construction Trades and Extraction Workers
- Heating, Air Conditioning, and Refrigeration Mechanics and Installers
- Construction Managers
- Cost Estimators

Other

- Childcare Workers
- Teacher Assistants
- Hairdressers, Hairstylists, and Cosmetologists
- Automotive Service Technicians and Mechanics
- Loan Officers
- Preschool Teachers, Except Special Education
- Tellers
- Social and Human Service Assistants
- Heavy and Tractor-Trailer Truck Drivers
- Police and Sheriff's Patrol Officers
- Property, Real Estate, and Community Association Managers
- Bill and Account Collectors
- Loan Interviewers and Clerks
- Purchasing Agents, Except Wholesale, Retail, and Farm Products
- Real Estate Sales Agents

Exhibit 1: Five-Year Projections by Annual Openings (2015-2020)

Occupation Groups	2015 Jobs	5-Yr Change	5-Yr % Change	Annual Replacements	Annual Openings	Median Hourly Earnings
Office & Administrative Support	158,265	5,853	4%	2,901	4,167	\$21.57
Health Care Practitioners & Technical	47,456	5,960	13%	1,107	2,300	\$29.23
Sales & Related	77,665	1,889	2%	1,735	2,201	\$23.86
HealthCare Support	35,002	6,684	19%	843	2,180	\$18.61
Installation, Maintenance & Repair	48,944	2,511	5%	1,191	1,722	\$23.88
Construction & Extraction	40,227	3,921	10%	672	1,457	\$27.50
Personal Care & Service	28,471	2,682	9%	730	1,281	\$16.29
Production	36,432	(137)	0%	875	1,033	\$22.80
Business & Financial	29,493	814	3%	739	969	\$30.02
Management	24,073	773	3%	515	726	\$33.92
Food Preparation & Serving	11,144	1,606	14%	338	659	\$17.32
Education, Training & Library	17,789	733	4%	491	637	\$17.44
Computer & Mathematical	20,135	1,492	7%	288	586	\$36.83
Arts, Design, Entertainment, Sports & Media	15,171	503	3%	427	537	\$20.62

Transportation & Material Moving	13,304	445	3%	269	355	\$24.87
Protective Service	8,537	285	3%	260	317	\$36.03
Architecture & Engineering	10,857	264	2%	232	293	\$26.98
Legal	5,622	344	6%	132	206	\$26.10
Community & Social Services	3,598	635	18%	79	206	\$16.75
Life, Physical & Social Science	2,895	257	9%	118	174	\$24.94
Building & Grounds Cleaning & Maintenance	2,147	74	3%	41	56	\$20.18
Total, All Selected	637,228	37,589	6%	13,985	22,061	\$24.56

Asset Map: Regional Partners and Resources

Orange County Business Council
Orange County Economic Vitality Council

University Of California, Irvine
Cal State University, Fullerton
Coastline Community College
Cypress College
Fullerton College
Golden West College
Irvine Valley College
Orange Coast College
Saddleback College
Santa Ana College
Santiago Canyon College

Orange County Department of Education (OCDE)

Adult Education Block Grants

- North Orange County Regional Consortium for Adult Education (NOCRC)
- Rancho Santiago Adult Education Consortium
- Coast Adult Education Consortium
- South Orange County Regional Consortium (SOCRC)

California Department of Education
California Department of Finance
Employment Training Panel

Orange County Workforce Development Board
Santa Ana Workforce Development Board
Anaheim Workforce Development Board
California Employment Development Department
State Department of Rehabilitation
Goodwill of Orange County

Center for Demographic Research California State University, Fullerton
Institute for Economic and Environmental Studies, Chapman University
Chapman University A. Gary Anderson Center for Economic Research
Public Policy Institute of California

Renovate America
CleanTech OC
Orange County Biotech Education Partnership
Los Angeles/Orange County Biotechnology Center
BIOCOM Institute
Biotechnology Industry Association

U.S. Small Business Administration
Orange County Small Business Development Center
Asian Business Association of Orange County
California Manufacturing and Technology Association
Santa Ana Chamber of Commerce
Irvine Chamber of Commerce
Orange County Hispanic Chamber Of Commerce
National Hispanic Business Women Association

Orange County Labor Federation
International Brotherhood of Electrical Workers
Los Angeles/Orange County Building & Construction Trades Council

IEEE Orange County Chapter
California Network for Manufacturing Innovation
Center for Applied Competitive Technology

3. List of Priority Sectors

Regional Priority and Emerging Sectors:

- **SWP Orange County Regional Consortium**

The Orange County Regional Consortium focused on nine industry sectors during the regional planning process. The nine sectors are identified below. For the first annual allocation of regional funds, the region remains committed to the priority and emergent sectors identified as part of our ongoing Doing What Matters efforts, and added four new sectors.

Priority Sectors:

Advanced Manufacturing
Health
Retail, Hospitality and Tourism

Emerging Sectors:

Information and Communications Technology (ICT) / Digital Media
Energy, Construction, and Utilities

Additionally, the region identified additional sectors that were in alignment with economic priorities of the region and/or its sub-regions:

Life Sciences/Biotechnology
Advanced Transportation and Renewable Energy
Global Trade and Logistics
Small Business and Entrepreneurship

4. Broad list of strategic priorities for the region

The regional planning process resulted in the development of 12 proposals for the allocation of the regional 40% fund. Below is a summary of the Strategic Priorities identified for initial funding. Final project proposals can be found in the addendum to this plan, which will be added once all metric projections and budget details have been finalized, and the online templates have been completed (not later than January 31, 2016).

During the course of the Regional Planning, and in the development and selection of projects, each of the critical Strategic Priorities contributed to the proposals' eventual goals and activities.

Efforts were directed to:

- Significantly enhance the ability of students to progress through the region’s career pathways
- Increasing the number and quality of work-based learning for students
- Improving the coordination of job placement, internships, and the regional industry involvement needed to achieve results
- Engaging the opportunities for business and industry partners to be better informed about CTE, and to grow co-investing for CTE programs

Information and Communications Technology: CyberPatriot Initiative

Cost: \$350,000

Number of colleges participating: 5

The CyberPatriot Initiative will plan and implement an innovative program to meeting the critical need for developing cyber-skills and awareness for K-12 students as a direct response to increased opportunities for employment and wage for students in this high demand field. Although three colleges are currently participating in a program (Coastline, Cypress and Irvine Valley College), there is a need to expand the program to more colleges throughout the region. Through CyberPatriot competitions –and the collaborative learning that comes with them -- students will be exposed to the basics of cybersecurity and its applications. Coastline is proposing \$165,000 of the regional funds to sponsor CyberPatriot competition activities at the current three colleges and increase to five colleges, and potentially all colleges in the region, during the next competition season. Expenses to be covered for these competitions include Coordinator (+Benefits), 25 Mentors to help teams on a weekly basis, K-12 teacher/coach stipends, CyberPatriot Team Registration (25 high schools, 25 middle schools), food for the events, marketing, bus transportation for high school students, and the design and implementation of a competition scoring engine.

Energy, Construction and Utilities, ICT: The Regional Heating Ventilation Air Conditioning Regional Collaborative (HVACRC)

Cost: \$500,000

Number of Colleges Participating: 4

The Regional Heating Ventilation Air Conditioning Regional Collaborative (HVACRC) will enhance existing HVACR Programs at five participating Colleges by the addition of three Orange County Community Colleges. In order to meet the needs for a prepared workforce several new programs will be developed: Foundational Heating, Ventilation, Air Conditioning-Refrigeration (HVACR) / Environmental Controls Technology; Advanced HVACR / Environmental Controls Technology; Advanced Lighting Controls; Energy Analytics Auditing; Facilities Management with one track with business and another concentrated on training incumbent workers; Building Science Zero Net Energy (ZNE/Sustainability To promote Architecture, Engineering, Construction, and Building Inspection programs to the campus community.

The three main goals of this program are to: increase and improve Employer Engagement at a regional level to benefit all community colleges; Improve Program Effectiveness by developing a Career Pathway using the 2+2+2 model with HS Juniors & Seniors entering a pipeline, getting trained at the community college, and transferring to university for their remaining 2 years prior to earning a Bachelor's Degree; and to Expand Marketing and Communications about Programs to promote Career Pathways and better informs all stakeholders especially faculty, potential students and employers. To these ends, the Project will determine real employment opportunities and identify and implement best practices to significantly improve employer engagement.

Life Sciences and Biotechnology: Regional Biotechnology Education Partnership

Cost: \$282,078 plus additional \$200,000 from

Vertical Sector Leads

Number of colleges participating: 5

The Biomanufacturing Technician Pathway is designed to educate technician-level professionals with the skills required to earn immediate gainful employment in the fields of technology that utilize the science of biology. These biotechnology and biomanufacturing jobs are essential aspects of our nation's economic and technical competitiveness and are a growing part of Orange County's Industrial and employer base. The Innovations in Biotechnology Initiative is a truly regional project, with each college responsible for priorities such as:

- Partnering with high schools to implement and sustain for-credit, dual-enrollment, biotechnology courses;
- identifying trends in Biotechnology and working with faculty within and across disciplines connecting to this rapidly evolving field;
- Enhancing the practical experience of high school and college students by offering for-credit, college-level courses – and cooperative work experiences – providing them with the much-needed experience of working in and managing a sustainable student-run enterprise that provides high school teachers with reagents, lab set ups, and lab assistance services;
- Outfitting high school partner laboratories with the equipment necessary to teach dual enrollment, college level courses on high school campuses, supplemented, wherever possible, by equipment distributed by the SoCal Bio-Link Depot;
- Growing the existing SoCal Bio-Link Depot to full capacity as a centralized location for the collection of in-kind donations from universities and biomanufacturing firms which will be used by up to 110 Orange County high schools;
- enhancing the current partnerships between educators, employers, businesses, government and labor and creating new and mutually beneficial collaborations to leverage resources and align efforts

**Advanced Manufacturing, Advanced Transportation, Agriculture, ICT and Others:
Drone Technology Initiative*¹**

Cost: \$1,000,000 (combined)

Number of colleges participating: 6

The Drone Technology Initiative will expand already existing relationships to establish a collaborative between regional colleges to create programs, certificates and degree and career pathways focused on the design, building and flying drones. This is a rapidly evolving field that brings together many occupations, skills sets and opportunities for education and employment, in perhaps unprecedented combinations. A collaborative approach – including colleges, districts, industry and employers-- is critical to ensure this Initiative's success.

Several colleges are already active in this field including: Cypress College (program approved and courses being offered), Golden West College, Santiago Canyon College, Fullerton College, Orange Coast College and Irvine Valley College. This effort will build on the progress to date to create new approaches and actions. The Initiative will address the many elements and disciplines associated with designing, building and piloting drones including: Sensor Technologies, Photography, Advanced Manufacturing, ICT, Engineering Technology, and Robotics. It will also focus on the various uses of drone technology in law enforcement and in the military, real estate, digital media and entertainment for examples.

No one college or program currently has all the integrated elements. Program and curriculum development across sectors with drone development will be required, as well as tied to emerging specific occupations locally and regionally. There is a significant number of businesses and occupations (and job prospects) associated with drone technologies in Orange County. This collaboration across the region will be especially important and could involve a range of stakeholders including four-year universities, workforce and economic development organizations, businesses and their representatives, and professional associations, military and law enforcement agencies, community colleges, Doing What Matters Deputy Sector Navigators and Sector Navigators, among others yet to be identified as the field evolves.

Advanced Manufacturing; Life Sciences and Biotechnology; Energy Construction & Utilities: The Robotics and Engineering Technology Innovations Regional Effort*

Budget: \$1,000,000 (combined)

Number of Participating Colleges: 5

The Robotics and Engineering Technology Innovations Regional Effort will respond directly to the local and Orange County needs for new cohorts of students trained in the

¹ Drone Technology and Robotics and Engineering Technology are considered one of the 12 proposals; the 1M in funding is for both projects combined

emerging fields and occupations associated in all its forms. There is a strong need for greater workforce preparedness in this area; in addition now, more than ever before, automation cuts across multiple sectors such as advanced manufacturing, robotics, food production, biotechnology, mechatronics and even construction.

The project would answer some immediate and critical needs. There are significant job openings in Orange County that involve automation-related skills and knowledge. Improved articulation of programs across colleges within the region would help both students and employers, and employers could benefit from better identifying current employees (incumbent workers) who could be retrained and up-skilled for automation jobs.

Advanced Transportation: The Automotive Technology Collaborative

Cost: \$400,000

Number of colleges participating: 5

The Automotive Technology Collaborative Project Work will create a collaborative to enhance the portability and comparability of Automotive Technology programs for students and employers across the region. The Collaborative will create showcases, competitions, and joint projects in support of the “car culture” of Orange County. Determining the strengths and growth areas for each program, will help focus regional resources to build unique programs that better meet the needs of the students and employers, more effectively market the five Automotive Technology programs in the region, and increase awareness and enrollments for each of them. The programs will also strive to incorporate technological changes in the Automotive field, in order to provide industry with prepared, ready to work employees.

ACROSS ALL SECTORS:

Seamless Pathways from Noncredit to Credit Initiative

Cost: \$350,000

Number of colleges participating: 8

The Seamless Pathways from Noncredit to Credit Initiative will create a regional resource for collaboration between Orange County’s Adult Education providers and Community Colleges. The shared goal will be to significantly enhance, improve and align opportunities for students to seamlessly transition from noncredit to for-credit programs for courses, certificates and degrees. The project will create a sustainable role and support for a liaison, convener, collaborator and manager to identify and implement the best ways for Adult Education and Community College to overcome current challenges. The goals of the Initiative include completion of Chancellor’s Office approved certificates, associate degrees, applied bachelor’s degrees, and/or third-party credentials, leading to increased longer-term employment at higher

wages. Students and faculty in Accounting, Automotive, Nursing, Pharmacy Tech, Culinary Arts and Biotechnology would especially benefit.

Regional Data Enhancement

Cost: \$130,000

Number of colleges participating: 10

To enhance and expand the ability of the current Los Angeles and Orange County Center of Excellence Director to:

- Research and analyze Labor Market Information and other quantitative and qualitative information from multiple sources,
- Identify current and future Skills Gaps, employment trends
- Uncover opportunities for the alignment of curriculum and planning
- Provide additional insights and recommendations specifically focused on Orange County, and its unique regional workforce and economic development system.

The addition of research capabilities will not only supplement current activities, but will extend them through innovative approaches and the inclusion of partners as sources of untapped information.

Regional Catalog

Budget: \$225,000

Number of colleges participating: 5

Several colleges are either considering the implementation of new course catalog technologies, while several colleges in the LA/ORC region are already using CourseLeaf. The proposed project would consolidate and align these efforts in Orange County (and potentially in Los Angeles County). In addition, a shared CourseLeaf catalog can provide much needed information for students on courses, certificates and degrees leading to Career Pathways – data that would be valuable to business, industry and regional partners.

CourseLeaf reaches into a college's ERP for course and program information and generates a web-based catalog. Implementing the use of this technology to all the colleges in Orange County would generate a common website displaying a regional program matrix with very high accuracy and automatic annual updates. The technology is flexible enough that it could serve as the foundation for additional uses across the region over time with the input of the colleges. The project would be an opportunity for all four Community College Districts within Orange County to use a common, mutually beneficial database.

Students as well as faculty, workforce and economic development organizations and employers from across the entire region would benefit.

The proposed project would require the creation of a regional team to support the full adoption of the CourseLeaf system, and the SWP funding would supplement the use of General Funds – and create a net saving over the college-by-college or District-by-District implementation. The direct input and involvement of colleges and Districts collaboratively will increase the likelihood of success; reduce the risks associated with siloed adoption; and provide a practical demonstration of the benefits of this cooperation (which can be shared as a best practice across the state). The shared effort will also be a mechanism for convening regional stakeholders around an important – and actionable – issue.

CTE Professional Development and Mentoring Project

Budget: \$200,000

Number of colleges participating: 10

The purpose of CTE Professional Development and Mentoring project is to develop, promote and implement a regional CTE administrator and faculty development program including expanded and innovative continuing education, professional development and mentorship. The impact of enhancing administrators and faculty skills, knowledge and abilities through both training and peer-to-peer mentoring and support will have far-reaching impact including improved instruction, student retention, completion and success but – as importantly for CTE students in particular – improved skills, and the likelihood of employment.

Regional Vertical Sector Leaders Initiative

Cost: \$1,000,000

Number of colleges participating: 5

The Regional Vertical Sector Leaders Initiative will create a network for additional research and coordination around evolving sectors as determined by Orange County Regional Planning Groups. The role of the Regional Vertical Sector Leaders will be twofold. First, they will work to identify opportunities for collaborative efforts that cut across sectors, especially crucial as the boundaries between industries and businesses erode and blur because of technological and economic change. Second, they will expand the contributors needed to fully anticipate and recommend responses to regional and statewide needs. The sectors most focused on will be those that: 1. do not fit into the current limited definitions of sectors and 2. will require enhanced involvement of a wider range of stakeholders to better predict and prepare for industries and associated occupations. The Initiative will identify college champions who will become resources to coordinate and support participating regional colleges with innovative sector-specific projects. Working with Sector Navigators and Deputy Sector Navigators, college champions would improve the effectiveness of

implementation of regional Strong Workforce Programs through enhanced partnerships with (but not limited to) K-12, business, industry, labor, non-profits, local governmental organizations, Workforce Development Boards, the North Orange Community College District's School of Continuing Education, the Adult Education Career Technical Education Programs, and other stakeholders. The outcomes will include a more complete and future-focused set of understanding of employment and occupational trends to supplement LMI and other data currently used for decision-making. In addition, the role of the Regional Vertical Sector Leaders will include curriculum and program alignment across colleges, sectors, programs and disciplines, building additional support structures, and the identification and sharing of best practices for both Local and Regional efforts.

Regional Marketing and Outreach

Cost: \$2,000,000

Number of colleges participating: 10

The project will develop a multi-pronged approach to marketing CTE programs regionally and will leverage regional efforts with statewide "projects in common" efforts related to branding and outreach to students and to employers. The statewide branding and outreach effort is already underway. The regional consortium will conduct research (phase 1) to gain a solid understanding of opportunities for developing a strategic approach and plan for communications within the four main stakeholder groups – students, colleges, third-party workforce development partners, and business and industry employers. Phase 1 will produce a comprehensive Communications Assessment, which will inform future phases of the regional marketing and outreach project.

NetLabs

Cost: \$600,000

Participating Colleges: 5

Coastline Community College will host the Los Angeles and Orange County Regional NetLabs project. Colleges throughout the region will maintain ownership of their NetLabs equipment; this equipment would be housed at the Coastline site and all of the participating colleges (whether they donated equipment or not) would use the virtual lab services on a minimal annual fee basis to cover the ongoing network administrative support, replacement, and maintenance/operation of the NetLabs system. The pooling of equipment would allow access to a larger number of colleges.

5. Agreed Upon Outcomes / Metrics

A single outcome/metric has been identified for the regional planning efforts for Orange County's SWP fund. Enrollment has been determined by the Region as the

single most important measure of our Region’s effective use of funds for the greatest amount of impact. As a result, a 1% enrollment growth is proposed for the term of this first year of funding, with a baseline year of 2016/2017.

6. Agreements About Future Engagement

Upon submission of regional plan, monthly meetings (virtual or in-person) will be organized to provide updates on plan’s progress, and to solicit input/feedback from all required partners.

A. Process for Annual Update

Annual planning will begin in the Spring of each year to ensure the proper updates are included before the beginning of a fiscal year.

B. Process to Develop a New Plan Every 4 years

The process to develop a new plan will begin in Spring of 2020 and will conclude in early Fall, so that adequate time is allowed for public input and submission to the CCCC by January 31, 2021.

C. Future Considerations for Development of Subsequent Plans

The Orange County Regional Planning Team determined the following areas would be included in subsequent discussions:

- 1. Determining Future Priority and Emergent Sectors for Orange County:** in addition to the current sectors identified in the DWM Framework, our planning process determined that the following Deputy Sector Navigators should be added to the Orange County region:
 - a. Education
 - b. Bioscience
 - c. Advanced Transportation

- 2. Improving Opportunities for Students in Career Pathways in Region’s Sectors:** examine and prioritize strategies to:
 - a. Implement clearer processes and procedures into career pathways, and enhance articulation and remove barriers
 - b. Identify, design, simplify, align and market career pathways
 - c. Improve coordination between K-12 and community college counselors
 - d. Improve professional development for counselors on CTE

- e. Increase outreach to traditional and non-traditional students, CTE counselors, K-12 and parents by creative marketing and education both internally and externally
- f. Add portable and stackable certificates as well as skills badging
- g. Provide more on-ramps and off ramps to pathways, such as Adult education and noncredit programs
- h. Provide additional counseling, communications and instructional support and basic skills, for example boot camps, bridge programs and just in time instruction, and incorporate more lab-based and project based learning
- i. Build K-14 relationships by connecting faculty to faculty between the two

3. Coordinating between Job Placement, Internships, and Regional Industry

Engagement: by prioritizing and implementing the following:

- a. Capturing existing success with internships and job placement (by faculty) through regional advisory committee process
- b. Identifying and sharing share best practices implementation on regional scale
- c. Improved engaging and alignment with Workforce Development Boards, Chambers of Commerce, K-12 education and industry and business partners, and other stakeholders and with DSNs
- d. Implementing a common data system
- e. Enhancing coordination between non-credit and credit for internships and externships

4. Improving Outreach to Industry Information and Co-investment in CTE: by the following strategies:

- a. Enhancing connections with regional advisory boards, chambers of commerce, associations and other stakeholders, including contract education
- b. Develop innovative ways to engage employers, such as on-campus events and competitions, providing faculty externships and increasing work-based learning
- c. Provide funding for student and faculty activities
- d. Combining OCBC economic and workforce efforts with LAOCRC to have businesses join us to discuss their needs